

June 21, 2024

Chris Rutishauser, P.E., CPWM  
Director of Public Works/Village Engineer  
Village of Ridgewood  
131 North Maple Avenue  
Ridgewood, New Jersey 07450

**Re: IMPORTED BERM MATERIAL EVALUATION  
VILLAGE OF RIDGEWOOD HISTORIC SITE – SCHEDLER PROPERTY  
460 WEST SADDLE RIVER ROAD  
VILLAGE OF RIDGEWOOD, BERGEN COUNTY, NEW JERSEY 07450  
NJDEP CASE NO. 24-05-28-1117-27  
PI No. 1062723  
MATRIX NO. 23-1429**

Dear Mr. Rutishauser:

Matrix New World Engineering, Land Surveying, and Landscape Architecture, PC (Matrix) has prepared this letter report detailing the recent soil sampling activities at the above referenced site located at 460 West Saddle River Road, Village of Ridgewood (Ridgewood), New Jersey (Site). The work performed and summarized below was conducted for Ridgewood to assess the quality of imported soil for the creation of a soil berm adjacent to New Jersey State Highway Route 17, along the southern side of the Site.

## **BACKGROUND**

Matrix understands that Ridgewood received correspondence from the New Jersey Department of Environmental Protection (NJDEP) Bureau of Solid Waste Compliance & Enforcement (BSWCE) on December 11, 2023, questioning the sources and quality of the fill material that were imported to the Site to create the berm (Appendix A). Based on this correspondence from the NJDEP, it appears that approximately 10,000 cubic yards of fill material was imported to the Site to create the soil berm, as well as possibly filling other low areas of the Site. Subsequently, Ridgewood retained Matrix to complete a review of the data associated with the fill material and respond to the NJDEP with a Sampling and Analysis Plan (SAP). On April 2, 2024 Matrix submitted a SAP to the NJDEP detailing the scope of work for the sampling of the berm and filled in areas, which was conditionally approved by NJDEP on April 3, 2024. The conditional approval was based on NJDEP's request for additional sampling in other areas of the Site. The SAP is included as Appendix B.

## **BERM SOIL INVESTIGATION**

The following section presents a technical overview of investigation activities performed by Matrix at the Site on May 3, 2024. Soil samples were collected in general accordance with NJDEP's Technical Requirements for Site Remediation (TRSR) N.J.A.C. 7:26E, NJDEP's Field Sampling Procedures Manual (FSPM), and any other applicable NJDEP Guidance Documents. The objective of the berm soil investigation was to complete soil sampling activities to determine if there were potential impacts associated with the materials imported to the Site to create the berm.

The applicable remediation standards for soil at this Site are the NJDEP's May 2021 Migration to Groundwater Exposure Pathway Soil Remediation Standards (MGWSRS) and the more stringent of the NJDEP's May 2021 Non-Residential Ingestion-Dermal Exposure Pathway Soil Remediation Standards (NRIDSRS); Non-Residential Inhalation Exposure Pathway Soil Remediation Standards (NRISRS); Residential Ingestion-Dermal Exposure Pathway Soil Remediation Standards (RIDSRS); and the Residential Inhalation Exposure Pathway Soil Remediation Standards (RISRS). Based on sample results, a Synthetic Precipitation Leaching Procedure (SPLP) was completed, and results were compared to the NJDEP's May 2021 Leachate Remediation Standard Migration to Groundwater Exposure Pathway (LRS-MGWEP). Subsequently, a Site-Specific Migration to Soil Remediation Standard (ARS-MGWSRS) was calculated.

Matrix retained Environmental Probing, Inc. (EPI) of Cream Ridge, New Jersey to advance a total of 14 soil borings using Geoprobe® direct push technology on May 3, 2024 throughout the soil berm. A Matrix representative provided full-time oversight of drilling activities. All soil borings were advanced to depths ranging from 5 to 10 feet below ground surface (BGS) with five-foot sampling cores using dedicated acetate sleeves. The berm material was visually inspected for any potential visual or olfactory impacts, screened with a photoionization detected (PID) (MiniRae parts per million [ppm] meter) for organic vapors and logged for material content and lithology. Soil samples were collected at the discrete six-inch interval that displayed the greatest likelihood of contamination based on field measurements and/or other evidence of contamination (i.e., staining, odor, elevated PID reading, etc.). Based on the approved NJDEP SAP, a total of 14 soil samples (SB-1 through SB-14) were collected for laboratory analysis and were analyzed for Target Compound List (TCL) Semi-volatile Organic Compounds (SVOCs) and Target Analyte List (TAL) Metals. Soil samples SB-1, SB-3 through SB-5, SB-7, SB-8, SB-10 through SB-12, and SB-14 were additionally analyzed for TCL Pesticides and polychlorinated biphenyls (PCBs). Quality Assurance/Quality Control (QA/QC) samples including two duplicate samples and a field blank were collected and analyzed for TCL SVOCs, TAL Metals, TCL Pesticides, and PCBs.

All soil borings were advanced from the top of the berm to a minimum depth of five feet within the limits of the soil berm and sample collection depths varied so that an evaluation of the emplaced imported soils could be performed. Three soil borings (SB-4, SB-10 and SB-14) were advanced to native soils to verify depths and soil horizons, native soils were encountered at approximately eight feet beneath the top center portion of the berm. The soil encountered within the soil berm predominantly consisted of a sandy silt. One soil boring location, SB-12, exhibited a dark brown clay material from 3 to 5 feet bgs. A PID reading of 67.5 parts per million (ppm) was observed at 3 feet bgs, therefore a volatile organic compound sample will be collected at a later date from this location. There were no observations of an odor, staining, or sheening throughout the soil column at SB-12. Groundwater was not encountered within any of the boring locations.

Soil boring locations are shown on Figure 2 and soil boring logs are provided in Appendix C. The soil sample analytical results are summarized below.

All soil samples were submitted to a NJDEP certified laboratory, SGS Laboratories of Dayton, New Jersey (#12129) within the prescribed field holding times and were received intact, and properly preserved. Matrix submitted all laboratory data to a third-party independent data validator, Nankowep Environmental Consulting (Nankowep) to review holding times, confirm that each analysis method met quality control requirements, and method blanks met method specific requirements. A sample summary table is included as Table 1.

The third-party validator noted that due to Matrix Spike (MS) and Matrix Spike Duplicate (MSD) recoveries, for metal analysis, were out of the control limits and as such reported concentrations for aluminum, manganese and iron may be biased high, while the concentration of antimony may be biased low. Two compounds, carbazole and beta-BHC were reported as estimated or non-detect concentrations but were detected at concentrations within five times the concentration of the method blank and the estimated concentrations may be due to potential blank contamination bias. It should be noted that extraction times for SPLP SVOC analysis were performed outside of their recommended timeframes and potential low bias may be demonstrated by missed extraction holding times, low laboratory control sample (LCS) recoveries, and low surrogate recoveries. Identification of benzo(a)anthracene may be accurate, but the magnitude of the sample results is not determined to be reliable. The Nankowep data validation report is included in Appendix D. Additional information regarding the reliability of the laboratory analytical data can be found in the Case Narrative/Conformance Summary section of the laboratory analytical reports for soil and groundwater included in Appendix E.

Laboratory analytical results indicated that three compounds, benzo(a)anthracene, lead, and mercury were identified at concentrations within samples exceeding the NJDEP's MGWSRS and benzo(a)pyrene was identified at concentrations within samples exceeding the NJDEP's RIDSRS. Benzo(a)pyrene does not have a MGWSRS because the criterion is above soil saturation limit. Six soil samples, SB-3 through SB-7 and two QA/QC samples (Dupe-1 and Dupe-2) exhibited concentrations (0.988 milligrams per kilogram [mg/kg] to 1.85 mg/kg) exceeding the NJDEP's MGWSRS for benzo(a)anthracene at depths ranging from 2 to 3.5 feet BGS. One soil sample, SB-1, exhibited concentrations (169 mg/kg) exceeding the NJDEP's MGWSRS for lead from 2 to 2.5 feet BGS. Three soil samples, SB-1, SB-9, and SB-14 and one QA/QC sample (Dupe-2) exhibited concentrations (0.15 mg/kg to 0.29 mg/kg) exceeding the NJDEP's MGWSRS for mercury from 2 to 2.5 feet BGS. Soil analytical results are shown on Table 2. Laboratory analytical reports are provided in Appendix E.

Based on the MGWSRS exceedances identified above, a SPLP analysis was performed on three to four samples exhibiting the highest concentrations for benzo(a)anthracene (SB-4, SB-5, SB-6, and Dupe-1), lead (SB-1, SB-9, and SB-11), and mercury (SB-1, SB-9, and SB-14). The results of the SPLP analysis were input into the NJDEP's Soil and Soil Leachate Migration to Ground Water Exposure Pathway Calculator and indicated that the leachate concentrations were below the Leachate Remediation Standard-Migration to Groundwater Exposure Pathway (LRS-MGWEP). Therefore, a Site-Specific Alternative Remediation Standard – Migration to Groundwater Soil Remediation Standard (ARS-MGWSRS) was calculated for each compound. Based on the results of the calculator, the following ARS-MGWSRS were created: benzo(a)anthracene – 1.85 mg/kg, lead – 169 mg/kg, and mercury – 0.29 mg/kg. Therefore, all analytical results for benzo(a)anthracene, lead, and mercury were below their applicable ARS-MGWSRS. The Soil and Soil Leachate Migration to Groundwater Exposure Pathway Calculator Spreadsheets are provided in Appendix F.

## **CONCLUSIONS**

Matrix completed an evaluation of soils imported to the Village of Ridgewood Historic Site for the creation of a berm to shield the Site from noise pollution associated with New Jersey State Highway Route 17. The soils were imported from six different sources located in Bergen County and were identified by NJDEP through record searches to be suspect soils not conforming with the importation of soil. The soil boring investigation identified the SVOC compound benzo(a)pyrene in seven soil samples (SB-3 through SB-8 and SB-14) and two QA/QC samples (Dupe-1 and Dupe-2) which exhibited concentrations (0.52 mg/kg to 1.96 mg/kg) exceeding the NJDEP's RIDSRS from 2 to 3.5 feet below the top of the berm..

Due to the initial RIDSRS exceedance of benzo(a)pyrene, as well as the MGWSRS exceedances of benzo(a)anthracene lead, and mercury, identified in the soils associated with the imported soils, Matrix notified the NJDEP via the NJDEP's Spill Hotline on May 28, 2024. NJDEP assigned Case No. 24-05-28-1117-27 and Program Interest Number 1062723 to the Site. Subsequently, Matrix submitted a Confirmed Discharge Notification (CDN) form on June 10, 2024.

Based on the results of the sampling yet to be completed on the balance of the Site, Matrix will coordinate with the Village of Ridgewood and the NJDEP to prepare a scope of work to remediate the remaining benzo(a)pyrene exceedances found in the berm material with the goal to resolve all NJDEP concerns.

If you have any questions or require any additional information, do not hesitate to contact us at (973) 240-1800.

Sincerely,



Melissa Feury  
Project Manager

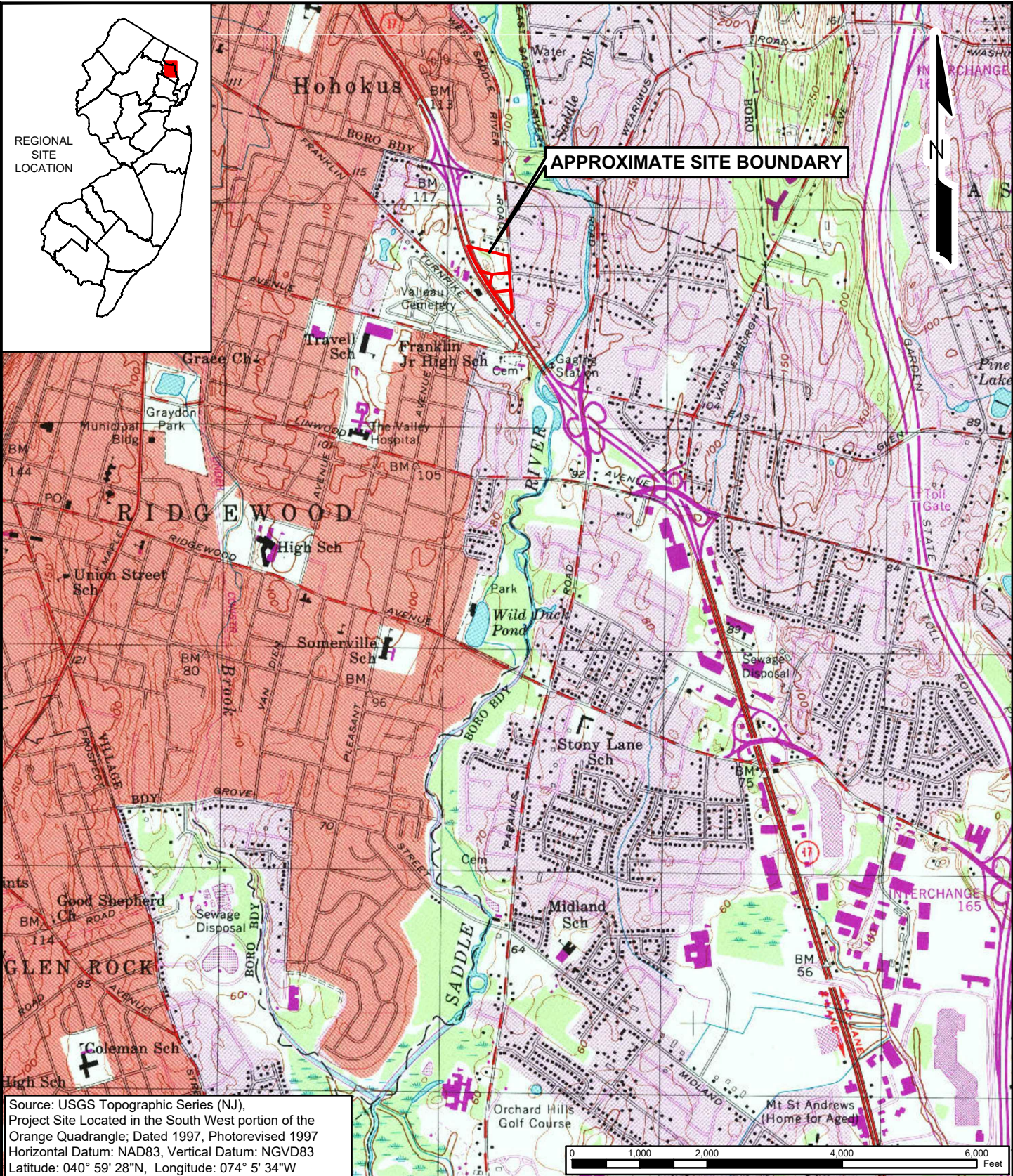


Thomas DeMichele, LSRP  
Senior Project Manager

Enclosed:

- Figure 1 – Site Location Map
- Figure 2 – Berm Soil Analytical Results Table
- Table 1 – Sample Summary Table
- Table 2 – Soil Analytical Results Table
- Appendix A – NJDEP December 11, 2023 Correspondence
- Appendix B – Sampling and Analysis Plan
- Appendix C – Soil Boring Logs
- Appendix D – Data Validation Reports
- Appendix E – Analytical Laboratory Reports
- Appendix F – Soil and Soil Leachate Migration to Groundwater Exposure Pathway Calculator Spreadsheets

## FIGURES



Source: USGS Topographic Series (NJ),  
 Project Site Located in the South West portion of the  
 Orange Quadrangle; Dated 1997, Photorevised 1997  
 Horizontal Datum: NAD83, Vertical Datum: NGVD83  
 Latitude: 040° 59' 28"N, Longitude: 074° 5' 34"W

### SITE LOCATION MAP

# MATRIX **N**EWORLD

Engineering Progress

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 and Landscape Architecture, P.C.  
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VILLAGE OF RIDGEWOOD  
 BLOCK 4704, LOTS 9, 10, 11, & 12  
 VILLAGE OF RIDGEWOOD  
 BERGEN COUNTY, NEW JERSEY

SCALE:  
 1 : 2,000

PROJECT NO.:  
 23-1429

DATE:  
 MARCH 2024

FIGURE NO.:  
 1

**LEGEND**

- ◆ TCL SVOCs, TAL METALS, PESTICIDES & PCBs
- ◆ TCL SVOCs & TAL METALS

SVOCs SEMI-VOLATILE ORGANIC COMPOUNDS  
 PCBs POLYCHLORINATED BIPHENYLS  
 NC NO CRITERIA ESTABLISHED FOR THIS CONTAMINANT  
 SRS SOIL REMEDIATION STANDARDS CRITERIA  
 NJDEP NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION  
 MGWSRS MIGRATION TO GROUNDWATER EXPOSURE PATHWAY SOIL REMEDIATION STANDARDS  
 RIDSRS RESIDENTIAL INGESTION-DERMAL EXPOSURE PATHWAY SOIL REMEDIATION STANDARDS  
 RISRS RESIDENTIAL INHALATION EXPOSURE PATHWAY SOIL REMEDIATION STANDARDS  
 NRIDSRS NON-RESIDENTIAL INGESTION-DERMAL EXPOSURE PATHWAY SOIL REMEDIATION STANDARDS  
 AR-MGWSRS ALTERNATIVE REMEDIATION - MIGRATION TO GROUNDWATER SOIL REMEDIATION STANDARD  
 \* AR-MGWSRS UTILIZED AS STANDARD

**Bold and italic** EXCEEDS NJDEP MGWSRS/AR-MGWSRS  
**Bold** EXCEEDS NJDEP RIDSRS/RISRS

ALL ANALYTICAL RESULTS FOR SOIL IN MILLIGRAMS PER KILOGRAM (mg/kg)  
 ALL SAMPLE DEPTHS PRESENTED IN ft, bgs (FEET BELOW GROUND SURFACE)  
 SITE SPECIFIC MIGRATION TO GROUNDWATER SOIL REMEDIATION STANDARD (MGWSRS) WAS CALCULATED FOR BENZO(A)ANTHRACENE, LEAD, AND MERCURY USING NJDEP'S SPLP SPREADSHEET, V1.0, MAY 2021.  
 UNSATURATED SOIL SAMPLES COMPARED TO MGWSRS/AR-MGWSRS

SAMPLE ID	SB-10
SAMPLE DATE	5/3/2024
SAMPLE DEPTH (ft)	3-3.5
SVOCs	<SRS
Pesticides	<SRS
PCBs	<SRS
Metals	<SRS

SAMPLE ID	SB-9
SAMPLE DATE	5/3/2024
SAMPLE DEPTH (ft)	3.5-4
SVOCs	<SRS
Pesticides	<SRS
PCBs	<SRS
Mercury	0.19
All other Metals	<SRS

SAMPLE ID	SB-12
SAMPLE DATE	5/3/2024
SAMPLE DEPTH (ft)	3-3.5
SVOCs	<SRS
Pesticides	<SRS
PCBs	<SRS
Metals	<SRS

SAMPLE ID	SB-13
SAMPLE DATE	5/3/2024
SAMPLE DEPTH (ft)	3-3.5
SVOCs	<SRS
Metals	<SRS

SAMPLE ID	SB-14
SAMPLE DATE	5/3/2024
SAMPLE DEPTH (ft)	3-3.5
Benzo(a)pyrene	1.87
All other SVOCs	<SRS
Pesticides	<SRS
PCBs	<SRS
Mercury	0.17
All other Metals	<SRS

SAMPLE ID	SB-11	DUPE 2
SAMPLE DATE	5/3/2024	5/3/2024
SAMPLE DEPTH (ft)	2.5-3	2.5-3
Benzo(a)anthracene	<SRS	0.988
Benzo(a)pyrene	<SRS	1.01
All other SVOCs	<SRS	<SRS
Pesticides	<SRS	<SRS
PCBs	<SRS	<SRS
Mercury	<SRS	0.15
All other Metals	<SRS	<SRS

SAMPLE ID	SB-8
SAMPLE DATE	5/3/2024
SAMPLE DEPTH (ft)	3-3.5
Benzo(a)anthracene	0.924
Benzo(a)pyrene	0.948
All other SVOCs	<SRS
Pesticides	<SRS
PCBs	<SRS
Metals	<SRS

SAMPLE ID	SB-5
SAMPLE DATE	5/3/2024
SAMPLE DEPTH (ft)	2-2.5
Benzo(a)anthracene	1.85
Benzo(a)pyrene	1.87
All other SVOCs	<SRS
Pesticides	<SRS
PCBs	<SRS
Metals	<SRS

SAMPLE ID	SB-2
SAMPLE DATE	5/3/2024
SAMPLE DEPTH (ft)	2-2.5
SVOCs	<SRS
Metals	<SRS

SAMPLE ID	SB-1
SAMPLE DATE	5/3/2024
SAMPLE DEPTH (ft)	2-2.5
SVOCs	<SRS
Pesticides	<SRS
PCBs	<SRS
Lead	169
Mercury	0.29
All other Metals	<SRS

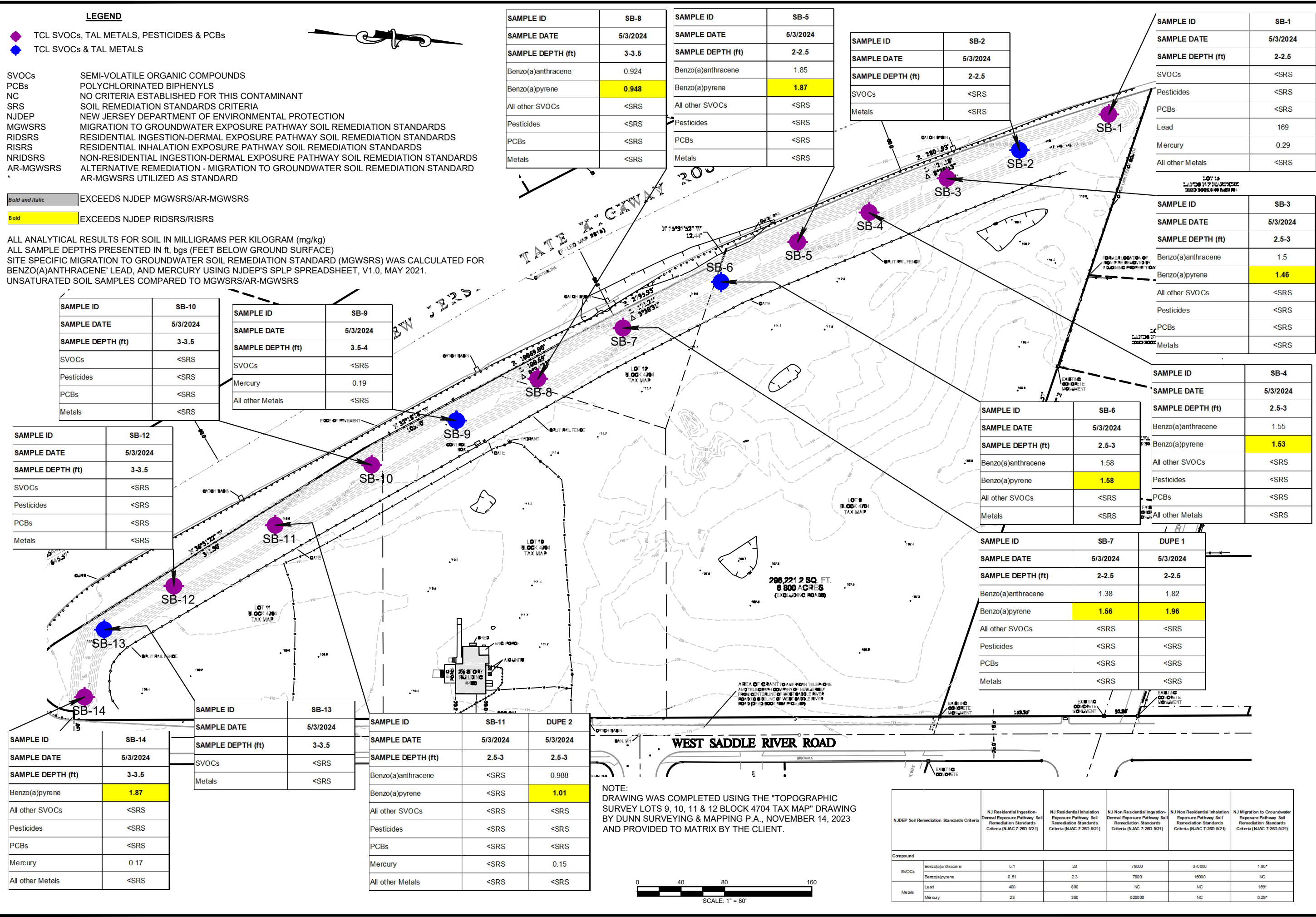
SAMPLE ID	SB-3
SAMPLE DATE	5/3/2024
SAMPLE DEPTH (ft)	2.5-3
Benzo(a)anthracene	1.5
Benzo(a)pyrene	1.46
All other SVOCs	<SRS
Pesticides	<SRS
PCBs	<SRS
Metals	<SRS

SAMPLE ID	SB-4
SAMPLE DATE	5/3/2024
SAMPLE DEPTH (ft)	2.5-3
Benzo(a)anthracene	1.55
Benzo(a)pyrene	1.53
All other SVOCs	<SRS
Pesticides	<SRS
PCBs	<SRS
All other Metals	<SRS

SAMPLE ID	SB-6
SAMPLE DATE	5/3/2024
SAMPLE DEPTH (ft)	2.5-3
Benzo(a)anthracene	1.58
Benzo(a)pyrene	1.58
All other SVOCs	<SRS
Metals	<SRS

SAMPLE ID	SB-7	DUPE 1
SAMPLE DATE	5/3/2024	5/3/2024
SAMPLE DEPTH (ft)	2-2.5	2-2.5
Benzo(a)anthracene	1.38	1.82
Benzo(a)pyrene	1.56	1.96
All other SVOCs	<SRS	<SRS
Pesticides	<SRS	<SRS
PCBs	<SRS	<SRS
Metals	<SRS	<SRS

© MATRIXWORLD/1:2023/23-1429 Village of Ridgewood Drawings/Plot Sheets/Berm Soil Analytical Results Compared to SRS - REV.dwg



NOTE: DRAWING WAS COMPLETED USING THE "TOPOGRAPHIC SURVEY LOTS 9, 10, 11 & 12 BLOCK 4704 TAX MAP" DRAWING BY DUNN SURVEYING & MAPPING P.A., NOVEMBER 14, 2023 AND PROVIDED TO MATRIX BY THE CLIENT.

Compound	NJ Residential Ingestion-Dermal Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/2)	NJ Residential Inhalation Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/2)	NJ Non Residential Ingestion-Dermal Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/2)	NJ Non Residential Inhalation Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/2)	NJ Migration to Groundwater Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/2)
SVOCs	Benzo(a)anthracene: 5.1	23	78000	370000	1.85*
	Benzo(a)pyrene: 0.51	2.3	7800	18000	NC
Metals	Lead: 400	800	NC	NC	169*
	Mercury: 23	390	520000	NC	0.29*

**MATRIXWORLD**  
Engineering Progress

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NEW JERSEY CERTIFICATE OF AUTHORIZATION No. 24GA27962300

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**BERM SOIL ANALYTICAL RESULTS COMPARED TO SRS**

VILLAGE OF RIDGEWOOD  
 BLOCK 4704, LOTS 9, 10, 11 & 12  
 WEST SADDLE RIVER ROAD  
 VILLAGE OF RIDGEWOOD  
 BERGEN COUNTY, NEW JERSEY

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PROJECT NUMBER: 23-1429

SCALE: AS SHOWN

DATE: 6/12/2024

2



**TABLES**

**Table - 1**  
**Sample Summary Table**  
**Ridgewood Village Historic Site**  
**460 West Saddle River Road, Village of Ridgewood, New Jersey**  
**23-1429**

LOCATION	DATE	MATRIX	DEPTH (ft, bgs)	ANALYTICAL PARAMETERS	SAMPLING METHOD
<b>Areas of Concern</b>					
<b>Berm</b>					
SB-1	5/3/2024	Soil	2.0 - 2.5	TCL SVOC'S, TAL Metals, Pesticides, PCB's, SPLP Lead, SPLP Mercury	Scoopula
SB-2	5/3/2024	Soil	2.0 - 2.5	TCL SVOC's & TAL Metals	Scoopula
SB-3	5/3/2024	Soil	2.5 - 3.0	TCL SVOC'S, TAL Metals, Pesticides, PCB's	Scoopula
SB-4	5/3/2024	Soil	2.5 - 3.0	TCL SVOC'S, TAL Metals, Pesticides, PCB's, SPLP Benzo(a)anthracene	Scoopula
SB-5	5/3/2024	Soil	2.0 - 2.5	TCL SVOC'S, TAL Metals, Pesticides, PCB's , SPLP Benzo(a)anthracene	Scoopula
SB-6	5/3/2024	Soil	2.5 - 3.0	TCL SVOC's & TAL Metals, SPLP Benzo(a)anthracene	Scoopula
SB-7	5/3/2024	Soil	2.0 - 2.5	TCL SVOC'S, TAL Metals, Pesticides, PCB's	Scoopula
SB-8	5/3/2024	Soil	3.0 - 3.5	TCL SVOC'S, TAL Metals, Pesticides, PCB's	Scoopula
SB-9	5/3/2024	Soil	3.5 - 4.0	TCL SVOC's, TAL Metals, SPLP Lead, SPLP Mercury	Scoopula
SB-10	5/3/2024	Soil	3.0 - 3.5	TCL SVOC'S, TAL Metals, Pesticides, PCB's	Scoopula
SB-11	5/3/2024	Soil	2.5 - 3.0	TCL SVOC'S, TAL Metals, Pesticides, PCB's , SPLP Lead	Scoopula
SB-12	5/3/2024	Soil	3.0 - 3.5	TCL SVOC'S, TAL Metals, Pesticides, PCB's	Scoopula
SB-13	5/3/2024	Soil	3.0 - 3.5	TCL SVOC's & TAL Metals	Scoopula
SB-14	5/3/2024	Soil	3.0 - 3.5	TCL SVOC'S, TAL Metals, Pesticides, PCB's, SPLP Mercury	Scoopula
DUPE 1	5/3/2024	Soil	2.0 - 2.5	TCL SVOC'S, TAL Metals, Pesticides, PCB's, SPLP Benzo(a)anthracene	Scoopula
DUPE 2	5/3/2024	Soil	2.5 - 3.0	TCL SVOC'S, TAL Metals, Pesticides, PCB's	Scoopula
Field Blank	5/3/2024	Aqueous	--	TCL SVOC'S, TAL Metals, Pesticides, PCB's	--

**Notes:**

TCL = Target Compound List  
 SVOC's= Semi Volatile organic Compounds  
 TAL= Target Analyte List  
 PCB's= Polychlorinated Biphenyls  
 SPLP = Synthetic Precipitation Leachte Procedure  
 ft, bgs = Feet, Below Ground Surface





**Table - 2**  
**Berm Soil Analytical Results - Pesticides**  
**Ridgewood Village Historic Site**  
**460 West Saddle River Road, Village of Ridgewood, New Jersey**  
**23-1429**

Client Sample ID:	NJ Residential Ingestion-Dermal Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	NJ Non-Residential Ingestion Dermal Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	NJ Residential Inhalation Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	NJ Non-Residential Inhalation Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	NJ Migration to Groundwater Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	SB-1		SB-2		SB-3		SB-4		SB-5		SB-6		SB-7	
Lab Sample ID:						JD87833-1	JD87833-2	JD87833-3	JD87833-4	JD87833-5	JD87833-6	JD87833-7							
Date Sampled:						5/3/2024	5/3/2024	5/3/2024	5/3/2024	5/3/2024	5/3/2024	5/3/2024							
Sample Depth (ft, bgs):						2.0 - 2.5	2.0 - 2.5	2.5 - 3.0	2.5 - 3.0	2.0 - 2.5	2.5 - 3.0	2.0 - 2.5							
Saturated (S)/Unsaturated (US):						US	US	US	US	US	US	US							
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil												
<b>Pesticides</b>																			
Aldrin	0.041	0.21	NC	NC	0.13	0.00053	U	-		0.00042	U	0.00042	U	0.0021	U	-		0.00044	U
alpha-BHC	0.086	0.41	NC	NC	0.0023	0.00053	U	-		0.00042	U	0.00042	U	0.0021	U	-		0.00044	U
beta-BHC	0.3	1.4	NC	NC	0.0046	0.00053	U	-		0.00013 <sup>c</sup>	JB	0.00014 <sup>c</sup>	JB	0.0021	U	-		0.00015 <sup>c</sup>	JB
delta-BHC	NC	NC	NC	NC	NC	0.00053	U	-		0.00042	U	0.00042	U	0.0021	U	-		0.00044	U
gamma-BHC (Lindane)	0.57	2.8	NC	NC	0.0035	0.00053	U	-		0.00042	U	0.00042	U	0.0021	U	-		0.00044	U
alpha-Chlordane	0.27	1.4	NC	NC	1.4	0.00048 <sup>c</sup>	J	-		0.00098		0.0012		0.00063 <sup>c</sup>	J	-		0.00086	
gamma-Chlordane	0.27	1.4	NC	NC	1.4	0.00053	U	-		0.00051		0.00046		0.0021	U	-		0.00044	
Chlordane (alpha and gamma)	0.27	1.4	NC	NC	1.4	0.00048	J	-		0.0015		0.0017		0.00063	J	-		0.0013	
Dieldrin	0.034	0.16	NC	NC	0.024	0.00043	J	-		0.00012 <sup>c</sup>	J	0.00021	J	0.0021	U	-		0.00015 <sup>c</sup>	J
4,4'-DDD	2.3	11	NC	NC	0.47	0.0015		-		0.00079		0.00040 <sup>c</sup>	J	0.00073 <sup>c</sup>	J	-		0.00069	
4,4'-DDE	2	11	NC	NC	0.47	0.0025		-		0.00045 <sup>c</sup>		0.00014 <sup>c</sup>	J	0.0021	U	-		0.00057	
4,4'-DDT	1.9	9.5	NC	NC	0.67	0.0022 <sup>d</sup>		-		0.0011 <sup>c</sup>		0.00053 <sup>c</sup>		0.0013	J	-		0.00044 <sup>c</sup>	
Endrin	19	270	NC	NC	1.6	0.00053	U	-		0.00042	U	0.00042	U	0.0021	U	-		0.00044	U
Endosulfan sulfate	NC	NC	NC	NC	NC	0.00053	U	-		0.00042	U	0.00042	U	0.0021	U	-		0.00044	U
Endrin aldehyde	NC	NC	NC	NC	NC	0.00053	U	-		0.00042	U	0.00042	U	0.0021	U	-		0.00044	U
Endosulfan-I	470	7800	NC	NC	NC	0.00053	U	-		0.00042	U	0.00042	U	0.0021	U	-		0.00044	U
Endosulfan-II	470	7800	NC	NC	NC	0.00053	U	-		0.00042	U	0.00042	U	0.0021	U	-		0.00044	U
Heptachlor	0.15	0.81	NC	NC	0.083	0.00053	U	-		0.00042	U	0.00042	U	0.0021	U	-		0.00044	U
Heptachlor epoxide	0.076	0.4	NC	NC	0.081	0.00035	J	-		0.00018 <sup>c</sup>	J	0.00024 <sup>c</sup>	J	0.0021	U	-		0.00030 <sup>c</sup>	J
Methoxychlor	320	4600	NC	NC	NC	0.00053	U	-		0.00042	U	0.00042	U	0.0021	U	-		0.00044	U
Endrin ketone	NC	NC	NC	NC	NC	0.00053	U	-		0.00042	U	0.00042	U	0.0021	U	-		0.00044	U
Toxaphene	0.49	2.3	NC	NC	6.2	0.0066	U	-		0.0052	U	0.0053	U	0.026	U	-		0.0055	U

**Notes:**

All analytical results for soil in milligrams per kilogram (mg/kg)

ft, bgs= feet below ground surface

All sample depths presented in ft, bgs

<sup>c</sup> More than 40 % RPD for detected concentrations between the two GC columns.

<sup>d</sup> Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.

More than 40% RPD for detected concentrations between the two GC columns.

<sup>e</sup> Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.

B = Indicates analyte found in associated method blank

J = Estimated concentration below laboratory reporting limit

NC = No criteria established for this contaminant

U = Denotes parameters analyzed for but not detected; value shown is the laboratory reporting limit

- = Not Analyzed

Unsaturated soil samples compared to NJDEP's May 2021 Default Migration to Groundwater Soil Remediation Standards

NJ-MGWSRS = New Jersey 2021 Migration to Groundwater Exposure Pathway Soil Remediation Standards Criteria

NJ-NRISRS = New Jersey 2021 Non-Residential Inhalation Exposure Pathway Soil Remediation Standards Criteria

NJ-NRIDSRS = New Jersey 2021 Non-Residential Ingestion-Dermal Exposure Pathway Soil Remediation Standards Criteria

NJ-RISRS = New Jersey 2021 Residential Inhalation Exposure Pathway Soil Remediation Standards Criteria

NJ-RIDSRS = New Jersey 2021 Residential Ingestion-Dermal Exposure Pathway Soil Remediation Standards Criteria

<b><i>Bold and italic</i></b>	Reporting limit exceeds NJDEP's most stringent standard
<b><i>Bold and italic</i></b>	Exceeds the NJDEP MGWSRS/AR-MGWSRS
<b>Bold</b>	Exceeds NJDEP RIDSRS/RISRS
<b><u>Bold and underline</u></b>	Exceeds NJDEP NRIDSRS/NRISRS

**Table - 2**  
**Berm Soil Analytical Results - Pesticides**  
**Ridgewood Village Historic Site**  
**460 West Saddle River Road, Village of Ridgewood, New Jersey**  
**23-1429**

Client Sample ID:	NJ Residential Ingestion-Dermal Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	NJ Non-Residential Ingestion Dermal Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	NJ Residential Inhalation Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	NJ Non-Residential Inhalation Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	NJ Migration to Groundwater Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	SB-8		SB-9		SB-10		SB-11		SB-12		SB-13		SB-14		DUPE 1		DUPE 2	
Lab Sample ID:						JD87833-8	JD87833-9	JD87833-10	JD87833-11	JD87833-12	JD87833-13	JD87833-14	JD87833-15	JD87833-16									
Date Sampled:						5/3/2024	5/3/2024	5/3/2024	5/3/2024	5/3/2024	5/3/2024	5/3/2024	5/3/2024	5/3/2024									
Sample Depth (ft, bgs):						3.0 - 3.5	3.5 - 4.0	3.0 - 3.5	2.5 - 3.0	3.0 - 3.5	3.0 - 3.5	3.0 - 3.5	2.0 - 2.5	2.5 - 3.0									
Saturated (S)/Unsaturated (US):						US	US	US	US	US	US	US	US	US									
Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil														
<b>Pesticides</b>																							
Aldrin	0.041	0.21	NC	NC	0.13	0.00041	U	-		0.00043	U	0.00043	U	0.00043	U	-		0.00042	U	0.00043	U	0.00042	U
alpha-BHC	0.086	0.41	NC	NC	0.0023	0.00041	U	-		0.00043	U	0.00043	U	0.00043	U	-		0.00042	U	0.00043	U	0.00042	U
beta-BHC	0.3	1.4	NC	NC	0.0046	0.00013 <sup>c</sup>	JB	-		0.00015	JB	0.00043	U	0.00043	U	-		0.000090 <sup>c</sup>	JB	0.00013 <sup>c</sup>	JB	0.00042	U
delta-BHC	NC	NC	NC	NC	NC	0.00041	U	-		0.00043	U	0.00043	U	0.00043	U	-		0.00042	U	0.00043	U	0.00042	U
gamma-BHC (Lindane)	0.57	2.8	NC	NC	0.0035	0.00041	U	-		0.00043	U	0.00043	U	0.00043	U	-		0.00042	U	0.00043	U	0.00042	U
alpha-Chlordane	0.27	1.4	NC	NC	1.4	0.00055		-		0.00017 <sup>c</sup>	J	0.00099 <sup>c</sup>		0.00043	U	-		0.0044 <sup>c</sup>		0.00015	J	0.0013	
gamma-Chlordane	0.27	1.4	NC	NC	1.4	0.00021 <sup>c</sup>	J	-		0.00043	U	0.00034 <sup>c</sup>	J	0.00043	U	-		0.0026		0.00043	U	0.00068	
Chlordane (alpha and gamma)	0.27	1.4	NC	NC	1.4	0.00076		-		0.00017	J	0.0013		0.00043	U	-		0.0069		0.00015	J	0.002	
Dieldrin	0.034	0.16	NC	NC	0.024	0.00041	U	-		0.00043	U	0.00043	U	0.00043	U	-		0.00061		0.00043	U	0.00028	J
4,4'-DDD	2.3	11	NC	NC	0.47	0.0005		-		0.00017	J	0.00069		0.00043	U	-		0.004		0.00021 <sup>c</sup>	J	0.00073 <sup>c</sup>	
4,4'-DDE	2	11	NC	NC	0.47	0.00022 <sup>c</sup>	J	-		0.00024	J	0.0055		0.00043	U	-		0.009		0.00043	U	0.0044	
4,4'-DDT	1.9	9.5	NC	NC	0.67	0.00045 <sup>c</sup>		-		0.000090 <sup>c</sup>	J	0.0017 <sup>e</sup>		0.00043	U	-		0.0029 <sup>e</sup>		0.00027 <sup>c</sup>	J	0.00093 <sup>d</sup>	
Endrin	19	270	NC	NC	1.6	0.00041	U	-		0.00043	U	0.00043	U	0.00043	U	-		0.00042	U	0.00043	U	0.00042	U
Endosulfan sulfate	NC	NC	NC	NC	NC	0.00041	U	-		0.00043	U	0.00043	U	0.00043	U	-		0.00042	U	0.00043	U	0.00042	U
Endrin aldehyde	NC	NC	NC	NC	NC	0.00041	U	-		0.00043	U	0.00043	U	0.00043	U	-		0.00042	U	0.00043	U	0.00042	U
Endosulfan-I	470	7800	NC	NC	NC	0.00041	U	-		0.00043	U	0.00043	U	0.00043	U	-		0.00042	U	0.00043	U	0.00042	U
Endosulfan-II	470	7800	NC	NC	NC	0.00041	U	-		0.00043	U	0.00043	U	0.00043	U	-		0.00042	U	0.00043	U	0.00042	U
Heptachlor	0.15	0.81	NC	NC	0.083	0.00041	U	-		0.00043	U	0.00043	U	0.00043	U	-		0.00042	U	0.00043	U	0.00042	U
Heptachlor epoxide	0.076	0.4	NC	NC	0.081	0.00016 <sup>c</sup>	J	-		0.00043	U	0.00043	U	0.00043	U	-		0.00076 <sup>c</sup>		0.00043	U	0.00034	J
Methoxychlor	320	4600	NC	NC	NC	0.00041	U	-		0.00043	U	0.00043	U	0.00043	U	-		0.00042	U	0.00043	U	0.00042	U
Endrin ketone	NC	NC	NC	NC	NC	0.00041	U	-		0.00043	U	0.00043	U	0.00043	U	-		0.00042	U	0.00043	U	0.00042	U
Toxaphene	0.49	2.3	NC	NC	6.2	0.0052	U	-		0.0054	U	0.0054	U	0.0054	U	-		0.0052	U	0.0054	U	0.0052	U

**Notes:**

All analytical results for soil in milligrams per kilogram (mg/kg)

ft, bgs= feet below ground surface

All sample depths presented in ft, bgs

<sup>c</sup> More than 40 % RPD for detected concentrations between the two GC columns.

<sup>d</sup> Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.

More than 40% RPD for detected concentrations between the two GC columns.

<sup>e</sup> Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.

B = Indicates analyte found in associated method blank

J = Estimated concentration below laboratory reporting limit

NC = No criteria established for this contaminant

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Unsaturated soil samples compared to NJDEP's May 2021 Default Migration to Groundwater Soil Remediation Standards

NJ-MGWSRS = New Jersey 2021 Migration to Groundwater Exposure Pathway Soil Remediation Standards Criteria

NJ-NRISRS = New Jersey 2021 Non-Residential Inhalation Exposure Pathway Soil Remediation Standards Criteria

NJ-NRIDSRS = New Jersey 2021 Non-Residential Ingestion-Dermal Exposure Pathway Soil Remediation Standards Criteria

NJ-RISRS = New Jersey 2021 Residential Inhalation Exposure Pathway Soil Remediation Standards Criteria

NJ-RIDSRS = New Jersey 2021 Residential Ingestion-Dermal Exposure Pathway Soil Remediation Standards Criteria

<b><i>Bold and italic</i></b>	Reporting limit exceeds NJDEP's most stringent standard
<b><i>Bold and italic</i></b>	Exceeds the NJDEP MGWSRS/AR-MGWSRS
<b>Bold</b>	Exceeds NJDEP RIDSRS/RISRS
<b><u>Bold and underline</u></b>	Exceeds NJDEP NRIDSRS/NRISRS

**Table - 2**  
**Berm Soil Analytical Results - PCBs and General Chemistry**  
**Ridgewood Village Historic Site**  
**460 West Saddle River Road, Village of Ridgewood, New Jersey**  
**23-1429**

Client Sample ID:	NJ Residential Ingestion-Dermal Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	NJ Non-Residential Ingestion Dermal Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	NJ Residential Inhalation Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	NJ Non-Residential Inhalation Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	NJ Migration to Groundwater Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	SB-1		SB-2		SB-3		SB-4		SB-5		SB-6		SB-7	
Lab Sample ID:						JD87833-1	JD87833-2	JD87833-3	JD87833-4	JD87833-5	JD87833-6	JD87833-7							
Date Sampled:						5/3/2024	5/3/2024	5/3/2024	5/3/2024	5/3/2024	5/3/2024	5/3/2024							
Sample Depth (ft, bgs):						2.0 - 2.5	2.0 - 2.5	2.5 - 3.0	2.5 - 3.0	2.0 - 2.5	2.5 - 3.0	2.0 - 2.5							
Saturated (S)/Unsaturated (US):						US	US	US	US	US	US	US							
Matrix:						Soil	Soil	Soil	Soil	Soil	Soil	Soil							
<b>PCBs</b>																			
Aroclor 1016	0.25	1.1	NC	NC	1.6	0.026	U	-		0.021	U	0.021	U	0.021	U	-		0.022	U
Aroclor 1221	0.25	1.1	NC	NC	1.6	0.026	U	-		0.021	U	0.021	U	0.021	U	-		0.022	U
Aroclor 1232	0.25	1.1	NC	NC	1.6	0.026	U	-		0.021	U	0.021	U	0.021	U	-		0.022	U
Aroclor 1242	0.25	1.1	NC	NC	1.6	0.026	U	-		0.021	U	0.021	U	0.021	U	-		0.022	U
Aroclor 1248	0.25	1.1	NC	NC	1.6	0.026	U	-		0.021	U	0.021	U	0.021	U	-		0.022	U
Aroclor 1254	0.25	1.1	NC	NC	1.6	0.026	U	-		0.021	U	0.021	U	0.021	U	-		0.022	U
Aroclor 1260	0.25	1.1	NC	NC	1.6	0.026	U	-		0.021	U	0.021	U	0.021	U	-		0.022	U
Aroclor 1268	0.25	1.1	NC	NC	1.6	0.026	U	-		0.021	U	0.021	U	0.021	U	-		0.022	U
Aroclor 1262	0.25	1.1	NC	NC	1.6	0.026	U	-		0.021	U	0.021	U	0.021	U	-		0.022	U
<b>General Chemistry</b>																			
Solids, Percent	NC	NC	NC	NC	NC	71.4		89.1		88.5		87.6		89.7		88.8		91.2	

**Notes:**

All analytical results for soil in milligrams per kilogram (mg/kg)

ft, bgs= feet below ground surface

All sample depths presented in ft, bgs

NC = No criteria established for this contaminant

U = Denotes parameters analyzed for but not detected; value shown is the laboratory reporting limit

- = Not Analyzed

PCBs = Polychlorinated Biphenyls

Unsaturated soil samples compared to NJDEP's May 2021 Default Migration to Groundwater Soil Remediation Standards

NJ-MGWSRS = New Jersey 2021 Migration to Groundwater Exposure Pathway Soil Remediation Standards Criteria

NJ-NRISRS = New Jersey 2021 Non-Residential Inhalation Exposure Pathway Soil Remediation Standards Criteria

NJ-NRIDSRS = New Jersey 2021 Non-Residential Ingestion-Dermal Exposure Pathway Soil Remediation Standards Criteria

NJ-RISRS = New Jersey 2021 Residential Inhalation Exposure Pathway Soil Remediation Standards Criteria

NJ-RIDSRS = New Jersey 2021 Residential Ingestion-Dermal Exposure Pathway Soil Remediation Standards Criteria

***Bold and italic*** Reporting limit exceeds NJDEP's most stringent standard

***Bold and italic*** Exceeds the NJDEP MGWSRS/AR-MGWSRS

**Bold** Exceeds NJDEP RIDSRS/RISRS

**Bold and underline** Exceeds NJDEP NRIDSRS/NRISRS

**Table - 2**  
**Berm Soil Analytical Results - PCBs and General Chemistry**  
**Ridgewood Village Historic Site**  
**460 West Saddle River Road, Village of Ridgewood, New Jersey**  
**23-1429**

Client Sample ID:	NJ Residential Ingestion-Dermal Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	NJ Non-Residential Ingestion Dermal Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	NJ Residential Inhalation Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	NJ Non-Residential Inhalation Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	NJ Migration to Groundwater Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	SB-8	SB-9	SB-10	SB-11	SB-12	SB-13	SB-14	DUPE 1	DUPE 2									
Lab Sample ID:						JD87833-8	JD87833-9	JD87833-10	JD87833-11	JD87833-12	JD87833-13	JD87833-14	JD87833-15	JD87833-16									
Date Sampled:						5/3/2024	5/3/2024	5/3/2024	5/3/2024	5/3/2024	5/3/2024	5/3/2024	5/3/2024	5/3/2024									
Sample Depth (ft, bgs):						3.0 - 3.5	3.5 - 4.0	3.0 - 3.5	2.5 - 3.0	3.0 - 3.5	3.0 - 3.5	3.0 - 3.5	2.0 - 2.5	2.5 - 3.0									
Saturated (S)/Unsaturated (US):						US	US	US	US	US	US	US	US	US									
Matrix:						Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil									
<b>PCBs</b>																							
Aroclor 1016	0.25	1.1	NC	NC	1.6	0.021	U	-	0.022	U	0.022	U	0.022	U	-	0.021	U	0.022	U	0.021	U		
Aroclor 1221	0.25	1.1	NC	NC	1.6	0.021	U	-	0.022	U	0.022	U	0.022	U	-	0.021	U	0.022	U	0.021	U		
Aroclor 1232	0.25	1.1	NC	NC	1.6	0.021	U	-	0.022	U	0.022	U	0.022	U	-	0.021	U	0.022	U	0.021	U		
Aroclor 1242	0.25	1.1	NC	NC	1.6	0.021	U	-	0.022	U	0.022	U	0.022	U	-	0.021	U	0.022	U	0.021	U		
Aroclor 1248	0.25	1.1	NC	NC	1.6	0.021	U	-	0.022	U	0.022	U	0.022	U	-	0.021	U	0.022	U	0.021	U		
Aroclor 1254	0.25	1.1	NC	NC	1.6	0.021	U	-	0.022	U	0.022	U	0.022	U	-	0.021	U	0.022	U	0.021	U		
Aroclor 1260	0.25	1.1	NC	NC	1.6	0.021	U	-	0.022	U	0.022	U	0.022	U	-	0.021	U	0.022	U	0.021	U		
Aroclor 1268	0.25	1.1	NC	NC	1.6	0.021	U	-	0.022	U	0.022	U	0.022	U	-	0.021	U	0.022	U	0.021	U		
Aroclor 1262	0.25	1.1	NC	NC	1.6	0.021	U	-	0.022	U	0.022	U	0.022	U	-	0.021	U	0.022	U	0.021	U		
<b>General Chemistry</b>																							
Solids, Percent	NC	NC	NC	NC	NC	91.1		81.5		84.2		87.7		85.7		85.7		90.7		90.9		91.8	

**Notes:**  
All analytical results for soil in milligrams per kilogram (mg/kg)  
ft, bgs= feet below ground surface  
All sample depths presented in ft, bgs  
NC = No criteria established for this contaminant  
U = Denotes parameters analyzed for but not detected; value shown is the laboratory reporting limit  
- = Not Analyzed  
PCBs = Polychlorinated Biphenyls  
Unsaturated soil samples compared to NJDEP's May 2021 Default Migration to Groundwater Soil Remediation Standards  
NJ-MGWSRS = New Jersey 2021 Migration to Groundwater Exposure Pathway Soil Remediation Standards Criteria  
NJ-NRISRS = New Jersey 2021 Non-Residential Inhalation Exposure Pathway Soil Remediation Standards Criteria  
NJ-NRIDSRS = New Jersey 2021 Non-Residential Ingestion-Dermal Exposure Pathway Soil Remediation Standards Criteria  
NJ-RISRS = New Jersey 2021 Residential Inhalation Exposure Pathway Soil Remediation Standards Criteria  
NJ-RIDSRS = New Jersey 2021 Residential Ingestion-Dermal Exposure Pathway Soil Remediation Standards Criteria

<b><i>Bold and italic</i></b>	Reporting limit exceeds NJDEP's most stringent standard
<b><i>Bold and italic</i></b>	Exceeds the NJDEP MGWSRS/AR-MGWSRS
<b>Bold</b>	Exceeds NJDEP RIDSRS/RISRS
<b><u>Bold and underline</u></b>	Exceeds NJDEP NRIDSRS/NRISRS



**Table - 2**  
**Berm Soil Analytical Results - Metals**  
**Ridgewood Village Historic Site**  
**460 West Saddle River Road, Village of Ridgewood, New Jersey**  
**23-1429**

Client Sample ID:	NJ Residential Ingestion-Dermal Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	NJ Non-Residential Ingestion Dermal Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	NJ Residential Inhalation Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	NJ Non-Residential Inhalation Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	NJ Migration to Groundwater Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	SB-1	SB-2	SB-3	SB-4	SB-5	SB-6	SB-7							
Lab Sample ID:						JD87833-1	JD87833-2	JD87833-3	JD87833-4	JD87833-5	JD87833-6	JD87833-7							
Date Sampled:						5/3/2024	5/3/2024	5/3/2024	5/3/2024	5/3/2024	5/3/2024	5/3/2024							
Sample Depth (ft, bgs):						2.0 - 2.5	2.0 - 2.5	2.5 - 3.0	2.5 - 3.0	2.0 - 2.5	2.5 - 3.0	2.0 - 2.5							
Saturated (S)/Unsaturated (US):						US	US	US	US	US	US	US							
Matrix:						Soil	Soil	Soil	Soil	Soil	Soil	Soil							
<b>Metals</b>																			
Aluminum	78000	NC	NC	NC	NC	11000		5830		7040		6940		7830		7860		8010	
Antimony	31	520	NC	NC	5.4	2.7	U	2.2	U	2.2	U	2.2	U	2.3	U	2.3	U	2.3	U
Arsenic	19	19	1100	5200	19	5.1		2.4		2.4		2.4		2.4		2.5		2.7	
Barium	16000	260000	870000	NC	2100	53.6		24.2		28.8		25.8		29.2		29.8		33.7	
Beryllium	160	2600	2000	9300	0.7	0.4		0.24		0.28		0.27		0.3		0.29		0.31	
Cadmium	71	1100	2600	12000	1.9	0.69	U	0.54	U	0.56	U	0.56	U	0.57	U	0.56	U	0.58	U
Calcium	NC	NC	NC	NC	NC	3000		1240		1560		1220		1450		1530		1710	
Chromium	NC	NC	NC	NC	NC	18		8.7		9.4		8.6		9.8		16		9.7	
Cobalt	23	390	520	2500	90	6.9	U	5.4	U	5.6	U	5.6	U	5.7	U	5.6	U	5.8	U
Copper	3100	52000	NC	NC	910	18.4		7.5		9.3		8.3		9.1		60.6		10.2	
Iron	NC	NC	NC	NC	NC	15600		10200		11400		10900		11900		12400		12500	
Lead	400	800	NC	NC	*169	169		13.7		13.1		17.2		9.8		13.6		13.1	
Magnesium	NC	NC	NC	NC	NC	2070		1340		1600		1510		1880		2740		1860	
Manganese	1900	31000	87000	400000	NC	333		164		226		178		213		200		255	
Mercury	23	390	520000	NC	*0.29	0.29		0.054		0.032	U	0.029	U	0.029	U	0.029	U	0.032	U
Nickel	1600	26000	20000	93000	48	12.6		6.6		7.9		7.2		8.5		9.7		8.6	
Potassium	NC	NC	NC	NC	NC	1400	U	1100	U	1100	U	1100	U	1100	U	1100	U	1200	U
Selenium	390	6500	NC	NC	11	2.7	U	2.2	U	2.2	U	2.2	U	2.3	U	2.3	U	2.3	U
Silver	390	6500	NC	NC	0.5	0.69	U	0.54	U	0.56	U	0.56	U	0.57	U	0.56	U	0.58	U
Sodium	NC	NC	NC	NC	NC	1400	U	1100	U	1100	U	1100	U	1100	U	1100	U	1200	U
Thallium	NC	NC	NC	NC	NC	1.4	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.2	U
Vanadium	390	6500	170000	800000	NC	32.1		16.9		20.2		18.7		18.7		20.8		20.5	
Zinc	23000	390000	NC	NC	930	74.8		26.9		29		26.9		27.3		30.4		30	

**Notes:**  
All analytical results for soil in milligrams per kilogram (mg/kg)  
Site Specific Migration to Groundwater Soil Remediation Standard (MGWSRS) was calculated for lead and mercury using NJDEP's SPLP Spreadsheet, V1.0, May 2021.  
ft, bgs= feet below ground surface  
All sample depths presented in ft, bgs  
NC = No criteria established for this contaminant  
U = Denotes parameters analyzed for but not detected; value shown is the laboratory reporting limit  
- = Not Analyzed  
Unsaturated soil samples compared to MGWSRS/AR-MGWSRS  
\* = AR-MGWSRS utilized as standard  
AR-MGWSRS = Alternative Remediation - Migration to Groundwater Soil Remediation Standard  
NJ-MGWSRS = New Jersey 2021 Migration to Groundwater Exposure Pathway Soil Remediation Standards Criteria  
NJ-NRISRS = New Jersey 2021 Non-Residential Inhalation Exposure Pathway Soil Remediation Standards Criteria  
NJ-NRIDSRS = New Jersey 2021 Non-Residential Ingestion-Dermal Exposure Pathway Soil Remediation Standards Criteria  
NJ-RISRS = New Jersey 2021 Residential Inhalation Exposure Pathway Soil Remediation Standards Criteria  
NJ-RIDSRS = New Jersey 2021 Residential Ingestion-Dermal Exposure Pathway Soil Remediation Standards Criteria

<b>Bold and italic</b>	Reporting limit exceeds NJDEP's most stringent standard
<b>Bold and italic</b>	Exceeds the NJDEP MGWSRS/AR-MGWSRS
<b>Bold</b>	Exceeds NJDEP RIDSRS/RISRS
<b>Bold and underline</b>	Exceeds NJDEP NRIDSRS/NRISRS

**Table - 2**  
**Berm Soil Analytical Results - Metals**  
**Ridgewood Village Historic Site**  
**460 West Saddle River Road, Village of Ridgewood, New Jersey**  
**23-1429**

Client Sample ID:	NJ Residential Ingestion-Dermal Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	NJ Non-Residential Ingestion Dermal Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	NJ Residential Inhalation Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	NJ Non-Residential Inhalation Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	NJ Migration to Groundwater Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	SB-8	SB-9	SB-10	SB-11	SB-12	SB-13	SB-14	DUPE 1	DUPE 2											
Lab Sample ID:						JD87833-8	JD87833-9	JD87833-10	JD87833-11	JD87833-12	JD87833-13	JD87833-14	JD87833-15	JD87833-16											
Date Sampled:						5/3/2024	5/3/2024	5/3/2024	5/3/2024	5/3/2024	5/3/2024	5/3/2024	5/3/2024	5/3/2024											
Sample Depth (ft, bgs):						3.0 - 3.5	3.5 - 4.0	3.0 - 3.5	2.5 - 3.0	3.0 - 3.5	3.0 - 3.5	3.0 - 3.5	2.0 - 2.5	2.5 - 3.0											
Saturated (S)/Unsaturated (US):						US	US	US	US	US	US	US	US	US											
Matrix:						Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil											
<b>Metals</b>																									
Aluminum	78000	NC	NC	NC	NC	6880		11300		14000		8260		16600		18600		7700		7590		7630			
Antimony	31	520	NC	NC	5.4	2.2	U	2.5	U	2.3	U	2.3	U	2.4	U	2.3	U	2.1	U	2.3	U	2.1	U		
Arsenic	19	19	1100	5200	19	2.6		4.8		4.3		3		5.1		5.4		3.8		2.5		3.2			
Barium	16000	260000	870000	NC	2100	24.1		54.4		37.8		36.3		46.4		45.8		33		24.8		31.3			
Beryllium	160	2600	2000	9300	0.7	0.29		0.43		0.45		0.35		0.58		0.5		0.29		0.29		0.3			
Cadmium	71	1100	2600	12000	1.9	0.55	U	0.63	U	0.58	U	0.57	U	0.6	U	0.57	U	0.54	U	0.58	U	0.53	U		
Calcium	NC	NC	NC	NC	NC	1120		1760		817		1840		600	U	905		1770		942		2440			
Chromium	NC	NC	NC	NC	NC	8.5		14.2		13.8		11.9		15.6		18.9		10.2		8.9		10.9			
Cobalt	23	390	520	2500	90	5.5	U	6.3	U	5.8	U	5.7	U	6	U	5.7		5.4	U	5.8	U	5.3	U		
Copper	3100	52000	NC	NC	910	7.9		15.8		6.8		12.9		7.6		8.6		10.9		8		9.5			
Iron	NC	NC	NC	NC	NC	11000		14200		14500		13500		17000		20200		11200		10600		10500			
Lead	400	800	NC	NC	*169	10.2		71.1		17.7		28.9		21.1		16		26.5		58.7		30.2			
Magnesium	NC	NC	NC	NC	NC	1590		1920		1770		1870		2110		2680		1640		1440		1550			
Manganese	1900	31000	87000	400000	NC	197		314		201		225		391		257		225		144		211			
Mercury	23	390	520000	NC	*0.29	0.035	U	0.19		0.041		0.065		0.072		0.036		0.17		0.03	U	0.15			
Nickel	1600	26000	20000	93000	48	7.6		11.3		10.5		9.1		12.3		13.5		8.1		7.7		7.6			
Potassium	NC	NC	NC	NC	NC	1100	U	1300	U	1200	U	1100	U	1200	U	1100	U	1100	U	1100	U	1200	U	1100	U
Selenium	390	6500	NC	NC	11	2.2	U	2.5	U	2.3	U	2.3	U	2.4	U	2.3	U	2.1	U	2.3	U	2.1	U		
Silver	390	6500	NC	NC	0.5	0.55	U	0.63	U	0.58	U	0.57	U	0.6	U	0.57	U	0.54	U	0.58	U	0.53	U		
Sodium	NC	NC	NC	NC	NC	1100	U	1300	U	1200	U	1100	U	1200	U	1100	U	1100	U	1200	U	1100	U		
Thallium	NC	NC	NC	NC	NC	1.1	U	1.3	U	1.2	U	1.1	U	1.2	U	1.1	U	1.1	U	1.2	U	1.1	U		
Vanadium	390	6500	170000	800000	NC	16.9		25.2		22.6		20.5		25.8		31.5		17.8		21.9		17.4			
Zinc	23000	390000	NC	NC	930	25.8		67.5		35.2		47.2		43		44		42.3		28.7		36.3			

**Notes:**  
All analytical results for soil in milligrams per kilogram (mg/kg)  
Site Specific Migration to Groundwater Soil Remediation Standard (MGWSRS) was calculated for lead and mercury using NJDEP's SPLP Spreadsheet, V1.0, May 2021.  
ft, bgs= feet below ground surface  
All sample depths presented in ft, bgs  
NC = No criteria established for this contaminant  
U = Denotes parameters analyzed for but not detected; value shown is the laboratory reporting limit  
- = Not Analyzed  
Unsaturated soil samples compared to MGWSRS/AR-MGWSRS  
\* = AR-MGWSRS utilized as standard  
AR-MGWSRS = Alternative Remediation - Migration to Groundwater Soil Remediation Standard  
NJ-MGWSRS = New Jersey 2021 Migration to Groundwater Exposure Pathway Soil Remediation Standards Criteria  
NJ-NRISRS = New Jersey 2021 Non-Residential Inhalation Exposure Pathway Soil Remediation Standards Criteria  
NJ-NRIDSRS = New Jersey 2021 Non-Residential Ingestion-Dermal Exposure Pathway Soil Remediation Standards Criteria  
NJ-RISRS = New Jersey 2021 Residential Inhalation Exposure Pathway Soil Remediation Standards Criteria  
NJ-RIDSRS = New Jersey 2021 Residential Ingestion-Dermal Exposure Pathway Soil Remediation Standards Criteria

<b><i>Bold and italic</i></b>	Reporting limit exceeds NJDEP's most stringent standard
<b><i>Bold and italic</i></b>	Exceeds the NJDEP MGWSRS/AR-MGWSRS
<b>Bold</b>	Exceeds NJDEP RIDSRS/RISRS
<b><u>Bold and underline</u></b>	Exceeds NJDEP NRIDSRS/NRISRS

**Table - 2**  
**Berm Soil Analytical Results - SPLP**  
**Ridgewood Village Historic Site**  
**460 West Saddle River Road, Village of Ridgewood, New Jersey**  
**23-1429**

Client Sample ID:	Leachate Remediation Standard Migration to GW Exp. Path (NJAC 7:26D 5/21)	SB-1	SB-4	SB-5	SB-6	SB-9	SB-11	SB-14	DUPE 1		
Lab Sample ID:		JD87833-1	JD87833-4	JD87833-5	JD87833-6	JD87833-9	JD87833-11	JD87833-14	JD87833-15		
Date Sampled:		5/3/2024	5/3/2024	5/3/2024	5/3/2024	5/3/2024	5/3/2024	5/3/2024	5/3/2024		
Sample Depth (ft, bgs):		2.0 - 2.5	2.5 - 3.0	2.0 - 2.5	2.5 - 3.0	3.5 - 4.0	2.5 - 3.0	3.0 - 3.5	2.0 - 2.5		
Saturated (S)/Unsaturated (US):		US	US	US	US	US	US	US	US		
Matrix:		Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil		
<b>SVOCs</b>											
Benzo(a)anthracene	2	-	0.0785	J	0.0483	J	0.104	-	-	-	0.153
<b>Metals</b>											
Lead	100	50	U	-	-	-	50	U	50	U	-
Mercury	40	0.0002	U	-	-	-	0.0002	U	-	0.2	U
<b>General Chemistry</b>											
pH, SPLP Leachate (su)	NC	9.38	9.49	8.91	9.53	10.02	9.65	6.8	8.15		
Volume, SPLP Leachate (L)	NC	2.013	2.002	3.005	2.016	2.002	2	2.006	2.002		
Weight, SPLP Leachate (kg)	NC	0.1006	0.1001	0.1002	0.1008	0.1001	0.1	0.1003	0.1001		
Dry Weight, SPLP Leachate (kg)	NC	0.07185	0.08771	0.08991	0.08951	0.08158	0.0877	0.09097	0.09099		

**Notes:**

All analytical results for soil in micrograms per liter (ug/L)

ft, bgs= feet below ground surface

All sample depths presented in ft, bgs

SPLP = Synthetic Precipitation Leachate Procedure

J = Estimated concentration below laboratory reporting limit

NC = No criteria established for this contaminant

U = Denotes parameters analyzed for but not detected; value shown is the laboratory reporting limit

- = Not Analyzed

SVOCs = Semi-Volatile Organic Compounds

<b><i>Bold and italic</i></b>	Reporting limit exceeds NJDEP's most stringent standard
<b><i>Bold and italic</i></b>	Exceeds the NJDEP Leachate MGWSRS

**Table - 2**  
**Berm Soil Analytical Results - Field Blank SVOCs**  
**Ridgewood Village Historic Site**  
**460 West Saddle River Road, Village of Ridgewood, New Jersey**  
**23-1429**

Client Sample ID: Lab Sample ID: Date Sampled: Dilution Factor: Matrix:	NJ Residential Ingestion-Dermal Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	NJ Non-Residential Ingestion Dermal Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	NJ Residential Inhalation Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	NJ Non-Residential Inhalation Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	NJ Migration to Groundwater Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	FIELD BLANK		FIELD BLANK	
						JD87833-17		JD87833-17R	
						5/3/2024		5/3/2024	
						1		1	
						Field Blank	Field Blank		
<b>SVOCs</b>									
2-Chlorophenol	NC	NC	NC	NC	NC	5	U	-	
4-Chloro-3-methyl phenol	NC	NC	NC	NC	NC	5	U	-	
2,4-Dichlorophenol	NC	NC	NC	NC	NC	2	U	-	
2,4-Dimethylphenol	NC	NC	NC	NC	NC	5	U	-	
2,4-Dinitrophenol	NC	NC	NC	NC	NC	5.0 <sup>a</sup>	U	-	
4,6-Dinitro-o-cresol	NC	NC	NC	NC	NC	5.0 <sup>a</sup>	U	-	
2-Methylphenol	NC	NC	NC	NC	NC	2	U	-	
3&4-Methylphenol	NC	NC	NC	NC	NC	2	U	-	
2-Nitrophenol	NC	NC	NC	NC	NC	5.0 <sup>a</sup>	U	-	
4-Nitrophenol	NC	NC	NC	NC	NC	10	U	-	
Pentachlorophenol	NC	NC	NC	NC	NC	4.0 <sup>a</sup>	U	-	
Phenol	NC	NC	NC	NC	NC	2	U	-	
2,3,4,6-Tetrachlorophenol	NC	NC	NC	NC	NC	5.0 <sup>a</sup>	U	-	
2,4,5-Trichlorophenol	NC	NC	NC	NC	NC	5	U	-	
2,4,6-Trichlorophenol	NC	NC	NC	NC	NC	5	U	-	
Acenaphthene	NC	NC	NC	NC	NC	1	U	-	
Acenaphthylene	NC	NC	NC	NC	NC	1	U	-	
Acetophenone	NC	NC	NC	NC	NC	2	U	-	
Anthracene	NC	NC	NC	NC	NC	1	U	-	
Atrazine	NC	NC	NC	NC	NC	2	U	-	
Benzo(a)anthracene	NC	NC	NC	NC	NC	5	U	-	
Benzo(a)pyrene	NC	NC	NC	NC	NC	1	U	-	
Benzo(b)fluoranthene	NC	NC	NC	NC	NC	1	U	-	
Benzo(g,h,i)perylene	NC	NC	NC	NC	NC	1	U	-	
Benzo(k)fluoranthene	NC	NC	NC	NC	NC	1	U	-	
4-Bromophenyl phenyl ether	NC	NC	NC	NC	NC	1	U	-	
Butyl benzyl phthalate	NC	NC	NC	NC	NC	2	U	-	
1,1'-Biphenyl	NC	NC	NC	NC	NC	2.0 <sup>a</sup>	U	-	
Benzaldehyde	NC	NC	NC	NC	NC	1	U	-	
2-Chloronaphthalene	NC	NC	NC	NC	NC	2	U	-	
4-Chloroaniline	NC	NC	NC	NC	NC	5	U	-	
Carbazole	NC	NC	NC	NC	NC	1	U	-	
Caprolactam	NC	NC	NC	NC	NC	2	U	-	
Chrysene	NC	NC	NC	NC	NC	1	U	-	
bis(2-Chloroethoxy)methane	NC	NC	NC	NC	NC	2	U	-	
bis(2-Chloroethyl)ether	NC	NC	NC	NC	NC	2	U	-	
2,2'-Oxybis(1-chloropropane)	NC	NC	NC	NC	NC	2	U	-	
4-Chlorophenyl phenyl ether	NC	NC	NC	NC	NC	2	U	-	
2,4-Dinitrotoluene	NC	NC	NC	NC	NC	1	U	-	
2,6-Dinitrotoluene	NC	NC	NC	NC	NC	1	U	-	
3,3'-Dichlorobenzidine	NC	NC	NC	NC	NC	2.0 <sup>a</sup>	U	-	
1,4-Dioxane	NC	NC	NC	NC	NC	1	U	-	
Dibenzo(a,h)anthracene	NC	NC	NC	NC	NC	1	U	-	
Dibenzofuran	NC	NC	NC	NC	NC	5	U	-	
Di-n-butyl phthalate	NC	NC	NC	NC	NC	2	U	-	
Di-n-octyl phthalate	NC	NC	NC	NC	NC	2.0 <sup>a</sup>	U	-	
Diethyl phthalate	NC	NC	NC	NC	NC	2	U	-	
Dimethyl phthalate	NC	NC	NC	NC	NC	2	U	-	
bis(2-Ethylhexyl)phthalate	NC	NC	NC	NC	NC	2	U	-	
Fluoranthene	NC	NC	NC	NC	NC	1	U	-	
Fluorene	NC	NC	NC	NC	NC	1	U	-	
Hexachlorobenzene	NC	NC	NC	NC	NC	1	U	-	
Hexachlorobutadiene	NC	NC	NC	NC	NC	1	U	-	
Hexachlorocyclopentadiene	NC	NC	NC	NC	NC	10	U	-	
Hexachloroethane	NC	NC	NC	NC	NC	2	U	-	
Indeno(1,2,3-cd)pyrene	NC	NC	NC	NC	NC	1	U	-	
Isophorone	NC	NC	NC	NC	NC	2	U	-	
2-Methylnaphthalene	NC	NC	NC	NC	NC	1	U	-	
2-Nitroaniline	NC	NC	NC	NC	NC	5	U	-	
3-Nitroaniline	NC	NC	NC	NC	NC	5	U	-	
4-Nitroaniline	NC	NC	NC	NC	NC	5	U	-	
Naphthalene	NC	NC	NC	NC	NC	1	U	-	
Nitrobenzene	NC	NC	NC	NC	NC	2	U	-	
N-Nitroso-di-n-propylamine	NC	NC	NC	NC	NC	2	U	-	
N-Nitrosodiphenylamine	NC	NC	NC	NC	NC	5	U	-	
Phenanthrene	NC	NC	NC	NC	NC	1	U	-	
Pyrene	NC	NC	NC	NC	NC	1	U	-	
1,2,4,5-Tetrachlorobenzene	NC	NC	NC	NC	NC	2	U	-	
Total TIC, Semi-Volatile	NC	NC	NC	NC	NC	7.8	J	-	

**Notes:**  
All analytical results for field blank in micrograms per liter (ug/L)  
<sup>a</sup> Associated CCV outside of control limits high, sample was ND.  
J = Estimated concentration below laboratory reporting limit  
NC = No criteria established for this contaminant  
U = Denotes parameters analyzed for but not detected; value shown is the laboratory reporting limit  
- = Not Analyzed  
SVOCs = Semi-Volatile Organic Compounds  
Unsaturated soil samples compared to NJDEP's May 2021 Default Migration to Groundwater Soil Remediation Standards  
NJ-MGWSRS = New Jersey 2021 Migration to Groundwater Exposure Pathway Soil Remediation Standards Criteria  
NJ-NRISRS = New Jersey 2021 Non-Residential Inhalation Exposure Pathway Soil Remediation Standards Criteria  
NJ-NRIDSRS = New Jersey 2021 Non-Residential Ingestion-Dermal Exposure Pathway Soil Remediation Standards Criteria  
NJ-RISRS = New Jersey 2021 Residential Inhalation Exposure Pathway Soil Remediation Standards Criteria  
NJ-RIDSRS = New Jersey 2021 Residential Ingestion-Dermal Exposure Pathway Soil Remediation Standards Criteria

<b>Bold and italic</b>	Reporting limit exceeds NJDEP's most stringent standard
<b>Bold and italic</b>	Exceeds the NJDEP MGWSRS/AR-MGWSRS
<b>Bold</b>	Exceeds NJDEP RIDSRS/RISRS
<b>Bold and underline</b>	Exceeds NJDEP NRIDSRS/NRISRS

**Table - 2**  
**Berm Soil Analytical Results - Field Blank Pesticides**  
**Ridgewood Village Historic Site**  
**460 West Saddle River Road, Village of Ridgewood, New Jersey**  
**23-1429**

Client Sample ID: Lab Sample ID: Date Sampled: Dilution Factor: Matrix:	NJ Residential Ingestion-Dermal Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	NJ Non-Residential Ingestion Dermal Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	NJ Residential Inhalation Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	NJ Non-Residential Inhalation Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	NJ Migration to Groundwater Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	FIELD BLANK		FIELD BLANK	
						JD87833-17		JD87833-17R	
						5/3/2024		5/3/2024	
						1		1	
						Field Blank		Field Blank	
<b>Pesticides</b>									
Aldrin	NC	NC	NC	NC	NC	0.008	U	0.0067	U
alpha-BHC	NC	NC	NC	NC	NC	0.008	U	0.0067	U
beta-BHC	NC	NC	NC	NC	NC	0.008	U	0.0067	U
delta-BHC	NC	NC	NC	NC	NC	0.008	U	0.0067	U
gamma-BHC (Lindane)	NC	NC	NC	NC	NC	0.008	U	0.0067	U
alpha-Chlordane	NC	NC	NC	NC	NC	0.008	U	0.0067	U
gamma-Chlordane	NC	NC	NC	NC	NC	0.008	U	0.0067	U
Chlordane (alpha and gamma)	NC	NC	NC	NC	NC	0.008	U	0.0067	U
Dieldrin	NC	NC	NC	NC	NC	0.008	U	0.0067	U
4,4'-DDD	NC	NC	NC	NC	NC	0.008	U	0.0067	U
4,4'-DDE	NC	NC	NC	NC	NC	0.008	U	0.0067	U
4,4'-DDT	NC	NC	NC	NC	NC	0.02	B	0.0048	J
Endrin	NC	NC	NC	NC	NC	0.008	U	0.0067	U
Endosulfan sulfate	NC	NC	NC	NC	NC	0.008	U	0.0067	U
Endrin aldehyde	NC	NC	NC	NC	NC	0.008	U	0.0067	U
Endrin ketone	NC	NC	NC	NC	NC	0.008	U	0.0067	U
Endosulfan-I	NC	NC	NC	NC	NC	0.008	U	0.0067	U
Endosulfan-II	NC	NC	NC	NC	NC	0.008	U	0.0067	U
Heptachlor	NC	NC	NC	NC	NC	0.008	U	0.0067	U
Heptachlor epoxide	NC	NC	NC	NC	NC	0.008	U	0.0067	U
Methoxychlor	NC	NC	NC	NC	NC	0.016	U	0.013	U
Toxaphene	NC	NC	NC	NC	NC	0.2	U	0.17	U

**Notes:**

All analytical results for field blank in micrograms per liter (ug/L)

B = Indicates analyte found in associated method blank

J = Estimated concentration below laboratory reporting limit

NC = No criteria established for this contaminant

U = Denotes parameters analyzed for but not detected; value shown is the laboratory reporting limit

- = Not Analyzed

Unsaturated soil samples compared to NJDEP's May 2021 Default Migration to Groundwater Soil Remediation Standards

NJ-MGWSRS = New Jersey 2021 Migration to Groundwater Exposure Pathway Soil Remediation Standards Criteria

NJ-NRISRS = New Jersey 2021 Non-Residential Inhalation Exposure Pathway Soil Remediation Standards Criteria

NJ-NRIDSRS = New Jersey 2021 Non-Residential Ingestion-Dermal Exposure Pathway Soil Remediation Standards Criteria

NJ-RISRS = New Jersey 2021 Residential Inhalation Exposure Pathway Soil Remediation Standards Criteria

NJ-RIDSRS = New Jersey 2021 Residential Ingestion-Dermal Exposure Pathway Soil Remediation Standards Criteria

**Bold and italic** Reporting limit exceeds NJDEP's most stringent standard

**Bold and italic** Exceeds the NJDEP MGWSRS/AR-MGWSRS

**Bold** Exceeds NJDEP RIDSRS/RISRS

**Bold and underline** Exceeds NJDEP NRIDSRS/NRISRS

**Table - 2**  
**Berm Soil Analytical Results - Field Blank PCBs General Chemistry**  
**Ridgewood Village Historic Site**  
**460 West Saddle River Road, Village of Ridgewood, New Jersey**  
**23-1429**

Client Sample ID:	NJ Residential Ingestion-Dermal Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	NJ Non-Residential Ingestion Dermal Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	NJ Residential Inhalation Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	NJ Non-Residential Inhalation Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	NJ Migration to Groundwater Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	FIELD BLANK		FIELD BLANK	
Lab Sample ID:						JD87833-17		JD87833-17R	
Date Sampled:						5/3/2024		5/3/2024	
Dilution Factor:						1		1	
Matrix:						Field Blank		Field Blank	
<b>PCBs</b>									
Aroclor 1016	NC	NC	NC	NC	NC	0.4	U	-	
Aroclor 1221	NC	NC	NC	NC	NC	0.4	U	-	
Aroclor 1232	NC	NC	NC	NC	NC	0.4	U	-	
Aroclor 1242	NC	NC	NC	NC	NC	0.4	U	-	
Aroclor 1248	NC	NC	NC	NC	NC	0.4	U	-	
Aroclor 1254	NC	NC	NC	NC	NC	0.4	U	-	
Aroclor 1260	NC	NC	NC	NC	NC	0.40 <sup>a</sup>	U	-	
Aroclor 1268	NC	NC	NC	NC	NC	0.4	U	-	
Aroclor 1262	NC	NC	NC	NC	NC	0.4	U	-	
<b>General Chemistry</b>									
Solids, Percent	NC	NC	NC	NC	NC	-		-	

**Notes:**

All analytical results for field blank in micrograms per liter (ug/L)

<sup>a</sup> Associated CCV outside of control limits high, sample was ND.

NC = No criteria established for this contaminant

U = Denotes parameters analyzed for but not detected; value shown is the laboratory reporting limit

- = Not Analyzed

PCBs = Polychlorinated Biphenyls

Unsaturated soil samples compared to NJDEP's May 2021 Default Migration to Groundwater Soil Remediation Standards

NJ-MGWSRS = New Jersey 2021 Migration to Groundwater Exposure Pathway Soil Remediation Standards Criteria

NJ-NRISRS = New Jersey 2021 Non-Residential Inhalation Exposure Pathway Soil Remediation Standards Criteria

NJ-NRIDSRS = New Jersey 2021 Non-Residential Ingestion-Dermal Exposure Pathway Soil Remediation Standards Criteria

NJ-RISRS = New Jersey 2021 Residential Inhalation Exposure Pathway Soil Remediation Standards Criteria

NJ-RIDSRS = New Jersey 2021 Residential Ingestion-Dermal Exposure Pathway Soil Remediation Standards Criteria

***Bold and italic*** Reporting limit exceeds NJDEP's most stringent standard

***Bold and italic*** Exceeds the NJDEP MGWSRS/AR-MGWSRS

**Bold** Exceeds NJDEP RIDSRS/RISRS

**Bold and underline** Exceeds NJDEP NRIDSRS/NRISRS

**Table - 2**  
**Berm Soil Analytical Results - Field Blank Metals**  
**Ridgewood Village Historic Site**  
**460 West Saddle River Road, Village of Ridgewood, New Jersey**  
**23-1429**

Client Sample ID:	NJ Residential Ingestion-Dermal Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	NJ Non-Residential Ingestion Dermal Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	NJ Residential Inhalation Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	NJ Non-Residential Inhalation Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	NJ Migration to Groundwater Exposure Pathway Soil Remediation Standards Criteria (NJAC 7:26D 5/21)	FIELD BLANK		
Lab Sample ID:						JD87833-17	JD87833-17R	
Date Sampled:						5/3/2024	5/3/2024	
Dilution Factor:						1	1	
Matrix:						Field Blank	Field Blank	
<b>Metals</b>								
Aluminum	NC	NC	NC	NC	NC	200	U	-
Antimony	NC	NC	NC	NC	NC	6	U	-
Arsenic	NC	NC	NC	NC	NC	3	U	-
Barium	NC	NC	NC	NC	NC	200	U	-
Beryllium	NC	NC	NC	NC	NC	1	U	-
Cadmium	NC	NC	NC	NC	NC	3	U	-
Calcium	NC	NC	NC	NC	NC	5000	U	-
Chromium	NC	NC	NC	NC	NC	10	U	-
Cobalt	NC	NC	NC	NC	NC	50	U	-
Copper	NC	NC	NC	NC	NC	10	U	-
Iron	NC	NC	NC	NC	NC	100	U	-
Lead	NC	NC	NC	NC	NC	3	U	-
Magnesium	NC	NC	NC	NC	NC	5000	U	-
Manganese	NC	NC	NC	NC	NC	15	U	-
Mercury	NC	NC	NC	NC	NC	0.2	U	-
Nickel	NC	NC	NC	NC	NC	10	U	-
Potassium	NC	NC	NC	NC	NC	10000	U	-
Selenium	NC	NC	NC	NC	NC	10	U	-
Silver	NC	NC	NC	NC	NC	10	U	-
Sodium	NC	NC	NC	NC	NC	10000	U	-
Thallium	NC	NC	NC	NC	NC	10	U	-
Vanadium	NC	NC	NC	NC	NC	50	U	-
Zinc	NC	NC	NC	NC	NC	20	U	-

**Notes:**

All analytical results for field blank in micrograms per liter (ug/L)

NC = No criteria established for this contaminant

U = Denotes parameters analyzed for but not detected; value shown is the laboratory reporting limit

- = Not Analyzed

Unsaturated soil samples compared to NJDEP's May 2021 Default Migration to Groundwater Soil Remediation Standards

NJ-MGWSRS = New Jersey 2021 Migration to Groundwater Exposure Pathway Soil Remediation Standards Criteria

NJ-NRISRS = New Jersey 2021 Non-Residential Inhalation Exposure Pathway Soil Remediation Standards Criteria

NJ-NRIDSRS = New Jersey 2021 Non-Residential Ingestion-Dermal Exposure Pathway Soil Remediation Standards Criteria

NJ-RISRS = New Jersey 2021 Residential Inhalation Exposure Pathway Soil Remediation Standards Criteria

NJ-RIDSRS = New Jersey 2021 Residential Ingestion-Dermal Exposure Pathway Soil Remediation Standards Criteria

***Bold and italic*** Reporting limit exceeds NJDEP's most stringent standard

***Bold and italic*** Exceeds the NJDEP MGWSRS/AR-MGWSRS

**Bold** Exceeds NJDEP RIDSRS/RISRS

**Bold and underline** Exceeds NJDEP NRIDSRS/NRISRS

**APPENDIX A**  
**NJDEP December 11, 2023 Correspondence**





## State of New Jersey

**PHILIP D. MURPHY**  
Governor

**DEPARTMENT OF ENVIRONMENTAL PROTECTION**  
Division of Waste & UST Compliance & Enforcement  
Bureau of Solid Waste Compliance & Enforcement  
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**SHAWN M. LATOURETTE**  
Commissioner

**TAHESHA L. WAY**  
Lt. Governor

Sent via email to:

[Keith Kazmark: kkazmark@ridgewoodnj.net](mailto:kkazmark@ridgewoodnj.net)

[Christopher Rutishauser: crutishauser@ridgewoodnj.net](mailto:crutishauser@ridgewoodnj.net)

December 11, 2023

**CERTIFIED MAIL – RRR**  
7022 3330 0001 3350 2709

**RE: Ridgewood Village Historic Site at 460 West Saddle River Road**  
**Issues with reported data associated with imported fill**  
**EA ID#: U4347**

Gentlemen:

The following evaluation of the analytical data reportedly associated with the soils imported to the referenced site reiterates information from Mr. Chris Rutishauser, Ridgewood Village's Director of Public Works/Village Engineer, followed by a response from NJDEP's Bureau of Solid Waste Compliance & Enforcement (BSWC&E). Further appropriate actions necessary to pursue closure of this solid waste case are also presented.

**Ridgewood Explanation for South Broad Street Fill Source:**

*"I visited this site when the offer of the soil became available. I did not observe an[y] indications of contamination in the soils. The development that generated the material was reviewed by the Village's planning board, for which I am the licensed review engineer. The material required and received a Village of Ridgewood major soil moving permit (planning board approves the permit followed by Village Council approval of the permit). Testing was done on the material in 2018 by Peak Environmental. Peak estimated the quantity of soil at 8,000 cubic yards. Peak collected 14 samples for testing under a reduce[d] sample quantity due to justification. Peak did not note any impacts to the soils sampled. The first three pages of their report submitted explains their protocol and observations. We used this soil as the bulk of the material for the berm construction. The berm was constructed by the Village's Streets Division using several of the Village's rubber tire front end loaders."*

**BSWC&E Response for Ridgewood Dayton, LLC – 152 South Broad Street fill source:**

The estimated 8,000 cubic yard soil source was indicated to be from excavations associated with the demolition of a building at a site that underwent remediation. No description of the remediation nor the potential of environmental impacts from the remediated discharge(s) to have impacted the soils taken to 460 Saddle River Road were discussed, yet the sampling and analyses protocol was reduced by relying on such data to reduce the analytical frequencies per cubic yard as compared to the NJDEP Guidance Document: "Fill Material Guidance for SRP Sites". Based on yet to be explained judgements, the analytical parameters were also further reduced. For example, for a volume of 8,000 cubic yards the aforementioned guidance document suggests that 21 samples be collected and analyzed unless information can be used to reduce such frequency to 14 samples to be analyzed. Yet, the consultant secured analyses from only 4 samples for polychlorinated biphenyls (PCBs, a.k.a. "Aroclors") and only 4 samples for pesticides while providing 14 samples for analyses for EPH, PAHs and Metals. While only 5 samples were analyzed for volatile organic compounds (VOC), field screening using a photoionization detector (PID) revealed no responses and therefore the BSWC&E does not disagree with the limitation of the VOC analyses. However, an explanation regarding the use of the reduced sampling frequencies and further reduction of analytes below those noted in NJDEP guidance has not been provided.

The Conformance/Non-Conformance Summary within the laboratory report submitted to the BSWC&E revealed that, while the instrumentation was operating correctly, sample matrix interference was observed which caused the surrogate recoveries of several of the metals analyzed via method 6010D and several of the semi-volatile organic compounds to produce analytical data which may be biased low.

**Ridgewood Explanation for Bergen Community College Site fill source:**

*“Through a contact, Bergen Community reached out to the Village and inquired if we would like some fill soil. I examined the soils at the college. I did not observe any indication of contamination. On September 27, 2019 ANS Consultants collected 5-point grab samples and subjected them to laboratory analysis. Laboratory results indicated the soils were suitable for the intended use at the Schedler site. The Village received approximately 500 cubic yards of material from the college.”*

**BSWC&E Response for Bergen County Community College fill source:**

No discussion on the reason for the excavation at this site was provided. The volume of soil represented by the 5-point composite to one sample is reported at 500 cubic yards. Compositing of such sample, although not preferred, may be acceptable, depending upon the reason for the excavation. The cover letter to the tabulated data indicates that the Department (NJDEP) does not require the Mercury found at 0.615 ppm, which is over the Migration to Ground Water Standard of 0.1 ppm as noted in N.J.A.C. 7:26D, to be addressed unless there is cause to believe that its presence is due to a discharge. However, such policy is applicable only for background conditions or historical fill scenarios where the subject fill is proposed to remain in place and does not address the movement of such fill to another site without a requisite evaluation of the potential impacts of such fill material. That is, the property at 460 Saddle River Road was not undergoing a remediation approved by a Licensed Site Remediation Professional (LSRP) retained pursuant to N.J.A.C. 7:26C at the time the fill was imported. As such, fill was not integrated into a remedial process pursuant to the “Like on Like” – 75 percentile assessment as noted in N.J.A.C. 7:26E-5.2 nor was a site-specific Migration to Ground Water pathway soil remediation standard established pursuant to N.J.A.C. 7:26D. Accordingly, no information has been presented to justify bringing in contaminated fill to a site that may have been uncontaminated prior to the importation of the subject fill materials.

The area(s) at the 460 Saddle River Road site where these soils were distributed are currently unknown to the BSWC&E. Further, there was no laboratory report or Non-Conformance Summary submitted with this data, therefore the integrity of the analytical results cannot be evaluated if limited to the information provided.

**Ridgewood Explanation for 533 Wyndmere fill source:**

*“This location was a residential house that was constructing a large addition and reached out to us to see if we were interested in their surplus material. I examined the soil in the field. It was a fine to medium sand, trace silt and would be excellent grading fill for the Schedler project. The site’s soil moving permit indicated approximately 280 cubic yards of cut and 40 cubic yards of fill. ANS Consultants collected one sample and subjected it to laboratory analysis on or about May 19, 2021. The results were acceptable for the intended use of the material.”*

**BSWC&E Response for 533 Wyndmere fill source:**

One sample from 320 cubic yards of soil and fill excavated from a residential home was analyzed for Target Analyte List and Target Compound List compounds for which the results did not indicate a concern.

The area(s) at the 460 Saddle River Road site where these soils were distributed are currently unknown to the BSWC&E.

There was no laboratory report or Non-Conformance Summary submitted with this data, therefore the integrity of the analytical results cannot be evaluated if limited to the information provided.

**Ridgewood Water DeBoer Avenue and Route 208 Water Main Installation:**

*“Trench spoil from this project was made available. On August 9, 2021 Aqua Pro-Tech Laboratories tested one grab sample. The soil was found to be acceptable for its intended use. The site provided approximately 200 cubic yards of fill. This is the one location I did not personally observe the material at its generating source.”*

**BSWC&E Response for Ridgewood Water DeBoer Ave and Rt. 208 Water Main Installation:**

It appears that one sample from a reported 200 cubic yard source was analyzed for volatile organic compounds, metals, PCBs and pesticides. No Chain of Custody was submitted. It is not known when the date of analysis was. There was no Non-Conformance Summary submitted with this data, therefore the integrity of the analytical results cannot be completely evaluated if limited to the information provided.

However, a concern is noted for sample # 1080405-01 as it displayed a benzo[a]pyrene concentration of at least 0.48 parts per million (ppm) while the Residential Ingestion-Dermal pathway soil remediation standard for this compound is 0.51 ppm. Although the reported result is below the Residential Soil Remediation Standard that triggers the definition of solid waste, because this sample was diluted, presumably to rectify some matrix interference, the result is biased low.

This sample also displayed a mercury concentration of 0.105 ppm. N.J.A.C. 7:26D denotes a Migration to Ground Water pathway standard for Mercury of 0.1 ppm.

This sample also displayed a benzo[a]anthracene concentration of at least 2.60 ppm while N.J.A.C. 7:26D denotes a Migration to Ground Water pathway standard for this compound is 0.71 ppm.

Again, without LSRP interaction pursuant to N.J.A.C. 7:26 C, there was no evaluation of the appropriateness of bringing in contaminated fill to the 460 West Saddle River Road site.

The location(s) where this fill was distributed at 460 West Saddle River Road site has not been disclosed to the BSWC&E.

**Ridgewood Explanation for Water Main Replacement Jefferson, William and Salem Streets fill source:**

*"The source of this material was the spoil from a water main replacement project in the following Village streets: Jefferson Street, William Street, and Salem Street. Work was done by a contractor working for Ridgewood Water Company. I observed the trenching work on several occasions. I did not note any contamination concerns. Three samples were collected, one from each street, and tested by Aqua Pro-tech Laboratories on or about September 22, 2020. Trench was approximately 4,100 linear feet, 2.5-feet wide and 4.5-feet deep for a volume of approximately 1,700 cubic yards of soil."*

**BSWC&E Response for Jefferson, William and Salem Streets fill source:**

There was no Non-Conformance Summary submitted with this data, therefore the integrity of the analytical results cannot be completely evaluated if limited to the information provided.

**Ridgewood Explanation for the Ridgewood Water Company Spoil Pile:**

*"The Village's Water Company had excess soil from their water main break repairs. On January 12, 2021 SGS North America collected three grab soil samples for analysis. This testing was a follow up to testing Eurofins had done on December 22, 2016 of a single grab sample of soil. With the test results being acceptable for use, the Village trucked approximately 300 cubic yards of material from the spoil pile to Schedler. I observed this spoil pile before it was trucked and did not note any indications of contamination."*

**SWC&E Response for the Ridgewood Water Company Spoil Pile:**

The 2016 sample results revealed detection limits that were higher than the remediation standards. For example, the sample analyzed for benzo[a]pyrene was diluted ten-fold yielding a detection limit of 0.94 ppm while the Residential Ingestion-Dermal pathway remediation standard for this compound is 0.51 ppm. Further, the laboratory Case Narrative disclosed surrogate recovery issues with several organic compounds and metals. The follow-up analyses reported for the subject materials revealed that benzo[a]anthracene was detected in sample S-15R at 0.75 ppm which is above the Migration to Ground Water Pathway soil remediation standard for this compound which is 0.71 ppm. Further, benzo[a]pyrene in this sample was reported at a concentration of 0.744 ppm while the Residential Ingestion-Dermal Pathway remediation standard for this compound is 0.51 ppm, thus triggering the definition of solid waste. Sample S-18R revealed similar elevated concentrations of benzo[a]anthracene of 0.873 ppm and 0.852 ppm respectively. BSWC&E's interpretation of the Case Narrative/Conformance Summary did not raise concerns regarding the accuracy of the compounds found at concentrations over the noted remediation standards.

No locations where the subject materials were deposited have been provided. Further, given the exceedance of the remediation standards, no explanation regarding the suitability of the subject material for the 460 West Saddle River Road site was provided.

**REQUIRED FURTHER ACTIONS TO DOCUMENT FILL QUALITY:**

Berm Along Route 17:

With respect to the soils used to construct the berm, the following actions are necessary to further evaluate the suitability of such materials for the site at 460 Saddle River Road:

1. Provide a detailed explanation describing how the previous analytical data collected for the remediation case that was the source of the fill along with the physical distances or barriers between the contaminated materials and the materials brought to the 460 West Saddle River Road site to justify employing a reduction in the analytical frequencies published in NJDEP guidance.
2. Assuming that, in the opinion of the BSWC&E, such explanation is acceptable, provide a Sampling and Analysis Plan (SAP) that incorporates the following scope of work: collect ten discrete grab (non-composited) samples from the soil berm at equally distributed aerial and vertical locations representing a full cross section of the berm. Using an NJDEP certified laboratory who are also certified by the NJDEP for the test methods employed, analyze each of these samples for those Pesticides and PCBs from the Target Compound List and in accordance with the test methods noted therein as defined in N.J.A.C. 7:26E-1.8. Further, for the data already submitted to the BSWC&E, perform a comprehensive review of the Conformance/Non-Conformance Summary to determine which samples displayed biased low results for metals and semi-volatile organic compounds and add such analytes to similarly equally spaced samples such that there will be at least 14 samples representing Target Analyte List metals and Target Compound List semi-volatile organics, each as defined and in accordance with the analytical procedures noted in N.J.A.C. 7:26E-1.8, for which reliable data is generated. Provide a detailed explanation on this review and analyte selection process. For the purposes of compliance with the solid waste issue, it is not necessary to perform analyses for Tentatively Identified Compounds.

The SAP shall include a scaled site map noting the proposed sampling locations and analytical parameters. The plan should not be implemented until approved in writing by the BSWC&E.

Other Imported Fill Areas of Deposition:

With respect to the soils/fill deposited in other areas of the property at 460 West Saddle River Road, the BSWC&E has observed that such fill contains materials that, at least from a geotechnical consideration, may not be suitable base material for the artificial turf which the BSWC&E understands is being contemplated for this site. As such, should any of the fill deposited outside of the berm be removed from the property, appropriate characterization of same is needed to ensure that its use, or disposal is consistent with NJDEP regulations. If any of this fill is contemplated to remain in place, without knowing the locations of the deposition of the various sources of the fill material and because the data for at least some of the fill material is suspect, the aforementioned SAP should be expanded to incorporate sampling of the remaining areas of imported fill deposition. Such expanded plan should incorporate a scaled site map depicting a grid pattern denoting where discrete (non-composited) samples will be collected for analyses for Target Analyte List and Target Compound List analytes as defined and in accordance with the analytical methods noted in N.J.A.C. 7:26E -1.8 (minus volatile organic analyses if appropriate soil gas screening confirms such analyses is not necessary). The expanded SAP should not be implemented until approved in writing by the BSWC&E.

Case Management:

In order to close the solid waste issue associated with the imported fill materials, any such fill that exceeds the Residential Ingestion-Dermal/Inhalation soil remediation standards (without performing data averaging) must be removed. Accordingly, following review of the data to be generated from the SAP, the BSWC&E will advise Ridgewood Village of the scope of work needed to incorporate into a Corrective Action Plan (CAP) designed to address any residual solid waste as determined by both the physical and chemical triggers noted in N.J.A.C. 7:26 -1.6(a)6. The CAP should not be conducted until approved in writing by the SWC&E.

Once the BSWC&E is satisfied that appropriate removal of the fill materials that trigger the definition of solid waste at N.J.A.C. 7:26-1.6(a)6 has been achieved, a letter will be issued noting that the subject solid waste issue has been resolved.

Please note that the BSWC&E does not offer opinions on whether or not a site has been remediated or if a site is suitable to allow leaving fill materials in place that do not trigger the definition of solid waste, but have a contaminant within them at a concentration greater than the respective default Migration to Ground Water soil remediation standard at N.J.A.C. 7:26D. Accordingly, if it is desired to pursue further evaluation of the suitability to leave such soils in place, alternative, site specific Migration to Ground Water pathway standards can be generated as afforded by N.J.A.C. 7:26D if approved by a Licensed Site Remediation Professional (LSRP) retained pursuant to the Administrative Requirements for the Remediation of Contaminated Sites as noted in N.J.A.C. 7:26C. Accordingly, Ridgewood Village may want to consider performing additional testing approved by such LSRP to address such pathway during the mobilization addressing the requisite sampling to further evaluate the solid waste issues.

Enforcement:

Please be advised that Ridgewood Village's documented use of contaminated fill at this site is in violation of the Solid Waste Management Act, particularly N.J.A.C. 7:26-2.8(e). As such, the BSWC&E expects full cooperation from Ridgewood Village at this time to facilitate the BSWC&E's discretionary authority to minimize any enforcement actions/penalty assessments. **As such, please provide the requisite Sampling and Analysis Plan within sixty (60) days upon receipt of this correspondence.**

Attached to this letter please find generic guidance from the BSWC&E addressing our expectations associated with data collection. Should you have any questions, please promptly contact me.

Regards,



Tom Farrell, Chief  
Bureau of Solid Waste Compliance & Enforcement

- c: Dave Ongaro, BSWC&E  
Gina Lugo, BSWC&E  
Mike Hastry, DW&USTC&E  
Kate Marcopul, DEP – Historic Preservation Office  
Keona Miller, DEP – Local Government Affairs



# State of New Jersey

**PHILIP D. MURPHY**  
Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF WASTE & UST COMPLIANCE and ENFORCEMENT  
BUREAU OF SOLID WASTE COMPLIANCE AND ENFORCEMENT

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## DATA REVIEW DOCUMENTATION FORM

page 1 of 4 (last updated October 2023)

*The following information should accompany analytical data submitted to the Bureau of Solid Waste Compliance and Enforcement (BSWC&E) for a determination that is limited to whether or not the materials represented by such data trigger the definition of solid waste pursuant to N.J.A.C. 7:26 - 1.6(a)6. BSWC&E's acknowledgement of such data shall not be construed to suggest that the New Jersey Department of Environmental Protection considers that the site represented by this data has been fully remediated in whole or in part. As this form is not designed for any one particular site, not all sections may be applicable.*

Current Name and Address of site:

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Specific Historical uses of property:

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Mapped on NJ GeoWeb as located in an area of Historical Fill? \_\_\_\_\_

Have the subject materials been in contact with any construction and demolition debris or historical discharge of a hazardous substance or historical fill? \_\_\_\_\_

**SAMPLE COLLECTION INFORMATION:**

- Was the sampling conducted in conformance with the Technical Requirements for Site Remediation at N.J.A.C. 7:26E and the most recent version of the NJDEP Field Sampling Procedures Manual? \_\_\_\_\_. If no, please explain:
- 
- 

- Was the sampling conducted to address a known volume of materials? \_\_\_\_\_. If so, what is the total volume of materials addressed by this project? \_\_\_\_\_ cubic yards.

- If the sampling addressed an area wherein the volume of potentially contaminated materials was not known, how many square feet is such Area of Concern? \_\_\_\_\_ square feet.

- Only for sites where no VOCs are expected:** Were Target Compound List Volatile Organic Compounds (VOCs) eliminated from the analyses based on the response from a photoionization detector (PID)? \_\_\_\_\_

- If a PID was used, how, when and by whom was it calibrated (please include the type of calibration gas used)?
- 
- 

- What was the eV value of the bulb used in the PID? \_\_\_\_\_.

- At what units in parts per million (ppm) of response on the PID was the fill considered to not require analysis for VOCs? \_\_\_\_\_.

Describe the process used to screen the materials with the PID. If screening was conducted within in situ materials, please include areal frequency in square feet and depths (from surface grade). If screening was conducted within stockpiled materials, please include the distances within the stockpile and frequency of screening per cubic yards.

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- If other information was used to eliminate volatile organics from the testing methods of the subject fill besides PID screening, please note same here:

Please complete the following table:

Analytical Group	Analytical Frequency per cubic yard of stockpiled materials (if applicable)	Analytical Frequency per square foot of in situ materials in Area of Concern (if applicable)	Reason for Noted Analytical Frequency
Target Analyte Metals			
Target Compound List Volatile Organic Compounds			
Target Compound List Semi- Volatile Organic Compounds			
Target Compound List Pesticides			
Target Compound List PCBs			

- Has a Sample Location Map been provided noting the sample identification numbers in a manner that one who had not seen the site could readily understand where the samples were collected?

- If there was any deviation from the Department's most recent version of the Guidance Documents: *Fill Materials Guidance for SRP Sites, October 2021* or *Understanding DEP's Requirements for Soil and Fill Materials*, please provide your justification for same here:

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**SAMPLE ANALYSIS INFORMATION:**

List the name and the New Jersey Laboratory Certification number(s) for the laboratory(ies) used:

\_\_\_\_\_

Were there any analyses conducted for which the laboratory did not have a specific New Jersey certification to perform same (note: In addition to the NJ Laboratory Certification, laboratories are required to hold a certification from NJDEP for each analytical method)?

If yes, please specify which test method and affected analytes was/were not certified by NJDEP: \_\_\_\_\_

Has the analyses been performed in accordance with N.J.A.C. 7:26E-2 and accompanied by the applicable Reduced Regulatory Deliverables pursuant to Attachment A-II of N.J.A.C. 7:26E?

\_\_\_\_\_

Does each laboratory report contain a summary of the samples received noting any deficiencies with, at a minimum: temperature of the samples upon receipt, condition of the sample bottles, appropriate Chain of Custody documentation, compliance with sample holding times? If any such deficiencies were noted, please list them here:

\_\_\_\_\_

\_\_\_\_\_

Was a Conformance/Non-Conformance Summary included for each laboratory report? \_\_\_\_\_

Did the Conformance/Non-Conformance Summary suggest data that could not be relied upon? \_\_\_\_\_ . If yes, please specify which analytes for which samples were not usable:

\_\_\_\_\_

\_\_\_\_\_

Has any data averaging been employed in an Area of Concern to generate the conclusions drawn? \_\_\_\_\_ If so, specify which Area of Concern employed data averaging and include the computations for same in the report of findings.

Has the data been tabulated with comparison to NJDEP Remediation Standards at N.J.A.C. 7:26D? \_\_\_\_\_

Per my signature below, I certify that the information provided on this form is true and accurate to the best of my knowledge.

Print name of person completing this form: \_\_\_\_\_; sign: \_\_\_\_\_; date: \_\_\_\_\_



## State of New Jersey

PHILIP D. MURPHY  
Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF WASTE & UST COMPLIANCE & ENFORCEMENT  
BUREAU OF SOLID WASTE COMPLIANCE AND ENFORCEMENT

SHAWN M. LATOURRETE  
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Fax. (609) 292-4539

### STANDARD SAMPLING and ANALYSES PLAN APPROVAL

(page 1 of 2)

**Project Name:**  
**NJEMS PI#:**  
**Date of S&AP:**

*The following document contains standard conditions and limitations that accompany any communication from the Bureau of Solid Waste Compliance and Enforcement (BSWC&E) which indicate approvals of Sampling and Analysis Plans. Unless otherwise appended to or altered by official written correspondence from the BSWC&E, these conditions and limitations shall apply.*

- 1.) This approval is limited to determine whether or not the soil/fill materials being sampled meet the portion of the definition of solid waste that addresses contaminant concentrations as referred to in N.J.A.C. 7:26-1.6(a)6. As such, analytical results from **any one** sample that indicate concentrations of contaminants that are above the Residential Ingestion-Dermal or Residential Inhalation soil remediation standards at N.J.A.C. 7:26 D are indicative of solid waste. While delineation of such contamination is acceptable with a plan approved by BSWC&E, **no compliance averaging** is accepted.
- 2.) The BSWC&E does not make determinations regarding whether or not soils or materials can be considered as Clean Fill pursuant to N.J.A.C. 7:26E -1.8. As such, upon receipt of acceptable data that indicates contaminant concentrations that are compliant with the definition of solid waste at N.J.A.C. 7:29-1.6(a)6, the BSWC&E will acknowledge same by noting compliance has been achieved with respect to the particular solid waste violation associated with the quality of the soil/fill materials. The BSWC&E does not make determinations regarding whether or not a site has been remediated.
- 3.) All sampling must be performed in accordance with the latest version of the NJDEP's Field Sampling Procedures Manual and N.J.A.C. 7:26 E – The Technical Requirements for Site Remediation.
- 4.) All analyses must be performed by a laboratory that has at least the following two certifications:
  - a.) Overall Laboratory Certification from the State of New Jersey; and, (b) Certification from the State of New Jersey for the particular test method being employed.

Project Name:

NJEMS PI#:

Date of S&amp;AP:

- 5.) Any proposed analytes shall incorporate the test methods associated with EPA's Contract Laboratory Program (CLP) and shall be those analytes included in the respective Target Analyte List (TAL) or Target Compound List (TCL) of the CLP. For example, any proposal to analyze for "Metals" shall be inclusive of all metals in the TAL. It is not necessary to include Tentatively Identified Compounds (TICs) when analyzing for TCL compounds. BSWC&E does not interpret Extractable Petroleum Hydrocarbon (EPH) data.
- 6.) The Quality Assurance Plans shall incorporate quality control provisions and report same that are at least as comprehensive as the Reduced Regulatory Deliverables pursuant to Attachment A-II of N.J.A.C. 7:26 E. The locations of the Laboratory Non-Conformance Summary, Sample Receipt Form and Chain of Custody shall be readily identified in the laboratory report.
- 7.) To expedite the BSWC&E's data review, in addition to the full scale laboratory report, a separate table shall be submitted which compares the data to the Residential Ingestion-Dermal and Residential Inhalation soil remediation standards at N.J.A.C. 7:26D. In order to facilitate the BSWC&E determination on whether or not the site needs to be referred to the Department's Site Remediation Program, the data should also be compared to the default Migration to Ground Water pathway soil remediation standards at N.J.A.C. 7:26D. Any comparison to a site specific Migration to Ground Water pathway soil remediation standard would not be performed by the BSWC&E. Further, if the site is located in a wetlands or other area of ecological significance, the analytical results should also be compared to the Ecological Screening Criteria.

*Place an "X" or appropriate number next to the applicable statement(s):*

- 8.) The proposed sampling frequency is: \_\_\_ acceptable as proposed; \_\_\_ needs to be increased to one sample per \_\_\_ cubic yards (for sampling the subject fill) or, one sample per \_\_\_ square feet (for post-excavation analyses).
- 9.) The proposed analytes are: \_\_\_ acceptable as proposed; \_\_\_ needs to include all of the TAL metals; \_\_\_ needs to include all of the TCL semi-volatile organics; \_\_\_ needs to include all of the TCL pesticides; \_\_\_ needs to include all of the TCL PCBs; \_\_\_ needs to include all of the TCL VOCs.
- 10.) The proposed field screening for volatile organic compounds (VOCs): \_\_\_ is acceptable as proposed; \_\_\_ must perform field screening with the stated instrument at intervals of \_\_\_ cubic yards or \_\_\_ square feet (if post excavation sampling); \_\_\_ must provide documentation of proper calibration; \_\_\_ if a photoionization detector is to be used, must specify the electron voltage of the bulb used.

Plan Approved By: \_\_\_\_\_  
on \_\_\_\_\_

**APPENDIX B**  
**Berm Sampling and Analysis Plan**

**SAMPLING AND ANALYSIS PLAN  
RIDGEWOOD VILLAGE HISTORIC SITE  
460 WEST SADDLE RIVER ROAD  
BLOCK 4704, LOT 9, 10, 11, 12  
VILLAGE OF RIDGEWOOD, BERGEN COUNTY, NEW JERSEY**



**Submitted to:**

Bureau of Solid Waste Compliance & Enforcement  
New Jersey Department of Environmental Protection  
9 Ewing Street  
P.O. Box 420  
Trenton, New Jersey 08625-0420

**Submitted for:**

Mr. Christopher Rutishauser, P.E., CPWM  
Director of Public Works/Village Engineer  
Village of Ridgewood  
131 North Maple Avenue  
Ridgewood, New Jersey 07450

**Submitted by:**

Matrix New World Engineering, Land Surveying  
and Landscape Architecture, P.C.  
26 Columbia Turnpike  
Florham Park, New Jersey 07932

Matrix No. 23-1429

April 2024

## EXECUTIVE SUMMARY

Matrix New World Engineering, Land Surveying, and Landscape Architecture, P.C. (Matrix) on behalf of the Village of Ridgewood, was contracted to prepare this Sampling and Analysis Plan (SAP) for the property located at 460 West Saddle River Road, Ridgewood, Bergen County, New Jersey (Site). The property consists of Block 4704, Lots 9, 10, 11, and 12. The Site underwent soil importation efforts as part of redevelopment activities to improve the Site with passive and active recreational spaces. The redevelopment activities include the construction of a berm along the western boundary of the Site and general site filling efforts. Six different fill sources were utilized in the filling activities with quantities ranging from 200 cubic yards (CYs) to 8,000 CYs including:

- 152 South Broad Street, Ridgewood, NJ;
- Bergen Community College, Paramus, NJ;
- 533 Wyndemere Avenue, Ridgewood, NJ;
- Ridgewood Water DeBoer Street and Route 208 Water Main Installation;
- Water Main Replacement Jefferson, William, and Salem Streets; and
- Ridgewood Water Company Spoil Pile.

The following SAP summarizes proposed investigation activities for the Site and is based on information obtained from the Village of Ridgewood and correspondence from the New Jersey Department of Environmental Protection (NJDEP) dated December 11, 2023 and included as Appendix A. The objective of this investigation is to determine whether contaminated soil has the potential to exist within the limits of the constructed berm and area of the Site believed to have received imported fill material. The findings will provide a soils baseline to assess current environmental conditions and assist in project close-out. The advancement of up to 14 soil borings and samples are proposed within the berm material. All soil borings will be advanced to a depth within the limits of the imported soils (approximately 5 to 10 feet below ground surface [bgs]). All soil samples will be collected for Target Compound List (TCL) semi-volatile organic compounds (SVOCs) and Target Analyte List (TAL) metals analyses with 10 of the borings additionally analyzed for Pesticides and Polychlorinated Biphenyls (PCBs). The advancement of up to five soil borings and samples are proposed within the northwestern portion of the Site. All soil borings will be advanced to a depth within the limits of the imported soils (approximately five feet bgs). One soil sample from each boring will be collected and submitted for TCL/ TAL plus 30 tentatively identified compounds (+30) and Extractable Petroleum Hydrocarbons (EPH) analyses. Samples for hexavalent chromium will be collected as contingent analysis and only analyzed if total chromium is greater than 20 milligrams per kilogram (mg/kg).

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## **1.0 INTRODUCTION**

Matrix New World Engineering, Land Surveying, and Landscape Architecture, P.C. (Matrix) on behalf of the Village of Ridgewood, was contracted to prepare this Sampling and Analysis Plan (SAP) for the property located at 460 West Saddle River Road, Ridgewood, Bergen County, New Jersey (Site). The property consists of Block 4704, Lots 9, 10, 11, and 12. The Site underwent soil importation efforts as part of redevelopment activities to improve the Site with passive and active recreational spaces. The redevelopment activities include the construction of a berm and site filling efforts. Six different fill sources were utilized in the filling activities with quantities ranging from 200 cubic yards (CYs) to 8,000 CYs. The following SAP summarizes proposed investigation activities for the Site and is based on information obtained from the Village of Ridgewood and correspondence from the New Jersey Department of Environmental Protection (NJDEP) dated December 11, 2023 and included as Appendix A.

### **1.1 Site Description**

The Site is located at 460 West Saddle River Road in Ridgewood, Bergen County, New Jersey. The Site consists of Block 4704, Lots 9 (3.76 acres), 10 (0.40 acres), 11 (1.74 acres), and 12 (1.24 acres) and is approximately 7.14 acres (311,018.40 square feet). The Site is developed with one unoccupied single-family residence, detached garage, garden shed, and a historic potable water well that is no longer in operation on Lot 10. The remainder of the site is wooded with deciduous trees and overgrown lawn areas. As part of redevelopment activities, soils were reportedly imported to the Site for the creation of a berm along the western side of Lots 9 through 12 and general site filling. Based on correspondence between the Village of Ridgewood and the NJDEP's Bureau of Solid Waste Compliance & Enforcement (BSWC&E), the source and quality (i.e., alternative fill or clean fill) of the material was brought into question.

The Site is bound by New Jersey State Highway Route 17 to the west, West Saddle River Road to the east, residential properties to the north, and the intersection of New Jersey State Highway Route 17 and West Saddle River Road to the south. The Site is zoned as Single-Family Residence (R-125), according to the 2022 Village of Ridgewood Zoning Map and lies within an area of mixed-use: including office and residential properties. The topography of the Site fluctuates between approximately 107 and 119 feet above mean sea level (AMSL) throughout majority of the Site, however the berm along the western Site boundary begins at 112 feet AMSL and reaches its highest elevation at 119 feet AMSL. A Site Location Plan depicting the Site topography is presented as Figure 1.



## 1.2 Site Filling Sources

Soils for the redevelopment activities were imported from six different sites throughout the Village of Ridgewood, Paramus, or Glen Rock, New Jersey. The soil was utilized to construct a berm along the western boundary of the Site adjacent to Route 17 or to fill in low-lying areas in the northwestern portion of the Site. A total of approximately 11,020 CYs of soil were imported to the Site. Each donor site provided between 200 and 8,000 CYs of soil. Summaries of the data collected to date from each donor site are provided below:

- 152 South Broad Street, Ridgewood, NJ: Approximately 8,000 CYs of soil were imported to the Site from 152 South Broad Street in Ridgewood, NJ, a site which was redeveloped into an apartment complex. The soil was utilized in construction of the soil berm along the western boundary of the Site. Peak Environmental (Peak) conducted sampling in October 2018 based on the NJDEP's Guidance Document "Fill Material Guidance for SRP Sites" (Fill Guidance), which requires the collection of 21 soil samples for the characterization of 8,000 CYs. Based on historical investigations at the site (Preliminary Assessment [PA], Site Investigation Report [SIR], Remedial Investigation Report [RIR], and Remedial Action Workplan [RAW], Peak opted to complete the sampling utilizing the reduced sampling frequency of 14 soil samples. However, no justification beyond stating that this site had a known history within the SRP was provided to rationalize a reduced sampling frequency. All 14 samples were analyzed for Extractable Petroleum Hydrocarbons (EPH), 10 samples were analyzed for Target Analyte List (TAL) Metals and Polynuclear Aromatic Hydrocarbons (PAHs), 5 samples were analyzed for Target Compound List (TCL) Volatile Organic Compounds (VOCs), and 4 samples were analyzed for the full TCL/TAL plus a library search (+30). The NJDEP's Fill Guidance states that all samples should be analyzed for TCL/TAL+30 and EPH, unless a targeted suite of contaminants can be justified. Based on the lack of justification in the selection of the analyses, the NJDEP was not satisfied with the reduced analysis. Therefore, the NJDEP requires further investigation (i.e., review of previous analytical data and additional soil sampling) to evaluate the suitability of the materials for the Site. The analytical results are included in Appendix B.
- Bergen Community College, Paramus, NJ: Approximately 500 CYs of soil were imported to the Site from Bergen Community College (BCC) in Paramus, NJ. No reasoning was provided for the purpose of the excavation. Soil sampling of the material was completed by ANS Consultants (ANS) in September 2019. One five-point composite sample was collected and analyzed for TCL/TAL, total petroleum hydrocarbons (TPH), pH, hexavalent chromium, and trivalent

chromium. While a composite sample representing the 500 CYs of material is not preferred, the NJDEP stated they would be willing to accept the data depending upon the purpose of the excavation. Based on the reported results, mercury was detected exceeding the NJDEP's May 2021 Migration to Groundwater Soil Remediation Standards (MGWSRS). ANS did not believe the mercury exceedance needed to be addressed based on the assumption that mercury may be found as a background contaminant. While this may be accurate, this policy only applies to scenarios where the subject fill is proposed to remain in place and is not to be moved to another site without evaluating the potential impacts of the fill material. Since the Site was not undergoing remediation under the guidance of a Licensed Site Remediation Professional (LSRP), the exceedances from the BCC fill were not integrated into a remedial process using the "Like on Like" – 75 percentile assessment or by creating a site-specific MGWSRS. ANS did not present any information justifying the import of contaminated fill onto a site that may have been uncontaminated prior to the importation of the BCC fill material. Further no laboratory report or Non-Conformance summary was provided with the data therefore, the integrity of the analytical results cannot be evaluated. According to the Village engineer, the BCC soils were placed in the northwestern portion of the Site, near Block 4704, lot 12. Based on the unknown conditions of the excavation, impacted material, and omission of a laboratory report, the NJDEP was not satisfied with the information provided for this fill source. Therefore, the NJDEP requires further investigation (i.e., additional soil sampling) to evaluate the suitability of the materials for the Site. The analytical results are included in Appendix C.

- 533 Wyndemere Avenue, Ridgewood, NJ: Approximately 320 CYs of soil were imported to the Site from a residential construction project (large addition) at 533 Wyndemere Avenue in Ridgewood, NJ. Soil sampling of the material was completed by ANS in May 2021. One sample (unknown if it was a grab or composite sample) was collected and analyzed for TCL/TAL. No concentrations were detected exceeding the NJDEP Soil Remediation Standards (SRS). However, no laboratory report or Non-Conformance summary was provided with the data therefore, the integrity of the analytical results cannot be evaluated. According to the Village engineer, the 533 Wyndemere Avenue soils were placed in the northwestern portion of the Site, near Block 4704, lot 12. Based on the omission of a laboratory report, the NJDEP was not satisfied with the information provided for this fill source. Therefore, the NJDEP requires further investigation (i.e., additional soil sampling) to evaluate the suitability of the materials for the Site. The analytical results are included in Appendix D.

- Ridgewood Water DeBoer Street and Route 208 Water Main Installation: Approximately 200 CYs of soil were imported to the Site from construction associated with a water main installation on DeBoer Avenue and Route 208 in Glen Rock, NJ. Soil sampling of the material was completed by Aqua Pro-Tech Laboratories (Aqua Pro-Tech) in August 2021. One grab sample was collected and analyzed for VOCs, pesticides, polychlorinated biphenyls (PCBs), and TAL metals. Two compounds, mercury and benzo(a)anthracene were detected exceeding their MGWSRS. In addition, benzo(a)pyrene was detected marginally below the Residential Ingestion Dermal Soil Remediation Standard (RIDSRS) however, many of the SVOCs (including benzo(a)pyrene and benzo(a)anthracene) required dilution therefore, the results are biased low. Since the Site was not undergoing remediation under the guidance of a LSRP, the exceedances from the DeBoer Avenue and Route 208 water main installation fill were not integrated into a remedial process using the “Like on Like” – 75 percentile assessment or by creating a site-specific MGWSRS. Aqua Pro-Tech did not present any information justifying the import of contaminated fill onto a site that may have been uncontaminated prior to the importation of the DeBoer Avenue and Route 208 water main installation fill material. Further no laboratory report or Non-Conformance summary was provided with the data therefore, the integrity of the analytical results cannot be evaluated. According to the Village engineer, the DeBoer Avenue and Route 208 water main installation soils were placed in the northwestern portion of the Site, near Block 4704, lot 12. Based on the impacted material and omission of a laboratory report, the NJDEP was not satisfied with the information provided for this fill source. Therefore, the NJDEP requires further investigation (i.e., additional soil sampling) to evaluate the suitability of the materials for the Site. The analytical results are included in Appendix E.
- Water Main Replacement Jefferson, William, and Salem Streets: Approximately 1,700 CYs of soil were imported to the Site from construction associated with a water main replacement on Jefferson Street, William Street, and Salem Lane in Ridgewood, NJ. Soil sampling of the material was completed by Aqua Pro-Tech in September 2020. Three samples (unknown if they were grab or composite samples) were collected, one from each street, and analyzed for TCL/TAL+30, pH, cyanide, hexavalent chromium, and Redox Potential. No concentrations were detected exceeding the NJDEP Soil Remediation Standards (SRS). However, no laboratory report or Non-Conformance summary was provided with the data therefore, the integrity of the analytical results cannot be evaluated. According to the Village engineer, the 533 Wyndemere Ave. soils were placed in the northwestern portion of the Site, near Block 4704, lot 12. Based on the omission of a laboratory report, the NJDEP was not satisfied with the information provided for this fill source.

Therefore, the NJDEP requires further investigation (i.e., additional soil sampling) to evaluate the suitability of the materials for the Site. The analytical results are included in Appendix F.

- Ridgewood Water Company Spoil Pile: Approximately 300 CYs of soil were imported to the Site from excess soil acquired through water main break repairs in Ridgewood, NJ. Soil sampling of the material was completed by Eurofins in December 2016 and SGS North America (SGS) in January 2021. One grab sample was collected by Eurofins in December 2016 and analyzed for TCL/TAL. Reporting limits for several constituents were identified exceeding the remediation standards along with surrogate recovery issues with several organic compounds and metals. Three grab samples were collected by SGS in January 2021 and analyzed for TCL SVOCs plus 20 tentatively identified compounds (+20). The sample results indicated that benzo(a)anthracene and benzo(a)pyrene were detected exceeding their MGWSRS and RIDSRS, respectively. Since the Site was not undergoing remediation under the guidance of a LSRP, the exceedances from the Ridgewood Water Company Spoil Piles were not integrated into a remedial process using the “Like on Like” – 75 percentile assessment or by creating a site-specific MGWSRS. Eurofins and SGS did not present any information justifying the import of contaminated fill onto a site that may have been uncontaminated prior to the importation of the fill material. According to the Village engineer, the Ridgewood Water Company spoils were placed in the northwestern portion of the Site, near Block 4704, lot 12. Based on the impacted material and the lack of explanation regarding the suitability of the fill for the Site, the NJDEP was not satisfied with the information provided for this fill source. Therefore, the NJDEP requires further investigation (i.e., additional soil sampling) to evaluate the suitability of the materials for the Site. The analytical results are included in Appendix G.

## **2.0 SAMPLING AND ANALYSIS PLAN**

### **2.1 Scope of Work**

The objective of this investigation is to determine whether contaminated soil has the potential to exist within the limits of the constructed berm and area of the Site believed to have received imported fill material. The findings will provide a soils baseline to assess current environmental conditions and assist in project close-out.

This SAP may be revised in the field in the event that potential areas of environmental concern (i.e., staining, discolored soil or other indicators of potential surface or subsurface contamination) are identified during the implementation of field activities. This SAP is intended for the use of Matrix personnel only. Matrix will not be responsible for the implementation of other sampling plans.

All work will be conducted in general accordance with the NJDEP Technical Requirements for Site Remediation (TRSR) N.J.A.C. 7:26E, NJDEP Field Sampling Procedures Manual (FSPM) and applicable NJDEP Guidance documents.

### **2.2 Sample Collection**

Prior to conducting the subsurface investigation, the drilling contractor will be responsible for obtaining proper utility mark-outs and required work permits, and active utility clearance prior to drilling. Soil borings will be advanced using Geoprobe® “direct push” technology or via hand tools. Soil samples will be collected via five-foot dedicated acetate sampling cores. All soil samples will be classified based on their color, structure, and particle size and field-screened using a photo-ionization detector (PID), calibrated using isobutylene span gas with a concentration of 100 parts per million (ppm). Coordinates of each soil boring will be collected by Matrix via a handheld global positioning system (GPS) unit. Soil sampling activities will require 2 days to complete. Matrix will coordinate with the property owner to allow access to the soil boring locations.

All soil sample analyses will be conducted by SGS Laboratories (NJDEP No. 12129) of Dayton, New Jersey under chain-of-custody documentation. The analytical data package for all samples will be a NJDEP Reduced Deliverables Package in Data Known Quality Protocol format. Figure 2 depicts the soil boring locations for the total of 19 proposed soil borings within the Site. The locations of the soil borings may be revised while in the field.

Quality assurance/quality control (QA/QC) samples will also be collected and analyzed in accordance with the NJDEP’s FSPM A field blank and/or trip blank will be collected and submitted for each day of sampling.

**2.2.1 Soil Sampling – Berm**

The advancement of up to 14 soil borings are proposed within the berm material. The borings will be equally distributed across the berm to ensure an accurate cross section of the berm is represented. Boring locations may be slightly adjusted in the field to accommodate recent tree plantings. All soil borings will be advanced to a depth within the limits of the imported soils (approximately 5 to 10 feet below ground surface [bgs]). One soil sample from each boring will be collected for TCL SVOCs and TAL metals analyses with 10 of the borings additionally utilized to investigate Pesticides and PCB analyses. Soil samples, as detailed in Table 1, will be collected from the borings biased towards the discrete 6-inch interval with the greatest potential for contamination based on field observations (i.e., elevated PID readings, staining, odor, evidence of fill materials, etc.). If no evidence of contamination is identified, soil samples will be collected from varying six-inch intervals to ensure the berm is fully represented.

**Table 1: Soil Sample Summary Table – Berm**

<b>Number of Borings/Samples</b>	<b>Analytical Parameters</b>
10 borings/1 sample	TCL Pesticides and PCBs
14 borings/1 sample	TCL SVOCs and TAL Metals

**NOTES:**

- TCL = Target Compound List
- PCBs = Polychlorinated Biphenyls
- SVOCs = Semi-volatile Organic Compounds
- TAL = Target Analyte List
- 10 of the soil borings will be co-located to allow for the investigation of multiple analytical parameters.

**2.2.2 Soil Sampling – Other Imported Fill Areas**

The advancement of up to five soil borings are proposed within the northwestern portion of the Site. The borings will be equally distributed throughout the area where filling took place to ensure an accurate cross section of the imported fill is represented. All soil borings will be advanced to a depth within the limits of the imported soils (approximately five feet bgs). One soil sample from each boring will be collected and submitted for TCL/TAL plus 30 tentatively identified compounds (+30) and EPH analyses. Samples for hexavalent chromium will be collected as contingent analysis and only analyzed if total chromium is greater than 20 milligrams per kilogram (mg/kg). A total of five soil samples, as detailed in Table 2, will be collected from the borings biased towards the discrete 6-inch interval with the greatest potential for contamination based on field observations (i.e., elevated PID readings, staining, odor, evidence of fill

materials, etc.). If no evidence of contamination is identified, soil samples will be collected from varying six-inch intervals to ensure imported fill limits are fully represented.

**Table 2: Soil Sample Summary Table – Other Imported Fill Areas**

<b>Number of Borings/Samples</b>	<b>Analytical Parameters</b>
5 borings/1 sample	EPH, TCL/TAL+30, Hexavalent Chromium (contingent)

**NOTES:**

TCL/TAL+30 = Target Compound List/Target Analyte List plus tentatively identified compounds

**2.2.3 Waste Handling**

Upon completion of each soil boring, drill cuttings will be placed back into the bore hole to the surface and the surface restored to match the surrounding ground material.

**2.4 Reporting**

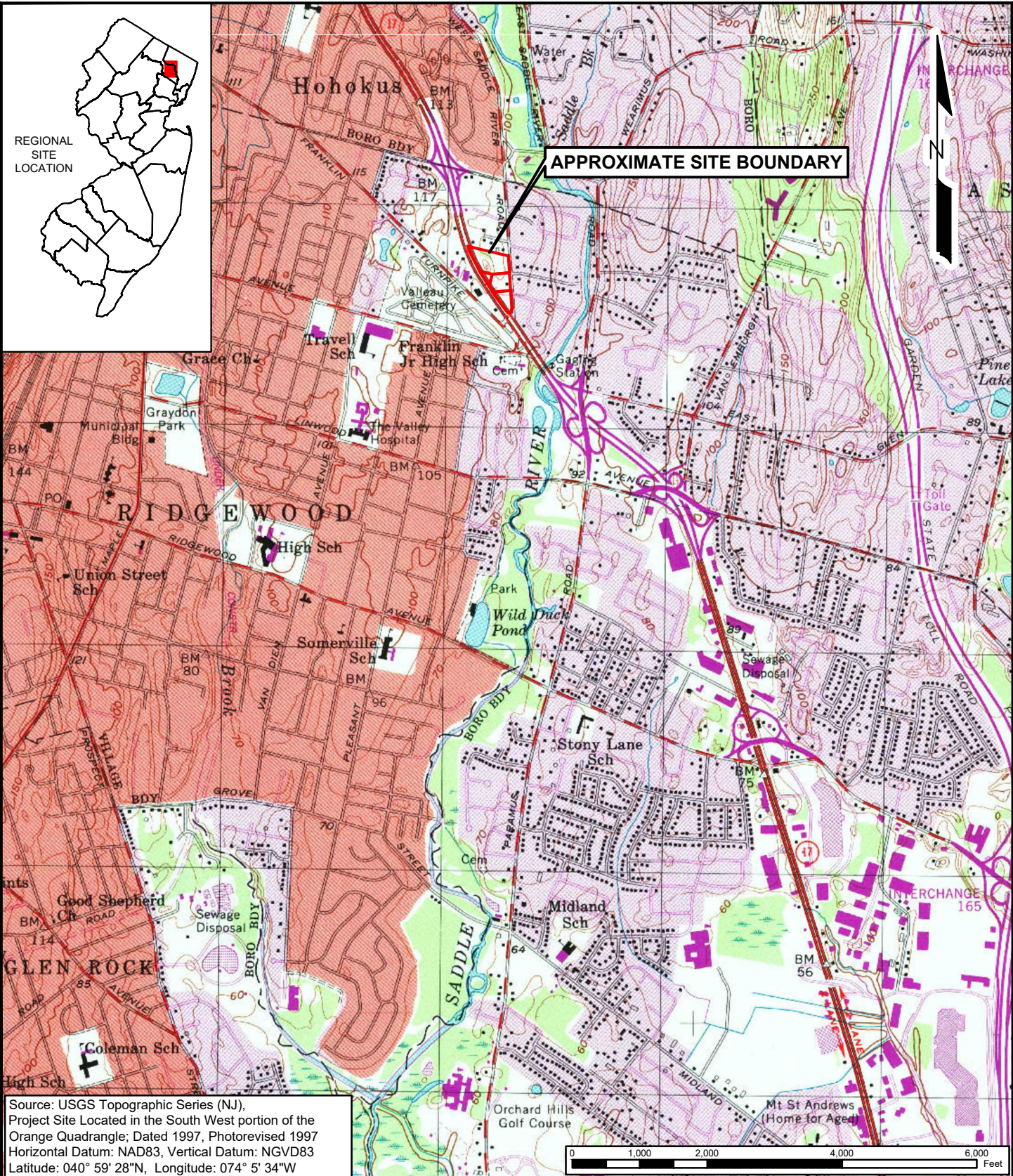
Upon the completion of all soil investigation field activities and receipt of all analytical data, an Environmental Summary Report will be prepared and will include:

- Sample location plan
- Summary of sampling events activities
- Summary of laboratory reported analytical results compared to applicable criteria and standards.
- Soil boring logs
- Laboratory analytical package
- Discussion of any remedial needs

The laboratory reported soil sample analytical results will be compared to NJDEP’s Soil Remediation Standards, promulgated at N.J.A.C. 7:26D.

## FIGURES





Source: USGS Topographic Series (NJ),  
 Project Site Located in the South West portion of the  
 Orange Quadrangle; Dated 1997, Photorevised 1997  
 Horizontal Datum: NAD83, Vertical Datum: NGVD83  
 Latitude: 040° 59' 28"N, Longitude: 074° 5' 34"W

**SITE LOCATION MAP**

**MATRIX** **NEWORLD**  
 Engineering Progress

Matrix New World Engineering, Land Surveying  
 and Landscape Architecture, P.C.  
 26 Columbia Turnpike  
 Florham Park, New Jersey 07932  
 Certified WBE

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 www.mnwe.com

VILLAGE OF RIDGEWOOD  
 BLOCK 4704, LOTS 9, 10, 11, & 12  
 VILLAGE OF RIDGEWOOD  
 BERGEN COUNTY, NEW JERSEY

SCALE:  
 1 : 2,000

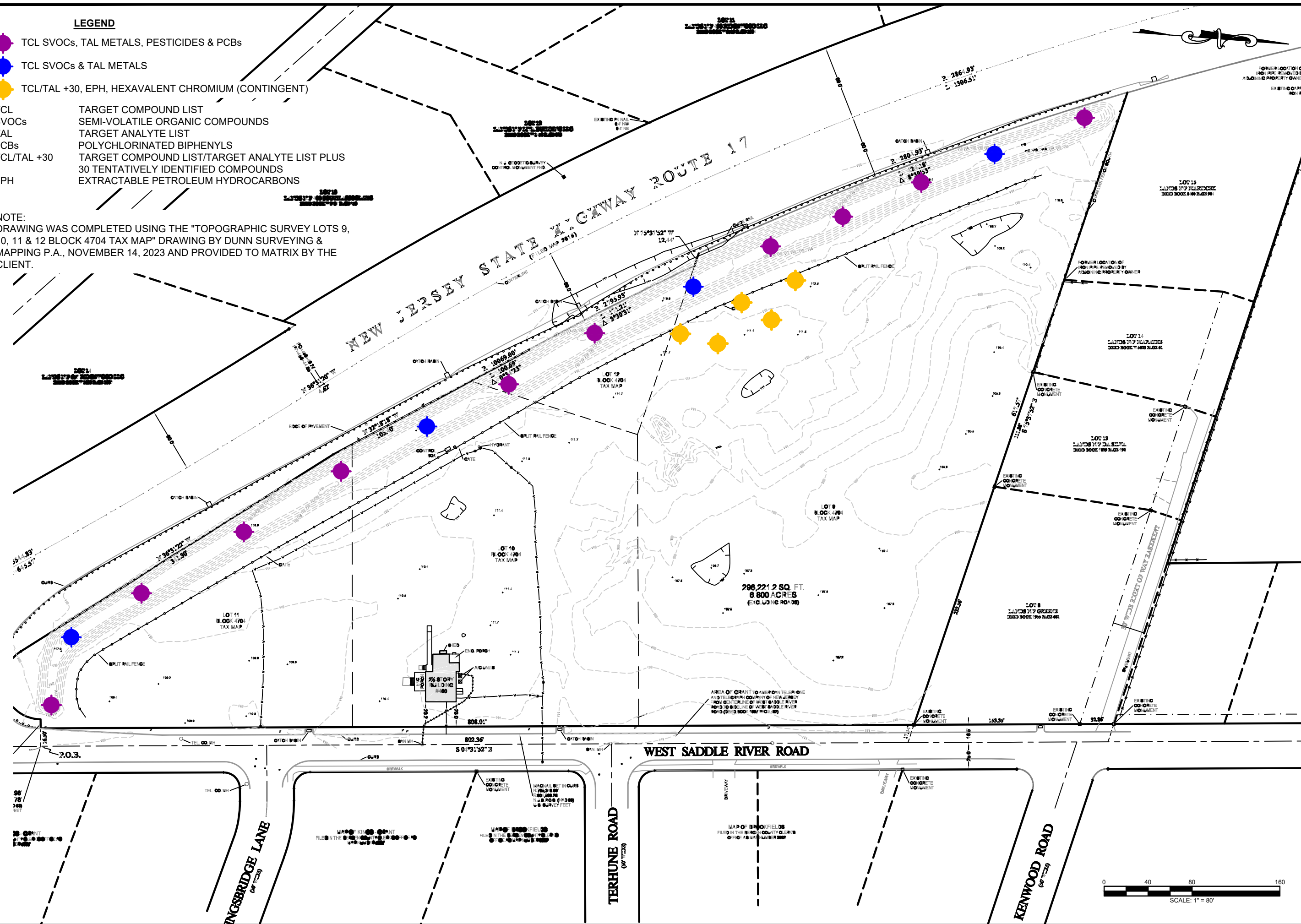
PROJECT NO.:  
 23-1429

DATE:  
 MARCH 2024

FIGURE NO.:  
 1

- LEGEND**
- TCL SVOCs, TAL METALS, PESTICIDES & PCBs
  - TCL SVOCs & TAL METALS
  - TCL/TAL +30, EPH, HEXAVALENT CHROMIUM (CONTINGENT)
- TCL TARGET COMPOUND LIST  
 SVOCs SEMI-VOLATILE ORGANIC COMPOUNDS  
 TAL TARGET ANALYTE LIST  
 PCBs POLYCHLORINATED BIPHENYLS  
 TCL/TAL +30 TARGET COMPOUND LIST/TARGET ANALYTE LIST PLUS  
 30 TENTATIVELY IDENTIFIED COMPOUNDS  
 EPH EXTRACTABLE PETROLEUM HYDROCARBONS

NOTE:  
 DRAWING WAS COMPLETED USING THE "TOPOGRAPHIC SURVEY LOTS 9, 10, 11 & 12 BLOCK 4704 TAX MAP" DRAWING BY DUNN SURVEYING & MAPPING P.A., NOVEMBER 14, 2023 AND PROVIDED TO MATRIX BY THE CLIENT.



DESIGNED BY:	ME	REVIEWED BY:	MF	RELEASED BY:	MF
DATE					

**MATRIXNEWORLD**  
 Engineering Progress

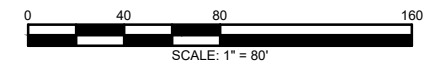
Matrix New World Engineering, Land Surveying  
 and Landscape Architecture, P.C.  
 26 Columbia Turnpike  
 Florham Park, New Jersey 07932  
 Tel: 973-240-1800  
 Fax: 973-240-1818  
 www.mnw.com

NEW JERSEY CERTIFICATE OF AUTHORIZATION No. 24GA27962300

**PROPOSED SOIL BORING LOCATIONS**

VILLAGE OF RIDGEWOOD  
 BLOCK 4704, LOTS 9, 10, 11 & 12  
 WEST SADDLE RIVER ROAD  
 VILLAGE OF RIDGEWOOD  
 BERGEN COUNTY, NEW JERSEY

PROJECT NUMBER: 23-1429
SCALE: AS SHOWN
DATE: 3/20/2024
<b>2</b>
SHEET OF



© MATRIXNEWORLD\F:\2023\23-1429 Village of Ridgewood\Drawings\Plot Sheets\Proposed Soil Boring Locations.dwg

**APPENDIX A**  
**NJDEP December 11, 2023 Correspondence**



## State of New Jersey

PHILIP D. MURPHY  
Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION  
Division of Waste & UST Compliance & Enforcement  
Bureau of Solid Waste Compliance & Enforcement  
9 Ewing Street  
P.O. Box 420, Mail-Code 09-01  
Trenton, NJ 08625-0420  
Tel.: (609) 292-6305 Fax: (609) 292-4539

SHAWN M. LATOURETTE  
Commissioner

TAHESHA L. WAY  
Lt. Governor

Sent via email to:

[Keith Kazmark: kkazmark@ridgewoodnj.net](mailto:kkazmark@ridgewoodnj.net)

[Christopher Rutishauser: crutishauser@ridgewoodnj.net](mailto:crutishauser@ridgewoodnj.net)

December 11, 2023

**CERTIFIED MAIL – RRR**  
7022 3330 0001 3350 2709

**RE: Ridgewood Village Historic Site at 460 West Saddle River Road**  
**Issues with reported data associated with imported fill**  
**EA ID#: U4347**

Gentlemen:

The following evaluation of the analytical data reportedly associated with the soils imported to the referenced site reiterates information from Mr. Chris Rutishauser, Ridgewood Village's Director of Public Works/Village Engineer, followed by a response from NJDEP's Bureau of Solid Waste Compliance & Enforcement (BSWC&E). Further appropriate actions necessary to pursue closure of this solid waste case are also presented.

**Ridgewood Explanation for South Broad Street Fill Source:**

*"I visited this site when the offer of the soil became available. I did not observe an[y] indications of contamination in the soils. The development that generated the material was reviewed by the Village's planning board, for which I am the licensed review engineer. The material required and received a Village of Ridgewood major soil moving permit (planning board approves the permit followed by Village Council approval of the permit). Testing was done on the material in 2018 by Peak Environmental. Peak estimated the quantity of soil at 8,000 cubic yards. Peak collected 14 samples for testing under a reduce[d] sample quantity due to justification. Peak did not note any impacts to the soils sampled. The first three pages of their report submitted explains their protocol and observations. We used this soil as the bulk of the material for the berm construction. The berm was constructed by the Village's Streets Division using several of the Village's rubber tire front end loaders."*

**BSWC&E Response for Ridgewood Dayton, LLC – 152 South Broad Street fill source:**

The estimated 8,000 cubic yard soil source was indicated to be from excavations associated with the demolition of a building at a site that underwent remediation. No description of the remediation nor the potential of environmental impacts from the remediated discharge(s) to have impacted the soils taken to 460 Saddle River Road were discussed, yet the sampling and analyses protocol was reduced by relying on such data to reduce the analytical frequencies per cubic yard as compared to the NJDEP Guidance Document: "Fill Material Guidance for SRP Sites". Based on yet to be explained judgements, the analytical parameters were also further reduced. For example, for a volume of 8,000 cubic yards the aforementioned guidance document suggests that 21 samples be collected and analyzed unless information can be used to reduce such frequency to 14 samples to be analyzed. Yet, the consultant secured analyses from only 4 samples for polychlorinated biphenyls (PCBs, a.k.a. "Aroclors") and only 4 samples for pesticides while providing 14 samples for analyses for EPH, PAHs and Metals. While only 5 samples were analyzed for volatile organic compounds (VOC), field screening using a photoionization detector (PID) revealed no responses and therefore the BSWC&E does not disagree with the limitation of the VOC analyses. However, an explanation regarding the use of the reduced sampling frequencies and further reduction of analytes below those noted in NJDEP guidance has not been provided.

The Conformance/Non-Conformance Summary within the laboratory report submitted to the BSWC&E revealed that, while the instrumentation was operating correctly, sample matrix interference was observed which caused the surrogate recoveries of several of the metals analyzed via method 6010D and several of the semi-volatile organic compounds to produce analytical data which may be biased low.

**Ridgewood Explanation for Bergen Community College Site fill source:**

*“Through a contact, Bergen Community reached out to the Village and inquired if we would like some fill soil. I examined the soils at the college. I did not observe any indication of contamination. On September 27, 2019 ANS Consultants collected 5-point grab samples and subjected them to laboratory analysis. Laboratory results indicated the soils were suitable for the intended use at the Schedler site. The Village received approximately 500 cubic yards of material from the college.”*

**BSWC&E Response for Bergen County Community College fill source:**

No discussion on the reason for the excavation at this site was provided. The volume of soil represented by the 5-point composite to one sample is reported at 500 cubic yards. Compositing of such sample, although not preferred, may be acceptable, depending upon the reason for the excavation. The cover letter to the tabulated data indicates that the Department (NJDEP) does not require the Mercury found at 0.615 ppm, which is over the Migration to Ground Water Standard of 0.1 ppm as noted in N.J.A.C. 7:26D, to be addressed unless there is cause to believe that its presence is due to a discharge. However, such policy is applicable only for background conditions or historical fill scenarios where the subject fill is proposed to remain in place and does not address the movement of such fill to another site without a requisite evaluation of the potential impacts of such fill material. That is, the property at 460 Saddle River Road was not undergoing a remediation approved by a Licensed Site Remediation Professional (LSRP) retained pursuant to N.J.A.C. 7:26C at the time the fill was imported. As such, fill was not integrated into a remedial process pursuant to the “Like on Like” – 75 percentile assessment as noted in N.J.A.C. 7:26E-5.2 nor was a site-specific Migration to Ground Water pathway soil remediation standard established pursuant to N.J.A.C. 7:26D. Accordingly, no information has been presented to justify bringing in contaminated fill to a site that may have been uncontaminated prior to the importation of the subject fill materials.

The area(s) at the 460 Saddle River Road site where these soils were distributed are currently unknown to the BSWC&E. Further, there was no laboratory report or Non-Conformance Summary submitted with this data, therefore the integrity of the analytical results cannot be evaluated if limited to the information provided.

**Ridgewood Explanation for 533 Wyndmere fill source:**

*“This location was a residential house that was constructing a large addition and reached out to us to see if we were interested in their surplus material. I examined the soil in the field. It was a fine to medium sand, trace silt and would be excellent grading fill for the Schedler project. The site’s soil moving permit indicated approximately 280 cubic yards of cut and 40 cubic yards of fill. ANS Consultants collected one sample and subjected it to laboratory analysis on or about May 19, 2021. The results were acceptable for the intended use of the material.”*

**BSWC&E Response for 533 Wyndmere fill source:**

One sample from 320 cubic yards of soil and fill excavated from a residential home was analyzed for Target Analyte List and Target Compound List compounds for which the results did not indicate a concern.

The area(s) at the 460 Saddle River Road site where these soils were distributed are currently unknown to the BSWC&E.

There was no laboratory report or Non-Conformance Summary submitted with this data, therefore the integrity of the analytical results cannot be evaluated if limited to the information provided.

**Ridgewood Water DeBoer Avenue and Route 208 Water Main Installation:**

*“Trench spoil from this project was made available. On August 9, 2021 Aqua Pro-Tech Laboratories tested one grab sample. The soil was found to be acceptable for its intended use. The site provided approximately 200 cubic yards of fill. This is the one location I did not personally observe the material at its generating source.”*

**BSWC&E Response for Ridgewood Water DeBoer Ave and Rt. 208 Water Main Installation:**

It appears that one sample from a reported 200 cubic yard source was analyzed for volatile organic compounds, metals, PCBs and pesticides. No Chain of Custody was submitted. It is not known when the date of analysis was. There was no Non-Conformance Summary submitted with this data, therefore the integrity of the analytical results cannot be completely evaluated if limited to the information provided.

However, a concern is noted for sample # 1080405-01 as it displayed a benzo[a]pyrene concentration of at least 0.48 parts per million (ppm) while the Residential Ingestion-Dermal pathway soil remediation standard for this compound is 0.51 ppm. Although the reported result is below the Residential Soil Remediation Standard that triggers the definition of solid waste, because this sample was diluted, presumably to rectify some matrix interference, the result is biased low.

This sample also displayed a mercury concentration of 0.105 ppm. N.J.A.C. 7:26D denotes a Migration to Ground Water pathway standard for Mercury of 0.1 ppm.

This sample also displayed a benzo[a]anthracene concentration of at least 2.60 ppm while N.J.A.C. 7:26D denotes a Migration to Ground Water pathway standard for this compound is 0.71 ppm.

Again, without LSRP interaction pursuant to N.J.A.C. 7:26 C, there was no evaluation of the appropriateness of bringing in contaminated fill to the 460 West Saddle River Road site.

The location(s) where this fill was distributed at 460 West Saddle River Road site has not been disclosed to the BSWC&E.

**Ridgewood Explanation for Water Main Replacement Jefferson, William and Salem Streets fill source:**

*"The source of this material was the spoil from a water main replacement project in the following Village streets: Jefferson Street, William Street, and Salem Street. Work was done by a contractor working for Ridgewood Water Company. I observed the trenching work on several occasions. I did not note any contamination concerns. Three samples were collected, one from each street, and tested by Aqua Pro-tech Laboratories on or about September 22, 2020. Trench was approximately 4,100 linear feet, 2.5-feet wide and 4.5-feet deep for a volume of approximately 1,700 cubic yards of soil."*

**BSWC&E Response for Jefferson, William and Salem Streets fill source:**

There was no Non-Conformance Summary submitted with this data, therefore the integrity of the analytical results cannot be completely evaluated if limited to the information provided.

**Ridgewood Explanation for the Ridgewood Water Company Spoil Pile:**

*"The Village's Water Company had excess soil from their water main break repairs. On January 12, 2021 SGS North America collected three grab soil samples for analysis. This testing was a follow up to testing Eurofins had done on December 22, 2016 of a single grab sample of soil. With the test results being acceptable for use, the Village trucked approximately 300 cubic yards of material from the spoil pile to Schedler. I observed this spoil pile before it was trucked and did not note any indications of contamination."*

**SWC&E Response for the Ridgewood Water Company Spoil Pile:**

The 2016 sample results revealed detection limits that were higher than the remediation standards. For example, the sample analyzed for benzo[a]pyrene was diluted ten-fold yielding a detection limit of 0.94 ppm while the Residential Ingestion-Dermal pathway remediation standard for this compound is 0.51 ppm. Further, the laboratory Case Narrative disclosed surrogate recovery issues with several organic compounds and metals. The follow-up analyses reported for the subject materials revealed that benzo[a]anthracene was detected in sample S-15R at 0.75 ppm which is above the Migration to Ground Water Pathway soil remediation standard for this compound which is 0.71 ppm. Further, benzo[a]pyrene in this sample was reported at a concentration of 0.744 ppm while the Residential Ingestion-Dermal Pathway remediation standard for this compound is 0.51 ppm, thus triggering the definition of solid waste. Sample S-18R revealed similar elevated concentrations of benzo[a]anthracene of 0.873 ppm and 0.852 ppm respectively. BSWC&E's interpretation of the Case Narrative/Conformance Summary did not raise concerns regarding the accuracy of the compounds found at concentrations over the noted remediation standards.

No locations where the subject materials were deposited have been provided. Further, given the exceedance of the remediation standards, no explanation regarding the suitability of the subject material for the 460 West Saddle River Road site was provided.

#### **REQUIRED FURTHER ACTIONS TO DOCUMENT FILL QUALITY:**

##### Berm Along Route 17:

With respect to the soils used to construct the berm, the following actions are necessary to further evaluate the suitability of such materials for the site at 460 Saddle River Road:

1. Provide a detailed explanation describing how the previous analytical data collected for the remediation case that was the source of the fill along with the physical distances or barriers between the contaminated materials and the materials brought to the 460 West Saddle River Road site to justify employing a reduction in the analytical frequencies published in NJDEP guidance.
2. Assuming that, in the opinion of the BSWC&E, such explanation is acceptable, provide a Sampling and Analysis Plan (SAP) that incorporates the following scope of work: collect ten discrete grab (non-composited) samples from the soil berm at equally distributed aerial and vertical locations representing a full cross section of the berm. Using an NJDEP certified laboratory who are also certified by the NJDEP for the test methods employed, analyze each of these samples for those Pesticides and PCBs from the Target Compound List and in accordance with the test methods noted therein as defined in N.J.A.C. 7:26E-1.8. Further, for the data already submitted to the BSWC&E, perform a comprehensive review of the Conformance/Non-Conformance Summary to determine which samples displayed biased low results for metals and semi-volatile organic compounds and add such analytes to similarly equally spaced samples such that there will be at least 14 samples representing Target Analyte List metals and Target Compound List semi-volatile organics, each as defined and in accordance with the analytical procedures noted in N.J.A.C. 7:26E-1.8, for which reliable data is generated. Provide a detailed explanation on this review and analyte selection process. For the purposes of compliance with the solid waste issue, it is not necessary to perform analyses for Tentatively Identified Compounds.

The SAP shall include a scaled site map noting the proposed sampling locations and analytical parameters. The plan should not be implemented until approved in writing by the BSWC&E.

##### Other Imported Fill Areas of Deposition:

With respect to the soils/fill deposited in other areas of the property at 460 West Saddle River Road, the BSWC&E has observed that such fill contains materials that, at least from a geotechnical consideration, may not be suitable base material for the artificial turf which the BSWC&E understands is being contemplated for this site. As such, should any of the fill deposited outside of the berm be removed from the property, appropriate characterization of same is needed to ensure that its use, or disposal is consistent with NJDEP regulations. If any of this fill is contemplated to remain in place, without knowing the locations of the deposition of the various sources of the fill material and because the data for at least some of the fill material is suspect, the aforementioned SAP should be expanded to incorporate sampling of the remaining areas of imported fill deposition. Such expanded plan should incorporate a scaled site map depicting a grid pattern denoting where discrete (non-composited) samples will be collected for analyses for Target Analyte List and Target Compound List analytes as defined and in accordance with the analytical methods noted in N.J.A.C. 7:26E -1.8 (minus volatile organic analyses if appropriate soil gas screening confirms such analyses is not necessary). The expanded SAP should not be implemented until approved in writing by the BSWC&E.

Case Management:

In order to close the solid waste issue associated with the imported fill materials, any such fill that exceeds the Residential Ingestion-Dermal/Inhalation soil remediation standards (without performing data averaging) must be removed. Accordingly, following review of the data to be generated from the SAP, the BSWC&E will advise Ridgewood Village of the scope of work needed to incorporate into a Corrective Action Plan (CAP) designed to address any residual solid waste as determined by both the physical and chemical triggers noted in N.J.A.C. 7:26 -1.6(a)6. The CAP should not be conducted until approved in writing by the SWC&E.

Once the BSWC&E is satisfied that appropriate removal of the fill materials that trigger the definition of solid waste at N.J.A.C. 7:26-1.6(a)6 has been achieved, a letter will be issued noting that the subject solid waste issue has been resolved.

Please note that the BSWC&E does not offer opinions on whether or not a site has been remediated or if a site is suitable to allow leaving fill materials in place that do not trigger the definition of solid waste, but have a contaminant within them at a concentration greater than the respective default Migration to Ground Water soil remediation standard at N.J.A.C. 7:26D. Accordingly, if it is desired to pursue further evaluation of the suitability to leave such soils in place, alternative, site specific Migration to Ground Water pathway standards can be generated as afforded by N.J.A.C. 7:26D if approved by a Licensed Site Remediation Professional (LSRP) retained pursuant to the Administrative Requirements for the Remediation of Contaminated Sites as noted in N.J.A.C. 7:26C. Accordingly, Ridgewood Village may want to consider performing additional testing approved by such LSRP to address such pathway during the mobilization addressing the requisite sampling to further evaluate the solid waste issues.

Enforcement:

Please be advised that Ridgewood Village's documented use of contaminated fill at this site is in violation of the Solid Waste Management Act, particularly N.J.A.C. 7:26-2.8(e). As such, the BSWC&E expects full cooperation from Ridgewood Village at this time to facilitate the BSWC&E's discretionary authority to minimize any enforcement actions/penalty assessments. **As such, please provide the requisite Sampling and Analysis Plan within sixty (60) days upon receipt of this correspondence.**

Attached to this letter please find generic guidance from the BSWC&E addressing our expectations associated with data collection. Should you have any questions, please promptly contact me.

Regards,



Tom Farrell, Chief  
Bureau of Solid Waste Compliance & Enforcement

- c: Dave Ongaro, BSWC&E  
Gina Lugo, BSWC&E  
Mike Hastry, DW&USTC&E  
Kate Marcopul, DEP – Historic Preservation Office  
Keona Miller, DEP – Local Government Affairs





# State of New Jersey

**PHILIP D. MURPHY**  
Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF WASTE & UST COMPLIANCE and ENFORCEMENT  
BUREAU OF SOLID WASTE COMPLIANCE AND ENFORCEMENT

**SHAWN M. LATOURETTE**  
Commissioner

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9 Ewing Street, Mail Code 09-02  
P.O. BOX 420  
TRENTON NJ 08625-0420  
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## DATA REVIEW DOCUMENTATION FORM

page 1 of 4 (last updated October 2023)

*The following information should accompany analytical data submitted to the Bureau of Solid Waste Compliance and Enforcement (BSWC&E) for a determination that is limited to whether or not the materials represented by such data trigger the definition of solid waste pursuant to N.J.A.C. 7:26 - 1.6(a)6. BSWC&E's acknowledgement of such data shall not be construed to suggest that the New Jersey Department of Environmental Protection considers that the site represented by this data has been fully remediated in whole or in part. As this form is not designed for any one particular site, not all sections may be applicable.*

Current Name and Address of site:

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Specific Historical uses of property:

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Mapped on NJ GeoWeb as located in an area of Historical Fill? \_\_\_\_\_

Have the subject materials been in contact with any construction and demolition debris or historical discharge of a hazardous substance or historical fill? \_\_\_\_\_

**SAMPLE COLLECTION INFORMATION:**

- Was the sampling conducted in conformance with the Technical Requirements for Site Remediation at N.J.A.C. 7:26E and the most recent version of the NJDEP Field Sampling Procedures Manual? \_\_\_\_\_. If no, please explain:
- 
- 

- Was the sampling conducted to address a known volume of materials? \_\_\_\_\_. If so, what is the total volume of materials addressed by this project? \_\_\_\_\_ cubic yards.

- If the sampling addressed an area wherein the volume of potentially contaminated materials was not known, how many square feet is such Area of Concern? \_\_\_\_\_ square feet.

- Only for sites where no VOCs are expected:** Were Target Compound List Volatile Organic Compounds (VOCs) eliminated from the analyses based on the response from a photoionization detector (PID)? \_\_\_\_\_

- If a PID was used, how, when and by whom was it calibrated (please include the type of calibration gas used)?
- 
- 

- What was the eV value of the bulb used in the PID? \_\_\_\_\_.

- At what units in parts per million (ppm) of response on the PID was the fill considered to not require analysis for VOCs? \_\_\_\_\_.

Describe the process used to screen the materials with the PID. If screening was conducted within in situ materials, please include areal frequency in square feet and depths (from surface grade). If screening was conducted within stockpiled materials, please include the distances within the stockpile and frequency of screening per cubic yards.

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- If other information was used to eliminate volatile organics from the testing methods of the subject fill besides PID screening, please note same here:

Please complete the following table:

Analytical Group	Analytical Frequency per cubic yard of stockpiled materials (if applicable)	Analytical Frequency per square foot of in situ materials in Area of Concern (if applicable)	Reason for Noted Analytical Frequency
Target Analyte Metals			
Target Compound List Volatile Organic Compounds			
Target Compound List Semi- Volatile Organic Compounds			
Target Compound List Pesticides			
Target Compound List PCBs			

- Has a Sample Location Map been provided noting the sample identification numbers in a manner that one who had not seen the site could readily understand where the samples were collected?

- If there was any deviation from the Department's most recent version of the Guidance Documents: *Fill Materials Guidance for SRP Sites, October 2021* or *Understanding DEP's Requirements for Soil and Fill Materials*, please provide your justification for same here:

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**SAMPLE ANALYSIS INFORMATION:**

List the name and the New Jersey Laboratory Certification number(s) for the laboratory(ies) used:

\_\_\_\_\_

Were there any analyses conducted for which the laboratory did not have a specific New Jersey certification to perform same (note: In addition to the NJ Laboratory Certification, laboratories are required to hold a certification from NJDEP for each analytical method)?

If yes, please specify which test method and affected analytes was/were not certified by NJDEP: \_\_\_\_\_

Has the analyses been performed in accordance with N.J.A.C. 7:26E-2 and accompanied by the applicable Reduced Regulatory Deliverables pursuant to Attachment A-II of N.J.A.C. 7:26E?

\_\_\_\_\_

Does each laboratory report contain a summary of the samples received noting any deficiencies with, at a minimum: temperature of the samples upon receipt, condition of the sample bottles, appropriate Chain of Custody documentation, compliance with sample holding times? If any such deficiencies were noted, please list them here:

\_\_\_\_\_

\_\_\_\_\_

Was a Conformance/Non-Conformance Summary included for each laboratory report? \_\_\_\_\_

Did the Conformance/Non-Conformance Summary suggest data that could not be relied upon? \_\_\_\_\_ . If yes, please specify which analytes for which samples were not usable:

\_\_\_\_\_

\_\_\_\_\_

Has any data averaging been employed in an Area of Concern to generate the conclusions drawn? \_\_\_\_\_ If so, specify which Area of Concern employed data averaging and include the computations for same in the report of findings.

Has the data been tabulated with comparison to NJDEP Remediation Standards at N.J.A.C. 7:26D? \_\_\_\_\_

Per my signature below, I certify that the information provided on this form is true and accurate to the best of my knowledge.

Print name of person completing this form: \_\_\_\_\_; sign: \_\_\_\_\_; date: \_\_\_\_\_



## State of New Jersey

PHILIP D. MURPHY  
Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF WASTE & UST COMPLIANCE & ENFORCEMENT  
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### STANDARD SAMPLING and ANALYSES PLAN APPROVAL

(page 1 of 2)

**Project Name:**  
**NJEMS PI#:**  
**Date of S&AP:**

*The following document contains standard conditions and limitations that accompany any communication from the Bureau of Solid Waste Compliance and Enforcement (BSWC&E) which indicate approvals of Sampling and Analysis Plans. Unless otherwise appended to or altered by official written correspondence from the BSWC&E, these conditions and limitations shall apply.*

- 1.) This approval is limited to determine whether or not the soil/fill materials being sampled meet the portion of the definition of solid waste that addresses contaminant concentrations as referred to in N.J.A.C. 7:26-1.6(a)6. As such, analytical results from **any one** sample that indicate concentrations of contaminants that are above the Residential Ingestion-Dermal or Residential Inhalation soil remediation standards at N.J.A.C. 7:26 D are indicative of solid waste. While delineation of such contamination is acceptable with a plan approved by BSWC&E, **no compliance averaging** is accepted.
- 2.) The BSWC&E does not make determinations regarding whether or not soils or materials can be considered as Clean Fill pursuant to N.J.A.C. 7:26E -1.8. As such, upon receipt of acceptable data that indicates contaminant concentrations that are compliant with the definition of solid waste at N.J.A.C. 7:29-1.6(a)6, the BSWC&E will acknowledge same by noting compliance has been achieved with respect to the particular solid waste violation associated with the quality of the soil/fill materials. The BSWC&E does not make determinations regarding whether or not a site has been remediated.
- 3.) All sampling must be performed in accordance with the latest version of the NJDEP's Field Sampling Procedures Manual and N.J.A.C. 7:26 E – The Technical Requirements for Site Remediation.
- 4.) All analyses must be performed by a laboratory that has at least the following two certifications:
  - a.) Overall Laboratory Certification from the State of New Jersey; and, (b) Certification from the State of New Jersey for the particular test method being employed.

Project Name:  
NJEMS PI#:  
Date of S&AP:

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- 5.) Any proposed analytes shall incorporate the test methods associated with EPA's Contract Laboratory Program (CLP) and shall be those analytes included in the respective Target Analyte List (TAL) or Target Compound List (TCL) of the CLP. For example, any proposal to analyze for "Metals" shall be inclusive of all metals in the TAL. It is not necessary to include Tentatively Identified Compounds (TICs) when analyzing for TCL compounds. BSWC&E does not interpret Extractable Petroleum Hydrocarbon (EPH) data.
- 6.) The Quality Assurance Plans shall incorporate quality control provisions and report same that are at least as comprehensive as the Reduced Regulatory Deliverables pursuant to Attachment A-II of N.J.A.C. 7:26 E. The locations of the Laboratory Non-Conformance Summary, Sample Receipt Form and Chain of Custody shall be readily identified in the laboratory report.
- 7.) To expedite the BSWC&E's data review, in addition to the full scale laboratory report, a separate table shall be submitted which compares the data to the Residential Ingestion-Dermal and Residential Inhalation soil remediation standards at N.J.A.C. 7:26D. In order to facilitate the BSWC&E determination on whether or not the site needs to be referred to the Department's Site Remediation Program, the data should also be compared to the default Migration to Ground Water pathway soil remediation standards at N.J.A.C. 7:26D. Any comparison to a site specific Migration to Ground Water pathway soil remediation standard would not be performed by the BSWC&E. Further, if the site is located in a wetlands or other area of ecological significance, the analytical results should also be compared to the Ecological Screening Criteria.

*Place an "X" or appropriate number next to the applicable statement(s):*

- 8.) The proposed sampling frequency is: \_\_\_ acceptable as proposed; \_\_\_ needs to be increased to one sample per \_\_\_ cubic yards (for sampling the subject fill) or, one sample per \_\_\_ square feet (for post-excavation analyses).
- 9.) The proposed analytes are: \_\_\_ acceptable as proposed; \_\_\_ needs to include all of the TAL metals; \_\_\_ needs to include all of the TCL semi-volatile organics; \_\_\_ needs to include all of the TCL pesticides; \_\_\_ needs to include all of the TCL PCBs; \_\_\_ needs to include all of the TCL VOCs.
- 10.) The proposed field screening for volatile organic compounds (VOCs): \_\_\_ is acceptable as proposed; \_\_\_ must perform field screening with the stated instrument at intervals of \_\_\_ cubic yards or \_\_\_ square feet (if post excavation sampling); \_\_\_ must provide documentation of proper calibration; \_\_\_ if a photoionization detector is to be used, must specify the electron voltage of the bulb used.

Plan Approved By: \_\_\_\_\_  
on \_\_\_\_\_

**APPENDIX B**  
**152 SOUTH BROAD STREET ANALYTICAL DATA**

October 18, 2018

Mr. Scott Loventhal  
Ridgewood Dayton, LLC  
820 Morris Turnpike, Suite 101  
Short Hills, NJ 07078

Via Email to [scottl@gardenhomes.com](mailto:scottl@gardenhomes.com)

**Re: Stockpiled Soil Characterization Results**  
**152 South Broad Street**  
**Ridgewood, New Jersey**  
**Project No. 1594:602**

Dear Mr. Loventhal:

The following letter report presents the results of soil characterization sampling and analysis conducted by Peak Environmental LLC (Peak) related to the 152 South Broad Street site (Site) on behalf of Ridgewood Dayton, LLC.

## **PROJECT BACKGROUND**

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It is Peak's understanding that, following the completion of the remedial excavation and off-site disposal of the known areas of environmental concern (AOCs), redevelopment related excavations of soils encountered at deeper depths at the Site resulted in the generation of approximately 8,000 cubic yards (cys) of excess soil. Peak understands that the client needs analytical data to provide to prospective recipients of the soil so that it can be used as fill material at an offsite property.

### **Soil Characterization Sampling**

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Review of the New Jersey Department of Environmental Protection (NJDEP) Fill Material Guidance Document for 8,000 cubic yards of material calls for the collection of 21 samples by default, or 14 samples using a reduced sampling scheme with justification. As this property is in the NJDEP Site Remediation Program, and a Preliminary Assessment, Site Investigation, Remedial Investigation, and Remedial Actions have already been completed at the Site under the direction and oversight of a Licensed Site Remediation Professional (LSRP), Peak conducted the characterization sampling using the reduced sampling frequency as the history of the property is known.

On October 10, 2018, Peak arrived on site and noted that the 8,000 cys of material was comprised of two separate stockpiles, one at the north side of the property (estimated to be 4,500 cys) and one along the south side of the property (estimated to be 3,500 cys). The stockpiles consisted of soils excavated from each respective general area, and the northern pile included soils excavated from below the former building. Peak conducted the characterization sampling by directing your operator to excavate test pits at representative locations within the soil piles using a track mounted excavator. The test pit locations were offset to split each of the two stockpiles into roughly seven equal sections and were advanced throughout the vertical extent of the piles which extended up to 13' high.



Specifically, a total of seven test pits (identified as NTP-1 through NTP-7) were advanced within the northern soil pile and seven test pits (identified as STP-1 through STP-7) were advanced within the southern soil pile. The soils at each test pit location were screened in the field for Volatile Organic Compounds (VOCs) using a calibrated photoionization detector (PID), and visually inspected for texture and physical evidence of contaminants and/or historic fill. There were no PID responses within any of the test pit locations and no evidence of subsurface extraneous debris and/or solid waste, or historic fill material. No obvious visual or olfactory evidence of contamination was noted. The stockpiled soils were generally homogenous and consisted of brown coarse and medium sand with various amounts of fine gravel.

As there were no indications of impacts noted, the sample locations were selected randomly. As the Site was formerly used as an automotive dealership and the remediated AOCs included historic fill, the lab analysis included: Extractable Petroleum Hydrocarbons (EPH) on all 14 samples; TAL Metals and Polynuclear Aromatic Hydrocarbons (PAHs) on ten samples; Volatile Organic Compounds (VOCs) on five samples; and the full Target Compound List/Target Analyte List (TCL/TAL+30) analysis on four samples. The samples collected are summarized in the following table:

Field ID	Location	Sample Depth (ft. from top of pile)	Analytical Parameters
<b>NTP-1A</b>	Northern Soil Pile	1.5-2	EPH Cat-2, TCL/TAL+30
<b>NTP-2A</b>	Northern Soil Pile	0.5-1	EPH Cat-2, PAHs, Metals, VOCs
<b>NTP-2B</b>	Northern Soil Pile	4.5-5	EPH Cat-2, PAHs, Metals
<b>NTP-3B</b>	Northern Soil Pile	4-4.5	EPH Cat-2, PAHs, Metals
<b>NTP-4B</b>	Northern Soil Pile	4.5-5	EPH Cat-2, PAHs, Metals
<b>NTP-6</b>	Northern Soil Pile	4-4.5	EPH Cat-2, TCL/TAL+30
<b>NTP-7</b>	Northern Soil Pile	0-0.5	EPH Cat-2, PAHs, Metals, VOCs
<b>STP-1B</b>	Southern Soil Pile	3.5-4	EPH Cat-2, PAHs, Metals, VOCs
<b>STP-2B</b>	Southern Soil Pile	3.5-4	EPH Cat-2, PAHs, Metals
<b>STP-3B</b>	Southern Soil Pile	4-4.5	EPH Cat-2, PAHs, Metals
<b>STP-4A</b>	Southern Soil Pile	4-4.5	EPH Cat-2, PAHs, Metals, VOCs
<b>STP-4B</b>	Southern Soil Pile	1.5-2	EPH Cat-2, TCL/TAL+30
<b>STP-5</b>	Southern Soil Pile	3-3.5	EPH Cat-2, PAHs, Metals
<b>STP-7</b>	Southern Soil Pile	2-2.5	EPH Cat-2, TCL/TAL+30

## Results and Conclusions

---

The results of analysis, as presented on Tables 1, 2, and 3, did not indicate the presence of any target compounds above an applicable NJDEP Soil Remediation Standard. Exceedances of the NJDEP Default Impact to Groundwater Soil Screening Levels (IGWSSLs) were identified for Aluminum and Manganese; however, based on the NJDEP Guidance Document Frequently Asked Questions for the Impact to Ground Water Pathway in Soil Remediation Standards Version 1.0, 1/27/2011 (see below), no further action is necessary for these naturally occurring earth metals. The complete NJ Reduced Lab Report is included as **Attachment I**.

*“Soil standards, by law, must be based on health considerations. The health based GWQS are used as the endpoint from which to back-calculate the IGWSRS. The GWQS Aluminum, Manganese, Silver and Zinc are secondary, that is they are not based on health considerations, but primarily on aesthetic considerations such as taste, odor and appearance. Additionally, these elements may be found as background contaminants. Therefore, the Department has decided that the IGW pathway does not need to be addressed for these contaminants unless there is cause to believe that their presence is due to a site discharge.”*

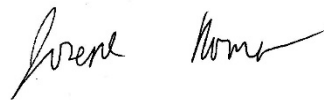
Based on our field observations and the results of analysis, the soil piles defined in this report meet the NJDEP Soil Remediation Standards and are suitable for use as clean fill. They have been shown to be uncontaminated pursuant to any applicable remediation standard and are free of contamination due to extraneous debris or solid waste. This report may be referenced as documentation of the quality of the fill. We recommend that when transporting this material from the site to its final destination, that bills of lading are used (and retained) to document the transfer of this soil to its final destination.

We appreciate the opportunity to provide you with professional services, and trust the foregoing information is suitable to meet your needs. We remain available to discuss any aspect of this project.

Sincerely,  
Peak Environmental LLC

A handwritten signature in blue ink, appearing to read "Robert M. Edgar".

Robert M. Edgar, Partner

A handwritten signature in blue ink, appearing to read "Joseph Romeo".

Joseph Romeo  
Senior Project Manager

enc: Tables 1, 2, and 3  
Attachment I - Laboratory Reduced Data Deliverables

Table 1. Soil Analytical Data Summary  
Volatile Organic Compounds

Table with columns for Area of Concern, Sample Identifier, Laboratory Identifier, Sample Date, CAS Number, NJDEP Direct Contact SRS1, NJDEP Nonresidential Direct Contact SRS2, NJDEP Default Impact to Ground Water SSL3, and various NTP-1A through NTP-7 and STP-1B through STP-4A columns for results, qualifiers, MDL, and RL.

Table 1. Soil Analytical Data Summary  
 Volatile Organic Compounds

Area of Concern Sample Identifier Laboratory Identifier Sample Date	CAS Number	NJDEP Residential Direct Contact SRS <sup>1</sup>	NJDEP Nonresidential Direct Contact SRS <sup>2</sup>	NJDEP Default Impact to Ground Water SSL <sup>3</sup>	8100452-12 STP-4B 10/10/2018				8100452-14 STP-7 10/10/2018				
					Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL	
<b>Volatile Organics - GC/MS (mg/kg)</b>													
1,1,1-Trichloroethane	71-55-6	160,000	NS	0.3	0.000129	U	0.000129	0.000887	0.000133	U	0.000133	0.000912	
1,1,2,2-Tetrachloroethane	79-34-5	1	3	0.007	0.000122	U	0.000122	0.000887	0.000126	U	0.000126	0.000912	
1,1,2-Trichloro-1,2,2-Trifluoroethane	76-13-1	NS	NS	NS	0.000379	U	0.000379	0.000887	0.000390	U	0.000390	0.000912	
1,1,2-Trichloroethane	79-00-5	2	6	0.02	0.000149	U	0.000149	0.000887	0.000154	U	0.000154	0.000912	
1,1-Dichloroethane	75-34-3	8	24	0.2	0.000129	U	0.000129	0.000887	0.000133	U	0.000133	0.000912	
1,1-Dichloroethene	75-35-4	11	150	0.008	0.000164	U	0.000164	0.000887	0.000169	U	0.000169	0.000912	
1,2,3-Trichlorobenzene	87-61-6	NS	NS	NS	0.000192	U	0.000192	0.000887	0.000197	U	0.000197	0.000912	
1,2,4-Trichlorobenzene	120-82-1	73	820	0.7	0.000236	U	0.000236	0.000887	0.000243	U	0.000243	0.000912	
1,2,4-Trimethylbenzene	95-63-6	NS	NS	NS	0.000122	U	0.000122	0.000887	0.000126	U	0.000126	0.000912	
1,2-Dibromo-3-chloropropane	96-12-8	0.08	0.20	0.005	0.000216	U	0.000216	0.000887	0.000222	U	0.000222	0.000912	
1,2-Dibromoethane	106-93-4	0.008	0.04	0.005	0.000112	U	0.000112	0.000887	0.000115	U	0.000115	0.000912	
1,2-Dichlorobenzene	95-50-1	5,300	59,000	17	0.000156	U	0.000156	0.000887	0.000161	U	0.000161	0.000912	
1,2-Dichloroethane	107-06-2	0.9	3	0.005	0.000125	U	0.000125	0.000887	0.000129	U	0.000129	0.000912	
1,2-Dichloropropane	78-87-5	2	5	0.005	0.000145	U	0.000145	0.000887	0.000150	U	0.000150	0.000912	
1,3-Dichlorobenzene	541-73-1	5,300	59,000	19	0.000065	U	0.000065	0.000887	0.000067	U	0.000067	0.000912	
1,4-Dichlorobenzene	106-46-7	5	13	2	0.000128	U	0.000128	0.000887	0.000131	U	0.000131	0.000912	
2-Butanone	78-93-3	3,100	44,000	0.9	0.000145	U	0.000145	0.002220	0.000149	U	0.000149	0.002280	
2-Hexanone	591-78-6	NS	NS	NS	0.000083	U	0.000083	0.000887	0.000085	U	0.000085	0.000912	
4-Methyl-2-pentanone	108-10-1	NS	NS	NS	0.000111	U	0.000111	0.000887	0.000114	U	0.000114	0.000912	
Acetone	67-64-1	70,000	NS	19	0.000269	U	0.000269	0.002220	0.000276	U	0.000276	0.002280	
Benzene	71-43-2	2	5	0.005	0.000081	U	0.000081	0.000887	0.000083	U	0.000083	0.000912	
Bromochloromethane	74-97-5	NS	NS	NS	0.000164	U	0.000164	0.000887	0.000168	U	0.000168	0.000912	
Bromodichloromethane	75-27-4	1	3	0.005	0.000111	U	0.000111	0.000887	0.000114	U	0.000114	0.000912	
Bromoform	75-25-2	81	280	0.03	0.000156	U	0.000156	0.000887	0.000160	U	0.000160	0.000912	
Bromomethane	74-83-9	25	59	0.04	0.000256	U	0.000256	0.000887	0.000263	U	0.000263	0.000912	
Carbon disulfide	75-15-0	7,800	110,000	6	0.000127	U	0.000127	0.000887	0.000131	U	0.000131	0.000912	
Carbon Tetrachloride	56-23-5	2	4	0.005	0.000133	U	0.000133	0.000887	0.000137	U	0.000137	0.000912	
Chlorobenzene	108-90-7	510	7,400	0.6	0.000129	U	0.000129	0.000887	0.000132	U	0.000132	0.000912	
Chlorodibromomethane	124-48-1	3	8	0.005	0.000109	U	0.000109	0.000887	0.000112	U	0.000112	0.000912	
Chloroethane	75-00-3	220	1,100	NS	0.000151	U	0.000151	0.000887	0.000155	U	0.000155	0.000912	
Chloroform	67-66-3	0.6	2	0.4	0.000149	U	0.000149	0.000887	0.000153	U	0.000153	0.000912	
Chloromethane	74-87-3	4	12	NS	0.000341	U	0.000341	0.000887	0.000351	U	0.000351	0.000912	
cis-1,2-Dichloroethene	156-59-2	230	560	0.3	0.000043	U	0.000043	0.000887	0.000044	U	0.000044	0.000912	
cis-1,3-Dichloropropene	10061-01-5	2	7	0.005	0.000112	U	0.000112	0.000887	0.000115	U	0.000115	0.000912	
Cyclohexane	110-82-7	NS	NS	NS	0.000196	U	0.000196	0.000887	0.000202	U	0.000202	0.000912	
Dichlorodifluoromethane	75-71-8	490	230,000	39	0.000299	U	0.000299	0.000887	0.000308	U	0.000308	0.000912	
EthylBenzene	100-41-4	7,800	110,000	13	0.000120	U	0.000120	0.000887	0.000124	U	0.000124	0.000912	
Isopropylbenzene	98-82-8	NS	NS	NS	0.000139	U	0.000139	0.000887	0.000143	U	0.000143	0.000912	
m+p-Xylenes	179601-23-1	12,000	170,000	19	0.000224	U	0.000224	0.001770	0.000230	U	0.000230	0.001820	
Methyl Acetate	79-20-9	78,000	NS	22	0.000117	U	0.000117	0.000887	0.000121	U	0.000121	0.000912	
Methyl tert-Butyl Ether	1634-04-4	110	320	0.2	0.000150	U	0.000150	0.000887	0.000154	U	0.000154	0.000912	
Methylcyclohexane	108-87-2	NS	NS	NS	0.000143	U	0.000143	0.000887	0.000147	U	0.000147	0.000912	
Methylene Chloride	75-09-2	46	230	0.01	0.000266	U	0.000266	0.000887	0.000274	U	0.000274	0.000912	
o-Xylene	95-47-6	12,000	170,000	19	0.000114	U	0.000114	0.000887	0.000117	U	0.000117	0.000912	
Styrene	100-42-5	90	260	3	0.000127	U	0.000127	0.000887	0.000130	U	0.000130	0.000912	
tert-Butyl alcohol	75-65-0	1,400	11,000	0.3	0.001860	U	0.001860	0.008870	0.001910	U	0.001910	0.009120	
Tetrachloroethene	127-18-4	43	1,500	0.005	0.000088	U	0.000088	0.000887	0.000090	U	0.000090	0.000912	
Toluene	108-88-3	6,300	91,000	7	0.000071	U	0.000071	0.000887	0.000073	U	0.000073	0.000912	
Total Xylenes	1330-20-7	12,000	170,000	19	0.000114	U	0.000114	0.000887	0.000117	U	0.000117	0.000912	
trans-1,2-Dichloroethene	156-60-5	300	720	0.6	0.000120	U	0.000120	0.000887	0.000124	U	0.000124	0.000912	
trans-1,3-Dichloropropene	10061-02-6	2	7	0.005	0.000169	U	0.000169	0.000887	0.000174	U	0.000174	0.000912	
Trichloroethene	79-01-6	3	10	0.01	0.000130	U	0.000130	0.000887	0.000134	U	0.000134	0.000912	
Trichlorofluoromethane	75-69-4	23,000	340,000	34	0.000102	U	0.000102	0.000887	0.000105	U	0.000105	0.000912	
Vinyl chloride	75-01-4	0.7	2	0.005	0.000168	U	0.000168	0.000887	0.000173	U	0.000173	0.000912	
Tentatively Identified Compounds		NS	NS	NS	0	J			0	J			











**ATTACHMENT I**



AQUA PRO-TECH LABORATORIES  
Certified Environmental Testing



# ANALYTICAL RESULTS

## REDUCED DELIVERABLES FORMAT

APL Work Order Number: 8100452

Peak Environmental

Project: Ridgewood

Brian Wood  
Laboratory Director

All Results meet the requirements of the National Environmental Laboratory Accreditation Conference and/or State specific certifications as applicable.

Report Date: Oct 17, 2018

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AQUA PRO-TECH LABORATORIES  
Certified Environmental Testing

# Sample Summary

Work Order: 8100452

Client: Peak Environmental

Project: Ridgewood

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
NTP-1A	8100452-01	Soil	10/10/2018 00:00	10/10/2018 15:40
NTP-2A	8100452-02	Soil	10/10/2018 00:00	10/10/2018 15:40
NTP-2B	8100452-03	Soil	10/10/2018 00:00	10/10/2018 15:40
NTP-3B	8100452-04	Soil	10/10/2018 00:00	10/10/2018 15:40
NTP-4B	8100452-05	Soil	10/10/2018 12:35	10/10/2018 15:40
NTP-6	8100452-06	Soil	10/10/2018 12:50	10/10/2018 15:40
NTP-7	8100452-07	Soil	10/10/2018 13:00	10/10/2018 15:40
STP-1B	8100452-08	Soil	10/10/2018 13:15	10/10/2018 15:40
STP-2B	8100452-09	Soil	10/10/2018 13:30	10/10/2018 15:40
STP-3B	8100452-10	Soil	10/10/2018 13:40	10/10/2018 15:40
STP-4A	8100452-11	Soil	10/10/2018 00:00	10/10/2018 15:40
STP-4B	8100452-12	Soil	10/10/2018 00:00	10/10/2018 15:40
STP-5	8100452-13	Soil	10/10/2018 00:00	10/10/2018 15:40
STP-7	8100452-14	Soil	10/10/2018 00:00	10/10/2018 15:40



www.aquaprotechlabs.com

1275 BLOOMFIELD AVENUE • BUILDING 6  
FAIRFIELD, NEW JERSEY 07004

TEL: 973.227.0422  
FAX: 973.227.2813

CONTAMINATION LEVEL

HIGH  MEDIUM  LOW

CHAIN OF CUSTODY

CLIENT: Peak SEND REPORT TO: Joe Renee

ADDRESS: 26 Kennedy Blvd. ADDRESS: joer@peak-environmental.com

East Brunswick PHONE: \_\_\_\_\_

PHONE: 732-326-1010 FAX: \_\_\_\_\_

E-MAIL: joer@peak-environmental.com

PROJECT NAME: Ridgewood SEND INVOICE TO: Kristen Van Dine

PROJECT MGR: Joe Renee ADDRESS: kristen@peak-environmental.com

PROJECT or PO #: 1594 SAMPLED BY: BSS

TURN-AROUND TIME

APL STANDARD 2 weeks  
 RUSH (Choose one below)  
 24 hr. date & time required  
 48 hr. date & time required  
 72 hr. date & time required  
 1 week

REPORT FORMAT  
 RESULTS ONLY  
 NJ DEP REDUCED  
 NJ DEP FULL  
 STATE FORMS/E2 REPORTING  
 PWSID# \_\_\_\_\_

ELECTRONIC FORMAT  
 EMAIL DELIVERY  
 HAZSITE EDD  
 EXCEL  
 SRP# \_\_\_\_\_

MATRIX ABBREVIATIONS: D - DRINKING WATER G - GROUNDWATER W - WASTEWATER S - SOIL SL - SLUDGE C - CONCRETE L - LAKE

APL Lab ID#	Sample Source: Field ID	Date	Time	Sample Type			No. of Bottles	Preservative	Analysis Requested
				G	A	B			
8100452-01	NTP-1A	10/10/18	X			S	5		TCL/TAL+30, EPH, VOCs
-02	NTP-2A						5		EPH, TAL metals, PAHs, VOCs
-03	NTP-2B						1		EPH, TAL metals, PAHs
-04	NTP-3B						1		" " "
-05	NTP-4B		12:35				5		" " " VOCs
-06	NTP-6		12:50				5		TCL/TAL+30, EPH, VOCs
-07	NTP-7		13:00				5		EPH, TAL metals, PAHs, VOCs
-08	STP-1B		13:15				5		" " " "
-09	STP-2B		13:30				1		EPH, TAL metals, PAHs

RELINQUISHED BY (Print) Ben Swasey DATE 10/10/18 RECEIVED BY (Print) \_\_\_\_\_

Signature \_\_\_\_\_ Time 14:50 Signature \_\_\_\_\_

RELINQUISHED BY (Print) \_\_\_\_\_ DATE 10/10/18 RECEIVED BY (Print) \_\_\_\_\_

Signature \_\_\_\_\_ Time 3:40 Signature \_\_\_\_\_

RELINQUISHED BY (Print) \_\_\_\_\_ DATE \_\_\_\_\_ RECEIVED BY (Print) \_\_\_\_\_

Signature \_\_\_\_\_ Time \_\_\_\_\_ Signature \_\_\_\_\_

COMMENTS/SPECIAL INSTRUCTIONS

Cooler Temp. upon receipt at lab 4.0

CERTIFICATIONS: NELAP (National Environmental Laboratory Accreditation Program) NJDEP #07010 PADEP #68-02903 NYDOH #11634 CTPH #0233 US ARMY  
 By signing this Chain of Custody Agreement, customer expressly agrees to pay APL for all charges, reasonably incurred in connection with analysis and reporting for these samples

**CONTAMINATION LEVEL**

HIGH  MEDIUM  LOW

**CHAIN OF CUSTODY**

CLIENT: \_\_\_\_\_ SEND REPORT TO: \_\_\_\_\_  
 ADDRESS: \_\_\_\_\_ ADDRESS: \_\_\_\_\_  
 PHONE: \_\_\_\_\_ PHONE: *See page 1*  
 E-MAIL: \_\_\_\_\_ FAX: \_\_\_\_\_  
 PROJECT NAME: \_\_\_\_\_ SEND INVOICE TO: \_\_\_\_\_  
 PROJECT MGR: \_\_\_\_\_ ADDRESS: \_\_\_\_\_  
 PROJECT or PO #: \_\_\_\_\_ SAMPLED BY: \_\_\_\_\_

**TURN-AROUND TIME**

- APL STANDARD 2 weeks
- RUSH (choose one below)
- 24 hr. date & time required
- 48 hr. date & time required
- 72 hr. date & time required
- 1 week

- REPORT FORMAT**
- RESULTS ONLY
  - NJ DEP REDUCED
  - NJ DEP FULL
  - STATE FORMS/E2 REPORTING
- ELECTRONIC FORMAT**
- EMAIL DELIVERY
  - HAZSITE EDD
  - EXCEL
- PWSID#: \_\_\_\_\_

MATRIX ABBREVIATIONS: D - DRINKING WATER G - GROUNDWATER W - WASTEWATER S - SOIL SL - SLUDGE C - CONCRETE L - LAKE

APL Lab ID#	Sample Source: Field ID	Date	Time	Sample Type		No. of Bottles	Preservative	Analysis Requested
				G R A B	S O I L P			
8100452-10	STP-3B	10/10/18	13:46	X		1		EPH, TAL metals, PAHs
-11	STP-4A	↓	↓	↓		5		" " " " VOCs
-12	STP-4B	↓	↓	↓		5		TCL/TAL+30, EPH, VOCs
-13	STP-5	↓	↓	↓		1		EPH, TAL metals, PAHs
-14	STP-7	↓	↓	↓		5		TCL/TAL+30, EPH, VOCs

RELINQUISHED BY (Print) *Benjamin Sweechey* DATE 10/10/18 RECEIVED BY (Print) *[Signature]*

Signature \_\_\_\_\_ Time 14:50 Signature \_\_\_\_\_

RELINQUISHED BY (Print) *[Signature]* DATE 10/10/18 RECEIVED BY (Print) *[Signature]*

Signature \_\_\_\_\_ Time 3:10 Signature \_\_\_\_\_

RELINQUISHED BY (Print) \_\_\_\_\_ DATE \_\_\_\_\_ RECEIVED BY (Print) \_\_\_\_\_

Signature \_\_\_\_\_ Time \_\_\_\_\_ Signature \_\_\_\_\_

**COMMENTS/SPECIAL INSTRUCTIONS**

Cooler Temp. upon receipt at lab 4.0

CERTIFICATIONS: NELAP (National Environmental Laboratory Accreditation Program) NJDEP #07010 PADEP #68-02903 NYDOH #11634 CTPH #0233 US ARMY  
 By signing this Chain of Custody Agreement, customer expressly agrees to pay APL for all charges, reasonably incurred in connection with analysis and reporting for these samples



## Extractable Petroleum Hydrocarbons:

### *Gas Chromatography/Flame Ionization Detector*

New Jersey Department of Environmental Protection Site Remediation Program Extractable Petroleum Hydrocarbons Methodology (Version 3.0).  
USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 8015B or NJDEP Office of Quality Assurance Quantitation of Semi-Volatile Petroleum Products in Water, Soil and Sediment OQA-QAM-025, Revision 6.

## Metals:

### *Inductively-Coupled Plasma Atomic Emission Spectrometry or Inductively-Coupled Plasma Mass Spectrometry*

**Wastewater and Groundwater Samples:** USEPA Methods for the Analysis of Water and Wastes, Method 200.7, Method 200.8.  
**Soil Samples:** USEPA Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 6010D.

## Mercury:

### *Cold Vapor Atomic Absorption Spectrometry*

**Wastewater and Groundwater Samples:** USEPA Methods for the Analysis of Water and Wastes, Method 245.1.  
**Soil Samples:** USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 7471B.

## Volatile Organic Compounds:

### *Purge and Trap Gas Chromatography/Mass Spectrometry*

**Drinking Water Samples:** USEPA Methods for the Determination of Organic Compounds in Drinking Water, Method 524.2.  
**Wastewater Samples:** USEPA Methods for the Analysis of Water and Wastes, Method 624.1, Method 8260C.  
**Soil and Groundwater Samples:** USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 8260C.

## Semi-Volatile Organic Compounds:

### *Gas Chromatography/Mass Spectrometry*

**Wastewater Samples:** USEPA Methods for the Analysis of Water and Wastes, Method 625.1, Method 8270D.  
**Soil and Groundwater Samples:** USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 8270D.

## Pesticides:

### *Gas Chromatography/Electron Capture Detector*

**Wastewater Samples:** USEPA Methods for the Analysis of Water and Wastes, Method 608.3, Method 8081B.  
**Soil and Groundwater Samples:** USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 8081B.

## Polychlorinated Biphenyls (PCBs):

### *Gas Chromatography/Electron Capture Detector*

**Wastewater Samples:** USEPA Methods for the Analysis of Water and Wastes, Method 608.3, Method 8082A.  
**Soil and Groundwater Samples:** USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 8082A.

## General Chemistry Methods:

*Various general chemistry methods are taken from "Standard Methods for the Examination of Water and Wastewater, 19th Edition".*

Specific method citations can be found on the Analytical Results Summary page of this report listed under 'Method'.

\*\* A complete list of APL's certified Methods are accessible on the [Standards And Docs](#) page of the Results Retrieval System



Aqua Pro-Tech Laboratories  
Data Reporting Abbreviations and Qualifiers

**MDL:**

Method Detection Limit. The minimum reportable concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero. The value is calculated from the analysis of seven replicates of a spike sample. On analytical reports this value is corrected for percent moisture and any concentration or dilution factors.

**RL:**

Reporting Limit. The Concentration of the lowest calibration standard that was included in the initial calibration of the instrument. On analytical reports this value is corrected for percent moisture and any concentration or dilution factors.

**Concentration (Conc) / Result:**

If the compound is detected, the measured concentration is reported. If this column is left blank, or contains a 'less than' (<) symbol, the compound was not detected.

**Tentatively Identified Compound (TIC):**

A TIC is a non-targeted compound, not included in the calibration, identified by a mass spectral library search.

**Qualifiers:**

- U:** Indicates the compound was analyzed for but was not detected.
- J:** Indicates an estimated value. All tentatively identified compounds (TICs) and results below the RL receive this qualifier.
- B:** Indicates the analyte was found in the method blank as well as the sample.
- N:** Used when reporting a specific tentatively identified compound.
- E:** Indicates that the concentration of the compound exceeds the calibration range of the instrument. The results of a diluted analysis will also be reported. The results of the dilution should be used for those compounds exceeding the calibration range in the undiluted analysis.

<b>DATA OF KNOWN QUALITY CONFORMANCE/NON-CONFORMANCE SUMMARY QUESTIONNAIRE</b>	
<b>Laboratory Name:</b> Aqua Pro-Tech Laboratories  <b>Client:</b> Peak Environmental  <b>Project Location:</b> Ridgewood  <b>Project Number:</b> 8100452  <b>Laboratory Sample ID(s):</b> 01-14 <b>Sampling Date(s):</b> October 10, 2018  <b>List DKQP Methods Used:</b> 8260C; 8270D; 8082A; 8081B; 7471B; 6010D; NJDEP-EPH-CAT2; SW 846 9014; Gravimetric	
<b>1</b>	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the NJDEP Data of Known Quality performance standards? <span style="float: right;"><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</span>
<b>1A</b>	Were the method specified handling, preservation, and holding time requirements met? <span style="float: right;"><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</span>
<b>1B</b>	<b>EPH Method:</b> Was the EPH method conducted without significant modifications (see Section 11.3 of respective DKQ methods) <span style="float: right;"><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</span>
<b>2</b>	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)? <span style="float: right;"><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</span>
<b>3</b>	Were samples received at an appropriate temperature (4±2° C)? <span style="float: right;"><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</span>
<b>4</b>	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span>
<b>5</b>	Were reporting limits specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt? <span style="float: right;"><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</span>  Were these reporting limits met? <span style="float: right;"><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A</span>
<b>6</b>	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the DKQP documents and/or site-specific QAPP? <span style="float: right;"><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</span>
<b>7</b>	Are project-specific matrix spikes and/or laboratory duplicates included in this data set? <span style="float: right;"><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</span>

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information should be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for Data of Known Quality.°



AQUA PRO-TECH LABORATORIES

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## QUALITY CONTROL Conformance/Non-Conformance Summary



### **ANALYSIS: INORGANICS [6010D / 7471B / 9014]**

#### **Method 6010D:**

The percent recoveries for several metals were outside of the QC limits for the matrix spike and matrix spike duplicate (low). The blank spike met all QC criteria.

#### **Methods 7471B / 9014:**

All samples met the QC criteria.

### **ANALYSIS: EPH [NJDEP-EPH-CAT2]**

All samples met the QC criteria.

### **ANALYSIS: PCBs [8082A]**

All samples met the QC criteria.

### **ANALYSIS: PESTICIDES [8081B]**

All samples met the QC criteria.

### **ANALYSIS: VOLATILES BY GC/MS [8260C]**

The continuing calibrations (S8J1704-CCV1, S8J1706-CCV1) were outside of the QC limits for Carbon disulfide (low).

Batch B8J1111:

The percent recovery for Chlorodibromomethane was outside of the QC limits for the blank spike (low).

### **ANALYSIS: SEMI-VOLATILES BY GC/MS [8270D]**

The percent recovery for Benzaldehyde was outside of the QC limits for the blank spike, matrix spike and matrix spike duplicate (low).

The percent recoveries for several other compounds were outside of the QC limits for the matrix spike and matrix spike duplicate (low). The blank spike met all QC criteria.

Reviewed By: \_\_\_\_\_

Brian Wood - Laboratory Director

(SK)

10/18/2018

Date

For any questions about your Quality Control, please call us at 973-227-0422.



AQUA PRO-TECH LABORATORIES  
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## Positive Results Only Summary

8100452-01 (Soil)

Sample Name: NTP-1A

### NJDEP-EPH-CAT2 - Extractable Petroleum Hydrocarbons Category 2

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Total EPH	62.8		11.1	22.2	mg/kg dry	1	10/11/18 12:51

### SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Aluminum	3290		0.0603	2.81	mg/kg dry	1	10/11/18 14:32
Barium	18.6		0.00108	0.562	mg/kg dry	1	10/11/18 14:32
Beryllium	0.138		0.000101	0.0281	mg/kg dry	1	10/11/18 14:32
Calcium	938		0.319	28.1	mg/kg dry	1	10/11/18 14:32
Chromium	5.14		0.00101	0.281	mg/kg dry	1	10/11/18 14:32
Cobalt	2.31		0.00122	0.225	mg/kg dry	1	10/11/18 14:32
Copper	8.71		0.00121	0.281	mg/kg dry	1	10/11/18 14:32
Iron	7190		0.127	5.62	mg/kg dry	1	10/11/18 14:32
Lead	23.8		0.00586	1.40	mg/kg dry	1	10/11/18 14:32
Magnesium	763		0.818	56.2	mg/kg dry	1	10/11/18 14:32
Manganese	125		0.000695	0.281	mg/kg dry	1	10/11/18 14:32
Nickel	4.33		0.00193	0.140	mg/kg dry	1	10/11/18 14:32
Potassium	212		2.64	112	mg/kg dry	1	10/11/18 14:32
Sodium	107		0.154	56.2	mg/kg dry	1	10/11/18 14:32
Vanadium	9.94		0.00973	0.562	mg/kg dry	1	10/11/18 14:32
Zinc	22.8		0.00258	0.843	mg/kg dry	1	10/11/18 14:32

### SW 846 8270D - Semivolatile Organics - GC/MS - BNA+25

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Benzo(a)anthracene	0.0995	J	0.0149	0.148	mg/kg dry	1	10/11/18 14:10
Benzo(a)pyrene	0.0887	J	0.0258	0.148	mg/kg dry	1	10/11/18 14:10
Benzo(b)fluoranthene	0.107	J	0.0208	0.148	mg/kg dry	1	10/11/18 14:10
Benzo(g,h,i)perylene	0.0702	J	0.0120	0.148	mg/kg dry	1	10/11/18 14:10
Benzo(k)fluoranthene	0.0788	J	0.0170	0.148	mg/kg dry	1	10/11/18 14:10
Chrysene	0.0909	J	0.0101	0.148	mg/kg dry	1	10/11/18 14:10
Fluoranthene	0.167		0.0139	0.148	mg/kg dry	1	10/11/18 14:10
Indeno(1,2,3-cd)pyrene	0.0610	J	0.0159	0.148	mg/kg dry	1	10/11/18 14:10
Phenanthrene	0.126	J	0.0195	0.148	mg/kg dry	1	10/11/18 14:10
Pyrene	0.158		0.0109	0.148	mg/kg dry	1	10/11/18 14:10

### SW 846 8260C - Volatile Organics - GC/MS - VO+15

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Tetrachloroethene	0.00329		0.000121	0.00122	mg/kg dry	1	10/10/18 18:59

8100452-02 (Soil)

Sample Name: NTP-2A

### NJDEP-EPH-CAT2 - Extractable Petroleum Hydrocarbons Category 2

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Total EPH	97.5		10.8	21.6	mg/kg dry	1	10/11/18 13:27

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AQUA PRO-TECH LABORATORIES  
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## Positive Results Only Summary

8100452-02 (Soil)

Sample Name: NTP-2A

### SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Aluminum	3800		0.0563	2.62	mg/kg dry	1	10/11/18 14:34
Barium	21.4		0.00101	0.525	mg/kg dry	1	10/11/18 14:34
Beryllium	0.160		0.0000946	0.0262	mg/kg dry	1	10/11/18 14:34
Calcium	1260		0.298	26.2	mg/kg dry	1	10/11/18 14:34
Chromium	6.19		0.000943	0.262	mg/kg dry	1	10/11/18 14:34
Cobalt	2.83		0.00114	0.210	mg/kg dry	1	10/11/18 14:34
Copper	10.4		0.00113	0.262	mg/kg dry	1	10/11/18 14:34
Iron	8240		0.119	5.25	mg/kg dry	1	10/11/18 14:34
Lead	26.2		0.00548	1.31	mg/kg dry	1	10/11/18 14:34
Magnesium	952		0.764	52.5	mg/kg dry	1	10/11/18 14:34
Manganese	144		0.000649	0.262	mg/kg dry	1	10/11/18 14:34
Nickel	5.14		0.00180	0.131	mg/kg dry	1	10/11/18 14:34
Potassium	251		2.47	105	mg/kg dry	1	10/11/18 14:34
Sodium	116		0.144	52.5	mg/kg dry	1	10/11/18 14:34
Vanadium	11.2		0.00909	0.525	mg/kg dry	1	10/11/18 14:34
Zinc	30.2		0.00241	0.787	mg/kg dry	1	10/11/18 14:34

### SW 846 8270D - Semivolatile Organics - GC/MS - BN-PAH

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Benzo(a)anthracene	0.0754	J	0.0145	0.144	mg/kg dry	1	10/11/18 14:38
Benzo(a)pyrene	0.0733	J	0.0251	0.144	mg/kg dry	1	10/11/18 14:38
Benzo(g,h,i)perylene	0.0911	J	0.0117	0.144	mg/kg dry	1	10/11/18 14:38
Benzo(k)fluoranthene	0.106	J	0.0165	0.144	mg/kg dry	1	10/11/18 14:38
Chrysene	0.0911	J	0.00985	0.144	mg/kg dry	1	10/11/18 14:38
Fluoranthene	0.120	J	0.0135	0.144	mg/kg dry	1	10/11/18 14:38
Phenanthrene	0.0544	J	0.0189	0.144	mg/kg dry	1	10/11/18 14:38
Pyrene	0.130	J	0.0106	0.144	mg/kg dry	1	10/11/18 14:38

### SW 846 8260C - Volatile Organics - GC/MS - VO+15

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Tetrachloroethene	0.00240		0.0000870	0.000879	mg/kg dry	1	10/10/18 19:28

8100452-03 (Soil)

Sample Name: NTP-2B

### NJDEP-EPH-CAT2 - Extractable Petroleum Hydrocarbons Category 2

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Total EPH	38.1		10.8	21.7	mg/kg dry	1	10/11/18 14:02

### SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Aluminum	3620		0.0549	2.56	mg/kg dry	1	10/11/18 14:36
Barium	17.9		0.000986	0.511	mg/kg dry	1	10/11/18 14:36
Beryllium	0.184		0.0000922	0.0256	mg/kg dry	1	10/11/18 14:36

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## Positive Results Only Summary

**8100452-03 (Soil)**

Sample Name: **NTP-2B**

**SW 846 6010D - Total Metals (con't)**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Calcium	1100		0.290	25.6	mg/kg dry	1	10/11/18 14:36
Chromium	5.98		0.000919	0.256	mg/kg dry	1	10/11/18 14:36
Cobalt	2.49		0.00111	0.205	mg/kg dry	1	10/11/18 14:36
Copper	9.46		0.00110	0.256	mg/kg dry	1	10/11/18 14:36
Iron	8490		0.116	5.11	mg/kg dry	1	10/11/18 14:36
Lead	19.0		0.00534	1.28	mg/kg dry	1	10/11/18 14:36
Magnesium	885		0.744	51.1	mg/kg dry	1	10/11/18 14:36
Manganese	139		0.000633	0.256	mg/kg dry	1	10/11/18 14:36
Nickel	5.09		0.00176	0.128	mg/kg dry	1	10/11/18 14:36
Potassium	233		2.40	102	mg/kg dry	1	10/11/18 14:36
Sodium	93.8		0.140	51.1	mg/kg dry	1	10/11/18 14:36
Vanadium	12.0		0.00886	0.511	mg/kg dry	1	10/11/18 14:36
Zinc	24.5		0.00235	0.767	mg/kg dry	1	10/11/18 14:36

**SW 846 8270D - Semivolatile Organics - GC/MS - BN-PAH**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Benzo(a)anthracene	0.0876	J	0.0145	0.144	mg/kg dry	1	10/11/18 15:07
Benzo(a)pyrene	0.0814	J	0.0251	0.144	mg/kg dry	1	10/11/18 15:07
Benzo(b)fluoranthene	0.0987	J	0.0203	0.144	mg/kg dry	1	10/11/18 15:07
Benzo(g,h,i)perylene	0.0663	J	0.0117	0.144	mg/kg dry	1	10/11/18 15:07
Benzo(k)fluoranthene	0.0460	J	0.0166	0.144	mg/kg dry	1	10/11/18 15:07
Chrysene	0.0730	J	0.00989	0.144	mg/kg dry	1	10/11/18 15:07
Fluoranthene	0.153		0.0135	0.144	mg/kg dry	1	10/11/18 15:07
Phenanthrene	0.114	J	0.0190	0.144	mg/kg dry	1	10/11/18 15:07
Pyrene	0.137	J	0.0106	0.144	mg/kg dry	1	10/11/18 15:07

**8100452-04 (Soil)**

Sample Name: **NTP-3B**

**SW 846 6010D - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Aluminum	4300		0.0571	2.66	mg/kg dry	1	10/11/18 14:38
Barium	24.3		0.00102	0.532	mg/kg dry	1	10/11/18 14:38
Beryllium	0.181		0.0000959	0.0266	mg/kg dry	1	10/11/18 14:38
Calcium	619		0.302	26.6	mg/kg dry	1	10/11/18 14:38
Chromium	7.12		0.000956	0.266	mg/kg dry	1	10/11/18 14:38
Cobalt	3.03		0.00116	0.213	mg/kg dry	1	10/11/18 14:38
Copper	7.89		0.00115	0.266	mg/kg dry	1	10/11/18 14:38
Iron	9220		0.120	5.32	mg/kg dry	1	10/11/18 14:38
Lead	6.72		0.00555	1.33	mg/kg dry	1	10/11/18 14:38
Magnesium	946		0.774	53.2	mg/kg dry	1	10/11/18 14:38
Manganese	165		0.000658	0.266	mg/kg dry	1	10/11/18 14:38
Nickel	5.13		0.00183	0.133	mg/kg dry	1	10/11/18 14:38

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AQUA PRO-TECH LABORATORIES  
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## Positive Results Only Summary

**8100452-04 (Soil)**

Sample Name: **NTP-3B**

**SW 846 6010D - Total Metals (con't)**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Potassium	252		2.50	106	mg/kg dry	1	10/11/18 14:38
Sodium	136		0.146	53.2	mg/kg dry	1	10/11/18 14:38
Vanadium	13.4		0.00921	0.532	mg/kg dry	1	10/11/18 14:38
Zinc	20.3		0.00245	0.797	mg/kg dry	1	10/11/18 14:38

**8100452-05 (Soil)**

Sample Name: **NTP-4B**

**SW 846 6010D - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Aluminum	5500		0.0614	2.86	mg/kg dry	1	10/11/18 14:40
Barium	31.8		0.00110	0.572	mg/kg dry	1	10/11/18 14:40
Beryllium	0.203		0.000103	0.0286	mg/kg dry	1	10/11/18 14:40
Calcium	933		0.325	28.6	mg/kg dry	1	10/11/18 14:40
Chromium	11.2		0.00103	0.286	mg/kg dry	1	10/11/18 14:40
Cobalt	4.83		0.00125	0.229	mg/kg dry	1	10/11/18 14:40
Copper	9.21		0.00124	0.286	mg/kg dry	1	10/11/18 14:40
Iron	12100		0.129	5.72	mg/kg dry	1	10/11/18 14:40
Lead	5.21		0.00597	1.43	mg/kg dry	1	10/11/18 14:40
Magnesium	1750		0.833	57.2	mg/kg dry	1	10/11/18 14:40
Manganese	229		0.000708	0.286	mg/kg dry	1	10/11/18 14:40
Nickel	7.75		0.00197	0.143	mg/kg dry	1	10/11/18 14:40
Potassium	261		2.69	114	mg/kg dry	1	10/11/18 14:40
Sodium	335		0.157	57.2	mg/kg dry	1	10/11/18 14:40
Vanadium	18.9		0.00991	0.572	mg/kg dry	1	10/11/18 14:40
Zinc	17.6		0.00263	0.858	mg/kg dry	1	10/11/18 14:40

**8100452-06 (Soil)**

Sample Name: **NTP-6**

**SW 846 6010D - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Aluminum	6670		0.0631	2.94	mg/kg dry	1	10/11/18 14:42
Arsenic	1.71		0.0141	1.47	mg/kg dry	1	10/11/18 14:42
Barium	29.1		0.00113	0.588	mg/kg dry	1	10/11/18 14:42
Beryllium	0.282		0.000106	0.0294	mg/kg dry	1	10/11/18 14:42
Calcium	1140		0.334	29.4	mg/kg dry	1	10/11/18 14:42
Chromium	9.79		0.00106	0.294	mg/kg dry	1	10/11/18 14:42
Cobalt	3.59		0.00128	0.235	mg/kg dry	1	10/11/18 14:42
Copper	10.1		0.00127	0.294	mg/kg dry	1	10/11/18 14:42
Iron	12300		0.133	5.88	mg/kg dry	1	10/11/18 14:42
Lead	7.82		0.00614	1.47	mg/kg dry	1	10/11/18 14:42
Magnesium	1290		0.856	58.8	mg/kg dry	1	10/11/18 14:42
Manganese	176		0.000728	0.294	mg/kg dry	1	10/11/18 14:42

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## Positive Results Only Summary

**8100452-06 (Soil)**

Sample Name: **NTP-6**

**SW 846 6010D - Total Metals (con't)**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Nickel	6.47		0.00202	0.147	mg/kg dry	1	10/11/18 14:42
Potassium	361		2.76	118	mg/kg dry	1	10/11/18 14:42
Sodium	132		0.161	58.8	mg/kg dry	1	10/11/18 14:42
Vanadium	17.4		0.0102	0.588	mg/kg dry	1	10/11/18 14:42
Zinc	20.9		0.00270	0.882	mg/kg dry	1	10/11/18 14:42

**SW 846 8270D - Semivolatile Organics - GC/MS - BNA+25**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dimethylphthalate	0.0721	J	0.00942	0.152	mg/kg dry	1	10/11/18 16:32

**8100452-07 (Soil)**

Sample Name: **NTP-7**

**NJDEP-EPH-CAT2 - Extractable Petroleum Hydrocarbons Category 2**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Total EPH	65.8		10.9	21.9	mg/kg dry	1	10/11/18 16:35

**SW 846 6010D - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Aluminum	4450		0.0582	2.71	mg/kg dry	1	10/11/18 14:44
Barium	21.4		0.00104	0.542	mg/kg dry	1	10/11/18 14:44
Beryllium	0.160		0.0000978	0.0271	mg/kg dry	1	10/11/18 14:44
Calcium	1080		0.308	27.1	mg/kg dry	1	10/11/18 14:44
Chromium	6.67		0.000974	0.271	mg/kg dry	1	10/11/18 14:44
Cobalt	3.01		0.00118	0.217	mg/kg dry	1	10/11/18 14:44
Copper	8.67		0.00117	0.271	mg/kg dry	1	10/11/18 14:44
Iron	8450		0.122	5.42	mg/kg dry	1	10/11/18 14:44
Lead	11.3		0.00566	1.35	mg/kg dry	1	10/11/18 14:44
Magnesium	1090		0.789	54.2	mg/kg dry	1	10/11/18 14:44
Manganese	145		0.000671	0.271	mg/kg dry	1	10/11/18 14:44
Nickel	5.23		0.00186	0.135	mg/kg dry	1	10/11/18 14:44
Potassium	230		2.55	108	mg/kg dry	1	10/11/18 14:44
Sodium	160		0.148	54.2	mg/kg dry	1	10/11/18 14:44
Vanadium	12.8		0.00939	0.542	mg/kg dry	1	10/11/18 14:44
Zinc	21.1		0.00249	0.813	mg/kg dry	1	10/11/18 14:44

**SW 846 8270D - Semivolatile Organics - GC/MS - BN-PAH**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Benzo(a)anthracene	0.133	J	0.0147	0.146	mg/kg dry	1	10/11/18 17:01
Benzo(a)pyrene	0.105	J	0.0254	0.146	mg/kg dry	1	10/11/18 17:01
Benzo(b)fluoranthene	0.169		0.0205	0.146	mg/kg dry	1	10/11/18 17:01
Benzo(g,h,i)perylene	0.124	J	0.0118	0.146	mg/kg dry	1	10/11/18 17:01
Benzo(k)fluoranthene	0.106	J	0.0167	0.146	mg/kg dry	1	10/11/18 17:01
Chrysene	0.134	J	0.00998	0.146	mg/kg dry	1	10/11/18 17:01

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## Positive Results Only Summary

**8100452-07 (Soil)**

Sample Name: **NTP-7**

**SW 846 8270D - Semivolatile Organics - GC/MS - BN-PAH (con't)**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Fluoranthene	0.193		0.0137	0.146	mg/kg dry	1	10/11/18 17:01
Phenanthrene	0.0964	J	0.0192	0.146	mg/kg dry	1	10/11/18 17:01
Pyrene	0.184		0.0107	0.146	mg/kg dry	1	10/11/18 17:01

**8100452-08 (Soil)**

Sample Name: **STP-1B**

**SW 846 6010D - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Aluminum	5040		0.0576	2.68	mg/kg dry	1	10/11/18 14:46
Barium	20.2		0.00103	0.537	mg/kg dry	1	10/11/18 14:46
Beryllium	0.191	0.0000968	0.0268	0.0268	mg/kg dry	1	10/11/18 14:46
Calcium	453		0.305	26.8	mg/kg dry	1	10/11/18 14:46
Chromium	7.08	0.000965	0.268	0.268	mg/kg dry	1	10/11/18 14:46
Cobalt	3.03	0.00117	0.215	0.215	mg/kg dry	1	10/11/18 14:46
Copper	7.22	0.00116	0.268	0.268	mg/kg dry	1	10/11/18 14:46
Iron	9500	0.121	5.37	5.37	mg/kg dry	1	10/11/18 14:46
Lead	4.88	0.00560	1.34	1.34	mg/kg dry	1	10/11/18 14:46
Magnesium	966	0.781	53.7	53.7	mg/kg dry	1	10/11/18 14:46
Manganese	144	0.000664	0.268	0.268	mg/kg dry	1	10/11/18 14:46
Nickel	5.18	0.00185	0.134	0.134	mg/kg dry	1	10/11/18 14:46
Potassium	260	2.52	107	107	mg/kg dry	1	10/11/18 14:46
Sodium	72.2	0.147	53.7	53.7	mg/kg dry	1	10/11/18 14:46
Vanadium	13.0	0.00929	0.537	0.537	mg/kg dry	1	10/11/18 14:46
Zinc	23.5	0.00247	0.805	0.805	mg/kg dry	1	10/11/18 14:46

**8100452-09 (Soil)**

Sample Name: **STP-2B**

**SW 846 6010D - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Aluminum	5700		0.0631	2.94	mg/kg dry	1	10/11/18 14:48
Barium	23.4		0.00113	0.587	mg/kg dry	1	10/11/18 14:48
Beryllium	0.223	0.000106	0.0294	0.0294	mg/kg dry	1	10/11/18 14:48
Calcium	473	0.334	29.4	29.4	mg/kg dry	1	10/11/18 14:48
Chromium	7.63	0.00106	0.294	0.294	mg/kg dry	1	10/11/18 14:48
Cobalt	3.23	0.00128	0.235	0.235	mg/kg dry	1	10/11/18 14:48
Copper	8.57	0.00127	0.294	0.294	mg/kg dry	1	10/11/18 14:48
Iron	11100	0.133	5.87	5.87	mg/kg dry	1	10/11/18 14:48
Lead	6.05	0.00613	1.47	1.47	mg/kg dry	1	10/11/18 14:48
Magnesium	1070	0.855	58.7	58.7	mg/kg dry	1	10/11/18 14:48
Manganese	187	0.000727	0.294	0.294	mg/kg dry	1	10/11/18 14:48
Nickel	5.76	0.00202	0.147	0.147	mg/kg dry	1	10/11/18 14:48
Potassium	271	2.76	117	117	mg/kg dry	1	10/11/18 14:48

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## Positive Results Only Summary

**8100452-09 (Soil)**

Sample Name: **STP-2B**

**SW 846 6010D - Total Metals (con't)**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Sodium	74.3		0.161	58.7	mg/kg dry	1	10/11/18 14:48
Vanadium	13.9		0.0102	0.587	mg/kg dry	1	10/11/18 14:48
Zinc	38.2		0.00270	0.881	mg/kg dry	1	10/11/18 14:48

**8100452-10 (Soil)**

Sample Name: **STP-3B**

**SW 846 7471B - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	0.0562		0.0235	0.0478	mg/kg dry	1	10/11/18 12:53

**SW 846 6010D - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Aluminum	4900		0.0556	2.59	mg/kg dry	1	10/11/18 14:50
Arsenic	1.65		0.0124	1.29	mg/kg dry	1	10/11/18 14:50
Barium	19.4		0.000998	0.518	mg/kg dry	1	10/11/18 14:50
Beryllium	0.184		0.0000934	0.0259	mg/kg dry	1	10/11/18 14:50
Calcium	463		0.294	25.9	mg/kg dry	1	10/11/18 14:50
Chromium	6.68		0.000931	0.259	mg/kg dry	1	10/11/18 14:50
Cobalt	2.90		0.00113	0.207	mg/kg dry	1	10/11/18 14:50
Copper	7.66		0.00112	0.259	mg/kg dry	1	10/11/18 14:50
Iron	9550		0.117	5.18	mg/kg dry	1	10/11/18 14:50
Lead	6.01		0.00541	1.29	mg/kg dry	1	10/11/18 14:50
Magnesium	977		0.754	51.8	mg/kg dry	1	10/11/18 14:50
Manganese	163		0.000641	0.259	mg/kg dry	1	10/11/18 14:50
Nickel	5.18		0.00178	0.129	mg/kg dry	1	10/11/18 14:50
Potassium	272		2.43	104	mg/kg dry	1	10/11/18 14:50
Sodium	74.0		0.142	51.8	mg/kg dry	1	10/11/18 14:50
Vanadium	12.7		0.00897	0.518	mg/kg dry	1	10/11/18 14:50
Zinc	21.0		0.00238	0.777	mg/kg dry	1	10/11/18 14:50

**8100452-11 (Soil)**

Sample Name: **STP-4A**

**SW 846 6010D - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Aluminum	6100		0.0608	2.83	mg/kg dry	1	10/11/18 15:31
Barium	23.3		0.00109	0.566	mg/kg dry	1	10/11/18 15:31
Beryllium	0.215		0.000102	0.0283	mg/kg dry	1	10/11/18 15:31
Calcium	634		0.321	28.3	mg/kg dry	1	10/11/18 15:31
Chromium	8.26		0.00102	0.283	mg/kg dry	1	10/11/18 15:31
Cobalt	3.51		0.00123	0.226	mg/kg dry	1	10/11/18 15:31
Copper	9.17		0.00122	0.283	mg/kg dry	1	10/11/18 15:31
Iron	10900		0.128	5.66	mg/kg dry	1	10/11/18 15:31

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## Positive Results Only Summary

8100452-11 (Soil)

Sample Name: **STP-4A**

**SW 846 6010D - Total Metals (con't)**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Lead	10.6		0.00591	1.41	mg/kg dry	1	10/11/18 15:31
Magnesium	1110		0.824	56.6	mg/kg dry	1	10/11/18 15:31
Manganese	209		0.000701	0.283	mg/kg dry	1	10/11/18 15:31
Nickel	6.25		0.00195	0.141	mg/kg dry	1	10/11/18 15:31
Potassium	286		2.66	113	mg/kg dry	1	10/11/18 15:31
Sodium	85.2		0.155	56.6	mg/kg dry	1	10/11/18 15:31
Vanadium	15.4		0.00980	0.566	mg/kg dry	1	10/11/18 15:31
Zinc	20.4		0.00260	0.849	mg/kg dry	1	10/11/18 15:31

8100452-12 (Soil)

Sample Name: **STP-4B**

**SW 846 6010D - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Aluminum	5610		0.0580	2.70	mg/kg dry	1	10/11/18 15:33
Barium	24.9		0.00104	0.540	mg/kg dry	1	10/11/18 15:33
Beryllium	0.211		0.0000974	0.0270	mg/kg dry	1	10/11/18 15:33
Calcium	899		0.307	27.0	mg/kg dry	1	10/11/18 15:33
Chromium	7.75		0.000971	0.270	mg/kg dry	1	10/11/18 15:33
Cobalt	3.46		0.00118	0.216	mg/kg dry	1	10/11/18 15:33
Copper	8.07		0.00117	0.270	mg/kg dry	1	10/11/18 15:33
Iron	10600		0.122	5.40	mg/kg dry	1	10/11/18 15:33
Lead	8.26		0.00564	1.35	mg/kg dry	1	10/11/18 15:33
Magnesium	1220		0.786	54.0	mg/kg dry	1	10/11/18 15:33
Manganese	261		0.000668	0.270	mg/kg dry	1	10/11/18 15:33
Nickel	6.18		0.00186	0.135	mg/kg dry	1	10/11/18 15:33
Potassium	283		2.54	108	mg/kg dry	1	10/11/18 15:33
Sodium	82.6		0.148	54.0	mg/kg dry	1	10/11/18 15:33
Vanadium	14.7		0.00935	0.540	mg/kg dry	1	10/11/18 15:33
Zinc	23.2		0.00248	0.810	mg/kg dry	1	10/11/18 15:33

**SW 846 8081B - Pesticides**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Chlordane	0.0103		0.000952	0.00142	mg/kg dry	1	10/11/18 16:51

**SW 846 8270D - Semivolatile Organics - GC/MS - BNA+25**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dimethylphthalate	0.0632	J	0.00901	0.145	mg/kg dry	1	10/11/18 15:57

8100452-13 (Soil)

Sample Name: **STP-5**

**SW 846 6010D - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
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## Positive Results Only Summary

**8100452-13 (Soil)**

Sample Name: **STP-5**

**SW 846 6010D - Total Metals (con't)**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Aluminum	6860		0.0617	2.87	mg/kg dry	1	10/11/18 15:37
Arsenic	3.01		0.0138	1.44	mg/kg dry	1	10/11/18 15:37
Barium	23.0		0.00111	0.574	mg/kg dry	1	10/11/18 15:37
Beryllium	0.256		0.000104	0.0287	mg/kg dry	1	10/11/18 15:37
Calcium	310		0.326	28.7	mg/kg dry	1	10/11/18 15:37
Chromium	8.30		0.00103	0.287	mg/kg dry	1	10/11/18 15:37
Cobalt	4.74		0.00125	0.230	mg/kg dry	1	10/11/18 15:37
Copper	9.68		0.00124	0.287	mg/kg dry	1	10/11/18 15:37
Iron	15100		0.130	5.74	mg/kg dry	1	10/11/18 15:37
Lead	5.25		0.00599	1.44	mg/kg dry	1	10/11/18 15:37
Magnesium	1150		0.836	57.4	mg/kg dry	1	10/11/18 15:37
Manganese	333		0.000711	0.287	mg/kg dry	1	10/11/18 15:37
Nickel	7.29		0.00198	0.144	mg/kg dry	1	10/11/18 15:37
Potassium	241		2.70	115	mg/kg dry	1	10/11/18 15:37
Vanadium	17.3		0.00995	0.574	mg/kg dry	1	10/11/18 15:37
Zinc	39.9		0.00264	0.861	mg/kg dry	1	10/11/18 15:37

**8100452-14 (Soil)**

Sample Name: **STP-7**

**SW 846 6010D - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Aluminum	4650		0.0545	2.54	mg/kg dry	1	10/11/18 15:39
Arsenic	1.49		0.0122	1.27	mg/kg dry	1	10/11/18 15:39
Barium	18.5		0.000979	0.508	mg/kg dry	1	10/11/18 15:39
Beryllium	0.178		0.0000916	0.0254	mg/kg dry	1	10/11/18 15:39
Calcium	294		0.288	25.4	mg/kg dry	1	10/11/18 15:39
Chromium	6.14		0.000913	0.254	mg/kg dry	1	10/11/18 15:39
Cobalt	2.97		0.00111	0.203	mg/kg dry	1	10/11/18 15:39
Copper	6.73		0.00110	0.254	mg/kg dry	1	10/11/18 15:39
Iron	9110		0.115	5.08	mg/kg dry	1	10/11/18 15:39
Lead	4.31		0.00530	1.27	mg/kg dry	1	10/11/18 15:39
Magnesium	910		0.739	50.8	mg/kg dry	1	10/11/18 15:39
Manganese	240		0.000628	0.254	mg/kg dry	1	10/11/18 15:39
Nickel	5.05		0.00175	0.127	mg/kg dry	1	10/11/18 15:39
Potassium	210		2.39	102	mg/kg dry	1	10/11/18 15:39
Sodium	52.0		0.139	50.8	mg/kg dry	1	10/11/18 15:39
Vanadium	11.8		0.00879	0.508	mg/kg dry	1	10/11/18 15:39
Zinc	24.1		0.00233	0.761	mg/kg dry	1	10/11/18 15:39

**SW 846 8081B - Pesticides**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDT [2C]	0.00928		0.000586	0.00140	mg/kg dry	1	10/11/18 17:14

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## Positive Results Only Summary

8100452-14 (Soil)

Sample Name: STP-7

SW 846 8081B - Pesticides (con't)

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Chlordane	0.0136		0.000939	0.00140	mg/kg dry	1	10/11/18 17:14



# All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

<b>8100452-01 (Soil)</b>	Sample Name: <b>NTP-1A</b>	Collected: <b>10/10/2018 12:00:00AM</b>
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**SW 846 8082A - PCBs**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Aroclor-1016	ND	U	0.000654	0.0367	mg/kg	1	10/11/18 14:00
Aroclor-1221	ND	U	0.00113	0.0367	mg/kg	1	10/11/18 14:00
Aroclor-1232	ND	U	0.000864	0.0367	mg/kg	1	10/11/18 14:00
Aroclor-1242	ND	U	0.00125	0.0367	mg/kg	1	10/11/18 14:00
Aroclor-1248	ND	U	0.000861	0.0367	mg/kg	1	10/11/18 14:00
Aroclor-1254	ND	U	0.00131	0.0367	mg/kg	1	10/11/18 14:00
Aroclor-1260	ND	U	0.000968	0.0367	mg/kg	1	10/11/18 14:00
Aroclor-1262	ND	U	0.00142	0.0367	mg/kg	1	10/11/18 14:00
Aroclor-1268	ND	U	0.000742	0.0367	mg/kg	1	10/11/18 14:00
Total PCBs	ND	U	0.000654	0.0367	mg/kg	1	10/11/18 14:00

**NJDEP-EPH-CAT2 - Extractable Petroleum Hydrocarbons Category 2**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Total EPH	62.8		11.1	22.2	mg/kg	1	10/11/18 12:51

**SW 846 7471B - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	ND		0.0267	0.0544	mg/kg	1	10/11/18 12:17

**SW 846 6010D - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Aluminum	3290		0.0603	2.81	mg/kg	1	10/11/18 14:32
Antimony	ND		0.00593	1.40	mg/kg	1	10/11/18 14:32
Arsenic	ND		0.0135	1.40	mg/kg	1	10/11/18 14:32
Barium	18.6		0.00108	0.562	mg/kg	1	10/11/18 14:32
Beryllium	0.138		0.000101	0.0281	mg/kg	1	10/11/18 14:32
Cadmium	ND		0.000957	0.281	mg/kg	1	10/11/18 14:32
Calcium	938		0.319	28.1	mg/kg	1	10/11/18 14:32
Chromium	5.14		0.00101	0.281	mg/kg	1	10/11/18 14:32
Cobalt	2.31		0.00122	0.225	mg/kg	1	10/11/18 14:32
Copper	8.71		0.00121	0.281	mg/kg	1	10/11/18 14:32
Iron	7190		0.127	5.62	mg/kg	1	10/11/18 14:32
Lead	23.8		0.00586	1.40	mg/kg	1	10/11/18 14:32
Magnesium	763		0.818	56.2	mg/kg	1	10/11/18 14:32
Manganese	125		0.000695	0.281	mg/kg	1	10/11/18 14:32
Nickel	4.33		0.00193	0.140	mg/kg	1	10/11/18 14:32
Potassium	212		2.64	112	mg/kg	1	10/11/18 14:32
Selenium	ND		0.0121	1.40	mg/kg	1	10/11/18 14:32
Silver	ND		0.00335	0.562	mg/kg	1	10/11/18 14:32

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit

# All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

<b>8100452-01 (Soil)</b>	Sample Name: <b>NTP-1A</b>	Collected: <b>10/10/2018 12:00:00AM</b>
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**SW 846 6010D - Total Metals (con't)**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Sodium	107		0.154	56.2	mg/kg	1	10/11/18 14:32
Thallium	ND		0.00779	1.40	mg/kg	1	10/11/18 14:32
Vanadium	9.94		0.00973	0.562	mg/kg	1	10/11/18 14:32
Zinc	22.8		0.00258	0.843	mg/kg	1	10/11/18 14:32

**SW 846 8081B - Pesticides**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDD	ND	U	0.000875	0.00145	mg/kg	1	10/11/18 16:06
4,4'-DDE	ND	U	0.00102	0.00145	mg/kg	1	10/11/18 16:06
4,4'-DDT	ND	U	0.000694	0.00145	mg/kg	1	10/11/18 16:06
Aldrin	ND	U	0.000898	0.00145	mg/kg	1	10/11/18 16:06
alpha-BHC	ND	U	0.000559	0.00145	mg/kg	1	10/11/18 16:06
beta-BHC	ND	U	0.00142	0.00145	mg/kg	1	10/11/18 16:06
Chlordane	ND	U	0.000971	0.00145	mg/kg	1	10/11/18 16:06
delta-BHC	ND	U	0.00112	0.00145	mg/kg	1	10/11/18 16:06
Dieldrin	ND	U	0.000779	0.00145	mg/kg	1	10/11/18 16:06
Endosulfan I	ND	U	0.00100	0.00145	mg/kg	1	10/11/18 16:06
Endosulfan II	ND	U	0.000786	0.00145	mg/kg	1	10/11/18 16:06
Endosulfan sulfate	ND	U	0.000786	0.00145	mg/kg	1	10/11/18 16:06
Endrin	ND	U	0.000742	0.00145	mg/kg	1	10/11/18 16:06
Endrin aldehyde	ND	U	0.000617	0.00145	mg/kg	1	10/11/18 16:06
Endrin ketone	ND	U	0.000882	0.00145	mg/kg	1	10/11/18 16:06
gamma-BHC (Lindane)	ND	U	0.000661	0.00145	mg/kg	1	10/11/18 16:06
Heptachlor	ND	U	0.000845	0.00145	mg/kg	1	10/11/18 16:06
Heptachlor Epoxide	ND	U	0.000904	0.00145	mg/kg	1	10/11/18 16:06
Methoxychlor	ND	U	0.000920	0.00145	mg/kg	1	10/11/18 16:06
Toxaphene	ND	U	0.0225	0.0734	mg/kg	1	10/11/18 16:06

**SW 846 8270D - Semivolatile Organics - GC/MS - BNA+25**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
1-Methylnaphthalene	ND	U	0.0355	0.222	mg/kg	1	10/11/18 14:10
2,3,4,6-Tetrachlorophenol	ND	U	0.0228	0.148	mg/kg	1	10/11/18 14:10
2,4,5-Trichlorophenol	ND	U	0.0201	0.148	mg/kg	1	10/11/18 14:10
2,4,6-Trichlorophenol	ND	U	0.00927	0.148	mg/kg	1	10/11/18 14:10
2,4-Dichlorophenol	ND	U	0.0149	0.148	mg/kg	1	10/11/18 14:10
2,4-Dimethylphenol	ND	U	0.0146	0.148	mg/kg	1	10/11/18 14:10
2,4-Dinitrophenol	ND	U	0.0214	0.742	mg/kg	1	10/11/18 14:10
2,4-Dinitrotoluene	ND	U	0.0158	0.148	mg/kg	1	10/11/18 14:10
2,6-Dinitrotoluene	ND	U	0.0354	0.148	mg/kg	1	10/11/18 14:10

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit



AQUA PRO-TECH LABORATORIES  
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# All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

**8100452-01 (Soil)** Sample Name: **NTP-1A** Collected: **10/10/2018 12:00:00AM**

**SW 846 8270D - Semivolatile Organics - GC/MS - BNA+25 (con't)**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
2-Chloronaphthalene	ND	U	0.0170	0.148	mg/kg	1	10/11/18 14:10
2-Chlorophenol	ND	U	0.0196	0.148	mg/kg	1	10/11/18 14:10
2-Methylnaphthalene	ND	U	0.0355	0.222	mg/kg	1	10/11/18 14:10
2-Methylphenol	ND	U	0.0293	0.148	mg/kg	1	10/11/18 14:10
2-Nitroaniline	ND	U	0.0119	0.148	mg/kg	1	10/11/18 14:10
2-Nitrophenol	ND	U	0.0165	0.148	mg/kg	1	10/11/18 14:10
3,3'-Dichlorobenzidine	ND	U	0.0156	0.148	mg/kg	1	10/11/18 14:10
3+4-Methylphenol	ND	U	0.0271	0.148	mg/kg	1	10/11/18 14:10
3-Nitroaniline	ND	U	0.0275	0.148	mg/kg	1	10/11/18 14:10
4,6-Dinitro-2-methylphenol	ND	U	0.0279	0.370	mg/kg	1	10/11/18 14:10
4-Bromophenyl-phenyl ether	ND	U	0.0211	0.148	mg/kg	1	10/11/18 14:10
4-Chloro-3-methylphenol	ND	U	0.0234	0.148	mg/kg	1	10/11/18 14:10
4-Chloroaniline	ND	U	0.00518	0.148	mg/kg	1	10/11/18 14:10
4-Chlorophenyl phenyl ether	ND	U	0.00800	0.148	mg/kg	1	10/11/18 14:10
4-Nitroaniline	ND	U	0.0741	0.148	mg/kg	1	10/11/18 14:10
4-Nitrophenol	ND	U	0.00948	0.148	mg/kg	1	10/11/18 14:10
Acenaphthene	ND	U	0.00844	0.148	mg/kg	1	10/11/18 14:10
Acenaphthylene	ND	U	0.00515	0.148	mg/kg	1	10/11/18 14:10
Acetophenone	ND	U	0.0147	0.148	mg/kg	1	10/11/18 14:10
Anthracene	ND	U	0.0215	0.148	mg/kg	1	10/11/18 14:10
Atrazine	ND	U	0.0139	0.148	mg/kg	1	10/11/18 14:10
Benzaldehyde	ND	U	0.0455	0.148	mg/kg	1	10/11/18 14:10
<b>Benzo(a)anthracene</b>	<b>0.0995</b>	<b>J</b>	<b>0.0149</b>	<b>0.148</b>	<b>mg/kg</b>	<b>1</b>	<b>10/11/18 14:10</b>
<b>Benzo(a)pyrene</b>	<b>0.0887</b>	<b>J</b>	<b>0.0258</b>	<b>0.148</b>	<b>mg/kg</b>	<b>1</b>	<b>10/11/18 14:10</b>
<b>Benzo(b)fluoranthene</b>	<b>0.107</b>	<b>J</b>	<b>0.0208</b>	<b>0.148</b>	<b>mg/kg</b>	<b>1</b>	<b>10/11/18 14:10</b>
<b>Benzo(g,h,i)perylene</b>	<b>0.0702</b>	<b>J</b>	<b>0.0120</b>	<b>0.148</b>	<b>mg/kg</b>	<b>1</b>	<b>10/11/18 14:10</b>
<b>Benzo(k)fluoranthene</b>	<b>0.0788</b>	<b>J</b>	<b>0.0170</b>	<b>0.148</b>	<b>mg/kg</b>	<b>1</b>	<b>10/11/18 14:10</b>
Biphenyl	ND	U	0.0130	0.148	mg/kg	1	10/11/18 14:10
bis(2-chloroethoxy)methane	ND	U	0.0205	0.148	mg/kg	1	10/11/18 14:10
bis(2-chloroethyl)ether	ND	U	0.0162	0.148	mg/kg	1	10/11/18 14:10
bis(2-chloroisopropyl)ether	ND	U	0.0533	0.148	mg/kg	1	10/11/18 14:10
bis(2-ethylhexyl)phthalate	ND	U	0.0296	0.148	mg/kg	1	10/11/18 14:10
Butylbenzylphthalate	ND	U	0.0135	0.148	mg/kg	1	10/11/18 14:10
Caprolactam	ND	U	0.0191	0.148	mg/kg	1	10/11/18 14:10
Carbazole	ND	U	0.0285	0.370	mg/kg	1	10/11/18 14:10
<b>Chrysene</b>	<b>0.0909</b>	<b>J</b>	<b>0.0101</b>	<b>0.148</b>	<b>mg/kg</b>	<b>1</b>	<b>10/11/18 14:10</b>
Dibenzo(a,h)anthracene	ND	U	0.0147	0.148	mg/kg	1	10/11/18 14:10
Dibenzofuran	ND	U	0.00882	0.148	mg/kg	1	10/11/18 14:10
Diethylphthalate	ND	U	0.0287	0.148	mg/kg	1	10/11/18 14:10

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 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit



# All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

**8100452-01 (Soil)** Sample Name: **NTP-1A** Collected: **10/10/2018 12:00:00AM**

**SW 846 8270D - Semivolatile Organics - GC/MS - BNA+25 (con't)**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dimethylphthalate	ND	U	0.00919	0.148	mg/kg	1	10/11/18 14:10
Di-n-butylphthalate	ND	U	0.0605	0.148	mg/kg	1	10/11/18 14:10
Di-n-octylphthalate	ND	U	0.0304	0.148	mg/kg	1	10/11/18 14:10
<b>Fluoranthene</b>	<b>0.167</b>		<b>0.0139</b>	<b>0.148</b>	<b>mg/kg</b>	<b>1</b>	<b>10/11/18 14:10</b>
Fluorene	ND	U	0.0123	0.148	mg/kg	1	10/11/18 14:10
Hexachlorobenzene	ND	U	0.0194	0.148	mg/kg	1	10/11/18 14:10
Hexachlorobutadiene	ND	U	0.0711	0.148	mg/kg	1	10/11/18 14:10
Hexachlorocyclopentadiene	ND	U	0.0617	0.370	mg/kg	1	10/11/18 14:10
Hexachloroethane	ND	U	0.0162	0.148	mg/kg	1	10/11/18 14:10
<b>Indeno(1,2,3-cd)pyrene</b>	<b>0.0610</b>	<b>J</b>	<b>0.0159</b>	<b>0.148</b>	<b>mg/kg</b>	<b>1</b>	<b>10/11/18 14:10</b>
Isophorone	ND	U	0.00970	0.148	mg/kg	1	10/11/18 14:10
Naphthalene	ND	U	0.0110	0.148	mg/kg	1	10/11/18 14:10
Nitrobenzene	ND	U	0.0251	0.148	mg/kg	1	10/11/18 14:10
n-Nitroso-di-n-propylamine	ND	U	0.00793	0.148	mg/kg	1	10/11/18 14:10
n-Nitrosodiphenylamine	ND	U	0.0316	0.148	mg/kg	1	10/11/18 14:10
<b>Phenanthrene</b>	<b>0.126</b>	<b>J</b>	<b>0.0195</b>	<b>0.148</b>	<b>mg/kg</b>	<b>1</b>	<b>10/11/18 14:10</b>
Phenol	ND	U	0.0120	0.148	mg/kg	1	10/11/18 14:10
<b>Pyrene</b>	<b>0.158</b>		<b>0.0109</b>	<b>0.148</b>	<b>mg/kg</b>	<b>1</b>	<b>10/11/18 14:10</b>

**SW 846 8270D - Semivolatile Organics - GC/MS - BNA+25 - TIC**

Tentatively Identified Compound	Est Conc	RT	Qual	Units	Dilution	Analyzed
No TICs Found						

**SW 846 8260C - Volatile Organics - GC/MS - VO+15**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
1,1,1-Trichloroethane	ND	U	0.000178	0.00122	mg/kg	1	10/10/18 18:59
1,1,1,2-Tetrachloroethane	ND	U	0.000169	0.00122	mg/kg	1	10/10/18 18:59
1,1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	U	0.000523	0.00122	mg/kg	1	10/10/18 18:59
1,1,2-Trichloroethane	ND	U	0.000206	0.00122	mg/kg	1	10/10/18 18:59
1,1-Dichloroethane	ND	U	0.000178	0.00122	mg/kg	1	10/10/18 18:59
1,1-Dichloroethene	ND	U	0.000226	0.00122	mg/kg	1	10/10/18 18:59
1,2,3-Trichlorobenzene	ND	U	0.000264	0.00122	mg/kg	1	10/10/18 18:59
1,2,4-Trichlorobenzene	ND	U	0.000326	0.00122	mg/kg	1	10/10/18 18:59
1,2,4-Trimethylbenzene	ND	U	0.000169	0.00122	mg/kg	1	10/10/18 18:59
1,2-Dibromo-3-chloropropane	ND	U	0.000298	0.00122	mg/kg	1	10/10/18 18:59
1,2-Dibromoethane	ND	U	0.000154	0.00122	mg/kg	1	10/10/18 18:59
1,2-Dichlorobenzene	ND	U	0.000216	0.00122	mg/kg	1	10/10/18 18:59
1,2-Dichloroethane	ND	U	0.000172	0.00122	mg/kg	1	10/10/18 18:59

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

# All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

**8100452-01 (Soil)** Sample Name: **NTP-1A** Collected: **10/10/2018 12:00:00AM**

**SW 846 8260C - Volatile Organics - GC/MS - VO+15 (con't)**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
1,2-Dichloropropane	ND	U	0.000200	0.00122	mg/kg	1	10/10/18 18:59
1,3-Dichlorobenzene	ND	U	0.0000898	0.00122	mg/kg	1	10/10/18 18:59
1,4-Dichlorobenzene	ND	U	0.000176	0.00122	mg/kg	1	10/10/18 18:59
2-Butanone	ND	U	0.000199	0.00306	mg/kg	1	10/10/18 18:59
2-Hexanone	ND	U	0.000114	0.00122	mg/kg	1	10/10/18 18:59
4-Methyl-2-pentanone	ND	U	0.000153	0.00122	mg/kg	1	10/10/18 18:59
Acetone	ND	U	0.000370	0.00306	mg/kg	1	10/10/18 18:59
Benzene	ND	U	0.000111	0.00122	mg/kg	1	10/10/18 18:59
Bromochloromethane	ND	U	0.000226	0.00122	mg/kg	1	10/10/18 18:59
Bromodichloromethane	ND	U	0.000153	0.00122	mg/kg	1	10/10/18 18:59
Bromoform	ND	U	0.000215	0.00122	mg/kg	1	10/10/18 18:59
Bromomethane	ND	U	0.000353	0.00122	mg/kg	1	10/10/18 18:59
Carbon disulfide	ND	U	0.000175	0.00122	mg/kg	1	10/10/18 18:59
Carbon Tetrachloride	ND	U	0.000184	0.00122	mg/kg	1	10/10/18 18:59
Chlorobenzene	ND	U	0.000177	0.00122	mg/kg	1	10/10/18 18:59
Chlorodibromomethane	ND	U	0.000150	0.00122	mg/kg	1	10/10/18 18:59
Chloroethane	ND	U	0.000208	0.00122	mg/kg	1	10/10/18 18:59
Chloroform	ND	U	0.000205	0.00122	mg/kg	1	10/10/18 18:59
Chloromethane	ND	U	0.000471	0.00122	mg/kg	1	10/10/18 18:59
cis-1,2-Dichloroethene	ND	U	0.0000591	0.00122	mg/kg	1	10/10/18 18:59
cis-1,3-Dichloropropene	ND	U	0.000155	0.00122	mg/kg	1	10/10/18 18:59
Cyclohexane	ND	U	0.000271	0.00122	mg/kg	1	10/10/18 18:59
Dichlorodifluoromethane	ND	U	0.000413	0.00122	mg/kg	1	10/10/18 18:59
EthylBenzene	ND	U	0.000166	0.00122	mg/kg	1	10/10/18 18:59
Isopropylbenzene	ND	U	0.000192	0.00122	mg/kg	1	10/10/18 18:59
m+p-Xylenes	ND	U	0.000309	0.00244	mg/kg	1	10/10/18 18:59
Methyl Acetate	ND	U	0.000162	0.00122	mg/kg	1	10/10/18 18:59
Methyl tert-Butyl Ether	ND	U	0.000207	0.00122	mg/kg	1	10/10/18 18:59
Methylcyclohexane	ND	U	0.000197	0.00122	mg/kg	1	10/10/18 18:59
Methylene Chloride	ND	U	0.000367	0.00122	mg/kg	1	10/10/18 18:59
o-Xylene	ND	U	0.000157	0.00122	mg/kg	1	10/10/18 18:59
Styrene	ND	U	0.000175	0.00122	mg/kg	1	10/10/18 18:59
tert-Butyl alcohol	ND	U	0.00257	0.0122	mg/kg	1	10/10/18 18:59
<b>Tetrachloroethene</b>	<b>0.00329</b>		<b>0.000121</b>	<b>0.00122</b>	<b>mg/kg</b>	<b>1</b>	<b>10/10/18 18:59</b>
Toluene	ND	U	0.0000984	0.00122	mg/kg	1	10/10/18 18:59
Total Xylenes	ND	U	0.000157	0.00122	mg/kg	1	10/10/18 18:59
trans-1,2-Dichloroethene	ND	U	0.000166	0.00122	mg/kg	1	10/10/18 18:59
trans-1,3-Dichloropropene	ND	U	0.000233	0.00122	mg/kg	1	10/10/18 18:59
Trichloroethene	ND	U	0.000180	0.00122	mg/kg	1	10/10/18 18:59

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit



AQUA PRO-TECH LABORATORIES  
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## All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

**8100452-01 (Soil)** Sample Name: **NTP-1A** Collected: **10/10/2018 12:00:00AM**

### SW 846 8260C - Volatile Organics - GC/MS - VO+15 (con't)

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Trichlorofluoromethane	ND	U	0.000141	0.00122	mg/kg	1	10/10/18 18:59
Vinyl chloride	ND	U	0.000232	0.00122	mg/kg	1	10/10/18 18:59

### SW 846 8260C - Volatile Organics - GC/MS - VO+15 - TIC

Tentitively Identified Compound	Est Conc	RT	Qual	Units	Dilution	Analyzed
No TICs Found						

### Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	89.9				%	1	10/11/18 10:54

### SW 846 9014 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Cyanide	ND		0.0834	0.278	mg/kg	1	10/11/18 13:30

**8100452-02 (Soil)** Sample Name: **NTP-2A** Collected: **10/10/2018 12:00:00AM**

### NJDEP-EPH-CAT2 - Extractable Petroleum Hydrocarbons Category 2

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Total EPH	97.5		10.8	21.6	mg/kg	1	10/11/18 13:27

### SW 846 7471B - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	ND		0.0228	0.0465	mg/kg	1	10/11/18 12:20

### SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Aluminum	3800		0.0563	2.62	mg/kg	1	10/11/18 14:34
Antimony	ND		0.00554	1.31	mg/kg	1	10/11/18 14:34
Arsenic	ND		0.0126	1.31	mg/kg	1	10/11/18 14:34
Barium	21.4		0.00101	0.525	mg/kg	1	10/11/18 14:34
Beryllium	0.160		0.0000946	0.0262	mg/kg	1	10/11/18 14:34
Cadmium	ND		0.000894	0.262	mg/kg	1	10/11/18 14:34
Calcium	1260		0.298	26.2	mg/kg	1	10/11/18 14:34
Chromium	6.19		0.000943	0.262	mg/kg	1	10/11/18 14:34
Cobalt	2.83		0.00114	0.210	mg/kg	1	10/11/18 14:34
Copper	10.4		0.00113	0.262	mg/kg	1	10/11/18 14:34
Iron	8240		0.119	5.25	mg/kg	1	10/11/18 14:34

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit

# All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

<b>8100452-02 (Soil)</b>	Sample Name: <b>NTP-2A</b>	Collected: <b>10/10/2018 12:00:00AM</b>
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**SW 846 6010D - Total Metals (con't)**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Lead	26.2		0.00548	1.31	mg/kg	1	10/11/18 14:34
Magnesium	952		0.764	52.5	mg/kg	1	10/11/18 14:34
Manganese	144		0.000649	0.262	mg/kg	1	10/11/18 14:34
Nickel	5.14		0.00180	0.131	mg/kg	1	10/11/18 14:34
Potassium	251		2.47	105	mg/kg	1	10/11/18 14:34
Selenium	ND		0.0113	1.31	mg/kg	1	10/11/18 14:34
Silver	ND		0.00313	0.525	mg/kg	1	10/11/18 14:34
Sodium	116		0.144	52.5	mg/kg	1	10/11/18 14:34
Thallium	ND		0.00727	1.31	mg/kg	1	10/11/18 14:34
Vanadium	11.2		0.00909	0.525	mg/kg	1	10/11/18 14:34
Zinc	30.2		0.00241	0.787	mg/kg	1	10/11/18 14:34

**SW 846 8270D - Semivolatile Organics - GC/MS - BN-PAH**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
1-Methylnaphthalene	ND	U	0.120	0.216	mg/kg	1	10/11/18 14:38
2-Methylnaphthalene	ND	U	0.0345	0.216	mg/kg	1	10/11/18 14:38
Acenaphthene	ND	U	0.00820	0.144	mg/kg	1	10/11/18 14:38
Acenaphthylene	ND	U	0.00500	0.144	mg/kg	1	10/11/18 14:38
Anthracene	ND	U	0.0209	0.144	mg/kg	1	10/11/18 14:38
Benzo(a)anthracene	0.0754	J	0.0145	0.144	mg/kg	1	10/11/18 14:38
Benzo(a)pyrene	0.0733	J	0.0251	0.144	mg/kg	1	10/11/18 14:38
Benzo(b)fluoranthene	ND	U	0.0202	0.144	mg/kg	1	10/11/18 14:38
Benzo(g,h,i)perylene	0.0911	J	0.0117	0.144	mg/kg	1	10/11/18 14:38
Benzo(k)fluoranthene	0.106	J	0.0165	0.144	mg/kg	1	10/11/18 14:38
Chrysene	0.0911	J	0.00985	0.144	mg/kg	1	10/11/18 14:38
Dibenzo(a,h)anthracene	ND	U	0.0143	0.144	mg/kg	1	10/11/18 14:38
Fluoranthene	0.120	J	0.0135	0.144	mg/kg	1	10/11/18 14:38
Fluorene	ND	U	0.0120	0.144	mg/kg	1	10/11/18 14:38
Indeno(1,2,3-cd)pyrene	ND	U	0.0155	0.144	mg/kg	1	10/11/18 14:38
Naphthalene	ND	U	0.0107	0.144	mg/kg	1	10/11/18 14:38
Phenanthrene	0.0544	J	0.0189	0.144	mg/kg	1	10/11/18 14:38
Pyrene	0.130	J	0.0106	0.144	mg/kg	1	10/11/18 14:38

**SW 846 8260C - Volatile Organics - GC/MS - VO+15**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
1,1,1-Trichloroethane	ND	U	0.000128	0.000879	mg/kg	1	10/10/18 19:28
1,1,2,2-Tetrachloroethane	ND	U	0.000121	0.000879	mg/kg	1	10/10/18 19:28
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	U	0.000376	0.000879	mg/kg	1	10/10/18 19:28

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit

# All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

**8100452-02 (Soil)**                      Sample Name: **NTP-2A**                      Collected: **10/10/2018 12:00:00AM**

**SW 846 8260C - Volatile Organics - GC/MS - VO+15 (con't)**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
1,1,2-Trichloroethane	ND	U	0.000148	0.000879	mg/kg	1	10/10/18 19:28
1,1-Dichloroethane	ND	U	0.000128	0.000879	mg/kg	1	10/10/18 19:28
1,1-Dichloroethene	ND	U	0.000163	0.000879	mg/kg	1	10/10/18 19:28
1,2,3-Trichlorobenzene	ND	U	0.000190	0.000879	mg/kg	1	10/10/18 19:28
1,2,4-Trichlorobenzene	ND	U	0.000234	0.000879	mg/kg	1	10/10/18 19:28
1,2,4-Trimethylbenzene	ND	U	0.000121	0.000879	mg/kg	1	10/10/18 19:28
1,2-Dibromo-3-chloropropane	ND	U	0.000214	0.000879	mg/kg	1	10/10/18 19:28
1,2-Dibromoethane	ND	U	0.000111	0.000879	mg/kg	1	10/10/18 19:28
1,2-Dichlorobenzene	ND	U	0.000155	0.000879	mg/kg	1	10/10/18 19:28
1,2-Dichloroethane	ND	U	0.000124	0.000879	mg/kg	1	10/10/18 19:28
1,2-Dichloropropane	ND	U	0.000144	0.000879	mg/kg	1	10/10/18 19:28
1,3-Dichlorobenzene	ND	U	0.0000646	0.000879	mg/kg	1	10/10/18 19:28
1,4-Dichlorobenzene	ND	U	0.000127	0.000879	mg/kg	1	10/10/18 19:28
2-Butanone	ND	U	0.000143	0.00220	mg/kg	1	10/10/18 19:28
2-Hexanone	ND	U	0.0000821	0.000879	mg/kg	1	10/10/18 19:28
4-Methyl-2-pentanone	ND	U	0.000110	0.000879	mg/kg	1	10/10/18 19:28
Acetone	ND	U	0.000266	0.00220	mg/kg	1	10/10/18 19:28
Benzene	ND	U	0.0000799	0.000879	mg/kg	1	10/10/18 19:28
Bromochloromethane	ND	U	0.000162	0.000879	mg/kg	1	10/10/18 19:28
Bromodichloromethane	ND	U	0.000110	0.000879	mg/kg	1	10/10/18 19:28
Bromoform	ND	U	0.000154	0.000879	mg/kg	1	10/10/18 19:28
Bromomethane	ND	U	0.000253	0.000879	mg/kg	1	10/10/18 19:28
Carbon disulfide	ND	U	0.000126	0.000879	mg/kg	1	10/10/18 19:28
Carbon Tetrachloride	ND	U	0.000132	0.000879	mg/kg	1	10/10/18 19:28
Chlorobenzene	ND	U	0.000127	0.000879	mg/kg	1	10/10/18 19:28
Chlorodibromomethane	ND	U	0.000108	0.000879	mg/kg	1	10/10/18 19:28
Chloroethane	ND	U	0.000150	0.000879	mg/kg	1	10/10/18 19:28
Chloroform	ND	U	0.000148	0.000879	mg/kg	1	10/10/18 19:28
Chloromethane	ND	U	0.000338	0.000879	mg/kg	1	10/10/18 19:28
cis-1,2-Dichloroethene	ND	U	0.0000425	0.000879	mg/kg	1	10/10/18 19:28
cis-1,3-Dichloropropene	ND	U	0.000111	0.000879	mg/kg	1	10/10/18 19:28
Cyclohexane	ND	U	0.000195	0.000879	mg/kg	1	10/10/18 19:28
Dichlorodifluoromethane	ND	U	0.000297	0.000879	mg/kg	1	10/10/18 19:28
EthylBenzene	ND	U	0.000119	0.000879	mg/kg	1	10/10/18 19:28
Isopropylbenzene	ND	U	0.000138	0.000879	mg/kg	1	10/10/18 19:28
m+p-Xylenes	ND	U	0.000222	0.00176	mg/kg	1	10/10/18 19:28
Methyl Acetate	ND	U	0.000116	0.000879	mg/kg	1	10/10/18 19:28
Methyl tert-Butyl Ether	ND	U	0.000148	0.000879	mg/kg	1	10/10/18 19:28
Methylcyclohexane	ND	U	0.000141	0.000879	mg/kg	1	10/10/18 19:28

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

# All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

**8100452-02 (Soil)** Sample Name: **NTP-2A** Collected: **10/10/2018 12:00:00AM**

**SW 846 8260C - Volatile Organics - GC/MS - VO+15 (con't)**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Methylene Chloride	ND	U	0.000264	0.000879	mg/kg	1	10/10/18 19:28
o-Xylene	ND	U	0.000113	0.000879	mg/kg	1	10/10/18 19:28
Styrene	ND	U	0.000126	0.000879	mg/kg	1	10/10/18 19:28
tert-Butyl alcohol	ND	U	0.00184	0.00879	mg/kg	1	10/10/18 19:28
<b>Tetrachloroethene</b>	<b>0.00240</b>		<b>0.0000870</b>	<b>0.000879</b>	<b>mg/kg</b>	<b>1</b>	<b>10/10/18 19:28</b>
Toluene	ND	U	0.0000707	0.000879	mg/kg	1	10/10/18 19:28
Total Xylenes	ND	U	0.000113	0.000879	mg/kg	1	10/10/18 19:28
trans-1,2-Dichloroethene	ND	U	0.000119	0.000879	mg/kg	1	10/10/18 19:28
trans-1,3-Dichloropropene	ND	U	0.000168	0.000879	mg/kg	1	10/10/18 19:28
Trichloroethene	ND	U	0.000129	0.000879	mg/kg	1	10/10/18 19:28
Trichlorofluoromethane	ND	U	0.000101	0.000879	mg/kg	1	10/10/18 19:28
Vinyl chloride	ND	U	0.000167	0.000879	mg/kg	1	10/10/18 19:28

**SW 846 8260C - Volatile Organics - GC/MS - VO+15 - TIC**

Tentatively Identified Compound	Est Conc	RT	Qual	Units	Dilution	Analyzed
No TICs Found						

**Gravimetric - General Chemistry**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	92.5				%	1	10/11/18 10:54

**8100452-03 (Soil)** Sample Name: **NTP-2B** Collected: **10/10/2018 12:00:00AM**

**NJDEP-EPH-CAT2 - Extractable Petroleum Hydrocarbons Category 2**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Total EPH	38.1		10.8	21.7	mg/kg	1	10/11/18 14:02

**SW 846 7471B - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	ND		0.0250	0.0510	mg/kg	1	10/11/18 12:24

**SW 846 6010D - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Aluminum	3620		0.0549	2.56	mg/kg	1	10/11/18 14:36
Antimony	ND		0.00540	1.28	mg/kg	1	10/11/18 14:36
Arsenic	ND		0.0123	1.28	mg/kg	1	10/11/18 14:36
Barium	17.9		0.000986	0.511	mg/kg	1	10/11/18 14:36
Beryllium	0.184		0.0000922	0.0256	mg/kg	1	10/11/18 14:36

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit

# All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

<b>8100452-03 (Soil)</b>	Sample Name: <b>NTP-2B</b>	Collected: <b>10/10/2018 12:00:00AM</b>
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**SW 846 6010D - Total Metals (con't)**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Cadmium	ND		0.000871	0.256	mg/kg	1	10/11/18 14:36
Calcium	1100		0.290	25.6	mg/kg	1	10/11/18 14:36
Chromium	5.98		0.000919	0.256	mg/kg	1	10/11/18 14:36
Cobalt	2.49		0.00111	0.205	mg/kg	1	10/11/18 14:36
Copper	9.46		0.00110	0.256	mg/kg	1	10/11/18 14:36
Iron	8490		0.116	5.11	mg/kg	1	10/11/18 14:36
Lead	19.0		0.00534	1.28	mg/kg	1	10/11/18 14:36
Magnesium	885		0.744	51.1	mg/kg	1	10/11/18 14:36
Manganese	139		0.000633	0.256	mg/kg	1	10/11/18 14:36
Nickel	5.09		0.00176	0.128	mg/kg	1	10/11/18 14:36
Potassium	233		2.40	102	mg/kg	1	10/11/18 14:36
Selenium	ND		0.0110	1.28	mg/kg	1	10/11/18 14:36
Silver	ND		0.00305	0.511	mg/kg	1	10/11/18 14:36
Sodium	93.8		0.140	51.1	mg/kg	1	10/11/18 14:36
Thallium	ND		0.00709	1.28	mg/kg	1	10/11/18 14:36
Vanadium	12.0		0.00886	0.511	mg/kg	1	10/11/18 14:36
Zinc	24.5		0.00235	0.767	mg/kg	1	10/11/18 14:36

**SW 846 8270D - Semivolatile Organics - GC/MS - BN-PAH**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
1-Methylnaphthalene	ND	U	0.120	0.217	mg/kg	1	10/11/18 15:07
2-Methylnaphthalene	ND	U	0.0346	0.217	mg/kg	1	10/11/18 15:07
Acenaphthene	ND	U	0.00823	0.144	mg/kg	1	10/11/18 15:07
Acenaphthylene	ND	U	0.00502	0.144	mg/kg	1	10/11/18 15:07
Anthracene	ND	U	0.0209	0.144	mg/kg	1	10/11/18 15:07
Benzo(a)anthracene	0.0876	J	0.0145	0.144	mg/kg	1	10/11/18 15:07
Benzo(a)pyrene	0.0814	J	0.0251	0.144	mg/kg	1	10/11/18 15:07
Benzo(b)fluoranthene	0.0987	J	0.0203	0.144	mg/kg	1	10/11/18 15:07
Benzo(g,h,i)perylene	0.0663	J	0.0117	0.144	mg/kg	1	10/11/18 15:07
Benzo(k)fluoranthene	0.0460	J	0.0166	0.144	mg/kg	1	10/11/18 15:07
Chrysene	0.0730	J	0.00989	0.144	mg/kg	1	10/11/18 15:07
Dibenzo(a,h)anthracene	ND	U	0.0143	0.144	mg/kg	1	10/11/18 15:07
Fluoranthene	0.153		0.0135	0.144	mg/kg	1	10/11/18 15:07
Fluorene	ND	U	0.0120	0.144	mg/kg	1	10/11/18 15:07
Indeno(1,2,3-cd)pyrene	ND	U	0.0155	0.144	mg/kg	1	10/11/18 15:07
Naphthalene	ND	U	0.0107	0.144	mg/kg	1	10/11/18 15:07
Phenanthrene	0.114	J	0.0190	0.144	mg/kg	1	10/11/18 15:07
Pyrene	0.137	J	0.0106	0.144	mg/kg	1	10/11/18 15:07

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit

# All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

**8100452-03 (Soil)** Sample Name: **NTP-2B** Collected: **10/10/2018 12:00:00AM**

**Gravimetric - General Chemistry**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	92.3				%	1	10/11/18 10:54

**8100452-04 (Soil)** Sample Name: **NTP-3B** Collected: **10/10/2018 12:00:00AM**

**NJDEP-EPH-CAT2 - Extractable Petroleum Hydrocarbons Category 2**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Total EPH	ND	U	10.9	21.9	mg/kg	1	10/11/18 14:37

**SW 846 7471B - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	ND		0.0244	0.0497	mg/kg	1	10/11/18 12:27

**SW 846 6010D - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Aluminum	4300		0.0571	2.66	mg/kg	1	10/11/18 14:38
Antimony	ND		0.00561	1.33	mg/kg	1	10/11/18 14:38
Arsenic	ND		0.0128	1.33	mg/kg	1	10/11/18 14:38
Barium	24.3		0.00102	0.532	mg/kg	1	10/11/18 14:38
Beryllium	0.181		0.0000959	0.0266	mg/kg	1	10/11/18 14:38
Cadmium	ND		0.000906	0.266	mg/kg	1	10/11/18 14:38
Calcium	619		0.302	26.6	mg/kg	1	10/11/18 14:38
Chromium	7.12		0.000956	0.266	mg/kg	1	10/11/18 14:38
Cobalt	3.03		0.00116	0.213	mg/kg	1	10/11/18 14:38
Copper	7.89		0.00115	0.266	mg/kg	1	10/11/18 14:38
Iron	9220		0.120	5.32	mg/kg	1	10/11/18 14:38
Lead	6.72		0.00555	1.33	mg/kg	1	10/11/18 14:38
Magnesium	946		0.774	53.2	mg/kg	1	10/11/18 14:38
Manganese	165		0.000658	0.266	mg/kg	1	10/11/18 14:38
Nickel	5.13		0.00183	0.133	mg/kg	1	10/11/18 14:38
Potassium	252		2.50	106	mg/kg	1	10/11/18 14:38
Selenium	ND		0.0115	1.33	mg/kg	1	10/11/18 14:38
Silver	ND		0.00317	0.532	mg/kg	1	10/11/18 14:38
Sodium	136		0.146	53.2	mg/kg	1	10/11/18 14:38
Thallium	ND		0.00737	1.33	mg/kg	1	10/11/18 14:38
Vanadium	13.4		0.00921	0.532	mg/kg	1	10/11/18 14:38
Zinc	20.3		0.00245	0.797	mg/kg	1	10/11/18 14:38

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit



# All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

**8100452-04 (Soil)** Sample Name: **NTP-3B** Collected: **10/10/2018 12:00:00AM**

**SW 846 8270D - Semivolatile Organics - GC/MS - BN-PAH**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
1-Methylnaphthalene	ND	U	0.122	0.219	mg/kg	1	10/11/18 15:35
2-Methylnaphthalene	ND	U	0.0349	0.219	mg/kg	1	10/11/18 15:35
Acenaphthene	ND	U	0.00831	0.146	mg/kg	1	10/11/18 15:35
Acenaphthylene	ND	U	0.00507	0.146	mg/kg	1	10/11/18 15:35
Anthracene	ND	U	0.0211	0.146	mg/kg	1	10/11/18 15:35
Benzo(a)anthracene	ND	U	0.0147	0.146	mg/kg	1	10/11/18 15:35
Benzo(a)pyrene	ND	U	0.0254	0.146	mg/kg	1	10/11/18 15:35
Benzo(b)fluoranthene	ND	U	0.0205	0.146	mg/kg	1	10/11/18 15:35
Benzo(g,h,i)perylene	ND	U	0.0118	0.146	mg/kg	1	10/11/18 15:35
Benzo(k)fluoranthene	ND	U	0.0168	0.146	mg/kg	1	10/11/18 15:35
Chrysene	ND	U	0.00999	0.146	mg/kg	1	10/11/18 15:35
Dibenzo(a,h)anthracene	ND	U	0.0145	0.146	mg/kg	1	10/11/18 15:35
Fluoranthene	ND	U	0.0137	0.146	mg/kg	1	10/11/18 15:35
Fluorene	ND	U	0.0122	0.146	mg/kg	1	10/11/18 15:35
Indeno(1,2,3-cd)pyrene	ND	U	0.0157	0.146	mg/kg	1	10/11/18 15:35
Naphthalene	ND	U	0.0108	0.146	mg/kg	1	10/11/18 15:35
Phenanthrene	ND	U	0.0192	0.146	mg/kg	1	10/11/18 15:35
Pyrene	ND	U	0.0107	0.146	mg/kg	1	10/11/18 15:35

**Gravimetric - General Chemistry**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	91.3				%	1	10/11/18 10:54

**8100452-05 (Soil)** Sample Name: **NTP-4B** Collected: **10/10/2018 12:35:00PM**

**NJDEP-EPH-CAT2 - Extractable Petroleum Hydrocarbons Category 2**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Total EPH	ND	U	10.9	21.7	mg/kg	1	10/11/18 15:25

**SW 846 7471B - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	ND		0.0246	0.0502	mg/kg	1	10/11/18 12:40

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit

# All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

**8100452-05 (Soil)**      Sample Name: **NTP-4B**      Collected: **10/10/2018 12:35:00PM**

**SW 846 6010D - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Aluminum	5500		0.0614	2.86	mg/kg	1	10/11/18 14:40
Antimony	ND		0.00604	1.43	mg/kg	1	10/11/18 14:40
Arsenic	ND		0.0137	1.43	mg/kg	1	10/11/18 14:40
Barium	31.8		0.00110	0.572	mg/kg	1	10/11/18 14:40
Beryllium	0.203		0.000103	0.0286	mg/kg	1	10/11/18 14:40
Cadmium	ND		0.000975	0.286	mg/kg	1	10/11/18 14:40
Calcium	933		0.325	28.6	mg/kg	1	10/11/18 14:40
Chromium	11.2		0.00103	0.286	mg/kg	1	10/11/18 14:40
Cobalt	4.83		0.00125	0.229	mg/kg	1	10/11/18 14:40
Copper	9.21		0.00124	0.286	mg/kg	1	10/11/18 14:40
Iron	12100		0.129	5.72	mg/kg	1	10/11/18 14:40
Lead	5.21		0.00597	1.43	mg/kg	1	10/11/18 14:40
Magnesium	1750		0.833	57.2	mg/kg	1	10/11/18 14:40
Manganese	229		0.000708	0.286	mg/kg	1	10/11/18 14:40
Nickel	7.75		0.00197	0.143	mg/kg	1	10/11/18 14:40
Potassium	261		2.69	114	mg/kg	1	10/11/18 14:40
Selenium	ND		0.0124	1.43	mg/kg	1	10/11/18 14:40
Silver	ND		0.00341	0.572	mg/kg	1	10/11/18 14:40
Sodium	335		0.157	57.2	mg/kg	1	10/11/18 14:40
Thallium	ND		0.00793	1.43	mg/kg	1	10/11/18 14:40
Vanadium	18.9		0.00991	0.572	mg/kg	1	10/11/18 14:40
Zinc	17.6		0.00263	0.858	mg/kg	1	10/11/18 14:40

**SW 846 8270D - Semivolatile Organics - GC/MS - BN-PAH**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
1-Methylnaphthalene	ND	U	0.121	0.217	mg/kg	1	10/11/18 16:04
2-Methylnaphthalene	ND	U	0.0347	0.217	mg/kg	1	10/11/18 16:04
Acenaphthene	ND	U	0.00825	0.145	mg/kg	1	10/11/18 16:04
Acenaphthylene	ND	U	0.00503	0.145	mg/kg	1	10/11/18 16:04
Anthracene	ND	U	0.0210	0.145	mg/kg	1	10/11/18 16:04
Benzo(a)anthracene	ND	U	0.0146	0.145	mg/kg	1	10/11/18 16:04
Benzo(a)pyrene	ND	U	0.0252	0.145	mg/kg	1	10/11/18 16:04
Benzo(b)fluoranthene	ND	U	0.0203	0.145	mg/kg	1	10/11/18 16:04
Benzo(g,h,i)perylene	ND	U	0.0117	0.145	mg/kg	1	10/11/18 16:04
Benzo(k)fluoranthene	ND	U	0.0166	0.145	mg/kg	1	10/11/18 16:04
Chrysene	ND	U	0.00991	0.145	mg/kg	1	10/11/18 16:04
Dibenzo(a,h)anthracene	ND	U	0.0143	0.145	mg/kg	1	10/11/18 16:04
Fluoranthene	ND	U	0.0136	0.145	mg/kg	1	10/11/18 16:04
Fluorene	ND	U	0.0121	0.145	mg/kg	1	10/11/18 16:04

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit

# All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

**8100452-05 (Soil)** Sample Name: **NTP-4B** Collected: **10/10/2018 12:35:00PM**

**SW 846 8270D - Semivolatile Organics - GC/MS - BN-PAH (con't)**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Indeno(1,2,3-cd)pyrene	ND	U	0.0155	0.145	mg/kg	1	10/11/18 16:04
Naphthalene	ND	U	0.0107	0.145	mg/kg	1	10/11/18 16:04
Phenanthrene	ND	U	0.0190	0.145	mg/kg	1	10/11/18 16:04
Pyrene	ND	U	0.0106	0.145	mg/kg	1	10/11/18 16:04

**SW 846 8260C - Volatile Organics - GC/MS - VO+15**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
1,1,1-Trichloroethane	ND	U	0.000139	0.000954	mg/kg	1	10/10/18 19:58
1,1,2,2-Tetrachloroethane	ND	U	0.000132	0.000954	mg/kg	1	10/10/18 19:58
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	U	0.000408	0.000954	mg/kg	1	10/10/18 19:58
1,1,2-Trichloroethane	ND	U	0.000161	0.000954	mg/kg	1	10/10/18 19:58
1,1-Dichloroethane	ND	U	0.000139	0.000954	mg/kg	1	10/10/18 19:58
1,1-Dichloroethene	ND	U	0.000176	0.000954	mg/kg	1	10/10/18 19:58
1,2,3-Trichlorobenzene	ND	U	0.000206	0.000954	mg/kg	1	10/10/18 19:58
1,2,4-Trichlorobenzene	ND	U	0.000254	0.000954	mg/kg	1	10/10/18 19:58
1,2,4-Trimethylbenzene	ND	U	0.000132	0.000954	mg/kg	1	10/10/18 19:58
1,2-Dibromo-3-chloropropane	ND	U	0.000233	0.000954	mg/kg	1	10/10/18 19:58
1,2-Dibromoethane	ND	U	0.000120	0.000954	mg/kg	1	10/10/18 19:58
1,2-Dichlorobenzene	ND	U	0.000168	0.000954	mg/kg	1	10/10/18 19:58
1,2-Dichloroethane	ND	U	0.000134	0.000954	mg/kg	1	10/10/18 19:58
1,2-Dichloropropane	ND	U	0.000156	0.000954	mg/kg	1	10/10/18 19:58
1,3-Dichlorobenzene	ND	U	0.0000701	0.000954	mg/kg	1	10/10/18 19:58
1,4-Dichlorobenzene	ND	U	0.000137	0.000954	mg/kg	1	10/10/18 19:58
2-Butanone	ND	U	0.000155	0.00238	mg/kg	1	10/10/18 19:58
2-Hexanone	ND	U	0.0000892	0.000954	mg/kg	1	10/10/18 19:58
4-Methyl-2-pentanone	ND	U	0.000119	0.000954	mg/kg	1	10/10/18 19:58
Acetone	ND	U	0.000289	0.00238	mg/kg	1	10/10/18 19:58
Benzene	ND	U	0.0000868	0.000954	mg/kg	1	10/10/18 19:58
Bromochloromethane	ND	U	0.000176	0.000954	mg/kg	1	10/10/18 19:58
Bromodichloromethane	ND	U	0.000120	0.000954	mg/kg	1	10/10/18 19:58
Bromoform	ND	U	0.000167	0.000954	mg/kg	1	10/10/18 19:58
Bromomethane	ND	U	0.000275	0.000954	mg/kg	1	10/10/18 19:58
Carbon disulfide	ND	U	0.000137	0.000954	mg/kg	1	10/10/18 19:58
Carbon Tetrachloride	ND	U	0.000144	0.000954	mg/kg	1	10/10/18 19:58
Chlorobenzene	ND	U	0.000138	0.000954	mg/kg	1	10/10/18 19:58
Chlorodibromomethane	ND	U	0.000117	0.000954	mg/kg	1	10/10/18 19:58
Chloroethane	ND	U	0.000163	0.000954	mg/kg	1	10/10/18 19:58
Chloroform	ND	U	0.000160	0.000954	mg/kg	1	10/10/18 19:58

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit

# All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

**8100452-05 (Soil)**                      Sample Name: **NTP-4B**                      Collected: **10/10/2018 12:35:00PM**

**SW 846 8260C - Volatile Organics - GC/MS - VO+15 (con't)**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Chloromethane	ND	U	0.000367	0.000954	mg/kg	1	10/10/18 19:58
cis-1,2-Dichloroethene	ND	U	0.0000461	0.000954	mg/kg	1	10/10/18 19:58
cis-1,3-Dichloropropene	ND	U	0.000121	0.000954	mg/kg	1	10/10/18 19:58
Cyclohexane	ND	U	0.000211	0.000954	mg/kg	1	10/10/18 19:58
Dichlorodifluoromethane	ND	U	0.000322	0.000954	mg/kg	1	10/10/18 19:58
EthylBenzene	ND	U	0.000129	0.000954	mg/kg	1	10/10/18 19:58
Isopropylbenzene	ND	U	0.000150	0.000954	mg/kg	1	10/10/18 19:58
m+p-Xylenes	ND	U	0.000241	0.00191	mg/kg	1	10/10/18 19:58
Methyl Acetate	ND	U	0.000126	0.000954	mg/kg	1	10/10/18 19:58
Methyl tert-Butyl Ether	ND	U	0.000161	0.000954	mg/kg	1	10/10/18 19:58
Methylcyclohexane	ND	U	0.000154	0.000954	mg/kg	1	10/10/18 19:58
Methylene Chloride	ND	U	0.000287	0.000954	mg/kg	1	10/10/18 19:58
o-Xylene	ND	U	0.000123	0.000954	mg/kg	1	10/10/18 19:58
Styrene	ND	U	0.000136	0.000954	mg/kg	1	10/10/18 19:58
tert-Butyl alcohol	ND	U	0.00200	0.00954	mg/kg	1	10/10/18 19:58
Tetrachloroethene	ND	U	0.0000944	0.000954	mg/kg	1	10/10/18 19:58
Toluene	ND	U	0.0000768	0.000954	mg/kg	1	10/10/18 19:58
Total Xylenes	ND	U	0.000123	0.000954	mg/kg	1	10/10/18 19:58
trans-1,2-Dichloroethene	ND	U	0.000129	0.000954	mg/kg	1	10/10/18 19:58
trans-1,3-Dichloropropene	ND	U	0.000182	0.000954	mg/kg	1	10/10/18 19:58
Trichloroethene	ND	U	0.000140	0.000954	mg/kg	1	10/10/18 19:58
Trichlorofluoromethane	ND	U	0.000110	0.000954	mg/kg	1	10/10/18 19:58
Vinyl chloride	ND	U	0.000181	0.000954	mg/kg	1	10/10/18 19:58

**SW 846 8260C - Volatile Organics - GC/MS - VO+15 - TIC**

Tentatively Identified Compound	Est Conc	RT	Qual	Units	Dilution	Analyzed
No TICs Found						

**Gravimetric - General Chemistry**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	92.0				%	1	10/11/18 10:54

ND - Indicates compound analyzed for but not detected  
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B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit

# All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

**8100452-06 (Soil)**      Sample Name: **NTP-6**      Collected: **10/10/2018 12:50:00PM**

**SW 846 8082A - PCBs**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Aroclor-1016	ND	U	0.000670	0.0376	mg/kg	1	10/11/18 14:26
Aroclor-1221	ND	U	0.00116	0.0376	mg/kg	1	10/11/18 14:26
Aroclor-1232	ND	U	0.000886	0.0376	mg/kg	1	10/11/18 14:26
Aroclor-1242	ND	U	0.00128	0.0376	mg/kg	1	10/11/18 14:26
Aroclor-1248	ND	U	0.000883	0.0376	mg/kg	1	10/11/18 14:26
Aroclor-1254	ND	U	0.00134	0.0376	mg/kg	1	10/11/18 14:26
Aroclor-1260	ND	U	0.000992	0.0376	mg/kg	1	10/11/18 14:26
Aroclor-1262	ND	U	0.00145	0.0376	mg/kg	1	10/11/18 14:26
Aroclor-1268	ND	U	0.000761	0.0376	mg/kg	1	10/11/18 14:26
Total PCBs	ND	U	0.000670	0.0376	mg/kg	1	10/11/18 14:26

**NJDEP-EPH-CAT2 - Extractable Petroleum Hydrocarbons Category 2**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Total EPH	ND	U	11.4	22.8	mg/kg	1	10/11/18 16:00

**SW 846 7471B - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	ND		0.0249	0.0508	mg/kg	1	10/11/18 12:04

**SW 846 6010D - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Aluminum	6670		0.0631	2.94	mg/kg	1	10/11/18 14:42
Antimony	ND		0.00621	1.47	mg/kg	1	10/11/18 14:42
Arsenic	1.71		0.0141	1.47	mg/kg	1	10/11/18 14:42
Barium	29.1		0.00113	0.588	mg/kg	1	10/11/18 14:42
Beryllium	0.282		0.000106	0.0294	mg/kg	1	10/11/18 14:42
Cadmium	ND		0.00100	0.294	mg/kg	1	10/11/18 14:42
Calcium	1140		0.334	29.4	mg/kg	1	10/11/18 14:42
Chromium	9.79		0.00106	0.294	mg/kg	1	10/11/18 14:42
Cobalt	3.59		0.00128	0.235	mg/kg	1	10/11/18 14:42
Copper	10.1		0.00127	0.294	mg/kg	1	10/11/18 14:42
Iron	12300		0.133	5.88	mg/kg	1	10/11/18 14:42
Lead	7.82		0.00614	1.47	mg/kg	1	10/11/18 14:42
Magnesium	1290		0.856	58.8	mg/kg	1	10/11/18 14:42
Manganese	176		0.000728	0.294	mg/kg	1	10/11/18 14:42
Nickel	6.47		0.00202	0.147	mg/kg	1	10/11/18 14:42
Potassium	361		2.76	118	mg/kg	1	10/11/18 14:42
Selenium	ND		0.0127	1.47	mg/kg	1	10/11/18 14:42
Silver	ND		0.00350	0.588	mg/kg	1	10/11/18 14:42

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit

# All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

**8100452-06 (Soil)** Sample Name: **NTP-6** Collected: **10/10/2018 12:50:00PM**

**SW 846 6010D - Total Metals (con't)**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Sodium	132		0.161	58.8	mg/kg	1	10/11/18 14:42
Thallium	ND		0.00815	1.47	mg/kg	1	10/11/18 14:42
Vanadium	17.4		0.0102	0.588	mg/kg	1	10/11/18 14:42
Zinc	20.9		0.00270	0.882	mg/kg	1	10/11/18 14:42

**SW 846 8081B - Pesticides**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDD	ND	U	0.000897	0.00148	mg/kg	1	10/11/18 16:29
4,4'-DDE	ND	U	0.00105	0.00148	mg/kg	1	10/11/18 16:29
4,4'-DDT	ND	U	0.000711	0.00148	mg/kg	1	10/11/18 16:29
Aldrin	ND	U	0.000920	0.00148	mg/kg	1	10/11/18 16:29
alpha-BHC	ND	U	0.000574	0.00148	mg/kg	1	10/11/18 16:29
beta-BHC	ND	U	0.00146	0.00148	mg/kg	1	10/11/18 16:29
Chlordane	ND	U	0.000995	0.00148	mg/kg	1	10/11/18 16:29
delta-BHC	ND	U	0.00115	0.00148	mg/kg	1	10/11/18 16:29
Dieldrin	ND	U	0.000798	0.00148	mg/kg	1	10/11/18 16:29
Endosulfan I	ND	U	0.00103	0.00148	mg/kg	1	10/11/18 16:29
Endosulfan II	ND	U	0.000806	0.00148	mg/kg	1	10/11/18 16:29
Endosulfan sulfate	ND	U	0.000806	0.00148	mg/kg	1	10/11/18 16:29
Endrin	ND	U	0.000761	0.00148	mg/kg	1	10/11/18 16:29
Endrin aldehyde	ND	U	0.000633	0.00148	mg/kg	1	10/11/18 16:29
Endrin ketone	ND	U	0.000904	0.00148	mg/kg	1	10/11/18 16:29
gamma-BHC (Lindane)	ND	U	0.000677	0.00148	mg/kg	1	10/11/18 16:29
Heptachlor	ND	U	0.000867	0.00148	mg/kg	1	10/11/18 16:29
Heptachlor Epoxide	ND	U	0.000927	0.00148	mg/kg	1	10/11/18 16:29
Methoxychlor	ND	U	0.000943	0.00148	mg/kg	1	10/11/18 16:29
Toxaphene	ND	U	0.0230	0.0753	mg/kg	1	10/11/18 16:29

**SW 846 8270D - Semivolatile Organics - GC/MS - BNA+25**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
1-Methylnaphthalene	ND	U	0.0364	0.228	mg/kg	1	10/11/18 16:32
2,3,4,6-Tetrachlorophenol	ND	U	0.0234	0.152	mg/kg	1	10/11/18 16:32
2,4,5-Trichlorophenol	ND	U	0.0206	0.152	mg/kg	1	10/11/18 16:32
2,4,6-Trichlorophenol	ND	U	0.00950	0.152	mg/kg	1	10/11/18 16:32
2,4-Dichlorophenol	ND	U	0.0153	0.152	mg/kg	1	10/11/18 16:32
2,4-Dimethylphenol	ND	U	0.0149	0.152	mg/kg	1	10/11/18 16:32
2,4-Dinitrophenol	ND	U	0.0219	0.761	mg/kg	1	10/11/18 16:32
2,4-Dinitrotoluene	ND	U	0.0162	0.152	mg/kg	1	10/11/18 16:32
2,6-Dinitrotoluene	ND	U	0.0363	0.152	mg/kg	1	10/11/18 16:32

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit

# All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

**8100452-06 (Soil)** Sample Name: **NTP-6** Collected: **10/10/2018 12:50:00PM**

**SW 846 8270D - Semivolatile Organics - GC/MS - BNA+25 (con't)**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
2-Chloronaphthalene	ND	U	0.0174	0.152	mg/kg	1	10/11/18 16:32
2-Chlorophenol	ND	U	0.0201	0.152	mg/kg	1	10/11/18 16:32
2-Methylnaphthalene	ND	U	0.0364	0.228	mg/kg	1	10/11/18 16:32
2-Methylphenol	ND	U	0.0300	0.152	mg/kg	1	10/11/18 16:32
2-Nitroaniline	ND	U	0.0122	0.152	mg/kg	1	10/11/18 16:32
2-Nitrophenol	ND	U	0.0169	0.152	mg/kg	1	10/11/18 16:32
3,3'-Dichlorobenzidine	ND	U	0.0160	0.152	mg/kg	1	10/11/18 16:32
3+4-Methylphenol	ND	U	0.0278	0.152	mg/kg	1	10/11/18 16:32
3-Nitroaniline	ND	U	0.0282	0.152	mg/kg	1	10/11/18 16:32
4,6-Dinitro-2-methylphenol	ND	U	0.0286	0.380	mg/kg	1	10/11/18 16:32
4-Bromophenyl-phenyl ether	ND	U	0.0217	0.152	mg/kg	1	10/11/18 16:32
4-Chloro-3-methylphenol	ND	U	0.0239	0.152	mg/kg	1	10/11/18 16:32
4-Chloroaniline	ND	U	0.00531	0.152	mg/kg	1	10/11/18 16:32
4-Chlorophenyl phenyl ether	ND	U	0.00820	0.152	mg/kg	1	10/11/18 16:32
4-Nitroaniline	ND	U	0.0759	0.152	mg/kg	1	10/11/18 16:32
4-Nitrophenol	ND	U	0.00971	0.152	mg/kg	1	10/11/18 16:32
Acenaphthene	ND	U	0.00865	0.152	mg/kg	1	10/11/18 16:32
Acenaphthylene	ND	U	0.00528	0.152	mg/kg	1	10/11/18 16:32
Acetophenone	ND	U	0.0151	0.152	mg/kg	1	10/11/18 16:32
Anthracene	ND	U	0.0220	0.152	mg/kg	1	10/11/18 16:32
Atrazine	ND	U	0.0143	0.152	mg/kg	1	10/11/18 16:32
Benzaldehyde	ND	U	0.0466	0.152	mg/kg	1	10/11/18 16:32
Benzo(a)anthracene	ND	U	0.0153	0.152	mg/kg	1	10/11/18 16:32
Benzo(a)pyrene	ND	U	0.0265	0.152	mg/kg	1	10/11/18 16:32
Benzo(b)fluoranthene	ND	U	0.0213	0.152	mg/kg	1	10/11/18 16:32
Benzo(g,h,i)perylene	ND	U	0.0123	0.152	mg/kg	1	10/11/18 16:32
Benzo(k)fluoranthene	ND	U	0.0174	0.152	mg/kg	1	10/11/18 16:32
Biphenyl	ND	U	0.0133	0.152	mg/kg	1	10/11/18 16:32
bis(2-chloroethoxy)methane	ND	U	0.0210	0.152	mg/kg	1	10/11/18 16:32
bis(2-chloroethyl)ether	ND	U	0.0166	0.152	mg/kg	1	10/11/18 16:32
bis(2-chloroisopropyl)ether	ND	U	0.0546	0.152	mg/kg	1	10/11/18 16:32
bis(2-ethylhexyl)phthalate	ND	U	0.0303	0.152	mg/kg	1	10/11/18 16:32
Butylbenzylphthalate	ND	U	0.0138	0.152	mg/kg	1	10/11/18 16:32
Caprolactam	ND	U	0.0196	0.152	mg/kg	1	10/11/18 16:32
Carbazole	ND	U	0.0292	0.380	mg/kg	1	10/11/18 16:32
Chrysene	ND	U	0.0104	0.152	mg/kg	1	10/11/18 16:32
Dibenzo(a,h)anthracene	ND	U	0.0151	0.152	mg/kg	1	10/11/18 16:32
Dibenzofuran	ND	U	0.00904	0.152	mg/kg	1	10/11/18 16:32
Diethylphthalate	ND	U	0.0294	0.152	mg/kg	1	10/11/18 16:32

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit



# All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

**8100452-06 (Soil)** Sample Name: **NTP-6** Collected: **10/10/2018 12:50:00PM**

**SW 846 8270D - Semivolatile Organics - GC/MS - BNA+25 (con't)**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Dimethylphthalate	0.0721	J	0.00942	0.152	mg/kg	1	10/11/18 16:32
Di-n-butylphthalate	ND	U	0.0620	0.152	mg/kg	1	10/11/18 16:32
Di-n-octylphthalate	ND	U	0.0311	0.152	mg/kg	1	10/11/18 16:32
Fluoranthene	ND	U	0.0143	0.152	mg/kg	1	10/11/18 16:32
Fluorene	ND	U	0.0127	0.152	mg/kg	1	10/11/18 16:32
Hexachlorobenzene	ND	U	0.0198	0.152	mg/kg	1	10/11/18 16:32
Hexachlorobutadiene	ND	U	0.0729	0.152	mg/kg	1	10/11/18 16:32
Hexachlorocyclopentadiene	ND	U	0.0633	0.380	mg/kg	1	10/11/18 16:32
Hexachloroethane	ND	U	0.0166	0.152	mg/kg	1	10/11/18 16:32
Indeno(1,2,3-cd)pyrene	ND	U	0.0163	0.152	mg/kg	1	10/11/18 16:32
Isophorone	ND	U	0.00994	0.152	mg/kg	1	10/11/18 16:32
Naphthalene	ND	U	0.0112	0.152	mg/kg	1	10/11/18 16:32
Nitrobenzene	ND	U	0.0258	0.152	mg/kg	1	10/11/18 16:32
n-Nitroso-di-n-propylamine	ND	U	0.00813	0.152	mg/kg	1	10/11/18 16:32
n-Nitrosodiphenylamine	ND	U	0.0324	0.152	mg/kg	1	10/11/18 16:32
Phenanthrene	ND	U	0.0200	0.152	mg/kg	1	10/11/18 16:32
Phenol	ND	U	0.0123	0.152	mg/kg	1	10/11/18 16:32
Pyrene	ND	U	0.0112	0.152	mg/kg	1	10/11/18 16:32

**SW 846 8270D - Semivolatile Organics - GC/MS - BNA+25 - TIC**

Tentatively Identified Compound	Est Conc	RT	Qual	Units	Dilution	Analyzed
No TICs Found						

**SW 846 8260C - Volatile Organics - GC/MS - VO+15**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
1,1,1-Trichloroethane	ND	U	0.000166	0.00114	mg/kg	1	10/10/18 20:28
1,1,1,2-Tetrachloroethane	ND	U	0.000157	0.00114	mg/kg	1	10/10/18 20:28
1,1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	U	0.000488	0.00114	mg/kg	1	10/10/18 20:28
1,1,2-Trichloroethane	ND	U	0.000192	0.00114	mg/kg	1	10/10/18 20:28
1,1-Dichloroethane	ND	U	0.000166	0.00114	mg/kg	1	10/10/18 20:28
1,1-Dichloroethene	ND	U	0.000211	0.00114	mg/kg	1	10/10/18 20:28
1,2,3-Trichlorobenzene	ND	U	0.000246	0.00114	mg/kg	1	10/10/18 20:28
1,2,4-Trichlorobenzene	ND	U	0.000304	0.00114	mg/kg	1	10/10/18 20:28
1,2,4-Trimethylbenzene	ND	U	0.000157	0.00114	mg/kg	1	10/10/18 20:28
1,2-Dibromo-3-chloropropane	ND	U	0.000278	0.00114	mg/kg	1	10/10/18 20:28
1,2-Dibromoethane	ND	U	0.000144	0.00114	mg/kg	1	10/10/18 20:28
1,2-Dichlorobenzene	ND	U	0.000201	0.00114	mg/kg	1	10/10/18 20:28
1,2-Dichloroethane	ND	U	0.000161	0.00114	mg/kg	1	10/10/18 20:28

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit



# All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

**8100452-06 (Soil)**                      Sample Name: **NTP-6**                      Collected: **10/10/2018 12:50:00PM**

**SW 846 8260C - Volatile Organics - GC/MS - VO+15 (con't)**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
1,2-Dichloropropane	ND	U	0.000187	0.00114	mg/kg	1	10/10/18 20:28
1,3-Dichlorobenzene	ND	U	0.0000838	0.00114	mg/kg	1	10/10/18 20:28
1,4-Dichlorobenzene	ND	U	0.000164	0.00114	mg/kg	1	10/10/18 20:28
2-Butanone	ND	U	0.000186	0.00285	mg/kg	1	10/10/18 20:28
2-Hexanone	ND	U	0.000107	0.00114	mg/kg	1	10/10/18 20:28
4-Methyl-2-pentanone	ND	U	0.000143	0.00114	mg/kg	1	10/10/18 20:28
Acetone	ND	U	0.000345	0.00285	mg/kg	1	10/10/18 20:28
Benzene	ND	U	0.000104	0.00114	mg/kg	1	10/10/18 20:28
Bromochloromethane	ND	U	0.000210	0.00114	mg/kg	1	10/10/18 20:28
Bromodichloromethane	ND	U	0.000143	0.00114	mg/kg	1	10/10/18 20:28
Bromoform	ND	U	0.000200	0.00114	mg/kg	1	10/10/18 20:28
Bromomethane	ND	U	0.000329	0.00114	mg/kg	1	10/10/18 20:28
Carbon disulfide	ND	U	0.000164	0.00114	mg/kg	1	10/10/18 20:28
Carbon Tetrachloride	ND	U	0.000172	0.00114	mg/kg	1	10/10/18 20:28
Chlorobenzene	ND	U	0.000165	0.00114	mg/kg	1	10/10/18 20:28
Chlorodibromomethane	ND	U	0.000140	0.00114	mg/kg	1	10/10/18 20:28
Chloroethane	ND	U	0.000194	0.00114	mg/kg	1	10/10/18 20:28
Chloroform	ND	U	0.000192	0.00114	mg/kg	1	10/10/18 20:28
Chloromethane	ND	U	0.000439	0.00114	mg/kg	1	10/10/18 20:28
cis-1,2-Dichloroethene	ND	U	0.0000551	0.00114	mg/kg	1	10/10/18 20:28
cis-1,3-Dichloropropene	ND	U	0.000144	0.00114	mg/kg	1	10/10/18 20:28
Cyclohexane	ND	U	0.000253	0.00114	mg/kg	1	10/10/18 20:28
Dichlorodifluoromethane	ND	U	0.000385	0.00114	mg/kg	1	10/10/18 20:28
EthylBenzene	ND	U	0.000154	0.00114	mg/kg	1	10/10/18 20:28
Isopropylbenzene	ND	U	0.000179	0.00114	mg/kg	1	10/10/18 20:28
m+p-Xylenes	ND	U	0.000288	0.00228	mg/kg	1	10/10/18 20:28
Methyl Acetate	ND	U	0.000151	0.00114	mg/kg	1	10/10/18 20:28
Methyl tert-Butyl Ether	ND	U	0.000193	0.00114	mg/kg	1	10/10/18 20:28
Methylcyclohexane	ND	U	0.000184	0.00114	mg/kg	1	10/10/18 20:28
Methylene Chloride	ND	U	0.000343	0.00114	mg/kg	1	10/10/18 20:28
o-Xylene	ND	U	0.000147	0.00114	mg/kg	1	10/10/18 20:28
Styrene	ND	U	0.000163	0.00114	mg/kg	1	10/10/18 20:28
tert-Butyl alcohol	ND	U	0.00239	0.0114	mg/kg	1	10/10/18 20:28
Tetrachloroethene	ND	U	0.000113	0.00114	mg/kg	1	10/10/18 20:28
Toluene	ND	U	0.0000918	0.00114	mg/kg	1	10/10/18 20:28
Total Xylenes	ND	U	0.000147	0.00114	mg/kg	1	10/10/18 20:28
trans-1,2-Dichloroethene	ND	U	0.000154	0.00114	mg/kg	1	10/10/18 20:28
trans-1,3-Dichloropropene	ND	U	0.000218	0.00114	mg/kg	1	10/10/18 20:28
Trichloroethene	ND	U	0.000168	0.00114	mg/kg	1	10/10/18 20:28

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit



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## All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

**8100452-06 (Soil)** Sample Name: **NTP-6** Collected: **10/10/2018 12:50:00PM**

### SW 846 8260C - Volatile Organics - GC/MS - VO+15 (con't)

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Trichlorofluoromethane	ND	U	0.000131	0.00114	mg/kg	1	10/10/18 20:28
Vinyl chloride	ND	U	0.000217	0.00114	mg/kg	1	10/10/18 20:28

### SW 846 8260C - Volatile Organics - GC/MS - VO+15 - TIC

Tentitively Identified Compound	Est Conc	RT	Qual	Units	Dilution	Analyzed
No TICs Found						

### Gravimetric - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	87.7				%	1	10/11/18 10:54

### SW 846 9014 - General Chemistry

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Cyanide	ND		0.0855	0.285	mg/kg	1	10/11/18 13:30

**8100452-07 (Soil)** Sample Name: **NTP-7** Collected: **10/10/2018 1:00:00PM**

### NJDEP-EPH-CAT2 - Extractable Petroleum Hydrocarbons Category 2

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Total EPH	65.8		10.9	21.9	mg/kg	1	10/11/18 16:35

### SW 846 7471B - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	ND		0.0235	0.0479	mg/kg	1	10/11/18 12:43

### SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Aluminum	4450		0.0582	2.71	mg/kg	1	10/11/18 14:44
Antimony	ND		0.00572	1.35	mg/kg	1	10/11/18 14:44
Arsenic	ND		0.0130	1.35	mg/kg	1	10/11/18 14:44
Barium	21.4		0.00104	0.542	mg/kg	1	10/11/18 14:44
Beryllium	0.160		0.0000978	0.0271	mg/kg	1	10/11/18 14:44
Cadmium	ND		0.000923	0.271	mg/kg	1	10/11/18 14:44
Calcium	1080		0.308	27.1	mg/kg	1	10/11/18 14:44
Chromium	6.67		0.000974	0.271	mg/kg	1	10/11/18 14:44
Cobalt	3.01		0.00118	0.217	mg/kg	1	10/11/18 14:44
Copper	8.67		0.00117	0.271	mg/kg	1	10/11/18 14:44
Iron	8450		0.122	5.42	mg/kg	1	10/11/18 14:44

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit

# All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

**8100452-07 (Soil)**      Sample Name: **NTP-7**      Collected: **10/10/2018 1:00:00PM**

**SW 846 6010D - Total Metals (con't)**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Lead	11.3		0.00566	1.35	mg/kg	1	10/11/18 14:44
Magnesium	1090		0.789	54.2	mg/kg	1	10/11/18 14:44
Manganese	145		0.000671	0.271	mg/kg	1	10/11/18 14:44
Nickel	5.23		0.00186	0.135	mg/kg	1	10/11/18 14:44
Potassium	230		2.55	108	mg/kg	1	10/11/18 14:44
Selenium	ND		0.0117	1.35	mg/kg	1	10/11/18 14:44
Silver	ND		0.00323	0.542	mg/kg	1	10/11/18 14:44
Sodium	160		0.148	54.2	mg/kg	1	10/11/18 14:44
Thallium	ND		0.00751	1.35	mg/kg	1	10/11/18 14:44
Vanadium	12.8		0.00939	0.542	mg/kg	1	10/11/18 14:44
Zinc	21.1		0.00249	0.813	mg/kg	1	10/11/18 14:44

**SW 846 8270D - Semivolatile Organics - GC/MS - BN-PAH**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
1-Methylnaphthalene	ND	U	0.122	0.219	mg/kg	1	10/11/18 17:01
2-Methylnaphthalene	ND	U	0.0349	0.219	mg/kg	1	10/11/18 17:01
Acenaphthene	ND	U	0.00831	0.146	mg/kg	1	10/11/18 17:01
Acenaphthylene	ND	U	0.00507	0.146	mg/kg	1	10/11/18 17:01
Anthracene	ND	U	0.0211	0.146	mg/kg	1	10/11/18 17:01
Benzo(a)anthracene	0.133	J	0.0147	0.146	mg/kg	1	10/11/18 17:01
Benzo(a)pyrene	0.105	J	0.0254	0.146	mg/kg	1	10/11/18 17:01
Benzo(b)fluoranthene	0.169		0.0205	0.146	mg/kg	1	10/11/18 17:01
Benzo(g,h,i)perylene	0.124	J	0.0118	0.146	mg/kg	1	10/11/18 17:01
Benzo(k)fluoranthene	0.106	J	0.0167	0.146	mg/kg	1	10/11/18 17:01
Chrysene	0.134	J	0.00998	0.146	mg/kg	1	10/11/18 17:01
Dibenzo(a,h)anthracene	ND	U	0.0144	0.146	mg/kg	1	10/11/18 17:01
Fluoranthene	0.193		0.0137	0.146	mg/kg	1	10/11/18 17:01
Fluorene	ND	U	0.0122	0.146	mg/kg	1	10/11/18 17:01
Indeno(1,2,3-cd)pyrene	ND	U	0.0157	0.146	mg/kg	1	10/11/18 17:01
Naphthalene	ND	U	0.0108	0.146	mg/kg	1	10/11/18 17:01
Phenanthrene	0.0964	J	0.0192	0.146	mg/kg	1	10/11/18 17:01
Pyrene	0.184		0.0107	0.146	mg/kg	1	10/11/18 17:01

**SW 846 8260C - Volatile Organics - GC/MS - VO+15**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
1,1,1-Trichloroethane	ND	U	0.000155	0.00106	mg/kg	1	10/10/18 21:02
1,1,2,2-Tetrachloroethane	ND	U	0.000147	0.00106	mg/kg	1	10/10/18 21:02
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	U	0.000455	0.00106	mg/kg	1	10/10/18 21:02

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit

# All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

**8100452-07 (Soil)**                      Sample Name: **NTP-7**                      Collected: **10/10/2018 1:00:00PM**

**SW 846 8260C - Volatile Organics - GC/MS - VO+15 (con't)**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
1,1,2-Trichloroethane	ND	U	0.000179	0.00106	mg/kg	1	10/10/18 21:02
1,1-Dichloroethane	ND	U	0.000155	0.00106	mg/kg	1	10/10/18 21:02
1,1-Dichloroethene	ND	U	0.000197	0.00106	mg/kg	1	10/10/18 21:02
1,2,3-Trichlorobenzene	ND	U	0.000230	0.00106	mg/kg	1	10/10/18 21:02
1,2,4-Trichlorobenzene	ND	U	0.000283	0.00106	mg/kg	1	10/10/18 21:02
1,2,4-Trimethylbenzene	ND	U	0.000147	0.00106	mg/kg	1	10/10/18 21:02
1,2-Dibromo-3-chloropropane	ND	U	0.000259	0.00106	mg/kg	1	10/10/18 21:02
1,2-Dibromoethane	ND	U	0.000134	0.00106	mg/kg	1	10/10/18 21:02
1,2-Dichlorobenzene	ND	U	0.000188	0.00106	mg/kg	1	10/10/18 21:02
1,2-Dichloroethane	ND	U	0.000150	0.00106	mg/kg	1	10/10/18 21:02
1,2-Dichloropropane	ND	U	0.000174	0.00106	mg/kg	1	10/10/18 21:02
1,3-Dichlorobenzene	ND	U	0.0000781	0.00106	mg/kg	1	10/10/18 21:02
1,4-Dichlorobenzene	ND	U	0.000153	0.00106	mg/kg	1	10/10/18 21:02
2-Butanone	ND	U	0.000173	0.00266	mg/kg	1	10/10/18 21:02
2-Hexanone	ND	U	0.0000994	0.00106	mg/kg	1	10/10/18 21:02
4-Methyl-2-pentanone	ND	U	0.000133	0.00106	mg/kg	1	10/10/18 21:02
Acetone	ND	U	0.000322	0.00266	mg/kg	1	10/10/18 21:02
Benzene	ND	U	0.0000967	0.00106	mg/kg	1	10/10/18 21:02
Bromochloromethane	ND	U	0.000196	0.00106	mg/kg	1	10/10/18 21:02
Bromodichloromethane	ND	U	0.000133	0.00106	mg/kg	1	10/10/18 21:02
Bromoform	ND	U	0.000187	0.00106	mg/kg	1	10/10/18 21:02
Bromomethane	ND	U	0.000307	0.00106	mg/kg	1	10/10/18 21:02
Carbon disulfide	ND	U	0.000153	0.00106	mg/kg	1	10/10/18 21:02
Carbon Tetrachloride	ND	U	0.000160	0.00106	mg/kg	1	10/10/18 21:02
Chlorobenzene	ND	U	0.000154	0.00106	mg/kg	1	10/10/18 21:02
Chlorodibromomethane	ND	U	0.000131	0.00106	mg/kg	1	10/10/18 21:02
Chloroethane	ND	U	0.000181	0.00106	mg/kg	1	10/10/18 21:02
Chloroform	ND	U	0.000179	0.00106	mg/kg	1	10/10/18 21:02
Chloromethane	ND	U	0.000409	0.00106	mg/kg	1	10/10/18 21:02
cis-1,2-Dichloroethene	ND	U	0.0000514	0.00106	mg/kg	1	10/10/18 21:02
cis-1,3-Dichloropropene	ND	U	0.000134	0.00106	mg/kg	1	10/10/18 21:02
Cyclohexane	ND	U	0.000235	0.00106	mg/kg	1	10/10/18 21:02
Dichlorodifluoromethane	ND	U	0.000359	0.00106	mg/kg	1	10/10/18 21:02
EthylBenzene	ND	U	0.000144	0.00106	mg/kg	1	10/10/18 21:02
Isopropylbenzene	ND	U	0.000167	0.00106	mg/kg	1	10/10/18 21:02
m+p-Xylenes	ND	U	0.000268	0.00213	mg/kg	1	10/10/18 21:02
Methyl Acetate	ND	U	0.000141	0.00106	mg/kg	1	10/10/18 21:02
Methyl tert-Butyl Ether	ND	U	0.000180	0.00106	mg/kg	1	10/10/18 21:02
Methylcyclohexane	ND	U	0.000171	0.00106	mg/kg	1	10/10/18 21:02

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 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

# All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

**8100452-07 (Soil)** Sample Name: **NTP-7** Collected: **10/10/2018 1:00:00PM**

**SW 846 8260C - Volatile Organics - GC/MS - VO+15 (con't)**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Methylene Chloride	ND	U	0.000319	0.00106	mg/kg	1	10/10/18 21:02
o-Xylene	ND	U	0.000137	0.00106	mg/kg	1	10/10/18 21:02
Styrene	ND	U	0.000152	0.00106	mg/kg	1	10/10/18 21:02
tert-Butyl alcohol	ND	U	0.00223	0.0106	mg/kg	1	10/10/18 21:02
Tetrachloroethene	ND	U	0.000105	0.00106	mg/kg	1	10/10/18 21:02
Toluene	ND	U	0.0000856	0.00106	mg/kg	1	10/10/18 21:02
Total Xylenes	ND	U	0.000137	0.00106	mg/kg	1	10/10/18 21:02
trans-1,2-Dichloroethene	ND	U	0.000144	0.00106	mg/kg	1	10/10/18 21:02
trans-1,3-Dichloropropene	ND	U	0.000203	0.00106	mg/kg	1	10/10/18 21:02
Trichloroethene	ND	U	0.000156	0.00106	mg/kg	1	10/10/18 21:02
Trichlorofluoromethane	ND	U	0.000122	0.00106	mg/kg	1	10/10/18 21:02
Vinyl chloride	ND	U	0.000202	0.00106	mg/kg	1	10/10/18 21:02

**SW 846 8260C - Volatile Organics - GC/MS - VO+15 - TIC**

Tentatively Identified Compound	Est Conc	RT	Qual	Units	Dilution	Analyzed
No TICs Found						

**Gravimetric - General Chemistry**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	91.4				%	1	10/11/18 10:54

**8100452-08 (Soil)** Sample Name: **STP-1B** Collected: **10/10/2018 1:15:00PM**

**NJDEP-EPH-CAT2 - Extractable Petroleum Hydrocarbons Category 2**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Total EPH	ND	U	11.2	22.3	mg/kg	1	10/11/18 17:10

**SW 846 7471B - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	ND		0.0224	0.0457	mg/kg	1	10/11/18 12:46

**SW 846 6010D - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Aluminum	5040		0.0576	2.68	mg/kg	1	10/11/18 14:46
Antimony	ND		0.00567	1.34	mg/kg	1	10/11/18 14:46
Arsenic	ND		0.0129	1.34	mg/kg	1	10/11/18 14:46
Barium	20.2		0.00103	0.537	mg/kg	1	10/11/18 14:46
Beryllium	0.191		0.0000968	0.0268	mg/kg	1	10/11/18 14:46

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit

# All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

**8100452-08 (Soil)** Sample Name: **STP-1B** Collected: **10/10/2018 1:15:00PM**

**SW 846 6010D - Total Metals (con't)**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Cadmium	ND		0.000914	0.268	mg/kg	1	10/11/18 14:46
Calcium	453		0.305	26.8	mg/kg	1	10/11/18 14:46
Chromium	7.08		0.000965	0.268	mg/kg	1	10/11/18 14:46
Cobalt	3.03		0.00117	0.215	mg/kg	1	10/11/18 14:46
Copper	7.22		0.00116	0.268	mg/kg	1	10/11/18 14:46
Iron	9500		0.121	5.37	mg/kg	1	10/11/18 14:46
Lead	4.88		0.00560	1.34	mg/kg	1	10/11/18 14:46
Magnesium	966		0.781	53.7	mg/kg	1	10/11/18 14:46
Manganese	144		0.000664	0.268	mg/kg	1	10/11/18 14:46
Nickel	5.18		0.00185	0.134	mg/kg	1	10/11/18 14:46
Potassium	260		2.52	107	mg/kg	1	10/11/18 14:46
Selenium	ND		0.0116	1.34	mg/kg	1	10/11/18 14:46
Silver	ND		0.00320	0.537	mg/kg	1	10/11/18 14:46
Sodium	72.2		0.147	53.7	mg/kg	1	10/11/18 14:46
Thallium	ND		0.00744	1.34	mg/kg	1	10/11/18 14:46
Vanadium	13.0		0.00929	0.537	mg/kg	1	10/11/18 14:46
Zinc	23.5		0.00247	0.805	mg/kg	1	10/11/18 14:46

**SW 846 8270D - Semivolatile Organics - GC/MS - BN-PAH**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
1-Methylnaphthalene	ND	U	0.124	0.223	mg/kg	1	10/11/18 17:29
2-Methylnaphthalene	ND	U	0.0356	0.223	mg/kg	1	10/11/18 17:29
Acenaphthene	ND	U	0.00847	0.148	mg/kg	1	10/11/18 17:29
Acenaphthylene	ND	U	0.00517	0.148	mg/kg	1	10/11/18 17:29
Anthracene	ND	U	0.0215	0.148	mg/kg	1	10/11/18 17:29
Benzo(a)anthracene	ND	U	0.0150	0.148	mg/kg	1	10/11/18 17:29
Benzo(a)pyrene	ND	U	0.0259	0.148	mg/kg	1	10/11/18 17:29
Benzo(b)fluoranthene	ND	U	0.0209	0.148	mg/kg	1	10/11/18 17:29
Benzo(g,h,i)perylene	ND	U	0.0121	0.148	mg/kg	1	10/11/18 17:29
Benzo(k)fluoranthene	ND	U	0.0171	0.148	mg/kg	1	10/11/18 17:29
Chrysene	ND	U	0.0102	0.148	mg/kg	1	10/11/18 17:29
Dibenzo(a,h)anthracene	ND	U	0.0147	0.148	mg/kg	1	10/11/18 17:29
Fluoranthene	ND	U	0.0140	0.148	mg/kg	1	10/11/18 17:29
Fluorene	ND	U	0.0124	0.148	mg/kg	1	10/11/18 17:29
Indeno(1,2,3-cd)pyrene	ND	U	0.0160	0.148	mg/kg	1	10/11/18 17:29
Naphthalene	ND	U	0.0110	0.148	mg/kg	1	10/11/18 17:29
Phenanthrene	ND	U	0.0195	0.148	mg/kg	1	10/11/18 17:29
Pyrene	ND	U	0.0109	0.148	mg/kg	1	10/11/18 17:29

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit

# All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

**8100452-08 (Soil)** Sample Name: **STP-1B** Collected: **10/10/2018 1:15:00PM**

**SW 846 8260C - Volatile Organics - GC/MS - VO+15**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
1,1,1-Trichloroethane	ND	U	0.000397	0.00272	mg/kg	1	10/11/18 13:34
1,1,2,2-Tetrachloroethane	ND	U	0.000376	0.00272	mg/kg	1	10/11/18 13:34
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	U	0.00117	0.00272	mg/kg	1	10/11/18 13:34
1,1,2-Trichloroethane	ND	U	0.000459	0.00272	mg/kg	1	10/11/18 13:34
1,1-Dichloroethane	ND	U	0.000397	0.00272	mg/kg	1	10/11/18 13:34
1,1-Dichloroethene	ND	U	0.000504	0.00272	mg/kg	1	10/11/18 13:34
1,2,3-Trichlorobenzene	ND	U	0.000588	0.00272	mg/kg	1	10/11/18 13:34
1,2,4-Trichlorobenzene	ND	U	0.000726	0.00272	mg/kg	1	10/11/18 13:34
1,2,4-Trimethylbenzene	ND	U	0.000376	0.00272	mg/kg	1	10/11/18 13:34
1,2-Dibromo-3-chloropropane	ND	U	0.000664	0.00272	mg/kg	1	10/11/18 13:34
1,2-Dibromoethane	ND	U	0.000343	0.00272	mg/kg	1	10/11/18 13:34
1,2-Dichlorobenzene	ND	U	0.000481	0.00272	mg/kg	1	10/11/18 13:34
1,2-Dichloroethane	ND	U	0.000384	0.00272	mg/kg	1	10/11/18 13:34
1,2-Dichloropropane	ND	U	0.000446	0.00272	mg/kg	1	10/11/18 13:34
1,3-Dichlorobenzene	ND	U	0.000200	0.00272	mg/kg	1	10/11/18 13:34
1,4-Dichlorobenzene	ND	U	0.000392	0.00272	mg/kg	1	10/11/18 13:34
2-Butanone	ND	U	0.000444	0.00681	mg/kg	1	10/11/18 13:34
2-Hexanone	ND	U	0.000255	0.00272	mg/kg	1	10/11/18 13:34
4-Methyl-2-pentanone	ND	U	0.000340	0.00272	mg/kg	1	10/11/18 13:34
Acetone	ND	U	0.000825	0.00681	mg/kg	1	10/11/18 13:34
Benzene	ND	U	0.000248	0.00272	mg/kg	1	10/11/18 13:34
Bromochloromethane	ND	U	0.000502	0.00272	mg/kg	1	10/11/18 13:34
Bromodichloromethane	ND	U	0.000342	0.00272	mg/kg	1	10/11/18 13:34
Bromoform	ND	U	0.000478	0.00272	mg/kg	1	10/11/18 13:34
Bromomethane	ND	U	0.000785	0.00272	mg/kg	1	10/11/18 13:34
Carbon disulfide	ND	U	0.000391	0.00272	mg/kg	1	10/11/18 13:34
Carbon Tetrachloride	ND	U	0.000410	0.00272	mg/kg	1	10/11/18 13:34
Chlorobenzene	ND	U	0.000395	0.00272	mg/kg	1	10/11/18 13:34
Chlorodibromomethane	ND	U	0.000335	0.00272	mg/kg	1	10/11/18 13:34
Chloroethane	ND	U	0.000464	0.00272	mg/kg	1	10/11/18 13:34
Chloroform	ND	U	0.000457	0.00272	mg/kg	1	10/11/18 13:34
Chloromethane	ND	U	0.00105	0.00272	mg/kg	1	10/11/18 13:34
cis-1,2-Dichloroethene	ND	U	0.000132	0.00272	mg/kg	1	10/11/18 13:34
cis-1,3-Dichloropropene	ND	U	0.000344	0.00272	mg/kg	1	10/11/18 13:34
Cyclohexane	ND	U	0.000603	0.00272	mg/kg	1	10/11/18 13:34
Dichlorodifluoromethane	ND	U	0.000919	0.00272	mg/kg	1	10/11/18 13:34
EthylBenzene	ND	U	0.000369	0.00272	mg/kg	1	10/11/18 13:34
Isopropylbenzene	ND	U	0.000427	0.00272	mg/kg	1	10/11/18 13:34

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

# All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

**8100452-08 (Soil)** Sample Name: **STP-1B** Collected: **10/10/2018 1:15:00PM**

**SW 846 8260C - Volatile Organics - GC/MS - VO+15 (con't)**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
m+p-Xylenes	ND	U	0.000687	0.00544	mg/kg	1	10/11/18 13:34
Methyl Acetate	ND	U	0.000361	0.00272	mg/kg	1	10/11/18 13:34
Methyl tert-Butyl Ether	ND	U	0.000460	0.00272	mg/kg	1	10/11/18 13:34
Methylcyclohexane	ND	U	0.000438	0.00272	mg/kg	1	10/11/18 13:34
Methylene Chloride	ND	U	0.000818	0.00272	mg/kg	1	10/11/18 13:34
o-Xylene	ND	U	0.000350	0.00272	mg/kg	1	10/11/18 13:34
Styrene	ND	U	0.000389	0.00272	mg/kg	1	10/11/18 13:34
tert-Butyl alcohol	ND	U	0.00572	0.0272	mg/kg	1	10/11/18 13:34
Tetrachloroethene	ND	U	0.000270	0.00272	mg/kg	1	10/11/18 13:34
Toluene	ND	U	0.000219	0.00272	mg/kg	1	10/11/18 13:34
Total Xylenes	ND	U	0.000350	0.00272	mg/kg	1	10/11/18 13:34
trans-1,2-Dichloroethene	ND	U	0.000369	0.00272	mg/kg	1	10/11/18 13:34
trans-1,3-Dichloropropene	ND	U	0.000520	0.00272	mg/kg	1	10/11/18 13:34
Trichloroethene	ND	U	0.000400	0.00272	mg/kg	1	10/11/18 13:34
Trichlorofluoromethane	ND	U	0.000313	0.00272	mg/kg	1	10/11/18 13:34
Vinyl chloride	ND	U	0.000517	0.00272	mg/kg	1	10/11/18 13:34

**SW 846 8260C - Volatile Organics - GC/MS - VO+15 - TIC**

Tentatively Identified Compound	Est Conc	RT	Qual	Units	Dilution	Analyzed
No TICs Found						

**Gravimetric - General Chemistry**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	89.6				%	1	10/11/18 10:54

**8100452-09 (Soil)** Sample Name: **STP-2B** Collected: **10/10/2018 1:30:00PM**

**NJDEP-EPH-CAT2 - Extractable Petroleum Hydrocarbons Category 2**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Total EPH	ND	U	10.9	21.8	mg/kg	1	10/12/18 11:28

**SW 846 7471B - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	ND		0.0252	0.0514	mg/kg	1	10/11/18 12:49

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit



# All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

**8100452-09 (Soil)**      Sample Name: **STP-2B**      Collected: **10/10/2018 1:30:00PM**

**SW 846 6010D - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Aluminum	5700		0.0631	2.94	mg/kg	1	10/11/18 14:48
Antimony	ND		0.00620	1.47	mg/kg	1	10/11/18 14:48
Arsenic	ND		0.0141	1.47	mg/kg	1	10/11/18 14:48
Barium	23.4		0.00113	0.587	mg/kg	1	10/11/18 14:48
Beryllium	0.223		0.000106	0.0294	mg/kg	1	10/11/18 14:48
Cadmium	ND		0.00100	0.294	mg/kg	1	10/11/18 14:48
Calcium	473		0.334	29.4	mg/kg	1	10/11/18 14:48
Chromium	7.63		0.00106	0.294	mg/kg	1	10/11/18 14:48
Cobalt	3.23		0.00128	0.235	mg/kg	1	10/11/18 14:48
Copper	8.57		0.00127	0.294	mg/kg	1	10/11/18 14:48
Iron	11100		0.133	5.87	mg/kg	1	10/11/18 14:48
Lead	6.05		0.00613	1.47	mg/kg	1	10/11/18 14:48
Magnesium	1070		0.855	58.7	mg/kg	1	10/11/18 14:48
Manganese	187		0.000727	0.294	mg/kg	1	10/11/18 14:48
Nickel	5.76		0.00202	0.147	mg/kg	1	10/11/18 14:48
Potassium	271		2.76	117	mg/kg	1	10/11/18 14:48
Selenium	ND		0.0127	1.47	mg/kg	1	10/11/18 14:48
Silver	ND		0.00350	0.587	mg/kg	1	10/11/18 14:48
Sodium	74.3		0.161	58.7	mg/kg	1	10/11/18 14:48
Thallium	ND		0.00814	1.47	mg/kg	1	10/11/18 14:48
Vanadium	13.9		0.0102	0.587	mg/kg	1	10/11/18 14:48
Zinc	38.2		0.00270	0.881	mg/kg	1	10/11/18 14:48

**SW 846 8270D - Semivolatile Organics - GC/MS - BN-PAH**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
1-Methylnaphthalene	ND	U	0.121	0.218	mg/kg	1	10/11/18 17:26
2-Methylnaphthalene	ND	U	0.0348	0.218	mg/kg	1	10/11/18 17:26
Acenaphthene	ND	U	0.00829	0.145	mg/kg	1	10/11/18 17:26
Acenaphthylene	ND	U	0.00506	0.145	mg/kg	1	10/11/18 17:26
Anthracene	ND	U	0.0211	0.145	mg/kg	1	10/11/18 17:26
Benzo(a)anthracene	ND	U	0.0146	0.145	mg/kg	1	10/11/18 17:26
Benzo(a)pyrene	ND	U	0.0253	0.145	mg/kg	1	10/11/18 17:26
Benzo(b)fluoranthene	ND	U	0.0204	0.145	mg/kg	1	10/11/18 17:26
Benzo(g,h,i)perylene	ND	U	0.0118	0.145	mg/kg	1	10/11/18 17:26
Benzo(k)fluoranthene	ND	U	0.0167	0.145	mg/kg	1	10/11/18 17:26
Chrysene	ND	U	0.00996	0.145	mg/kg	1	10/11/18 17:26
Dibenzo(a,h)anthracene	ND	U	0.0144	0.145	mg/kg	1	10/11/18 17:26
Fluoranthene	ND	U	0.0137	0.145	mg/kg	1	10/11/18 17:26
Fluorene	ND	U	0.0121	0.145	mg/kg	1	10/11/18 17:26

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit

# All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

**8100452-09 (Soil)** Sample Name: **STP-2B** Collected: **10/10/2018 1:30:00PM**

**SW 846 8270D - Semivolatile Organics - GC/MS - BN-PAH (con't)**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Indeno(1,2,3-cd)pyrene	ND	U	0.0156	0.145	mg/kg	1	10/11/18 17:26
Naphthalene	ND	U	0.0108	0.145	mg/kg	1	10/11/18 17:26
Phenanthrene	ND	U	0.0191	0.145	mg/kg	1	10/11/18 17:26
Pyrene	ND	U	0.0107	0.145	mg/kg	1	10/11/18 17:26

**Gravimetric - General Chemistry**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	91.5				%	1	10/11/18 10:54

**8100452-10 (Soil)** Sample Name: **STP-3B** Collected: **10/10/2018 1:40:00PM**

**NJDEP-EPH-CAT2 - Extractable Petroleum Hydrocarbons Category 2**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Total EPH	ND	U	10.9	21.9	mg/kg	1	10/12/18 12:03

**SW 846 7471B - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	0.0562		0.0235	0.0478	mg/kg	1	10/11/18 12:53

**SW 846 6010D - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Aluminum	4900		0.0556	2.59	mg/kg	1	10/11/18 14:50
Antimony	ND		0.00547	1.29	mg/kg	1	10/11/18 14:50
Arsenic	1.65		0.0124	1.29	mg/kg	1	10/11/18 14:50
Barium	19.4		0.000998	0.518	mg/kg	1	10/11/18 14:50
Beryllium	0.184		0.000934	0.0259	mg/kg	1	10/11/18 14:50
Cadmium	ND		0.000882	0.259	mg/kg	1	10/11/18 14:50
Calcium	463		0.294	25.9	mg/kg	1	10/11/18 14:50
Chromium	6.68		0.000931	0.259	mg/kg	1	10/11/18 14:50
Cobalt	2.90		0.00113	0.207	mg/kg	1	10/11/18 14:50
Copper	7.66		0.00112	0.259	mg/kg	1	10/11/18 14:50
Iron	9550		0.117	5.18	mg/kg	1	10/11/18 14:50
Lead	6.01		0.00541	1.29	mg/kg	1	10/11/18 14:50
Magnesium	977		0.754	51.8	mg/kg	1	10/11/18 14:50
Manganese	163		0.000641	0.259	mg/kg	1	10/11/18 14:50
Nickel	5.18		0.00178	0.129	mg/kg	1	10/11/18 14:50
Potassium	272		2.43	104	mg/kg	1	10/11/18 14:50
Selenium	ND		0.0112	1.29	mg/kg	1	10/11/18 14:50

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit

# All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

**8100452-10 (Soil)** Sample Name: **STP-3B** Collected: **10/10/2018 1:40:00PM**

**SW 846 6010D - Total Metals (con't)**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Silver	ND		0.00309	0.518	mg/kg	1	10/11/18 14:50
<b>Sodium</b>	<b>74.0</b>		<b>0.142</b>	<b>51.8</b>	<b>mg/kg</b>	<b>1</b>	<b>10/11/18 14:50</b>
Thallium	ND		0.00718	1.29	mg/kg	1	10/11/18 14:50
<b>Vanadium</b>	<b>12.7</b>		<b>0.00897</b>	<b>0.518</b>	<b>mg/kg</b>	<b>1</b>	<b>10/11/18 14:50</b>
<b>Zinc</b>	<b>21.0</b>		<b>0.00238</b>	<b>0.777</b>	<b>mg/kg</b>	<b>1</b>	<b>10/11/18 14:50</b>

**SW 846 8270D - Semivolatile Organics - GC/MS - BN-PAH**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
1-Methylnaphthalene	ND	U	0.121	0.219	mg/kg	1	10/11/18 14:58
2-Methylnaphthalene	ND	U	0.0349	0.219	mg/kg	1	10/11/18 14:58
Acenaphthene	ND	U	0.00829	0.145	mg/kg	1	10/11/18 14:58
Acenaphthylene	ND	U	0.00506	0.145	mg/kg	1	10/11/18 14:58
Anthracene	ND	U	0.0211	0.145	mg/kg	1	10/11/18 14:58
Benzo(a)anthracene	ND	U	0.0146	0.145	mg/kg	1	10/11/18 14:58
Benzo(a)pyrene	ND	U	0.0253	0.145	mg/kg	1	10/11/18 14:58
Benzo(b)fluoranthene	ND	U	0.0204	0.145	mg/kg	1	10/11/18 14:58
Benzo(g,h,i)perylene	ND	U	0.0118	0.145	mg/kg	1	10/11/18 14:58
Benzo(k)fluoranthene	ND	U	0.0167	0.145	mg/kg	1	10/11/18 14:58
Chrysene	ND	U	0.00996	0.145	mg/kg	1	10/11/18 14:58
Dibenzo(a,h)anthracene	ND	U	0.0144	0.145	mg/kg	1	10/11/18 14:58
Fluoranthene	ND	U	0.0137	0.145	mg/kg	1	10/11/18 14:58
Fluorene	ND	U	0.0121	0.145	mg/kg	1	10/11/18 14:58
Indeno(1,2,3-cd)pyrene	ND	U	0.0156	0.145	mg/kg	1	10/11/18 14:58
Naphthalene	ND	U	0.0108	0.145	mg/kg	1	10/11/18 14:58
Phenanthrene	ND	U	0.0191	0.145	mg/kg	1	10/11/18 14:58
Pyrene	ND	U	0.0107	0.145	mg/kg	1	10/11/18 14:58

**Gravimetric - General Chemistry**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
<b>Percent Solids</b>	<b>91.5</b>				<b>%</b>	<b>1</b>	<b>10/11/18 10:54</b>

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit

# All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

<b>8100452-11 (Soil)</b>	Sample Name: <b>STP-4A</b>	Collected: <b>10/10/2018 12:00:00AM</b>
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**NJDEP-EPH-CAT2 - Extractable Petroleum Hydrocarbons Category 2**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Total EPH	ND	U	11.0	22.1	mg/kg	1	10/12/18 12:38

**SW 846 7471B - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	ND		0.0265	0.0540	mg/kg	1	10/11/18 12:56

**SW 846 6010D - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Aluminum	6100		0.0608	2.83	mg/kg	1	10/11/18 15:31
Antimony	ND		0.00598	1.41	mg/kg	1	10/11/18 15:31
Arsenic	ND		0.0136	1.41	mg/kg	1	10/11/18 15:31
Barium	23.3		0.00109	0.566	mg/kg	1	10/11/18 15:31
Beryllium	0.215		0.000102	0.0283	mg/kg	1	10/11/18 15:31
Cadmium	ND		0.000964	0.283	mg/kg	1	10/11/18 15:31
Calcium	634		0.321	28.3	mg/kg	1	10/11/18 15:31
Chromium	8.26		0.00102	0.283	mg/kg	1	10/11/18 15:31
Cobalt	3.51		0.00123	0.226	mg/kg	1	10/11/18 15:31
Copper	9.17		0.00122	0.283	mg/kg	1	10/11/18 15:31
Iron	10900		0.128	5.66	mg/kg	1	10/11/18 15:31
Lead	10.6		0.00591	1.41	mg/kg	1	10/11/18 15:31
Magnesium	1110		0.824	56.6	mg/kg	1	10/11/18 15:31
Manganese	209		0.000701	0.283	mg/kg	1	10/11/18 15:31
Nickel	6.25		0.00195	0.141	mg/kg	1	10/11/18 15:31
Potassium	286		2.66	113	mg/kg	1	10/11/18 15:31
Selenium	ND		0.0122	1.41	mg/kg	1	10/11/18 15:31
Silver	ND		0.00337	0.566	mg/kg	1	10/11/18 15:31
Sodium	85.2		0.155	56.6	mg/kg	1	10/11/18 15:31
Thallium	ND		0.00784	1.41	mg/kg	1	10/11/18 15:31
Vanadium	15.4		0.00980	0.566	mg/kg	1	10/11/18 15:31
Zinc	20.4		0.00260	0.849	mg/kg	1	10/11/18 15:31

**SW 846 8270D - Semivolatile Organics - GC/MS - BN-PAH**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
1-Methylnaphthalene	ND	U	0.122	0.221	mg/kg	1	10/11/18 15:28
2-Methylnaphthalene	ND	U	0.0352	0.221	mg/kg	1	10/11/18 15:28
Acenaphthene	ND	U	0.00837	0.147	mg/kg	1	10/11/18 15:28
Acenaphthylene	ND	U	0.00511	0.147	mg/kg	1	10/11/18 15:28
Anthracene	ND	U	0.0213	0.147	mg/kg	1	10/11/18 15:28
Benzo(a)anthracene	ND	U	0.0148	0.147	mg/kg	1	10/11/18 15:28

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit

# All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

**8100452-11 (Soil)** Sample Name: **STP-4A** Collected: **10/10/2018 12:00:00AM**

**SW 846 8270D - Semivolatile Organics - GC/MS - BN-PAH (con't)**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Benzo(a)pyrene	ND	U	0.0256	0.147	mg/kg	1	10/11/18 15:28
Benzo(b)fluoranthene	ND	U	0.0206	0.147	mg/kg	1	10/11/18 15:28
Benzo(g,h,i)perylene	ND	U	0.0119	0.147	mg/kg	1	10/11/18 15:28
Benzo(k)fluoranthene	ND	U	0.0169	0.147	mg/kg	1	10/11/18 15:28
Chrysene	ND	U	0.0101	0.147	mg/kg	1	10/11/18 15:28
Dibenzo(a,h)anthracene	ND	U	0.0146	0.147	mg/kg	1	10/11/18 15:28
Fluoranthene	ND	U	0.0138	0.147	mg/kg	1	10/11/18 15:28
Fluorene	ND	U	0.0122	0.147	mg/kg	1	10/11/18 15:28
Indeno(1,2,3-cd)pyrene	ND	U	0.0158	0.147	mg/kg	1	10/11/18 15:28
Naphthalene	ND	U	0.0109	0.147	mg/kg	1	10/11/18 15:28
Phenanthrene	ND	U	0.0193	0.147	mg/kg	1	10/11/18 15:28
Pyrene	ND	U	0.0108	0.147	mg/kg	1	10/11/18 15:28

**SW 846 8260C - Volatile Organics - GC/MS - VO+15**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
1,1,1-Trichloroethane	ND	U	0.000109	0.000746	mg/kg	1	10/10/18 22:01
1,1,2,2-Tetrachloroethane	ND	U	0.000103	0.000746	mg/kg	1	10/10/18 22:01
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	U	0.000319	0.000746	mg/kg	1	10/10/18 22:01
1,1,2-Trichloroethane	ND	U	0.000126	0.000746	mg/kg	1	10/10/18 22:01
1,1-Dichloroethane	ND	U	0.000109	0.000746	mg/kg	1	10/10/18 22:01
1,1-Dichloroethene	ND	U	0.000138	0.000746	mg/kg	1	10/10/18 22:01
1,2,3-Trichlorobenzene	ND	U	0.000161	0.000746	mg/kg	1	10/10/18 22:01
1,2,4-Trichlorobenzene	ND	U	0.000199	0.000746	mg/kg	1	10/10/18 22:01
1,2,4-Trimethylbenzene	ND	U	0.000103	0.000746	mg/kg	1	10/10/18 22:01
1,2-Dibromo-3-chloropropane	ND	U	0.000182	0.000746	mg/kg	1	10/10/18 22:01
1,2-Dibromoethane	ND	U	0.0000939	0.000746	mg/kg	1	10/10/18 22:01
1,2-Dichlorobenzene	ND	U	0.000132	0.000746	mg/kg	1	10/10/18 22:01
1,2-Dichloroethane	ND	U	0.000105	0.000746	mg/kg	1	10/10/18 22:01
1,2-Dichloropropane	ND	U	0.000122	0.000746	mg/kg	1	10/10/18 22:01
1,3-Dichlorobenzene	ND	U	0.0000548	0.000746	mg/kg	1	10/10/18 22:01
1,4-Dichlorobenzene	ND	U	0.000107	0.000746	mg/kg	1	10/10/18 22:01
2-Butanone	ND	U	0.000122	0.00186	mg/kg	1	10/10/18 22:01
2-Hexanone	ND	U	0.0000697	0.000746	mg/kg	1	10/10/18 22:01
4-Methyl-2-pentanone	ND	U	0.0000932	0.000746	mg/kg	1	10/10/18 22:01
Acetone	ND	U	0.000226	0.00186	mg/kg	1	10/10/18 22:01
Benzene	ND	U	0.0000678	0.000746	mg/kg	1	10/10/18 22:01
Bromochloromethane	ND	U	0.000138	0.000746	mg/kg	1	10/10/18 22:01
Bromodichloromethane	ND	U	0.0000936	0.000746	mg/kg	1	10/10/18 22:01

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit



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## All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

<b>8100452-11 (Soil)</b>	Sample Name: <b>STP-4A</b>	Collected: <b>10/10/2018 12:00:00AM</b>
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### SW 846 8260C - Volatile Organics - GC/MS - VO+15 (con't)

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Bromoform	ND	U	0.000131	0.000746	mg/kg	1	10/10/18 22:01
Bromomethane	ND	U	0.000215	0.000746	mg/kg	1	10/10/18 22:01
Carbon disulfide	ND	U	0.000107	0.000746	mg/kg	1	10/10/18 22:01
Carbon Tetrachloride	ND	U	0.000112	0.000746	mg/kg	1	10/10/18 22:01
Chlorobenzene	ND	U	0.000108	0.000746	mg/kg	1	10/10/18 22:01
Chlorodibromomethane	ND	U	0.0000917	0.000746	mg/kg	1	10/10/18 22:01
Chloroethane	ND	U	0.000127	0.000746	mg/kg	1	10/10/18 22:01
Chloroform	ND	U	0.000125	0.000746	mg/kg	1	10/10/18 22:01
Chloromethane	ND	U	0.000287	0.000746	mg/kg	1	10/10/18 22:01
cis-1,2-Dichloroethene	ND	U	0.0000360	0.000746	mg/kg	1	10/10/18 22:01
cis-1,3-Dichloropropene	ND	U	0.0000943	0.000746	mg/kg	1	10/10/18 22:01
Cyclohexane	ND	U	0.000165	0.000746	mg/kg	1	10/10/18 22:01
Dichlorodifluoromethane	ND	U	0.000252	0.000746	mg/kg	1	10/10/18 22:01
EthylBenzene	ND	U	0.000101	0.000746	mg/kg	1	10/10/18 22:01
Isopropylbenzene	ND	U	0.000117	0.000746	mg/kg	1	10/10/18 22:01
m+p-Xylenes	ND	U	0.000188	0.00149	mg/kg	1	10/10/18 22:01
Methyl Acetate	ND	U	0.0000988	0.000746	mg/kg	1	10/10/18 22:01
Methyl tert-Butyl Ether	ND	U	0.000126	0.000746	mg/kg	1	10/10/18 22:01
Methylcyclohexane	ND	U	0.000120	0.000746	mg/kg	1	10/10/18 22:01
Methylene Chloride	ND	U	0.000224	0.000746	mg/kg	1	10/10/18 22:01
o-Xylene	ND	U	0.0000958	0.000746	mg/kg	1	10/10/18 22:01
Styrene	ND	U	0.000107	0.000746	mg/kg	1	10/10/18 22:01
tert-Butyl alcohol	ND	U	0.00157	0.00746	mg/kg	1	10/10/18 22:01
Tetrachloroethene	ND	U	0.0000738	0.000746	mg/kg	1	10/10/18 22:01
Toluene	ND	U	0.0000600	0.000746	mg/kg	1	10/10/18 22:01
Total Xylenes	ND	U	0.0000958	0.000746	mg/kg	1	10/10/18 22:01
trans-1,2-Dichloroethene	ND	U	0.000101	0.000746	mg/kg	1	10/10/18 22:01
trans-1,3-Dichloropropene	ND	U	0.000142	0.000746	mg/kg	1	10/10/18 22:01
Trichloroethene	ND	U	0.000110	0.000746	mg/kg	1	10/10/18 22:01
Trichlorofluoromethane	ND	U	0.0000857	0.000746	mg/kg	1	10/10/18 22:01
Vinyl chloride	ND	U	0.000142	0.000746	mg/kg	1	10/10/18 22:01

### SW 846 8260C - Volatile Organics - GC/MS - VO+15 - TIC

Tentitively Identified Compound	Est Conc	RT	Qual	Units	Dilution	Analyzed
No TICs Found						

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit

# All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

**8100452-11 (Soil)** Sample Name: **STP-4A** Collected: **10/10/2018 12:00:00AM**

**Gravimetric - General Chemistry**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	90.6				%	1	10/11/18 10:54

**8100452-12 (Soil)** Sample Name: **STP-4B** Collected: **10/10/2018 12:00:00AM**

**SW 846 8082A - PCBs**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Aroclor-1016	ND	U	0.000641	0.0360	mg/kg	1	10/11/18 14:52
Aroclor-1221	ND	U	0.00111	0.0360	mg/kg	1	10/11/18 14:52
Aroclor-1232	ND	U	0.000847	0.0360	mg/kg	1	10/11/18 14:52
Aroclor-1242	ND	U	0.00122	0.0360	mg/kg	1	10/11/18 14:52
Aroclor-1248	ND	U	0.000844	0.0360	mg/kg	1	10/11/18 14:52
Aroclor-1254	ND	U	0.00128	0.0360	mg/kg	1	10/11/18 14:52
Aroclor-1260	ND	U	0.000949	0.0360	mg/kg	1	10/11/18 14:52
Aroclor-1262	ND	U	0.00139	0.0360	mg/kg	1	10/11/18 14:52
Aroclor-1268	ND	U	0.000727	0.0360	mg/kg	1	10/11/18 14:52
Total PCBs	ND	U	0.000641	0.0360	mg/kg	1	10/11/18 14:52

**NJDEP-EPH-CAT2 - Extractable Petroleum Hydrocarbons Category 2**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Total EPH	ND	U	10.9	21.8	mg/kg	1	10/12/18 13:13

**SW 846 7471B - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	ND		0.0243	0.0495	mg/kg	1	10/11/18 12:59

**SW 846 6010D - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Aluminum	5610		0.0580	2.70	mg/kg	1	10/11/18 15:33
Antimony	ND		0.00570	1.35	mg/kg	1	10/11/18 15:33
Arsenic	ND		0.0130	1.35	mg/kg	1	10/11/18 15:33
Barium	24.9		0.00104	0.540	mg/kg	1	10/11/18 15:33
Beryllium	0.211		0.0000974	0.0270	mg/kg	1	10/11/18 15:33
Cadmium	ND		0.000920	0.270	mg/kg	1	10/11/18 15:33
Calcium	899		0.307	27.0	mg/kg	1	10/11/18 15:33
Chromium	7.75		0.000971	0.270	mg/kg	1	10/11/18 15:33
Cobalt	3.46		0.00118	0.216	mg/kg	1	10/11/18 15:33
Copper	8.07		0.00117	0.270	mg/kg	1	10/11/18 15:33
Iron	10600		0.122	5.40	mg/kg	1	10/11/18 15:33

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit

# All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

<b>8100452-12 (Soil)</b>	<b>Sample Name: STP-4B</b>	<b>Collected: 10/10/2018 12:00:00AM</b>
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**SW 846 6010D - Total Metals (con't)**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Lead	8.26		0.00564	1.35	mg/kg	1	10/11/18 15:33
Magnesium	1220		0.786	54.0	mg/kg	1	10/11/18 15:33
Manganese	261		0.000668	0.270	mg/kg	1	10/11/18 15:33
Nickel	6.18		0.00186	0.135	mg/kg	1	10/11/18 15:33
Potassium	283		2.54	108	mg/kg	1	10/11/18 15:33
Selenium	ND		0.0117	1.35	mg/kg	1	10/11/18 15:33
Silver	ND		0.00322	0.540	mg/kg	1	10/11/18 15:33
Sodium	82.6		0.148	54.0	mg/kg	1	10/11/18 15:33
Thallium	ND		0.00748	1.35	mg/kg	1	10/11/18 15:33
Vanadium	14.7		0.00935	0.540	mg/kg	1	10/11/18 15:33
Zinc	23.2		0.00248	0.810	mg/kg	1	10/11/18 15:33

**SW 846 8081B - Pesticides**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDD	ND	U	0.000858	0.00142	mg/kg	1	10/11/18 16:51
4,4'-DDE	ND	U	0.00100	0.00142	mg/kg	1	10/11/18 16:51
4,4'-DDT	ND	U	0.000681	0.00142	mg/kg	1	10/11/18 16:51
Aldrin	ND	U	0.000880	0.00142	mg/kg	1	10/11/18 16:51
alpha-BHC	ND	U	0.000549	0.00142	mg/kg	1	10/11/18 16:51
beta-BHC	ND	U	0.00140	0.00142	mg/kg	1	10/11/18 16:51
<b>Chlordane</b>	<b>0.0103</b>		<b>0.000952</b>	<b>0.00142</b>	<b>mg/kg</b>	<b>1</b>	<b>10/11/18 16:51</b>
delta-BHC	ND	U	0.00110	0.00142	mg/kg	1	10/11/18 16:51
Dieldrin	ND	U	0.000763	0.00142	mg/kg	1	10/11/18 16:51
Endosulfan I	ND	U	0.000981	0.00142	mg/kg	1	10/11/18 16:51
Endosulfan II	ND	U	0.000771	0.00142	mg/kg	1	10/11/18 16:51
Endosulfan sulfate	ND	U	0.000771	0.00142	mg/kg	1	10/11/18 16:51
Endrin	ND	U	0.000727	0.00142	mg/kg	1	10/11/18 16:51
Endrin aldehyde	ND	U	0.000605	0.00142	mg/kg	1	10/11/18 16:51
Endrin ketone	ND	U	0.000865	0.00142	mg/kg	1	10/11/18 16:51
gamma-BHC (Lindane)	ND	U	0.000648	0.00142	mg/kg	1	10/11/18 16:51
Heptachlor	ND	U	0.000829	0.00142	mg/kg	1	10/11/18 16:51
Heptachlor Epoxide	ND	U	0.000887	0.00142	mg/kg	1	10/11/18 16:51
Methoxychlor	ND	U	0.000902	0.00142	mg/kg	1	10/11/18 16:51
Toxaphene	ND	U	0.0220	0.0720	mg/kg	1	10/11/18 16:51

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit



# All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

**8100452-12 (Soil)** Sample Name: **STP-4B** Collected: **10/10/2018 12:00:00AM**

**SW 846 8270D - Semivolatile Organics - GC/MS - BNA+25**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
1-Methylnaphthalene	ND	U	0.0348	0.218	mg/kg	1	10/11/18 15:57
2,3,4,6-Tetrachlorophenol	ND	U	0.0224	0.145	mg/kg	1	10/11/18 15:57
2,4,5-Trichlorophenol	ND	U	0.0197	0.145	mg/kg	1	10/11/18 15:57
2,4,6-Trichlorophenol	ND	U	0.00908	0.145	mg/kg	1	10/11/18 15:57
2,4-Dichlorophenol	ND	U	0.0146	0.145	mg/kg	1	10/11/18 15:57
2,4-Dimethylphenol	ND	U	0.0143	0.145	mg/kg	1	10/11/18 15:57
2,4-Dinitrophenol	ND	U	0.0209	0.727	mg/kg	1	10/11/18 15:57
2,4-Dinitrotoluene	ND	U	0.0155	0.145	mg/kg	1	10/11/18 15:57
2,6-Dinitrotoluene	ND	U	0.0347	0.145	mg/kg	1	10/11/18 15:57
2-Chloronaphthalene	ND	U	0.0167	0.145	mg/kg	1	10/11/18 15:57
2-Chlorophenol	ND	U	0.0192	0.145	mg/kg	1	10/11/18 15:57
2-Methylnaphthalene	ND	U	0.0348	0.218	mg/kg	1	10/11/18 15:57
2-Methylphenol	ND	U	0.0287	0.145	mg/kg	1	10/11/18 15:57
2-Nitroaniline	ND	U	0.0117	0.145	mg/kg	1	10/11/18 15:57
2-Nitrophenol	ND	U	0.0161	0.145	mg/kg	1	10/11/18 15:57
3,3'-Dichlorobenzidine	ND	U	0.0153	0.145	mg/kg	1	10/11/18 15:57
3+4-Methylphenol	ND	U	0.0266	0.145	mg/kg	1	10/11/18 15:57
3-Nitroaniline	ND	U	0.0269	0.145	mg/kg	1	10/11/18 15:57
4,6-Dinitro-2-methylphenol	ND	U	0.0274	0.363	mg/kg	1	10/11/18 15:57
4-Bromophenyl-phenyl ether	ND	U	0.0207	0.145	mg/kg	1	10/11/18 15:57
4-Chloro-3-methylphenol	ND	U	0.0229	0.145	mg/kg	1	10/11/18 15:57
4-Chloroaniline	ND	U	0.00508	0.145	mg/kg	1	10/11/18 15:57
4-Chlorophenyl phenyl ether	ND	U	0.00784	0.145	mg/kg	1	10/11/18 15:57
4-Nitroaniline	ND	U	0.0726	0.145	mg/kg	1	10/11/18 15:57
4-Nitrophenol	ND	U	0.00929	0.145	mg/kg	1	10/11/18 15:57
Acenaphthene	ND	U	0.00828	0.145	mg/kg	1	10/11/18 15:57
Acenaphthylene	ND	U	0.00505	0.145	mg/kg	1	10/11/18 15:57
Acetophenone	ND	U	0.0144	0.145	mg/kg	1	10/11/18 15:57
Anthracene	ND	U	0.0210	0.145	mg/kg	1	10/11/18 15:57
Atrazine	ND	U	0.0136	0.145	mg/kg	1	10/11/18 15:57
Benzaldehyde	ND	U	0.0446	0.145	mg/kg	1	10/11/18 15:57
Benzo(a)anthracene	ND	U	0.0146	0.145	mg/kg	1	10/11/18 15:57
Benzo(a)pyrene	ND	U	0.0253	0.145	mg/kg	1	10/11/18 15:57
Benzo(b)fluoranthene	ND	U	0.0204	0.145	mg/kg	1	10/11/18 15:57
Benzo(g,h,i)perylene	ND	U	0.0118	0.145	mg/kg	1	10/11/18 15:57
Benzo(k)fluoranthene	ND	U	0.0167	0.145	mg/kg	1	10/11/18 15:57
Biphenyl	ND	U	0.0128	0.145	mg/kg	1	10/11/18 15:57
bis(2-chloroethoxy)methane	ND	U	0.0201	0.145	mg/kg	1	10/11/18 15:57
bis(2-chloroethyl)ether	ND	U	0.0159	0.145	mg/kg	1	10/11/18 15:57

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit



# All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

**8100452-12 (Soil)** Sample Name: **STP-4B** Collected: **10/10/2018 12:00:00AM**

**SW 846 8270D - Semivolatile Organics - GC/MS - BNA+25 (con't)**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
bis(2-chloroisopropyl)ether	ND	U	0.0522	0.145	mg/kg	1	10/11/18 15:57
bis(2-ethylhexyl)phthalate	ND	U	0.0290	0.145	mg/kg	1	10/11/18 15:57
Butylbenzylphthalate	ND	U	0.0132	0.145	mg/kg	1	10/11/18 15:57
Caprolactam	ND	U	0.0188	0.145	mg/kg	1	10/11/18 15:57
Carbazole	ND	U	0.0279	0.363	mg/kg	1	10/11/18 15:57
Chrysene	ND	U	0.00995	0.145	mg/kg	1	10/11/18 15:57
Dibenzo(a,h)anthracene	ND	U	0.0144	0.145	mg/kg	1	10/11/18 15:57
Dibenzofuran	ND	U	0.00865	0.145	mg/kg	1	10/11/18 15:57
Diethylphthalate	ND	U	0.0281	0.145	mg/kg	1	10/11/18 15:57
<b>Dimethylphthalate</b>	<b>0.0632</b>	<b>J</b>	<b>0.00901</b>	<b>0.145</b>	<b>mg/kg</b>	<b>1</b>	<b>10/11/18 15:57</b>
Di-n-butylphthalate	ND	U	0.0593	0.145	mg/kg	1	10/11/18 15:57
Di-n-octylphthalate	ND	U	0.0298	0.145	mg/kg	1	10/11/18 15:57
Fluoranthene	ND	U	0.0136	0.145	mg/kg	1	10/11/18 15:57
Fluorene	ND	U	0.0121	0.145	mg/kg	1	10/11/18 15:57
Hexachlorobenzene	ND	U	0.0190	0.145	mg/kg	1	10/11/18 15:57
Hexachlorobutadiene	ND	U	0.0697	0.145	mg/kg	1	10/11/18 15:57
Hexachlorocyclopentadiene	ND	U	0.0605	0.363	mg/kg	1	10/11/18 15:57
Hexachloroethane	ND	U	0.0159	0.145	mg/kg	1	10/11/18 15:57
Indeno(1,2,3-cd)pyrene	ND	U	0.0156	0.145	mg/kg	1	10/11/18 15:57
Isophorone	ND	U	0.00951	0.145	mg/kg	1	10/11/18 15:57
Naphthalene	ND	U	0.0108	0.145	mg/kg	1	10/11/18 15:57
Nitrobenzene	ND	U	0.0246	0.145	mg/kg	1	10/11/18 15:57
n-Nitroso-di-n-propylamine	ND	U	0.00778	0.145	mg/kg	1	10/11/18 15:57
n-Nitrosodiphenylamine	ND	U	0.0310	0.145	mg/kg	1	10/11/18 15:57
Phenanthrene	ND	U	0.0191	0.145	mg/kg	1	10/11/18 15:57
Phenol	ND	U	0.0118	0.145	mg/kg	1	10/11/18 15:57
Pyrene	ND	U	0.0107	0.145	mg/kg	1	10/11/18 15:57

**SW 846 8270D - Semivolatile Organics - GC/MS - BNA+25 - TIC**

Tentatively Identified Compound	Est Conc	RT	Qual	Units	Dilution	Analyzed
No TICs Found						

**SW 846 8260C - Volatile Organics - GC/MS - VO+15**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
1,1,1-Trichloroethane	ND	U	0.000129	0.000887	mg/kg	1	10/10/18 22:30
1,1,1,2-Tetrachloroethane	ND	U	0.000122	0.000887	mg/kg	1	10/10/18 22:30
1,1,2-Trichloro-1,2,2	ND	U	0.000379	0.000887	mg/kg	1	10/10/18 22:30
Trifluoroethane							
1,1,2-Trichloroethane	ND	U	0.000149	0.000887	mg/kg	1	10/10/18 22:30

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit

# All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

**8100452-12 (Soil)** Sample Name: **STP-4B** Collected: **10/10/2018 12:00:00AM**

**SW 846 8260C - Volatile Organics - GC/MS - VO+15 (con't)**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
1,1-Dichloroethane	ND	U	0.000129	0.000887	mg/kg	1	10/10/18 22:30
1,1-Dichloroethene	ND	U	0.000164	0.000887	mg/kg	1	10/10/18 22:30
1,2,3-Trichlorobenzene	ND	U	0.000192	0.000887	mg/kg	1	10/10/18 22:30
1,2,4-Trichlorobenzene	ND	U	0.000236	0.000887	mg/kg	1	10/10/18 22:30
1,2,4-Trimethylbenzene	ND	U	0.000122	0.000887	mg/kg	1	10/10/18 22:30
1,2-Dibromo-3-chloropropane	ND	U	0.000216	0.000887	mg/kg	1	10/10/18 22:30
1,2-Dibromoethane	ND	U	0.000112	0.000887	mg/kg	1	10/10/18 22:30
1,2-Dichlorobenzene	ND	U	0.000156	0.000887	mg/kg	1	10/10/18 22:30
1,2-Dichloroethane	ND	U	0.000125	0.000887	mg/kg	1	10/10/18 22:30
1,2-Dichloropropane	ND	U	0.000145	0.000887	mg/kg	1	10/10/18 22:30
1,3-Dichlorobenzene	ND	U	0.0000652	0.000887	mg/kg	1	10/10/18 22:30
1,4-Dichlorobenzene	ND	U	0.000128	0.000887	mg/kg	1	10/10/18 22:30
2-Butanone	ND	U	0.000145	0.00222	mg/kg	1	10/10/18 22:30
2-Hexanone	ND	U	0.0000829	0.000887	mg/kg	1	10/10/18 22:30
4-Methyl-2-pentanone	ND	U	0.000111	0.000887	mg/kg	1	10/10/18 22:30
Acetone	ND	U	0.000269	0.00222	mg/kg	1	10/10/18 22:30
Benzene	ND	U	0.0000807	0.000887	mg/kg	1	10/10/18 22:30
Bromochloromethane	ND	U	0.000164	0.000887	mg/kg	1	10/10/18 22:30
Bromodichloromethane	ND	U	0.000111	0.000887	mg/kg	1	10/10/18 22:30
Bromoform	ND	U	0.000156	0.000887	mg/kg	1	10/10/18 22:30
Bromomethane	ND	U	0.000256	0.000887	mg/kg	1	10/10/18 22:30
Carbon disulfide	ND	U	0.000127	0.000887	mg/kg	1	10/10/18 22:30
Carbon Tetrachloride	ND	U	0.000133	0.000887	mg/kg	1	10/10/18 22:30
Chlorobenzene	ND	U	0.000129	0.000887	mg/kg	1	10/10/18 22:30
Chlorodibromomethane	ND	U	0.000109	0.000887	mg/kg	1	10/10/18 22:30
Chloroethane	ND	U	0.000151	0.000887	mg/kg	1	10/10/18 22:30
Chloroform	ND	U	0.000149	0.000887	mg/kg	1	10/10/18 22:30
Chloromethane	ND	U	0.000341	0.000887	mg/kg	1	10/10/18 22:30
cis-1,2-Dichloroethene	ND	U	0.0000429	0.000887	mg/kg	1	10/10/18 22:30
cis-1,3-Dichloropropene	ND	U	0.000112	0.000887	mg/kg	1	10/10/18 22:30
Cyclohexane	ND	U	0.000196	0.000887	mg/kg	1	10/10/18 22:30
Dichlorodifluoromethane	ND	U	0.000299	0.000887	mg/kg	1	10/10/18 22:30
EthylBenzene	ND	U	0.000120	0.000887	mg/kg	1	10/10/18 22:30
Isopropylbenzene	ND	U	0.000139	0.000887	mg/kg	1	10/10/18 22:30
m+p-Xylenes	ND	U	0.000224	0.00177	mg/kg	1	10/10/18 22:30
Methyl Acetate	ND	U	0.000117	0.000887	mg/kg	1	10/10/18 22:30
Methyl tert-Butyl Ether	ND	U	0.000150	0.000887	mg/kg	1	10/10/18 22:30
Methylcyclohexane	ND	U	0.000143	0.000887	mg/kg	1	10/10/18 22:30
Methylene Chloride	ND	U	0.000266	0.000887	mg/kg	1	10/10/18 22:30

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit



# All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

**8100452-12 (Soil)** Sample Name: **STP-4B** Collected: **10/10/2018 12:00:00AM**

**SW 846 8260C - Volatile Organics - GC/MS - VO+15 (con't)**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
o-Xylene	ND	U	0.000114	0.000887	mg/kg	1	10/10/18 22:30
Styrene	ND	U	0.000127	0.000887	mg/kg	1	10/10/18 22:30
tert-Butyl alcohol	ND	U	0.00186	0.00887	mg/kg	1	10/10/18 22:30
Tetrachloroethene	ND	U	0.0000878	0.000887	mg/kg	1	10/10/18 22:30
Toluene	ND	U	0.0000714	0.000887	mg/kg	1	10/10/18 22:30
Total Xylenes	ND	U	0.000114	0.000887	mg/kg	1	10/10/18 22:30
trans-1,2-Dichloroethene	ND	U	0.000120	0.000887	mg/kg	1	10/10/18 22:30
trans-1,3-Dichloropropene	ND	U	0.000169	0.000887	mg/kg	1	10/10/18 22:30
Trichloroethene	ND	U	0.000130	0.000887	mg/kg	1	10/10/18 22:30
Trichlorofluoromethane	ND	U	0.000102	0.000887	mg/kg	1	10/10/18 22:30
Vinyl chloride	ND	U	0.000168	0.000887	mg/kg	1	10/10/18 22:30

**SW 846 8260C - Volatile Organics - GC/MS - VO+15 - TIC**

Tentatively Identified Compound	Est Conc	RT	Qual	Units	Dilution	Analyzed
No TICs Found						

**Gravimetric - General Chemistry**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	91.7				%	1	10/11/18 10:54

**SW 846 9014 - General Chemistry**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Cyanide	ND		0.0818	0.273	mg/kg	1	10/11/18 13:30

**8100452-13 (Soil)** Sample Name: **STP-5** Collected: **10/10/2018 12:00:00AM**

**NJDEP-EPH-CAT2 - Extractable Petroleum Hydrocarbons Category 2**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Total EPH	ND	U	10.8	21.6	mg/kg	1	10/12/18 15:07

**SW 846 7471B - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	ND		0.0254	0.0518	mg/kg	1	10/11/18 13:02

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit

# All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

<b>8100452-13 (Soil)</b>	Sample Name: <b>STP-5</b>	Collected: <b>10/10/2018 12:00:00AM</b>
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**SW 846 6010D - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Aluminum	6860		0.0617	2.87	mg/kg	1	10/11/18 15:37
Antimony	ND		0.00606	1.44	mg/kg	1	10/11/18 15:37
Arsenic	3.01		0.0138	1.44	mg/kg	1	10/11/18 15:37
Barium	23.0		0.00111	0.574	mg/kg	1	10/11/18 15:37
Beryllium	0.256		0.000104	0.0287	mg/kg	1	10/11/18 15:37
Cadmium	ND		0.000978	0.287	mg/kg	1	10/11/18 15:37
Calcium	310		0.326	28.7	mg/kg	1	10/11/18 15:37
Chromium	8.30		0.00103	0.287	mg/kg	1	10/11/18 15:37
Cobalt	4.74		0.00125	0.230	mg/kg	1	10/11/18 15:37
Copper	9.68		0.00124	0.287	mg/kg	1	10/11/18 15:37
Iron	15100		0.130	5.74	mg/kg	1	10/11/18 15:37
Lead	5.25		0.00599	1.44	mg/kg	1	10/11/18 15:37
Magnesium	1150		0.836	57.4	mg/kg	1	10/11/18 15:37
Manganese	333		0.000711	0.287	mg/kg	1	10/11/18 15:37
Nickel	7.29		0.00198	0.144	mg/kg	1	10/11/18 15:37
Potassium	241		2.70	115	mg/kg	1	10/11/18 15:37
Selenium	ND		0.0124	1.44	mg/kg	1	10/11/18 15:37
Silver	ND		0.00342	0.574	mg/kg	1	10/11/18 15:37
Sodium	ND		0.157	57.4	mg/kg	1	10/11/18 15:37
Thallium	ND		0.00796	1.44	mg/kg	1	10/11/18 15:37
Vanadium	17.3		0.00995	0.574	mg/kg	1	10/11/18 15:37
Zinc	39.9		0.00264	0.861	mg/kg	1	10/11/18 15:37

**SW 846 8270D - Semivolatile Organics - GC/MS - BN-PAH**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
1-Methylnaphthalene	ND	U	0.120	0.216	mg/kg	1	10/11/18 16:27
2-Methylnaphthalene	ND	U	0.0344	0.216	mg/kg	1	10/11/18 16:27
Acenaphthene	ND	U	0.00819	0.144	mg/kg	1	10/11/18 16:27
Acenaphthylene	ND	U	0.00500	0.144	mg/kg	1	10/11/18 16:27
Anthracene	ND	U	0.0208	0.144	mg/kg	1	10/11/18 16:27
Benzo(a)anthracene	ND	U	0.0145	0.144	mg/kg	1	10/11/18 16:27
Benzo(a)pyrene	ND	U	0.0250	0.144	mg/kg	1	10/11/18 16:27
Benzo(b)fluoranthene	ND	U	0.0202	0.144	mg/kg	1	10/11/18 16:27
Benzo(g,h,i)perylene	ND	U	0.0117	0.144	mg/kg	1	10/11/18 16:27
Benzo(k)fluoranthene	ND	U	0.0165	0.144	mg/kg	1	10/11/18 16:27
Chrysene	ND	U	0.00985	0.144	mg/kg	1	10/11/18 16:27
Dibenzo(a,h)anthracene	ND	U	0.0142	0.144	mg/kg	1	10/11/18 16:27
Fluoranthene	ND	U	0.0135	0.144	mg/kg	1	10/11/18 16:27
Fluorene	ND	U	0.0120	0.144	mg/kg	1	10/11/18 16:27

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit

# All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

**8100452-13 (Soil)** Sample Name: **STP-5** Collected: **10/10/2018 12:00:00AM**

**SW 846 8270D - Semivolatile Organics - GC/MS - BN-PAH (con't)**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Indeno(1,2,3-cd)pyrene	ND	U	0.0154	0.144	mg/kg	1	10/11/18 16:27
Naphthalene	ND	U	0.0106	0.144	mg/kg	1	10/11/18 16:27
Phenanthrene	ND	U	0.0189	0.144	mg/kg	1	10/11/18 16:27
Pyrene	ND	U	0.0106	0.144	mg/kg	1	10/11/18 16:27

**Gravimetric - General Chemistry**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	92.6				%	1	10/11/18 10:54

**8100452-14 (Soil)** Sample Name: **STP-7** Collected: **10/10/2018 12:00:00AM**

**SW 846 8082A - PCBs**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Aroclor-1016	ND	U	0.000633	0.0355	mg/kg	1	10/11/18 15:17
Aroclor-1221	ND	U	0.00109	0.0355	mg/kg	1	10/11/18 15:17
Aroclor-1232	ND	U	0.000836	0.0355	mg/kg	1	10/11/18 15:17
Aroclor-1242	ND	U	0.00121	0.0355	mg/kg	1	10/11/18 15:17
Aroclor-1248	ND	U	0.000833	0.0355	mg/kg	1	10/11/18 15:17
Aroclor-1254	ND	U	0.00127	0.0355	mg/kg	1	10/11/18 15:17
Aroclor-1260	ND	U	0.000936	0.0355	mg/kg	1	10/11/18 15:17
Aroclor-1262	ND	U	0.00137	0.0355	mg/kg	1	10/11/18 15:17
Aroclor-1268	ND	U	0.000718	0.0355	mg/kg	1	10/11/18 15:17
Total PCBs	ND	U	0.000633	0.0355	mg/kg	1	10/11/18 15:17

**NJDEP-EPH-CAT2 - Extractable Petroleum Hydrocarbons Category 2**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Total EPH	ND	U	10.8	21.5	mg/kg	1	10/12/18 15:42

**SW 846 7471B - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Mercury	ND		0.0227	0.0463	mg/kg	1	10/11/18 13:05

**SW 846 6010D - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Aluminum	4650		0.0545	2.54	mg/kg	1	10/11/18 15:39
Antimony	ND		0.00536	1.27	mg/kg	1	10/11/18 15:39
Arsenic	1.49		0.0122	1.27	mg/kg	1	10/11/18 15:39
Barium	18.5		0.000979	0.508	mg/kg	1	10/11/18 15:39

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit

# All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

<b>8100452-14 (Soil)</b>	Sample Name: <b>STP-7</b>	Collected: <b>10/10/2018 12:00:00AM</b>
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**SW 846 6010D - Total Metals (con't)**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Beryllium	0.178		0.0000916	0.0254	mg/kg	1	10/11/18 15:39
Cadmium	ND		0.000865	0.254	mg/kg	1	10/11/18 15:39
Calcium	294		0.288	25.4	mg/kg	1	10/11/18 15:39
Chromium	6.14		0.000913	0.254	mg/kg	1	10/11/18 15:39
Cobalt	2.97		0.00111	0.203	mg/kg	1	10/11/18 15:39
Copper	6.73		0.00110	0.254	mg/kg	1	10/11/18 15:39
Iron	9110		0.115	5.08	mg/kg	1	10/11/18 15:39
Lead	4.31		0.00530	1.27	mg/kg	1	10/11/18 15:39
Magnesium	910		0.739	50.8	mg/kg	1	10/11/18 15:39
Manganese	240		0.000628	0.254	mg/kg	1	10/11/18 15:39
Nickel	5.05		0.00175	0.127	mg/kg	1	10/11/18 15:39
Potassium	210		2.39	102	mg/kg	1	10/11/18 15:39
Selenium	ND		0.0110	1.27	mg/kg	1	10/11/18 15:39
Silver	ND		0.00303	0.508	mg/kg	1	10/11/18 15:39
Sodium	52.0		0.139	50.8	mg/kg	1	10/11/18 15:39
Thallium	ND		0.00703	1.27	mg/kg	1	10/11/18 15:39
Vanadium	11.8		0.00879	0.508	mg/kg	1	10/11/18 15:39
Zinc	24.1		0.00233	0.761	mg/kg	1	10/11/18 15:39

**SW 846 8081B - Pesticides**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDD	ND	U	0.000847	0.00140	mg/kg	1	10/11/18 17:14
4,4'-DDE	ND	U	0.000990	0.00140	mg/kg	1	10/11/18 17:14
4,4'-DDT [2C]	0.00928		0.000586	0.00140	mg/kg	1	10/11/18 17:14
Aldrin	ND	U	0.000868	0.00140	mg/kg	1	10/11/18 17:14
alpha-BHC	ND	U	0.000541	0.00140	mg/kg	1	10/11/18 17:14
beta-BHC	ND	U	0.00138	0.00140	mg/kg	1	10/11/18 17:14
Chlordane	0.0136		0.000939	0.00140	mg/kg	1	10/11/18 17:14
delta-BHC	ND	U	0.00108	0.00140	mg/kg	1	10/11/18 17:14
Dieldrin	ND	U	0.000753	0.00140	mg/kg	1	10/11/18 17:14
Endosulfan I	ND	U	0.000968	0.00140	mg/kg	1	10/11/18 17:14
Endosulfan II	ND	U	0.000761	0.00140	mg/kg	1	10/11/18 17:14
Endosulfan sulfate	ND	U	0.000761	0.00140	mg/kg	1	10/11/18 17:14
Endrin	ND	U	0.000718	0.00140	mg/kg	1	10/11/18 17:14
Endrin aldehyde	ND	U	0.000597	0.00140	mg/kg	1	10/11/18 17:14
Endrin ketone	ND	U	0.000853	0.00140	mg/kg	1	10/11/18 17:14
gamma-BHC (Lindane)	ND	U	0.000639	0.00140	mg/kg	1	10/11/18 17:14
Heptachlor	ND	U	0.000818	0.00140	mg/kg	1	10/11/18 17:14
Heptachlor Epoxide	ND	U	0.000875	0.00140	mg/kg	1	10/11/18 17:14

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit

# All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

<b>8100452-14 (Soil)</b>	Sample Name: <b>STP-7</b>	Collected: <b>10/10/2018 12:00:00AM</b>
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**SW 846 8081B - Pesticides (con't)**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Methoxychlor	ND	U	0.000890	0.00140	mg/kg	1	10/11/18 17:14
Toxaphene	ND	U	0.0217	0.0710	mg/kg	1	10/11/18 17:14

**SW 846 8270D - Semivolatile Organics - GC/MS - BNA+25**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
1-Methylnaphthalene	ND	U	0.0343	0.215	mg/kg	1	10/11/18 16:57
2,3,4,6-Tetrachlorophenol	ND	U	0.0221	0.143	mg/kg	1	10/11/18 16:57
2,4,5-Trichlorophenol	ND	U	0.0195	0.143	mg/kg	1	10/11/18 16:57
2,4,6-Trichlorophenol	ND	U	0.00896	0.143	mg/kg	1	10/11/18 16:57
2,4-Dichlorophenol	ND	U	0.0144	0.143	mg/kg	1	10/11/18 16:57
2,4-Dimethylphenol	ND	U	0.0141	0.143	mg/kg	1	10/11/18 16:57
2,4-Dinitrophenol	ND	U	0.0207	0.718	mg/kg	1	10/11/18 16:57
2,4-Dinitrotoluene	ND	U	0.0153	0.143	mg/kg	1	10/11/18 16:57
2,6-Dinitrotoluene	ND	U	0.0342	0.143	mg/kg	1	10/11/18 16:57
2-Chloronaphthalene	ND	U	0.0165	0.143	mg/kg	1	10/11/18 16:57
2-Chlorophenol	ND	U	0.0189	0.143	mg/kg	1	10/11/18 16:57
2-Methylnaphthalene	ND	U	0.0343	0.215	mg/kg	1	10/11/18 16:57
2-Methylphenol	ND	U	0.0283	0.143	mg/kg	1	10/11/18 16:57
2-Nitroaniline	ND	U	0.0115	0.143	mg/kg	1	10/11/18 16:57
2-Nitrophenol	ND	U	0.0159	0.143	mg/kg	1	10/11/18 16:57
3,3'-Dichlorobenzidine	ND	U	0.0151	0.143	mg/kg	1	10/11/18 16:57
3+4-Methylphenol	ND	U	0.0263	0.143	mg/kg	1	10/11/18 16:57
3-Nitroaniline	ND	U	0.0266	0.143	mg/kg	1	10/11/18 16:57
4,6-Dinitro-2-methylphenol	ND	U	0.0270	0.358	mg/kg	1	10/11/18 16:57
4-Bromophenyl-phenyl ether	ND	U	0.0204	0.143	mg/kg	1	10/11/18 16:57
4-Chloro-3-methylphenol	ND	U	0.0226	0.143	mg/kg	1	10/11/18 16:57
4-Chloroaniline	ND	U	0.00501	0.143	mg/kg	1	10/11/18 16:57
4-Chlorophenyl phenyl ether	ND	U	0.00774	0.143	mg/kg	1	10/11/18 16:57
4-Nitroaniline	ND	U	0.0717	0.143	mg/kg	1	10/11/18 16:57
4-Nitrophenol	ND	U	0.00917	0.143	mg/kg	1	10/11/18 16:57
Acenaphthene	ND	U	0.00817	0.143	mg/kg	1	10/11/18 16:57
Acenaphthylene	ND	U	0.00498	0.143	mg/kg	1	10/11/18 16:57
Acetophenone	ND	U	0.0142	0.143	mg/kg	1	10/11/18 16:57
Anthracene	ND	U	0.0208	0.143	mg/kg	1	10/11/18 16:57
Atrazine	ND	U	0.0135	0.143	mg/kg	1	10/11/18 16:57
Benzaldehyde	ND	U	0.0440	0.143	mg/kg	1	10/11/18 16:57
Benzo(a)anthracene	ND	U	0.0144	0.143	mg/kg	1	10/11/18 16:57
Benzo(a)pyrene	ND	U	0.0250	0.143	mg/kg	1	10/11/18 16:57
Benzo(b)fluoranthene	ND	U	0.0201	0.143	mg/kg	1	10/11/18 16:57

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit



# All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

**8100452-14 (Soil)**                      Sample Name: **STP-7**                      Collected: **10/10/2018 12:00:00AM**

**SW 846 8270D - Semivolatile Organics - GC/MS - BNA+25 (con't)**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Benzo(g,h,i)perylene	ND	U	0.0116	0.143	mg/kg	1	10/11/18 16:57
Benzo(k)fluoranthene	ND	U	0.0165	0.143	mg/kg	1	10/11/18 16:57
Biphenyl	ND	U	0.0126	0.143	mg/kg	1	10/11/18 16:57
bis(2-chloroethoxy)methane	ND	U	0.0198	0.143	mg/kg	1	10/11/18 16:57
bis(2-chloroethyl)ether	ND	U	0.0157	0.143	mg/kg	1	10/11/18 16:57
bis(2-chloroisopropyl)ether	ND	U	0.0515	0.143	mg/kg	1	10/11/18 16:57
bis(2-ethylhexyl)phthalate	ND	U	0.0286	0.143	mg/kg	1	10/11/18 16:57
Butylbenzylphthalate	ND	U	0.0130	0.143	mg/kg	1	10/11/18 16:57
Caprolactam	ND	U	0.0185	0.143	mg/kg	1	10/11/18 16:57
Carbazole	ND	U	0.0275	0.358	mg/kg	1	10/11/18 16:57
Chrysene	ND	U	0.00981	0.143	mg/kg	1	10/11/18 16:57
Dibenzo(a,h)anthracene	ND	U	0.0142	0.143	mg/kg	1	10/11/18 16:57
Dibenzofuran	ND	U	0.00853	0.143	mg/kg	1	10/11/18 16:57
Diethylphthalate	ND	U	0.0278	0.143	mg/kg	1	10/11/18 16:57
Dimethylphthalate	ND	U	0.00889	0.143	mg/kg	1	10/11/18 16:57
Di-n-butylphthalate	ND	U	0.0585	0.143	mg/kg	1	10/11/18 16:57
Di-n-octylphthalate	ND	U	0.0294	0.143	mg/kg	1	10/11/18 16:57
Fluoranthene	ND	U	0.0135	0.143	mg/kg	1	10/11/18 16:57
Fluorene	ND	U	0.0119	0.143	mg/kg	1	10/11/18 16:57
Hexachlorobenzene	ND	U	0.0187	0.143	mg/kg	1	10/11/18 16:57
Hexachlorobutadiene	ND	U	0.0688	0.143	mg/kg	1	10/11/18 16:57
Hexachlorocyclopentadiene	ND	U	0.0597	0.358	mg/kg	1	10/11/18 16:57
Hexachloroethane	ND	U	0.0157	0.143	mg/kg	1	10/11/18 16:57
Indeno(1,2,3-cd)pyrene	ND	U	0.0154	0.143	mg/kg	1	10/11/18 16:57
Isophorone	ND	U	0.00938	0.143	mg/kg	1	10/11/18 16:57
Naphthalene	ND	U	0.0106	0.143	mg/kg	1	10/11/18 16:57
Nitrobenzene	ND	U	0.0243	0.143	mg/kg	1	10/11/18 16:57
n-Nitroso-di-n-propylamine	ND	U	0.00767	0.143	mg/kg	1	10/11/18 16:57
n-Nitrosodiphenylamine	ND	U	0.0306	0.143	mg/kg	1	10/11/18 16:57
Phenanthrene	ND	U	0.0188	0.143	mg/kg	1	10/11/18 16:57
Phenol	ND	U	0.0116	0.143	mg/kg	1	10/11/18 16:57
Pyrene	ND	U	0.0105	0.143	mg/kg	1	10/11/18 16:57

**SW 846 8270D - Semivolatile Organics - GC/MS - BNA+25 - TIC**

Tentitively Identified Compound	Est Conc	RT	Qual	Units	Dilution	Analyzed
No TICs Found						

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit



# All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

**8100452-14 (Soil)**                      Sample Name: **STP-7**                      Collected: **10/10/2018 12:00:00AM**

**SW 846 8260C - Volatile Organics - GC/MS - VO+15**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
1,1,1-Trichloroethane	ND	U	0.000133	0.000912	mg/kg	1	10/10/18 22:59
1,1,2,2-Tetrachloroethane	ND	U	0.000126	0.000912	mg/kg	1	10/10/18 22:59
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	U	0.000390	0.000912	mg/kg	1	10/10/18 22:59
1,1,2-Trichloroethane	ND	U	0.000154	0.000912	mg/kg	1	10/10/18 22:59
1,1-Dichloroethane	ND	U	0.000133	0.000912	mg/kg	1	10/10/18 22:59
1,1-Dichloroethene	ND	U	0.000169	0.000912	mg/kg	1	10/10/18 22:59
1,2,3-Trichlorobenzene	ND	U	0.000197	0.000912	mg/kg	1	10/10/18 22:59
1,2,4-Trichlorobenzene	ND	U	0.000243	0.000912	mg/kg	1	10/10/18 22:59
1,2,4-Trimethylbenzene	ND	U	0.000126	0.000912	mg/kg	1	10/10/18 22:59
1,2-Dibromo-3-chloropropane	ND	U	0.000222	0.000912	mg/kg	1	10/10/18 22:59
1,2-Dibromoethane	ND	U	0.000115	0.000912	mg/kg	1	10/10/18 22:59
1,2-Dichlorobenzene	ND	U	0.000161	0.000912	mg/kg	1	10/10/18 22:59
1,2-Dichloroethane	ND	U	0.000129	0.000912	mg/kg	1	10/10/18 22:59
1,2-Dichloropropane	ND	U	0.000150	0.000912	mg/kg	1	10/10/18 22:59
1,3-Dichlorobenzene	ND	U	0.0000670	0.000912	mg/kg	1	10/10/18 22:59
1,4-Dichlorobenzene	ND	U	0.000131	0.000912	mg/kg	1	10/10/18 22:59
2-Butanone	ND	U	0.000149	0.00228	mg/kg	1	10/10/18 22:59
2-Hexanone	ND	U	0.0000853	0.000912	mg/kg	1	10/10/18 22:59
4-Methyl-2-pentanone	ND	U	0.000114	0.000912	mg/kg	1	10/10/18 22:59
Acetone	ND	U	0.000276	0.00228	mg/kg	1	10/10/18 22:59
Benzene	ND	U	0.0000830	0.000912	mg/kg	1	10/10/18 22:59
Bromochloromethane	ND	U	0.000168	0.000912	mg/kg	1	10/10/18 22:59
Bromodichloromethane	ND	U	0.000114	0.000912	mg/kg	1	10/10/18 22:59
Bromoform	ND	U	0.000160	0.000912	mg/kg	1	10/10/18 22:59
Bromomethane	ND	U	0.000263	0.000912	mg/kg	1	10/10/18 22:59
Carbon disulfide	ND	U	0.000131	0.000912	mg/kg	1	10/10/18 22:59
Carbon Tetrachloride	ND	U	0.000137	0.000912	mg/kg	1	10/10/18 22:59
Chlorobenzene	ND	U	0.000132	0.000912	mg/kg	1	10/10/18 22:59
Chlorodibromomethane	ND	U	0.000112	0.000912	mg/kg	1	10/10/18 22:59
Chloroethane	ND	U	0.000155	0.000912	mg/kg	1	10/10/18 22:59
Chloroform	ND	U	0.000153	0.000912	mg/kg	1	10/10/18 22:59
Chloromethane	ND	U	0.000351	0.000912	mg/kg	1	10/10/18 22:59
cis-1,2-Dichloroethene	ND	U	0.0000441	0.000912	mg/kg	1	10/10/18 22:59
cis-1,3-Dichloropropene	ND	U	0.000115	0.000912	mg/kg	1	10/10/18 22:59
Cyclohexane	ND	U	0.000202	0.000912	mg/kg	1	10/10/18 22:59
Dichlorodifluoromethane	ND	U	0.000308	0.000912	mg/kg	1	10/10/18 22:59
EthylBenzene	ND	U	0.000124	0.000912	mg/kg	1	10/10/18 22:59
Isopropylbenzene	ND	U	0.000143	0.000912	mg/kg	1	10/10/18 22:59

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

# All Results Summary

**Client:** Peak Environmental  
**Project:** Ridgewood

**Work Order:** 8100452  
**Date to Lab:** 10/10/2018 3:40:00PM

<b>8100452-14 (Soil)</b>	Sample Name: <b>STP-7</b>	Collected: <b>10/10/2018 12:00:00AM</b>
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**SW 846 8260C - Volatile Organics - GC/MS - VO+15 (con't)**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
m+p-Xylenes	ND	U	0.000230	0.00182	mg/kg	1	10/10/18 22:59
Methyl Acetate	ND	U	0.000121	0.000912	mg/kg	1	10/10/18 22:59
Methyl tert-Butyl Ether	ND	U	0.000154	0.000912	mg/kg	1	10/10/18 22:59
Methylcyclohexane	ND	U	0.000147	0.000912	mg/kg	1	10/10/18 22:59
Methylene Chloride	ND	U	0.000274	0.000912	mg/kg	1	10/10/18 22:59
o-Xylene	ND	U	0.000117	0.000912	mg/kg	1	10/10/18 22:59
Styrene	ND	U	0.000130	0.000912	mg/kg	1	10/10/18 22:59
tert-Butyl alcohol	ND	U	0.00191	0.00912	mg/kg	1	10/10/18 22:59
Tetrachloroethene	ND	U	0.0000903	0.000912	mg/kg	1	10/10/18 22:59
Toluene	ND	U	0.0000734	0.000912	mg/kg	1	10/10/18 22:59
Total Xylenes	ND	U	0.000117	0.000912	mg/kg	1	10/10/18 22:59
trans-1,2-Dichloroethene	ND	U	0.000124	0.000912	mg/kg	1	10/10/18 22:59
trans-1,3-Dichloropropene	ND	U	0.000174	0.000912	mg/kg	1	10/10/18 22:59
Trichloroethene	ND	U	0.000134	0.000912	mg/kg	1	10/10/18 22:59
Trichlorofluoromethane	ND	U	0.000105	0.000912	mg/kg	1	10/10/18 22:59
Vinyl chloride	ND	U	0.000173	0.000912	mg/kg	1	10/10/18 22:59

**SW 846 8260C - Volatile Organics - GC/MS - VO+15 - TIC**

Tentatively Identified Compound	Est Conc	RT	Qual	Units	Dilution	Analyzed
No TICs Found						

**Gravimetric - General Chemistry**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	92.9				%	1	10/11/18 10:54

**SW 846 9014 - General Chemistry**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Cyanide	ND		0.0807	0.269	mg/kg	1	10/11/18 13:30

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit



AQUA PRO-TECH LABORATORIES  
*Certified Environmental Testing*

## PCBs

Peak Environmental  
Work Order: 8100452  
Project: Ridgewood



# ANALYSIS DATA SHEET

PCBs - SW 846 8082A

Client: Peak Environmental  
Client Sample ID: Blank  
Lab Sample ID: B8J1064-BLK1

Project: Ridgewood  
Work Order: 8100452

Init/Final Vol:	15 g / 10 mL	Prep Date:	10/10/2018 16:36	File ID:	6B23444.D
		Prep Batch:	B8J1064	Analyzed:	10/12/2018 19:13
		Matrix:	Soil	Sequence:	S8J1201
		Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg wet)	MDL	RL	Q
12674-11-2	Aroclor-1016	ND	0.000588	0.0330	U
11104-28-2	Aroclor-1221	ND	0.00102	0.0330	U
11141-16-5	Aroclor-1232	ND	0.000777	0.0330	U
53469-21-9	Aroclor-1242	ND	0.00112	0.0330	U
12672-29-6	Aroclor-1248	ND	0.000774	0.0330	U
11097-69-1	Aroclor-1254	ND	0.00118	0.0330	U
11096-82-5	Aroclor-1260	ND	0.000870	0.0330	U
37324-23-5	Aroclor-1262	ND	0.00127	0.0330	U
11100-14-4	Aroclor-1268	ND	0.000667	0.0330	U
1336-36-3	Total PCBs	ND	0.000588	0.0330	U

9.1.

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD6\DATA\20181012\6B23444.D\ECD1A.CH Vial: 24  
 Signal #2 : G:\HPCHEM\GCECD6\DATA\20181012\6B23444.D\ECD2B.CH  
 Acq On : 12 Oct 2018 19:13 Operator: RL  
 Sample : B8J1064-BLK1 Inst : GCECD-6  
 Misc : Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
 Quant Time: Oct 13 11:39 2018 Quant Results File: 80820925.RES

Quant Method : G:\HPCHEM\G...\80820925.M (Chemstation Integrator)  
 Title : PCBs by EPA Method 8082  
 Last Update : Wed Sep 26 13:16:10 2018  
 Response via : Initial Calibration  
 DataAcq Meth : RUNPCB.M

Volume Inj. : 1ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
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System Monitoring Compounds

1) S TCMX	4.25	5.25	741.2E6	252.5E6	61.566m	50.512
Spiked Amount	50.000	Range	40 - 149	Recovery =	123.13%	101.02%
2) S Decachlorobiphen	16.00	20.24	526.2E6	231.2E6	48.066	43.780
Spiked Amount	50.000	Range	52 - 136	Recovery =	96.13%	87.56%

Target Compounds

Sum Aroclor-1016 (1)			0	0	N.D.	N.D.
Average Aroclor-1016 (1)					0.000	0.000
Sum Aroclor-1221 (1)			0	0	N.D.	N.D.
Average Aroclor-1221 (1)					0.000	0.000
Sum Aroclor-1232 (1)			0	0	N.D.	N.D.
Average Aroclor-1232 (1)					0.000	0.000
Sum Aroclor-1242 (1)			0	0	N.D.	N.D.
Average Aroclor-1242 (1)					0.000	0.000
Sum Aroclor-1248 (1)			0	0	N.D.	N.D.
Average Aroclor-1248 (1)					0.000	0.000
Sum Aroclor-1254 (1)			0	0	N.D.	N.D.
Average Aroclor-1254 (1)					0.000	0.000
Sum Aroclor-1260 (1)			0	0	N.D.	N.D.
Average Aroclor-1260 (1)					0.000	0.000
Sum Aroclor-1262 (1)			0	0	N.D.	N.D.
Average Aroclor-1262 (1)					0.000	0.000
Sum Aroclor-1268 (1)			0	0	N.D.	N.D.
Average Aroclor-1268 (1)					0.000	0.000

-----  
 (f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
 6B23444.D 80820925.M Sat Oct 13 11:58:07 2018 SS

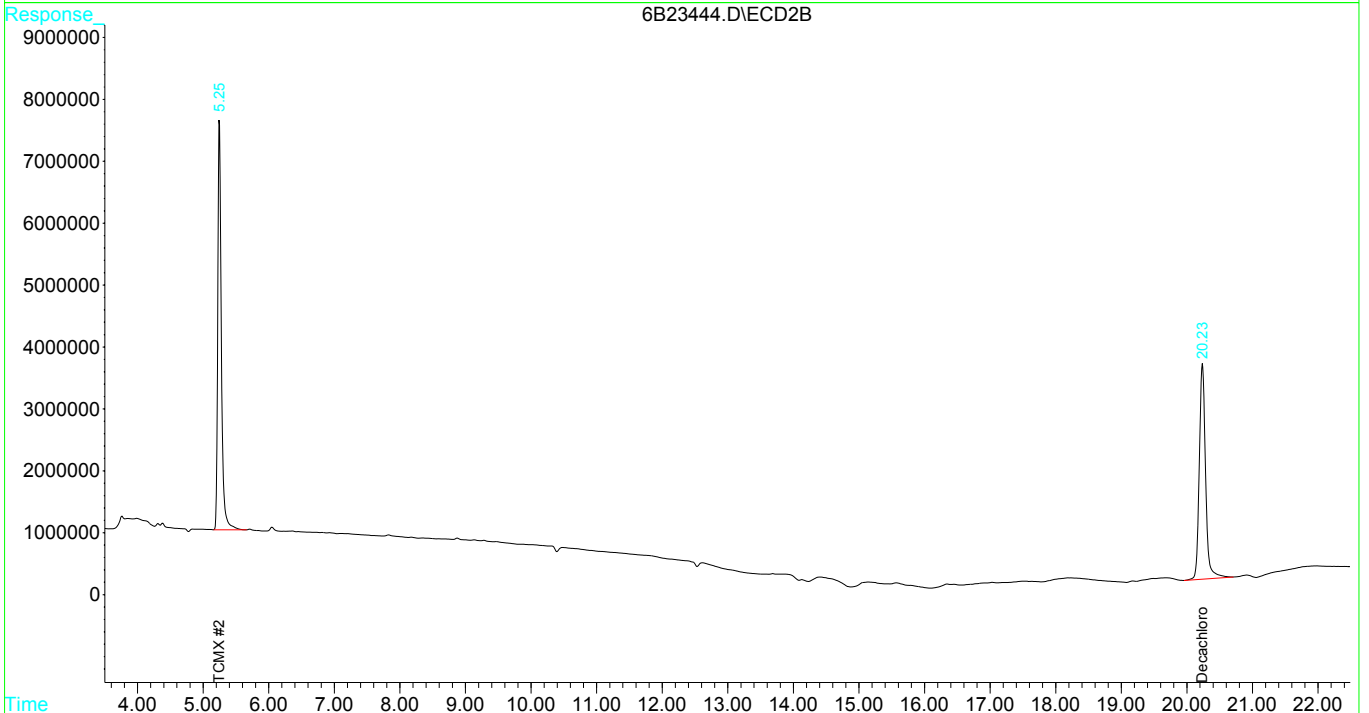
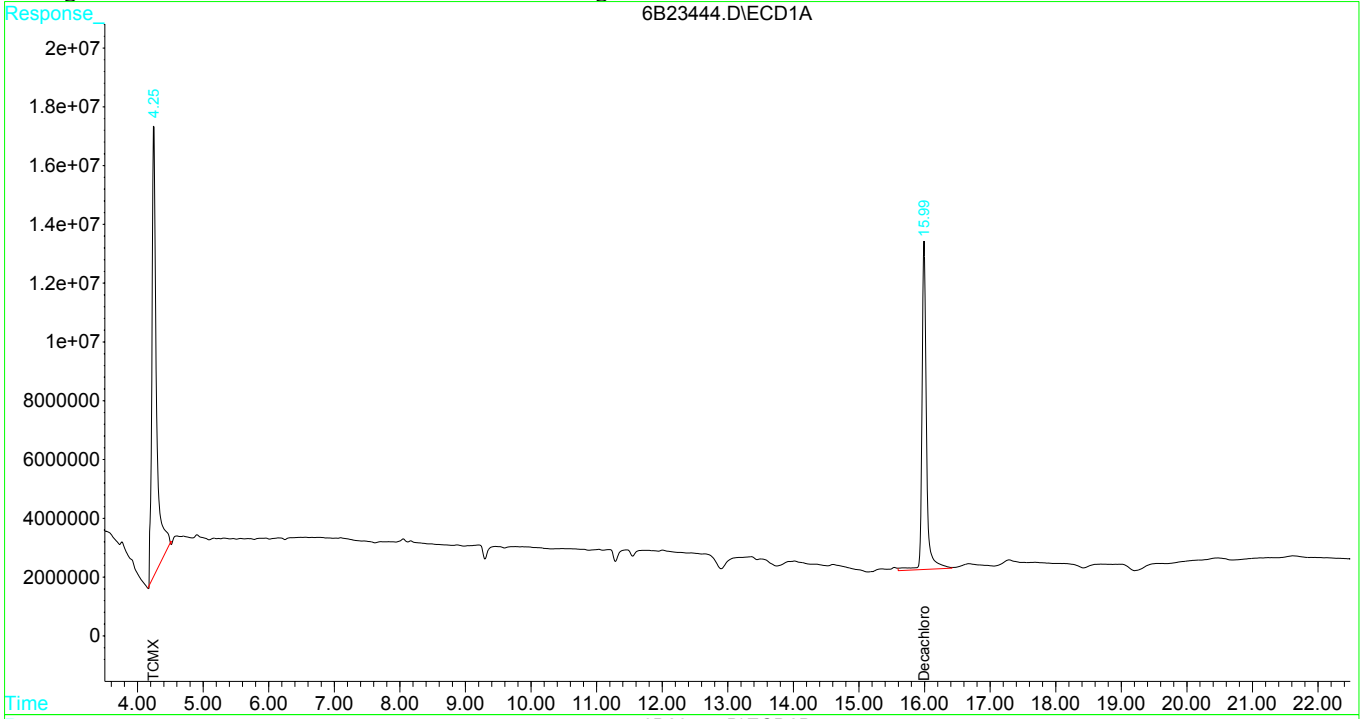


Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD6\DATA\20181012\6B23444.D\ECD1A.CH Vial: 24  
Signal #2 : G:\HPCHEM\GCECD6\DATA\20181012\6B23444.D\ECD2B.CH  
Acq On : 12 Oct 2018 19:13 Operator: RL  
Sample : B8J1064-BLK1 Inst : GCECD-6  
Misc : Multiplr: 1.00  
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
Quant Time: Oct 13 11:39 2018 Quant Results File: 80820925.RES

Quant Method : G:\HPCHEM\G...\80820925.M (Chemstation Integrator)  
Title : PCBs by EPA Method 8082  
Last Update : Wed Sep 26 13:16:10 2018  
Response via : Multiple Level Calibration  
DataAcq Meth : RUNPCB.M

Volume Inj. : 1ul  
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um



# ANALYSIS DATA SHEET

PCBs - SW 846 8082A

**Client:** Peak Environmental  
**Client Sample ID:** NTP-1A  
**Lab Sample ID:** 8100452-01  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 00:00	Prep Date:	10/10/18 16:36	File ID:	6B23378.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B8J1064	Analyzed:	10/11/18 14:00
Dilution:	1	Matrix:	Soil	Sequence:	S8J1113
Percent Solids:	89.91	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
12674-11-2	Aroclor-1016	ND	0.000654	0.0367	U
11104-28-2	Aroclor-1221	ND	0.00113	0.0367	U
11141-16-5	Aroclor-1232	ND	0.000864	0.0367	U
53469-21-9	Aroclor-1242	ND	0.00125	0.0367	U
12672-29-6	Aroclor-1248	ND	0.000861	0.0367	U
11097-69-1	Aroclor-1254	ND	0.00131	0.0367	U
11096-82-5	Aroclor-1260	ND	0.000968	0.0367	U
37324-23-5	Aroclor-1262	ND	0.00142	0.0367	U
11100-14-4	Aroclor-1268	ND	0.000742	0.0367	U
1336-36-3	Total PCBs	ND	0.000654	0.0367	U

9.2.

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit

F-I



Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD6\DATA\20181011\6B23378.D\ECD1A.CH Vial: 1  
 Signal #2 : G:\HPCHEM\GCECD6\DATA\20181011\6B23378.D\ECD2B.CH  
 Acq On : 11 Oct 2018 14:00 Operator: RL  
 Sample : 8100452-01 Inst : HP G1530A  
 Misc : Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
 Quant Time: Oct 11 14:29 2018 Quant Results File: 80820925.RES

Quant Method : G:\HPCHEM\G...\80820925.M (Chemstation Integrator)  
 Title : PCBs by EPA Method 8082  
 Last Update : Wed Sep 26 13:16:10 2018  
 Response via : Initial Calibration  
 DataAcq Meth : RUNPCB.M

Volume Inj. : 1ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
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System Monitoring Compounds

1) S TCMX	4.26	5.25	619.8E6	251.3E6	51.480	50.260
Spiked Amount	50.000	Range	40 - 149	Recovery =	102.96%	100.52%
2) S Decachlorobiphen	15.99	20.23	437.6E6	200.8E6	39.976	38.024
Spiked Amount	50.000	Range	52 - 136	Recovery =	79.95%	76.05%

Target Compounds

Sum Aroclor-1016 (1)			0	0	N.D.	N.D.
Average Aroclor-1016 (1)					0.000	0.000
Sum Aroclor-1221 (1)			0	0	N.D.	N.D.
Average Aroclor-1221 (1)					0.000	0.000
Sum Aroclor-1232 (1)			0	0	N.D.	N.D.
Average Aroclor-1232 (1)					0.000	0.000
Sum Aroclor-1242 (1)			0	0	N.D.	N.D.
Average Aroclor-1242 (1)					0.000	0.000
Sum Aroclor-1248 (1)			0	0	N.D.	N.D.
Average Aroclor-1248 (1)					0.000	0.000
Sum Aroclor-1254 (1)			0	0	N.D.	N.D.
Average Aroclor-1254 (1)					0.000	0.000
Sum Aroclor-1260 (1)			0	0	N.D.	N.D.
Average Aroclor-1260 (1)					0.000	0.000
Sum Aroclor-1262 (1)			0	0	N.D.	N.D.
Average Aroclor-1262 (1)					0.000	0.000
Sum Aroclor-1268 (1)			0	0	N.D.	N.D.
Average Aroclor-1268 (1)					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
 6B23378.D 80820925.M Thu Oct 11 15:34:58 2018 SS

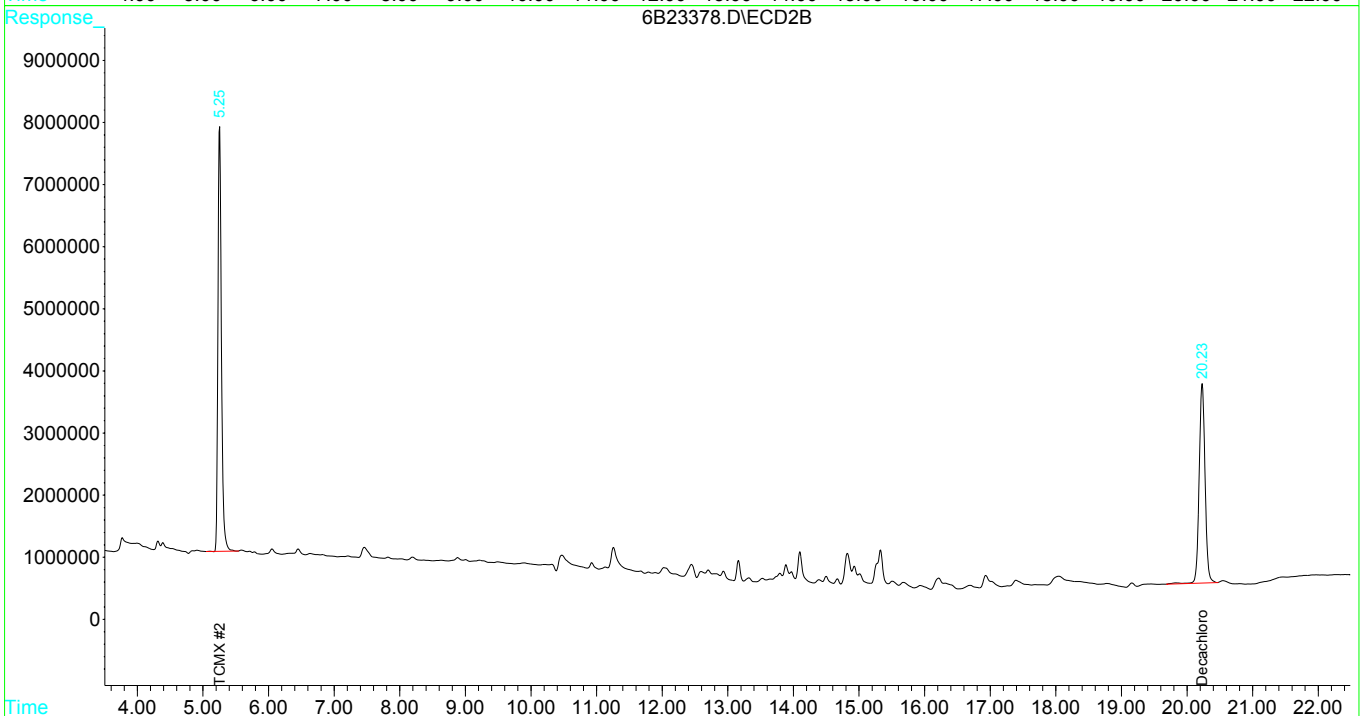
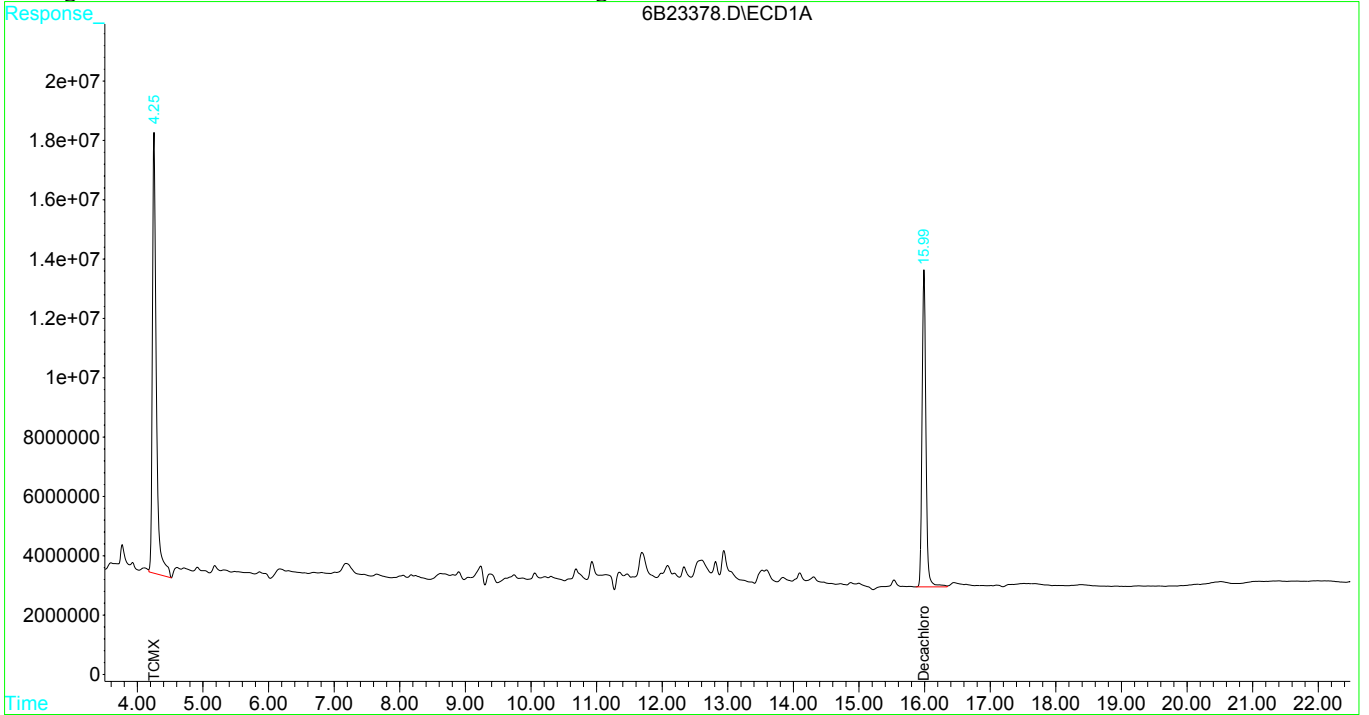
9  
9.2.

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD6\DATA\20181011\6B23378.D\ECD1A.CH Vial: 1  
Signal #2 : G:\HPCHEM\GCECD6\DATA\20181011\6B23378.D\ECD2B.CH  
Acq On : 11 Oct 2018 14:00 Operator: RL  
Sample : 8100452-01 Inst : HP G1530A  
Misc : Multiplr: 1.00  
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
Quant Time: Oct 11 14:29 2018 Quant Results File: 80820925.RES

Quant Method : G:\HPCHEM\G...\80820925.M (Chemstation Integrator)  
Title : PCBs by EPA Method 8082  
Last Update : Wed Sep 26 13:16:10 2018  
Response via : Multiple Level Calibration  
DataAcq Meth : RUNPCB.M

Volume Inj. : 1ul  
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um



# ANALYSIS DATA SHEET

PCBs - SW 846 8082A

**Client:** Peak Environmental  
**Client Sample ID:** NTP-6  
**Lab Sample ID:** 8100452-06  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 12:50	Prep Date: 10/10/18 16:36	File ID: 6B23379.D
Init/Final Vol: 15 g / 10 mL	Prep Batch: B8J1064	Analyzed: 10/11/18 14:26
Dilution: 1	Matrix: Soil	Sequence: S8J1113
Percent Solids: 87.70	Prep Method: Microwave Extraction	

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
12674-11-2	Aroclor-1016	ND	0.000670	0.0376	U
11104-28-2	Aroclor-1221	ND	0.00116	0.0376	U
11141-16-5	Aroclor-1232	ND	0.000886	0.0376	U
53469-21-9	Aroclor-1242	ND	0.00128	0.0376	U
12672-29-6	Aroclor-1248	ND	0.000883	0.0376	U
11097-69-1	Aroclor-1254	ND	0.00134	0.0376	U
11096-82-5	Aroclor-1260	ND	0.000992	0.0376	U
37324-23-5	Aroclor-1262	ND	0.00145	0.0376	U
11100-14-4	Aroclor-1268	ND	0.000761	0.0376	U
1336-36-3	Total PCBs	ND	0.000670	0.0376	U

9.2.

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD6\DATA\20181011\6B23379.D\ECD1A.CH Vial: 2  
 Signal #2 : G:\HPCHEM\GCECD6\DATA\20181011\6B23379.D\ECD2B.CH  
 Acq On : 11 Oct 2018 14:26 Operator: RL  
 Sample : 8100452-06 Inst : HP G1530A  
 Misc : Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
 Quant Time: Oct 11 15:33 2018 Quant Results File: 80820925.RES

Quant Method : G:\HPCHEM\G...\80820925.M (Chemstation Integrator)  
 Title : PCBs by EPA Method 8082  
 Last Update : Wed Sep 26 13:16:10 2018  
 Response via : Initial Calibration  
 DataAcq Meth : RUNPCB.M

Volume Inj. : 1ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
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System Monitoring Compounds

1) S TCMX	4.26	5.26	639.9E6	252.5E6	53.149	50.502
Spiked Amount	50.000	Range	40 - 149	Recovery =	106.30%	101.00%
2) S Decachlorobiphen	15.99	20.24	427.4E6	206.9E6	39.042	39.167
Spiked Amount	50.000	Range	52 - 136	Recovery =	78.08%	78.33%

Target Compounds

Sum Aroclor-1016 (1)			0	0	N.D.	N.D.
Average Aroclor-1016 (1)					0.000	0.000
Sum Aroclor-1221 (1)			0	0	N.D.	N.D.
Average Aroclor-1221 (1)					0.000	0.000
Sum Aroclor-1232 (1)			0	0	N.D.	N.D.
Average Aroclor-1232 (1)					0.000	0.000
Sum Aroclor-1242 (1)			0	0	N.D.	N.D.
Average Aroclor-1242 (1)					0.000	0.000
Sum Aroclor-1248 (1)			0	0	N.D.	N.D.
Average Aroclor-1248 (1)					0.000	0.000
Sum Aroclor-1254 (1)			0	0	N.D.	N.D.
Average Aroclor-1254 (1)					0.000	0.000
Sum Aroclor-1260 (1)			0	0	N.D.	N.D.
Average Aroclor-1260 (1)					0.000	0.000
Sum Aroclor-1262 (1)			0	0	N.D.	N.D.
Average Aroclor-1262 (1)					0.000	0.000
Sum Aroclor-1268 (1)			0	0	N.D.	N.D.
Average Aroclor-1268 (1)					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
 6B23379.D 80820925.M Thu Oct 11 15:35:00 2018 SS

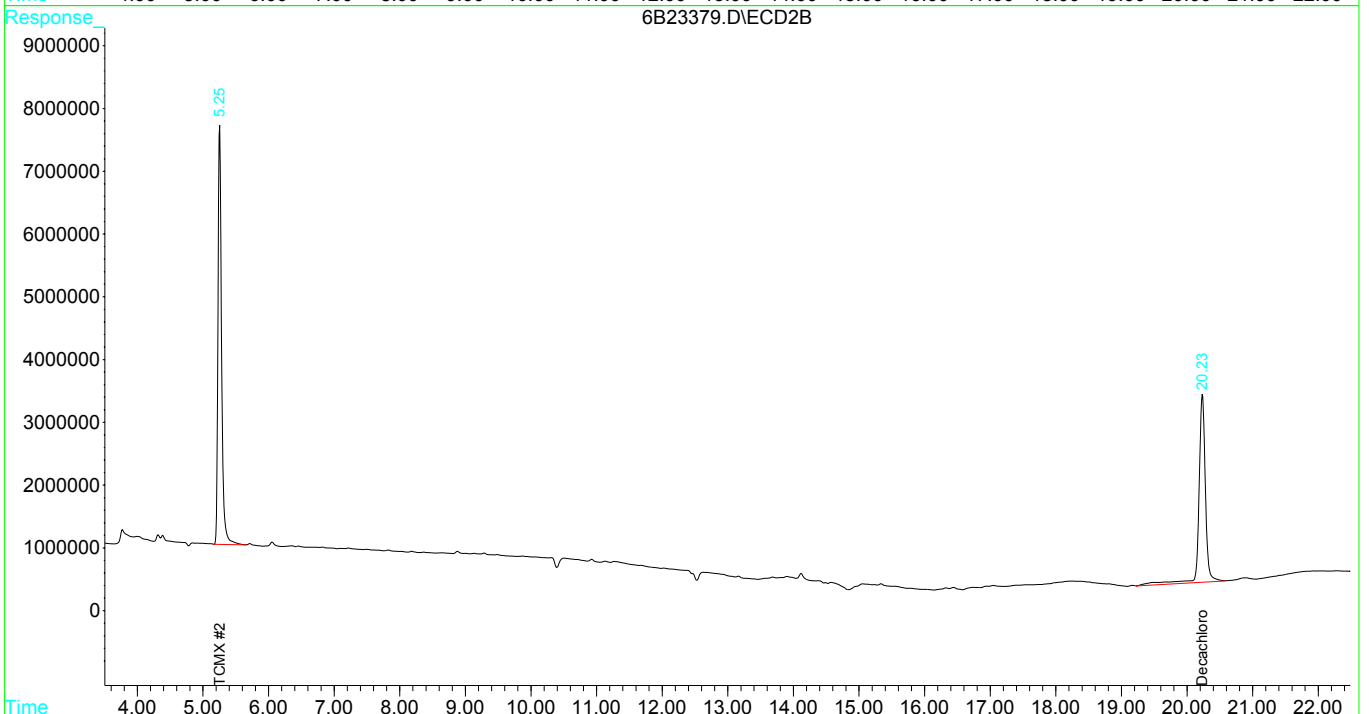
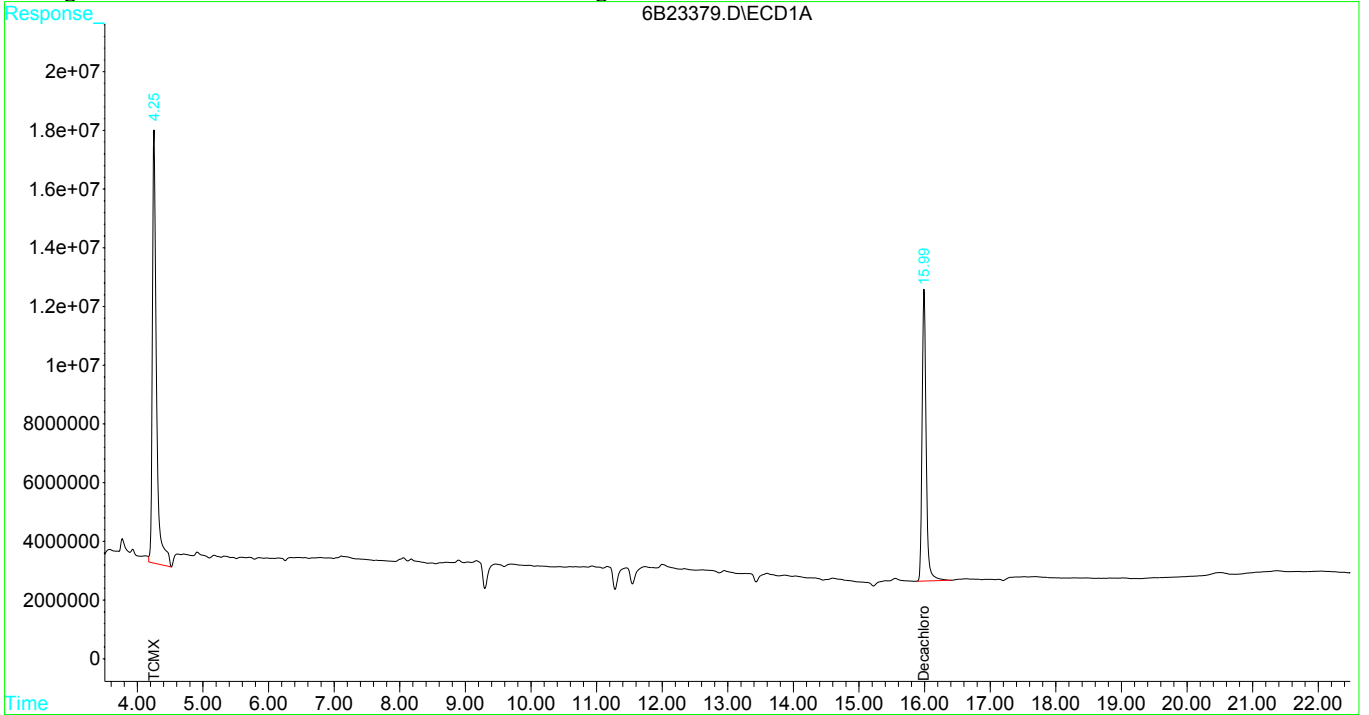
9.2.

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD6\DATA\20181011\6B23379.D\ECD1A.CH Vial: 2  
Signal #2 : G:\HPCHEM\GCECD6\DATA\20181011\6B23379.D\ECD2B.CH  
Acq On : 11 Oct 2018 14:26 Operator: RL  
Sample : 8100452-06 Inst : HP G1530A  
Misc : Multiplr: 1.00  
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
Quant Time: Oct 11 15:33 2018 Quant Results File: 80820925.RES

Quant Method : G:\HPCHEM\G...\80820925.M (Chemstation Integrator)  
Title : PCBs by EPA Method 8082  
Last Update : Wed Sep 26 13:16:10 2018  
Response via : Multiple Level Calibration  
DataAcq Meth : RUNPCB.M

Volume Inj. : 1ul  
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um



# ANALYSIS DATA SHEET

PCBs - SW 846 8082A

**Client:** Peak Environmental  
**Client Sample ID:** STP-4B  
**Lab Sample ID:** 8100452-12  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 00:00	Prep Date: 10/10/18 16:36	File ID: 6B23380.D
Init/Final Vol: 15 g / 10 mL	Prep Batch: B8J1064	Analyzed: 10/11/18 14:52
Dilution: 1	Matrix: Soil	Sequence: S8J1113
Percent Solids: 91.70	Prep Method: Microwave Extraction	

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
12674-11-2	Aroclor-1016	ND	0.000641	0.0360	U
11104-28-2	Aroclor-1221	ND	0.00111	0.0360	U
11141-16-5	Aroclor-1232	ND	0.000847	0.0360	U
53469-21-9	Aroclor-1242	ND	0.00122	0.0360	U
12672-29-6	Aroclor-1248	ND	0.000844	0.0360	U
11097-69-1	Aroclor-1254	ND	0.00128	0.0360	U
11096-82-5	Aroclor-1260	ND	0.000949	0.0360	U
37324-23-5	Aroclor-1262	ND	0.00139	0.0360	U
11100-14-4	Aroclor-1268	ND	0.000727	0.0360	U
1336-36-3	Total PCBs	ND	0.000641	0.0360	U

9.2.

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD6\DATA\20181011\6B23380.D\ECD1A.CH Vial: 3  
 Signal #2 : G:\HPCHEM\GCECD6\DATA\20181011\6B23380.D\ECD2B.CH  
 Acq On : 11 Oct 2018 14:52 Operator: RL  
 Sample : 8100452-12 Inst : HP G1530A  
 Misc : Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
 Quant Time: Oct 11 15:34 2018 Quant Results File: 80820925.RES

Quant Method : G:\HPCHEM\G...\80820925.M (Chemstation Integrator)  
 Title : PCBs by EPA Method 8082  
 Last Update : Wed Sep 26 13:16:10 2018  
 Response via : Initial Calibration  
 DataAcq Meth : RUNPCB.M

Volume Inj. : 1ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
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System Monitoring Compounds

1) S TCMX	4.26	5.26	675.3E6	267.9E6	56.089	53.582
Spiked Amount	50.000	Range	40 - 149	Recovery =	112.18%	107.16%
2) S Decachlorobiphen	16.00	20.24	455.0E6	223.6E6	41.566	42.335
Spiked Amount	50.000	Range	52 - 136	Recovery =	83.13%	84.67%

Target Compounds

Sum Aroclor-1016 (1)			0	0	N.D.	N.D.
Average Aroclor-1016 (1)					0.000	0.000
Sum Aroclor-1221 (1)			0	0	N.D.	N.D.
Average Aroclor-1221 (1)					0.000	0.000
Sum Aroclor-1232 (1)			0	0	N.D.	N.D.
Average Aroclor-1232 (1)					0.000	0.000
Sum Aroclor-1242 (1)			0	0	N.D.	N.D.
Average Aroclor-1242 (1)					0.000	0.000
Sum Aroclor-1248 (1)			0	0	N.D.	N.D.
Average Aroclor-1248 (1)					0.000	0.000
Sum Aroclor-1254 (1)			0	0	N.D.	N.D.
Average Aroclor-1254 (1)					0.000	0.000
Sum Aroclor-1260 (1)			0	0	N.D.	N.D.
Average Aroclor-1260 (1)					0.000	0.000
Sum Aroclor-1262 (1)			0	0	N.D.	N.D.
Average Aroclor-1262 (1)					0.000	0.000
Sum Aroclor-1268 (1)			0	0	N.D.	N.D.
Average Aroclor-1268 (1)					0.000	0.000

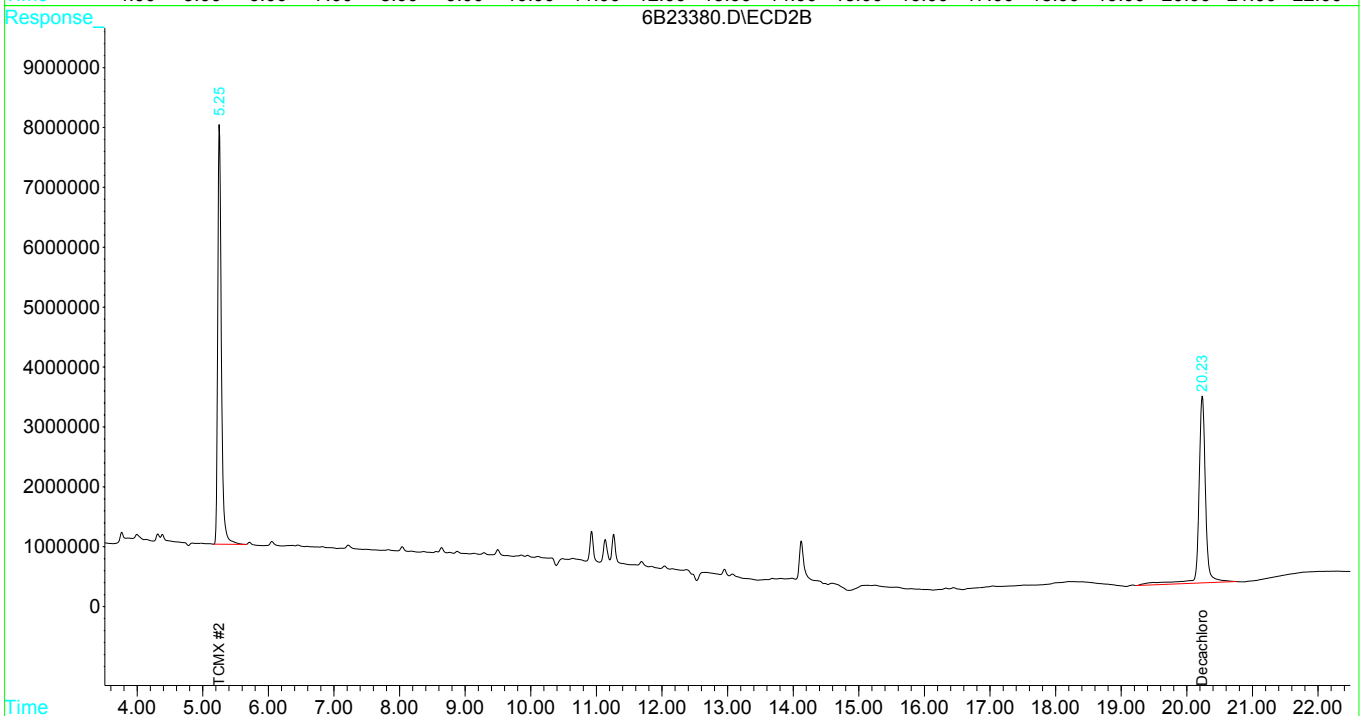
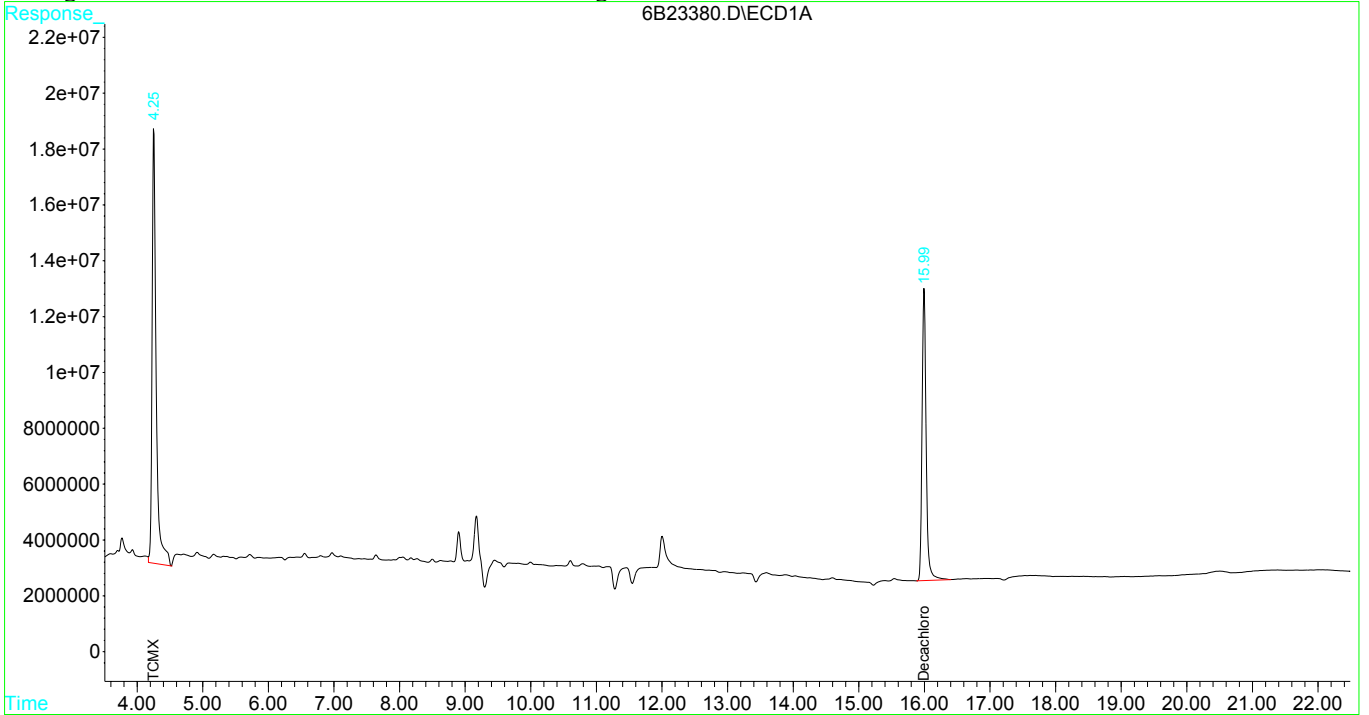
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
 6B23380.D 80820925.M Thu Oct 11 15:35:02 2018 SS

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD6\DATA\20181011\6B23380.D\ECD1A.CH Vial: 3  
Signal #2 : G:\HPCHEM\GCECD6\DATA\20181011\6B23380.D\ECD2B.CH  
Acq On : 11 Oct 2018 14:52 Operator: RL  
Sample : 8100452-12 Inst : HP G1530A  
Misc : Multiplr: 1.00  
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
Quant Time: Oct 11 15:34 2018 Quant Results File: 80820925.RES

Quant Method : G:\HPCHEM\G...\80820925.M (Chemstation Integrator)  
Title : PCBs by EPA Method 8082  
Last Update : Wed Sep 26 13:16:10 2018  
Response via : Multiple Level Calibration  
DataAcq Meth : RUNPCB.M

Volume Inj. : 1ul  
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um





# ANALYSIS DATA SHEET

PCBs - SW 846 8082A

**Client:** Peak Environmental  
**Client Sample ID:** STP-7  
**Lab Sample ID:** 8100452-14  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 00:00	Prep Date:	10/10/18 16:36	File ID:	6B23381.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B8J1064	Analyzed:	10/11/18 15:17
Dilution:	1	Matrix:	Soil	Sequence:	S8J1113
Percent Solids:	92.94	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
12674-11-2	Aroclor-1016	ND	0.000633	0.0355	U
11104-28-2	Aroclor-1221	ND	0.00109	0.0355	U
11141-16-5	Aroclor-1232	ND	0.000836	0.0355	U
53469-21-9	Aroclor-1242	ND	0.00121	0.0355	U
12672-29-6	Aroclor-1248	ND	0.000833	0.0355	U
11097-69-1	Aroclor-1254	ND	0.00127	0.0355	U
11096-82-5	Aroclor-1260	ND	0.000936	0.0355	U
37324-23-5	Aroclor-1262	ND	0.00137	0.0355	U
11100-14-4	Aroclor-1268	ND	0.000718	0.0355	U
1336-36-3	Total PCBs	ND	0.000633	0.0355	U

9.2.

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD6\DATA\20181011\6B23381.D\ECD1A.CH Vial: 4  
 Signal #2 : G:\HPCHEM\GCECD6\DATA\20181011\6B23381.D\ECD2B.CH  
 Acq On : 11 Oct 2018 15:17 Operator: RL  
 Sample : 8100452-14 Inst : GCECD-6  
 Misc : Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
 Quant Time: Oct 11 15:41 2018 Quant Results File: 80820925.RES

Quant Method : G:\HPCHEM\G... \80820925.M (Chemstation Integrator)  
 Title : PCBs by EPA Method 8082  
 Last Update : Wed Sep 26 13:16:10 2018  
 Response via : Initial Calibration  
 DataAcq Meth : RUNPCB.M

Volume Inj. : 1ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
----------	------	------	--------	--------	-------	-------

System Monitoring Compounds

1) S TCMX	4.26	5.26	695.1E6	276.6E6	57.731	55.327
Spiked Amount	50.000	Range	40 - 149	Recovery =	115.46%	110.65%
2) S Decachlorobiphen	16.00	20.24	478.6E6	231.8E6	43.722	43.890
Spiked Amount	50.000	Range	52 - 136	Recovery =	87.44%	87.78%

Target Compounds

Sum Aroclor-1016 (1)			0	0	N.D.	N.D.
Average Aroclor-1016 (1)					0.000	0.000
Sum Aroclor-1221 (1)			0	0	N.D.	N.D.
Average Aroclor-1221 (1)					0.000	0.000
Sum Aroclor-1232 (1)			0	0	N.D.	N.D.
Average Aroclor-1232 (1)					0.000	0.000
Sum Aroclor-1242 (1)			0	0	N.D.	N.D.
Average Aroclor-1242 (1)					0.000	0.000
Sum Aroclor-1248 (1)			0	0	N.D.	N.D.
Average Aroclor-1248 (1)					0.000	0.000
Sum Aroclor-1254 (1)			0	0	N.D.	N.D.
Average Aroclor-1254 (1)					0.000	0.000
Sum Aroclor-1260 (1)			0	0	N.D.	N.D.
Average Aroclor-1260 (1)					0.000	0.000
Sum Aroclor-1262 (1)			0	0	N.D.	N.D.
Average Aroclor-1262 (1)					0.000	0.000
Sum Aroclor-1268 (1)			0	0	N.D.	N.D.
Average Aroclor-1268 (1)					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
 6B23381.D 80820925.M Thu Oct 11 15:42:00 2018 SS

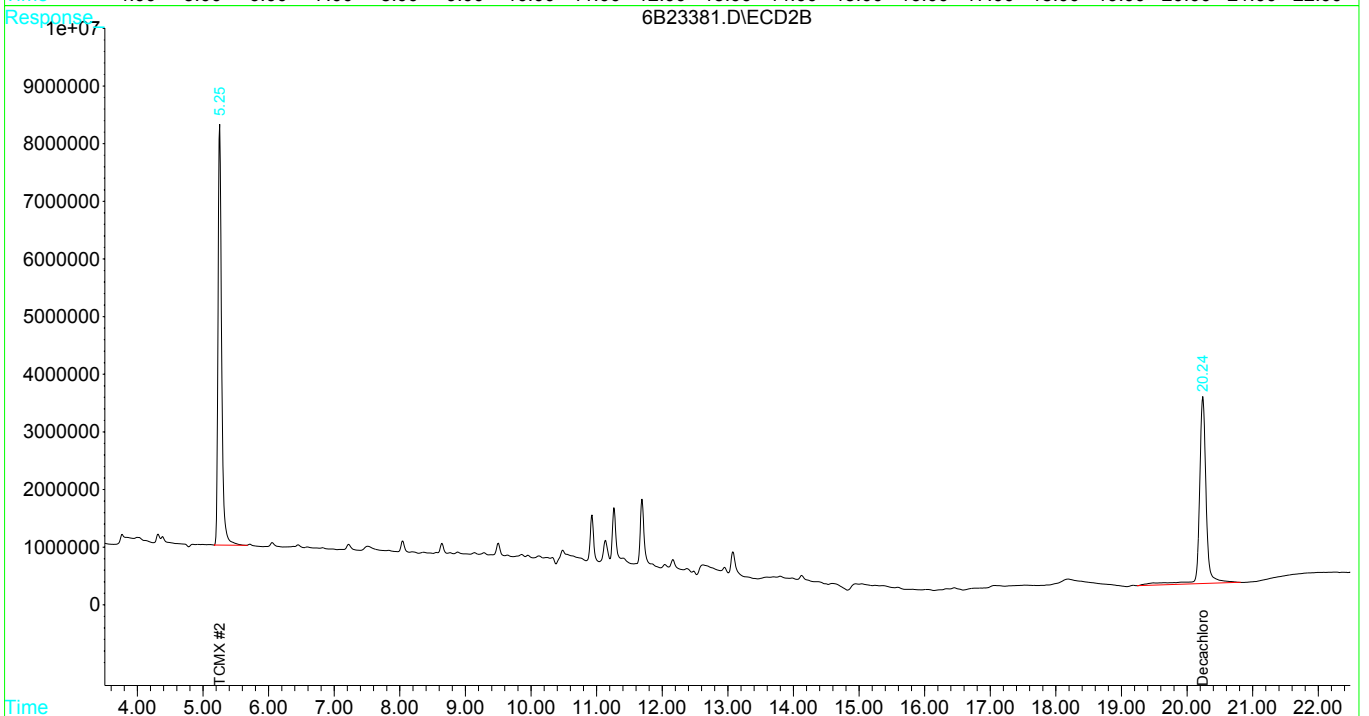
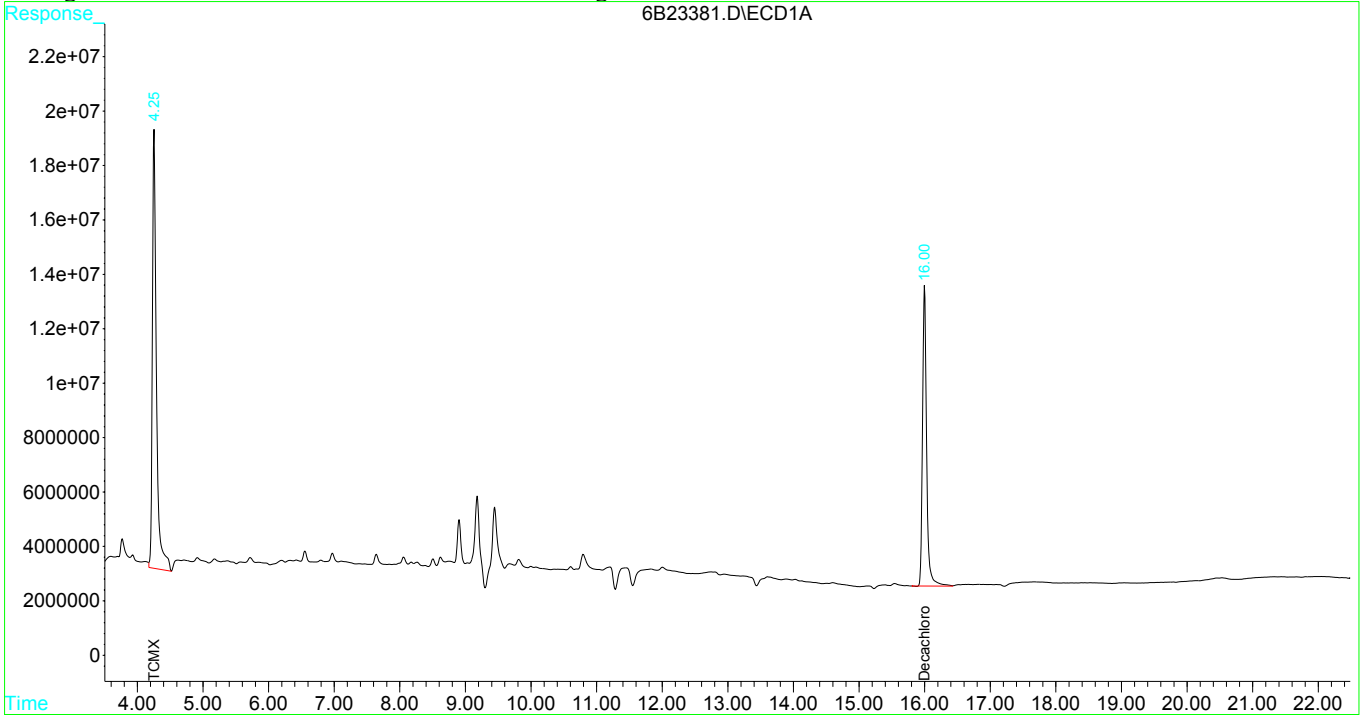


Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD6\DATA\20181011\6B23381.D\ECD1A.CH Vial: 4  
Signal #2 : G:\HPCHEM\GCECD6\DATA\20181011\6B23381.D\ECD2B.CH  
Acq On : 11 Oct 2018 15:17 Operator: RL  
Sample : 8100452-14 Inst : GCECD-6  
Misc : Multiplr: 1.00  
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
Quant Time: Oct 11 15:41 2018 Quant Results File: 80820925.RES

Quant Method : G:\HPCHEM\G...\80820925.M (Chemstation Integrator)  
Title : PCBs by EPA Method 8082  
Last Update : Wed Sep 26 13:16:10 2018  
Response via : Multiple Level Calibration  
DataAcq Meth : RUNPCB.M

Volume Inj. : 1ul  
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um



## SURROGATE RECOVERIES

Analysis Class: PCBs

Matrix: Soil

Method: SW 846 8082A

PCBs

Lab Number	File ID	TCMX	DCB	TCMX[2C]	DCB[2C]
8100452-01	6B23378.D	103	80.0	101	76.0
8100452-06	6B23379.D	106	78.1	101	78.3
8100452-12	6B23380.D	112	83.1	107	84.7
8100452-14	6B23381.D	115	87.4	111	87.8
B8J1064-BLK1	6B23444.D	123	96.1	101	87.6
B8J1064-BS1	6B23445.D	120	95.2	105	90.8
B8J1064-MS1	6B23446.D	101	93.6	94.5	93.1
B8J1064-MSD1	6B23447.D	107	91.2	101	94.3

9.3.

Surrogate Limits		Lo Limit	Hi Limit
TCMX	Tetrachloro-m-xylene	40.2	149
DCB	Decachlorobiphenyl	52.1	136
TCMX[2C]	Tetrachloro-m-xylene [2C]	40.2	149
DCB[2C]	Decachlorobiphenyl [2C]	52.1	136

F-II

\* - Outside of QC Limits

**PCBs - Quality Control  
Aqua Pro-Tech Laboratories**

<b>Batch B8J1064</b>			<b>Method: SW 846 8082A</b>			<b>Prepared: 10/10/2018</b>					
<b>Lab Number</b>	<b>Source</b>	<b>Analyte</b>	<b>Result</b>	<b>Units</b>	<b>Spike Level</b>	<b>Source Result</b>	<b>%REC</b>	<b>%REC Limits</b>	<b>RPD</b>	<b>RPD Limit</b>	
B8J1064-BS1		Aroclor-1016	0.345	mg/kg wet	0.333		104	87.3-144			
B8J1064-BS1		Aroclor-1260	0.322	mg/kg wet	0.333		96.6	68.3-160			

<b>Batch B8J1064 (cont.)</b>			<b>Method: SW 846 8082A</b>			<b>Prepared: 10/10/2018</b>					
<b>Lab Number</b>	<b>Source</b>	<b>Analyte</b>	<b>Result</b>	<b>Units</b>	<b>Spike Level</b>	<b>Source Result</b>	<b>%REC</b>	<b>%REC Limits</b>	<b>RPD</b>	<b>RPD Limit</b>	
B8J1064-MS1	8100452-01	Aroclor-1016	0.353	mg/kg dry	0.371	ND	95.3	74.4-141			
B8J1064-MS1	8100452-01	Aroclor-1260	0.384	mg/kg dry	0.371	ND	104	64.5-133			

<b>Batch B8J1064 (cont.)</b>			<b>Method: SW 846 8082A</b>			<b>Prepared: 10/10/2018</b>					
<b>Lab Number</b>	<b>Source</b>	<b>Analyte</b>	<b>Result</b>	<b>Units</b>	<b>Spike Level</b>	<b>Source Result</b>	<b>%REC</b>	<b>%REC Limits</b>	<b>RPD</b>	<b>RPD Limit</b>	
B8J1064-MSD1	8100452-01	Aroclor-1016	0.405	mg/kg dry	0.371	ND	109	74.4-141	13.6	30	
B8J1064-MSD1	8100452-01	Aroclor-1260	0.417	mg/kg dry	0.371	ND	112	64.5-133	8.12	30	

9.4.

\* - Outside of QC Limits      J - Result is between the MDL and RL for an Analysis reported to an RL  
 F-III      NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

## METHOD BLANK SUMMARY

Batch ID: B8J1064

<u>Lab Number</u>	<u>Sample Id</u>	<u>Extraction Date</u>	<u>Analysis Date</u>
B8J1064-BLK1	BLK1	10/10/2018	10/12/2018 19:13
B8J1064-BS1	BS1	10/10/2018	10/12/2018 19:39
B8J1064-MS1	MS1	10/10/2018	10/12/2018 20:04
B8J1064-MSD1	MSD1	10/10/2018	10/12/2018 20:30
8100452-01	NTP-1A	10/10/2018	10/11/2018 14:00
8100452-06	NTP-6	10/10/2018	10/11/2018 14:26
8100452-12	STP-4B	10/10/2018	10/11/2018 14:52
8100452-14	STP-7	10/10/2018	10/11/2018 15:17



9.5.

# SURROGATE RT DRIFT REPORT

Analysis Class: PCBs

**Sequence : S8J1113**

Lab Number	File ID	TCMX			DCB			TCMX[2C]			DCB[2C]		
		RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift
8100452-01	6B23378.D	4.26	4.26	0.00	15.99	16	-0.01	5.25	5.25	0.00	20.23	20.24	-0.01
8100452-06	6B23379.D	4.26	4.26	0.00	15.99	16	-0.01	5.26	5.25	0.01	20.24	20.24	0.00
8100452-12	6B23380.D	4.26	4.26	0.00	16	16	0.00	5.26	5.25	0.01	20.24	20.24	0.00
8100452-14	6B23381.D	4.26	4.26	0.00	16	16	0.00	5.26	5.25	0.01	20.24	20.24	0.00

**Sequence : S8J1201**

Lab Number	File ID	TCMX			DCB			TCMX[2C]			DCB[2C]		
		RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift
B8J1064-BLK1	6B23444.D	4.25	4.25	0.00	16	15.99	0.01	5.25	5.25	0.00	20.24	20.24	0.00
B8J1064-BS1	6B23445.D	4.25	4.25	0.00	16	15.99	0.01	5.25	5.25	0.00	20.24	20.24	0.00
B8J1064-MS1	6B23446.D	4.24	4.25	-0.01	15.99	15.99	0.00	5.25	5.25	0.00	20.23	20.24	-0.01
B8J1064-MSD1	6B23447.D	4.25	4.25	0.00	15.99	15.99	0.00	5.25	5.25	0.00	20.23	20.24	-0.01

9.6

Surrogate	Limit
TCMX	Tetrachloro-m-xylene 0.10
DCB	Decachlorobiphenyl 0.10
TCMX[2C]	Tetrachloro-m-xylene [2C] 0.10
DCB[2C]	Decachlorobiphenyl [2C] 0.10

DISS = Dissolved Analysis

F-V

Response Factor Report GCECD-6

Method : G:\HPCHEM\GCECD6\METHODS\80820925.M (Chemstation Integrator)  
 Title : PCBs by EPA Method 8082  
 Last Update : Wed Sep 26 13:16:10 2018

Calibration Files  
 50 =6B22802.D 250 =6B22801.D 500 =6B22800.D  
 1000 =6B22799.D 2000 =6B22798.D

Compound	50	250	500	1000	2000	Avg	%RSD
1) S TCMX	1.124	1.199	1.193	1.228	1.275	1.204	E7 4.58
2) S Decachlorobiphenyl	0.930	1.183	1.128	1.109	1.123	1.095	E7 8.78
3) L3 Aroclor-1016 (1)	1.979	2.211	2.129	2.181	2.089	2.118	E5 4.27
4) L3 Aroclor-1016 (2)	4.448	4.498	4.239	4.324	4.110	4.324	E5 3.63
5) L3 Aroclor-1016 (3)	3.034	3.281	3.048	3.173	3.022	3.112	E5 3.62
6) L3 Aroclor-1016 (4)	1.132	1.110	1.030	1.033	1.029	1.067	E6 4.70
7) L3 Aroclor-1016 (5)	4.759	4.462	4.073	4.023	3.890	4.241	E5 8.47
8) L4 Aroclor-1221 (1)					1.229	1.229	E5 0.00
9) L4 Aroclor-1221 (2)					6.008	6.008	E4 0.00
10) L4 Aroclor-1221 (3)					3.598	3.598	E5 0.00
11) L5 Aroclor-1232 (1)					1.296	1.296	E5 0.00
12) L5 Aroclor-1232 (2)					3.529	3.529	E5 0.00
13) L5 Aroclor-1232 (3)					1.554	1.554	E5 0.00
14) L5 Aroclor-1232 (4)					1.190	1.190	E5 0.00
15) L6 Aroclor-1242 (1)					3.538	3.538	E5 0.00
16) L6 Aroclor-1242 (2)					2.371	2.371	E5 0.00
17) L6 Aroclor-1242 (3)					8.487	8.487	E5 0.00
18) L6 Aroclor-1242 (4)					2.887	2.887	E5 0.00
19) L6 Aroclor-1242 (5)					2.666	2.666	E5 0.00
20) L7 Aroclor-1248 (1)					1.511	1.511	E5 0.00
21) L7 Aroclor-1248 (2)					4.275	4.275	E5 0.00
22) L7 Aroclor-1248 (3)					5.986	5.986	E5 0.00
23) L7 Aroclor-1248 (4)					4.502	4.502	E5 0.00
24) L8 Aroclor-1254 (1)					7.957	7.957	E5 0.00
25) L8 Aroclor-1254 (2)					6.157	6.157	E5 0.00
26) L8 Aroclor-1254 (3)					6.310	6.310	E5 0.00
27) L8 Aroclor-1254 (4)					8.613	8.613	E5 0.00
28) L9 Aroclor-1260 (1)	5.536	6.418	5.741	5.855	5.372	5.784	E5 6.92
29) L9 Aroclor-1260 (2)	1.027	1.323	1.209	1.245	1.207	1.202	E6 9.05
30) L9 Aroclor-1260 (3)	0.934	1.060	0.989	1.020	0.998	1.000	E6 4.61
31) L9 Aroclor-1260 (4)	1.396	1.728	1.665	1.717	1.735	1.648	E6 8.72
32) L9 Aroclor-1260 (5)	4.232	3.743	3.701	3.780	4.055	3.902	E5 5.92
33) L1 Aroclor-1262 (1)					6.160	6.160	E5 0.00
34) L1 Aroclor-1262 (2)					5.399	5.399	E5 0.00
35) L1 Aroclor-1262 (3)					2.370	2.370	E6 0.00
36) L2 Aroclor-1268 (1)					6.571	6.571	E5 0.00
37) L2 Aroclor-1268 (2)					5.099	5.099	E6 0.00
38) L2 Aroclor-1268 (3)					1.047	1.047	E6 0.00

Signal #2 Calibration Files  
 50 =6B22802.D 250 =6B22801.D 500 =6B22800.D  
 1000 =6B22799.D 2000 =6B22798.D

Compound	50	250	500	1000	2000	Avg	%RSD
1) S TCMX	4.211	5.014	5.084	5.206	5.481	4.999	E6 9.51
2) S Decachlorobiphenyl	5.488	5.746	4.805	5.093	5.277	5.282	E6 6.83
3) L3 Aroclor-1016 (1)	9.455	9.385	8.910	8.628	8.478	8.971	E4 4.89
4) L3 Aroclor-1016 (2)	1.996	1.958	1.792	1.706	1.667	1.824	E5 8.10
5) L3 Aroclor-1016 (3)	8.050	8.007	7.654	7.437	7.124	7.654	E4 5.10
6) L3 Aroclor-1016 (4)	4.199	4.250	3.998	3.942	3.977	4.073	E5 3.46
7) L3 Aroclor-1016 (5)	1.686	1.816	1.745	1.699	1.631	1.716	E5 4.05
8) L4 Aroclor-1221 (1)					5.255	5.255	E4 0.00
9) L4 Aroclor-1221 (2)					3.282	3.282	E4 0.00
10) L4 Aroclor-1221 (3)					1.320	1.320	E5 0.00
11) L5 Aroclor-1232 (1)					1.053	1.053	E5 0.00
12) L5 Aroclor-1232 (2)					7.772	7.772	E4 0.00
13) L5 Aroclor-1232 (3)					1.715	1.715	E5 0.00
14) L5 Aroclor-1232 (4)					7.694	7.694	E4 0.00
15) L6 Aroclor-1242 (1)					1.395	1.395	E5 0.00
16) L6 Aroclor-1242 (2)					3.269	3.269	E5 0.00

(#) = Out of Range  
 80820925.M

Tue Oct 02 12:32:29 2018 SS

Page 1

9.7.



Response Factor Report GCECD-6

Method : G:\HPCHEM\GCECD6\METHODS\80820925.M (Chemstation Integrator)  
 Title : PCBs by EPA Method 8082  
 Last Update : Wed Sep 26 13:16:10 2018

Calibration Files

50 =6B22802.D 250 =6B22801.D 500 =6B22800.D  
 1000 =6B22799.D 2000 =6B22798.D

Compound	50	250	500	1000	2000	Avg	%RSD
17) L6 Aroclor-1242 (3)					1.415	1.415 E5	0.00
18) L6 Aroclor-1242 (4)					4.403	4.403 E4	0.00
19) L6 Aroclor-1242 (5)					1.351	1.351 E5	0.00
20) L7 Aroclor-1248 (1)					7.096	7.096 E4	0.00
21) L7 Aroclor-1248 (2)					1.874	1.874 E5	0.00
22) L7 Aroclor-1248 (3)					5.568	5.568 E4	0.00
23) L7 Aroclor-1248 (4)					1.854	1.854 E5	0.00
24) L8 Aroclor-1254 (1)					2.440	2.440 E5	0.00
25) L8 Aroclor-1254 (2)					1.577	1.577 E5	0.00
26) L8 Aroclor-1254 (3)					1.391	1.391 E5	0.00
27) L8 Aroclor-1254 (4)					2.902	2.902 E5	0.00
28) L9 Aroclor-1260 (1)	2.385	2.235	2.018	1.951	1.962	2.110 E5	9.08
29) L9 Aroclor-1260 (2)	2.687	2.878	2.644	2.552	2.613	2.675 E5	4.63
30) L9 Aroclor-1260 (3)	2.473	2.492	2.324	2.291	2.374	2.391 E5	3.73
31) L9 Aroclor-1260 (4)	2.429	2.129	2.080	2.096	2.198	2.187 E5	6.54
32) L9 Aroclor-1260 (5)	6.170	5.259	5.378	5.260	5.513	5.516 E5	6.90
33) L1 Aroclor-1262 (1)					1.505	1.505 E5	0.00
34) L1 Aroclor-1262 (2)					2.912	2.912 E5	0.00
35) L1 Aroclor-1262 (3)					7.018	7.018 E5	0.00
36) L2 Aroclor-1268 (1)					2.827	2.827 E5	0.00
37) L2 Aroclor-1268 (2)					2.413	2.413 E6	0.00
38) L2 Aroclor-1268 (3)					4.433	4.433 E5	0.00

9  
9.7.

Compound List Report GCECD-6

Method : G:\HPCHEM\GCECD6\METHODS\80820925.M (Chemstation Integrator)  
 Title : PCBs by EPA Method 8082  
 Last Update : Wed Sep 26 13:16:10 2018  
 Response via : Initial Calibration  
 Total Cpnds : 77

PK#	Type	Compound Name	Exp RT	Rel RT	Cal	A/H	ID
1	S	TCMX	4.25	1.000	A	A	B
2	S	Decachlorobiphenyl	16.00	1.000	A	A	B
3	L3	Aroclor-1016 (1)	4.85	1.000	A	A	B
4	L3	Aroclor-1016 (2)	5.47	1.000	A	A	B
5	L3	Aroclor-1016 (3)	5.85	1.000	A	A	B
6	L3	Aroclor-1016 (4)	6.40	1.000	A	A	B
7	L3	Aroclor-1016 (5)	6.65	1.000	A	A	B
8	L4	Aroclor-1221 (1)	4.53	1.000	A	A	B
9	L4	Aroclor-1221 (2)	4.78	1.000	A	A	B
10	L4	Aroclor-1221 (3)	4.85	1.000	A	A	B
11	L5	Aroclor-1232 (1)	5.85	1.000	A	A	B
12	L5	Aroclor-1232 (2)	6.40	1.000	A	A	B
13	L5	Aroclor-1232 (3)	7.04	1.000	A	A	B
14	L5	Aroclor-1232 (4)	7.45	1.000	A	A	B
15	L6	Aroclor-1242 (1)	5.47	1.000	A	A	B
16	L6	Aroclor-1242 (2)	5.85	1.000	A	A	B
17	L6	Aroclor-1242 (3)	6.39	1.000	A	A	B
18	L6	Aroclor-1242 (4)	7.45	1.000	A	A	B
19	L6	Aroclor-1242 (5)	7.64	1.000	A	A	B
20	L7	Aroclor-1248 (1)	5.46	1.000	A	A	B
21	L7	Aroclor-1248 (2)	6.39	1.000	A	A	B
22	L7	Aroclor-1248 (3)	7.04	1.000	A	A	B
23	L7	Aroclor-1248 (4)	7.45	1.000	A	A	B
24	L8	Aroclor-1254 (1)	9.68	1.000	A	A	B
25	L8	Aroclor-1254 (2)	10.34	1.000	A	A	B
26	L8	Aroclor-1254 (3)	10.68	1.000	A	A	B
27	L8	Aroclor-1254 (4)	11.32	1.000	A	A	B
28	L9	Aroclor-1260 (1)	10.05	1.000	A	A	B
29	L9	Aroclor-1260 (2)	10.68	1.000	A	A	B
30	L9	Aroclor-1260 (3)	11.33	1.000	A	A	B
31	L9	Aroclor-1260 (4)	12.82	1.000	A	A	B
32	L9	Aroclor-1260 (5)	14.89	1.000	A	A	B
33	L1	Aroclor-1262 (1)	11.65	1.000	A	A	B
34	L1	Aroclor-1262 (2)	12.20	1.000	A	A	B
35	L1	Aroclor-1262 (3)	12.82	1.000	A	A	B
36	L2	Aroclor-1268 (1)	14.88	1.000	A	A	B
37	L2	Aroclor-1268 (2)	15.54	1.000	A	A	B
38	L2	Aroclor-1268 (3)	16.00	1.000	A	A	B
39		Signal #2	34.78	1.000	A	A	B
40	S	TCMX #2	5.25	1.000	A	A	B
41	S	Decachlorobiphenyl #2	20.24	1.000	A	A	B
42	L3	Aroclor-1016 (1) #2	6.26	1.000	A	A	B
43	L3	Aroclor-1016 (2) #2	7.13	1.000	A	A	B
44	L3	Aroclor-1016 (3) #2	7.68	1.000	A	A	B
45	L3	Aroclor-1016 (4) #2	8.19	1.000	A	A	B
46	L3	Aroclor-1016 (5) #2	8.48	1.000	A	A	B
47	L4	Aroclor-1221 (1) #2	5.83	1.000	A	A	B
48	L4	Aroclor-1221 (2) #2	6.13	1.000	A	A	B
49	L4	Aroclor-1221 (3) #2	6.27	1.000	A	A	B
50	L5	Aroclor-1232 (1) #2	6.27	1.000	A	A	B
51	L5	Aroclor-1232 (2) #2	7.13	1.000	A	A	B
52	L5	Aroclor-1232 (3) #2	8.19	1.000	A	A	B
53	L5	Aroclor-1232 (4) #2	8.49	1.000	A	A	B
54	L6	Aroclor-1242 (1) #2	7.13	1.000	A	A	B
55	L6	Aroclor-1242 (2) #2	8.18	1.000	A	A	B
56	L6	Aroclor-1242 (3) #2	8.48	1.000	A	A	B
57	L6	Aroclor-1242 (4) #2	9.63	1.000	A	A	B
58	L6	Aroclor-1242 (5) #2	9.82	1.000	A	A	B
59	L7	Aroclor-1248 (1) #2	7.13	1.000	A	A	B
60	L7	Aroclor-1248 (2) #2	8.18	1.000	A	A	B
61	L7	Aroclor-1248 (3) #2	8.73	1.000	A	A	B
62	L7	Aroclor-1248 (4) #2	9.53	1.000	A	A	B
63	L8	Aroclor-1254 (1) #2	10.48	1.000	A	A	B
64	L8	Aroclor-1254 (2) #2	11.07	1.000	A	A	B
65	L8	Aroclor-1254 (3) #2	11.74	1.000	A	A	B
66	L8	Aroclor-1254 (4) #2	12.02	1.000	A	A	B



67	L9	Aroclor-1260	(1) #2	12.45	1.000	A	A	B
68	L9	Aroclor-1260	(2) #2	12.94	1.000	A	A	B
69	L9	Aroclor-1260	(3) #2	13.33	1.000	A	A	B
70	L9	Aroclor-1260	(4) #2	14.68	1.000	A	A	B
71	L9	Aroclor-1260	(5) #2	15.28	1.000	A	A	B
72	L1	Aroclor-1262	(1) #2	14.11	1.000	A	A	B
73	L1	Aroclor-1262	(2) #2	14.68	1.000	A	A	B
74	L1	Aroclor-1262	(3) #2	15.28	1.000	A	A	B
75	L2	Aroclor-1268	(1) #2	17.98	1.000	A	A	B
76	L2	Aroclor-1268	(2) #2	19.17	1.000	A	A	B
77	L2	Aroclor-1268	(3) #2	20.24	1.000	A	A	B

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin

A/H = Area or Height

ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

-----  
80820925.M Tue Oct 02 12:32:28 2018 SS

# CALIBRATION VERIFICATION SUMMARY

**Client:** Peak Environmental  
**Work Order:** 8100452

Lab Sample ID (500): S8J1113-CCV1(1)      Init. Calib. Date(s): 09/25/2018  
 File ID: 6B23377.D      Date Analyzed: 10/11/2018 13:34  
 PCBs: Column 1      Matrix: Soil

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Average-Aroclor-1016	-----	-----	-----	489212	492245	0.60
Aroclor-1016 (1)	04.86	04.76	04.96	211764	242144	14.30
Aroclor-1016 (2)	05.47	05.37	05.57	432364	350618	18.90
Aroclor-1016 (3)	05.86	05.76	05.96	311160	362270	16.40
Aroclor-1016 (4)	06.42	06.32	06.52	1066628	1057362	0.90
Aroclor-1016 (5)	06.67	06.57	06.77	424144	448831	5.80
Average-Aroclor-1260	-----	-----	-----	963897	982236	1.90
Aroclor-1260 (1)	10.06	09.96	10.16	578436	484968	16.20
Aroclor-1260 (2)	10.70	10.60	10.80	1202407	1318524	9.70
Aroclor-1260 (3)	11.34	11.24	11.44	1000381	1006615	0.60
Aroclor-1260 (4)	12.83	12.73	12.93	1648039	1697299	3.00
Aroclor-1260 (5)	14.89	14.79	14.99	390220	403773	3.50
Tetrachloro-m-xylene	04.26	04.16	04.36	12039880	11968110	0.60
Decachlorobiphenyl	16.00	15.90	16.10	10947110	9284400	15.20

**Average %D:** 8.76

\* - Outside of QC limits

F-VII



9.8.

# CALIBRATION VERIFICATION SUMMARY

**Client:** Peak Environmental  
**Work Order:** 8100452

Lab Sample ID (500): S8J1113-CCV1(2)      Init. Calib. Date(s): 09/25/2018  
 File ID: 6B23377.D      Date Analyzed: 10/11/2018 13:34  
 PCBs      Column 2      Matrix: Soil

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Average-Aroclor-1016 [2C]	-----	-----	-----	185625	204123	10.00
Aroclor-1016 (1) [2C]	06.27	06.17	06.37	89712	97027	8.20
Aroclor-1016 (2) [2C]	07.14	07.04	07.24	182386	195712	7.30
Aroclor-1016 (3) [2C]	07.69	07.59	07.79	77154	93895	21.70
Aroclor-1016 (4) [2C]	08.20	08.10	08.30	407320	425268	4.40
Aroclor-1016 (5) [2C]	08.50	08.40	08.60	171552	208715	21.70
Average-Aroclor-1260 [2C]	-----	-----	-----	297563	314212	5.60
Aroclor-1260 (1) [2C]	12.45	12.35	12.55	211007	227921	8.00
Aroclor-1260 (2) [2C]	12.95	12.85	13.05	267464	295603	10.50
Aroclor-1260 (3) [2C]	13.33	13.23	13.43	239078	257236	7.60
Aroclor-1260 (4) [2C]	14.68	14.58	14.78	218661	226848	3.70
Aroclor-1260 (5) [2C]	15.28	15.18	15.38	551606	563451	2.10
Tetrachloro-m-xylene [2C]	05.25	05.15	05.35	4999281	5174800	3.50
Decachlorobiphenyl [2C]	20.24	20.14	20.34	5281753	4225960	20.00

**Average %D:** 9.89

\* - Outside of QC limits

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9.8.

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD6\DATA\20181011\6B23377.D\ECD1A.CH Vial: 96  
 Signal #2 : G:\HPCHEM\GCECD6\DATA\20181011\6B23377.D\ECD2B.CH  
 Acq On : 11 Oct 2018 13:34 Operator: RL  
 Sample : SEQ-CCV Inst : GCECD-6  
 Misc : Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
 Quant Time: Oct 11 14:28 2018 Quant Results File: 80820925.RES

Quant Method : G:\HPCHEM\G...\80820925.M (Chemstation Integrator)  
 Title : PCBs by EPA Method 8082  
 Last Update : Wed Sep 26 13:16:10 2018  
 Response via : Initial Calibration  
 DataAcq Meth : RUNPCB.M

Volume Inj. : 1ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

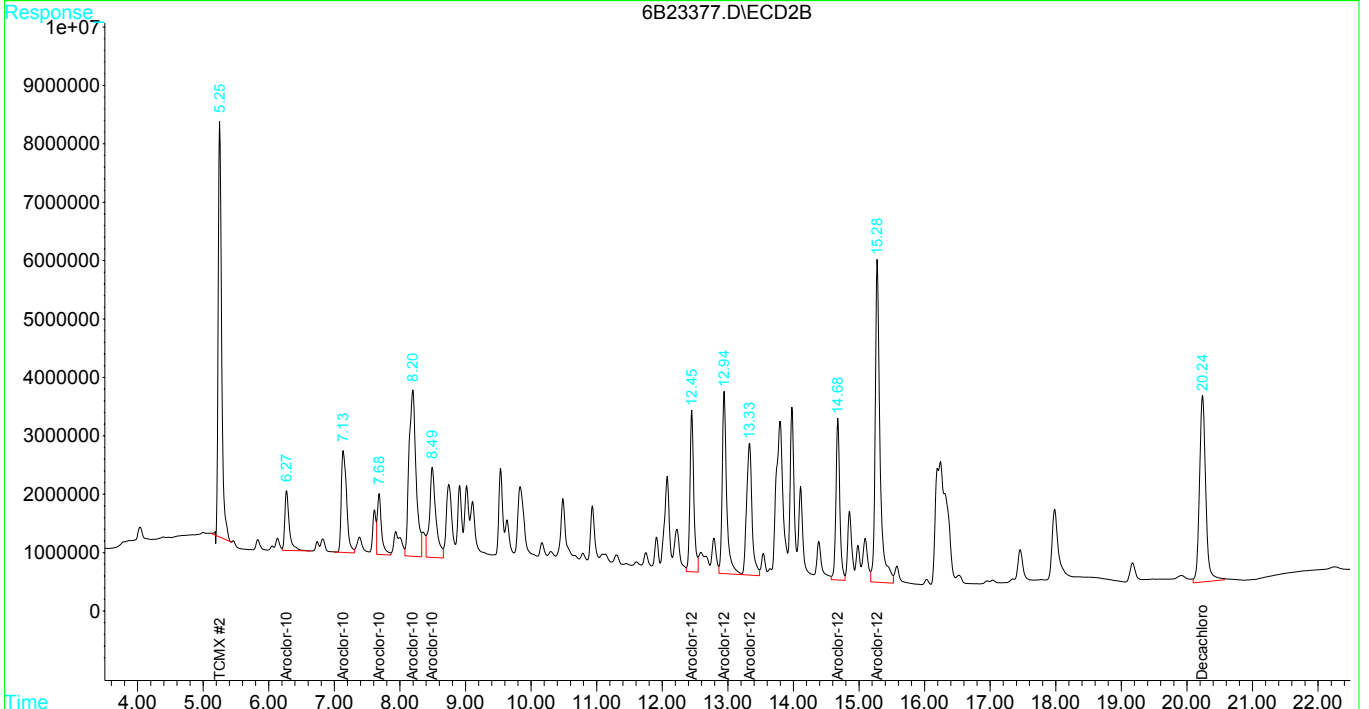
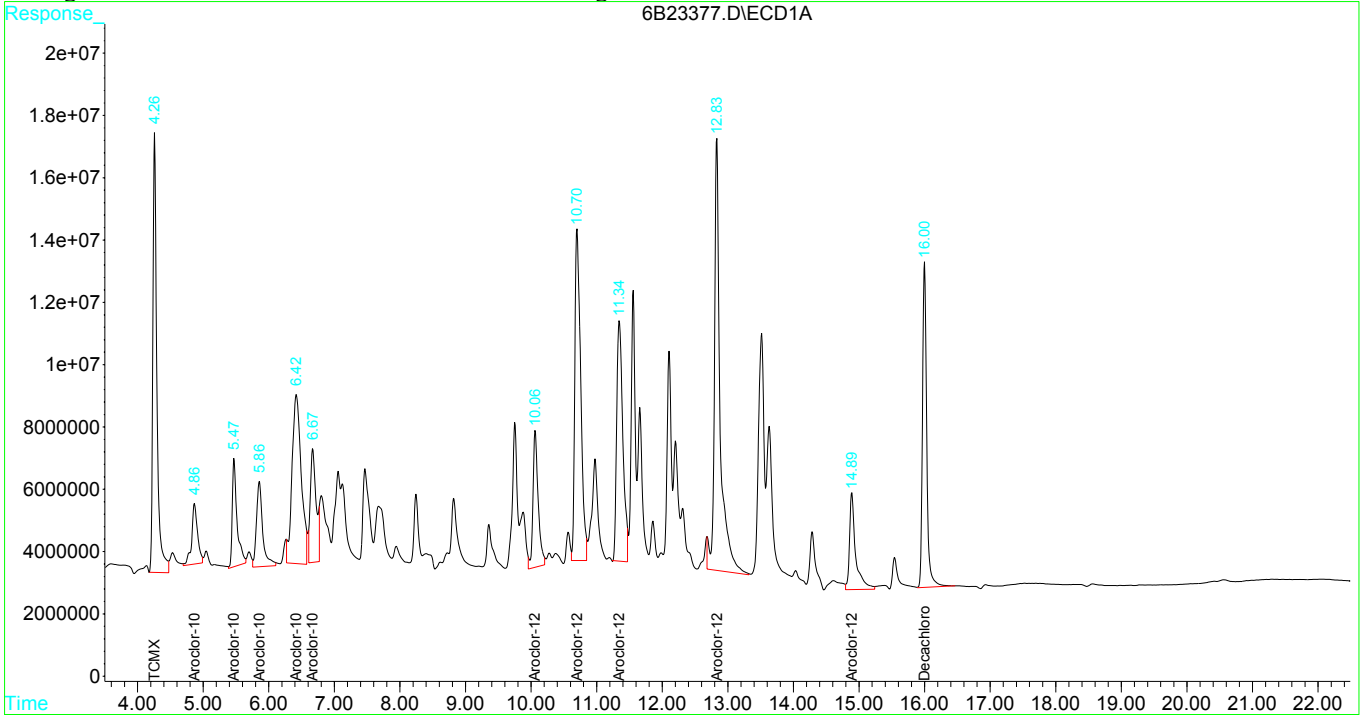
Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
-----						
System Monitoring Compounds						
1) S TCMX	4.26	5.25	598.4E6	258.7E6	49.702	51.755
Spiked Amount	50.000	Range	40 - 149	Recovery	= 99.40%	103.51%
2) S Decachlorobiphen	16.00	20.24	464.2E6	211.3E6	42.406	40.005m
Spiked Amount	50.000	Range	52 - 136	Recovery	= 84.81%	80.01%
Target Compounds						
3) L3 Aroclor-1016 (1)	4.86	6.27	121.1E6	48513559	571.731m	540.769
4) L3 Aroclor-1016 (2)	5.47	7.14	175.3E6	97855933	405.466m	536.531 #
5) L3 Aroclor-1016 (3)	5.86	7.69	181.1E6	46947332	582.127m	613.340
6) L3 Aroclor-1016 (4)	6.42	8.20	528.7E6	212.6E6	495.656m	522.032
7) L3 Aroclor-1016 (5)	6.67	8.50	224.4E6	104.4E6	529.101m	608.315
Sum Aroclor-1016 (1)			1230.6E6	510.3E6	2584.082	2820.986
Average Aroclor-1016 (1)					516.816	564.197
Sum Aroclor-1221 (1)			0	0	N.D.	N.D.
Average Aroclor-1221 (1)					0.000	0.000
Sum Aroclor-1232 (1)			0	0	N.D.	N.D.
Average Aroclor-1232 (1)					0.000	0.000
Sum Aroclor-1242 (1)			0	0	N.D.	N.D.
Average Aroclor-1242 (1)					0.000	0.000
Sum Aroclor-1248 (1)			0	0	N.D.	N.D.
Average Aroclor-1248 (1)					0.000	0.000
Sum Aroclor-1254 (1)			0	0	N.D.	N.D.
Average Aroclor-1254 (1)					0.000	0.000
28) L9 Aroclor-1260 (1)	10.06	12.45	242.5E6	114.0E6	419.207m	540.080 #
29) L9 Aroclor-1260 (2)	10.70	12.95	659.3E6	147.8E6	548.285m	552.603
30) L9 Aroclor-1260 (3)	11.34	13.33	503.3E6	128.6E6	503.116m	537.976
31) L9 Aroclor-1260 (4)	12.83	14.68	848.6E6	113.4E6	514.945m	518.722
32) L9 Aroclor-1260 (5)	14.89	15.28	201.9E6	281.7E6	517.366	510.737
Sum Aroclor-1260 (1)			2455.6E6	785.5E6	2502.919	2660.119
Average Aroclor-1260 (1)					500.584	532.024
Sum Aroclor-1262 (1)			0	0	N.D.	N.D.
Average Aroclor-1262 (1)					0.000	0.000
Sum Aroclor-1268 (1)			0	0	N.D.	N.D.
Average Aroclor-1268 (1)					0.000	0.000

-----  
 (f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
 6B23377.D 80820925.M Thu Oct 11 15:41:58 2018 SS

Signal #1 : G:\HPCHEM\GCECD6\DATA\20181011\6B23377.D\ECD1A.CH Vial: 96  
Signal #2 : G:\HPCHEM\GCECD6\DATA\20181011\6B23377.D\ECD2B.CH  
Acq On : 11 Oct 2018 13:34 Operator: RL  
Sample : SEQ-CCV Inst : GCECD-6  
Misc : Multiplr: 1.00  
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
Quant Time: Oct 11 14:28 2018 Quant Results File: 80820925.RES

Quant Method : G:\HPCHEM\G...\80820925.M (Chemstation Integrator)  
Title : PCBs by EPA Method 8082  
Last Update : Wed Sep 26 13:16:10 2018  
Response via : Multiple Level Calibration  
DataAcq Meth : RUNPCB.M

Volume Inj. : 1ul  
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um



# CALIBRATION VERIFICATION SUMMARY

**Client:** Peak Environmental  
**Work Order:** 8100452

Lab Sample ID (X500): S8J1113-CCV2(1)      Init. Calib. Date(s): 09/25/2018  
 File ID: 6B23397.D      Date Analyzed: 10/11/2018 22:07  
 PCBs: Column 1      Matrix: Soil

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Average-Aroclor-1016	-----	-----	-----	489212	525758	7.50
Aroclor-1016 (1)	04.87	04.77	04.97	211764	264302	24.80
Aroclor-1016 (2)	05.47	05.37	05.57	432364	354249	18.10
Aroclor-1016 (3)	05.86	05.76	05.96	311160	413866	33.00
Aroclor-1016 (4)	06.43	06.33	06.53	1066628	1107490	3.80
Aroclor-1016 (5)	06.67	06.57	06.77	424144	488881	15.30
Average-Aroclor-1260	-----	-----	-----	963897	1019026	5.70
Aroclor-1260 (1)	10.06	09.96	10.16	578436	582350	0.70
Aroclor-1260 (2)	10.70	10.60	10.80	1202407	1381838	14.90
Aroclor-1260 (3)	11.35	11.25	11.45	1000381	1067650	6.70
Aroclor-1260 (4)	12.84	12.74	12.94	1648039	1668999	1.30
Aroclor-1260 (5)	14.90	14.80	15.00	390220	394291	1.00
Tetrachloro-m-xylene	04.26	04.16	04.36	12039880	11906430	1.10
Decachlorobiphenyl	16.00	15.90	16.10	10947110	10036770	8.30

**Average %D:** 10.75

\* - Outside of QC limits

F-VII

9.8.



# CALIBRATION VERIFICATION SUMMARY

**Client:** Peak Environmental  
**Work Order:** 8100452

Lab Sample ID (X500): S8J1113-CCV2(2)      Init. Calib. Date(s): 09/25/2018  
 File ID: 6B23397.D      Date Analyzed: 10/11/2018 22:07  
 PCBs      Column 2      Matrix: Soil

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Average-Aroclor-1016 [2C]	-----	-----	-----	185625	202212	8.90
Aroclor-1016 (1) [2C]	06.28	06.18	06.38	89712	103543	15.40
Aroclor-1016 (2) [2C]	07.14	07.04	07.24	182386	201714	10.60
Aroclor-1016 (3) [2C]	07.68	07.58	07.78	77154	84942	10.10
Aroclor-1016 (4) [2C]	08.20	08.10	08.30	407320	435194	6.80
Aroclor-1016 (5) [2C]	08.50	08.40	08.60	171552	185668	8.20
Average-Aroclor-1260 [2C]	-----	-----	-----	297563	331038	11.20
Aroclor-1260 (1) [2C]	12.46	12.36	12.56	211007	246616	16.90
Aroclor-1260 (2) [2C]	12.95	12.85	13.05	267464	324460	21.30
Aroclor-1260 (3) [2C]	13.34	13.24	13.44	239078	278363	16.40
Aroclor-1260 (4) [2C]	14.68	14.58	14.78	218661	230825	5.60
Aroclor-1260 (5) [2C]	15.29	15.19	15.39	551606	574924	4.20
Tetrachloro-m-xylene [2C]	05.26	05.16	05.36	4999281	5696838	14.00
Decachlorobiphenyl [2C]	20.25	20.15	20.35	5281753	4377342	17.10

**Average %D:** 12.22

\* - Outside of QC limits

F-VII



9.8.

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD6\DATA\20181011\6B23397.D\ECD1A.CH Vial: 96  
 Signal #2 : G:\HPCHEM\GCECD6\DATA\20181011\6B23397.D\ECD2B.CH  
 Acq On : 11 Oct 2018 22:07 Operator: RL  
 Sample : SEQ-CCV Inst : GCECD-6  
 Misc : Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
 Quant Time: Oct 12 7:56 2018 Quant Results File: 80820925.RES

Quant Method : G:\HPCHEM\G...\80820925.M (Chemstation Integrator)  
 Title : PCBs by EPA Method 8082  
 Last Update : Wed Sep 26 13:16:10 2018  
 Response via : Initial Calibration  
 DataAcq Meth : RUNPCB.M

Volume Inj. : 1ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

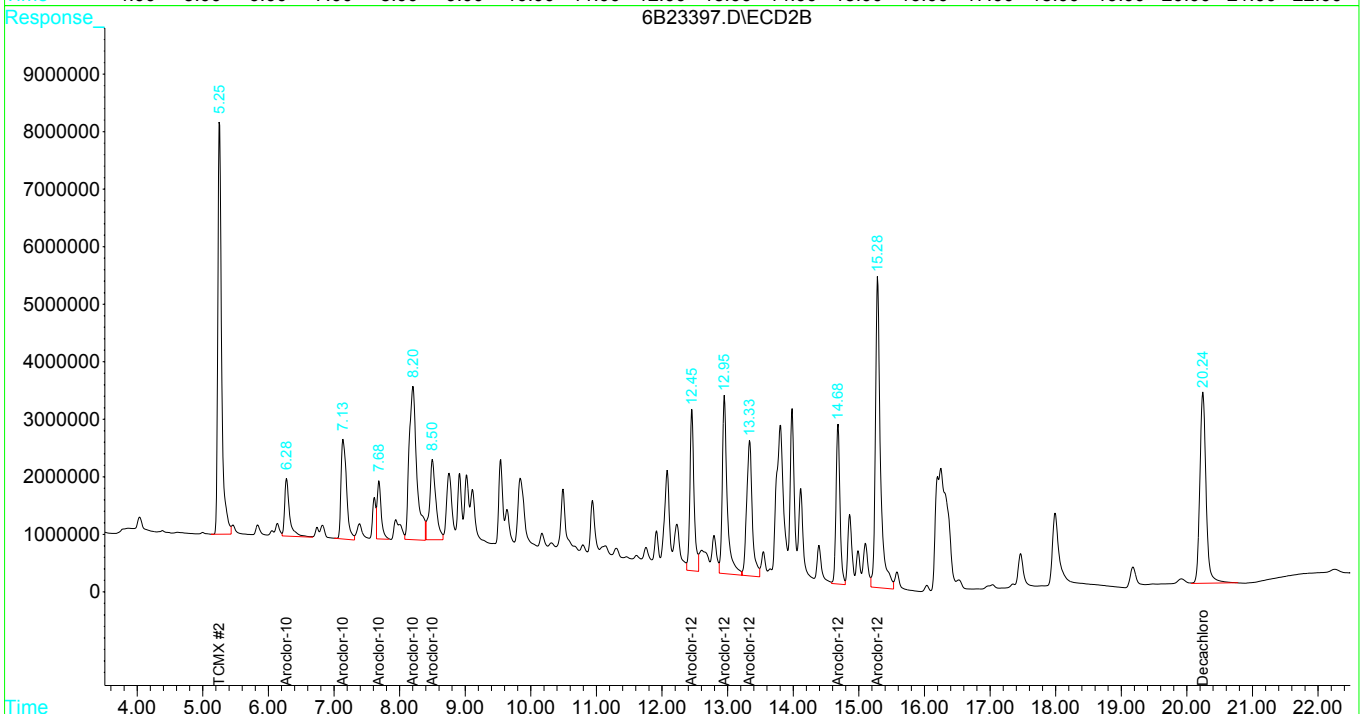
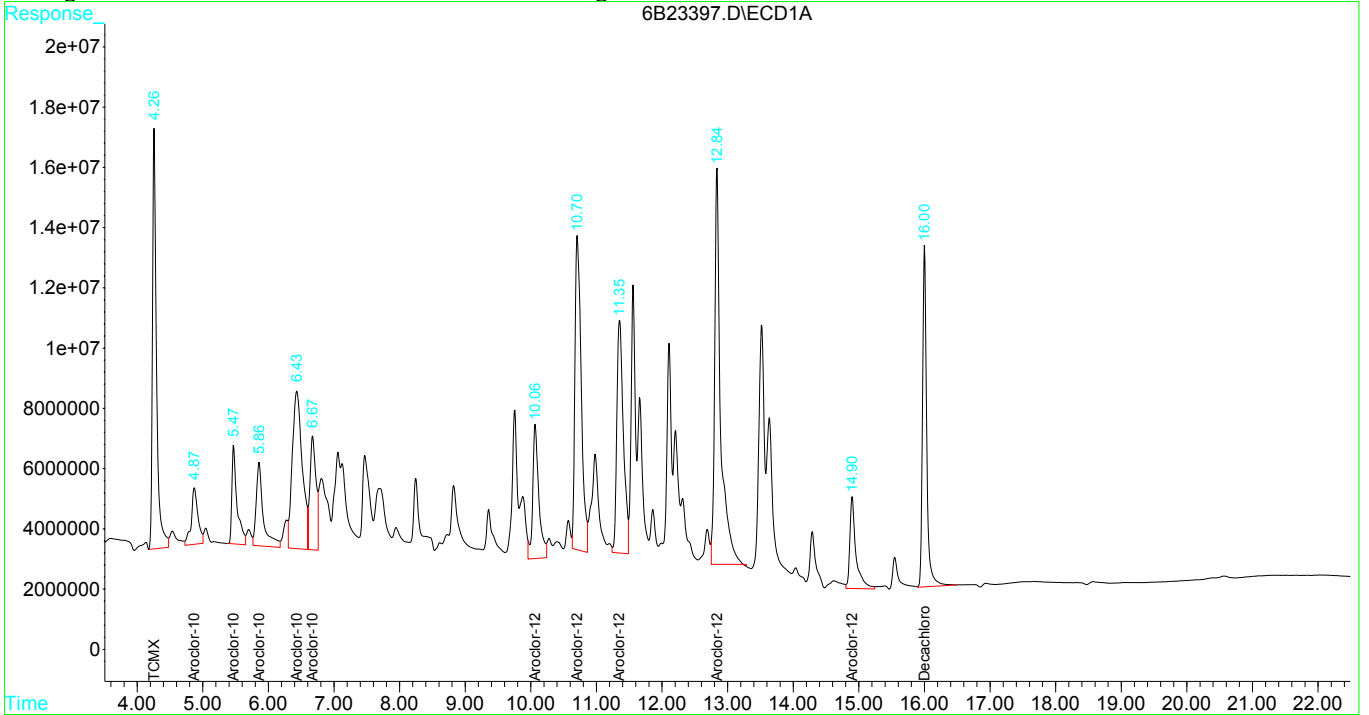
Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
<b>System Monitoring Compounds</b>						
1) S TCMX	4.26	5.26	595.3E6	284.8E6	49.446	56.977
Spiked Amount	50.000	Range	40 - 149	Recovery =	98.89%	113.95%
2) S Decachlorobiphen	16.00	20.25	501.8E6	218.9E6	45.842	41.438
Spiked Amount	50.000	Range	52 - 136	Recovery =	91.68%	82.88%
<b>Target Compounds</b>						
3) L3 Aroclor-1016 (1)	4.87	6.28	132.2E6	51771629	624.048	577.086
4) L3 Aroclor-1016 (2)	5.47	7.14	177.1E6	100.9E6	409.666	552.984 #
5) L3 Aroclor-1016 (3)	5.86	7.68	206.9E6	42470920	665.037	554.858m
6) L3 Aroclor-1016 (4)	6.43f	8.20	553.7E6	217.6E6	519.155	534.216m
7) L3 Aroclor-1016 (5)	6.67	8.50	244.4E6	92833897	576.315	541.141m
Sum Aroclor-1016 (1)			1314.4E6	505.5E6	2794.220	2760.286
Average Aroclor-1016 (1)					558.844	552.057
Sum Aroclor-1221 (1)			0	0	N.D.	N.D.
Average Aroclor-1221 (1)					0.000	0.000
Sum Aroclor-1232 (1)			0	0	N.D.	N.D.
Average Aroclor-1232 (1)					0.000	0.000
Sum Aroclor-1242 (1)			0	0	N.D.	N.D.
Average Aroclor-1242 (1)					0.000	0.000
Sum Aroclor-1248 (1)			0	0	N.D.	N.D.
Average Aroclor-1248 (1)					0.000	0.000
Sum Aroclor-1254 (1)			0	0	N.D.	N.D.
Average Aroclor-1254 (1)					0.000	0.000
28) L9 Aroclor-1260 (1)	10.06	12.46	291.2E6	123.3E6	503.384m	584.379
29) L9 Aroclor-1260 (2)	10.70	12.95	690.9E6	162.2E6	574.614m	606.549
30) L9 Aroclor-1260 (3)	11.35	13.34	533.8E6	139.2E6	533.622m	582.158
31) L9 Aroclor-1260 (4)	12.84	14.68	834.5E6	115.4E6	506.359m	527.817
32) L9 Aroclor-1260 (5)	14.90	15.29	197.1E6	287.5E6	505.217	521.137
Sum Aroclor-1260 (1)			2547.6E6	827.6E6	2623.195	2822.040
Average Aroclor-1260 (1)					524.639	564.408
Sum Aroclor-1262 (1)			0	0	N.D.	N.D.
Average Aroclor-1262 (1)					0.000	0.000
Sum Aroclor-1268 (1)			0	0	N.D.	N.D.
Average Aroclor-1268 (1)					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
 6B23397.D 80820925.M Fri Oct 12 07:57:53 2018 SS

Signal #1 : G:\HPCHEM\GCECD6\DATA\20181011\6B23397.D\ECD1A.CH Vial: 96  
Signal #2 : G:\HPCHEM\GCECD6\DATA\20181011\6B23397.D\ECD2B.CH  
Acq On : 11 Oct 2018 22:07 Operator: RL  
Sample : SEQ-CCV Inst : GCECD-6  
Misc : Multiplr: 1.00  
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
Quant Time: Oct 12 7:56 2018 Quant Results File: 80820925.RES

Quant Method : G:\HPCHEM\G...\80820925.M (Chemstation Integrator)  
Title : PCBs by EPA Method 8082  
Last Update : Wed Sep 26 13:16:10 2018  
Response via : Multiple Level Calibration  
DataAcq Meth : RUNPCB.M

Volume Inj. : 1ul  
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info: 30M x 0.53mm x 0.42um



# CALIBRATION VERIFICATION SUMMARY

**Client:** Peak Environmental  
**Work Order:** 8100452

Lab Sample ID (X500): S8J1201-CCV2(1)      Init. Calib. Date(s): 09/25/2018  
 File ID: 6B23428.D      Date Analyzed: 10/12/2018 12:32  
 PCBs: Column 1      Matrix: Soil

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Average-Aroclor-1016	-----	-----	-----	489212	489879	0.10
Aroclor-1016 (1)	04.86	04.76	04.96	211764	236319	11.60
Aroclor-1016 (2)	05.46	05.36	05.56	432364	379154	12.30
Aroclor-1016 (3)	05.85	05.75	05.95	311160	391151	25.70
Aroclor-1016 (4)	06.42	06.32	06.52	1066628	1013619	5.00
Aroclor-1016 (5)	06.67	06.57	06.77	424144	429149	1.20
Average-Aroclor-1260	-----	-----	-----	963897	1046925	8.60
Aroclor-1260 (1)	10.06	09.96	10.16	578436	521228	9.90
Aroclor-1260 (2)	10.70	10.60	10.80	1202407	1365615	13.60
Aroclor-1260 (3)	11.34	11.24	11.44	1000381	1085042	8.50
Aroclor-1260 (4)	12.83	12.73	12.93	1648039	1844663	11.90
Aroclor-1260 (5)	14.89	14.79	14.99	390220	418078	7.10
Tetrachloro-m-xylene	04.25	04.15	04.35	12039880	11211800	6.90
Decachlorobiphenyl	15.99	15.89	16.09	10947110	10848370	0.90

**Average %D:** 9.55

\* - Outside of QC limits

F-VII

9.8.

# CALIBRATION VERIFICATION SUMMARY

**Client:** Peak Environmental  
**Work Order:** 8100452

Lab Sample ID (X500): S8J1201-CCV2(2)      Init. Calib. Date(s): 09/25/2018  
 File ID: 6B23428.D      Date Analyzed: 10/12/2018 12:32  
 PCBs      Column 2      Matrix: Soil

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Average-Aroclor-1016 [2C]	-----	-----	-----	185625	203909	9.80
Aroclor-1016 (1) [2C]	06.27	06.17	06.37	89712	102069	13.80
Aroclor-1016 (2) [2C]	07.14	07.04	07.24	182386	205763	12.80
Aroclor-1016 (3) [2C]	07.68	07.58	07.78	77154	103176	33.70
Aroclor-1016 (4) [2C]	08.20	08.10	08.30	407320	452984	11.20
Aroclor-1016 (5) [2C]	08.49	08.39	08.59	171552	155551	9.30
Average-Aroclor-1260 [2C]	-----	-----	-----	297563	340614	14.50
Aroclor-1260 (1) [2C]	12.45	12.35	12.55	211007	245710	16.40
Aroclor-1260 (2) [2C]	12.94	12.84	13.04	267464	327465	22.40
Aroclor-1260 (3) [2C]	13.33	13.23	13.43	239078	283898	18.70
Aroclor-1260 (4) [2C]	14.68	14.58	14.78	218661	239500	9.50
Aroclor-1260 (5) [2C]	15.28	15.18	15.38	551606	606497	10.00
Tetrachloro-m-xylene [2C]	05.25	05.15	05.35	4999281	5951186	19.00
Decachlorobiphenyl [2C]	20.24	20.14	20.34	5281753	4483482	15.10

**Average %D:** 15.99

\* - Outside of QC limits

F-VII



9.8.

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD6\DATA\20181012\6B23428.D\ECD1A.CH Vial: 96  
 Signal #2 : G:\HPCHEM\GCECD6\DATA\20181012\6B23428.D\ECD2B.CH  
 Acq On : 12 Oct 2018 12:32 Operator: RL  
 Sample : SEQ-CCV Inst : GCECD-6  
 Misc : Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
 Quant Time: Oct 12 13:26 2018 Quant Results File: 80820925.RES

Quant Method : G:\HPCHEM\G...\80820925.M (Chemstation Integrator)  
 Title : PCBs by EPA Method 8082  
 Last Update : Wed Sep 26 13:16:10 2018  
 Response via : Initial Calibration  
 DataAcq Meth : RUNPCB.M

Volume Inj. : 1ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
-----						
System Monitoring Compounds						
1) S TCMX	4.25	5.25	560.6E6	297.6E6	46.561m	59.520 #
Spiked Amount	50.000	Range	40 - 149	Recovery =	93.12%	119.04%
2) S Decachlorobiphen	15.99	20.24	542.4E6	224.2E6	49.549	42.443
Spiked Amount	50.000	Range	52 - 136	Recovery =	99.10%	84.89%
Target Compounds						
3) L3 Aroclor-1016 (1)	4.86	6.27	118.2E6	51034430	557.978m	568.868
4) L3 Aroclor-1016 (2)	5.46	7.14	189.6E6	102.9E6	438.467m	564.086 #
5) L3 Aroclor-1016 (3)	5.85	7.68	195.6E6	51588084	628.537m	673.969
6) L3 Aroclor-1016 (4)	6.42	8.20	506.8E6	226.5E6	475.151m	556.055m
7) L3 Aroclor-1016 (5)	6.67	8.49	214.6E6	77775629	505.900m	453.365m
Sum Aroclor-1016 (1)			1224.7E6	509.8E6	2606.033	2816.343
Average Aroclor-1016 (1)					521.207	563.269
Sum Aroclor-1221 (1)			0	0	N.D.	N.D.
Average Aroclor-1221 (1)					0.000	0.000
Sum Aroclor-1232 (1)			0	0	N.D.	N.D.
Average Aroclor-1232 (1)					0.000	0.000
Sum Aroclor-1242 (1)			0	0	N.D.	N.D.
Average Aroclor-1242 (1)					0.000	0.000
Sum Aroclor-1248 (1)			0	0	N.D.	N.D.
Average Aroclor-1248 (1)					0.000	0.000
Sum Aroclor-1254 (1)			0	0	N.D.	N.D.
Average Aroclor-1254 (1)					0.000	0.000
28) L9 Aroclor-1260 (1)	10.06	12.45	260.6E6	122.9E6	450.550m	582.231 #
29) L9 Aroclor-1260 (2)	10.70	12.94	682.8E6	163.7E6	567.868m	612.167
30) L9 Aroclor-1260 (3)	11.34	13.33	542.5E6	141.9E6	542.314m	593.735
31) L9 Aroclor-1260 (4)	12.83	14.68	922.3E6	119.7E6	559.654m	547.651
32) L9 Aroclor-1260 (5)	14.89	15.28	209.0E6	303.2E6	535.695	549.756
Sum Aroclor-1260 (1)			2617.3E6	851.5E6	2656.081	2885.540
Average Aroclor-1260 (1)					531.216	577.108
Sum Aroclor-1262 (1)			0	0	N.D.	N.D.
Average Aroclor-1262 (1)					0.000	0.000
Sum Aroclor-1268 (1)			0	0	N.D.	N.D.
Average Aroclor-1268 (1)					0.000	0.000

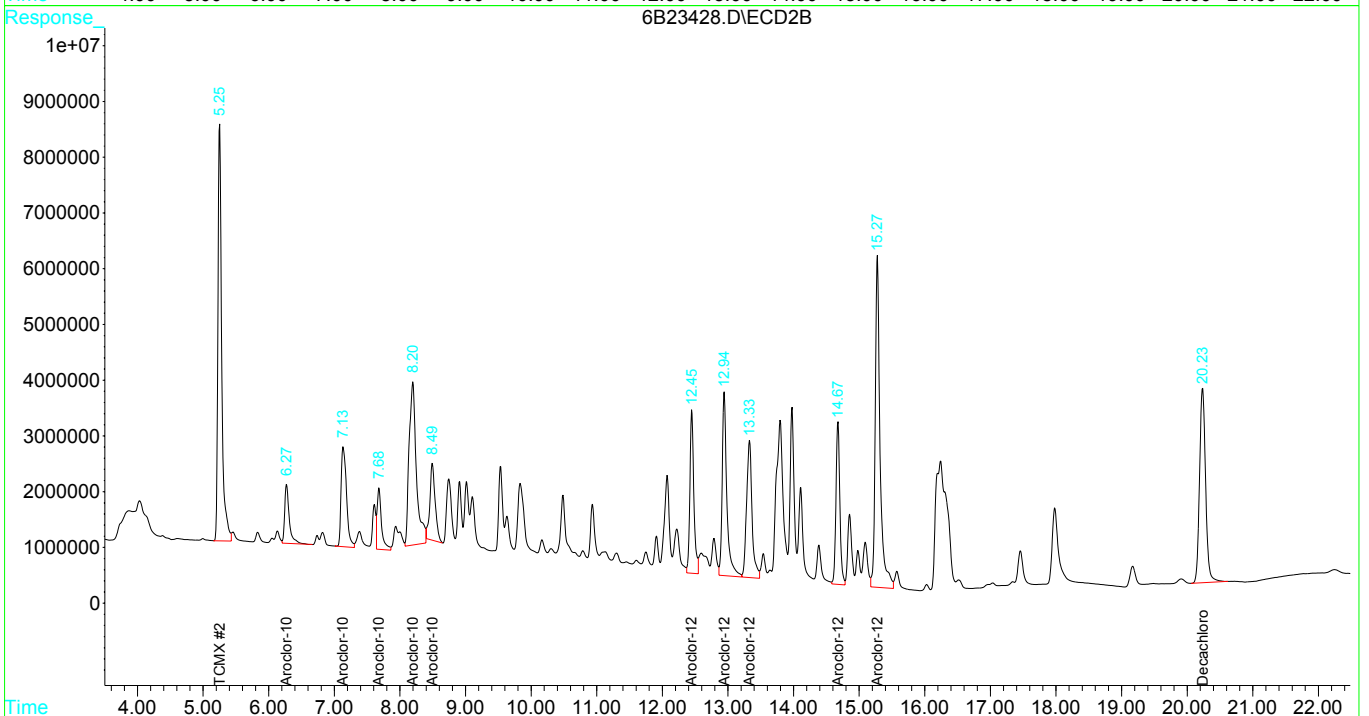
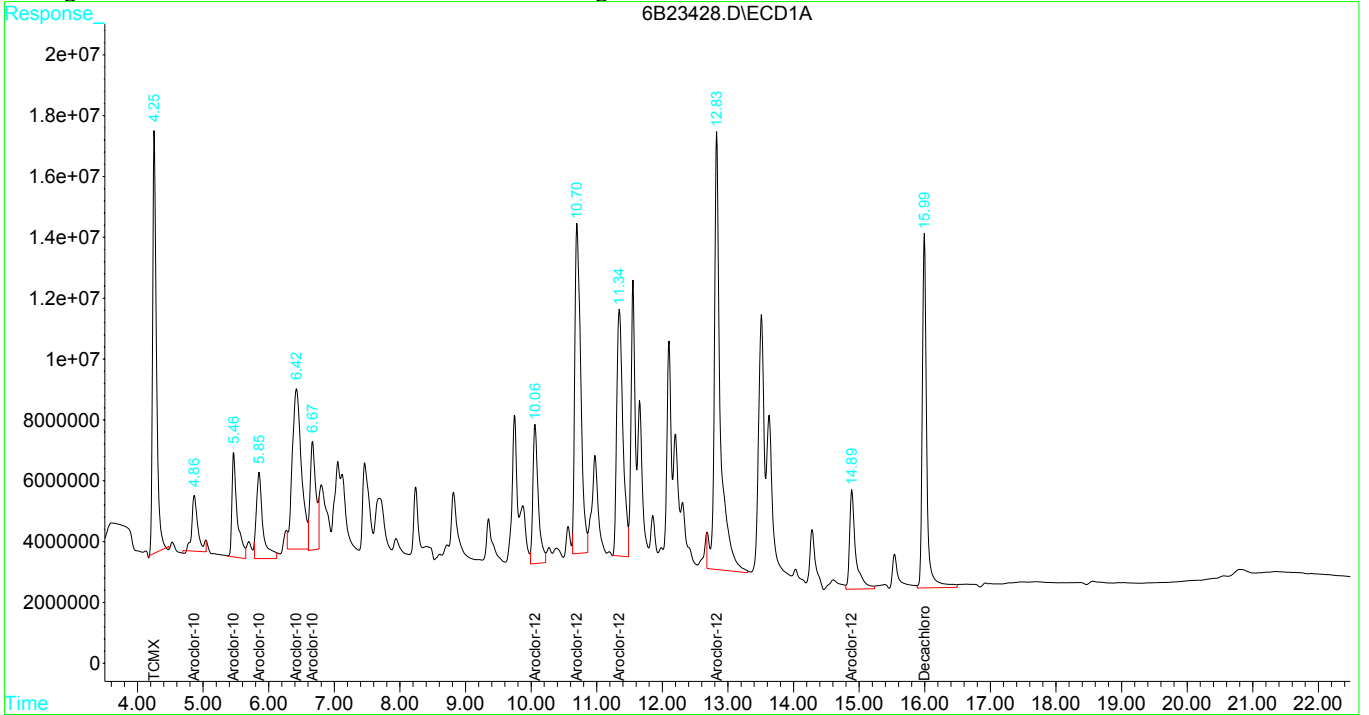
-----  
 (f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
 6B23428.D 80820925.M Fri Oct 12 13:27:22 2018 SS

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD6\DATA\20181012\6B23428.D\ECD1A.CH Vial: 96  
Signal #2 : G:\HPCHEM\GCECD6\DATA\20181012\6B23428.D\ECD2B.CH  
Acq On : 12 Oct 2018 12:32 Operator: RL  
Sample : SEQ-CCV Inst : GCECD-6  
Misc : Multiplr: 1.00  
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
Quant Time: Oct 12 13:26 2018 Quant Results File: 80820925.RES

Quant Method : G:\HPCHEM\G...\80820925.M (Chemstation Integrator)  
Title : PCBs by EPA Method 8082  
Last Update : Wed Sep 26 13:16:10 2018  
Response via : Multiple Level Calibration  
DataAcq Meth : RUNPCB.M

Volume Inj. : 1ul  
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info: 30M x 0.53mm x 0.42um



# CALIBRATION VERIFICATION SUMMARY

**Client:** Peak Environmental  
**Work Order:** 8100452

Lab Sample ID (500): S8J1201-CCV3(1)      Init. Calib. Date(s): 09/25/2018  
 File ID: 6B23452.D      Date Analyzed: 10/12/2018 22:38  
 PCBs: Column 1      Matrix: Soil

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Average-Aroclor-1016	-----	-----	-----	489212	500467	2.30
Aroclor-1016 (1)	04.86	04.76	04.96	211764	226495	7.00
Aroclor-1016 (2)	05.47	05.37	05.57	432364	458916	6.10
Aroclor-1016 (3)	05.85	05.75	05.95	311160	403781	29.80
Aroclor-1016 (4)	06.42	06.32	06.52	1066628	984666	7.70
Aroclor-1016 (5)	06.66	06.56	06.76	424144	428477	1.00
Average-Aroclor-1260	-----	-----	-----	963897	967087	0.30
Aroclor-1260 (1)	10.06	09.96	10.16	578436	511702	11.50
Aroclor-1260 (2)	10.70	10.60	10.80	1202407	1375504	14.40
Aroclor-1260 (3)	11.34	11.24	11.44	1000381	995055	0.50
Aroclor-1260 (4)	12.83	12.73	12.93	1648039	1527679	7.30
Aroclor-1260 (5)	14.89	14.79	14.99	390220	425497	9.00
Tetrachloro-m-xylene	04.25	04.15	04.35	12039880	12060070	0.20
Decachlorobiphenyl	16.00	15.90	16.10	10947110	11517900	5.20

**Average %D:** 8.31

\* - Outside of QC limits

F-VII



9.8.



# CALIBRATION VERIFICATION SUMMARY

**Client:** Peak Environmental  
**Work Order:** 8100452

Lab Sample ID (500): S8J1201-CCV3(2)      Init. Calib. Date(s): 09/25/2018  
 File ID: 6B23452.D      Date Analyzed: 10/12/2018 22:38  
 PCBs      Column 2      Matrix: Soil

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Average-Aroclor-1016 [2C]	-----	-----	-----	185625	205202	10.50
Aroclor-1016 (1) [2C]	06.27	06.17	06.37	89712	102332	14.10
Aroclor-1016 (2) [2C]	07.13	07.03	07.23	182386	202774	11.20
Aroclor-1016 (3) [2C]	07.68	07.58	07.78	77154	92581	20.00
Aroclor-1016 (4) [2C]	08.20	08.10	08.30	407320	428289	5.10
Aroclor-1016 (5) [2C]	08.49	08.39	08.59	171552	200033	16.60
Average-Aroclor-1260 [2C]	-----	-----	-----	297563	322063	8.20
Aroclor-1260 (1) [2C]	12.45	12.35	12.55	211007	235643	11.70
Aroclor-1260 (2) [2C]	12.95	12.85	13.05	267464	309658	15.80
Aroclor-1260 (3) [2C]	13.33	13.23	13.43	239078	236292	1.20
Aroclor-1260 (4) [2C]	14.68	14.58	14.78	218661	230188	5.30
Aroclor-1260 (5) [2C]	15.28	15.18	15.38	551606	598535	8.50
Tetrachloro-m-xylene [2C]	05.25	05.15	05.35	4999281	5504700	10.10
Decachlorobiphenyl [2C]	20.24	20.14	20.34	5281753	5213400	1.30

**Average %D:** 10.08

\* - Outside of QC limits

F-VII



9.8.

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD6\DATA\20181012\6B23452.D\ECD1A.CH Vial: 96  
 Signal #2 : G:\HPCHEM\GCECD6\DATA\20181012\6B23452.D\ECD2B.CH  
 Acq On : 12 Oct 2018 22:38 Operator: RL  
 Sample : SEQ-CCV Inst : GCECD-6  
 Misc : Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
 Quant Time: Oct 13 11:53 2018 Quant Results File: 80820925.RES

Quant Method : G:\HPCHEM\G...\80820925.M (Chemstation Integrator)  
 Title : PCBs by EPA Method 8082  
 Last Update : Wed Sep 26 13:16:10 2018  
 Response via : Initial Calibration  
 DataAcq Meth : RUNPCB.M

Volume Inj. : 1ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
<b>System Monitoring Compounds</b>						
1) S TCMX	4.25	5.25	603.0E6	275.2E6	50.084	55.055
Spiked Amount	50.000	Range	40 - 149	Recovery	= 100.17%	110.11%
2) S Decachlorobiphen	16.00	20.24	575.9E6	260.7E6	52.607	49.353
Spiked Amount	50.000	Range	52 - 136	Recovery	= 105.21%	98.71%
<b>Target Compounds</b>						
3) L3 Aroclor-1016 (1)	4.86	6.27	113.2E6	51165995	534.781m	570.335
4) L3 Aroclor-1016 (2)	5.47	7.13	229.5E6	101.4E6	530.706	555.892
5) L3 Aroclor-1016 (3)	5.85	7.68	201.9E6	46290428	648.831m	604.758
6) L3 Aroclor-1016 (4)	6.42	8.20	492.3E6	214.1E6	461.579m	525.741
7) L3 Aroclor-1016 (5)	6.66	8.49	214.2E6	100.0E6	505.108m	583.008
Sum Aroclor-1016 (1)			1251.2E6	513.0E6	2681.005	2839.734
Average Aroclor-1016 (1)					536.201	567.947
Sum Aroclor-1221 (1)			0	0	N.D.	N.D.
Average Aroclor-1221 (1)					0.000	0.000
Sum Aroclor-1232 (1)			0	0	N.D.	N.D.
Average Aroclor-1232 (1)					0.000	0.000
Sum Aroclor-1242 (1)			0	0	N.D.	N.D.
Average Aroclor-1242 (1)					0.000	0.000
Sum Aroclor-1248 (1)			0	0	N.D.	N.D.
Average Aroclor-1248 (1)					0.000	0.000
Sum Aroclor-1254 (1)			0	0	N.D.	N.D.
Average Aroclor-1254 (1)					0.000	0.000
28) L9 Aroclor-1260 (1)	10.06	12.45	255.9E6	117.8E6	442.316m	558.378 #
29) L9 Aroclor-1260 (2)	10.70	12.95	687.8E6	154.8E6	571.979m	578.878
30) L9 Aroclor-1260 (3)	11.34	13.33	497.5E6	118.1E6	497.338m	494.174
31) L9 Aroclor-1260 (4)	12.83	14.68	763.8E6	115.1E6	463.484m	526.359
32) L9 Aroclor-1260 (5)	14.89	15.28	212.7E6	299.3E6	545.200	542.539
Sum Aroclor-1260 (1)			2417.7E6	805.2E6	2520.318	2700.327
Average Aroclor-1260 (1)					504.064	540.065
Sum Aroclor-1262 (1)			0	0	N.D.	N.D.
Average Aroclor-1262 (1)					0.000	0.000
Sum Aroclor-1268 (1)			0	0	N.D.	N.D.
Average Aroclor-1268 (1)					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
 6B23452.D 80820925.M Sat Oct 13 11:58:23 2018 SS

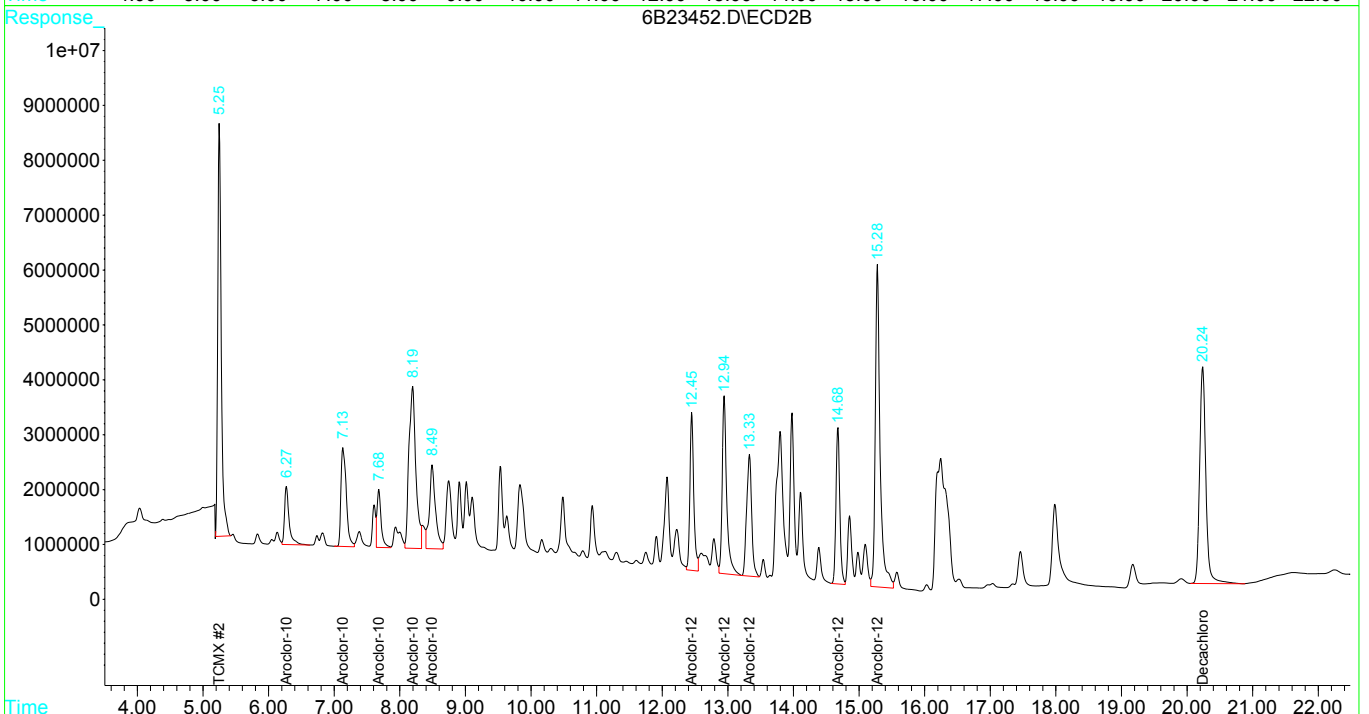
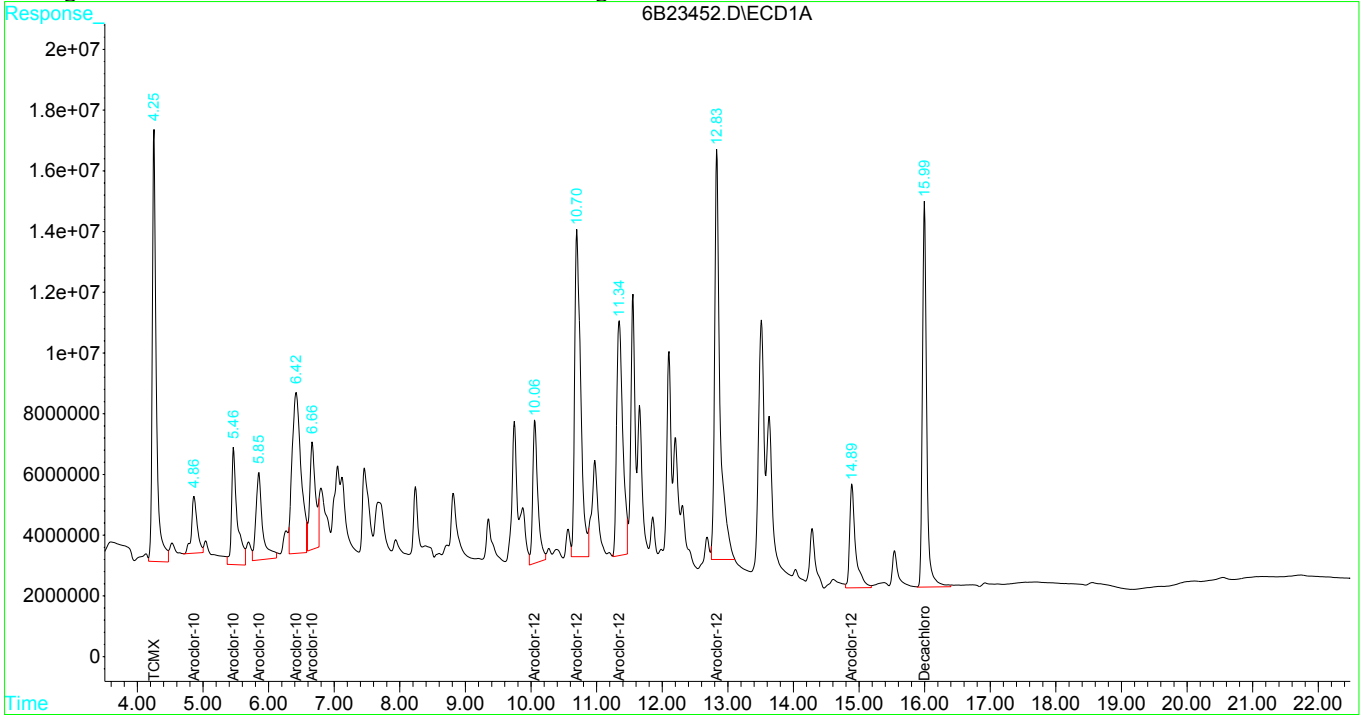


Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD6\DATA\20181012\6B23452.D\ECD1A.CH Vial: 96  
Signal #2 : G:\HPCHEM\GCECD6\DATA\20181012\6B23452.D\ECD2B.CH  
Acq On : 12 Oct 2018 22:38 Operator: RL  
Sample : SEQ-CCV Inst : GCECD-6  
Misc : Multiplr: 1.00  
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
Quant Time: Oct 13 11:53 2018 Quant Results File: 80820925.RES

Quant Method : G:\HPCHEM\G...\80820925.M (Chemstation Integrator)  
Title : PCBs by EPA Method 8082  
Last Update : Wed Sep 26 13:16:10 2018  
Response via : Multiple Level Calibration  
DataAcq Meth : RUNPCB.M

Volume Inj. : 1ul  
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info: 30M x 0.53mm x 0.42um



8'6



AQUA PRO-TECH LABORATORIES  
*Certified Environmental Testing*

## GC

Peak Environmental  
Work Order: 8100452  
Project: Ridgewood

10  
10.

# ANALYSIS DATA SHEET

Extractable Petroleum Hydrocarbons Category 2 - NJDEP-EPH-CAT2

Client: Peak Environmental Project: Ridgewood  
Client Sample ID: Blank Work Order: 8100452  
Lab Sample ID: B8J1103-BLK1

Init/Final Vol:	10 g / 2 mL	Prep Date:	10/11/2018 08:17	File ID:	E22949.D
		Prep Batch:	B8J1103	Analyzed:	10/11/2018 21:15
		Matrix:	Soil	Sequence:	S8J1218
		Prep Method:	Sonication GC		

CAS NO.	COMPOUND	CONC. (mg/kg wet)	MDL	RL	Q
NJDEP-EPH2	Total EPH	ND	10.0	20.0	U

10  
10.1.

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\GCFID3\DATA\20181011\E22949.D Vial: 16  
 Acq On : 11 Oct 2018 9:15 pm Operator: BW  
 Sample : B8J1103-BLK1 Inst : GCFID-3  
 Misc : Multiplr: 1.00  
 IntFile : EVENTS.E  
 Quant Time: Oct 12 16:06 2018 Quant Results File: ALIP1106.RES

Quant Method : G:\HPCHEM\G...\ALIP1106.M (Chemstation Integrator)  
 Title : Extractable Petroleum Hydrocarbons Aliphatics  
 Last Update : Tue Sep 25 10:37:10 2018  
 Response via : Initial Calibration  
 DataAcq Meth : EPHALIP.M

Volume Inj. : 1 ul  
 Signal Phase : Rxi-5ms  
 Signal Info : 30M x 0.32mm x 0.25 df

Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
9) o-Terphenyl	13.57	580602	26.368 mg/L
11) Chlorooctadecane	14.45	400643	23.543 mg/L

10  
10.1.

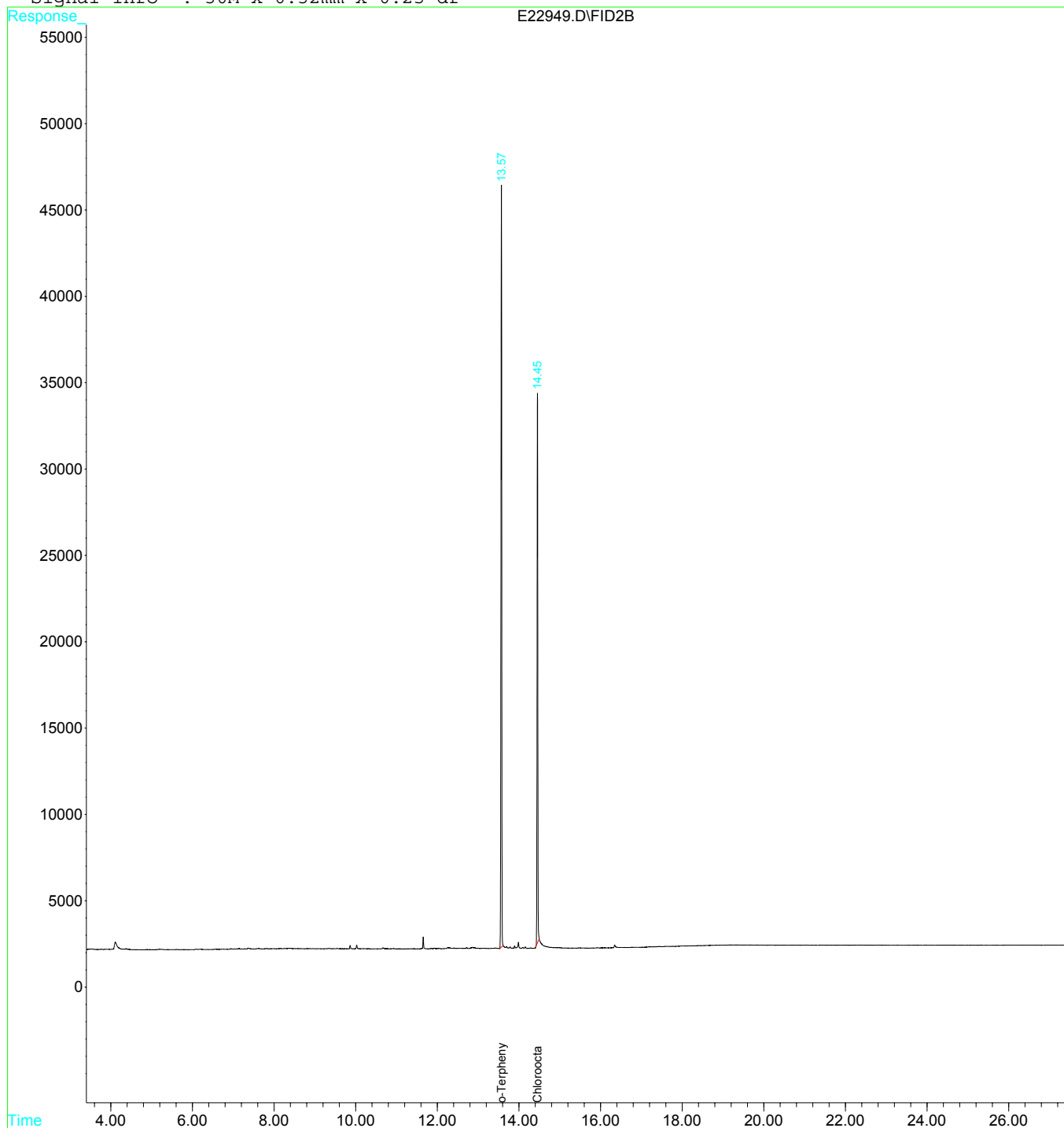
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 (f)=RT Delta > 1/2 Window (m)=manual int.  
 E22949.D ALIP1106.M Fri Oct 12 16:06:45 2018 SS

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\GCFID3\DATA\20181011\E22949.D Vial: 16  
Acq On : 11 Oct 2018 9:15 pm Operator: BW  
Sample : B8J1103-BLK1 Inst : GCFID-3  
Misc : Multiplr: 1.00  
IntFile : EVENTS.E  
Quant Time: Oct 12 16:06 2018 Quant Results File: ALIP1106.RES

Quant Method : G:\HPCHEM\G...\ALIP1106.M (Chemstation Integrator)  
Title : Extractable Petroleum Hydrocarbons Aliphatics  
Last Update : Tue Sep 25 10:37:10 2018  
Response via : Multiple Level Calibration  
DataAcq Meth : EPHALIP.M

Volume Inj. : 1 ul  
Signal Phase : Rxi-5ms  
Signal Info : 30M x 0.32mm x 0.25 df



10  
10.1.

# ANALYSIS DATA SHEET

Extractable Petroleum Hydrocarbons Category 2 - NJDEP-EPH-CAT2

**Client:** Peak Environmental  
**Client Sample ID:** NTP-1A  
**Lab Sample ID:** 8100452-01  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 00:00	Prep Date:	10/11/18 08:17	File ID:	E22935.D
Init/Final Vol:	10 g / 2 mL	Prep Batch:	B8J1103	Analyzed:	10/11/18 12:51
Dilution:	1	Matrix:	Soil	Sequence:	S8J1218
Percent Solids:	89.91	Prep Method:	Sonication GC		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
NJDEP-EPH2	Total EPH	62.8	11.1	22.2	

10  
10.2.

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit

F-I



Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\GCFID3\DATA\20181011\E22935.D Vial: 2  
 Acq On : 11 Oct 2018 12:51 pm Operator: BW  
 Sample : 8100452-01 Inst : GCFID-3  
 Misc : Multiplr: 1.00  
 IntFile : EVENTS.E  
 Quant Time: Oct 11 13:42 2018 Quant Results File: ALIP1106.RES

Quant Method : G:\HPCHEM\G...\ALIP1106.M (Chemstation Integrator)  
 Title : Extractable Petroleum Hydrocarbons Aliphatics  
 Last Update : Tue Sep 25 10:37:10 2018  
 Response via : Initial Calibration  
 DataAcq Meth : EPHALIP.M

Volume Inj. : 1 ul  
 Signal Phase : Rxi-5ms  
 Signal Info : 30M x 0.32mm x 0.25 df

Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
9) o-Terphenyl	13.57	574237	26.079 mg/L
11) Chlorooctadecane	14.46	417116	24.511 mg/L
25) Total EPH	13.57	8160091	332.829 mg/L m

10  
10.2

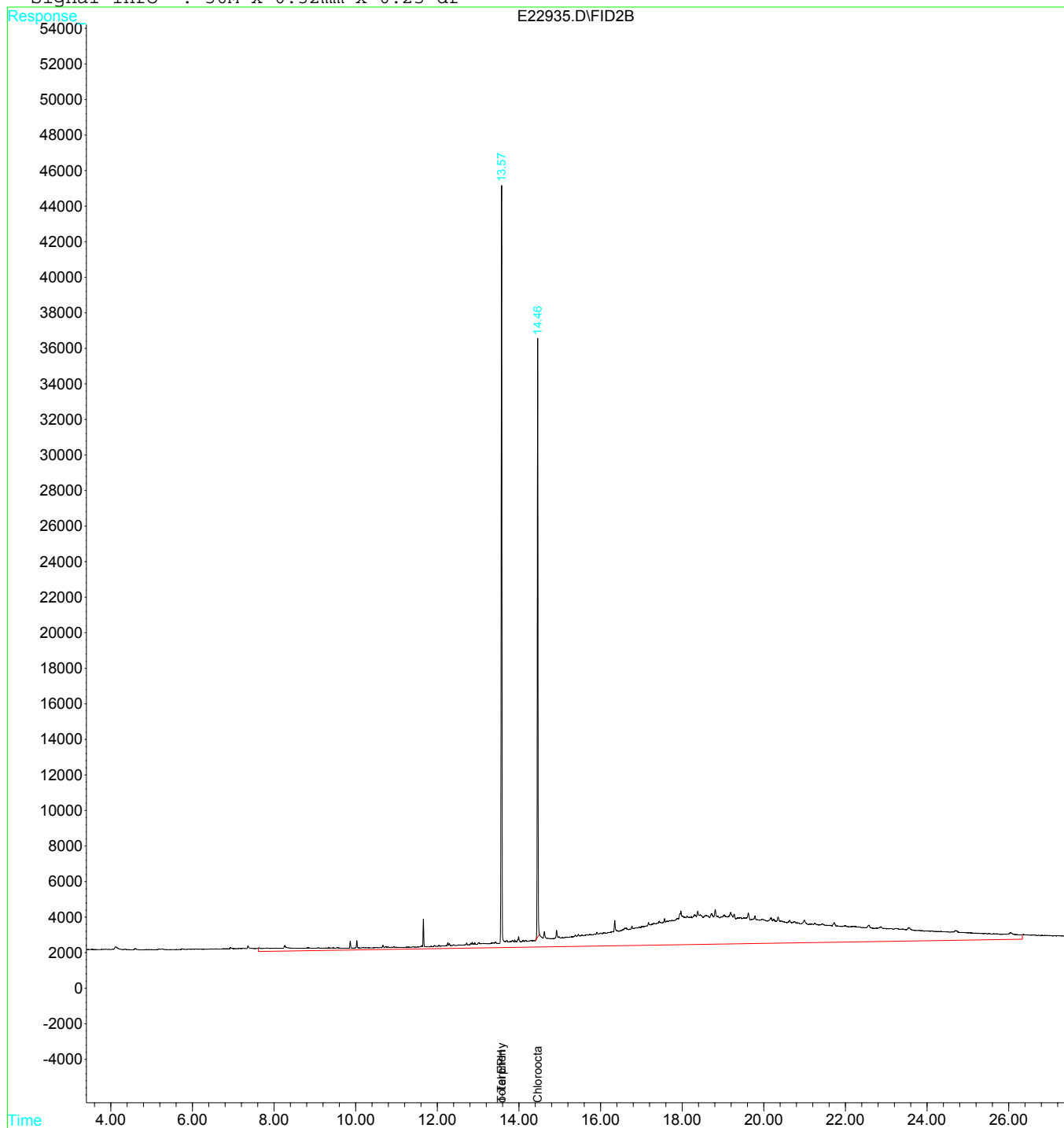
-----  
 (f)=RT Delta > 1/2 Window (m)=manual int.  
 E22935.D ALIP1106.M Fri Oct 12 16:06:24 2018 SS

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\GCFID3\DATA\20181011\E22935.D Vial: 2  
Acq On : 11 Oct 2018 12:51 pm Operator: BW  
Sample : 8100452-01 Inst : GCFID-3  
Misc : Multiplr: 1.00  
IntFile : EVENTS.E  
Quant Time: Oct 11 13:42 2018 Quant Results File: ALIP1106.RES

Quant Method : G:\HPCHEM\G...\ALIP1106.M (Chemstation Integrator)  
Title : Extractable Petroleum Hydrocarbons Aliphatics  
Last Update : Tue Sep 25 10:37:10 2018  
Response via : Multiple Level Calibration  
DataAcq Meth : EPHALIP.M

Volume Inj. : 1 ul  
Signal Phase : Rxi-5ms  
Signal Info : 30M x 0.32mm x 0.25 df



10  
10.2.

# ANALYSIS DATA SHEET

Extractable Petroleum Hydrocarbons Category 2 - NJDEP-EPH-CAT2

**Client:** Peak Environmental  
**Client Sample ID:** NTP-2A  
**Lab Sample ID:** 8100452-02  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 00:00	Prep Date:	10/11/18 08:17	File ID:	E22936.D
Init/Final Vol:	10 g / 2 mL	Prep Batch:	B8J1103	Analyzed:	10/11/18 13:27
Dilution:	1	Matrix:	Soil	Sequence:	S8J1218
Percent Solids:	92.54	Prep Method:	Sonication GC		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
NJDEP-EPH2	Total EPH	97.5	10.8	21.6	

10  
10.2.

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\GCFID3\DATA\20181011\E22936.D Vial: 3  
 Acq On : 11 Oct 2018 1:27 pm Operator: BW  
 Sample : 8100452-02 Inst : GCFID-3  
 Misc : Multiplr: 1.00  
 IntFile : EVENTS.E  
 Quant Time: Oct 11 14:07 2018 Quant Results File: ALIP1106.RES

Quant Method : G:\HPCHEM\G...\ALIP1106.M (Chemstation Integrator)  
 Title : Extractable Petroleum Hydrocarbons Aliphatics  
 Last Update : Tue Sep 25 10:37:10 2018  
 Response via : Initial Calibration  
 DataAcq Meth : EPHALIP.M

Volume Inj. : 1 ul  
 Signal Phase : Rxi-5ms  
 Signal Info : 30M x 0.32mm x 0.25 df

Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
9) o-Terphenyl	13.58	612460	27.814 mg/L
11) Chlorooctadecane	14.46	456551	26.828 mg/L
25) Total EPH	13.57	12400867	505.799 mg/L m

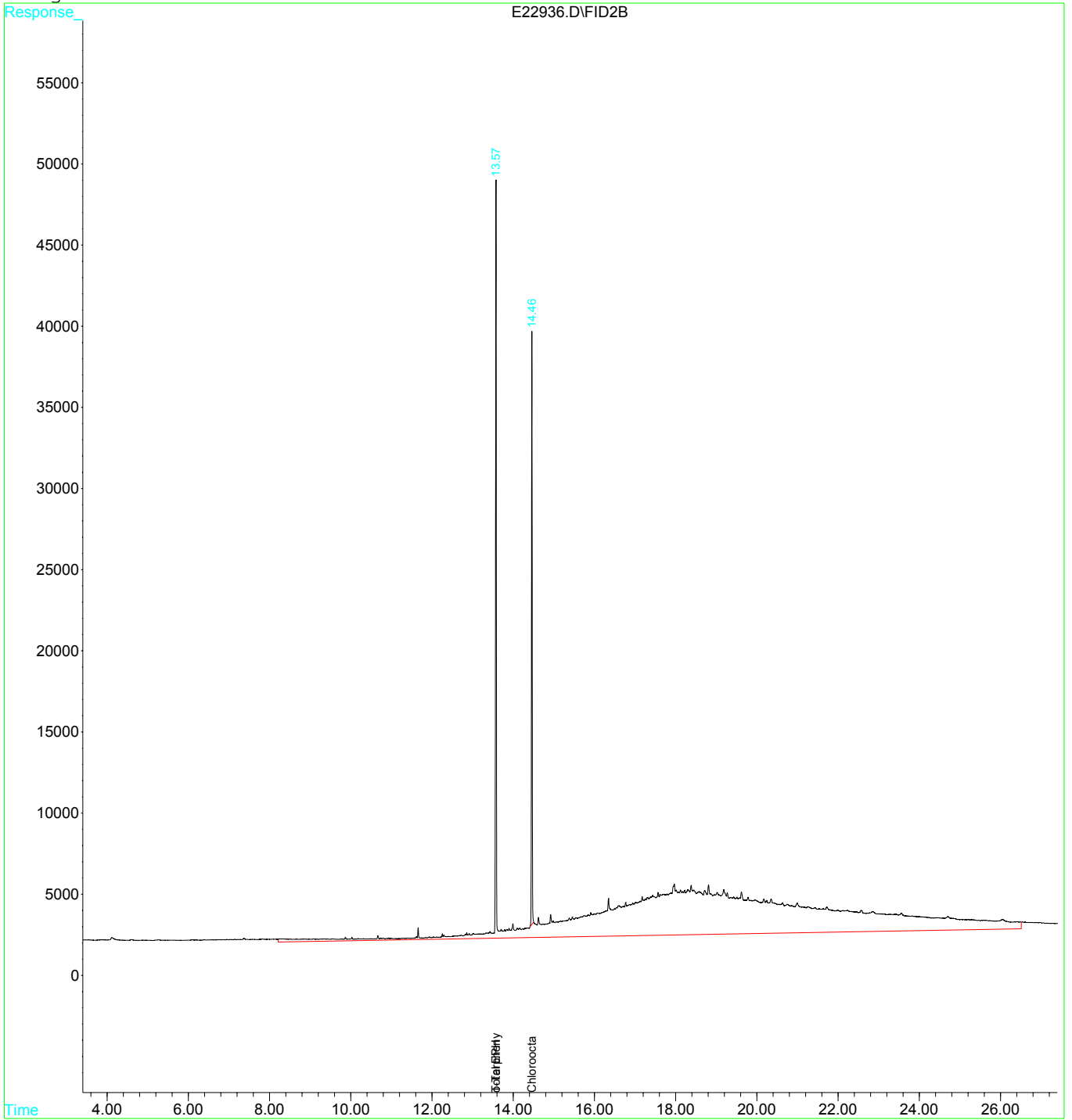
10  
10.2.

-----  
 (f)=RT Delta > 1/2 Window (m)=manual int.  
 E22936.D ALIP1106.M Fri Oct 12 16:06:27 2018 SS

Data File : G:\HPCHEM\GCFID3\DATA\20181011\E22936.D Vial: 3  
Acq On : 11 Oct 2018 1:27 pm Operator: BW  
Sample : 8100452-02 Inst : GCFID-3  
Misc : Multiplr: 1.00  
IntFile : EVENTS.E  
Quant Time: Oct 11 14:07 2018 Quant Results File: ALIP1106.RES

Quant Method : G:\HPCHEM\G...\ALIP1106.M (Chemstation Integrator)  
Title : Extractable Petroleum Hydrocarbons Aliphatics  
Last Update : Tue Sep 25 10:37:10 2018  
Response via : Multiple Level Calibration  
DataAcq Meth : EPHALIP.M

Volume Inj. : 1 ul  
Signal Phase : Rxi-5ms  
Signal Info : 30M x 0.32mm x 0.25 df



10  
10.2.

# ANALYSIS DATA SHEET

Extractable Petroleum Hydrocarbons Category 2 - NJDEP-EPH-CAT2

**Client:** Peak Environmental  
**Client Sample ID:** NTP-2B  
**Lab Sample ID:** 8100452-03  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 00:00	Prep Date:	10/11/18 08:17	File ID:	E22937.D
Init/Final Vol:	10 g / 2 mL	Prep Batch:	B8J1103	Analyzed:	10/11/18 14:02
Dilution:	1	Matrix:	Soil	Sequence:	S8J1218
Percent Solids:	92.25	Prep Method:	Sonication GC		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
NJDEP-EPH2	Total EPH	38.1	10.8	21.7	

10  
10.2.

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\GCFID3\DATA\20181011\E22937.D Vial: 4  
 Acq On : 11 Oct 2018 2:02 pm Operator: BW  
 Sample : 8100452-03 Inst : GCFID-3  
 Misc : Multiplr: 1.00  
 IntFile : EVENTS.E  
 Quant Time: Oct 11 14:32 2018 Quant Results File: ALIP1106.RES

Quant Method : G:\HPCHEM\G...\ALIP1106.M (Chemstation Integrator)  
 Title : Extractable Petroleum Hydrocarbons Aliphatics  
 Last Update : Tue Sep 25 10:37:10 2018  
 Response via : Initial Calibration  
 DataAcq Meth : EPHALIP.M

Volume Inj. : 1 ul  
 Signal Phase : Rxi-5ms  
 Signal Info : 30M x 0.32mm x 0.25 df

Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
9) o-Terphenyl	13.57	599348	27.219 mg/L
11) Chlorooctadecane	14.46	445679	26.189 mg/L
25) Total EPH	13.57	5622677	229.334 mg/L m

10  
10.2

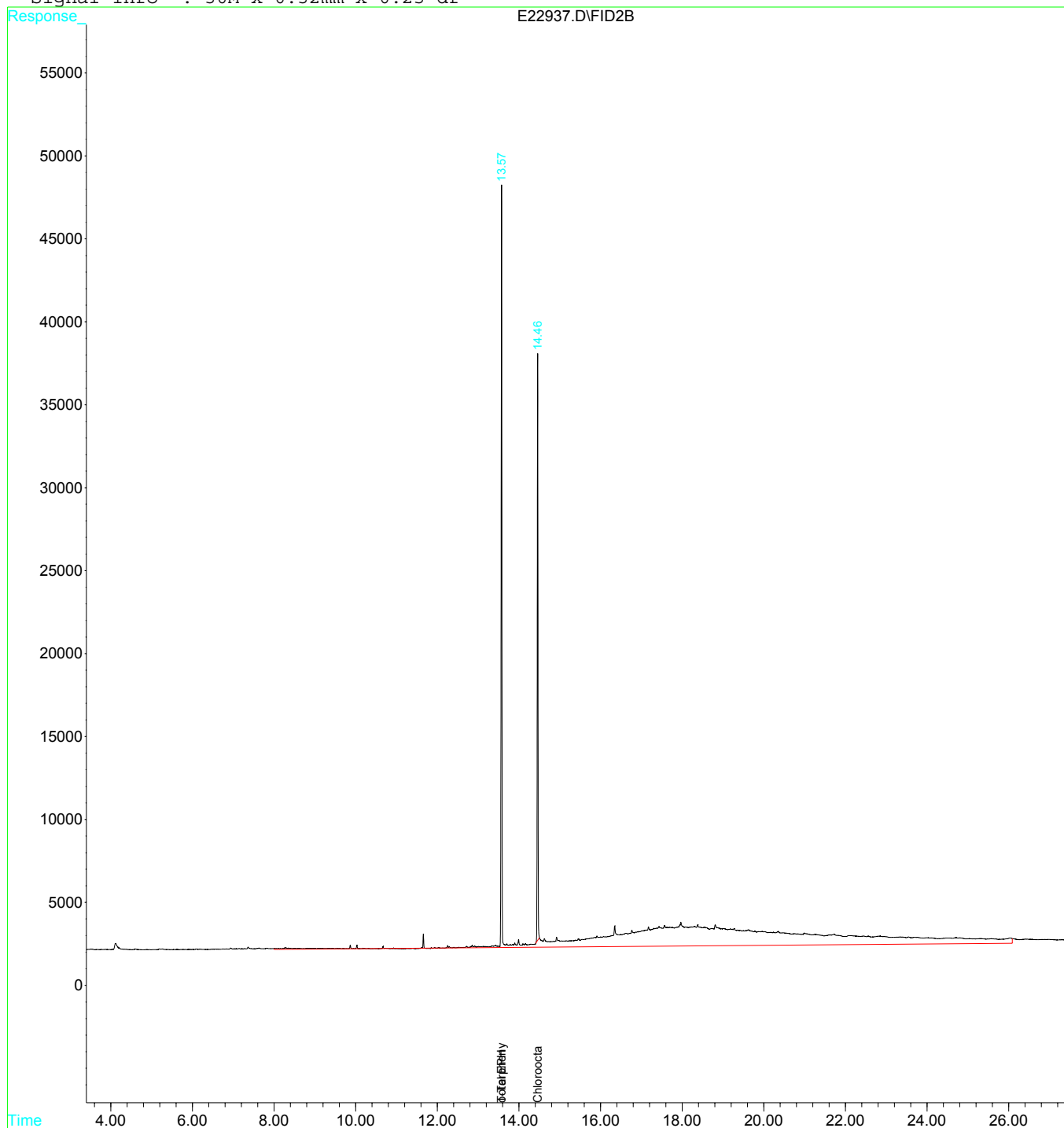
-----  
 (f)=RT Delta > 1/2 Window (m)=manual int.  
 E22937.D ALIP1106.M Fri Oct 12 16:06:30 2018 SS

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\GCFID3\DATA\20181011\E22937.D Vial: 4  
Acq On : 11 Oct 2018 2:02 pm Operator: BW  
Sample : 8100452-03 Inst : GCFID-3  
Misc : Multiplr: 1.00  
IntFile : EVENTS.E  
Quant Time: Oct 11 14:32 2018 Quant Results File: ALIP1106.RES

Quant Method : G:\HPCHEM\G...\ALIP1106.M (Chemstation Integrator)  
Title : Extractable Petroleum Hydrocarbons Aliphatics  
Last Update : Tue Sep 25 10:37:10 2018  
Response via : Multiple Level Calibration  
DataAcq Meth : EPHALIP.M

Volume Inj. : 1 ul  
Signal Phase : Rxi-5ms  
Signal Info : 30M x 0.32mm x 0.25 df



10  
10.2.



# ANALYSIS DATA SHEET

Extractable Petroleum Hydrocarbons Category 2 - NJDEP-EPH-CAT2

**Client:** Peak Environmental  
**Client Sample ID:** NTP-3B  
**Lab Sample ID:** 8100452-04  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 00:00	Prep Date:	10/11/18 08:17	File ID:	E22938.D
Init/Final Vol:	10 g / 2 mL	Prep Batch:	B8J1103	Analyzed:	10/11/18 14:37
Dilution:	1	Matrix:	Soil	Sequence:	S8J1218
Percent Solids:	91.33	Prep Method:	Sonication GC		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
NJDEP-EPH2	Total EPH	ND	10.9	21.9	U

10  
10.2.

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\GCFID3\DATA\20181011\E22938.D Vial: 5  
 Acq On : 11 Oct 2018 2:37 pm Operator: BW  
 Sample : 8100452-04 Inst : GCFID-3  
 Misc : Multiplr: 1.00  
 IntFile : EVENTS.E  
 Quant Time: Oct 11 15:28 2018 Quant Results File: ALIP1106.RES

Quant Method : G:\HPCHEM\G...\ALIP1106.M (Chemstation Integrator)  
 Title : Extractable Petroleum Hydrocarbons Aliphatics  
 Last Update : Tue Sep 25 10:37:10 2018  
 Response via : Initial Calibration  
 DataAcq Meth : EPHALIP.M

Volume Inj. : 1 ul  
 Signal Phase : Rxi-5ms  
 Signal Info : 30M x 0.32mm x 0.25 df

Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
9) o-Terphenyl	13.57	569746	25.875 mg/L
11) Chlorooctadecane	14.46	414587	24.362 mg/L

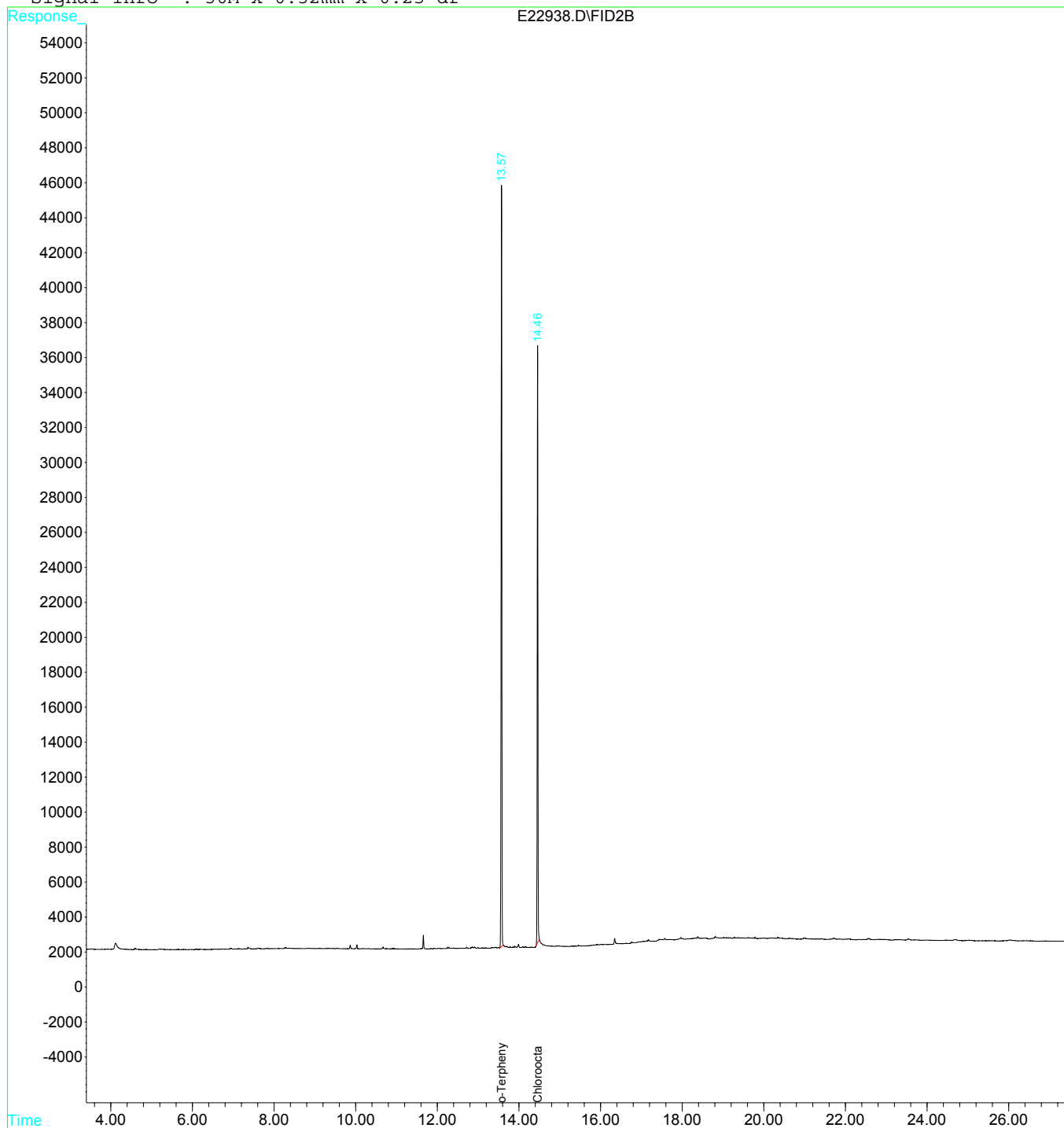
10  
10.2

-----  
 (f)=RT Delta > 1/2 Window (m)=manual int.  
 E22938.D ALIP1106.M Fri Oct 12 16:06:33 2018 SS

Data File : G:\HPCHEM\GCFID3\DATA\20181011\E22938.D Vial: 5  
Acq On : 11 Oct 2018 2:37 pm Operator: BW  
Sample : 8100452-04 Inst : GCFID-3  
Misc : Multiplr: 1.00  
IntFile : EVENTS.E  
Quant Time: Oct 11 15:28 2018 Quant Results File: ALIP1106.RES

Quant Method : G:\HPCHEM\G...\ALIP1106.M (Chemstation Integrator)  
Title : Extractable Petroleum Hydrocarbons Aliphatics  
Last Update : Tue Sep 25 10:37:10 2018  
Response via : Multiple Level Calibration  
DataAcq Meth : EPHALIP.M

Volume Inj. : 1 ul  
Signal Phase : Rxi-5ms  
Signal Info : 30M x 0.32mm x 0.25 df



10  
10.2.

# ANALYSIS DATA SHEET

Extractable Petroleum Hydrocarbons Category 2 - NJDEP-EPH-CAT2

**Client:** Peak Environmental  
**Client Sample ID:** NTP-4B  
**Lab Sample ID:** 8100452-05  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 12:35	Prep Date:	10/11/18 08:17	File ID:	E22939.D
Init/Final Vol:	10 g / 2 mL	Prep Batch:	B8J1103	Analyzed:	10/11/18 15:25
Dilution:	1	Matrix:	Soil	Sequence:	S8J1218
Percent Solids:	92.00	Prep Method:	Sonication GC		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
NJDEP-EPH2	Total EPH	ND	10.9	21.7	U

10  
10.2.

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\GCFID3\DATA\20181011\E22939.D Vial: 6  
 Acq On : 11 Oct 2018 3:25 pm Operator: BW  
 Sample : 8100452-05 Inst : GCFID-3  
 Misc : Multiplr: 1.00  
 IntFile : EVENTS.E  
 Quant Time: Oct 11 16:22 2018 Quant Results File: ALIP1106.RES

Quant Method : G:\HPCHEM\G...\ALIP1106.M (Chemstation Integrator)  
 Title : Extractable Petroleum Hydrocarbons Aliphatics  
 Last Update : Tue Sep 25 10:37:10 2018  
 Response via : Initial Calibration  
 DataAcq Meth : EPHALIP.M

Volume Inj. : 1 ul  
 Signal Phase : Rxi-5ms  
 Signal Info : 30M x 0.32mm x 0.25 df

Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
9) o-Terphenyl	13.57	571790	25.968 mg/L
11) Chlorooctadecane	14.46	422450	24.824 mg/L

10  
10.2

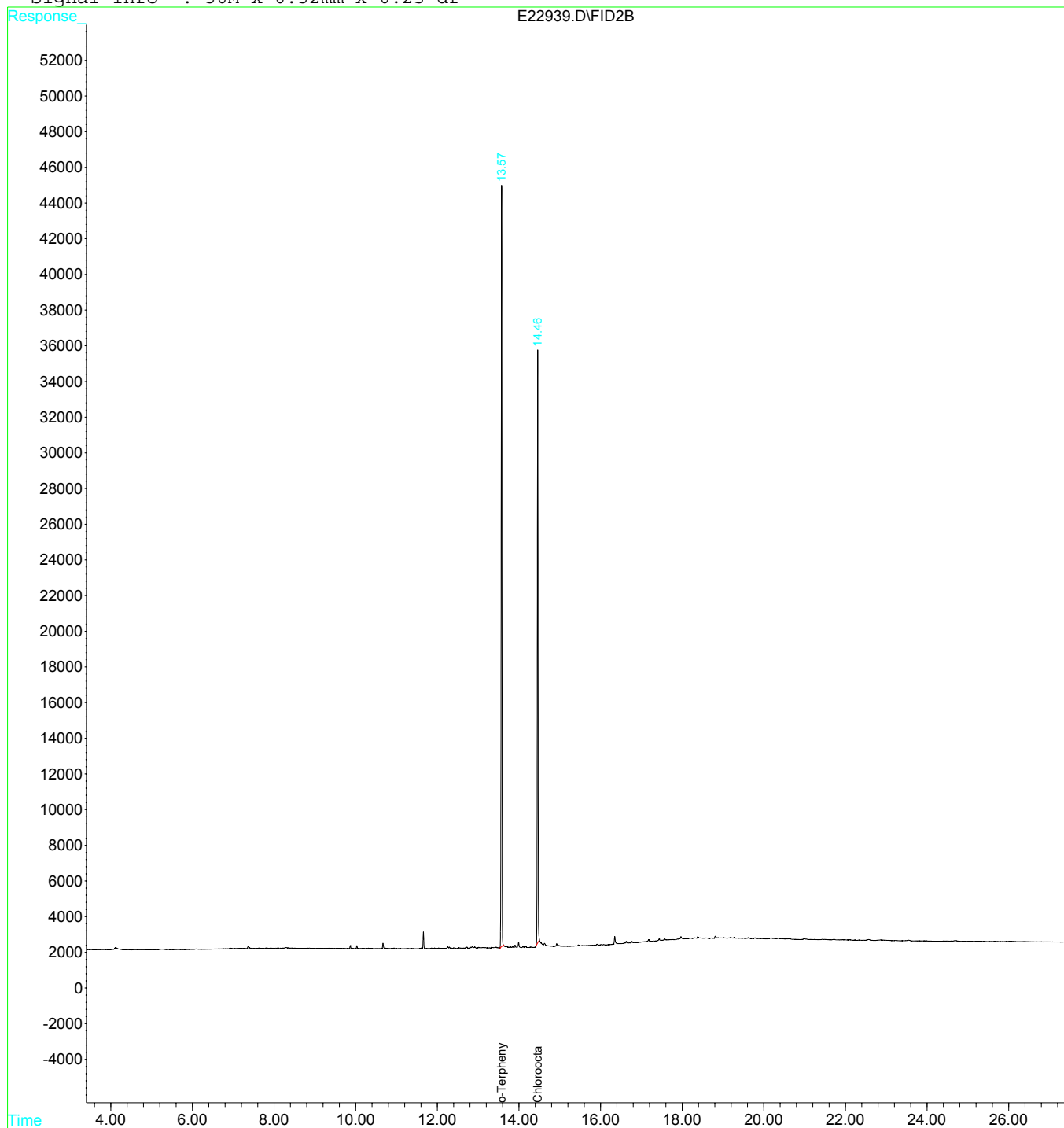
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 (f)=RT Delta > 1/2 Window (m)=manual int.  
 E22939.D ALIP1106.M Fri Oct 12 16:06:35 2018 SS

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\GCFID3\DATA\20181011\E22939.D Vial: 6  
Acq On : 11 Oct 2018 3:25 pm Operator: BW  
Sample : 8100452-05 Inst : GCFID-3  
Misc : Multiplr: 1.00  
IntFile : EVENTS.E  
Quant Time: Oct 11 16:22 2018 Quant Results File: ALIP1106.RES

Quant Method : G:\HPCHEM\G...\ALIP1106.M (Chemstation Integrator)  
Title : Extractable Petroleum Hydrocarbons Aliphatics  
Last Update : Tue Sep 25 10:37:10 2018  
Response via : Multiple Level Calibration  
DataAcq Meth : EPHALIP.M

Volume Inj. : 1 ul  
Signal Phase : Rxi-5ms  
Signal Info : 30M x 0.32mm x 0.25 df



10  
10.2.

# ANALYSIS DATA SHEET

Extractable Petroleum Hydrocarbons Category 2 - NJDEP-EPH-CAT2

**Client:** Peak Environmental  
**Client Sample ID:** NTP-6  
**Lab Sample ID:** 8100452-06  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 12:50	Prep Date:	10/11/18 08:17	File ID:	E22940.D
Init/Final Vol:	10 g / 2 mL	Prep Batch:	B8J1103	Analyzed:	10/11/18 16:00
Dilution:	1	Matrix:	Soil	Sequence:	S8J1218
Percent Solids:	87.70	Prep Method:	Sonication GC		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
NJDEP-EPH2	Total EPH	ND	11.4	22.8	U

10  
10.2.

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\GCFID3\DATA\20181011\E22940.D Vial: 7  
 Acq On : 11 Oct 2018 4:00 pm Operator: BW  
 Sample : 8100452-06 Inst : GCFID-3  
 Misc : Multiplr: 1.00  
 IntFile : EVENTS.E  
 Quant Time: Oct 11 16:56 2018 Quant Results File: ALIP1106.RES

Quant Method : G:\HPCHEM\G...\ALIP1106.M (Chemstation Integrator)  
 Title : Extractable Petroleum Hydrocarbons Aliphatics  
 Last Update : Tue Sep 25 10:37:10 2018  
 Response via : Initial Calibration  
 DataAcq Meth : EPHALIP.M

Volume Inj. : 1 ul  
 Signal Phase : Rxi-5ms  
 Signal Info : 30M x 0.32mm x 0.25 df

Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
9) o-Terphenyl	13.57	520767	23.650 mg/L
11) Chlorooctadecane	14.46	379562	22.304 mg/L

10  
10.2

-----  
 (f)=RT Delta > 1/2 Window (m)=manual int.  
 E22940.D ALIP1106.M Fri Oct 12 16:06:37 2018 SS

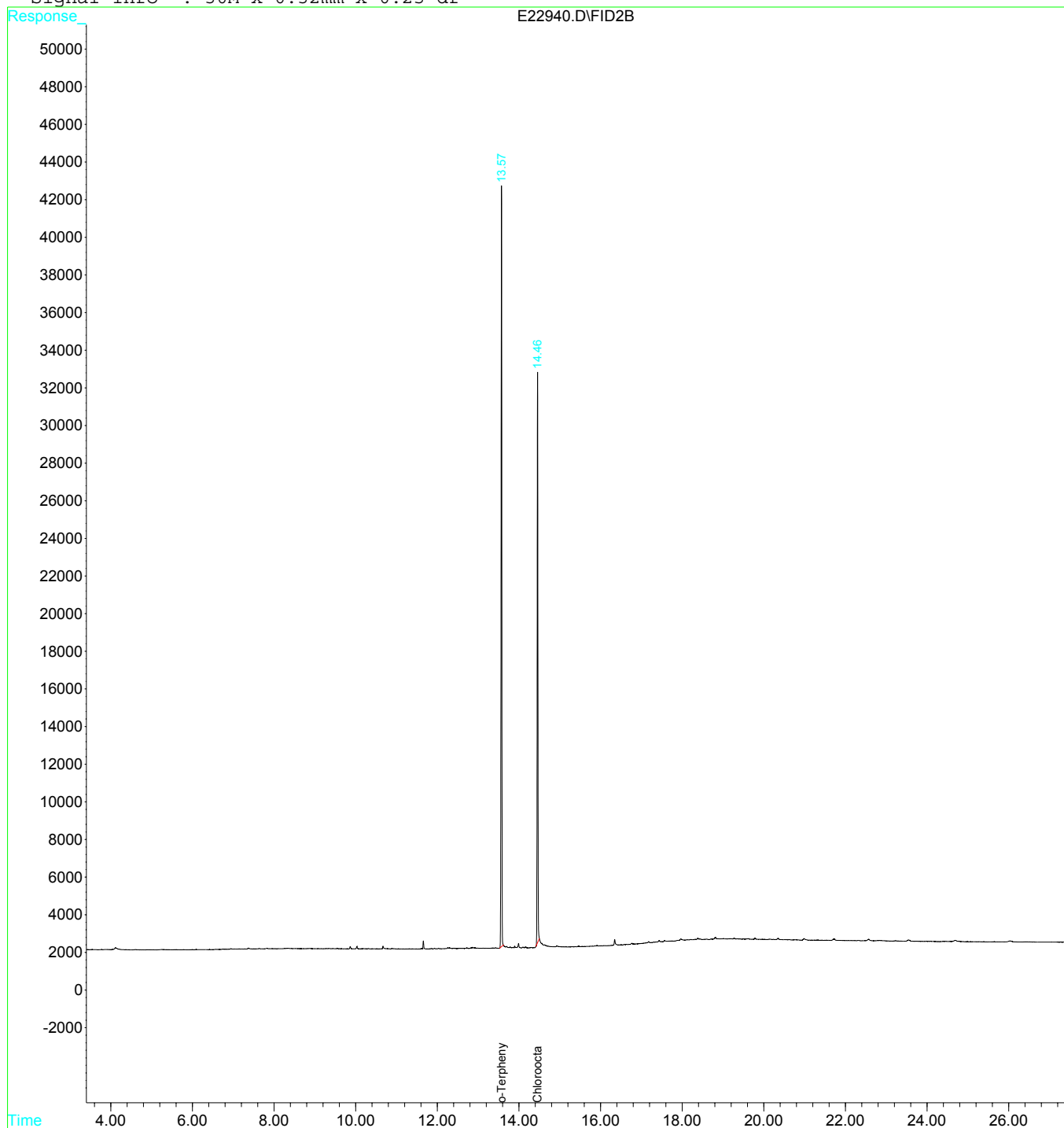


Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\GCFID3\DATA\20181011\E22940.D Vial: 7  
Acq On : 11 Oct 2018 4:00 pm Operator: BW  
Sample : 8100452-06 Inst : GCFID-3  
Misc : Multiplr: 1.00  
IntFile : EVENTS.E  
Quant Time: Oct 11 16:56 2018 Quant Results File: ALIP1106.RES

Quant Method : G:\HPCHEM\G...\ALIP1106.M (Chemstation Integrator)  
Title : Extractable Petroleum Hydrocarbons Aliphatics  
Last Update : Tue Sep 25 10:37:10 2018  
Response via : Multiple Level Calibration  
DataAcq Meth : EPHALIP.M

Volume Inj. : 1 ul  
Signal Phase : Rxi-5ms  
Signal Info : 30M x 0.32mm x 0.25 df



10  
10.2.

# ANALYSIS DATA SHEET

Extractable Petroleum Hydrocarbons Category 2 - NJDEP-EPH-CAT2

**Client:** Peak Environmental  
**Client Sample ID:** NTP-7  
**Lab Sample ID:** 8100452-07  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 13:00	Prep Date:	10/11/18 08:17	File ID:	E22941.D
Init/Final Vol:	10 g / 2 mL	Prep Batch:	B8J1103	Analyzed:	10/11/18 16:35
Dilution:	1	Matrix:	Soil	Sequence:	S8J1218
Percent Solids:	91.36	Prep Method:	Sonication GC		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
NJDEP-EPH2	Total EPH	65.8	10.9	21.9	

10  
10.2.

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\GCFID3\DATA\20181011\E22941.D Vial: 8  
 Acq On : 11 Oct 2018 4:35 pm Operator: BW  
 Sample : 8100452-07 Inst : GCFID-3  
 Misc : Multiplr: 1.00  
 IntFile : EVENTS.E  
 Quant Time: Oct 11 17:08 2018 Quant Results File: ALIP1106.RES

Quant Method : G:\HPCHEM\G...\ALIP1106.M (Chemstation Integrator)  
 Title : Extractable Petroleum Hydrocarbons Aliphatics  
 Last Update : Tue Sep 25 10:37:10 2018  
 Response via : Initial Calibration  
 DataAcq Meth : EPHALIP.M

Volume Inj. : 1 ul  
 Signal Phase : Rxi-5ms  
 Signal Info : 30M x 0.32mm x 0.25 df

Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
9) o-Terphenyl	13.57	547163	24.849 mg/L
11) Chlorooctadecane	14.46	400305	23.523 mg/L
25) Total EPH	13.57	8555007	348.936 mg/L m

10  
10.2.

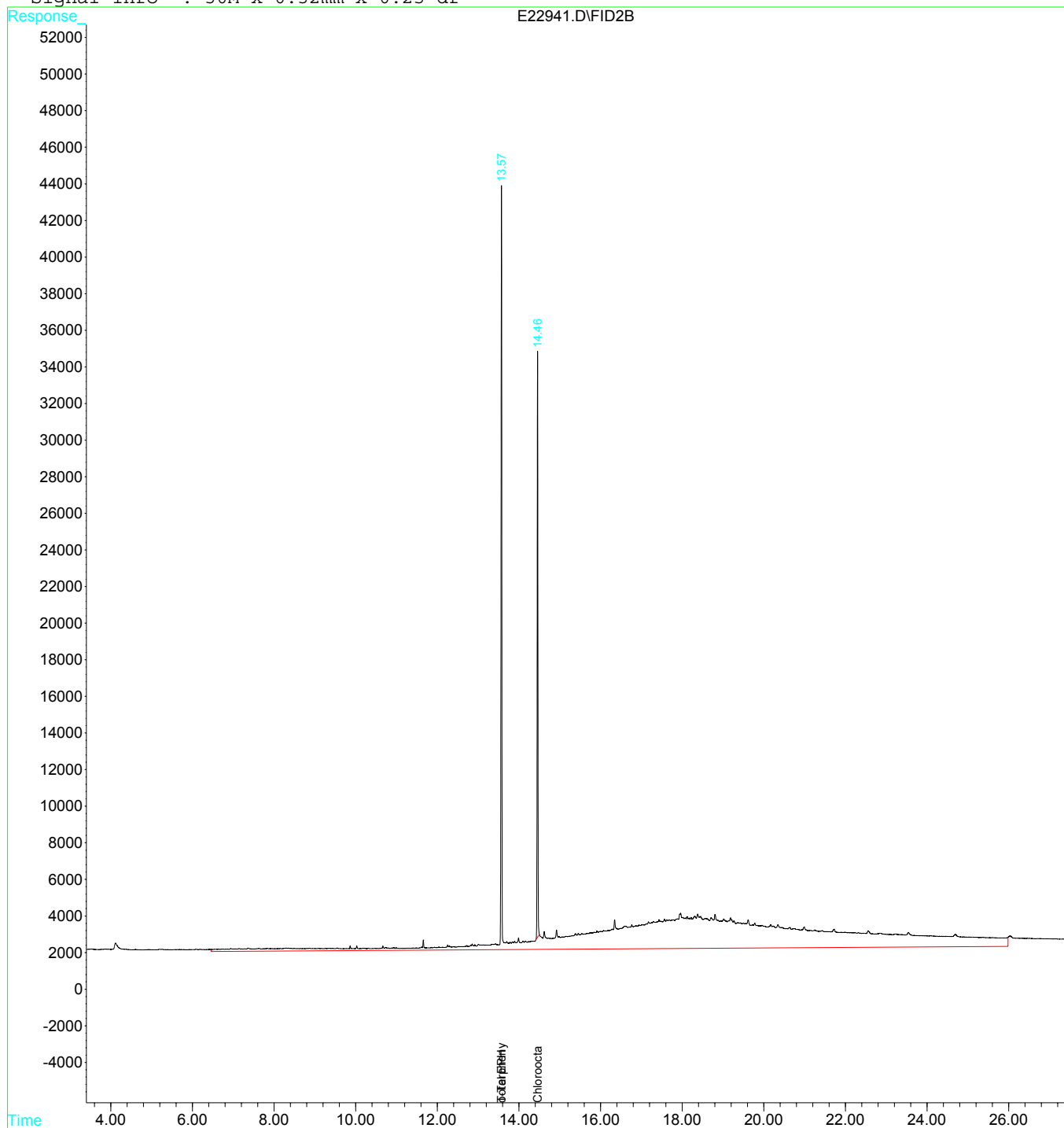
-----  
 (f)=RT Delta > 1/2 Window (m)=manual int.  
 E22941.D ALIP1106.M Fri Oct 12 16:06:40 2018 SS

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\GCFID3\DATA\20181011\E22941.D Vial: 8  
Acq On : 11 Oct 2018 4:35 pm Operator: BW  
Sample : 8100452-07 Inst : GCFID-3  
Misc : Multiplr: 1.00  
IntFile : EVENTS.E  
Quant Time: Oct 11 17:08 2018 Quant Results File: ALIP1106.RES

Quant Method : G:\HPCHEM\G...\ALIP1106.M (Chemstation Integrator)  
Title : Extractable Petroleum Hydrocarbons Aliphatics  
Last Update : Tue Sep 25 10:37:10 2018  
Response via : Multiple Level Calibration  
DataAcq Meth : EPHALIP.M

Volume Inj. : 1 ul  
Signal Phase : Rxi-5ms  
Signal Info : 30M x 0.32mm x 0.25 df



10  
10.2.

# ANALYSIS DATA SHEET

Extractable Petroleum Hydrocarbons Category 2 - NJDEP-EPH-CAT2

**Client:** Peak Environmental  
**Client Sample ID:** STP-1B  
**Lab Sample ID:** 8100452-08  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 13:15	Prep Date:	10/11/18 08:17	File ID:	E22942.D
Init/Final Vol:	10 g / 2 mL	Prep Batch:	B8J1103	Analyzed:	10/11/18 17:10
Dilution:	1	Matrix:	Soil	Sequence:	S8J1218
Percent Solids:	89.59	Prep Method:	Sonication GC		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
NJDEP-EPH2	Total EPH	ND	11.2	22.3	U

10  
10.2.

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\GCFID3\DATA\20181011\E22942.D Vial: 9  
 Acq On : 11 Oct 2018 5:10 pm Operator: BW  
 Sample : 8100452-08 Inst : GCFID-3  
 Misc : Multiplr: 1.00  
 IntFile : EVENTS.E  
 Quant Time: Oct 12 9:27 2018 Quant Results File: ALIP1106.RES

Quant Method : G:\HPCHEM\G...\ALIP1106.M (Chemstation Integrator)  
 Title : Extractable Petroleum Hydrocarbons Aliphatics  
 Last Update : Tue Sep 25 10:37:10 2018  
 Response via : Initial Calibration  
 DataAcq Meth : EPHALIP.M

Volume Inj. : 1 ul  
 Signal Phase : Rxi-5ms  
 Signal Info : 30M x 0.32mm x 0.25 df

Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
9) o-Terphenyl	13.57	553827	25.152 mg/L
11) Chlorooctadecane	14.46	410480	24.121 mg/L

10  
10.2.

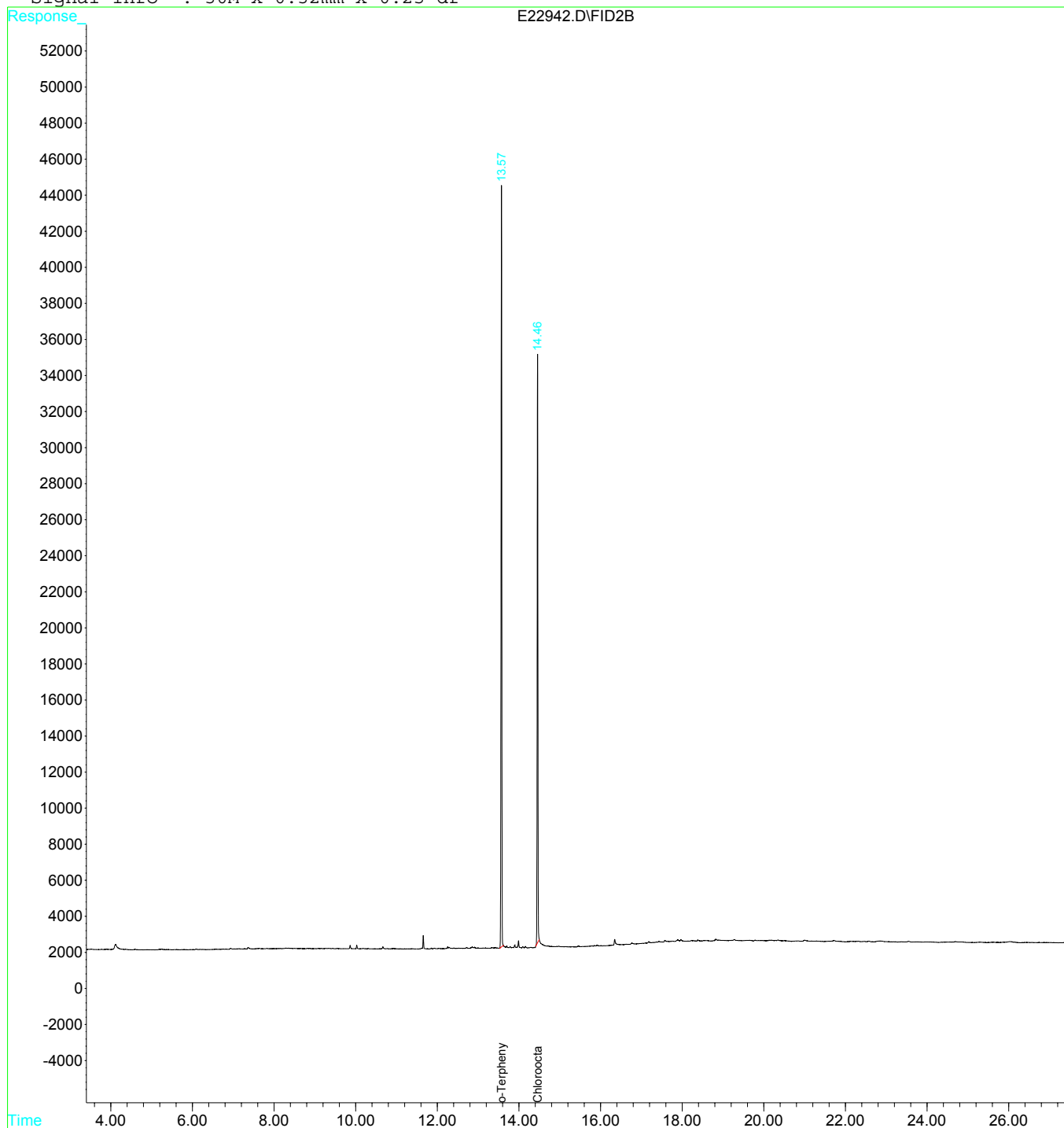
-----  
 (f)=RT Delta > 1/2 Window (m)=manual int.  
 E22942.D ALIP1106.M Fri Oct 12 16:06:43 2018 SS

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\GCFID3\DATA\20181011\E22942.D Vial: 9  
Acq On : 11 Oct 2018 5:10 pm Operator: BW  
Sample : 8100452-08 Inst : GCFID-3  
Misc : Multiplr: 1.00  
IntFile : EVENTS.E  
Quant Time: Oct 12 9:27 2018 Quant Results File: ALIP1106.RES

Quant Method : G:\HPCHEM\G...\ALIP1106.M (Chemstation Integrator)  
Title : Extractable Petroleum Hydrocarbons Aliphatics  
Last Update : Tue Sep 25 10:37:10 2018  
Response via : Multiple Level Calibration  
DataAcq Meth : EPHALIP.M

Volume Inj. : 1 ul  
Signal Phase : Rxi-5ms  
Signal Info : 30M x 0.32mm x 0.25 df



10  
10.2.

# ANALYSIS DATA SHEET

Extractable Petroleum Hydrocarbons Category 2 - NJDEP-EPH-CAT2

**Client:** Peak Environmental  
**Client Sample ID:** STP-2B  
**Lab Sample ID:** 8100452-09  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 13:30	Prep Date:	10/11/18 08:17	File ID:	E22960.D
Init/Final Vol:	10 g / 2 mL	Prep Batch:	B8J1103	Analyzed:	10/12/18 11:28
Dilution:	1	Matrix:	Soil	Sequence:	S8J1601
Percent Solids:	91.55	Prep Method:	Sonication GC		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
NJDEP-EPH2	Total EPH	ND	10.9	21.8	U

10  
10.2.

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit

F-I



Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\GCFID3\DATA\20181012\E22960.D Vial: 2  
 Acq On : 12 Oct 2018 11:28 am Operator: BW  
 Sample : 8100452-09 Inst : GCFID-3  
 Misc : Multiplr: 1.00  
 IntFile : EVENTS.E  
 Quant Time: Oct 12 13:26 2018 Quant Results File: ALIP1106.RES

Quant Method : G:\HPCHEM\G...\ALIP1106.M (Chemstation Integrator)  
 Title : Extractable Petroleum Hydrocarbons Aliphatics  
 Last Update : Tue Sep 25 10:37:10 2018  
 Response via : Initial Calibration  
 DataAcq Meth : EPHALIP.M

Volume Inj. : 1 ul  
 Signal Phase : Rxi-5ms  
 Signal Info : 30M x 0.32mm x 0.25 df

Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
9) o-Terphenyl	13.57	492675	22.375 mg/L
11) Chlorooctadecane	14.45	360379	21.177 mg/L m

10  
10.2.

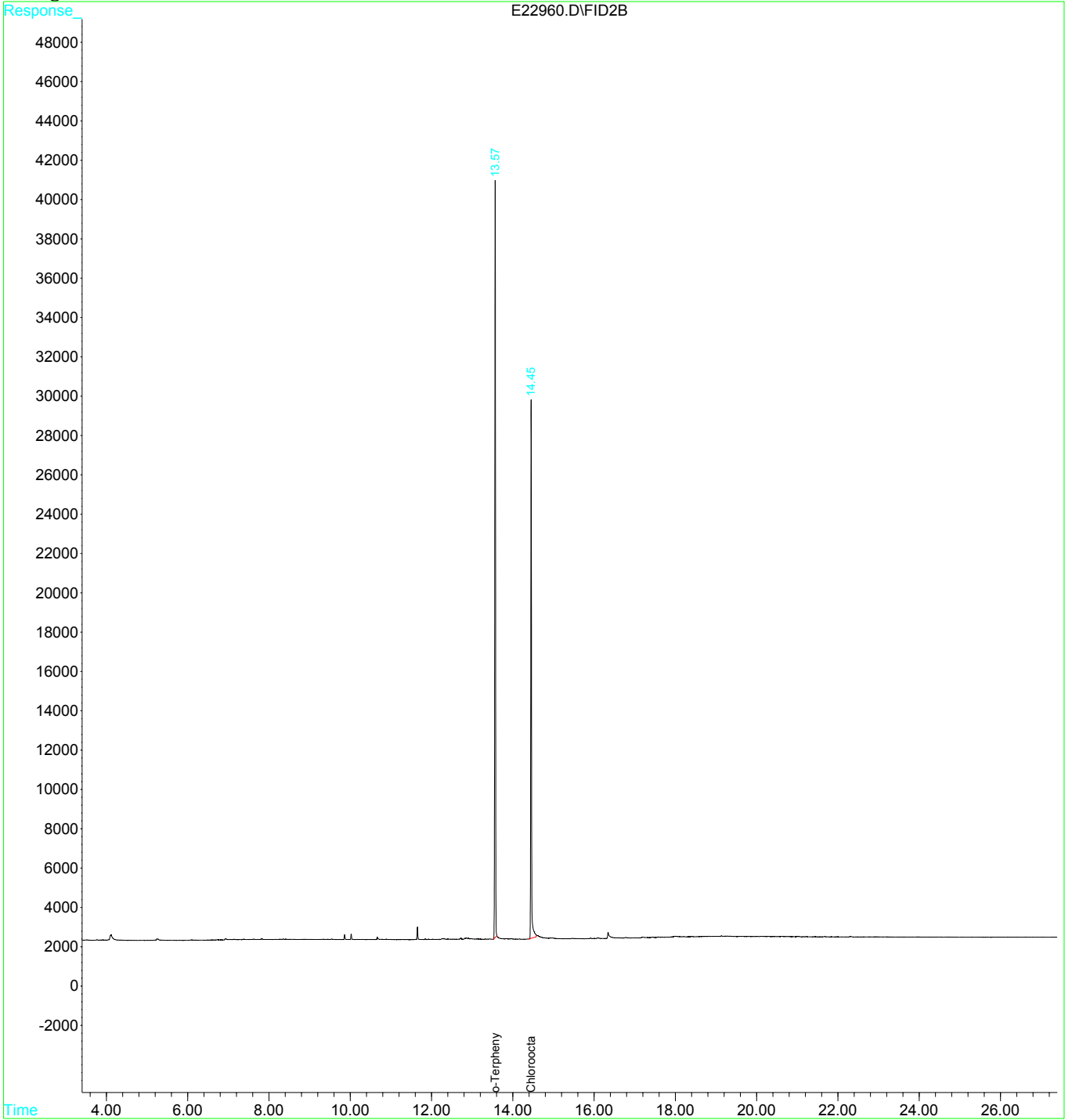
-----  
 (f)=RT Delta > 1/2 Window (m)=manual int.  
 E22960.D ALIP1106.M Tue Oct 16 10:11:51 2018 SS

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\GCFID3\DATA\20181012\E22960.D Vial: 2  
Acq On : 12 Oct 2018 11:28 am Operator: BW  
Sample : 8100452-09 Inst : GCFID-3  
Misc : Multiplr: 1.00  
IntFile : EVENTS.E  
Quant Time: Oct 12 13:26 2018 Quant Results File: ALIP1106.RES

Quant Method : G:\HPCHEM\G...\ALIP1106.M (Chemstation Integrator)  
Title : Extractable Petroleum Hydrocarbons Aliphatics  
Last Update : Tue Sep 25 10:37:10 2018  
Response via : Multiple Level Calibration  
DataAcq Meth : EPHALIP.M

Volume Inj. : 1 ul  
Signal Phase : Rxi-5ms  
Signal Info : 30M x 0.32mm x 0.25 df



10  
10.2.

# ANALYSIS DATA SHEET

Extractable Petroleum Hydrocarbons Category 2 - NJDEP-EPH-CAT2

**Client:** Peak Environmental  
**Client Sample ID:** STP-3B  
**Lab Sample ID:** 8100452-10  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 13:40	Prep Date:	10/11/18 08:17	File ID:	E22961.D
Init/Final Vol:	10 g / 2 mL	Prep Batch:	B8J1103	Analyzed:	10/12/18 12:03
Dilution:	1	Matrix:	Soil	Sequence:	S8J1601
Percent Solids:	91.53	Prep Method:	Sonication GC		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
NJDEP-EPH2	Total EPH	ND	10.9	21.9	U

10  
10.2.

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\GCFID3\DATA\20181012\E22961.D Vial: 3  
 Acq On : 12 Oct 2018 12:03 pm Operator: BW  
 Sample : 8100452-10 Inst : GCFID-3  
 Misc : Multiplr: 1.00  
 IntFile : EVENTS.E  
 Quant Time: Oct 12 13:27 2018 Quant Results File: ALIP1106.RES

Quant Method : G:\HPCHEM\G...\ALIP1106.M (Chemstation Integrator)  
 Title : Extractable Petroleum Hydrocarbons Aliphatics  
 Last Update : Tue Sep 25 10:37:10 2018  
 Response via : Initial Calibration  
 DataAcq Meth : EPHALIP.M

Volume Inj. : 1 ul  
 Signal Phase : Rxi-5ms  
 Signal Info : 30M x 0.32mm x 0.25 df

Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
9) o-Terphenyl	13.57	538206	24.442 mg/L
11) Chlorooctadecane	14.45	372031	21.861 mg/L m

10  
10.2.

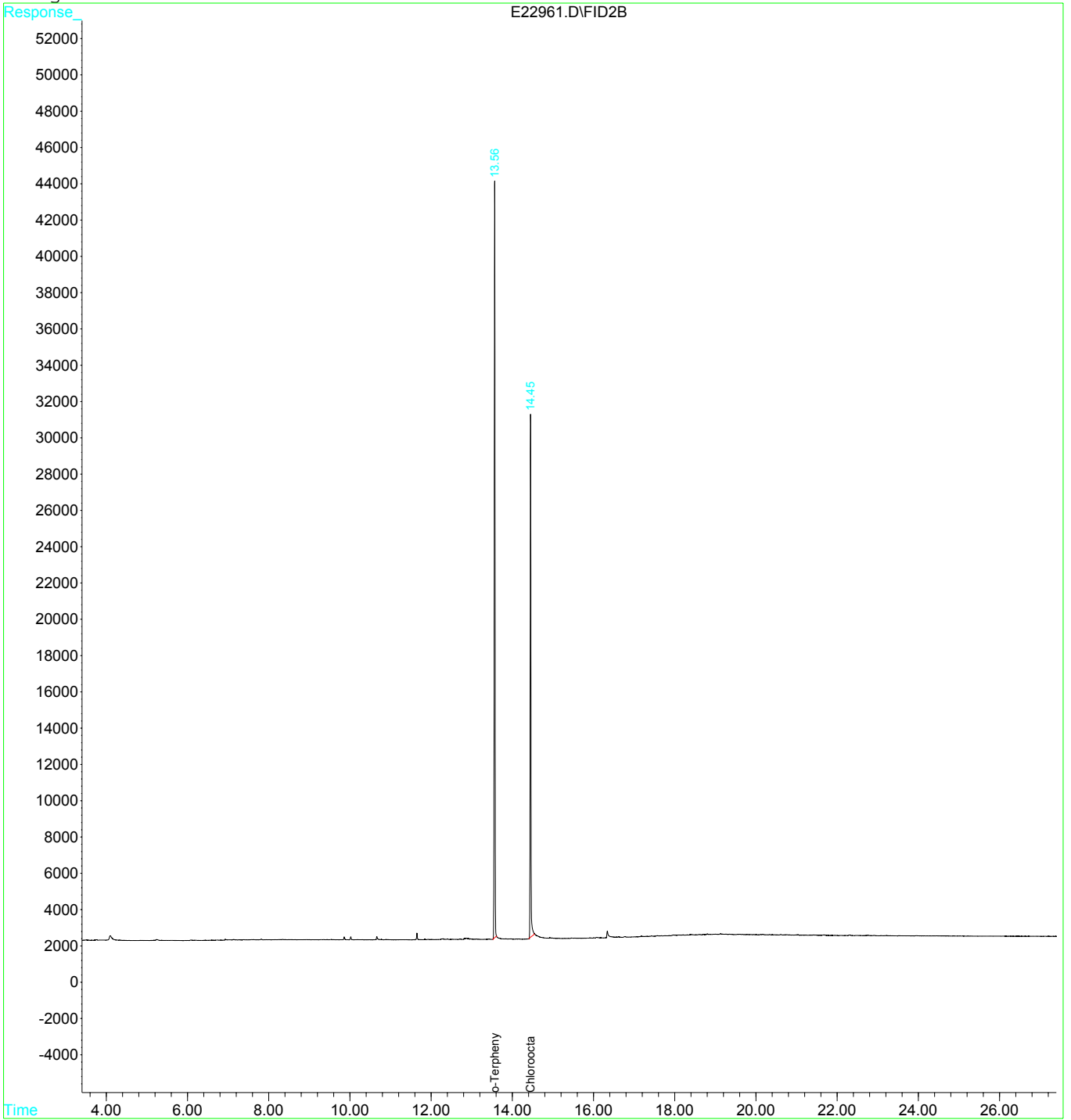
-----  
 (f)=RT Delta > 1/2 Window (m)=manual int.  
 E22961.D ALIP1106.M Tue Oct 16 10:11:54 2018 SS

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\GCFID3\DATA\20181012\E22961.D Vial: 3  
Acq On : 12 Oct 2018 12:03 pm Operator: BW  
Sample : 8100452-10 Inst : GCFID-3  
Misc : Multiplr: 1.00  
IntFile : EVENTS.E  
Quant Time: Oct 12 13:27 2018 Quant Results File: ALIP1106.RES

Quant Method : G:\HPCHEM\G...\ALIP1106.M (Chemstation Integrator)  
Title : Extractable Petroleum Hydrocarbons Aliphatics  
Last Update : Tue Sep 25 10:37:10 2018  
Response via : Multiple Level Calibration  
DataAcq Meth : EPHALIP.M

Volume Inj. : 1 ul  
Signal Phase : Rxi-5ms  
Signal Info : 30M x 0.32mm x 0.25 df



10  
10.2.

# ANALYSIS DATA SHEET

Extractable Petroleum Hydrocarbons Category 2 - NJDEP-EPH-CAT2

**Client:** Peak Environmental  
**Client Sample ID:** STP-4A  
**Lab Sample ID:** 8100452-11  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 00:00	Prep Date:	10/11/18 08:17	File ID:	E22962.D
Init/Final Vol:	10 g / 2 mL	Prep Batch:	B8J1103	Analyzed:	10/12/18 12:38
Dilution:	1	Matrix:	Soil	Sequence:	S8J1601
Percent Solids:	90.63	Prep Method:	Sonication GC		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
NJDEP-EPH2	Total EPH	ND	11.0	22.1	U

10  
10.2.

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\GCFID3\DATA\20181012\E22962.D Vial: 4  
 Acq On : 12 Oct 2018 12:38 pm Operator: BW  
 Sample : 8100452-11 Inst : GCFID-3  
 Misc : Multiplr: 1.00  
 IntFile : EVENTS.E  
 Quant Time: Oct 12 13:27 2018 Quant Results File: ALIP1106.RES

Quant Method : G:\HPCHEM\G...\ALIP1106.M (Chemstation Integrator)  
 Title : Extractable Petroleum Hydrocarbons Aliphatics  
 Last Update : Tue Sep 25 10:37:10 2018  
 Response via : Initial Calibration  
 DataAcq Meth : EPHALIP.M

Volume Inj. : 1 ul  
 Signal Phase : Rxi-5ms  
 Signal Info : 30M x 0.32mm x 0.25 df

Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
9) o-Terphenyl	13.56	556782	25.286 mg/L
11) Chlorooctadecane	14.45	381375	22.410 mg/L

10  
10.2.

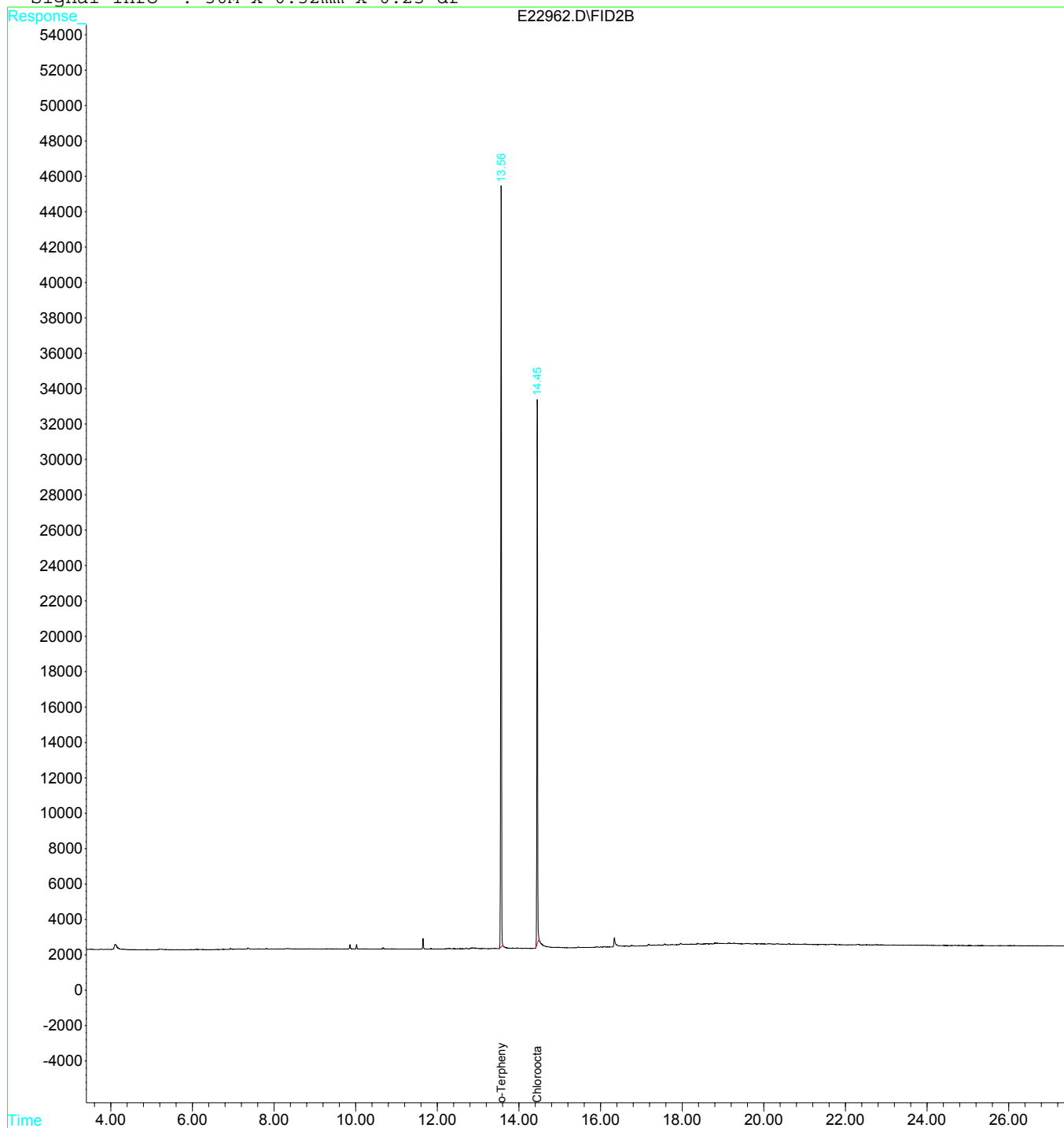
-----  
 (f)=RT Delta > 1/2 Window (m)=manual int.  
 E22962.D ALIP1106.M Tue Oct 16 10:11:57 2018 SS

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\GCFID3\DATA\20181012\E22962.D Vial: 4  
Acq On : 12 Oct 2018 12:38 pm Operator: BW  
Sample : 8100452-11 Inst : GCFID-3  
Misc : Multiplr: 1.00  
IntFile : EVENTS.E  
Quant Time: Oct 12 13:27 2018 Quant Results File: ALIP1106.RES

Quant Method : G:\HPCHEM\G...\ALIP1106.M (Chemstation Integrator)  
Title : Extractable Petroleum Hydrocarbons Aliphatics  
Last Update : Tue Sep 25 10:37:10 2018  
Response via : Multiple Level Calibration  
DataAcq Meth : EPHALIP.M

Volume Inj. : 1 ul  
Signal Phase : Rxi-5ms  
Signal Info : 30M x 0.32mm x 0.25 df



10  
10.2.



# ANALYSIS DATA SHEET

Extractable Petroleum Hydrocarbons Category 2 - NJDEP-EPH-CAT2

**Client:** Peak Environmental  
**Client Sample ID:** STP-4B  
**Lab Sample ID:** 8100452-12  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 00:00	Prep Date:	10/11/18 08:17	File ID:	E22963.D
Init/Final Vol:	10 g / 2 mL	Prep Batch:	B8J1103	Analyzed:	10/12/18 13:13
Dilution:	1	Matrix:	Soil	Sequence:	S8J1601
Percent Solids:	91.70	Prep Method:	Sonication GC		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
NJDEP-EPH2	Total EPH	ND	10.9	21.8	U

10  
10.2.

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\GCFID3\DATA\20181012\E22963.D Vial: 5  
 Acq On : 12 Oct 2018 1:13 pm Operator: BW  
 Sample : 8100452-12 Inst : GCFID-3  
 Misc : Multiplr: 1.00  
 IntFile : EVENTS.E  
 Quant Time: Oct 12 13:54 2018 Quant Results File: ALIP1106.RES

Quant Method : G:\HPCHEM\G...\ALIP1106.M (Chemstation Integrator)  
 Title : Extractable Petroleum Hydrocarbons Aliphatics  
 Last Update : Tue Sep 25 10:37:10 2018  
 Response via : Initial Calibration  
 DataAcq Meth : EPHALIP.M

Volume Inj. : 1 ul  
 Signal Phase : Rxi-5ms  
 Signal Info : 30M x 0.32mm x 0.25 df

Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
9) o-Terphenyl	13.56	542074	24.618 mg/L
11) Chlorooctadecane	14.45	375904	22.089 mg/L

10  
10.2

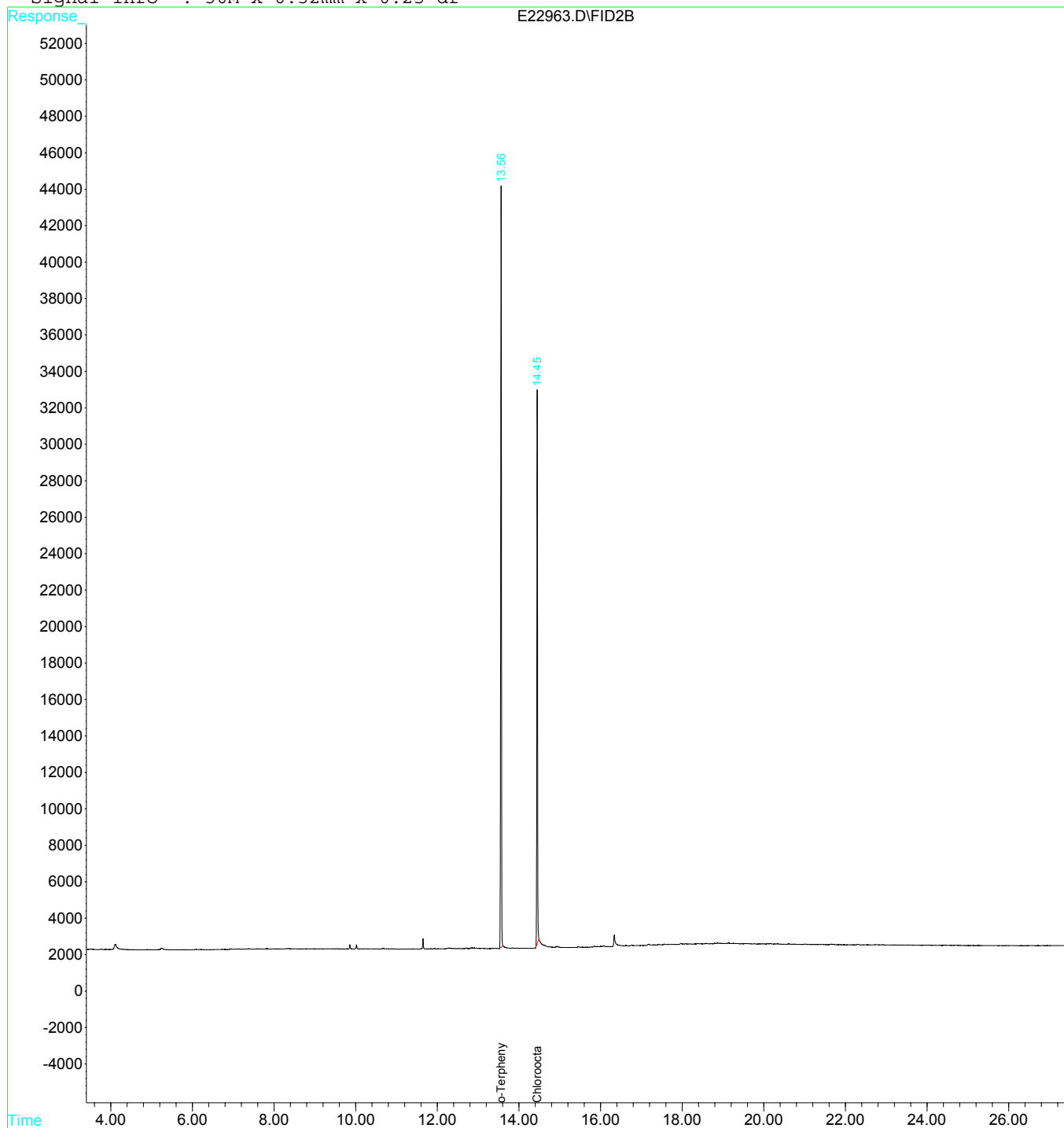
-----  
 (f)=RT Delta > 1/2 Window (m)=manual int.  
 E22963.D ALIP1106.M Tue Oct 16 10:11:59 2018 SS

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\GCFID3\DATA\20181012\E22963.D Vial: 5  
Acq On : 12 Oct 2018 1:13 pm Operator: BW  
Sample : 8100452-12 Inst : GCFID-3  
Misc : Multiplr: 1.00  
IntFile : EVENTS.E  
Quant Time: Oct 12 13:54 2018 Quant Results File: ALIP1106.RES

Quant Method : G:\HPCHEM\G...\ALIP1106.M (Chemstation Integrator)  
Title : Extractable Petroleum Hydrocarbons Aliphatics  
Last Update : Tue Sep 25 10:37:10 2018  
Response via : Multiple Level Calibration  
DataAcq Meth : EPHALIP.M

Volume Inj. : 1 ul  
Signal Phase : Rxi-5ms  
Signal Info : 30M x 0.32mm x 0.25 df



10  
10.2.

# ANALYSIS DATA SHEET

Extractable Petroleum Hydrocarbons Category 2 - NJDEP-EPH-CAT2

**Client:** Peak Environmental  
**Client Sample ID:** STP-5  
**Lab Sample ID:** 8100452-13  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 00:00	Prep Date:	10/11/18 08:17	File ID:	E22966.D
Init/Final Vol:	10 g / 2 mL	Prep Batch:	B8J1103	Analyzed:	10/12/18 15:07
Dilution:	1	Matrix:	Soil	Sequence:	S8J1601
Percent Solids:	92.63	Prep Method:	Sonication GC		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
NJDEP-EPH2	Total EPH	ND	10.8	21.6	U

10  
10.2.

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\GCFID3\DATA\20181012\E22966.D Vial: 9  
 Acq On : 12 Oct 2018 3:07 pm Operator: BW  
 Sample : 8100452-13 Inst : GCFID-3  
 Misc : Multiplr: 1.00  
 IntFile : EVENTS.E  
 Quant Time: Oct 12 16:01 2018 Quant Results File: ALIP1106.RES

Quant Method : G:\HPCHEM\G...\ALIP1106.M (Chemstation Integrator)  
 Title : Extractable Petroleum Hydrocarbons Aliphatics  
 Last Update : Tue Sep 25 10:37:10 2018  
 Response via : Initial Calibration  
 DataAcq Meth : EPHALIP.M

Volume Inj. : 1 ul  
 Signal Phase : Rxi-5ms  
 Signal Info : 30M x 0.32mm x 0.25 df

Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
9) o-Terphenyl	13.56	533738	24.239 mg/L
11) Chlorooctadecane	14.45f	378388	22.235 mg/L m

10  
10.2.

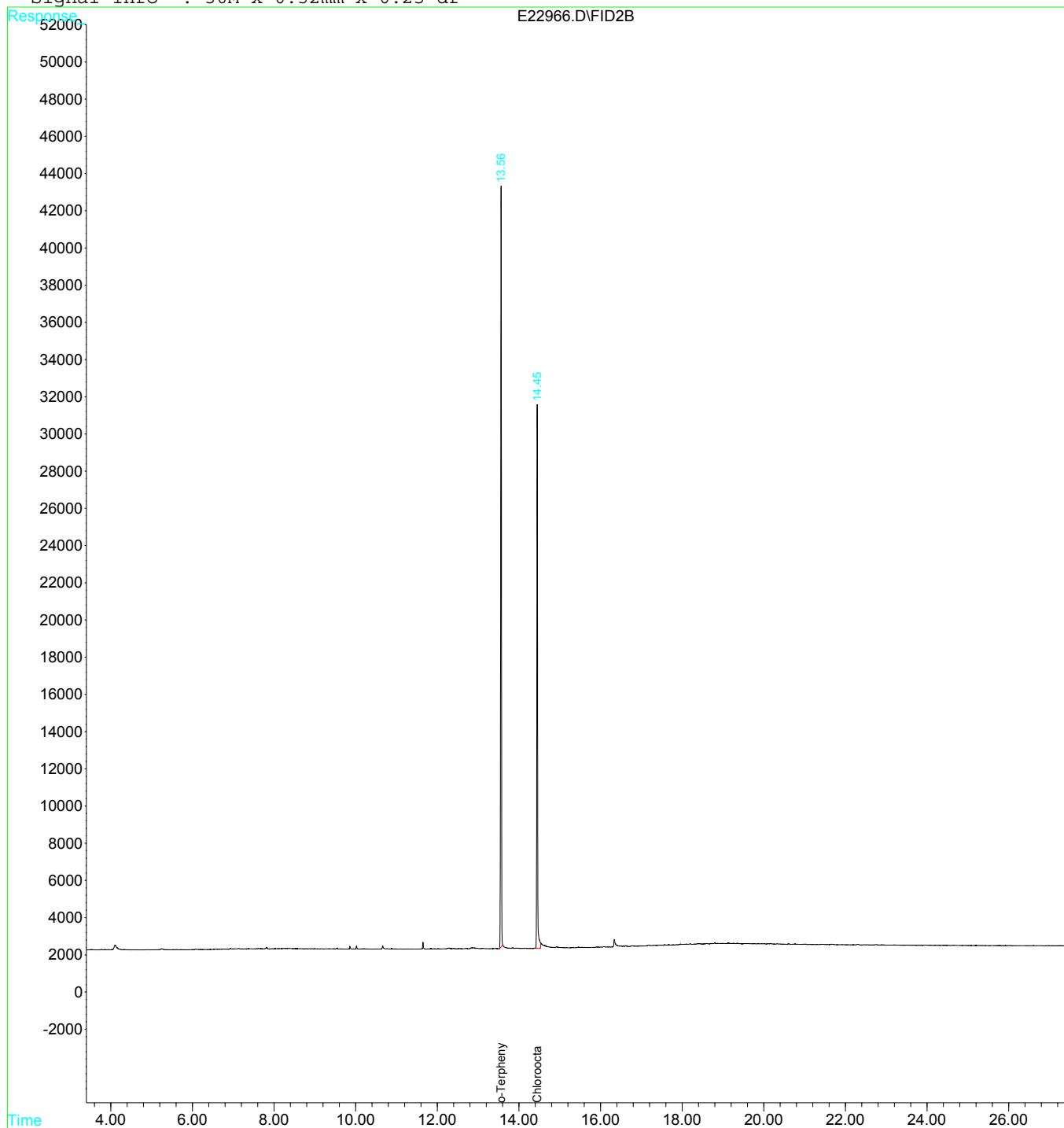
-----  
 (f)=RT Delta > 1/2 Window (m)=manual int.  
 E22966.D ALIP1106.M Tue Oct 16 10:12:01 2018 SS

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\GCFID3\DATA\20181012\E22966.D Vial: 9  
Acq On : 12 Oct 2018 3:07 pm Operator: BW  
Sample : 8100452-13 Inst : GCFID-3  
Misc : Multiplr: 1.00  
IntFile : EVENTS.E  
Quant Time: Oct 12 16:01 2018 Quant Results File: ALIP1106.RES

Quant Method : G:\HPCHEM\G...\ALIP1106.M (Chemstation Integrator)  
Title : Extractable Petroleum Hydrocarbons Aliphatics  
Last Update : Tue Sep 25 10:37:10 2018  
Response via : Multiple Level Calibration  
DataAcq Meth : EPHALIP.M

Volume Inj. : 1 ul  
Signal Phase : Rxi-5ms  
Signal Info : 30M x 0.32mm x 0.25 df



10  
10.2.

# ANALYSIS DATA SHEET

Extractable Petroleum Hydrocarbons Category 2 - NJDEP-EPH-CAT2

**Client:** Peak Environmental  
**Client Sample ID:** STP-7  
**Lab Sample ID:** 8100452-14  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 00:00	Prep Date:	10/11/18 08:17	File ID:	E22967.D
Init/Final Vol:	10 g / 2 mL	Prep Batch:	B8J1103	Analyzed:	10/12/18 15:42
Dilution:	1	Matrix:	Soil	Sequence:	S8J1601
Percent Solids:	92.94	Prep Method:	Sonication GC		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
NJDEP-EPH2	Total EPH	ND	10.8	21.5	U

10  
10.2.

ND - Indicates compound analyzed for but not detected  
J - Indicates estimated value  
B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
MDL - Minimum detection limit  
RL - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\GCFID3\DATA\20181012\E22967.D Vial: 10  
 Acq On : 12 Oct 2018 3:42 pm Operator: BW  
 Sample : 8100452-14 Inst : GCFID-3  
 Misc : Multiplr: 1.00  
 IntFile : EVENTS.E  
 Quant Time: Oct 16 10:11 2018 Quant Results File: ALIP1106.RES

Quant Method : G:\HPCHEM\G...\ALIP1106.M (Chemstation Integrator)  
 Title : Extractable Petroleum Hydrocarbons Aliphatics  
 Last Update : Tue Sep 25 10:37:10 2018  
 Response via : Initial Calibration  
 DataAcq Meth : EPHALIP.M

Volume Inj. : 1 ul  
 Signal Phase : Rxi-5ms  
 Signal Info : 30M x 0.32mm x 0.25 df

Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
9) o-Terphenyl	13.56	565545	25.684 mg/L
11) Chlorooctadecane	14.45f	384500	22.594 mg/L

10  
10.2.

-----  
 (f)=RT Delta > 1/2 Window (m)=manual int.  
 E22967.D ALIP1106.M Tue Oct 16 10:12:04 2018 SS

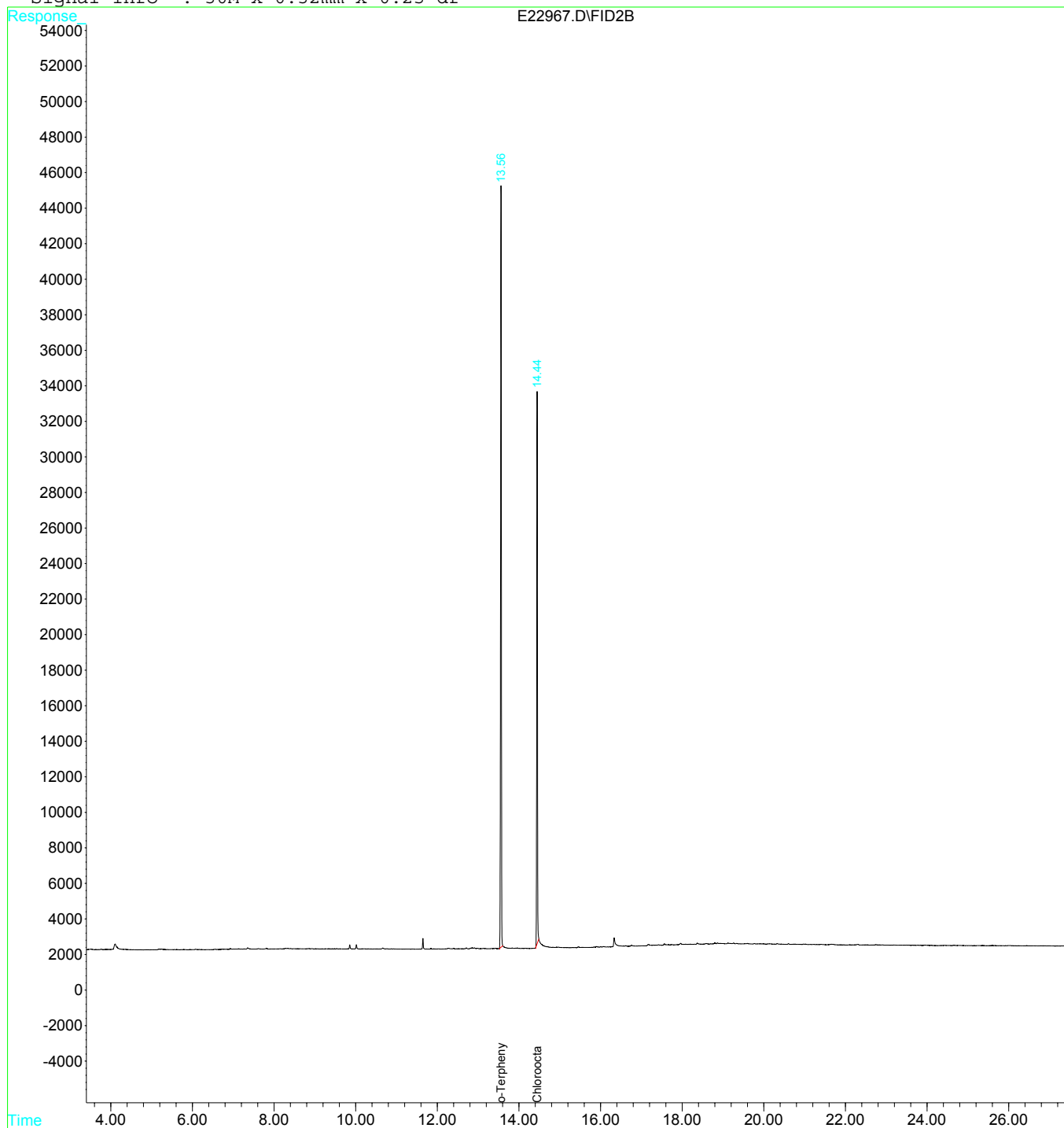


Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\GCFID3\DATA\20181012\E22967.D Vial: 10  
Acq On : 12 Oct 2018 3:42 pm Operator: BW  
Sample : 8100452-14 Inst : GCFID-3  
Misc : Multiplr: 1.00  
IntFile : EVENTS.E  
Quant Time: Oct 16 10:11 2018 Quant Results File: ALIP1106.RES

Quant Method : G:\HPCHEM\G...\ALIP1106.M (Chemstation Integrator)  
Title : Extractable Petroleum Hydrocarbons Aliphatics  
Last Update : Tue Sep 25 10:37:10 2018  
Response via : Multiple Level Calibration  
DataAcq Meth : EPHALIP.M

Volume Inj. : 1 ul  
Signal Phase : Rxi-5ms  
Signal Info : 30M x 0.32mm x 0.25 df



10  
10.2.

# SURROGATE RECOVERIES

Analysis Class: GC

Matrix: Soil

Method: NJDEP-EPH-CAT2

## EPH Category 2

Lab Number	File ID	1-COD	O-TPL
8100452-01	E22935.D	49.0	52.2
8100452-02	E22936.D	53.7	55.6
8100452-03	E22937.D	52.4	54.4
8100452-04	E22938.D	48.7	51.7
8100452-05	E22939.D	49.6	51.9
8100452-06	E22940.D	44.6	47.3
8100452-07	E22941.D	47.0	49.7
8100452-08	E22942.D	48.2	50.3
8100452-09	E22960.D	42.4	44.7
8100452-10	E22961.D	43.7	48.9
8100452-11	E22962.D	44.8	50.6
8100452-12	E22963.D	44.2	49.2
8100452-13	E22966.D	44.5	48.5
8100452-14	E22967.D	45.2	51.4

10  
10.3.

Surrogate Limits		Lo Limit	Hi Limit
1-COD	1-Chlorooctadecane	40	121
O-TPL	o-Terphenyl	42.2	113

\* - Outside of QC Limits

F-II

**Extractable Petroleum Hydrocarbons Category 2 - Quality Control**  
**Aqua Pro-Tech Laboratories**

<b>Batch B8J1103</b>			<b>Method: NJDEP-EPH-CAT2</b>			<b>Prepared: 10/11/2018</b>				
<b>Lab Number</b>	<b>Source</b>	<b>Analyte</b>	<b>Result</b>	<b>Units</b>	<b>Spike Level</b>	<b>Source Result</b>	<b>%REC</b>	<b>%REC</b>	<b>RPD</b>	<b>RPD</b>
							<b>Limits</b>			<b>Limit</b>
B8J1103-BS1		Total EPH	187	mg/kg wet	360		52.0	40-140		

<b>Batch B8J1103 (cont.)</b>			<b>Method: NJDEP-EPH-CAT2</b>			<b>Prepared: 10/11/2018</b>				
<b>Lab Number</b>	<b>Source</b>	<b>Analyte</b>	<b>Result</b>	<b>Units</b>	<b>Spike Level</b>	<b>Source Result</b>	<b>%REC</b>	<b>%REC</b>	<b>RPD</b>	<b>RPD</b>
							<b>Limits</b>			<b>Limit</b>
B8J1103-DUP1	8100452-01	Total EPH	57.4	mg/kg dry		62.8			9.04	200

<b>Batch B8J1103 (cont.)</b>			<b>Method: NJDEP-EPH-CAT2</b>			<b>Prepared: 10/11/2018</b>				
<b>Lab Number</b>	<b>Source</b>	<b>Analyte</b>	<b>Result</b>	<b>Units</b>	<b>Spike Level</b>	<b>Source Result</b>	<b>%REC</b>	<b>%REC</b>	<b>RPD</b>	<b>RPD</b>
							<b>Limits</b>			<b>Limit</b>
B8J1103-MS1	8100452-01	Total EPH	282	mg/kg dry	400	62.8	54.7	40-140		

**10**  
10.4.

F-III      \* - Outside of QC Limits      J - Result is between the MDL and RL for an Analysis reported to an RL  
 NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

## METHOD BLANK SUMMARY

Batch ID: B8J1103

<u>Lab Number</u>	<u>Sample Id</u>	<u>Extraction Date</u>	<u>Analysis Date</u>
B8J1103-BLK1	BLK1	10/11/2018	10/11/2018 21:15
B8J1103-BS1	BS1	10/11/2018	10/11/2018 21:49
B8J1103-DUP1	DUP1	10/11/2018	10/11/2018 22:59
B8J1103-MS1	MS1	10/11/2018	10/11/2018 22:24
8100452-01	NTP-1A	10/11/2018	10/11/2018 12:51
8100452-02	NTP-2A	10/11/2018	10/11/2018 13:27
8100452-03	NTP-2B	10/11/2018	10/11/2018 14:02
8100452-04	NTP-3B	10/11/2018	10/11/2018 14:37
8100452-05	NTP-4B	10/11/2018	10/11/2018 15:25
8100452-06	NTP-6	10/11/2018	10/11/2018 16:00
8100452-07	NTP-7	10/11/2018	10/11/2018 16:35
8100452-08	STP-1B	10/11/2018	10/11/2018 17:10
8100452-09	STP-2B	10/11/2018	10/12/2018 11:28
8100452-10	STP-3B	10/11/2018	10/12/2018 12:03
8100452-11	STP-4A	10/11/2018	10/12/2018 12:38
8100452-12	STP-4B	10/11/2018	10/12/2018 13:13
8100452-13	STP-5	10/11/2018	10/12/2018 15:07
8100452-14	STP-7	10/11/2018	10/12/2018 15:42

10  
10.5.

Response Factor Report GCFID-3

Method : G:\HPCHEM\GCFID3\METHODS\ALIP1106.M (Chemstation Integrator)  
 Title : Extractable Petroleum Hydrocarbons Aliphatics  
 Last Update : Tue Nov 07 08:45:46 2017

Calibration Files  
 25 =E18801.D 50 =E18802.D 100 =E18803.D  
 200 =E18804.D 300 =E18805.D

Compound	25	50	100	200	300	Avg	%RSD
1) n-Nonane	1.957	2.055	2.017	2.283	2.256	2.114 E4	6.94
2) n-Decane	1.929	1.969	1.798	2.291	2.259	2.049 E4	10.54
3) n-Dodecane	1.690	1.727	1.855	2.306	2.225	1.961 E4	14.60
4) C9-C12 Aliphatics	2.023	2.043	2.218	2.527	2.321	2.227 E4	9.38
5) n-Tetradecane	1.683	1.730	1.841	2.294	2.211	1.952 E4	14.46
6) n-Hexadecane	1.821	1.878	1.858	2.302	2.218	2.015 E4	11.22
7) C12-C16 Aliphatics	2.015	2.041	2.102	2.407	2.297	2.172 E4	7.89
8) n-Octadecane	1.848	1.890	1.870	2.307	2.229	2.029 E4	10.86
9) o-Terphenyl	1.798	2.197	1.987	2.584	2.444	2.202 E4	14.60
10) n-Eicosane	1.881	1.907	1.868	2.219	2.124	2.000 E4	8.03
11) Chlorooctadecane	1.416	1.739	1.587	2.040	1.727	1.702 E4	13.50
12) n-Heneicosane	2.001	2.034	2.002	2.276	1.967	2.056 E4	6.10
13) C16-C21 Aliphatics	3.497	3.330	2.626	2.816	2.548	2.963 E4	14.39
14) n-Docosane	1.851	1.875	1.832	2.163	1.983	1.941 E4	7.07
15) n-Tetracosane	1.833	1.859	1.820	2.156	1.982	1.930 E4	7.33
16) n-Hexacosane	1.833	1.863	1.826	2.181	2.019	1.944 E4	7.91
17) n-Octacosane	1.846	1.850	1.812	2.178	2.044	1.946 E4	8.13
18) n-Triacontane	1.826	1.853	1.818	2.203	2.087	1.957 E4	9.02
19) n-Dotriacontane	1.836	1.859	1.825	2.233	2.113	1.973 E4	9.51
20) n-Tetratriacontane	1.877	1.900	1.867	2.292	2.173	2.022 E4	9.75
21) n-Hexatriacontane	1.836	1.857	1.829	2.255	2.095	1.974 E4	9.71
22) n-Octatriacontane	1.839	1.864	1.843	2.265	2.020	1.966 E4	9.30
23) n-Tetracontane	1.786	1.836	1.821	2.182	1.419	1.809 E4	14.96
24) C21-C40 Aliphatics	2.496	2.289	1.945	2.376	2.100	2.241 E4	9.80
25) Total EPH	2.859	2.582	1.981	2.421	2.415	2.452 E4	13.01

10  
10.6.

Compound List Report GCFID-3

Method : G:\HPCHEM\GCFID3\METHODS\ALIP1106.M (Chemstation Integrator)  
 Title : Extractable Petroleum Hydrocarbons Aliphatics  
 Last Update : Tue Nov 07 08:45:46 2017  
 Response via : Initial Calibration  
 Total Cpnds : 25

PK#	Type	Compound Name	Exp RT	Rel RT	Cal	A/H	ID
1		n-Nonane	3.85	1.000	A	A	B
2		n-Decane	5.53	1.000	A	A	B
3		n-Dodecane	8.32	1.000	A	A	B
4		C9-C12 Aliphatics	5.90	1.000	A	A	B
5		n-Tetradecane	10.15	1.000	A	A	B
6		n-Hexadecane	11.59	1.000	A	A	B
7		C12-C16 Aliphatics	10.60	1.000	A	A	B
8		n-Octadecane	12.84	1.000	A	A	B
9		o-Terphenyl	13.54	1.000	A	A	B
10		n-Eicosane	13.95	1.000	A	A	B
11		Chlorooctadecane	14.43	1.000	A	A	B
12		n-Heneicosane	14.47	1.000	A	A	B
13		C16-C21 Aliphatics	12.30	1.000	A	A	B
14		n-Docosane	14.96	1.000	A	A	B
15		n-Tetracosane	15.89	1.000	A	A	B
16		n-Hexacosane	16.76	1.000	A	A	B
17		n-Octacosane	17.56	1.000	A	A	B
18		n-Triacontane	18.36	1.000	A	A	B
19		n-Dotriacontane	19.26	1.000	A	A	B
20		n-Tetratriacontane	20.33	1.000	A	A	B
21		n-Hexatriacontane	21.70	1.000	A	A	B
22		n-Octatriacontane	23.51	1.000	A	A	B
23		n-Tetracontane	25.99	1.000	A	A	B
24		C21-C40 Aliphatics	19.60	1.000	A	A	B
25		Total EPH	15.20	1.000	A	A	B

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin  
 A/H = Area or Height  
 ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

ALIP1106.M Tue Nov 07 10:35:18 2017 SS

10  
10.6.

# CALIBRATION VERIFICATION SUMMARY

**Client:** Peak Environmental  
**Work Order:** 8100452

Lab Sample ID (Aliph): S8J1218-CCV1      Init. Calib. Date(s): 11/06/2017  
 File ID: E22933.D      Date Analyzed: 10/11/2018 12:11  
 EPH Category 2      Matrix: Soil

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Total EPH	12.88	----	----	22962	19581	14.70

**Average %D:** 14.70

10  
10.7.

\* - Outside of QC limits

F-VII

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\GCFID3\DATA\20181011\E22933.D Vial: 1  
 Acq On : 11 Oct 2018 12:11 pm Operator: BW  
 Sample : SEQ-CCV Inst : GCFID-3  
 Misc : Multiplr: 1.00  
 IntFile : EVENTS.E  
 Quant Time: Oct 11 16:21 2018 Quant Results File: ALIP1106.RES

Quant Method : G:\HPCHEM\G...\ALIP1106.M (Chemstation Integrator)  
 Title : Extractable Petroleum Hydrocarbons Aliphatics  
 Last Update : Tue Sep 25 10:37:10 2018  
 Response via : Initial Calibration  
 DataAcq Meth : EPHALIP.M

Volume Inj. : 1 ul  
 Signal Phase : Rxi-5ms  
 Signal Info : 30M x 0.32mm x 0.25 df

Compound	R.T.	Response	Conc Units
-----			
Target Compounds			
1) n-Nonane	3.90	1735111	82.091 mg/L m
2) n-Decane	5.60	1538775	75.089 mg/L
3) n-Dodecane	8.37	1583399	80.754 mg/L
5) n-Tetradecane	10.20	1554474	79.645 mg/L
6) n-Hexadecane	11.64	1579341	78.366 mg/L
8) n-Octadecane	12.88	1627710	80.234 mg/L
10) n-Eicosane	13.99	1666390	83.332 mg/L
12) n-Heneicosane	14.51f	1816201	88.338 mg/L
14) n-Docosane	15.00	1652657	85.163 mg/L
15) n-Tetracosane	15.93	1656270	85.813 mg/L
16) n-Hexacosane	16.79	1669737	85.874 mg/L
17) n-Octacosane	17.59	1659367	85.264 mg/L
18) n-Triacontane	18.41	1657746	84.696 mg/L
19) n-Dotriacontane	19.31	1649178	83.572 mg/L
20) n-Tetratriacontane	20.40	1652674	81.743 mg/L
21) n-Hexatriacontane	21.79	1542321	78.123 mg/L
22) n-Octatriacontane	23.64	1405688	71.496 mg/L
23) n-Tetracontane	26.16f	1161287	64.208 mg/L
25) Total EPH	12.88	35245779	1437.583 mg/L m

10  
10.7.

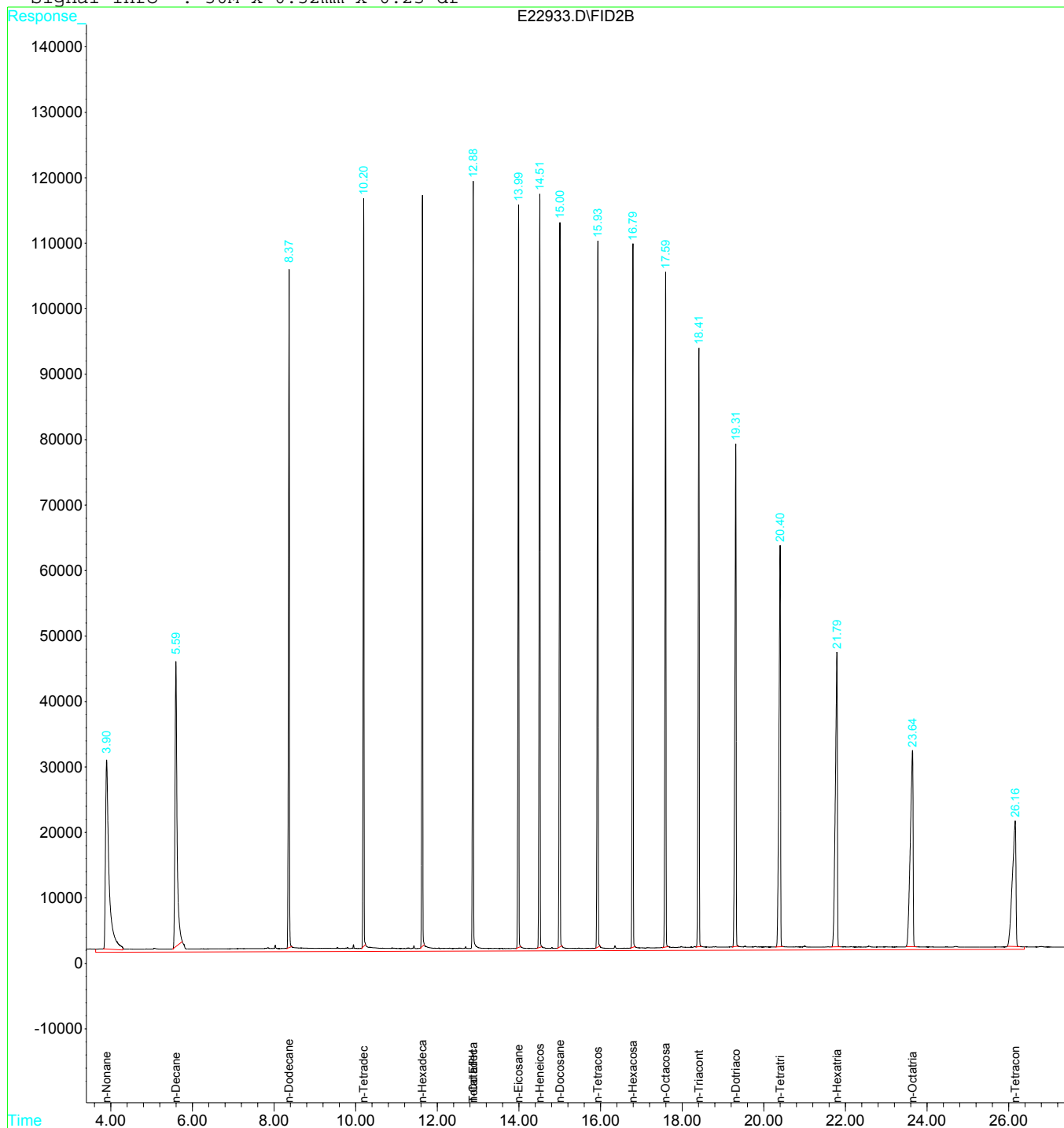
-----  
 (f)=RT Delta > 1/2 Window (m)=manual int.  
 E22933.D ALIP1106.M Fri Oct 12 16:06:21 2018 SS



Data File : G:\HPCHEM\GCFID3\DATA\20181011\E22933.D Vial: 1  
 Acq On : 11 Oct 2018 12:11 pm Operator: BW  
 Sample : SEQ-CCV Inst : GCFID-3  
 Misc : Multiplr: 1.00  
 IntFile : EVENTS.E  
 Quant Time: Oct 11 16:21 2018 Quant Results File: ALIP1106.RES

Quant Method : G:\HPCHEM\G...\ALIP1106.M (Chemstation Integrator)  
 Title : Extractable Petroleum Hydrocarbons Aliphatics  
 Last Update : Tue Sep 25 10:37:10 2018  
 Response via : Multiple Level Calibration  
 DataAcq Meth : EPHALIP.M

Volume Inj. : 1 ul  
 Signal Phase : Rxi-5ms  
 Signal Info : 30M x 0.32mm x 0.25 df



10  
10.7.



AQUA PRO-TECH LABORATORIES  
*Certified Environmental Testing*

# MERCURY

Peak Environmental  
Work Order: 8100452  
Project: Ridgewood



# ANALYSIS DATA SHEET

## Mercury

Client: Peak Environmental  
Project: Ridgewood  
Work Order: 8100452

### Total Metals - Soil (SW 846 7471B)

Lab Number	Analyte	Extract	Concentration	Units	RL	DF	Analyst	Analyzed
B8J1110-BLK1	Mercury	0.6 g / 50 mL	ND	mg/kg wet	0.0416	1	AS	10/11/2018 12:01
S8J1108-CCB1	Mercury	N/A	ND	ug/L	0.499	1	AS	10/11/2018 12:36
S8J1108-CCB2	Mercury	N/A	ND	ug/L	0.499	1	AS	10/11/2018 13:18
S8J1108-ICB1	Mercury	N/A	ND	ug/L	0.499	1	AS	10/11/2018 11:55



ND - Indicates compound analyzed for but not detected

RL - Reporting limit  
DF - Dilution Factor

F-1

# ANALYSIS DATA SHEET

## Mercury

Client: Peak Environmental  
Project: Ridgewood  
Work Order: 8100452

### Total Metals - Soil (SW 846 7471B)

Lab Number	Analyte	Extract	Concentration	Units	RL	DF	Analyst	Analyzed
8100452-01	Mercury	0.51 / 50	ND	mg/kg dry	0.0544	1	AS	10/11/18 12:17
8100452-02	Mercury	0.58 / 50	ND	mg/kg dry	0.0465	1	AS	10/11/18 12:20
8100452-03	Mercury	0.53 / 50	ND	mg/kg dry	0.0510	1	AS	10/11/18 12:24
8100452-04	Mercury	0.55 / 50	ND	mg/kg dry	0.0497	1	AS	10/11/18 12:27
8100452-05	Mercury	0.54 / 50	ND	mg/kg dry	0.0502	1	AS	10/11/18 12:40
8100452-06	Mercury	0.56 / 50	ND	mg/kg dry	0.0508	1	AS	10/11/18 12:04
8100452-07	Mercury	0.57 / 50	ND	mg/kg dry	0.0479	1	AS	10/11/18 12:43
8100452-08	Mercury	0.61 / 50	ND	mg/kg dry	0.0457	1	AS	10/11/18 12:46
8100452-09	Mercury	0.53 / 50	ND	mg/kg dry	0.0514	1	AS	10/11/18 12:49
8100452-10	Mercury	0.57 / 50	0.0562	mg/kg dry	0.0478	1	AS	10/11/18 12:53
8100452-11	Mercury	0.51 / 50	ND	mg/kg dry	0.0540	1	AS	10/11/18 12:56
8100452-12	Mercury	0.55 / 50	ND	mg/kg dry	0.0495	1	AS	10/11/18 12:59
8100452-13	Mercury	0.52 / 50	ND	mg/kg dry	0.0518	1	AS	10/11/18 13:02
8100452-14	Mercury	0.58 / 50	ND	mg/kg dry	0.0463	1	AS	10/11/18 13:05

ND - Indicates compound analyzed for but not detected

RL - Reporting limit  
DF - Dilution Factor

F-I

**Total Metals - Quality Control  
Aqua Pro-Tech Laboratories**

<b>Batch B8J1110</b>			<b>Method: SW 846 7471B</b>			<b>Prepared: 10/11/2018</b>				
<b>Lab Number</b>	<b>Source</b>	<b>Analyte</b>	<b>Result</b>	<b>Units</b>	<b>Spike Level</b>	<b>Source Result</b>	<b>%REC</b>	<b>%REC</b>	<b>RPD</b>	<b>RPD</b>
								<b>Limits</b>		<b>Limit</b>
B8J1110-BS1		Mercury	0.833	mg/kg wet	0.833		100	80-120		

<b>Batch B8J1110 (cont.)</b>			<b>Method: SW 846 7471B</b>			<b>Prepared: 10/11/2018</b>				
<b>Lab Number</b>	<b>Source</b>	<b>Analyte</b>	<b>Result</b>	<b>Units</b>	<b>Spike Level</b>	<b>Source Result</b>	<b>%REC</b>	<b>%REC</b>	<b>RPD</b>	<b>RPD</b>
								<b>Limits</b>		<b>Limit</b>
B8J1110-DUP1	8100452-06	Mercury	ND	mg/kg dry		ND				20

<b>Batch B8J1110 (cont.)</b>			<b>Method: SW 846 7471B</b>			<b>Prepared: 10/11/2018</b>				
<b>Lab Number</b>	<b>Source</b>	<b>Analyte</b>	<b>Result</b>	<b>Units</b>	<b>Spike Level</b>	<b>Source Result</b>	<b>%REC</b>	<b>%REC</b>	<b>RPD</b>	<b>RPD</b>
								<b>Limits</b>		<b>Limit</b>
B8J1110-MS1	8100452-06	Mercury	1.06	mg/kg dry	1.02	ND	104	80-120		

<b>Batch B8J1110 (cont.)</b>			<b>Method: SW 846 7471B</b>			<b>Prepared: 10/11/2018</b>				
<b>Lab Number</b>	<b>Source</b>	<b>Analyte</b>	<b>Result</b>	<b>Units</b>	<b>Spike Level</b>	<b>Source Result</b>	<b>%REC</b>	<b>%REC</b>	<b>RPD</b>	<b>RPD</b>
								<b>Limits</b>		<b>Limit</b>
B8J1110-MSD1	8100452-06	Mercury	1.07	mg/kg dry	1.02	ND	105	80-120	0.819	20



\* - Outside of QC Limits      J - Result is between the MDL and RL for an Analysis reported to an RL  
 NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

F-III

## METHOD BLANK SUMMARY

Batch ID: B8J1110

<u>Lab Number</u>	<u>Sample Id</u>	<u>Extraction Date</u>	<u>Analysis Date</u>
B8J1110-BLK1	BLK1	10/11/2018	10/11/2018 12:01
B8J1110-BS1	BS1	10/11/2018	10/11/2018 11:58
B8J1110-DUP1	DUP1	10/11/2018	10/11/2018 12:07
B8J1110-MS1	MS1	10/11/2018	10/11/2018 12:11
B8J1110-MSD1	MSD1	10/11/2018	10/11/2018 12:14
8100452-01	NTP-1A	10/11/2018	10/11/2018 12:17
8100452-02	NTP-2A	10/11/2018	10/11/2018 12:20
8100452-03	NTP-2B	10/11/2018	10/11/2018 12:24
8100452-04	NTP-3B	10/11/2018	10/11/2018 12:27
8100452-05	NTP-4B	10/11/2018	10/11/2018 12:40
8100452-06	NTP-6	10/11/2018	10/11/2018 12:04
8100452-07	NTP-7	10/11/2018	10/11/2018 12:43
8100452-08	STP-1B	10/11/2018	10/11/2018 12:46
8100452-09	STP-2B	10/11/2018	10/11/2018 12:49
8100452-10	STP-3B	10/11/2018	10/11/2018 12:53
8100452-11	STP-4A	10/11/2018	10/11/2018 12:56
8100452-12	STP-4B	10/11/2018	10/11/2018 12:59
8100452-13	STP-5	10/11/2018	10/11/2018 13:02
8100452-14	STP-7	10/11/2018	10/11/2018 13:05



11.4.

## ANALYSIS SEQUENCE SUMMARY

Laboratory:	Aqua Pro-Tech Laboratories	Work Order:	8100452
Client:	Peak Environmental	Project:	Ridgewood
Sequence:	S8J1108	Instrument:	Mercury Analyzer

Sample Name	Lab Sample ID	FileID	Analysis Date/Time
Initial Cal Check	S8J1108-ICV1	2018-10-11-A.csv-012	10/11/18 11:51
Initial Cal Blank	S8J1108-ICB1	2018-10-11-A.csv-013	10/11/18 11:55
LCS	B8J1110-BS1	2018-10-11-A.csv-014	10/11/18 11:58
Blank	B8J1110-BLK1	2018-10-11-A.csv-015	10/11/18 12:01
NTP-6	8100452-06	2018-10-11-A.csv-016	10/11/18 12:04
Duplicate	B8J1110-DUP1	2018-10-11-A.csv-017	10/11/18 12:07
Matrix Spike	B8J1110-MS1	2018-10-11-A.csv-018	10/11/18 12:11
Matrix Spike Dup	B8J1110-MSD1	2018-10-11-A.csv-019	10/11/18 12:14
NTP-1A	8100452-01	2018-10-11-A.csv-020	10/11/18 12:17
NTP-2A	8100452-02	2018-10-11-A.csv-021	10/11/18 12:20
NTP-2B	8100452-03	2018-10-11-A.csv-022	10/11/18 12:24
NTP-3B	8100452-04	2018-10-11-A.csv-023	10/11/18 12:27
Calibration Check	S8J1108-CCV1	2018-10-11-A.csv-025	10/11/18 12:33
Calibration Blank	S8J1108-CCB1	2018-10-11-A.csv-026	10/11/18 12:36
NTP-4B	8100452-05	2018-10-11-A.csv-027	10/11/18 12:40
NTP-7	8100452-07	2018-10-11-A.csv-028	10/11/18 12:43
STP-1B	8100452-08	2018-10-11-A.csv-029	10/11/18 12:46
STP-2B	8100452-09	2018-10-11-A.csv-030	10/11/18 12:49
STP-3B	8100452-10	2018-10-11-A.csv-031	10/11/18 12:53
STP-4A	8100452-11	2018-10-11-A.csv-032	10/11/18 12:56
STP-4B	8100452-12	2018-10-11-A.csv-033	10/11/18 12:59
STP-5	8100452-13	2018-10-11-A.csv-034	10/11/18 13:02
STP-7	8100452-14	2018-10-11-A.csv-035	10/11/18 13:05
Calibration Check	S8J1108-CCV2	2018-10-11-A.csv-038	10/11/18 13:15
Calibration Blank	S8J1108-CCB2	2018-10-11-A.csv-039	10/11/18 13:18



# SEQUENCE CALIBRATION CHECKS

SW 846 7471B

Client: Peak Environmental  
Project: Ridgewood  
Work Order: 8100452

Sequence: S8J1108  
Instrument: Mercury Analyzer

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
S8J1108-ICV1	Mercury	10.0	10.6	106	ug/L	90-110
S8J1108-CCV1	Mercury	10.0	10.2	102	ug/L	80-120
S8J1108-CCV2	Mercury	10.0	10.3	103	ug/L	80-120

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11.6.

F-VII

ICV = Initial Cal Verification

CCV = Continuing Cal Verification

IFB = Interference Check Standard B





AQUA PRO-TECH LABORATORIES  
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# METALS

Peak Environmental  
Work Order: 8100452  
Project: Ridgewood

# ANALYSIS DATA SHEET

**Client:** Peak Environmental  
**Client Sample ID:** Blank  
**Lab Sample ID:** B8J1105-BLK1  
**Project:** Ridgewood  
**Work Order:** 8100452

Init/Final Vol:	2 g / 50 mL	Prep Date:	10/11/2018 9:33:00AM
Matrix:	Soil	Prep Method:	Hot Block ICP Soil

**Total Metals - Soil (SW 846 6010D)**

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst Sequence/Batch
7429-90-5	Aluminum	10/11/2018 17:57	ND	mg/kg wet	2.50	1	MS S8J1112/B8J1105
7440-36-0	Antimony	10/11/2018 17:57	ND	mg/kg wet	1.25	1	MS S8J1112/B8J1105
7440-38-2	Arsenic	10/11/2018 17:57	ND	mg/kg wet	1.25	1	MS S8J1112/B8J1105
7440-39-3	Barium	10/11/2018 17:57	ND	mg/kg wet	0.500	1	MS S8J1112/B8J1105
7440-41-7	Beryllium	10/11/2018 17:57	ND	mg/kg wet	0.0250	1	MS S8J1112/B8J1105
7440-43-9	Cadmium	10/11/2018 17:57	ND	mg/kg wet	0.250	1	MS S8J1112/B8J1105
7440-70-2	Calcium	10/11/2018 17:57	ND	mg/kg wet	25.0	1	MS S8J1112/B8J1105
7440-47-3	Chromium	10/11/2018 17:57	ND	mg/kg wet	0.250	1	MS S8J1112/B8J1105
7440-48-4	Cobalt	10/11/2018 17:57	ND	mg/kg wet	0.200	1	MS S8J1112/B8J1105
7440-50-8	Copper	10/11/2018 17:57	ND	mg/kg wet	0.250	1	MS S8J1112/B8J1105
7439-89-6	Iron	10/11/2018 17:57	ND	mg/kg wet	5.00	1	MS S8J1112/B8J1105
7439-92-1	Lead	10/11/2018 17:57	ND	mg/kg wet	1.25	1	MS S8J1112/B8J1105
7439-95-4	Magnesium	10/11/2018 17:57	ND	mg/kg wet	50.0	1	MS S8J1112/B8J1105
7439-96-5	Manganese	10/11/2018 17:57	ND	mg/kg wet	0.250	1	MS S8J1112/B8J1105
7440-02-0	Nickel	10/11/2018 17:57	ND	mg/kg wet	0.125	1	MS S8J1112/B8J1105
7440-09-7	Potassium	10/11/2018 17:57	ND	mg/kg wet	100	1	MS S8J1112/B8J1105
7782-49-2	Selenium	10/11/2018 17:57	ND	mg/kg wet	1.25	1	MS S8J1112/B8J1105
7440-22-4	Silver	10/11/2018 17:57	ND	mg/kg wet	0.500	1	MS S8J1112/B8J1105
7440-23-5	Sodium	10/11/2018 17:57	ND	mg/kg wet	50.0	1	MS S8J1112/B8J1105
7440-28-0	Thallium	10/11/2018 17:57	ND	mg/kg wet	1.25	1	MS S8J1112/B8J1105
7440-62-2	Vanadium	10/11/2018 17:57	ND	mg/kg wet	0.500	1	MS S8J1112/B8J1105
7440-66-6	Zinc	10/11/2018 17:57	ND	mg/kg wet	0.750	1	MS S8J1112/B8J1105

ND - Indicates compound analyzed for but not detected

RL - Reporting limit  
DF - Dilution Factor

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# ANALYSIS DATA SHEET

**Client:** Peak Environmental  
**Client Sample ID:** Calibration Blank  
**Lab Sample ID:** S8J1112-CCB1  
**Project:** Ridgewood  
**Work Order:** 8100452

Init/Final Vol:	N/A	Prep Date:	10/11/2018 9:00:57AM
Matrix:	Soil	Prep Method:	

**Total Metals - Aqueous (SW 846 6010D)**

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst Sequence/Batch
7429-90-5	Aluminum	10/11/2018 14:58	ND	mg/L	0.100	1	MS S8J1112/S8J1112
7440-36-0	Antimony	10/11/2018 14:58	ND	mg/L	0.0500	1	MS S8J1112/S8J1112
7440-38-2	Arsenic	10/11/2018 14:58	ND	mg/L	0.0500	1	MS S8J1112/S8J1112
7440-39-3	Barium	10/11/2018 14:58	ND	mg/L	0.0200	1	MS S8J1112/S8J1112
7440-41-7	Beryllium	10/11/2018 14:58	ND	mg/L	0.00100	1	MS S8J1112/S8J1112
7440-43-9	Cadmium	10/11/2018 14:58	ND	mg/L	0.0100	1	MS S8J1112/S8J1112
7440-70-2	Calcium	10/11/2018 14:58	ND	mg/L	1.00	1	MS S8J1112/S8J1112
7440-47-3	Chromium	10/11/2018 14:58	ND	mg/L	0.0100	1	MS S8J1112/S8J1112
7440-48-4	Cobalt	10/11/2018 14:58	ND	mg/L	0.00800	1	MS S8J1112/S8J1112
7440-50-8	Copper	10/11/2018 14:58	ND	mg/L	0.0100	1	MS S8J1112/S8J1112
7439-89-6	Iron	10/11/2018 14:58	ND	mg/L	0.200	1	MS S8J1112/S8J1112
7439-92-1	Lead	10/11/2018 14:58	ND	mg/L	0.0500	1	MS S8J1112/S8J1112
7439-95-4	Magnesium	10/11/2018 14:58	ND	mg/L	2.00	1	MS S8J1112/S8J1112
7439-96-5	Manganese	10/11/2018 14:58	ND	mg/L	0.0100	1	MS S8J1112/S8J1112
7440-02-0	Nickel	10/11/2018 14:58	ND	mg/L	0.00500	1	MS S8J1112/S8J1112
7440-09-7	Potassium	10/11/2018 14:58	ND	mg/L	4.00	1	MS S8J1112/S8J1112
7782-49-2	Selenium	10/11/2018 14:58	ND	mg/L	0.0500	1	MS S8J1112/S8J1112
7440-22-4	Silver	10/11/2018 14:58	ND	mg/L	0.0200	1	MS S8J1112/S8J1112
7440-23-5	Sodium	10/11/2018 14:58	ND	mg/L	2.00	1	MS S8J1112/S8J1112
7440-28-0	Thallium	10/11/2018 14:58	ND	mg/L	0.0500	1	MS S8J1112/S8J1112
7440-62-2	Vanadium	10/11/2018 14:58	ND	mg/L	0.0200	1	MS S8J1112/S8J1112
7440-66-6	Zinc	10/11/2018 14:58	ND	mg/L	0.0300	1	MS S8J1112/S8J1112

ND - Indicates compound analyzed for but not detected

RL - Reporting limit  
DF - Dilution Factor

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# ANALYSIS DATA SHEET

**Client:** Peak Environmental  
**Client Sample ID:** Calibration Blank  
**Lab Sample ID:** S8J1112-CCB2  
**Project:** Ridgewood  
**Work Order:** 8100452

Init/Final Vol:	N/A	Prep Date:	10/11/2018 9:00:57AM
Matrix:	Soil	Prep Method:	

**Total Metals - Aqueous (SW 846 6010D)**

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst Sequence/Batch
7429-90-5	Aluminum	10/11/2018 15:47	ND	mg/L	0.100	1	MS S8J1112/S8J1112
7440-36-0	Antimony	10/11/2018 15:47	ND	mg/L	0.0500	1	MS S8J1112/S8J1112
7440-38-2	Arsenic	10/11/2018 15:47	ND	mg/L	0.0500	1	MS S8J1112/S8J1112
7440-39-3	Barium	10/11/2018 15:47	ND	mg/L	0.0200	1	MS S8J1112/S8J1112
7440-41-7	Beryllium	10/11/2018 15:47	ND	mg/L	0.00100	1	MS S8J1112/S8J1112
7440-43-9	Cadmium	10/11/2018 15:47	ND	mg/L	0.0100	1	MS S8J1112/S8J1112
7440-70-2	Calcium	10/11/2018 15:47	ND	mg/L	1.00	1	MS S8J1112/S8J1112
7440-47-3	Chromium	10/11/2018 15:47	ND	mg/L	0.0100	1	MS S8J1112/S8J1112
7440-48-4	Cobalt	10/11/2018 15:47	ND	mg/L	0.00800	1	MS S8J1112/S8J1112
7440-50-8	Copper	10/11/2018 15:47	ND	mg/L	0.0100	1	MS S8J1112/S8J1112
7439-89-6	Iron	10/11/2018 15:47	ND	mg/L	0.200	1	MS S8J1112/S8J1112
7439-92-1	Lead	10/11/2018 15:47	ND	mg/L	0.0500	1	MS S8J1112/S8J1112
7439-95-4	Magnesium	10/11/2018 15:47	ND	mg/L	2.00	1	MS S8J1112/S8J1112
7439-96-5	Manganese	10/11/2018 15:47	ND	mg/L	0.0100	1	MS S8J1112/S8J1112
7440-02-0	Nickel	10/11/2018 15:47	ND	mg/L	0.00500	1	MS S8J1112/S8J1112
7440-09-7	Potassium	10/11/2018 15:47	ND	mg/L	4.00	1	MS S8J1112/S8J1112
7782-49-2	Selenium	10/11/2018 15:47	ND	mg/L	0.0500	1	MS S8J1112/S8J1112
7440-22-4	Silver	10/11/2018 15:47	ND	mg/L	0.0200	1	MS S8J1112/S8J1112
7440-23-5	Sodium	10/11/2018 15:47	ND	mg/L	2.00	1	MS S8J1112/S8J1112
7440-28-0	Thallium	10/11/2018 15:47	ND	mg/L	0.0500	1	MS S8J1112/S8J1112
7440-62-2	Vanadium	10/11/2018 15:47	ND	mg/L	0.0200	1	MS S8J1112/S8J1112
7440-66-6	Zinc	10/11/2018 15:47	ND	mg/L	0.0300	1	MS S8J1112/S8J1112

ND - Indicates compound analyzed for but not detected

RL - Reporting limit  
DF - Dilution Factor

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# ANALYSIS DATA SHEET

**Client:** Peak Environmental  
**Client Sample ID:** Calibration Blank  
**Lab Sample ID:** S8J1112-CCB3  
**Project:** Ridgewood  
**Work Order:** 8100452

Init/Final Vol:	N/A	Prep Date:	10/11/2018 9:00:57AM
Matrix:	Soil	Prep Method:	

**Total Metals - Aqueous (SW 846 6010D)**

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst Sequence/Batch
7429-90-5	Aluminum	10/11/2018 16:30	ND	mg/L	0.100	1	MS S8J1112/S8J1112
7440-36-0	Antimony	10/11/2018 16:30	ND	mg/L	0.0500	1	MS S8J1112/S8J1112
7440-38-2	Arsenic	10/11/2018 16:30	ND	mg/L	0.0500	1	MS S8J1112/S8J1112
7440-39-3	Barium	10/11/2018 16:30	ND	mg/L	0.0200	1	MS S8J1112/S8J1112
7440-41-7	Beryllium	10/11/2018 16:30	ND	mg/L	0.00100	1	MS S8J1112/S8J1112
7440-43-9	Cadmium	10/11/2018 16:30	ND	mg/L	0.0100	1	MS S8J1112/S8J1112
7440-70-2	Calcium	10/11/2018 16:30	ND	mg/L	1.00	1	MS S8J1112/S8J1112
7440-47-3	Chromium	10/11/2018 16:30	ND	mg/L	0.0100	1	MS S8J1112/S8J1112
7440-48-4	Cobalt	10/11/2018 16:30	ND	mg/L	0.00800	1	MS S8J1112/S8J1112
7440-50-8	Copper	10/11/2018 16:30	ND	mg/L	0.0100	1	MS S8J1112/S8J1112
7439-89-6	Iron	10/11/2018 16:30	ND	mg/L	0.200	1	MS S8J1112/S8J1112
7439-92-1	Lead	10/11/2018 16:30	ND	mg/L	0.0500	1	MS S8J1112/S8J1112
7439-95-4	Magnesium	10/11/2018 16:30	ND	mg/L	2.00	1	MS S8J1112/S8J1112
7439-96-5	Manganese	10/11/2018 16:30	ND	mg/L	0.0100	1	MS S8J1112/S8J1112
7440-02-0	Nickel	10/11/2018 16:30	ND	mg/L	0.00500	1	MS S8J1112/S8J1112
7440-09-7	Potassium	10/11/2018 16:30	ND	mg/L	4.00	1	MS S8J1112/S8J1112
7782-49-2	Selenium	10/11/2018 16:30	ND	mg/L	0.0500	1	MS S8J1112/S8J1112
7440-22-4	Silver	10/11/2018 16:30	ND	mg/L	0.0200	1	MS S8J1112/S8J1112
7440-23-5	Sodium	10/11/2018 16:30	ND	mg/L	2.00	1	MS S8J1112/S8J1112
7440-28-0	Thallium	10/11/2018 16:30	ND	mg/L	0.0500	1	MS S8J1112/S8J1112
7440-62-2	Vanadium	10/11/2018 16:30	ND	mg/L	0.0200	1	MS S8J1112/S8J1112
7440-66-6	Zinc	10/11/2018 16:30	ND	mg/L	0.0300	1	MS S8J1112/S8J1112

ND - Indicates compound analyzed for but not detected

RL - Reporting limit  
DF - Dilution Factor

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# ANALYSIS DATA SHEET

**Client:** Peak Environmental  
**Client Sample ID:** Calibration Blank  
**Lab Sample ID:** S8J1112-CCB4  
**Project:** Ridgewood  
**Work Order:** 8100452

Init/Final Vol:	N/A	Prep Date:	10/11/2018 9:00:57AM
Matrix:	Soil	Prep Method:	

**Total Metals - Aqueous (SW 846 6010D)**

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst Sequence/Batch
7429-90-5	Aluminum	10/11/2018 18:15	ND	mg/L	0.100	1	MS S8J1112/S8J1112
7440-36-0	Antimony	10/11/2018 18:15	ND	mg/L	0.0500	1	MS S8J1112/S8J1112
7440-38-2	Arsenic	10/11/2018 18:15	ND	mg/L	0.0500	1	MS S8J1112/S8J1112
7440-39-3	Barium	10/11/2018 18:15	ND	mg/L	0.0200	1	MS S8J1112/S8J1112
7440-41-7	Beryllium	10/11/2018 18:15	ND	mg/L	0.00100	1	MS S8J1112/S8J1112
7440-43-9	Cadmium	10/11/2018 18:15	ND	mg/L	0.0100	1	MS S8J1112/S8J1112
7440-70-2	Calcium	10/11/2018 18:15	ND	mg/L	1.00	1	MS S8J1112/S8J1112
7440-47-3	Chromium	10/11/2018 18:15	ND	mg/L	0.0100	1	MS S8J1112/S8J1112
7440-48-4	Cobalt	10/11/2018 18:15	ND	mg/L	0.00800	1	MS S8J1112/S8J1112
7440-50-8	Copper	10/11/2018 18:15	ND	mg/L	0.0100	1	MS S8J1112/S8J1112
7439-89-6	Iron	10/11/2018 18:15	ND	mg/L	0.200	1	MS S8J1112/S8J1112
7439-92-1	Lead	10/11/2018 18:15	ND	mg/L	0.0500	1	MS S8J1112/S8J1112
7439-95-4	Magnesium	10/11/2018 18:15	ND	mg/L	2.00	1	MS S8J1112/S8J1112
7439-96-5	Manganese	10/11/2018 18:15	ND	mg/L	0.0100	1	MS S8J1112/S8J1112
7440-02-0	Nickel	10/11/2018 18:15	ND	mg/L	0.00500	1	MS S8J1112/S8J1112
7440-09-7	Potassium	10/11/2018 18:15	ND	mg/L	4.00	1	MS S8J1112/S8J1112
7782-49-2	Selenium	10/11/2018 18:15	ND	mg/L	0.0500	1	MS S8J1112/S8J1112
7440-22-4	Silver	10/11/2018 18:15	ND	mg/L	0.0200	1	MS S8J1112/S8J1112
7440-23-5	Sodium	10/11/2018 18:15	ND	mg/L	2.00	1	MS S8J1112/S8J1112
7440-28-0	Thallium	10/11/2018 18:15	ND	mg/L	0.0500	1	MS S8J1112/S8J1112
7440-62-2	Vanadium	10/11/2018 18:15	ND	mg/L	0.0200	1	MS S8J1112/S8J1112
7440-66-6	Zinc	10/11/2018 18:15	ND	mg/L	0.0300	1	MS S8J1112/S8J1112

ND - Indicates compound analyzed for but not detected

RL - Reporting limit  
DF - Dilution Factor

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# ANALYSIS DATA SHEET

**Client:** Peak Environmental  
**Client Sample ID:** Initial Cal Blank  
**Lab Sample ID:** S8J1112-ICB1  
**Project:** Ridgewood  
**Work Order:** 8100452

Init/Final Vol:	N/A	Prep Date:	10/11/2018 9:00:57AM
Matrix:	Soil	Prep Method:	

**Total Metals - Aqueous (SW 846 6010D)**

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst Sequence/Batch
7429-90-5	Aluminum	10/11/2018 10:19	ND	mg/L	0.100	1	MS S8J1112/S8J1112
7440-36-0	Antimony	10/11/2018 10:19	ND	mg/L	0.0500	1	MS S8J1112/S8J1112
7440-38-2	Arsenic	10/11/2018 10:19	ND	mg/L	0.0500	1	MS S8J1112/S8J1112
7440-39-3	Barium	10/11/2018 10:19	ND	mg/L	0.0200	1	MS S8J1112/S8J1112
7440-41-7	Beryllium	10/11/2018 10:19	ND	mg/L	0.00100	1	MS S8J1112/S8J1112
7440-43-9	Cadmium	10/11/2018 10:19	ND	mg/L	0.0100	1	MS S8J1112/S8J1112
7440-70-2	Calcium	10/11/2018 10:19	ND	mg/L	1.00	1	MS S8J1112/S8J1112
7440-47-3	Chromium	10/11/2018 10:19	ND	mg/L	0.0100	1	MS S8J1112/S8J1112
7440-48-4	Cobalt	10/11/2018 10:19	ND	mg/L	0.00800	1	MS S8J1112/S8J1112
7440-50-8	Copper	10/11/2018 10:19	ND	mg/L	0.0100	1	MS S8J1112/S8J1112
7439-89-6	Iron	10/11/2018 10:19	ND	mg/L	0.200	1	MS S8J1112/S8J1112
7439-92-1	Lead	10/11/2018 10:19	ND	mg/L	0.0500	1	MS S8J1112/S8J1112
7439-95-4	Magnesium	10/11/2018 10:19	ND	mg/L	2.00	1	MS S8J1112/S8J1112
7439-96-5	Manganese	10/11/2018 10:19	ND	mg/L	0.0100	1	MS S8J1112/S8J1112
7440-02-0	Nickel	10/11/2018 10:19	ND	mg/L	0.00500	1	MS S8J1112/S8J1112
7440-09-7	Potassium	10/11/2018 10:19	ND	mg/L	4.00	1	MS S8J1112/S8J1112
7782-49-2	Selenium	10/11/2018 10:19	ND	mg/L	0.0500	1	MS S8J1112/S8J1112
7440-22-4	Silver	10/11/2018 10:19	ND	mg/L	0.0200	1	MS S8J1112/S8J1112
7440-23-5	Sodium	10/11/2018 10:19	ND	mg/L	2.00	1	MS S8J1112/S8J1112
7440-28-0	Thallium	10/11/2018 10:19	ND	mg/L	0.0500	1	MS S8J1112/S8J1112
7440-62-2	Vanadium	10/11/2018 10:19	ND	mg/L	0.0200	1	MS S8J1112/S8J1112
7440-66-6	Zinc	10/11/2018 10:19	ND	mg/L	0.0300	1	MS S8J1112/S8J1112

ND - Indicates compound analyzed for but not detected

RL - Reporting limit  
DF - Dilution Factor

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# ANALYSIS DATA SHEET

**Client:** Peak Environmental  
**Client Sample ID:** NTP-1A  
**Lab Sample ID:** 8100452-01  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 00:00	Prep Date: 10/11/18 09:33
Init/Final Vol: 1.98 g / 50 mL	Prep Method: Hot Block ICP Soil
Matrix: Soil	
Percent Solids: 89.91	

**Total Metals - Soil (SW 846 6010D)**

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7429-90-5	Aluminum	10/11/18 14:32	3290	mg/kg dry	2.81	1	MS	S8J1112/B8J1105
7440-36-0	Antimony	10/11/18 14:32	ND	mg/kg dry	1.40	1	MS	S8J1112/B8J1105
7440-38-2	Arsenic	10/11/18 14:32	ND	mg/kg dry	1.40	1	MS	S8J1112/B8J1105
7440-39-3	Barium	10/11/18 14:32	18.6	mg/kg dry	0.562	1	MS	S8J1112/B8J1105
7440-41-7	Beryllium	10/11/18 14:32	0.138	mg/kg dry	0.0281	1	MS	S8J1112/B8J1105
7440-43-9	Cadmium	10/11/18 14:32	ND	mg/kg dry	0.281	1	MS	S8J1112/B8J1105
7440-70-2	Calcium	10/11/18 14:32	938	mg/kg dry	28.1	1	MS	S8J1112/B8J1105
7440-47-3	Chromium	10/11/18 14:32	5.14	mg/kg dry	0.281	1	MS	S8J1112/B8J1105
7440-48-4	Cobalt	10/11/18 14:32	2.31	mg/kg dry	0.225	1	MS	S8J1112/B8J1105
7440-50-8	Copper	10/11/18 14:32	8.71	mg/kg dry	0.281	1	MS	S8J1112/B8J1105
7439-89-6	Iron	10/11/18 14:32	7190	mg/kg dry	5.62	1	MS	S8J1112/B8J1105
7439-92-1	Lead	10/11/18 14:32	23.8	mg/kg dry	1.40	1	MS	S8J1112/B8J1105
7439-95-4	Magnesium	10/11/18 14:32	763	mg/kg dry	56.2	1	MS	S8J1112/B8J1105
7439-96-5	Manganese	10/11/18 14:32	125	mg/kg dry	0.281	1	MS	S8J1112/B8J1105
7440-02-0	Nickel	10/11/18 14:32	4.33	mg/kg dry	0.140	1	MS	S8J1112/B8J1105
7440-09-7	Potassium	10/11/18 14:32	212	mg/kg dry	112	1	MS	S8J1112/B8J1105
7782-49-2	Selenium	10/11/18 14:32	ND	mg/kg dry	1.40	1	MS	S8J1112/B8J1105
7440-22-4	Silver	10/11/18 14:32	ND	mg/kg dry	0.562	1	MS	S8J1112/B8J1105
7440-23-5	Sodium	10/11/18 14:32	107	mg/kg dry	56.2	1	MS	S8J1112/B8J1105
7440-28-0	Thallium	10/11/18 14:32	ND	mg/kg dry	1.40	1	MS	S8J1112/B8J1105
7440-62-2	Vanadium	10/11/18 14:32	9.94	mg/kg dry	0.562	1	MS	S8J1112/B8J1105
7440-66-6	Zinc	10/11/18 14:32	22.8	mg/kg dry	0.843	1	MS	S8J1112/B8J1105

ND - Indicates compound analyzed for but not detected

RL - Reporting limit  
DF - Dilution Factor

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# ANALYSIS DATA SHEET

**Client:** Peak Environmental  
**Client Sample ID:** NTP-2A  
**Lab Sample ID:** 8100452-02  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 00:00	Prep Date: 10/11/18 09:33
Init/Final Vol: 2.06 g / 50 mL	Prep Method: Hot Block ICP Soil
Matrix: Soil	
Percent Solids: 92.54	

**Total Metals - Soil (SW 846 6010D)**

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7429-90-5	Aluminum	10/11/18 14:34	3800	mg/kg dry	2.62	1	MS	S8J1112/B8J1105
7440-36-0	Antimony	10/11/18 14:34	ND	mg/kg dry	1.31	1	MS	S8J1112/B8J1105
7440-38-2	Arsenic	10/11/18 14:34	ND	mg/kg dry	1.31	1	MS	S8J1112/B8J1105
7440-39-3	Barium	10/11/18 14:34	21.4	mg/kg dry	0.525	1	MS	S8J1112/B8J1105
7440-41-7	Beryllium	10/11/18 14:34	0.160	mg/kg dry	0.0262	1	MS	S8J1112/B8J1105
7440-43-9	Cadmium	10/11/18 14:34	ND	mg/kg dry	0.262	1	MS	S8J1112/B8J1105
7440-70-2	Calcium	10/11/18 14:34	1260	mg/kg dry	26.2	1	MS	S8J1112/B8J1105
7440-47-3	Chromium	10/11/18 14:34	6.19	mg/kg dry	0.262	1	MS	S8J1112/B8J1105
7440-48-4	Cobalt	10/11/18 14:34	2.83	mg/kg dry	0.210	1	MS	S8J1112/B8J1105
7440-50-8	Copper	10/11/18 14:34	10.4	mg/kg dry	0.262	1	MS	S8J1112/B8J1105
7439-89-6	Iron	10/11/18 14:34	8240	mg/kg dry	5.25	1	MS	S8J1112/B8J1105
7439-92-1	Lead	10/11/18 14:34	26.2	mg/kg dry	1.31	1	MS	S8J1112/B8J1105
7439-95-4	Magnesium	10/11/18 14:34	952	mg/kg dry	52.5	1	MS	S8J1112/B8J1105
7439-96-5	Manganese	10/11/18 14:34	144	mg/kg dry	0.262	1	MS	S8J1112/B8J1105
7440-02-0	Nickel	10/11/18 14:34	5.14	mg/kg dry	0.131	1	MS	S8J1112/B8J1105
7440-09-7	Potassium	10/11/18 14:34	251	mg/kg dry	105	1	MS	S8J1112/B8J1105
7782-49-2	Selenium	10/11/18 14:34	ND	mg/kg dry	1.31	1	MS	S8J1112/B8J1105
7440-22-4	Silver	10/11/18 14:34	ND	mg/kg dry	0.525	1	MS	S8J1112/B8J1105
7440-23-5	Sodium	10/11/18 14:34	116	mg/kg dry	52.5	1	MS	S8J1112/B8J1105
7440-28-0	Thallium	10/11/18 14:34	ND	mg/kg dry	1.31	1	MS	S8J1112/B8J1105
7440-62-2	Vanadium	10/11/18 14:34	11.2	mg/kg dry	0.525	1	MS	S8J1112/B8J1105
7440-66-6	Zinc	10/11/18 14:34	30.2	mg/kg dry	0.787	1	MS	S8J1112/B8J1105

ND - Indicates compound analyzed for but not detected

RL - Reporting limit  
DF - Dilution Factor

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12.2.

# ANALYSIS DATA SHEET

**Client:** Peak Environmental  
**Client Sample ID:** NTP-2B  
**Lab Sample ID:** 8100452-03  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 00:00	Prep Date: 10/11/18 09:33
Init/Final Vol: 2.12 g / 50 mL	Prep Method: Hot Block ICP Soil
Matrix: Soil	
Percent Solids: 92.25	

**Total Metals - Soil (SW 846 6010D)**

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7429-90-5	Aluminum	10/11/18 14:36	3620	mg/kg dry	2.56	1	MS	S8J1112/B8J1105
7440-36-0	Antimony	10/11/18 14:36	ND	mg/kg dry	1.28	1	MS	S8J1112/B8J1105
7440-38-2	Arsenic	10/11/18 14:36	ND	mg/kg dry	1.28	1	MS	S8J1112/B8J1105
7440-39-3	Barium	10/11/18 14:36	17.9	mg/kg dry	0.511	1	MS	S8J1112/B8J1105
7440-41-7	Beryllium	10/11/18 14:36	0.184	mg/kg dry	0.0256	1	MS	S8J1112/B8J1105
7440-43-9	Cadmium	10/11/18 14:36	ND	mg/kg dry	0.256	1	MS	S8J1112/B8J1105
7440-70-2	Calcium	10/11/18 14:36	1100	mg/kg dry	25.6	1	MS	S8J1112/B8J1105
7440-47-3	Chromium	10/11/18 14:36	5.98	mg/kg dry	0.256	1	MS	S8J1112/B8J1105
7440-48-4	Cobalt	10/11/18 14:36	2.49	mg/kg dry	0.205	1	MS	S8J1112/B8J1105
7440-50-8	Copper	10/11/18 14:36	9.46	mg/kg dry	0.256	1	MS	S8J1112/B8J1105
7439-89-6	Iron	10/11/18 14:36	8490	mg/kg dry	5.11	1	MS	S8J1112/B8J1105
7439-92-1	Lead	10/11/18 14:36	19.0	mg/kg dry	1.28	1	MS	S8J1112/B8J1105
7439-95-4	Magnesium	10/11/18 14:36	885	mg/kg dry	51.1	1	MS	S8J1112/B8J1105
7439-96-5	Manganese	10/11/18 14:36	139	mg/kg dry	0.256	1	MS	S8J1112/B8J1105
7440-02-0	Nickel	10/11/18 14:36	5.09	mg/kg dry	0.128	1	MS	S8J1112/B8J1105
7440-09-7	Potassium	10/11/18 14:36	233	mg/kg dry	102	1	MS	S8J1112/B8J1105
7782-49-2	Selenium	10/11/18 14:36	ND	mg/kg dry	1.28	1	MS	S8J1112/B8J1105
7440-22-4	Silver	10/11/18 14:36	ND	mg/kg dry	0.511	1	MS	S8J1112/B8J1105
7440-23-5	Sodium	10/11/18 14:36	93.8	mg/kg dry	51.1	1	MS	S8J1112/B8J1105
7440-28-0	Thallium	10/11/18 14:36	ND	mg/kg dry	1.28	1	MS	S8J1112/B8J1105
7440-62-2	Vanadium	10/11/18 14:36	12.0	mg/kg dry	0.511	1	MS	S8J1112/B8J1105
7440-66-6	Zinc	10/11/18 14:36	24.5	mg/kg dry	0.767	1	MS	S8J1112/B8J1105

ND - Indicates compound analyzed for but not detected

RL - Reporting limit  
DF - Dilution Factor

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# ANALYSIS DATA SHEET

**Client:** Peak Environmental  
**Client Sample ID:** NTP-3B  
**Lab Sample ID:** 8100452-04  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 00:00	Prep Date: 10/11/18 09:33
Init/Final Vol: 2.06 g / 50 mL	Prep Method: Hot Block ICP Soil
Matrix: Soil	
Percent Solids: 91.33	

**Total Metals - Soil (SW 846 6010D)**

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7429-90-5	Aluminum	10/11/18 14:38	4300	mg/kg dry	2.66	1	MS	S8J1112/B8J1105
7440-36-0	Antimony	10/11/18 14:38	ND	mg/kg dry	1.33	1	MS	S8J1112/B8J1105
7440-38-2	Arsenic	10/11/18 14:38	ND	mg/kg dry	1.33	1	MS	S8J1112/B8J1105
7440-39-3	Barium	10/11/18 14:38	24.3	mg/kg dry	0.532	1	MS	S8J1112/B8J1105
7440-41-7	Beryllium	10/11/18 14:38	0.181	mg/kg dry	0.0266	1	MS	S8J1112/B8J1105
7440-43-9	Cadmium	10/11/18 14:38	ND	mg/kg dry	0.266	1	MS	S8J1112/B8J1105
7440-70-2	Calcium	10/11/18 14:38	619	mg/kg dry	26.6	1	MS	S8J1112/B8J1105
7440-47-3	Chromium	10/11/18 14:38	7.12	mg/kg dry	0.266	1	MS	S8J1112/B8J1105
7440-48-4	Cobalt	10/11/18 14:38	3.03	mg/kg dry	0.213	1	MS	S8J1112/B8J1105
7440-50-8	Copper	10/11/18 14:38	7.89	mg/kg dry	0.266	1	MS	S8J1112/B8J1105
7439-89-6	Iron	10/11/18 14:38	9220	mg/kg dry	5.32	1	MS	S8J1112/B8J1105
7439-92-1	Lead	10/11/18 14:38	6.72	mg/kg dry	1.33	1	MS	S8J1112/B8J1105
7439-95-4	Magnesium	10/11/18 14:38	946	mg/kg dry	53.2	1	MS	S8J1112/B8J1105
7439-96-5	Manganese	10/11/18 14:38	165	mg/kg dry	0.266	1	MS	S8J1112/B8J1105
7440-02-0	Nickel	10/11/18 14:38	5.13	mg/kg dry	0.133	1	MS	S8J1112/B8J1105
7440-09-7	Potassium	10/11/18 14:38	252	mg/kg dry	106	1	MS	S8J1112/B8J1105
7782-49-2	Selenium	10/11/18 14:38	ND	mg/kg dry	1.33	1	MS	S8J1112/B8J1105
7440-22-4	Silver	10/11/18 14:38	ND	mg/kg dry	0.532	1	MS	S8J1112/B8J1105
7440-23-5	Sodium	10/11/18 14:38	136	mg/kg dry	53.2	1	MS	S8J1112/B8J1105
7440-28-0	Thallium	10/11/18 14:38	ND	mg/kg dry	1.33	1	MS	S8J1112/B8J1105
7440-62-2	Vanadium	10/11/18 14:38	13.4	mg/kg dry	0.532	1	MS	S8J1112/B8J1105
7440-66-6	Zinc	10/11/18 14:38	20.3	mg/kg dry	0.797	1	MS	S8J1112/B8J1105

ND - Indicates compound analyzed for but not detected

RL - Reporting limit  
DF - Dilution Factor

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12.2.

# ANALYSIS DATA SHEET

**Client:** Peak Environmental  
**Client Sample ID:** NTP-4B  
**Lab Sample ID:** 8100452-05  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 12:35	Prep Date: 10/11/18 09:33
Init/Final Vol: 1.9 g / 50 mL	Prep Method: Hot Block ICP Soil
Matrix: Soil	
Percent Solids: 92.00	

**Total Metals - Soil (SW 846 6010D)**

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7429-90-5	Aluminum	10/11/18 14:40	5500	mg/kg dry	2.86	1	MS	S8J1112/B8J1105
7440-36-0	Antimony	10/11/18 14:40	ND	mg/kg dry	1.43	1	MS	S8J1112/B8J1105
7440-38-2	Arsenic	10/11/18 14:40	ND	mg/kg dry	1.43	1	MS	S8J1112/B8J1105
7440-39-3	Barium	10/11/18 14:40	31.8	mg/kg dry	0.572	1	MS	S8J1112/B8J1105
7440-41-7	Beryllium	10/11/18 14:40	0.203	mg/kg dry	0.0286	1	MS	S8J1112/B8J1105
7440-43-9	Cadmium	10/11/18 14:40	ND	mg/kg dry	0.286	1	MS	S8J1112/B8J1105
7440-70-2	Calcium	10/11/18 14:40	933	mg/kg dry	28.6	1	MS	S8J1112/B8J1105
7440-47-3	Chromium	10/11/18 14:40	11.2	mg/kg dry	0.286	1	MS	S8J1112/B8J1105
7440-48-4	Cobalt	10/11/18 14:40	4.83	mg/kg dry	0.229	1	MS	S8J1112/B8J1105
7440-50-8	Copper	10/11/18 14:40	9.21	mg/kg dry	0.286	1	MS	S8J1112/B8J1105
7439-89-6	Iron	10/11/18 14:40	12100	mg/kg dry	5.72	1	MS	S8J1112/B8J1105
7439-92-1	Lead	10/11/18 14:40	5.21	mg/kg dry	1.43	1	MS	S8J1112/B8J1105
7439-95-4	Magnesium	10/11/18 14:40	1750	mg/kg dry	57.2	1	MS	S8J1112/B8J1105
7439-96-5	Manganese	10/11/18 14:40	229	mg/kg dry	0.286	1	MS	S8J1112/B8J1105
7440-02-0	Nickel	10/11/18 14:40	7.75	mg/kg dry	0.143	1	MS	S8J1112/B8J1105
7440-09-7	Potassium	10/11/18 14:40	261	mg/kg dry	114	1	MS	S8J1112/B8J1105
7782-49-2	Selenium	10/11/18 14:40	ND	mg/kg dry	1.43	1	MS	S8J1112/B8J1105
7440-22-4	Silver	10/11/18 14:40	ND	mg/kg dry	0.572	1	MS	S8J1112/B8J1105
7440-23-5	Sodium	10/11/18 14:40	335	mg/kg dry	57.2	1	MS	S8J1112/B8J1105
7440-28-0	Thallium	10/11/18 14:40	ND	mg/kg dry	1.43	1	MS	S8J1112/B8J1105
7440-62-2	Vanadium	10/11/18 14:40	18.9	mg/kg dry	0.572	1	MS	S8J1112/B8J1105
7440-66-6	Zinc	10/11/18 14:40	17.6	mg/kg dry	0.858	1	MS	S8J1112/B8J1105

ND - Indicates compound analyzed for but not detected

RL - Reporting limit  
DF - Dilution Factor

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12.2.

# ANALYSIS DATA SHEET

**Client:** Peak Environmental  
**Client Sample ID:** NTP-6  
**Lab Sample ID:** 8100452-06  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 12:50	Prep Date: 10/11/18 09:33
Init/Final Vol: 1.94 g / 50 mL	Prep Method: Hot Block ICP Soil
Matrix: Soil	
Percent Solids: 87.70	

**Total Metals - Soil (SW 846 6010D)**

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7429-90-5	Aluminum	10/11/18 14:42	6670	mg/kg dry	2.94	1	MS	S8J1112/B8J1105
7440-36-0	Antimony	10/11/18 14:42	ND	mg/kg dry	1.47	1	MS	S8J1112/B8J1105
7440-38-2	Arsenic	10/11/18 14:42	1.71	mg/kg dry	1.47	1	MS	S8J1112/B8J1105
7440-39-3	Barium	10/11/18 14:42	29.1	mg/kg dry	0.588	1	MS	S8J1112/B8J1105
7440-41-7	Beryllium	10/11/18 14:42	0.282	mg/kg dry	0.0294	1	MS	S8J1112/B8J1105
7440-43-9	Cadmium	10/11/18 14:42	ND	mg/kg dry	0.294	1	MS	S8J1112/B8J1105
7440-70-2	Calcium	10/11/18 14:42	1140	mg/kg dry	29.4	1	MS	S8J1112/B8J1105
7440-47-3	Chromium	10/11/18 14:42	9.79	mg/kg dry	0.294	1	MS	S8J1112/B8J1105
7440-48-4	Cobalt	10/11/18 14:42	3.59	mg/kg dry	0.235	1	MS	S8J1112/B8J1105
7440-50-8	Copper	10/11/18 14:42	10.1	mg/kg dry	0.294	1	MS	S8J1112/B8J1105
7439-89-6	Iron	10/11/18 14:42	12300	mg/kg dry	5.88	1	MS	S8J1112/B8J1105
7439-92-1	Lead	10/11/18 14:42	7.82	mg/kg dry	1.47	1	MS	S8J1112/B8J1105
7439-95-4	Magnesium	10/11/18 14:42	1290	mg/kg dry	58.8	1	MS	S8J1112/B8J1105
7439-96-5	Manganese	10/11/18 14:42	176	mg/kg dry	0.294	1	MS	S8J1112/B8J1105
7440-02-0	Nickel	10/11/18 14:42	6.47	mg/kg dry	0.147	1	MS	S8J1112/B8J1105
7440-09-7	Potassium	10/11/18 14:42	361	mg/kg dry	118	1	MS	S8J1112/B8J1105
7782-49-2	Selenium	10/11/18 14:42	ND	mg/kg dry	1.47	1	MS	S8J1112/B8J1105
7440-22-4	Silver	10/11/18 14:42	ND	mg/kg dry	0.588	1	MS	S8J1112/B8J1105
7440-23-5	Sodium	10/11/18 14:42	132	mg/kg dry	58.8	1	MS	S8J1112/B8J1105
7440-28-0	Thallium	10/11/18 14:42	ND	mg/kg dry	1.47	1	MS	S8J1112/B8J1105
7440-62-2	Vanadium	10/11/18 14:42	17.4	mg/kg dry	0.588	1	MS	S8J1112/B8J1105
7440-66-6	Zinc	10/11/18 14:42	20.9	mg/kg dry	0.882	1	MS	S8J1112/B8J1105

ND - Indicates compound analyzed for but not detected

RL - Reporting limit  
DF - Dilution Factor

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12.2.

# ANALYSIS DATA SHEET

**Client:** Peak Environmental  
**Client Sample ID:** NTP-7  
**Lab Sample ID:** 8100452-07  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 13:00	Prep Date: 10/11/18 09:33
Init/Final Vol: 2.02 g / 50 mL	Prep Method: Hot Block ICP Soil
Matrix: Soil	
Percent Solids: 91.36	

**Total Metals - Soil (SW 846 6010D)**

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7429-90-5	Aluminum	10/11/18 14:44	4450	mg/kg dry	2.71	1	MS	S8J1112/B8J1105
7440-36-0	Antimony	10/11/18 14:44	ND	mg/kg dry	1.35	1	MS	S8J1112/B8J1105
7440-38-2	Arsenic	10/11/18 14:44	ND	mg/kg dry	1.35	1	MS	S8J1112/B8J1105
7440-39-3	Barium	10/11/18 14:44	21.4	mg/kg dry	0.542	1	MS	S8J1112/B8J1105
7440-41-7	Beryllium	10/11/18 14:44	0.160	mg/kg dry	0.0271	1	MS	S8J1112/B8J1105
7440-43-9	Cadmium	10/11/18 14:44	ND	mg/kg dry	0.271	1	MS	S8J1112/B8J1105
7440-70-2	Calcium	10/11/18 14:44	1080	mg/kg dry	27.1	1	MS	S8J1112/B8J1105
7440-47-3	Chromium	10/11/18 14:44	6.67	mg/kg dry	0.271	1	MS	S8J1112/B8J1105
7440-48-4	Cobalt	10/11/18 14:44	3.01	mg/kg dry	0.217	1	MS	S8J1112/B8J1105
7440-50-8	Copper	10/11/18 14:44	8.67	mg/kg dry	0.271	1	MS	S8J1112/B8J1105
7439-89-6	Iron	10/11/18 14:44	8450	mg/kg dry	5.42	1	MS	S8J1112/B8J1105
7439-92-1	Lead	10/11/18 14:44	11.3	mg/kg dry	1.35	1	MS	S8J1112/B8J1105
7439-95-4	Magnesium	10/11/18 14:44	1090	mg/kg dry	54.2	1	MS	S8J1112/B8J1105
7439-96-5	Manganese	10/11/18 14:44	145	mg/kg dry	0.271	1	MS	S8J1112/B8J1105
7440-02-0	Nickel	10/11/18 14:44	5.23	mg/kg dry	0.135	1	MS	S8J1112/B8J1105
7440-09-7	Potassium	10/11/18 14:44	230	mg/kg dry	108	1	MS	S8J1112/B8J1105
7782-49-2	Selenium	10/11/18 14:44	ND	mg/kg dry	1.35	1	MS	S8J1112/B8J1105
7440-22-4	Silver	10/11/18 14:44	ND	mg/kg dry	0.542	1	MS	S8J1112/B8J1105
7440-23-5	Sodium	10/11/18 14:44	160	mg/kg dry	54.2	1	MS	S8J1112/B8J1105
7440-28-0	Thallium	10/11/18 14:44	ND	mg/kg dry	1.35	1	MS	S8J1112/B8J1105
7440-62-2	Vanadium	10/11/18 14:44	12.8	mg/kg dry	0.542	1	MS	S8J1112/B8J1105
7440-66-6	Zinc	10/11/18 14:44	21.1	mg/kg dry	0.813	1	MS	S8J1112/B8J1105

ND - Indicates compound analyzed for but not detected

RL - Reporting limit  
DF - Dilution Factor

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12.2.

# ANALYSIS DATA SHEET

**Client:** Peak Environmental  
**Client Sample ID:** STP-1B  
**Lab Sample ID:** 8100452-08  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 13:15	Prep Date: 10/11/18 09:33
Init/Final Vol: 2.08 g / 50 mL	Prep Method: Hot Block ICP Soil
Matrix: Soil	
Percent Solids: 89.59	

**Total Metals - Soil (SW 846 6010D)**

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7429-90-5	Aluminum	10/11/18 14:46	5040	mg/kg dry	2.68	1	MS	S8J1112/B8J1105
7440-36-0	Antimony	10/11/18 14:46	ND	mg/kg dry	1.34	1	MS	S8J1112/B8J1105
7440-38-2	Arsenic	10/11/18 14:46	ND	mg/kg dry	1.34	1	MS	S8J1112/B8J1105
7440-39-3	Barium	10/11/18 14:46	20.2	mg/kg dry	0.537	1	MS	S8J1112/B8J1105
7440-41-7	Beryllium	10/11/18 14:46	0.191	mg/kg dry	0.0268	1	MS	S8J1112/B8J1105
7440-43-9	Cadmium	10/11/18 14:46	ND	mg/kg dry	0.268	1	MS	S8J1112/B8J1105
7440-70-2	Calcium	10/11/18 14:46	453	mg/kg dry	26.8	1	MS	S8J1112/B8J1105
7440-47-3	Chromium	10/11/18 14:46	7.08	mg/kg dry	0.268	1	MS	S8J1112/B8J1105
7440-48-4	Cobalt	10/11/18 14:46	3.03	mg/kg dry	0.215	1	MS	S8J1112/B8J1105
7440-50-8	Copper	10/11/18 14:46	7.22	mg/kg dry	0.268	1	MS	S8J1112/B8J1105
7439-89-6	Iron	10/11/18 14:46	9500	mg/kg dry	5.37	1	MS	S8J1112/B8J1105
7439-92-1	Lead	10/11/18 14:46	4.88	mg/kg dry	1.34	1	MS	S8J1112/B8J1105
7439-95-4	Magnesium	10/11/18 14:46	966	mg/kg dry	53.7	1	MS	S8J1112/B8J1105
7439-96-5	Manganese	10/11/18 14:46	144	mg/kg dry	0.268	1	MS	S8J1112/B8J1105
7440-02-0	Nickel	10/11/18 14:46	5.18	mg/kg dry	0.134	1	MS	S8J1112/B8J1105
7440-09-7	Potassium	10/11/18 14:46	260	mg/kg dry	107	1	MS	S8J1112/B8J1105
7782-49-2	Selenium	10/11/18 14:46	ND	mg/kg dry	1.34	1	MS	S8J1112/B8J1105
7440-22-4	Silver	10/11/18 14:46	ND	mg/kg dry	0.537	1	MS	S8J1112/B8J1105
7440-23-5	Sodium	10/11/18 14:46	72.2	mg/kg dry	53.7	1	MS	S8J1112/B8J1105
7440-28-0	Thallium	10/11/18 14:46	ND	mg/kg dry	1.34	1	MS	S8J1112/B8J1105
7440-62-2	Vanadium	10/11/18 14:46	13.0	mg/kg dry	0.537	1	MS	S8J1112/B8J1105
7440-66-6	Zinc	10/11/18 14:46	23.5	mg/kg dry	0.805	1	MS	S8J1112/B8J1105

ND - Indicates compound analyzed for but not detected

RL - Reporting limit  
DF - Dilution Factor

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12.2.

# ANALYSIS DATA SHEET

**Client:** Peak Environmental  
**Client Sample ID:** STP-2B  
**Lab Sample ID:** 8100452-09  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 13:30	Prep Date: 10/11/18 09:33
Init/Final Vol: 1.86 g / 50 mL	Prep Method: Hot Block ICP Soil
Matrix: Soil	
Percent Solids: 91.55	

**Total Metals - Soil (SW 846 6010D)**

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7429-90-5	Aluminum	10/11/18 14:48	5700	mg/kg dry	2.94	1	MS	S8J1112/B8J1105
7440-36-0	Antimony	10/11/18 14:48	ND	mg/kg dry	1.47	1	MS	S8J1112/B8J1105
7440-38-2	Arsenic	10/11/18 14:48	ND	mg/kg dry	1.47	1	MS	S8J1112/B8J1105
7440-39-3	Barium	10/11/18 14:48	23.4	mg/kg dry	0.587	1	MS	S8J1112/B8J1105
7440-41-7	Beryllium	10/11/18 14:48	0.223	mg/kg dry	0.0294	1	MS	S8J1112/B8J1105
7440-43-9	Cadmium	10/11/18 14:48	ND	mg/kg dry	0.294	1	MS	S8J1112/B8J1105
7440-70-2	Calcium	10/11/18 14:48	473	mg/kg dry	29.4	1	MS	S8J1112/B8J1105
7440-47-3	Chromium	10/11/18 14:48	7.63	mg/kg dry	0.294	1	MS	S8J1112/B8J1105
7440-48-4	Cobalt	10/11/18 14:48	3.23	mg/kg dry	0.235	1	MS	S8J1112/B8J1105
7440-50-8	Copper	10/11/18 14:48	8.57	mg/kg dry	0.294	1	MS	S8J1112/B8J1105
7439-89-6	Iron	10/11/18 14:48	11100	mg/kg dry	5.87	1	MS	S8J1112/B8J1105
7439-92-1	Lead	10/11/18 14:48	6.05	mg/kg dry	1.47	1	MS	S8J1112/B8J1105
7439-95-4	Magnesium	10/11/18 14:48	1070	mg/kg dry	58.7	1	MS	S8J1112/B8J1105
7439-96-5	Manganese	10/11/18 14:48	187	mg/kg dry	0.294	1	MS	S8J1112/B8J1105
7440-02-0	Nickel	10/11/18 14:48	5.76	mg/kg dry	0.147	1	MS	S8J1112/B8J1105
7440-09-7	Potassium	10/11/18 14:48	271	mg/kg dry	117	1	MS	S8J1112/B8J1105
7782-49-2	Selenium	10/11/18 14:48	ND	mg/kg dry	1.47	1	MS	S8J1112/B8J1105
7440-22-4	Silver	10/11/18 14:48	ND	mg/kg dry	0.587	1	MS	S8J1112/B8J1105
7440-23-5	Sodium	10/11/18 14:48	74.3	mg/kg dry	58.7	1	MS	S8J1112/B8J1105
7440-28-0	Thallium	10/11/18 14:48	ND	mg/kg dry	1.47	1	MS	S8J1112/B8J1105
7440-62-2	Vanadium	10/11/18 14:48	13.9	mg/kg dry	0.587	1	MS	S8J1112/B8J1105
7440-66-6	Zinc	10/11/18 14:48	38.2	mg/kg dry	0.881	1	MS	S8J1112/B8J1105

ND - Indicates compound analyzed for but not detected

RL - Reporting limit  
DF - Dilution Factor

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12.2.



# ANALYSIS DATA SHEET

**Client:** Peak Environmental  
**Client Sample ID:** STP-3B  
**Lab Sample ID:** 8100452-10  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 13:40	Prep Date: 10/11/18 09:33
Init/Final Vol: 2.11 g / 50 mL	Prep Method: Hot Block ICP Soil
Matrix: Soil	
Percent Solids: 91.53	

**Total Metals - Soil (SW 846 6010D)**

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7429-90-5	Aluminum	10/11/18 14:50	4900	mg/kg dry	2.59	1	MS	S8J1112/B8J1105
7440-36-0	Antimony	10/11/18 14:50	ND	mg/kg dry	1.29	1	MS	S8J1112/B8J1105
7440-38-2	Arsenic	10/11/18 14:50	1.65	mg/kg dry	1.29	1	MS	S8J1112/B8J1105
7440-39-3	Barium	10/11/18 14:50	19.4	mg/kg dry	0.518	1	MS	S8J1112/B8J1105
7440-41-7	Beryllium	10/11/18 14:50	0.184	mg/kg dry	0.0259	1	MS	S8J1112/B8J1105
7440-43-9	Cadmium	10/11/18 14:50	ND	mg/kg dry	0.259	1	MS	S8J1112/B8J1105
7440-70-2	Calcium	10/11/18 14:50	463	mg/kg dry	25.9	1	MS	S8J1112/B8J1105
7440-47-3	Chromium	10/11/18 14:50	6.68	mg/kg dry	0.259	1	MS	S8J1112/B8J1105
7440-48-4	Cobalt	10/11/18 14:50	2.90	mg/kg dry	0.207	1	MS	S8J1112/B8J1105
7440-50-8	Copper	10/11/18 14:50	7.66	mg/kg dry	0.259	1	MS	S8J1112/B8J1105
7439-89-6	Iron	10/11/18 14:50	9550	mg/kg dry	5.18	1	MS	S8J1112/B8J1105
7439-92-1	Lead	10/11/18 14:50	6.01	mg/kg dry	1.29	1	MS	S8J1112/B8J1105
7439-95-4	Magnesium	10/11/18 14:50	977	mg/kg dry	51.8	1	MS	S8J1112/B8J1105
7439-96-5	Manganese	10/11/18 14:50	163	mg/kg dry	0.259	1	MS	S8J1112/B8J1105
7440-02-0	Nickel	10/11/18 14:50	5.18	mg/kg dry	0.129	1	MS	S8J1112/B8J1105
7440-09-7	Potassium	10/11/18 14:50	272	mg/kg dry	104	1	MS	S8J1112/B8J1105
7782-49-2	Selenium	10/11/18 14:50	ND	mg/kg dry	1.29	1	MS	S8J1112/B8J1105
7440-22-4	Silver	10/11/18 14:50	ND	mg/kg dry	0.518	1	MS	S8J1112/B8J1105
7440-23-5	Sodium	10/11/18 14:50	74.0	mg/kg dry	51.8	1	MS	S8J1112/B8J1105
7440-28-0	Thallium	10/11/18 14:50	ND	mg/kg dry	1.29	1	MS	S8J1112/B8J1105
7440-62-2	Vanadium	10/11/18 14:50	12.7	mg/kg dry	0.518	1	MS	S8J1112/B8J1105
7440-66-6	Zinc	10/11/18 14:50	21.0	mg/kg dry	0.777	1	MS	S8J1112/B8J1105

ND - Indicates compound analyzed for but not detected

RL - Reporting limit  
DF - Dilution Factor

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12.2.

# ANALYSIS DATA SHEET

**Client:** Peak Environmental  
**Client Sample ID:** STP-4A  
**Lab Sample ID:** 8100452-11  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 00:00	Prep Date: 10/11/18 09:33
Init/Final Vol: 1.95 g / 50 mL	Prep Method: Hot Block ICP Soil
Matrix: Soil	
Percent Solids: 90.63	

**Total Metals - Soil (SW 846 6010D)**

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7429-90-5	Aluminum	10/11/18 15:31	6100	mg/kg dry	2.83	1	MS	S8J1112/B8J1105
7440-36-0	Antimony	10/11/18 15:31	ND	mg/kg dry	1.41	1	MS	S8J1112/B8J1105
7440-38-2	Arsenic	10/11/18 15:31	ND	mg/kg dry	1.41	1	MS	S8J1112/B8J1105
7440-39-3	Barium	10/11/18 15:31	23.3	mg/kg dry	0.566	1	MS	S8J1112/B8J1105
7440-41-7	Beryllium	10/11/18 15:31	0.215	mg/kg dry	0.0283	1	MS	S8J1112/B8J1105
7440-43-9	Cadmium	10/11/18 15:31	ND	mg/kg dry	0.283	1	MS	S8J1112/B8J1105
7440-70-2	Calcium	10/11/18 15:31	634	mg/kg dry	28.3	1	MS	S8J1112/B8J1105
7440-47-3	Chromium	10/11/18 15:31	8.26	mg/kg dry	0.283	1	MS	S8J1112/B8J1105
7440-48-4	Cobalt	10/11/18 15:31	3.51	mg/kg dry	0.226	1	MS	S8J1112/B8J1105
7440-50-8	Copper	10/11/18 15:31	9.17	mg/kg dry	0.283	1	MS	S8J1112/B8J1105
7439-89-6	Iron	10/11/18 15:31	10900	mg/kg dry	5.66	1	MS	S8J1112/B8J1105
7439-92-1	Lead	10/11/18 15:31	10.6	mg/kg dry	1.41	1	MS	S8J1112/B8J1105
7439-95-4	Magnesium	10/11/18 15:31	1110	mg/kg dry	56.6	1	MS	S8J1112/B8J1105
7439-96-5	Manganese	10/11/18 15:31	209	mg/kg dry	0.283	1	MS	S8J1112/B8J1105
7440-02-0	Nickel	10/11/18 15:31	6.25	mg/kg dry	0.141	1	MS	S8J1112/B8J1105
7440-09-7	Potassium	10/11/18 15:31	286	mg/kg dry	113	1	MS	S8J1112/B8J1105
7782-49-2	Selenium	10/11/18 15:31	ND	mg/kg dry	1.41	1	MS	S8J1112/B8J1105
7440-22-4	Silver	10/11/18 15:31	ND	mg/kg dry	0.566	1	MS	S8J1112/B8J1105
7440-23-5	Sodium	10/11/18 15:31	85.2	mg/kg dry	56.6	1	MS	S8J1112/B8J1105
7440-28-0	Thallium	10/11/18 15:31	ND	mg/kg dry	1.41	1	MS	S8J1112/B8J1105
7440-62-2	Vanadium	10/11/18 15:31	15.4	mg/kg dry	0.566	1	MS	S8J1112/B8J1105
7440-66-6	Zinc	10/11/18 15:31	20.4	mg/kg dry	0.849	1	MS	S8J1112/B8J1105

ND - Indicates compound analyzed for but not detected

RL - Reporting limit  
DF - Dilution Factor

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12.2.

# ANALYSIS DATA SHEET

**Client:** Peak Environmental  
**Client Sample ID:** STP-4B  
**Lab Sample ID:** 8100452-12  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 00:00	Prep Date: 10/11/18 09:33
Init/Final Vol: 2.02 g / 50 mL	Prep Method: Hot Block ICP Soil
Matrix: Soil	
Percent Solids: 91.70	

**Total Metals - Soil (SW 846 6010D)**

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7429-90-5	Aluminum	10/11/18 15:33	5610	mg/kg dry	2.70	1	MS	S8J1112/B8J1105
7440-36-0	Antimony	10/11/18 15:33	ND	mg/kg dry	1.35	1	MS	S8J1112/B8J1105
7440-38-2	Arsenic	10/11/18 15:33	ND	mg/kg dry	1.35	1	MS	S8J1112/B8J1105
7440-39-3	Barium	10/11/18 15:33	24.9	mg/kg dry	0.540	1	MS	S8J1112/B8J1105
7440-41-7	Beryllium	10/11/18 15:33	0.211	mg/kg dry	0.0270	1	MS	S8J1112/B8J1105
7440-43-9	Cadmium	10/11/18 15:33	ND	mg/kg dry	0.270	1	MS	S8J1112/B8J1105
7440-70-2	Calcium	10/11/18 15:33	899	mg/kg dry	27.0	1	MS	S8J1112/B8J1105
7440-47-3	Chromium	10/11/18 15:33	7.75	mg/kg dry	0.270	1	MS	S8J1112/B8J1105
7440-48-4	Cobalt	10/11/18 15:33	3.46	mg/kg dry	0.216	1	MS	S8J1112/B8J1105
7440-50-8	Copper	10/11/18 15:33	8.07	mg/kg dry	0.270	1	MS	S8J1112/B8J1105
7439-89-6	Iron	10/11/18 15:33	10600	mg/kg dry	5.40	1	MS	S8J1112/B8J1105
7439-92-1	Lead	10/11/18 15:33	8.26	mg/kg dry	1.35	1	MS	S8J1112/B8J1105
7439-95-4	Magnesium	10/11/18 15:33	1220	mg/kg dry	54.0	1	MS	S8J1112/B8J1105
7439-96-5	Manganese	10/11/18 15:33	261	mg/kg dry	0.270	1	MS	S8J1112/B8J1105
7440-02-0	Nickel	10/11/18 15:33	6.18	mg/kg dry	0.135	1	MS	S8J1112/B8J1105
7440-09-7	Potassium	10/11/18 15:33	283	mg/kg dry	108	1	MS	S8J1112/B8J1105
7782-49-2	Selenium	10/11/18 15:33	ND	mg/kg dry	1.35	1	MS	S8J1112/B8J1105
7440-22-4	Silver	10/11/18 15:33	ND	mg/kg dry	0.540	1	MS	S8J1112/B8J1105
7440-23-5	Sodium	10/11/18 15:33	82.6	mg/kg dry	54.0	1	MS	S8J1112/B8J1105
7440-28-0	Thallium	10/11/18 15:33	ND	mg/kg dry	1.35	1	MS	S8J1112/B8J1105
7440-62-2	Vanadium	10/11/18 15:33	14.7	mg/kg dry	0.540	1	MS	S8J1112/B8J1105
7440-66-6	Zinc	10/11/18 15:33	23.2	mg/kg dry	0.810	1	MS	S8J1112/B8J1105

ND - Indicates compound analyzed for but not detected

RL - Reporting limit  
DF - Dilution Factor

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12.2.

# ANALYSIS DATA SHEET

**Client:** Peak Environmental  
**Client Sample ID:** STP-5  
**Lab Sample ID:** 8100452-13  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 00:00	Prep Date: 10/11/18 09:33
Init/Final Vol: 1.88 g / 50 mL	Prep Method: Hot Block ICP Soil
Matrix: Soil	
Percent Solids: 92.63	

**Total Metals - Soil (SW 846 6010D)**

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7429-90-5	Aluminum	10/11/18 15:37	6860	mg/kg dry	2.87	1	MS	S8J1112/B8J1105
7440-36-0	Antimony	10/11/18 15:37	ND	mg/kg dry	1.44	1	MS	S8J1112/B8J1105
7440-38-2	Arsenic	10/11/18 15:37	3.01	mg/kg dry	1.44	1	MS	S8J1112/B8J1105
7440-39-3	Barium	10/11/18 15:37	23.0	mg/kg dry	0.574	1	MS	S8J1112/B8J1105
7440-41-7	Beryllium	10/11/18 15:37	0.256	mg/kg dry	0.0287	1	MS	S8J1112/B8J1105
7440-43-9	Cadmium	10/11/18 15:37	ND	mg/kg dry	0.287	1	MS	S8J1112/B8J1105
7440-70-2	Calcium	10/11/18 15:37	310	mg/kg dry	28.7	1	MS	S8J1112/B8J1105
7440-47-3	Chromium	10/11/18 15:37	8.30	mg/kg dry	0.287	1	MS	S8J1112/B8J1105
7440-48-4	Cobalt	10/11/18 15:37	4.74	mg/kg dry	0.230	1	MS	S8J1112/B8J1105
7440-50-8	Copper	10/11/18 15:37	9.68	mg/kg dry	0.287	1	MS	S8J1112/B8J1105
7439-89-6	Iron	10/11/18 15:37	15100	mg/kg dry	5.74	1	MS	S8J1112/B8J1105
7439-92-1	Lead	10/11/18 15:37	5.25	mg/kg dry	1.44	1	MS	S8J1112/B8J1105
7439-95-4	Magnesium	10/11/18 15:37	1150	mg/kg dry	57.4	1	MS	S8J1112/B8J1105
7439-96-5	Manganese	10/11/18 15:37	333	mg/kg dry	0.287	1	MS	S8J1112/B8J1105
7440-02-0	Nickel	10/11/18 15:37	7.29	mg/kg dry	0.144	1	MS	S8J1112/B8J1105
7440-09-7	Potassium	10/11/18 15:37	241	mg/kg dry	115	1	MS	S8J1112/B8J1105
7782-49-2	Selenium	10/11/18 15:37	ND	mg/kg dry	1.44	1	MS	S8J1112/B8J1105
7440-22-4	Silver	10/11/18 15:37	ND	mg/kg dry	0.574	1	MS	S8J1112/B8J1105
7440-23-5	Sodium	10/11/18 15:37	ND	mg/kg dry	57.4	1	MS	S8J1112/B8J1105
7440-28-0	Thallium	10/11/18 15:37	ND	mg/kg dry	1.44	1	MS	S8J1112/B8J1105
7440-62-2	Vanadium	10/11/18 15:37	17.3	mg/kg dry	0.574	1	MS	S8J1112/B8J1105
7440-66-6	Zinc	10/11/18 15:37	39.9	mg/kg dry	0.861	1	MS	S8J1112/B8J1105

ND - Indicates compound analyzed for but not detected

RL - Reporting limit  
DF - Dilution Factor

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12.2.

# ANALYSIS DATA SHEET

**Client:** Peak Environmental  
**Client Sample ID:** STP-7  
**Lab Sample ID:** 8100452-14  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 00:00	Prep Date: 10/11/18 09:33
Init/Final Vol: 2.12 g / 50 mL	Prep Method: Hot Block ICP Soil
Matrix: Soil	
Percent Solids: 92.94	

**Total Metals - Soil (SW 846 6010D)**

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst	Sequence/Batch
7429-90-5	Aluminum	10/11/18 15:39	4650	mg/kg dry	2.54	1	MS	S8J1112/B8J1105
7440-36-0	Antimony	10/11/18 15:39	ND	mg/kg dry	1.27	1	MS	S8J1112/B8J1105
7440-38-2	Arsenic	10/11/18 15:39	1.49	mg/kg dry	1.27	1	MS	S8J1112/B8J1105
7440-39-3	Barium	10/11/18 15:39	18.5	mg/kg dry	0.508	1	MS	S8J1112/B8J1105
7440-41-7	Beryllium	10/11/18 15:39	0.178	mg/kg dry	0.0254	1	MS	S8J1112/B8J1105
7440-43-9	Cadmium	10/11/18 15:39	ND	mg/kg dry	0.254	1	MS	S8J1112/B8J1105
7440-70-2	Calcium	10/11/18 15:39	294	mg/kg dry	25.4	1	MS	S8J1112/B8J1105
7440-47-3	Chromium	10/11/18 15:39	6.14	mg/kg dry	0.254	1	MS	S8J1112/B8J1105
7440-48-4	Cobalt	10/11/18 15:39	2.97	mg/kg dry	0.203	1	MS	S8J1112/B8J1105
7440-50-8	Copper	10/11/18 15:39	6.73	mg/kg dry	0.254	1	MS	S8J1112/B8J1105
7439-89-6	Iron	10/11/18 15:39	9110	mg/kg dry	5.08	1	MS	S8J1112/B8J1105
7439-92-1	Lead	10/11/18 15:39	4.31	mg/kg dry	1.27	1	MS	S8J1112/B8J1105
7439-95-4	Magnesium	10/11/18 15:39	910	mg/kg dry	50.8	1	MS	S8J1112/B8J1105
7439-96-5	Manganese	10/11/18 15:39	240	mg/kg dry	0.254	1	MS	S8J1112/B8J1105
7440-02-0	Nickel	10/11/18 15:39	5.05	mg/kg dry	0.127	1	MS	S8J1112/B8J1105
7440-09-7	Potassium	10/11/18 15:39	210	mg/kg dry	102	1	MS	S8J1112/B8J1105
7782-49-2	Selenium	10/11/18 15:39	ND	mg/kg dry	1.27	1	MS	S8J1112/B8J1105
7440-22-4	Silver	10/11/18 15:39	ND	mg/kg dry	0.508	1	MS	S8J1112/B8J1105
7440-23-5	Sodium	10/11/18 15:39	52.0	mg/kg dry	50.8	1	MS	S8J1112/B8J1105
7440-28-0	Thallium	10/11/18 15:39	ND	mg/kg dry	1.27	1	MS	S8J1112/B8J1105
7440-62-2	Vanadium	10/11/18 15:39	11.8	mg/kg dry	0.508	1	MS	S8J1112/B8J1105
7440-66-6	Zinc	10/11/18 15:39	24.1	mg/kg dry	0.761	1	MS	S8J1112/B8J1105

ND - Indicates compound analyzed for but not detected

RL - Reporting limit  
DF - Dilution Factor

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12.2.

**Total Metals - Quality Control  
Aqua Pro-Tech Laboratories**

**Batch B8J1105**

**Method: SW 846 6010D**

**Prepared: 10/11/2018**

<b>Lab Number</b>	<b>Source</b>	<b>Analyte</b>	<b>Result</b>	<b>Units</b>	<b>Spike Level</b>	<b>Source Result</b>	<b>%REC</b>	<b>%REC Limits</b>	<b>RPD</b>	<b>RPD Limit</b>
B8J1105-BS1		Aluminum	4590	mg/kg wet	5000		91.7	80-120		
B8J1105-BS1		Antimony	11.2	mg/kg wet	12.5		90.0	80-120		
B8J1105-BS1		Arsenic	11.2	mg/kg wet	12.5		89.6	80-120		
B8J1105-BS1		Barium	11.4	mg/kg wet	12.5		91.4	80-120		
B8J1105-BS1		Beryllium	12.2	mg/kg wet	12.5		97.2	80-120		
B8J1105-BS1		Cadmium	11.6	mg/kg wet	12.5		92.4	80-120		
B8J1105-BS1		Calcium	2980	mg/kg wet	3120		95.2	80-120		
B8J1105-BS1		Chromium	11.5	mg/kg wet	12.5		92.0	80-120		
B8J1105-BS1		Cobalt	11.0	mg/kg wet	12.5		88.0	80-120		
B8J1105-BS1		Copper	12.3	mg/kg wet	12.5		98.6	80-120		
B8J1105-BS1		Iron	6650	mg/kg wet	7500		88.7	80-120		
B8J1105-BS1		Lead	11.0	mg/kg wet	12.5		88.0	80-120		
B8J1105-BS1		Magnesium	2910	mg/kg wet	3120		93.0	80-120		
B8J1105-BS1		Manganese	11.4	mg/kg wet	12.5		90.8	80-120		
B8J1105-BS1		Nickel	11.0	mg/kg wet	12.5		87.6	80-120		
B8J1105-BS1		Potassium	2950	mg/kg wet	3120		94.4	80-120		
B8J1105-BS1		Selenium	10.9	mg/kg wet	12.5		87.4	80-120		
B8J1105-BS1		Silver	10.6	mg/kg wet	12.5		84.6	80-120		
B8J1105-BS1		Sodium	2920	mg/kg wet	3120		93.6	80-120		
B8J1105-BS1		Thallium	11.2	mg/kg wet	12.5		89.8	80-120		
B8J1105-BS1		Vanadium	11.8	mg/kg wet	12.5		94.8	80-120		
B8J1105-BS1		Zinc	10.7	mg/kg wet	12.5		85.8	80-120		

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12.3.

\* - Outside of QC Limits      J - Result is between the MDL and RL for an Analysis reported to an RL  
NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

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**Total Metals - Quality Control**  
**Aqua Pro-Tech Laboratories**

Batch B8J1105 (cont.)			Method: SW 846 6010D			Prepared: 10/11/2018				
Lab Number	Source	Analyte	Result	Units	Spike Level	Source Result	%REC Limits	%REC Limits	RPD	RPD Limit
B8J1105-DUP1	8100452-13	Aluminum	5880	mg/kg dry		6860			15.4	20
B8J1105-DUP1	8100452-13	Antimony	ND	mg/kg dry		ND				20
B8J1105-DUP1	8100452-13	Arsenic	3.16	mg/kg dry		3.01			4.65	20
B8J1105-DUP1	8100452-13	Barium	20.0	mg/kg dry		23.0			13.8	20
B8J1105-DUP1	8100452-13	Beryllium	0.224	mg/kg dry		0.256			13.2	20
B8J1105-DUP1	8100452-13	Cadmium	ND	mg/kg dry		ND				20
B8J1105-DUP1	8100452-13	Calcium	141	mg/kg dry		310			75.2*	20
B8J1105-DUP1	8100452-13	Chromium	7.41	mg/kg dry		8.30			11.3	20
B8J1105-DUP1	8100452-13	Cobalt	4.39	mg/kg dry		4.74			7.55	20
B8J1105-DUP1	8100452-13	Copper	8.30	mg/kg dry		9.68			15.3	20
B8J1105-DUP1	8100452-13	Iron	13800	mg/kg dry		15100			8.54	20
B8J1105-DUP1	8100452-13	Lead	3.90	mg/kg dry		5.25			29.5*	20
B8J1105-DUP1	8100452-13	Magnesium	904	mg/kg dry		1150			23.6*	20
B8J1105-DUP1	8100452-13	Manganese	322	mg/kg dry		333			3.51	20
B8J1105-DUP1	8100452-13	Nickel	6.69	mg/kg dry		7.29			8.62	20
B8J1105-DUP1	8100452-13	Potassium	196	mg/kg dry		241			20.4*	20
B8J1105-DUP1	8100452-13	Selenium	ND	mg/kg dry		ND				20
B8J1105-DUP1	8100452-13	Silver	ND	mg/kg dry		ND				20
B8J1105-DUP1	8100452-13	Sodium	ND	mg/kg dry		ND				20
B8J1105-DUP1	8100452-13	Thallium	ND	mg/kg dry		ND				20
B8J1105-DUP1	8100452-13	Vanadium	15.0	mg/kg dry		17.3			13.7	20
B8J1105-DUP1	8100452-13	Zinc	35.3	mg/kg dry		39.9			12.2	20

\* - Outside of QC Limits

J - Result is between the MDL and RL for an Analysis reported to an RL

NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

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12.3.

**Total Metals - Quality Control**  
**Aqua Pro-Tech Laboratories**

**Batch B8J1105 (cont.)**

**Method: SW 846 6010D**

**Prepared: 10/11/2018**

<u>Lab Number</u>	<u>Source</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>
B8J1105-MS1	8100452-13	Aluminum	11700	mg/kg dry	5740	6860	84.7	75-125		
B8J1105-MS1	8100452-13	Antimony	10.4	mg/kg dry	14.4	ND	72.2*	75-125		
B8J1105-MS1	8100452-13	Arsenic	14.3	mg/kg dry	14.4	3.01	78.8	75-125		
B8J1105-MS1	8100452-13	Barium	32.7	mg/kg dry	14.4	23.0	68.0*	75-125		
B8J1105-MS1	8100452-13	Beryllium	12.1	mg/kg dry	14.4	0.256	82.4	75-125		
B8J1105-MS1	8100452-13	Cadmium	11.0	mg/kg dry	14.4	ND	76.8	75-125		
B8J1105-MS1	8100452-13	Calcium	3010	mg/kg dry	3590	310	75.4	75-125		
B8J1105-MS1	8100452-13	Chromium	19.1	mg/kg dry	14.4	8.30	75.2	75-125		
B8J1105-MS1	8100452-13	Cobalt	15.4	mg/kg dry	14.4	4.74	74.0*	75-125		
B8J1105-MS1	8100452-13	Copper	22.0	mg/kg dry	14.4	9.68	86.2	75-125		
B8J1105-MS1	8100452-13	Iron	21700	mg/kg dry	8610	15100	77.0	75-125		
B8J1105-MS1	8100452-13	Lead	14.2	mg/kg dry	14.4	5.25	62.4*	75-125		
B8J1105-MS1	8100452-13	Magnesium	3920	mg/kg dry	3590	1150	77.2	75-125		
B8J1105-MS1	8100452-13	Manganese	362	mg/kg dry	14.4	333	200(NC)	75-125		
B8J1105-MS1	8100452-13	Nickel	17.6	mg/kg dry	14.4	7.29	72.0*	75-125		
B8J1105-MS1	8100452-13	Potassium	3070	mg/kg dry	3590	241	78.9	75-125		
B8J1105-MS1	8100452-13	Selenium	10.3	mg/kg dry	14.4	ND	72.0*	75-125		
B8J1105-MS1	8100452-13	Silver	10.3	mg/kg dry	14.4	ND	72.0*	75-125		
B8J1105-MS1	8100452-13	Sodium	2930	mg/kg dry	3590	53.4 J	80.1	75-125		
B8J1105-MS1	8100452-13	Thallium	10.8	mg/kg dry	14.4	0.307 J	73.3*	75-125		
B8J1105-MS1	8100452-13	Vanadium	29.0	mg/kg dry	14.4	17.3	81.8	75-125		
B8J1105-MS1	8100452-13	Zinc	49.7	mg/kg dry	14.4	39.9	68.0*	75-125		

\* - Outside of QC Limits

J - Result is between the MDL and RL for an Analysis reported to an RL

NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

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12.3.



**Total Metals - Quality Control  
Aqua Pro-Tech Laboratories**

Batch B8J1105 (cont.)			Method: SW 846 6010D			Prepared: 10/11/2018				
Lab Number	Source	Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
B8J1105-MSD1	8100452-13	Aluminum	12100	mg/kg dry	5740	6860	91.8	75-125	3.42	20
B8J1105-MSD1	8100452-13	Antimony	12.0	mg/kg dry	14.4	ND	83.6	75-125	14.6	20
B8J1105-MSD1	8100452-13	Arsenic	15.6	mg/kg dry	14.4	3.01	87.6	75-125	8.45	20
B8J1105-MSD1	8100452-13	Barium	33.6	mg/kg dry	14.4	23.0	74.0*	75-125	2.60	20
B8J1105-MSD1	8100452-13	Beryllium	13.8	mg/kg dry	14.4	0.256	94.4	75-125	13.3	20
B8J1105-MSD1	8100452-13	Cadmium	12.7	mg/kg dry	14.4	ND	88.4	75-125	14.0	20
B8J1105-MSD1	8100452-13	Calcium	3420	mg/kg dry	3590	310	86.6	75-125	12.5	20
B8J1105-MSD1	8100452-13	Chromium	20.5	mg/kg dry	14.4	8.30	84.8	75-125	6.97	20
B8J1105-MSD1	8100452-13	Cobalt	16.8	mg/kg dry	14.4	4.74	83.8	75-125	8.76	20
B8J1105-MSD1	8100452-13	Copper	23.5	mg/kg dry	14.4	9.68	96.2	75-125	6.31	20
B8J1105-MSD1	8100452-13	Iron	21900	mg/kg dry	8610	15100	79.3	75-125	0.922	20
B8J1105-MSD1	8100452-13	Lead	16.1	mg/kg dry	14.4	5.25	75.4	75-125	12.3	20
B8J1105-MSD1	8100452-13	Magnesium	4240	mg/kg dry	3590	1150	86.3	75-125	7.99	20
B8J1105-MSD1	8100452-13	Manganese	359	mg/kg dry	14.4	333	180(NC)	75-125	0.797	20
B8J1105-MSD1	8100452-13	Nickel	19.1	mg/kg dry	14.4	7.29	82.0	75-125	7.82	20
B8J1105-MSD1	8100452-13	Potassium	3500	mg/kg dry	3590	241	90.9	75-125	13.1	20
B8J1105-MSD1	8100452-13	Selenium	11.8	mg/kg dry	14.4	ND	82.2	75-125	13.2	20
B8J1105-MSD1	8100452-13	Silver	11.7	mg/kg dry	14.4	ND	81.2	75-125	12.0	20
B8J1105-MSD1	8100452-13	Sodium	3330	mg/kg dry	3590	53.4 J	91.3	75-125	12.8	20
B8J1105-MSD1	8100452-13	Thallium	12.3	mg/kg dry	14.4	0.307 J	83.9	75-125	13.1	20
B8J1105-MSD1	8100452-13	Vanadium	29.3	mg/kg dry	14.4	17.3	83.8	75-125	0.985	20
B8J1105-MSD1	8100452-13	Zinc	50.2	mg/kg dry	14.4	39.9	72.0*	75-125	1.15	20

\* - Outside of QC Limits      J - Result is between the MDL and RL for an Analysis reported to an RL  
 NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

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12.3.

**Total Metals - Quality Control**  
**Aqua Pro-Tech Laboratories**

Batch B8J1105 (cont.)			Method: SW 846 6010D			Prepared: 10/11/2018				
Lab Number	Source	Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
B8J1105-PS1	8100452-13	Aluminum	428	mg/L	200	239	94.5	75-125		
B8J1105-PS1	8100452-13	Antimony	0.480	mg/L	0.500	ND	96.0	75-125		
B8J1105-PS1	8100452-13	Arsenic	0.607	mg/L	0.500	0.105 J	100	75-125		
B8J1105-PS1	8100452-13	Barium	1.19	mg/L	0.500	0.800	78.0	75-125		
B8J1105-PS1	8100452-13	Beryllium	0.529	mg/L	0.500	0.00890 J	104	75-125		
B8J1105-PS1	8100452-13	Cadmium	0.503	mg/L	0.500	ND	101	75-125		
B8J1105-PS1	8100452-13	Calcium	132	mg/L	125	10.8 J	97.0	75-125		
B8J1105-PS1	8100452-13	Chromium	0.751	mg/L	0.500	0.289	92.4	75-125		
B8J1105-PS1	8100452-13	Cobalt	0.627	mg/L	0.500	0.165 J	92.4	75-125		
B8J1105-PS1	8100452-13	Copper	0.868	mg/L	0.500	0.337	106	75-125		
B8J1105-PS1	8100452-13	Iron	756	mg/L	300	525	77.0	75-125		
B8J1105-PS1	8100452-13	Lead	0.589	mg/L	0.500	0.183 J	81.2	75-125		
B8J1105-PS1	8100452-13	Magnesium	161	mg/L	125	39.9 J	96.6	75-125		
B8J1105-PS1	8100452-13	Manganese	11.2	mg/L	0.500	11.6	-80.0(NC)	75-125		
B8J1105-PS1	8100452-13	Nickel	0.693	mg/L	0.500	0.254	87.8	75-125		
B8J1105-PS1	8100452-13	Potassium	137	mg/L	125	8.38 J	103	75-125		
B8J1105-PS1	8100452-13	Selenium	0.477	mg/L	0.500	ND	95.4	75-125		
B8J1105-PS1	8100452-13	Silver	0.392	mg/L	0.500	ND	78.4	75-125		
B8J1105-PS1	8100452-13	Sodium	128	mg/L	125	1.86 J	101	75-125		
B8J1105-PS1	8100452-13	Thallium	0.473	mg/L	0.500	0.0107 J	92.5	75-125		
B8J1105-PS1	8100452-13	Vanadium	1.06	mg/L	0.500	0.601	91.8	75-125		
B8J1105-PS1	8100452-13	Zinc	1.75	mg/L	0.500	1.39	72.0*	75-125		

\* - Outside of QC Limits

J - Result is between the MDL and RL for an Analysis reported to an RL

NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

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**Total Metals - Quality Control**  
**Aqua Pro-Tech Laboratories**

**Sequence S8J1112**

**Method: SW 846 6010D**

**Prepared: 10/11/2018**

<u>Lab Number</u>	<u>Source</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Spike Level</u>	<u>Source Result</u>	<u>%REC Limits</u>	<u>RPD</u>	<u>RPD Limit</u>
S8J1112-SRD1	8100452-13	Aluminum	6940	mg/kg dry		6860		1.21	10
S8J1112-SRD1	8100452-13	Antimony	ND	mg/kg dry		ND			10
S8J1112-SRD1	8100452-13	Arsenic	ND	mg/kg dry		3.01			10
S8J1112-SRD1	8100452-13	Barium	25.3	mg/kg dry		23.0		9.52	10
S8J1112-SRD1	8100452-13	Beryllium	0.258	mg/kg dry		0.256		1.12	10
S8J1112-SRD1	8100452-13	Cadmium	ND	mg/kg dry		ND			10
S8J1112-SRD1	8100452-13	Calcium	324	mg/kg dry		310		4.52	10
S8J1112-SRD1	8100452-13	Chromium	8.96	mg/kg dry		8.30		7.65	10
S8J1112-SRD1	8100452-13	Cobalt	5.12	mg/kg dry		4.74		7.86	10
S8J1112-SRD1	8100452-13	Copper	9.99	mg/kg dry		9.68		3.21	10
S8J1112-SRD1	8100452-13	Iron	15900	mg/kg dry		15100		5.56	10
S8J1112-SRD1	8100452-13	Lead	ND	mg/kg dry		5.25			10
S8J1112-SRD1	8100452-13	Magnesium	1270	mg/kg dry		1150		10.1*	10
S8J1112-SRD1	8100452-13	Manganese	375	mg/kg dry		333		11.8*	10
S8J1112-SRD1	8100452-13	Nickel	8.10	mg/kg dry		7.29		10.4*	10
S8J1112-SRD1	8100452-13	Potassium	ND	mg/kg dry		241			10
S8J1112-SRD1	8100452-13	Selenium	ND	mg/kg dry		ND			10
S8J1112-SRD1	8100452-13	Silver	ND	mg/kg dry		ND			10
S8J1112-SRD1	8100452-13	Sodium	ND	mg/kg dry		53.4 J			10
S8J1112-SRD1	8100452-13	Thallium	ND	mg/kg dry		0.307 J			10
S8J1112-SRD1	8100452-13	Vanadium	18.4	mg/kg dry		17.3		6.29	10
S8J1112-SRD1	8100452-13	Zinc	45.2	mg/kg dry		39.9		12.5*	10

\* - Outside of QC Limits

J - Result is between the MDL and RL for an Analysis reported to an RL

NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

F-III

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12.3.

## METHOD BLANK SUMMARY

Batch ID: B8J1105

<u>Lab Number</u>	<u>Sample Id</u>	<u>Extraction Date</u>	<u>Analysis Date</u>
B8J1105-BLK1	BLK1	10/11/2018	10/11/2018 17:57
B8J1105-BS1	BS1	10/11/2018	10/11/2018 17:58
B8J1105-DUP1	DUP1	10/11/2018	10/11/2018 18:00
B8J1105-MS1	MS1	10/11/2018	10/11/2018 18:03
B8J1105-MSD1	MSD1	10/11/2018	10/11/2018 18:05
B8J1105-PS1	PS1	10/11/2018	10/11/2018 18:07
8100452-01	NTP-1A	10/11/2018	10/11/2018 14:32
8100452-02	NTP-2A	10/11/2018	10/11/2018 14:34
8100452-03	NTP-2B	10/11/2018	10/11/2018 14:36
8100452-04	NTP-3B	10/11/2018	10/11/2018 14:38
8100452-05	NTP-4B	10/11/2018	10/11/2018 14:40
8100452-06	NTP-6	10/11/2018	10/11/2018 14:42
8100452-07	NTP-7	10/11/2018	10/11/2018 14:44
8100452-08	STP-1B	10/11/2018	10/11/2018 14:46
8100452-09	STP-2B	10/11/2018	10/11/2018 14:48
8100452-10	STP-3B	10/11/2018	10/11/2018 14:50
8100452-11	STP-4A	10/11/2018	10/11/2018 15:31
8100452-12	STP-4B	10/11/2018	10/11/2018 15:33
8100452-13	STP-5	10/11/2018	10/11/2018 15:37
8100452-14	STP-7	10/11/2018	10/11/2018 15:39

## ANALYSIS SEQUENCE SUMMARY

Laboratory:	Aqua Pro-Tech Laboratories	Work Order:	8100452
Client:	Peak Environmental	Project:	Ridgewood
Sequence:	S8J1112	Instrument:	ICP OES-1

Sample Name	Lab Sample ID	FileID	Analysis Date/Time
Initial Cal Check	S8J1112-ICV1	APL1_METHOD_IEC_2018-10-	10/11/18 10:15
Initial Cal Blank	S8J1112-ICB1	APL1_METHOD_IEC_2018-10-	10/11/18 10:19
Interference Check A	S8J1112-IFA1	APL1_METHOD_IEC_2018-10-	10/11/18 10:20
Interference Check B	S8J1112-IFB1	APL1_METHOD_IEC_2018-10-	10/11/18 10:22
NTP-1A	8100452-01	APL1_METHOD_IEC_2018-10-	10/11/18 14:32
NTP-2A	8100452-02	APL1_METHOD_IEC_2018-10-	10/11/18 14:34
NTP-2B	8100452-03	APL1_METHOD_IEC_2018-10-	10/11/18 14:36
NTP-3B	8100452-04	APL1_METHOD_IEC_2018-10-	10/11/18 14:38
NTP-4B	8100452-05	APL1_METHOD_IEC_2018-10-	10/11/18 14:40
NTP-6	8100452-06	APL1_METHOD_IEC_2018-10-	10/11/18 14:42
NTP-7	8100452-07	APL1_METHOD_IEC_2018-10-	10/11/18 14:44
STP-1B	8100452-08	APL1_METHOD_IEC_2018-10-	10/11/18 14:46
STP-2B	8100452-09	APL1_METHOD_IEC_2018-10-	10/11/18 14:48
STP-3B	8100452-10	APL1_METHOD_IEC_2018-10-	10/11/18 14:50
Calibration Check	S8J1112-CCV1	APL1_METHOD_IEC_2018-10-	10/11/18 14:54
Calibration Check	S8J1112-CCV2	APL1_METHOD_IEC_2018-10-	10/11/18 14:56
Calibration Blank	S8J1112-CCB1	APL1_METHOD_IEC_2018-10-	10/11/18 14:58
STP-4A	8100452-11	APL1_METHOD_IEC_2018-10-	10/11/18 15:31
STP-4B	8100452-12	APL1_METHOD_IEC_2018-10-	10/11/18 15:33
Serial Dilution	S8J1112-SRD1	APL1_METHOD_IEC_2018-10-	10/11/18 15:35
STP-5	8100452-13	APL1_METHOD_IEC_2018-10-	10/11/18 15:37
STP-7	8100452-14	APL1_METHOD_IEC_2018-10-	10/11/18 15:39
Calibration Check	S8J1112-CCV3	APL1_METHOD_IEC_2018-10-	10/11/18 15:43
Calibration Check	S8J1112-CCV4	APL1_METHOD_IEC_2018-10-	10/11/18 15:45
Calibration Blank	S8J1112-CCB2	APL1_METHOD_IEC_2018-10-	10/11/18 15:47
Calibration Check	S8J1112-CCV5	APL1_METHOD_IEC_2018-10-	10/11/18 16:27
Calibration Check	S8J1112-CCV6	APL1_METHOD_IEC_2018-10-	10/11/18 16:28
Calibration Blank	S8J1112-CCB3	APL1_METHOD_IEC_2018-10-	10/11/18 16:30
Blank	B8J1105-BLK1	APL1_METHOD_IEC_2018-10-	10/11/18 17:57
LCS	B8J1105-BS1	APL1_METHOD_IEC_2018-10-	10/11/18 17:58
Duplicate	B8J1105-DUP1	APL1_METHOD_IEC_2018-10-	10/11/18 18:00
Matrix Spike	B8J1105-MS1	APL1_METHOD_IEC_2018-10-	10/11/18 18:03
Matrix Spike Dup	B8J1105-MSD1	APL1_METHOD_IEC_2018-10-	10/11/18 18:05

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12.5.

## ANALYSIS SEQUENCE SUMMARY

Laboratory: Aqua Pro-Tech Laboratories      Work Order: 8100452  
Client: Peak Environmental      Project: Ridgewood  
Sequence: S8J1112      Instrument: ICP OES-1

Sample Name	Lab Sample ID	FileID	Analysis Date/Time
Post Spike	B8J1105-PS1	APL1_METHOD_IEC_2018-10-	10/11/18 18:07
Calibration Check	S8J1112-CCV7	APL1_METHOD_IEC_2018-10-	10/11/18 18:11
Calibration Check	S8J1112-CCV8	APL1_METHOD_IEC_2018-10-	10/11/18 18:13
Calibration Blank	S8J1112-CCB4	APL1_METHOD_IEC_2018-10-	10/11/18 18:15

# SEQUENCE CALIBRATION CHECKS

SW 846 6010D

**Client:** Peak Environmental  
**Project:** Ridgewood  
**Work Order:** 8100452

**Sequence:** S8J1112  
**Instrument:** ICP OES-1

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
S8J1112-ICV1	Antimony	1.00	0.969	96.9	mg/L	90-110
	Arsenic	1.00	0.975	97.5	mg/L	90-110
	Barium	1.00	0.979	97.9	mg/L	90-110
	Beryllium	1.00	0.982	98.2	mg/L	90-110
	Cadmium	1.00	0.977	97.7	mg/L	90-110
	Chromium	1.00	0.975	97.5	mg/L	90-110
	Cobalt	1.00	0.976	97.6	mg/L	90-110
	Copper	1.00	0.976	97.6	mg/L	90-110
	Lead	1.00	0.972	97.2	mg/L	90-110
	Manganese	1.00	0.970	97.0	mg/L	90-110
	Nickel	1.00	0.973	97.3	mg/L	90-110
	Selenium	1.00	0.992	99.2	mg/L	90-110
	Silver	1.00	0.922	92.2	mg/L	90-110
	Thallium	1.00	0.973	97.3	mg/L	90-110
	Vanadium	1.00	0.972	97.2	mg/L	90-110
	Zinc	1.00	0.982	98.2	mg/L	90-110
S8J1112-IFB1	Aluminum	501	515	103	mg/L	80-120
	Antimony	1.00	1.00	100	mg/L	80-120
	Arsenic	1.00	1.01	101	mg/L	80-120
	Barium	1.00	0.969	96.9	mg/L	80-120
	Beryllium	1.00	1.04	104	mg/L	80-120
	Cadmium	1.00	1.02	102	mg/L	80-120
	Calcium	501	494	98.6	mg/L	80-120
	Chromium	1.00	0.960	96.0	mg/L	80-120
	Cobalt	1.00	0.909	90.9	mg/L	80-120
	Copper	1.00	1.07	107	mg/L	80-120
	Iron	201	195	97.0	mg/L	80-120
	Lead	1.00	0.901	90.1	mg/L	80-120
	Magnesium	501	500	99.9	mg/L	80-120
	Manganese	1.00	0.944	94.4	mg/L	80-120
	Nickel	1.00	0.884	88.4	mg/L	80-120
	Selenium	1.00	0.996	99.6	mg/L	80-120
	Silver	1.00	1.00	100	mg/L	80-120
	Thallium	1.00	0.946	94.6	mg/L	80-120
Vanadium	1.00	0.994	99.4	mg/L	80-120	
Zinc	1.00	0.903	90.3	mg/L	80-120	
S8J1112-CCV1	Antimony	1.00	0.968	96.8	mg/L	90-110
	Arsenic	1.00	0.977	97.7	mg/L	90-110
	Barium	1.00	0.984	98.4	mg/L	90-110

ICV = Initial Cal Verification

CCV = Continuing Cal Verification

IFB = Interference Check Standard B

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12.6.

# SEQUENCE CALIBRATION CHECKS

SW 846 6010D

Client: **Peak Environmental**  
 Project: **Ridgewood**  
 Work Order: **8100452**

Sequence: **S8J1112**  
 Instrument: **ICP OES-1**

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
S8J1112-CCV1	Beryllium	1.00	1.00	100	mg/L	90-110
	Cadmium	1.00	0.982	98.2	mg/L	90-110
	Chromium	1.00	0.981	98.1	mg/L	90-110
	Cobalt	1.00	0.967	96.7	mg/L	90-110
	Copper	1.00	0.984	98.4	mg/L	90-110
	Lead	1.00	0.971	97.1	mg/L	90-110
	Manganese	1.00	0.976	97.6	mg/L	90-110
	Nickel	1.00	0.974	97.4	mg/L	90-110
	Selenium	1.00	0.994	99.4	mg/L	90-110
	Silver	1.00	0.933	93.3	mg/L	90-110
	Thallium	1.00	0.979	97.9	mg/L	90-110
	Vanadium	1.00	0.973	97.3	mg/L	90-110
	Zinc	1.00	0.960	96.0	mg/L	90-110
	S8J1112-CCV2	Aluminum	100	99.4	99.4	mg/L
Calcium		100	99.0	99.0	mg/L	90-110
Iron		40.0	39.5	98.8	mg/L	90-110
Magnesium		100	98.8	98.8	mg/L	90-110
Potassium		100	100	100	mg/L	90-110
Sodium		100	99.1	99.1	mg/L	90-110
S8J1112-CCV3	Antimony	1.00	0.986	98.6	mg/L	90-110
	Arsenic	1.00	0.991	99.1	mg/L	90-110
	Barium	1.00	1.00	100	mg/L	90-110
	Beryllium	1.00	1.02	102	mg/L	90-110
	Cadmium	1.00	1.00	100	mg/L	90-110
	Chromium	1.00	1.00	100	mg/L	90-110
	Cobalt	1.00	0.988	98.8	mg/L	90-110
	Copper	1.00	1.01	101	mg/L	90-110
	Lead	1.00	0.992	99.2	mg/L	90-110
	Manganese	1.00	0.998	99.8	mg/L	90-110
	Nickel	1.00	0.995	99.5	mg/L	90-110
	Selenium	1.00	1.01	101	mg/L	90-110
	Silver	1.00	0.950	95.0	mg/L	90-110
	Thallium	1.00	1.00	100	mg/L	90-110
	Vanadium	1.00	0.995	99.5	mg/L	90-110
Zinc	1.00	0.978	97.8	mg/L	90-110	
S8J1112-CCV4	Aluminum	100	101	101	mg/L	90-110
	Calcium	100	101	101	mg/L	90-110
	Iron	40.0	40.0	100	mg/L	90-110

ICV = Initial Cal Verification

CCV = Continuing Cal Verification

IFB = Interference Check Standard B

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12.6.



# SEQUENCE CALIBRATION CHECKS

SW 846 6010D

Client: **Peak Environmental**  
 Project: **Ridgewood**  
 Work Order: **8100452**

Sequence: **S8J1112**  
 Instrument: **ICP OES-1**

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
S8J1112-CCV4	Magnesium	100	101	101	mg/L	90-110
	Potassium	100	102	102	mg/L	90-110
	Sodium	100	100	100	mg/L	90-110
S8J1112-CCV5	Antimony	1.00	0.981	98.1	mg/L	90-110
	Arsenic	1.00	0.981	98.1	mg/L	90-110
	Barium	1.00	1.00	100	mg/L	90-110
	Beryllium	1.00	1.01	101	mg/L	90-110
	Cadmium	1.00	1.00	100	mg/L	90-110
	Chromium	1.00	1.00	100	mg/L	90-110
	Cobalt	1.00	0.985	98.5	mg/L	90-110
	Copper	1.00	1.00	100	mg/L	90-110
	Lead	1.00	0.989	98.9	mg/L	90-110
	Manganese	1.00	0.994	99.4	mg/L	90-110
	Nickel	1.00	0.991	99.1	mg/L	90-110
	Selenium	1.00	1.01	101	mg/L	90-110
	Silver	1.00	0.945	94.5	mg/L	90-110
	Thallium	1.00	0.995	99.5	mg/L	90-110
	Vanadium	1.00	0.993	99.3	mg/L	90-110
Zinc	1.00	0.977	97.7	mg/L	90-110	
S8J1112-CCV6	Aluminum	100	99.4	99.4	mg/L	90-110
	Calcium	100	98.6	98.6	mg/L	90-110
	Iron	40.0	39.0	97.5	mg/L	90-110
	Magnesium	100	99.7	99.7	mg/L	90-110
	Potassium	100	99.3	99.3	mg/L	90-110
	Sodium	100	98.6	98.6	mg/L	90-110
S8J1112-CCV7	Antimony	1.00	0.946	94.6	mg/L	90-110
	Arsenic	1.00	0.952	95.2	mg/L	90-110
	Barium	1.00	0.966	96.6	mg/L	90-110
	Beryllium	1.00	0.972	97.2	mg/L	90-110
	Cadmium	1.00	0.966	96.6	mg/L	90-110
	Chromium	1.00	0.965	96.5	mg/L	90-110
	Cobalt	1.00	0.953	95.3	mg/L	90-110
	Copper	1.00	0.962	96.2	mg/L	90-110
	Lead	1.00	0.957	95.7	mg/L	90-110
	Manganese	1.00	0.958	95.8	mg/L	90-110
	Nickel	1.00	0.957	95.7	mg/L	90-110
	Selenium	1.00	0.976	97.6	mg/L	90-110
	Silver	1.00	0.924	92.4	mg/L	90-110

ICV = Initial Cal Verification

CCV = Continuing Cal Verification

IFB = Interference Check Standard B

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12.6.

# SEQUENCE CALIBRATION CHECKS

SW 846 6010D

**Client:** Peak Environmental  
**Project:** Ridgewood  
**Work Order:** 8100452

**Sequence:** S8J1112  
**Instrument:** ICP OES-1

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
S8J1112-CCV7	Thallium	1.00	0.955	95.5	mg/L	90-110
	Vanadium	1.00	0.957	95.7	mg/L	90-110
	Zinc	1.00	0.943	94.3	mg/L	90-110
S8J1112-CCV8	Aluminum	100	96.7	96.7	mg/L	90-110
	Calcium	100	97.3	97.3	mg/L	90-110
	Iron	40.0	38.1	95.2	mg/L	90-110
	Magnesium	100	97.7	97.7	mg/L	90-110
	Potassium	100	97.8	97.8	mg/L	90-110
	Sodium	100	96.3	96.3	mg/L	90-110

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12.6.

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ICV = Initial Cal Verification

CCV = Continuing Cal Verification

IFB = Interference Check Standard B



AQUA PRO-TECH LABORATORIES  
*Certified Environmental Testing*

# PESTICIDES

Peak Environmental  
Work Order: 8100452  
Project: Ridgewood

# ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: Peak Environmental  
Client Sample ID: Blank  
Lab Sample ID: B8J1047-BLK1

Project: Ridgewood  
Work Order: 8100452

Init/Final Vol: 15 g / 10 mL	Prep Date: 10/10/2018 15:25	File ID: 7T01034.D
	Prep Batch: B8J1047	Analyzed: 10/12/2018 18:05
	Matrix: Soil	Sequence: S8J1503
	Prep Method: Microwave Extraction	

CAS NO.	COMPOUND	CONC. (mg/kg wet)	MDL	RL	Q
72-54-8	4,4'-DDD	ND	0.000787	0.00130	U
72-55-9	4,4'-DDE	ND	0.000920	0.00130	U
50-29-3	4,4'-DDT	ND	0.000624	0.00130	U
309-00-2	Aldrin	ND	0.000807	0.00130	U
319-84-6	alpha-BHC	ND	0.000503	0.00130	U
319-85-7	beta-BHC	ND	0.00128	0.00130	U
57-74-9	Chlordane	ND	0.000873	0.00130	U
319-86-8	delta-BHC	ND	0.00101	0.00130	U
60-57-1	Dieldrin	ND	0.000700	0.00130	U
959-98-8	Endosulfan I	ND	0.000900	0.00130	U
33213-65-9	Endosulfan II	ND	0.000707	0.00130	U
1031-07-8	Endosulfan sulfate	ND	0.000707	0.00130	U
72-20-8	Endrin	ND	0.000667	0.00130	U
7421-93-4	Endrin aldehyde	ND	0.000555	0.00130	U
53494-70-5	Endrin ketone	ND	0.000793	0.00130	U
58-89-9	gamma-BHC (Lindane)	ND	0.000594	0.00130	U
76-44-8	Heptachlor	ND	0.000760	0.00130	U
1024-57-3	Heptachlor Epoxide	ND	0.000813	0.00130	U
72-43-5	Methoxychlor	ND	0.000827	0.00130	U
8001-35-2	Toxaphene	ND	0.0202	0.0660	U

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13.1.

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20181012\7T01034.D\ECD1A.CH Vial: 17  
 Signal #2 : G:\HPCHEM\GCECD7\DATA\20181012\7T01034.D\ECD2B.CH  
 Acq On : 12 Oct 2018 18:05 Operator: sdp  
 Sample : B8J1047-BLK1 Inst : GCECD-7  
 Misc : Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
 Quant Time: Oct 15 10:52 2018 Quant Results File: 80811012.RES

Quant Method : G:\HPCHEM\G...\80811012.M (Chemstation Integrator)  
 Title : Pesticides by EPA Method 8081  
 Last Update : Mon Oct 15 10:51:09 2018  
 Response via : Initial Calibration  
 DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
-----						
System Monitoring Compounds						
1) S TCMX	3.14	3.75	234.2E6	205.9E6	54.252	50.737
Spiked Amount	50.000	Range	43 - 129	Recovery	= 108.50%	101.47%
20) S Decachlorobiphen	15.35	18.20	321.5E6	201.8E6	52.567	52.639
Spiked Amount	50.000	Range	42 - 136	Recovery	= 105.13%	105.28%
Target Compounds						
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

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13.1.

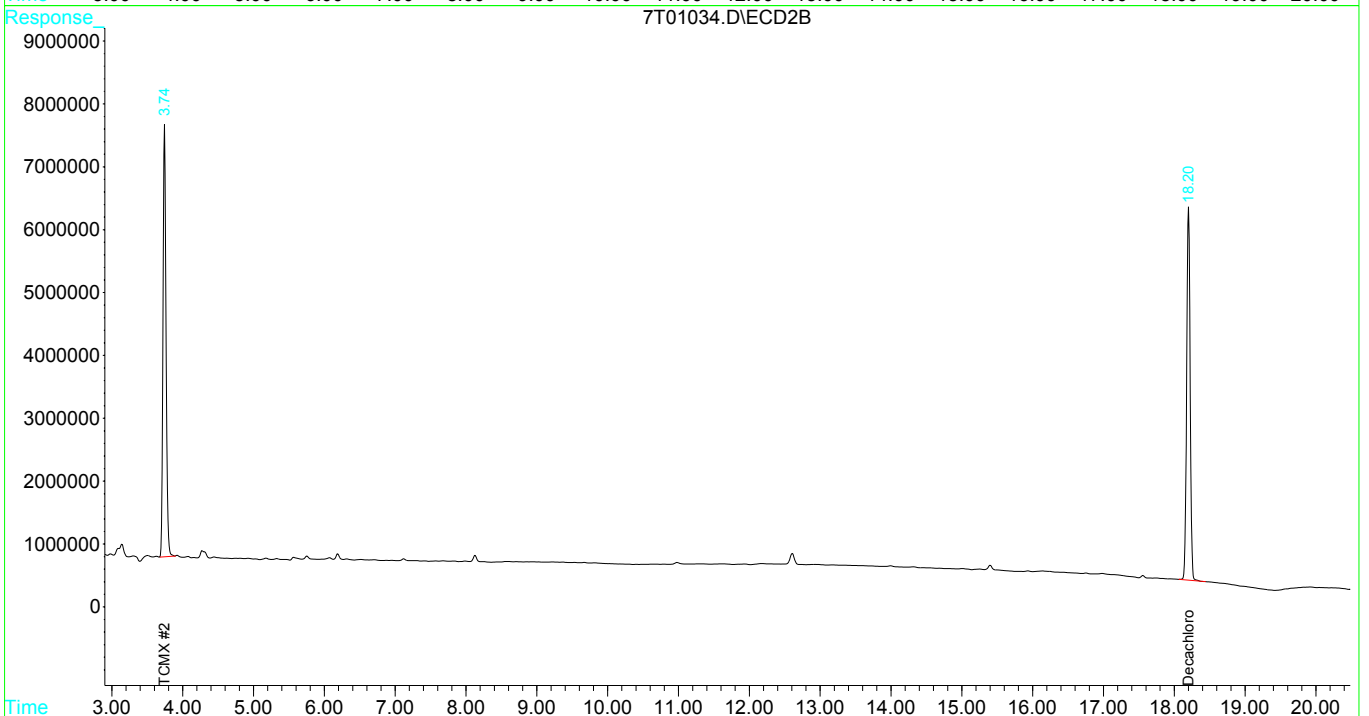
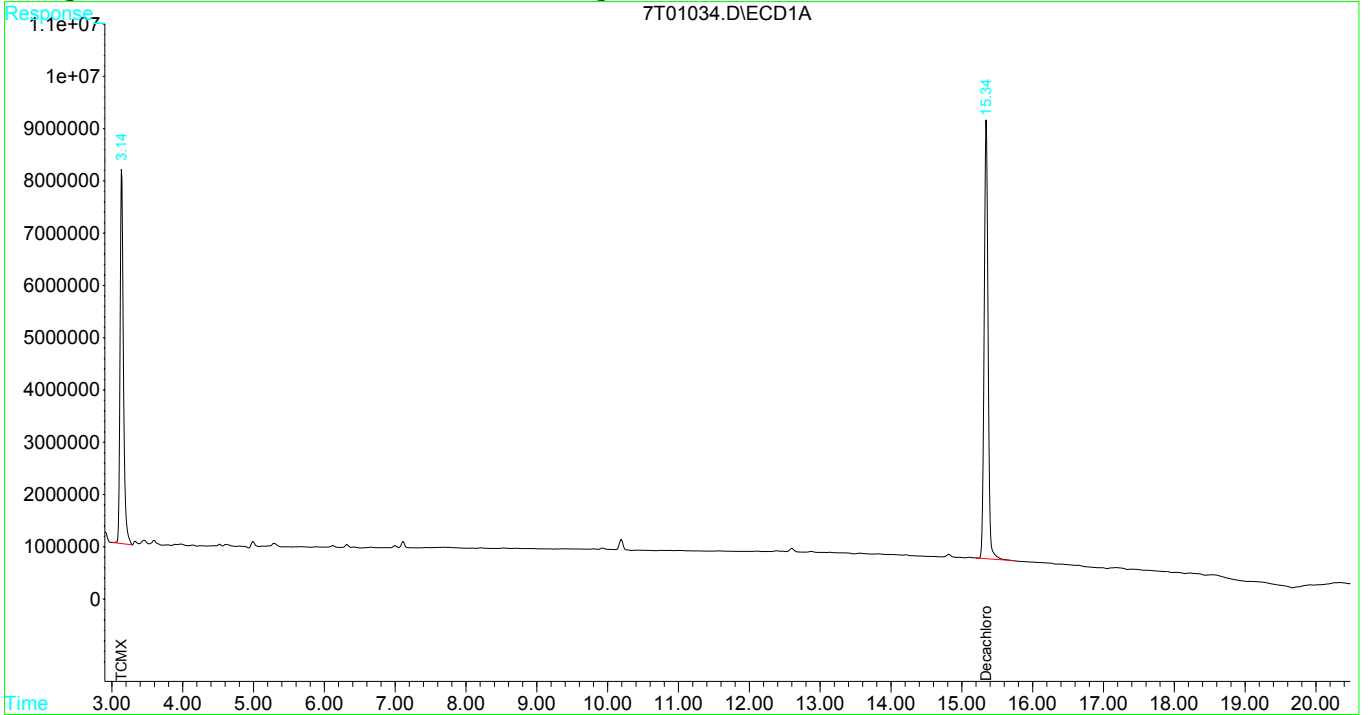
-----  
 (f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
 7T01034.D 80811012.M Mon Oct 15 11:18:17 2018 SS

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20181012\7T01034.D\ECD1A.CH Vial: 17  
Signal #2 : G:\HPCHEM\GCECD7\DATA\20181012\7T01034.D\ECD2B.CH  
Acq On : 12 Oct 2018 18:05 Operator: sdp  
Sample : B8J1047-BLK1 Inst : GCECD-7  
Misc : Multiplr: 1.00  
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
Quant Time: Oct 15 10:52 2018 Quant Results File: 80811012.RES

Quant Method : G:\HPCHEM\G...\80811012.M (Chemstation Integrator)  
Title : Pesticides by EPA Method 8081  
Last Update : Mon Oct 15 10:51:09 2018  
Response via : Multiple Level Calibration  
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul  
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um



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13.1.

# ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

**Client:** Peak Environmental  
**Client Sample ID:** NTP-1A  
**Lab Sample ID:** 8100452-01  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 00:00	Prep Date: 10/10/18 16:45	File ID: 7T01004.D
Init/Final Vol: 15 g / 10 mL	Prep Batch: B8J1047	Analyzed: 10/11/18 16:06
Dilution: 1	Matrix: Soil	Sequence: S8J1202
Percent Solids: 89.91	Prep Method: Microwave Extraction	

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
72-54-8	4,4'-DDD	ND	0.000875	0.00145	U
72-55-9	4,4'-DDE	ND	0.00102	0.00145	U
50-29-3	4,4'-DDT	ND	0.000694	0.00145	U
309-00-2	Aldrin	ND	0.000898	0.00145	U
319-84-6	alpha-BHC	ND	0.000559	0.00145	U
319-85-7	beta-BHC	ND	0.00142	0.00145	U
57-74-9	Chlordane	ND	0.000971	0.00145	U
319-86-8	delta-BHC	ND	0.00112	0.00145	U
60-57-1	Dieldrin	ND	0.000779	0.00145	U
959-98-8	Endosulfan I	ND	0.00100	0.00145	U
33213-65-9	Endosulfan II	ND	0.000786	0.00145	U
1031-07-8	Endosulfan sulfate	ND	0.000786	0.00145	U
72-20-8	Endrin	ND	0.000742	0.00145	U
7421-93-4	Endrin aldehyde	ND	0.000617	0.00145	U
53494-70-5	Endrin ketone	ND	0.000882	0.00145	U
58-89-9	gamma-BHC (Lindane)	ND	0.000661	0.00145	U
76-44-8	Heptachlor	ND	0.000845	0.00145	U
1024-57-3	Heptachlor Epoxide	ND	0.000904	0.00145	U
72-43-5	Methoxychlor	ND	0.000920	0.00145	U
8001-35-2	Toxaphene	ND	0.0225	0.0734	U

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 13.2

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

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Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20181011\7T01004.D\ECD1A.CH Vial: 6  
 Signal #2 : G:\HPCHEM\GCECD7\DATA\20181011\7T01004.D\ECD2B.CH  
 Acq On : 11 Oct 2018 16:06 Operator: sdp  
 Sample : 8100452-01 Inst : GCECD-7  
 Misc : Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
 Quant Time: Oct 11 17:53 2018 Quant Results File: 80810806.RES

Quant Method : G:\HPCHEM\G...\80810806.M (Chemstation Integrator)  
 Title : Pesticides by EPA Method 8081  
 Last Update : Thu Oct 11 15:28:30 2018  
 Response via : Initial Calibration  
 DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
-----						
System Monitoring Compounds						
1) S TCMX	3.14	3.74	226.0E6	200.0E6	56.297	53.185
Spiked Amount	50.000	Range	43 - 129	Recovery	= 112.59%	106.37%
20) S Decachlorobiphen	15.34	18.20	268.3E6	189.7E6	52.160m	46.656
Spiked Amount	50.000	Range	42 - 136	Recovery	= 104.32%	93.31%
Target Compounds						
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

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13.2.

-----  
 (f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
 7T01004.D 80810806.M Fri Oct 12 10:05:58 2018 SS

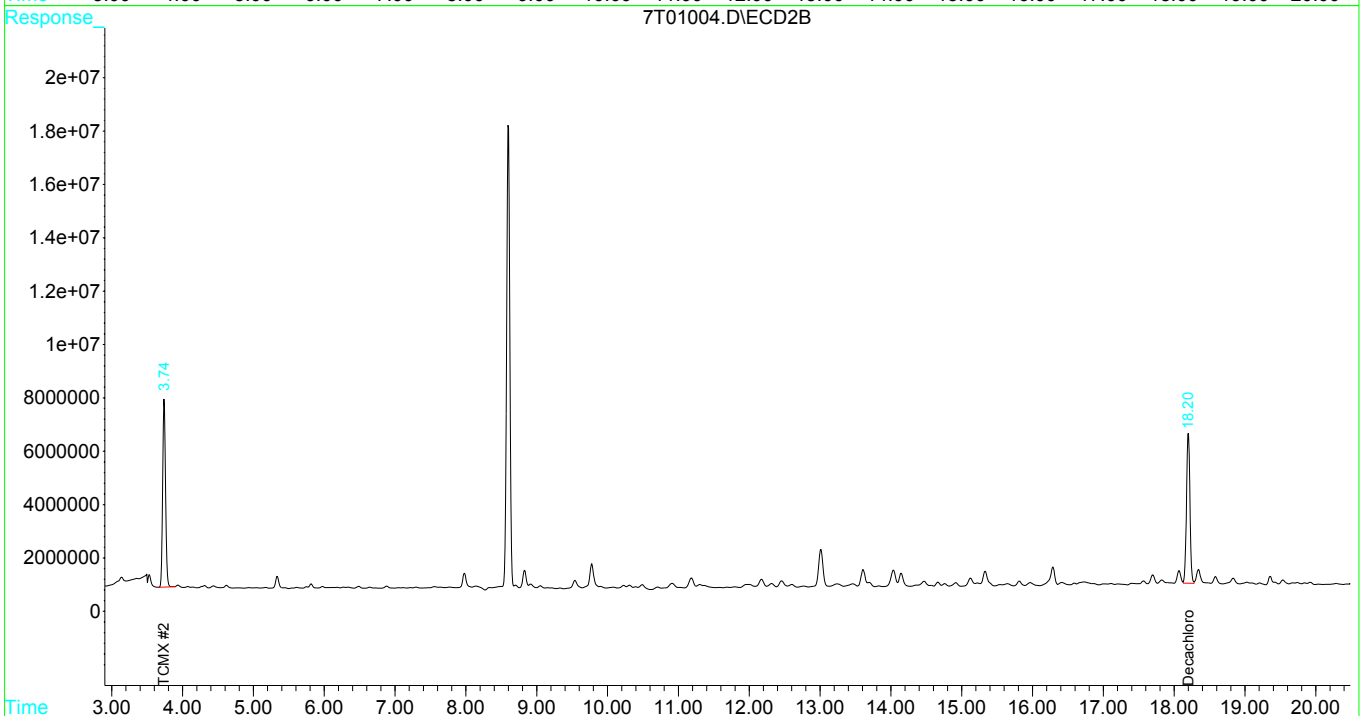
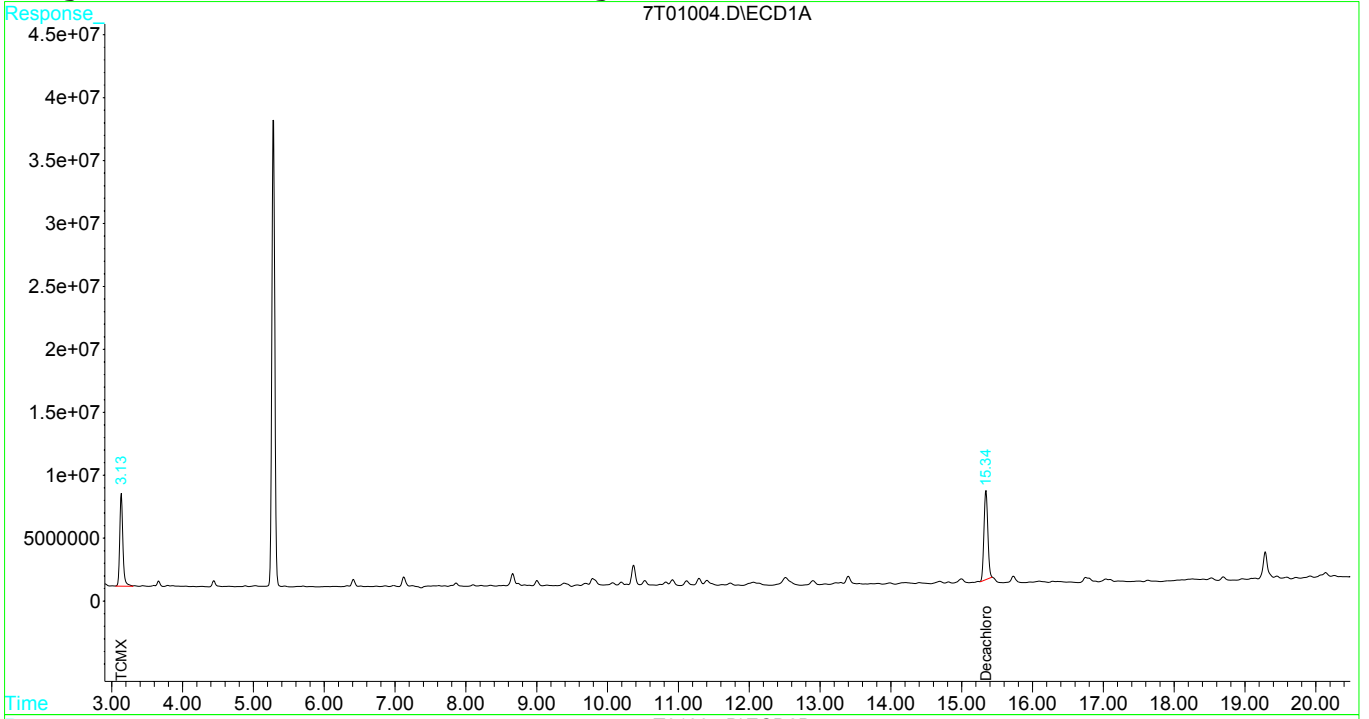


Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20181011\7T01004.D\ECD1A.CH Vial: 6  
Signal #2 : G:\HPCHEM\GCECD7\DATA\20181011\7T01004.D\ECD2B.CH  
Acq On : 11 Oct 2018 16:06 Operator: sdp  
Sample : 8100452-01 Inst : GCECD-7  
Misc : Multiplr: 1.00  
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
Quant Time: Oct 11 17:53 2018 Quant Results File: 80810806.RES

Quant Method : G:\HPCHEM\G...\80810806.M (Chemstation Integrator)  
Title : Pesticides by EPA Method 8081  
Last Update : Thu Oct 11 15:28:30 2018  
Response via : Multiple Level Calibration  
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul  
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um



13  
13.2.

# ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

**Client:** Peak Environmental  
**Client Sample ID:** NTP-6  
**Lab Sample ID:** 8100452-06  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 12:50	Prep Date:	10/10/18 16:45	File ID:	7T01005.D
Init/Final Vol:	15 g / 10 mL	Prep Batch:	B8J1047	Analyzed:	10/11/18 16:29
Dilution:	1	Matrix:	Soil	Sequence:	S8J1202
Percent Solids:	87.70	Prep Method:	Microwave Extraction		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
72-54-8	4,4'-DDD	ND	0.000897	0.00148	U
72-55-9	4,4'-DDE	ND	0.00105	0.00148	U
50-29-3	4,4'-DDT	ND	0.000711	0.00148	U
309-00-2	Aldrin	ND	0.000920	0.00148	U
319-84-6	alpha-BHC	ND	0.000574	0.00148	U
319-85-7	beta-BHC	ND	0.00146	0.00148	U
57-74-9	Chlordane	ND	0.000995	0.00148	U
319-86-8	delta-BHC	ND	0.00115	0.00148	U
60-57-1	Dieldrin	ND	0.000798	0.00148	U
959-98-8	Endosulfan I	ND	0.00103	0.00148	U
33213-65-9	Endosulfan II	ND	0.000806	0.00148	U
1031-07-8	Endosulfan sulfate	ND	0.000806	0.00148	U
72-20-8	Endrin	ND	0.000761	0.00148	U
7421-93-4	Endrin aldehyde	ND	0.000633	0.00148	U
53494-70-5	Endrin ketone	ND	0.000904	0.00148	U
58-89-9	gamma-BHC (Lindane)	ND	0.000677	0.00148	U
76-44-8	Heptachlor	ND	0.000867	0.00148	U
1024-57-3	Heptachlor Epoxide	ND	0.000927	0.00148	U
72-43-5	Methoxychlor	ND	0.000943	0.00148	U
8001-35-2	Toxaphene	ND	0.0230	0.0753	U

13  
 13.2

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20181011\7T01005.D\ECD1A.CH Vial: 7  
 Signal #2 : G:\HPCHEM\GCECD7\DATA\20181011\7T01005.D\ECD2B.CH  
 Acq On : 11 Oct 2018 16:29 Operator: sdp  
 Sample : 8100452-06 Inst : GCECD-7  
 Misc : Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
 Quant Time: Oct 11 17:51 2018 Quant Results File: 80810806.RES

Quant Method : G:\HPCHEM\G...\80810806.M (Chemstation Integrator)  
 Title : Pesticides by EPA Method 8081  
 Last Update : Thu Oct 11 15:28:30 2018  
 Response via : Initial Calibration  
 DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
-----						
System Monitoring Compounds						
1) S TCMX	3.14	3.74	224.1E6	195.4E6	55.817	51.962
Spiked Amount	50.000	Range	43 - 129	Recovery	= 111.63%	103.92%
20) S Decachlorobiphen	15.34	18.20	280.5E6	187.5E6	54.540	46.111
Spiked Amount	50.000	Range	42 - 136	Recovery	= 109.08%	92.22%
Target Compounds						
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

13  
13.2.

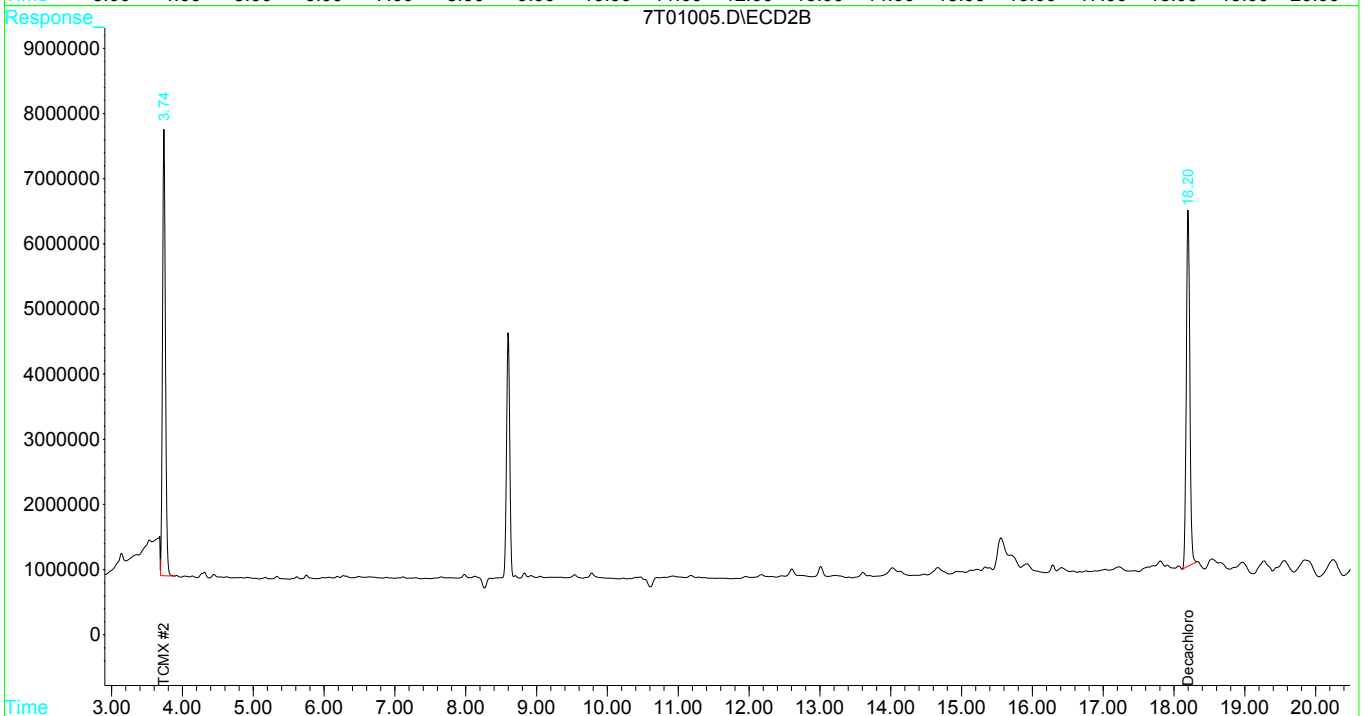
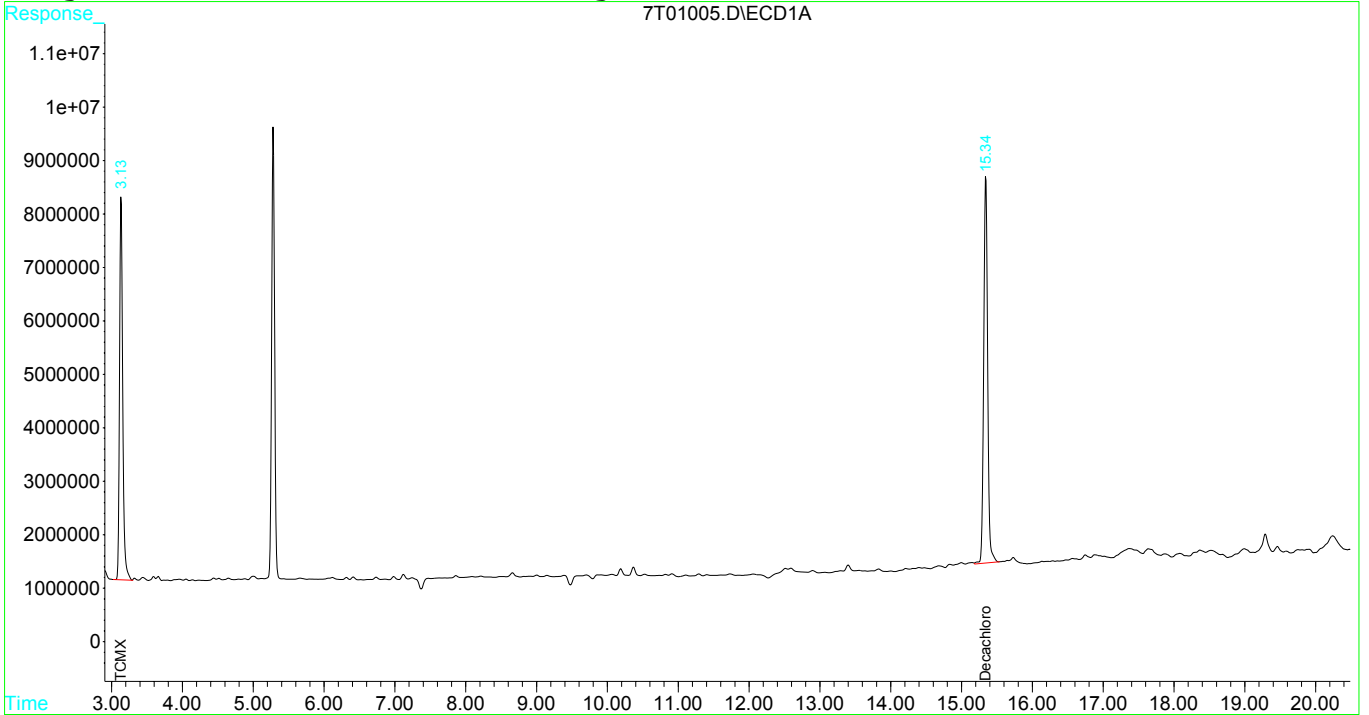
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 (f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
 7T01005.D 80810806.M Fri Oct 12 10:05:59 2018 SS

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20181011\7T01005.D\ECD1A.CH Vial: 7  
Signal #2 : G:\HPCHEM\GCECD7\DATA\20181011\7T01005.D\ECD2B.CH  
Acq On : 11 Oct 2018 16:29 Operator: sdp  
Sample : 8100452-06 Inst : GCECD-7  
Misc : Multiplr: 1.00  
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
Quant Time: Oct 11 17:51 2018 Quant Results File: 80810806.RES

Quant Method : G:\HPCHEM\G...\80810806.M (Chemstation Integrator)  
Title : Pesticides by EPA Method 8081  
Last Update : Thu Oct 11 15:28:30 2018  
Response via : Multiple Level Calibration  
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul  
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um



13  
13.2.

# ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

**Client:** Peak Environmental  
**Client Sample ID:** STP-4B  
**Lab Sample ID:** 8100452-12  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 00:00	Prep Date: 10/10/18 16:45	File ID: 7T01006.D
Init/Final Vol: 15 g / 10 mL	Prep Batch: B8J1047	Analyzed: 10/11/18 16:51
Dilution: 1	Matrix: Soil	Sequence: S8J1202
Percent Solids: 91.70	Prep Method: Microwave Extraction	

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
72-54-8	4,4'-DDD	ND	0.000858	0.00142	U
72-55-9	4,4'-DDE	ND	0.00100	0.00142	U
50-29-3	4,4'-DDT	ND	0.000681	0.00142	U
309-00-2	Aldrin	ND	0.000880	0.00142	U
319-84-6	alpha-BHC	ND	0.000549	0.00142	U
319-85-7	beta-BHC	ND	0.00140	0.00142	U
57-74-9	Chlordane	0.0103	0.000952	0.00142	
319-86-8	delta-BHC	ND	0.00110	0.00142	U
60-57-1	Dieldrin	ND	0.000763	0.00142	U
959-98-8	Endosulfan I	ND	0.000981	0.00142	U
33213-65-9	Endosulfan II	ND	0.000771	0.00142	U
1031-07-8	Endosulfan sulfate	ND	0.000771	0.00142	U
72-20-8	Endrin	ND	0.000727	0.00142	U
7421-93-4	Endrin aldehyde	ND	0.000605	0.00142	U
53494-70-5	Endrin ketone	ND	0.000865	0.00142	U
58-89-9	gamma-BHC (Lindane)	ND	0.000648	0.00142	U
76-44-8	Heptachlor	ND	0.000829	0.00142	U
1024-57-3	Heptachlor Epoxide	ND	0.000887	0.00142	U
72-43-5	Methoxychlor	ND	0.000902	0.00142	U
8001-35-2	Toxaphene	ND	0.0220	0.0720	U

13  
 13.2.

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20181011\7T01006.D\ECD1A.CH Vial: 8  
 Signal #2 : G:\HPCHEM\GCECD7\DATA\20181011\7T01006.D\ECD2B.CH  
 Acq On : 11 Oct 2018 16:51 Operator: sdp  
 Sample : 8100452-12 Inst : GCECD-7  
 Misc : Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
 Quant Time: Oct 11 17:58 2018 Quant Results File: 80810806.RES

Quant Method : G:\HPCHEM\G...\80810806.M (Chemstation Integrator)  
 Title : Pesticides by EPA Method 8081  
 Last Update : Thu Oct 11 15:28:30 2018  
 Response via : Initial Calibration  
 DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
-----						
System Monitoring Compounds						
1) S TCMX	3.14	3.75	239.5E6	213.7E6	59.656	56.836
Spiked Amount	50.000	Range	43 - 129	Recovery	= 119.31%	113.67%
20) S Decachlorobiphen	15.34	18.20	281.7E6	191.5E6	54.755m	47.076
Spiked Amount	50.000	Range	42 - 136	Recovery	= 109.51%	94.15%
Target Compounds						
21) L1 Chlordane (gamma	6.98	8.70	30174757	23287349	6.157	5.468
22) L1 Chlordane (alpha	7.24f	9.06	38651343	17308403	8.014m	4.082 #
Sum Chlordane (gamma)			68826100	40595752	14.171	9.550
Average Chlordane (gamma)					7.086	4.775
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

13  
13.2.

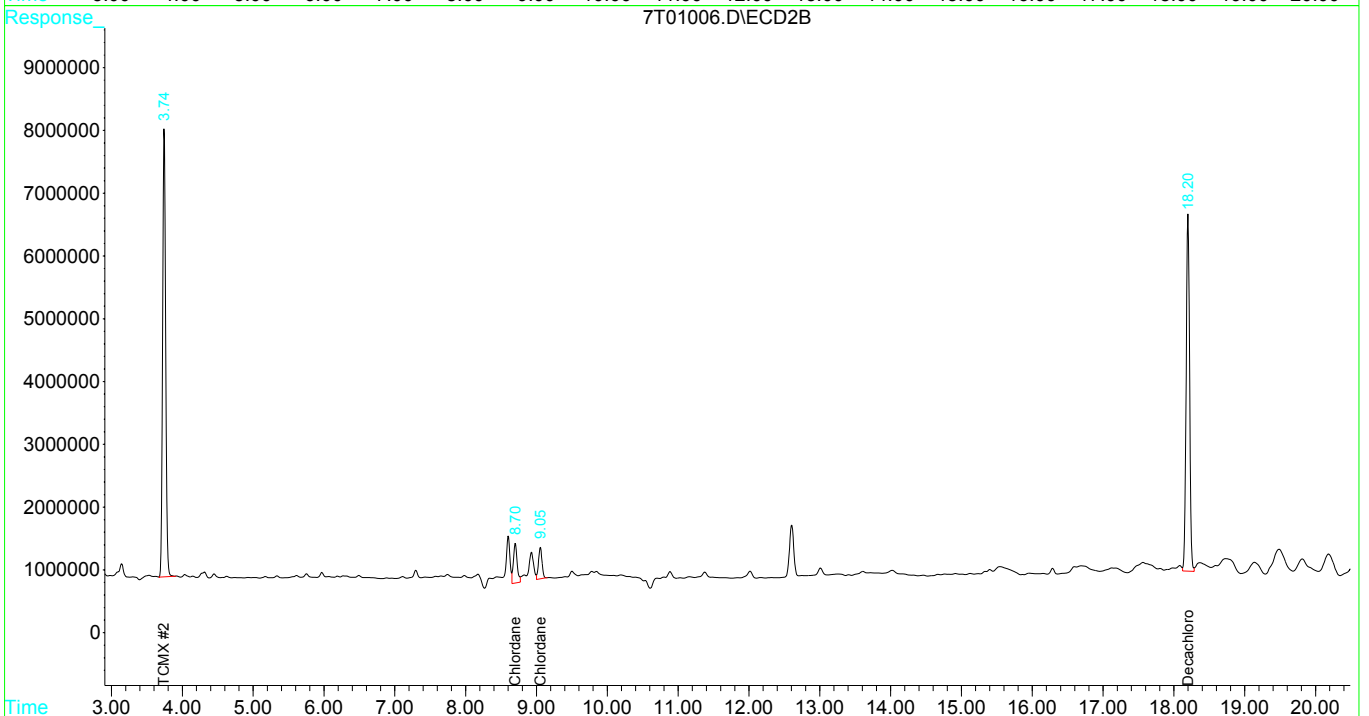
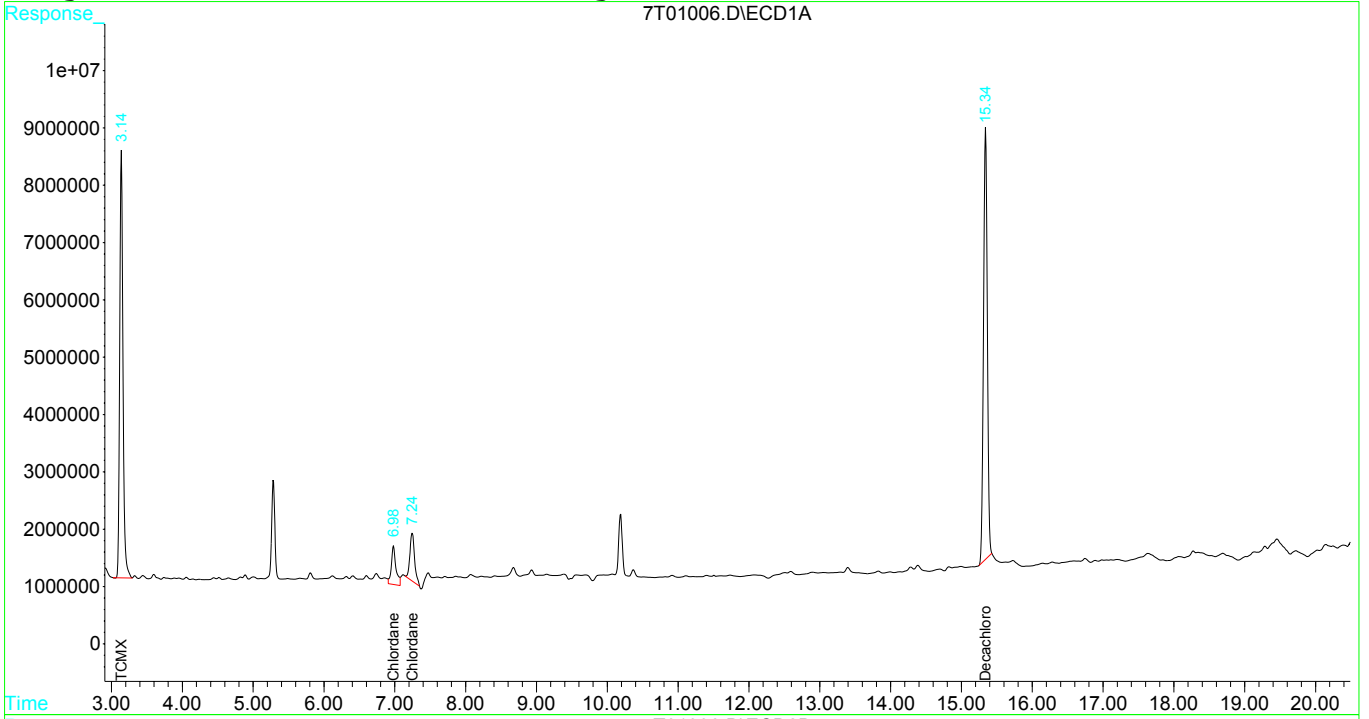
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 (f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
 7T01006.D 80810806.M Fri Oct 12 10:06:01 2018 SS

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20181011\7T01006.D\ECD1A.CH Vial: 8  
Signal #2 : G:\HPCHEM\GCECD7\DATA\20181011\7T01006.D\ECD2B.CH  
Acq On : 11 Oct 2018 16:51 Operator: sdp  
Sample : 8100452-12 Inst : GCECD-7  
Misc : Multiplr: 1.00  
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
Quant Time: Oct 11 17:58 2018 Quant Results File: 80810806.RES

Quant Method : G:\HPCHEM\G...\80810806.M (Chemstation Integrator)  
Title : Pesticides by EPA Method 8081  
Last Update : Thu Oct 11 15:28:30 2018  
Response via : Multiple Level Calibration  
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul  
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um



13  
13.2.

# ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

**Client:** Peak Environmental  
**Client Sample ID:** STP-7  
**Lab Sample ID:** 8100452-14  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 00:00	Prep Date: 10/10/18 16:45	File ID: 7T01007.D
Init/Final Vol: 15 g / 10 mL	Prep Batch: B8J1047	Analyzed: 10/11/18 17:14
Dilution: 1	Matrix: Soil	Sequence: S8J1202
Percent Solids: 92.94	Prep Method: Microwave Extraction	

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
72-54-8	4,4'-DDD	ND	0.000847	0.00140	U
72-55-9	4,4'-DDE	ND	0.000990	0.00140	U
50-29-3	4,4'-DDT [2C]	0.00928	0.000586	0.00140	
309-00-2	Aldrin	ND	0.000868	0.00140	U
319-84-6	alpha-BHC	ND	0.000541	0.00140	U
319-85-7	beta-BHC	ND	0.00138	0.00140	U
57-74-9	Chlordane	0.0136	0.000939	0.00140	
319-86-8	delta-BHC	ND	0.00108	0.00140	U
60-57-1	Dieldrin	ND	0.000753	0.00140	U
959-98-8	Endosulfan I	ND	0.000968	0.00140	U
33213-65-9	Endosulfan II	ND	0.000761	0.00140	U
1031-07-8	Endosulfan sulfate	ND	0.000761	0.00140	U
72-20-8	Endrin	ND	0.000718	0.00140	U
7421-93-4	Endrin aldehyde	ND	0.000597	0.00140	U
53494-70-5	Endrin ketone	ND	0.000853	0.00140	U
58-89-9	gamma-BHC (Lindane)	ND	0.000639	0.00140	U
76-44-8	Heptachlor	ND	0.000818	0.00140	U
1024-57-3	Heptachlor Epoxide	ND	0.000875	0.00140	U
72-43-5	Methoxychlor	ND	0.000890	0.00140	U
8001-35-2	Toxaphene	ND	0.0217	0.0710	U

13  
 13.2

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I



Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20181011\7T01007.D\ECD1A.CH Vial: 9  
 Signal #2 : G:\HPCHEM\GCECD7\DATA\20181011\7T01007.D\ECD2B.CH  
 Acq On : 11 Oct 2018 17:14 Operator: sdp  
 Sample : 8100452-14 Inst : GCECD-7  
 Misc : Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
 Quant Time: Oct 11 17:57 2018 Quant Results File: 80810806.RES

Quant Method : G:\HPCHEM\G...\80810806.M (Chemstation Integrator)  
 Title : Pesticides by EPA Method 8081  
 Last Update : Thu Oct 11 15:28:30 2018  
 Response via : Initial Calibration  
 DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
-----						
System Monitoring Compounds						
1) S TCMX	3.14	3.75	238.7E6	221.1E6	59.464m	58.818
Spiked Amount	50.000	Range	43 - 129	Recovery	= 118.93%	117.64%
20) S Decachlorobiphen	15.34	18.20	291.8E6	203.7E6	56.724m	50.087
Spiked Amount	50.000	Range	42 - 136	Recovery	= 113.45%	100.17%
Target Compounds						
15) M 4,4'-DDT	9.48	12.02	30161373	38863152	7.794	12.942m#
21) L1 Chlordane (gamma)	6.98	8.71	39449677	27879066	8.050	6.546
22) L1 Chlordane (alpha)	7.26	9.06	52527887	30940546	10.891m	7.297 #
Sum Chlordane (gamma)			91977564	58819613	18.941	13.843
Average Chlordane (gamma)					9.471	6.921
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

-----  
 (f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
 7T01007.D 80810806.M Fri Oct 12 10:06:03 2018 SS

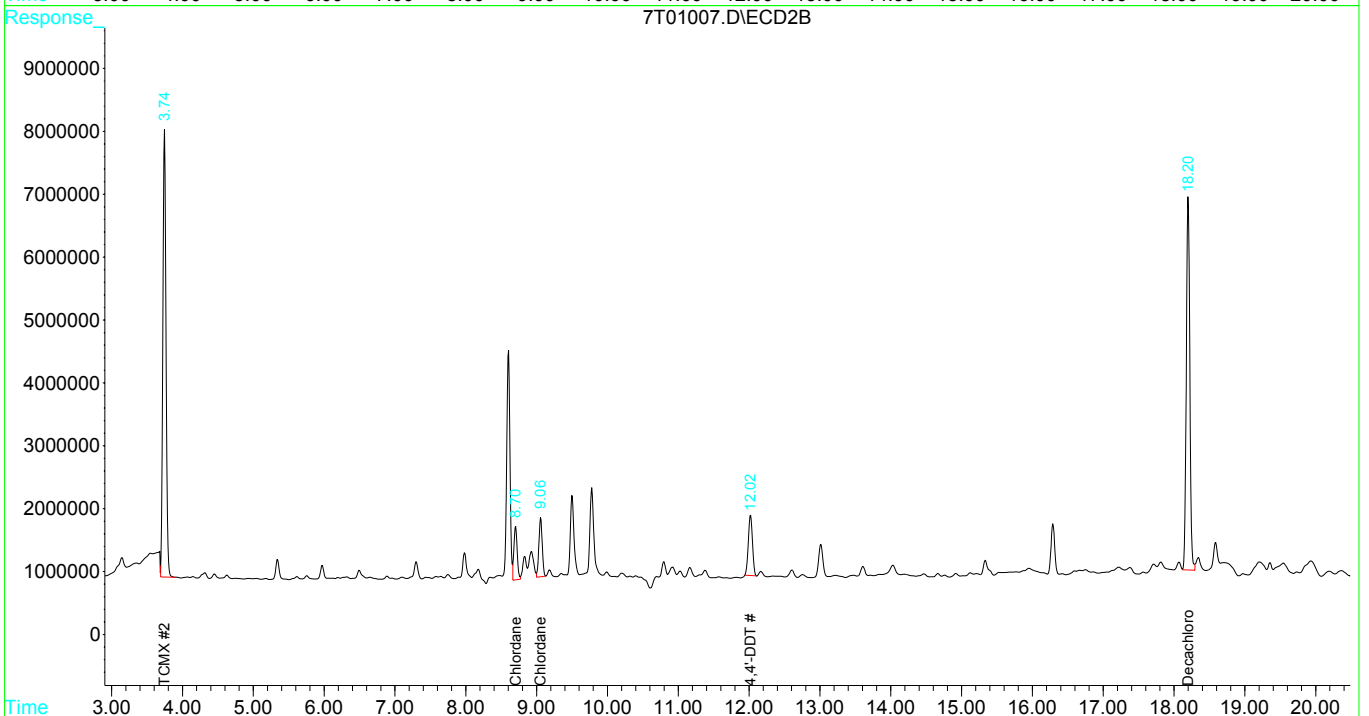
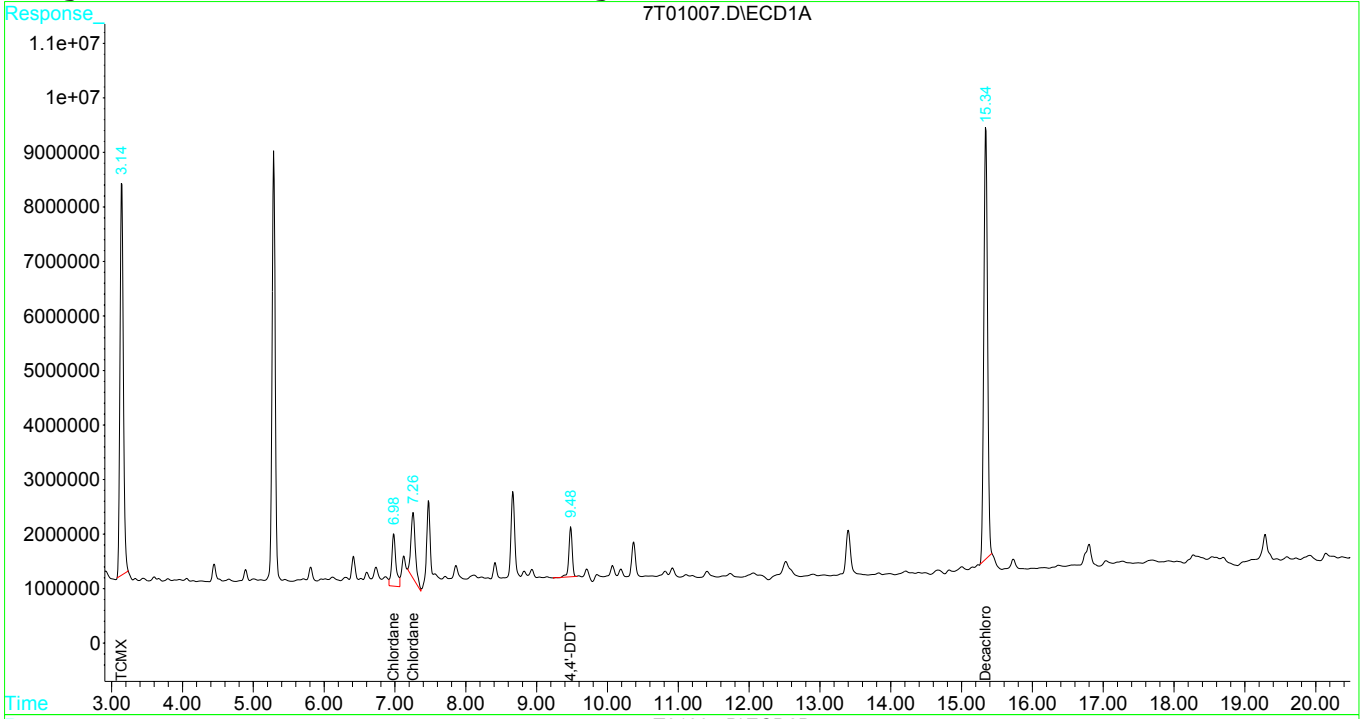
13  
13.2.

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20181011\7T01007.D\ECD1A.CH Vial: 9  
Signal #2 : G:\HPCHEM\GCECD7\DATA\20181011\7T01007.D\ECD2B.CH  
Acq On : 11 Oct 2018 17:14 Operator: sdp  
Sample : 8100452-14 Inst : GCECD-7  
Misc : Multiplr: 1.00  
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
Quant Time: Oct 11 17:57 2018 Quant Results File: 80810806.RES

Quant Method : G:\HPCHEM\G...\80810806.M (Chemstation Integrator)  
Title : Pesticides by EPA Method 8081  
Last Update : Thu Oct 11 15:28:30 2018  
Response via : Multiple Level Calibration  
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul  
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um



13  
13.2.

## SURROGATE RECOVERIES

Analysis Class: PESTICIDES

Matrix: Soil

Method: SW 846 8081B

**Pesticides**

Lab Number	File ID	TCMX	DCB	TCMX[2C]	DCB[2C]
8100452-01	7T01004.D	113	104	106	93.3
8100452-06	7T01005.D	112	109	104	92.2
8100452-12	7T01006.D	119	110	114	94.2
8100452-14	7T01007.D	119	113	118	100
B8J1047-BLK1	7T01034.D	108	105	101	105
B8J1047-BS1	7T01035.D	103	102	96.3	102
B8J1047-MS1	7T01018.D	97.6	112	104	95.2
B8J1047-MSD1	7T01019.D	97.2	115	105	89.4

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13.3.

Surrogate Limits		Lo Limit	Hi Limit
TCMX	Tetrachloro-m-xylene	41.8	136
DCB	Decachlorobiphenyl	43.1	129
TCMX[2C]	Tetrachloro-m-xylene [2C]	41.8	136
DCB[2C]	Decachlorobiphenyl [2C]	43.1	129

F-II

\* - Outside of QC Limits

**Pesticides - Quality Control**  
**Aqua Pro-Tech Laboratories**

Batch B8J1047			Method: SW 846 8081B			Prepared: 10/10/2018				
Lab Number	Source	Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
B8J1047-BS1		4,4'-DDD	0.0386	mg/kg wet	0.0333		116	91.1-141		
B8J1047-BS1		4,4'-DDE	0.0375	mg/kg wet	0.0333		113	98.2-139		
B8J1047-BS1		4,4'-DDT	0.0390	mg/kg wet	0.0333		117	23.3-144		
B8J1047-BS1		Aldrin	0.0384	mg/kg wet	0.0333		115	75-130		
B8J1047-BS1		alpha-BHC	0.0387	mg/kg wet	0.0333		116	74.3-132		
B8J1047-BS1		beta-BHC	0.0386	mg/kg wet	0.0333		116	76.9-128		
B8J1047-BS1		delta-BHC	0.0395	mg/kg wet	0.0333		118	61-155		
B8J1047-BS1		Dieldrin	0.0385	mg/kg wet	0.0333		115	74.9-130		
B8J1047-BS1		Endosulfan I	0.0375	mg/kg wet	0.0333		113	60.8-126		
B8J1047-BS1		Endosulfan II	0.0365	mg/kg wet	0.0333		110	72.7-125		
B8J1047-BS1		Endosulfan sulfate	0.0340	mg/kg wet	0.0333		102	63.7-128		
B8J1047-BS1		Endrin	0.0392	mg/kg wet	0.0333		118	77.7-141		
B8J1047-BS1		Endrin aldehyde	0.0329	mg/kg wet	0.0333		98.6	57.7-113		
B8J1047-BS1		Endrin ketone	0.0349	mg/kg wet	0.0333		105	64.1-133		
B8J1047-BS1		gamma-BHC (Lindane)	0.0386	mg/kg wet	0.0333		116	74-133		
B8J1047-BS1		Heptachlor	0.0376	mg/kg wet	0.0333		113	74.4-132		
B8J1047-BS1		Heptachlor Epoxide	0.0358	mg/kg wet	0.0333		108	75.2-127		
B8J1047-BS1		Methoxychlor	0.0362	mg/kg wet	0.0333		109	37.4-147		

Batch B8J1047 (cont.)			Method: SW 846 8081B			Prepared: 10/10/2018				
Lab Number	Source	Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
B8J1047-MS1	8100408-01	4,4'-DDD	0.0542	mg/kg dry	0.0406	ND	134	56.4-168		
B8J1047-MS1	8100408-01	4,4'-DDE	0.0454	mg/kg dry	0.0406	ND	112	67.4-153		
B8J1047-MS1	8100408-01	4,4'-DDT	0.0256	mg/kg dry	0.0406	ND	63.1	15-117		
B8J1047-MS1	8100408-01	Aldrin	0.0485	mg/kg dry	0.0406	ND	119	49.4-130		
B8J1047-MS1	8100408-01	alpha-BHC	0.0597	mg/kg dry	0.0406	ND	147*	48.9-139		
B8J1047-MS1	8100408-01	beta-BHC	0.0464	mg/kg dry	0.0406	ND	114	43.1-140		
B8J1047-MS1	8100408-01	delta-BHC	0.0575	mg/kg dry	0.0406	ND	142	36.1-164		
B8J1047-MS1	8100408-01	Dieldrin	0.0461	mg/kg dry	0.0406	ND	114	55.1-122		
B8J1047-MS1	8100408-01	Endosulfan I	0.0441	mg/kg dry	0.0406	ND	109	42.1-110		
B8J1047-MS1	8100408-01	Endosulfan II	0.0411	mg/kg dry	0.0406	ND	101	46.9-119		
B8J1047-MS1	8100408-01	Endosulfan sulfate	0.0397	mg/kg dry	0.0406	ND	97.9	24.6-139		
B8J1047-MS1	8100408-01	Endrin	0.0546	mg/kg dry	0.0406	ND	135	40.4-139		
B8J1047-MS1	8100408-01	Endrin aldehyde	0.0285	mg/kg dry	0.0406	ND	70.2	36.3-126		
B8J1047-MS1	8100408-01	Endrin ketone	0.0428	mg/kg dry	0.0406	ND	105	15-149		
B8J1047-MS1	8100408-01	gamma-BHC (Lindane)	0.0675	mg/kg dry	0.0406	ND	166*	32.3-140		
B8J1047-MS1	8100408-01	Heptachlor	0.0428	mg/kg dry	0.0406	ND	105	15-147		
B8J1047-MS1	8100408-01	Heptachlor Epoxide	0.0469	mg/kg dry	0.0406	ND	116	49-121		
B8J1047-MS1	8100408-01	Methoxychlor	0.0378	mg/kg dry	0.0406	ND	93.0	15-122		

\* - Outside of QC Limits      J - Result is between the MDL and RL for an Analysis reported to an RL  
 F-III      NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

**13**  
13.4.

**Pesticides - Quality Control**  
**Aqua Pro-Tech Laboratories**

Batch B8J1047 (cont.)			Method: SW 846 8081B			Prepared: 10/10/2018				
Lab Number	Source	Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
B8J1047-MSD1	8100408-01	4,4'-DDD	0.0549	mg/kg dry	0.0406	ND	135	56.4-168	1.22	30
B8J1047-MSD1	8100408-01	4,4'-DDE	0.0459	mg/kg dry	0.0406	ND	113	67.4-153	1.05	30
B8J1047-MSD1	8100408-01	4,4'-DDT	0.0253	mg/kg dry	0.0406	ND	62.4	15-117	1.21	30
B8J1047-MSD1	8100408-01	Aldrin	0.0486	mg/kg dry	0.0406	ND	120	49.4-130	0.184	30
B8J1047-MSD1	8100408-01	alpha-BHC	0.0599	mg/kg dry	0.0406	ND	148*	48.9-139	0.448	30
B8J1047-MSD1	8100408-01	beta-BHC	0.0526	mg/kg dry	0.0406	ND	130	43.1-140	12.5	30
B8J1047-MSD1	8100408-01	delta-BHC	0.0546	mg/kg dry	0.0406	ND	135	36.1-164	5.09	30
B8J1047-MSD1	8100408-01	Dieldrin	0.0465	mg/kg dry	0.0406	ND	114	55.1-122	0.754	30
B8J1047-MSD1	8100408-01	Endosulfan I	0.0445	mg/kg dry	0.0406	ND	110	42.1-110	1.04	30
B8J1047-MSD1	8100408-01	Endosulfan II	0.0413	mg/kg dry	0.0406	ND	102	46.9-119	0.394	30
B8J1047-MSD1	8100408-01	Endosulfan sulfate	0.0398	mg/kg dry	0.0406	ND	98.0	24.6-139	0.0613	30
B8J1047-MSD1	8100408-01	Endrin	0.0549	mg/kg dry	0.0406	ND	135	40.4-139	0.475	30
B8J1047-MSD1	8100408-01	Endrin aldehyde	0.0287	mg/kg dry	0.0406	ND	70.7	36.3-126	0.681	30
B8J1047-MSD1	8100408-01	Endrin ketone	0.0424	mg/kg dry	0.0406	ND	104	15-149	0.896	30
B8J1047-MSD1	8100408-01	gamma-BHC (Lindane)	0.0487	mg/kg dry	0.0406	ND	120	32.3-140	32.4*	30
B8J1047-MSD1	8100408-01	Heptachlor	0.0549	mg/kg dry	0.0406	ND	135	15-147	24.7	30
B8J1047-MSD1	8100408-01	Heptachlor Epoxide	0.0471	mg/kg dry	0.0406	ND	116	49-121	0.501	30
B8J1047-MSD1	8100408-01	Methoxychlor	0.0377	mg/kg dry	0.0406	ND	92.8	15-122	0.258	30

**13**  
13.4.

\* - Outside of QC Limits      J - Result is between the MDL and RL for an Analysis reported to an RL  
NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

F-III

## METHOD BLANK SUMMARY

**Batch ID:** B8J1047

<u>Lab Number</u>	<u>Sample Id</u>	<u>Extraction Date</u>	<u>Analysis Date</u>
B8J1047-BLK1	BLK1	10/10/2018	10/12/2018 18:05
B8J1047-BS1	BS1	10/10/2018	10/12/2018 18:27
B8J1047-MS1	MS1	10/10/2018	10/11/2018 21:24
B8J1047-MSD1	MSD1	10/10/2018	10/11/2018 21:47
8100452-01	NTP-1A	10/10/2018	10/11/2018 16:06
8100452-06	NTP-6	10/10/2018	10/11/2018 16:29
8100452-12	STP-4B	10/10/2018	10/11/2018 16:51
8100452-14	STP-7	10/10/2018	10/11/2018 17:14

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13.5.

# SURROGATE RT DRIFT REPORT

Analysis Class: PESTICIDES

**Sequence : S8J1202**

Lab Number	File ID	TCMX			DCB			TCMX[2C]			DCB[2C]		
		RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift
8100452-01	7T01004.D	3.14	3.14	0.00	15.34	15.35	-0.01	3.74	3.74	0.00	18.2	18.2	0.00
8100452-06	7T01005.D	3.14	3.14	0.00	15.34	15.35	-0.01	3.74	3.74	0.00	18.2	18.2	0.00
8100452-12	7T01006.D	3.14	3.14	0.00	15.34	15.35	-0.01	3.75	3.74	0.01	18.2	18.2	0.00
8100452-14	7T01007.D	3.14	3.14	0.00	15.34	15.35	-0.01	3.75	3.74	0.01	18.2	18.2	0.00
B8J1047-MS1	7T01018.D	3.14	3.14	0.00	15.34	15.35	-0.01	3.74	3.74	0.00	18.2	18.2	0.00
B8J1047-MSD1	7T01019.D	3.15	3.14	0.01	15.34	15.35	-0.01	3.75	3.74	0.01	18.2	18.2	0.00

**Sequence : S8J1503**

Lab Number	File ID	TCMX			DCB			TCMX[2C]			DCB[2C]		
		RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift
B8J1047-BLK1	7T01034.D	3.14	3.14	0.00	15.35	15.34	0.01	3.75	3.74	0.01	18.2	18.2	0.00
B8J1047-BS1	7T01035.D	3.14	3.14	0.00	15.34	15.34	0.00	3.75	3.74	0.01	18.2	18.2	0.00

13  
13.6.

Surrogate	Limit
TCMX	Tetrachloro-m-xylene 0.10
DCB	Decachlorobiphenyl 0.10
TCMX[2C]	Tetrachloro-m-xylene [2C] 0.10
DCB[2C]	Decachlorobiphenyl [2C] 0.10

DISS = Dissolved Analysis

F-V

Response Factor Report GCECD-7

Method : G:\HPCHEM\GCECD7\METHODS\80810806.M (Chemstation Integrator)  
 Title : Pesticides by EPA Method 8081  
 Last Update : Mon Aug 06 17:06:26 2018

Calibration Files  
 2 =7T00005.D 5 =7T00006.D 10 =7T00007.D  
 25 =7T00008.D 50 =7T00009.D 100 =7T00010.D

Compound	2	5	10	25	50	100	Avg	%RSD
1) S TCMX	4.045	4.005	4.067	4.008	3.906	4.055	4.014 E6	1.46
2) alpha-BHC	4.499	4.881	5.144	5.638	5.948	6.630	5.456 E6	14.19
3) M gamma-BHC (Lindane)	4.257	4.697	4.878	5.214	5.422	6.026	5.082 E6	12.11
4) M Heptachlor	4.914	5.123	5.058	5.167	5.321	5.895	5.246 E6	6.57
5) beta-BHC	2.561	2.548	2.459	2.387	2.361	2.530	2.474 E6	3.46
6) delta-BHC	4.622	4.691	4.951	5.178	5.496	6.097	5.172 E6	10.74
7) M Aldrin	4.374	4.626	4.630	4.865	5.092	5.679	4.877 E6	9.47
8) Heptachlor epoxide	4.902	4.713	4.618	4.629	4.714	5.189	4.794 E6	4.56
9) Endosulfan I	4.345	4.478	4.418	4.455	4.547	5.008	4.542 E6	5.24
10) 4,4'-DDE	3.997	4.195	4.191	4.381	4.543	5.119	4.404 E6	9.00
11) M Dieldrin	4.308	4.479	4.524	4.678	4.852	5.417	4.710 E6	8.34
12) M Endrin	3.818	3.959	3.952	4.060	4.207	4.727	4.121 E6	7.86
13) 4,4'-DDD	3.146	3.332	3.343	3.488	3.641	4.129	3.513 E6	9.80
14) Endosulfan II	4.378	4.408	4.517	4.426	4.437	4.772	4.490 E6	3.25
15) M 4,4'-DDT	3.880	3.724	3.692	3.731	3.851	4.340	3.870 E6	6.26
16) Endrin aldehyde	3.629	3.952	4.116	4.121	4.097	3.960	3.979 E6	4.72
17) Endosulfan sulfate	4.673	4.260	4.349	4.187	4.173	4.311	4.325 E6	4.24
18) Methoxychlor	2.123	2.082	2.003	1.985	1.960	2.050	2.034 E6	3.07
19) Endrin ketone	4.904	4.877	5.092	5.060	5.044	5.236	5.035 E6	2.61
20) S Decachlorobiphenyl	6.135	5.425	5.055	4.807	4.644	4.797	5.144 E6	10.83
21) L1 Chlordane (gamma)	4.778	4.801	4.718	4.768	4.902	5.437	4.901 E6	5.50
22) L1 Chlordane (alpha)	4.615	4.799	4.704	4.718	4.805	5.295	4.823 E6	5.01
23) L2 Toxaphene (1)						0.000	0	-1.00

Signal #2 Calibration Files  
 2 =7T00005.D 5 =7T00006.D 10 =7T00007.D  
 25 =7T00008.D 50 =7T00009.D 100 =7T00010.D

Compound	2	5	10	25	50	100	Avg	%RSD
1) S TCMX	4.327	3.849	3.718	3.614	3.466	3.585	3.760 E6	8.15
2) alpha-BHC	4.264	4.551	4.790	5.235	5.445	6.094	5.063 E6	13.14
3) M gamma-BHC (Lindane)	4.229	4.354	4.531	4.781	4.967	5.500	4.727 E6	9.85
4) M Heptachlor	5.085	4.763	4.624	4.650	4.772	5.317	4.868 E6	5.63
5) beta-BHC	2.616	2.438	2.312	2.219	2.175	2.274	2.339 E6	6.96
6) delta-BHC	4.260	4.200	4.452	4.691	4.951	5.529	4.681 E6	10.70
7) M Aldrin	4.188	4.263	4.235	4.352	4.497	5.011	4.424 E6	6.95
8) Heptachlor epoxide	4.124	4.189	4.141	4.134	4.183	4.607	4.230 E6	4.41
9) Endosulfan I	4.007	4.015	3.890	3.844	3.865	4.217	3.973 E6	3.51
10) 4,4'-DDE	3.791	3.736	3.669	3.745	3.854	4.328	3.854 E6	6.24
11) M Dieldrin	3.975	4.096	4.052	4.086	4.163	4.646	4.170 E6	5.79
12) M Endrin	3.641	3.587	3.497	3.504	3.619	4.058	3.651 E6	5.70
13) 4,4'-DDD	3.560	3.241	3.103	3.117	3.182	3.542	3.291 E6	6.31
14) Endosulfan II	4.357	4.116	4.085	3.890	3.838	4.052	4.056 E6	4.54
15) M 4,4'-DDT	3.304	2.799	2.715	2.843	2.963	3.395	3.003 E6	9.37
16) Endrin aldehyde	3.975	3.582	3.628	3.576	3.471	3.312	3.591 E6	6.12
17) Endosulfan sulfate	4.236	3.935	3.913	3.734	3.683	3.759	3.877 E6	5.23
18) Methoxychlor	1.892	1.722	1.677	1.650	1.636	1.726	1.717 E6	5.42
19) Endrin ketone	4.161	4.065	4.206	4.127	4.158	4.290	4.168 E6	1.82
20) S Decachlorobiphenyl	4.556	4.448	4.139	3.826	3.657	3.776	4.067 E6	9.21
21) L1 Chlordane (gamma)	4.141	4.238	4.156	4.142	4.215	4.660	4.259 E6	4.71
22) L1 Chlordane (alpha)	4.404	4.243	4.163	4.079	4.093	4.462	4.240 E6	3.80
23) L2 Toxaphene (1)						0.000	0	-1.00

(#) = Out of Range  
 80810806.M

Wed Aug 08 15:41:43 2018 SS

Page 1

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13.7.



Compound List Report GCECD-7

Method : G:\HPCHEM\GCECD7\METHODS\80810806.M (Chemstation Integrator)  
 Title : Pesticides by EPA Method 8081  
 Last Update : Mon Aug 06 17:06:26 2018  
 Response via : Initial Calibration  
 Total Cpnds : 47

PK#	Type	Compound Name	Exp_RT	Rel_RT	Cal	A/H	ID
1	S	TCMX	3.15	1.000	A	A	B
2		alpha-BHC	3.83	1.000	A	A	B
3	M	gamma-BHC (Lindane)	4.28	1.000	A	A	B
4	M	Heptachlor	5.05	1.000	A	A	B
5		beta-BHC	4.41	1.000	A	A	B
6		delta-BHC	4.69	1.000	A	A	B
7	M	Aldrin	5.58	1.000	A	A	B
8		Heptachlor epoxide	6.76	1.000	A	A	B
9		Endosulfan I	7.58	1.000	A	A	B
10		4,4'-DDE	7.51	1.000	A	A	B
11	M	Dieldrin	8.10	1.000	A	A	B
12	M	Endrin	8.62	1.000	A	A	B
13		4,4'-DDD	8.86	1.000	A	A	B
14		Endosulfan II	9.13	1.000	A	A	B
15	M	4,4'-DDT	9.52	1.000	A	A	B
16		Endrin aldehyde	10.15	1.000	A	A	B
17		Endosulfan sulfate	11.33	1.000	A	A	B
18		Methoxychlor	10.83	1.000	A	A	B
19		Endrin ketone	12.16	1.000	A	A	B
20	S	Decachlorobiphenyl	15.38	1.000	A	A	B
21	L1	Chlordane (gamma)	7.01	1.000	A	A	B
22	L1	Chlordane (alpha)	7.29	1.000	A	A	B
23	L2	Toxaphene (1)	11.16	1.000	A	A	R
24		Signal #2	35.00	1.000	A	A	B
25	S	TCMX #2	3.78	1.000	A	A	B
26		alpha-BHC #2	4.77	1.000	A	A	B
27	M	gamma-BHC (Lindane) #2	5.44	1.000	A	A	B
28	M	Heptachlor #2	6.34	1.000	A	A	B
29		beta-BHC #2	5.58	1.000	A	A	B
30		delta-BHC #2	6.19	1.000	A	A	B
31	M	Aldrin #2	7.04	1.000	A	A	B
32		Heptachlor epoxide #2	8.35	1.000	A	A	B
33		Endosulfan I #2	9.28	1.000	A	A	B
34		4,4'-DDE #2	9.60	1.000	A	A	B
35	M	Dieldrin #2	9.96	1.000	A	A	B
36	M	Endrin #2	10.75	1.000	A	A	B
37		4,4'-DDD #2	11.15	1.000	A	A	B
38		Endosulfan II #2	11.37	1.000	A	A	B
39	M	4,4'-DDT #2	12.16	1.000	A	A	B
40		Endrin aldehyde #2	12.50	1.000	A	A	B
41		Endosulfan sulfate #2	13.39	1.000	A	A	B
42		Methoxychlor #2	14.42	1.000	A	A	B
43		Endrin ketone #2	14.94	1.000	A	A	B
44	S	Decachlorobiphenyl #2	18.31	1.000	A	A	B
45	L1	Chlordane (gamma) #2	8.80	1.000	A	A	B
46	L1	Chlordane (alpha) #2	9.15	1.000	A	A	B
47	L2	Toxaphene (1) #2	14.65	1.000	A	A	R

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin  
 A/H = Area or Height  
 ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

80810806.M Wed Aug 08 15:41:43 2018 SS

13  
 13.7.

Response Factor Report GCECD-7

Method : G:\HPCHEM\GCECD7\METHODS\80811012.M (Chemstation Integrator)  
 Title : Pesticides by EPA Method 8081  
 Last Update : Mon Oct 15 10:51:09 2018

Calibration Files  
 2 =7T01026.D 5 =7T01027.D 10 =7T01028.D  
 25 =7T01023.D 50 =7T01024.D 100 =7T01025.D

Compound	2	5	10	25	50	100	Avg	%RSD
1) S TCMX	4.033	4.390	4.433	4.420	4.198	4.425	4.317 E6	3.82
2) alpha-BHC	4.681	5.207	5.398	6.049	6.306	7.209	5.808 E6	15.53
3) M gamma-BHC (Lindane)	4.557	4.999	5.123	5.592	5.740	6.521	5.422 E6	12.65
4) M Heptachlor	5.638	5.959	5.755	5.935	5.964	6.690	5.990 E6	6.13
5) beta-BHC	2.631	2.672	2.603	2.613	2.491	2.756	2.628 E6	3.31
6) delta-BHC	4.676	5.031	5.221	5.593	5.883	6.751	5.526 E6	13.28
7) M Aldrin	4.718	5.147	5.071	5.319	5.506	6.274	5.339 E6	9.90
8) Heptachlor epoxide	5.481	5.389	5.122	5.109	5.111	5.655	5.311 E6	4.37
9) Endosulfan I	4.788	5.161	4.998	5.088	5.098	5.662	5.133 E6	5.65
10) 4,4'-DDE	4.788	5.161	4.998	5.088	5.098	5.662	5.133 E6	5.65
11) M Dieldrin	4.483	4.878	4.835	4.970	5.079	5.890	5.023 E6	9.36
12) M Endrin	4.286	4.557	4.500	4.712	4.798	5.486	4.723 E6	8.76
13) 4,4'-DDD	3.476	3.694	3.677	3.773	3.927	4.599	3.858 E6	10.15
14) Endosulfan II	4.589	4.867	4.969	4.915	4.859	5.321	4.920 E6	4.80
15) M 4,4'-DDT	3.669	3.907	3.921	4.091	4.248	4.978	4.136 E6	11.03
16) Endrin aldehyde	4.377	4.519	4.661	4.569	4.472	4.673	4.545 E6	2.50
17) Endosulfan sulfate	4.966	4.980	5.111	4.850	4.728	4.967	4.934 E6	2.64
18) Methoxychlor	2.574	2.589	2.553	2.506	2.429	2.593	2.541 E6	2.48
19) Endrin ketone	5.041	5.404	5.575	5.445	5.409	5.795	5.445 E6	4.54
20) S Decachlorobiphenyl	6.811	6.990	6.289	5.667	5.346	5.589	6.115 E6	11.21
21) L1 Chlordane (gamma)	5.198	5.436	5.242	5.270	5.347	6.023	5.419 E6	5.67
22) L1 Chlordane (alpha)	4.976	5.339	5.191	5.247	5.277	5.921	5.325 E6	5.96
23) L2 Toxaphene (1)						0.000	0	-1.00

Signal #2 Calibration Files

2 =7T01026.D 5 =7T01027.D 10 =7T01028.D  
 25 =7T01023.D 50 =7T01024.D 100 =7T01025.D

Compound	2	5	10	25	50	100	Avg	%RSD
1) S TCMX	4.878	4.229	4.007	3.866	3.609	3.760	4.058 E6	11.19
2) alpha-BHC	4.974	5.424	5.555	5.886	5.905	6.555	5.717 E6	9.36
3) M gamma-BHC (Lindane)	4.797	5.148	5.217	5.402	5.390	5.951	5.318 E6	7.15
4) M Heptachlor	6.002	5.766	5.470	5.420	5.372	5.944	5.662 E6	4.90
5) beta-BHC	2.928	2.771	2.607	2.437	2.326	2.452	2.587 E6	8.81
6) delta-BHC	4.878	5.129	5.293	5.389	5.489	6.104	5.380 E6	7.70
7) M Aldrin	4.853	5.063	4.882	4.878	4.869	5.450	4.999 E6	4.68
8) Heptachlor epoxide	4.850	5.102	4.873	4.695	4.600	5.036	4.859 E6	3.96
9) Endosulfan I	4.980	5.068	4.836	4.565	4.473	4.898	4.803 E6	4.90
10) 4,4'-DDE	3.929	4.185	4.052	4.047	4.101	4.646	4.160 E6	6.07
11) M Dieldrin	4.691	4.877	4.723	4.590	4.535	5.056	4.745 E6	4.07
12) M Endrin	4.257	4.407	4.269	4.247	4.205	4.687	4.345 E6	4.16
13) 4,4'-DDD	4.270	3.968	3.755	3.551	3.522	3.930	3.833 E6	7.39
14) Endosulfan II	4.723	4.761	4.763	4.352	4.166	4.427	4.532 E6	5.58
15) M 4,4'-DDT	2.917	3.303	3.312	3.407	3.475	4.014	3.405 E6	10.44
16) Endrin aldehyde	4.241	4.134	4.243	3.977	3.786	3.869	4.042 E6	4.80
17) Endosulfan sulfate	4.893	4.748	4.717	4.259	4.062	4.173	4.475 E6	7.85
18) Methoxychlor	2.152	2.251	2.158	2.053	1.984	2.100	2.116 E6	4.38
19) Endrin ketone	4.585	4.858	4.972	4.595	4.506	4.733	4.708 E6	3.82
20) S Decachlorobiphenyl	4.482	4.380	3.971	3.486	3.274	3.404	3.833 E6	13.59
21) L1 Chlordane (gamma)	4.856	5.047	4.814	4.634	4.589	5.073	4.835 E6	4.17
22) L1 Chlordane (alpha)	4.980	5.068	4.836	4.565	4.473	4.898	4.803 E6	4.90
23) L2 Toxaphene (1)						0.000	0	-1.00

(#) = Out of Range  
 80811012.M

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13.7.

Compound List Report GCECD-7

Method : G:\HPCHEM\GCECD7\METHODS\80811012.M (Chemstation Integrator)  
 Title : Pesticides by EPA Method 8081  
 Last Update : Mon Oct 15 10:51:09 2018  
 Response via : Initial Calibration  
 Total Cpnds : 47

PK#	Type	Compound Name	Exp_RT	Rel_RT	Cal	A/H	ID
1	S	TCMX	3.14	1.000	A	A	B
2		alpha-BHC	3.81	1.000	A	A	B
3	M	gamma-BHC (Lindane)	4.27	1.000	A	A	B
4	M	Heptachlor	5.02	1.000	A	A	B
5		beta-BHC	4.39	1.000	A	A	B
6		delta-BHC	4.67	1.000	A	A	B
7	M	Aldrin	5.55	1.000	A	A	B
8		Heptachlor epoxide	6.73	1.000	A	A	B
9		Endosulfan I	7.54	1.000	A	A	B
10		4,4'-DDE	7.54	1.000	A	A	B
11	M	Dieldrin	8.07	1.000	A	A	B
12	M	Endrin	8.58	1.000	A	A	B
13		4,4'-DDD	8.82	1.000	A	A	B
14		Endosulfan II	9.10	1.000	A	A	B
15	M	4,4'-DDT	9.48	1.000	A	A	B
16		Endrin aldehyde	10.11	1.000	A	A	B
17		Endosulfan sulfate	11.28	1.000	A	A	B
18		Methoxychlor	10.79	1.000	A	A	B
19		Endrin ketone	12.11	1.000	A	A	B
20	S	Decachlorobiphenyl	15.34	1.000	A	A	B
21	L1	Chlordane (gamma)	6.98	1.000	A	A	B
22	L1	Chlordane (alpha)	7.26	1.000	A	A	B
23	L2	Toxaphene (1)	11.16	1.000	A	A	R
24		Signal #2	35.00	1.000	A	A	B
25	S	TCMX #2	3.74	1.000	A	A	B
26		alpha-BHC #2	4.72	1.000	A	A	B
27	M	gamma-BHC (Lindane) #2	5.37	1.000	A	A	B
28	M	Heptachlor #2	6.27	1.000	A	A	B
29		beta-BHC #2	5.52	1.000	A	A	B
30		delta-BHC #2	6.12	1.000	A	A	B
31	M	Aldrin #2	6.96	1.000	A	A	B
32		Heptachlor epoxide #2	8.26	1.000	A	A	B
33		Endosulfan I #2	9.06	1.000	A	A	B
34		4,4'-DDE #2	9.50	1.000	A	A	B
35	M	Dieldrin #2	9.86	1.000	A	A	B
36	M	Endrin #2	10.63	1.000	A	A	B
37		4,4'-DDD #2	11.03	1.000	A	A	B
38		Endosulfan II #2	11.25	1.000	A	A	B
39	M	4,4'-DDT #2	12.02	1.000	A	A	B
40		Endrin aldehyde #2	12.36	1.000	A	A	B
41		Endosulfan sulfate #2	13.26	1.000	A	A	B
42		Methoxychlor #2	14.29	1.000	A	A	B
43		Endrin ketone #2	14.81	1.000	A	A	B
44	S	Decachlorobiphenyl #2	18.20	1.000	A	A	B
45	L1	Chlordane (gamma) #2	8.70	1.000	A	A	B
46	L1	Chlordane (alpha) #2	9.06	1.000	A	A	B
47	L2	Toxaphene (1) #2	14.69	1.000	A	A	R

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin  
 A/H = Area or Height  
 ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

80811012.M Mon Oct 15 11:43:27 2018 SS

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 13.7.

# CALIBRATION VERIFICATION SUMMARY

**Client:** Peak Environmental  
**Work Order:** 8100452

Lab Sample ID (X50pp): S8J1202-CCV1(1)      Init. Calib. Date(s): 08/06/2018  
 File ID: 7T01001.D      Date Analyzed: 10/11/2018 14:58  
 Pesticides: Column 1      Matrix: Soil

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin	05.57	05.47	05.67	4877459	4899942	0.50
alpha-BHC	03.82	03.72	03.92	5456497	5403858	1.00
alpha-Chlordane (cis)	07.28	07.18	07.38	4822852	4695952	2.60
beta-BHC	04.40	04.30	04.50	2474249	2265636	8.40
delta-BHC	04.69	04.59	04.79	5172184	5055150	2.30
Dieldrin	08.08	07.98	08.18	4709648	4418592	6.20
Endosulfan I	07.56	07.46	07.66	4541974	4600952	1.30
Endosulfan II	09.11	09.01	09.21	4489556	4140890	7.80
Endosulfan sulfate	11.30	11.20	11.40	4325451	3862356	10.70
Endrin	08.59	08.49	08.69	4120614	4351818	5.60
Endrin aldehyde	10.12	10.02	10.22	3979113	3387226	14.90
Endrin ketone	12.13	12.03	12.23	5035335	4704802	6.60
gamma-BHC (Lindane)	04.28	04.18	04.38	5082343	5136686	1.10
4,4'-DDT	09.50	09.40	09.60	3869625	3787356	2.10
4,4'-DDE	07.56	07.46	07.66	4404421	4600952	4.50
4,4'-DDD	08.84	08.74	08.94	3512994	3496960	0.50
Methoxychlor	10.80	10.70	10.90	2033945	2231690	9.70
Heptachlor Epoxide	06.74	06.64	06.84	4794081	4565794	4.80
Heptachlor	05.04	04.94	05.14	5246329	5236254	0.20

**Average %D:** 4.78

\* - Outside of QC limits

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13.8.

## CALIBRATION VERIFICATION SUMMARY

**Client:** Peak Environmental  
**Work Order:** 8100452

Lab Sample ID (X50pp): S8J1202-CCV1(2)      Init. Calib. Date(s): 08/06/2018  
 File ID: 7T01001.D      Date Analyzed: 10/11/2018 14:58  
 Pesticides Column 2      Matrix: Soil

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin [2C]	06.96	06.86	07.06	4424124	4460442	0.80
alpha-BHC [2C]	04.71	04.61	04.81	5063246	5193134	2.60
alpha-Chlordane (cis) [2C]	09.05	08.95	09.15	4240424	4000910	5.60
beta-BHC [2C]	05.51	05.41	05.61	2339061	2105140	10.00
delta-BHC [2C]	06.11	06.01	06.21	4680517	4850104	3.60
Dieldrin [2C]	09.85	09.75	09.95	4169666	4016782	3.70
Endosulfan I [2C]	09.05	08.95	09.15	3973062	4000910	0.70
Endosulfan II [2C]	11.24	11.14	11.34	4056479	3573708	11.90
Endosulfan sulfate [2C]	13.25	13.15	13.35	3876638	3371792	13.00
Endrin [2C]	10.63	10.53	10.73	3651053	3836088	5.10
Endrin aldehyde [2C]	12.35	12.25	12.45	3590744	2943654	18.00
Endrin ketone [2C]	14.81	14.71	14.91	4167805	3970844	4.70
gamma-BHC (Lindane) [2C]	05.37	05.27	05.47	4726962	4938496	4.50
4,4'-DDT [2C]	12.01	11.91	12.11	3002849	3151962	5.00
4,4'-DDE [2C]	09.50	09.40	09.60	3853824	3778712	1.90
4,4'-DDD [2C]	11.02	10.92	11.12	3290967	3164538	3.80
Methoxychlor [2C]	14.29	14.19	14.39	1717232	1844271	7.40
Heptachlor Epoxide [2C]	08.26	08.16	08.36	4229546	4141770	2.10
Heptachlor [2C]	06.26	06.16	06.36	4868319	4842704	0.50

**Average %D:** 5.52

\* - Outside of QC limits

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13.8.

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20181011\7T01001.D\ECD1A.CH Vial: 3  
 Signal #2 : G:\HPCHEM\GCECD7\DATA\20181011\7T01001.D\ECD2B.CH  
 Acq On : 11 Oct 2018 14:58 Operator: sdp  
 Sample : SEQ-CCV Inst : GCECD-7  
 Misc : Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
 Quant Time: Oct 11 15:26 2018 Quant Results File: 80810806.RES

Quant Method : G:\HPCHEM\G...\80810806.M (Chemstation Integrator)  
 Title : Pesticides by EPA Method 8081  
 Last Update : Thu Oct 11 09:23:17 2018  
 Response via : Initial Calibration  
 DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	3.14	3.74	66826565	59120632	16.647	15.725
Spiked Amount	50.000	Range	43 - 129	Recovery =	33.29%#	31.45%#
20) S Decachlorobiphen	15.35	18.20	89341608	56240380	17.369	13.829
Spiked Amount	50.000	Range	42 - 136	Recovery =	34.74%#	27.66%#
Target Compounds						
2) alpha-BHC	3.82	4.71	270.2E6	259.7E6	49.518	51.283
3) M gamma-BHC (Linda)	4.28	5.37	256.8E6	246.9E6	50.535	52.238
4) M Heptachlor	5.04	6.26	261.8E6	242.1E6	49.904	49.737
5) beta-BHC	4.40	5.51	113.3E6	105.3E6	45.784	45.000
6) delta-BHC	4.69	6.11	252.8E6	242.5E6	48.869	51.812
7) M Aldrin	5.57	6.96	245.0E6	223.0E6	50.230	50.410
8) Heptachlor epoxi	6.74	8.26	228.3E6	207.1E6	47.619	48.962
9) Endosulfan I	7.56	9.05	230.0E6	200.0E6	50.649	50.350
10) 4,4'-DDE	7.56	9.50	230.0E6	188.9E6	52.231	49.026
11) M Dieldrin	8.08	9.85	220.9E6	200.8E6	46.910	48.167
12) M Endrin	8.59	10.63	217.6E6	191.8E6	52.805	52.534
13) 4,4'-DDD	8.84	11.02	174.8E6	158.2E6	49.772	48.079
14) Endosulfan II	9.11	11.24	207.0E6	178.7E6	46.117	44.049
15) M 4,4'-DDT	9.50	12.01	189.4E6	157.6E6	48.937	52.483
16) Endrin aldehyde	10.12	12.35	169.4E6	147.2E6	42.563	40.989
17) Endosulfan sulfa	11.30	13.25	193.1E6	168.6E6	44.647	43.489
18) Methoxychlor	10.80	14.29	111.6E6	92213569	54.861	53.699
19) Endrin ketone	12.13	14.81	235.2E6	198.5E6	46.718	47.637
21) L1 Chlordane (gamma)	7.00	8.70	237.8E6	206.4E6	48.517	48.457
22) L1 Chlordane (alpha)	7.28	9.05	234.8E6	200.0E6	48.684	47.176
Sum Chlordane (gamma)			472.6E6	406.4E6	97.201	95.633
Average Chlordane (gamma)					48.601	47.816
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
 7T01001.D 80810806.M Fri Oct 12 10:05:53 2018 SS

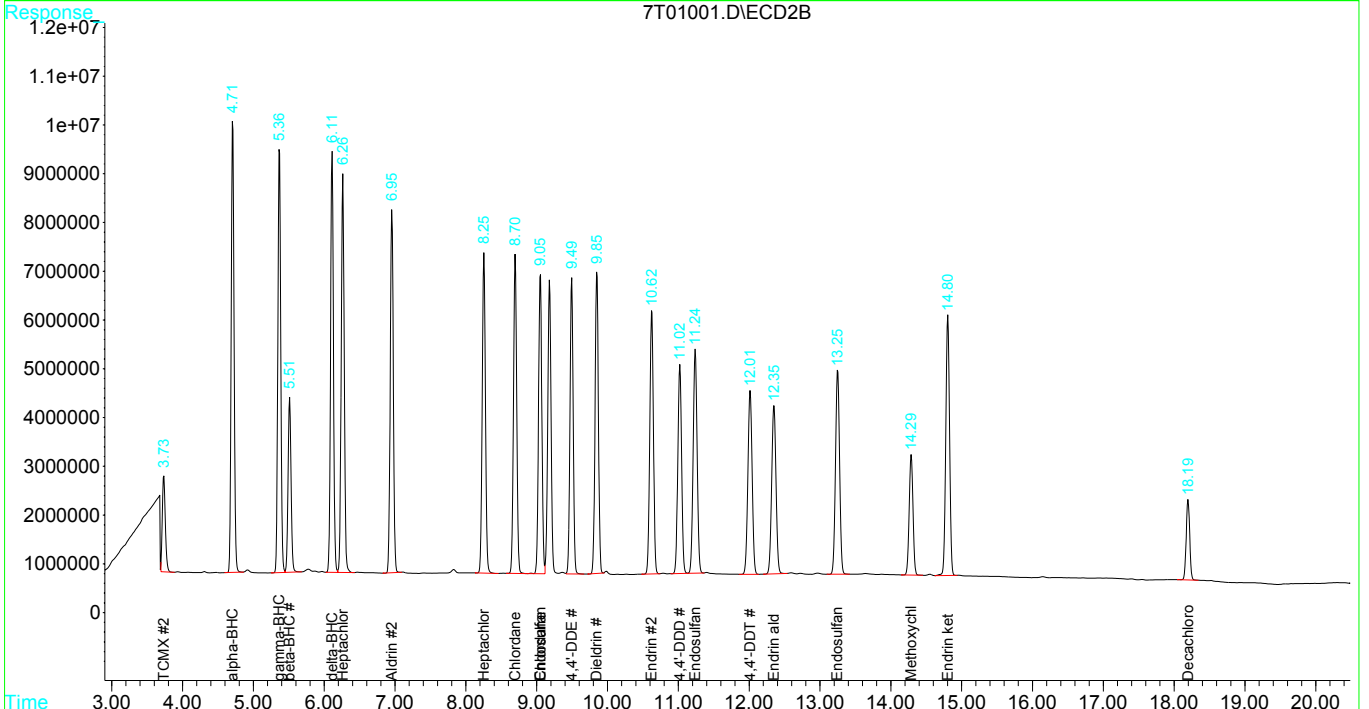
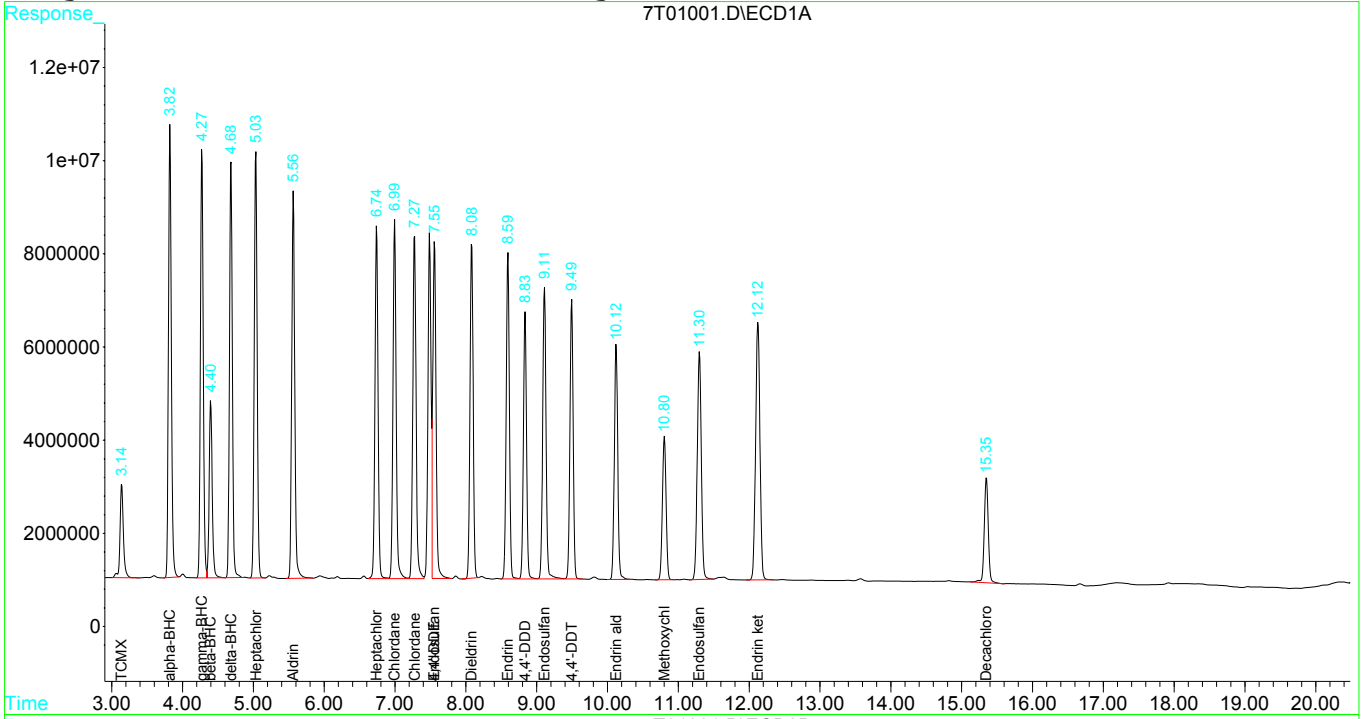
13  
 13.8.

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20181011\7T01001.D\ECD1A.CH Vial: 3  
 Signal #2 : G:\HPCHEM\GCECD7\DATA\20181011\7T01001.D\ECD2B.CH  
 Acq On : 11 Oct 2018 14:58 Operator: sdp  
 Sample : SEQ-CCV Inst : GCECD-7  
 Misc : Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
 Quant Time: Oct 11 15:26 2018 Quant Results File: 80810806.RES

Quant Method : G:\HPCHEM\G...\80810806.M (Chemstation Integrator)  
 Title : Pesticides by EPA Method 8081  
 Last Update : Thu Oct 11 09:23:17 2018  
 Response via : Multiple Level Calibration  
 DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um



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13.8.



AQUA PRO-TECH LABORATORIES  
*Certified Environmental Testing*

# SEMIVOLATILES

Peak Environmental  
Work Order: 8100452  
Project: Ridgewood



# ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

Client: **Peak Environmental** Project: **Ridgewood**  
Client Sample ID: **Blank** Work Order: **8100452**  
Lab Sample ID: **B8J1101-BLK1**

Init/Final Vol:	15 g / 1 mL	Prep Date:	10/11/2018 08:03	File ID:	DS18769.D
		Prep Batch:	B8J1101	Analyzed:	10/11/2018 13:11
		Matrix:	Soil	Sequence:	S8J1213
		Prep Method:	Sonication MS		

CAS NO.	COMPOUND	CONC. (mg/kg wet)	MDL	RL	Q
90-12-0	1-Methylnaphthalene	ND	0.0319	0.200	U
58-90-2	2,3,4,6-Tetrachlorophenol	ND	0.0205	0.133	U
95-95-4	2,4,5-Trichlorophenol	ND	0.0181	0.133	U
88-06-2	2,4,6-Trichlorophenol	ND	0.00833	0.133	U
120-83-2	2,4-Dichlorophenol	ND	0.0134	0.133	U
105-67-9	2,4-Dimethylphenol	ND	0.0131	0.133	U
51-28-5	2,4-Dinitrophenol	ND	0.0192	0.667	U
121-14-2	2,4-Dinitrotoluene	ND	0.0142	0.133	U
606-20-2	2,6-Dinitrotoluene	ND	0.0318	0.133	U
91-58-7	2-Chloronaphthalene	ND	0.0153	0.133	U
95-57-8	2-Chlorophenol	ND	0.0176	0.133	U
91-57-6	2-Methylnaphthalene	ND	0.0319	0.200	U
95-48-7	2-Methylphenol	ND	0.0263	0.133	U
88-74-4	2-Nitroaniline	ND	0.0107	0.133	U
88-75-5	2-Nitrophenol	ND	0.0148	0.133	U
91-94-1	3,3'-Dichlorobenzidine	ND	0.0140	0.133	U
106-44-5	3+4-Methylphenol	ND	0.0244	0.133	U
99-09-2	3-Nitroaniline	ND	0.0247	0.133	U
534-52-1	4,6-Dinitro-2-methylphenol	ND	0.0251	0.333	U
101-55-3	4-Bromophenyl-phenyl ether	ND	0.0190	0.133	U
59-50-7	4-Chloro-3-methylphenol	ND	0.0210	0.133	U
106-47-8	4-Chloroaniline	ND	0.00466	0.133	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.00719	0.133	U
100-01-6	4-Nitroaniline	ND	0.0666	0.133	U
100-02-7	4-Nitrophenol	ND	0.00852	0.133	U
83-32-9	Acenaphthene	ND	0.00759	0.133	U
208-96-8	Acenaphthylene	ND	0.00463	0.133	U
98-86-2	Acetophenone	ND	0.0132	0.133	U
120-12-7	Anthracene	ND	0.0193	0.133	U
1912-24-9	Atrazine	ND	0.0125	0.133	U
100-52-7	Benzaldehyde	ND	0.0409	0.133	U

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14.1.

# ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

<b>Client:</b>	Peak Environmental	<b>Project:</b>	Ridgewood
<b>Client Sample ID:</b>	Blank	<b>Work Order:</b>	8100452
<b>Lab Sample ID:</b>	B8J1101-BLK1		

Init/Final Vol:	15 g / 1 mL	Prep Date:	10/11/2018 08:03	File ID:	DS18769.D
		Prep Batch:	B8J1101	Analyzed:	10/11/2018 13:11
		Matrix:	Soil	Sequence:	S8J1213
		Prep Method:	Sonication MS		

CAS NO.	COMPOUND	CONC. (mg/kg wet)	MDL	RL	Q
56-55-3	Benzo(a)anthracene	ND	0.0134	0.133	U
50-32-8	Benzo(a)pyrene	ND	0.0232	0.133	U
205-99-2	Benzo(b)fluoranthene	ND	0.0187	0.133	U
191-24-2	Benzo(g,h,i)perylene	ND	0.0108	0.133	U
207-08-9	Benzo(k)fluoranthene	ND	0.0153	0.133	U
92-52-4	Biphenyl	ND	0.0117	0.133	U
111-91-1	bis(2-chloroethoxy)methane	ND	0.0184	0.133	U
111-44-4	bis(2-chloroethyl)ether	ND	0.0146	0.133	U
108-60-1	bis(2-chloroisopropyl)ether	ND	0.0479	0.133	U
117-81-7	bis(2-ethylhexyl)phthalate	ND	0.0266	0.133	U
85-68-7	Butylbenzylphthalate	ND	0.0121	0.133	U
105-60-2	Caprolactam	ND	0.0172	0.133	U
86-74-8	Carbazole	ND	0.0256	0.333	U
218-01-9	Chrysene	ND	0.00912	0.133	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.0132	0.133	U
132-64-9	Dibenzofuran	ND	0.00793	0.133	U
84-66-2	Diethylphthalate	ND	0.0258	0.133	U
131-11-3	Dimethylphthalate	0.0574	0.00826	0.133	J
84-74-2	Di-n-butylphthalate	ND	0.0544	0.133	U
117-84-0	Di-n-octylphthalate	ND	0.0273	0.133	U
206-44-0	Fluoranthene	ND	0.0125	0.133	U
86-73-7	Fluorene	ND	0.0111	0.133	U
118-74-1	Hexachlorobenzene	ND	0.0174	0.133	U
87-68-3	Hexachlorobutadiene	ND	0.0639	0.133	U
77-47-4	Hexachlorocyclopentadiene	ND	0.0555	0.333	U
67-72-1	Hexachloroethane	ND	0.0146	0.133	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.0143	0.133	U
78-59-1	Isophorone	ND	0.00872	0.133	U
91-20-3	Naphthalene	ND	0.00986	0.133	U
98-95-3	Nitrobenzene	ND	0.0226	0.133	U
621-64-7	n-Nitroso-di-n-propylamine	ND	0.00713	0.133	U

F-I

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14.1.

# ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

Client: Peak Environmental Project: Ridgewood  
Client Sample ID: Blank Work Order: 8100452  
Lab Sample ID: B8J1101-BLK1

Init/Final Vol:	15 g / 1 mL	Prep Date:	10/11/2018 08:03	File ID:	DS18769.D
		Prep Batch:	B8J1101	Analyzed:	10/11/2018 13:11
		Matrix:	Soil	Sequence:	S8J1213
		Prep Method:	Sonication MS		

CAS NO.	COMPOUND	CONC. (mg/kg wet)	MDL	RL	Q
86-30-6	n-Nitrosodiphenylamine	ND	0.0284	0.133	U
85-01-8	Phenanthrene	ND	0.0175	0.133	U
108-95-2	Phenol	ND	0.0108	0.133	U
129-00-0	Pyrene	ND	0.00979	0.133	U

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F-I

# ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

Client: Peak Environmental Project: Ridgewood  
Client Sample ID: Blank Work Order: 8100452  
Lab Sample ID: B8J1101-BLK1

Init/Final Vol:	15 g / 1 mL	Prep Date:	10/11/2018 08:03	File ID:	DS18769.D
		Prep Batch:	B8J1101	Analyzed:	10/11/2018 13:11
		Matrix:	Soil	Sequence:	S8J1213
		Prep Method:	Sonication MS		

CAS NO.	TENTATIVELY IDENTIFIED COMPOUNDS	CONC. (mg/kg wet)	RT	Q
	Sum of Tentatively Identified Compounds	0.000		

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# ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

Client: **Peak Environmental** Project: **Ridgewood**  
Client Sample ID: **Blank** Work Order: **8100452**  
Lab Sample ID: **B8J1101-BLK1**

Init/Final Vol:	15 g / 1 mL	Prep Date:	10/11/2018 08:03	File ID:	DS18769.D
		Prep Batch:	B8J1101	Analyzed:	10/11/2018 13:11
		Matrix:	Soil	Sequence:	S8J1213
		Prep Method:	Sonication MS		

CAS NO.	COMPOUND	CONC. (mg/kg wet)	MDL	RL	Q
90-12-0	1-Methylnaphthalene	ND	0.111	0.200	U
91-57-6	2-Methylnaphthalene	ND	0.0319	0.200	U
83-32-9	Acenaphthene	ND	0.00759	0.133	U
208-96-8	Acenaphthylene	ND	0.00463	0.133	U
120-12-7	Anthracene	ND	0.0193	0.133	U
56-55-3	Benzo(a)anthracene	ND	0.0134	0.133	U
50-32-8	Benzo(a)pyrene	ND	0.0232	0.133	U
205-99-2	Benzo(b)fluoranthene	ND	0.0187	0.133	U
191-24-2	Benzo(g,h,i)perylene	ND	0.0108	0.133	U
207-08-9	Benzo(k)fluoranthene	ND	0.0153	0.133	U
218-01-9	Chrysene	ND	0.00912	0.133	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.0132	0.133	U
206-44-0	Fluoranthene	ND	0.0125	0.133	U
86-73-7	Fluorene	ND	0.0111	0.133	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.0143	0.133	U
91-20-3	Naphthalene	ND	0.00986	0.133	U
85-01-8	Phenanthrene	ND	0.0175	0.133	U
129-00-0	Pyrene	ND	0.00979	0.133	U

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14.1.

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\D\DATA\20181011\DS18769.D Vial: 4  
 Acq On : 11 Oct 2018 13:11 Operator: GCH  
 Sample : B8J1101-BLK1 Inst : GCMS-D  
 Misc : SOIL Multiplr: 1.00

MS Integration Params: rteint.p  
 Quant Time: Oct 12 13:39 2018

Quant Results File: 0802ABN.RES

Quant Method : G:\HPCHEM\D\METHODS\0802ABN.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270D

Last Update : Wed Oct 10 10:16:58 2018

Response via : Initial Calibration

DataAcq Meth : RUN8270B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.55	152	169814	40.00	ug/kg	-0.06
22) Naphthalene-d8	6.83	136	643038	40.00	ug/kg	-0.06
39) Acenaphthene-d10	8.58	164	307744	40.00	ug/kg	-0.06
62) Phenanthrene-d10	10.05	188	545070	40.00	ug/kg	-0.07
76) Chrysene-d12	12.75	240	412629	40.00	ug/kg	-0.08
85) Perylene-d12	14.45	264	408173	40.00	ug/kg	-0.10

System Monitoring Compounds

5) 2-Fluorophenol	4.18	112	443335	76.16	ug/kg	-0.08
Spiked Amount	100.000	Range	18 - 82	Recovery	=	76.16%
8) Phenol-d6	5.17	99	576916	78.04	ug/kg	-0.08
Spiked Amount	100.000	Range	20 - 88	Recovery	=	78.04%
23) Nitrobenzene-d5	6.10	82	242418	40.51	ug/kg	-0.12
Spiked Amount	50.000	Range	27 - 100	Recovery	=	81.02%
44) 2-Fluorobiphenyl	7.90	172	433591	38.16	ug/kg	-0.09
Spiked Amount	50.000	Range	27 - 105	Recovery	=	76.32%
66) 2,4,6-Tribromophenol	9.36	330	79068	68.63	ug/kg	-0.10
Spiked Amount	100.000	Range	24 - 115	Recovery	=	68.63%
79) p-Terphenyl-d14	11.62	244	385999	40.93	ug/kg	-0.02
Spiked Amount	50.000	Range	29 - 110	Recovery	=	81.86%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
48) Dimethylphthalate	8.28	163	9408	0.86	ug/kg	90

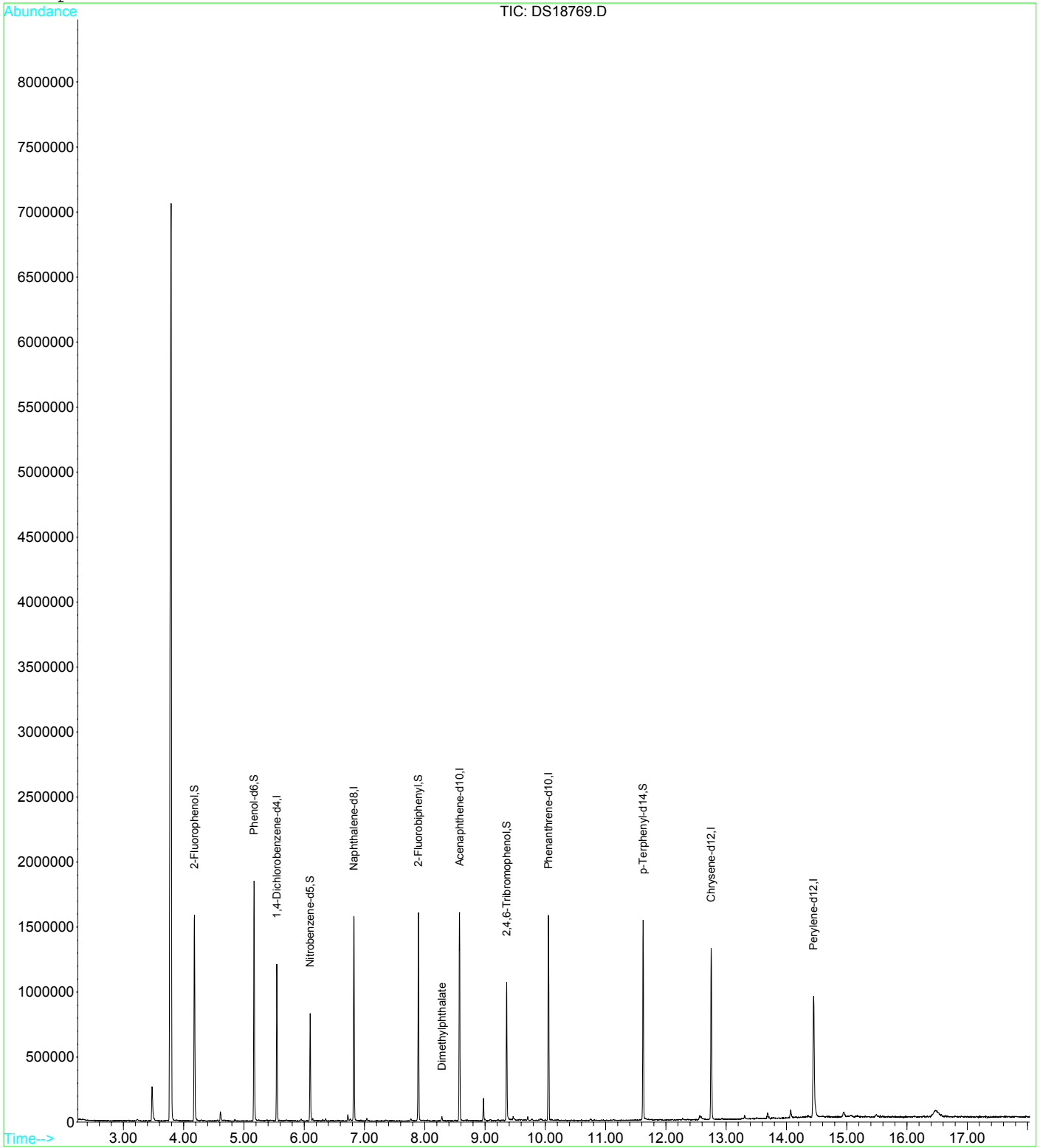
(#) = qualifier out of range (m) = manual integration  
 DS18769.D 0802ABN.M Tue Oct 16 12:43:50 2018 SS

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14.1

Quantitation Report

Data File : G:\HPCHEM\D\DATA\20181011\DS18769.D Vial: 4  
Acq On : 11 Oct 2018 13:11 Operator: GCH  
Sample : B8J1101-BLK1 Inst : GCMS-D  
Misc : SOIL Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Oct 12 13:39 2018 Quant Results File: 0802ABN.RES

Method : G:\HPCHEM\D\METHODS\0802ABN.M (RTE Integrator)  
Title : BNA Extractables GC/MS 8270D  
Last Update : Mon Oct 15 10:25:43 2018  
Response via : Initial Calibration



# ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

**Client:** Peak Environmental  
**Client Sample ID:** NTP-1A  
**Lab Sample ID:** 8100452-01  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 00:00	Prep Date: 10/11/18 08:03	File ID: DS18771.D
Init/Final Vol: 15 g / 1 mL	Prep Batch: B8J1101	Analyzed: 10/11/18 14:10
Dilution: 1	Matrix: Soil	Sequence: S8J1213
Percent Solids: 89.91	Prep Method: Sonication MS	

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
90-12-0	1-Methylnaphthalene	ND	0.0355	0.222	U
58-90-2	2,3,4,6-Tetrachlorophenol	ND	0.0228	0.148	U
95-95-4	2,4,5-Trichlorophenol	ND	0.0201	0.148	U
88-06-2	2,4,6-Trichlorophenol	ND	0.00927	0.148	U
120-83-2	2,4-Dichlorophenol	ND	0.0149	0.148	U
105-67-9	2,4-Dimethylphenol	ND	0.0146	0.148	U
51-28-5	2,4-Dinitrophenol	ND	0.0214	0.742	U
121-14-2	2,4-Dinitrotoluene	ND	0.0158	0.148	U
606-20-2	2,6-Dinitrotoluene	ND	0.0354	0.148	U
91-58-7	2-Chloronaphthalene	ND	0.0170	0.148	U
95-57-8	2-Chlorophenol	ND	0.0196	0.148	U
91-57-6	2-Methylnaphthalene	ND	0.0355	0.222	U
95-48-7	2-Methylphenol	ND	0.0293	0.148	U
88-74-4	2-Nitroaniline	ND	0.0119	0.148	U
88-75-5	2-Nitrophenol	ND	0.0165	0.148	U
91-94-1	3,3'-Dichlorobenzidine	ND	0.0156	0.148	U
106-44-5	3+4-Methylphenol	ND	0.0271	0.148	U
99-09-2	3-Nitroaniline	ND	0.0275	0.148	U
534-52-1	4,6-Dinitro-2-methylphenol	ND	0.0279	0.370	U
101-55-3	4-Bromophenyl-phenyl ether	ND	0.0211	0.148	U
59-50-7	4-Chloro-3-methylphenol	ND	0.0234	0.148	U
106-47-8	4-Chloroaniline	ND	0.00518	0.148	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.00800	0.148	U
100-01-6	4-Nitroaniline	ND	0.0741	0.148	U
100-02-7	4-Nitrophenol	ND	0.00948	0.148	U
83-32-9	Acenaphthene	ND	0.00844	0.148	U

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

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 14.2



# ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

**Client:** Peak Environmental  
**Client Sample ID:** NTP-1A  
**Lab Sample ID:** 8100452-01  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 00:00	Prep Date:	10/11/18 08:03	File ID:	DS18771.D
Init/Final Vol:	15 g / 1 mL	Prep Batch:	B8J1101	Analyzed:	10/11/18 14:10
Dilution:	1	Matrix:	Soil	Sequence:	S8J1213
Percent Solids:	89.91	Prep Method:	Sonication MS		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
208-96-8	Acenaphthylene	ND	0.00515	0.148	U
98-86-2	Acetophenone	ND	0.0147	0.148	U
120-12-7	Anthracene	ND	0.0215	0.148	U
1912-24-9	Atrazine	ND	0.0139	0.148	U
100-52-7	Benzaldehyde	ND	0.0455	0.148	U
56-55-3	Benzo(a)anthracene	0.0995	0.0149	0.148	J
50-32-8	Benzo(a)pyrene	0.0887	0.0258	0.148	J
205-99-2	Benzo(b)fluoranthene	0.107	0.0208	0.148	J
191-24-2	Benzo(g,h,i)perylene	0.0702	0.0120	0.148	J
207-08-9	Benzo(k)fluoranthene	0.0788	0.0170	0.148	J
92-52-4	Biphenyl	ND	0.0130	0.148	U
111-91-1	bis(2-chloroethoxy)methane	ND	0.0205	0.148	U
111-44-4	bis(2-chloroethyl)ether	ND	0.0162	0.148	U
108-60-1	bis(2-chloroisopropyl)ether	ND	0.0533	0.148	U
117-81-7	bis(2-ethylhexyl)phthalate	ND	0.0296	0.148	U
85-68-7	Butylbenzylphthalate	ND	0.0135	0.148	U
105-60-2	Caprolactam	ND	0.0191	0.148	U
86-74-8	Carbazole	ND	0.0285	0.370	U
218-01-9	Chrysene	0.0909	0.0101	0.148	J
53-70-3	Dibenzo(a,h)anthracene	ND	0.0147	0.148	U
132-64-9	Dibenzofuran	ND	0.00882	0.148	U
84-66-2	Diethylphthalate	ND	0.0287	0.148	U
131-11-3	Dimethylphthalate	ND	0.00919	0.148	U
84-74-2	Di-n-butylphthalate	ND	0.0605	0.148	U
117-84-0	Di-n-octylphthalate	ND	0.0304	0.148	U
206-44-0	Fluoranthene	0.167	0.0139	0.148	

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

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 14.2

# ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

**Client:** Peak Environmental  
**Client Sample ID:** NTP-1A  
**Lab Sample ID:** 8100452-01  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 00:00	Prep Date: 10/11/18 08:03	File ID: DS18771.D
Init/Final Vol: 15 g / 1 mL	Prep Batch: B8J1101	Analyzed: 10/11/18 14:10
Dilution: 1	Matrix: Soil	Sequence: S8J1213
Percent Solids: 89.91	Prep Method: Sonication MS	

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
86-73-7	Fluorene	ND	0.0123	0.148	U
118-74-1	Hexachlorobenzene	ND	0.0194	0.148	U
87-68-3	Hexachlorobutadiene	ND	0.0711	0.148	U
77-47-4	Hexachlorocyclopentadiene	ND	0.0617	0.370	U
67-72-1	Hexachloroethane	ND	0.0162	0.148	U
193-39-5	Indeno(1,2,3-cd)pyrene	0.0610	0.0159	0.148	J
78-59-1	Isophorone	ND	0.00970	0.148	U
91-20-3	Naphthalene	ND	0.0110	0.148	U
98-95-3	Nitrobenzene	ND	0.0251	0.148	U
621-64-7	n-Nitroso-di-n-propylamine	ND	0.00793	0.148	U
86-30-6	n-Nitrosodiphenylamine	ND	0.0316	0.148	U
85-01-8	Phenanthrene	0.126	0.0195	0.148	J
108-95-2	Phenol	ND	0.0120	0.148	U
129-00-0	Pyrene	0.158	0.0109	0.148	

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 14.2

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

# ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

**Client:** Peak Environmental  
**Client Sample ID:** NTP-1A  
**Lab Sample ID:** 8100452-01  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 00:00	Prep Date: 10/11/18 08:03	File ID: DS18771.D
Init/Final Vol: 15 g / 1 mL	Prep Batch: B8J1101	Analyzed: 10/11/18 14:10
Dilution: 1	Matrix: Soil	Sequence: S8J1213
Percent Solids: 89.91	Prep Method: Sonication MS	

CAS NO.	TENTATIVELY IDENTIFIED COMPOUNDS	CONC. (mg/kg dry)	RT	Q
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14.2.

J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 D - Indicates result is based on a dilution

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\D\DATA\20181011\DS18771.D Vial: 6  
 Acq On : 11 Oct 2018 14:10 Operator: GCH  
 Sample : 8100452-01 Inst : GCMS-D  
 Misc : B8J1101 SOIL Multiplr: 1.00  
 MS Integration Params: rteint.p  
 Quant Time: Oct 11 15:13 2018 Quant Results File: 0802ABN.RES

Quant Method : G:\HPCHEM\D\METHODS\0802ABN.M (RTE Integrator)  
 Title : BNA Extractables GC/MS 8270D  
 Last Update : Wed Oct 10 10:16:58 2018  
 Response via : Initial Calibration  
 DataAcq Meth : RUN8270B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.55	152	162070	40.00	ug/kg	-0.06
22) Naphthalene-d8	6.83	136	608163	40.00	ug/kg	-0.06
39) Acenaphthene-d10	8.57	164	299587	40.00	ug/kg	-0.07
62) Phenanthrene-d10	10.05	188	519499	40.00	ug/kg	-0.07
76) Chrysene-d12	12.76	240	391750	40.00	ug/kg	-0.08
85) Perylene-d12	14.45	264	379160	40.00	ug/kg	-0.10

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol	4.18	112	381348	68.64	ug/kg	-0.08
Spiked Amount 100.000	Range 18 - 82		Recovery =	68.64%		
8) Phenol-d6	5.17	99	508165	72.03	ug/kg	-0.08
Spiked Amount 100.000	Range 20 - 88		Recovery =	72.03%		
23) Nitrobenzene-d5	6.10	82	212205	37.49	ug/kg	-0.12
Spiked Amount 50.000	Range 27 - 100		Recovery =	74.98%		
44) 2-Fluorobiphenyl	7.90	172	386618	34.96	ug/kg	-0.09
Spiked Amount 50.000	Range 27 - 105		Recovery =	69.92%		
66) 2,4,6-Tribromophenol	9.36	330	70459	64.17	ug/kg	-0.10
Spiked Amount 100.000	Range 24 - 115		Recovery =	64.17%		
79) p-Terphenyl-d14	11.62	244	347430	38.80	ug/kg	-0.01
Spiked Amount 50.000	Range 29 - 110		Recovery =	77.60%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
71) Phenanthrene	10.08	178	25294	1.70	ug/kg	96
75) Fluoranthene	11.26	202	35267	2.25	ug/kg	97
78) Pyrene	11.49	202	32004	2.13	ug/kg	94
81) Benzo(a)anthracene	12.74	228	17116	1.34	ug/kg	85
83) Chrysene	12.78	228	14951m	1.23	ug/kg	
87) Benzo(b)fluoranthene	13.99	252	15059m	1.44	ug/kg	
88) Benzo(k)fluoranthene	14.00	252	11305m	1.06	ug/kg	
89) Benzo(a)pyrene	14.39	252	12766	1.20	ug/kg#	89
90) Indeno(1,2,3-cd)pyrene	16.03	276	9646m	0.82	ug/kg	
92) Benzo(g,h,i)perylene	16.51	276	9349m	0.95	ug/kg	

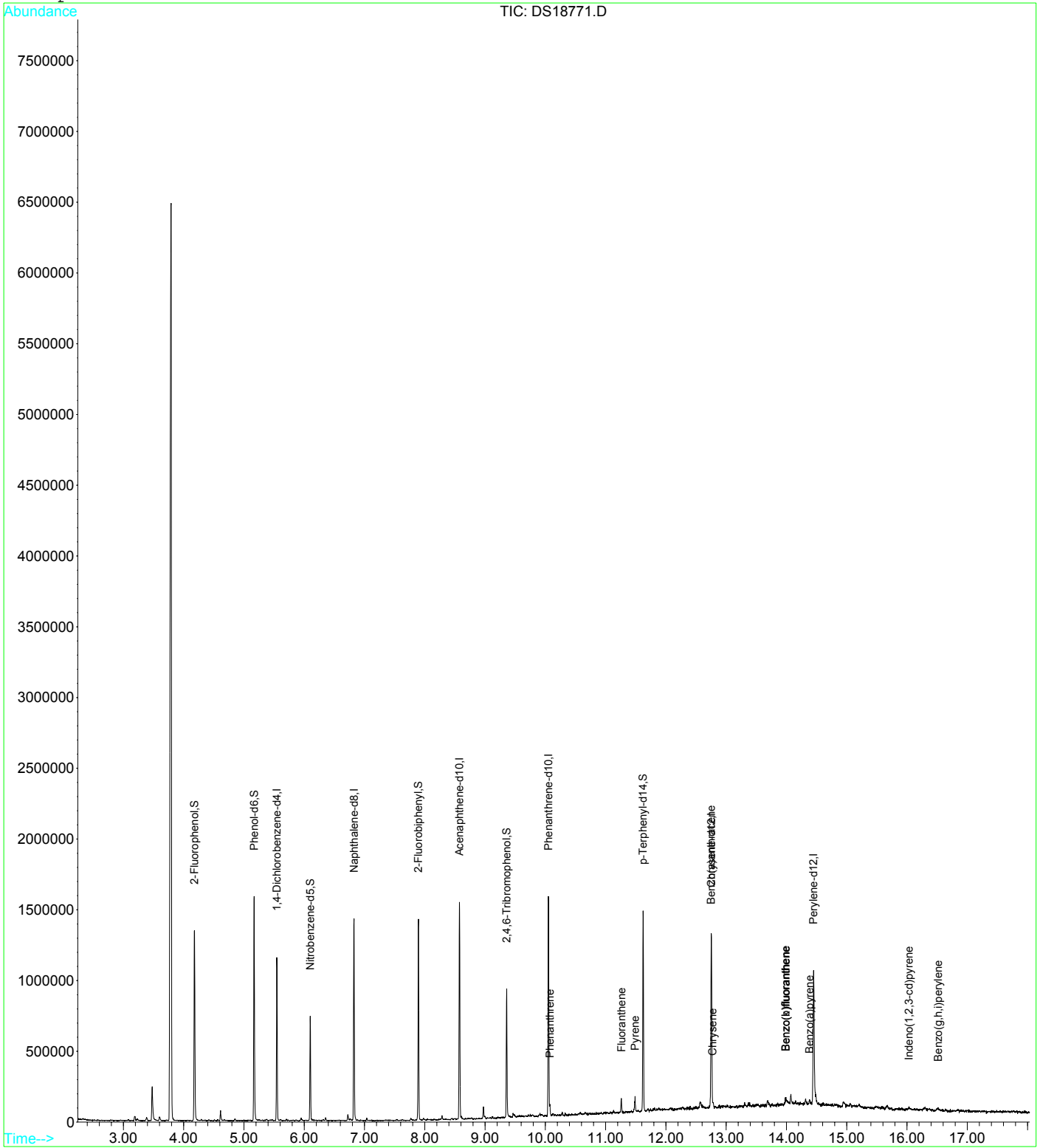
(#) = qualifier out of range (m) = manual integration  
 DS18771.D 0802ABN.M Tue Oct 16 12:43:55 2018 SS

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14.2

Quantitation Report

Data File : G:\HPCHEM\D\DATA\20181011\DS18771.D Vial: 6  
Acq On : 11 Oct 2018 14:10 Operator: GCH  
Sample : 8100452-01 Inst : GCMS-D  
Misc : B8J1101 SOIL Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Oct 11 15:13 2018 Quant Results File: 0802ABN.RES

Method : G:\HPCHEM\D\METHODS\0802ABN.M (RTE Integrator)  
Title : BNA Extractables GC/MS 8270D  
Last Update : Mon Oct 15 10:25:43 2018  
Response via : Initial Calibration



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14.2

# ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

**Client:** Peak Environmental  
**Client Sample ID:** NTP-2A  
**Lab Sample ID:** 8100452-02  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 00:00	Prep Date: 10/11/18 08:03	File ID: DS18772.D
Init/Final Vol: 15 g / 1 mL	Prep Batch: B8J1101	Analyzed: 10/11/18 14:38
Dilution: 1	Matrix: Soil	Sequence: S8J1213
Percent Solids: 92.54	Prep Method: Sonication MS	

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
90-12-0	1-Methylnaphthalene	ND	0.120	0.216	U
91-57-6	2-Methylnaphthalene	ND	0.0345	0.216	U
83-32-9	Acenaphthene	ND	0.00820	0.144	U
208-96-8	Acenaphthylene	ND	0.00500	0.144	U
120-12-7	Anthracene	ND	0.0209	0.144	U
56-55-3	Benzo(a)anthracene	0.0754	0.0145	0.144	J
50-32-8	Benzo(a)pyrene	0.0733	0.0251	0.144	J
205-99-2	Benzo(b)fluoranthene	ND	0.0202	0.144	U
191-24-2	Benzo(g,h,i)perylene	0.0911	0.0117	0.144	J
207-08-9	Benzo(k)fluoranthene	0.106	0.0165	0.144	J
218-01-9	Chrysene	0.0911	0.00985	0.144	J
53-70-3	Dibenzo(a,h)anthracene	ND	0.0143	0.144	U
206-44-0	Fluoranthene	0.120	0.0135	0.144	J
86-73-7	Fluorene	ND	0.0120	0.144	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.0155	0.144	U
91-20-3	Naphthalene	ND	0.0107	0.144	U
85-01-8	Phenanthrene	0.0544	0.0189	0.144	J
129-00-0	Pyrene	0.130	0.0106	0.144	J

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 14.2

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\D\DATA\20181011\DS18772.D Vial: 7  
 Acq On : 11 Oct 2018 14:38 Operator: GCH  
 Sample : 8100452-02 Inst : GCMS-D  
 Misc : B8J1101 SOIL Multiplr: 1.00  
 MS Integration Params: rteint.p  
 Quant Time: Oct 11 15:14 2018 Quant Results File: 0802ABN.RES

Quant Method : G:\HPCHEM\D\METHODS\0802ABN.M (RTE Integrator)  
 Title : BNA Extractables GC/MS 8270D  
 Last Update : Wed Oct 10 10:16:58 2018  
 Response via : Initial Calibration  
 DataAcq Meth : RUN8270B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.55	152	182818	40.00	ug/kg	-0.06
22) Naphthalene-d8	6.82	136	695780	40.00	ug/kg	-0.07
39) Acenaphthene-d10	8.57	164	358130	40.00	ug/kg	-0.07
62) Phenanthrene-d10	10.05	188	600167	40.00	ug/kg	-0.07
76) Chrysene-d12	12.75	240	442655	40.00	ug/kg	-0.08
85) Perylene-d12	14.45	264	426788	40.00	ug/kg	-0.10

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol	4.18	112	449804	71.78	ug/kg	-0.08
Spiked Amount 100.000	Range 18 - 82		Recovery =	71.78%		
8) Phenol-d6	5.17	99	588966	74.01	ug/kg	-0.07
Spiked Amount 100.000	Range 20 - 88		Recovery =	74.01%		
23) Nitrobenzene-d5	6.10	82	249646	38.55	ug/kg	-0.12
Spiked Amount 50.000	Range 27 - 100		Recovery =	77.10%		
44) 2-Fluorobiphenyl	7.89	172	446223	33.75	ug/kg	-0.09
Spiked Amount 50.000	Range 27 - 105		Recovery =	67.50%		
66) 2,4,6-Tribromophenol	9.36	330	79687	62.82	ug/kg	-0.10
Spiked Amount 100.000	Range 24 - 115		Recovery =	62.82%		
79) p-Terphenyl-d14	11.62	244	378142	37.38	ug/kg	-0.02
Spiked Amount 50.000	Range 29 - 110		Recovery =	74.76%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
71) Phenanthrene	10.07	178	12989	0.76	ug/kg	92
75) Fluoranthene	11.26	202	30146	1.67	ug/kg	93
78) Pyrene	11.49	202	30527	1.80	ug/kg	99
81) Benzo(a)anthracene	12.74	228	15089m	1.05	ug/kg	
83) Chrysene	12.78	228	17418m	1.26	ug/kg	
88) Benzo(k)fluoranthene	13.98	252	17607m	1.47	ug/kg	
89) Benzo(a)pyrene	14.01	252	12220m	1.02	ug/kg	
92) Benzo(g,h,i)perylene	16.51	276	14061m	1.26	ug/kg	

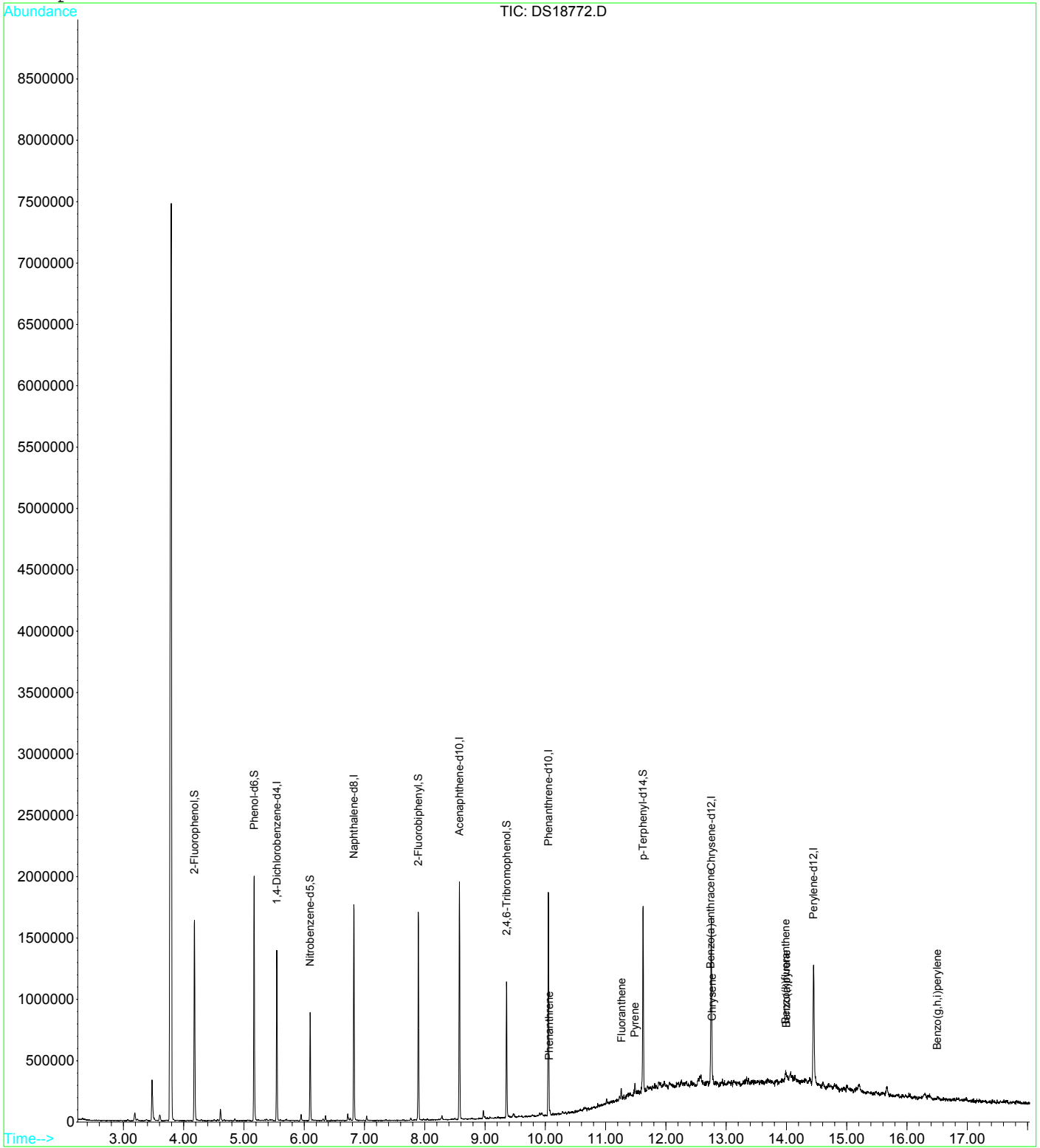
(#) = qualifier out of range (m) = manual integration  
 DS18772.D 0802ABN.M Tue Oct 16 12:43:57 2018 SS

14  
14.2

Quantitation Report

Data File : G:\HPCHEM\D\DATA\20181011\DS18772.D Vial: 7  
Acq On : 11 Oct 2018 14:38 Operator: GCH  
Sample : 8100452-02 Inst : GCMS-D  
Misc : B8J1101 SOIL Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Oct 11 15:14 2018 Quant Results File: 0802ABN.RES

Method : G:\HPCHEM\D\METHODS\0802ABN.M (RTE Integrator)  
Title : BNA Extractables GC/MS 8270D  
Last Update : Mon Oct 15 10:25:43 2018  
Response via : Initial Calibration



14  
14.2



# ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

**Client:** Peak Environmental  
**Client Sample ID:** NTP-2B  
**Lab Sample ID:** 8100452-03  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 00:00	Prep Date: 10/11/18 08:03	File ID: DS18773.D
Init/Final Vol: 15 g / 1 mL	Prep Batch: B8J1101	Analyzed: 10/11/18 15:07
Dilution: 1	Matrix: Soil	Sequence: S8J1213
Percent Solids: 92.25	Prep Method: Sonication MS	

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
90-12-0	1-Methylnaphthalene	ND	0.120	0.217	U
91-57-6	2-Methylnaphthalene	ND	0.0346	0.217	U
83-32-9	Acenaphthene	ND	0.00823	0.144	U
208-96-8	Acenaphthylene	ND	0.00502	0.144	U
120-12-7	Anthracene	ND	0.0209	0.144	U
56-55-3	Benzo(a)anthracene	0.0876	0.0145	0.144	J
50-32-8	Benzo(a)pyrene	0.0814	0.0251	0.144	J
205-99-2	Benzo(b)fluoranthene	0.0987	0.0203	0.144	J
191-24-2	Benzo(g,h,i)perylene	0.0663	0.0117	0.144	J
207-08-9	Benzo(k)fluoranthene	0.0460	0.0166	0.144	J
218-01-9	Chrysene	0.0730	0.00989	0.144	J
53-70-3	Dibenzo(a,h)anthracene	ND	0.0143	0.144	U
206-44-0	Fluoranthene	0.153	0.0135	0.144	
86-73-7	Fluorene	ND	0.0120	0.144	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.0155	0.144	U
91-20-3	Naphthalene	ND	0.0107	0.144	U
85-01-8	Phenanthrene	0.114	0.0190	0.144	J
129-00-0	Pyrene	0.137	0.0106	0.144	J

14  
14.2.

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\D\DATA\20181011\DS18773.D Vial: 8  
 Acq On : 11 Oct 2018 15:07 Operator: GCH  
 Sample : 8100452-03 Inst : GCMS-D  
 Misc : B8J1101 SOIL Multiplr: 1.00  
 MS Integration Params: rteint.p  
 Quant Time: Oct 11 16:06 2018 Quant Results File: 0802ABN.RES

Quant Method : G:\HPCHEM\D\METHODS\0802ABN.M (RTE Integrator)  
 Title : BNA Extractables GC/MS 8270D  
 Last Update : Wed Oct 10 10:16:58 2018  
 Response via : Initial Calibration  
 DataAcq Meth : RUN8270B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.55	152	167877	40.00	ug/kg	-0.06
22) Naphthalene-d8	6.82	136	627978	40.00	ug/kg	-0.07
39) Acenaphthene-d10	8.57	164	308607	40.00	ug/kg	-0.07
62) Phenanthrene-d10	10.05	188	531137	40.00	ug/kg	-0.07
76) Chrysene-d12	12.75	240	397045	40.00	ug/kg	-0.08
85) Perylene-d12	14.45	264	381767	40.00	ug/kg	-0.10

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol	4.18	112	432315	75.13	ug/kg	-0.08
Spiked Amount 100.000	Range 18 - 82		Recovery =	75.13%		
8) Phenol-d6	5.17	99	560231	76.66	ug/kg	-0.08
Spiked Amount 100.000	Range 20 - 88		Recovery =	76.66%		
23) Nitrobenzene-d5	6.10	82	227128	38.86	ug/kg	-0.12
Spiked Amount 50.000	Range 27 - 100		Recovery =	77.72%		
44) 2-Fluorobiphenyl	7.90	172	426186	37.41	ug/kg	-0.09
Spiked Amount 50.000	Range 27 - 105		Recovery =	74.82%		
66) 2,4,6-Tribromophenol	9.36	330	79506	70.82	ug/kg	-0.10
Spiked Amount 100.000	Range 24 - 115		Recovery =	70.82%		
79) p-Terphenyl-d14	11.62	244	365684	40.30	ug/kg	-0.02
Spiked Amount 50.000	Range 29 - 110		Recovery =	80.60%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
71) Phenanthrene	10.07	178	24099	1.58	ug/kg	95
75) Fluoranthene	11.26	202	33875	2.11	ug/kg	96
78) Pyrene	11.49	202	28837	1.90	ug/kg	98
81) Benzo(a)anthracene	12.74	228	15674m	1.21	ug/kg	
83) Chrysene	12.78	228	12491	1.01	ug/kg	97
87) Benzo(b)fluoranthene	13.99	252	14397	1.37	ug/kg	82
88) Benzo(k)fluoranthene	14.01	252	6816m	0.64	ug/kg	
89) Benzo(a)pyrene	14.38	252	12104	1.13	ug/kg	84
92) Benzo(g,h,i)perylene	16.51	276	9119m	0.92	ug/kg	

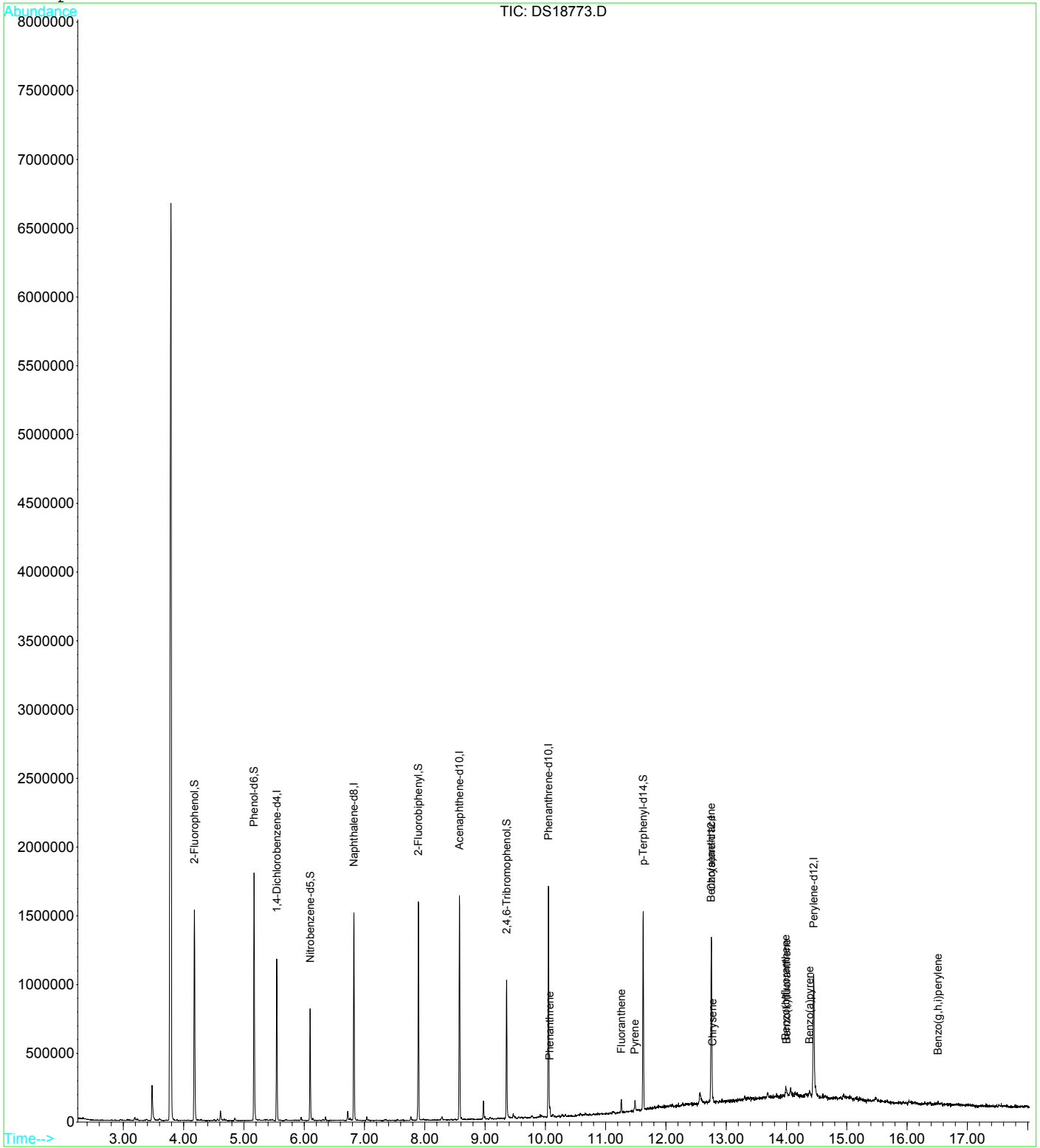
(#) = qualifier out of range (m) = manual integration  
 DS18773.D 0802ABN.M Tue Oct 16 12:44:00 2018 SS

14  
14.2

Quantitation Report

Data File : G:\HPCHEM\D\DATA\20181011\DS18773.D Vial: 8  
Acq On : 11 Oct 2018 15:07 Operator: GCH  
Sample : 8100452-03 Inst : GCMS-D  
Misc : B8J1101 SOIL Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Oct 11 16:06 2018 Quant Results File: 0802ABN.RES

Method : G:\HPCHEM\D\METHODS\0802ABN.M (RTE Integrator)  
Title : BNA Extractables GC/MS 8270D  
Last Update : Mon Oct 15 10:25:43 2018  
Response via : Initial Calibration



# ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

**Client:** Peak Environmental  
**Client Sample ID:** NTP-3B  
**Lab Sample ID:** 8100452-04  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 00:00	Prep Date: 10/11/18 08:03	File ID: DS18774.D
Init/Final Vol: 15 g / 1 mL	Prep Batch: B8J1101	Analyzed: 10/11/18 15:35
Dilution: 1	Matrix: Soil	Sequence: S8J1213
Percent Solids: 91.33	Prep Method: Sonication MS	

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
90-12-0	1-Methylnaphthalene	ND	0.122	0.219	U
91-57-6	2-Methylnaphthalene	ND	0.0349	0.219	U
83-32-9	Acenaphthene	ND	0.00831	0.146	U
208-96-8	Acenaphthylene	ND	0.00507	0.146	U
120-12-7	Anthracene	ND	0.0211	0.146	U
56-55-3	Benzo(a)anthracene	ND	0.0147	0.146	U
50-32-8	Benzo(a)pyrene	ND	0.0254	0.146	U
205-99-2	Benzo(b)fluoranthene	ND	0.0205	0.146	U
191-24-2	Benzo(g,h,i)perylene	ND	0.0118	0.146	U
207-08-9	Benzo(k)fluoranthene	ND	0.0168	0.146	U
218-01-9	Chrysene	ND	0.00999	0.146	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.0145	0.146	U
206-44-0	Fluoranthene	ND	0.0137	0.146	U
86-73-7	Fluorene	ND	0.0122	0.146	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.0157	0.146	U
91-20-3	Naphthalene	ND	0.0108	0.146	U
85-01-8	Phenanthrene	ND	0.0192	0.146	U
129-00-0	Pyrene	ND	0.0107	0.146	U

14  
14.2.

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\D\DATA\20181011\DS18774.D Vial: 9  
 Acq On : 11 Oct 2018 15:35 Operator: GCH  
 Sample : 8100452-04 Inst : GCMS-D  
 Misc : B8J1101 SOIL Multiplr: 1.00  
 MS Integration Params: rteint.p  
 Quant Time: Oct 11 16:06 2018 Quant Results File: 0802ABN.RES

Quant Method : G:\HPCHEM\D\METHODS\0802ABN.M (RTE Integrator)  
 Title : BNA Extractables GC/MS 8270D  
 Last Update : Wed Oct 10 10:16:58 2018  
 Response via : Initial Calibration  
 DataAcq Meth : RUN8270B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.55	152	162627	40.00	ug/kg	-0.06
22) Naphthalene-d8	6.82	136	625040	40.00	ug/kg	-0.07
39) Acenaphthene-d10	8.57	164	296500	40.00	ug/kg	-0.07
62) Phenanthrene-d10	10.05	188	521121	40.00	ug/kg	-0.07
76) Chrysene-d12	12.75	240	383151	40.00	ug/kg	-0.08
85) Perylene-d12	14.45	264	361524	40.00	ug/kg	-0.10

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol	4.18	112	373953	67.08	ug/kg	-0.08
Spiked Amount 100.000	Range 18 - 82		Recovery =	67.08%		
8) Phenol-d6	5.17	99	499782	70.60	ug/kg	-0.08
Spiked Amount 100.000	Range 20 - 88		Recovery =	70.60%		
23) Nitrobenzene-d5	6.10	82	214431	36.86	ug/kg	-0.12
Spiked Amount 50.000	Range 27 - 100		Recovery =	73.72%		
44) 2-Fluorobiphenyl	7.90	172	381180	34.82	ug/kg	-0.09
Spiked Amount 50.000	Range 27 - 105		Recovery =	69.64%		
66) 2,4,6-Tribromophenol	9.36	330	69643	63.23	ug/kg	-0.10
Spiked Amount 100.000	Range 24 - 115		Recovery =	63.23%		
79) p-Terphenyl-d14	11.62	244	324130	37.01	ug/kg	-0.02
Spiked Amount 50.000	Range 29 - 110		Recovery =	74.02%		

Target Compounds Qvalue

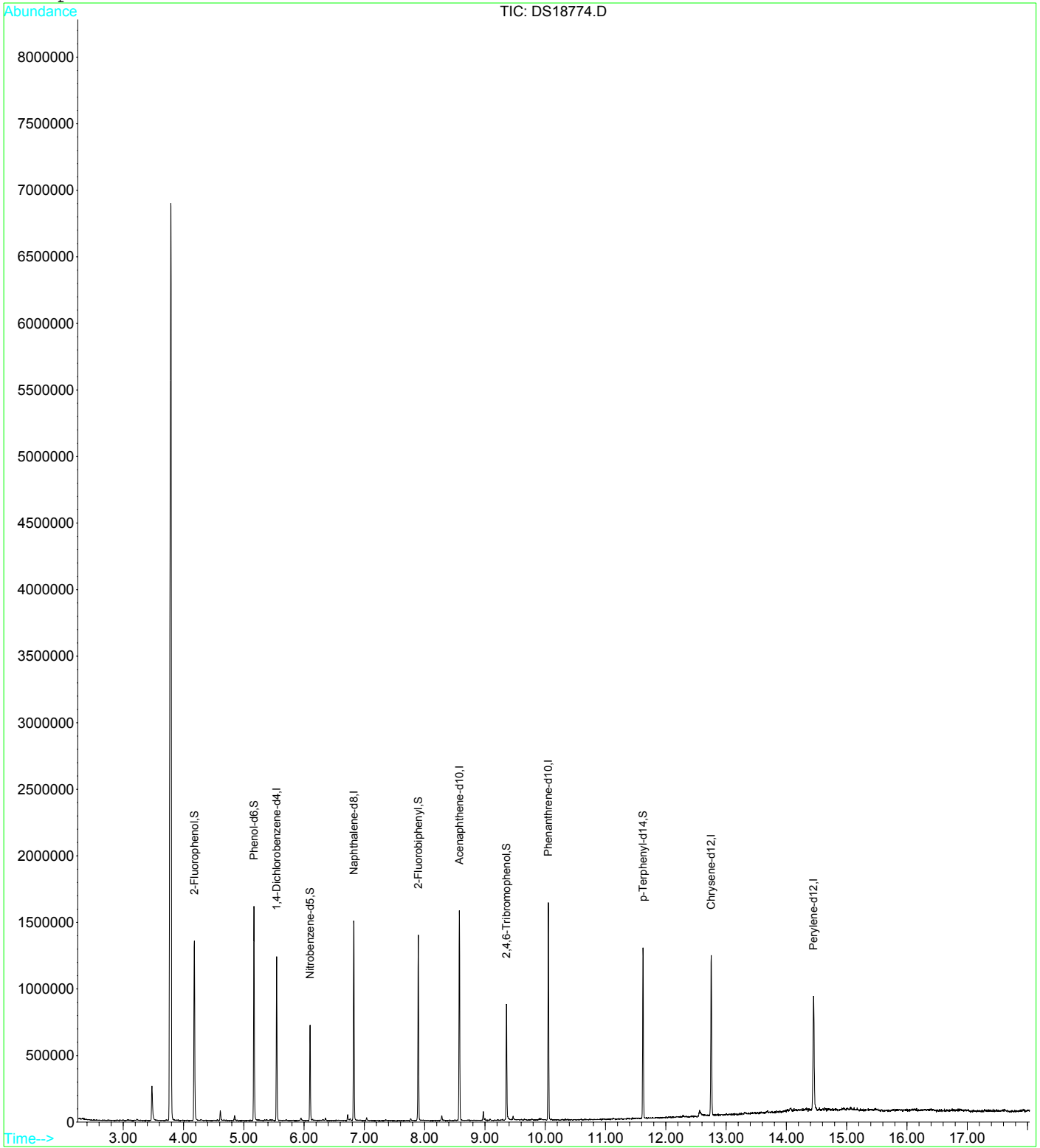
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 DS18774.D 0802ABN.M Tue Oct 16 12:44:02 2018 SS

14  
14.2

Quantitation Report

Data File : G:\HPCHEM\D\DATA\20181011\DS18774.D Vial: 9  
Acq On : 11 Oct 2018 15:35 Operator: GCH  
Sample : 8100452-04 Inst : GCMS-D  
Misc : B8J1101 SOIL Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Oct 11 16:06 2018 Quant Results File: 0802ABN.RES

Method : G:\HPCHEM\D\METHODS\0802ABN.M (RTE Integrator)  
Title : BNA Extractables GC/MS 8270D  
Last Update : Mon Oct 15 10:25:43 2018  
Response via : Initial Calibration



# ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

**Client:** Peak Environmental  
**Client Sample ID:** NTP-4B  
**Lab Sample ID:** 8100452-05  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 12:35	Prep Date:	10/11/18 08:03	File ID:	DS18775.D
Init/Final Vol:	15 g / 1 mL	Prep Batch:	B8J1101	Analyzed:	10/11/18 16:04
Dilution:	1	Matrix:	Soil	Sequence:	S8J1213
Percent Solids:	92.00	Prep Method:	Sonication MS		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
90-12-0	1-Methylnaphthalene	ND	0.121	0.217	U
91-57-6	2-Methylnaphthalene	ND	0.0347	0.217	U
83-32-9	Acenaphthene	ND	0.00825	0.145	U
208-96-8	Acenaphthylene	ND	0.00503	0.145	U
120-12-7	Anthracene	ND	0.0210	0.145	U
56-55-3	Benzo(a)anthracene	ND	0.0146	0.145	U
50-32-8	Benzo(a)pyrene	ND	0.0252	0.145	U
205-99-2	Benzo(b)fluoranthene	ND	0.0203	0.145	U
191-24-2	Benzo(g,h,i)perylene	ND	0.0117	0.145	U
207-08-9	Benzo(k)fluoranthene	ND	0.0166	0.145	U
218-01-9	Chrysene	ND	0.00991	0.145	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.0143	0.145	U
206-44-0	Fluoranthene	ND	0.0136	0.145	U
86-73-7	Fluorene	ND	0.0121	0.145	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.0155	0.145	U
91-20-3	Naphthalene	ND	0.0107	0.145	U
85-01-8	Phenanthrene	ND	0.0190	0.145	U
129-00-0	Pyrene	ND	0.0106	0.145	U

14  
14.2.

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\D\DATA\20181011\DS18775.D Vial: 10  
 Acq On : 11 Oct 2018 16:04 Operator: GCH  
 Sample : 8100452-05 Inst : GCMS-D  
 Misc : B8J1101 SOIL Multiplr: 1.00  
 MS Integration Params: rteint.p  
 Quant Time: Oct 11 16:55 2018 Quant Results File: 0802ABN.RES

Quant Method : G:\HPCHEM\D\METHODS\0802ABN.M (RTE Integrator)  
 Title : BNA Extractables GC/MS 8270D  
 Last Update : Wed Oct 10 10:16:58 2018  
 Response via : Initial Calibration  
 DataAcq Meth : RUN8270B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.54	152	159249	40.00	ug/kg	-0.07
22) Naphthalene-d8	6.83	136	609200	40.00	ug/kg	-0.07
39) Acenaphthene-d10	8.57	164	307467	40.00	ug/kg	-0.07
62) Phenanthrene-d10	10.05	188	538317	40.00	ug/kg	-0.07
76) Chrysene-d12	12.75	240	389183	40.00	ug/kg	-0.08
85) Perylene-d12	14.45	264	380947	40.00	ug/kg	-0.10

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol	4.18	112	375745	68.83	ug/kg	-0.08
Spiked Amount 100.000	Range 18 - 82		Recovery =	68.83%		
8) Phenol-d6	5.17	99	505436	72.91	ug/kg	-0.08
Spiked Amount 100.000	Range 20 - 88		Recovery =	72.91%		
23) Nitrobenzene-d5	6.10	82	201356	35.52	ug/kg	-0.12
Spiked Amount 50.000	Range 27 - 100		Recovery =	71.04%		
44) 2-Fluorobiphenyl	7.89	172	387132	34.11	ug/kg	-0.09
Spiked Amount 50.000	Range 27 - 105		Recovery =	68.22%		
66) 2,4,6-Tribromophenol	9.36	330	68356	60.08	ug/kg	-0.10
Spiked Amount 100.000	Range 24 - 115		Recovery =	60.08%		
79) p-Terphenyl-d14	11.62	244	329459	37.04	ug/kg	-0.02
Spiked Amount 50.000	Range 29 - 110		Recovery =	74.08%		

Target Compounds Qvalue

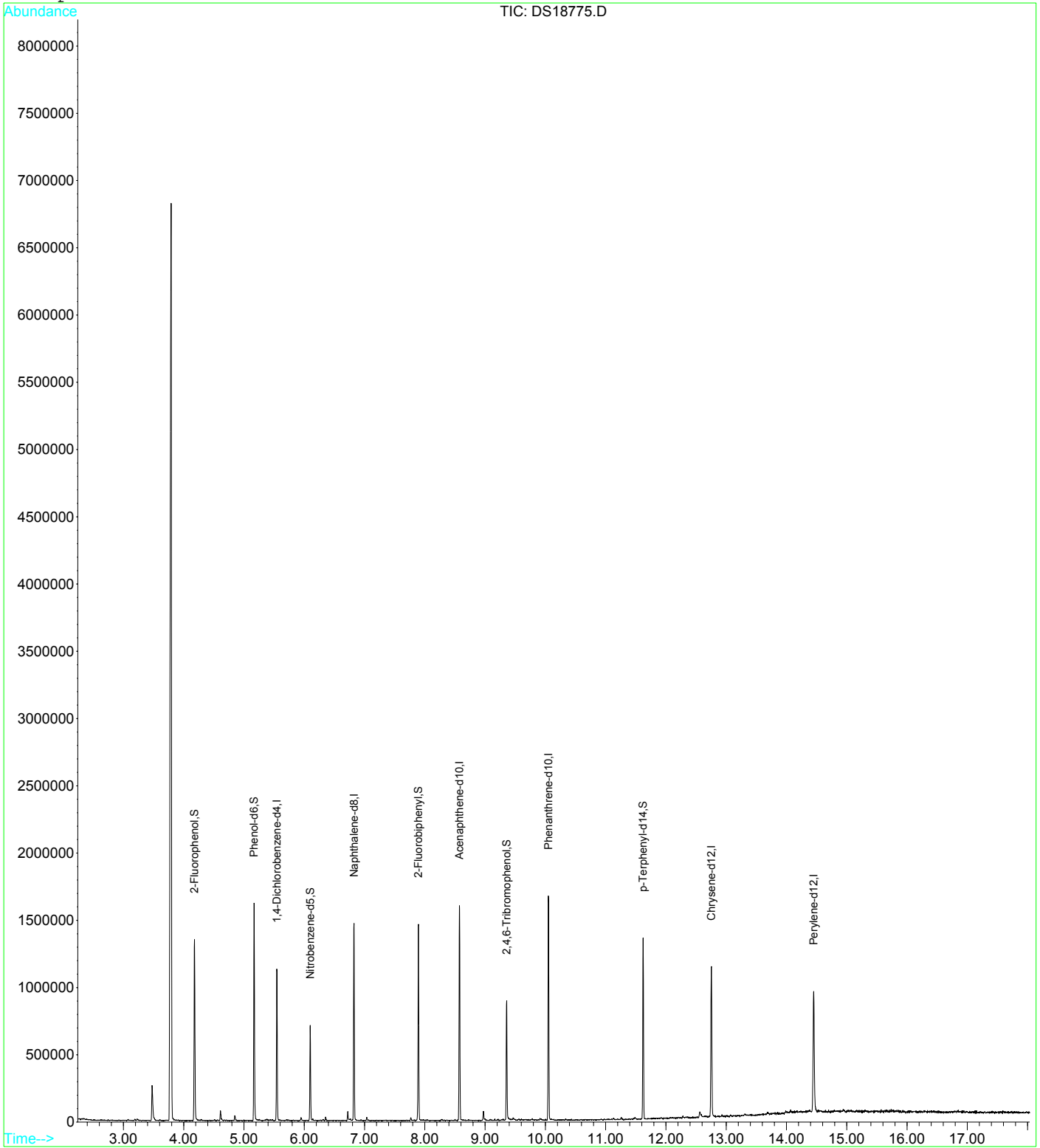
(#) = qualifier out of range (m) = manual integration  
 DS18775.D 0802ABN.M Tue Oct 16 12:44:04 2018 SS



Quantitation Report

Data File : G:\HPCHEM\D\DATA\20181011\DS18775.D Vial: 10  
Acq On : 11 Oct 2018 16:04 Operator: GCH  
Sample : 8100452-05 Inst : GCMS-D  
Misc : B8J1101 SOIL Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Oct 11 16:55 2018 Quant Results File: 0802ABN.RES

Method : G:\HPCHEM\D\METHODS\0802ABN.M (RTE Integrator)  
Title : BNA Extractables GC/MS 8270D  
Last Update : Mon Oct 15 10:25:43 2018  
Response via : Initial Calibration



# ANALYSIS DATA SHEET

## Semivolatile Organics - GC/MS - SW 846 8270D

**Client:** Peak Environmental  
**Client Sample ID:** NTP-6  
**Lab Sample ID:** 8100452-06  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 12:50	Prep Date: 10/11/18 08:03	File ID: DS18776.D
Init/Final Vol: 15 g / 1 mL	Prep Batch: B8J1101	Analyzed: 10/11/18 16:32
Dilution: 1	Matrix: Soil	Sequence: S8J1213
Percent Solids: 87.70	Prep Method: Sonication MS	

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
90-12-0	1-Methylnaphthalene	ND	0.0364	0.228	U
58-90-2	2,3,4,6-Tetrachlorophenol	ND	0.0234	0.152	U
95-95-4	2,4,5-Trichlorophenol	ND	0.0206	0.152	U
88-06-2	2,4,6-Trichlorophenol	ND	0.00950	0.152	U
120-83-2	2,4-Dichlorophenol	ND	0.0153	0.152	U
105-67-9	2,4-Dimethylphenol	ND	0.0149	0.152	U
51-28-5	2,4-Dinitrophenol	ND	0.0219	0.761	U
121-14-2	2,4-Dinitrotoluene	ND	0.0162	0.152	U
606-20-2	2,6-Dinitrotoluene	ND	0.0363	0.152	U
91-58-7	2-Chloronaphthalene	ND	0.0174	0.152	U
95-57-8	2-Chlorophenol	ND	0.0201	0.152	U
91-57-6	2-Methylnaphthalene	ND	0.0364	0.228	U
95-48-7	2-Methylphenol	ND	0.0300	0.152	U
88-74-4	2-Nitroaniline	ND	0.0122	0.152	U
88-75-5	2-Nitrophenol	ND	0.0169	0.152	U
91-94-1	3,3'-Dichlorobenzidine	ND	0.0160	0.152	U
106-44-5	3+4-Methylphenol	ND	0.0278	0.152	U
99-09-2	3-Nitroaniline	ND	0.0282	0.152	U
534-52-1	4,6-Dinitro-2-methylphenol	ND	0.0286	0.380	U
101-55-3	4-Bromophenyl-phenyl ether	ND	0.0217	0.152	U
59-50-7	4-Chloro-3-methylphenol	ND	0.0239	0.152	U
106-47-8	4-Chloroaniline	ND	0.00531	0.152	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.00820	0.152	U
100-01-6	4-Nitroaniline	ND	0.0759	0.152	U
100-02-7	4-Nitrophenol	ND	0.00971	0.152	U
83-32-9	Acenaphthene	ND	0.00865	0.152	U

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

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 14.2

# ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

**Client:** Peak Environmental  
**Client Sample ID:** NTP-6  
**Lab Sample ID:** 8100452-06  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 12:50	Prep Date: 10/11/18 08:03	File ID: DS18776.D
Init/Final Vol: 15 g / 1 mL	Prep Batch: B8J1101	Analyzed: 10/11/18 16:32
Dilution: 1	Matrix: Soil	Sequence: S8J1213
Percent Solids: 87.70	Prep Method: Sonication MS	

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
208-96-8	Acenaphthylene	ND	0.00528	0.152	U
98-86-2	Acetophenone	ND	0.0151	0.152	U
120-12-7	Anthracene	ND	0.0220	0.152	U
1912-24-9	Atrazine	ND	0.0143	0.152	U
100-52-7	Benzaldehyde	ND	0.0466	0.152	U
56-55-3	Benzo(a)anthracene	ND	0.0153	0.152	U
50-32-8	Benzo(a)pyrene	ND	0.0265	0.152	U
205-99-2	Benzo(b)fluoranthene	ND	0.0213	0.152	U
191-24-2	Benzo(g,h,i)perylene	ND	0.0123	0.152	U
207-08-9	Benzo(k)fluoranthene	ND	0.0174	0.152	U
92-52-4	Biphenyl	ND	0.0133	0.152	U
111-91-1	bis(2-chloroethoxy)methane	ND	0.0210	0.152	U
111-44-4	bis(2-chloroethyl)ether	ND	0.0166	0.152	U
108-60-1	bis(2-chloroisopropyl)ether	ND	0.0546	0.152	U
117-81-7	bis(2-ethylhexyl)phthalate	ND	0.0303	0.152	U
85-68-7	Butylbenzylphthalate	ND	0.0138	0.152	U
105-60-2	Caprolactam	ND	0.0196	0.152	U
86-74-8	Carbazole	ND	0.0292	0.380	U
218-01-9	Chrysene	ND	0.0104	0.152	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.0151	0.152	U
132-64-9	Dibenzofuran	ND	0.00904	0.152	U
84-66-2	Diethylphthalate	ND	0.0294	0.152	U
131-11-3	Dimethylphthalate	0.0721	0.00942	0.152	J
84-74-2	Di-n-butylphthalate	ND	0.0620	0.152	U
117-84-0	Di-n-octylphthalate	ND	0.0311	0.152	U
206-44-0	Fluoranthene	ND	0.0143	0.152	U

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

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 14.2

# ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

**Client:** Peak Environmental  
**Client Sample ID:** NTP-6  
**Lab Sample ID:** 8100452-06  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 12:50	Prep Date: 10/11/18 08:03	File ID: DS18776.D
Init/Final Vol: 15 g / 1 mL	Prep Batch: B8J1101	Analyzed: 10/11/18 16:32
Dilution: 1	Matrix: Soil	Sequence: S8J1213
Percent Solids: 87.70	Prep Method: Sonication MS	

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
86-73-7	Fluorene	ND	0.0127	0.152	U
118-74-1	Hexachlorobenzene	ND	0.0198	0.152	U
87-68-3	Hexachlorobutadiene	ND	0.0729	0.152	U
77-47-4	Hexachlorocyclopentadiene	ND	0.0633	0.380	U
67-72-1	Hexachloroethane	ND	0.0166	0.152	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.0163	0.152	U
78-59-1	Isophorone	ND	0.00994	0.152	U
91-20-3	Naphthalene	ND	0.0112	0.152	U
98-95-3	Nitrobenzene	ND	0.0258	0.152	U
621-64-7	n-Nitroso-di-n-propylamine	ND	0.00813	0.152	U
86-30-6	n-Nitrosodiphenylamine	ND	0.0324	0.152	U
85-01-8	Phenanthrene	ND	0.0200	0.152	U
108-95-2	Phenol	ND	0.0123	0.152	U
129-00-0	Pyrene	ND	0.0112	0.152	U

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 14.2

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

# ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

**Client:** Peak Environmental  
**Client Sample ID:** NTP-6  
**Lab Sample ID:** 8100452-06  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 12:50	Prep Date:	10/11/18 08:03	File ID:	DS18776.D
Init/Final Vol:	15 g / 1 mL	Prep Batch:	B8J1101	Analyzed:	10/11/18 16:32
Dilution:	1	Matrix:	Soil	Sequence:	S8J1213
Percent Solids:	87.70	Prep Method:	Sonication MS		

CAS NO.	TENTATIVELY IDENTIFIED COMPOUNDS	CONC. (mg/kg dry)	RT	Q
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14.2.

J - Indicates estimated value  
B - Indicates compound found in associated blank  
D - Indicates result is based on a dilution

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Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\D\DATA\20181011\DS18776.D Vial: 11  
 Acq On : 11 Oct 2018 16:32 Operator: GCH  
 Sample : 8100452-06 Inst : GCMS-D  
 Misc : B8J1101 SOIL Multiplr: 1.00  
 MS Integration Params: rteint.p  
 Quant Time: Oct 11 16:55 2018 Quant Results File: 0802ABN.RES

Quant Method : G:\HPCHEM\D\METHODS\0802ABN.M (RTE Integrator)  
 Title : BNA Extractables GC/MS 8270D  
 Last Update : Wed Oct 10 10:16:58 2018  
 Response via : Initial Calibration  
 DataAcq Meth : RUN8270B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.55	152	159499	40.00	ug/kg	-0.06
22) Naphthalene-d8	6.83	136	607328	40.00	ug/kg	-0.06
39) Acenaphthene-d10	8.57	164	297278	40.00	ug/kg	-0.07
62) Phenanthrene-d10	10.05	188	519141	40.00	ug/kg	-0.07
76) Chrysene-d12	12.75	240	384901	40.00	ug/kg	-0.08
85) Perylene-d12	14.45	264	374104	40.00	ug/kg	-0.10

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol	4.18	112	333649	61.03	ug/kg	-0.08
Spiked Amount 100.000	Range 18 - 82		Recovery =	61.03%		
8) Phenol-d6	5.17	99	449574	64.75	ug/kg	-0.08
Spiked Amount 100.000	Range 20 - 88		Recovery =	64.75%		
23) Nitrobenzene-d5	6.10	82	181211	32.06	ug/kg	-0.12
Spiked Amount 50.000	Range 27 - 100		Recovery =	64.12%		
44) 2-Fluorobiphenyl	7.90	172	334071	30.44	ug/kg	-0.09
Spiked Amount 50.000	Range 27 - 105		Recovery =	60.88%		
66) 2,4,6-Tribromophenol	9.36	330	61158	55.74	ug/kg	-0.10
Spiked Amount 100.000	Range 24 - 115		Recovery =	55.74%		
79) p-Terphenyl-d14	11.62	244	310860	35.34	ug/kg	-0.02
Spiked Amount 50.000	Range 29 - 110		Recovery =	70.68%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
48) Dimethylphthalate	8.28	163	10007	0.95	ug/kg	89

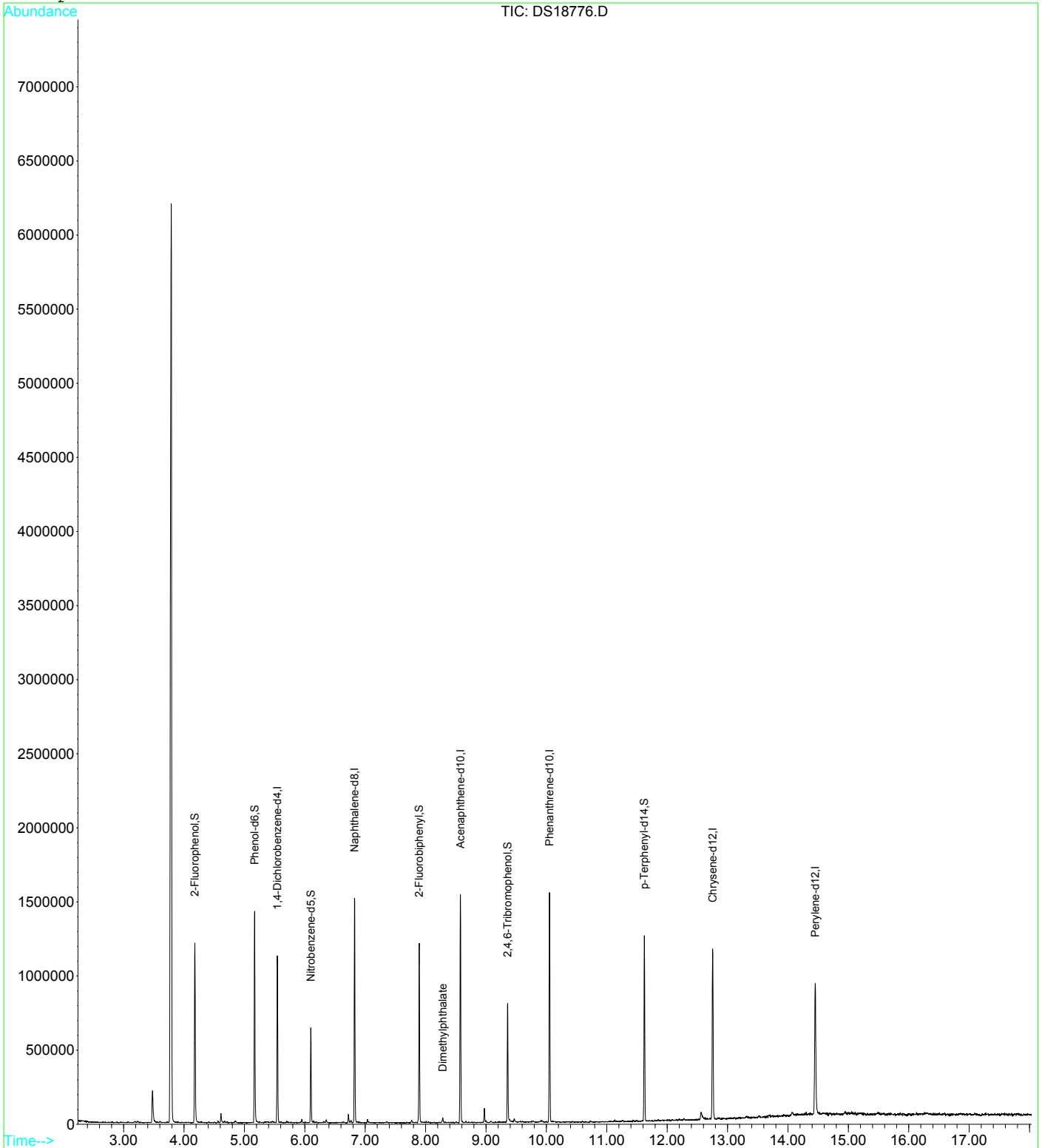
(#) = qualifier out of range (m) = manual integration  
 DS18776.D 0802ABN.M Tue Oct 16 12:44:06 2018 SS

14  
14.2

Quantitation Report

Data File : G:\HPCHEM\D\DATA\20181011\DS18776.D Vial: 11  
Acq On : 11 Oct 2018 16:32 Operator: GCH  
Sample : 8100452-06 Inst : GCMS-D  
Misc : B8J1101 SOIL Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Oct 11 16:55 2018 Quant Results File: 0802ABN.RES

Method : G:\HPCHEM\D\METHODS\0802ABN.M (RTE Integrator)  
Title : BNA Extractables GC/MS 8270D  
Last Update : Mon Oct 15 10:25:43 2018  
Response via : Initial Calibration



# ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

**Client:** Peak Environmental  
**Client Sample ID:** NTP-7  
**Lab Sample ID:** 8100452-07  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 13:00	Prep Date: 10/11/18 08:03	File ID: DS18777.D
Init/Final Vol: 15 g / 1 mL	Prep Batch: B8J1101	Analyzed: 10/11/18 17:01
Dilution: 1	Matrix: Soil	Sequence: S8J1213
Percent Solids: 91.36	Prep Method: Sonication MS	

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
90-12-0	1-Methylnaphthalene	ND	0.122	0.219	U
91-57-6	2-Methylnaphthalene	ND	0.0349	0.219	U
83-32-9	Acenaphthene	ND	0.00831	0.146	U
208-96-8	Acenaphthylene	ND	0.00507	0.146	U
120-12-7	Anthracene	ND	0.0211	0.146	U
56-55-3	Benzo(a)anthracene	0.133	0.0147	0.146	J
50-32-8	Benzo(a)pyrene	0.105	0.0254	0.146	J
205-99-2	Benzo(b)fluoranthene	0.169	0.0205	0.146	
191-24-2	Benzo(g,h,i)perylene	0.124	0.0118	0.146	J
207-08-9	Benzo(k)fluoranthene	0.106	0.0167	0.146	J
218-01-9	Chrysene	0.134	0.00998	0.146	J
53-70-3	Dibenzo(a,h)anthracene	ND	0.0144	0.146	U
206-44-0	Fluoranthene	0.193	0.0137	0.146	
86-73-7	Fluorene	ND	0.0122	0.146	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.0157	0.146	U
91-20-3	Naphthalene	ND	0.0108	0.146	U
85-01-8	Phenanthrene	0.0964	0.0192	0.146	J
129-00-0	Pyrene	0.184	0.0107	0.146	

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14.2.

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I



Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\D\DATA\20181011\DS18777.D Vial: 12  
 Acq On : 11 Oct 2018 17:01 Operator: GCH  
 Sample : 8100452-07 Inst : GCMS-D  
 Misc : B8J1101 SOIL Multiplr: 1.00  
 MS Integration Params: rteint.p  
 Quant Time: Oct 11 17:23 2018 Quant Results File: 0802ABN.RES

Quant Method : G:\HPCHEM\D\METHODS\0802ABN.M (RTE Integrator)  
 Title : BNA Extractables GC/MS 8270D  
 Last Update : Wed Oct 10 10:16:58 2018  
 Response via : Initial Calibration  
 DataAcq Meth : RUN8270B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.55	152	174325	40.00	ug/kg	-0.06
22) Naphthalene-d8	6.83	136	649764	40.00	ug/kg	-0.06
39) Acenaphthene-d10	8.57	164	323492	40.00	ug/kg	-0.07
62) Phenanthrene-d10	10.05	188	554925	40.00	ug/kg	-0.07
76) Chrysene-d12	12.75	240	419384	40.00	ug/kg	-0.08
85) Perylene-d12	14.45	264	388875	40.00	ug/kg	-0.10

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol	4.18	112	405659	67.89	ug/kg	-0.08
Spiked Amount 100.000	Range 18 - 82		Recovery =	67.89%		
8) Phenol-d6	5.17	99	544457	71.75	ug/kg	-0.08
Spiked Amount 100.000	Range 20 - 88		Recovery =	71.75%		
23) Nitrobenzene-d5	6.10	82	225533	37.30	ug/kg	-0.12
Spiked Amount 50.000	Range 27 - 100		Recovery =	74.60%		
44) 2-Fluorobiphenyl	7.90	172	419126	35.10	ug/kg	-0.09
Spiked Amount 50.000	Range 27 - 105		Recovery =	70.20%		
66) 2,4,6-Tribromophenol	9.36	330	75193	64.11	ug/kg	-0.10
Spiked Amount 100.000	Range 24 - 115		Recovery =	64.11%		
79) p-Terphenyl-d14	11.62	244	352232	36.75	ug/kg	-0.02
Spiked Amount 50.000	Range 29 - 110		Recovery =	73.50%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
71) Phenanthrene	10.08	178	21016	1.32	ug/kg	93
75) Fluoranthene	11.26	202	44262	2.64	ug/kg	96
78) Pyrene	11.49	202	40417	2.52	ug/kg	98
81) Benzo(a)anthracene	12.74	228	24823	1.82	ug/kg	81
83) Chrysene	12.78	228	24015	1.84	ug/kg	92
87) Benzo(b)fluoranthene	13.99	252	24866	2.32	ug/kg#	82
88) Benzo(k)fluoranthene	14.01	252	15919m	1.46	ug/kg	
89) Benzo(a)pyrene	14.38	252	15721	1.44	ug/kg	86
92) Benzo(g,h,i)perylene	16.51	276	17201m	1.70	ug/kg	

(#) = qualifier out of range (m) = manual integration  
 DS18777.D 0802ABN.M Tue Oct 16 12:44:08 2018 SS

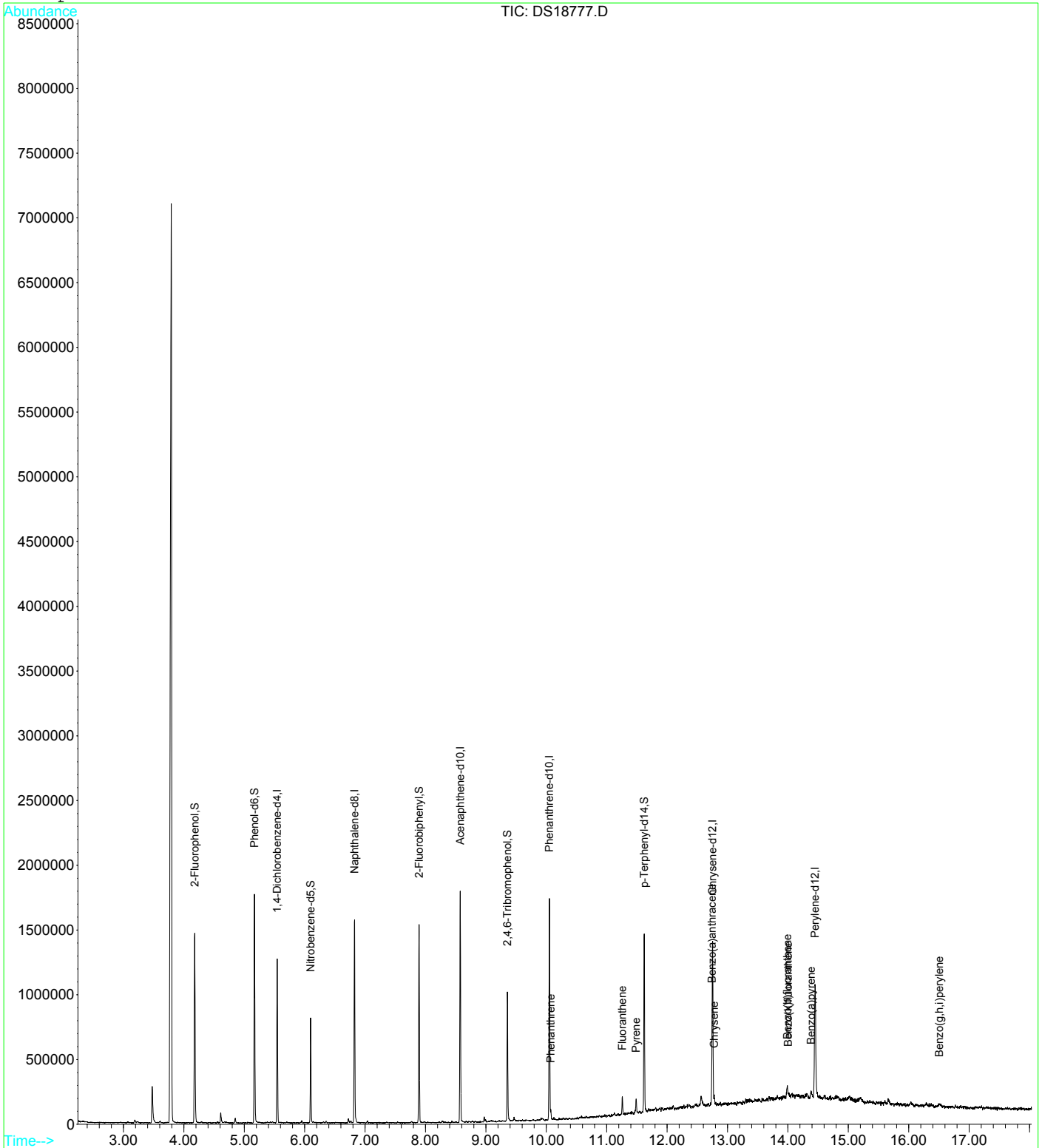
Quantitation Report

Data File : G:\HPCHEM\D\DATA\20181011\DS18777.D  
Acq On : 11 Oct 2018 17:01  
Sample : 8100452-07  
Misc : B8J1101 SOIL  
MS Integration Params: rteint.p  
Quant Time: Oct 11 17:23 2018

Vial: 12  
Operator: GCH  
Inst : GCMS-D  
Multiplr: 1.00

Quant Results File: 0802ABN.RES

Method : G:\HPCHEM\D\METHODS\0802ABN.M (RTE Integrator)  
Title : BNA Extractables GC/MS 8270D  
Last Update : Mon Oct 15 10:25:43 2018  
Response via : Initial Calibration



# ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

**Client:** Peak Environmental  
**Client Sample ID:** STP-1B  
**Lab Sample ID:** 8100452-08  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 13:15	Prep Date: 10/11/18 08:03	File ID: DS18778.D
Init/Final Vol: 15 g / 1 mL	Prep Batch: B8J1101	Analyzed: 10/11/18 17:29
Dilution: 1	Matrix: Soil	Sequence: S8J1213
Percent Solids: 89.59	Prep Method: Sonication MS	

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
90-12-0	1-Methylnaphthalene	ND	0.124	0.223	U
91-57-6	2-Methylnaphthalene	ND	0.0356	0.223	U
83-32-9	Acenaphthene	ND	0.00847	0.148	U
208-96-8	Acenaphthylene	ND	0.00517	0.148	U
120-12-7	Anthracene	ND	0.0215	0.148	U
56-55-3	Benzo(a)anthracene	ND	0.0150	0.148	U
50-32-8	Benzo(a)pyrene	ND	0.0259	0.148	U
205-99-2	Benzo(b)fluoranthene	ND	0.0209	0.148	U
191-24-2	Benzo(g,h,i)perylene	ND	0.0121	0.148	U
207-08-9	Benzo(k)fluoranthene	ND	0.0171	0.148	U
218-01-9	Chrysene	ND	0.0102	0.148	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.0147	0.148	U
206-44-0	Fluoranthene	ND	0.0140	0.148	U
86-73-7	Fluorene	ND	0.0124	0.148	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.0160	0.148	U
91-20-3	Naphthalene	ND	0.0110	0.148	U
85-01-8	Phenanthrene	ND	0.0195	0.148	U
129-00-0	Pyrene	ND	0.0109	0.148	U

14  
 14.2

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\D\DATA\20181011\DS18778.D Vial: 13  
 Acq On : 11 Oct 2018 17:29 Operator: GCH  
 Sample : 8100452-08 Inst : GCMS-D  
 Misc : B8J1101 SOIL Multiplr: 1.00  
 MS Integration Params: rteint.p  
 Quant Time: Oct 11 17:56 2018 Quant Results File: 0802ABN.RES

Quant Method : G:\HPCHEM\D\METHODS\0802ABN.M (RTE Integrator)  
 Title : BNA Extractables GC/MS 8270D  
 Last Update : Wed Oct 10 10:16:58 2018  
 Response via : Initial Calibration  
 DataAcq Meth : RUN8270B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.54	152	160052	40.00	ug/kg	-0.06
22) Naphthalene-d8	6.83	136	608878	40.00	ug/kg	-0.06
39) Acenaphthene-d10	8.57	164	294400	40.00	ug/kg	-0.07
62) Phenanthrene-d10	10.05	188	519881	40.00	ug/kg	-0.07
76) Chrysene-d12	12.76	240	381925	40.00	ug/kg	-0.08
85) Perylene-d12	14.45	264	375896	40.00	ug/kg	-0.10

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol	4.18	112	397722	72.49	ug/kg	-0.08
Spiked Amount 100.000	Range 18 - 82		Recovery =	72.49%		
8) Phenol-d6	5.17	99	538634	77.31	ug/kg	-0.08
Spiked Amount 100.000	Range 20 - 88		Recovery =	77.31%		
23) Nitrobenzene-d5	6.10	82	217854	38.45	ug/kg	-0.12
Spiked Amount 50.000	Range 27 - 100		Recovery =	76.90%		
44) 2-Fluorobiphenyl	7.90	172	420201	38.66	ug/kg	-0.09
Spiked Amount 50.000	Range 27 - 105		Recovery =	77.32%		
66) 2,4,6-Tribromophenol	9.36	330	73752	67.12	ug/kg	-0.10
Spiked Amount 100.000	Range 24 - 115		Recovery =	67.12%		
79) p-Terphenyl-d14	11.62	244	352558	40.39	ug/kg	-0.02
Spiked Amount 50.000	Range 29 - 110		Recovery =	80.78%		

Target Compounds Qvalue

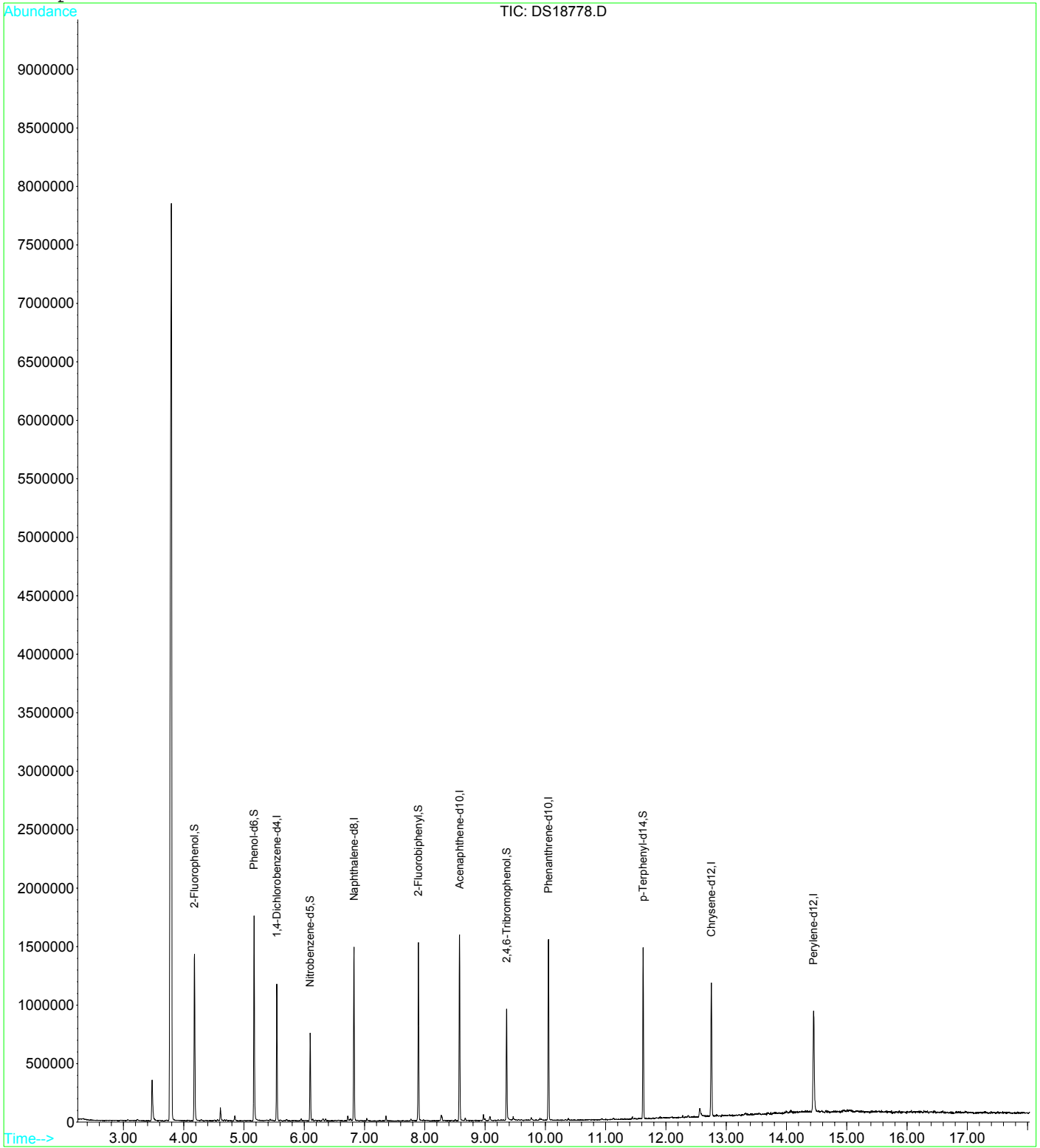
(#) = qualifier out of range (m) = manual integration  
 DS18778.D 0802ABN.M Tue Oct 16 12:44:10 2018 SS

14  
14.2

Quantitation Report

Data File : G:\HPCHEM\D\DATA\20181011\DS18778.D Vial: 13  
Acq On : 11 Oct 2018 17:29 Operator: GCH  
Sample : 8100452-08 Inst : GCMS-D  
Misc : B8J1101 SOIL Multiplr: 1.00  
MS Integration Params: rteint.p  
Quant Time: Oct 11 17:56 2018 Quant Results File: 0802ABN.RES

Method : G:\HPCHEM\D\METHODS\0802ABN.M (RTE Integrator)  
Title : BNA Extractables GC/MS 8270D  
Last Update : Mon Oct 15 10:25:43 2018  
Response via : Initial Calibration



# ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

**Client:** Peak Environmental  
**Client Sample ID:** STP-2B  
**Lab Sample ID:** 8100452-09  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 13:30	Prep Date: 10/11/18 08:03	File ID: AS07401.D
Init/Final Vol: 15 g / 1 mL	Prep Batch: B8J1101	Analyzed: 10/11/18 17:26
Dilution: 1	Matrix: Soil	Sequence: S8J1212
Percent Solids: 91.55	Prep Method: Sonication MS	

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
90-12-0	1-Methylnaphthalene	ND	0.121	0.218	U
91-57-6	2-Methylnaphthalene	ND	0.0348	0.218	U
83-32-9	Acenaphthene	ND	0.00829	0.145	U
208-96-8	Acenaphthylene	ND	0.00506	0.145	U
120-12-7	Anthracene	ND	0.0211	0.145	U
56-55-3	Benzo(a)anthracene	ND	0.0146	0.145	U
50-32-8	Benzo(a)pyrene	ND	0.0253	0.145	U
205-99-2	Benzo(b)fluoranthene	ND	0.0204	0.145	U
191-24-2	Benzo(g,h,i)perylene	ND	0.0118	0.145	U
207-08-9	Benzo(k)fluoranthene	ND	0.0167	0.145	U
218-01-9	Chrysene	ND	0.00996	0.145	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.0144	0.145	U
206-44-0	Fluoranthene	ND	0.0137	0.145	U
86-73-7	Fluorene	ND	0.0121	0.145	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.0156	0.145	U
91-20-3	Naphthalene	ND	0.0108	0.145	U
85-01-8	Phenanthrene	ND	0.0191	0.145	U
129-00-0	Pyrene	ND	0.0107	0.145	U

14  
14.2.

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20181011\AS07401.D Vial: 9  
 Acq On : 11 Oct 2018 17:26 Operator: GCH  
 Sample : 8100452-09 Inst : GCMS-A  
 Misc : B8J1101 SOIL Multiplr: 1.00  
 MS Integration Params: LSTINT.P  
 Quant Time: Oct 11 17:57 2018 Quant Results File: 0824ABN.RES

Quant Method : G:\HPCHEM\A\METHODS\0824ABN.M (RTE Integrator)  
 Title : BNA Extractables GC/MS 8270D  
 Last Update : Tue Oct 02 11:16:59 2018  
 Response via : Initial Calibration  
 DataAcq Meth : RUN8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.27	152	148181	40.00	ug/kg	0.00
21) Naphthalene-d8	7.54	136	560064	40.00	ug/kg	0.00
38) Acenaphthene-d10	9.31	164	296470	40.00	ug/kg	0.00
61) Phenanthrene-d10	10.81	188	568102	40.00	ug/kg	0.00
75) Chrysene-d12	13.67	240	628942	40.00	ug/kg	0.00
84) Perylene-d12	15.76	264	651720	40.00	ug/kg	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
4) 2-Fluorophenol	4.97	112	275527	66.92	ug/kg	-0.03
Spiked Amount 100.000	Range 18 - 82		Recovery =	66.92%		
7) Phenol-d6	5.88	99	326363	66.98	ug/kg	0.00
Spiked Amount 100.000	Range 20 - 88		Recovery =	66.98%		
22) Nitrobenzene-d5	6.81	82	145665	38.52	ug/kg	-0.02
Spiked Amount 50.000	Range 27 - 100		Recovery =	77.04%		
43) 2-Fluorobiphenyl	8.61	172	381724	32.55	ug/kg	-0.02
Spiked Amount 50.000	Range 27 - 105		Recovery =	65.10%		
65) 2,4,6-Tribromophenol	10.10	330	120099	71.92	ug/kg	-0.01
Spiked Amount 100.000	Range 24 - 115		Recovery =	71.92%		
78) p-Terphenyl-d14	12.40	244	532800	34.04	ug/kg	0.01
Spiked Amount 50.000	Range 29 - 110		Recovery =	68.08%		

Target Compounds Qvalue

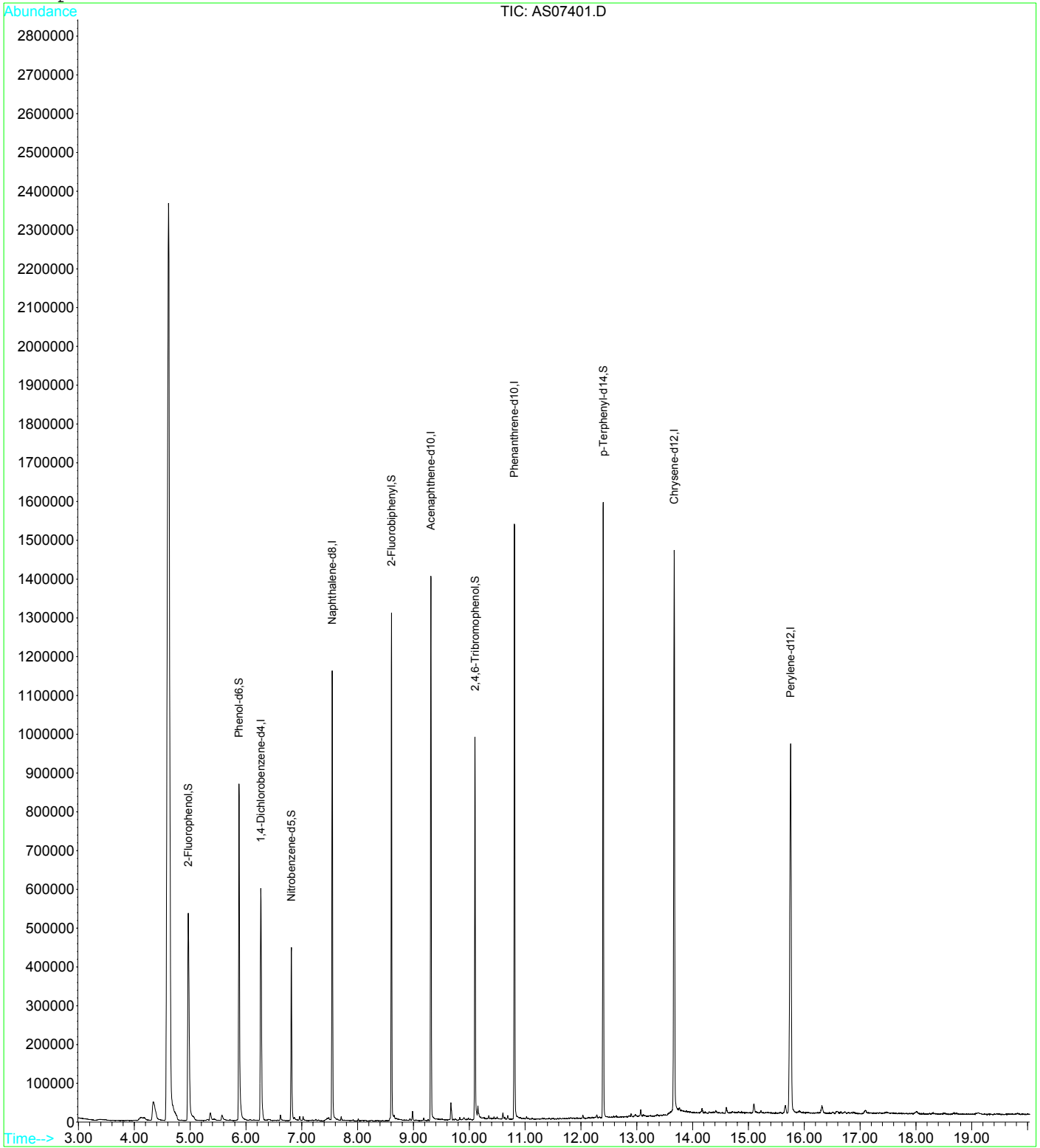
(#) = qualifier out of range (m) = manual integration  
 AS07401.D 0824ABN.M Fri Oct 12 15:12:04 2018 SS

14  
14.2

Quantitation Report

Data File : G:\HPCHEM\A\DATA\20181011\AS07401.D Vial: 9  
Acq On : 11 Oct 2018 17:26 Operator: GCH  
Sample : 8100452-09 Inst : GCMS-A  
Misc : B8J1101 SOIL Multiplr: 1.00  
MS Integration Params: LSTINT.P  
Quant Time: Oct 11 17:57 2018 Quant Results File: 0824ABN.RES

Method : G:\HPCHEM\A\METHODS\0824ABN.M (RTE Integrator)  
Title : BNA Extractables GC/MS 8270D  
Last Update : Tue Oct 02 11:16:59 2018  
Response via : Initial Calibration





# ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

**Client:** Peak Environmental  
**Client Sample ID:** STP-3B  
**Lab Sample ID:** 8100452-10  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 13:40	Prep Date:	10/11/18 08:03	File ID:	AS07396.D
Init/Final Vol:	15 g / 1 mL	Prep Batch:	B8J1101	Analyzed:	10/11/18 14:58
Dilution:	1	Matrix:	Soil	Sequence:	S8J1212
Percent Solids:	91.53	Prep Method:	Sonication MS		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
90-12-0	1-Methylnaphthalene	ND	0.121	0.219	U
91-57-6	2-Methylnaphthalene	ND	0.0349	0.219	U
83-32-9	Acenaphthene	ND	0.00829	0.145	U
208-96-8	Acenaphthylene	ND	0.00506	0.145	U
120-12-7	Anthracene	ND	0.0211	0.145	U
56-55-3	Benzo(a)anthracene	ND	0.0146	0.145	U
50-32-8	Benzo(a)pyrene	ND	0.0253	0.145	U
205-99-2	Benzo(b)fluoranthene	ND	0.0204	0.145	U
191-24-2	Benzo(g,h,i)perylene	ND	0.0118	0.145	U
207-08-9	Benzo(k)fluoranthene	ND	0.0167	0.145	U
218-01-9	Chrysene	ND	0.00996	0.145	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.0144	0.145	U
206-44-0	Fluoranthene	ND	0.0137	0.145	U
86-73-7	Fluorene	ND	0.0121	0.145	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.0156	0.145	U
91-20-3	Naphthalene	ND	0.0108	0.145	U
85-01-8	Phenanthrene	ND	0.0191	0.145	U
129-00-0	Pyrene	ND	0.0107	0.145	U

14  
14.2.

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20181011\AS07396.D Vial: 4  
 Acq On : 11 Oct 2018 14:58 Operator: GCH  
 Sample : 8100452-10 Inst : GCMS-A  
 Misc : B8J1101 SOIL Multiplr: 1.00  
 MS Integration Params: LSTINT.P  
 Quant Time: Oct 11 16:02 2018 Quant Results File: 0824ABN.RES

Quant Method : G:\HPCHEM\A\METHODS\0824ABN.M (RTE Integrator)  
 Title : BNA Extractables GC/MS 8270D  
 Last Update : Thu Oct 11 15:59:28 2018  
 Response via : Initial Calibration  
 DataAcq Meth : RUN8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.27	152	137601	40.00	ug/kg	0.00
21) Naphthalene-d8	7.54	136	525512	40.00	ug/kg	0.00
38) Acenaphthene-d10	9.31	164	279789	40.00	ug/kg	0.00
61) Phenanthrene-d10	10.81	188	528787	40.00	ug/kg	0.00
75) Chrysene-d12	13.67	240	578999	40.00	ug/kg	0.00
84) Perylene-d12	15.75	264	603659	40.00	ug/kg	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
4) 2-Fluorophenol	4.97	112	263114	68.82	ug/kg	-0.03
Spiked Amount 100.000	Range 18 - 82		Recovery =	68.82%		
7) Phenol-d6	5.87	99	301119	66.55	ug/kg	0.00
Spiked Amount 100.000	Range 20 - 88		Recovery =	66.55%		
22) Nitrobenzene-d5	6.81	82	139038	39.19	ug/kg	-0.03
Spiked Amount 50.000	Range 27 - 100		Recovery =	78.38%		
43) 2-Fluorobiphenyl	8.61	172	357978	32.35	ug/kg	-0.02
Spiked Amount 50.000	Range 27 - 105		Recovery =	64.70%		
65) 2,4,6-Tribromophenol	10.10	330	116012	74.23	ug/kg	-0.01
Spiked Amount 100.000	Range 24 - 115		Recovery =	74.23%		
78) p-Terphenyl-d14	12.40	244	524654	36.41	ug/kg	0.01
Spiked Amount 50.000	Range 29 - 110		Recovery =	72.82%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration  
 AS07396.D 0824ABN.M Fri Oct 12 15:11:52 2018 SS

14  
14.2

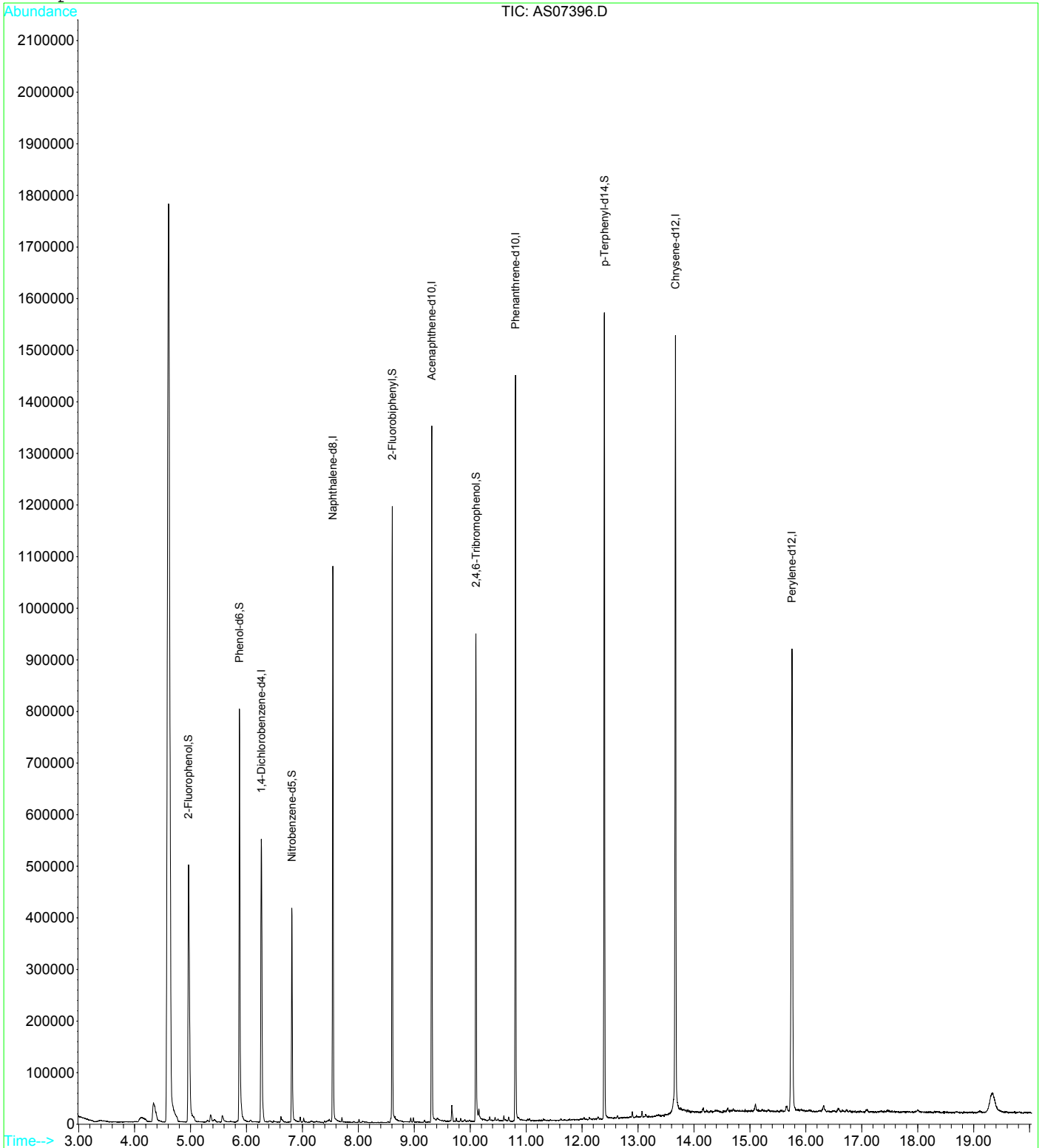
Quantitation Report

Data File : G:\HPCHEM\A\DATA\20181011\AS07396.D  
Acq On : 11 Oct 2018 14:58  
Sample : 8100452-10  
Misc : B8J1101 SOIL  
MS Integration Params: LSTINT.P  
Quant Time: Oct 11 16:02 2018

Vial: 4  
Operator: GCH  
Inst : GCMS-A  
Multiplr: 1.00

Quant Results File: 0824ABN.RES

Method : G:\HPCHEM\A\METHODS\0824ABN.M (RTE Integrator)  
Title : BNA Extractables GC/MS 8270D  
Last Update : Tue Oct 02 11:16:59 2018  
Response via : Initial Calibration



# ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

**Client:** Peak Environmental  
**Client Sample ID:** STP-4A  
**Lab Sample ID:** 8100452-11  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 00:00	Prep Date: 10/11/18 08:03	File ID: AS07397.D
Init/Final Vol: 15 g / 1 mL	Prep Batch: B8J1101	Analyzed: 10/11/18 15:28
Dilution: 1	Matrix: Soil	Sequence: S8J1212
Percent Solids: 90.63	Prep Method: Sonication MS	

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
90-12-0	1-Methylnaphthalene	ND	0.122	0.221	U
91-57-6	2-Methylnaphthalene	ND	0.0352	0.221	U
83-32-9	Acenaphthene	ND	0.00837	0.147	U
208-96-8	Acenaphthylene	ND	0.00511	0.147	U
120-12-7	Anthracene	ND	0.0213	0.147	U
56-55-3	Benzo(a)anthracene	ND	0.0148	0.147	U
50-32-8	Benzo(a)pyrene	ND	0.0256	0.147	U
205-99-2	Benzo(b)fluoranthene	ND	0.0206	0.147	U
191-24-2	Benzo(g,h,i)perylene	ND	0.0119	0.147	U
207-08-9	Benzo(k)fluoranthene	ND	0.0169	0.147	U
218-01-9	Chrysene	ND	0.0101	0.147	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.0146	0.147	U
206-44-0	Fluoranthene	ND	0.0138	0.147	U
86-73-7	Fluorene	ND	0.0122	0.147	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.0158	0.147	U
91-20-3	Naphthalene	ND	0.0109	0.147	U
85-01-8	Phenanthrene	ND	0.0193	0.147	U
129-00-0	Pyrene	ND	0.0108	0.147	U

14  
 14.2

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20181011\AS07397.D Vial: 5  
 Acq On : 11 Oct 2018 15:28 Operator: GCH  
 Sample : 8100452-11 Inst : GCMS-A  
 Misc : B8J1101 SOIL Multiplr: 1.00  
 MS Integration Params: LSTINT.P  
 Quant Time: Oct 11 16:03 2018 Quant Results File: 0824ABN.RES

Quant Method : G:\HPCHEM\A\METHODS\0824ABN.M (RTE Integrator)  
 Title : BNA Extractables GC/MS 8270D  
 Last Update : Thu Oct 11 15:59:28 2018  
 Response via : Initial Calibration  
 DataAcq Meth : RUN8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.27	152	144157	40.00	ug/kg	0.00
21) Naphthalene-d8	7.54	136	544435	40.00	ug/kg	0.00
38) Acenaphthene-d10	9.31	164	292101	40.00	ug/kg	0.00
61) Phenanthrene-d10	10.81	188	558645	40.00	ug/kg	0.00
75) Chrysene-d12	13.67	240	606407	40.00	ug/kg	0.00
84) Perylene-d12	15.75	264	627427	40.00	ug/kg	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
4) 2-Fluorophenol	4.97	112	239574	59.81	ug/kg	-0.03
Spiked Amount 100.000	Range 18 - 82		Recovery =	59.81%		
7) Phenol-d6	5.88	99	286179	60.38	ug/kg	0.01
Spiked Amount 100.000	Range 20 - 88		Recovery =	60.38%		
22) Nitrobenzene-d5	6.81	82	129974	35.36	ug/kg	-0.03
Spiked Amount 50.000	Range 27 - 100		Recovery =	70.72%		
43) 2-Fluorobiphenyl	8.61	172	331539	28.69	ug/kg	-0.02
Spiked Amount 50.000	Range 27 - 105		Recovery =	57.38%		
65) 2,4,6-Tribromophenol	10.10	330	105023	65.04	ug/kg	-0.01
Spiked Amount 100.000	Range 24 - 115		Recovery =	65.04%		
78) p-Terphenyl-d14	12.40	244	457486	30.32	ug/kg	0.01
Spiked Amount 50.000	Range 29 - 110		Recovery =	60.64%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration  
 AS07397.D 0824ABN.M Fri Oct 12 15:11:54 2018 SS

14  
14.2

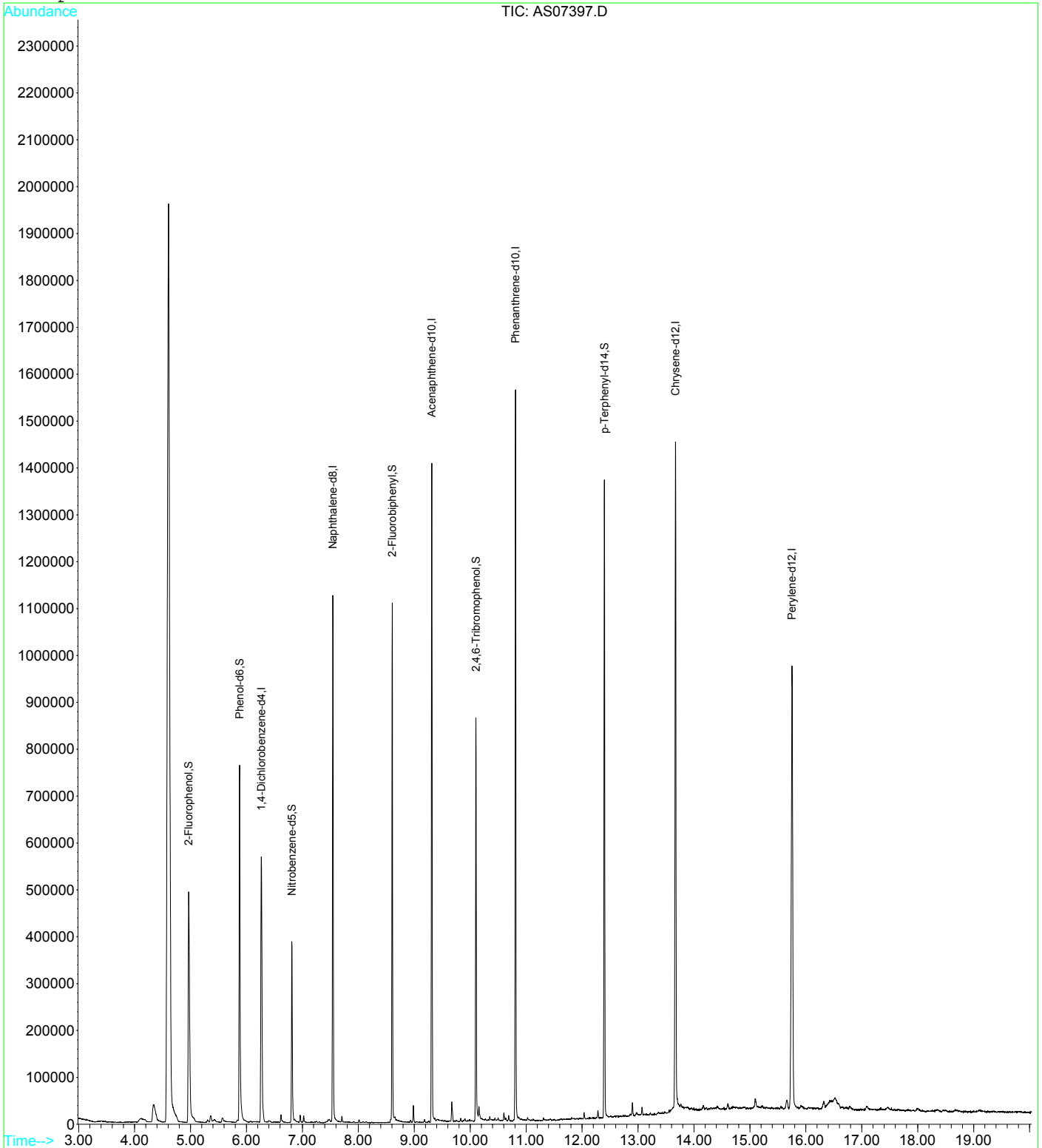
Quantitation Report

Data File : G:\HPCHEM\A\DATA\20181011\AS07397.D  
Acq On : 11 Oct 2018 15:28  
Sample : 8100452-11  
Misc : B8J1101 SOIL  
MS Integration Params: LSTINT.P  
Quant Time: Oct 11 16:03 2018

Vial: 5  
Operator: GCH  
Inst : GCMS-A  
Multiplr: 1.00

Quant Results File: 0824ABN.RES

Method : G:\HPCHEM\A\METHODS\0824ABN.M (RTE Integrator)  
Title : BNA Extractables GC/MS 8270D  
Last Update : Tue Oct 02 11:16:59 2018  
Response via : Initial Calibration



# ANALYSIS DATA SHEET

## Semivolatile Organics - GC/MS - SW 846 8270D

**Client:** Peak Environmental  
**Client Sample ID:** STP-4B  
**Lab Sample ID:** 8100452-12  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 00:00	Prep Date:	10/11/18 08:03	File ID:	AS07398.D
Init/Final Vol:	15 g / 1 mL	Prep Batch:	B8J1101	Analyzed:	10/11/18 15:57
Dilution:	1	Matrix:	Soil	Sequence:	S8J1212
Percent Solids:	91.70	Prep Method:	Sonication MS		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
90-12-0	1-Methylnaphthalene	ND	0.0348	0.218	U
58-90-2	2,3,4,6-Tetrachlorophenol	ND	0.0224	0.145	U
95-95-4	2,4,5-Trichlorophenol	ND	0.0197	0.145	U
88-06-2	2,4,6-Trichlorophenol	ND	0.00908	0.145	U
120-83-2	2,4-Dichlorophenol	ND	0.0146	0.145	U
105-67-9	2,4-Dimethylphenol	ND	0.0143	0.145	U
51-28-5	2,4-Dinitrophenol	ND	0.0209	0.727	U
121-14-2	2,4-Dinitrotoluene	ND	0.0155	0.145	U
606-20-2	2,6-Dinitrotoluene	ND	0.0347	0.145	U
91-58-7	2-Chloronaphthalene	ND	0.0167	0.145	U
95-57-8	2-Chlorophenol	ND	0.0192	0.145	U
91-57-6	2-Methylnaphthalene	ND	0.0348	0.218	U
95-48-7	2-Methylphenol	ND	0.0287	0.145	U
88-74-4	2-Nitroaniline	ND	0.0117	0.145	U
88-75-5	2-Nitrophenol	ND	0.0161	0.145	U
91-94-1	3,3'-Dichlorobenzidine	ND	0.0153	0.145	U
106-44-5	3+4-Methylphenol	ND	0.0266	0.145	U
99-09-2	3-Nitroaniline	ND	0.0269	0.145	U
534-52-1	4,6-Dinitro-2-methylphenol	ND	0.0274	0.363	U
101-55-3	4-Bromophenyl-phenyl ether	ND	0.0207	0.145	U
59-50-7	4-Chloro-3-methylphenol	ND	0.0229	0.145	U
106-47-8	4-Chloroaniline	ND	0.00508	0.145	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.00784	0.145	U
100-01-6	4-Nitroaniline	ND	0.0726	0.145	U
100-02-7	4-Nitrophenol	ND	0.00929	0.145	U
83-32-9	Acenaphthene	ND	0.00828	0.145	U

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

14  
 14.2

# ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

**Client:** Peak Environmental  
**Client Sample ID:** STP-4B  
**Lab Sample ID:** 8100452-12  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 00:00	Prep Date:	10/11/18 08:03	File ID:	AS07398.D
Init/Final Vol:	15 g / 1 mL	Prep Batch:	B8J1101	Analyzed:	10/11/18 15:57
Dilution:	1	Matrix:	Soil	Sequence:	S8J1212
Percent Solids:	91.70	Prep Method:	Sonication MS		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
208-96-8	Acenaphthylene	ND	0.00505	0.145	U
98-86-2	Acetophenone	ND	0.0144	0.145	U
120-12-7	Anthracene	ND	0.0210	0.145	U
1912-24-9	Atrazine	ND	0.0136	0.145	U
100-52-7	Benzaldehyde	ND	0.0446	0.145	U
56-55-3	Benzo(a)anthracene	ND	0.0146	0.145	U
50-32-8	Benzo(a)pyrene	ND	0.0253	0.145	U
205-99-2	Benzo(b)fluoranthene	ND	0.0204	0.145	U
191-24-2	Benzo(g,h,i)perylene	ND	0.0118	0.145	U
207-08-9	Benzo(k)fluoranthene	ND	0.0167	0.145	U
92-52-4	Biphenyl	ND	0.0128	0.145	U
111-91-1	bis(2-chloroethoxy)methane	ND	0.0201	0.145	U
111-44-4	bis(2-chloroethyl)ether	ND	0.0159	0.145	U
108-60-1	bis(2-chloroisopropyl)ether	ND	0.0522	0.145	U
117-81-7	bis(2-ethylhexyl)phthalate	ND	0.0290	0.145	U
85-68-7	Butylbenzylphthalate	ND	0.0132	0.145	U
105-60-2	Caprolactam	ND	0.0188	0.145	U
86-74-8	Carbazole	ND	0.0279	0.363	U
218-01-9	Chrysene	ND	0.00995	0.145	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.0144	0.145	U
132-64-9	Dibenzofuran	ND	0.00865	0.145	U
84-66-2	Diethylphthalate	ND	0.0281	0.145	U
131-11-3	Dimethylphthalate	0.0632	0.00901	0.145	J
84-74-2	Di-n-butylphthalate	ND	0.0593	0.145	U
117-84-0	Di-n-octylphthalate	ND	0.0298	0.145	U
206-44-0	Fluoranthene	ND	0.0136	0.145	U

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

14  
 14.2



# ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

**Client:** Peak Environmental  
**Client Sample ID:** STP-4B  
**Lab Sample ID:** 8100452-12  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 00:00	Prep Date: 10/11/18 08:03	File ID: AS07398.D
Init/Final Vol: 15 g / 1 mL	Prep Batch: B8J1101	Analyzed: 10/11/18 15:57
Dilution: 1	Matrix: Soil	Sequence: S8J1212
Percent Solids: 91.70	Prep Method: Sonication MS	

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
86-73-7	Fluorene	ND	0.0121	0.145	U
118-74-1	Hexachlorobenzene	ND	0.0190	0.145	U
87-68-3	Hexachlorobutadiene	ND	0.0697	0.145	U
77-47-4	Hexachlorocyclopentadiene	ND	0.0605	0.363	U
67-72-1	Hexachloroethane	ND	0.0159	0.145	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.0156	0.145	U
78-59-1	Isophorone	ND	0.00951	0.145	U
91-20-3	Naphthalene	ND	0.0108	0.145	U
98-95-3	Nitrobenzene	ND	0.0246	0.145	U
621-64-7	n-Nitroso-di-n-propylamine	ND	0.00778	0.145	U
86-30-6	n-Nitrosodiphenylamine	ND	0.0310	0.145	U
85-01-8	Phenanthrene	ND	0.0191	0.145	U
108-95-2	Phenol	ND	0.0118	0.145	U
129-00-0	Pyrene	ND	0.0107	0.145	U

14  
 14.2.

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

# ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

**Client:** Peak Environmental  
**Client Sample ID:** STP-4B  
**Lab Sample ID:** 8100452-12  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 00:00	Prep Date:	10/11/18 08:03	File ID:	AS07398.D
Init/Final Vol:	15 g / 1 mL	Prep Batch:	B8J1101	Analyzed:	10/11/18 15:57
Dilution:	1	Matrix:	Soil	Sequence:	S8J1212
Percent Solids:	91.70	Prep Method:	Sonication MS		

CAS NO.	TENTATIVELY IDENTIFIED COMPOUNDS	CONC. (mg/kg dry)	RT	Q
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14

14.2.

J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 D - Indicates result is based on a dilution

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20181011\AS07398.D Vial: 6  
 Acq On : 11 Oct 2018 15:57 Operator: GCH  
 Sample : 8100452-12 Inst : GCMS-A  
 Misc : B8J1101 SOIL Multiplr: 1.00  
 MS Integration Params: LSTINT.P  
 Quant Time: Oct 11 16:58 2018 Quant Results File: 0824ABN.RES

Quant Method : G:\HPCHEM\A\METHODS\0824ABN.M (RTE Integrator)  
 Title : BNA Extractables GC/MS 8270D  
 Last Update : Tue Oct 02 11:16:59 2018  
 Response via : Initial Calibration  
 DataAcq Meth : RUN8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.26	152	160040	40.00	ug/kg	0.00
21) Naphthalene-d8	7.54	136	621406	40.00	ug/kg	0.00
38) Acenaphthene-d10	9.31	164	331206	40.00	ug/kg	0.00
61) Phenanthrene-d10	10.81	188	635462	40.00	ug/kg	0.00
75) Chrysene-d12	13.67	240	691875	40.00	ug/kg	0.00
84) Perylene-d12	15.76	264	723702	40.00	ug/kg	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
4) 2-Fluorophenol	4.97	112	300876	67.66	ug/kg	-0.03
Spiked Amount 100.000	Range 18 - 82		Recovery =	67.66%		
7) Phenol-d6	5.88	99	360028	68.42	ug/kg	0.01
Spiked Amount 100.000	Range 20 - 88		Recovery =	68.42%		
22) Nitrobenzene-d5	6.81	82	160092	38.16	ug/kg	-0.03
Spiked Amount 50.000	Range 27 - 100		Recovery =	76.32%		
43) 2-Fluorobiphenyl	8.61	172	418240	31.92	ug/kg	-0.02
Spiked Amount 50.000	Range 27 - 105		Recovery =	63.84%		
65) 2,4,6-Tribromophenol	10.10	330	133633	71.60	ug/kg	-0.01
Spiked Amount 100.000	Range 24 - 115		Recovery =	71.60%		
78) p-Terphenyl-d14	12.40	244	588569	34.18	ug/kg	0.01
Spiked Amount 50.000	Range 29 - 110		Recovery =	68.36%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
47) Dimethylphthalate	8.98	163	10534	0.87	ug/kg	99

(#) = qualifier out of range (m) = manual integration  
 AS07398.D 0824ABN.M Fri Oct 12 15:11:57 2018 SS

14  
14.2

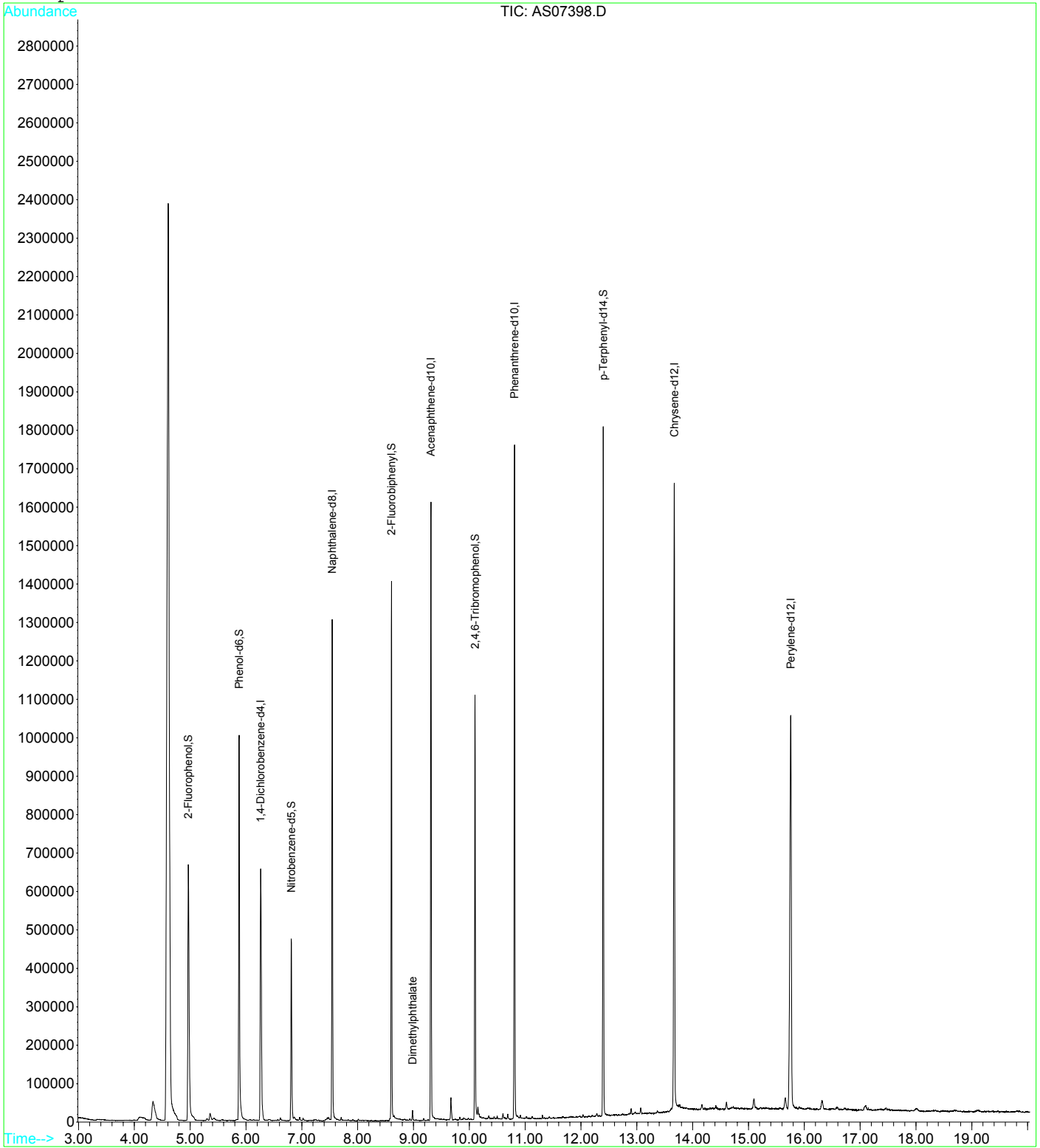
Quantitation Report

Data File : G:\HPCHEM\A\DATA\20181011\AS07398.D  
Acq On : 11 Oct 2018 15:57  
Sample : 8100452-12  
Misc : B8J1101 SOIL  
MS Integration Params: LSTINT.P  
Quant Time: Oct 11 16:58 2018

Vial: 6  
Operator: GCH  
Inst : GCMS-A  
Multiplr: 1.00

Quant Results File: 0824ABN.RES

Method : G:\HPCHEM\A\METHODS\0824ABN.M (RTE Integrator)  
Title : BNA Extractables GC/MS 8270D  
Last Update : Tue Oct 02 11:16:59 2018  
Response via : Initial Calibration



# ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

**Client:** Peak Environmental  
**Client Sample ID:** STP-5  
**Lab Sample ID:** 8100452-13  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 00:00	Prep Date: 10/11/18 08:03	File ID: AS07399.D
Init/Final Vol: 15 g / 1 mL	Prep Batch: B8J1101	Analyzed: 10/11/18 16:27
Dilution: 1	Matrix: Soil	Sequence: S8J1212
Percent Solids: 92.63	Prep Method: Sonication MS	

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
90-12-0	1-Methylnaphthalene	ND	0.120	0.216	U
91-57-6	2-Methylnaphthalene	ND	0.0344	0.216	U
83-32-9	Acenaphthene	ND	0.00819	0.144	U
208-96-8	Acenaphthylene	ND	0.00500	0.144	U
120-12-7	Anthracene	ND	0.0208	0.144	U
56-55-3	Benzo(a)anthracene	ND	0.0145	0.144	U
50-32-8	Benzo(a)pyrene	ND	0.0250	0.144	U
205-99-2	Benzo(b)fluoranthene	ND	0.0202	0.144	U
191-24-2	Benzo(g,h,i)perylene	ND	0.0117	0.144	U
207-08-9	Benzo(k)fluoranthene	ND	0.0165	0.144	U
218-01-9	Chrysene	ND	0.00985	0.144	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.0142	0.144	U
206-44-0	Fluoranthene	ND	0.0135	0.144	U
86-73-7	Fluorene	ND	0.0120	0.144	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.0154	0.144	U
91-20-3	Naphthalene	ND	0.0106	0.144	U
85-01-8	Phenanthrene	ND	0.0189	0.144	U
129-00-0	Pyrene	ND	0.0106	0.144	U

14  
 14.2

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20181011\AS07399.D Vial: 7  
 Acq On : 11 Oct 2018 16:27 Operator: GCH  
 Sample : 8100452-13 Inst : GCMS-A  
 Misc : B8J1101 SOIL Multiplr: 1.00  
 MS Integration Params: LSTINT.P  
 Quant Time: Oct 11 16:58 2018 Quant Results File: 0824ABN.RES

Quant Method : G:\HPCHEM\A\METHODS\0824ABN.M (RTE Integrator)  
 Title : BNA Extractables GC/MS 8270D  
 Last Update : Tue Oct 02 11:16:59 2018  
 Response via : Initial Calibration  
 DataAcq Meth : RUN8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.27	152	144929	40.00	ug/kg	0.00
21) Naphthalene-d8	7.54	136	551744	40.00	ug/kg	0.00
38) Acenaphthene-d10	9.31	164	296526	40.00	ug/kg	0.00
61) Phenanthrene-d10	10.81	188	563939	40.00	ug/kg	0.00
75) Chrysene-d12	13.67	240	621689	40.00	ug/kg	0.00
84) Perylene-d12	15.75	264	638170	40.00	ug/kg	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
4) 2-Fluorophenol	4.97	112	237168	58.90	ug/kg	-0.03
Spiked Amount 100.000	Range 18 - 82		Recovery =	58.90%		
7) Phenol-d6	5.88	99	278926	58.53	ug/kg	0.01
Spiked Amount 100.000	Range 20 - 88		Recovery =	58.53%		
22) Nitrobenzene-d5	6.81	82	128849	34.59	ug/kg	-0.03
Spiked Amount 50.000	Range 27 - 100		Recovery =	69.18%		
43) 2-Fluorobiphenyl	8.61	172	327959	27.96	ug/kg	-0.02
Spiked Amount 50.000	Range 27 - 105		Recovery =	55.92%		
65) 2,4,6-Tribromophenol	10.10	330	103360	63.63	ug/kg	-0.01
Spiked Amount 100.000	Range 24 - 115		Recovery =	63.63%		
78) p-Terphenyl-d14	12.40	244	463219	29.94	ug/kg	0.01
Spiked Amount 50.000	Range 29 - 110		Recovery =	59.88%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration  
 AS07399.D 0824ABN.M Fri Oct 12 15:11:59 2018 SS

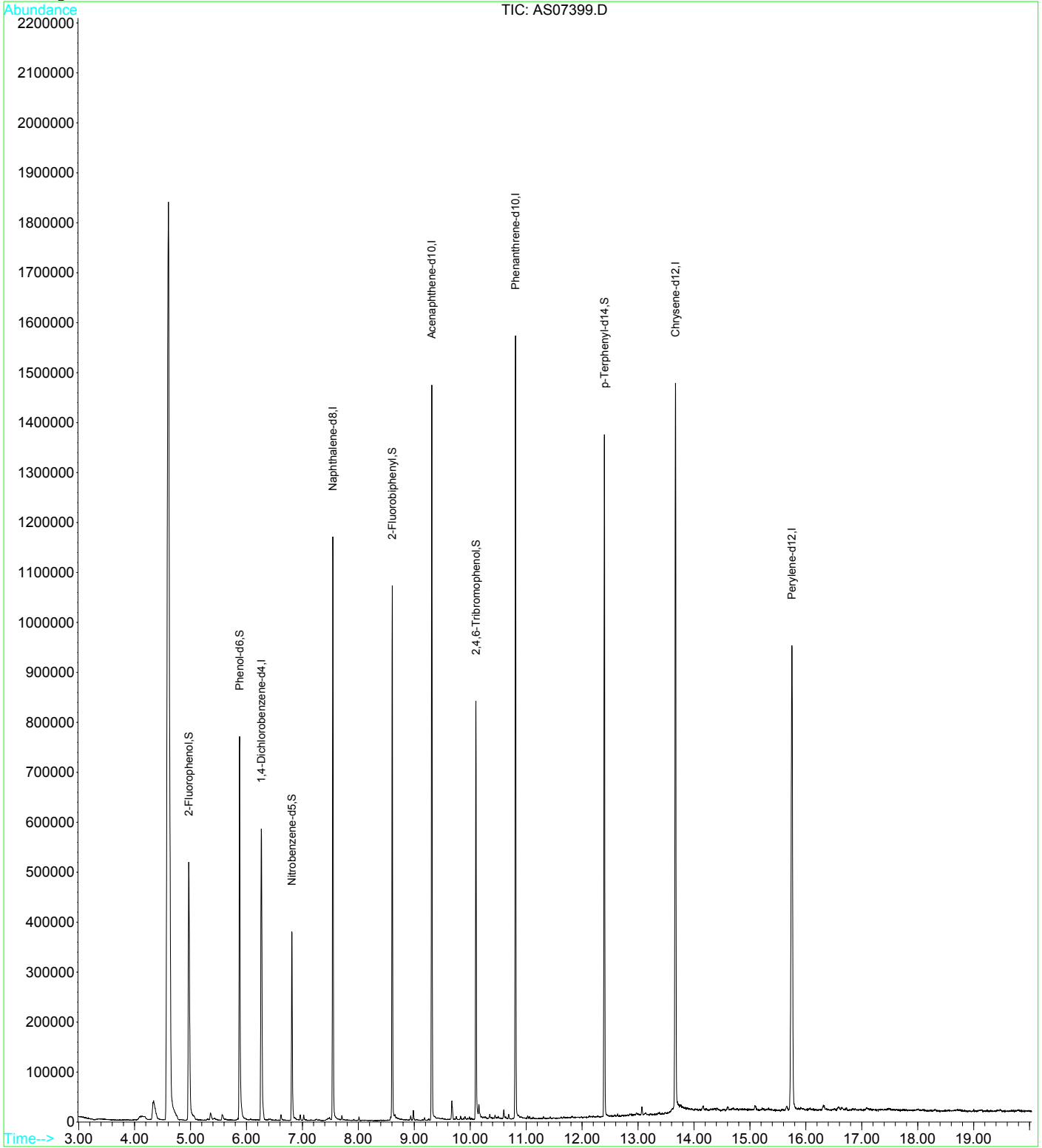
Quantitation Report

Data File : G:\HPCHEM\A\DATA\20181011\AS07399.D  
Acq On : 11 Oct 2018 16:27  
Sample : 8100452-13  
Misc : B8J1101 SOIL  
MS Integration Params: LSTINT.P  
Quant Time: Oct 11 16:58 2018

Vial: 7  
Operator: GCH  
Inst : GCMS-A  
Multiplr: 1.00

Quant Results File: 0824ABN.RES

Method : G:\HPCHEM\A\METHODS\0824ABN.M (RTE Integrator)  
Title : BNA Extractables GC/MS 8270D  
Last Update : Tue Oct 02 11:16:59 2018  
Response via : Initial Calibration



# ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

**Client:** Peak Environmental  
**Client Sample ID:** STP-7  
**Lab Sample ID:** 8100452-14  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 00:00	Prep Date: 10/11/18 08:03	File ID: AS07400.D
Init/Final Vol: 15 g / 1 mL	Prep Batch: B8J1101	Analyzed: 10/11/18 16:57
Dilution: 1	Matrix: Soil	Sequence: S8J1212
Percent Solids: 92.94	Prep Method: Sonication MS	

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
90-12-0	1-Methylnaphthalene	ND	0.0343	0.215	U
58-90-2	2,3,4,6-Tetrachlorophenol	ND	0.0221	0.143	U
95-95-4	2,4,5-Trichlorophenol	ND	0.0195	0.143	U
88-06-2	2,4,6-Trichlorophenol	ND	0.00896	0.143	U
120-83-2	2,4-Dichlorophenol	ND	0.0144	0.143	U
105-67-9	2,4-Dimethylphenol	ND	0.0141	0.143	U
51-28-5	2,4-Dinitrophenol	ND	0.0207	0.718	U
121-14-2	2,4-Dinitrotoluene	ND	0.0153	0.143	U
606-20-2	2,6-Dinitrotoluene	ND	0.0342	0.143	U
91-58-7	2-Chloronaphthalene	ND	0.0165	0.143	U
95-57-8	2-Chlorophenol	ND	0.0189	0.143	U
91-57-6	2-Methylnaphthalene	ND	0.0343	0.215	U
95-48-7	2-Methylphenol	ND	0.0283	0.143	U
88-74-4	2-Nitroaniline	ND	0.0115	0.143	U
88-75-5	2-Nitrophenol	ND	0.0159	0.143	U
91-94-1	3,3'-Dichlorobenzidine	ND	0.0151	0.143	U
106-44-5	3+4-Methylphenol	ND	0.0263	0.143	U
99-09-2	3-Nitroaniline	ND	0.0266	0.143	U
534-52-1	4,6-Dinitro-2-methylphenol	ND	0.0270	0.358	U
101-55-3	4-Bromophenyl-phenyl ether	ND	0.0204	0.143	U
59-50-7	4-Chloro-3-methylphenol	ND	0.0226	0.143	U
106-47-8	4-Chloroaniline	ND	0.00501	0.143	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.00774	0.143	U
100-01-6	4-Nitroaniline	ND	0.0717	0.143	U
100-02-7	4-Nitrophenol	ND	0.00917	0.143	U
83-32-9	Acenaphthene	ND	0.00817	0.143	U

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

14  
 14.2



# ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

**Client:** Peak Environmental  
**Client Sample ID:** STP-7  
**Lab Sample ID:** 8100452-14  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 00:00	Prep Date:	10/11/18 08:03	File ID:	AS07400.D
Init/Final Vol:	15 g / 1 mL	Prep Batch:	B8J1101	Analyzed:	10/11/18 16:57
Dilution:	1	Matrix:	Soil	Sequence:	S8J1212
Percent Solids:	92.94	Prep Method:	Sonication MS		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
208-96-8	Acenaphthylene	ND	0.00498	0.143	U
98-86-2	Acetophenone	ND	0.0142	0.143	U
120-12-7	Anthracene	ND	0.0208	0.143	U
1912-24-9	Atrazine	ND	0.0135	0.143	U
100-52-7	Benzaldehyde	ND	0.0440	0.143	U
56-55-3	Benzo(a)anthracene	ND	0.0144	0.143	U
50-32-8	Benzo(a)pyrene	ND	0.0250	0.143	U
205-99-2	Benzo(b)fluoranthene	ND	0.0201	0.143	U
191-24-2	Benzo(g,h,i)perylene	ND	0.0116	0.143	U
207-08-9	Benzo(k)fluoranthene	ND	0.0165	0.143	U
92-52-4	Biphenyl	ND	0.0126	0.143	U
111-91-1	bis(2-chloroethoxy)methane	ND	0.0198	0.143	U
111-44-4	bis(2-chloroethyl)ether	ND	0.0157	0.143	U
108-60-1	bis(2-chloroisopropyl)ether	ND	0.0515	0.143	U
117-81-7	bis(2-ethylhexyl)phthalate	ND	0.0286	0.143	U
85-68-7	Butylbenzylphthalate	ND	0.0130	0.143	U
105-60-2	Caprolactam	ND	0.0185	0.143	U
86-74-8	Carbazole	ND	0.0275	0.358	U
218-01-9	Chrysene	ND	0.00981	0.143	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.0142	0.143	U
132-64-9	Dibenzofuran	ND	0.00853	0.143	U
84-66-2	Diethylphthalate	ND	0.0278	0.143	U
131-11-3	Dimethylphthalate	ND	0.00889	0.143	U
84-74-2	Di-n-butylphthalate	ND	0.0585	0.143	U
117-84-0	Di-n-octylphthalate	ND	0.0294	0.143	U
206-44-0	Fluoranthene	ND	0.0135	0.143	U

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

14  
 14.2

# ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

**Client:** Peak Environmental  
**Client Sample ID:** STP-7  
**Lab Sample ID:** 8100452-14  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 00:00	Prep Date: 10/11/18 08:03	File ID: AS07400.D
Init/Final Vol: 15 g / 1 mL	Prep Batch: B8J1101	Analyzed: 10/11/18 16:57
Dilution: 1	Matrix: Soil	Sequence: S8J1212
Percent Solids: 92.94	Prep Method: Sonication MS	

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
86-73-7	Fluorene	ND	0.0119	0.143	U
118-74-1	Hexachlorobenzene	ND	0.0187	0.143	U
87-68-3	Hexachlorobutadiene	ND	0.0688	0.143	U
77-47-4	Hexachlorocyclopentadiene	ND	0.0597	0.358	U
67-72-1	Hexachloroethane	ND	0.0157	0.143	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.0154	0.143	U
78-59-1	Isophorone	ND	0.00938	0.143	U
91-20-3	Naphthalene	ND	0.0106	0.143	U
98-95-3	Nitrobenzene	ND	0.0243	0.143	U
621-64-7	n-Nitroso-di-n-propylamine	ND	0.00767	0.143	U
86-30-6	n-Nitrosodiphenylamine	ND	0.0306	0.143	U
85-01-8	Phenanthrene	ND	0.0188	0.143	U
108-95-2	Phenol	ND	0.0116	0.143	U
129-00-0	Pyrene	ND	0.0105	0.143	U

14  
 14.2

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

# ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

**Client:** Peak Environmental  
**Client Sample ID:** STP-7  
**Lab Sample ID:** 8100452-14  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 00:00	Prep Date:	10/11/18 08:03	File ID:	AS07400.D
Init/Final Vol:	15 g / 1 mL	Prep Batch:	B8J1101	Analyzed:	10/11/18 16:57
Dilution:	1	Matrix:	Soil	Sequence:	S8J1212
Percent Solids:	92.94	Prep Method:	Sonication MS		

CAS NO.	TENTATIVELY IDENTIFIED COMPOUNDS	CONC. (mg/kg dry)	RT	Q
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14  
14.2.

J - Indicates estimated value  
B - Indicates compound found in associated blank  
D - Indicates result is based on a dilution

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20181011\AS07400.D Vial: 8  
 Acq On : 11 Oct 2018 16:57 Operator: GCH  
 Sample : 8100452-14 Inst : GCMS-A  
 Misc : B8J1101 SOIL Multiplr: 1.00  
 MS Integration Params: LSTINT.P  
 Quant Time: Oct 11 17:22 2018 Quant Results File: 0824ABN.RES

Quant Method : G:\HPCHEM\A\METHODS\0824ABN.M (RTE Integrator)  
 Title : BNA Extractables GC/MS 8270D  
 Last Update : Tue Oct 02 11:16:59 2018  
 Response via : Initial Calibration  
 DataAcq Meth : RUN8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.27	152	139395	40.00	ug/kg	0.00
21) Naphthalene-d8	7.54	136	542847	40.00	ug/kg	0.00
38) Acenaphthene-d10	9.31	164	286684	40.00	ug/kg	0.00
61) Phenanthrene-d10	10.81	188	546847	40.00	ug/kg	0.00
75) Chrysene-d12	13.67	240	598306	40.00	ug/kg	0.00
84) Perylene-d12	15.75	264	626870	40.00	ug/kg	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
4) 2-Fluorophenol	4.97	112	184990	47.76	ug/kg	-0.03
Spiked Amount 100.000	Range 18 - 82		Recovery =	47.76%		
7) Phenol-d6	5.87	99	217367	47.43	ug/kg	0.00
Spiked Amount 100.000	Range 20 - 88		Recovery =	47.43%		
22) Nitrobenzene-d5	6.81	82	101420	27.67	ug/kg	-0.03
Spiked Amount 50.000	Range 27 - 100		Recovery =	55.34%		
43) 2-Fluorobiphenyl	8.61	172	263884	23.27	ug/kg	-0.02
Spiked Amount 50.000	Range 27 - 105		Recovery =	46.54%		
65) 2,4,6-Tribromophenol	10.10	330	77092	50.57	ug/kg	-0.01
Spiked Amount 100.000	Range 24 - 115		Recovery =	50.57%		
78) p-Terphenyl-d14	12.40	244	361237	24.26	ug/kg	0.00
Spiked Amount 50.000	Range 29 - 110		Recovery =	48.52%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration  
 AS07400.D 0824ABN.M Fri Oct 12 15:12:01 2018 SS

14  
14.2

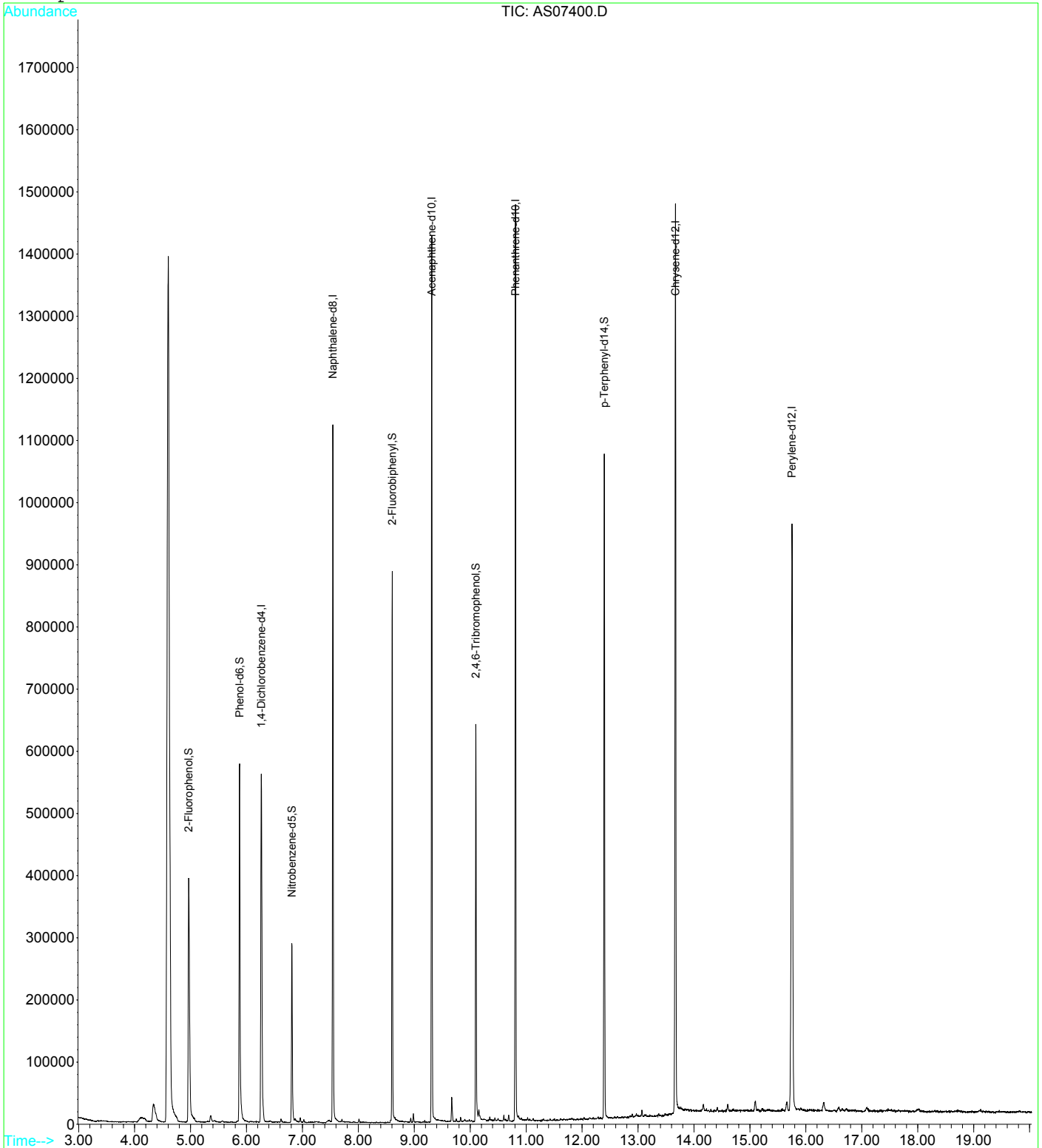
Quantitation Report

Data File : G:\HPCHEM\A\DATA\20181011\AS07400.D  
Acq On : 11 Oct 2018 16:57  
Sample : 8100452-14  
Misc : B8J1101 SOIL  
MS Integration Params: LSTINT.P  
Quant Time: Oct 11 17:22 2018

Vial: 8  
Operator: GCH  
Inst : GCMS-A  
Multiplr: 1.00

Quant Results File: 0824ABN.RES

Method : G:\HPCHEM\A\METHODS\0824ABN.M (RTE Integrator)  
Title : BNA Extractables GC/MS 8270D  
Last Update : Tue Oct 02 11:16:59 2018  
Response via : Initial Calibration



# SURROGATE RECOVERIES

Analysis Class: SEMIVOLATILES

Matrix: Soil Method: SW 846 8270D

## BN-PAH

Lab Number	File ID	NBZ	FPB	TER-D14	2FP	PHN-D6	TBP
8100452-02	DS18772.D	77.1	67.5	74.8			
8100452-03	DS18773.D	77.7	74.8	80.6			
8100452-04	DS18774.D	73.7	69.6	74.0			
8100452-05	DS18775.D	71.0	68.2	74.1			
8100452-07	DS18777.D	74.6	70.2	73.5			
8100452-08	DS18778.D	76.9	77.3	80.8			
8100452-09	AS07401.D	77.0	65.1	68.1			
8100452-10	AS07396.D	78.4	64.7	72.8			
8100452-11	AS07397.D	70.7	57.4	60.6			
8100452-13	AS07399.D	69.2	55.9	59.9			
B8J1101-BLK1	DS18769.D	81.0	76.3	81.9			
B8J1101-BS1	DS18770.D	87.6	83.0	90.3			
B8J1101-MS1	DS18779.D	51.6	51.0	55.2			
B8J1101-MSD1	DS18780.D	69.3	65.2	70.4			

## BNA+25

Lab Number	File ID	NBZ	FPB	TER-D14	2FP	PHN-D6	TBP
8100452-01	DS18771.D	75.0	69.9	77.6	68.6	72.0	64.2
8100452-06	DS18776.D	64.1	60.9	70.7	61.0	64.8	55.7
8100452-12	AS07398.D	76.3	63.8	68.4	67.7	68.4	71.6
8100452-14	AS07400.D	55.3	46.5	48.5	47.8	47.4	50.6
B8J1101-BLK1	DS18769.D	81.0	76.3	81.9	76.2	78.0	68.6
B8J1101-BS1	DS18770.D	87.6	83.0	90.3	87.0*	87.9	72.0
B8J1101-MS1	DS18779.D	51.6	51.0	55.2	47.7	50.8	47.4
B8J1101-MSD1	DS18780.D	69.3	65.2	70.4	66.4	70.8	61.4

Surrogate Limits		Lo Limit	Hi Limit
NBZ	Nitrobenzene-d5	27.1	99.6
FPB	2-Fluorobiphenyl	26.5	105
TER-D14	p-Terphenyl-d14	28.8	110
2FP	2-Fluorophenol	18	81.6
PHN-D6	Phenol-d6	19.9	88.2
TBP	2,4,6-Tribromophenol	23.7	115

\* - Outside of QC Limits

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14.3.

**Semivolatile Organics - GC/MS - Quality Control**  
**Aqua Pro-Tech Laboratories**

Batch B8J1101			Method: SW 846 8270D			Prepared: 10/11/2018				
Lab Number	Source	Analyte	Result	Units	Spike Level	Source Result	%REC Limits	%REC	RPD	RPD Limit
B8J1101-BS1		2,3,4,6-Tetrachlorophenol	2.60	mg/kg wet	3.33		77.9	51.8-112		
B8J1101-BS1		2,4,5-Trichlorophenol	2.74	mg/kg wet	3.33		82.1	49.3-106		
B8J1101-BS1		2,4,6-Trichlorophenol	2.68	mg/kg wet	3.33		80.3	51.9-97		
B8J1101-BS1		2,4-Dichlorophenol	2.78	mg/kg wet	3.33		83.5	57.3-101		
B8J1101-BS1		2,4-Dimethylphenol	3.03	mg/kg wet	3.33		91.0*	54.1-90.3		
B8J1101-BS1		2,4-Dinitrophenol	0.854	mg/kg wet	3.33		25.6	15-109		
B8J1101-BS1		2,4-Dinitrotoluene	2.90	mg/kg wet	3.33		87.0	48.2-110		
B8J1101-BS1		2,6-Dinitrotoluene	2.74	mg/kg wet	3.33		82.3	52.3-102		
B8J1101-BS1		2-Chloronaphthalene	2.64	mg/kg wet	3.33		79.3	50.4-88.1		
B8J1101-BS1		2-Chlorophenol	2.87	mg/kg wet	3.33		86.1	50.4-90.6		
B8J1101-BS1		2-Methylnaphthalene	2.74	mg/kg wet	3.33		82.1	58.8-99.1		
B8J1101-BS1		2-Methylphenol	3.00	mg/kg wet	3.33		90.1*	53.3-89.3		
B8J1101-BS1		2-Nitroaniline	3.01	mg/kg wet	3.33		90.2	53.6-103		
B8J1101-BS1		2-Nitrophenol	2.69	mg/kg wet	3.33		80.8	47.4-90.4		
B8J1101-BS1		3,3'-Dichlorobenzidine	2.32	mg/kg wet	3.33		69.5	27.7-175		
B8J1101-BS1		3+4-Methylphenol	2.92	mg/kg wet	3.33		87.7	48.9-90.5		
B8J1101-BS1		3-Nitroaniline	2.83	mg/kg wet	3.33		85.0	55.6-113		
B8J1101-BS1		4,6-Dinitro-2-methylphenol	1.60	mg/kg wet	3.33		47.9	24.4-112		
B8J1101-BS1		4-Bromophenyl-phenyl ether	2.79	mg/kg wet	3.33		83.6	54.7-102		
B8J1101-BS1		4-Chloro-3-methylphenol	3.04	mg/kg wet	3.33		91.2	54-102		
B8J1101-BS1		4-Chloroaniline	2.58	mg/kg wet	3.33		77.5	15-163		
B8J1101-BS1		4-Chlorophenyl phenyl ether	2.65	mg/kg wet	3.33		79.6	48.5-103		
B8J1101-BS1		4-Nitroaniline	3.11	mg/kg wet	3.33		93.3	47.3-162		
B8J1101-BS1		4-Nitrophenol	3.20	mg/kg wet	3.33		96.1	15-178		
B8J1101-BS1		Acenaphthene	2.71	mg/kg wet	3.33		81.2	52.1-88		
B8J1101-BS1		Acenaphthylene	2.70	mg/kg wet	3.33		80.9	45.6-89.2		
B8J1101-BS1		Acetophenone	2.53	mg/kg wet	3.33		75.8	44.8-81		
B8J1101-BS1		Anthracene	2.91	mg/kg wet	3.33		87.2	51.8-96.7		
B8J1101-BS1		Atrazine	2.51	mg/kg wet	3.33		75.3	34.4-161		
B8J1101-BS1		Benzaldehyde	0.0572	mg/kg wet	3.33		1.72*	15-99.5		
B8J1101-BS1		Benzo(a)anthracene	2.79	mg/kg wet	3.33		83.6	54.4-90.2		
B8J1101-BS1		Benzo(a)pyrene	2.93	mg/kg wet	3.33		87.8	56.9-99.9		
B8J1101-BS1		Benzo(b)fluoranthene	3.01	mg/kg wet	3.33		90.2	59-104		
B8J1101-BS1		Benzo(g,h,i)perylene	2.96	mg/kg wet	3.33		88.9	55.8-113		
B8J1101-BS1		Benzo(k)fluoranthene	3.02	mg/kg wet	3.33		90.6	56.8-101		
B8J1101-BS1		Biphenyl	2.91	mg/kg wet	3.33		87.2	68.5-109		
B8J1101-BS1		bis(2-chloroethoxy)methane	2.91	mg/kg wet	3.33		87.2	59.9-96		
B8J1101-BS1		bis(2-chloroethyl)ether	2.80	mg/kg wet	3.33		84.0	25.4-102		
B8J1101-BS1		bis(2-chloroisopropyl)ether	2.67	mg/kg wet	3.33		80.1	22.7-94.1		
B8J1101-BS1		bis(2-ethylhexyl)phthalate	3.14	mg/kg wet	3.33		94.2	53.2-109		
B8J1101-BS1		Butylbenzylphthalate	3.24	mg/kg wet	3.33		97.3	51-107		
B8J1101-BS1		Caprolactam	2.82	mg/kg wet	3.33		84.7	51.6-117		
B8J1101-BS1		Carbazole	2.92	mg/kg wet	3.33		87.6	26.1-122		
B8J1101-BS1		Chrysene	2.79	mg/kg wet	3.33		83.8	50.3-91.6		

\* - Outside of QC Limits

J - Result is between the MDL and RL for an Analysis reported to an RL

F-III

NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

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14.4.

**Semivolatile Organics - GC/MS - Quality Control**  
**Aqua Pro-Tech Laboratories**

Batch B8J1101 (cont.)			Method: SW 846 8270D			Prepared: 10/11/2018				
Lab Number	Source	Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
B8J1101-BS1		Dibenzo(a,h)anthracene	2.80	mg/kg wet	3.33		84.1	52.3-109		
B8J1101-BS1		Dibenzofuran	2.76	mg/kg wet	3.33		82.8	52.4-94		
B8J1101-BS1		Diethylphthalate	2.98	mg/kg wet	3.33		89.4	50.3-93.7		
B8J1101-BS1		Dimethylphthalate	2.93	mg/kg wet	3.33		88.0	52.1-92		
B8J1101-BS1		Di-n-butylphthalate	3.00	mg/kg wet	3.33		89.9	50.2-105		
B8J1101-BS1		Di-n-octylphthalate	3.22	mg/kg wet	3.33		96.6	41.8-121		
B8J1101-BS1		Fluoranthene	2.77	mg/kg wet	3.33		83.0	54.9-92.7		
B8J1101-BS1		Fluorene	2.65	mg/kg wet	3.33		79.5	52.1-89.5		
B8J1101-BS1		Hexachlorobenzene	2.45	mg/kg wet	3.33		73.5	45.6-102		
B8J1101-BS1		Hexachlorobutadiene	2.43	mg/kg wet	3.33		72.9	39.2-104		
B8J1101-BS1		Hexachlorocyclopentadiene	2.38	mg/kg wet	3.33		71.5	37.5-94.3		
B8J1101-BS1		Hexachloroethane	2.71	mg/kg wet	3.33		81.3	49.3-83.4		
B8J1101-BS1		Indeno(1,2,3-cd)pyrene	2.94	mg/kg wet	3.33		88.2	49.7-115		
B8J1101-BS1		Isophorone	3.44	mg/kg wet	3.33		103*	63.1-100		
B8J1101-BS1		Naphthalene	2.53	mg/kg wet	3.33		75.8	49-85.3		
B8J1101-BS1		Nitrobenzene	2.86	mg/kg wet	3.33		85.9	51.4-89.6		
B8J1101-BS1		n-Nitroso-di-n-propylamine	2.96	mg/kg wet	3.33		88.8	47.3-94		
B8J1101-BS1		n-Nitrosodiphenylamine	2.95	mg/kg wet	3.33		88.4	56.4-106		
B8J1101-BS1		Pentachlorophenol	1.42	mg/kg wet	3.33		42.5	15-116		
B8J1101-BS1		Phenanthrene	2.90	mg/kg wet	3.33		86.9	51.6-93.8		
B8J1101-BS1		Phenol	3.21	mg/kg wet	3.33		96.4*	42.3-86.3		
B8J1101-BS1		Pyrene	2.93	mg/kg wet	3.33		87.9	46.5-96.7		

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14.4.

\* - Outside of QC Limits      J - Result is between the MDL and RL for an Analysis reported to an RL  
NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

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**Semivolatile Organics - GC/MS - Quality Control**  
**Aqua Pro-Tech Laboratories**

Batch B8J1101 (cont.)			Method: SW 846 8270D			Prepared: 10/11/2018				
Lab Number	Source	Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
B8J1101-MS1	8100452-01	2,3,4,6-Tetrachlorophenol	1.47	mg/kg dry	3.71	ND	39.7	31.5-156		
B8J1101-MS1	8100452-01	2,4,5-Trichlorophenol	1.78	mg/kg dry	3.71	ND	47.9	39.1-118		
B8J1101-MS1	8100452-01	2,4,6-Trichlorophenol	1.74	mg/kg dry	3.71	ND	46.9	40.4-117		
B8J1101-MS1	8100452-01	2,4-Dichlorophenol	1.77	mg/kg dry	3.71	ND	47.7	36.4-101		
B8J1101-MS1	8100452-01	2,4-Dimethylphenol	2.07	mg/kg dry	3.71	ND	55.8	36.2-114		
B8J1101-MS1	8100452-01	2,4-Dinitrophenol	0.141	mg/kg dry	3.71	ND	3.79*	15-63		
B8J1101-MS1	8100452-01	2,4-Dinitrotoluene	2.02	mg/kg dry	3.71	ND	54.6	32.9-118		
B8J1101-MS1	8100452-01	2,6-Dinitrotoluene	1.88	mg/kg dry	3.71	ND	50.7	33.3-121		
B8J1101-MS1	8100452-01	2-Chloronaphthalene	1.75	mg/kg dry	3.71	ND	47.1	39-96.6		
B8J1101-MS1	8100452-01	2-Chlorophenol	1.68	mg/kg dry	3.71	ND	45.2	37-105		
B8J1101-MS1	8100452-01	2-Methylnaphthalene	1.86	mg/kg dry	3.71	ND	50.1	22.1-135		
B8J1101-MS1	8100452-01	2-Methylphenol	1.84	mg/kg dry	3.71	ND	49.6	35.8-108		
B8J1101-MS1	8100452-01	2-Nitroaniline	1.94	mg/kg dry	3.71	ND	52.4	46.6-119		
B8J1101-MS1	8100452-01	2-Nitrophenol	1.63	mg/kg dry	3.71	ND	44.1	15-102		
B8J1101-MS1	8100452-01	3,3'-Dichlorobenzidine	1.59	mg/kg dry	3.71	ND	42.9	15-168		
B8J1101-MS1	8100452-01	3+4-Methylphenol	1.80	mg/kg dry	3.71	ND	48.5	37.5-108		
B8J1101-MS1	8100452-01	3-Nitroaniline	1.91	mg/kg dry	3.71	ND	51.4*	81.4-181		
B8J1101-MS1	8100452-01	4,6-Dinitro-2-methylphenol	0.820	mg/kg dry	3.71	ND	22.1	15-80.1		
B8J1101-MS1	8100452-01	4-Bromophenyl-phenyl ether	1.86	mg/kg dry	3.71	ND	50.2	47.8-116		
B8J1101-MS1	8100452-01	4-Chloro-3-methylphenol	1.96	mg/kg dry	3.71	ND	52.8	42.5-109		
B8J1101-MS1	8100452-01	4-Chloroaniline	1.58	mg/kg dry	3.71	ND	42.5	36.6-159		
B8J1101-MS1	8100452-01	4-Chlorophenyl phenyl ether	1.79	mg/kg dry	3.71	ND	48.2	37.8-127		
B8J1101-MS1	8100452-01	4-Nitroaniline	2.23	mg/kg dry	3.71	ND	60.1*	65.5-172		
B8J1101-MS1	8100452-01	4-Nitrophenol	1.99	mg/kg dry	3.71	ND	53.7	15-149		
B8J1101-MS1	8100452-01	Acenaphthene	1.80	mg/kg dry	3.71	ND	48.5	46.5-107		
B8J1101-MS1	8100452-01	Acenaphthylene	1.83	mg/kg dry	3.71	ND	49.4	44.9-104		
B8J1101-MS1	8100452-01	Acetophenone	1.59	mg/kg dry	3.71	ND	42.9	27.2-114		
B8J1101-MS1	8100452-01	Anthracene	2.00	mg/kg dry	3.71	ND	54.0	40.6-106		
B8J1101-MS1	8100452-01	Atrazine	1.82	mg/kg dry	3.71	ND	49.1	48.9-137		
B8J1101-MS1	8100452-01	Benzaldehyde	ND	mg/kg dry	3.71	ND	*	15-187		
B8J1101-MS1	8100452-01	Benzo(a)anthracene	1.93	mg/kg dry	3.71	0.0995	49.3	46.3-117		
B8J1101-MS1	8100452-01	Benzo(a)pyrene	1.98	mg/kg dry	3.71	0.0887	51.0	40.6-131		
B8J1101-MS1	8100452-01	Benzo(b)fluoranthene	2.21	mg/kg dry	3.71	0.107	56.8	41.1-134		
B8J1101-MS1	8100452-01	Benzo(g,h,i)perylene	2.07	mg/kg dry	3.71	0.0702	53.9	15-104		
B8J1101-MS1	8100452-01	Benzo(k)fluoranthene	2.05	mg/kg dry	3.71	0.0788	53.2	41-150		
B8J1101-MS1	8100452-01	Biphenyl	1.99	mg/kg dry	3.71	ND	53.7	42.6-106		
B8J1101-MS1	8100452-01	bis(2-chloroethoxy)methane	1.87	mg/kg dry	3.71	ND	50.6	42.9-110		
B8J1101-MS1	8100452-01	bis(2-chloroethyl)ether	1.63	mg/kg dry	3.71	ND	44.0	37-110		
B8J1101-MS1	8100452-01	bis(2-chloroisopropyl)ether	1.62	mg/kg dry	3.71	ND	43.8	31-132		
B8J1101-MS1	8100452-01	bis(2-ethylhexyl)phthalate	2.24	mg/kg dry	3.71	ND	60.3	53.6-131		
B8J1101-MS1	8100452-01	Butylbenzylphthalate	2.19	mg/kg dry	3.71	ND	59.0	46.6-134		
B8J1101-MS1	8100452-01	Caprolactam	1.97	mg/kg dry	3.71	ND	53.1	38.6-126		
B8J1101-MS1	8100452-01	Carbazole	2.01	mg/kg dry	3.71	ND	54.1	53.7-153		
B8J1101-MS1	8100452-01	Chrysene	1.98	mg/kg dry	3.71	0.0909	50.9	40.5-125		

\* - Outside of QC Limits

J - Result is between the MDL and RL for an Analysis reported to an RL

F-III

NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

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14.4.

**Semivolatile Organics - GC/MS - Quality Control**  
**Aqua Pro-Tech Laboratories**

Batch B8J1101 (cont.)			Method: SW 846 8270D			Prepared: 10/11/2018				
Lab Number	Source	Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
B8J1101-MS1	8100452-01	Dibenzo(a,h)anthracene	1.95	mg/kg dry	3.71	ND	52.5	15-109		
B8J1101-MS1	8100452-01	Dibenzofuran	1.92	mg/kg dry	3.71	ND	51.7	15-138		
B8J1101-MS1	8100452-01	Diethylphthalate	2.04	mg/kg dry	3.71	ND	54.9	40.1-132		
B8J1101-MS1	8100452-01	Dimethylphthalate	2.08	mg/kg dry	3.71	ND	56.0	32.5-112		
B8J1101-MS1	8100452-01	Di-n-butylphthalate	2.13	mg/kg dry	3.71	ND	57.5	40.1-129		
B8J1101-MS1	8100452-01	Di-n-octylphthalate	2.38	mg/kg dry	3.71	ND	64.3*	71.6-172		
B8J1101-MS1	8100452-01	Fluoranthene	1.96	mg/kg dry	3.71	0.167	48.4	43.8-116		
B8J1101-MS1	8100452-01	Fluorene	1.84	mg/kg dry	3.71	ND	49.6	43.7-110		
B8J1101-MS1	8100452-01	Hexachlorobenzene	1.71	mg/kg dry	3.71	ND	46.1	39.4-110		
B8J1101-MS1	8100452-01	Hexachlorobutadiene	1.49	mg/kg dry	3.71	ND	40.1	37.7-119		
B8J1101-MS1	8100452-01	Hexachlorocyclopentadiene	1.06	mg/kg dry	3.71	ND	28.6	15-62.9		
B8J1101-MS1	8100452-01	Hexachloroethane	1.54	mg/kg dry	3.71	ND	41.7	15-110		
B8J1101-MS1	8100452-01	Indeno(1,2,3-cd)pyrene	2.04	mg/kg dry	3.71	0.0610	53.5	15-107		
B8J1101-MS1	8100452-01	Isophorone	2.20	mg/kg dry	3.71	ND	59.3	41.2-120		
B8J1101-MS1	8100452-01	Naphthalene	1.64	mg/kg dry	3.71	ND	44.1	25.3-117		
B8J1101-MS1	8100452-01	Nitrobenzene	1.80	mg/kg dry	3.71	ND	48.4	40.1-117		
B8J1101-MS1	8100452-01	n-Nitroso-di-n-propylamine	1.78	mg/kg dry	3.71	ND	48.0	27.8-169		
B8J1101-MS1	8100452-01	n-Nitrosodiphenylamine	2.08	mg/kg dry	3.71	ND	56.0	45.4-155		
B8J1101-MS1	8100452-01	Pentachlorophenol	0.540	mg/kg dry	3.71	ND	14.6*	15-104		
B8J1101-MS1	8100452-01	Phenanthrene	2.05	mg/kg dry	3.71	0.126	51.8	30-114		
B8J1101-MS1	8100452-01	Phenol	1.87	mg/kg dry	3.71	ND	50.5	28.3-131		
B8J1101-MS1	8100452-01	Pyrene	2.17	mg/kg dry	3.71	0.158	54.3	33.7-116		

\* - Outside of QC Limits

J - Result is between the MDL and RL for an Analysis reported to an RL

NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

F-III

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14.4.

**Semivolatile Organics - GC/MS - Quality Control**  
**Aqua Pro-Tech Laboratories**

Batch B8J1101 (cont.)			Method: SW 846 8270D			Prepared: 10/11/2018				
Lab Number	Source	Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
B8J1101-MSD1	8100452-01	2,3,4,6-Tetrachlorophenol	2.29	mg/kg dry	3.71	ND	61.8	31.5-156	43.6*	30
B8J1101-MSD1	8100452-01	2,4,5-Trichlorophenol	2.46	mg/kg dry	3.71	ND	66.2	39.1-118	32.2*	30
B8J1101-MSD1	8100452-01	2,4,6-Trichlorophenol	2.29	mg/kg dry	3.71	ND	61.7	40.4-117	27.2	30
B8J1101-MSD1	8100452-01	2,4-Dichlorophenol	2.51	mg/kg dry	3.71	ND	67.8	36.4-101	34.8*	30
B8J1101-MSD1	8100452-01	2,4-Dimethylphenol	2.80	mg/kg dry	3.71	ND	75.5	36.2-114	30.0	30
B8J1101-MSD1	8100452-01	2,4-Dinitrophenol	0.459	mg/kg dry	3.71	ND	12.4*	15-63	106*	30
B8J1101-MSD1	8100452-01	2,4-Dinitrotoluene	2.60	mg/kg dry	3.71	ND	70.2	32.9-118	25.1	30
B8J1101-MSD1	8100452-01	2,6-Dinitrotoluene	2.48	mg/kg dry	3.71	ND	66.8	33.3-121	27.4	30
B8J1101-MSD1	8100452-01	2-Chloronaphthalene	2.39	mg/kg dry	3.71	ND	64.4	39-96.6	31.1*	30
B8J1101-MSD1	8100452-01	2-Chlorophenol	2.45	mg/kg dry	3.71	ND	66.1	37-105	37.6*	30
B8J1101-MSD1	8100452-01	2-Methylnaphthalene	2.49	mg/kg dry	3.71	ND	67.1	22.1-135	29.1	30
B8J1101-MSD1	8100452-01	2-Methylphenol	2.55	mg/kg dry	3.71	ND	68.7	35.8-108	32.3*	30
B8J1101-MSD1	8100452-01	2-Nitroaniline	2.77	mg/kg dry	3.71	ND	74.7	46.6-119	35.0*	30
B8J1101-MSD1	8100452-01	2-Nitrophenol	2.47	mg/kg dry	3.71	ND	66.6	15-102	40.8*	30
B8J1101-MSD1	8100452-01	3,3'-Dichlorobenzidine	1.98	mg/kg dry	3.71	ND	53.4	15-168	21.7	30
B8J1101-MSD1	8100452-01	3+4-Methylphenol	2.54	mg/kg dry	3.71	ND	68.6	37.5-108	34.3*	30
B8J1101-MSD1	8100452-01	3-Nitroaniline	2.58	mg/kg dry	3.71	ND	69.7*	81.4-181	30.2*	30
B8J1101-MSD1	8100452-01	4,6-Dinitro-2-methylphenol	1.17	mg/kg dry	3.71	ND	31.7	15-80.1	35.6*	30
B8J1101-MSD1	8100452-01	4-Bromophenyl-phenyl ether	2.43	mg/kg dry	3.71	ND	65.7	47.8-116	26.6	30
B8J1101-MSD1	8100452-01	4-Chloro-3-methylphenol	2.68	mg/kg dry	3.71	ND	72.3	42.5-109	31.2*	30
B8J1101-MSD1	8100452-01	4-Chloroaniline	2.34	mg/kg dry	3.71	ND	63.0	36.6-159	38.8*	30
B8J1101-MSD1	8100452-01	4-Chlorophenyl phenyl ether	2.43	mg/kg dry	3.71	ND	65.6	37.8-127	30.6*	30
B8J1101-MSD1	8100452-01	4-Nitroaniline	2.94	mg/kg dry	3.71	ND	79.3	65.5-172	27.6	30
B8J1101-MSD1	8100452-01	4-Nitrophenol	2.94	mg/kg dry	3.71	ND	79.3	15-149	38.5*	30
B8J1101-MSD1	8100452-01	Acenaphthene	2.40	mg/kg dry	3.71	ND	64.9	46.5-107	28.9	30
B8J1101-MSD1	8100452-01	Acenaphthylene	2.43	mg/kg dry	3.71	ND	65.4	44.9-104	27.9	30
B8J1101-MSD1	8100452-01	Acetophenone	2.16	mg/kg dry	3.71	ND	58.3	27.2-114	30.4*	30
B8J1101-MSD1	8100452-01	Anthracene	2.61	mg/kg dry	3.71	ND	70.5	40.6-106	26.4	30
B8J1101-MSD1	8100452-01	Atrazine	2.15	mg/kg dry	3.71	ND	58.0	48.9-137	16.7	30
B8J1101-MSD1	8100452-01	Benzaldehyde	0.0485	mg/kg dry	3.71	ND	1.31*	15-187		30
B8J1101-MSD1	8100452-01	Benzo(a)anthracene	2.48	mg/kg dry	3.71	0.0995	64.2	46.3-117	25.0	30
B8J1101-MSD1	8100452-01	Benzo(a)pyrene	2.64	mg/kg dry	3.71	0.0887	68.8	40.6-131	28.6	30
B8J1101-MSD1	8100452-01	Benzo(b)fluoranthene	2.92	mg/kg dry	3.71	0.107	76.0	41.1-134	27.8	30
B8J1101-MSD1	8100452-01	Benzo(g,h,i)perylene	2.77	mg/kg dry	3.71	0.0702	72.9	15-104	29.0	30
B8J1101-MSD1	8100452-01	Benzo(k)fluoranthene	2.71	mg/kg dry	3.71	0.0788	71.0	41-150	27.7	30
B8J1101-MSD1	8100452-01	Biphenyl	2.55	mg/kg dry	3.71	ND	68.7	42.6-106	24.5	30
B8J1101-MSD1	8100452-01	bis(2-chloroethoxy)methane	2.70	mg/kg dry	3.71	ND	72.8	42.9-110	36.0*	30
B8J1101-MSD1	8100452-01	bis(2-chloroethyl)ether	2.39	mg/kg dry	3.71	ND	64.6	37-110	37.9*	30
B8J1101-MSD1	8100452-01	bis(2-chloroisopropyl)ether	2.30	mg/kg dry	3.71	ND	61.9	31-132	34.2*	30
B8J1101-MSD1	8100452-01	bis(2-ethylhexyl)phthalate	2.86	mg/kg dry	3.71	ND	77.1	53.6-131	24.4	30
B8J1101-MSD1	8100452-01	Butylbenzylphthalate	2.80	mg/kg dry	3.71	ND	75.6	46.6-134	24.6	30
B8J1101-MSD1	8100452-01	Caprolactam	2.57	mg/kg dry	3.71	ND	69.3	38.6-126	26.6	30
B8J1101-MSD1	8100452-01	Carbazole	2.58	mg/kg dry	3.71	ND	69.6	53.7-153	25.1	30
B8J1101-MSD1	8100452-01	Chrysene	2.53	mg/kg dry	3.71	0.0909	65.7	40.5-125	24.4	30

\* - Outside of QC Limits      J - Result is between the MDL and RL for an Analysis reported to an RL  
F-III      NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

14  
14.4.

**Semivolatile Organics - GC/MS - Quality Control**  
**Aqua Pro-Tech Laboratories**

Batch B8J1101 (cont.)			Method: SW 846 8270D			Prepared: 10/11/2018				
Lab Number	Source	Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
B8J1101-MSD1	8100452-01	Dibenzo(a,h)anthracene	2.62	mg/kg dry	3.71	ND	70.7	15-109	29.6	30
B8J1101-MSD1	8100452-01	Dibenzofuran	2.49	mg/kg dry	3.71	ND	67.2	15-138	26.1	30
B8J1101-MSD1	8100452-01	Diethylphthalate	2.70	mg/kg dry	3.71	ND	72.8	40.1-132	28.0	30
B8J1101-MSD1	8100452-01	Dimethylphthalate	2.62	mg/kg dry	3.71	ND	70.5	32.5-112	23.0	30
B8J1101-MSD1	8100452-01	Di-n-butylphthalate	2.69	mg/kg dry	3.71	ND	72.4	40.1-129	22.9	30
B8J1101-MSD1	8100452-01	Di-n-octylphthalate	3.01	mg/kg dry	3.71	ND	81.1	71.6-172	23.1	30
B8J1101-MSD1	8100452-01	Fluoranthene	2.56	mg/kg dry	3.71	0.167	64.7	43.8-116	26.6	30
B8J1101-MSD1	8100452-01	Fluorene	2.44	mg/kg dry	3.71	ND	65.8	43.7-110	28.1	30
B8J1101-MSD1	8100452-01	Hexachlorobenzene	2.25	mg/kg dry	3.71	ND	60.7	39.4-110	27.2	30
B8J1101-MSD1	8100452-01	Hexachlorobutadiene	2.19	mg/kg dry	3.71	ND	59.1	37.7-119	38.4*	30
B8J1101-MSD1	8100452-01	Hexachlorocyclopentadiene	1.60	mg/kg dry	3.71	ND	43.1	15-62.9	40.4*	30
B8J1101-MSD1	8100452-01	Hexachloroethane	2.21	mg/kg dry	3.71	ND	59.7	15-110	35.5*	30
B8J1101-MSD1	8100452-01	Indeno(1,2,3-cd)pyrene	2.69	mg/kg dry	3.71	0.0610	70.8	15-107	27.1	30
B8J1101-MSD1	8100452-01	Isophorone	3.08	mg/kg dry	3.71	ND	83.0	41.2-120	33.3*	30
B8J1101-MSD1	8100452-01	Naphthalene	2.27	mg/kg dry	3.71	ND	61.3	25.3-117	32.6*	30
B8J1101-MSD1	8100452-01	Nitrobenzene	2.55	mg/kg dry	3.71	ND	68.8	40.1-117	34.7*	30
B8J1101-MSD1	8100452-01	n-Nitroso-di-n-propylamine	2.51	mg/kg dry	3.71	ND	67.8	27.8-169	34.2*	30
B8J1101-MSD1	8100452-01	n-Nitrosodiphenylamine	2.70	mg/kg dry	3.71	ND	72.9	45.4-155	26.1	30
B8J1101-MSD1	8100452-01	Pentachlorophenol	0.801	mg/kg dry	3.71	ND	21.6	15-104	38.8*	30
B8J1101-MSD1	8100452-01	Phenanthrene	2.61	mg/kg dry	3.71	0.126	67.1	30-114	24.4	30
B8J1101-MSD1	8100452-01	Phenol	2.77	mg/kg dry	3.71	ND	74.8	28.3-131	38.8*	30
B8J1101-MSD1	8100452-01	Pyrene	2.77	mg/kg dry	3.71	0.158	70.5	33.7-116	24.3	30

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14.4.

\* - Outside of QC Limits      J - Result is between the MDL and RL for an Analysis reported to an RL  
NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

F-III

## METHOD BLANK SUMMARY

Batch ID: B8J1101

<u>Lab Number</u>	<u>Sample Id</u>	<u>Extraction Date</u>	<u>Analysis Date</u>
B8J1101-BLK1	BLK1	10/11/2018	10/11/2018 13:11
B8J1101-BS1	BS1	10/11/2018	10/11/2018 13:40
B8J1101-MS1	MS1	10/11/2018	10/11/2018 17:57
B8J1101-MSD1	MSD1	10/11/2018	10/11/2018 18:26
8100452-01	NTP-1A	10/11/2018	10/11/2018 14:10
8100452-02	NTP-2A	10/11/2018	10/11/2018 14:38
8100452-03	NTP-2B	10/11/2018	10/11/2018 15:07
8100452-04	NTP-3B	10/11/2018	10/11/2018 15:35
8100452-05	NTP-4B	10/11/2018	10/11/2018 16:04
8100452-06	NTP-6	10/11/2018	10/11/2018 16:32
8100452-07	NTP-7	10/11/2018	10/11/2018 17:01
8100452-08	STP-1B	10/11/2018	10/11/2018 17:29
8100452-09	STP-2B	10/11/2018	10/11/2018 17:26
8100452-10	STP-3B	10/11/2018	10/11/2018 14:58
8100452-11	STP-4A	10/11/2018	10/11/2018 15:28
8100452-12	STP-4B	10/11/2018	10/11/2018 15:57
8100452-13	STP-5	10/11/2018	10/11/2018 16:27
8100452-14	STP-7	10/11/2018	10/11/2018 16:57

# INSTRUMENT PERFORMANCE CHECK

Client: Peak Environmental  
 Instrument ID: GCMS-D  
 Sequence: S8H0618

Work Order: 8100452  
 Project: Ridgewood

Lab Sample ID: **S8H0618-TUN1** Injection Date: 08/02/2018 Injection Time: 20:15  
 Lab File ID: DS17873a.D

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	PASS/FAIL
51	30 - 60% of 198	47.1	PASS
68	Less than 2% of 69	0.689	PASS
69	Less than 100% of 198	47.2	PASS
70	Less than 2% of 69	0.553	PASS
127	40 - 60% of 198	53.3	PASS
197	Less than 1% of 198	0	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	6.83	PASS
275	10 - 30% of 198	22	PASS
365	1 - 100% of 198	2.28	PASS
441	0.01 - 99.9% of 443	70.5	PASS
442	40 - 100% of 198	73.6	PASS
443	17 - 23% of 442	19.2	PASS

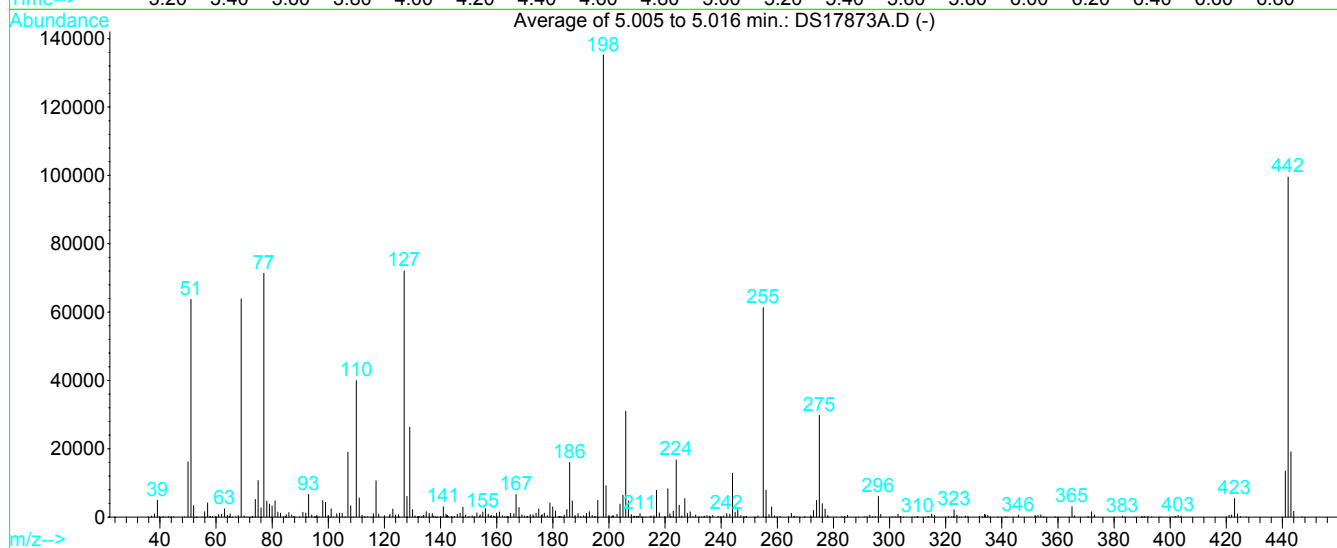
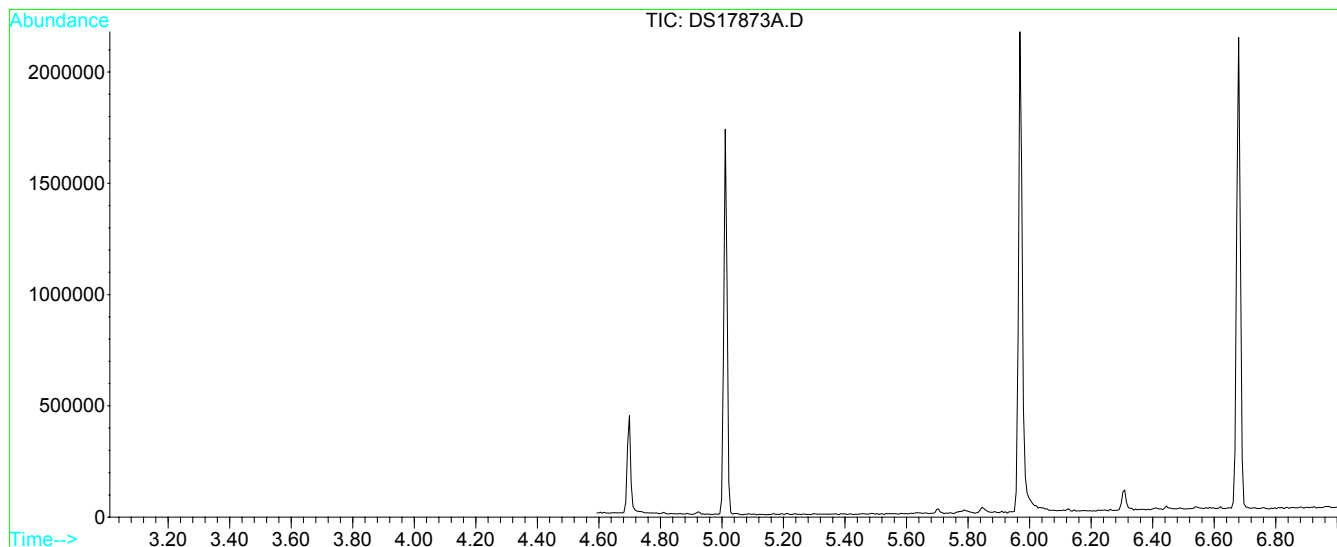
### Samples Associated with Tune

Client ID or QC Type	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Cal Standard	S8H0618-CAL1	DS17875.D	08/02/2018	21:02.00
Cal Standard	S8H0618-CAL2	DS17876.D	08/02/2018	21:31.00
Cal Standard	S8H0618-CAL3	DS17877.D	08/02/2018	22:01.00
Cal Standard	S8H0618-CAL4	DS17879.D	08/02/2018	23:00.00
Cal Standard	S8H0618-CAL5	DS17880.D	08/02/2018	23:29.00
Cal Standard	S8H0618-CAL6	DS17881.D	08/02/2018	23:59.00

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14.6.

DFTPP

Data File : G:\HPCHEM\D\DATA\20180802\DS17873A.D Vial: 2  
 Acq On : 2 Aug 2018 20:15 Operator: GCH  
 Sample : SEQ-TUN Inst : GCMS-D  
 Misc : Multiplr: 1.00  
 MS Integration Params: rteint.p  
 Method : G:\HPCHEM\D\METHODS\0802ABN.M (RTE Integrator)  
 Title : BNA Extractables GC/MS 8270D



Spectrum Information: Average of 5.005 to 5.016 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	47.1	63731	PASS
68	69	0.00	2	0.7	440	PASS
69	198	0.00	100	47.2	63846	PASS
70	69	0.00	2	0.6	353	PASS
127	198	40	60	53.3	72064	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	135253	PASS
199	198	5	9	6.8	9244	PASS
275	198	10	30	22.0	29723	PASS
365	198	1	100	2.3	3084	PASS
441	443	0.01	100	70.5	13472	PASS
442	198	40	100	73.6	99555	PASS
443	442	17	23	19.2	19099	PASS

DS17873A.D 0802ABN.M Mon Aug 06 19:16:14 2018 SS

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14.6.

# INSTRUMENT PERFORMANCE CHECK

Client: Peak Environmental  
 Instrument ID: GCMS-A  
 Sequence: S8H2831

Work Order: 8100452  
 Project: Ridgewood

Lab Sample ID: **S8H2831-TUN1** Injection Date: 08/24/2018 Injection Time: 17:07  
 Lab File ID: AS06906.D

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	PASS/FAIL
51	30 - 60% of 198	43.6	PASS
68	Less than 2% of 69	0	PASS
69	Less than 100% of 198	36.3	PASS
70	Less than 2% of 69	0.577	PASS
127	40 - 60% of 198	44.4	PASS
197	Less than 1% of 198	0	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	7.06	PASS
275	10 - 30% of 198	25.6	PASS
365	1 - 100% of 198	2.84	PASS
441	0.01 - 99.9% of 443	78.2	PASS
442	40 - 100% of 198	68.2	PASS
443	17 - 23% of 442	19.3	PASS

## Samples Associated with Tune

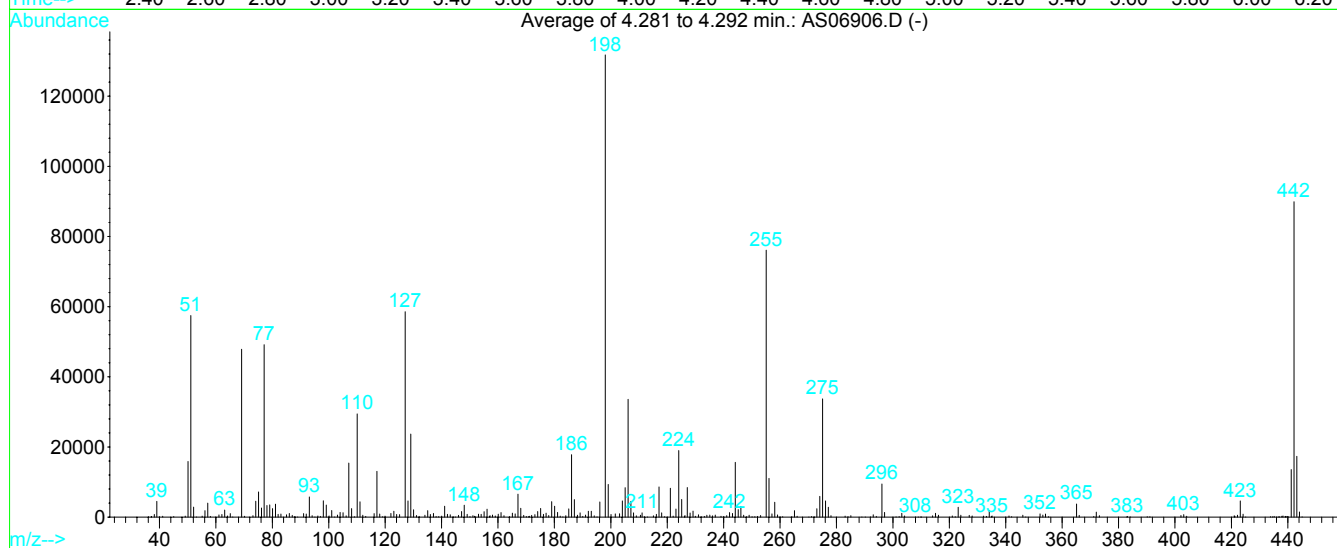
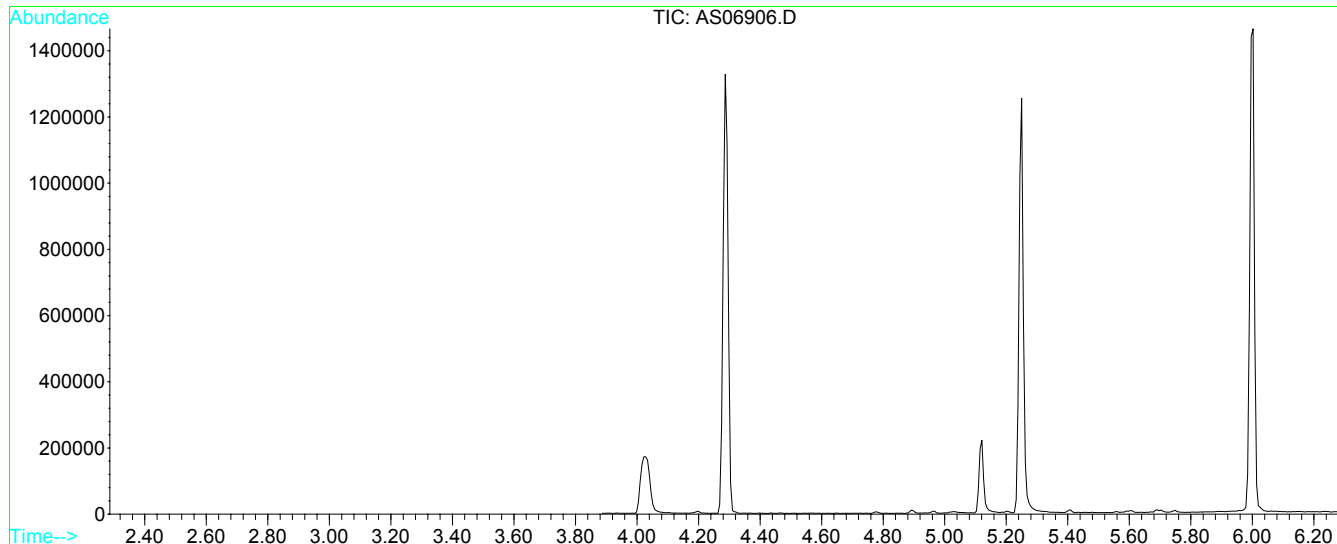
Client ID or QC Type	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Cal Standard	S8H2831-CAL1	AS06908.D	08/24/2018	17:58.00
Cal Standard	S8H2831-CAL2	AS06909.D	08/24/2018	18:26.00
Cal Standard	S8H2831-CAL3	AS06911.D	08/24/2018	19:23.00
Cal Standard	S8H2831-CAL4	AS06912.D	08/24/2018	19:52.00
Cal Standard	S8H2831-CAL5	AS06913.D	08/24/2018	20:20.00
Cal Standard	S8H2831-CAL6	AS06914.D	08/24/2018	20:49.00

14  
14.6.



DFTPP

Data File : G:\HPCHEM\A\DATA\20180824\AS06906.D Vial: 2  
 Acq On : 24 Aug 2018 17:07 Operator: GCH  
 Sample : SEQ-TUN Inst : GCMS-A  
 Misc : Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Method : G:\HPCHEM\A\METHODS\0824ABN.M (RTE Integrator)  
 Title : BNA Extractables GC/MS 8270D



Spectrum Information: Average of 4.281 to 4.292 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	43.6	57469	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	36.3	47853	PASS
70	69	0.00	2	0.6	276	PASS
127	198	40	60	44.4	58541	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	131757	PASS
199	198	5	9	7.1	9308	PASS
275	198	10	30	25.6	33699	PASS
365	198	1	100	2.8	3748	PASS
441	443	0.01	100	78.2	13568	PASS
442	198	40	100	68.2	89917	PASS
443	442	17	23	19.3	17357	PASS

AS06906.D 0824ABN.M Tue Aug 28 18:57:50 2018 SS

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14.6.

# INSTRUMENT PERFORMANCE CHECK

Client: Peak Environmental  
 Instrument ID: GCMS-A  
 Sequence: S8J1212

Work Order: 8100452  
 Project: Ridgewood

Lab Sample ID: **S8J1212-TUN1** Injection Date: 10/11/2018 Injection Time: 14:09  
 Lab File ID: AS07394.D

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	PASS/FAIL
51	30 - 60% of 198	41.1	PASS
68	Less than 2% of 69	0	PASS
69	Less than 100% of 198	35.2	PASS
70	Less than 2% of 69	0.184	PASS
127	40 - 60% of 198	43.7	PASS
197	Less than 1% of 198	0	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	7.07	PASS
275	10 - 30% of 198	26.7	PASS
365	1 - 100% of 198	2.93	PASS
441	0.01 - 99.9% of 443	75.9	PASS
442	40 - 100% of 198	66	PASS
443	17 - 23% of 442	20.3	PASS

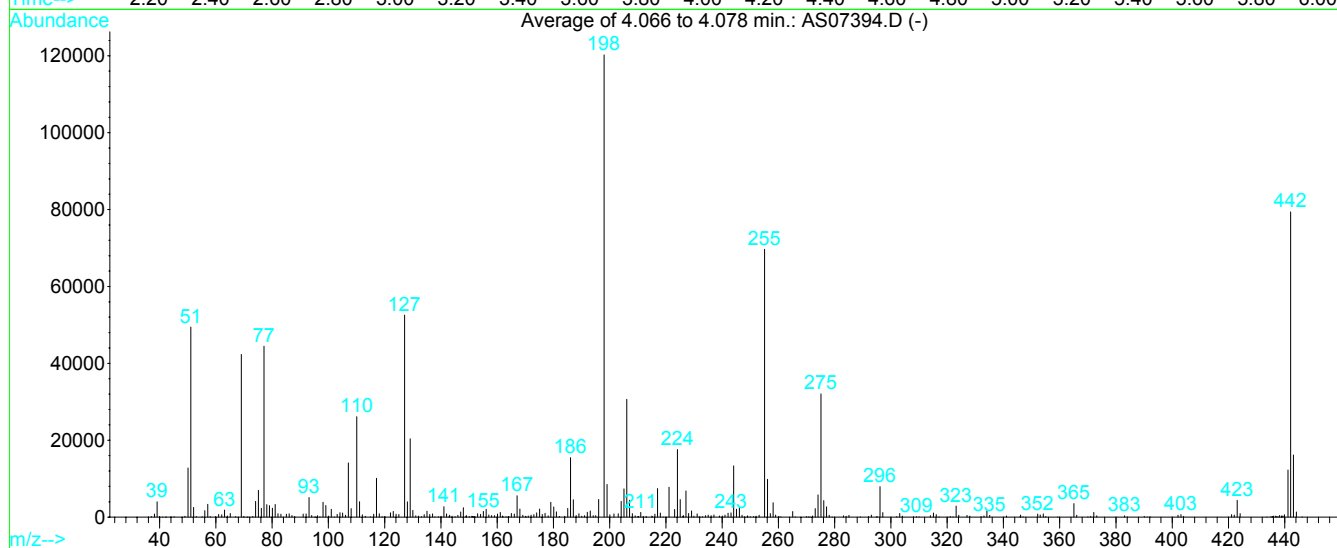
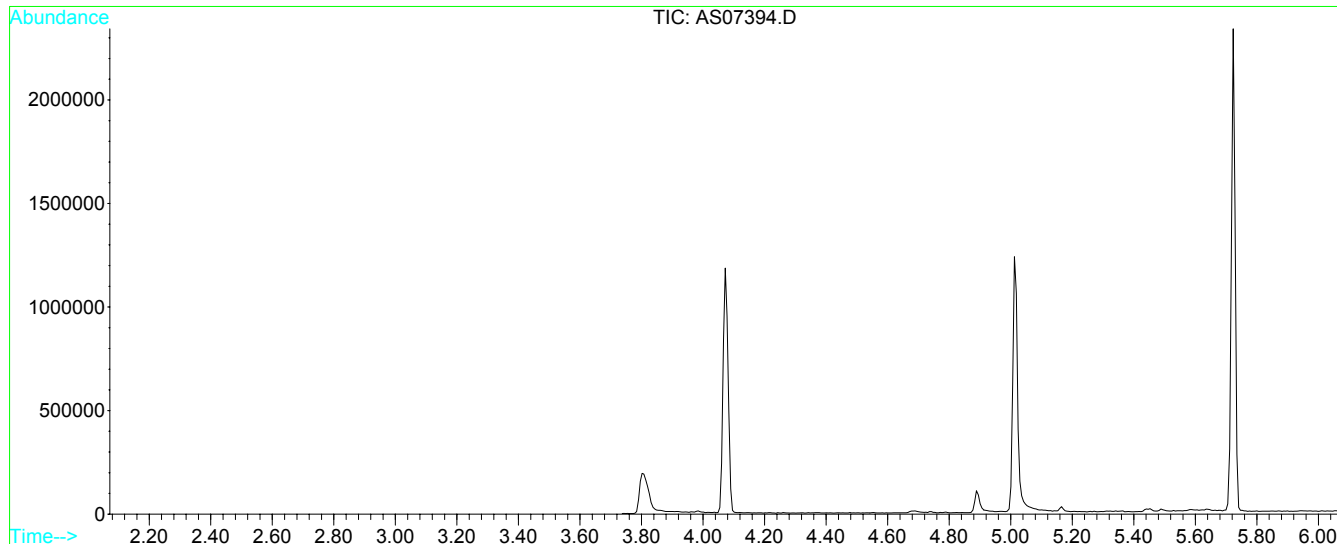
## Samples Associated with Tune

Client ID or QC Type	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Calibration Check	S8J1212-CCV1	AS07395.D	10/11/2018	14:28.00
STP-3B	8100452-10	AS07396.D	10/11/2018	14:58.00
STP-4A	8100452-11	AS07397.D	10/11/2018	15:28.00
STP-4B	8100452-12	AS07398.D	10/11/2018	15:57.00
STP-5	8100452-13	AS07399.D	10/11/2018	16:27.00
STP-7	8100452-14	AS07400.D	10/11/2018	16:57.00
STP-2B	8100452-09	AS07401.D	10/11/2018	17:26.00

14  
14.6.

DFTPP

Data File : G:\HPCHEM\A\DATA\20181011\AS07394.D Vial: 2  
 Acq On : 11 Oct 2018 14:09 Operator: GCH  
 Sample : SEQ-TUN Inst : GCMS-A  
 Misc : Multiplr: 1.00  
 MS Integration Params: LSTINT.P  
 Method : G:\HPCHEM\A\METHODS\0824ABN.M (RTE Integrator)  
 Title : BNA Extractables GC/MS 8270D



Spectrum Information: Average of 4.066 to 4.078 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	41.1	49448	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	35.2	42314	PASS
70	69	0.00	2	0.2	78	PASS
127	198	40	60	43.7	52547	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	120232	PASS
199	198	5	9	7.1	8503	PASS
275	198	10	30	26.7	32045	PASS
365	198	1	100	2.9	3522	PASS
441	443	0.01	100	75.9	12261	PASS
442	198	40	100	66.0	79395	PASS
443	442	17	23	20.3	16148	PASS

AS07394.D 0824ABN.M Fri Oct 12 15:05:29 2018 SS

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14.6.

# INSTRUMENT PERFORMANCE CHECK

Client: Peak Environmental  
 Instrument ID: GCMS-D  
 Sequence: S8J1213

Work Order: 8100452  
 Project: Ridgewood

Lab Sample ID: **S8J1213-TUN1**      Injection Date: 10/11/2018      Injection Time: 12:24  
 Lab File ID: DS18767.D

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	PASS/FAIL
51	30 - 60% of 198	52.4	PASS
68	Less than 2% of 69	0.199	PASS
69	Less than 100% of 198	55.1	PASS
70	Less than 2% of 69	0.981	PASS
127	40 - 60% of 198	58.7	PASS
197	Less than 1% of 198	0	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	7.08	PASS
275	10 - 30% of 198	18.8	PASS
365	1 - 100% of 198	2.14	PASS
441	0.01 - 99.9% of 443	58.2	PASS
442	40 - 100% of 198	55.2	PASS
443	17 - 23% of 442	22	PASS

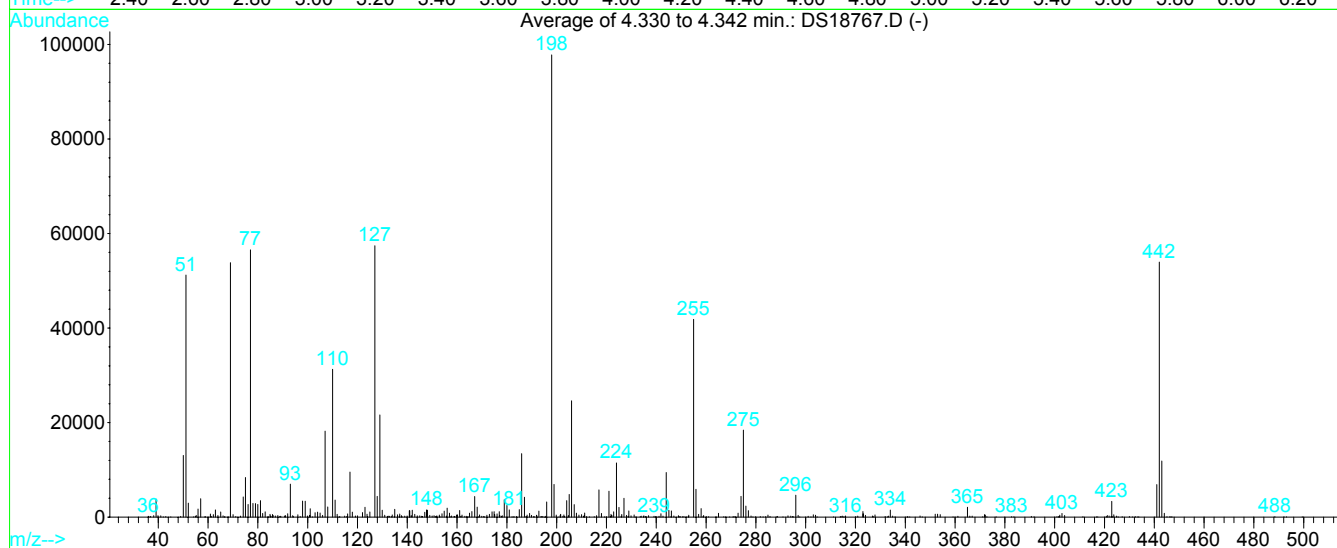
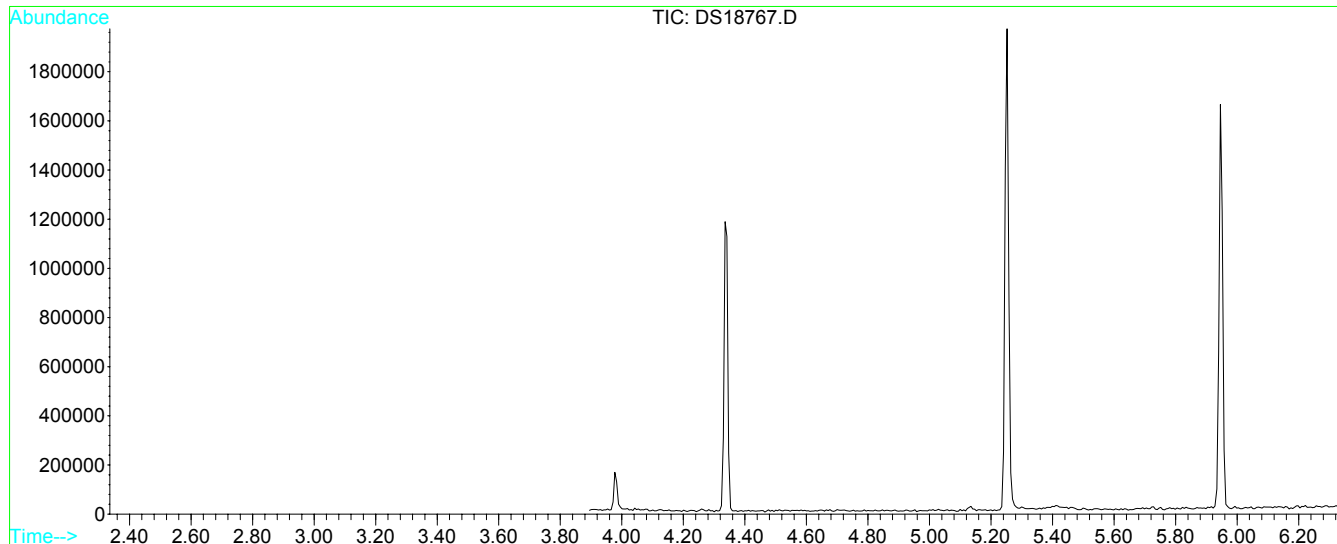
## Samples Associated with Tune

Client ID or QC Type	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Calibration Check	S8J1213-CCV1	DS18768.D	10/11/2018	12:41.00
Blank	B8J1101-BLK1	DS18769.D	10/11/2018	13:11.00
LCS	B8J1101-BS1	DS18770.D	10/11/2018	13:40.00
NTP-1A	8100452-01	DS18771.D	10/11/2018	14:10.00
NTP-2A	8100452-02	DS18772.D	10/11/2018	14:38.00
NTP-2B	8100452-03	DS18773.D	10/11/2018	15:07.00
NTP-3B	8100452-04	DS18774.D	10/11/2018	15:35.00
NTP-4B	8100452-05	DS18775.D	10/11/2018	16:04.00
NTP-6	8100452-06	DS18776.D	10/11/2018	16:32.00
NTP-7	8100452-07	DS18777.D	10/11/2018	17:01.00
STP-1B	8100452-08	DS18778.D	10/11/2018	17:29.00
Matrix Spike	B8J1101-MS1	DS18779.D	10/11/2018	17:57.00
Matrix Spike Dup	B8J1101-MSD1	DS18780.D	10/11/2018	18:26.00

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14.6.

DFTPP

Data File : G:\HPCHEM\D\DATA\20181011\DS18767.D Vial: 2  
 Acq On : 11 Oct 2018 12:24 Operator: GCH  
 Sample : SEQ-TUN Inst : GCMS-D  
 Misc : Multiplr: 1.00  
 MS Integration Params: rteint.p  
 Method : G:\HPCHEM\D\METHODS\0802ABN.M (RTE Integrator)  
 Title : BNA Extractables GC/MS 8270D



Spectrum Information: Average of 4.330 to 4.342 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	52.4	51204	PASS
68	69	0.00	2	0.2	107	PASS
69	198	0.00	100	55.1	53840	PASS
70	69	0.00	2	1.0	528	PASS
127	198	40	60	58.7	57429	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	97789	PASS
199	198	5	9	7.1	6927	PASS
275	198	10	30	18.8	18425	PASS
365	198	1	100	2.1	2097	PASS
441	443	0.01	100	58.2	6902	PASS
442	198	40	100	55.2	53958	PASS
443	442	17	23	22.0	11861	PASS

DS18767.D 0802ABN.M Tue Oct 16 12:43:27 2018 SS

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14.6.

## Compound List Report GCMS-D

Method : G:\HPCHEM\D\METHODS\0802ABN.M (RTE Integrator)  
 Title : BNA Extractables GC/MS 8270D  
 Last Update : Tue Aug 07 11:07:34 2018  
 Response via : Initial Calibration  
 Total Cpnds : 92

PK#	Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	1,4-Dichlorobenzene-d4	152	6.24	1.000	A	2	A B
2		1,4-Dioxane	88	2.93	0.470	A	2	A B
3		N-nitrosodimethylamine	42	3.34	0.534	A	2	A B
4		Pyridine	79	3.40	0.544	A	1	A B
5	S	2-Fluorophenol	112	4.91	0.787	A	3	A B
6		Benzaldehyde	77	5.80	0.929	A	3	A B
7		Aniline	93	5.90	0.946	A	2	A B
8	S	Phenol-d6	99	5.84	0.935	A	2	A B
9	M C	Phenol	94	5.85	0.937	A	2	A B
10		bis(2-Chloroethyl)ether	93	5.95	0.953	A	2	A B
11	M	2-Chlorophenol	128	6.04	0.967	A	2	A B
12		1,3-Dichlorobenzene	146	6.19	0.992	A	3	A B
13	M C	1,4-Dichlorobenzene	146	6.26	1.003	A	3	A B
14		Benzyl Alcohol	108	6.36	1.018	A	2	A B
15		1,2-Dichlorobenzene	146	6.42	1.028	A	3	A B
16		2-Methylphenol	108	6.46	1.034	A	2	A B
17		bis(2-Chloroisopropyl)ether	45	6.49	1.039	A	2	A B
18		Acetophenone	105	6.63	1.062	A	2	A B
19		3+4-Methylphenol	108	6.61	1.058	A	2	A B
20	M P	n-Nitroso-di-n-propylamine	70	6.62	1.060	A	2	A B
21		Hexachloroethane	117	6.77	1.084	A	3	A B
22	I	Naphthalene-d8	136	7.53	1.000	A	3	A B
23	S	Nitrobenzene-d5	82	6.79	0.902	A	2	A B
24		Nitrobenzene	77	6.81	0.905	A	2	A B
25		Isophorone	82	7.04	0.935	A	2	A B
26	C	2-Nitrophenol	139	7.13	0.947	A	2	A B
27		2,4-Dimethylphenol	107	7.14	0.949	A	3	A B
28		bis(2-Chloroethoxy)methane	93	7.23	0.961	A	2	A B
29	C	2,4-Dichlorophenol	162	7.37	0.979	A	2	A B
30		Benzoic Acid	105	7.20	0.957	QO	2	A B
31	M	1,2,4-Trichlorobenzene	180	7.46	0.991	A	2	A B
32		Naphthalene	128	7.55	1.003	A	3	A B
33		4-Chloroaniline	127	7.58	1.006	A	2	A B
34	C	Hexachlorobutadiene	225	7.66	1.018	A	3	A B
35		Caprolactam	113	7.90	1.050	A	2	A B
36	M C	4-Chloro-3-methylphenol	107	8.04	1.068	A	2	A B
37		2-Methylnaphthalene	142	8.23	1.094	A	2	A B
38		1-Methylnaphthalene	142	8.34	1.108	A	2	A B
39	I	Acenaphthene-d10	164	9.29	1.000	A	2	A B
40	P	Hexachlorocyclopentadiene	237	8.39	0.903	A	2	A B
41		1,2,4,5-Tetrachlorobenzene	216	8.41	0.905	A	2	A B
42	C	2,4,6-Trichlorophenol	196	8.51	0.916	A	3	A B
43		2,4,5-Trichlorophenol	196	8.55	0.920	A	3	A B
44	S	2-Fluorobiphenyl	172	8.58	0.924	A	2	A B
45		Biphenyl	154	8.69	0.936	A	2	A B
46		2-Chloronaphthalene	162	8.73	0.939	A	2	A B
47		2-Nitroaniline	138	8.81	0.948	A	2	A B
48		Dimethylphthalate	163	8.96	0.965	A	2	A B
49		Acenaphthylene	152	9.15	0.985	A	2	A B
50		2,6-Dinitrotoluene	165	9.04	0.973	A	2	A B
51		3-Nitroaniline	138	9.22	0.992	A	2	A B
52	M C	Acenaphthene	153	9.32	1.004	A	2	A B
53	P	2,4-Dinitrophenol	184	9.32	1.003	QO	1	A B
54		Dibenzofuran	168	9.49	1.022	A	2	A B
55	M P	4-Nitrophenol	65	9.36	1.007	QO	2	A B
56	M	2,4-Dinitrotoluene	165	9.45	1.017	A	2	A B
57		2,3,4,6-Tetrachlorophenol	232	9.61	1.034	A	2	A L
58		Fluorene	166	9.84	1.059	A	2	A B
59		Diethylphthalate	149	9.66	1.040	A	2	A B
60		4-Chlorophenyl phenyl ether	204	9.81	1.056	A	2	A B
61		4-Nitroaniline	138	9.83	1.058	A	2	A B
62	I	Phenanthrene-d10	188	10.79	1.000	A	2	A B
63		4,6-Dinitro-2-methylphenol	198	9.86	0.914	QO	2	A B

64		n-Nitrosodiphenylamine	169	9.92	0.920	A	2	A	B
65		1,2-Diphenylhydrazine	77	9.97	0.924	A	2	A	B
66	S	2,4,6-Tribromophenol	330	10.08	0.934	A	2	A	B
67		4-Bromophenyl-phenyl ether	248	10.30	0.955	A	2	A	B
68		Hexachlorobenzene	284	10.40	0.964	A	2	A	B
69		Atrazine	200	10.43	0.967	QO	2	A	B
70	M C	Pentachlorophenol	266	10.59	0.981	QO	2	A	B
71		Phenanthrene	178	10.81	1.002	A	2	A	B
72		Anthracene	178	10.86	1.007	A	2	A	B
73		Carbazole	167	11.01	1.020	A	2	A	B
74		Di-n-butylphthalate	149	11.29	1.046	A	2	A	B
75	C	Fluoranthene	202	12.01	1.113	A	2	A	B
76	I	Chrysene-d12	240	13.64	1.000	A	2	A	B
77		Benzidine	184	12.11	0.887	A	2	A	B
78	M	Pyrene	202	12.26	0.899	A	2	A	B
79	S	p-Terphenyl-d14	244	12.37	0.907	A	2	A	B
80		Butylbenzylphthalate	149	12.88	0.944	A	2	A	B
81		Benzo(a)anthracene	228	13.63	0.999	A	2	A	B
82		3,3'-Dichlorobenzidine	252	13.56	0.994	A	2	A	B
83		Chrysene	228	13.68	1.002	A	2	A	B
84		bis(2-Ethylhexyl)phthalate	149	13.53	0.992	A	2	A	B
85	I	Perylene-d12	264	15.71	1.000	A	2	A	B
86	C	Di-n-octylphthalate	149	14.33	0.913	A	1	A	B
87		Benzo(b)fluoranthene	252	15.07	0.960	A	3	A	B
88		Benzo(k)fluoranthene	252	15.11	0.962	A	3	A	B
89	C	Benzo(a)pyrene	252	15.61	0.994	A	3	A	L
90		Indeno(1,2,3-cd)pyrene	276	17.93	1.141	A	2	A	B
91		Dibenzo(a,h)anthracene	278	17.94	1.142	A	2	A	B
92		Benzo(g,h,i)perylene	276	18.61	1.185	A	2	A	B

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin

#Qual = number of qualifiers

A/H = Area or Height

ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

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0802ABN.M Tue Aug 07 11:09:45 2018 SS

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14.7.

Response Factor Report GCMS-D

Method : G:\HPCHEM\D\METHODS\0802ABN.M (RTE Integrator)  
 Title : BNA Extractables GC/MS 8270D  
 Last Update : Tue Aug 07 11:07:34 2018  
 Response via : Initial Calibration

Calibration Files  
 2 =DS17875.D 5 =DS17876.D 10 =DS17877.D  
 50 =DS17879.D 60 =DS17880.D 80 =DS17881.D

Compound	2	5	10	50	60	80	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	-----ISTD-----							
2) 1,4-Dioxane		0.657	0.747	0.699	0.656	0.597	0.671	8.30
3) N-nitrosodimethylam	0.639	0.745	0.800	0.791	0.688	0.661	0.721	9.45
4) Pyridine	1.847	1.740	1.839	1.883	1.681	1.654	1.774	5.38
5) S 2-Fluorophenol	1.207	1.351	1.426	1.456	1.406	1.380	1.371	6.42
6) Benzaldehyde	0.982	1.059	1.091	1.050	0.953	0.866	1.000	8.33
7) Aniline	2.080	2.098	2.135	2.113	2.068	1.998	2.082	2.28
8) S Phenol-d6	1.598	1.727	1.824	1.805	1.768	1.725	1.741	4.63
9) M C Phenol	1.704	1.834	1.850	1.753	1.710	1.640	1.749	4.63
10) bis(2-Chloroethyl)e	1.494	1.428	1.509	1.431	1.424	1.369	1.442	3.55
11) M 2-Chlorophenol	1.609	1.565	1.571	1.485	1.457	1.423	1.518	4.84
12) 1,3-Dichlorobenzene	1.806	1.679	1.716	1.631	1.597	1.579	1.668	5.06
13) M C 1,4-Dichlorobenzene	1.757	1.622	1.673	1.546	1.521	1.481	1.600	6.48
14) Benzyl Alcohol	0.809	0.827	0.877	0.960	0.968	0.975	0.903	8.26
15) 1,2-Dichlorobenzene	1.752	1.668	1.674	1.539	1.519	1.494	1.608	6.48
16) 2-Methylphenol	1.276	1.304	1.320	1.281	1.279	1.290	1.292	1.33
17) bis(2-Chloroisoprop	2.861	2.542	2.464	2.272	2.285	2.201	2.437	10.00
18) Acetophenone	1.837	2.042	1.946	1.846	1.821	1.800	1.882	4.95
19) 3+4-Methylphenol	1.283	1.387	1.506	1.403	1.417	1.402	1.400	5.11
20) M P n-Nitroso-di-n-prop	1.091	1.036	0.996	0.929	0.953	0.961	0.994	6.03
21) Hexachloroethane	0.701	0.677	0.656	0.640	0.642	0.654	0.662	3.55
22) I Naphthalene-d8	-----ISTD-----							
23) S Nitrobenzene-d5	0.375	0.361	0.382	0.375	0.381	0.360	0.372	2.63
24) Nitrobenzene	0.385	0.386	0.398	0.390	0.396	0.370	0.388	2.54
25) Isophorone	0.589	0.581	0.604	0.569	0.583	0.549	0.579	3.25
26) C 2-Nitrophenol	0.171	0.186	0.190	0.213	0.213	0.211	0.197	9.01
27) 2,4-Dimethylphenol	0.324	0.329	0.349	0.327	0.328	0.315	0.329	3.42
28) bis(2-Chloroethoxy)	0.389	0.408	0.431	0.424	0.415	0.405	0.412	3.64
29) C 2,4-Dichlorophenol	0.256	0.287	0.312	0.310	0.310	0.293	0.295	7.30
30) Benzoic Acid	0.018	0.018	0.020	0.058	0.074	0.093	0.047	69.33
31) M 1,2,4-Trichlorobenz	0.363	0.337	0.352	0.333	0.332	0.314	0.338	4.97
32) Naphthalene	1.204	1.203	1.234	1.104	1.057	0.971	1.129	9.11
33) 4-Chloroaniline	0.461	0.410	0.449	0.454	0.456	0.430	0.443	4.41
34) C Hexachlorobutadiene	0.158	0.155	0.158	0.149	0.150	0.141	0.152	4.34
35) Caprolactam	0.108	0.109	0.123	0.138	0.146	0.135	0.126	12.46
36) M C 4-Chloro-3-methylph	0.272	0.328	0.311	0.321	0.326	0.304	0.310	6.79
37) 2-Methylnaphthalene	0.762	0.786	0.767	0.695	0.670	0.596	0.712	10.21
38) 1-Methylnaphthalene	0.757	0.787	0.759	0.649	0.648	0.579	0.697	11.88
39) I Acenaphthene-d10	-----ISTD-----							
40) P Hexachlorocyclopent	0.182	0.219	0.231	0.275	0.279	0.287	0.246	16.97
41) 1,2,4,5-Tetrachloro	0.619	0.593	0.581	0.522	0.511	0.502	0.555	8.88
42) C 2,4,6-Trichlorophen	0.384	0.373	0.373	0.400	0.393	0.391	0.386	2.82
43) 2,4,5-Trichlorophen	0.350	0.355	0.371	0.402	0.401	0.398	0.380	6.26
44) S 2-Fluorobiphenyl	1.643	1.600	1.545	1.422	1.354	1.296	1.477	9.50
45) Biphenyl	1.805	1.777	1.818	1.653	1.564	1.508	1.688	7.84
46) 2-Chloronaphthalene	1.452	1.434	1.423	1.294	1.257	1.216	1.346	7.60
47) 2-Nitroaniline	0.380	0.437	0.442	0.499	0.490	0.484	0.455	9.86
48) Dimethylphthalate	1.557	1.459	1.498	1.400	1.325	1.279	1.420	7.44
49) Acenaphthylene	2.329	2.308	2.331	2.057	1.972	1.842	2.140	9.90
50) 2,6-Dinitrotoluene	0.356	0.355	0.351	0.366	0.356	0.353	0.356	1.40
51) 3-Nitroaniline	0.385	0.374	0.414	0.415	0.411	0.404	0.401	4.25
52) M C Acenaphthene	1.440	1.437	1.455	1.323	1.260	1.195	1.352	8.06
53) P 2,4-Dinitrophenol	0.007	0.023	0.049	0.179	0.194	0.201	0.109	84.26
54) Dibenzofuran	2.006	1.900	1.962	1.723	1.658	1.560	1.801	10.00
55) M P 4-Nitrophenol	0.131	0.098	0.142	0.227	0.246	0.250	0.182	36.40
56) M 2,4-Dinitrotoluene	0.393	0.408	0.458	0.497	0.486	0.476	0.453	9.47
57) 2,3,4,6-Tetrachloro	0.217	0.216	0.243	0.273	0.269	0.274	0.249	11.02

(#) = Out of Range  
 0802ABN.M

Tue Aug 07 11:09:46 2018 SS

Page 1

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14.7



Response Factor Report GCMS-D

Method : G:\HPCHEM\D\METHODS\0802ABN.M (RTE Integrator)  
 Title : BNA Extractables GC/MS 8270D  
 Last Update : Tue Aug 07 11:07:34 2018  
 Response via : Initial Calibration

Calibration Files  
 2 =DS17875.D 5 =DS17876.D 10 =DS17877.D  
 50 =DS17879.D 60 =DS17880.D 80 =DS17881.D

Compound	2	5	10	50	60	80	Avg	%RSD
58) Fluorene	1.634	1.622	1.615	1.480	1.371	1.281	1.501	9.95
59) Diethylphthalate	1.470	1.525	1.501	1.418	1.344	1.282	1.423	6.66
60) 4-Chlorophenyl phen	0.674	0.675	0.705	0.680	0.631	0.612	0.663	5.22
61) 4-Nitroaniline	0.341	0.336	0.396	0.415	0.397	0.384	0.378	8.57
62) I Phenanthrene-d10	-----ISTD-----							
63) 4,6-Dinitro-2-methy	0.030	0.061	0.088	0.147	0.152	0.151	0.105	50.36
64) n-Nitrosodiphenylam	0.706	0.706	0.729	0.690	0.685	0.630	0.691	4.89
65) 1,2-Diphenylhydrazi	0.907	0.943	0.885	0.882	0.848	0.789	0.876	6.01
66) S 2,4,6-Tribromopheno	0.076	0.078	0.078	0.091	0.094	0.090	0.085	9.35
67) 4-Bromophenyl-pheny	0.188	0.182	0.205	0.195	0.195	0.187	0.192	4.34
68) Hexachlorobenzene	0.239	0.237	0.226	0.211	0.211	0.202	0.221	6.90
69) Atrazine	0.166	0.182	0.186	0.175	0.178	0.171	0.176	4.00
70) M C Pentachlorophenol	0.012	0.018	0.029	0.083	0.092	0.095	0.055	71.67#
71) Phenanthrene	1.245	1.224	1.263	1.116	1.057	0.975	1.147	10.14
72) Anthracene	1.207	1.209	1.280	1.169	1.097	1.004	1.161	8.40
73) Carbazole	1.132	1.177	1.243	1.133	1.076	0.988	1.125	7.75
74) Di-n-butylphthalate	1.399	1.477	1.532	1.385	1.265	1.160	1.370	9.99
75) C Fluoranthene	1.235	1.275	1.372	1.204	1.111	1.041	1.206	9.77
76) I Chrysene-d12	-----ISTD-----							
77) Benzidine	0.688	0.803	0.803	0.878	0.856	0.765	0.799	8.47
78) M Pyrene	1.553	1.630	1.611	1.493	1.495	1.414	1.533	5.30
79) S p-Terphenyl-d14	0.905	0.922	0.952	0.907	0.916	0.883	0.914	2.49
80) Butylbenzylphthalat	0.782	0.772	0.834	0.822	0.844	0.795	0.808	3.63
81) Benzo(a)anthracene	1.384	1.306	1.354	1.274	1.270	1.228	1.303	4.46
82) 3,3'-Dichlorobenzid	0.418	0.438	0.442	0.429	0.429	0.412	0.428	2.64
83) Chrysene	1.322	1.262	1.314	1.226	1.203	1.143	1.245	5.50
84) bis(2-Ethylhexyl)ph	1.027	1.017	1.107	1.112	1.102	1.056	1.070	3.96
85) I Perylene-d12	-----ISTD-----							
86) C Di-n-octylphthalate	1.629	1.719	1.779	1.752	1.706	1.623	1.701	3.76
87) Benzo(b)fluoranthen	1.135	1.133	1.122	1.096	1.086	1.054	1.104	2.88
88) Benzo(k)fluoranthen	1.180	1.154	1.130	1.081	1.109	1.083	1.123	3.50
89) C Benzo(a)pyrene	1.083	1.120	1.161	1.150	1.138	1.104	1.126	2.60
90) Indeno(1,2,3-cd)pyr	1.241	1.215	1.248	1.226	1.273	1.223	1.238	1.71
91) Dibenzo(a,h)anthrac	1.038	1.064	1.080	1.084	1.085	1.064	1.069	1.70
92) Benzo(g,h,i)perylen	1.021	1.009	1.031	1.063	1.076	1.052	1.042	2.48

(#) = Out of Range  
 0802ABN.M

Tue Aug 07 11:09:46 2018 SS

Page 2

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14.7

Response Factor Report GCMS-A

Method : G:\HPCHEM\A\METHODS\0824ABN.M (RTE Integrator)  
 Title : BNA Extractables GC/MS 8270D  
 Last Update : Mon Aug 27 15:35:59 2018  
 Response via : Initial Calibration

Calibration Files  
 2 =AS06908.D 5 =AS06909.D 20 =AS06911.D  
 50 =AS06912.D 60 =AS06913.D 80 =AS06914.D

Compound	2	5	20	50	60	80	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	-----ISTD-----							
2) Pyridine	1.251	1.239	1.295	1.281	1.270	1.298	1.272	1.85
3) N-Nitroso-dimethyla	0.594	0.567	0.600	0.588	0.590	0.605	0.591	2.23
4) S 2-Fluorophenol	1.017	0.977	1.115	1.150	1.198	1.212	1.111	8.65
5) Benzaldehyde	0.922	0.945	0.957	0.914	0.891	0.840	0.911	4.62
6) Aniline	1.439	1.424	1.591	1.589	1.538	1.512	1.516	4.75
7) S Phenol-d6	1.137	1.163	1.365	1.396	1.407	1.423	1.315	9.85
8) Phenol	1.239	1.276	1.415	1.442	1.447	1.464	1.381	7.04
9) bis(2-Chloroethyl)e	1.179	1.224	1.225	1.217	1.233	1.194	1.212	1.72
10) 2-Chlorophenol	1.102	1.135	1.303	1.320	1.330	1.351	1.257	8.65
11) 1,3-Dichlorobenzene	1.613	1.597	1.691	1.650	1.652	1.653	1.643	2.03
12) 1,4-Dichlorobenzene	1.608	1.596	1.627	1.612	1.595	1.591	1.605	0.86
13) Benzyl Alcohol	0.660	0.718	0.797	0.801	0.815	0.830	0.770	8.64
14) 1,2-Dichlorobenzene	1.520	1.506	1.606	1.572	1.554	1.574	1.555	2.38
15) 2-Methylphenol	0.974	1.015	1.100	1.085	1.078	1.094	1.058	4.83
16) bis(2-Chloroisoprop	2.515	2.504	2.581	2.466	2.436	2.418	2.487	2.40
17) Acetophenone	1.567	1.576	1.635	1.578	1.581	1.606	1.591	1.61
18) 3+4-Methylphenol	0.956	0.975	1.132	1.162	1.161	1.189	1.096	9.37
19) n-Nitroso-di-n-prop	0.639	0.670	0.705	0.691	0.681	0.691	0.680	3.39
20) Hexachloroethane	0.546	0.543	0.569	0.575	0.575	0.581	0.565	2.83
21) I Naphthalene-d8	-----ISTD-----							
22) S Nitrobenzene-d5	0.221	0.213	0.252	0.313	0.308	0.313	0.270	17.49
23) Nitrobenzene	0.330	0.328	0.343	0.331	0.327	0.326	0.331	1.87
24) Isophorone	0.454	0.469	0.510	0.496	0.494	0.496	0.487	4.28
25) 2-Nitrophenol	0.057	0.063	0.106	0.141	0.162	0.174	0.117	42.68
26) 2,4-Dimethylphenol	0.267	0.262	0.286	0.284	0.282	0.286	0.278	3.74
27) bis(2-Chloroethoxy)	0.345	0.329	0.359	0.342	0.341	0.345	0.344	2.77
28) 2,4-Dichlorophenol	0.223	0.220	0.284	0.308	0.309	0.317	0.277	16.01
29) Benzoic Acid	0.011	0.015	0.035	0.043	0.061	0.080	0.041	65.29
30) 1,2,4-Trichlorobenz	0.375	0.369	0.387	0.380	0.375	0.376	0.377	1.62
31) Naphthalene	1.115	1.094	1.142	1.087	1.073	1.068	1.097	2.55
32) 4-Chloroaniline	0.347	0.362	0.383	0.323	0.304	0.304	0.337	9.63
33) Hexachlorobutadiene	0.233	0.232	0.242	0.235	0.232	0.236	0.235	1.64
34) Caprolactam	0.066	0.070	0.090	0.095	0.096	0.100	0.086	16.61
35) 4-Chloro-3-methylph	0.185	0.192	0.242	0.254	0.260	0.263	0.233	15.03
36) 2-Methylnaphthalene	0.711	0.706	0.754	0.713	0.709	0.698	0.715	2.75
37) 1-Methylnaphthalene	0.686	0.681	0.714	0.677	0.669	0.663	0.682	2.62
38) I Acenaphthene-d10	-----ISTD-----							
39) Hexachlorocyclopent	0.304	0.307	0.406	0.456	0.471	0.481	0.404	19.94
40) 1,2,4,5-Tetrachloro	0.732	0.719	0.763	0.757	0.749	0.741	0.743	2.18
41) 2,4,6-Trichlorophen	0.284	0.317	0.411	0.464	0.458	0.459	0.399	19.85
42) 2,4,5-Trichlorophen	0.316	0.327	0.427	0.473	0.472	0.479	0.416	18.15
43) S 2-Fluorobiphenyl	1.545	1.560	1.645	1.605	1.589	1.551	1.582	2.43
44) Biphenyl	1.616	1.662	1.726	1.702	1.681	1.639	1.671	2.44
45) 2-Chloronaphthalene	1.335	1.340	1.407	1.384	1.378	1.350	1.366	2.08
46) 2-Nitroaniline	0.142	0.158	0.279	0.370	0.394	0.408	0.292	40.80
47) Dimethylphthalate	1.457	1.455	1.486	1.476	1.462	1.452	1.465	0.92
48) Acenaphthylene	1.979	2.028	2.147	2.078	2.035	2.022	2.048	2.83
49) 2,6-Dinitrotoluene	0.112	0.149	0.256	0.313	0.328	0.344	0.250	39.24
50) 3-Nitroaniline	0.139	0.162	0.210	0.201	0.204	0.199	0.186	15.47
51) Acenaphthene	1.365	1.358	1.409	1.380	1.367	1.347	1.371	1.57
52) 2,4-Dinitrophenol	0.004	0.011	0.038	0.080	0.106	0.140	0.063	86.88
53) Dibenzofuran	1.819	1.808	1.885	1.822	1.775	1.758	1.811	2.43
54) 4-Nitrophenol	0.041	0.029	0.078	0.148	0.173	0.184	0.109	62.78
55) 2,4-Dinitrotoluene	0.168	0.144	0.277	0.384	0.418	0.443	0.306	42.22
56) 2,3,4,6-Tetrachloro	0.226	0.264	0.348	0.393	0.414	0.411	0.343	23.38
57) Fluorene	1.513	1.537	1.585	1.541	1.520	1.518	1.536	1.74

(#) = Out of Range  
 0824ABN.M

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Response Factor Report GCMS-A

Method : G:\HPCHEM\A\METHODS\0824ABN.M (RTE Integrator)  
 Title : BNA Extractables GC/MS 8270D  
 Last Update : Mon Aug 27 15:35:59 2018  
 Response via : Initial Calibration

Calibration Files  
 2 =AS06908.D 5 =AS06909.D 20 =AS06911.D  
 50 =AS06912.D 60 =AS06913.D 80 =AS06914.D

Compound	2	5	20	50	60	80	Avg	%RSD
58) Diethylphthalate	1.394	1.391	1.468	1.456	1.447	1.436	1.432	2.27
59) 4-Chlorophenyl phen	0.765	0.765	0.800	0.777	0.771	0.776	0.776	1.68
60) 4-Nitroaniline	0.159	0.170	0.161	0.201	0.200	0.196	0.181	10.98
61) I Phenanthrene-d10	-----ISTD-----							
62) 4,6-Dinitro-2-methy	0.015	0.020	0.047	0.081	0.097	0.115	0.062	66.38
63) n-Nitrosodiphenylam	0.673	0.658	0.663	0.633	0.617	0.626	0.645	3.51
64) 1,2-Diphenylhydrazi	0.649	0.652	0.670	0.628	0.626	0.625	0.642	2.83
65) S 2,4,6-Tribromopheno	0.056	0.066	0.102	0.112	0.115	0.119	0.095	28.65
66) 4-Bromophenyl-pheny	0.244	0.253	0.269	0.260	0.259	0.262	0.258	3.25
67) Hexachlorobenzene	0.287	0.272	0.286	0.277	0.273	0.277	0.278	2.24
68) Atrazine	0.172	0.183	0.188	0.172	0.167	0.162	0.174	5.75
69) Pentachlorophenol	0.055	0.063	0.127	0.158	0.165	0.175	0.124	42.81
70) Phenanthrene	1.162	1.152	1.183	1.141	1.119	1.113	1.145	2.31
71) Anthracene	1.123	1.148	1.210	1.161	1.136	1.126	1.151	2.82
72) Carbazole	1.051	1.047	0.682	0.574	0.631	0.632	0.769	28.48
73) Di-n-butylphthalate	1.179	1.251	1.412	1.333	1.303	1.277	1.293	6.08
74) Fluoranthene	1.366	1.375	1.471	1.402	1.387	1.347	1.391	3.11
75) I Chrysene-d12	-----ISTD-----							
76) Benzidine	0.131	0.087	0.042	0.028	0.029	0.028	0.058	73.75
77) Pyrene	1.255	1.280	1.350	1.300	1.284	1.259	1.288	2.70
78) S p-Terphenyl-d14	0.953	0.966	1.051	1.011	1.006	0.985	0.995	3.53
79) Butylbenzylphthalat	0.418	0.463	0.580	0.593	0.594	0.597	0.541	14.67
80) Benzo(a)anthracene	1.292	1.283	1.346	1.330	1.309	1.304	1.311	1.81
81) 3,3'-Dichlorobenzid	0.316	0.302	0.235	0.206	0.203	0.207	0.245	20.95
82) Chrysene	1.169	1.184	1.232	1.205	1.195	1.182	1.194	1.84
83) bis(2-Ethylhexyl)ph	0.613	0.666	0.845	0.859	0.847	0.844	0.779	14.06
84) I Perylene-d12	-----ISTD-----							
85) Di-n-octylphthalate	0.898	0.991	1.349	1.389	1.408	1.378	1.236	18.47
86) Benzo(b)fluoranthen	0.972	1.037	1.119	1.135	1.146	1.151	1.093	6.67
87) Benzo(k)fluoranthen	1.080	1.048	1.129	1.081	1.092	1.056	1.081	2.67
88) Benzo(a)pyrene	0.999	1.042	1.153	1.149	1.157	1.150	1.108	6.26
89) Indeno(1,2,3-cd)pyr	1.067	1.094	1.245	1.275	1.291	1.288	1.210	8.41
90) Dibenzo(a,h)anthrac	0.919	0.958	1.088	1.105	1.120	1.118	1.051	8.47
91) Benzo(g,h,i)perylene	0.896	0.925	1.017	1.037	1.049	1.061	0.997	6.96

(#) = Out of Range  
 0824ABN.M

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## Compound List Report GCMS-A

Method : G:\HPCHEM\A\METHODS\0824ABN.M (RTE Integrator)  
 Title : BNA Extractables GC/MS 8270D  
 Last Update : Tue Aug 28 19:14:16 2018  
 Response via : Initial Calibration  
 Total Cpnds : 91

PK#	Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	1,4-Dichlorobenzene-d4	152	6.51	1.000	A	2	A B
2		Pyridine	79	3.77	0.579	A	1	A B
3		N-Nitroso-dimethylamine	42	3.70	0.569	A	2	A B
4	S	2-Fluorophenol	112	5.18	0.796	A	3	A B
5		Benzaldehyde	77	6.07	0.933	A	3	A B
6		Aniline	93	6.17	0.948	A	2	A B
7	S	Phenol-d6	99	6.09	0.936	A	2	A B
8		Phenol	94	6.11	0.938	A	2	A B
9		bis(2-Chloroethyl)ether	93	6.21	0.954	A	2	A B
10		2-Chlorophenol	128	6.30	0.968	A	2	A B
11		1,3-Dichlorobenzene	146	6.46	0.992	A	3	A B
12		1,4-Dichlorobenzene	146	6.53	1.003	A	3	A B
13		Benzyl Alcohol	108	6.62	1.017	A	2	A B
14		1,2-Dichlorobenzene	146	6.69	1.027	A	3	A B
15		2-Methylphenol	108	6.71	1.031	A	2	A B
16		bis(2-Chloroisopropyl)ether	45	6.75	1.036	A	2	A B
17		Acetophenone	105	6.90	1.059	A	2	A B
18		3+4-Methylphenol	108	6.86	1.054	A	2	A B
19		n-Nitroso-di-n-propylamine	70	6.88	1.057	A	2	A B
20		Hexachloroethane	117	7.03	1.080	A	3	A B
21	I	Naphthalene-d8	136	7.79	1.000	A	3	A B
22	S	Nitrobenzene-d5	82	7.06	0.906	A	2	A B
23		Nitrobenzene	77	6.89	0.885	A	2	A B
24		Isophorone	82	7.30	0.937	A	2	A B
25		2-Nitrophenol	139	7.39	0.949	QO	2	A B
26		2,4-Dimethylphenol	107	7.39	0.949	A	3	A B
27		bis(2-Chloroethoxy)methane	93	7.48	0.961	A	2	A B
28		2,4-Dichlorophenol	162	7.63	0.979	A	2	A B
29		Benzoic Acid	105	7.46	0.958	QO	2	A B
30		1,2,4-Trichlorobenzene	180	7.72	0.991	A	2	A B
31		Naphthalene	128	7.81	1.003	A	3	A B
32		4-Chloroaniline	127	7.83	1.006	A	2	A B
33		Hexachlorobutadiene	225	7.92	1.017	A	3	A B
34		Caprolactam	113	8.19	1.051	A	2	A B
35		4-Chloro-3-methylphenol	107	8.29	1.065	A	2	A B
36		2-Methylnaphthalene	142	8.50	1.091	A	2	A B
37		1-Methylnaphthalene	142	8.61	1.105	A	2	A B
38	I	Acenaphthene-d10	164	9.56	1.000	A	2	A B
39		Hexachlorocyclopentadiene	237	8.66	0.906	A	2	A B
40		1,2,4,5-Tetrachlorobenzene	216	8.67	0.907	A	2	A B
41		2,4,6-Trichlorophenol	196	8.77	0.917	A	3	A B
42		2,4,5-Trichlorophenol	196	8.81	0.921	A	3	A B
43	S	2-Fluorobiphenyl	172	8.85	0.925	A	2	A B
44		Biphenyl	154	8.96	0.937	A	2	A B
45		2-Chloronaphthalene	162	9.00	0.941	A	2	A B
46		2-Nitroaniline	138	9.08	0.949	QO	2	A B
47		Dimethylphthalate	163	9.23	0.965	A	2	A B
48		Acenaphthylene	152	9.42	0.985	A	2	A B
49		2,6-Dinitrotoluene	165	9.30	0.973	QO	2	A B
50		3-Nitroaniline	138	9.49	0.992	A	2	A B
51		Acenaphthene	153	9.60	1.003	A	2	A B
52		2,4-Dinitrophenol	184	9.58	1.002	QO	1	A B
53		Dibenzofuran	168	9.76	1.021	A	2	A B
54		4-Nitrophenol	65	9.61	1.005	QO	2	A B
55		2,4-Dinitrotoluene	165	9.71	1.016	QO	2	A B
56		2,3,4,6-Tetrachlorophenol	232	9.88	1.033	QO	2	A B
57		Fluorene	166	10.11	1.057	A	2	A B
58		Diethylphthalate	149	9.93	1.038	A	2	A B
59		4-Chlorophenyl phenyl ether	204	10.08	1.054	A	2	A B
60		4-Nitroaniline	138	10.10	1.056	A	2	A B
61	I	Phenanthrene-d10	188	11.06	1.000	A	2	A B
62		4,6-Dinitro-2-methylphenol	198	10.13	0.916	QO	2	A B
63		n-Nitrosodiphenylamine	169	10.19	0.921	A	2	A B

64		1,2-Diphenylhydrazine	77	10.24	0.926	A	2	A	B
65	S	2,4,6-Tribromophenol	330	10.35	0.936	QO	2	A	B
66		4-Bromophenyl-phenyl ether	248	10.58	0.956	A	2	A	B
67		Hexachlorobenzene	284	10.68	0.965	A	2	A	B
68		Atrazine	200	10.69	0.967	A	2	A	B
69		Pentachlorophenol	266	10.86	0.981	QO	2	A	B
70		Phenanthrene	178	11.09	1.002	A	2	A	B
71		Anthracene	178	11.14	1.007	A	2	A	B
72		Carbazole	167	11.28	1.019	QO	2	A	B
73		Di-n-butylphthalate	149	11.55	1.044	A	2	A	B
74		Fluoranthene	202	12.31	1.112	A	2	A	B
75	I	Chrysene-d12	240	13.99	1.000	A	2	A	B
76		Benzidine	184	12.40	0.887	Q	2	A	B
77		Pyrene	202	12.57	0.898	A	2	A	B
78	S	p-Terphenyl-d14	244	12.67	0.906	A	2	A	B
79		Butylbenzylphthalate	149	13.19	0.943	A	2	A	B
80		Benzo(a)anthracene	228	13.97	0.999	A	2	A	B
81		3,3'-Dichlorobenzidine	252	13.89	0.993	QO	2	A	B
82		Chrysene	228	14.02	1.002	A	2	A	B
83		bis(2-Ethylhexyl)phthalate	149	13.85	0.990	A	2	A	B
84	I	Perylene-d12	264	16.25	1.000	A	2	A	B
85		Di-n-octylphthalate	149	14.71	0.905	A	1	A	B
86		Benzo(b)fluoranthene	252	15.54	0.956	A	3	A	B
87		Benzo(k)fluoranthene	252	15.59	0.959	A	3	A	B
88		Benzo(a)pyrene	252	16.15	0.994	A	3	A	B
89		Indeno(1,2,3-cd)pyrene	276	18.76	1.154	A	2	A	B
90		Dibenzo(a,h)anthracene	278	18.79	1.156	A	2	A	B
91		Benzo(g,h,i)perylene	276	19.54	1.202	A	2	A	B

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin

#Qual = number of qualifiers

A/H = Area or Height

ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

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0824ABN.M Tue Aug 28 19:16:51 2018 SS

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# CALIBRATION VERIFICATION SUMMARY

**SW 846 8270D**

**CCV ID:** S8J1212-CCV1

**Analyzed:** 10/11/18 14:28

Analyte	Response	Expected		% Drift	Limit(s)
	Factor	Result	Result		
1-Methylnaphthalene	0.6436179	75.20	70.99	6	30
2,3,4,6-Tetrachlorophenol	0.3778771	50.00	48.13	4	30
2,4,5-Trichlorophenol	0.4462864	50.00	53.70	7	30
2,4,6-Trichlorophenol	0.4375443	50.00	54.87	10	20 (CCC)
2,4-Dichlorophenol	0.296475	50.00	53.56	7	20 (CCC)
2,4-Dimethylphenol	0.2792829	50.00	50.26	1	30
2,4-Dinitrophenol	0.1581587	50.00	67.53	* 35	0.05 (SPCC)
2,4-Dinitrotoluene	0.4601779	50.00	57.70	15	30
2,6-Dinitrotoluene	0.3359065	50.00	53.45	7	30
2-Chloronaphthalene	1.282212	50.00	46.94	6	30
2-Chlorophenol	1.258503	50.00	50.06	0	30
2-Methylnaphthalene	0.6798893	75.20	71.47	5	30
2-Methylphenol	1.023695	50.00	48.39	3	30
2-Nitroaniline	0.3991819	50.00	53.68	7	30
2-Nitrophenol	0.1930638	50.00	61.61	23	20 (CCC)
3,3'-Dichlorobenzidine	0.2253867	50.00	53.90	8	30
3+4-Methylphenol	1.118261	50.00	51.01	2	30
3-Nitroaniline	0.1810068	50.00	48.75	2	30
4,6-Dinitro-2-methylphenol	0.1480051	50.00	70.36	* 41	30
4-Bromophenyl-phenyl ether	0.2474413	50.00	47.93	4	30
4-Chloro-3-methylphenol	0.2581365	50.00	55.44	11	20 (CCC)
4-Chloroaniline	0.313133	50.00	46.43	7	30
4-Chlorophenyl phenyl ether	0.7440782	50.00	47.97	4	30
4-Nitroaniline	0.1499715	50.00	41.38	17	30
4-Nitrophenol	0.1072094	50.00	41.78	16	0.05 (SPCC)
Acenaphthene	1.267501	50.00	46.23	8	20 (CCC)
Acenaphthylene	1.885835	50.00	46.04	8	30
Acetophenone	1.633287	50.00	51.34	3	30
Anthracene	1.058996	50.00	46.02	8	30
Atrazine	0.1515081	50.00	43.54	13	30
Benzaldehyde	0.7238946	50.00	41.50	17	30
Benzo(a)anthracene	1.207992	50.00	46.08	8	30
Benzo(a)pyrene	1.028786	50.00	46.41	7	20 (CCC)
Benzo(b)fluoranthene	1.028701	50.00	47.04	6	30
Benzo(g,h,i)perylene	0.9923932	50.00	49.75	1	30
Benzo(k)fluoranthene	0.9732221	50.00	45.02	10	30
Biphenyl	1.521553	50.00	45.53	9	30
bis(2-chloroethoxy)methane	0.332707	50.00	48.42	3	30
bis(2-chloroethyl)ether	1.264599	50.00	52.17	4	30
bis(2-chloroisopropyl)ether	2.184053	50.00	43.92	12	30
bis(2-ethylhexyl)phthalate	0.7700481	50.00	49.43	1	30
Butylbenzylphthalate	0.5399785	50.00	49.93	0	30
Caprolactam	9.298892E-02	50.00	53.96	8	30
Carbazole	0.6699405	50.00	54.06	8	30
Chrysene	1.104658	50.00	46.25	8	30
Dibenzo(a,h)anthracene	1.05841	50.00	50.34	1	30
Dibenzofuran	1.680528	50.00	46.39	7	30

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14.8.

# CALIBRATION VERIFICATION SUMMARY

**SW 846 8270D**

**CCV ID:** S8J1212-CCV1

**Analyzed:** 10/11/18 14:28

Analyte	Response	Expected		% Drift	Limit(s)
	Factor	Result	Result		
Diethylphthalate	1.358499	50.00	47.44	5	30
Dimethylphthalate	1.363624	50.00	46.55	7	30
Di-n-butylphthalate	1.229137	50.00	47.55	5	30
Di-n-octylphthalate	1.350972	50.00	50.68	1	20 (CCC)
Fluoranthene	1.283546	50.00	46.12	8	20 (CCC)
Fluorene	1.402544	50.00	45.66	9	30
Hexachlorobenzene	0.2633497	50.00	47.29	5	30
Hexachlorobutadiene	0.2328334	50.00	49.50	1	20 (CCC)
Hexachlorocyclopentadiene	0.3853038	50.00	47.67	5	0.05 (SPCC)
Hexachloroethane	0.5914757	50.00	52.34	5	30
Indeno(1,2,3-cd)pyrene	1.198203	50.00	49.52	1	30
Isophorone	0.470318	50.00	48.33	3	30
Naphthalene	0.9762417	50.00	44.51	11	30
Nitrobenzene	0.3191734	50.00	48.24	4	30
n-Nitroso-dimethylamine	0.5318674	50.00	45.03	10	30
n-Nitroso-di-n-propylamine	0.672835	50.00	49.50	1	0.05 (SPCC)
n-Nitrosodiphenylamine	0.5759163	50.00	44.65	11	20 (CCC)
Pentachlorophenol	0.1223561	50.00	41.00	18	20 (CCC)
Phenanthrene	1.030003	50.00	44.98	10	30
Phenol	1.302726	50.00	47.18	6	20 (CCC)
Pyrene	1.194812	50.00	46.37	7	30

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14.8.

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20181011\AS07395.D Vial: 3  
 Acq On : 11 Oct 2018 14:28 Operator: GCH  
 Sample : SEQ-CCV Inst : GCMS-A  
 Misc : Multiplr: 1.00

MS Integration Params: LSTINT.P  
 Quant Time: Oct 12 10:55 2018 Quant Results File: 0824ABN.RES

Quant Method : G:\HPCHEM\A\METHODS\0824ABN.M (RTE Integrator)  
 Title : BNA Extractables GC/MS 8270D  
 Last Update : Fri Oct 12 10:53:36 2018  
 Response via : Initial Calibration  
 DataAcq Meth : RUN8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.27	152	171909	40.00	ug/kg	0.00
21) Naphthalene-d8	7.55	136	668028	40.00	ug/kg	0.00
38) Acenaphthene-d10	9.32	164	361834	40.00	ug/kg	0.00
61) Phenanthrene-d10	10.81	188	711170	40.00	ug/kg	0.00
75) Chrysene-d12	13.68	240	779517	40.00	ug/kg	0.00
84) Perylene-d12	15.76	264	840849	40.00	ug/kg	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
4) 2-Fluorophenol	4.94	112	235747	49.36	ug/kg	-0.05
Spiked Amount	100.000	Range 15 - 62	Recovery =	49.36%		
7) Phenol-d6	5.87	99	277152	49.03	ug/kg	0.00
Spiked Amount	100.000	Range 15 - 45	Recovery =	49.03%#		
22) Nitrobenzene-d5	6.82	82	263141	58.34	ug/kg	-0.02
Spiked Amount	50.000	Range 32 - 101	Recovery =	116.68%#		
43) 2-Fluorobiphenyl	8.61	172	651989	45.55	ug/kg	-0.01
Spiked Amount	50.000	Range 36 - 103	Recovery =	91.10%		
65) 2,4,6-Tribromophenol	10.11	330	99993	50.45	ug/kg	0.00
Spiked Amount	100.000	Range 28 - 167	Recovery =	50.45%		
78) p-Terphenyl-d14	12.40	244	918700	47.36	ug/kg	0.01
Spiked Amount	50.000	Range 44 - 117	Recovery =	94.72%		

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Pyridine	3.47	79	257481m	47.08	ng/uL	
3) N-Nitroso-dimethylamine	3.41	42	114291m	45.03	ng/uL	
5) Benzaldehyde	5.83	77	155555m	41.50	ug/kg	
6) Aniline	5.94	93	300167	46.08	ug/kg	96
8) Phenol	5.88	94	279938	47.18	ug/kg	89
9) bis(2-Chloroethyl)ether	5.98	93	271745	52.17	ug/kg	90
10) 2-Chlorophenol	6.06	128	270435	50.06	ug/kg	99
11) 1,3-Dichlorobenzene	6.22	146	330678	46.84	ug/kg	99
12) 1,4-Dichlorobenzene	6.28	146	320640	46.49	ug/kg	98
13) Benzyl Alcohol	6.39	108	140178	42.36	ug/kg	95
14) 1,2-Dichlorobenzene	6.44	146	318668	47.68	ug/kg	99
15) 2-Methylphenol	6.49	108	219978	48.39	ug/kg	97
16) bis(2-Chloroisopropyl)ethe	6.51	45	469323	43.92	ug/kg	96
17) Acetophenone	6.66	105	350971	51.34	ug/kg	89
18) 3+4-Methylphenol	6.64	108	240299	51.01	ug/kg	99
19) n-Nitroso-di-n-propylamine	6.65	70	144583	49.50	ug/kg	90
20) Hexachloroethane	6.79	117	127100	52.34	ug/kg	98
23) Nitrobenzene	6.84	77	266521	48.24	ug/kg	99
24) Isophorone	7.07	82	392732	48.33	ug/kg	99
25) 2-Nitrophenol	7.16	139	161215	61.61	ug/kg	98
26) 2,4-Dimethylphenol	7.17	107	233211	50.26	ug/kg	96
27) bis(2-Chloroethoxy)methane	7.25	93	277822	48.42	ug/kg	97
28) 2,4-Dichlorophenol	7.40	162	247567	53.56	ug/kg	98
29) Benzoic Acid	7.25	105	41557	50.02	ug/kg	87
30) 1,2,4-Trichlorobenzene	7.49	180	302410	48.05	ug/kg	99
31) Naphthalene	7.57	128	815196	44.51	ug/kg	99
32) 4-Chloroaniline	7.60	127	261477m	46.43	ug/kg	
33) Hexachlorobutadiene	7.68	225	194424	49.50	ug/kg	99
34) Caprolactam	7.96	113	77649	53.96	ug/kg	99
35) 4-Chloro-3-methylphenol	8.07	107	215553	55.44	ug/kg	98
36) 2-Methylnaphthalene	8.26	142	853868	71.47	ug/kg	99
37) 1-Methylnaphthalene	8.36	142	808315	70.99	ng/uL	99
39) Hexachlorocyclopentadiene	8.42	237	174270	47.67	ug/kg	100
40) 1,2,4,5-Tetrachlorobenzene	8.43	216	318529	47.37	ug/kg	99
41) 2,4,6-Trichlorophenol	8.53	196	197898	54.87	ug/kg	100
42) 2,4,5-Trichlorophenol	8.58	196	201852	53.70	ug/kg	95

(#) = qualifier out of range (m) = manual integration  
 AS07395.D 0824ABN.M Fri Oct 12 15:11:49 2018 SS

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Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20181011\AS07395.D Vial: 3  
 Acq On : 11 Oct 2018 14:28 Operator: GCH  
 Sample : SEQ-CCV Inst : GCMS-A  
 Misc : Multiplr: 1.00

MS Integration Params: LSTINT.P  
 Quant Time: Oct 12 10:55 2018

Quant Results File: 0824ABN.RES

Quant Method : G:\HPCHEM\A\METHODS\0824ABN.M (RTE Integrator)  
 Title : BNA Extractables GC/MS 8270D  
 Last Update : Fri Oct 12 10:53:36 2018  
 Response via : Initial Calibration  
 DataAcq Meth : RUN8270A

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
44) Biphenyl	8.72	154	688187	45.53	ug/kg	99
45) 2-Chloronaphthalene	8.76	162	579935	46.94	ug/kg	99
46) 2-Nitroaniline	8.84	138	180547	53.68	ug/kg	99
47) Dimethylphthalate	9.00	163	616757	46.55	ug/kg	99
48) Acenaphthylene	9.18	152	852949	46.04	ug/kg	100
49) 2,6-Dinitrotoluene	9.07	165	151928	53.45	ug/kg	97
50) 3-Nitroaniline	9.25	138	81868	48.75	ug/kg	98
51) Acenaphthene	9.35	153	573281	46.23	ug/kg	99
52) 2,4-Dinitrophenol	9.35	184	71534	67.53	ug/kg	22
53) Dibenzofuran	9.52	168	760090	46.39	ug/kg	99
54) 4-Nitrophenol	9.39	65	48490m	41.78	ug/kg	
55) 2,4-Dinitrotoluene	9.48	165	208135	57.70	ug/kg	95
56) 2,3,4,6-Tetrachlorophenol	9.63	232	170911m	48.13	ug/kg	
57) Fluorene	9.87	166	634360	45.66	ug/kg	99
58) Diethylphthalate	9.69	149	614439	47.44	ug/kg	99
59) 4-Chlorophenyl phenyl ethe	9.84	204	336541	47.97	ug/kg	98
60) 4-Nitroaniline	9.86	138	67831	41.38	ug/kg	89
62) 4,6-Dinitro-2-methylphenol	9.89	198	131571	70.36	ug/kg	94
63) n-Nitrosodiphenylamine	9.95	169	511968	44.65	ug/kg	99
64) 1,2-Diphenylhydrazine	10.00	77	525766	46.09	ug/kg	96
66) 4-Bromophenyl-phenyl ether	10.33	248	219966	47.93	ug/kg	97
67) Hexachlorobenzene	10.43	284	234108	47.29	ug/kg	100
68) Atrazine	10.46	200	134685	43.54	ug/kg	97
69) Pentachlorophenol	10.61	266	108770	41.00	ug/kg	98
70) Phenanthrene	10.84	178	915634	44.98	ug/kg	99
71) Anthracene	10.89	178	941408	46.02	ug/kg	99
72) Carbazole	11.03	167	595552m	54.06	ug/kg	
73) Di-n-butylphthalate	11.31	149	1092657	47.55	ug/kg	99
74) Fluoranthene	12.04	202	1141024	46.12	ug/kg	99
76) Benzidine	12.14	184	17383m	15.49	ug/kg	
77) Pyrene	12.29	202	1164220	46.37	ug/kg	99
79) Butylbenzylphthalate	12.90	149	526153	49.93	ug/kg	99
80) Benzo(a)anthracene	13.66	228	1177063	46.08	ug/kg	99
81) 3,3'-Dichlorobenzidine	13.59	252	219616	53.90	ug/kg	99
82) Chrysene	13.71	228	1076375	46.25	ug/kg	99
83) bis(2-Ethylhexyl)phthalate	13.56	149	750332	49.43	ug/kg	98
85) Di-n-octylphthalate	14.37	149	1316382	50.68	ug/kg	98
86) Benzo(b)fluoranthene	15.12	252	1081228	47.04	ug/kg	98
87) Benzo(k)fluoranthene	15.16	252	1022916	45.02	ug/kg	97
88) Benzo(a)pyrene	15.67	252	1081317	46.41	ug/kg	99
89) Indeno(1,2,3-cd)pyrene	18.04	276	1259385	49.52	ug/kg#	76
90) Dibenzo(a,h)anthracene	18.05	278	1112454	50.34	ug/kg	99
91) Benzo(g,h,i)perylene	18.74	276	1043066	49.75	ug/kg	93

(#) = qualifier out of range (m) = manual integration  
 AS07395.D 0824ABN.M Fri Oct 12 15:11:49 2018 SS

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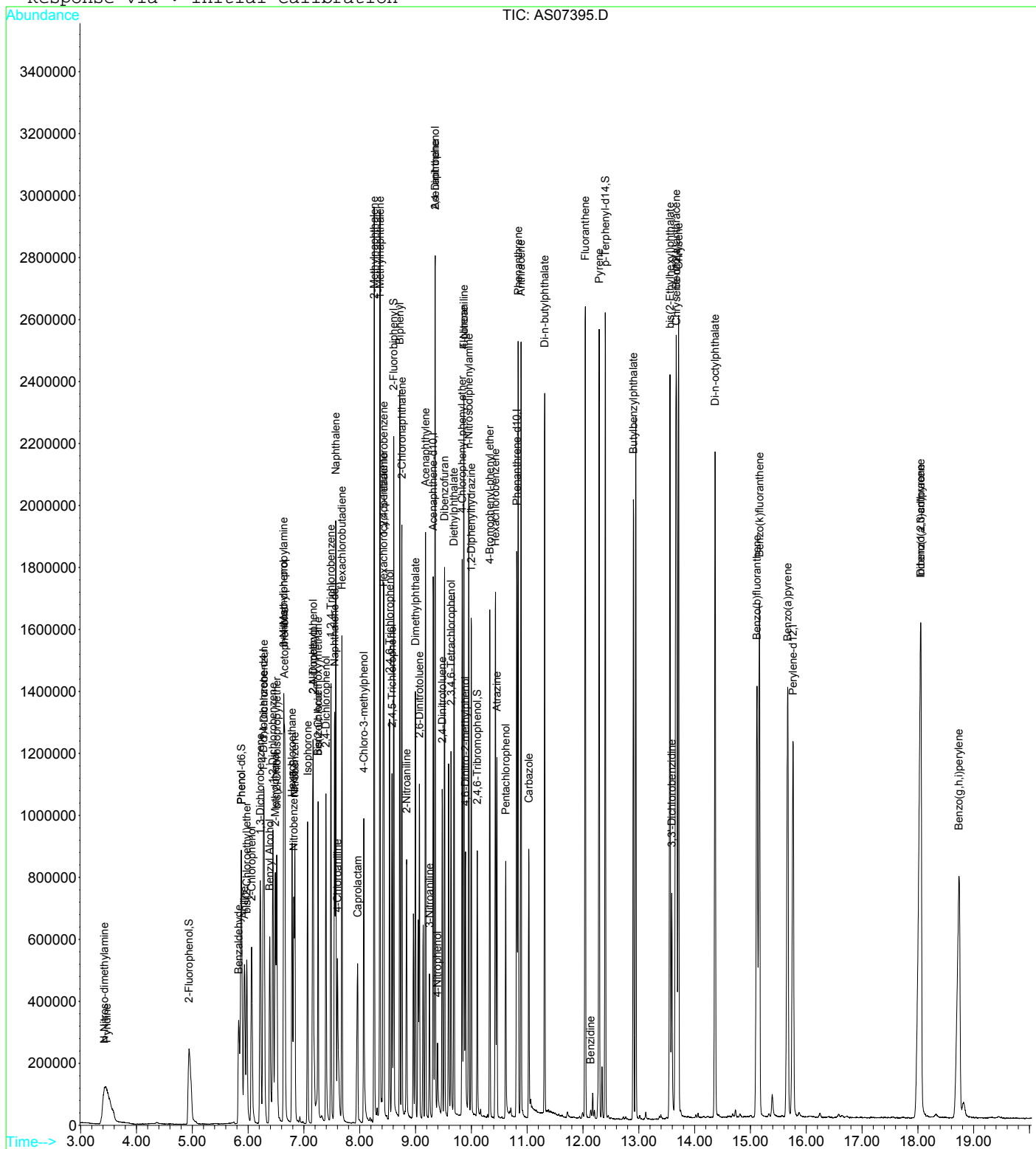
Quantitation Report

Data File : G:\HPCHEM\A\DATA\20181011\AS07395.D  
 Acq On : 11 Oct 2018 14:28  
 Sample : SEQ-CCV  
 Misc :  
 MS Integration Params: LSTINT.P  
 Quant Time: Oct 12 10:55 2018

Vial: 3  
 Operator: GCH  
 Inst : GCMS-A  
 Multiplr: 1.00

Quant Results File: 0824ABN.RES

Method : G:\HPCHEM\A\METHODS\0824ABN.M (RTE Integrator)  
 Title : BNA Extractables GC/MS 8270D  
 Last Update : Tue Oct 02 11:16:59 2018  
 Response via : Initial Calibration



# CALIBRATION VERIFICATION SUMMARY

**SW 846 8270D**

**CCV ID:** S8J1213-CCV1

**Analyzed:** 10/11/18 12:41

Analyte	Response	Expected		% Drift	Limit(s)
	Factor	Result	Result		
1-Methylnaphthalene	0.6170175	75.20	66.61	11	30
2,3,4,6-Tetrachlorophenol	0.2210259	50.00	44.46	11	30
2,4,5-Trichlorophenol	0.3713432	50.00	48.91	2	30
2,4,6-Trichlorophenol	0.3678283	50.00	47.71	5	20 (CCC)
2,4-Dichlorophenol	0.2786784	50.00	47.27	5	20 (CCC)
2,4-Dimethylphenol	0.3406714	50.00	51.82	4	30
2,4-Dinitrophenol	0.1517089	50.00	44.58	11	0.05 (SPCC)
2,4-Dinitrotoluene	0.4696406	50.00	51.84	4	30
2,6-Dinitrotoluene	0.3549094	50.00	49.82	0	30
2-Chloronaphthalene	1.262154	50.00	46.88	6	30
2-Chlorophenol	1.414604	50.00	46.59	7	30
2-Methylnaphthalene	0.6290265	75.20	66.40	12	30
2-Methylphenol	1.25947	50.00	48.76	2	30
2-Nitroaniline	0.4579944	50.00	50.29	1	30
2-Nitrophenol	0.193405	50.00	49.02	2	20 (CCC)
3,3'-Dichlorobenzidine	0.3423161	50.00	39.98	20	30
3+4-Methylphenol	1.297142	50.00	46.34	7	30
3-Nitroaniline	0.3855607	50.00	48.12	4	30
4,6-Dinitro-2-methylphenol	0.1204901	50.00	42.28	15	30
4-Bromophenyl-phenyl ether	0.1749858	50.00	45.63	9	30
4-Chloro-3-methylphenol	0.3176657	50.00	51.18	2	20 (CCC)
4-Chloroaniline	0.430819	50.00	48.58	3	30
4-Chlorophenyl phenyl ether	0.5674663	50.00	42.80	14	30
4-Nitroaniline	0.3513361	50.00	46.45	7	30
4-Nitrophenol	0.2322004	50.00	50.71	1	0.05 (SPCC)
Acenaphthene	1.279867	50.00	47.34	5	20 (CCC)
Acenaphthylene	1.944157	50.00	45.43	9	30
Acetophenone	1.78983	50.00	47.55	5	30
Anthracene	1.043079	50.00	44.93	10	30
Atrazine	0.1509149	50.00	42.26	15	30
Benzaldehyde	0.7565848	50.00	40.70	19	30
Benzo(a)anthracene	1.178373	50.00	45.22	10	30
Benzo(a)pyrene	1.034226	50.00	45.92	8	20 (CCC)
Benzo(b)fluoranthene	0.9878955	50.00	44.73	11	30
Benzo(g,h,i)perylene	0.9405901	50.00	45.13	10	30
Benzo(k)fluoranthene	1.064207	50.00	47.39	5	30
Biphenyl	1.651505	50.00	48.93	2	30
bis(2-chloroethoxy)methane	0.4024938	50.00	48.84	2	30
bis(2-chloroethyl)ether	1.332693	50.00	46.20	8	30
bis(2-chloroisopropyl)ether	2.183828	50.00	44.80	10	30
bis(2-ethylhexyl)phthalate	1.12361	50.00	52.50	5	30
Butylbenzylphthalate	0.8560527	50.00	52.97	6	30
Caprolactam	0.1196928	50.00	47.35	5	30
Carbazole	1.049554	50.00	46.66	7	30
Chrysene	1.09854	50.00	44.12	12	30
Dibenzo(a,h)anthracene	0.9746596	50.00	45.57	9	30
Dibenzofuran	1.642075	50.00	45.58	9	30

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14.8.

# CALIBRATION VERIFICATION SUMMARY

**SW 846 8270D**

**CCV ID:** S8J1213-CCV1

**Analyzed:** 10/11/18 12:41

Analyte	Response	Expected		% Drift	Limit(s)
	Factor	Result	Result		
Diethylphthalate	1.402559	50.00	49.27	1	30
Dimethylphthalate	1.366886	50.00	48.14	4	30
Di-n-butylphthalate	1.288366	50.00	47.03	6	30
Di-n-octylphthalate	1.912487	50.00	54.01	8	20 (CCC)
Fluoranthene	1.067539	50.00	44.25	12	20 (CCC)
Fluorene	1.316505	50.00	43.87	12	30
Hexachlorobenzene	0.1800945	50.00	40.75	19	30
Hexachlorobutadiene	0.1321879	50.00	43.52	13	20 (CCC)
Hexachlorocyclopentadiene	0.2175306	50.00	44.30	11	0.05 (SPCC)
Hexachloroethane	0.6155156	50.00	46.51	7	30
Indeno(1,2,3-cd)pyrene	1.120793	50.00	45.27	9	30
Isophorone	0.5648747	50.00	48.78	2	30
Naphthalene	1.036528	50.00	45.92	8	30
Nitrobenzene	0.3979684	50.00	51.34	3	30
n-Nitroso-dimethylamine	0.7850718	50.00	54.45	9	30
n-Nitroso-di-n-propylamine	0.9614274	50.00	48.34	3	0.05 (SPCC)
n-Nitrosodiphenylamine	0.6527311	50.00	47.23	6	20 (CCC)
Pentachlorophenol	6.390914E-02	50.00	40.65	19	20 (CCC)
Phenanthrene	1.051483	50.00	45.85	8	30
Phenol	1.729527	50.00	49.46	1	20 (CCC)
Pyrene	1.483093	50.00	48.38	3	30

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14.8.

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\D\DATA\20181011\DS18768.D Vial: 3  
 Acq On : 11 Oct 2018 12:41 Operator: GCH  
 Sample : SEQ-CCV@X50 Inst : GCMS-D  
 Misc : Multiplr: 1.00  
 MS Integration Params: rteint.p  
 Quant Time: Oct 12 10:27 2018 Quant Results File: 0802ABN.RES

Quant Method : G:\HPCHEM\D\METHODS\0802ABN.M (RTE Integrator)  
 Title : BNA Extractables GC/MS 8270D  
 Last Update : Fri Oct 12 10:26:51 2018  
 Response via : Initial Calibration  
 DataAcq Meth : RUN8270B

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.54	152	199193	40.00	ug/kg	0.00
22) Naphthalene-d8	6.82	136	754665	40.00	ug/kg	0.00
39) Acenaphthene-d10	8.58	164	369629	40.00	ug/kg	0.00
62) Phenanthrene-d10	10.05	188	661777	40.00	ug/kg	0.00
76) Chrysene-d12	12.76	240	480148	40.00	ug/kg	0.00
85) Perylene-d12	14.45	264	499614	40.00	ug/kg	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
5) 2-Fluorophenol	4.18	112	331696	48.58	ug/kg	-0.03
Spiked Amount	100.000	Range 15 - 62	Recovery	=	48.58%	
8) Phenol-d6	5.17	99	428944	49.47	ug/kg	-0.01
Spiked Amount	100.000	Range 15 - 45	Recovery	=	49.47%#	
23) Nitrobenzene-d5	6.10	82	365749	52.08	ug/kg	-0.06
Spiked Amount	50.000	Range 32 - 101	Recovery	=	104.16%#	
44) 2-Fluorobiphenyl	7.89	172	628427	46.05	ug/kg	-0.03
Spiked Amount	50.000	Range 36 - 103	Recovery	=	92.10%	
66) 2,4,6-Tribromophenol	9.36	330	61943	44.29	ug/kg	-0.04
Spiked Amount	100.000	Range 28 - 167	Recovery	=	44.29%	
79) p-Terphenyl-d14	11.62	244	555171	50.59	ug/kg	0.05
Spiked Amount	50.000	Range 44 - 117	Recovery	=	101.18%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) N-nitrosodimethylamine	2.32	42	195476	54.45	ng/uL	95
4) Pyridine	2.38	79	427564	48.40	ng/uL	100
6) Benzaldehyde	5.09	77	188383	40.70	ug/kg	99
7) Aniline	5.20	93	490041	47.26	ug/kg	97
9) Phenol	5.18	94	430637	49.46	ug/kg	95
10) bis(2-Chloroethyl)ether	5.27	93	331829	46.20	ug/kg	96
11) 2-Chlorophenol	5.33	128	352224	46.59	ug/kg	97
12) 1,3-Dichlorobenzene	5.49	146	382027	45.99	ug/kg	97
13) 1,4-Dichlorobenzene	5.56	146	356141	44.70	ug/kg	98
14) Benzyl Alcohol	5.68	108	239976	53.39	ug/kg	97
15) 1,2-Dichlorobenzene	5.72	146	357907	44.71	ug/kg	99
16) 2-Methylphenol	5.79	108	313597	48.76	ug/kg	97
17) bis(2-Chloroisopropyl)ethe	5.81	45	543754	44.80	ug/kg	80
18) Acetophenone	5.94	105	445652	47.55	ug/kg	93
19) 3+4-Methylphenol	5.94	108	322977	46.34	ug/kg	94
20) n-Nitroso-di-n-propylamine	5.94	70	239387	48.34	ug/kg	93
21) Hexachloroethane	6.06	117	153258	46.51	ug/kg	98
24) Nitrobenzene	6.12	77	375416	51.34	ug/kg	95
25) Isophorone	6.35	82	532864	48.78	ug/kg	97
26) 2-Nitrophenol	6.44	139	182445	49.02	ug/kg	95
27) 2,4-Dimethylphenol	6.48	107	321366	51.82	ug/kg	96
28) bis(2-Chloroethoxy)methane	6.56	93	379685	48.84	ug/kg	98
29) 2,4-Dichlorophenol	6.68	162	262886	47.27	ug/kg	100
30) Benzoic Acid	6.47	105	18281m	26.66	ug/kg	
31) 1,2,4-Trichlorobenzene	6.77	180	281093	44.02	ug/kg	95
32) Naphthalene	6.85	128	977789	45.92	ug/kg	99
33) 4-Chloroaniline	6.89	127	406405	48.58	ug/kg	98
34) Hexachlorobutadiene	6.97	225	124697	43.52	ug/kg	96
35) Caprolactam	7.22	113	112910	47.35	ug/kg	90
36) 4-Chloro-3-methylphenol	7.37	107	299664	51.18	ug/kg	92
37) 2-Methylnaphthalene	7.54	142	892444	66.40	ug/kg	98
38) 1-Methylnaphthalene	7.63	142	875406	66.61	ng/uL	99
40) Hexachlorocyclopentadiene	7.70	237	100507	44.30	ug/kg	98
41) 1,2,4,5-Tetrachlorobenzene	7.71	216	226743	44.22	ug/kg	100
42) 2,4,6-Trichlorophenol	7.82	196	169950m	47.71	ug/kg	
43) 2,4,5-Trichlorophenol	7.85	196	171574	48.91	ug/kg	94

(#) = qualifier out of range (m) = manual integration  
 DS18768.D 0802ABN.M Tue Oct 16 12:43:47 2018 SS

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14.8.

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\D\DATA\20181011\DS18768.D Vial: 3  
 Acq On : 11 Oct 2018 12:41 Operator: GCH  
 Sample : SEQ-CCV@X50 Inst : GCMS-D  
 Misc : Multiplr: 1.00  
 MS Integration Params: rteint.p  
 Quant Time: Oct 12 10:27 2018 Quant Results File: 0802ABN.RES

Quant Method : G:\HPCHEM\D\METHODS\0802ABN.M (RTE Integrator)  
 Title : BNA Extractables GC/MS 8270D  
 Last Update : Fri Oct 12 10:26:51 2018  
 Response via : Initial Calibration  
 DataAcq Meth : RUN8270B

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
45) Biphenyl	7.99	154	763055	48.93	ug/kg	99
46) 2-Chloronaphthalene	8.02	162	583161	46.88	ug/kg	97
47) 2-Nitroaniline	8.12	138	211610	50.29	ug/kg	93
48) Dimethylphthalate	8.29	163	631551	48.14	ug/kg	95
49) Acenaphthylene	8.44	152	898271	45.42	ug/kg	99
50) 2,6-Dinitrotoluene	8.35	165	163981	49.82	ug/kg	95
51) 3-Nitroaniline	8.52	138	178143	48.12	ug/kg	90
52) Acenaphthene	8.61	153	591345	47.34	ug/kg	96
53) 2,4-Dinitrophenol	8.63	184	70095	44.58	ug/kg	63
54) Dibenzofuran	8.78	168	758698	45.58	ug/kg	98
55) 4-Nitrophenol	8.68	65	107285	50.71	ug/kg	97
56) 2,4-Dinitrotoluene	8.76	165	216991	51.84	ug/kg	90
57) 2,3,4,6-Tetrachlorophenol	8.90	232	102122	44.45	ug/kg	92
58) Fluorene	9.12	166	608273	43.87	ug/kg	99
59) Diethylphthalate	8.98	149	648033	49.27	ug/kg	98
60) 4-Chlorophenyl phenyl ethe	9.11	204	262190	42.80	ug/kg	92
61) 4-Nitroaniline	9.13	138	162330	46.45	ug/kg	88
63) 4,6-Dinitro-2-methylphenol	9.17	198	99672	42.28	ug/kg	89
64) n-Nitrosodiphenylamine	9.22	169	539953	47.23	ug/kg	99
65) 1,2-Diphenylhydrazine	9.26	77	739137	51.02	ug/kg	94
67) 4-Bromophenyl-phenyl ether	9.59	248	144752	45.63	ug/kg	91
68) Hexachlorobenzene	9.68	284	148978	40.75	ug/kg	99
69) Atrazine	9.74	200	124840	42.26	ug/kg	96
70) Pentachlorophenol	9.87	266	52867m	40.65	ug/kg	
71) Phenanthrene	10.07	178	869809	45.85	ug/kg	100
72) Anthracene	10.13	178	862857	44.93	ug/kg	99
73) Carbazole	10.28	167	868213	46.66	ug/kg	97
74) Di-n-butylphthalate	10.60	149	1065764	47.03	ug/kg	98
75) Fluoranthene	11.26	202	883091	44.25	ug/kg	98
77) Benzidine	11.37	184	88261	9.21	ug/kg	98
78) Pyrene	11.49	202	890130	48.38	ug/kg	98
80) Butylbenzylphthalate	12.10	149	513790	52.97	ug/kg	97
81) Benzo(a)anthracene	12.74	228	707242	45.22	ug/kg	100
82) 3,3'-Dichlorobenzidine	12.70	252	205453	39.98	ug/kg	99
83) Chrysene	12.79	228	659327	44.12	ug/kg	98
84) bis(2-Ethylhexyl)phthalate	12.72	149	674374	52.50	ug/kg	98
86) Di-n-octylphthalate	13.46	149	1147846	54.01	ug/kg	97
87) Benzo(b)fluoranthene	13.99	252	616958	44.73	ug/kg	98
88) Benzo(k)fluoranthene	14.02	252	664616m	47.39	ug/kg	
89) Benzo(a)pyrene	14.38	252	645892	45.92	ug/kg	99
90) Indeno(1,2,3-cd)pyrene	16.04	276	699955	45.27	ug/kg	98
91) Dibenzo(a,h)anthracene	16.05	278	608692	45.57	ug/kg	97
92) Benzo(g,h,i)perylene	16.51	276	587415	45.13	ug/kg	99

(#) = qualifier out of range (m) = manual integration  
 DS18768.D 0802ABN.M Tue Oct 16 12:43:47 2018 SS

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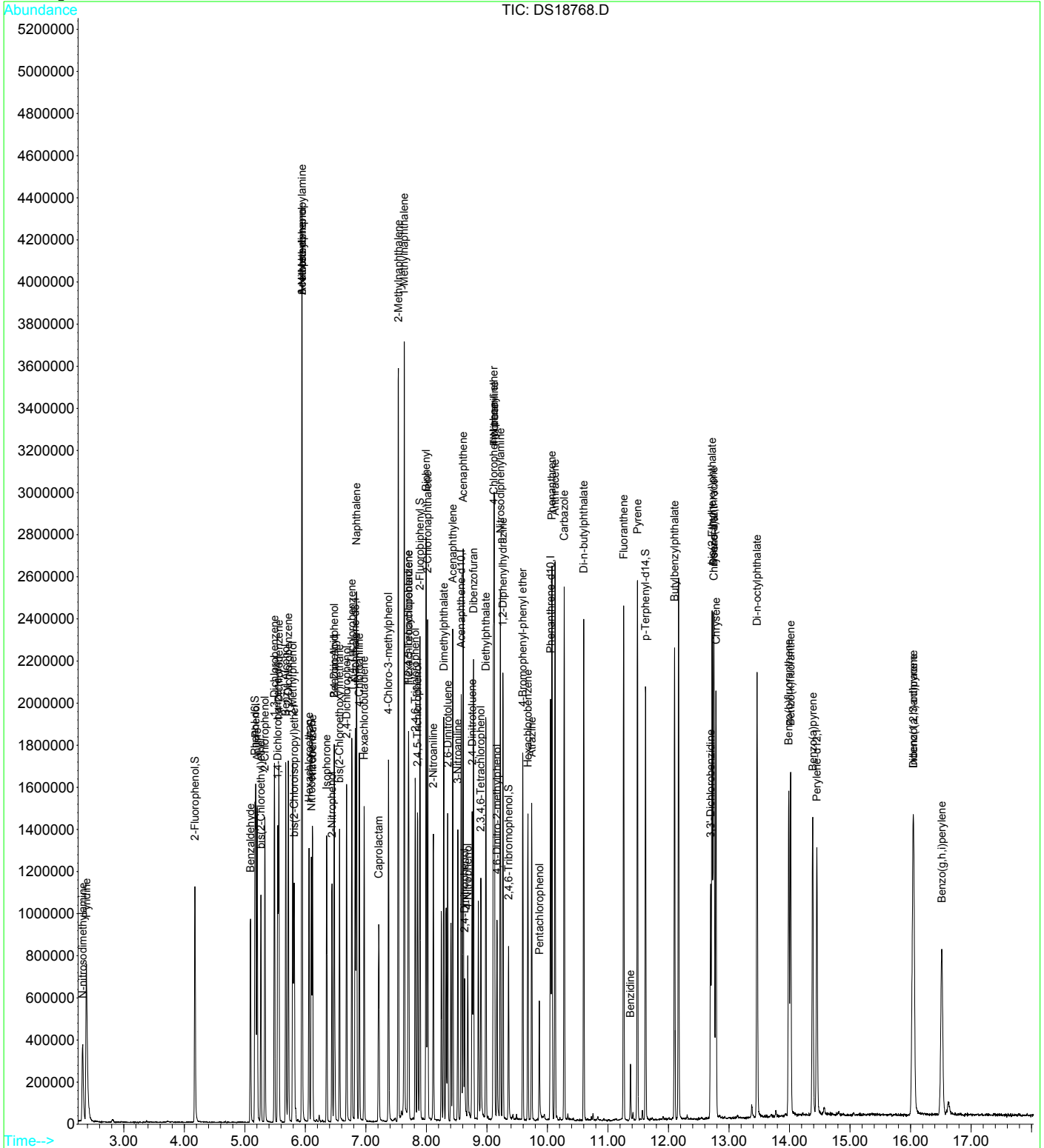
Quantitation Report

Data File : G:\HPCHEM\D\DATA\20181011\DS18768.D  
 Acq On : 11 Oct 2018 12:41  
 Sample : SEQ-CCV@X50  
 Misc :  
 MS Integration Params: rteint.p  
 Quant Time: Oct 12 10:27 2018

Vial: 3  
 Operator: GCH  
 Inst : GCMS-D  
 Multiplr: 1.00

Quant Results File: 0802ABN.RES

Method : G:\HPCHEM\D\METHODS\0802ABN.M (RTE Integrator)  
 Title : BNA Extractables GC/MS 8270D  
 Last Update : Mon Oct 15 10:25:43 2018  
 Response via : Initial Calibration



# INTERNAL STANDARD REPORT

**Analysis Class: SEMIVOLATILES**

**Analysis Batch: S8J1212**

Lab Number	File ID	DCB-D4		NAP-D8		ACE-D10		PHE-D10		CHR-D12		PER-D12	
		Area	Rt	Area	Rt	Area	Rt	Area	Rt	Area	Rt	Area	Rt
8100452-10	AS07396.D	137601	6.27	525512	7.54	279789	9.31	528787	10.81	578999	13.67	603659	15.75
8100452-11	AS07397.D	144157	6.27	544435	7.54	292101	9.31	558645	10.81	606407	13.67	627427	15.75
8100452-12	AS07398.D	160040	6.26	621406	7.54	331206	9.31	635462	10.81	691875	13.67	723702	15.76
8100452-13	AS07399.D	144929	6.27	551744	7.54	296526	9.31	563939	10.81	621689	13.67	638170	15.75
8100452-14	AS07400.D	139395	6.27	542847	7.54	286684	9.31	546847	10.81	598306	13.67	626870	15.75
8100452-09	AS07401.D	148181	6.27	560064	7.54	296470	9.31	568102	10.81	628942	13.67	651720	15.76

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Reference Std ID
S8J1212-CCV1

Internal Standard	Ref Area	Area Limit	Ref RT	RT Limit
DCB-D4	1,4-Dichlorobenzene-d4	171909	6.27	0.50
NAP-D8	Naphthalene-d8	668028	7.55	0.50
ACE-D10	Acenaphthene-d10	361834	9.32	0.50
PHE-D10	Phenanthrene-d10	711170	10.81	0.50
CHR-D12	Chrysene-d12	779517	13.68	0.50
PER-D12	Perylene-d12	840849	15.76	0.50

\* - Outside of QC Limits

F-VIII



# INTERNAL STANDARD REPORT

**Analysis Class: SEMIVOLATILES**

**Analysis Batch: S8J1213**

Lab Number	File ID	DCB-D4		NAP-D8		ACE-D10		PHE-D10		CHR-D12		PER-D12	
		Area	Rt	Area	Rt	Area	Rt	Area	Rt	Area	Rt	Area	Rt
B8J1101-BLK1	DS18769.D	169814	5.55	643038	6.83	307744	8.58	545070	10.05	412629	12.75	408173	14.45
8100452-01	DS18771.D	162070	5.55	608163	6.83	299587	8.57	519499	10.05	391750	12.76	379160	14.45
8100452-02	DS18772.D	182818	5.55	695780	6.82	358130	8.57	600167	10.05	442655	12.75	426788	14.45
8100452-03	DS18773.D	167877	5.55	627978	6.82	308607	8.57	531137	10.05	397045	12.75	381767	14.45
8100452-04	DS18774.D	162627	5.55	625040	6.82	296500	8.57	521121	10.05	383151	12.75	361524	14.45
8100452-05	DS18775.D	159249	5.54	609200	6.83	307467	8.57	538317	10.05	389183	12.75	380947	14.45
8100452-06	DS18776.D	159499	5.55	607328	6.83	297278	8.57	519141	10.05	384901	12.75	374104	14.45
8100452-07	DS18777.D	174325	5.55	649764	6.83	323492	8.57	554925	10.05	419384	12.75	388875	14.45
8100452-08	DS18778.D	160052	5.54	608878	6.83	294400	8.57	519881	10.05	381925	12.76	375896	14.45

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14.9.

Reference Std ID
S8J1213-CCV1

Internal Standard	Ref Area	Area Limit	Ref RT	RT Limit
DCB-D4	1,4-Dichlorobenzene-d4	199193	99,596.50 - 398,386.00	5.54 0.50
NAP-D8	Naphthalene-d8	754665	377,332.50 - 1,509,330.00	6.82 0.50
ACE-D10	Acenaphthene-d10	369629	184,814.50 - 739,258.00	8.58 0.50
PHE-D10	Phenanthrene-d10	661777	330,888.50 - 1,323,554.00	10.05 0.50
CHR-D12	Chrysene-d12	480148	240,074.00 - 960,296.00	12.76 0.50
PER-D12	Perylene-d12	499614	249,807.00 - 999,228.00	14.45 0.50

\* - Outside of QC Limits

F-VIII



AQUA PRO-TECH LABORATORIES  
*Certified Environmental Testing*

# VOLATILES

Peak Environmental  
Work Order: 8100452  
Project: Ridgewood

# ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260C

<b>Client:</b>	Peak Environmental	<b>Project:</b>	Ridgewood
<b>Client Sample ID:</b>	Blank	<b>Work Order:</b>	8100452
<b>Lab Sample ID:</b>	B8J1111-BLK1		

Init/Final Vol:	5 g / 5 mL	Prep Date:	10/10/2018 15:02	File ID:	3V33994.D
		Prep Batch:	B8J1111	Analyzed:	10/10/2018 15:02
		Matrix:	Soil	Sequence:	S8J1704
		Prep Method:	PURGE & TRAP SOIL EPA 5035A		

CAS NO.	COMPOUND	CONC. (mg/kg wet)	MDL	RL	Q
71-55-6	1,1,1-Trichloroethane	ND	0.000292	0.00200	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.000276	0.00200	U
76-13-1	1,1,2-Trichloro-1,2,2 Trifluoroethane	ND	0.000856	0.00200	U
79-00-5	1,1,2-Trichloroethane	ND	0.000337	0.00200	U
75-34-3	1,1-Dichloroethane	ND	0.000292	0.00200	U
75-35-4	1,1-Dichloroethene	ND	0.000370	0.00200	U
87-61-6	1,2,3-Trichlorobenzene	ND	0.000432	0.00200	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.000533	0.00200	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.000276	0.00200	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.000488	0.00200	U
106-93-4	1,2-Dibromoethane	ND	0.000252	0.00200	U
95-50-1	1,2-Dichlorobenzene	ND	0.000353	0.00200	U
107-06-2	1,2-Dichloroethane	ND	0.000282	0.00200	U
78-87-5	1,2-Dichloropropane	ND	0.000328	0.00200	U
541-73-1	1,3-Dichlorobenzene	ND	0.000147	0.00200	U
106-46-7	1,4-Dichlorobenzene	ND	0.000288	0.00200	U
78-93-3	2-Butanone	ND	0.000326	0.00500	U
591-78-6	2-Hexanone	ND	0.000187	0.00200	U
108-10-1	4-Methyl-2-pentanone	ND	0.000250	0.00200	U
67-64-1	Acetone	ND	0.000606	0.00500	U
71-43-2	Benzene	ND	0.000182	0.00200	U
74-97-5	Bromochloromethane	ND	0.000369	0.00200	U
75-27-4	Bromodichloromethane	ND	0.000251	0.00200	U
75-25-2	Bromoform	ND	0.000351	0.00200	U
74-83-9	Bromomethane	ND	0.000577	0.00200	U
75-15-0	Carbon disulfide	ND	0.000287	0.00200	U
56-23-5	Carbon Tetrachloride	ND	0.000301	0.00200	U
108-90-7	Chlorobenzene	ND	0.000290	0.00200	U
124-48-1	Chlorodibromomethane	ND	0.000246	0.00200	U
75-00-3	Chloroethane	ND	0.000341	0.00200	U
67-66-3	Chloroform	ND	0.000336	0.00200	U

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# ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260C

Client: Peak Environmental Project: Ridgewood  
Client Sample ID: Blank Work Order: 8100452  
Lab Sample ID: B8J1111-BLK1

Init/Final Vol:	5 g / 5 mL	Prep Date:	10/10/2018 15:02	File ID:	3V33994.D
		Prep Batch:	B8J1111	Analyzed:	10/10/2018 15:02
		Matrix:	Soil	Sequence:	S8J1704
		Prep Method:	PURGE & TRAP SOIL EPA 5035A		

CAS NO.	COMPOUND	CONC. (mg/kg wet)	MDL	RL	Q
74-87-3	Chloromethane	ND	0.000770	0.00200	U
156-59-2	cis-1,2-Dichloroethene	ND	0.0000967	0.00200	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.000253	0.00200	U
110-82-7	Cyclohexane	ND	0.000443	0.00200	U
75-71-8	Dichlorodifluoromethane	ND	0.000675	0.00200	U
100-41-4	EthylBenzene	ND	0.000271	0.00200	U
98-82-8	Isopropylbenzene	ND	0.000314	0.00200	U
179601-23-1	m+p-Xylenes	ND	0.000505	0.00400	U
79-20-9	Methyl Acetate	ND	0.000265	0.00200	U
1634-04-4	Methyl tert-Butyl Ether	ND	0.000338	0.00200	U
108-87-2	Methylcyclohexane	ND	0.000322	0.00200	U
75-09-2	Methylene Chloride	ND	0.000601	0.00200	U
95-47-6	o-Xylene	ND	0.000257	0.00200	U
100-42-5	Styrene	ND	0.000286	0.00200	U
75-65-0	tert-Butyl alcohol	ND	0.00420	0.0200	U
127-18-4	Tetrachloroethene	ND	0.000198	0.00200	U
108-88-3	Toluene	ND	0.000161	0.00200	U
1330-20-7	Total Xylenes	ND	0.000257	0.00200	U
156-60-5	trans-1,2-Dichloroethene	ND	0.000271	0.00200	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.000382	0.00200	U
79-01-6	Trichloroethene	ND	0.000294	0.00200	U
75-69-4	Trichlorofluoromethane	ND	0.000230	0.00200	U
75-01-4	Vinyl chloride	ND	0.000380	0.00200	U

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# ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260C

Client: Peak Environmental Project: Ridgewood  
Client Sample ID: Blank Work Order: 8100452  
Lab Sample ID: B8J1111-BLK1

Init/Final Vol:	5 g / 5 mL	Prep Date:	10/10/2018 15:02	File ID:	3V33994.D
		Prep Batch:	B8J1111	Analyzed:	10/10/2018 15:02
		Matrix:	Soil	Sequence:	S8J1704
		Prep Method:	PURGE & TRAP SOIL EPA 5035A		

CAS NO.	TENTATIVELY IDENTIFIED COMPOUNDS	CONC. (mg/kg wet)	RT	Q
	Sum of Tentatively Identified Compounds	0.000		

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Quantitation Report (QT/LSC Reviewed)

Data File : G:\HPCHEM\3\DATA\10102018\3V33994.D Vial: 45  
 Acq On : 10 Oct 2018 15:02 Operator: omd  
 Sample : B8J1111-BLK1 Inst : GCMS-3  
 Misc : soil re Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Oct 11 11:24 2018 Quant Results File: 0717WC3.RES

Quant Method : G:\HPCHEM\3\METHODS\0717WC3.M (RTE Integrator)  
 Title : VOC's by EPA Method 8260C  
 Last Update : Wed Oct 10 16:46:14 2018  
 Response via : Initial Calibration  
 DataAcq Meth : VOCRUN1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.49	168	145721	50.00	ug/kg	0.03
33) 1,4-Difluorobenzene	8.91	114	275232	50.00	ug/kg	0.02
52) Chlorobenzene-d5	14.07	82	144968	50.00	ug/kg	0.02
74) 1,4-Dichlorobenzene-d4	18.06	152	125977	50.00	ug/kg	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
26) Dibromofluoromethane	7.37	113	99990	56.41	ug/kg	0.03
Spiked Amount 50.000	Range 59 - 147		Recovery =	112.82%		
43) Toluene-d8	11.54	98	325733	52.62	ug/kg	0.02
Spiked Amount 50.000	Range 66 - 134		Recovery =	105.24%		
62) 4-Bromofluorobenzene	16.11	95	145973	59.76	ug/kg	0.02
Spiked Amount 50.000	Range 64 - 125		Recovery =	119.52%		

Target Compounds Qvalue

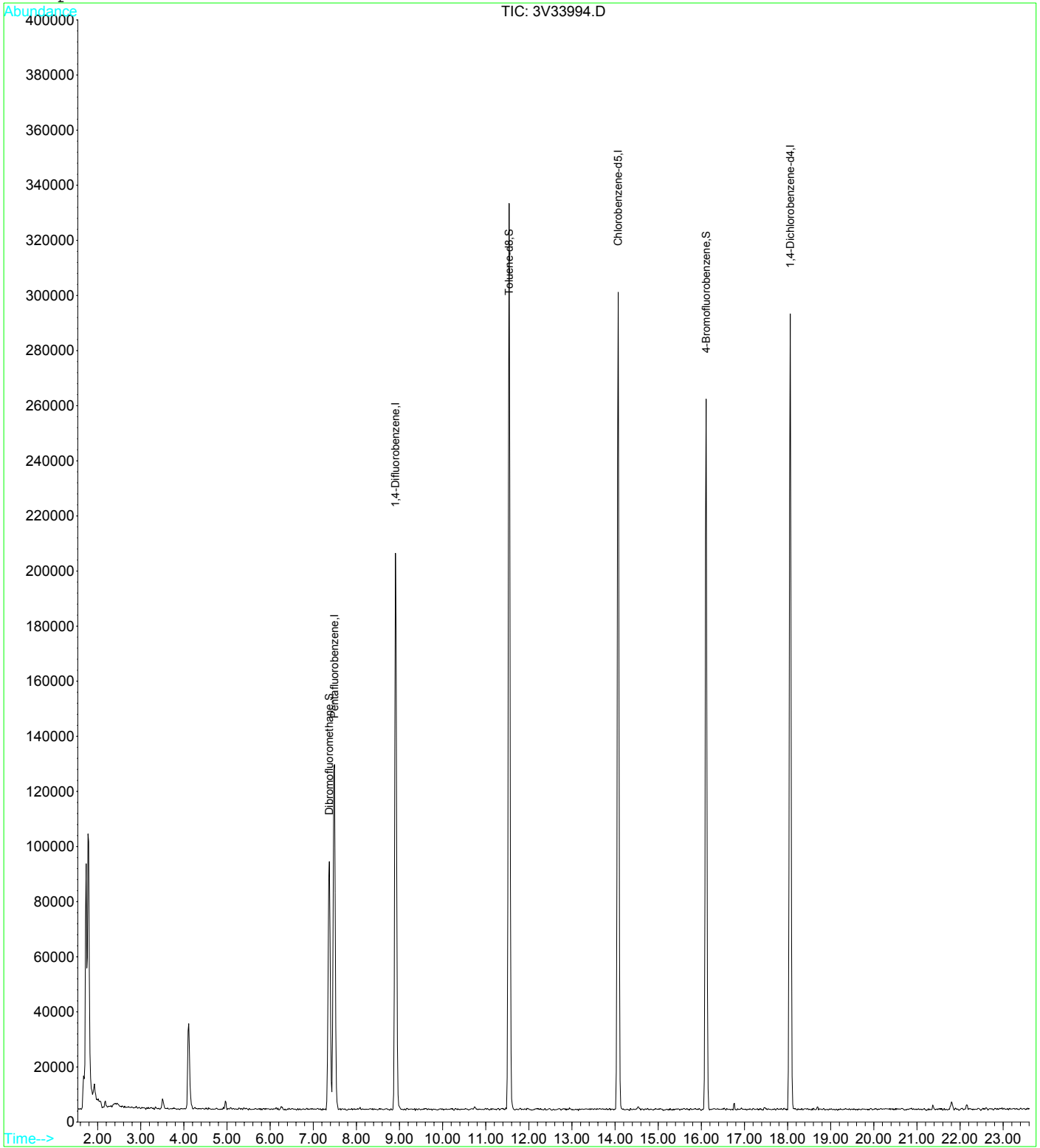
(#) = qualifier out of range (m) = manual integration  
 3V33994.D 0717WC3.M Wed Oct 17 12:06:31 2018 SS

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Quantitation Report

Data File : G:\HPCHEM\3\DATA\10102018\3V33994.D Vial: 45  
Acq On : 10 Oct 2018 15:02 Operator: omd  
Sample : B8J1111-BLK1 Inst : GCMS-3  
Misc : soil re Multiplr: 1.00  
MS Integration Params: RTEINT.P  
Quant Time: Oct 11 11:24 2018 Quant Results File: 0717WC3.RES

Method : G:\HPCHEM\3\METHODS\0717WC3.M (RTE Integrator)  
Title : VOC's by EPA Method 8260C  
Last Update : Wed Oct 10 16:46:14 2018  
Response via : Initial Calibration



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# ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260C

Client: Peak Environmental Project: Ridgewood  
Client Sample ID: Blank Work Order: 8100452  
Lab Sample ID: B8J1141-BLK1

Init/Final Vol:	5 g / 5 mL	Prep Date:	10/11/2018 13:05	File ID:	3V34019.D
		Prep Batch:	B8J1141	Analyzed:	10/11/2018 13:05
		Matrix:	Soil	Sequence:	S8J1706
		Prep Method:	PURGE & TRAP SOIL EPA 5035A		

CAS NO.	COMPOUND	CONC. (mg/kg wet)	MDL	RL	Q
71-55-6	1,1,1-Trichloroethane	ND	0.000292	0.00200	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.000276	0.00200	U
76-13-1	1,1,2-Trichloro-1,2,2 Trifluoroethane	ND	0.000856	0.00200	U
79-00-5	1,1,2-Trichloroethane	ND	0.000337	0.00200	U
75-34-3	1,1-Dichloroethane	ND	0.000292	0.00200	U
75-35-4	1,1-Dichloroethene	ND	0.000370	0.00200	U
87-61-6	1,2,3-Trichlorobenzene	ND	0.000432	0.00200	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.000533	0.00200	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.000276	0.00200	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.000488	0.00200	U
106-93-4	1,2-Dibromoethane	ND	0.000252	0.00200	U
95-50-1	1,2-Dichlorobenzene	ND	0.000353	0.00200	U
107-06-2	1,2-Dichloroethane	ND	0.000282	0.00200	U
78-87-5	1,2-Dichloropropane	ND	0.000328	0.00200	U
541-73-1	1,3-Dichlorobenzene	ND	0.000147	0.00200	U
106-46-7	1,4-Dichlorobenzene	ND	0.000288	0.00200	U
78-93-3	2-Butanone	ND	0.000326	0.00500	U
591-78-6	2-Hexanone	ND	0.000187	0.00200	U
108-10-1	4-Methyl-2-pentanone	ND	0.000250	0.00200	U
67-64-1	Acetone	ND	0.000606	0.00500	U
71-43-2	Benzene	ND	0.000182	0.00200	U
74-97-5	Bromochloromethane	ND	0.000369	0.00200	U
75-27-4	Bromodichloromethane	ND	0.000251	0.00200	U
75-25-2	Bromoform	ND	0.000351	0.00200	U
74-83-9	Bromomethane	ND	0.000577	0.00200	U
75-15-0	Carbon disulfide	ND	0.000287	0.00200	U
56-23-5	Carbon Tetrachloride	ND	0.000301	0.00200	U
108-90-7	Chlorobenzene	ND	0.000290	0.00200	U
124-48-1	Chlorodibromomethane	ND	0.000246	0.00200	U
75-00-3	Chloroethane	ND	0.000341	0.00200	U
67-66-3	Chloroform	ND	0.000336	0.00200	U

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15.1.



# ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260C

Client: Peak Environmental Project: Ridgewood  
Client Sample ID: Blank Work Order: 8100452  
Lab Sample ID: B8J1141-BLK1

Init/Final Vol:	5 g / 5 mL	Prep Date:	10/11/2018 13:05	File ID:	3V34019.D
		Prep Batch:	B8J1141	Analyzed:	10/11/2018 13:05
		Matrix:	Soil	Sequence:	S8J1706
		Prep Method:	PURGE & TRAP SOIL EPA 5035A		

CAS NO.	COMPOUND	CONC. (mg/kg wet)	MDL	RL	Q
74-87-3	Chloromethane	ND	0.000770	0.00200	U
156-59-2	cis-1,2-Dichloroethene	ND	0.0000967	0.00200	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.000253	0.00200	U
110-82-7	Cyclohexane	ND	0.000443	0.00200	U
75-71-8	Dichlorodifluoromethane	ND	0.000675	0.00200	U
100-41-4	EthylBenzene	ND	0.000271	0.00200	U
98-82-8	Isopropylbenzene	ND	0.000314	0.00200	U
179601-23-1	m+p-Xylenes	ND	0.000505	0.00400	U
79-20-9	Methyl Acetate	ND	0.000265	0.00200	U
1634-04-4	Methyl tert-Butyl Ether	ND	0.000338	0.00200	U
108-87-2	Methylcyclohexane	ND	0.000322	0.00200	U
75-09-2	Methylene Chloride	ND	0.000601	0.00200	U
95-47-6	o-Xylene	ND	0.000257	0.00200	U
100-42-5	Styrene	ND	0.000286	0.00200	U
75-65-0	tert-Butyl alcohol	ND	0.00420	0.0200	U
127-18-4	Tetrachloroethene	ND	0.000198	0.00200	U
108-88-3	Toluene	ND	0.000161	0.00200	U
1330-20-7	Total Xylenes	ND	0.000257	0.00200	U
156-60-5	trans-1,2-Dichloroethene	ND	0.000271	0.00200	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.000382	0.00200	U
79-01-6	Trichloroethene	ND	0.000294	0.00200	U
75-69-4	Trichlorofluoromethane	ND	0.000230	0.00200	U
75-01-4	Vinyl chloride	ND	0.000380	0.00200	U

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# ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260C

Client: Peak Environmental Project: Ridgewood  
Client Sample ID: Blank Work Order: 8100452  
Lab Sample ID: B8J1141-BLK1

Init/Final Vol:	5 g / 5 mL	Prep Date:	10/11/2018 13:05	File ID:	3V34019.D
		Prep Batch:	B8J1141	Analyzed:	10/11/2018 13:05
		Matrix:	Soil	Sequence:	S8J1706
		Prep Method:	PURGE & TRAP SOIL EPA 5035A		

CAS NO.	TENTATIVELY IDENTIFIED COMPOUNDS	CONC. (mg/kg wet)	RT	Q
	Sum of Tentatively Identified Compounds	0.000		

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15.1.

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Quantitation Report (QT/LSC Reviewed)

Data File : G:\HPCHEM\3\DATA\10112018\3V34019.D Vial: 74  
 Acq On : 11 Oct 2018 13:05 Operator: omd  
 Sample : B8J1141-BLK1 Inst : GCMS-3  
 Misc : soil Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Oct 17 12:27 2018 Quant Results File: 0717WC3.RES

Quant Method : G:\HPCHEM\3\METHODS\0717WC3.M (RTE Integrator)  
 Title : VOC's by EPA Method 8260C  
 Last Update : Wed Oct 10 16:46:14 2018  
 Response via : Initial Calibration  
 DataAcq Meth : VOCRUN1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.54	168	160008	50.00	ug/kg	0.07
33) 1,4-Difluorobenzene	8.95	114	297018	50.00	ug/kg	0.06
52) Chlorobenzene-d5	14.12	82	159603	50.00	ug/kg	0.06
74) 1,4-Dichlorobenzene-d4	18.11	152	134115	50.00	ug/kg	0.04

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
26) Dibromofluoromethane	7.42	113	105989	54.46	ug/kg	0.07
Spiked Amount	50.000	Range 59 - 147	Recovery	=	108.92%	
43) Toluene-d8	11.59	98	357963	53.58	ug/kg	0.06
Spiked Amount	50.000	Range 66 - 134	Recovery	=	107.16%	
62) 4-Bromofluorobenzene	16.14	95	157684	58.64	ug/kg	0.04
Spiked Amount	50.000	Range 64 - 125	Recovery	=	117.28%	

Target Compounds Qvalue

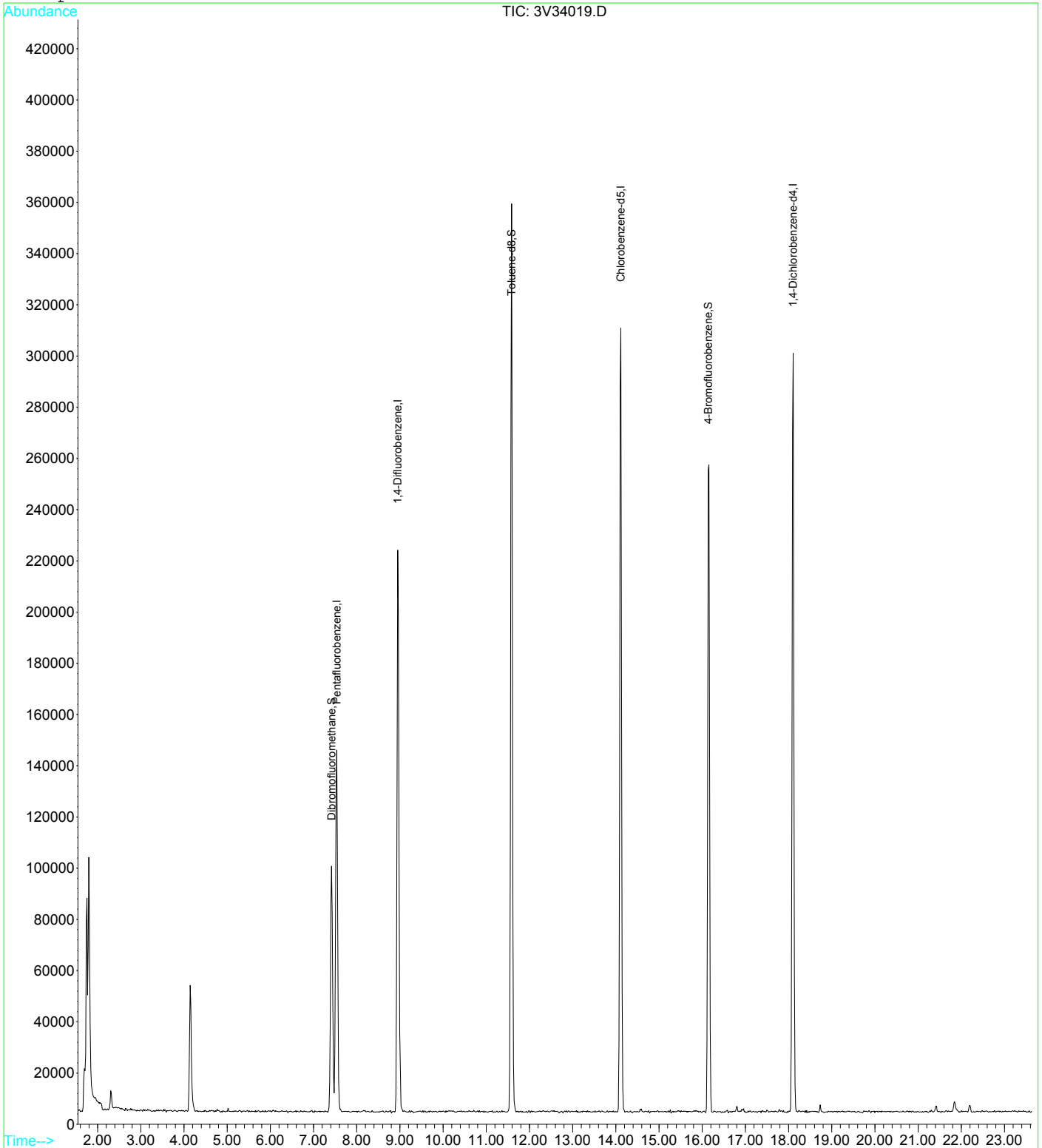
(#) = qualifier out of range (m) = manual integration  
 3V34019.D 0717WC3.M Wed Oct 17 12:26:09 2018 SS

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15.1.

Quantitation Report

Data File : G:\HPCHEM\3\DATA\10112018\3V34019.D Vial: 74  
Acq On : 11 Oct 2018 13:05 Operator: omd  
Sample : B8J1141-BLK1 Inst : GCMS-3  
Misc : soil Multiplr: 1.00  
MS Integration Params: RTEINT.P  
Quant Time: Oct 17 12:27 2018 Quant Results File: 0717WC3.RES

Method : G:\HPCHEM\3\METHODS\0717WC3.M (RTE Integrator)  
Title : VOC's by EPA Method 8260C  
Last Update : Wed Oct 10 16:46:14 2018  
Response via : Initial Calibration



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15.1

# ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260C

**Client:** Peak Environmental  
**Client Sample ID:** NTP-1A  
**Lab Sample ID:** 8100452-01  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 00:00	Prep Date:	10/10/18 18:59	File ID:	3V34002.D
Init/Final Vol:	9.1 g / 5 mL	Prep Batch:	B8J1111	Analyzed:	10/10/18 18:59
Dilution:	1	Matrix:	Soil	Sequence:	S8J1704
Percent Solids:	89.91	Prep Method:	PURGE & TRAP SOIL EPA 5035A		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
71-55-6	1,1,1-Trichloroethane	ND	0.000178	0.00122	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.000169	0.00122	U
76-13-1	1,1,2-Trichloro-1,2,2 Trifluoroethane	ND	0.000523	0.00122	U
79-00-5	1,1,2-Trichloroethane	ND	0.000206	0.00122	U
75-34-3	1,1-Dichloroethane	ND	0.000178	0.00122	U
75-35-4	1,1-Dichloroethene	ND	0.000226	0.00122	U
87-61-6	1,2,3-Trichlorobenzene	ND	0.000264	0.00122	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.000326	0.00122	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.000169	0.00122	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.000298	0.00122	U
106-93-4	1,2-Dibromoethane	ND	0.000154	0.00122	U
95-50-1	1,2-Dichlorobenzene	ND	0.000216	0.00122	U
107-06-2	1,2-Dichloroethane	ND	0.000172	0.00122	U
78-87-5	1,2-Dichloropropane	ND	0.000200	0.00122	U
541-73-1	1,3-Dichlorobenzene	ND	0.0000898	0.00122	U
106-46-7	1,4-Dichlorobenzene	ND	0.000176	0.00122	U
78-93-3	2-Butanone	ND	0.000199	0.00306	U
591-78-6	2-Hexanone	ND	0.000114	0.00122	U
108-10-1	4-Methyl-2-pentanone	ND	0.000153	0.00122	U
67-64-1	Acetone	ND	0.000370	0.00306	U
71-43-2	Benzene	ND	0.000111	0.00122	U
74-97-5	Bromochloromethane	ND	0.000226	0.00122	U
75-27-4	Bromodichloromethane	ND	0.000153	0.00122	U
75-25-2	Bromoform	ND	0.000215	0.00122	U
74-83-9	Bromomethane	ND	0.000353	0.00122	U
75-15-0	Carbon disulfide	ND	0.000175	0.00122	U

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

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152.

# ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260C

**Client:** Peak Environmental  
**Client Sample ID:** NTP-1A  
**Lab Sample ID:** 8100452-01  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 00:00	Prep Date: 10/10/18 18:59	File ID: 3V34002.D
Init/Final Vol: 9.1 g / 5 mL	Prep Batch: B8J1111	Analyzed: 10/10/18 18:59
Dilution: 1	Matrix: Soil	Sequence: S8J1704
Percent Solids: 89.91	Prep Method: PURGE & TRAP SOIL EPA 5035A	

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
56-23-5	Carbon Tetrachloride	ND	0.000184	0.00122	U
108-90-7	Chlorobenzene	ND	0.000177	0.00122	U
124-48-1	Chlorodibromomethane	ND	0.000150	0.00122	U
75-00-3	Chloroethane	ND	0.000208	0.00122	U
67-66-3	Chloroform	ND	0.000205	0.00122	U
74-87-3	Chloromethane	ND	0.000471	0.00122	U
156-59-2	cis-1,2-Dichloroethene	ND	0.0000591	0.00122	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.000155	0.00122	U
110-82-7	Cyclohexane	ND	0.000271	0.00122	U
75-71-8	Dichlorodifluoromethane	ND	0.000413	0.00122	U
100-41-4	EthylBenzene	ND	0.000166	0.00122	U
98-82-8	Isopropylbenzene	ND	0.000192	0.00122	U
179601-23-1	m+p-Xylenes	ND	0.000309	0.00244	U
79-20-9	Methyl Acetate	ND	0.000162	0.00122	U
1634-04-4	Methyl tert-Butyl Ether	ND	0.000207	0.00122	U
108-87-2	Methylcyclohexane	ND	0.000197	0.00122	U
75-09-2	Methylene Chloride	ND	0.000367	0.00122	U
95-47-6	o-Xylene	ND	0.000157	0.00122	U
100-42-5	Styrene	ND	0.000175	0.00122	U
75-65-0	tert-Butyl alcohol	ND	0.00257	0.0122	U
127-18-4	Tetrachloroethene	0.00329	0.000121	0.00122	
108-88-3	Toluene	ND	0.0000984	0.00122	U
1330-20-7	Total Xylenes	ND	0.000157	0.00122	U
156-60-5	trans-1,2-Dichloroethene	ND	0.000166	0.00122	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.000233	0.00122	U
79-01-6	Trichloroethene	ND	0.000180	0.00122	U

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

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15.2.

# ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260C

**Client:** Peak Environmental  
**Client Sample ID:** NTP-1A  
**Lab Sample ID:** 8100452-01  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 00:00	Prep Date: 10/10/18 18:59	File ID: 3V34002.D
Init/Final Vol: 9.1 g / 5 mL	Prep Batch: B8J1111	Analyzed: 10/10/18 18:59
Dilution: 1	Matrix: Soil	Sequence: S8J1704
Percent Solids: 89.91	Prep Method: PURGE & TRAP SOIL EPA 5035A	

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
75-69-4	Trichlorofluoromethane	ND	0.000141	0.00122	U
75-01-4	Vinyl chloride	ND	0.000232	0.00122	U

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 15.2.

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

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# ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260C

**Client:** Peak Environmental  
**Client Sample ID:** NTP-1A  
**Lab Sample ID:** 8100452-01  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 00:00	Prep Date:	10/10/18 18:59	File ID:	3V34002.D
Init/Final Vol:	9.1 g / 5 mL	Prep Batch:	B8J1111	Analyzed:	10/10/18 18:59
Dilution:	1	Matrix:	Soil	Sequence:	S8J1704
Percent Solids:	89.91	Prep Method:	PURGE & TRAP SOIL EPA 5035A		

CAS NO.	TENTATIVELY IDENTIFIED COMPOUNDS	CONC. (mg/kg dry)	RT	Q
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 15.2.

J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 D - Indicates result is based on a dilution

F-I



Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\3\DATA\10102018\3V34002.D Vial: 53  
 Acq On : 10 Oct 2018 18:59 Operator: omd  
 Sample : 8100452-01 Inst : GCMS-3  
 Misc : soil Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Oct 11 11:33 2018 Quant Results File: 0717WC3.RES

Quant Method : G:\HPCHEM\3\METHODS\0717WC3.M (RTE Integrator)  
 Title : VOC's by EPA Method 8260C  
 Last Update : Wed Oct 10 16:46:14 2018  
 Response via : Initial Calibration  
 DataAcq Meth : VOCRUN1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.49	168	150003	50.00	ug/kg	0.03
33) 1,4-Difluorobenzene	8.92	114	284129	50.00	ug/kg	0.03
52) Chlorobenzene-d5	14.07	82	152189	50.00	ug/kg	0.02
74) 1,4-Dichlorobenzene-d4	18.06	152	132035	50.00	ug/kg	0.00
System Monitoring Compounds						
26) Dibromofluoromethane	7.37	113	105847	58.01	ug/kg	0.03
Spiked Amount	50.000	Range 59 - 147	Recovery	=	116.02%	
43) Toluene-d8	11.54	98	339816	53.17	ug/kg	0.02
Spiked Amount	50.000	Range 66 - 134	Recovery	=	106.34%	
62) 4-Bromofluorobenzene	16.11	95	153370	59.81	ug/kg	0.02
Spiked Amount	50.000	Range 64 - 125	Recovery	=	119.62%	
Target Compounds						Qvalue
49) Tetrachloroethene	12.57	166	7007	5.38	ug/kg	91

(#) = qualifier out of range (m) = manual integration  
 3V34002.D 0717WC3.M Thu Oct 11 11:39:55 2018 SS

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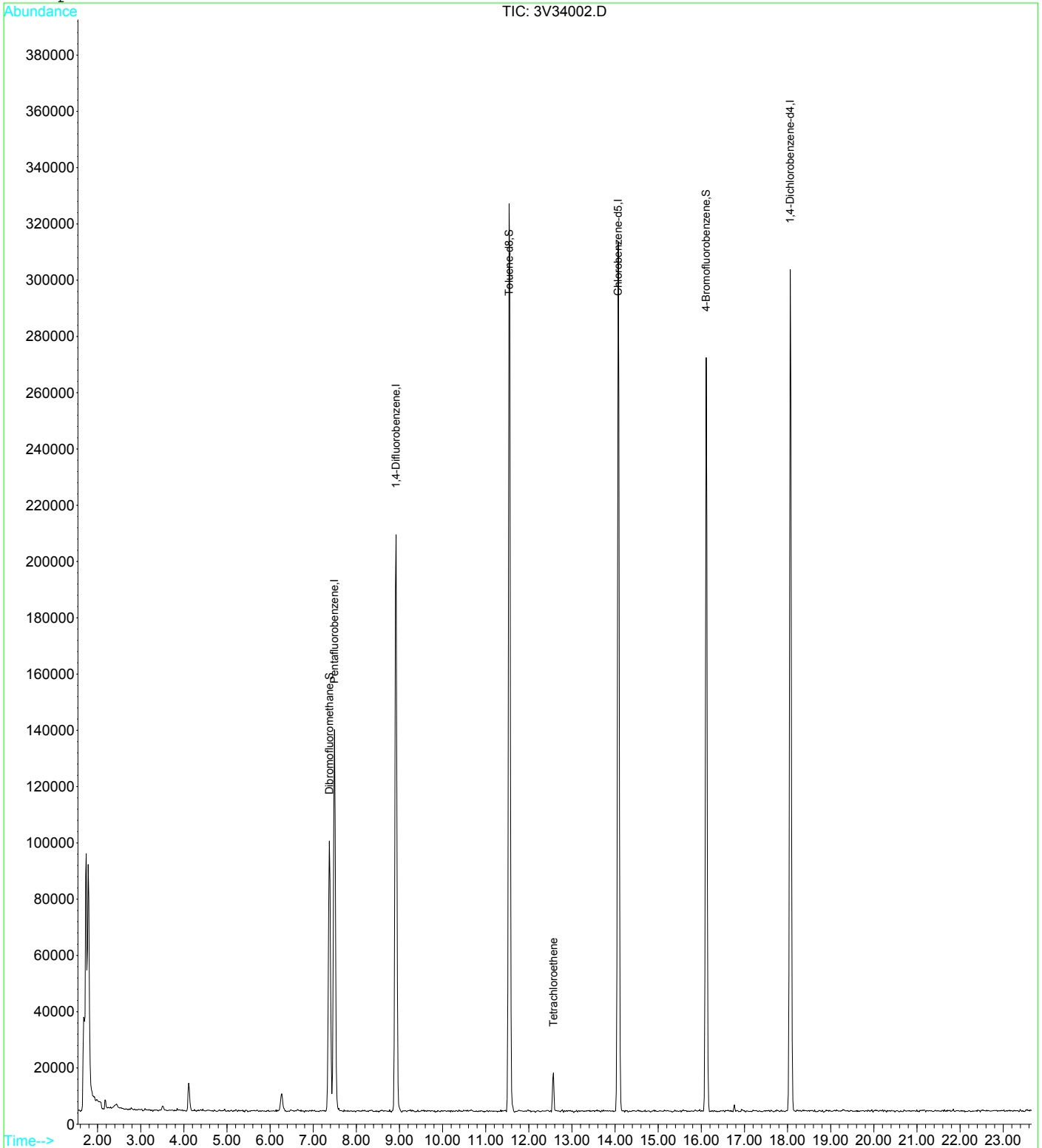
Quantitation Report

Data File : G:\HPCHEM\3\DATA\10102018\3V34002.D  
Acq On : 10 Oct 2018 18:59  
Sample : 8100452-01  
Misc : soil  
MS Integration Params: RTEINT.P  
Quant Time: Oct 11 11:33 2018

Vial: 53  
Operator: omd  
Inst : GCMS-3  
Multiplr: 1.00

Quant Results File: 0717WC3.RES

Method : G:\HPCHEM\3\METHODS\0717WC3.M (RTE Integrator)  
Title : VOC's by EPA Method 8260C  
Last Update : Wed Oct 10 16:46:14 2018  
Response via : Initial Calibration



# ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260C

**Client:** Peak Environmental  
**Client Sample ID:** NTP-2A  
**Lab Sample ID:** 8100452-02  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 00:00	Prep Date: 10/10/18 19:28	File ID: 3V34003.D
Init/Final Vol: 12.3 g / 5 mL	Prep Batch: B8J1111	Analyzed: 10/10/18 19:28
Dilution: 1	Matrix: Soil	Sequence: S8J1704
Percent Solids: 92.54	Prep Method: PURGE & TRAP SOIL EPA 5035A	

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
71-55-6	1,1,1-Trichloroethane	ND	0.000128	0.000879	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.000121	0.000879	U
76-13-1	1,1,2-Trichloro-1,2,2 Trifluoroethane	ND	0.000376	0.000879	U
79-00-5	1,1,2-Trichloroethane	ND	0.000148	0.000879	U
75-34-3	1,1-Dichloroethane	ND	0.000128	0.000879	U
75-35-4	1,1-Dichloroethene	ND	0.000163	0.000879	U
87-61-6	1,2,3-Trichlorobenzene	ND	0.000190	0.000879	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.000234	0.000879	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.000121	0.000879	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.000214	0.000879	U
106-93-4	1,2-Dibromoethane	ND	0.000111	0.000879	U
95-50-1	1,2-Dichlorobenzene	ND	0.000155	0.000879	U
107-06-2	1,2-Dichloroethane	ND	0.000124	0.000879	U
78-87-5	1,2-Dichloropropane	ND	0.000144	0.000879	U
541-73-1	1,3-Dichlorobenzene	ND	0.0000646	0.000879	U
106-46-7	1,4-Dichlorobenzene	ND	0.000127	0.000879	U
78-93-3	2-Butanone	ND	0.000143	0.00220	U
591-78-6	2-Hexanone	ND	0.0000821	0.000879	U
108-10-1	4-Methyl-2-pentanone	ND	0.000110	0.000879	U
67-64-1	Acetone	ND	0.000266	0.00220	U
71-43-2	Benzene	ND	0.0000799	0.000879	U
74-97-5	Bromochloromethane	ND	0.000162	0.000879	U
75-27-4	Bromodichloromethane	ND	0.000110	0.000879	U
75-25-2	Bromoform	ND	0.000154	0.000879	U
74-83-9	Bromomethane	ND	0.000253	0.000879	U
75-15-0	Carbon disulfide	ND	0.000126	0.000879	U

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

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15.2.

# ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260C

**Client:** Peak Environmental  
**Client Sample ID:** NTP-2A  
**Lab Sample ID:** 8100452-02  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 00:00	Prep Date:	10/10/18 19:28	File ID:	3V34003.D
Init/Final Vol:	12.3 g / 5 mL	Prep Batch:	B8J1111	Analyzed:	10/10/18 19:28
Dilution:	1	Matrix:	Soil	Sequence:	S8J1704
Percent Solids:	92.54	Prep Method:	PURGE & TRAP SOIL EPA 5035A		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
56-23-5	Carbon Tetrachloride	ND	0.000132	0.000879	U
108-90-7	Chlorobenzene	ND	0.000127	0.000879	U
124-48-1	Chlorodibromomethane	ND	0.000108	0.000879	U
75-00-3	Chloroethane	ND	0.000150	0.000879	U
67-66-3	Chloroform	ND	0.000148	0.000879	U
74-87-3	Chloromethane	ND	0.000338	0.000879	U
156-59-2	cis-1,2-Dichloroethene	ND	0.0000425	0.000879	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.000111	0.000879	U
110-82-7	Cyclohexane	ND	0.000195	0.000879	U
75-71-8	Dichlorodifluoromethane	ND	0.000297	0.000879	U
100-41-4	EthylBenzene	ND	0.000119	0.000879	U
98-82-8	Isopropylbenzene	ND	0.000138	0.000879	U
179601-23-1	m+p-Xylenes	ND	0.000222	0.00176	U
79-20-9	Methyl Acetate	ND	0.000116	0.000879	U
1634-04-4	Methyl tert-Butyl Ether	ND	0.000148	0.000879	U
108-87-2	Methylcyclohexane	ND	0.000141	0.000879	U
75-09-2	Methylene Chloride	ND	0.000264	0.000879	U
95-47-6	o-Xylene	ND	0.000113	0.000879	U
100-42-5	Styrene	ND	0.000126	0.000879	U
75-65-0	tert-Butyl alcohol	ND	0.00184	0.00879	U
127-18-4	Tetrachloroethene	0.00240	0.0000870	0.000879	
108-88-3	Toluene	ND	0.0000707	0.000879	U
1330-20-7	Total Xylenes	ND	0.000113	0.000879	U
156-60-5	trans-1,2-Dichloroethene	ND	0.000119	0.000879	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.000168	0.000879	U
79-01-6	Trichloroethene	ND	0.000129	0.000879	U

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

15  
15.2.

# ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260C

**Client:** Peak Environmental  
**Client Sample ID:** NTP-2A  
**Lab Sample ID:** 8100452-02  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 00:00	Prep Date: 10/10/18 19:28	File ID: 3V34003.D
Init/Final Vol: 12.3 g / 5 mL	Prep Batch: B8J1111	Analyzed: 10/10/18 19:28
Dilution: 1	Matrix: Soil	Sequence: S8J1704
Percent Solids: 92.54	Prep Method: PURGE & TRAP SOIL EPA 5035A	

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
75-69-4	Trichlorofluoromethane	ND	0.000101	0.000879	U
75-01-4	Vinyl chloride	ND	0.000167	0.000879	U

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 15.2.

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

# ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260C

**Client:** Peak Environmental  
**Client Sample ID:** NTP-2A  
**Lab Sample ID:** 8100452-02  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 00:00	Prep Date:	10/10/18 19:28	File ID:	3V34003.D
Init/Final Vol:	12.3 g / 5 mL	Prep Batch:	B8J1111	Analyzed:	10/10/18 19:28
Dilution:	1	Matrix:	Soil	Sequence:	S8J1704
Percent Solids:	92.54	Prep Method:	PURGE & TRAP SOIL EPA 5035A		

CAS NO.	TENTATIVELY IDENTIFIED COMPOUNDS	CONC. (mg/kg dry)	RT	Q
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 15.2.

J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 D - Indicates result is based on a dilution

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\3\DATA\10102018\3V34003.D Vial: 54  
 Acq On : 10 Oct 2018 19:28 Operator: omd  
 Sample : 8100452-02 Inst : GCMS-3  
 Misc : soil Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Oct 11 11:34 2018 Quant Results File: 0717WC3.RES

Quant Method : G:\HPCHEM\3\METHODS\0717WC3.M (RTE Integrator)  
 Title : VOC's by EPA Method 8260C  
 Last Update : Wed Oct 10 16:46:14 2018  
 Response via : Initial Calibration  
 DataAcq Meth : VOCRUN1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.49	168	147411	50.00	ug/kg	0.03
33) 1,4-Difluorobenzene	8.92	114	282053	50.00	ug/kg	0.03
52) Chlorobenzene-d5	14.07	82	150180	50.00	ug/kg	0.02
74) 1,4-Dichlorobenzene-d4	18.06	152	126429	50.00	ug/kg	0.00
System Monitoring Compounds						
26) Dibromofluoromethane	7.37	113	103123	57.51	ug/kg	0.03
Spiked Amount	50.000	Range 59 - 147	Recovery	=	115.02%	
43) Toluene-d8	11.56	98	331639	52.28	ug/kg	0.03
Spiked Amount	50.000	Range 66 - 134	Recovery	=	104.56%	
62) 4-Bromofluorobenzene	16.11	95	149127	58.94	ug/kg	0.02
Spiked Amount	50.000	Range 64 - 125	Recovery	=	117.88%	
Target Compounds						
49) Tetrachloroethene	12.57	166	7081	5.47	ug/kg	Qvalue 94

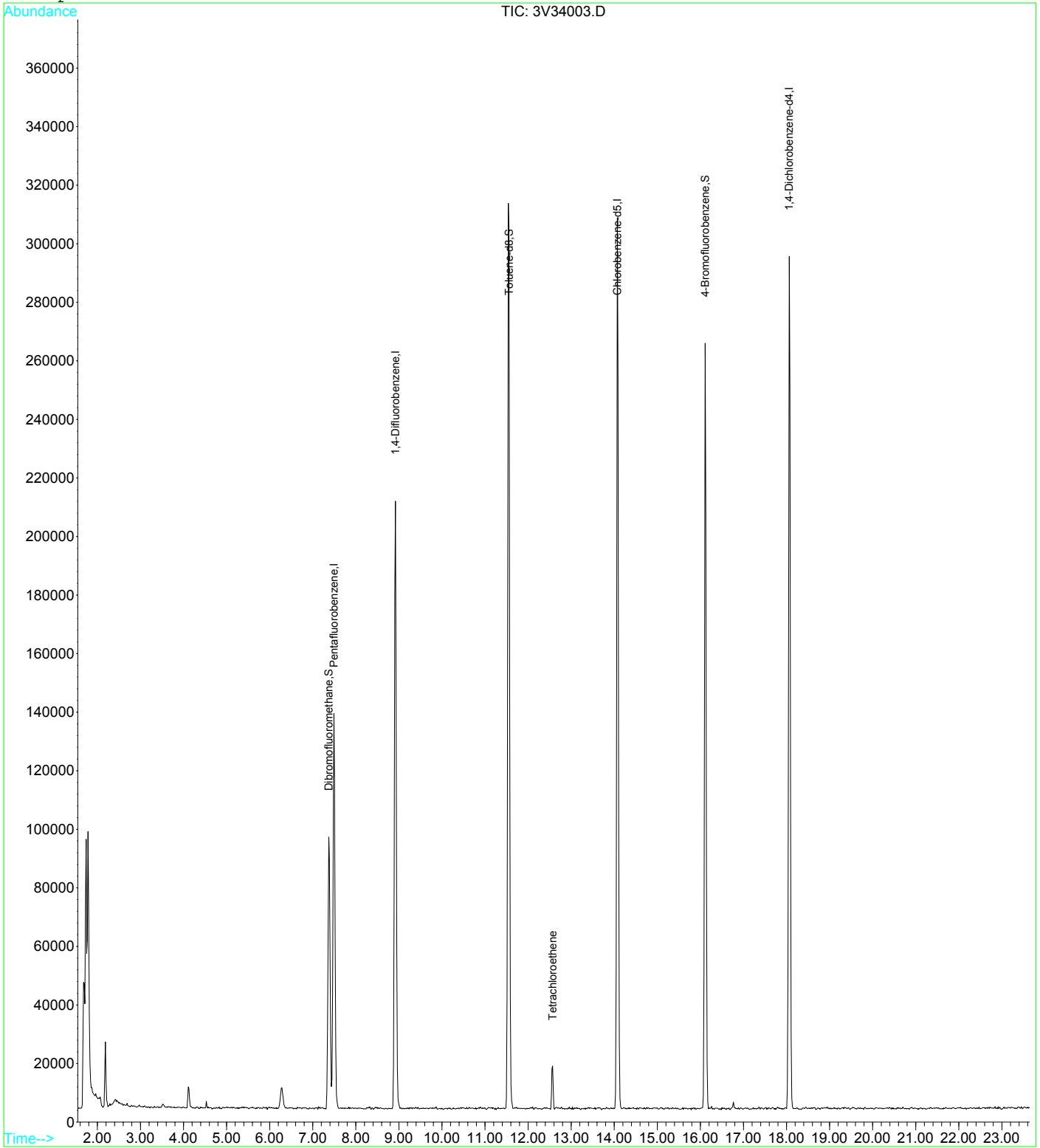
(#) = qualifier out of range (m) = manual integration  
 3V34003.D 0717WC3.M Thu Oct 11 11:39:56 2018 SS

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152.

Quantitation Report

Data File : G:\HPCHEM\3\DATA\10102018\3V34003.D Vial: 54  
Acq On : 10 Oct 2018 19:28 Operator: omd  
Sample : 8100452-02 Inst : GCMS-3  
Misc : soil Multiplr: 1.00  
MS Integration Params: RTEINT.P  
Quant Time: Oct 11 11:34 2018 Quant Results File: 0717WC3.RES

Method : G:\HPCHEM\3\METHODS\0717WC3.M (RTE Integrator)  
Title : VOC's by EPA Method 8260C  
Last Update : Wed Oct 10 16:46:14 2018  
Response via : Initial Calibration



15  
15.2.



# ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260C

**Client:** Peak Environmental  
**Client Sample ID:** NTP-4B  
**Lab Sample ID:** 8100452-05  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 12:35	Prep Date:	10/10/18 19:58	File ID:	3V34004.D
Init/Final Vol:	11.4 g / 5 mL	Prep Batch:	B8J1111	Analyzed:	10/10/18 19:58
Dilution:	1	Matrix:	Soil	Sequence:	S8J1704
Percent Solids:	92.00	Prep Method:	PURGE & TRAP SOIL EPA 5035A		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
71-55-6	1,1,1-Trichloroethane	ND	0.000139	0.000954	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.000132	0.000954	U
76-13-1	1,1,2-Trichloro-1,2,2 Trifluoroethane	ND	0.000408	0.000954	U
79-00-5	1,1,2-Trichloroethane	ND	0.000161	0.000954	U
75-34-3	1,1-Dichloroethane	ND	0.000139	0.000954	U
75-35-4	1,1-Dichloroethene	ND	0.000176	0.000954	U
87-61-6	1,2,3-Trichlorobenzene	ND	0.000206	0.000954	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.000254	0.000954	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.000132	0.000954	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.000233	0.000954	U
106-93-4	1,2-Dibromoethane	ND	0.000120	0.000954	U
95-50-1	1,2-Dichlorobenzene	ND	0.000168	0.000954	U
107-06-2	1,2-Dichloroethane	ND	0.000134	0.000954	U
78-87-5	1,2-Dichloropropane	ND	0.000156	0.000954	U
541-73-1	1,3-Dichlorobenzene	ND	0.0000701	0.000954	U
106-46-7	1,4-Dichlorobenzene	ND	0.000137	0.000954	U
78-93-3	2-Butanone	ND	0.000155	0.00238	U
591-78-6	2-Hexanone	ND	0.0000892	0.000954	U
108-10-1	4-Methyl-2-pentanone	ND	0.000119	0.000954	U
67-64-1	Acetone	ND	0.000289	0.00238	U
71-43-2	Benzene	ND	0.0000868	0.000954	U
74-97-5	Bromochloromethane	ND	0.000176	0.000954	U
75-27-4	Bromodichloromethane	ND	0.000120	0.000954	U
75-25-2	Bromoform	ND	0.000167	0.000954	U
74-83-9	Bromomethane	ND	0.000275	0.000954	U
75-15-0	Carbon disulfide	ND	0.000137	0.000954	U

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

15

152.

# ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260C

**Client:** Peak Environmental  
**Client Sample ID:** NTP-4B  
**Lab Sample ID:** 8100452-05  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 12:35	Prep Date:	10/10/18 19:58	File ID:	3V34004.D
Init/Final Vol:	11.4 g / 5 mL	Prep Batch:	B8J1111	Analyzed:	10/10/18 19:58
Dilution:	1	Matrix:	Soil	Sequence:	S8J1704
Percent Solids:	92.00	Prep Method:	PURGE & TRAP SOIL EPA 5035A		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
56-23-5	Carbon Tetrachloride	ND	0.000144	0.000954	U
108-90-7	Chlorobenzene	ND	0.000138	0.000954	U
124-48-1	Chlorodibromomethane	ND	0.000117	0.000954	U
75-00-3	Chloroethane	ND	0.000163	0.000954	U
67-66-3	Chloroform	ND	0.000160	0.000954	U
74-87-3	Chloromethane	ND	0.000367	0.000954	U
156-59-2	cis-1,2-Dichloroethene	ND	0.0000461	0.000954	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.000121	0.000954	U
110-82-7	Cyclohexane	ND	0.000211	0.000954	U
75-71-8	Dichlorodifluoromethane	ND	0.000322	0.000954	U
100-41-4	EthylBenzene	ND	0.000129	0.000954	U
98-82-8	Isopropylbenzene	ND	0.000150	0.000954	U
179601-23-1	m+p-Xylenes	ND	0.000241	0.00191	U
79-20-9	Methyl Acetate	ND	0.000126	0.000954	U
1634-04-4	Methyl tert-Butyl Ether	ND	0.000161	0.000954	U
108-87-2	Methylcyclohexane	ND	0.000154	0.000954	U
75-09-2	Methylene Chloride	ND	0.000287	0.000954	U
95-47-6	o-Xylene	ND	0.000123	0.000954	U
100-42-5	Styrene	ND	0.000136	0.000954	U
75-65-0	tert-Butyl alcohol	ND	0.00200	0.00954	U
127-18-4	Tetrachloroethene	ND	0.0000944	0.000954	U
108-88-3	Toluene	ND	0.0000768	0.000954	U
1330-20-7	Total Xylenes	ND	0.000123	0.000954	U
156-60-5	trans-1,2-Dichloroethene	ND	0.000129	0.000954	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.000182	0.000954	U
79-01-6	Trichloroethene	ND	0.000140	0.000954	U

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

15  
15.2.

# ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260C

**Client:** Peak Environmental  
**Client Sample ID:** NTP-4B  
**Lab Sample ID:** 8100452-05  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 12:35	Prep Date: 10/10/18 19:58	File ID: 3V34004.D
Init/Final Vol: 11.4 g / 5 mL	Prep Batch: B8J1111	Analyzed: 10/10/18 19:58
Dilution: 1	Matrix: Soil	Sequence: S8J1704
Percent Solids: 92.00	Prep Method: PURGE & TRAP SOIL EPA 5035A	

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
75-69-4	Trichlorofluoromethane	ND	0.000110	0.000954	U
75-01-4	Vinyl chloride	ND	0.000181	0.000954	U

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 15.2.

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

# ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260C

**Client:** Peak Environmental  
**Client Sample ID:** NTP-4B  
**Lab Sample ID:** 8100452-05  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 12:35	Prep Date:	10/10/18 19:58	File ID:	3V34004.D
Init/Final Vol:	11.4 g / 5 mL	Prep Batch:	B8J1111	Analyzed:	10/10/18 19:58
Dilution:	1	Matrix:	Soil	Sequence:	S8J1704
Percent Solids:	92.00	Prep Method:	PURGE & TRAP SOIL EPA 5035A		

CAS NO.	TENTATIVELY IDENTIFIED COMPOUNDS	CONC. (mg/kg dry)	RT	Q
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 15.2.

J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 D - Indicates result is based on a dilution

F-I

Quantitation Report (QT/LSC Reviewed)

Data File : G:\HPCHEM\3\DATA\10102018\3V34004.D Vial: 55  
 Acq On : 10 Oct 2018 19:58 Operator: omd  
 Sample : 8100452-05 Inst : GCMS-3  
 Misc : soil Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Oct 11 11:37 2018 Quant Results File: 0717WC3.RES

Quant Method : G:\HPCHEM\3\METHODS\0717WC3.M (RTE Integrator)  
 Title : VOC's by EPA Method 8260C  
 Last Update : Wed Oct 10 16:46:14 2018  
 Response via : Initial Calibration  
 DataAcq Meth : VOCRUN1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.49	168	153714	50.00	ug/kg	0.03
33) 1,4-Difluorobenzene	8.92	114	287940	50.00	ug/kg	0.03
52) Chlorobenzene-d5	14.07	82	152713	50.00	ug/kg	0.01
74) 1,4-Dichlorobenzene-d4	18.08	152	134717	50.00	ug/kg	0.01

System Monitoring Compounds						
26) Dibromofluoromethane	7.37	113	107367	57.43	ug/kg	0.03
Spiked Amount	50.000	Range 59 - 147	Recovery	=	114.86%	
43) Toluene-d8	11.56	98	345576	53.36	ug/kg	0.03
Spiked Amount	50.000	Range 66 - 134	Recovery	=	106.72%	
62) 4-Bromofluorobenzene	16.11	95	146652m	57.00	ug/kg	0.01
Spiked Amount	50.000	Range 64 - 125	Recovery	=	114.00%	

Target Compounds Qvalue

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152.

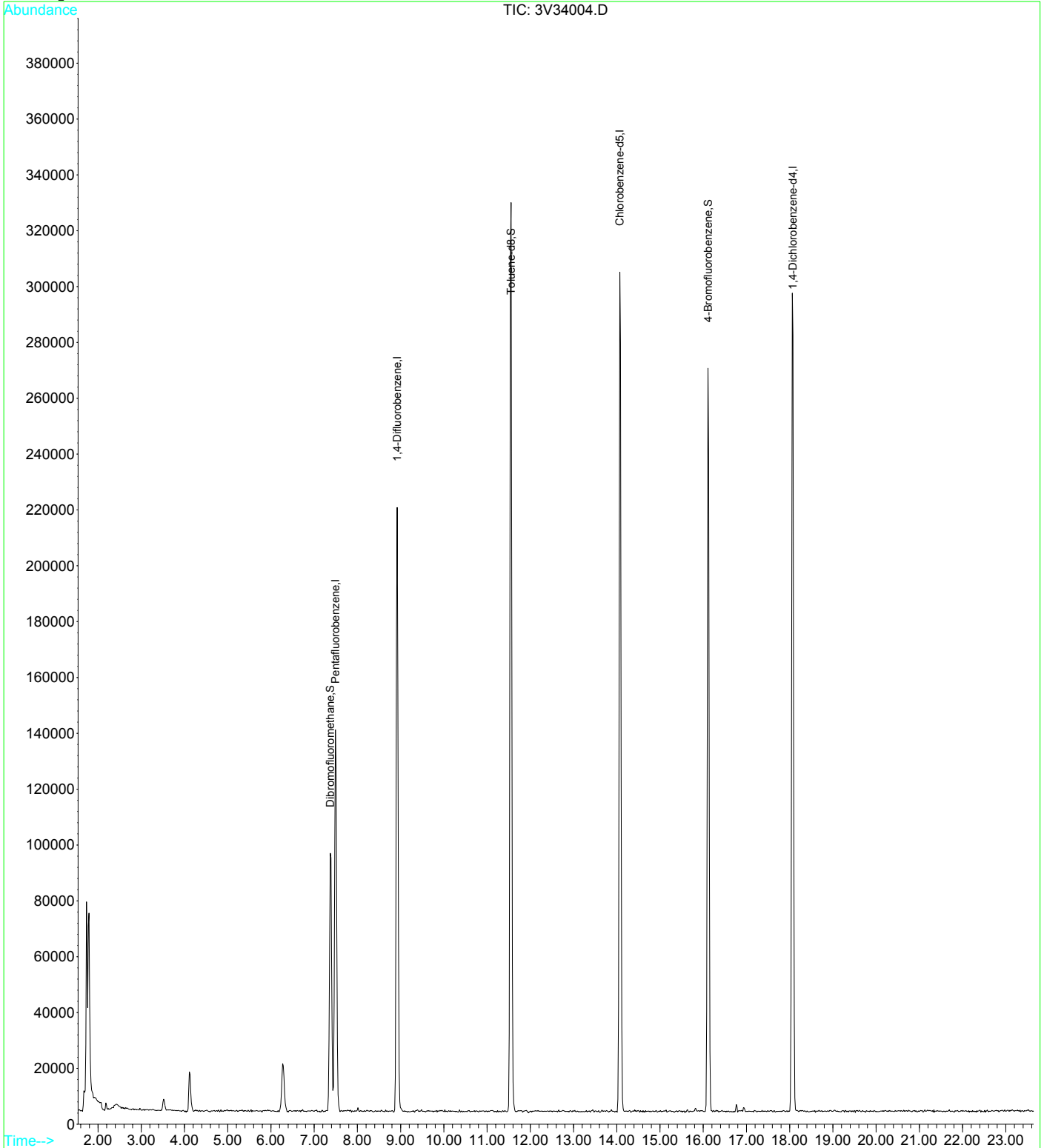
Quantitation Report

Data File : G:\HPCHEM\3\DATA\10102018\3V34004.D  
Acq On : 10 Oct 2018 19:58  
Sample : 8100452-05  
Misc : soil  
MS Integration Params: RTEINT.P  
Quant Time: Oct 11 11:37 2018

Vial: 55  
Operator: omd  
Inst : GCMS-3  
Multiplr: 1.00

Quant Results File: 0717WC3.RES

Method : G:\HPCHEM\3\METHODS\0717WC3.M (RTE Integrator)  
Title : VOC's by EPA Method 8260C  
Last Update : Wed Oct 10 16:46:14 2018  
Response via : Initial Calibration



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15.2.

# ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260C

**Client:** Peak Environmental  
**Client Sample ID:** NTP-6  
**Lab Sample ID:** 8100452-06  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 12:50	Prep Date: 10/10/18 20:28	File ID: 3V34005.D
Init/Final Vol: 10 g / 5 mL	Prep Batch: B8J1111	Analyzed: 10/10/18 20:28
Dilution: 1	Matrix: Soil	Sequence: S8J1704
Percent Solids: 87.70	Prep Method: PURGE & TRAP SOIL EPA 5035A	

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
71-55-6	1,1,1-Trichloroethane	ND	0.000166	0.00114	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.000157	0.00114	U
76-13-1	1,1,2-Trichloro-1,2,2 Trifluoroethane	ND	0.000488	0.00114	U
79-00-5	1,1,2-Trichloroethane	ND	0.000192	0.00114	U
75-34-3	1,1-Dichloroethane	ND	0.000166	0.00114	U
75-35-4	1,1-Dichloroethene	ND	0.000211	0.00114	U
87-61-6	1,2,3-Trichlorobenzene	ND	0.000246	0.00114	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.000304	0.00114	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.000157	0.00114	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.000278	0.00114	U
106-93-4	1,2-Dibromoethane	ND	0.000144	0.00114	U
95-50-1	1,2-Dichlorobenzene	ND	0.000201	0.00114	U
107-06-2	1,2-Dichloroethane	ND	0.000161	0.00114	U
78-87-5	1,2-Dichloropropane	ND	0.000187	0.00114	U
541-73-1	1,3-Dichlorobenzene	ND	0.0000838	0.00114	U
106-46-7	1,4-Dichlorobenzene	ND	0.000164	0.00114	U
78-93-3	2-Butanone	ND	0.000186	0.00285	U
591-78-6	2-Hexanone	ND	0.000107	0.00114	U
108-10-1	4-Methyl-2-pentanone	ND	0.000143	0.00114	U
67-64-1	Acetone	ND	0.000345	0.00285	U
71-43-2	Benzene	ND	0.000104	0.00114	U
74-97-5	Bromochloromethane	ND	0.000210	0.00114	U
75-27-4	Bromodichloromethane	ND	0.000143	0.00114	U
75-25-2	Bromoform	ND	0.000200	0.00114	U
74-83-9	Bromomethane	ND	0.000329	0.00114	U
75-15-0	Carbon disulfide	ND	0.000164	0.00114	U

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

15

152.

# ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260C

**Client:** Peak Environmental  
**Client Sample ID:** NTP-6  
**Lab Sample ID:** 8100452-06  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 12:50	Prep Date:	10/10/18 20:28	File ID:	3V34005.D
Init/Final Vol:	10 g / 5 mL	Prep Batch:	B8J1111	Analyzed:	10/10/18 20:28
Dilution:	1	Matrix:	Soil	Sequence:	S8J1704
Percent Solids:	87.70	Prep Method:	PURGE & TRAP SOIL EPA 5035A		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
56-23-5	Carbon Tetrachloride	ND	0.000172	0.00114	U
108-90-7	Chlorobenzene	ND	0.000165	0.00114	U
124-48-1	Chlorodibromomethane	ND	0.000140	0.00114	U
75-00-3	Chloroethane	ND	0.000194	0.00114	U
67-66-3	Chloroform	ND	0.000192	0.00114	U
74-87-3	Chloromethane	ND	0.000439	0.00114	U
156-59-2	cis-1,2-Dichloroethene	ND	0.0000551	0.00114	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.000144	0.00114	U
110-82-7	Cyclohexane	ND	0.000253	0.00114	U
75-71-8	Dichlorodifluoromethane	ND	0.000385	0.00114	U
100-41-4	EthylBenzene	ND	0.000154	0.00114	U
98-82-8	Isopropylbenzene	ND	0.000179	0.00114	U
179601-23-1	m+p-Xylenes	ND	0.000288	0.00228	U
79-20-9	Methyl Acetate	ND	0.000151	0.00114	U
1634-04-4	Methyl tert-Butyl Ether	ND	0.000193	0.00114	U
108-87-2	Methylcyclohexane	ND	0.000184	0.00114	U
75-09-2	Methylene Chloride	ND	0.000343	0.00114	U
95-47-6	o-Xylene	ND	0.000147	0.00114	U
100-42-5	Styrene	ND	0.000163	0.00114	U
75-65-0	tert-Butyl alcohol	ND	0.00239	0.0114	U
127-18-4	Tetrachloroethene	ND	0.000113	0.00114	U
108-88-3	Toluene	ND	0.0000918	0.00114	U
1330-20-7	Total Xylenes	ND	0.000147	0.00114	U
156-60-5	trans-1,2-Dichloroethene	ND	0.000154	0.00114	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.000218	0.00114	U
79-01-6	Trichloroethene	ND	0.000168	0.00114	U

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

15  
15.2.



# ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260C

**Client:** Peak Environmental  
**Client Sample ID:** NTP-6  
**Lab Sample ID:** 8100452-06  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 12:50	Prep Date: 10/10/18 20:28	File ID: 3V34005.D
Init/Final Vol: 10 g / 5 mL	Prep Batch: B8J1111	Analyzed: 10/10/18 20:28
Dilution: 1	Matrix: Soil	Sequence: S8J1704
Percent Solids: 87.70	Prep Method: PURGE & TRAP SOIL EPA 5035A	

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
75-69-4	Trichlorofluoromethane	ND	0.000131	0.00114	U
75-01-4	Vinyl chloride	ND	0.000217	0.00114	U

15  
 15.2.

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

# ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260C

**Client:** Peak Environmental  
**Client Sample ID:** NTP-6  
**Lab Sample ID:** 8100452-06  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 12:50	Prep Date:	10/10/18 20:28	File ID:	3V34005.D
Init/Final Vol:	10 g / 5 mL	Prep Batch:	B8J1111	Analyzed:	10/10/18 20:28
Dilution:	1	Matrix:	Soil	Sequence:	S8J1704
Percent Solids:	87.70	Prep Method:	PURGE & TRAP SOIL EPA 5035A		

CAS NO.	TENTATIVELY IDENTIFIED COMPOUNDS	CONC. (mg/kg dry)	RT	Q
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15  
 15.2.

J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 D - Indicates result is based on a dilution

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\3\DATA\10102018\3V34005.D Vial: 56  
 Acq On : 10 Oct 2018 20:28 Operator: omd  
 Sample : 8100452-06 Inst : GCMS-3  
 Misc : soil Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Oct 11 11:36 2018 Quant Results File: 0717WC3.RES

Quant Method : G:\HPCHEM\3\METHODS\0717WC3.M (RTE Integrator)  
 Title : VOC's by EPA Method 8260C  
 Last Update : Wed Oct 10 16:46:14 2018  
 Response via : Initial Calibration  
 DataAcq Meth : VOCRUN1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.51	168	121951	50.00	ug/kg	0.05
33) 1,4-Difluorobenzene	8.92	114	230145	50.00	ug/kg	0.03
52) Chlorobenzene-d5	14.07	82	121749	50.00	ug/kg	0.02
74) 1,4-Dichlorobenzene-d4	18.06	152	109706	50.00	ug/kg	0.00

System Monitoring Compounds		R.T.	QIon	Response	Conc	Units	Dev(Min)
26) Dibromofluoromethane		7.37	113	86488	58.31	ug/kg	0.03
Spiked Amount	50.000	Range	59 - 147	Recovery	=	116.62%	
43) Toluene-d8		11.56	98	273822	52.90	ug/kg	0.03
Spiked Amount	50.000	Range	66 - 134	Recovery	=	105.80%	
62) 4-Bromofluorobenzene		16.11	95	122749m	59.84	ug/kg	0.02
Spiked Amount	50.000	Range	64 - 125	Recovery	=	119.68%	

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration  
 3V34005.D 0717WC3.M Thu Oct 11 11:39:59 2018 SS

15  
152.

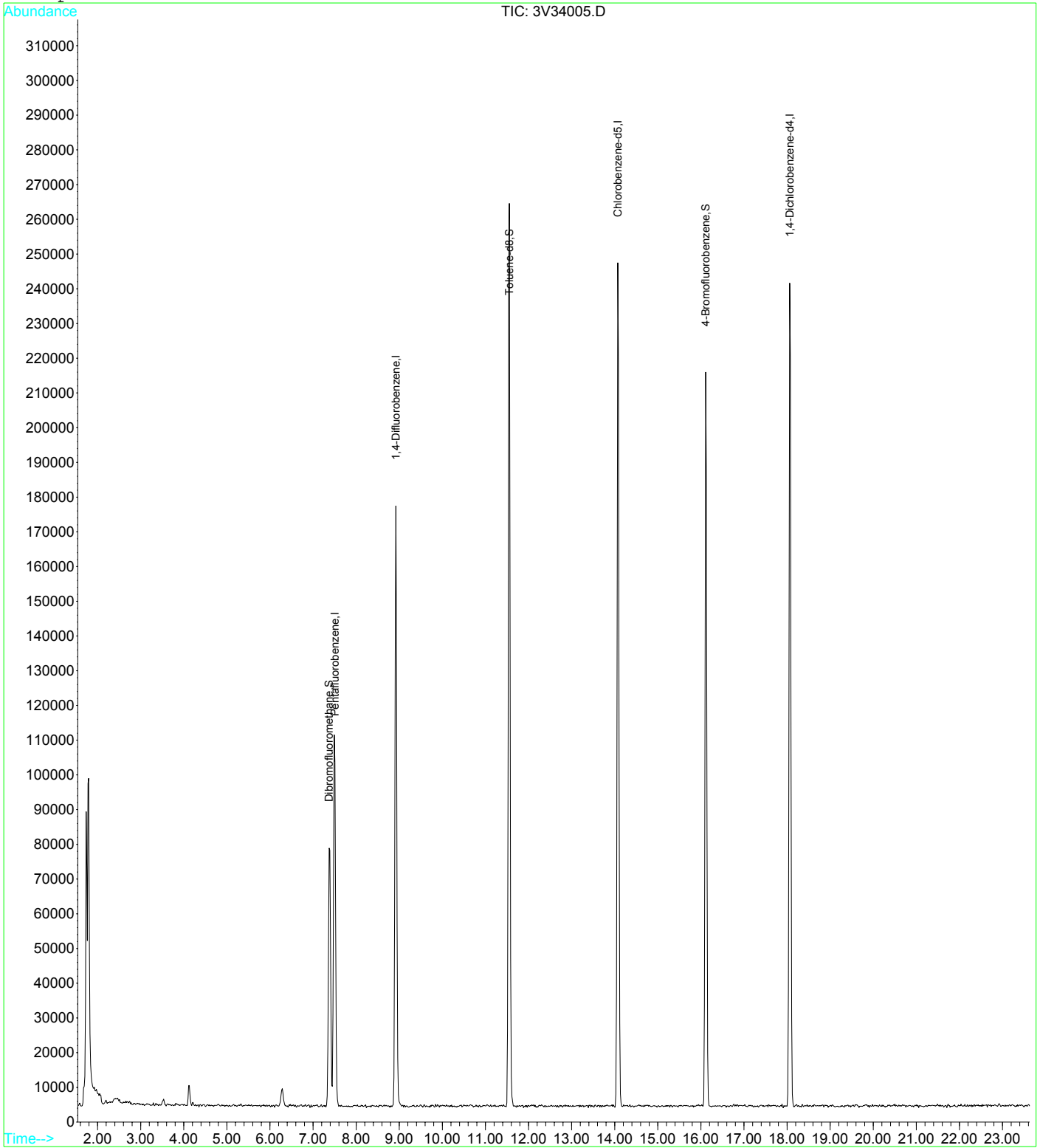
Quantitation Report

Data File : G:\HPCHEM\3\DATA\10102018\3V34005.D  
Acq On : 10 Oct 2018 20:28  
Sample : 8100452-06  
Misc : soil  
MS Integration Params: RTEINT.P  
Quant Time: Oct 11 11:36 2018

Vial: 56  
Operator: omd  
Inst : GCMS-3  
Multiplr: 1.00

Quant Results File: 0717WC3.RES

Method : G:\HPCHEM\3\METHODS\0717WC3.M (RTE Integrator)  
Title : VOC's by EPA Method 8260C  
Last Update : Wed Oct 10 16:46:14 2018  
Response via : Initial Calibration



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15.2.

# ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260C

**Client:** Peak Environmental  
**Client Sample ID:** NTP-7  
**Lab Sample ID:** 8100452-07  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 13:00	Prep Date:	10/10/18 21:02	File ID:	3V34006.D
Init/Final Vol:	10.3 g / 5 mL	Prep Batch:	B8J1111	Analyzed:	10/10/18 21:02
Dilution:	1	Matrix:	Soil	Sequence:	S8J1704
Percent Solids:	91.36	Prep Method:	PURGE & TRAP SOIL EPA 5035A		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
71-55-6	1,1,1-Trichloroethane	ND	0.000155	0.00106	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.000147	0.00106	U
76-13-1	1,1,2-Trichloro-1,2,2 Trifluoroethane	ND	0.000455	0.00106	U
79-00-5	1,1,2-Trichloroethane	ND	0.000179	0.00106	U
75-34-3	1,1-Dichloroethane	ND	0.000155	0.00106	U
75-35-4	1,1-Dichloroethene	ND	0.000197	0.00106	U
87-61-6	1,2,3-Trichlorobenzene	ND	0.000230	0.00106	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.000283	0.00106	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.000147	0.00106	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.000259	0.00106	U
106-93-4	1,2-Dibromoethane	ND	0.000134	0.00106	U
95-50-1	1,2-Dichlorobenzene	ND	0.000188	0.00106	U
107-06-2	1,2-Dichloroethane	ND	0.000150	0.00106	U
78-87-5	1,2-Dichloropropane	ND	0.000174	0.00106	U
541-73-1	1,3-Dichlorobenzene	ND	0.0000781	0.00106	U
106-46-7	1,4-Dichlorobenzene	ND	0.000153	0.00106	U
78-93-3	2-Butanone	ND	0.000173	0.00266	U
591-78-6	2-Hexanone	ND	0.0000994	0.00106	U
108-10-1	4-Methyl-2-pentanone	ND	0.000133	0.00106	U
67-64-1	Acetone	ND	0.000322	0.00266	U
71-43-2	Benzene	ND	0.0000967	0.00106	U
74-97-5	Bromochloromethane	ND	0.000196	0.00106	U
75-27-4	Bromodichloromethane	ND	0.000133	0.00106	U
75-25-2	Bromoform	ND	0.000187	0.00106	U
74-83-9	Bromomethane	ND	0.000307	0.00106	U
75-15-0	Carbon disulfide	ND	0.000153	0.00106	U

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

15

152.

# ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260C

**Client:** Peak Environmental  
**Client Sample ID:** NTP-7  
**Lab Sample ID:** 8100452-07  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 13:00	Prep Date:	10/10/18 21:02	File ID:	3V34006.D
Init/Final Vol:	10.3 g / 5 mL	Prep Batch:	B8J1111	Analyzed:	10/10/18 21:02
Dilution:	1	Matrix:	Soil	Sequence:	S8J1704
Percent Solids:	91.36	Prep Method:	PURGE & TRAP SOIL EPA 5035A		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
56-23-5	Carbon Tetrachloride	ND	0.000160	0.00106	U
108-90-7	Chlorobenzene	ND	0.000154	0.00106	U
124-48-1	Chlorodibromomethane	ND	0.000131	0.00106	U
75-00-3	Chloroethane	ND	0.000181	0.00106	U
67-66-3	Chloroform	ND	0.000179	0.00106	U
74-87-3	Chloromethane	ND	0.000409	0.00106	U
156-59-2	cis-1,2-Dichloroethene	ND	0.0000514	0.00106	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.000134	0.00106	U
110-82-7	Cyclohexane	ND	0.000235	0.00106	U
75-71-8	Dichlorodifluoromethane	ND	0.000359	0.00106	U
100-41-4	EthylBenzene	ND	0.000144	0.00106	U
98-82-8	Isopropylbenzene	ND	0.000167	0.00106	U
179601-23-1	m+p-Xylenes	ND	0.000268	0.00213	U
79-20-9	Methyl Acetate	ND	0.000141	0.00106	U
1634-04-4	Methyl tert-Butyl Ether	ND	0.000180	0.00106	U
108-87-2	Methylcyclohexane	ND	0.000171	0.00106	U
75-09-2	Methylene Chloride	ND	0.000319	0.00106	U
95-47-6	o-Xylene	ND	0.000137	0.00106	U
100-42-5	Styrene	ND	0.000152	0.00106	U
75-65-0	tert-Butyl alcohol	ND	0.00223	0.0106	U
127-18-4	Tetrachloroethene	ND	0.000105	0.00106	U
108-88-3	Toluene	ND	0.0000856	0.00106	U
1330-20-7	Total Xylenes	ND	0.000137	0.00106	U
156-60-5	trans-1,2-Dichloroethene	ND	0.000144	0.00106	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.000203	0.00106	U
79-01-6	Trichloroethene	ND	0.000156	0.00106	U

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

15

15.2.

# ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260C

**Client:** Peak Environmental  
**Client Sample ID:** NTP-7  
**Lab Sample ID:** 8100452-07  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 13:00	Prep Date: 10/10/18 21:02	File ID: 3V34006.D
Init/Final Vol: 10.3 g / 5 mL	Prep Batch: B8J1111	Analyzed: 10/10/18 21:02
Dilution: 1	Matrix: Soil	Sequence: S8J1704
Percent Solids: 91.36	Prep Method: PURGE & TRAP SOIL EPA 5035A	

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
75-69-4	Trichlorofluoromethane	ND	0.000122	0.00106	U
75-01-4	Vinyl chloride	ND	0.000202	0.00106	U

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 15.2.

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

# ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260C

**Client:** Peak Environmental  
**Client Sample ID:** NTP-7  
**Lab Sample ID:** 8100452-07  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 13:00	Prep Date:	10/10/18 21:02	File ID:	3V34006.D
Init/Final Vol:	10.3 g / 5 mL	Prep Batch:	B8J1111	Analyzed:	10/10/18 21:02
Dilution:	1	Matrix:	Soil	Sequence:	S8J1704
Percent Solids:	91.36	Prep Method:	PURGE & TRAP SOIL EPA 5035A		

CAS NO.	TENTATIVELY IDENTIFIED COMPOUNDS	CONC. (mg/kg dry)	RT	Q
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 15.2.

J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 D - Indicates result is based on a dilution

F-I



Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\3\DATA\10102018\3V34006.D Vial: 57  
 Acq On : 10 Oct 2018 21:02 Operator: omd  
 Sample : 8100452-07 Inst : GCMS-3  
 Misc : soil Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Oct 11 11:37 2018 Quant Results File: 0717WC3.RES

Quant Method : G:\HPCHEM\3\METHODS\0717WC3.M (RTE Integrator)  
 Title : VOC's by EPA Method 8260C  
 Last Update : Wed Oct 10 16:46:14 2018  
 Response via : Initial Calibration  
 DataAcq Meth : VOCRUN1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.51	168	140882	50.00	ug/kg	0.05
33) 1,4-Difluorobenzene	8.92	114	262094	50.00	ug/kg	0.03
52) Chlorobenzene-d5	14.07	82	139480	50.00	ug/kg	0.02
74) 1,4-Dichlorobenzene-d4	18.08	152	114467	50.00	ug/kg	0.02

System Monitoring Compounds						
26) Dibromofluoromethane	7.39	113	96471	56.30	ug/kg	0.05
Spiked Amount	50.000	Range 59 - 147	Recovery	=	112.60%	
43) Toluene-d8	11.56	98	313500	53.18	ug/kg	0.03
Spiked Amount	50.000	Range 66 - 134	Recovery	=	106.36%	
62) 4-Bromofluorobenzene	16.11	95	139563	59.39	ug/kg	0.02
Spiked Amount	50.000	Range 64 - 125	Recovery	=	118.78%	

Target Compounds Qvalue

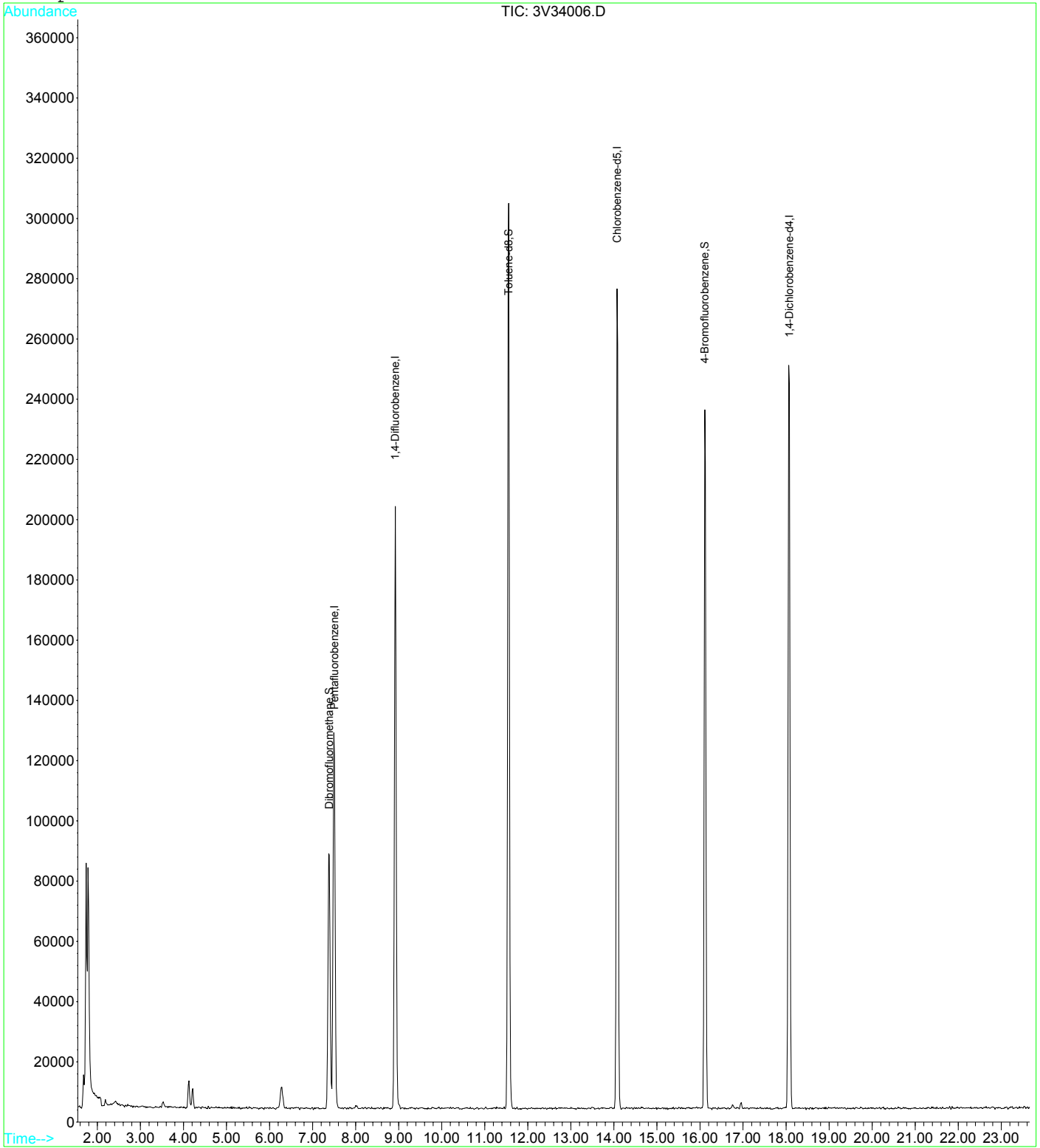
(#) = qualifier out of range (m) = manual integration  
 3V34006.D 0717WC3.M Thu Oct 11 11:40:01 2018 SS

15  
152.

Quantitation Report

Data File : G:\HPCHEM\3\DATA\10102018\3V34006.D Vial: 57  
Acq On : 10 Oct 2018 21:02 Operator: omd  
Sample : 8100452-07 Inst : GCMS-3  
Misc : soil Multiplr: 1.00  
MS Integration Params: RTEINT.P  
Quant Time: Oct 11 11:37 2018 Quant Results File: 0717WC3.RES

Method : G:\HPCHEM\3\METHODS\0717WC3.M (RTE Integrator)  
Title : VOC's by EPA Method 8260C  
Last Update : Wed Oct 10 16:46:14 2018  
Response via : Initial Calibration



15  
15.2

# ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260C

**Client:** Peak Environmental  
**Client Sample ID:** STP-1B  
**Lab Sample ID:** 8100452-08  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 13:15	Prep Date: 10/11/18 13:34	File ID: 3V34020.D
Init/Final Vol: 4.1 g / 5 mL	Prep Batch: B8J1141	Analyzed: 10/11/18 13:34
Dilution: 1	Matrix: Soil	Sequence: S8J1706
Percent Solids: 89.59	Prep Method: PURGE & TRAP SOIL EPA 5035A	

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
71-55-6	1,1,1-Trichloroethane	ND	0.000397	0.00272	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.000376	0.00272	U
76-13-1	1,1,2-Trichloro-1,2,2 Trifluoroethane	ND	0.00117	0.00272	U
79-00-5	1,1,2-Trichloroethane	ND	0.000459	0.00272	U
75-34-3	1,1-Dichloroethane	ND	0.000397	0.00272	U
75-35-4	1,1-Dichloroethene	ND	0.000504	0.00272	U
87-61-6	1,2,3-Trichlorobenzene	ND	0.000588	0.00272	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.000726	0.00272	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.000376	0.00272	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.000664	0.00272	U
106-93-4	1,2-Dibromoethane	ND	0.000343	0.00272	U
95-50-1	1,2-Dichlorobenzene	ND	0.000481	0.00272	U
107-06-2	1,2-Dichloroethane	ND	0.000384	0.00272	U
78-87-5	1,2-Dichloropropane	ND	0.000446	0.00272	U
541-73-1	1,3-Dichlorobenzene	ND	0.000200	0.00272	U
106-46-7	1,4-Dichlorobenzene	ND	0.000392	0.00272	U
78-93-3	2-Butanone	ND	0.000444	0.00681	U
591-78-6	2-Hexanone	ND	0.000255	0.00272	U
108-10-1	4-Methyl-2-pentanone	ND	0.000340	0.00272	U
67-64-1	Acetone	ND	0.000825	0.00681	U
71-43-2	Benzene	ND	0.000248	0.00272	U
74-97-5	Bromochloromethane	ND	0.000502	0.00272	U
75-27-4	Bromodichloromethane	ND	0.000342	0.00272	U
75-25-2	Bromoform	ND	0.000478	0.00272	U
74-83-9	Bromomethane	ND	0.000785	0.00272	U
75-15-0	Carbon disulfide	ND	0.000391	0.00272	U

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

15

152.

# ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260C

**Client:** Peak Environmental  
**Client Sample ID:** STP-1B  
**Lab Sample ID:** 8100452-08  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 13:15	Prep Date:	10/11/18 13:34	File ID:	3V34020.D
Init/Final Vol:	4.1 g / 5 mL	Prep Batch:	B8J1141	Analyzed:	10/11/18 13:34
Dilution:	1	Matrix:	Soil	Sequence:	S8J1706
Percent Solids:	89.59	Prep Method:	PURGE & TRAP SOIL EPA 5035A		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
56-23-5	Carbon Tetrachloride	ND	0.000410	0.00272	U
108-90-7	Chlorobenzene	ND	0.000395	0.00272	U
124-48-1	Chlorodibromomethane	ND	0.000335	0.00272	U
75-00-3	Chloroethane	ND	0.000464	0.00272	U
67-66-3	Chloroform	ND	0.000457	0.00272	U
74-87-3	Chloromethane	ND	0.00105	0.00272	U
156-59-2	cis-1,2-Dichloroethene	ND	0.000132	0.00272	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.000344	0.00272	U
110-82-7	Cyclohexane	ND	0.000603	0.00272	U
75-71-8	Dichlorodifluoromethane	ND	0.000919	0.00272	U
100-41-4	EthylBenzene	ND	0.000369	0.00272	U
98-82-8	Isopropylbenzene	ND	0.000427	0.00272	U
179601-23-1	m+p-Xylenes	ND	0.000687	0.00544	U
79-20-9	Methyl Acetate	ND	0.000361	0.00272	U
1634-04-4	Methyl tert-Butyl Ether	ND	0.000460	0.00272	U
108-87-2	Methylcyclohexane	ND	0.000438	0.00272	U
75-09-2	Methylene Chloride	ND	0.000818	0.00272	U
95-47-6	o-Xylene	ND	0.000350	0.00272	U
100-42-5	Styrene	ND	0.000389	0.00272	U
75-65-0	tert-Butyl alcohol	ND	0.00572	0.0272	U
127-18-4	Tetrachloroethene	ND	0.000270	0.00272	U
108-88-3	Toluene	ND	0.000219	0.00272	U
1330-20-7	Total Xylenes	ND	0.000350	0.00272	U
156-60-5	trans-1,2-Dichloroethene	ND	0.000369	0.00272	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.000520	0.00272	U
79-01-6	Trichloroethene	ND	0.000400	0.00272	U

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

15

15.2.

# ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260C

**Client:** Peak Environmental  
**Client Sample ID:** STP-1B  
**Lab Sample ID:** 8100452-08  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 13:15	Prep Date: 10/11/18 13:34	File ID: 3V34020.D
Init/Final Vol: 4.1 g / 5 mL	Prep Batch: B8J1141	Analyzed: 10/11/18 13:34
Dilution: 1	Matrix: Soil	Sequence: S8J1706
Percent Solids: 89.59	Prep Method: PURGE & TRAP SOIL EPA 5035A	

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
75-69-4	Trichlorofluoromethane	ND	0.000313	0.00272	U
75-01-4	Vinyl chloride	ND	0.000517	0.00272	U

15

  
 15.2.

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

# ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260C

**Client:** Peak Environmental  
**Client Sample ID:** STP-1B  
**Lab Sample ID:** 8100452-08  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 13:15	Prep Date:	10/11/18 13:34	File ID:	3V34020.D
Init/Final Vol:	4.1 g / 5 mL	Prep Batch:	B8J1141	Analyzed:	10/11/18 13:34
Dilution:	1	Matrix:	Soil	Sequence:	S8J1706
Percent Solids:	89.59	Prep Method:	PURGE & TRAP SOIL EPA 5035A		

CAS NO.	TENTATIVELY IDENTIFIED COMPOUNDS	CONC. (mg/kg dry)	RT	Q
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15  
 15.2.

J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 D - Indicates result is based on a dilution

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\3\DATA\10112018\3V34020.D Vial: 75  
 Acq On : 11 Oct 2018 13:34 Operator: omd  
 Sample : 8100452-08 Inst : GCMS-3  
 Misc : soil re Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Oct 11 16:25 2018 Quant Results File: 0717WC3.RES

Quant Method : G:\HPCHEM\3\METHODS\0717WC3.M (RTE Integrator)  
 Title : VOC's by EPA Method 8260C  
 Last Update : Wed Oct 10 16:46:14 2018  
 Response via : Initial Calibration  
 DataAcq Meth : VOCRUN1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.54	168	157363	50.00	ug/kg	0.07
33) 1,4-Difluorobenzene	8.95	114	288376	50.00	ug/kg	0.06
52) Chlorobenzene-d5	14.10	82	154637	50.00	ug/kg	0.05
74) 1,4-Dichlorobenzene-d4	18.11	152	136983	50.00	ug/kg	0.05

System Monitoring Compounds						
26) Dibromofluoromethane	7.42	113	106632	55.71	ug/kg	0.07
Spiked Amount	50.000	Range 59 - 147	Recovery	=	111.42%	
43) Toluene-d8	11.59	98	346621	53.44	ug/kg	0.06
Spiked Amount	50.000	Range 66 - 134	Recovery	=	106.88%	
62) 4-Bromofluorobenzene	16.14	95	156107	59.92	ug/kg	0.05
Spiked Amount	50.000	Range 64 - 125	Recovery	=	119.84%	

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration  
 3V34020.D 0717WC3.M Thu Oct 11 16:23:23 2018 SS

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152.

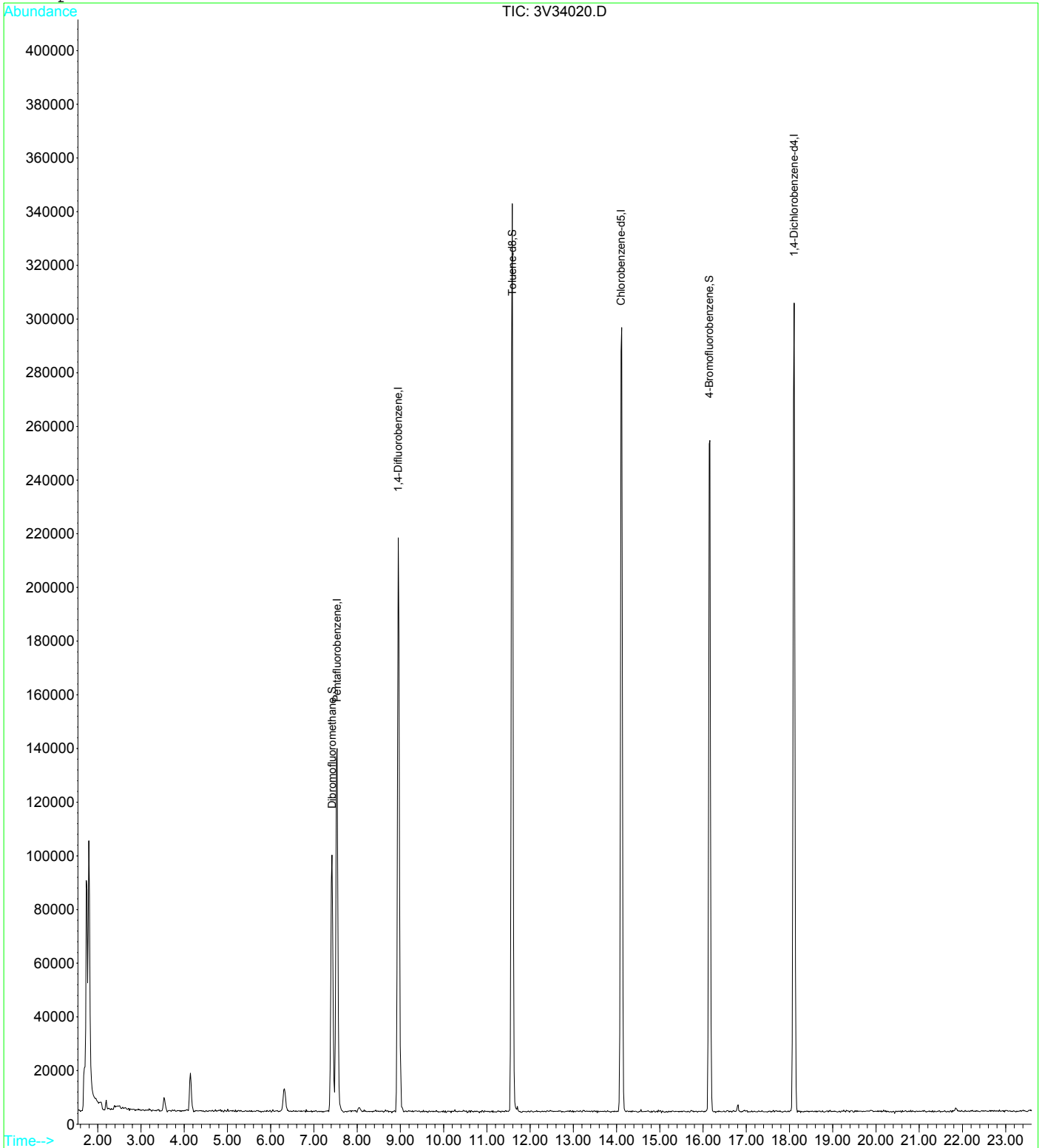
Quantitation Report

Data File : G:\HPCHEM\3\DATA\10112018\3V34020.D  
Acq On : 11 Oct 2018 13:34  
Sample : 8100452-08  
Misc : soil re  
MS Integration Params: RTEINT.P  
Quant Time: Oct 11 16:25 2018

Vial: 75  
Operator: omd  
Inst : GCMS-3  
Multiplr: 1.00

Quant Results File: 0717WC3.RES

Method : G:\HPCHEM\3\METHODS\0717WC3.M (RTE Integrator)  
Title : VOC's by EPA Method 8260C  
Last Update : Wed Oct 10 16:46:14 2018  
Response via : Initial Calibration



15  
15.2.



# ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260C

**Client:** Peak Environmental  
**Client Sample ID:** STP-4A  
**Lab Sample ID:** 8100452-11  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 00:00	Prep Date:	10/10/18 22:01	File ID:	3V34008.D
Init/Final Vol:	14.8 g / 5 mL	Prep Batch:	B8J1111	Analyzed:	10/10/18 22:01
Dilution:	1	Matrix:	Soil	Sequence:	S8J1704
Percent Solids:	90.63	Prep Method:	PURGE & TRAP SOIL EPA 5035A		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
71-55-6	1,1,1-Trichloroethane	ND	0.000109	0.000746	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.000103	0.000746	U
76-13-1	1,1,2-Trichloro-1,2,2 Trifluoroethane	ND	0.000319	0.000746	U
79-00-5	1,1,2-Trichloroethane	ND	0.000126	0.000746	U
75-34-3	1,1-Dichloroethane	ND	0.000109	0.000746	U
75-35-4	1,1-Dichloroethene	ND	0.000138	0.000746	U
87-61-6	1,2,3-Trichlorobenzene	ND	0.000161	0.000746	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.000199	0.000746	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.000103	0.000746	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.000182	0.000746	U
106-93-4	1,2-Dibromoethane	ND	0.0000939	0.000746	U
95-50-1	1,2-Dichlorobenzene	ND	0.000132	0.000746	U
107-06-2	1,2-Dichloroethane	ND	0.000105	0.000746	U
78-87-5	1,2-Dichloropropane	ND	0.000122	0.000746	U
541-73-1	1,3-Dichlorobenzene	ND	0.0000548	0.000746	U
106-46-7	1,4-Dichlorobenzene	ND	0.000107	0.000746	U
78-93-3	2-Butanone	ND	0.000122	0.00186	U
591-78-6	2-Hexanone	ND	0.0000697	0.000746	U
108-10-1	4-Methyl-2-pentanone	ND	0.0000932	0.000746	U
67-64-1	Acetone	ND	0.000226	0.00186	U
71-43-2	Benzene	ND	0.0000678	0.000746	U
74-97-5	Bromochloromethane	ND	0.000138	0.000746	U
75-27-4	Bromodichloromethane	ND	0.0000936	0.000746	U
75-25-2	Bromoform	ND	0.000131	0.000746	U
74-83-9	Bromomethane	ND	0.000215	0.000746	U
75-15-0	Carbon disulfide	ND	0.000107	0.000746	U

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

15  
15.2.

# ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260C

**Client:** Peak Environmental  
**Client Sample ID:** STP-4A  
**Lab Sample ID:** 8100452-11  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 00:00	Prep Date:	10/10/18 22:01	File ID:	3V34008.D
Init/Final Vol:	14.8 g / 5 mL	Prep Batch:	B8J1111	Analyzed:	10/10/18 22:01
Dilution:	1	Matrix:	Soil	Sequence:	S8J1704
Percent Solids:	90.63	Prep Method:	PURGE & TRAP SOIL EPA 5035A		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
56-23-5	Carbon Tetrachloride	ND	0.000112	0.000746	U
108-90-7	Chlorobenzene	ND	0.000108	0.000746	U
124-48-1	Chlorodibromomethane	ND	0.0000917	0.000746	U
75-00-3	Chloroethane	ND	0.000127	0.000746	U
67-66-3	Chloroform	ND	0.000125	0.000746	U
74-87-3	Chloromethane	ND	0.000287	0.000746	U
156-59-2	cis-1,2-Dichloroethene	ND	0.0000360	0.000746	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.0000943	0.000746	U
110-82-7	Cyclohexane	ND	0.000165	0.000746	U
75-71-8	Dichlorodifluoromethane	ND	0.000252	0.000746	U
100-41-4	EthylBenzene	ND	0.000101	0.000746	U
98-82-8	Isopropylbenzene	ND	0.000117	0.000746	U
179601-23-1	m+p-Xylenes	ND	0.000188	0.00149	U
79-20-9	Methyl Acetate	ND	0.0000988	0.000746	U
1634-04-4	Methyl tert-Butyl Ether	ND	0.000126	0.000746	U
108-87-2	Methylcyclohexane	ND	0.000120	0.000746	U
75-09-2	Methylene Chloride	ND	0.000224	0.000746	U
95-47-6	o-Xylene	ND	0.0000958	0.000746	U
100-42-5	Styrene	ND	0.000107	0.000746	U
75-65-0	tert-Butyl alcohol	ND	0.00157	0.00746	U
127-18-4	Tetrachloroethene	ND	0.0000738	0.000746	U
108-88-3	Toluene	ND	0.0000600	0.000746	U
1330-20-7	Total Xylenes	ND	0.0000958	0.000746	U
156-60-5	trans-1,2-Dichloroethene	ND	0.000101	0.000746	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.000142	0.000746	U
79-01-6	Trichloroethene	ND	0.000110	0.000746	U

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

15  
15.2.

# ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260C

**Client:** Peak Environmental  
**Client Sample ID:** STP-4A  
**Lab Sample ID:** 8100452-11  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 00:00	Prep Date: 10/10/18 22:01	File ID: 3V34008.D
Init/Final Vol: 14.8 g / 5 mL	Prep Batch: B8J1111	Analyzed: 10/10/18 22:01
Dilution: 1	Matrix: Soil	Sequence: S8J1704
Percent Solids: 90.63	Prep Method: PURGE & TRAP SOIL EPA 5035A	

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
75-69-4	Trichlorofluoromethane	ND	0.0000857	0.000746	U
75-01-4	Vinyl chloride	ND	0.000142	0.000746	U

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 15.2.

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

# ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260C

**Client:** Peak Environmental  
**Client Sample ID:** STP-4A  
**Lab Sample ID:** 8100452-11  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 00:00	Prep Date:	10/10/18 22:01	File ID:	3V34008.D
Init/Final Vol:	14.8 g / 5 mL	Prep Batch:	B8J1111	Analyzed:	10/10/18 22:01
Dilution:	1	Matrix:	Soil	Sequence:	S8J1704
Percent Solids:	90.63	Prep Method:	PURGE & TRAP SOIL EPA 5035A		

CAS NO.	TENTATIVELY IDENTIFIED COMPOUNDS	CONC. (mg/kg dry)	RT	Q
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 15.2.

J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 D - Indicates result is based on a dilution

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\3\DATA\10102018\3V34008.D Vial: 59  
 Acq On : 10 Oct 2018 22:01 Operator: omd  
 Sample : 8100452-11 Inst : GCMS-3  
 Misc : soil Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Oct 11 11:38 2018 Quant Results File: 0717WC3.RES

Quant Method : G:\HPCHEM\3\METHODS\0717WC3.M (RTE Integrator)  
 Title : VOC's by EPA Method 8260C  
 Last Update : Wed Oct 10 16:46:14 2018  
 Response via : Initial Calibration  
 DataAcq Meth : VOCRUN1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.49	168	147505	50.00	ug/kg	0.03
33) 1,4-Difluorobenzene	8.92	114	269462	50.00	ug/kg	0.03
52) Chlorobenzene-d5	14.07	82	143908	50.00	ug/kg	0.02
74) 1,4-Dichlorobenzene-d4	18.08	152	125562	50.00	ug/kg	0.02

System Monitoring Compounds						
26) Dibromofluoromethane	7.37	113	99824	55.64	ug/kg	0.03
Spiked Amount	50.000	Range 59 - 147	Recovery	=	111.28%	
43) Toluene-d8	11.56	98	321151	52.99	ug/kg	0.03
Spiked Amount	50.000	Range 66 - 134	Recovery	=	105.98%	
62) 4-Bromofluorobenzene	16.11	95	145178	59.88	ug/kg	0.02
Spiked Amount	50.000	Range 64 - 125	Recovery	=	119.76%	

Target Compounds Qvalue

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 152.

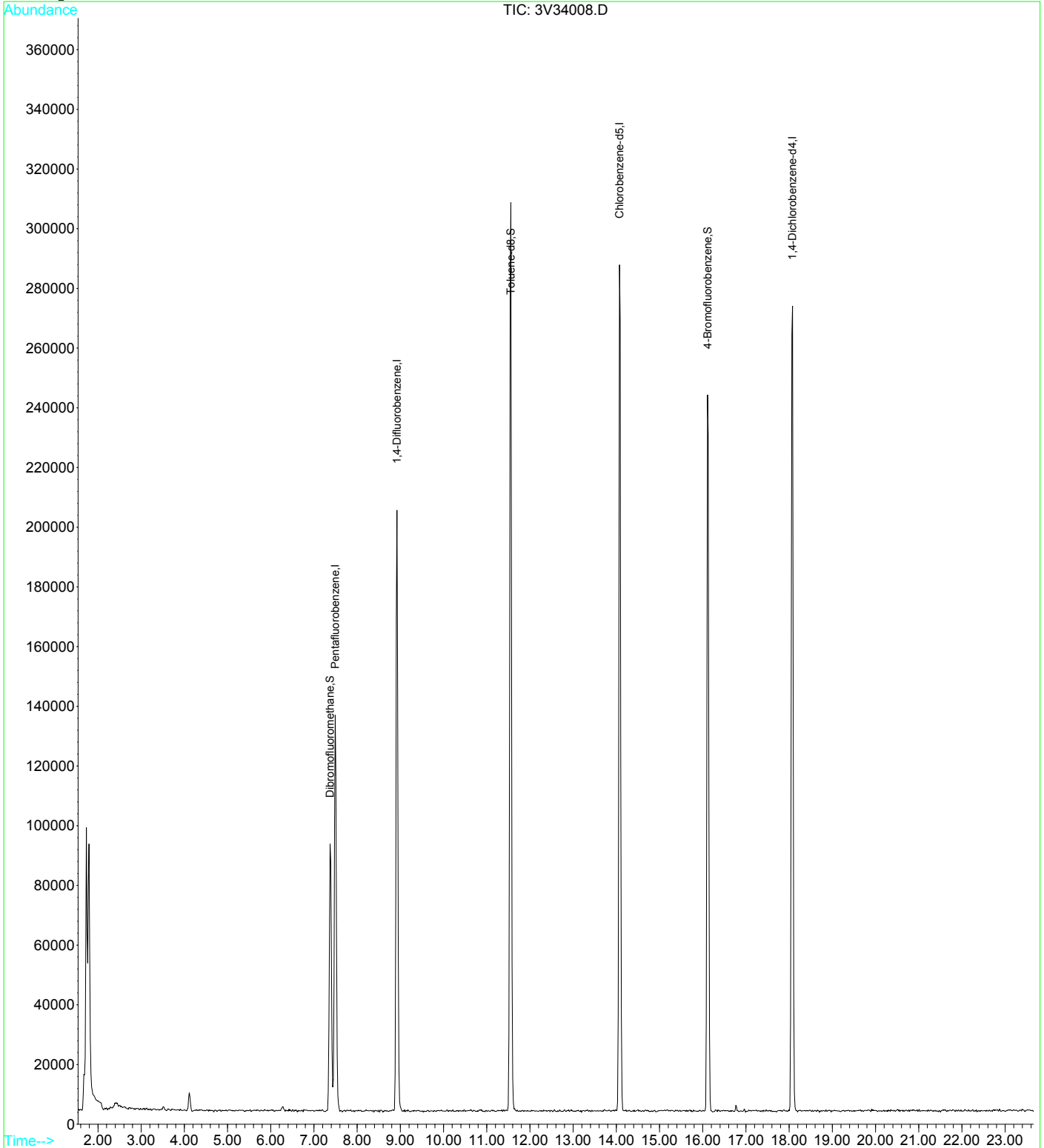
Quantitation Report

Data File : G:\HPCHEM\3\DATA\10102018\3V34008.D  
Acq On : 10 Oct 2018 22:01  
Sample : 8100452-11  
Misc : soil  
MS Integration Params: RTEINT.P  
Quant Time: Oct 11 11:38 2018

Vial: 59  
Operator: omd  
Inst : GCMS-3  
Multiplr: 1.00

Quant Results File: 0717WC3.RES

Method : G:\HPCHEM\3\METHODS\0717WC3.M (RTE Integrator)  
Title : VOC's by EPA Method 8260C  
Last Update : Wed Oct 10 16:46:14 2018  
Response via : Initial Calibration



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15.2.

# ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260C

**Client:** Peak Environmental  
**Client Sample ID:** STP-4B  
**Lab Sample ID:** 8100452-12  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 00:00	Prep Date:	10/10/18 22:30	File ID:	3V34009.D
Init/Final Vol:	12.3 g / 5 mL	Prep Batch:	B8J1111	Analyzed:	10/10/18 22:30
Dilution:	1	Matrix:	Soil	Sequence:	S8J1704
Percent Solids:	91.70	Prep Method:	PURGE & TRAP SOIL EPA 5035A		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
71-55-6	1,1,1-Trichloroethane	ND	0.000129	0.000887	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.000122	0.000887	U
76-13-1	1,1,2-Trichloro-1,2,2 Trifluoroethane	ND	0.000379	0.000887	U
79-00-5	1,1,2-Trichloroethane	ND	0.000149	0.000887	U
75-34-3	1,1-Dichloroethane	ND	0.000129	0.000887	U
75-35-4	1,1-Dichloroethene	ND	0.000164	0.000887	U
87-61-6	1,2,3-Trichlorobenzene	ND	0.000192	0.000887	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.000236	0.000887	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.000122	0.000887	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.000216	0.000887	U
106-93-4	1,2-Dibromoethane	ND	0.000112	0.000887	U
95-50-1	1,2-Dichlorobenzene	ND	0.000156	0.000887	U
107-06-2	1,2-Dichloroethane	ND	0.000125	0.000887	U
78-87-5	1,2-Dichloropropane	ND	0.000145	0.000887	U
541-73-1	1,3-Dichlorobenzene	ND	0.0000652	0.000887	U
106-46-7	1,4-Dichlorobenzene	ND	0.000128	0.000887	U
78-93-3	2-Butanone	ND	0.000145	0.00222	U
591-78-6	2-Hexanone	ND	0.0000829	0.000887	U
108-10-1	4-Methyl-2-pentanone	ND	0.000111	0.000887	U
67-64-1	Acetone	ND	0.000269	0.00222	U
71-43-2	Benzene	ND	0.0000807	0.000887	U
74-97-5	Bromochloromethane	ND	0.000164	0.000887	U
75-27-4	Bromodichloromethane	ND	0.000111	0.000887	U
75-25-2	Bromoform	ND	0.000156	0.000887	U
74-83-9	Bromomethane	ND	0.000256	0.000887	U
75-15-0	Carbon disulfide	ND	0.000127	0.000887	U

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

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152.

# ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260C

**Client:** Peak Environmental  
**Client Sample ID:** STP-4B  
**Lab Sample ID:** 8100452-12  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 00:00	Prep Date:	10/10/18 22:30	File ID:	3V34009.D
Init/Final Vol:	12.3 g / 5 mL	Prep Batch:	B8J1111	Analyzed:	10/10/18 22:30
Dilution:	1	Matrix:	Soil	Sequence:	S8J1704
Percent Solids:	91.70	Prep Method:	PURGE & TRAP SOIL EPA 5035A		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
56-23-5	Carbon Tetrachloride	ND	0.000133	0.000887	U
108-90-7	Chlorobenzene	ND	0.000129	0.000887	U
124-48-1	Chlorodibromomethane	ND	0.000109	0.000887	U
75-00-3	Chloroethane	ND	0.000151	0.000887	U
67-66-3	Chloroform	ND	0.000149	0.000887	U
74-87-3	Chloromethane	ND	0.000341	0.000887	U
156-59-2	cis-1,2-Dichloroethene	ND	0.0000429	0.000887	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.000112	0.000887	U
110-82-7	Cyclohexane	ND	0.000196	0.000887	U
75-71-8	Dichlorodifluoromethane	ND	0.000299	0.000887	U
100-41-4	EthylBenzene	ND	0.000120	0.000887	U
98-82-8	Isopropylbenzene	ND	0.000139	0.000887	U
179601-23-1	m+p-Xylenes	ND	0.000224	0.00177	U
79-20-9	Methyl Acetate	ND	0.000117	0.000887	U
1634-04-4	Methyl tert-Butyl Ether	ND	0.000150	0.000887	U
108-87-2	Methylcyclohexane	ND	0.000143	0.000887	U
75-09-2	Methylene Chloride	ND	0.000266	0.000887	U
95-47-6	o-Xylene	ND	0.000114	0.000887	U
100-42-5	Styrene	ND	0.000127	0.000887	U
75-65-0	tert-Butyl alcohol	ND	0.00186	0.00887	U
127-18-4	Tetrachloroethene	ND	0.0000878	0.000887	U
108-88-3	Toluene	ND	0.0000714	0.000887	U
1330-20-7	Total Xylenes	ND	0.000114	0.000887	U
156-60-5	trans-1,2-Dichloroethene	ND	0.000120	0.000887	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.000169	0.000887	U
79-01-6	Trichloroethene	ND	0.000130	0.000887	U

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

15  
15.2.



# ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260C

**Client:** Peak Environmental  
**Client Sample ID:** STP-4B  
**Lab Sample ID:** 8100452-12  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 00:00	Prep Date: 10/10/18 22:30	File ID: 3V34009.D
Init/Final Vol: 12.3 g / 5 mL	Prep Batch: B8J1111	Analyzed: 10/10/18 22:30
Dilution: 1	Matrix: Soil	Sequence: S8J1704
Percent Solids: 91.70	Prep Method: PURGE & TRAP SOIL EPA 5035A	

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
75-69-4	Trichlorofluoromethane	ND	0.000102	0.000887	U
75-01-4	Vinyl chloride	ND	0.000168	0.000887	U

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 15.2.

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

# ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260C

**Client:** Peak Environmental  
**Client Sample ID:** STP-4B  
**Lab Sample ID:** 8100452-12  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 00:00	Prep Date:	10/10/18 22:30	File ID:	3V34009.D
Init/Final Vol:	12.3 g / 5 mL	Prep Batch:	B8J1111	Analyzed:	10/10/18 22:30
Dilution:	1	Matrix:	Soil	Sequence:	S8J1704
Percent Solids:	91.70	Prep Method:	PURGE & TRAP SOIL EPA 5035A		

CAS NO.	TENTATIVELY IDENTIFIED COMPOUNDS	CONC. (mg/kg dry)	RT	Q
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 15.2.

J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 D - Indicates result is based on a dilution

F-I

Quantitation Report (QT/LSC Reviewed)

Data File : G:\HPCHEM\3\DATA\10102018\3V34009.D Vial: 60  
 Acq On : 10 Oct 2018 22:30 Operator: omd  
 Sample : 8100452-12 Inst : GCMS-3  
 Misc : soil Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Oct 11 11:40 2018 Quant Results File: 0717WC3.RES

Quant Method : G:\HPCHEM\3\METHODS\0717WC3.M (RTE Integrator)  
 Title : VOC's by EPA Method 8260C  
 Last Update : Wed Oct 10 16:46:14 2018  
 Response via : Initial Calibration  
 DataAcq Meth : VOCRUN1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.51	168	137633	50.00	ug/kg	0.04
33) 1,4-Difluorobenzene	8.92	114	257853	50.00	ug/kg	0.03
52) Chlorobenzene-d5	14.07	82	137391	50.00	ug/kg	0.02
74) 1,4-Dichlorobenzene-d4	18.08	152	119681	50.00	ug/kg	0.02

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
26) Dibromofluoromethane	7.39	113	94850	56.66	ug/kg	0.04
Spiked Amount	50.000	Range 59 - 147	Recovery =	113.32%		
43) Toluene-d8	11.56	98	307658	53.05	ug/kg	0.03
Spiked Amount	50.000	Range 66 - 134	Recovery =	106.10%		
62) 4-Bromofluorobenzene	16.11	95	138293m	59.74	ug/kg	0.02
Spiked Amount	50.000	Range 64 - 125	Recovery =	119.48%		

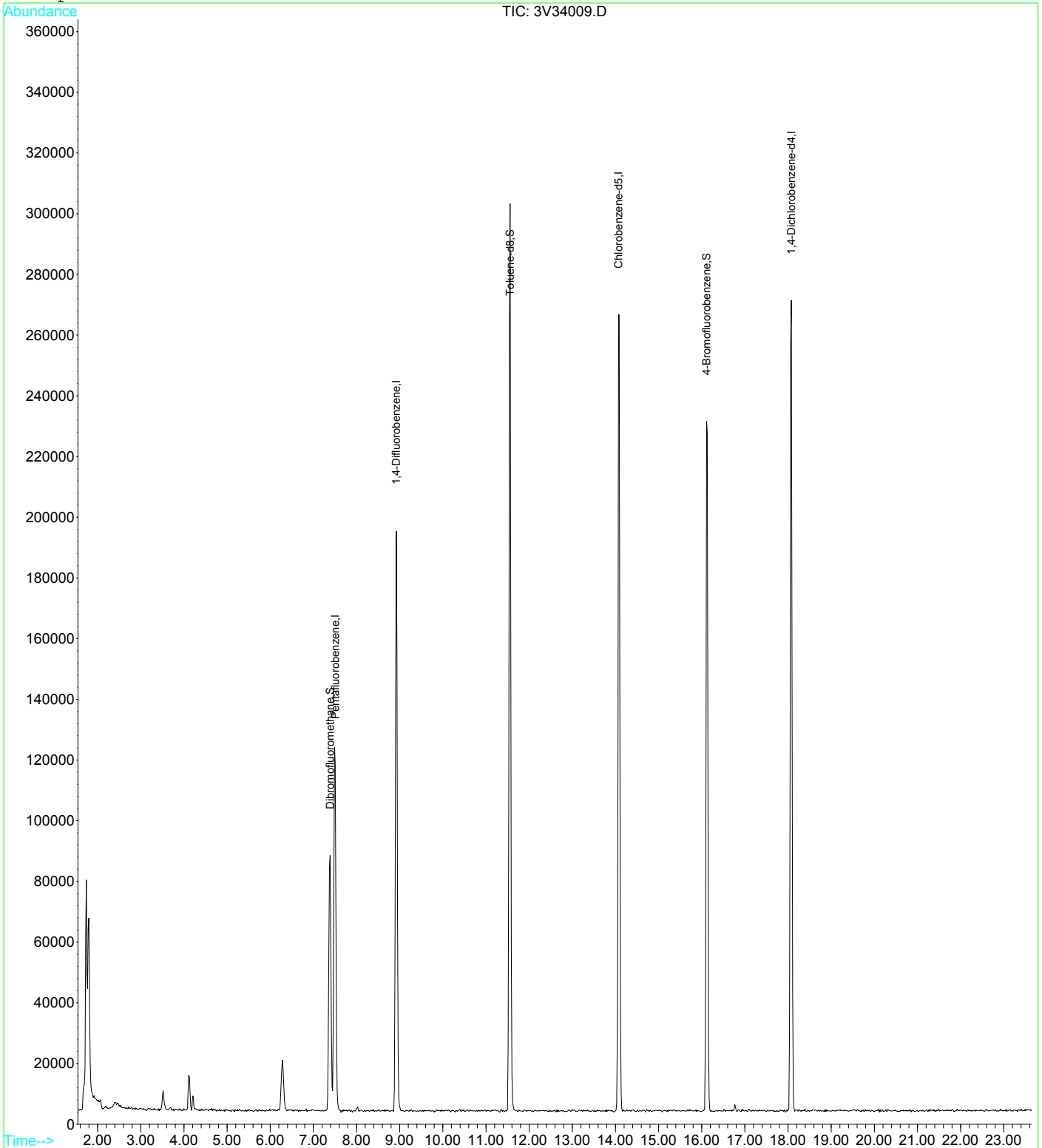
Target Compounds Qvalue

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152.

Quantitation Report

Data File : G:\HPCHEM\3\DATA\10102018\3V34009.D Vial: 60  
Acq On : 10 Oct 2018 22:30 Operator: omd  
Sample : 8100452-12 Inst : GCMS-3  
Misc : soil Multiplr: 1.00  
MS Integration Params: RTEINT.P  
Quant Time: Oct 11 11:40 2018 Quant Results File: 0717WC3.RES

Method : G:\HPCHEM\3\METHODS\0717WC3.M (RTE Integrator)  
Title : VOC's by EPA Method 8260C  
Last Update : Wed Oct 10 16:46:14 2018  
Response via : Initial Calibration



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15.2.

# ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260C

**Client:** Peak Environmental  
**Client Sample ID:** STP-7  
**Lab Sample ID:** 8100452-14  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 00:00	Prep Date: 10/10/18 22:59	File ID: 3V34010.D
Init/Final Vol: 11.8 g / 5 mL	Prep Batch: B8J1111	Analyzed: 10/10/18 22:59
Dilution: 1	Matrix: Soil	Sequence: S8J1704
Percent Solids: 92.94	Prep Method: PURGE & TRAP SOIL EPA 5035A	

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
71-55-6	1,1,1-Trichloroethane	ND	0.000133	0.000912	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.000126	0.000912	U
76-13-1	1,1,2-Trichloro-1,2,2 Trifluoroethane	ND	0.000390	0.000912	U
79-00-5	1,1,2-Trichloroethane	ND	0.000154	0.000912	U
75-34-3	1,1-Dichloroethane	ND	0.000133	0.000912	U
75-35-4	1,1-Dichloroethene	ND	0.000169	0.000912	U
87-61-6	1,2,3-Trichlorobenzene	ND	0.000197	0.000912	U
120-82-1	1,2,4-Trichlorobenzene	ND	0.000243	0.000912	U
95-63-6	1,2,4-Trimethylbenzene	ND	0.000126	0.000912	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.000222	0.000912	U
106-93-4	1,2-Dibromoethane	ND	0.000115	0.000912	U
95-50-1	1,2-Dichlorobenzene	ND	0.000161	0.000912	U
107-06-2	1,2-Dichloroethane	ND	0.000129	0.000912	U
78-87-5	1,2-Dichloropropane	ND	0.000150	0.000912	U
541-73-1	1,3-Dichlorobenzene	ND	0.0000670	0.000912	U
106-46-7	1,4-Dichlorobenzene	ND	0.000131	0.000912	U
78-93-3	2-Butanone	ND	0.000149	0.00228	U
591-78-6	2-Hexanone	ND	0.0000853	0.000912	U
108-10-1	4-Methyl-2-pentanone	ND	0.000114	0.000912	U
67-64-1	Acetone	ND	0.000276	0.00228	U
71-43-2	Benzene	ND	0.0000830	0.000912	U
74-97-5	Bromochloromethane	ND	0.000168	0.000912	U
75-27-4	Bromodichloromethane	ND	0.000114	0.000912	U
75-25-2	Bromoform	ND	0.000160	0.000912	U
74-83-9	Bromomethane	ND	0.000263	0.000912	U
75-15-0	Carbon disulfide	ND	0.000131	0.000912	U

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

15

152.

# ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260C

**Client:** Peak Environmental  
**Client Sample ID:** STP-7  
**Lab Sample ID:** 8100452-14  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 00:00	Prep Date:	10/10/18 22:59	File ID:	3V34010.D
Init/Final Vol:	11.8 g / 5 mL	Prep Batch:	B8J1111	Analyzed:	10/10/18 22:59
Dilution:	1	Matrix:	Soil	Sequence:	S8J1704
Percent Solids:	92.94	Prep Method:	PURGE & TRAP SOIL EPA 5035A		

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
56-23-5	Carbon Tetrachloride	ND	0.000137	0.000912	U
108-90-7	Chlorobenzene	ND	0.000132	0.000912	U
124-48-1	Chlorodibromomethane	ND	0.000112	0.000912	U
75-00-3	Chloroethane	ND	0.000155	0.000912	U
67-66-3	Chloroform	ND	0.000153	0.000912	U
74-87-3	Chloromethane	ND	0.000351	0.000912	U
156-59-2	cis-1,2-Dichloroethene	ND	0.0000441	0.000912	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.000115	0.000912	U
110-82-7	Cyclohexane	ND	0.000202	0.000912	U
75-71-8	Dichlorodifluoromethane	ND	0.000308	0.000912	U
100-41-4	EthylBenzene	ND	0.000124	0.000912	U
98-82-8	Isopropylbenzene	ND	0.000143	0.000912	U
179601-23-1	m+p-Xylenes	ND	0.000230	0.00182	U
79-20-9	Methyl Acetate	ND	0.000121	0.000912	U
1634-04-4	Methyl tert-Butyl Ether	ND	0.000154	0.000912	U
108-87-2	Methylcyclohexane	ND	0.000147	0.000912	U
75-09-2	Methylene Chloride	ND	0.000274	0.000912	U
95-47-6	o-Xylene	ND	0.000117	0.000912	U
100-42-5	Styrene	ND	0.000130	0.000912	U
75-65-0	tert-Butyl alcohol	ND	0.00191	0.00912	U
127-18-4	Tetrachloroethene	ND	0.0000903	0.000912	U
108-88-3	Toluene	ND	0.0000734	0.000912	U
1330-20-7	Total Xylenes	ND	0.000117	0.000912	U
156-60-5	trans-1,2-Dichloroethene	ND	0.000124	0.000912	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.000174	0.000912	U
79-01-6	Trichloroethene	ND	0.000134	0.000912	U

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

15  
15.2.

# ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260C

**Client:** Peak Environmental  
**Client Sample ID:** STP-7  
**Lab Sample ID:** 8100452-14  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled: 10/10/18 00:00	Prep Date: 10/10/18 22:59	File ID: 3V34010.D
Init/Final Vol: 11.8 g / 5 mL	Prep Batch: B8J1111	Analyzed: 10/10/18 22:59
Dilution: 1	Matrix: Soil	Sequence: S8J1704
Percent Solids: 92.94	Prep Method: PURGE & TRAP SOIL EPA 5035A	

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Q
75-69-4	Trichlorofluoromethane	ND	0.000105	0.000912	U
75-01-4	Vinyl chloride	ND	0.000173	0.000912	U

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 15.2.

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

# ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260C

**Client:** Peak Environmental  
**Client Sample ID:** STP-7  
**Lab Sample ID:** 8100452-14  
**Project:** Ridgewood  
**Work Order:** 8100452

Date Sampled:	10/10/18 00:00	Prep Date:	10/10/18 22:59	File ID:	3V34010.D
Init/Final Vol:	11.8 g / 5 mL	Prep Batch:	B8J1111	Analyzed:	10/10/18 22:59
Dilution:	1	Matrix:	Soil	Sequence:	S8J1704
Percent Solids:	92.94	Prep Method:	PURGE & TRAP SOIL EPA 5035A		

CAS NO.	TENTATIVELY IDENTIFIED COMPOUNDS	CONC. (mg/kg dry)	RT	Q
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 15.2.

J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 D - Indicates result is based on a dilution

F-I



Quantitation Report (QT/LSC Reviewed)

Data File : G:\HPCHEM\3\DATA\10102018\3V34010.D Vial: 61  
 Acq On : 10 Oct 2018 22:59 Operator: omd  
 Sample : 8100452-14 Inst : GCMS-3  
 Misc : soil Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Oct 11 11:41 2018 Quant Results File: 0717WC3.RES

Quant Method : G:\HPCHEM\3\METHODS\0717WC3.M (RTE Integrator)  
 Title : VOC's by EPA Method 8260C  
 Last Update : Wed Oct 10 16:46:14 2018  
 Response via : Initial Calibration  
 DataAcq Meth : VOCRUN1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.51	168	149345	50.00	ug/kg	0.05
33) 1,4-Difluorobenzene	8.92	114	275625	50.00	ug/kg	0.03
52) Chlorobenzene-d5	14.09	82	150050	50.00	ug/kg	0.03
74) 1,4-Dichlorobenzene-d4	18.08	152	131114	50.00	ug/kg	0.02

System Monitoring Compounds						
26) Dibromofluoromethane	7.39	113	102924	56.66	ug/kg	0.05
Spiked Amount	50.000	Range 59 - 147	Recovery	=	113.32%	
43) Toluene-d8	11.56	98	331966	53.55	ug/kg	0.03
Spiked Amount	50.000	Range 66 - 134	Recovery	=	107.10%	
62) 4-Bromofluorobenzene	16.13	95	151194	59.80	ug/kg	0.03
Spiked Amount	50.000	Range 64 - 125	Recovery	=	119.60%	

Target Compounds Qvalue

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152.

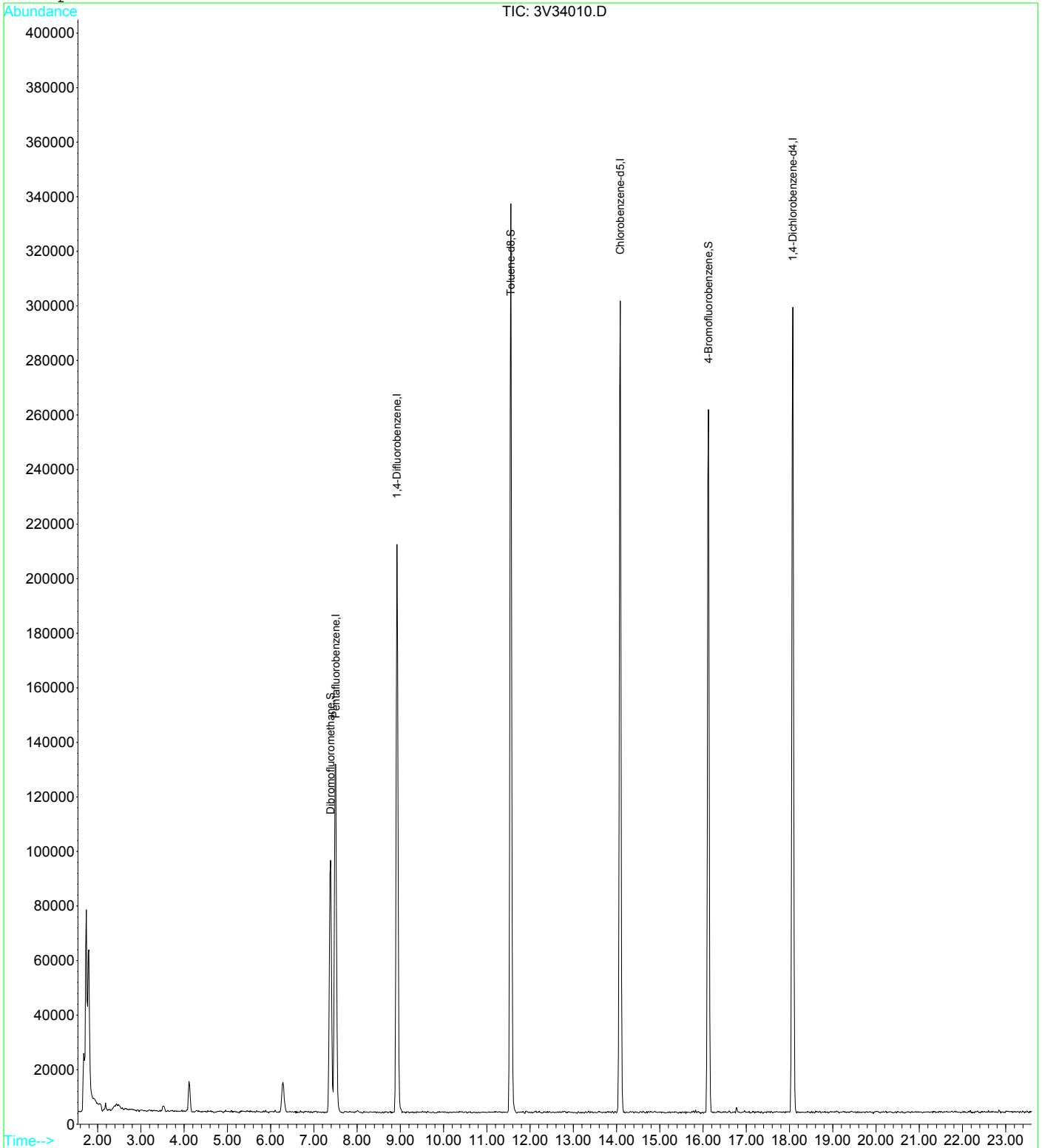
Quantitation Report

Data File : G:\HPCHEM\3\DATA\10102018\3V34010.D  
Acq On : 10 Oct 2018 22:59  
Sample : 8100452-14  
Misc : soil  
MS Integration Params: RTEINT.P  
Quant Time: Oct 11 11:41 2018

Vial: 61  
Operator: omd  
Inst : GCMS-3  
Multiplr: 1.00

Quant Results File: 0717WC3.RES

Method : G:\HPCHEM\3\METHODS\0717WC3.M (RTE Integrator)  
Title : VOC's by EPA Method 8260C  
Last Update : Wed Oct 10 16:46:14 2018  
Response via : Initial Calibration



## SURROGATE RECOVERIES

Analysis Class: VOLATILES

Matrix: Soil

Method: SW 846 8260C

VO+15

Lab Number	File ID	DBF	TOL-d8	BFB
8100452-01	3V34002.D	116	106	120
8100452-02	3V34003.D	115	105	118
8100452-05	3V34004.D	115	107	114
8100452-06	3V34005.D	117	106	120
8100452-07	3V34006.D	113	106	119
8100452-08	3V34020.D	111	107	120
8100452-11	3V34008.D	111	106	120
8100452-12	3V34009.D	113	106	119
8100452-14	3V34010.D	113	107	120
B8J1111-BLK1	3V33994.D	113	105	120
B8J1111-BS1	3V33992.D	109	107	117
B8J1111-MS1	3V34013.D	109	107	121
B8J1111-MSD1	3V34014.D	113	106	120
B8J1141-BLK1	3V34019.D	109	107	117
B8J1141-BS1	3V34018.D	107	108	119
B8J1141-MS1	3V34039.D	111	113	120
B8J1141-MSD1	3V34040.D	108	114	118

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15.3.

Surrogate Limits		Lo Limit	Hi Limit
DBF	Dibromofluoromethane	75.2	135
TOL-d8	Toluene-d8	68.6	140
BFB	4-Bromofluorobenzene	66.9	139

F-II

\* - Outside of QC Limits

**Volatile Organics - GC/MS - Quality Control**  
**Aqua Pro-Tech Laboratories**

Batch B8J1111			Method: SW 846 8260C			Prepared: 10/10/2018			
Lab Number	Source	Analyte	Result	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit
B8J1111-BS1		1,1,1-Trichloroethane	253	ug/kg	200		126 55.7-146		
B8J1111-BS1		1,1,2,2-Tetrachloroethane	168	ug/kg	200		84.2 60.6-129		
B8J1111-BS1		1,1,2-Trichloro-1,2,2 Trifluoroeth	165	ug/kg	200		82.7 40.9-152		
B8J1111-BS1		1,1,2-Trichloroethane	184	ug/kg	200		91.9 79.9-125		
B8J1111-BS1		1,1-Dichloroethane	221	ug/kg	200		110 56.4-138		
B8J1111-BS1		1,1-Dichloroethene	232	ug/kg	200		116 51.9-135		
B8J1111-BS1		1,2,3-Trichlorobenzene	219	ug/kg	200		109 60-138		
B8J1111-BS1		1,2,4-Trichlorobenzene	233	ug/kg	200		116 64.8-139		
B8J1111-BS1		1,2-Dibromo-3-chloropropane	213	ug/kg	200		106 45.6-154		
B8J1111-BS1		1,2-Dibromoethane	194	ug/kg	200		97.2 73.7-130		
B8J1111-BS1		1,2-Dichlorobenzene	211	ug/kg	200		105 55.4-130		
B8J1111-BS1		1,2-Dichloroethane	253	ug/kg	200		127 53.2-151		
B8J1111-BS1		1,2-Dichloropropane	193	ug/kg	200		96.3 75.1-122		
B8J1111-BS1		1,3-Dichlorobenzene	214	ug/kg	200		107 63.4-126		
B8J1111-BS1		1,4-Dichlorobenzene	210	ug/kg	200		105 51.4-129		
B8J1111-BS1		2-Butanone	152	ug/kg	200		76.0 39.6-169		
B8J1111-BS1		2-Hexanone	165	ug/kg	200		82.5 58.6-157		
B8J1111-BS1		4-Methyl-2-pentanone	170	ug/kg	200		84.8 53.6-156		
B8J1111-BS1		Acetone	202	ug/kg	200		101 38.5-171		
B8J1111-BS1		Benzene	182	ug/kg	200		91.0 58.1-135		
B8J1111-BS1		Bromochloromethane	198	ug/kg	200		99.1 51.6-146		
B8J1111-BS1		Bromodichloromethane	165	ug/kg	200		82.7 79.8-121		
B8J1111-BS1		Bromoform	211	ug/kg	200		105 63.4-145		
B8J1111-BS1		Bromomethane	212	ug/kg	200		106 18.7-164		
B8J1111-BS1		Carbon disulfide	141	ug/kg	200		70.4 15.3-152		
B8J1111-BS1		Carbon Tetrachloride	254	ug/kg	200		127 53.4-147		
B8J1111-BS1		Chlorobenzene	205	ug/kg	200		103 66.8-122		
B8J1111-BS1		Chlorodibromomethane	153	ug/kg	200		76.4* 80.2-129		
B8J1111-BS1		Chloroethane	198	ug/kg	200		99.2 37-152		
B8J1111-BS1		Chloroform	234	ug/kg	200		117 51.8-141		
B8J1111-BS1		Chloromethane	175	ug/kg	200		87.4 33.9-139		
B8J1111-BS1		cis-1,2-Dichloroethene	225	ug/kg	200		113 57.5-140		
B8J1111-BS1		cis-1,3-Dichloropropene	211	ug/kg	200		106 80.5-120		
B8J1111-BS1		Cyclohexane	164	ug/kg	200		81.8 52.2-125		
B8J1111-BS1		Dichlorodifluoromethane	240	ug/kg	200		120 15-144		
B8J1111-BS1		EthylBenzene	213	ug/kg	200		107 63.7-119		
B8J1111-BS1		Isopropylbenzene	218	ug/kg	200		109 65.4-120		
B8J1111-BS1		m+p-Xylenes	408	ug/kg	400		102 63.5-126		
B8J1111-BS1		Methyl Acetate	158	ug/kg	200		79.1 31.8-165		
B8J1111-BS1		Methyl tert-Butyl Ether	194	ug/kg	200		97.2 64.7-151		
B8J1111-BS1		Methylcyclohexane	173	ug/kg	200		86.4 70.4-112		
B8J1111-BS1		Methylene Chloride	213	ug/kg	200		106 54.4-150		
B8J1111-BS1		o-Xylene	216	ug/kg	200		108 63.7-125		
B8J1111-BS1		Styrene	208	ug/kg	200		104 70.6-121		

\* - Outside of QC Limits      J - Result is between the MDL and RL for an Analysis reported to an RL  
 F-III      NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

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15.4.

**Volatile Organics - GC/MS - Quality Control**  
**Aqua Pro-Tech Laboratories**

**Batch B8J1111 (cont.)**

**Method: SW 846 8260C**

**Prepared: 10/10/2018**

<b>Lab Number</b>	<b>Source</b>	<b>Analyte</b>	<b>Result</b>	<b>Units</b>	<b>Spike Level</b>	<b>Source Result</b>	<b>%REC</b>	<b>%REC Limits</b>	<b>RPD</b>	<b>RPD Limit</b>
B8J1111-BS1		tert-Butyl alcohol	1830	ug/kg	2000		91.3	39.7-175		
B8J1111-BS1		Tetrachloroethene	211	ug/kg	200		105	77.9-124		
B8J1111-BS1		Toluene	196	ug/kg	200		98.1	74.8-115		
B8J1111-BS1		trans-1,2-Dichloroethene	225	ug/kg	200		113	51.7-138		
B8J1111-BS1		trans-1,3-Dichloropropene	227	ug/kg	200		114	79.7-125		
B8J1111-BS1		Trichloroethene	212	ug/kg	200		106	77.1-121		
B8J1111-BS1		Trichlorofluoromethane	187	ug/kg	200		93.6	47.2-144		
B8J1111-BS1		Vinyl chloride	215	ug/kg	200		107	44.2-137		

**15**  
15.4.

\* - Outside of QC Limits      J - Result is between the MDL and RL for an Analysis reported to an RL  
 NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

F-III

**Volatile Organics - GC/MS - Quality Control**  
**Aqua Pro-Tech Laboratories**

Batch B8J1111 (cont.)			Method: SW 846 8260C			Prepared: 10/11/2018			
Lab Number	Source	Analyte	Result	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit
B8J1111-MS1	8100261-01	1,1,1-Trichloroethane	248	ug/kg	200	0.00	124 60.7-148		
B8J1111-MS1	8100261-01	1,1,2,2-Tetrachloroethane	189	ug/kg	200	0.00	94.3 65.7-121		
B8J1111-MS1	8100261-01	1,1,2-Trichloro-1,2,2 Trifluoroeth	154	ug/kg	200	0.00	76.8 44.9-144		
B8J1111-MS1	8100261-01	1,1,2-Trichloroethane	196	ug/kg	200	0.00	98.1 80-131		
B8J1111-MS1	8100261-01	1,1-Dichloroethane	211	ug/kg	200	0.00	106 64.8-137		
B8J1111-MS1	8100261-01	1,1-Dichloroethene	220	ug/kg	200	0.00	110 56.9-127		
B8J1111-MS1	8100261-01	1,2,3-Trichlorobenzene	211	ug/kg	200	0.00	105 66.9-121		
B8J1111-MS1	8100261-01	1,2,4-Trichlorobenzene	218	ug/kg	200	0.00	109 66.5-124		
B8J1111-MS1	8100261-01	1,2-Dibromo-3-chloropropane	249	ug/kg	200	0.00	124 48.7-149		
B8J1111-MS1	8100261-01	1,2-Dibromoethane	210	ug/kg	200	0.00	105 72.2-138		
B8J1111-MS1	8100261-01	1,2-Dichlorobenzene	210	ug/kg	200	0.00	105 51.2-127		
B8J1111-MS1	8100261-01	1,2-Dichloroethane	266	ug/kg	200	0.00	133 59.7-163		
B8J1111-MS1	8100261-01	1,2-Dichloropropane	190	ug/kg	200	0.00	94.9 80.2-120		
B8J1111-MS1	8100261-01	1,3-Dichlorobenzene	209	ug/kg	200	0.00	104 56.6-125		
B8J1111-MS1	8100261-01	1,4-Dichlorobenzene	198	ug/kg	200	0.00	99.2 47.7-123		
B8J1111-MS1	8100261-01	2-Butanone	175	ug/kg	200	0.00	87.3 39.7-175		
B8J1111-MS1	8100261-01	2-Hexanone	192	ug/kg	200	0.00	95.8 49.2-166		
B8J1111-MS1	8100261-01	4-Methyl-2-pentanone	197	ug/kg	200	0.00	98.7 47.8-159		
B8J1111-MS1	8100261-01	Acetone	229	ug/kg	200	0.00	115 35.1-168		
B8J1111-MS1	8100261-01	Benzene	172	ug/kg	200	0.00	86.1 67-127		
B8J1111-MS1	8100261-01	Bromochloromethane	199	ug/kg	200	0.00	99.4 61.9-147		
B8J1111-MS1	8100261-01	Bromodichloromethane	169	ug/kg	200	0.00	84.7 80.2-125		
B8J1111-MS1	8100261-01	Bromoform	232	ug/kg	200	0.00	116 73.3-129		
B8J1111-MS1	8100261-01	Bromomethane	202	ug/kg	200	0.00	101 24.6-155		
B8J1111-MS1	8100261-01	Carbon disulfide	130	ug/kg	200	0.00	65.2 40.6-129		
B8J1111-MS1	8100261-01	Carbon Tetrachloride	244	ug/kg	200	0.00	122 59.3-142		
B8J1111-MS1	8100261-01	Chlorobenzene	195	ug/kg	200	0.00	97.7 59.3-122		
B8J1111-MS1	8100261-01	Chlorodibromomethane	164	ug/kg	200	0.00	82.1 79.8-129		
B8J1111-MS1	8100261-01	Chloroethane	191	ug/kg	200	0.00	95.4 32.7-154		
B8J1111-MS1	8100261-01	Chloroform	228	ug/kg	200	0.00	114 59.9-142		
B8J1111-MS1	8100261-01	Chloromethane	163	ug/kg	200	0.00	81.4 28.2-127		
B8J1111-MS1	8100261-01	cis-1,2-Dichloroethene	215	ug/kg	200	0.00	108 65.8-138		
B8J1111-MS1	8100261-01	cis-1,3-Dichloropropene	206	ug/kg	200	0.00	103 79-121		
B8J1111-MS1	8100261-01	Cyclohexane	148	ug/kg	200	0.00	74.2 48.8-127		
B8J1111-MS1	8100261-01	Dichlorodifluoromethane	214	ug/kg	200	0.00	107 15-151		
B8J1111-MS1	8100261-01	EthylBenzene	202	ug/kg	200	0.00	101 58-118		
B8J1111-MS1	8100261-01	Isopropylbenzene	206	ug/kg	200	0.00	103 55.7-122		
B8J1111-MS1	8100261-01	m+p-Xylenes	384	ug/kg	400	0.00	96.0 57.3-121		
B8J1111-MS1	8100261-01	Methyl Acetate	179	ug/kg	200	0.00	89.4 31.6-176		
B8J1111-MS1	8100261-01	Methyl tert-Butyl Ether	201	ug/kg	200	0.00	101 64.1-150		
B8J1111-MS1	8100261-01	Methylcyclohexane	163	ug/kg	200	0.00	81.5 52.3-121		
B8J1111-MS1	8100261-01	Methylene Chloride	185	ug/kg	200	0.00	92.5 66.4-152		
B8J1111-MS1	8100261-01	o-Xylene	211	ug/kg	200	0.00	105 57.7-122		
B8J1111-MS1	8100261-01	Styrene	200	ug/kg	200	0.00	100 61.6-125		

\* - Outside of QC Limits      J - Result is between the MDL and RL for an Analysis reported to an RL  
F-III      NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

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15.4.

**Volatile Organics - GC/MS - Quality Control**  
**Aqua Pro-Tech Laboratories**

**Batch B8J1111 (cont.)**

**Method: SW 846 8260C**

**Prepared: 10/11/2018**

<b>Lab Number</b>	<b>Source</b>	<b>Analyte</b>	<b>Result</b>	<b>Units</b>	<b>Spike Level</b>	<b>Source Result</b>	<b>%REC</b>	<b>%REC Limits</b>	<b>RPD</b>	<b>RPD Limit</b>
B8J1111-MS1	8100261-01	tert-Butyl alcohol	2090	ug/kg	2000	0.00	104	34-171		
B8J1111-MS1	8100261-01	Tetrachloroethene	201	ug/kg	200	0.00	101	73.7-119		
B8J1111-MS1	8100261-01	Toluene	188	ug/kg	200	0.00	94.2	65.2-125		
B8J1111-MS1	8100261-01	trans-1,2-Dichloroethene	213	ug/kg	200	0.00	107	61.6-129		
B8J1111-MS1	8100261-01	trans-1,3-Dichloropropene	234	ug/kg	200	0.00	117	77-128		
B8J1111-MS1	8100261-01	Trichloroethene	201	ug/kg	200	0.00	100	75.9-117		
B8J1111-MS1	8100261-01	Trichlorofluoromethane	179	ug/kg	200	0.00	89.4	48.1-130		
B8J1111-MS1	8100261-01	Vinyl chloride	190	ug/kg	200	0.00	95.2	34.9-130		

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**Volatile Organics - GC/MS - Quality Control**  
**Aqua Pro-Tech Laboratories**

Batch B8J1111 (cont.)			Method: SW 846 8260C			Prepared: 10/11/2018				
Lab Number	Source	Analyte	Result	Units	Spike Level	Source Result	%REC Limits	%REC	RPD	RPD Limit
B8J1111-MSD1	8100261-01	1,1,1-Trichloroethane	243	ug/kg	200	0.00	122	60.7-148	2.07	30
B8J1111-MSD1	8100261-01	1,1,2,2-Tetrachloroethane	205	ug/kg	200	0.00	102	65.7-121	8.20	30
B8J1111-MSD1	8100261-01	1,1,2-Trichloro-1,2,2 Trifluoroeth	152	ug/kg	200	0.00	76.2	44.9-144	0.745	30
B8J1111-MSD1	8100261-01	1,1,2-Trichloroethane	207	ug/kg	200	0.00	103	80-131	5.29	30
B8J1111-MSD1	8100261-01	1,1-Dichloroethane	215	ug/kg	200	0.00	108	64.8-137	1.96	30
B8J1111-MSD1	8100261-01	1,1-Dichloroethene	218	ug/kg	200	0.00	109	56.9-127	1.26	30
B8J1111-MSD1	8100261-01	1,2,3-Trichlorobenzene	218	ug/kg	200	0.00	109	66.9-121	3.31	30
B8J1111-MSD1	8100261-01	1,2,4-Trichlorobenzene	214	ug/kg	200	0.00	107	66.5-124	1.89	30
B8J1111-MSD1	8100261-01	1,2-Dibromo-3-chloropropane	274	ug/kg	200	0.00	137	48.7-149	9.50	30
B8J1111-MSD1	8100261-01	1,2-Dibromoethane	225	ug/kg	200	0.00	113	72.2-138	7.03	30
B8J1111-MSD1	8100261-01	1,2-Dichlorobenzene	210	ug/kg	200	0.00	105	51.2-127	0.0534	30
B8J1111-MSD1	8100261-01	1,2-Dichloroethane	277	ug/kg	200	0.00	139	59.7-163	4.34	30
B8J1111-MSD1	8100261-01	1,2-Dichloropropane	191	ug/kg	200	0.00	95.5	80.2-120	0.579	30
B8J1111-MSD1	8100261-01	1,3-Dichlorobenzene	201	ug/kg	200	0.00	100	56.6-125	3.99	30
B8J1111-MSD1	8100261-01	1,4-Dichlorobenzene	199	ug/kg	200	0.00	99.4	47.7-123	0.245	30
B8J1111-MSD1	8100261-01	2-Butanone	208	ug/kg	200	0.00	104	39.7-175	17.7	30
B8J1111-MSD1	8100261-01	2-Hexanone	225	ug/kg	200	0.00	113	49.2-166	16.1	30
B8J1111-MSD1	8100261-01	4-Methyl-2-pentanone	226	ug/kg	200	0.00	113	47.8-159	13.7	30
B8J1111-MSD1	8100261-01	Acetone	260	ug/kg	200	0.00	130	35.1-168	12.5	30
B8J1111-MSD1	8100261-01	Benzene	176	ug/kg	200	0.00	88.0	67-127	2.25	30
B8J1111-MSD1	8100261-01	Bromochloromethane	209	ug/kg	200	0.00	104	61.9-147	4.83	30
B8J1111-MSD1	8100261-01	Bromodichloromethane	240	ug/kg	200	0.00	120	80.2-125	34.4*	30
B8J1111-MSD1	8100261-01	Bromoform	246	ug/kg	200	0.00	123	73.3-129	6.06	30
B8J1111-MSD1	8100261-01	Bromomethane	190	ug/kg	200	0.00	94.9	24.6-155	6.31	30
B8J1111-MSD1	8100261-01	Carbon disulfide	130	ug/kg	200	0.00	65.2	40.6-129	0.0866	30
B8J1111-MSD1	8100261-01	Carbon Tetrachloride	238	ug/kg	200	0.00	119	59.3-142	2.58	30
B8J1111-MSD1	8100261-01	Chlorobenzene	193	ug/kg	200	0.00	96.4	59.3-122	1.31	30
B8J1111-MSD1	8100261-01	Chlorodibromomethane	242	ug/kg	200	0.00	121	79.8-129	38.3*	30
B8J1111-MSD1	8100261-01	Chloroethane	187	ug/kg	200	0.00	93.4	32.7-154	2.13	30
B8J1111-MSD1	8100261-01	Chloroform	233	ug/kg	200	0.00	117	59.9-142	2.11	30
B8J1111-MSD1	8100261-01	Chloromethane	163	ug/kg	200	0.00	81.3	28.2-127	0.0971	30
B8J1111-MSD1	8100261-01	cis-1,2-Dichloroethene	220	ug/kg	200	0.00	110	65.8-138	2.02	30
B8J1111-MSD1	8100261-01	cis-1,3-Dichloropropene	209	ug/kg	200	0.00	105	79-121	1.49	30
B8J1111-MSD1	8100261-01	Cyclohexane	150	ug/kg	200	0.00	74.9	48.8-127	0.967	30
B8J1111-MSD1	8100261-01	Dichlorodifluoromethane	198	ug/kg	200	0.00	99.0	15-151	7.95	30
B8J1111-MSD1	8100261-01	EthylBenzene	198	ug/kg	200	0.00	99.0	58-118	2.23	30
B8J1111-MSD1	8100261-01	Isopropylbenzene	202	ug/kg	200	0.00	101	55.7-122	2.13	30
B8J1111-MSD1	8100261-01	m+p-Xylenes	379	ug/kg	400	0.00	94.7	57.3-121	1.43	30
B8J1111-MSD1	8100261-01	Methyl Acetate	213	ug/kg	200	0.00	107	31.6-176	17.6	30
B8J1111-MSD1	8100261-01	Methyl tert-Butyl Ether	222	ug/kg	200	0.00	111	64.1-150	9.67	30
B8J1111-MSD1	8100261-01	Methylcyclohexane	156	ug/kg	200	0.00	77.9	52.3-121	4.58	30
B8J1111-MSD1	8100261-01	Methylene Chloride	194	ug/kg	200	0.00	97.1	66.4-152	4.84	30
B8J1111-MSD1	8100261-01	o-Xylene	208	ug/kg	200	0.00	104	57.7-122	1.27	30
B8J1111-MSD1	8100261-01	Styrene	201	ug/kg	200	0.00	100	61.6-125	0.339	30

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F-III

NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

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15.4.



**Volatile Organics - GC/MS - Quality Control**  
**Aqua Pro-Tech Laboratories**

**Batch B8J1111 (cont.)**

**Method: SW 846 8260C**

**Prepared: 10/11/2018**

<b>Lab Number</b>	<b>Source</b>	<b>Analyte</b>	<b>Result</b>	<b>Units</b>	<b>Spike Level</b>	<b>Source Result</b>	<b>%REC</b>	<b>%REC Limits</b>	<b>RPD</b>	<b>RPD Limit</b>
B8J1111-MSD1	8100261-01	tert-Butyl alcohol	2630	ug/kg	2000	0.00	131	34-171	22.9	30
B8J1111-MSD1	8100261-01	Tetrachloroethene	192	ug/kg	200	0.00	96.1	73.7-119	4.65	30
B8J1111-MSD1	8100261-01	Toluene	185	ug/kg	200	0.00	92.5	65.2-125	1.86	30
B8J1111-MSD1	8100261-01	trans-1,2-Dichloroethene	213	ug/kg	200	0.00	106	61.6-129	0.212	30
B8J1111-MSD1	8100261-01	trans-1,3-Dichloropropene	237	ug/kg	200	0.00	119	77-128	1.54	30
B8J1111-MSD1	8100261-01	Trichloroethene	196	ug/kg	200	0.00	98.1	75.9-117	2.42	30
B8J1111-MSD1	8100261-01	Trichlorofluoromethane	250	ug/kg	200	0.00	125	48.1-130	33.4*	30
B8J1111-MSD1	8100261-01	Vinyl chloride	191	ug/kg	200	0.00	95.6	34.9-130	0.413	30

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 NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

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**Volatile Organics - GC/MS - Quality Control**  
**Aqua Pro-Tech Laboratories**

Batch B8J1141			Method: SW 846 8260C			Prepared: 10/11/2018			
Lab Number	Source	Analyte	Result	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit
B8J1141-BS1		1,1,1-Trichloroethane	240	ug/kg	200		120 55.7-146		
B8J1141-BS1		1,1,2,2-Tetrachloroethane	194	ug/kg	200		97.0 60.6-129		
B8J1141-BS1		1,1,2-Trichloro-1,2,2 Trifluoroeth	155	ug/kg	200		77.3 40.9-152		
B8J1141-BS1		1,1,2-Trichloroethane	201	ug/kg	200		100 79.9-125		
B8J1141-BS1		1,1-Dichloroethane	211	ug/kg	200		106 56.4-138		
B8J1141-BS1		1,1-Dichloroethene	221	ug/kg	200		111 51.9-135		
B8J1141-BS1		1,2,3-Trichlorobenzene	231	ug/kg	200		116 60-138		
B8J1141-BS1		1,2,4-Trichlorobenzene	238	ug/kg	200		119 64.8-139		
B8J1141-BS1		1,2-Dibromo-3-chloropropane	255	ug/kg	200		127 45.6-154		
B8J1141-BS1		1,2-Dibromoethane	218	ug/kg	200		109 73.7-130		
B8J1141-BS1		1,2-Dichlorobenzene	216	ug/kg	200		108 55.4-130		
B8J1141-BS1		1,2-Dichloroethane	257	ug/kg	200		128 53.2-151		
B8J1141-BS1		1,2-Dichloropropane	193	ug/kg	200		96.7 75.1-122		
B8J1141-BS1		1,3-Dichlorobenzene	211	ug/kg	200		106 63.4-126		
B8J1141-BS1		1,4-Dichlorobenzene	210	ug/kg	200		105 51.4-129		
B8J1141-BS1		2-Butanone	194	ug/kg	200		96.8 39.6-169		
B8J1141-BS1		2-Hexanone	212	ug/kg	200		106 58.6-157		
B8J1141-BS1		4-Methyl-2-pentanone	213	ug/kg	200		107 53.6-156		
B8J1141-BS1		Acetone	238	ug/kg	200		119 38.5-171		
B8J1141-BS1		Benzene	178	ug/kg	200		88.8 58.1-135		
B8J1141-BS1		Bromochloromethane	203	ug/kg	200		102 51.6-146		
B8J1141-BS1		Bromodichloromethane	239	ug/kg	200		120 79.8-121		
B8J1141-BS1		Bromoform	235	ug/kg	200		118 63.4-145		
B8J1141-BS1		Bromomethane	193	ug/kg	200		96.3 18.7-164		
B8J1141-BS1		Carbon disulfide	134	ug/kg	200		66.9 15.3-152		
B8J1141-BS1		Carbon Tetrachloride	237	ug/kg	200		119 53.4-147		
B8J1141-BS1		Chlorobenzene	198	ug/kg	200		99.1 66.8-122		
B8J1141-BS1		Chlorodibromomethane	236	ug/kg	200		118 80.2-129		
B8J1141-BS1		Chloroethane	188	ug/kg	200		94.0 37-152		
B8J1141-BS1		Chloroform	224	ug/kg	200		112 51.8-141		
B8J1141-BS1		Chloromethane	166	ug/kg	200		82.8 33.9-139		
B8J1141-BS1		cis-1,2-Dichloroethene	218	ug/kg	200		109 57.5-140		
B8J1141-BS1		cis-1,3-Dichloropropene	216	ug/kg	200		108 80.5-120		
B8J1141-BS1		Cyclohexane	160	ug/kg	200		79.9 52.2-125		
B8J1141-BS1		Dichlorodifluoromethane	205	ug/kg	200		102 15-144		
B8J1141-BS1		EthylBenzene	205	ug/kg	200		103 63.7-119		
B8J1141-BS1		Isopropylbenzene	209	ug/kg	200		104 65.4-120		
B8J1141-BS1		m+p-Xylenes	392	ug/kg	400		98.0 63.5-126		
B8J1141-BS1		Methyl Acetate	196	ug/kg	200		98.0 31.8-165		
B8J1141-BS1		Methyl tert-Butyl Ether	207	ug/kg	200		103 64.7-151		
B8J1141-BS1		Methylcyclohexane	169	ug/kg	200		84.4 70.4-112		
B8J1141-BS1		Methylene Chloride	204	ug/kg	200		102 54.4-150		
B8J1141-BS1		o-Xylene	211	ug/kg	200		105 63.7-125		
B8J1141-BS1		Styrene	204	ug/kg	200		102 70.6-121		

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 F-III      NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

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15.4.

**Volatile Organics - GC/MS - Quality Control**  
**Aqua Pro-Tech Laboratories**

**Batch B8J1141 (cont.)**

**Method: SW 846 8260C**

**Prepared: 10/11/2018**

<b>Lab Number</b>	<b>Source</b>	<b>Analyte</b>	<b>Result</b>	<b>Units</b>	<b>Spike Level</b>	<b>Source Result</b>	<b>%REC</b>	<b>%REC Limits</b>	<b>RPD</b>	<b>RPD Limit</b>
B8J1141-BS1		tert-Butyl alcohol	2350	ug/kg	2000		117	39.7-175		
B8J1141-BS1		Tetrachloroethene	207	ug/kg	200		104	77.9-124		
B8J1141-BS1		Toluene	194	ug/kg	200		97.0	74.8-115		
B8J1141-BS1		trans-1,2-Dichloroethene	213	ug/kg	200		106	51.7-138		
B8J1141-BS1		trans-1,3-Dichloropropene	239	ug/kg	200		119	79.7-125		
B8J1141-BS1		Trichloroethene	205	ug/kg	200		103	77.1-121		
B8J1141-BS1		Trichlorofluoromethane	248	ug/kg	200		124	47.2-144		
B8J1141-BS1		Vinyl chloride	199	ug/kg	200		99.5	44.2-137		

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15.4.

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 NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

F-III

**Volatile Organics - GC/MS - Quality Control**  
**Aqua Pro-Tech Laboratories**

Batch B8J1141 (cont.)			Method: SW 846 8260C			Prepared: 10/12/2018				
Lab Number	Source	Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
B8J1141-MS1	8100452-08	1,1,1-Trichloroethane	240	ug/kg	200	0.00	120	60.7-148		
B8J1141-MS1	8100452-08	1,1,2,2-Tetrachloroethane	215	ug/kg	200	0.00	107	65.7-121		
B8J1141-MS1	8100452-08	1,1,2-Trichloro-1,2,2 Trifluoroeth	154	ug/kg	200	0.00	77.1	44.9-144		
B8J1141-MS1	8100452-08	1,1,2-Trichloroethane	230	ug/kg	200	0.00	115	80-131		
B8J1141-MS1	8100452-08	1,1-Dichloroethane	221	ug/kg	200	0.00	110	64.8-137		
B8J1141-MS1	8100452-08	1,1-Dichloroethene	220	ug/kg	200	0.00	110	56.9-127		
B8J1141-MS1	8100452-08	1,2,3-Trichlorobenzene	215	ug/kg	200	0.00	108	66.9-121		
B8J1141-MS1	8100452-08	1,2,4-Trichlorobenzene	215	ug/kg	200	0.00	107	66.5-124		
B8J1141-MS1	8100452-08	1,2-Dibromo-3-chloropropane	277	ug/kg	200	0.00	139	48.7-149		
B8J1141-MS1	8100452-08	1,2-Dibromoethane	246	ug/kg	200	0.00	123	72.2-138		
B8J1141-MS1	8100452-08	1,2-Dichlorobenzene	210	ug/kg	200	0.00	105	51.2-127		
B8J1141-MS1	8100452-08	1,2-Dichloroethane	275	ug/kg	200	0.00	138	59.7-163		
B8J1141-MS1	8100452-08	1,2-Dichloropropane	211	ug/kg	200	0.00	105	80.2-120		
B8J1141-MS1	8100452-08	1,3-Dichlorobenzene	204	ug/kg	200	0.00	102	56.6-125		
B8J1141-MS1	8100452-08	1,4-Dichlorobenzene	197	ug/kg	200	0.00	98.4	47.7-123		
B8J1141-MS1	8100452-08	2-Butanone	231	ug/kg	200	0.00	116	39.7-175		
B8J1141-MS1	8100452-08	2-Hexanone	259	ug/kg	200	0.00	130	49.2-166		
B8J1141-MS1	8100452-08	4-Methyl-2-pentanone	258	ug/kg	200	0.00	129	47.8-159		
B8J1141-MS1	8100452-08	Acetone	276	ug/kg	200	0.00	138	35.1-168		
B8J1141-MS1	8100452-08	Benzene	186	ug/kg	200	0.00	93.0	67-127		
B8J1141-MS1	8100452-08	Bromochloromethane	223	ug/kg	200	0.00	111	61.9-147		
B8J1141-MS1	8100452-08	Bromodichloromethane	254	ug/kg	200	0.00	127*	80.2-125		
B8J1141-MS1	8100452-08	Bromoform	249	ug/kg	200	0.00	124	73.3-129		
B8J1141-MS1	8100452-08	Bromomethane	169	ug/kg	200	0.00	84.6	24.6-155		
B8J1141-MS1	8100452-08	Carbon disulfide	135	ug/kg	200	0.00	67.6	40.6-129		
B8J1141-MS1	8100452-08	Carbon Tetrachloride	237	ug/kg	200	0.00	118	59.3-142		
B8J1141-MS1	8100452-08	Chlorobenzene	200	ug/kg	200	0.00	99.9	59.3-122		
B8J1141-MS1	8100452-08	Chlorodibromomethane	260	ug/kg	200	0.00	130*	79.8-129		
B8J1141-MS1	8100452-08	Chloroethane	185	ug/kg	200	0.00	92.4	32.7-154		
B8J1141-MS1	8100452-08	Chloroform	233	ug/kg	200	0.00	117	59.9-142		
B8J1141-MS1	8100452-08	Chloromethane	168	ug/kg	200	0.00	84.0	28.2-127		
B8J1141-MS1	8100452-08	cis-1,2-Dichloroethene	222	ug/kg	200	0.00	111	65.8-138		
B8J1141-MS1	8100452-08	cis-1,3-Dichloropropene	230	ug/kg	200	0.00	115	79-121		
B8J1141-MS1	8100452-08	Cyclohexane	161	ug/kg	200	0.00	80.7	48.8-127		
B8J1141-MS1	8100452-08	Dichlorodifluoromethane	188	ug/kg	200	0.00	93.9	15-151		
B8J1141-MS1	8100452-08	EthylBenzene	201	ug/kg	200	0.00	101	58-118		
B8J1141-MS1	8100452-08	Isopropylbenzene	203	ug/kg	200	0.00	101	55.7-122		
B8J1141-MS1	8100452-08	m+p-Xylenes	387	ug/kg	400	0.00	96.8	57.3-121		
B8J1141-MS1	8100452-08	Methyl Acetate	235	ug/kg	200	0.00	117	31.6-176		
B8J1141-MS1	8100452-08	Methyl tert-Butyl Ether	227	ug/kg	200	0.00	113	64.1-150		
B8J1141-MS1	8100452-08	Methylcyclohexane	173	ug/kg	200	0.00	86.7	52.3-121		
B8J1141-MS1	8100452-08	Methylene Chloride	204	ug/kg	200	0.00	102	66.4-152		
B8J1141-MS1	8100452-08	o-Xylene	207	ug/kg	200	0.00	104	57.7-122		
B8J1141-MS1	8100452-08	Styrene	204	ug/kg	200	0.00	102	61.6-125		

\* - Outside of QC Limits

J - Result is between the MDL and RL for an Analysis reported to an RL

F-III

NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

15  
15.4.

**Volatile Organics - GC/MS - Quality Control**  
**Aqua Pro-Tech Laboratories**

**Batch B8J1141 (cont.)**

**Method: SW 846 8260C**

**Prepared: 10/12/2018**

<b>Lab Number</b>	<b>Source</b>	<b>Analyte</b>	<b>Result</b>	<b>Units</b>	<b>Spike Level</b>	<b>Source Result</b>	<b>%REC</b>	<b>%REC Limits</b>	<b>RPD</b>	<b>RPD Limit</b>
B8J1141-MS1	8100452-08	tert-Butyl alcohol	2900	ug/kg	2000	0.00	145	34-171		
B8J1141-MS1	8100452-08	Tetrachloroethene	205	ug/kg	200	0.00	103	73.7-119		
B8J1141-MS1	8100452-08	Toluene	204	ug/kg	200	0.00	102	65.2-125		
B8J1141-MS1	8100452-08	trans-1,2-Dichloroethene	217	ug/kg	200	0.00	109	61.6-129		
B8J1141-MS1	8100452-08	trans-1,3-Dichloropropene	258	ug/kg	200	0.00	129*	77-128		
B8J1141-MS1	8100452-08	Trichloroethene	214	ug/kg	200	0.00	107	75.9-117		
B8J1141-MS1	8100452-08	Trichlorofluoromethane	241	ug/kg	200	0.00	120	48.1-130		
B8J1141-MS1	8100452-08	Vinyl chloride	192	ug/kg	200	0.00	96.2	34.9-130		

\* - Outside of QC Limits

J - Result is between the MDL and RL for an Analysis reported to an RL

NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

F-III

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15.4.

**Volatile Organics - GC/MS - Quality Control**  
**Aqua Pro-Tech Laboratories**

Batch B8J1141 (cont.)			Method: SW 846 8260C			Prepared: 10/12/2018				
Lab Number	Source	Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
B8J1141-MSD1	8100452-08	1,1,1-Trichloroethane	234	ug/kg	200	0.00	117	60.7-148	2.60	30
B8J1141-MSD1	8100452-08	1,1,2,2-Tetrachloroethane	179	ug/kg	200	0.00	89.7	65.7-121	18.0	30
B8J1141-MSD1	8100452-08	1,1,2-Trichloro-1,2,2 Trifluoroeth	151	ug/kg	200	0.00	75.4	44.9-144	2.27	30
B8J1141-MSD1	8100452-08	1,1,2-Trichloroethane	201	ug/kg	200	0.00	101	80-131	13.3	30
B8J1141-MSD1	8100452-08	1,1-Dichloroethane	213	ug/kg	200	0.00	106	64.8-137	3.65	30
B8J1141-MSD1	8100452-08	1,1-Dichloroethene	215	ug/kg	200	0.00	107	56.9-127	2.48	30
B8J1141-MSD1	8100452-08	1,2,3-Trichlorobenzene	200	ug/kg	200	0.00	100	66.9-121	7.04	30
B8J1141-MSD1	8100452-08	1,2,4-Trichlorobenzene	206	ug/kg	200	0.00	103	66.5-124	4.22	30
B8J1141-MSD1	8100452-08	1,2-Dibromo-3-chloropropane	224	ug/kg	200	0.00	112	48.7-149	21.4	30
B8J1141-MSD1	8100452-08	1,2-Dibromoethane	214	ug/kg	200	0.00	107	72.2-138	13.9	30
B8J1141-MSD1	8100452-08	1,2-Dichlorobenzene	201	ug/kg	200	0.00	101	51.2-127	4.30	30
B8J1141-MSD1	8100452-08	1,2-Dichloroethane	248	ug/kg	200	0.00	124	59.7-163	10.3	30
B8J1141-MSD1	8100452-08	1,2-Dichloropropane	200	ug/kg	200	0.00	100	80.2-120	5.26	30
B8J1141-MSD1	8100452-08	1,3-Dichlorobenzene	192	ug/kg	200	0.00	96.1	56.6-125	5.75	30
B8J1141-MSD1	8100452-08	1,4-Dichlorobenzene	193	ug/kg	200	0.00	96.3	47.7-123	2.13	30
B8J1141-MSD1	8100452-08	2-Butanone	180	ug/kg	200	0.00	89.8	39.7-175	25.2	30
B8J1141-MSD1	8100452-08	2-Hexanone	199	ug/kg	200	0.00	99.6	49.2-166	26.1	30
B8J1141-MSD1	8100452-08	4-Methyl-2-pentanone	207	ug/kg	200	0.00	104	47.8-159	21.9	30
B8J1141-MSD1	8100452-08	Acetone	212	ug/kg	200	0.00	106	35.1-168	26.1	30
B8J1141-MSD1	8100452-08	Benzene	180	ug/kg	200	0.00	90.2	67-127	3.06	30
B8J1141-MSD1	8100452-08	Bromochloromethane	205	ug/kg	200	0.00	102	61.9-147	8.29	30
B8J1141-MSD1	8100452-08	Bromodichloromethane	238	ug/kg	200	0.00	119	80.2-125	6.29	30
B8J1141-MSD1	8100452-08	Bromoform	210	ug/kg	200	0.00	105	73.3-129	16.7	30
B8J1141-MSD1	8100452-08	Bromomethane	193	ug/kg	200	0.00	96.3	24.6-155	13.0	30
B8J1141-MSD1	8100452-08	Carbon disulfide	132	ug/kg	200	0.00	66.2	40.6-129	2.20	30
B8J1141-MSD1	8100452-08	Carbon Tetrachloride	229	ug/kg	200	0.00	115	59.3-142	3.20	30
B8J1141-MSD1	8100452-08	Chlorobenzene	192	ug/kg	200	0.00	96.1	59.3-122	3.91	30
B8J1141-MSD1	8100452-08	Chlorodibromomethane	233	ug/kg	200	0.00	117	79.8-129	10.7	30
B8J1141-MSD1	8100452-08	Chloroethane	187	ug/kg	200	0.00	93.3	32.7-154	0.897	30
B8J1141-MSD1	8100452-08	Chloroform	221	ug/kg	200	0.00	111	59.9-142	5.42	30
B8J1141-MSD1	8100452-08	Chloromethane	170	ug/kg	200	0.00	84.8	28.2-127	0.960	30
B8J1141-MSD1	8100452-08	cis-1,2-Dichloroethene	215	ug/kg	200	0.00	107	65.8-138	3.30	30
B8J1141-MSD1	8100452-08	cis-1,3-Dichloropropene	214	ug/kg	200	0.00	107	79-121	7.26	30
B8J1141-MSD1	8100452-08	Cyclohexane	157	ug/kg	200	0.00	78.7	48.8-127	2.51	30
B8J1141-MSD1	8100452-08	Dichlorodifluoromethane	196	ug/kg	200	0.00	98.1	15-151	4.36	30
B8J1141-MSD1	8100452-08	EthylBenzene	196	ug/kg	200	0.00	97.8	58-118	2.87	30
B8J1141-MSD1	8100452-08	Isopropylbenzene	197	ug/kg	200	0.00	98.7	55.7-122	2.75	30
B8J1141-MSD1	8100452-08	m+p-Xylenes	375	ug/kg	400	0.00	93.9	57.3-121	3.04	30
B8J1141-MSD1	8100452-08	Methyl Acetate	184	ug/kg	200	0.00	91.9	31.6-176	24.3	30
B8J1141-MSD1	8100452-08	Methyl tert-Butyl Ether	201	ug/kg	200	0.00	101	64.1-150	12.0	30
B8J1141-MSD1	8100452-08	Methylcyclohexane	173	ug/kg	200	0.00	86.3	52.3-121	0.469	30
B8J1141-MSD1	8100452-08	Methylene Chloride	193	ug/kg	200	0.00	96.6	66.4-152	5.46	30
B8J1141-MSD1	8100452-08	o-Xylene	202	ug/kg	200	0.00	101	57.7-122	2.61	30
B8J1141-MSD1	8100452-08	Styrene	194	ug/kg	200	0.00	96.8	61.6-125	5.28	30

\* - Outside of QC Limits      J - Result is between the MDL and RL for an Analysis reported to an RL  
 F-III      NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

15  
15.4.

**Volatile Organics - GC/MS - Quality Control**  
**Aqua Pro-Tech Laboratories**

**Batch B8J1141 (cont.)**

**Method: SW 846 8260C**

**Prepared: 10/12/2018**

<b>Lab Number</b>	<b>Source</b>	<b>Analyte</b>	<b>Result</b>	<b>Units</b>	<b>Spike Level</b>	<b>Source Result</b>	<b>%REC</b>	<b>%REC Limits</b>	<b>RPD</b>	<b>RPD Limit</b>
B8J1141-MSD1	8100452-08	tert-Butyl alcohol	2130	ug/kg	2000	0.00	106	34-171	30.5*	30
B8J1141-MSD1	8100452-08	Tetrachloroethene	201	ug/kg	200	0.00	101	73.7-119	2.14	30
B8J1141-MSD1	8100452-08	Toluene	199	ug/kg	200	0.00	99.6	65.2-125	2.13	30
B8J1141-MSD1	8100452-08	trans-1,2-Dichloroethene	211	ug/kg	200	0.00	105	61.6-129	3.17	30
B8J1141-MSD1	8100452-08	trans-1,3-Dichloropropene	234	ug/kg	200	0.00	117	77-128	9.66	30
B8J1141-MSD1	8100452-08	Trichloroethene	208	ug/kg	200	0.00	104	75.9-117	2.59	30
B8J1141-MSD1	8100452-08	Trichlorofluoromethane	243	ug/kg	200	0.00	121	48.1-130	0.692	30
B8J1141-MSD1	8100452-08	Vinyl chloride	195	ug/kg	200	0.00	97.5	34.9-130	1.30	30

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15.4.

\* - Outside of QC Limits      J - Result is between the MDL and RL for an Analysis reported to an RL  
 NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

F-III

## VOLATILE METHOD BLANK SUMMARY

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Batch ID: B8J1111

Instrument: GCMS-3

Sequence ID: S8J1704

<u>Lab Number</u>	<u>Sample ID</u>	<u>Analyzed</u>	<u>File ID</u>
B8J1111-BLK1	BLK1	10/10/2018 15:02	3V33994.D
B8J1111-BS1	BS1	10/10/2018 14:03	3V33992.D
B8J1111-MS1	MS1	10/11/2018 0:28	3V34013.D
B8J1111-MSD1	MSD1	10/11/2018 0:57	3V34014.D
8100452-01	NTP-1A	10/10/2018 18:59	3V34002.D
8100452-02	NTP-2A	10/10/2018 19:28	3V34003.D
8100452-05	NTP-4B	10/10/2018 19:58	3V34004.D
8100452-06	NTP-6	10/10/2018 20:28	3V34005.D
8100452-07	NTP-7	10/10/2018 21:02	3V34006.D
8100452-11	STP-4A	10/10/2018 22:01	3V34008.D
8100452-12	STP-4B	10/10/2018 22:30	3V34009.D
8100452-14	STP-7	10/10/2018 22:59	3V34010.D

Batch ID: B8J1141

Instrument: GCMS-3

Sequence ID: S8J1706

<u>Lab Number</u>	<u>Sample ID</u>	<u>Analyzed</u>	<u>File ID</u>
B8J1141-BLK1	BLK1	10/11/2018 13:05	3V34019.D
B8J1141-BS1	BS1	10/11/2018 12:35	3V34018.D
B8J1141-MS1	MS1	10/12/2018 1:37	3V34039.D
B8J1141-MSD1	MSD1	10/12/2018 2:06	3V34040.D
8100452-08	STP-1B	10/11/2018 13:34	3V34020.D

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15.5.



# INSTRUMENT PERFORMANCE CHECK

Client: Peak Environmental  
 Instrument ID: GCMS-3  
 Sequence: S8G2901

Work Order: 8100452  
 Project: Ridgewood

Lab Sample ID: **S8G2901-TUN1**      Injection Date: 07/17/2018      Injection Time: 11:46  
 Lab File ID: 3V32663.D

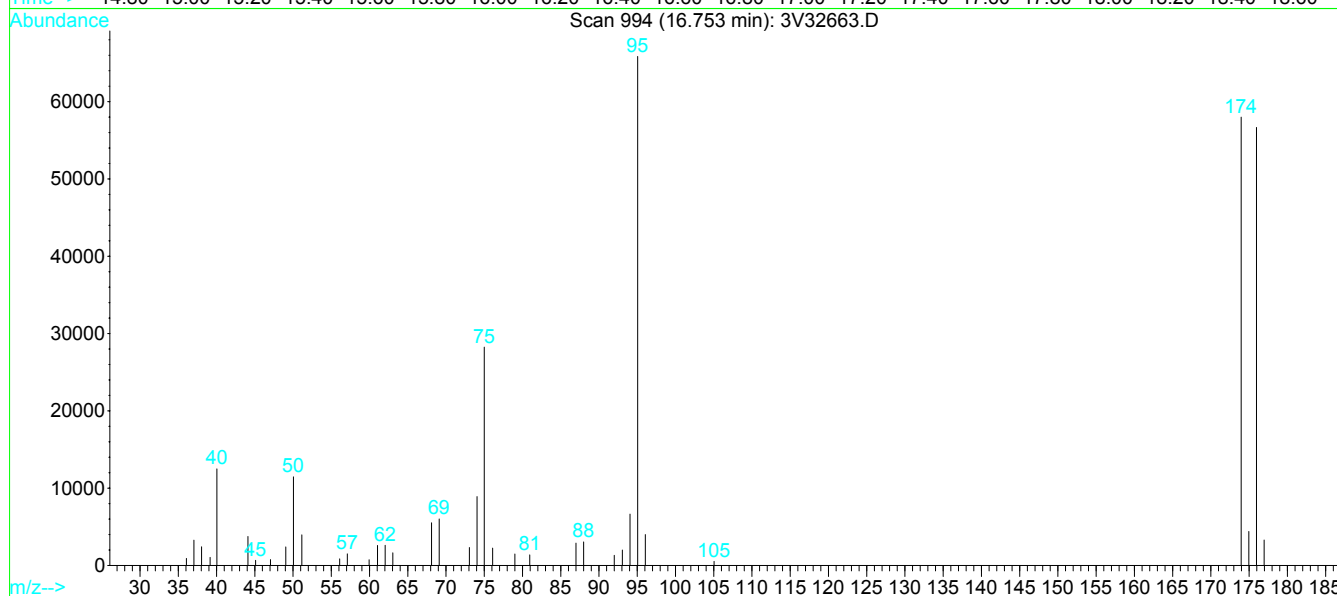
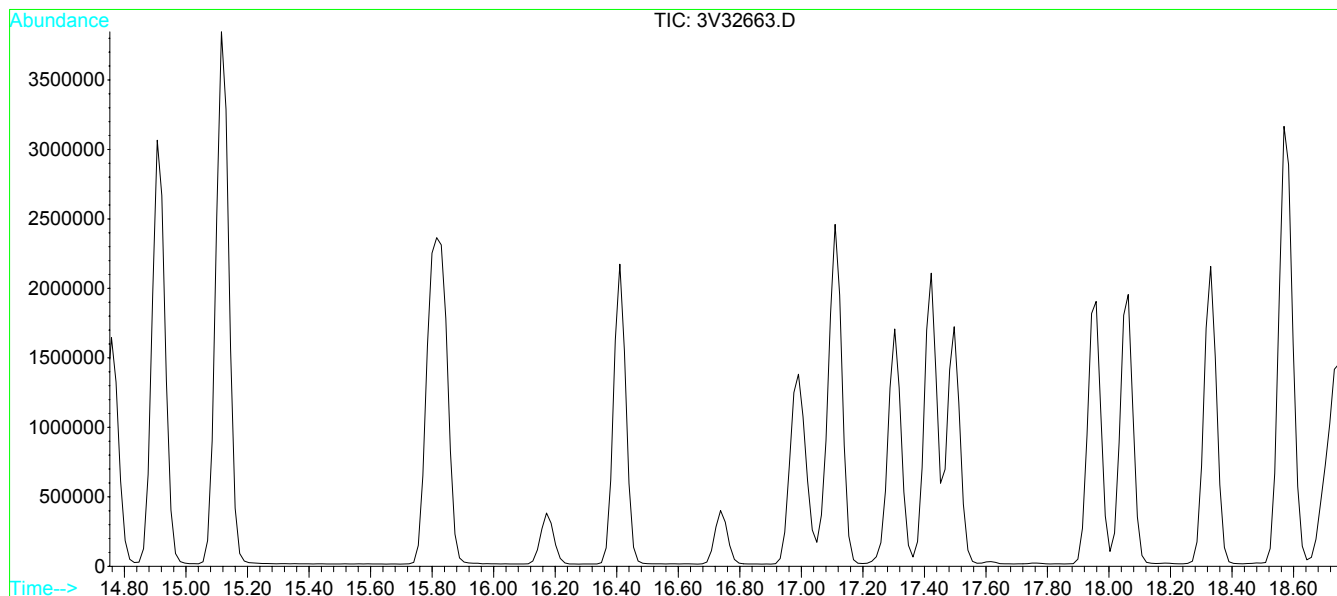
m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	PASS/FAIL
50	15 - 40% of 95	17.4	PASS
75	30 - 60% of 95	42.9	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	6.08	PASS
173	Less than 2% of 174	0	PASS
174	50 - 100% of 95	88.1	PASS
175	5 - 9% of 174	7.58	PASS
176	95 - 101% of 174	97.7	PASS
177	5 - 9% of 176	5.82	PASS

## Samples Associated with Tune

Client ID or QC Type	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Cal Standard	S8G2901-CAL1	3V32673.D	07/17/2018	17:55.00
Cal Standard	S8G2901-CAL2	3V32674.D	07/17/2018	18:24.00
Cal Standard	S8G2901-CAL3	3V32675.D	07/17/2018	18:53.00
Cal Standard	S8G2901-CAL4	3V32676.D	07/17/2018	19:21.00
Cal Standard	S8G2901-CAL5	3V32677.D	07/17/2018	19:50.00
Cal Standard	S8G2901-CAL6	3V32678.D	07/17/2018	20:18.00
Cal Standard	S8G2901-CAL7	3V32679.D	07/17/2018	20:47.00

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15.6.

Data File : G:\HPCHEM\3\DATA\07172018\3V32663.D Vial: 50  
 Acq On : 17 Jul 2018 11:46 Operator: omd  
 Sample : SEQ-TUN Inst : GCMS-3  
 Misc : soil Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Method : G:\HPCHEM\3\METHODS\0717WC3.M (RTE Integrator)  
 Title : VOC's by EPA Method 8260C



Spectrum Information: Scan 994

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.4	11466	PASS
75	95	30	60	42.9	28256	PASS
95	95	100	100	100.0	65848	PASS
96	95	5	9	6.1	4006	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	88.1	58000	PASS
175	174	5	9	7.6	4395	PASS
176	174	95	101	97.7	56664	PASS
177	176	5	9	5.8	3296	PASS

3V32663.D 0717WC3.M Thu Aug 16 14:04:49 2018 SS

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15.6.

# INSTRUMENT PERFORMANCE CHECK

Client: Peak Environmental  
 Instrument ID: GCMS-3  
 Sequence: S8J1704

Work Order: 8100452  
 Project: Ridgewood

Lab Sample ID: **S8J1704-TUN1**      Injection Date: 10/10/2018      Injection Time: 12:59  
 Lab File ID: 3V33990.D

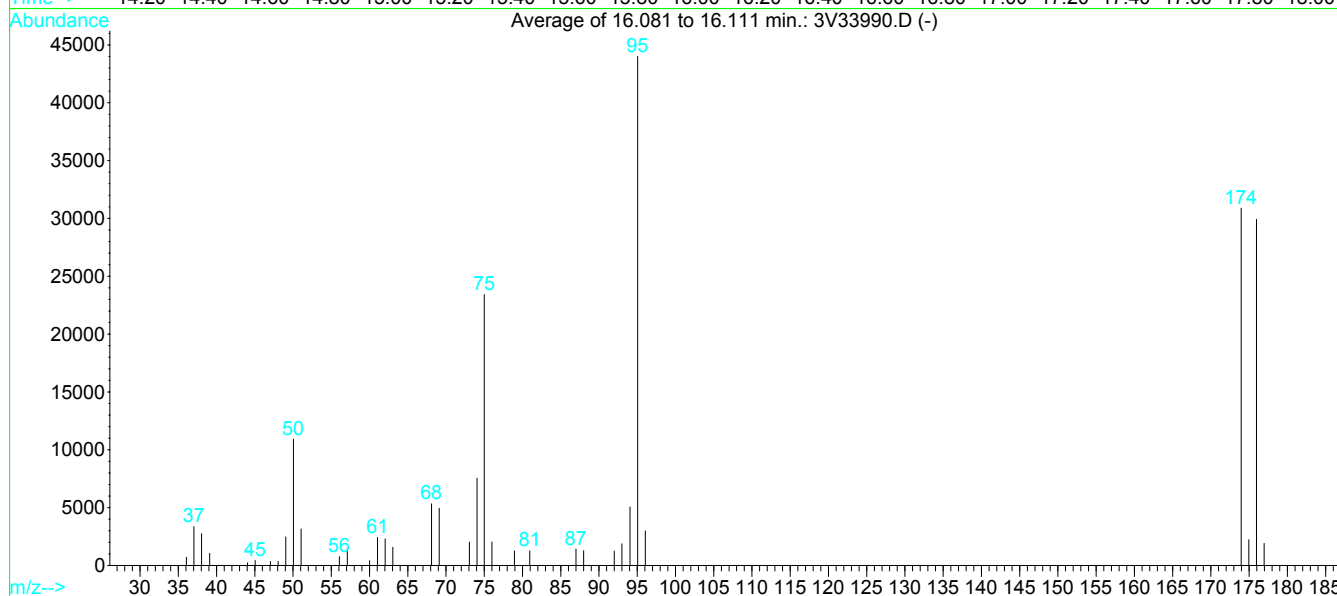
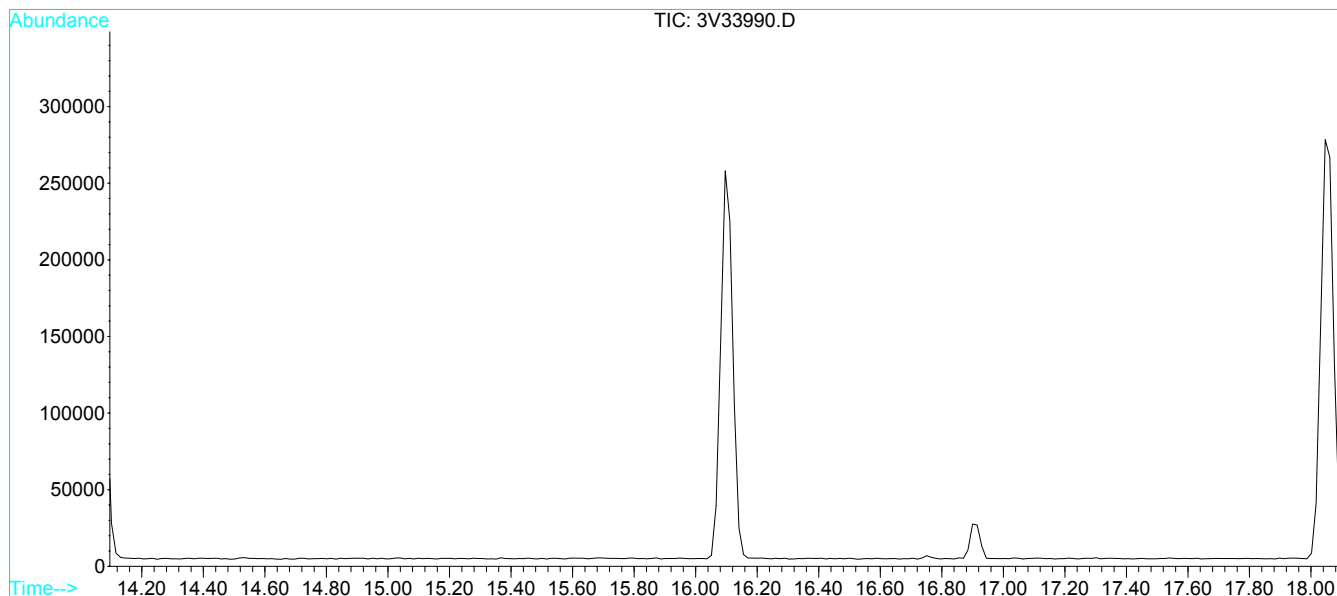
m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	PASS/FAIL
50	15 - 40% of 95	24.8	PASS
75	30 - 60% of 95	53.2	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	6.8	PASS
173	Less than 2% of 174	0	PASS
174	50 - 100% of 95	70.2	PASS
175	5 - 9% of 174	7.22	PASS
176	95 - 101% of 174	96.9	PASS
177	5 - 9% of 176	6.38	PASS

## Samples Associated with Tune

Client ID or QC Type	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Calibration Check	S8J1704-CCV1	3V33991.D	10/10/2018	13:33.00
LCS	B8J1111-BS1	3V33992.D	10/10/2018	14:03.00
Blank	B8J1111-BLK1	3V33994.D	10/10/2018	15:02.00
NTP-1A	8100452-01	3V34002.D	10/10/2018	18:59.00
NTP-2A	8100452-02	3V34003.D	10/10/2018	19:28.00
NTP-4B	8100452-05	3V34004.D	10/10/2018	19:58.00
NTP-6	8100452-06	3V34005.D	10/10/2018	20:28.00
NTP-7	8100452-07	3V34006.D	10/10/2018	21:02.00
STP-4A	8100452-11	3V34008.D	10/10/2018	22:01.00
STP-4B	8100452-12	3V34009.D	10/10/2018	22:30.00
STP-7	8100452-14	3V34010.D	10/10/2018	22:59.00
Matrix Spike	B8J1111-MS1	3V34013.D	10/11/2018	0:28.00
Matrix Spike Dup	B8J1111-MSD1	3V34014.D	10/11/2018	0:57.00

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15.6.

Data File : G:\HPCHEM\3\DATA\10102018\3V33990.D Vial: 41  
 Acq On : 10 Oct 2018 12:59 Operator: omd  
 Sample : SEQ-TUN Inst : GCMS-3  
 Misc : soil Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Method : G:\HPCHEM\3\METHODS\0717WC3.M (RTE Integrator)  
 Title : VOC's by EPA Method 8260C



Spectrum Information: Average of 16.081 to 16.111 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	24.8	10911	PASS
75	95	30	60	53.2	23416	PASS
95	95	100	100	100.0	44005	PASS
96	95	5	9	6.8	2994	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	70.2	30888	PASS
175	174	5	9	7.2	2231	PASS
176	174	95	101	96.9	29928	PASS
177	176	5	9	6.4	1909	PASS

3V33990.D 0717WC3.M Wed Oct 17 12:05:02 2018 SS

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15.6.

## INSTRUMENT PERFORMANCE CHECK

Client: Peak Environmental  
 Instrument ID: GCMS-3  
 Sequence: S8J1706

Work Order: 8100452  
 Project: Ridgewood

Lab Sample ID: **S8J1706-TUN1**      Injection Date: 10/11/2018      Injection Time: 11:36  
 Lab File ID: 3V34016.D

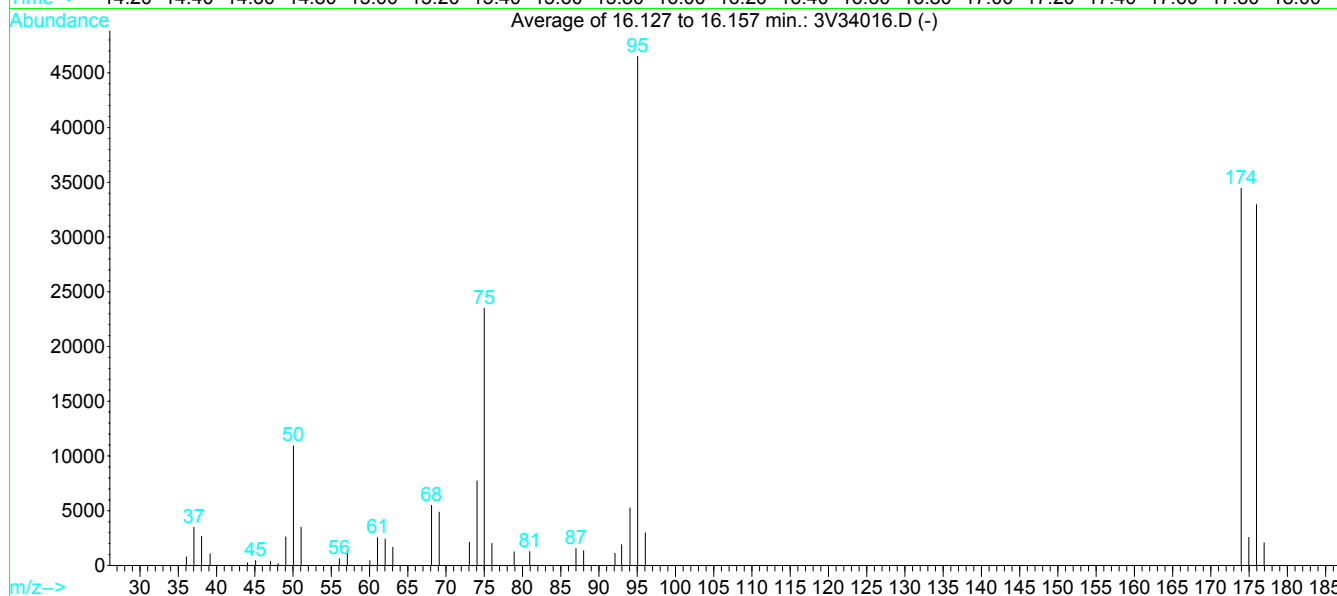
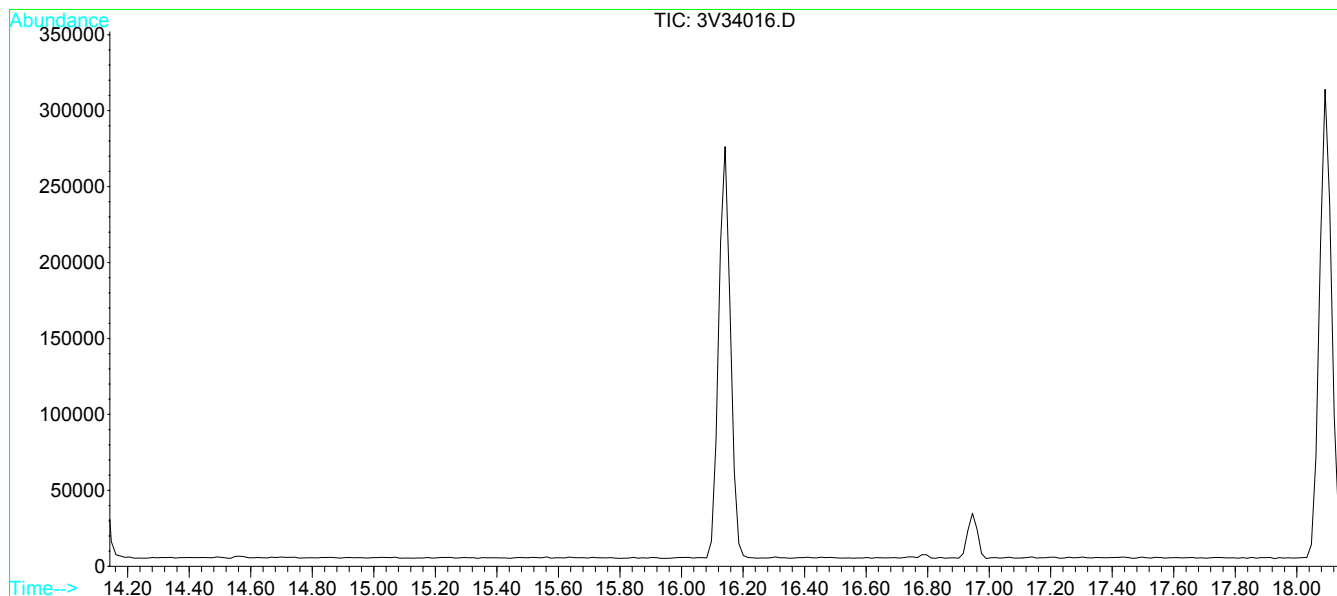
m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	PASS/FAIL
50	15 - 40% of 95	23.5	PASS
75	30 - 60% of 95	50.5	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	6.43	PASS
173	Less than 2% of 174	0	PASS
174	50 - 100% of 95	74.1	PASS
175	5 - 9% of 174	7.47	PASS
176	95 - 101% of 174	95.7	PASS
177	5 - 9% of 176	6.31	PASS

### Samples Associated with Tune

Client ID or QC Type	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Calibration Check	S8J1706-CCV1	3V34017.D	10/11/2018	12:06.00
LCS	B8J1141-BS1	3V34018.D	10/11/2018	12:35.00
Blank	B8J1141-BLK1	3V34019.D	10/11/2018	13:05.00
STP-1B	8100452-08	3V34020.D	10/11/2018	13:34.00
Matrix Spike	B8J1141-MS1	3V34039.D	10/12/2018	1:37.00
Matrix Spike Dup	B8J1141-MSD1	3V34040.D	10/12/2018	2:06.00

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15.6.

Data File : G:\HPCHEM\3\DATA\10112018\3V34016.D Vial: 71  
 Acq On : 11 Oct 2018 11:36 Operator: omd  
 Sample : SEQ-TUN Inst : GCMS-3  
 Misc : soil Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Method : G:\HPCHEM\3\METHODS\0717WC3.M (RTE Integrator)  
 Title : VOC's by EPA Method 8260C



AutoFind: Scans 979, 980, 981; Background Corrected with Scan 974

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.5	10925	PASS
75	95	30	60	50.5	23488	PASS
95	95	100	100	100.0	46496	PASS
96	95	5	9	6.4	2988	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	74.1	34440	PASS
175	174	5	9	7.5	2571	PASS
176	174	95	101	95.7	32968	PASS
177	176	5	9	6.3	2079	PASS

3V34016.D 0717WC3.M Wed Oct 17 12:24:55 2018 SS

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15.6.

Response Factor Report GCMS-3

Method : G:\HPCHEM\3\METHODS\0717WC3.M (RTE Integrator)  
 Title : VOC's by EPA Method 8260C  
 Last Update : Sun Jul 29 14:39:15 2018  
 Response via : Initial Calibration

Calibration Files  
 2 =3V32673.D 5 =3V32674.D 40 =3V32675.D  
 80 =3V32676.D 200 =3V32678.D 400 =3V32679.D

Compound	2	5	40	80	200	400	Avg	%RSD
1) I Pentafluorobenzene	-----ISTD-----							
2) Dichlorodifluoromet	0.237	0.311	0.343	0.326	0.299	0.297	0.301	11.10
3) P Chloromethane	0.441	0.436	0.469	0.458	0.449	0.447	0.446	3.29
4) Acrolein			0.025	0.025	0.035	0.024	0.027	17.67
5) C Vinyl Chloride	0.325	0.451	0.468	0.467	0.457	0.460	0.437	11.69
6) Bromomethane	0.279	0.290	0.302	0.298	0.232	0.200	0.269	14.28
7) Chloroethane	0.229	0.306	0.339	0.351	0.311	0.291	0.307	13.03
8) Trichlorofluorometh	0.519	0.589	0.599	0.595	0.583	0.586	0.576	4.86
9) 1,1,2-Trichloro-1,2	0.441	0.467	0.490	0.489	0.487	0.490	0.475	4.05
10) Acetone		0.113	0.142	0.130	0.168	0.112	0.131	16.20
11) C 1,1-Dichloroethene	0.638	0.677	0.706	0.704	0.703	0.706	0.686	3.82
12) tert-Butyl Alcohol	0.031	0.026	0.041	0.037	0.051	0.033	0.036	22.13
13) Methyl Acetate	0.242	0.257	0.341	0.310	0.398	0.274	0.302	17.84
14) Methylene Chloride	2.466	1.205	0.545	0.522	0.482	0.455	0.877	85.53
15) Carbon Disulfide	1.630	1.752	1.774	1.771	1.772	1.807	1.740	3.67
16) Acrylonitrile		0.053	0.140	0.142	0.182	0.125	0.129	32.84
17) Methyl tert-Butyl E	0.976	0.988	1.147	1.115	1.236	1.068	1.084	8.40
18) trans-1,2-Dichloroe	0.526	0.617	0.676	0.677	0.663	0.680	0.639	8.66
19) P 1,1-Dichloroethane	0.697	0.726	0.809	0.810	0.821	0.815	0.779	6.30
20) Vinyl Acetate							0.000	-1.00
21) 2-Butanone		0.152	0.228	0.208	0.267	0.176	0.204	19.76
22) 2,2-Dichloropropane	0.464	0.566	0.609	0.611	0.614	0.620	0.580	9.48
23) cis-1,2-Dichloroeth	0.580	0.695	0.766	0.770	0.781	0.775	0.728	9.92
24) C Chloroform	0.702	0.723	0.784	0.771	0.772	0.761	0.747	4.28
25) Bromochloromethane	0.316	0.360	0.411	0.405	0.416	0.389	0.383	9.21
26) S Dibromofluoromethan	0.602	0.604	0.613	0.606	0.605	0.605	0.608	1.11
27) Cyclohexane	0.678	0.805	0.810	0.814	0.805	0.820	0.786	6.39
28) 1,1,1-Trichloroetha	0.486	0.587	0.618	0.621	0.623	0.621	0.592	8.32
29) 1,1-Dichloropropene	0.453	0.590	0.610	0.599	0.607	0.608	0.577	9.78
30) Carbon Tetrachlorid	0.500	0.518	0.551	0.546	0.546	0.555	0.534	3.95
31) 1,2-Dichloroethane	0.454	0.485	0.557	0.545	0.612	0.546	0.531	9.65
32) Benzene	1.543	1.653	1.751	1.711	1.737	1.786	1.686	5.07
33) I 1,4-Difluorobenzene	-----ISTD-----							
34) Trichloroethene	0.203	0.213	0.238	0.243	0.240	0.242	0.230	6.91
35) Methylcyclohexane	0.358	0.395	0.413	0.413	0.415	0.422	0.401	5.43
36) C 1,2-Dichloropropane	0.185	0.228	0.237	0.241	0.248	0.240	0.230	9.15
37) Bromodichloromethan	0.288	0.302	0.318	0.320	0.326	0.314	0.309	4.34
38) p-Dioxane							0.000	-1.00
39) Dibromomethane		0.109	0.133	0.132	0.145	0.125	0.128	9.30
40) 2-Chloroethylvinyl		0.085	0.126	0.123	0.144	0.116	0.118	16.38
41) 4-Methyl-2-Pentanon	0.206	0.179	0.248	0.230	0.287	0.204	0.224	15.67
42) cis-1,3-Dichloropro	0.321	0.354	0.384	0.387	0.406	0.390	0.372	7.66
43) S Toluene-d8	1.117	1.137	1.109	1.126	1.127	1.136	1.125	0.90
44) C Toluene	0.857	0.910	0.947	0.955	0.960	0.943	0.923	4.21
45) trans-1,3-Dichlorop	0.293	0.284	0.346	0.336	0.367	0.333	0.325	9.01
46) 1,1,2-Trichloroetha	0.165	0.162	0.190	0.181	0.202	0.171	0.178	8.13
47) 2-Hexanone	0.131	0.128	0.185	0.168	0.215	0.149	0.162	19.06
48) 1,3-Dichloropropane	0.319	0.282	0.330	0.326	0.355	0.312	0.319	6.97
49) Tetrachloroethene	0.202	0.224	0.240	0.239	0.237	0.242	0.229	6.33
50) Dibromochloromethan	0.179	0.202	0.229	0.228	0.244	0.219	0.217	9.68
51) 1,2-Dibromoethane	0.156	0.157	0.189	0.183	0.209	0.170	0.177	10.58
52) I Chlorobenzene-d5	-----ISTD-----							
53) C Chlorobenzene	1.141	1.083	1.158	1.113	1.162	1.126	1.120	3.56
54) 1,1,1,2-Tetrachloro	0.351	0.373	0.415	0.402	0.410	0.382	0.387	5.98
55) C Ethylbenzene	1.865	1.981	2.071	2.010	2.056	1.975	1.980	3.84
56) m+p-Xylenes	0.680	0.725	0.773	0.742	0.753	0.714	0.726	4.50
57) o-Xylene	1.433	1.501	1.622	1.553	1.595	1.527	1.531	4.26

(#) = Out of Range ### Number of calibration levels exceeded format ###  
 0717WC3.M Mon Jul 30 08:56:07 2018 SS

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Response Factor Report GCMS-3

Method : G:\HPCHEM\3\METHODS\0717WC3.M (RTE Integrator)  
 Title : VOC's by EPA Method 8260C  
 Last Update : Sun Jul 29 14:39:15 2018  
 Response via : Initial Calibration

Calibration Files  
 2 =3V32673.D 5 =3V32674.D 40 =3V32675.D  
 80 =3V32676.D 200 =3V32678.D 400 =3V32679.D

Compound	2	5	40	80	200	400	Avg	%RSD
58) Styrene	1.089	1.177	1.260	1.242	1.263	1.199	1.200	5.16
59) Isopropylbenzene	1.738	1.868	1.969	1.905	1.979	1.917	1.883	4.63
60) P Bromoform	0.259	0.224	0.285	0.264	0.307	0.244	0.262	10.49
61) P 1,1,2,2-Tetrachloro	0.432	0.425	0.521	0.457	0.552	0.420	0.463	11.19
62) S 4-Bromofluorobenzen	0.852	0.853	0.857	0.821	0.860	0.823	0.842	1.98
63) 1,2,3-Trichloroprop		0.103	0.139	0.123	0.151	0.108	0.123	15.22
64) n-Propylbenzene	2.345	2.462	2.495	2.440	2.521	2.409	2.431	2.84
65) Bromobenzene	0.756	0.704	0.799	0.763	0.823	0.749	0.761	5.30
66) 2-Chlorotoluene	1.302	1.306	1.417	1.354	1.407	1.351	1.349	3.61
67) 4-Chlorotoluene	1.402	1.529	1.659	1.603	1.644	1.561	1.560	5.61
68) 1,3,5-Trimethylbenz	1.423	1.481	1.598	1.543	1.583	1.545	1.524	4.03
69) tert-Butylbenzene	1.201	1.301	1.366	1.313	1.344	1.284	1.291	4.63
70) 1,2,4-Trimethylbenz	1.362	1.481	1.563	1.541	1.584	1.527	1.504	4.98
71) sec-Butylbenzene	2.017	2.085	2.248	2.163	2.215	2.122	2.130	3.92
72) 4-Isopropyltoluene	1.534	1.624	1.795	1.769	1.792	1.632	1.687	5.95
73) 1,3-Dichlorobenzene	0.822	0.848	0.915	0.875	0.884	0.799	0.852	4.83
74) I 1,4-Dichlorobenzene-d	-----ISTD-----							
75) 1,4-Dichlorobenzene	0.928	0.909	0.986	0.979	1.007	0.974	0.960	3.73
76) n-Butylbenzene	1.668	1.807	1.995	1.964	1.951	1.958	1.894	6.14
77) 1,2-Dichlorobenzene	0.741	0.816	0.876	0.863	0.912	0.866	0.845	6.48
78) 1,2-Dibromo-3-chlor		0.046	0.088	0.081	0.102	0.072	0.077	24.41
79) 1,2,4-Trichlorobenz	0.428	0.425	0.549	0.573	0.606	0.583	0.531	13.89
80) Hexachlorobutadiene	0.322	0.339	0.317	0.322	0.326	0.336	0.324	3.27
81) Naphthalene	1.367	0.900	1.152	1.169	1.412	1.150	1.186	14.20
82) 1,2,3-Trichlorobenz	0.450	0.395	0.483	0.488	0.546	0.509	0.479	9.88
83) Indan							0.000	-1.00

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(#) = Out of Range ### Number of calibration levels exceeded format ###  
 0717WC3.M Mon Jul 30 08:56:07 2018 SS



## Compound List Report GCMS-3

Method : G:\HPCHEM\3\METHODS\0717WC3.M (RTE Integrator)  
 Title : VOC's by EPA Method 8260C  
 Last Update : Sun Jul 29 14:39:15 2018  
 Response via : Initial Calibration  
 Total Cpnds : 83

PK#	Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	Pentafluorobenzene	168	8.19	1.000	A	2	A B
2		Dichlorodifluoromethane	85	2.07	0.253	A	1	A B
3	P	Chloromethane	50	2.30	0.280	A	1	A B
4		Acrolein	56	3.76	0.459	A	1	A B
5	C	Vinyl Chloride	62	2.40	0.293	A	1	A B
6		Bromomethane	94	2.77	0.339	A	2	A B
7		Chloroethane	64	2.89	0.353	A	1	A B
8		Trichlorofluoromethane	101	3.20	0.390	A	1	A B
9		1,1,2-Trichloro-1,2,2 Trifluor	101	3.85	0.470	A	2	A B
10		Acetone	43	3.97	0.485	A	1	A B
11	C	1,1-Dichloroethene	61	3.88	0.474	A	2	A B
12		tert-Butyl Alcohol	59	4.76	0.581	Q	2	A B
13		Methyl Acetate	43	4.42	0.539	A	1	A B
14		Methylene Chloride	84	4.64	0.567	Q	2	A B
15		Carbon Disulfide	76	4.21	0.514	A	1	A B
16		Acrylonitrile	53	5.07	0.619	Q	2	A B
17		Methyl tert-Butyl Ether	73	5.01	0.612	A	1	A B
18		trans-1,2-Dichloroethene	61	5.06	0.618	A	2	A B
19	P	1,1-Dichloroethane	63	5.89	0.720	A	2	A B
20		Vinyl Acetate	43	5.94	0.725	A	1	A B
21		2-Butanone	43	7.10	0.867	A	1	A B
22		2,2-Dichloropropane	77	7.06	0.862	A	1	A B
23		cis-1,2-Dichloroethene	61	7.10	0.867	A	1	A B
24	C	Chloroform	83	7.74	0.945	A	1	A B
25		Bromochloromethane	49	7.58	0.925	A	2	A B
26	S	Dibromofluoromethane	113	8.06	0.984	A	2	A B
27		Cyclohexane	56	8.07	0.985	A	2	A B
28		1,1,1-Trichloroethane	97	8.04	0.982	A	2	A B
29		1,1-Dichloropropene	75	8.37	1.022	A	2	A B
30		Carbon Tetrachloride	117	8.33	1.016	A	2	A B
31		1,2-Dichloroethane	62	8.88	1.084	A	1	A B
32		Benzene	78	8.73	1.066	A	1	A B
33	I	1,4-Difluorobenzene	114	9.53	1.000	A	2	A B
34		Trichloroethene	130	9.98	1.047	A	2	A B
35		Methylcyclohexane	83	10.25	1.075	A	2	A B
36	C	1,2-Dichloropropane	63	10.41	1.092	A	2	A B
37		Bromodichloromethane	83	10.93	1.147	A	1	A B
38		p-Dioxane	88	8.72	0.914	A	2	A B
39		Dibromomethane	174	10.63	1.115	A	2	A B
40		2-Chloroethylvinyl Ether	63	11.49	1.206	A	1	A B
41		4-Methyl-2-Pentanone	43	11.99	1.257	A	2	A B
42		cis-1,3-Dichloropropene	75	11.75	1.232	A	2	A B
43	S	Toluene-d8	98	12.16	1.276	A	2	A B
44	C	Toluene	91	12.28	1.288	A	1	A B
45		trans-1,3-Dichloropropene	75	12.77	1.340	A	2	A B
46		1,1,2-Trichloroethane	97	13.09	1.373	A	1	A B
47		2-Hexanone	43	13.47	1.413	A	2	A B
48		1,3-Dichloropropane	76	13.38	1.404	A	1	A B
49		Tetrachloroethene	166	13.25	1.390	A	2	A B
50		Dibromochloromethane	129	13.74	1.441	A	1	A B
51		1,2-Dibromoethane	107	13.93	1.462	A	1	A B
52	I	Chlorobenzene-d5	82	14.70	1.000	A	2	A B
53	C	Chlorobenzene	112	14.74	1.003	A	1	A B
54		1,1,1,2-Tetrachloroethane	131	14.91	1.014	A	2	A B
55	C	Ethylbenzene	91	14.89	1.013	A	1	A B
56		m+p-Xylenes	106	15.11	1.028	A	2	A B
57		o-Xylene	91	15.80	1.075	A	2	A B
58		Styrene	104	15.83	1.077	A	2	A B
59		Isopropylbenzene	105	16.40	1.116	A	1	A B
60	P	Bromoform	173	16.17	1.100	A	2	A B
61	P	1,1,2,2-Tetrachloroethane	83	17.01	1.157	A	1	A B
62	S	4-Bromofluorobenzene	95	16.74	1.139	A	2	A B
63		1,2,3-Trichloropropane	110	17.09	1.162	A	1	A B
64		n-Propylbenzene	91	17.12	1.164	A	2	A B

65	Bromobenzene	77	16.98	1.155	A	2	A	B
66	2-Chlorotoluene	91	17.31	1.178	A	2	A	B
67	4-Chlorotoluene	91	17.50	1.191	A	2	A	B
68	1,3,5-Trimethylbenzene	105	17.43	1.186	A	1	A	B
69	tert-Butylbenzene	119	17.96	1.222	A	2	A	B
70	1,2,4-Trimethylbenzene	105	18.08	1.230	A	1	A	B
71	sec-Butylbenzene	105	18.35	1.248	A	2	A	B
72	4-Isopropyltoluene	119	18.60	1.265	A	2	A	B
73	1,3-Dichlorobenzene	146	18.60	1.265	A	2	A	B
74 I	1,4-Dichlorobenzene-d4	152	18.69	1.000	A	2	A	B
75	1,4-Dichlorobenzene	146	18.73	1.002	A	2	A	B
76	n-Butylbenzene	91	19.25	1.030	A	2	A	B
77	1,2-Dichlorobenzene	146	19.37	1.036	A	2	A	B
78	1,2-Dibromo-3-chloropropane	75	20.69	1.107	QO	2	A	B
79	1,2,4-Trichlorobenzene	180	22.08	1.181	A	2	A	B
80	Hexachlorobutadiene	225	22.30	1.193	A	2	A	B
81	Naphthalene	128	22.48	1.203	A	2	A	B
82	1,2,3-Trichlorobenzene	180	22.91	1.226	A	2	A	B
83	Indan	117	18.05	0.966	A	2	A	B

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin  
 #Qual = number of qualifiers  
 A/H = Area or Height  
 ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

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 0717WC3.M Mon Jul 30 08:56:06 2018 SS

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# CALIBRATION VERIFICATION SUMMARY

**SW 846 8260C**

**CCV ID:** S8J1704-CCV1

**Analyzed:** 10/10/18 13:33

Analyte	Response	Expected		% Drift	Limit(s)
	Factor	Result	Result		
1,1,1-Trichloroethane	0.7373984	200.00	249.17	* 25	20
1,1,2,2-Tetrachloroethane	0.4323567	200.00	186.64	7	0.3 (SPCC)
1,1,2-Trichloro-1,2,2 Trifluoroethane	0.3885111	200.00	163.56	18	20
1,1,2-Trichloroethane	0.1703746	200.00	191.60	4	20
1,1-Dichloroethane	0.8496664	200.00	218.21	9	0.1 (SPCC)
1,1-Dichloroethene	0.7945612	200.00	231.64	16	20 (CCC)
1,2,3-Trichlorobenzene	0.4828518	200.00	221.99	11	20
1,2,4-Trichlorobenzene	0.6295863	200.00	237.27	19	20
1,2,4-Trimethylbenzene	1.864631	200.00	225.19	13	20
1,2-Dibromo-3-chloropropane	9.506023E-02	200.00	236.88	18	20
1,2-Dibromoethane	0.1826416	200.00	206.38	3	20
1,2-Dichlorobenzene	0.9081894	200.00	214.98	7	20
1,2-Dichloroethane	0.6933126	200.00	261.14	* 31	20
1,2-Dichloropropane	0.220676	200.00	192.26	4	20 (CCC)
1,3-Dichlorobenzene	0.919692	200.00	215.86	8	20
1,4-Dichlorobenzene	1.006167	200.00	209.68	5	20
2-Butanone	0.1800639	200.00	176.21	12	20
2-Hexanone	0.1525543	200.00	188.49	6	20
4-Methyl-2-pentanone	0.2146098	200.00	191.62	4	20
Acetone	0.1557066	200.00	237.49	19	20
Benzene	1.516194	200.00	179.91	10	20
Bromochloromethane	0.387115	200.00	202.36	1	20
Bromodichloromethane	0.3697722	200.00	166.53	17	20
Bromoform	0.2964029	200.00	226.45	13	0.1 (SPCC)
Bromomethane	0.2743366	200.00	204.02	2	20
Carbon disulfide	1.218475	200.00	140.08	* 30	20
Carbon Tetrachloride	0.6674893	200.00	250.10	* 25	20
Chlorobenzene	1.142052	200.00	204.01	2	0.3 (SPCC)
Chlorodibromomethane	0.2495352	200.00	160.58	20	20
Chloroethane	0.3086909	200.00	201.40	1	20
Chloroform	0.8609991	200.00	230.37	15	20 (CCC)
Chloromethane	0.3907103	200.00	175.04	12	0.1 (SPCC)
cis-1,2-Dichloroethene	0.8156015	200.00	224.02	12	20
cis-1,3-Dichloropropene	0.3982	200.00	213.87	7	20
Cyclohexane	0.6395256	200.00	162.71	19	20
Dichlorodifluoromethane	0.351371	200.00	233.67	17	20
EthylBenzene	2.102067	200.00	212.34	6	20 (CCC)
Isopropylbenzene	2.044636	200.00	217.18	9	20
m+p-Xylenes	0.729369	400.00	401.78	0	20
Methyl Acetate	0.270541	200.00	179.27	10	20
Methyl tert-Butyl Ether	1.097602	200.00	202.42	1	20
Methylcyclohexane	0.3421712	200.00	170.67	15	20
Methylene Chloride	0.501129	200.00	212.62	6	20
o-Xylene	1.663676	200.00	217.35	9	20
Styrene	1.250545	200.00	208.39	4	20
tert-Butyl alcohol	4.009553E-02	2,000.00	2,094.81	5	20
Tetrachloroethene	0.2408909	200.00	210.03	5	20

F-VII

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15.8.

# CALIBRATION VERIFICATION SUMMARY

SW 846 8260C

CCV ID: S8J1704-CCV1

Analyzed: 10/10/18 13:33

Analyte	Response	Expected		% Drift	Limit(s)
	Factor	Result	Result		
Toluene	0.8913027	200.00	193.11	3	20 (CCC)
trans-1,2-Dichloroethene	0.7078446	200.00	221.55	11	20
trans-1,3-Dichloropropene	0.3795366	200.00	233.29	17	20
Trichloroethene	0.2390769	200.00	208.22	4	20
Trichlorofluoromethane	0.7778794	200.00	188.23	6	20
Vinyl chloride	0.4649842	200.00	212.84	6	20 (CCC)

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15.8.

F-VII

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\3\DATA\10102018\3V33991.D Vial: 42  
 Acq On : 10 Oct 2018 13:33 Operator: omd  
 Sample : SEQ-CCV@200 Inst : GCMS-3  
 Misc : soil Multiplr: 1.00

MS Integration Params: RTEINT.P  
 Quant Time: Oct 10 16:49 2018

Quant Results File: 0717WC3.RES

Quant Method : G:\HPCHEM\3\METHODS\0717WC3.M (RTE Integrator)

Title : VOC's by EPA Method 8260C

Last Update : Tue Oct 09 14:36:22 2018

Response via : Initial Calibration

DataAcq Meth : VOCRUN1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.48	168	157222	50.00	ug/kg	0.02
33) 1,4-Difluorobenzene	8.91	114	291493	50.00	ug/kg	0.02
52) Chlorobenzene-d5	14.07	82	151386	50.00	ug/kg	0.02
74) 1,4-Dichlorobenzene-d4	18.06	152	137476	50.00	ug/kg	0.00

System Monitoring Compounds

26) Dibromofluoromethane	7.36	113	104550	54.67	ug/kg	0.02
Spiked Amount	50.000	Range 59 - 147	Recovery	=	109.34%	
43) Toluene-d8	11.54	98	347844	53.06	ug/kg	0.02
Spiked Amount	50.000	Range 66 - 134	Recovery	=	106.12%	
62) 4-Bromofluorobenzene	16.11	95	151180	59.27	ug/kg	0.02
Spiked Amount	50.000	Range 64 - 125	Recovery	=	118.54%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.90	85	220973	233.67	ug/kg	95
3) Chloromethane	2.07	50	245713	175.04	ug/kg	95
4) Acrolein	3.32	56	5637	66.67	ug/kg	75
5) Vinyl Chloride	2.16	62	292423	212.84	ug/kg	93
6) Bromomethane	2.48	94	172527	204.02	ug/kg#	93
7) Chloroethane	2.58	64	194132	201.40	ug/kg	94
8) Trichlorofluoromethane	2.86	101	489199	188.23	ug/kg	99
9) 1,1,2-Trichloro-1,2,2 Trif	3.46	101	244330	163.56	ug/kg	84
10) Acetone	3.50	43	97922m	237.49	ug/kg	
11) 1,1-Dichloroethene	3.44	61	499690	231.64	ug/kg	70
12) tert-Butyl Alcohol	4.23	59	252156	2094.81	ug/kg	87
13) Methyl Acetate	3.89	43	170140	179.27	ug/kg	93
14) Methylene Chloride	4.10	84	315154	212.62	ug/kg	91
15) Carbon Disulfide	3.73	76	766284	140.08	ug/kg	98
16) Acrylonitrile	4.43	53	74733	161.31	ug/kg	92
17) Methyl tert-Butyl Ether	4.49	73	690269	202.42	ug/kg	89
18) trans-1,2-Dichloroethene	4.49	61	445155	221.55	ug/kg	76
19) 1,1-Dichloroethane	5.21	63	534345	218.21	ug/kg	99
21) 2-Butanone	6.33	43	113240	176.21	ug/kg	100
22) 2,2-Dichloropropane	6.35	77	495299	271.51	ug/kg	100
23) cis-1,2-Dichloroethene	6.35	61	512922	224.02	ug/kg	73
24) Chloroform	7.05	83	541472	230.37	ug/kg	99
25) Bromochloromethane	6.81	49	243452	202.36	ug/kg	84
27) Cyclohexane	7.46	56	402190	162.71	ug/kg	97
28) 1,1,1-Trichloroethane	7.34	97	463741	249.17	ug/kg	95
29) 1,1-Dichloropropene	7.67	75	396281	218.49	ug/kg	87
30) Carbon Tetrachloride	7.64	117	419776	250.10	ug/kg	100
31) 1,2-Dichloroethane	8.15	62	436016	261.14	ug/kg	98
32) Benzene	8.03	78	953516	179.91	ug/kg	98
34) Trichloroethene	9.31	130	278757	208.22	ug/kg	91
35) Methylcyclohexane	9.73	83	398962	170.67	ug/kg#	86
36) 1,2-Dichloropropane	9.78	63	257302	192.26	ug/kg	97
37) Bromodichloromethane	10.29	83	431144	166.53	ug/kg	97
39) Dibromomethane	9.93	174	162831	217.70	ug/kg	71
41) 4-Methyl-2-Pentanone	11.38	43	250229	191.62	ug/kg	93
42) cis-1,3-Dichloropropene	11.08	75	464290	213.87	ug/kg	94
44) Toluene	11.66	91	1039234	193.11	ug/kg	97
45) trans-1,3-Dichloropropene	12.11	75	442529	233.29	ug/kg	90
46) 1,1,2-Trichloroethane	12.45	97	198652	191.60	ug/kg	99
47) 2-Hexanone	12.85	43	177874	188.49	ug/kg	91
48) 1,3-Dichloropropane	12.72	76	370880	199.49	ug/kg	100
49) Tetrachloroethene	12.55	166	280872	210.03	ug/kg	98
50) Dibromochloromethane	13.07	129	290951	160.58	ug/kg	100
51) 1,2-Dibromoethane	13.25	107	212955	206.38	ug/kg#	83

(#) = qualifier out of range (m) = manual integration

3V33991.D 0717WC3.M Wed Oct 17 12:06:27 2018 SS

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15.8.

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\3\DATA\10102018\3V33991.D Vial: 42  
 Acq On : 10 Oct 2018 13:33 Operator: omd  
 Sample : SEQ-CCV@200 Inst : GCMS-3  
 Misc : soil Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Oct 10 16:49 2018 Quant Results File: 0717WC3.RES

Quant Method : G:\HPCHEM\3\METHODS\0717WC3.M (RTE Integrator)  
 Title : VOC's by EPA Method 8260C  
 Last Update : Tue Oct 09 14:36:22 2018  
 Response via : Initial Calibration  
 DataAcq Meth : VOCRUN1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
53) Chlorobenzene	14.12	112	691563	204.01	ug/kg	98
54) 1,1,1,2-Tetrachloroethane	14.30	131	273915	233.79	ug/kg	99
55) Ethylbenzene	14.31	91	1272894	212.34	ug/kg	91
56) m+p-Xylenes	14.55	106	883330	401.78	ug/kg	77
57) o-Xylene	15.19	91	1007429	217.35	ug/kg	86
58) Styrene	15.23	104	757260	208.39	ug/kg	89
59) Isopropylbenzene	15.83	105	1238117	217.18	ug/kg#	90
60) Bromoform	15.52	173	179485	226.45	ug/kg	99
61) 1,1,2,2-Tetrachloroethane	16.36	83	261811	186.64	ug/kg	96
63) 1,2,3-Trichloropropane	16.44	110	82275	220.57	ug/kg	96
64) n-Propylbenzene	16.54	91	1509041	205.02	ug/kg#	93
65) Bromobenzene	16.32	77	484663	210.46	ug/kg	75
66) 2-Chlorotoluene	16.66	91	893241	218.73	ug/kg	85
67) 4-Chlorotoluene	16.87	91	1053181	222.93	ug/kg#	83
68) 1,3,5-Trimethylbenzene	15.83	105	1238117	268.30	ug/kg#	56
69) tert-Butylbenzene	17.38	119	864652	221.26	ug/kg#	81
70) 1,2,4-Trimethylbenzene	17.48	105	1025368	225.19	ug/kg	90
71) sec-Butylbenzene	17.48	105	1025368	158.97	ug/kg#	70
72) 4-Isopropyltoluene	18.02	119	1132844	221.76	ug/kg	90
73) 1,3-Dichlorobenzene	17.93	146	556914	215.86	ug/kg#	93
75) 1,4-Dichlorobenzene	18.11	146	553295	209.68	ug/kg#	91
76) n-Butylbenzene	18.69	91	1123812	215.84	ug/kg	94
77) 1,2-Dichlorobenzene	18.70	146	499417	214.98	ug/kg#	93
78) 1,2-Dibromo-3-chloropropan	20.00	75	52274	236.88	ug/kg	46
79) 1,2,4-Trichlorobenzene	21.37	180	346212	237.27	ug/kg	96
80) Hexachlorobutadiene	21.62	225	200317	224.69	ug/kg	98
81) Naphthalene	21.80	128	645900	198.15	ug/kg	98
82) 1,2,3-Trichlorobenzene	22.16	180	292388	221.99	ug/kg	95

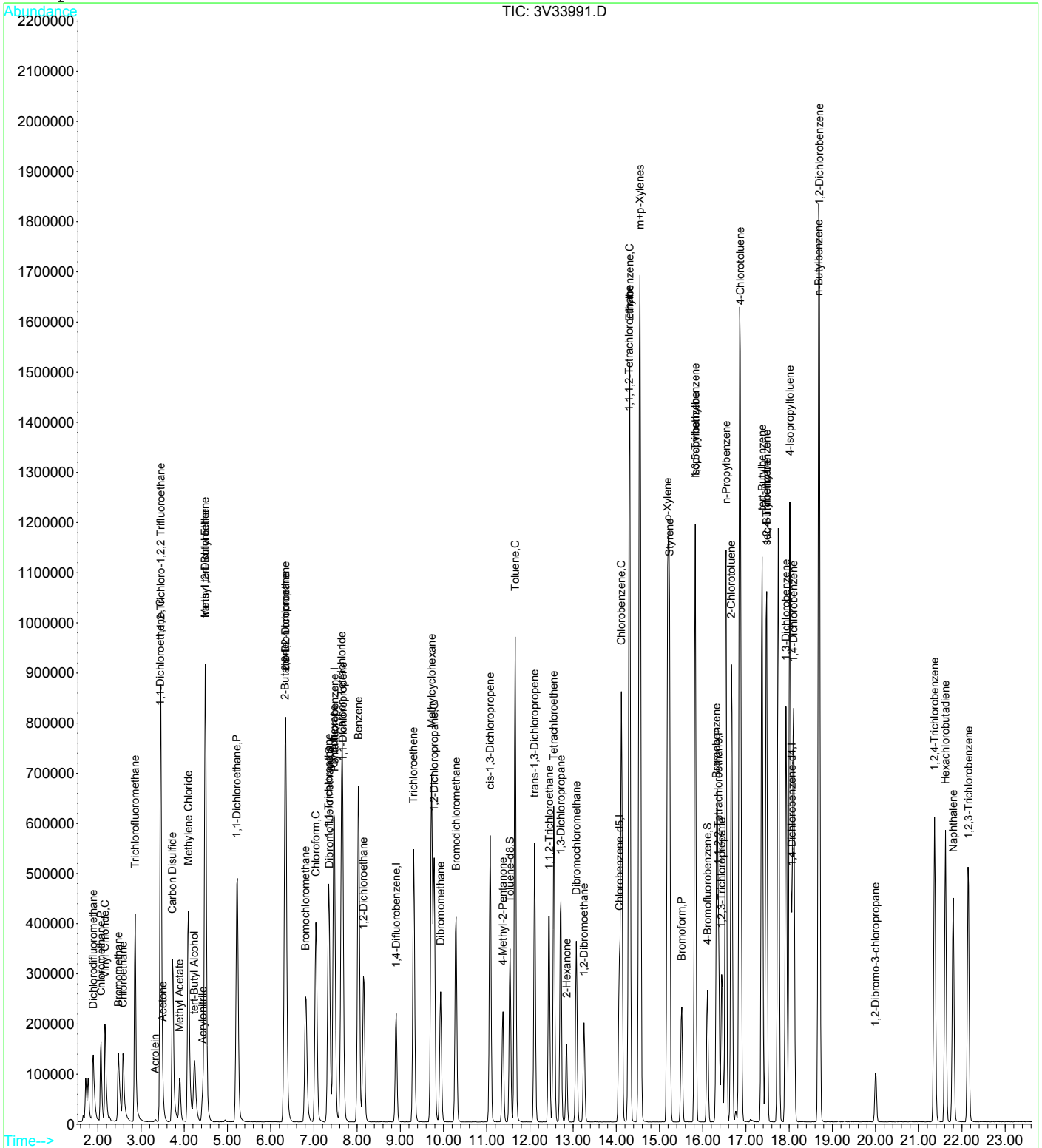
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15.8.

(#) = qualifier out of range (m) = manual integration  
 3V33991.D 0717WC3.M Wed Oct 17 12:06:27 2018 SS

Quantitation Report

Data File : G:\HPCHEM\3\DATA\10102018\3V33991.D Vial: 42  
 Acq On : 10 Oct 2018 13:33 Operator: omd  
 Sample : SEQ-CCV@200 Inst : GCMS-3  
 Misc : soil Multiplr: 1.00  
 MS Integration Params: RTEINT.P  
 Quant Time: Oct 10 16:49 2018 Quant Results File: 0717WC3.RES

Method : G:\HPCHEM\3\METHODS\0717WC3.M (RTE Integrator)  
 Title : VOC's by EPA Method 8260C  
 Last Update : Wed Oct 10 16:46:14 2018  
 Response via : Initial Calibration



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# CALIBRATION VERIFICATION SUMMARY

**SW 846 8260C**

**CCV ID:** S8J1706-CCV1

**Analyzed:** 10/11/18 12:06

Analyte	Response	Expected		% Drift	Limit(s)
	Factor	Result	Result		
1,1,1-Trichloroethane	0.7386335	200.00	249.58	* 25	20
1,1,2,2-Tetrachloroethane	0.4083544	200.00	176.28	12	0.3 (SPCC)
1,1,2-Trichloro-1,2,2 Trifluoroethane	0.3855659	200.00	162.32	19	20
1,1,2-Trichloroethane	0.1675339	200.00	188.40	6	20
1,1-Dichloroethane	0.8625258	200.00	221.52	11	0.1 (SPCC)
1,1-Dichloroethene	0.790563	200.00	230.48	15	20 (CCC)
1,2,3-Trichlorobenzene	0.4491346	200.00	215.12	8	20
1,2,4-Trichlorobenzene	0.6022689	200.00	226.98	13	20
1,2,4-Trimethylbenzene	1.827834	200.00	211.88	6	20
1,2-Dibromo-3-chloropropane	9.097148E-02	200.00	227.47	14	20
1,2-Dibromoethane	0.1789234	200.00	202.18	1	20
1,2-Dichlorobenzene	0.8925047	200.00	211.27	6	20
1,2-Dichloroethane	0.6866358	200.00	258.62	* 29	20
1,2-Dichloropropane	0.2236168	200.00	194.82	3	20 (CCC)
1,3-Dichlorobenzene	0.8714575	200.00	204.54	2	20
1,4-Dichlorobenzene	0.9952809	200.00	207.42	4	20
2-Butanone	0.174838	200.00	171.09	14	20
2-Hexanone	0.1469789	200.00	181.60	9	20
4-Methyl-2-pentanone	0.2100835	200.00	187.58	6	20
Acetone	0.1409729	200.00	215.02	8	20
Benzene	1.549129	200.00	183.82	8	20
Bromochloromethane	0.3924546	200.00	205.15	3	20
Bromodichloromethane	0.3659221	200.00	236.47	18	20
Bromoform	0.275435	200.00	210.43	5	0.1 (SPCC)
Bromomethane	0.2825013	200.00	210.10	5	20
Carbon disulfide	1.202848	200.00	138.28	* 31	20
Carbon Tetrachloride	0.6633847	200.00	248.56	* 24	20
Chlorobenzene	1.095323	200.00	195.66	2	0.3 (SPCC)
Chlorodibromomethane	0.242004	200.00	223.20	12	20
Chloroethane	0.3058067	200.00	199.51	0	20
Chloroform	0.8718411	200.00	233.27	17	20 (CCC)
Chloromethane	0.3931683	200.00	176.15	12	0.1 (SPCC)
cis-1,2-Dichloroethene	0.8241116	200.00	226.36	13	20
cis-1,3-Dichloropropene	0.3956789	200.00	212.51	6	20
Cyclohexane	0.6490688	200.00	165.14	17	20
Dichlorodifluoromethane	0.3183648	200.00	211.72	6	20
EthylBenzene	2.010652	200.00	203.11	2	20 (CCC)
Isopropylbenzene	1.959547	200.00	208.14	4	20
m+p-Xylenes	0.7026695	400.00	387.07	3	20
Methyl Acetate	0.2670947	200.00	176.99	12	20
Methyl tert-Butyl Ether	1.089082	200.00	200.85	0	20
Methylcyclohexane	0.3416175	200.00	170.39	15	20
Methylene Chloride	0.4934852	200.00	209.19	5	20
o-Xylene	1.596957	200.00	208.63	4	20
Styrene	1.20811	200.00	201.32	1	20
tert-Butyl alcohol	3.908876E-02	2,000.00	2,041.49	2	20
Tetrachloroethene	0.2411271	200.00	210.23	5	20

F-VII

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# CALIBRATION VERIFICATION SUMMARY

SW 846 8260C

CCV ID: S8J1706-CCV1

Analyzed: 10/11/18 12:06

Analyte	Response	Expected		% Drift	Limit(s)
	Factor	Result	Result		
Toluene	0.8995815	200.00	194.91	3	20 (CCC)
trans-1,2-Dichloroethene	0.7171729	200.00	224.47	12	20
trans-1,3-Dichloropropene	0.3788893	200.00	232.89	16	20
Trichloroethene	0.2374675	200.00	206.82	3	20
Trichlorofluoromethane	0.7502296	200.00	260.69	* 30	20
Vinyl chloride	0.4569313	200.00	209.15	5	20 (CCC)

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F-VII

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\3\DATA\10112018\3V34017.D Vial: 72  
 Acq On : 11 Oct 2018 12:06 Operator: omd  
 Sample : SEQ-CCV@200 Inst : GCMS-3  
 Misc : soil Multiplr: 1.00

MS Integration Params: RTEINT.P  
 Quant Time: Oct 11 16:20 2018

Quant Results File: 0717WC3.RES

Quant Method : G:\HPCHEM\3\METHODS\0717WC3.M (RTE Integrator)

Title : VOC's by EPA Method 8260C

Last Update : Wed Oct 10 16:46:14 2018

Response via : Initial Calibration

DataAcq Meth : VOCRUN1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	7.52	168	161132	50.00	ug/kg	0.06
33) 1,4-Difluorobenzene	8.95	114	302494	50.00	ug/kg	0.06
52) Chlorobenzene-d5	14.10	82	165068	50.00	ug/kg	0.05
74) 1,4-Dichlorobenzene-d4	18.11	152	143883	50.00	ug/kg	0.05

System Monitoring Compounds

26) Dibromofluoromethane	7.40	113	109643	55.94	ug/kg	0.06
Spiked Amount	50.000	Range 59 - 147	Recovery	=	111.88%	
43) Toluene-d8	11.59	98	362129	53.23	ug/kg	0.06
Spiked Amount	50.000	Range 66 - 134	Recovery	=	106.46%	
62) 4-Bromofluorobenzene	16.14	95	162426	58.40	ug/kg	0.05
Spiked Amount	50.000	Range 64 - 125	Recovery	=	116.80%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.91	85	205195	211.72	ug/kg	95
3) Chloromethane	2.09	50	253408	176.15	ug/kg	96
4) Acrolein	3.37	56	6158	71.06	ug/kg	81
5) Vinyl Chloride	2.19	62	294505	209.15	ug/kg	94
6) Bromomethane	2.51	94	182080	210.10	ug/kg#	94
7) Chloroethane	2.61	64	197101	199.51	ug/kg	95
8) Trichlorofluoromethane	2.89	101	483544	260.69	ug/kg	99
9) 1,1,2-Trichloro-1,2,2 Trif	3.49	101	248508	162.32	ug/kg	80
10) Acetone	3.53	43	90861m	215.02	ug/kg	
11) 1,1-Dichloroethene	3.49	61	509540	230.48	ug/kg	75
12) tert-Butyl Alcohol	4.28	59	251938	2041.49	ug/kg	89
13) Methyl Acetate	3.93	43	172150	176.99	ug/kg	92
14) Methylene Chloride	4.13	84	318065	209.19	ug/kg	83
15) Carbon Disulfide	3.77	76	775269	138.28	ug/kg	99
16) Acrylonitrile	4.47	53	76245	160.56	ug/kg	96
17) Methyl tert-Butyl Ether	4.53	73	701944	200.85	ug/kg	91
18) trans-1,2-Dichloroethene	4.53	61	462238	224.47	ug/kg	76
19) 1,1-Dichloroethane	5.26	63	555922	221.52	ug/kg	99
21) 2-Butanone	6.39	43	112688	171.09	ug/kg	98
22) 2,2-Dichloropropane	6.40	77	509725	272.64	ug/kg	99
23) cis-1,2-Dichloroethene	6.39	61	531163	226.36	ug/kg	73
24) Chloroform	7.10	83	561926	233.27	ug/kg	99
25) Bromochloromethane	6.87	49	252948	205.15	ug/kg	83
27) Cyclohexane	7.52	56	418343	165.14	ug/kg	98
28) 1,1,1-Trichloroethane	7.39	97	476070	249.58	ug/kg	95
29) 1,1-Dichloropropene	7.71	75	410098	220.62	ug/kg	87
30) Carbon Tetrachloride	7.69	117	427570	248.56	ug/kg	100
31) 1,2-Dichloroethane	8.21	62	442556	258.62	ug/kg	98
32) Benzene	8.09	78	998457	183.82	ug/kg	98
34) Trichloroethene	9.35	130	287330	206.82	ug/kg	91
35) Methylcyclohexane	9.77	83	413349	170.39	ug/kg#	87
36) 1,2-Dichloropropane	9.83	63	270571	194.82	ug/kg	97
37) Bromodichloromethane	10.32	83	442757	236.47	ug/kg	98
39) Dibromomethane	9.98	174	162695	209.61	ug/kg	68
41) 4-Methyl-2-Pentanone	11.41	43	254196	187.58	ug/kg	93
42) cis-1,3-Dichloropropene	11.13	75	478762	212.51	ug/kg	95
44) Toluene	11.71	91	1088472	194.91	ug/kg	96
45) trans-1,3-Dichloropropene	12.15	75	458447	232.89	ug/kg	90
46) 1,1,2-Trichloroethane	12.48	97	202712	188.40	ug/kg	98
47) 2-Hexanone	12.88	43	177841	181.60	ug/kg	91
48) 1,3-Dichloropropane	12.75	76	383651	198.86	ug/kg	99
49) Tetrachloroethene	12.60	166	291758	210.23	ug/kg	98
50) Dibromochloromethane	13.12	129	292819	223.20	ug/kg	98
51) 1,2-Dibromoethane	13.30	107	216493	202.18	ug/kg#	85

(#) = qualifier out of range (m) = manual integration

3V34017.D 0717WC3.M Wed Oct 17 12:26:05 2018 SS

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Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\3\DATA\10112018\3V34017.D  
 Acq On : 11 Oct 2018 12:06  
 Sample : SEQ-CCV@200  
 Misc : soil

Vial: 72  
 Operator: omd  
 Inst : GCMS-3  
 Multiplr: 1.00

MS Integration Params: RTEINT.P  
 Quant Time: Oct 11 16:20 2018

Quant Results File: 0717WC3.RES

Quant Method : G:\HPCHEM\3\METHODS\0717WC3.M (RTE Integrator)  
 Title : VOC's by EPA Method 8260C  
 Last Update : Wed Oct 10 16:46:14 2018  
 Response via : Initial Calibration  
 DataAcq Meth : VOCRUN1

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
53) Chlorobenzene	14.16	112	723211	195.66	ug/kg	99
54) 1,1,1,2-Tetrachloroethane	14.33	131	283199	221.68	ug/kg	99
55) Ethylbenzene	14.36	91	1327577	203.11	ug/kg	92
56) m+p-Xylenes	14.58	106	927906	387.07	ug/kg	75
57) o-Xylene	15.23	91	1054426	208.63	ug/kg	88
58) Styrene	15.26	104	797681	201.32	ug/kg	88
59) Isopropylbenzene	15.86	105	1293834	208.14	ug/kg#	88
60) Bromoform	15.55	173	181862	210.43	ug/kg	97
61) 1,1,2,2-Tetrachloroethane	16.41	83	269625	176.28	ug/kg	96
63) 1,2,3-Trichloropropane	16.48	110	81877	201.31	ug/kg	94
64) n-Propylbenzene	16.57	91	1567359	195.29	ug/kg#	91
65) Bromobenzene	16.37	77	503094	200.36	ug/kg	82
66) 2-Chlorotoluene	16.71	91	922148	207.10	ug/kg	87
67) 4-Chlorotoluene	16.92	91	1092826	212.15	ug/kg	87
68) 1,3,5-Trimethylbenzene	15.86	105	1293834	257.13	ug/kg#	55
69) tert-Butylbenzene	17.41	119	889991	208.87	ug/kg#	79
70) 1,2,4-Trimethylbenzene	17.51	105	1051977	211.88	ug/kg	89
71) sec-Butylbenzene	17.51	105	1051977	149.58	ug/kg#	70
72) 4-Isopropyltoluene	18.05	119	1158571	208.00	ug/kg#	88
73) 1,3-Dichlorobenzene	17.97	146	575399	204.54	ug/kg#	94
75) 1,4-Dichlorobenzene	18.15	146	572816	207.42	ug/kg#	92
76) n-Butylbenzene	18.73	91	1141911	209.55	ug/kg	95
77) 1,2-Dichlorobenzene	18.73	146	513665	211.27	ug/kg#	91
78) 1,2-Dibromo-3-chloropropan	20.04	75	52357	227.47	ug/kg	48
79) 1,2,4-Trichlorobenzene	21.41	180	346625	226.98	ug/kg	95
80) Hexachlorobutadiene	21.66	225	202071	216.57	ug/kg	96
81) Naphthalene	21.84	128	643272	188.56	ug/kg	98
82) 1,2,3-Trichlorobenzene	22.19	180	296551	215.12	ug/kg	96

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(#) = qualifier out of range (m) = manual integration  
 3V34017.D 0717WC3.M Wed Oct 17 12:26:06 2018

SS

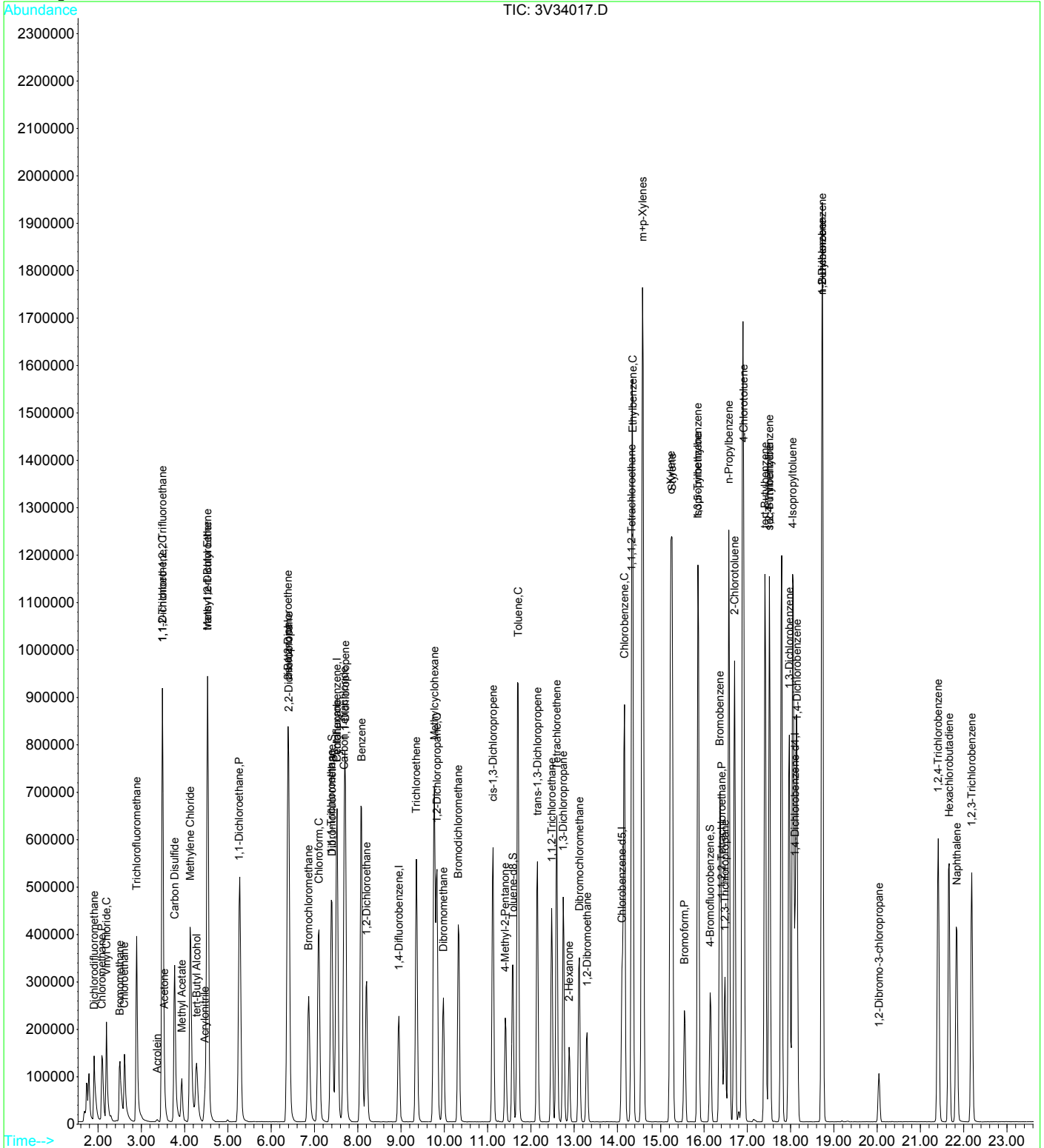
Quantitation Report

Data File : G:\HPCHEM\3\DATA\10112018\3V34017.D  
Acq On : 11 Oct 2018 12:06  
Sample : SEQ-CCV@200  
Misc : soil  
MS Integration Params: RTEINT.P  
Quant Time: Oct 11 16:20 2018

Vial: 72  
Operator: omd  
Inst : GCMS-3  
Multiplr: 1.00

Quant Results File: 0717WC3.RES

Method : G:\HPCHEM\3\METHODS\0717WC3.M (RTE Integrator)  
Title : VOC's by EPA Method 8260C  
Last Update : Wed Oct 10 16:46:14 2018  
Response via : Initial Calibration



# INTERNAL STANDARD REPORT

**Analysis Class: VOLATILES**

**Analysis Batch: S8J1704**

Lab Number	File ID	PFB		DFB		CHB-D5		DCB-D4		Area	Rt	Area	Rt
		Area	Rt	Area	Rt	Area	Rt	Area	Rt				
B8J1111-BLK1	3V33994.D	145721	7.49	275232	8.91	144968	14.07	125977	18.06				
8100452-01	3V34002.D	150003	7.49	284129	8.92	152189	14.07	132035	18.06				
8100452-02	3V34003.D	147411	7.49	282053	8.92	150180	14.07	126429	18.06				
8100452-05	3V34004.D	153714	7.49	287940	8.92	152713	14.07	134717	18.08				
8100452-06	3V34005.D	121951	7.51	230145	8.92	121749	14.07	109706	18.06				
8100452-07	3V34006.D	140882	7.51	262094	8.92	139480	14.07	114467	18.08				
8100452-11	3V34008.D	147505	7.49	269462	8.92	143908	14.07	125562	18.08				
8100452-12	3V34009.D	137633	7.51	257853	8.92	137391	14.07	119681	18.08				
8100452-14	3V34010.D	149345	7.51	275625	8.92	150050	14.09	131114	18.08				

15  
15.9.

Reference Std ID
S8J1704-CCV1

Internal Standard	Ref Area	Area Limit	Ref RT	RT Limit
PFB	Pentafluorobenzene	157222	78,611.00 - 314,444.00	7.48 0.50
DFB	1,4-Difluorobenzene	291493	145,746.50 - 582,986.00	8.91 0.50
CHB-D5	Chlorobenzene-d5	151386	75,693.00 - 302,772.00	14.07 0.50
DCB-D4	1,4-Dichlorobenzene-d4	137476	68,738.00 - 274,952.00	18.06 0.50

\* - Outside of QC Limits

F-VIII

# INTERNAL STANDARD REPORT

**Analysis Class: VOLATILES**

**Analysis Batch: S8J1706**

Lab Number	File ID	PFB		DFB		CHB-D5		DCB-D4		Area	Rt	Area	Rt
		Area	Rt	Area	Rt	Area	Rt	Area	Rt				
B8J1141-BLK1	3V34019.D	160008	7.54	297018	8.95	159603	14.12	134115	18.11				
8100452-08	3V34020.D	157363	7.54	288376	8.95	154637	14.1	136983	18.11				

15  
15.9.

Reference Std ID
S8J1706-CCV1

Internal Standard	Ref Area	Area Limit	Ref RT	RT Limit
PFB	Pentafluorobenzene	161132	7.52	0.50
DFB	1,4-Difluorobenzene	302494	8.95	0.50
CHB-D5	Chlorobenzene-d5	165068	14.1	0.50
DCB-D4	1,4-Dichlorobenzene-d4	143883	18.11	0.50

\* - Outside of QC Limits

F-VIII



AQUA PRO-TECH LABORATORIES  
*Certified Environmental Testing*

# GENERAL CHEMISTRY

Peak Environmental  
Work Order: 8100452  
Project: Ridgewood

# ANALYSIS DATA SHEET

## General Chemistry

Client: Peak Environmental  
 Project: Ridgewood  
 Work Order: 8100452

### General Chemistry

#### 8100452-01 (Soil) - NTP-1A

Analyte	Units	Conc.	RL	DF	Q	Analyzed	Method
Percent Solids	%	89.9		1		10/11/18 10:54	Gravimetric
Cyanide	mg/kg dry	ND	0.278	1	U	10/11/18 13:30	SW 846 9014

#### 8100452-02 (Soil) - NTP-2A

Analyte	Units	Conc.	RL	DF	Q	Analyzed	Method
Percent Solids	%	92.5		1		10/11/18 10:54	Gravimetric

#### 8100452-03 (Soil) - NTP-2B

Analyte	Units	Conc.	RL	DF	Q	Analyzed	Method
Percent Solids	%	92.3		1		10/11/18 10:54	Gravimetric

#### 8100452-04 (Soil) - NTP-3B

Analyte	Units	Conc.	RL	DF	Q	Analyzed	Method
Percent Solids	%	91.3		1		10/11/18 10:54	Gravimetric

#### 8100452-05 (Soil) - NTP-4B

Analyte	Units	Conc.	RL	DF	Q	Analyzed	Method
Percent Solids	%	92.0		1		10/11/18 10:54	Gravimetric

#### 8100452-06 (Soil) - NTP-6

Analyte	Units	Conc.	RL	DF	Q	Analyzed	Method
Cyanide	mg/kg dry	ND	0.285	1	U	10/11/18 13:30	SW 846 9014
Percent Solids	%	87.7		1		10/11/18 10:54	Gravimetric

#### 8100452-07 (Soil) - NTP-7

Analyte	Units	Conc.	RL	DF	Q	Analyzed	Method
Percent Solids	%	91.4		1		10/11/18 10:54	Gravimetric

#### 8100452-08 (Soil) - STP-1B

Analyte	Units	Conc.	RL	DF	Q	Analyzed	Method
Percent Solids	%	89.6		1		10/11/18 10:54	Gravimetric

#### 8100452-09 (Soil) - STP-2B

Analyte	Units	Conc.	RL	DF	Q	Analyzed	Method
Percent Solids	%	91.5		1		10/11/18 10:54	Gravimetric

#### 8100452-10 (Soil) - STP-3B

Analyte	Units	Conc.	RL	DF	Q	Analyzed	Method
Percent Solids	%	91.5		1		10/11/18 10:54	Gravimetric

#### 8100452-11 (Soil) - STP-4A

Analyte	Units	Conc.	RL	DF	Q	Analyzed	Method
Percent Solids	%	90.6		1		10/11/18 10:54	Gravimetric

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

16  
16.1



**General Chemistry (Con't)**

**8100452-12 (Soil) - STP-4B**

Analyte	Units	Conc.	RL	DF	Q	Analyzed	Method
Cyanide	mg/kg dry	ND	0.273	1	U	10/11/18 13:30	SW 846 9014
Percent Solids	%	91.7		1		10/11/18 10:54	Gravimetric

**8100452-13 (Soil) - STP-5**

Analyte	Units	Conc.	RL	DF	Q	Analyzed	Method
Percent Solids	%	92.6		1		10/11/18 10:54	Gravimetric

**8100452-14 (Soil) - STP-7**

Analyte	Units	Conc.	RL	DF	Q	Analyzed	Method
Percent Solids	%	92.9		1		10/11/18 10:54	Gravimetric
Cyanide	mg/kg dry	ND	0.269	1	U	10/11/18 13:30	SW 846 9014

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-I

**Aqua Pro-Tech Laboratories**

**General Chemistry - Quality Control**

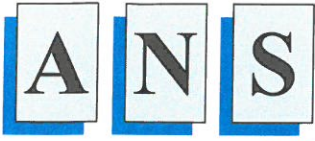
<b>Cyanide</b>		Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch B8J1057</b>		Prepared & Analyzed: 10/10/2018								
B8J1057-MSD1	<b>Source: 8100324-04</b>	2.98	0.313	mg/kg dry	3.13	ND	95.0	75-125	0.00	20
B8J1057-BLK1		ND	0.250	mg/kg wet						
B8J1057-MS1	<b>Source: 8100324-04</b>	2.98	0.313	mg/kg dry	3.13	ND	95.0	75-125		
B8J1057-DUP1	<b>Source: 8100324-04</b>	ND	0.313	mg/kg dry		ND				30
B8J1057-BS1		2.38	0.250	mg/kg wet	2.50		95.0	80-120		

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit  
 RL - Reporting limit

F-III

**APPENDIX C**  
**BERGEN COMMUNITY COLLEGE ANALYTICAL DATA**



**CONSULTANTS, INC.**  
4405 South Clinton Avenue  
South Plainfield, NJ 07080

**Tel: (800) 545-ATUL**  
**(908) 754-8383**  
**Fax: (908) 754-8633**

**NJ EDA Approved Testing Laboratory • MBE/DBE Certified • NJ DEP Certified**  
[www.ANSConsultants.net](http://www.ANSConsultants.net)

Soil, Concrete, Masonry, Rebar, Asphalt, Structural Steel, Precast, Piles, Caissons, Fire-proofing, Roofing, Soil Boring, Concrete/Rock Coring, UST Removal, Environmental Testing & Reports

October 8, 2019

Village of Ridgewood  
131 North Maple Avenue  
Ridgewood, NJ 07450

Attn: Mr. Chris Rutishauser, P.E. CPWM

**Re: "Clean Fill" Testing of Soil Sample-TAL/TCL Test**

Soil sample marked as # ANS-5326-S1  
Bergen Community College

Dear Mr. Rutishauser,

Enclosed, please find a laboratory test report for one composite soil sample prepared from 5-point grab samples on September 27, 2019 for the project referenced above. The primary purpose of the sampling and analytical work was to determine the presence of any hazardous contaminants in the soil.

Sample was analyzed for Target Compound List (TCL), Target Analyte List (TAL), Total Petroleum Hydrocarbon (TPHC- by EPH Method), pH, Chromium Hexavalent & Chromium Trivalent. Test results were reviewed against N.J. D.E.P. Residential, Non-Residential Direct Contact Soil Remediation Standard and Impact to Groundwater soil screening level criteria effective from September 18, 2017.

Contamination was not encountered exceeding NJDEP Residential and Non-Residential Standards in this sample.

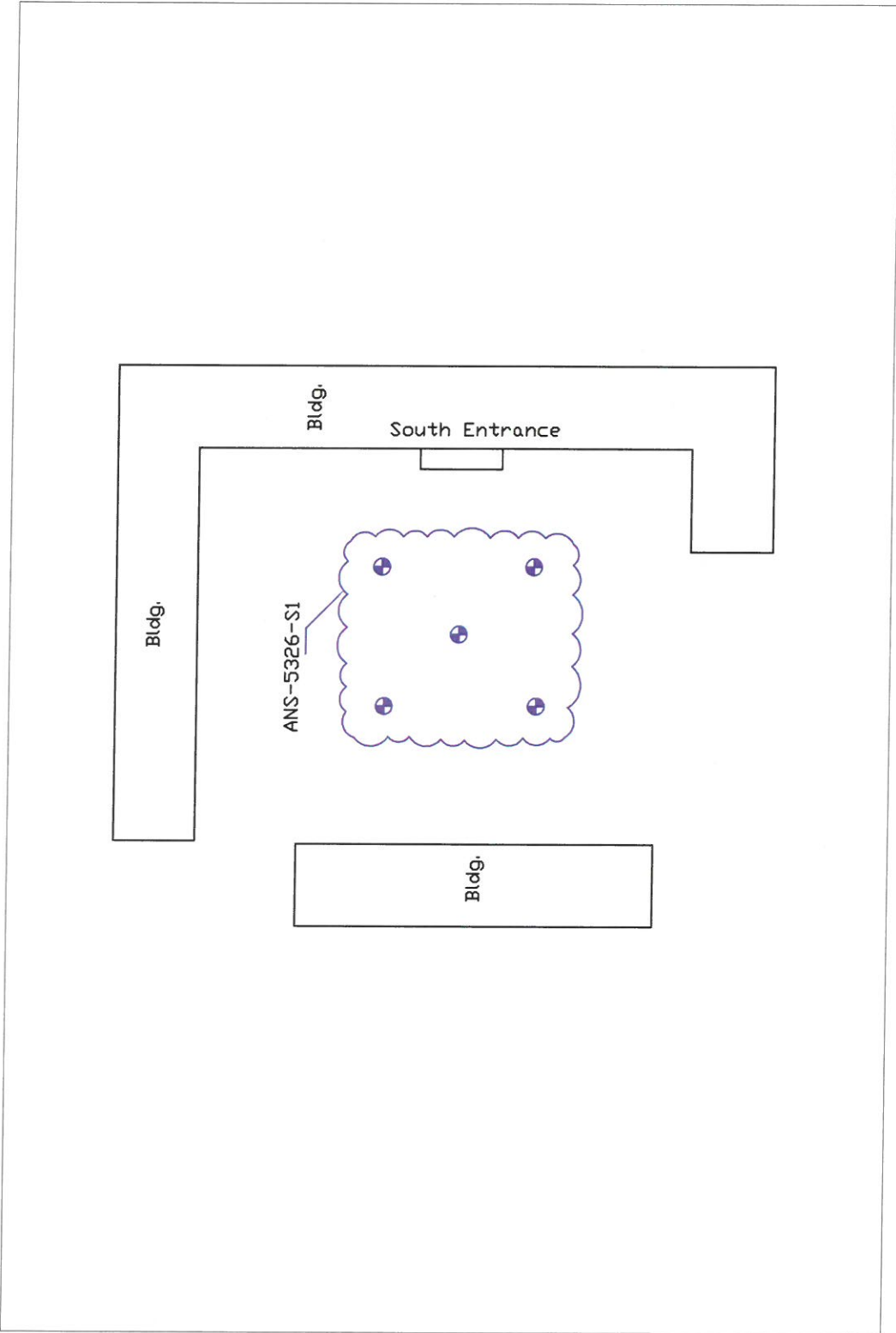
However, Aluminum, Manganese and Mercury exceeded Impact to Groundwater soil screening level criteria; but the Groundwater Quality Standards (GWQS) for Aluminum and Manganese are secondary, that is they are not based on health considerations. Additionally, these elements may be found as background contaminants. Therefore, Department does not require to address IGW pathway for these contaminants unless there is cause to believe that their presence is due to a site discharge.

Should you have any question or require additional information, please do not hesitate to contact the undersigned at (908) 754 - 8383.

Sincerely,  
ANS CONSULTANTS, INC.

Atul N Shah, PE, F.ASCE  
President  
NJ PE License #24GE03443900  
ANS/np

File: ANS-5326. TAL-TCL.01



**SOIL BORING LOCATION PLAN**  
SCALE: N.T.S

**LEGEND:**  
⊕ Soil Boring Location

CLIENT: Village of Ridgewood
PROJECT: 131 North Maple Ave, Ridgewood, NJ
ANS CONSULTANTS INC. 4405 SOUTH CLINTON AVE SO. PLAINFIELD, NJ, 07080
PHONE: (908) 754 8383 - FAX: (908) 754 8633
BY: Dharmin Parekh
DATE: 09/27/2019
Project No: ANS-5326

Client: Village of Ridgewood  
 Project: Bergen Community College  
 Date:10/8/2019  
 File No: ANS-5326

Sample Collected: 9/27/2019

Work Order 9091335		NJDEP Soil Remediation Standards 2017						
Lab: Aqua Pro-Tech Laboratories		NJDEP Residential Direct Contact Standard 9/2017	NJDEP Non-Residential Direct Contact Standard 9/2017	NJDEP Impact To Ground Water Standard 11/2013	9091335-01			
Client: ANS Consultants - 131 North Maple Ave, Ridgewood, NY					ANS-5326-S1			
CAS#	Compound							
Extractable Petroleum Hydrocarbons Category 2 (mg/kg)					Result	Qualifier	MDL	RL
NJDEP-EPH2 Total EPH		NA	NA	NA	29.3		10.5	21.1
General Chemistry (mg/kg)					Result	Qualifier	MDL	RL
18540-29-9	Chromium, Hexavalent	240	20	As spec.	0.423	U		0.423
57-12-5	Cyanide	47	680	20	0.263	U		0.263
General Chemistry (%)					Result	Qualifier	MDL	RL
PERSOL	Percent Solids	NA	NA	NA	94.9			
General Chemistry (pH Units)					Result	Qualifier	MDL	RL
	pH	NA	NA	NA	7.64		0.01	0.01
General Chemistry (mV)					Result	Qualifier	MDL	RL
	Redox Potential	NA	NA	NA	164			-1000
PCBs (mg/kg)					Result	Qualifier	MDL	RL
12674-11-2	Aroclor-1016	0.2	1	0.2	0.000619	U	0.000619	0.0348
11104-28-2	Aroclor-1221	0.2	1	0.2	0.00107	U	0.00107	0.0348
11141-16-5	Aroclor-1232	0.2	1	0.2	0.000819	U	0.000819	0.0348
53469-21-9	Aroclor-1242	0.2	1	0.2	0.00118	U	0.00118	0.0348
12672-29-6	Aroclor-1248	0.2	1	0.2	0.000815	U	0.000815	0.0348
11097-69-1	Aroclor-1254	0.2	1	0.2	0.00124	U	0.00124	0.0348
11096-82-5	Aroclor-1260	0.2	1	0.2	0.000917	U	0.000917	0.0348
37324-23-5	Aroclor-1262	0.2	1	0.2	0.00134	U	0.00134	0.0348
11100-14-4	Aroclor-1268	0.2	1	0.2	0.000703	U	0.000703	0.0348
1336-36-3	Total PCBs	0.2	1	0.2	0.000619	U	0.000619	0.0348
Pesticides (mg/kg)					Result	Qualifier	MDL	RL
72-54-8	4,4'-DDD	3	13	4	0.0181		0.000829	0.00137
72-55-9	4,4'-DDE	2	9	18	0.158	D	0.00969	0.0137
50-29-3	4,4'-DDT [2C]	2	8	11	0.0102		0.000574	0.00137
309-00-2	Aldrin	0.04	0.2	0.2	0.00085	U	0.00085	0.00137
319-84-6	alpha-BHC	0.1	0.5	0.002	0.00053	U	0.00053	0.00137
319-85-7	beta-BHC	0.4	2	0.002	0.00135	U	0.00135	0.00137
57-74-9	Chlordane	0.2	1	0.05	0.00092	U	0.00092	0.00137
319-86-8	delta-BHC	NA	NA	NA	0.00106	U	0.00106	0.00137
60-57-1	Dieldrin	0.04	0.2	0.003	0.000737	U	0.000737	0.00137
959-98-8	Endosulfan I	470	6800	4	0.000948	U	0.000948	0.00137
33213-65-9	Endosulfan II	470	6800	4	0.000745	U	0.000745	0.00137
1031-07-8	Endosulfan sulfate	470	6800	2	0.000745	U	0.000745	0.00137
72-20-8	Endrin	23	340	1	0.000703	U	0.000703	0.00137
7421-93-4	Endrin aldehyde	NA	NA	NA	0.000585	U	0.000585	0.00137
53494-70-5	Endrin ketone	NA	NA	NA	0.000835	U	0.000835	0.00137
58-89-9	gamma-BHC (Lindane)	0.4	2	0.002	0.000626	U	0.000626	0.00137
76-44-8	Heptachlor	0.1	0.7	0.5	0.000801	U	0.000801	0.00137
1024-57-3	Heptachlor Epoxide	0.07	0.3	0.01	0.000856	U	0.000856	0.00137
72-43-5	Methoxychlor	390	5700	160	0.000871	U	0.000871	0.00137
8001-35-2	Toxaphene	0.6	3	0.3	0.0213	U	0.0213	0.0695
Semivolatile Organics - GC/MS (mg/kg)					Result	Qualifier	MDL	RL
58-90-2	2,3,4,6-Tetrachlorophenol	NA	NA	NA	0.0216	U	0.0216	0.14
95-95-4	2,4,5-Trichlorophenol	6100	68000	68	0.0191	U	0.0191	0.14
88-06-2	2,4,6-Trichlorophenol	19	74	0.2	0.00878	U	0.00878	0.14
120-83-2	2,4-Dichlorophenol	180	2100	0.2	0.0141	U	0.0141	0.14
105-67-9	2,4-Dimethylphenol	1200	14000	1	0.0138	U	0.0138	0.14
51-28-5	2,4-Dinitrophenol	120	1400	0.3	0.0202	U	0.0202	0.703
121-14-2	2,4-Dinitrotoluene	0.7	3	0.2	0.015	U	0.015	0.14
606-20-2	2,6-Dinitrotoluene	0.7	3	0.2	0.0335	U	0.0335	0.14
91-58-7	2-Chloronaphthalene	NA	NA	NA	0.0161	U	0.0161	0.14
95-57-8	2-Chlorophenol	310	2200	0.8	0.0185	U	0.0185	0.14
91-57-6	2-Methylnaphthalene	230	2400	8	0.0336	U	0.0336	0.211
95-48-7	2-Methylphenol	310	3400	NA	0.0277	U	0.0277	0.14
88-74-4	2-Nitroaniline	39	23000	NA	0.0113	U	0.0113	0.14

Work Order 9091335		NJDEP Soil Remediation Standards 2017					
Lab: Aqua Pro-Tech Laboratories		NJDEP Residential Direct Contact Standard 9/2017	NJDEP Non-Residential Direct Contact Standard 9/2017	NJDEP Impact To Ground Water Standard 11/2013	9091335-01		
Client: ANS Consultants - 131 North Maple Ave, Ridgewood, NY					ANS-5326-S1		
CAS#	Compound				09/27/2019 13:00		
88-75-5	2-Nitrophenol	NA	NA	NA	0.0156	U	0.0156 0.14
91-94-1	3,3'-Dichlorobenzidine	1	4	0.2	0.0147	U	0.0147 0.14
106-44-5	3+4-Methylphenol	31	340	NA	0.0257	U	0.0257 0.14
99-09-2	3-Nitroaniline	NA	NA	NA	0.026	U	0.026 0.14
534-52-1	4,6-Dinitro-2-methylphenol	6	68	0.3	0.0264	U	0.0264 0.351
101-55-3	4-Bromophenyl-phenyl ether	NA	NA	NA	0.02	U	0.02 0.14
59-50-7	4-Chloro-3-methylphenol	NA	NA	NA	0.0221	U	0.0221 0.14
106-47-8	4-Chloroaniline	NA	NA	NA	0.00491	U	0.00491 0.14
7005-72-3	4-Chlorophenyl phenyl ether	NA	NA	NA	0.00757	U	0.00757 0.14
100-01-6	4-Nitroaniline	NA	NA	NA	0.0702	U	0.0702 0.14
100-02-7	4-Nitrophenol	NA	NA	NA	0.00898	U	0.00898 0.14
83-32-9	Acenaphthene	3400	37000	110	0.008	U	0.008 0.14
208-96-8	Acenaphthylene	NA	300000	NA	0.00488	U	0.00488 0.14
98-86-2	Acetophenone	2	5	3	0.0139	U	0.0139 0.14
120-12-7	Anthracene	17000	30000	2400	0.0203	U	0.0203 0.14
1912-24-9	Atrazine	210	2400	0.2	0.0132	U	0.0132 0.14
100-52-7	Benzaldehyde	6100	68000	NA	0.0431	U	0.0431 0.14
56-55-3	Benzo(a)anthracene	5	17	0.8	0.0141	U	0.0141 0.14
50-32-8	Benzo(a)pyrene	0.5	2	0.2	0.0244	U	0.0244 0.14
205-99-2	Benzo(b)fluoranthene	5	17	2	0.0197	U	0.0197 0.14
191-24-2	Benzo(g,h,i)perylene	380000	30000	NA	0.0114	U	0.0114 0.14
207-08-9	Benzo(k)fluoranthene	45	170	25	0.0161	U	0.0161 0.14
92-52-4	Biphenyl	61	240	140	0.0123	U	0.0123 0.14
111-91-1	bis(2-chloroethoxy)methane	NA	NA	NA	0.0194	U	0.0194 0.14
111-44-4	bis(2-chloroethyl)ether	0.4	2	0.2	0.0154	U	0.0154 0.14
108-60-1	bis(2-chloroisopropyl)ether	23	67	5	0.0505	U	0.0505 0.14
117-81-7	bis(2-ethylhexyl)phthalate	35	140	1200	0.028	U	0.028 0.14
85-68-7	Butylbenzylphthalate	1200	14000	230	0.0127	U	0.0127 0.14
105-60-2	Caprolactam	31000	340000	12	0.0181	U	0.0181 0.14
86-74-8	Carbazole	24	96	NA	0.027	U	0.027 0.351
218-01-9	Chrysene	450	1700	80	0.00961	U	0.00961 0.14
53-70-3	Dibenzo(a,h)anthracene	0.5	2	0.8	0.0139	U	0.0139 0.14
132-64-9	Dibenzofuran	NA	NA	NA	0.00835	U	0.00835 0.14
84-66-2	Diethylphthalate	49000	550000	88	0.0272	U	0.0272 0.14
131-11-3	Dimethylphthalate	NA	NA	NA	0.0087	U	0.0087 0.14
84-74-2	Di-n-butylphthalate	6100	68000	760	0.0573	U	0.0573 0.14
117-84-0	Di-n-octylphthalate	2400	27000	3300	0.0288	U	0.0288 0.14
206-44-0	Fluoranthene	2300	24000	1300	0.0132	U	0.0132 0.14
86-73-7	Fluorene	2300	24000	170	0.0117	U	0.0117 0.14
118-74-1	Hexachlorobenzene	0.3	1	0.2	0.0183	U	0.0183 0.14
87-68-3	Hexachlorobutadiene	6	25	0.9	0.0673	U	0.0673 0.14
77-47-4	Hexachlorocyclopentadiene	45	110	320	0.0585	U	0.0585 0.351
67-72-1	Hexachloroethane	12	48	0.2	0.0154	U	0.0154 0.14
193-39-5	Indeno(1,2,3-cd)pyrene	5	17	7	0.0151	U	0.0151 0.14
78-59-1	Isophorone	510	2000	0.2	0.00919	U	0.00919 0.14
91-20-3	Naphthalene	6	17	25	0.0104	U	0.0104 0.14
98-95-3	Nitrobenzene	5	14	0.2	0.0238	U	0.0238 0.14
621-64-7	n-Nitroso-di-n-propylamine	0.2	0.3	0.2	0.00751	U	0.00751 0.14
86-30-6	n-Nitrosodiphenylamine	99	390	0.4	0.0299	U	0.0299 0.14
87-86-5	Pentachlorophenol	0.9	3	0.3	0.0193	U	0.0193 0.351
85-01-8	Phenanthrene	NA	300000	NA	0.0184	U	0.0184 0.14
108-95-2	Phenol	18000	210000	8	0.0114	U	0.0114 0.14
129-00-0	Pyrene	1700	18000	840	0.0103	U	0.0103 0.14
000123-95-5	Octadecanoic acid, butyl ester				13.2	J	
	unknown (01)				16.5	J	
	unknown (02)				0.544	J	
NA	Tentatively Identified Compounds				30.2	J	

Client: Village of Ridgewood  
 Project: Bergen Community College  
 Date: 10/8/2019  
 File No: ANS-5326

Sample Collected: 9/27/2019

Work Order 9091335		NJDEP Soil Remediation Standards 2017						
Lab: Aqua Pro-Tech Laboratories		NJDEP Residential Direct Contact Standard 9/2017	NJDEP Non-Residential Direct Contact Standard 9/2017	NJDEP Impact To Ground Water Standard 11/2013	9091335-01			
Client: ANS Consultants - 131 North Maple Ave, Ridgewood, NY					ANS-5326-S1			
CAS#	Compound				09/27/2019 13:00			
Total Metals (mg/kg)					Result	Qualifier	RL	
7429-90-5	Aluminum	78000	NA	6000	7610		2.74	
7440-36-0	Antimony	31	450	6	1.37	U	1.37	
7440-38-2	Arsenic	19	19	19	4.06		0.549	
7440-39-3	Barium	16000	59000	2100	51.6		0.549	
7440-41-7	Beryllium	16	140	0.7	0.235		0.0274	
7440-43-9	Cadmium	78	78	2	0.274	U	0.274	
7440-70-2	Calcium	NA	NA	NA	3370		27.4	
7440-47-3	Chromium	120000	NA	s spec.	15.0		0.274	
7440-48-4	Cobalt	1600	590	90	4.28		0.219	
7440-50-8	Copper	3100	45000	11000	12.3		0.274	
7439-89-6	Iron	NA	NA	NA	10600		5.49	
7439-92-1	Lead	400	800	90	24.1		1.37	
7439-95-4	Magnesium	NA	NA	NA	2270		54.9	
7439-96-5	Manganese	11000	5900	65	175		0.274	
7439-97-6	Mercury	23	65	0.1	0.615		0.0516	
7440-02-0	Nickel	1600	23000	48	8.42		0.137	
7440-09-7	Potassium	NA	NA	NA	1350		110	
7782-49-2	Selenium	390	5700	11	1.37	U	1.37	
7440-22-4	Silver	390	5700	1	0.549	U	0.549	
7440-23-5	Sodium	NA	NA	NA	103		54.9	
7440-28-0	Thallium	NA	NA	3	1.37	U	1.37	
7440-62-2	Vanadium	78	1100	NA	18.0		0.549	
7440-66-6	Zinc	23000	110000	930	36.8		0.823	
Volatile Organics - GC/MS (mg/kg)					Result	Qualifi	MDL	RL
71-55-6	1,1,1-Trichloroethane	160000	NA	0.3	0.00029	U	0.00029	0.00199
79-34-5	1,1,1,2-Tetrachloroethane	1	3	0.007	0.000274	U	0.000274	0.00199
76-13-1	1,1,2-Trichloro-1,2,2 Trifluoroethane	NA	NA	NA	0.000851	U	0.000851	0.00199
79-00-5	1,1,2-Trichloroethane	2	6	0.02	0.000335	U	0.000335	0.00199
75-34-3	1,1-Dichloroethane	8	24	0.2	0.00029	U	0.00029	0.00199
75-35-4	1,1-Dichloroethene	11	150	0.008	0.000368	U	0.000368	0.00199
87-61-6	1,2,3-Trichlorobenzene	NA	NA	NA	0.000429	U	0.000429	0.00199
120-82-1	1,2,4-Trichlorobenzene	73	820	0.7	0.00053	U	0.00053	0.00199
95-63-6	1,2,4-Trimethylbenzene	NA	NA	NA	0.000274	U	0.000274	0.00199
96-12-8	1,2-Dibromo-3-chloropropane	0.08	0.2	0.005	0.000485	U	0.000485	0.00497
106-93-4	1,2-Dibromoethane	0.008	0.04	0.005	0.00025	U	0.00025	0.00199
95-50-1	1,2-Dichlorobenzene	5300	59000	17	0.000351	U	0.000351	0.00199
107-06-2	1,2-Dichloroethane	0.9	3	0.005	0.00028	U	0.00028	0.00199
78-87-5	1,2-Dichloropropane	2	5	0.005	0.000326	U	0.000326	0.00199
541-73-1	1,3-Dichlorobenzene	5300	59000	19	0.000146	U	0.000146	0.00199
106-46-7	1,4-Dichlorobenzene	5	13	2	0.000286	U	0.000286	0.00199
78-93-3	2-Butanone	3100	44000	0.9	0.000324	U	0.000324	0.00497
591-78-6	2-Hexanone	NA	NA	NA	0.000186	U	0.000186	0.00199
108-10-1	4-Methyl-2-pentanone	NA	NA	NA	0.000248	U	0.000248	0.00199
67-64-1	Acetone	70000	NA	19	0.000602	U	0.000602	0.00497
71-43-2	Benzene	2	5	0.005	0.000181	U	0.000181	0.00199
74-97-5	Bromochloromethane	NA	NA	NA	0.000367	U	0.000367	0.00199
75-27-4	Bromodichloromethane	1	3	0.005	0.000249	U	0.000249	0.00199
75-25-2	Bromoform	81	280	0.03	0.000349	U	0.000349	0.00199
74-83-9	Bromomethane	25	59	0.04	0.000573	U	0.000573	0.00199
75-15-0	Carbon disulfide	7800	110000	6	0.000285	U	0.000285	0.00199
56-23-5	Carbon Tetrachloride	2	4	0.005	0.000299	U	0.000299	0.00199
108-90-7	Chlorobenzene	510	7400	0.6	0.000288	U	0.000288	0.00199
124-48-1	Chlorodibromomethane	3	8	0.005	0.000244	U	0.000244	0.00199
75-00-3	Chloroethane	220	1100	NA	0.000339	U	0.000339	0.00199
67-66-3	Chloroform	0.6	2	0.4	0.000334	U	0.000334	0.00199
74-87-3	Chloromethane	4	12	NA	0.000765	U	0.000765	0.00199



Client: Village of Ridgewood  
 Project: Bergen Community College  
 Date: 10/8/2019  
 File No: ANS-5326

Sample Collected: 9/27/2019

Work Order 9091335		NJDEP Soil Remediation Standards 2017						
Lab: Aqua Pro-Tech Laboratories		NJDEP Residential Direct Contact Standard 9/2017	NJDEP Non-Residential Direct Contact Standard 9/2017	NJDEP Impact To Ground Water Standard 11/2013	9091335-01			
Client: ANS Consultants - 131 North Maple Ave, Ridgewood, NY					ANS-5326-S1			
CAS#	Compound				09/27/2019 13:00			
156-59-2	cis-1,2-Dichloroethene	230	560	0.3	0.0000961	U	0.0000961	0.00199
10061-01-5	cis-1,3-Dichloropropene	2	7	0.005	0.000251	U	0.000251	0.00199
110-82-7	Cyclohexane	NA	NA	NA	0.00044	U	0.00044	0.00199
75-71-8	Dichlorodifluoromethane	490	230000	39	0.000671	U	0.000671	0.00199
100-41-4	EthylBenzene	7800	110000	13	0.000269	U	0.000269	0.00199
98-82-8	Isopropylbenzene	NA	NA	NA	0.000312	U	0.000312	0.00199
179601-23-1	m+p-Xylenes	12000	170000	19	0.000502	U	0.000502	0.00398
79-20-9	Methyl Acetate	78000	NA	22	0.000263	U	0.000263	0.00199
1634-04-4	Methyl tert-Butyl Ether	110	320	0.2	0.000336	U	0.000336	0.00199
108-87-2	Methylcyclohexane	NA	NA	NA	0.00032	U	0.00032	0.00199
75-09-2	Methylene Chloride	46	230	0.01	0.000597	U	0.000597	0.00199
95-47-6	o-Xylene	12000	170000	19	0.000255	U	0.000255	0.00199
100-42-5	Styrene	90	260	3	0.000284	U	0.000284	0.00199
75-65-0	tert-Butyl alcohol	1400	11000	0.3	0.00417	U	0.00417	0.0199
127-18-4	Tetrachloroethene	43	1500	0.005	0.000197	U	0.000197	0.00199
108-88-3	Toluene	6300	91000	7	0.00016	U	0.00016	0.00199
1330-20-7	Total Xylenes	12000	170000	19	0.000255	U	0.000255	0.00199
156-60-5	trans-1,2-Dichloroethene	300	720	0.6	0.000269	U	0.000269	0.00199
10061-02-6	trans-1,3-Dichloropropene	2	7	0.005	0.00038	U	0.00038	0.00199
79-01-6	Trichloroethene	3	10	0.01	0.000292	U	0.000292	0.00199
75-69-4	Trichlorofluoromethane	23000	340000	34	0.000229	U	0.000229	0.00199
75-01-4	Vinyl chloride	0.7	2	0.005	0.000378	U	0.000378	0.00199
NA	Tentatively Identified Compounds				0.00	J		

**Main Footnotes:**

Standards listed are based upon APL's interpretation of the published documents. APL assumes no liability for the interpretation and/or accuracy of the standards.

**Qualifiers:**

- U - Indicates compound analyzed for but not detected
- J - Indicates estimated value for TICs and all results when detected below the RL
- D - Indicates result is based on a dilution
- E - Concentration exceeds highest calibration standard
- B - Indicates compound found in associated blank
- H - Indicates a Hold Time violation
- P - Indicates a Greater than 25% diff. between 2 GC columns.

APL 9091335



www.aquaprotechlabs.com

TEL: 973.227.0422  
FAX: 973.227.2813

CONTAMINATION LEVEL  
I HIGH I MEDIUM I LOW

### CHAIN OF CUSTODY

CLIENT: ANS Consultants

SEND REPORT TO:

ADDRESS: 4405 South Clinton Ave.  
South Plainfield, NJ 07080

ADDRESS: 4405 South Clinton Ave.  
South Plainfield, NJ 07080

PHONE: 908-754-8383

PHONE: 908-754-8383

E-MAIL: ansgeoinc@yahoo.com  
Nehapatel@ansconsultants.net

FAX: 908-754-8633

PROJECT NAME: 131 North Maple Ave  
Ridgewood NY

SEND INVOICE TO: MR. ATUL SHAH, PE

PROJECT MGR: MR. ATUL SHAH, PE

ADDRESS: Same as above

PROJECT or PO #: ANS-5326

SAMPLED BY: Serge

MATRIX ABBREVIATIONS: D - DRINKING WATER G - GROUNDWATER W - WASTEWATER S - SOIL SL - SLUDGE C - CONCRETE L - LAKE  
Intermediate Reduced Deliverables

APL Lab ID#	Sample Source: Field ID	Date	Time	Sample Type		Matrix	No. of Bottles	Preservative	Analysis Requested
				GRAB	COMPT				
9091335-01	ANS-5326-S1	09/27/2019	1:00 pm	X		S	2, 8 oz. bottles & 3 Encores		TAL/TCL, pH, EPH, Chromium Hex. and Chromium Tri.

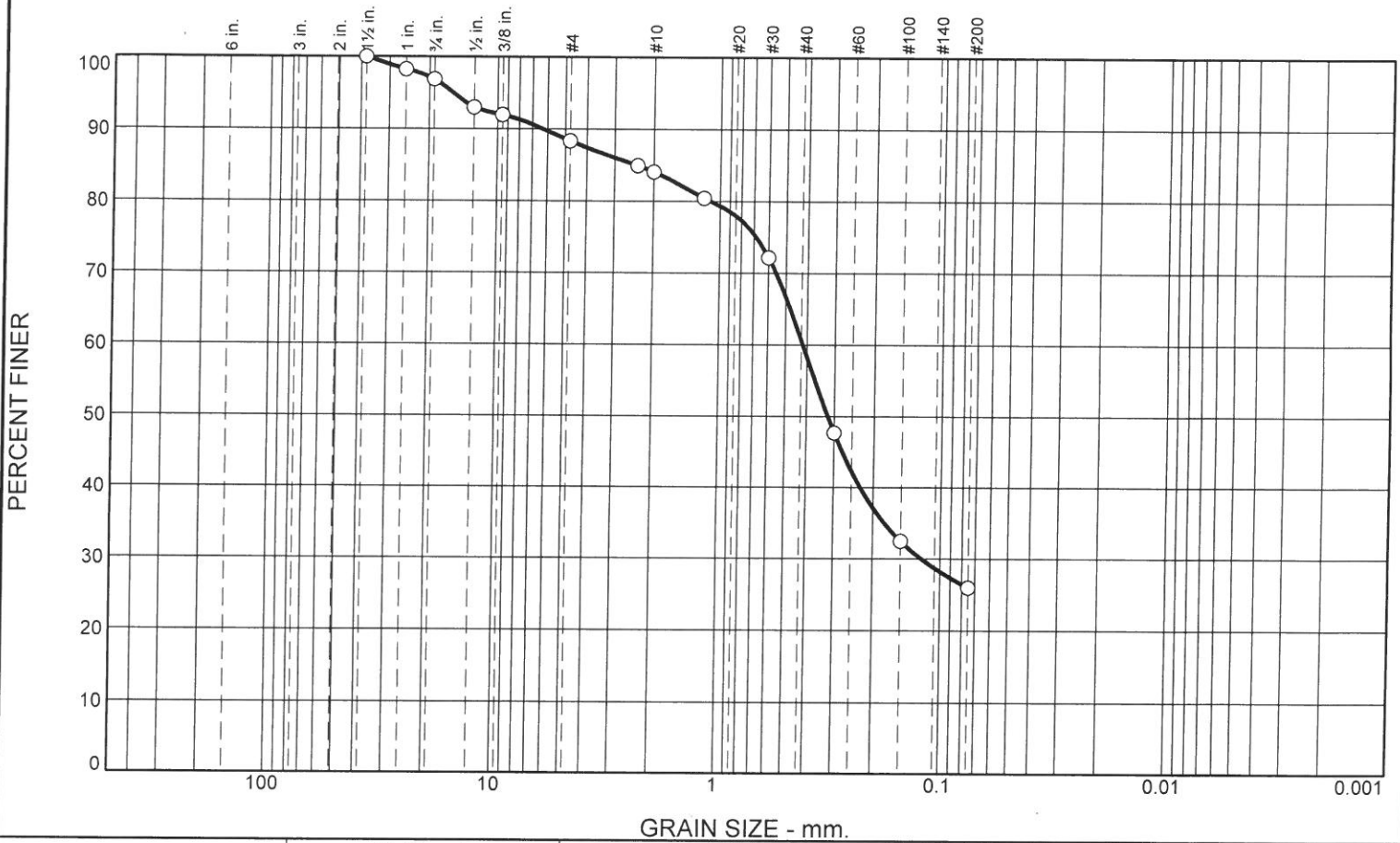
RELINQUISHED BY (Print) *Chermin*  
Signature  
RELINQUISHED BY (Print) *S. P. P. P.*  
Signature  
RELINQUISHED BY (Print) *S. P. P. P.*  
Signature

RECEIVED BY (Print) *S. P. P. P.*  
Signature  
RECEIVED BY (Print) *S. P. P. P.*  
Signature  
RECEIVED BY (Print) *S. P. P. P.*  
Signature

COMMENTS/SPECIAL INSTRUCTIONS  
Cooler Temp. upon receipt at lab 41

CERTIFICATIONS: NELAP (National Environmental Laboratory Accreditation Program) NJDEP #07010 PADEP #68-02903 NYDOH #11634 CTPH #0233 US ARMY  
By signing this Chain of Custody Agreement, customer expressly agrees to pay APL for all charges, reasonably incurred in connection with analysis and reporting for these samples

# Particle Size Distribution Report As per ASTM D 422



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	3.2	8.5	4.2	23.5	34.6	26.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5	100.0		
1	98.2		
3/4	96.8		
1/2	93.0		
3/8	91.9		
#4	88.3		
#8	84.9		
#10	84.1		
#16	80.4		
#30	72.2		
#50	47.6		
#100	32.5		
#200	26.0		

\* (no specification provided)

**Material Description**

Brown in color. silty sand

**Atterberg Limits**

PL= NP      LL= NV      PI= NP

**Coefficients**

D<sub>90</sub>= 6.3186      D<sub>85</sub>= 2.3965      D<sub>60</sub>= 0.4181  
 D<sub>50</sub>= 0.3212      D<sub>30</sub>= 0.1213      D<sub>15</sub>=  
 D<sub>10</sub>=              C<sub>u</sub>=              C<sub>c</sub>=

**Classification**

USCS= SM              AASHTO= A-2-4(0)

**Remarks**

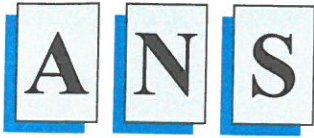
Sample was collected by Mr. Sergy on 09/26/19 and tested on 09/30/19. In-Situ %MC=4.5  
 F.M.=2.05

Source of Sample: On-Site material  
 Sample Number: S-1

Date: 09/30/2019

<b>ANS CONSULTANTS, INC.</b> South Plainfield, New Jersey	Client: Village of Ridgewood
	Project: 131 North Maple Avenue, Ridgewood, NJ
Project No: ANS-5326	Figure 1 F 1

**APPENDIX D**  
**533 WYNDEMERE AVENUE ANALYTICAL DATA**



**CONSULTANTS, INC.**  
 4405 South Clinton Avenue  
 South Plainfield, NJ 07080

**Tel: (800) 545-ATUL**  
**(908) 754-8383**  
**Fax: (908) 754-8633**

**NJ EDA Approved Testing Laboratory • MBE/DBE Certified • NJ DEP Certified**  
[www.ANSConsultants.net](http://www.ANSConsultants.net)

Soil, Concrete, Masonry, Rebar, Asphalt, Structural Steel, Precast, Piles, Caissons, Fire-proofing, Roofing, Soil Boring, Concrete/Rock Coring, UST Removal, Environmental Testing & Reports

May 19, 2021

DJR Renovations LLC  
 340 Fairway Road  
 Ridgewood, NJ 07450

Attn: Mr. Don Rick

**Re: "Clean Fill" Testing of Soil Sample-TAL/TCL Test**  
 Soil sample marked as # ANS-5727-S1  
 533 Wyndmere Avenue  
 Ridgewood, NJ 07450

Dear Mr. Rick,

Enclosed, please find a laboratory test report for one soil sample collected on May 10, 2021 for the project referenced above. Sample ANS-5727-S1 is collected from 8' depth from the testpit. The primary purpose of the sampling and analytical work was to determine the presence of any hazardous contaminants in the soil.

Sample was analyzed for Target Compound List (TCL), Target Analyte List (TAL), Total Petroleum Hydrocarbon (TPHC- by EPH Method), pH, Chromium Hexavalent and Chromium Trivalent. Test results were reviewed against N.J. D.E.P. Residential, Non-Residential Direct Contact Soil Remediation Standard and Impact to Groundwater soil screening level criteria effective from September 18, 2017.

EPH concentration of 117 ppm was noted in this sample. (EPH concentration below fractionation trigger of 1700 ppm).

Contamination was not encountered exceeding NJDEP Residential and Non-Residential Standards in this sample.

However, **Aluminum** and **Manganese** exceeded Impact to Groundwater soil screening level criteria; but the Groundwater Quality Standards (GWQS) for **Aluminum** and **Manganese** are secondary, that is they are not based on health considerations. Additionally, these elements may be found as background contaminants. Therefore, Department does not require to address IGW pathway for these contaminants unless there is cause to believe that their presence is due to a site discharge.

Should you have any question or require additional information, please do not hesitate to contact the undersigned at (908) 754 - 8383.

Sincerely,  
 ANS CONSULTANTS, INC.

Atul Shah, PE, F.ASCE  
 President  
 NJ PE License #24GE03443900  
 ANS/NP

File: ANS-5727. TAL-TCL.01

Work Order 1050518							
Lab: Aqua Pro-Tech Laboratories							
Client: ANS Consultants - 533 Wyndemere Ave, Ridgewood, NJ		NJDEP Soil Remediation Standards 2017					
		NJDEP	NJDEP	NJDEP	1050518-01		
		Residential	Non-Residential	Impact To	ANS-5727-S1		
		Direct Contact	Direct Contact	Ground Water	05/11/2021 00:00		
		Standard	Standard	Standard	Soil		
		9/2017	9/2017	11/2013			
CAS#	Compound						
<b>Extractable Petroleum Hydrocarbons Category 2 (mg/kg)</b>							
NJDEP-EPH2	Total EPH	NA	NA	NA	Result	Qualifier	MDL RL
					117		10.5 21
<b>General Chemistry (%)</b>							
PERSOL	Percent Solids	NA	NA	NA	Result	Qualifier	ZERO
					95.4		
<b>General Chemistry (mg/kg)</b>							
18540-29-9	Chromium, Hexavalent	240	20	s spec.	Result	Qualifier	RL
					0.414	U	0.414
57-12-5	Cyanide	47	680	20	Result	Qualifier	RL
					0.267	U	0.267
<b>General Chemistry (mV)</b>							
	Redox Potential	NA	NA	NA	Result	Qualifier	RL
					189		-1000
<b>General Chemistry (pH Units)</b>							
	pH	NA	NA	NA	Result	Qualifier	RL
					5.30		0.0100
<b>PCBs (mg/kg)</b>							
					Result	Qualifier	MDL RL
12674-11-2	Aroclor-1016	0.2	1	0.2	0.00464	U	0.00464 0.0346
11104-28-2	Aroclor-1221	0.2	1	0.2	0.00913	U	0.00913 0.0346
11141-16-5	Aroclor-1232	0.2	1	0.2	0.0116	U	0.0116 0.0346
53469-21-9	Aroclor-1242	0.2	1	0.2	0.0068	U	0.0068 0.0346
12672-29-6	Aroclor-1248	0.2	1	0.2	0.00711	U	0.00711 0.0346
11097-69-1	Aroclor-1254	0.2	1	0.2	0.00558	U	0.00558 0.0346
11096-82-5	Aroclor-1260	0.2	1	0.2	0.00433	U	0.00433 0.0346
37324-23-5	Aroclor-1262	0.2	1	0.2	0.00931	U	0.00931 0.0346
11100-14-4	Aroclor-1268	0.2	1	0.2	0.00419	U	0.00419 0.0346
1336-36-3	Total PCBs	0.2	1	0.2	0.00323	U	0.00323 0.0346
<b>Pesticides (mg/kg)</b>							
					Result	Qualifier	MDL RL
72-54-8	4,4'-DDD	3	13	4	0.000624	U	0.000624 0.00136
72-55-9	4,4'-DDE	2	9	18	0.000746	U	0.000746 0.00136
50-29-3	4,4'-DDT	2	8	11	0.000963	U	0.000963 0.00136
309-00-2	Aldrin	0.04	0.2	0.2	0.000646	U	0.000646 0.00136
319-84-6	alpha-BHC	0.1	0.5	0.002	0.000406	U	0.000406 0.00136
319-85-7	beta-BHC	0.4	2	0.002	0.000651	U	0.000651 0.00136
57-74-9	Chlordane	0.2	1	0.05	0.000606	U	0.000606 0.00136
319-86-8	delta-BHC	NA	NA	NA	0.000633	U	0.000633 0.00136
60-57-1	Dieldrin	0.04	0.2	0.003	0.000713	U	0.000713 0.00136
959-98-8	Endosulfan I	470	6800	4	0.000644	U	0.000644 0.00136
33213-65-9	Endosulfan II	470	6800	4	0.00062	U	0.00062 0.00136
1031-07-8	Endosulfan sulfate	470	6800	2	0.000513	U	0.000513 0.00136
72-20-8	Endrin	23	340	1	0.000471	U	0.000471 0.00136
7421-93-4	Endrin aldehyde	NA	NA	NA	0.000543	U	0.000543 0.00136
53494-70-5	Endrin ketone	NA	NA	NA	0.00048	U	0.00048 0.00136
58-89-9	gamma-BHC (Lindane)	0.4	2	0.002	0.000432	U	0.000432 0.00136
76-44-8	Heptachlor	0.1	0.7	0.5	0.000365	U	0.000365 0.00136
1024-57-3	Heptachlor Epoxide	0.07	0.3	0.01	0.000688	U	0.000688 0.00136
72-43-5	Methoxychlor	390	5700	160	0.0004	U	0.0004 0.00136
8001-35-2	Toxaphene	0.6	3	0.3	0.0657	U	0.0657 0.0692
<b>Semivolatile Organics - GC/MS (mg/kg)</b>							
					Result	Qualifier	MDL RL
122-66-7	1,2-Diphenylhydrazine	0.7	2	0.7	0.0152	U	0.0152 0.139
58-90-2	2,3,4,6-Tetrachlorophenol	NA	NA	NA	0.0215	U	0.0215 0.139
95-95-4	2,4,5-Trichlorophenol	6100	68000	68	0.019	U	0.019 0.139
88-06-2	2,4,6-Trichlorophenol	19	74	0.2	0.00873	U	0.00873 0.139
120-83-2	2,4-Dichlorophenol	180	2100	0.2	0.0141	U	0.0141 0.139
105-67-9	2,4-Dimethylphenol	1200	14000	1	0.0137	U	0.0137 0.139
51-28-5	2,4-Dinitrophenol	120	1400	0.3	0.0201	U	0.0201 0.699
121-14-2	2,4-Dinitrotoluene	0.7	3	0.2	0.0149	U	0.0149 0.139
606-20-2	2,6-Dinitrotoluene	0.7	3	0.2	0.0333	U	0.0333 0.139
91-58-7	2-Chloronaphthalene	NA	NA	NA	0.016	U	0.016 0.139

Work Order 1050518		NJDEP Soil Remediation Standards 2017						
Lab: Aqua Pro-Tech Laboratories								
Client: ANS Consultants - 533 Wyndemere Ave, Ridgewood, NJ					1050518-01			
		Residential	Non-Residential	Impact To	ANS-5727-S1			
		Direct Contact	Direct Contact	Ground Water	05/11/2021 00:00			
		Standard	Standard	Standard	Soil			
		9/2017	9/2017	11/2013				
CAS#	Compound							
95-57-8	2-Chlorophenol	310	2200	0.8	0.0185	U	0.0185	0.139
91-57-6	2-Methylnaphthalene	230	2400	8	0.0335	U	0.0335	0.21
95-48-7	2-Methylphenol	310	3400	NA	0.0276	U	0.0276	0.139
88-74-4	2-Nitroaniline	39	23000	NA	0.0112	U	0.0112	0.139
88-75-5	2-Nitrophenol	NA	NA	NA	0.0155	U	0.0155	0.139
91-94-1	3,3'-Dichlorobenzidine	1	4	0.2	0.0147	U	0.0147	0.139
65794-96-9	3+4-Methylphenol	31	340	NA	0.0256	U	0.0256	0.139
99-09-2	3-Nitroaniline	NA	NA	NA	0.0259	U	0.0259	0.139
534-52-1	4,6-Dinitro-2-methylphenol	6	68	0.3	0.0263	U	0.0263	0.349
101-55-3	4-Bromophenyl-phenyl ether	NA	NA	NA	0.0199	U	0.0199	0.139
59-50-7	4-Chloro-3-methylphenol	NA	NA	NA	0.022	U	0.022	0.139
106-47-8	4-Chloroaniline	NA	NA	NA	0.00489	U	0.00489	0.139
7005-72-3	4-Chlorophenyl phenyl ether	NA	NA	NA	0.00754	U	0.00754	0.139
100-01-6	4-Nitroaniline	NA	NA	NA	0.0698	U	0.0698	0.139
100-02-7	4-Nitrophenol	NA	NA	NA	0.00893	U	0.00893	0.139
83-32-9	Acenaphthene	3400	37000	110	0.00796	U	0.00796	0.139
208-96-8	Acenaphthylene	NA	300000	NA	0.00485	U	0.00485	0.139
98-86-2	Acetophenone	2	5	3	0.0138	U	0.0138	0.139
120-12-7	Anthracene	17000	30000	2400	0.0202	U	0.0202	0.139
1912-24-9	Atrazine	210	2400	0.2	0.0131	U	0.0131	0.139
100-52-7	Benzaldehyde	6100	68000	NA	0.0429	U	0.0429	0.139
92-87-5	Benidine	0.7	0.7	0.7	0.319	U	0.319	0.349
56-55-3	Benzo(a)anthracene	5	17	0.8	0.0141	U	0.0141	0.139
50-32-8	Benzo(a)pyrene	0.5	2	0.2	0.0243	U	0.0243	0.139
205-99-2	Benzo(b)fluoranthene	5	17	2	0.0196	U	0.0196	0.139
191-24-2	Benzo(g,h,i)perylene	380000	30000	NA	0.0113	U	0.0113	0.139
207-08-9	Benzo(k)fluoranthene	45	170	25	0.016	U	0.016	0.139
92-52-4	Biphenyl	61	240	140	0.0123	U	0.0123	0.139
111-91-1	bis(2-chloroethoxy)methane	NA	NA	NA	0.0193	U	0.0193	0.139
111-44-4	bis(2-chloroethyl)ether	0.4	2	0.2	0.0153	U	0.0153	0.139
108-60-1	bis(2-chloroisopropyl)ether	23	67	5	0.0502	U	0.0502	0.139
117-81-7	bis(2-ethylhexyl)phthalate	35	140	1200	0.0279	U	0.0279	0.139
85-68-7	Butylbenzylphthalate	1200	14000	230	0.0127	U	0.0127	0.139
105-60-2	Caprolactam	31000	340000	12	0.018	U	0.018	0.139
86-74-8	Carbazole	24	96	NA	0.0268	U	0.0268	0.349
218-01-9	Chrysene	450	1700	80	0.00956	U	0.00956	0.139
53-70-3	Dibenzo(a,h)anthracene	0.5	2	0.8	0.0138	U	0.0138	0.139
132-64-9	Dibenzofuran	NA	NA	NA	0.00832	U	0.00832	0.139
84-66-2	Diethylphthalate	49000	550000	88	0.0271	U	0.0271	0.139
131-11-3	Dimethylphthalate	NA	NA	NA	0.00866	U	0.00866	0.139
84-74-2	Di-n-butylphthalate	6100	68000	760	0.057	U	0.057	0.139
117-84-0	Di-n-octylphthalate	2400	27000	3300	0.0286	U	0.0286	0.139
206-44-0	Fluoranthene	2300	24000	1300	0.0131	U	0.0131	0.139
86-73-7	Fluorene	2300	24000	170	0.0116	U	0.0116	0.139
118-74-1	Hexachlorobenzene	0.3	1	0.2	0.0182	U	0.0182	0.139
87-68-3	Hexachlorobutadiene	6	25	0.9	0.067	U	0.067	0.139
77-47-4	Hexachlorocyclopentadiene	45	110	320	0.0582	U	0.0582	0.349
67-72-1	Hexachloroethane	12	48	0.2	0.0153	U	0.0153	0.139
193-39-5	Indeno(1,2,3-cd)pyrene	5	17	7	0.015	U	0.015	0.139
78-59-1	Isophorone	510	2000	0.2	0.00914	U	0.00914	0.139
91-20-3	Naphthalene	6	17	25	0.0103	U	0.0103	0.139
98-95-3	Nitrobenzene	5	14	0.2	0.0237	U	0.0237	0.139
62-75-9	n-Nitroso-dimethylamine	0.7	0.7	0.7	0.0497	U	0.0497	0.139
621-64-7	n-Nitroso-di-n-propylamine	0.2	0.3	0.2	0.00748	U	0.00748	0.139

Work Order 1050518		NJDEP Soil Remediation Standards 2017						
Lab: Aqua Pro-Tech Laboratories								
Client: ANS Consultants - 533 Wyndemere Ave, Ridgewood, NJ					1050518-01			
		Residential	Non-Residential	Impact To	ANS-5727-S1			
		Direct Contact	Direct Contact	Ground Water	05/11/2021 00:00			
		Standard	Standard	Standard	Soil			
		9/2017	9/2017	11/2013				
CAS#	Compound							
86-30-6	n-Nitrosodiphenylamine	99	390	0.4	0.0298	U	0.0298	0.139
87-86-5	Pentachlorophenol	0.9	3	0.3	0.0192	U	0.0192	0.349
85-01-8	Phenanthrene	NA	300000	NA	0.0184	U	0.0184	0.139
108-95-2	Phenol	18000	210000	8	0.0113	U	0.0113	0.139
129-00-0	Pyrene	1700	18000	840	0.0103	U	0.0103	0.139
NA	Tentatively Identified Compounds				0.00	J		
Total Metals (mg/kg)					Result	Qualifier	RL	
7429-90-5	Aluminum	78000	NA	6000	8420			2.65
7440-36-0	Antimony	31	450	6	1.32	U		1.32
7440-38-2	Arsenic	19	19	19	1.48			1.32
7440-39-3	Barium	16000	59000	2100	34.7			0.530
7440-41-7	Beryllium	16	140	0.7	0.277			0.0265
7440-43-9	Cadmium	78	78	2	0.265	U		0.265
7440-70-2	Calcium	NA	NA	NA	265			26.5
7440-47-3	Chromium	120000	NA	s spec.	7.47			0.265
16065-83-1	Chromium, Trivalent	NA	NA	NA	7.47			0.265
7440-48-4	Cobalt	1600	590	90	3.39			0.212
7440-50-8	Copper	3100	45000	11000	6.75			0.265
7439-89-6	Iron	NA	NA	NA	11400			5.30
7439-92-1	Lead	400	800	90	4.45			1.32
7439-95-4	Magnesium	NA	NA	NA	2200			53.0
7439-96-5	Manganese	11000	5900	65	239			0.265
7439-97-6	Mercury	23	65	0.1	0.0485	U		0.0485
7440-02-0	Nickel	1600	23000	48	8.84			0.132
7440-09-7	Potassium	NA	NA	NA	638			106
7782-49-2	Selenium	390	5700	11	1.32	U		1.32
7440-22-4	Silver	390	5700	1	0.53	U		0.530
7440-23-5	Sodium	NA	NA	NA	73.6			53.0
7440-28-0	Thallium	NA	NA	3	1.32	U		1.32
7440-62-2	Vanadium	78	1100	NA	10.8			0.530
7440-66-6	Zinc	23000	110000	930	24.1			0.794
Volatile Organics - GC/MS (mg/kg)					Result	Qualifier	MDL	RL
71-55-6	1,1,1-Trichloroethane	160000	NA	0.3	0.000201	U	0.000201	0.00138
79-34-5	1,1,2,2-Tetrachloroethane	1	3	0.007	0.00019	U	0.00019	0.00138
76-13-1	1,1,2-Trichloro-1,2,2 Trifluoroethane	NA	NA	NA	0.000591	U	0.000591	0.00138
79-00-5	1,1,2-Trichloroethane	2	6	0.02	0.000232	U	0.000232	0.00138
75-34-3	1,1-Dichloroethane	8	24	0.2	0.000201	U	0.000201	0.00138
75-35-4	1,1-Dichloroethene	11	150	0.008	0.000255	U	0.000255	0.00138
87-61-6	1,2,3-Trichlorobenzene	NA	NA	NA	0.000298	U	0.000298	0.00138
120-82-1	1,2,4-Trichlorobenzene	73	820	0.7	0.000368	U	0.000368	0.00138
95-63-6	1,2,4-Trimethylbenzene	NA	NA	NA	0.00617		0.00019	0.00138
96-12-8	1,2-Dibromo-3-chloropropane	0.08	0.2	0.005	0.000337	U	0.000337	0.00345
106-93-4	1,2-Dibromoethane	0.008	0.04	0.005	0.000174	U	0.000174	0.00138
95-50-1	1,2-Dichlorobenzene	5300	59000	17	0.000244	U	0.000244	0.00138
107-06-2	1,2-Dichloroethane	0.9	3	0.005	0.000195	U	0.000195	0.00138
78-87-5	1,2-Dichloropropane	2	5	0.005	0.000226	U	0.000226	0.00138
541-73-1	1,3-Dichlorobenzene	5300	59000	19	0.000101	U	0.000101	0.00138
106-46-7	1,4-Dichlorobenzene	5	13	2	0.000199	U	0.000199	0.00138
78-93-3	2-Butanone	3100	44000	0.9	0.000225	U	0.000225	0.00345
591-78-6	2-Hexanone	NA	NA	NA	0.000129	U	0.000129	0.00138
108-10-1	4-Methyl-2-pentanone	NA	NA	NA	0.000172	U	0.000172	0.00138
67-64-1	Acetone	70000	NA	19	0.000418	U	0.000418	0.00345
107-02-8	Acrolein	0.5	1	0.5	0.000745	U	0.000745	0.00138
107-13-1	Acrylonitrile	0.9	3	0.5	0.000322	U	0.000322	0.00138



Work Order 1050518		NJDEP Soil Remediation Standards 2017						
Lab: Aqua Pro-Tech Laboratories								
Client: ANS Consultants - 533 Wyndemere Ave, Ridgewood, NJ								
		Residential	Non-Residential	Impact To	1050518-01			
		Direct Contact	Direct Contact	Ground Water	ANS-5727-S1			
		Standard	Standard	Standard	05/11/2021 00:00			
		9/2017	9/2017	11/2013	Soil			
CAS#	Compound							
71-43-2	Benzene	2	5	0.005	0.000126	U	0.000126	0.00138
74-97-5	Bromochloromethane	NA	NA	NA	0.000255	U	0.000255	0.00138
75-27-4	Bromodichloromethane	1	3	0.005	0.000173	U	0.000173	0.00138
75-25-2	Bromoform	81	280	0.03	0.000242	U	0.000242	0.00138
74-83-9	Bromomethane	25	59	0.04	0.000398	U	0.000398	0.00138
75-15-0	Carbon disulfide	7800	110000	6	0.000198	U	0.000198	0.00138
56-23-5	Carbon Tetrachloride	2	4	0.005	0.000208	U	0.000208	0.00138
108-90-7	Chlorobenzene	510	7400	0.6	0.0002	U	0.0002	0.00138
124-48-1	Chlorodibromomethane	3	8	0.005	0.00017	U	0.00017	0.00138
75-00-3	Chloroethane	220	1100	NA	0.000235	U	0.000235	0.00138
67-66-3	Chloroform	0.6	2	0.4	0.000232	U	0.000232	0.00138
74-87-3	Chloromethane	4	12	NA	0.000531	U	0.000531	0.00138
156-59-2	cis-1,2-Dichloroethene	230	560	0.3	0.000667	U	0.000667	0.00138
10061-01-5	cis-1,3-Dichloropropene	2	7	0.005	0.000175	U	0.000175	0.00138
110-82-7	Cyclohexane	NA	NA	NA	0.000306	U	0.000306	0.00138
75-71-8	Dichlorodifluoromethane	490	230000	39	0.000466	U	0.000466	0.00138
100-41-4	EthylBenzene	7800	110000	13	0.00102	J	0.000187	0.00138
98-82-8	Isopropylbenzene	NA	NA	NA	0.000217	U	0.000217	0.00138
179601-23-1	m+p-Xylenes	12000	170000	19	0.00620		0.000348	0.00276
79-20-9	Methyl Acetate	78000	NA	22	0.000183	U	0.000183	0.00138
1634-04-4	Methyl tert-Butyl Ether	110	320	0.2	0.000233	U	0.000233	0.00138
108-87-2	Methylcyclohexane	NA	NA	NA	0.000222	U	0.000222	0.00138
75-09-2	Methylene Chloride	46	230	0.01	0.000415	U	0.000415	0.00138
95-47-6	o-Xylene	12000	170000	19	0.00174		0.000177	0.00138
100-42-5	Styrene	90	260	3	0.000197	U	0.000197	0.00138
75-65-0	tert-Butyl alcohol	1400	11000	0.3	0.0029	U	0.0029	0.0138
127-18-4	Tetrachloroethene	43	1500	0.005	0.000137	U	0.000137	0.00138
108-88-3	Toluene	6300	91000	7	0.000111	U	0.000111	0.00138
1330-20-7	Total Xylenes	12000	170000	19	0.00794		0.000177	0.00138
156-60-5	trans-1,2-Dichloroethene	300	720	0.6	0.000187	U	0.000187	0.00138
10061-02-6	trans-1,3-Dichloropropene	2	7	0.005	0.000264	U	0.000264	0.00138
79-01-6	Trichloroethene	3	10	0.01	0.000203	U	0.000203	0.00138
75-69-4	Trichlorofluoromethane	23000	340000	34	0.000159	U	0.000159	0.00138
75-01-4	Vinyl chloride	0.7	2	0.005	0.000262	U	0.000262	0.00138
NA	Tentatively Identified Compounds				0.00	J		

**Main Footnotes:**

Standards listed are based upon APL's interpretation of the published documents. APL assumes no liability for the interpretation and/or accuracy of the standards.

**Qualifiers:**

- U - Indicates compound analyzed for but not detected
- J - Indicates estimated value for TICs and all results when detected below the RL
- D - Indicates result is based on a dilution
- E - Concentration exceeds highest calibration standard
- B - Indicates compound found in associated blank
- H - Indicates a Hold Time violation
- P - Indicates a Greater than 25% diff. between 2 GC columns.

**APL**

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**APL 1050518**

AQUA PRO-TECH LABORATORIES



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**CONTAMINATION LEVEL**

HIGH  MEDIUM  LOW

**CHAIN OF CUSTODY**

CLIENT: ANS Consultants

ADDRESS: 4405 South Clinton Ave.  
South Plainfield, NJ 07080  
PHONE: 908-754-8383

E-MAIL: ansgeoinc@yahoo.com  
nehapatel@ansconsultants.net

PROJECT NAME: 533 Wyndmere Ave,  
Ridgewood, NJ

PROJECT MGR: MR. ATUL SHAH, PE

PROJECT or PO #: ANS-5727

SEND REPORT TO:

ADDRESS: 4405 South Clinton Ave.  
South Plainfield, NJ 07080  
PHONE: 908-754-8383

FAX: 908-754-8633

SEND INVOICE TO: MR. ATUL SHAH, PE

ADDRESS: Same as above

SAMPLED BY: Sunil Shah

Client: DJR Renovations, LLC.

**TURN-AROUND TIME**

- APL STANDARD 2 week
- RUSH (choose one below)
  - 24 hr. date & time required
  - 48 hr. date & time required
  - 72 hr. date & time required
- 1 week

**REPORT FORMAT**

- RESULTS ONLY
- NJ DEP REDUCED
- NJ DEP FULL
- STATE FORMS/E2 REPORTING

PMSD#

SKP#

**ELECTRONIC FORMAT**

- EMAIL DELIVERY
- HAZSITE EDO
- EXCEL

Intermediate Reduced Deliverables

**MATRIX ABBREVIATIONS: D - DRINKING WATER G - GROUNDWATER W - WASTEWATER S - SOIL SL - SLUDGE C - CONCRETE L - LAKE**

APL Lab ID#	Sample Source: Field ID	Date	Time	Sample Type		Matrix	No. of Bottles	Preservative	Analysis Requested
				GRAB	COMPT				
1050518	ANS-5727-S1	5/10/2021	12:30 PM			S	2 - 8.oz jars, 3 Encores		TAL/TCL, pH, Chromium Hex. And Chromium Tri., EPH, VOCs, SVOC's, Metals, PCBs, Pesticides, Acrolein, Acrylonitrile, Benzidine, 1, 2-Diphenylhydrazine, N-Nitrosodimethylamine
<p>RELINQUISHED BY (Print) <i>Charmie</i> DATE <i>5/11/21</i> RECEIVED BY (Print) <i>Sunil Shah</i></p> <p>Signature Time <i>10:35 AM</i> Signature</p> <p>RELINQUISHED BY (Print) <i>Sunil Shah</i> DATE <i>5/11/21</i> RECEIVED BY (Print) <i>Sunil Shah</i></p> <p>Signature Time Signature</p> <p>RELINQUISHED BY (Print) <i>Sunil Shah</i> DATE <i>5/11/21</i> RECEIVED BY (Print) <i>Sunil Shah</i></p> <p>Signature Time Signature</p> <p>COMMENTS/SPECIAL INSTRUCTIONS Cooler Temp. upon receipt at lab <i>4.0</i></p>									

CERTIFICATIONS: NELAP (National Environmental Laboratory Accreditation Program) NJDEP #07010 PADEP #68-02903 NYDOH #11634 CTPH #0233 US ARMY

By signing this Chain of Custody Agreement, customer expressly agrees to pay APL for all charges, reasonably incurred in connection with analysis and reporting for these samples

**APPENDIX E**  
**RIDGEWOOD WATER DEBOER AVENUE AND ROUTE 208**  
**ANALYTICAL DATA**

Work Order 1080405													
Lab: Aqua Pro-Tech Laboratories													
Client: One Time Client - Conquest Contracting													
NJDEP 2021 Soil Remediation Standards													
Lab ID:	NJDEP					1080405-01							
	Residential	Residential	Non-Residential	Non-Residential	Migration to	DeBoer & 208 Ramp							
Date Sampled:	Ingestion-Dermal	Inhalation	Ingestion-Dermal	Inhalation	Ground Water	08/09/2021 11:00							
Matrix:	SRS	SRS	SRS	SRS	SRS	Soil							
	May 2021	May 2021	May 2021	May 2021	May 2021								
CAS#	Compound	Type											
Volatile Organics - GC/MS (mg/kg)										Result	Qualifier	MDL	RL
71-55-6	1,1,1-Trichloroethane	TRG	160000	NA	NA	NA	0.2	0.000352	U	0.000352	0.00241		
79-34-5	1,1,2,2-Tetrachloroethane	TRG	3.5	NA	18	NA	0.0069	0.000332	U	0.000332	0.00241		
76-13-1	1,1,2-Trichloro-1,2,2 Trifluoroethane	TRG	NA	NA	NA	NA	NA	0.00103	U	0.00103	0.00241		
79-00-5	1,1,2-Trichloroethane	TRG	12	NA	64	NA	0.017	0.000406	U	0.000406	0.00241		
75-34-3	1,1-Dichloroethane	TRG	120	NA	640	NA	0.24	0.000352	U	0.000352	0.00241		
75-35-4	1,1-Dichloroethene	TRG	11	52	180	240	0.0069	0.000446	U	0.000446	0.00241		
87-61-6	1,2,3-Trichlorobenzene	TRG						0.00052	U	0.00052	0.00241		
120-82-1	1,2,4-Trichlorobenzene	TRG	780	94	13000	NA	0.52	0.000642	U	0.000642	0.00241		
95-63-6	1,2,4-Trimethylbenzene	TRG	780	NA	13000	NA	NA	0.000332	U	0.000332	0.00241		
96-12-8	1,2-Dibromo-3-chloropropane	TRG	0.87	0.026	4.5	0.12	0.005	0.000588	U	0.000588	0.00602		
106-93-4	1,2-Dibromoethane	TRG	0.35	0.085	1.8	0.41	0.005	0.000304	U	0.000304	0.00241		
95-50-1	1,2-Dichlorobenzene	TRG	6700	NA	110000	NA	11	0.000425	U	0.000425	0.00241		
107-06-2	1,2-Dichloroethane	TRG	5.8	71	30	320	0.0095	0.00034	U	0.00034	0.00241		
78-87-5	1,2-Dichloropropane	TRG	19	5.7	98	27	0.0058	0.000395	U	0.000395	0.00241		
541-73-1	1,3-Dichlorobenzene	TRG	6700	NA	110000	NA	11	0.000177	U	0.000177	0.00241		
106-46-7	1,4-Dichlorobenzene	TRG	780	NA	13000	NA	1.4	0.000347	U	0.000347	0.00241		
78-93-3	2-Butanone	TRG	47000	NA	780000	NA	0.98	0.0398		0.000393	0.00602		
591-78-6	2-Hexanone	TRG	390	1000	6500	NA	0.15	0.000225	U	0.000225	0.00241		
108-10-1	4-Methyl-2-pentanone	TRG	NA	NA	NA	NA	NA	0.000301	U	0.000301	0.00241		
67-64-1	Acetone	TRG	70000	NA	NA	NA	19	0.275		0.00073	0.00602		
71-43-2	Benzene	TRG	3	2.2	16	11	0.0094	0.000219	U	0.000219	0.00241		
74-97-5	Bromochloromethane	TRG						0.000444	U	0.000444	0.00241		
75-27-4	Bromodichloromethane	TRG	11	NA	59	NA	0.005	0.000302	U	0.000302	0.00241		
75-25-2	Bromofrom	TRG	88	NA	460	NA	0.018	0.000423	U	0.000423	0.00241		
74-83-9	Bromomethane	TRG	110	18	1800	82	0.043	0.000695	U	0.000695	0.00241		
75-15-0	Carbon disulfide	TRG	NA	NA	NA	NA	3.7	0.000346	U	0.000346	0.00241		
56-23-5	Carbon Tetrachloride	TRG	7.6	1.4	40	6.9	0.0075	0.000363	U	0.000363	0.00241		
108-90-7	Chlorobenzene	TRG	510	NA	8400	NA	0.64	0.000349	U	0.000349	0.00241		
124-48-1	Chlorodibromomethane	TRG	8.3	NA	43	NA	0.005	0.000296	U	0.000296	0.00241		
75-00-3	Chloroethane	TRG	NA	NA	NA	NA	NA	0.000411	U	0.000411	0.00241		
67-66-3	Chloroform	TRG	780	590	13000	NA	0.33	0.000405	U	0.000405	0.00241		
74-87-3	Chloromethane	TRG	NA	270	NA	1200	NA	0.000927	U	0.000927	0.00241		
156-59-2	cis-1,2-Dichloroethene	TRG	780	NA	13000	NA	0.35	0.000116	U	0.000116	0.00241		
10061-01-5	cis-1,3-Dichloropropene	TRG	7	4.8	36	23	0.0063	0.000305	U	0.000305	0.00241		
110-82-7	Cyclohexane	TRG	NA	NA	NA	NA	NA	0.000534	U	0.000534	0.00241		
75-71-8	Dichlorodifluoromethane	TRG	16000	NA	260000	NA	38	0.000813	U	0.000813	0.00241		
100-41-4	EthylBenzene	TRG	7800	10	130000	48	15	0.000326	U	0.000326	0.00241		
98-82-8	Isopropylbenzene	TRG	7800	NA	130000	NA	22	0.000378	U	0.000378	0.00241		
179601-23-1	m+p-Xylenes	TRG	12000	NA	190000	NA	19	0.000608	U	0.000608	0.00482		
79-20-9	Methyl Acetate	TRG	78000	NA	NA	NA	22	0.000319	U	0.000319	0.00241		
1634-04-4	Methyl tert-Butyl Ether	TRG	780	140	13000	650	0.25	0.000407	U	0.000407	0.00241		
108-87-2	Methylcyclohexane	TRG						0.000388	U	0.000388	0.00241		
75-09-2	Methylene Chloride	TRG	50	1400	260	NA	0.013	0.000724	U	0.000724	0.00241		
95-47-6	o-Xylene	TRG	12000	NA	190000	NA	19	0.00031	U	0.00031	0.00241		
100-42-5	Styrene	TRG	16000	NA	260000	NA	2.1	0.000344	U	0.000344	0.00241		
75-65-0	tert-Butyl alcohol	TRG	1400	NA	23000	NA	0.32	0.00506	U	0.00506	0.0241		
127-18-4	Tetrachloroethene	TRG	330	47	1700	NA	0.0086	0.000238	U	0.000238	0.00241		
108-88-3	Toluene	TRG	6300	NA	100000	NA	7.8	0.000194	U	0.000194	0.00241		
1330-20-7	Total Xylenes	TRG	12000	NA	190000	NA	19	0.00031	U	0.00031	0.00241		
156-60-5	trans-1,2-Dichloroethene	TRG	1300	NA	22000	NA	0.56	0.000326	U	0.000326	0.00241		
10061-02-6	trans-1,3-Dichloropropene	TRG	7	4.8	36	23	0.0063	0.00046	U	0.00046	0.00241		
79-01-6	Trichloroethene	TRG	15	3	79	14	0.0065	0.000354	U	0.000354	0.00241		
75-69-4	Trichlorofluoromethane	TRG	23000	NA	390000	NA	29	0.000277	U	0.000277	0.00241		
75-01-4	Vinyl chloride	TRG	0.97	1.4	5	6.4	0.0067	0.000458	U	0.000458	0.00241		
NA	Tentatively Identified Compounds	TIC Total						0.00	J				

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**Key:**  
Reporting Limit exceeds Reg Standard  
Value Exceeded One or More of the Criteria  
Detected in Sample  
E Qualified, may require Dilution

**Specific Footnotes:**

Work Order 1080405		Lab: Aqua Pro-Tech Laboratories		Client: One Time Client - Conquest Contracting		Lab ID: 1080405-01		DeBoer & 208 Ramp		08/09/2021 11:00	
Date Sampled:		Residential Ingestion-Dermal SRS May 2021		Residential Ingestion-Dermal SRS May 2021		Non-Residential Ingestion-Dermal SRS May 2021		Non-Residential Inhalation SRS May 2021		Migration to Ground Water SRS May 2021	
Matrix:		Residential Ingestion-Dermal SRS May 2021		Residential Ingestion-Dermal SRS May 2021		Non-Residential Ingestion-Dermal SRS May 2021		Non-Residential Inhalation SRS May 2021		Migration to Ground Water SRS May 2021	
CAS#	Compound	TRG	78000	NA	NA	NA	NA	NA	NA	NA	NA
Total Metals (mg/kg)	Type	TRG	31	NA	NA	520	390	2500	90	90	910
7429-90-5	Aluminum	TRG	31	NA	NA	520	390	2500	90	90	910
7440-38-0	Antimony	TRG	19	1100	19	5200	19	5200	19	5200	19
7440-38-2	Arsenic	TRG	16000	870000	260000	260000	260000	9300	0.7	0.0332	0.0332
7440-41-7	Beryllium	TRG	160	2000	2600	1100	12000	12000	1.9	0.332	0.332
7440-43-9	Cadmium	TRG	71	2600	1100	1100	1100	12000	1.9	0.332	0.332
7440-70-2	Calcium	TRG									
7440-47-3	Chromium	TRG									
7440-48-4	Cobalt	TRG	23	520	390	52000	52000	NA	910	0.266	0.266
7440-50-8	Copper	TRG	3100	NA	52000	52000	52000	NA	910	0.332	0.332
7439-89-6	Iron	TRG									
7439-92-1	Lead	TRG	400	NA	800	800	800	NA	90	1.66	1.66
7439-95-4	Magnesium	TRG									
7439-96-5	Manganese	TRG	1900	87000	31000	400000	400000	NA	NA	0.332	0.332
7439-97-6	Mercury	TRG	23	520000	390	390	390	NA	0.1	0.0552	0.0552
7440-02-0	Nickel	TRG	1600	20000	26000	26000	26000	93000	48	0.166	0.166
7440-09-7	Potassium	TRG									
7782-49-2	Selenium	TRG	390	NA	6500	6500	6500	NA	11	1.66	1.66
7440-22-4	Silver	TRG	390	NA	6500	6500	6500	NA	0.5	0.199	0.199
7440-23-5	Sodium	TRG									
7440-28-0	Thallium	TRG									
7440-62-2	Vanadium	TRG	390	170000	6500	800000	800000	800000	NA	1.66	1.66
7440-66-6	Zinc	TRG	23000	NA	390000	390000	390000	NA	930	0.664	0.664
										9240	3.32
										1.66	1.66
										5.12	1.66
										61.5	0.664
										0.340	0.0332
										0.332	0.332
										3890	33.2
										10.5	0.332
										4.39	0.266
										27.9	0.332
										13500	6.64
										66.1	1.66
										2210	66.4
										183	0.332
										0.105	0.0552
										8.67	0.166
										405	133
										1.66	1.66
										0.199	0.199
										1710	66.4
										1.66	1.66
										27.7	0.664
										56.9	0.997

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**Key:**

- Reporting Limit exceeds Reg Standard
- Value Exceeded One or More of the Criteria
- Detected in Sample
- Qualified, may require Dilution

**Specific Footnotes:**

<b>Work Order 1080405</b>										
<b>Lab: Aqua Pro-Tech Laboratories</b>										
<b>Client: _One Time Client - Conquest Contracting</b>										
<b>NJDEP 2021 Soil Remediation Standards</b>										
		<b>Lab ID:</b>	NJDEP	NJDEP	NJDEP	NJDEP	NJDEP	<b>1080405-01</b>		
		<b>Client ID:</b>	Residential	Residential	Non-Residential	Non-Residential	Migration to	<b>DeBoer &amp; 208 Ramp</b>		
		<b>Date Sampled:</b>	Ingestion-Dermal	Inhalation	Ingestion-Dermal	Inhalation	Ground Water	<b>08/09/2021 11:00</b>		
		<b>Matrix:</b>	SRS	SRS	SRS	SRS	SRS	<b>Soil</b>		
			May 2021	May 2021	May 2021	May 2021	May 2021			
<b>CAS#</b>	<b>Compound</b>	<b>Type</b>								
<b>Extractable Petroleum Hydrocarbons Category 2 (mg/kg)</b>								<b>Result</b>	<b>Qualifier</b>	<b>MDL</b>
NJDEP-EPH2 Total EPH		TRG						<b>245</b>		13.5
<b>PCBs (mg/kg)</b>								<b>Result</b>	<b>Qualifier</b>	<b>MDL</b>
12674-11-2	Aroclor-1016	TRG	0.25	NA	1.1	NA	1.6	0.00597	U	0.00597
11104-28-2	Aroclor-1221	TRG	0.25	NA	1.1	NA	1.6	0.0117	U	0.0117
11141-16-5	Aroclor-1232	TRG	0.25	NA	1.1	NA	1.6	0.0149	U	0.0149
53469-21-9	Aroclor-1242	TRG	0.25	NA	1.1	NA	1.6	0.00875	U	0.00875
12672-29-6	Aroclor-1248	TRG	0.25	NA	1.1	NA	1.6	0.00915	U	0.00915
11097-69-1	Aroclor-1254	TRG	0.25	NA	1.1	NA	1.6	0.00718	U	0.00718
11096-82-5	Aroclor-1260	TRG	0.25	NA	1.1	NA	1.6	0.00557	U	0.00557
37324-23-5	Aroclor-1262	TRG	0.25	NA	1.1	NA	1.6	0.012	U	0.012
11100-14-4	Aroclor-1268	TRG	0.25	NA	1.1	NA	1.6	0.00538	U	0.00538
1336-36-3	Total PCBs	TRG	0.25	NA	1.1	NA	1.6	0.00416	U	0.00416
<b>Pesticides (mg/kg)</b>								<b>Result</b>	<b>Qualifier</b>	<b>MDL</b>
72-54-8	4,4'-DDD	TRG	2.3	NA	11	NA	0.47	0.000803	U	0.000803
72-55-9	4,4'-DDE	TRG	2	NA	11	NA	0.47	0.000959	U	0.000959
50-29-3	4,4'-DDT	TRG	1.9	NA	9.5	NA	0.67	<b>0.0112</b>		0.00124
309-00-2	Aldrin	TRG	0.041	NA	0.21	NA	0.13	0.000831	U	0.000831
319-84-6	alpha-BHC	TRG	0.086	NA	0.41	NA	0.0023	0.000522	U	0.000522
319-85-7	beta-BHC	TRG	0.3	NA	1.4	NA	0.0046	0.000838	U	0.000838
57-74-9	Chlordane	TRG	0.27	NA	1.4	NA	1.4	0.00078	U	0.00078
319-86-8	delta-BHC	TRG						0.000815	U	0.000815
60-57-1	Dieldrin	TRG	0.034	NA	0.16	NA	0.024	0.000917	U	0.000917
959-98-8	Endosulfan I	TRG	470	NA	7800	NA	NA	0.000828	U	0.000828
33213-65-9	Endosulfan II	TRG	470	NA	7800	NA	NA	0.000797	U	0.000797
1031-07-8	Endosulfan sulfate	TRG						0.00066	U	0.00066
72-20-8	Endrin	TRG	19	NA	270	NA	1.6	0.000606	U	0.000606
7421-93-4	Endrin aldehyde	TRG						0.000699	U	0.000699
53494-70-5	Endrin ketone	TRG						0.000618	U	0.000618
58-89-9	gamma-BHC (Lindane)	TRG	0.57	NA	2.8	NA	0.0035	0.000556	U	0.000556
76-44-8	Heptachlor	TRG	0.15	NA	0.81	NA	0.083	0.000469	U	0.000469
1024-57-3	Heptachlor Epoxide	TRG	0.076	NA	0.4	NA	0.081	0.000885	U	0.000885
72-43-5	Methoxychlor	TRG	320	NA	4600	NA	NA	0.000514	U	0.000514
8001-35-2	Toxaphene	TRG	0.49	NA	2.3	NA	6.2	0.0845	U	0.0845
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<b>Key:</b>										
Reporting Limit exceeds Reg Standard										
Value Exceeded One or More of the Criteria										
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<b>Specific Footnotes:</b>										

<b>Work Order 1080405</b>								
<b>Lab: Aqua Pro-Tech Laboratories</b>								
<b>Client: _One Time Client - Conquest Contracting</b>			<b>NJDEP 2021 Soil Remediation Standards</b>					
	<b>Lab ID:</b>		NJDEP	NJDEP	NJDEP	NJDEP	NJDEP	
	<b>Client ID:</b>		Residential	Residential	Non-Residential	Non-Residential	Migration to	
	<b>Date Sampled:</b>		Ingestion-Dermal	Inhalation	Ingestion-Dermal	Inhalation	Ground Water	
	<b>Matrix:</b>		SRS	SRS	SRS	SRS	SRS	
			May 2021	May 2021	May 2021	May 2021	May 2021	
<b>CAS#</b>	<b>Compound</b>	<b>Type</b>						
<b>Extractable Petroleum Hydrocarbons Category 2 (mg/kg)</b>								<b>RL</b>
NJDEP-EPH2 Total EPH		TRG						27
<b>PCBs (mg/kg)</b>								<b>RL</b>
12674-11-2	Aroclor-1016	TRG	0.25	NA	1.1	NA	1.6	0.0445
11104-28-2	Aroclor-1221	TRG	0.25	NA	1.1	NA	1.6	0.0445
11141-16-5	Aroclor-1232	TRG	0.25	NA	1.1	NA	1.6	0.0445
53469-21-9	Aroclor-1242	TRG	0.25	NA	1.1	NA	1.6	0.0445
12672-29-6	Aroclor-1248	TRG	0.25	NA	1.1	NA	1.6	0.0445
11097-69-1	Aroclor-1254	TRG	0.25	NA	1.1	NA	1.6	0.0445
11096-82-5	Aroclor-1260	TRG	0.25	NA	1.1	NA	1.6	0.0445
37324-23-5	Aroclor-1262	TRG	0.25	NA	1.1	NA	1.6	0.0445
11100-14-4	Aroclor-1268	TRG	0.25	NA	1.1	NA	1.6	0.0445
1336-36-3	Total PCBs	TRG	0.25	NA	1.1	NA	1.6	0.0445
<b>Pesticides (mg/kg)</b>								<b>RL</b>
72-54-8	4,4'-DDD	TRG	2.3	NA	11	NA	0.47	0.00175
72-55-9	4,4'-DDE	TRG	2	NA	11	NA	0.47	0.00175
50-29-3	4,4'-DDT	TRG	1.9	NA	9.5	NA	0.67	0.00175
309-00-2	Aldrin	TRG	0.041	NA	0.21	NA	0.13	0.00175
319-84-6	alpha-BHC	TRG	0.086	NA	0.41	NA	0.0023	0.00175
319-85-7	beta-BHC	TRG	0.3	NA	1.4	NA	0.0046	0.00175
57-74-9	Chlordane	TRG	0.27	NA	1.4	NA	1.4	0.00175
319-86-8	delta-BHC	TRG						0.00175
60-57-1	Dieldrin	TRG	0.034	NA	0.16	NA	0.024	0.00175
959-98-8	Endosulfan I	TRG	470	NA	7800	NA	NA	0.00175
33213-65-9	Endosulfan II	TRG	470	NA	7800	NA	NA	0.00175
1031-07-8	Endosulfan sulfate	TRG						0.00175
72-20-8	Endrin	TRG	19	NA	270	NA	1.6	0.00175
7421-93-4	Endrin aldehyde	TRG						0.00175
53494-70-5	Endrin ketone	TRG						0.00175
58-89-9	gamma-BHC (Lindane)	TRG	0.57	NA	2.8	NA	0.0035	0.00175
76-44-8	Heptachlor	TRG	0.15	NA	0.81	NA	0.083	0.00175
1024-57-3	Heptachlor Epoxide	TRG	0.076	NA	0.4	NA	0.081	0.00175
72-43-5	Methoxychlor	TRG	320	NA	4600	NA	NA	0.00175
8001-35-2	Toxaphene	TRG	0.49	NA	2.3	NA	6.2	0.089
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<b>Specific Footnotes:</b>								

Work Order 1080405											
Lab: Aqua Pro-Tech Laboratories											
Client: _One Time Client - Conquest Contracting											
NJDEP 2021 Soil Remediation Standards											
Lab ID:	NJDEP	NJDEP	NJDEP	NJDEP	NJDEP	1080405-01					
Client ID:	Residential	Residential	Non-Residential	Non-Residential	Migration to	DeBoer & 208 Ramp					
Date Sampled:	Ingestion-Dermal	Inhalation	Ingestion-Dermal	Inhalation	Ground Water	08/09/2021 11:00					
Matrix:	SRS	SRS	SRS	SRS	SRS	Soil					
	May 2021	May 2021	May 2021	May 2021	May 2021						
CAS#	Compound	Type									
Semivolatile Organics - GC/MS (mg/kg)											
			7	45	36	210	0.067	Result	Qualifier	MDL	RL
123-91-1	1,4-Dioxane	TRG						0.0101	U	0.0101	0.0898
58-90-2	2,3,4,6-Tetrachlorophenol	TRG	1900	NA	27000	NA	26	0.0553	U	0.0553	0.359
95-95-4	2,4,5-Trichlorophenol	TRG	6300	NA	91000	NA	68	0.0488	U	0.0488	0.359
88-06-2	2,4,6-Trichlorophenol	TRG	49	NA	230	NA	0.86	0.0225	U	0.0225	0.359
120-83-2	2,4-Dichlorophenol	TRG	190	NA	2700	NA	0.19	0.0362	U	0.0362	0.359
105-67-9	2,4-Dimethylphenol	TRG	1300	NA	18000	NA	2.3	0.0353	U	0.0353	0.359
51-28-5	2,4-Dinitrophenol	TRG	130	NA	1800	NA	0.33	0.0518	U	0.0518	1.8
121-14-2	2,4-Dinitrotoluene	TRG	0.8	NA	3.8	NA	0.27	0.0383	U	0.0383	0.359
606-20-2	2,6-Dinitrotoluene	TRG	0.8	NA	3.8	NA	0.27	0.0858	U	0.0858	0.359
91-58-7	2-Chloronaphthalene	TRG	4800	NA	67000	NA	NA	0.0413	U	0.0413	0.359
95-57-8	2-Chlorophenol	TRG	390	NA	6500	NA	0.76	0.0475	U	0.0475	0.359
91-57-6	2-Methylnaphthalene	TRG	240	NA	3300	NA	3.1	0.197	JD	0.0861	0.54
95-48-7	2-Methylphenol	TRG	320	NA	4600	NA	0.77	0.071	U	0.071	0.359
88-74-4	2-Nitroaniline	TRG						0.0289	U	0.0289	0.359
88-75-5	2-Nitrophenol	TRG						0.0399	U	0.0399	0.359
91-94-1	3,3'-Dichlorobenzidine	TRG	1.2	NA	5.7	NA	3.9	0.0378	U	0.0378	0.359
65794-96-9	3+4-Methylphenol	TRG						0.0658	U	0.0658	0.359
99-09-2	3-Nitroaniline	TRG						0.0666	U	0.0666	0.359
534-52-1	4,6-Dinitro-2-methylphenol	TRG						0.0677	U	0.0677	0.898
101-55-3	4-Bromophenyl-phenyl ether	TRG						0.0513	U	0.0513	0.359
59-50-7	4-Chloro-3-methylphenol	TRG						0.0567	U	0.0567	0.359
106-47-8	4-Chloroaniline	TRG	2.7	NA	13	NA	0.23	0.0126	U	0.0126	0.359
7005-72-3	4-Chlorophenyl phenyl ether	TRG						0.0194	U	0.0194	0.359
100-01-6	4-Nitroaniline	TRG	27	NA	130	NA	NA	0.18	U	0.18	0.359
100-02-7	4-Nitrophenol	TRG						0.023	U	0.023	0.359
83-32-9	Acenaphthene	TRG	3600	NA	50000	NA	NA	0.258	JD	0.0205	0.359
208-96-8	Acenaphthylene	TRG						1.44	D	0.0125	0.359
98-86-2	Acetophenone	TRG	7800	NA	130000	NA	3.6	0.0356	U	0.0356	0.359
120-12-7	Anthracene	TRG	18000	NA	250000	NA	NA	1.05	D	0.0521	0.359
1912-24-9	Atrazine	TRG	220	NA	3200	NA	0.33	0.0337	U	0.0337	0.359
100-52-7	Benzaldehyde	TRG	170	NA	910	NA	NA	0.11	U	0.11	0.359
56-55-3	Benzo(a)anthracene	TRG	5.1	78000	23	370000	0.71	2.60	D	0.0362	0.359
50-32-8	Benzo(a)pyrene	TRG	0.51	3500	2.3	16000	NA	0.48	D	0.0626	0.359
205-99-2	Benzo(b)fluoranthene	TRG	5.1	78000	23	370000	NA	3.49	D	0.0504	0.359
191-24-2	Benzo(g,h,i)perylene	TRG						1.98	D	0.0291	0.359
207-08-9	Benzo(k)fluoranthene	TRG	51	780000	230	NA	NA	1.53	D	0.0413	0.359
92-52-4	Biphenyl	TRG	87	NA	450	NA	NA	0.0316	U	0.0316	0.359
111-91-1	bis(2-chloroethoxy)methane	TRG	190	NA	2700	NA	NA	0.0496	U	0.0496	0.359
111-44-4	bis(2-chloroethyl)ether	TRG	0.63	NA	3.3	NA	0.33	0.0394	U	0.0394	0.359
108-60-1	bis(2-chloroisopropyl)ether	TRG	3100	NA	52000	NA	1.9	0.129	U	0.129	0.359
117-81-7	bis(2-ethylhexyl)phthalate	TRG	39	NA	180	NA	14	0.0718	U	0.0718	0.359
85-68-7	Butylbenzylphthalate	TRG	290	NA	1300	NA	29	0.0326	U	0.0326	0.359
105-60-2	Caprolactam	TRG	32000	290	460000	1300	16	0.0464	U	0.0464	0.359
86-74-8	Carbazole	TRG						0.207	JD	0.0691	0.898
218-01-9	Chrysene	TRG	510	NA	2300	NA	NA	3.62	D	0.0246	0.359
53-70-3	Dibenzo(a,h)anthracene	TRG	0.51	7800	2.3	37000	NA	0.49	D	0.0356	0.359
132-64-9	Dibenzofuran	TRG						0.0841	JD	0.0214	0.359
84-66-2	Diethylphthalate	TRG	51000	NA	730000	NA	44	0.0696	U	0.0696	0.359
131-11-3	Dimethylphthalate	TRG						0.279	JD	0.0223	0.359
84-74-2	Di-n-butylphthalate	TRG	6300	NA	91000	NA	NA	0.147	U	0.147	0.359
117-84-0	Di-n-octylphthalate	TRG	630	NA	9100	NA	NA	0.0737	U	0.0737	0.359
206-44-0	Fluoranthene	TRG	2400	NA	33000	NA	NA	5.40	D	0.0337	0.359
86-73-7	Fluorene	TRG	2400	NA	33000	NA	NA	0.677	D	0.0299	0.359
118-74-1	Hexachlorobenzene	TRG	0.43	NA	2.3	NA	0.17	0.0469	U	0.0469	0.359
87-68-3	Hexachlorobutadiene	TRG	8.9	NA	47	NA	0.17	0.172	U	0.172	0.359
77-47-4	Hexachlorocyclopentadiene	TRG	470	2.7	7800	NA	2.5	0.15	U	0.15	0.898
67-72-1	Hexachloroethane	TRG	17	NA	91	NA	0.17	0.0394	U	0.0394	0.359
193-39-5	Indeno(1,2,3-cd)pyrene	TRG	5.1	78000	23	370000	NA	1.65	D	0.0386	0.359
78-59-1	Isophorone	TRG	570	NA	2700	NA	0.23	0.0235	U	0.0235	0.359
91-20-3	Naphthalene	TRG	2500	5.7	34000	27	19	0.114	JD	0.0266	0.359
98-95-3	Nitrobenzene	TRG	160	7.5	2600	36	0.17	0.061	U	0.061	0.359
621-64-7	n-Nitroso-di-n-propylamine	TRG	0.17	NA	0.36	NA	0.17	0.0192	U	0.0192	0.359
86-30-6	n-Nitrosodiphenylamine	TRG	110	NA	520	NA	1.1	0.0766	U	0.0766	0.359
87-86-5	Pentachlorophenol	TRG	1	NA	4.4	NA	0.33	0.0494	U	0.0494	0.898
85-01-8	Phenanthrene	TRG						4.97	D	0.0472	0.359
108-95-2	Phenol	TRG	19000	39000	270000	NA	21	0.0291	U	0.0291	0.359
129-00-0	Pyrene	TRG	1800	NA	25000	NA	NA	7.15	D	0.0264	0.359
000084-65-1	9,10-Anthracenedione	TIC						0.888	JD		
000084-54-8	9,10-Anthracenedione, -methyl-isomer	TIC						0.908	JD		
010387-13-0	9,10-di(Chloromethyl)anthracene	TIC						0.896	JD		
000781-92-0	Anthracene, -dimethyl-isomer	TIC						2.67	JD		
000613-12-7	Anthracene, -methyl-isomer (01)	TIC						2.30	JD		
000613-12-7	Anthracene, -methyl-isomer (02)	TIC						2.56	JD		
000192-97-2	Benzo[e]pyrene	TIC						2.04	JD		
003351-28-8	Chrysene, -methyl-isomer	TIC						0.925	JD		
000112-95-8	Eicosane	TIC						1.95	JD		



<b>Work Order 1080405</b>									
<b>Lab: Aqua Pro-Tech Laboratories</b>									
<b>Client: _One Time Client - Conquest Contracting</b>									
			<b>NJDEP 2021 Soil Remediation Standards</b>						
	<b>Lab ID:</b>		NJDEP	NJDEP	NJDEP	NJDEP	NJDEP	<b>1080405-01</b>	
	<b>Client ID:</b>		Residential	Residential	Non-Residential	Non-Residential	Migration to	<b>DeBoer &amp; 208 Ramp</b>	
	<b>Date Sampled:</b>		Ingestion-Dermal	Inhalation	Ingestion-Dermal	Inhalation	Ground Water	<b>08/09/2021 11:00</b>	
	<b>Matrix:</b>		SRS	SRS	SRS	SRS	SRS	<b>Soil</b>	
			May 2021	May 2021	May 2021	May 2021	May 2021		
<b>CAS#</b>	<b>Compound</b>	<b>Type</b>							
000883-20-5	Phenanthrene, -methyl-isomer	TIC						<b>3.16</b>	<b>JD</b>
003353-12-6	Pyrene, -methyl-isomer (01)	TIC						<b>1.45</b>	<b>JD</b>
003442-78-2	Pyrene, -methyl-isomer (02)	TIC						<b>1.03</b>	<b>JD</b>
003442-78-2	Pyrene, -methyl-isomer (03)	TIC						<b>0.851</b>	<b>JD</b>
002381-21-7	Pyrene, -methyl-isomer (04)	TIC						<b>1.04</b>	<b>JD</b>
	unknown	TIC						<b>0.898</b>	<b>JD</b>
NA	Tentatively Identified Compounds	TIC Total						<b>23.6</b>	<b>J</b>
<b>Main Footnotes:</b>									
Standards listed are based upon APL's interpretation of the published documents.									
APL assumes no liability for the interpretation and/or accuracy of the standards.									
<b>Qualifiers:</b>									
U - Indicates compound analyzed for but not detected									
J - Indicates estimated value for TICs and all results when detected below the RL									
D - Indicates result is based on a dilution									
E - Concentration exceeds highest calibration standard									
B - Indicates compound found in associated blank									
H - Indicates a Hold Time violation									
P - Indicates a Greater than 25% diff. between 2 GC columns.									
<b>Key:</b>									
	Reporting Limit exceeds Reg Standard								
	Value Exceeded One or More of the Criteria								
	Detected in Sample								
	E Qualified, may require Dilution								
<b>Specific Footnotes:</b>									

**APPENDIX F**  
**WATER MAIN REPLACEMENT – JEFFERSON, WILLIAM, AND SLEM**  
**STREETS ANALYTICAL DATA**



AQUA PRO-TECH LABORATORIES  
Certified Environmental Testing



# ANALYTICAL RESULTS

STANDARD DELIVERABLES FORMAT

APL WORK ORDER NUMBER: 0090585

Project: Water Main Replacement Jefferson & Salem

Brian Wood  
Laboratory Director

All Results meet the requirements of the National Environmental Laboratory Accreditation Conference and/or State specific certifications as applicable.

Report Date: Sep 22, 2020

1275 Bloomfield Ave., Bldg. 6, Fairfield, New Jersey 07004  
(t) 973.227.0422 (f) 973.227.2813 (w) www.aquaprotechlabs.com

NELAC National Environmental Laboratory Accreditation Conference  
NJDEP #07010 / NYDOH #11634





AQUA PRO-TECH LABORATORIES  
 Certified Environmental Testing

## Analytical Results Summary

### Conquest Contracting Engineers

#### 0090585-01 (Soil)

Williams St

<b>Collected</b> 09/14/2020 08:50	<b>Received</b> 09/14/2020 16:05	<b>Contact</b>
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Lab Section/ Analysis	Method	Prepared	Analyzed	Result	Qual	MDL	RL	Units	
<b>General Chemistry</b>									
Chromium, Hexavalent	SW 846 7196A	09/16/20 07:40	09/16/20 09:30	ND	U		0.445	mg/kg dry	
Cyanide	SW 846 9014	09/15/20 13:13	09/16/20 15:25	ND	U		0.275	mg/kg dry	
<b>Percent Solids</b>	<b>Gravimetric</b>	09/14/20 17:55	09/15/20 10:40	<b>91.1</b>				%	
<b>pH</b>	<b>SW 846 9045D</b>	09/21/20 15:50	09/21/20 15:50	<b>7.13</b>			<b>0.0100</b>	pH Units	
<b>Redox Potential</b>	<b>SM 2580 (mod)</b>	09/21/20 13:35	09/21/20 13:55	<b>184</b>			<b>-1000</b>	mV	
<b>Total Metals</b>									
Aluminum	SW 846 6010D	09/16/20 06:38	09/18/20 11:46	<b>7160</b>			<b>2.73</b>	mg/kg dry	
Antimony	SW 846 6010D	09/16/20 06:38	09/18/20 11:46	ND	U		1.37	mg/kg dry	
Arsenic	SW 846 6010D	09/16/20 06:38	09/18/20 11:46	<b>2.46</b>			<b>1.37</b>	mg/kg dry	
Barium	SW 846 6010D	09/16/20 06:38	09/18/20 11:46	<b>33.1</b>			<b>0.546</b>	mg/kg dry	
Beryllium	SW 846 6010D	09/16/20 06:38	09/18/20 11:46	<b>0.309</b>			<b>0.0273</b>	mg/kg dry	
Cadmium	SW 846 6010D	09/16/20 06:38	09/18/20 11:46	ND	U		0.273	mg/kg dry	
Calcium	SW 846 6010D	09/16/20 06:38	09/18/20 11:46	<b>899</b>			<b>27.3</b>	mg/kg dry	
Chromium	SW 846 6010D	09/16/20 06:38	09/18/20 11:46	<b>8.91</b>			<b>0.273</b>	mg/kg dry	
Cobalt	SW 846 6010D	09/16/20 06:38	09/18/20 11:46	<b>4.18</b>			<b>0.219</b>	mg/kg dry	
Copper	SW 846 6010D	09/16/20 06:38	09/18/20 11:46	<b>9.70</b>			<b>0.273</b>	mg/kg dry	
Iron	SW 846 6010D	09/16/20 06:38	09/18/20 11:46	<b>11100</b>	B		<b>5.46</b>	mg/kg dry	
Lead	SW 846 6010D	09/16/20 06:38	09/18/20 11:46	<b>4.15</b>			<b>1.37</b>	mg/kg dry	
Magnesium	SW 846 6010D	09/16/20 06:38	09/18/20 11:46	<b>1760</b>			<b>54.6</b>	mg/kg dry	
Manganese	SW 846 6010D	09/16/20 06:38	09/18/20 11:46	<b>391</b>			<b>0.273</b>	mg/kg dry	
Mercury	SW 846 7471B	09/16/20 07:00	09/16/20 14:34	ND	U		0.0527	mg/kg dry	
Nickel	SW 846 6010D	09/16/20 06:38	09/18/20 11:46	<b>8.71</b>			<b>0.137</b>	mg/kg dry	
Potassium	SW 846 6010D	09/16/20 06:38	09/18/20 11:46	<b>713</b>			<b>109</b>	mg/kg dry	
Selenium	SW 846 6010D	09/16/20 06:38	09/18/20 11:46	ND	U		1.37	mg/kg dry	
Silver	SW 846 6010D	09/16/20 06:38	09/18/20 11:46	ND	U		0.546	mg/kg dry	
Sodium	SW 846 6010D	09/16/20 06:38	09/18/20 11:46	<b>135</b>			<b>54.6</b>	mg/kg dry	
Thallium	SW 846 6010D	09/16/20 06:38	09/18/20 11:46	ND	U		1.37	mg/kg dry	
Vanadium	SW 846 6010D	09/16/20 06:38	09/18/20 11:46	<b>12.0</b>			<b>0.546</b>	mg/kg dry	
Zinc	SW 846 6010D	09/16/20 06:38	09/18/20 11:46	<b>24.0</b>			<b>0.820</b>	mg/kg dry	
<b>EPH Category 2 Extractable Petroleum Hydrocarbons Category 2</b>									
Total EPH	NJDEP-EPH-CAT2	09/16/20 15:55	09/21/20 11:45	<b>36.4</b>			<b>11.0</b>	<b>22.0</b>	mg/kg dry
<b>BNA+25 Semivolatile Organics - GC/MS</b>									

FootNotes

RL - Reporting limit  
 MDL - Minimum detection limit  
 ND, U - Indicates compound analyzed for but not detected  
 J - Indicates estimated value

B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard  
 D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 H - Indicates a Hold Time violation



AQUA PRO-TECH LABORATORIES  
 Certified Environmental Testing

## Analytical Results Summary

### Conquest Contracting Engineers

#### 0090585-01 (Soil)

Williams St

<b>Collected</b> 09/14/2020 08:50	<b>Received</b> 09/14/2020 16:05	<b>Contact</b>
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Lab Section/ Analysis	Method	Prepared	Analyzed	Result	Qual	MDL	RL	Units
<b>BNA+25 Semivolatile Organics - GC/MS</b>								
2,3,4,6-Tetrachlorophenol	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0225	0.146	mg/kg dry
2,4,5-Trichlorophenol	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0199	0.146	mg/kg dry
2,4,6-Trichlorophenol	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.00915	0.146	mg/kg dry
2,4-Dichlorophenol	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0147	0.146	mg/kg dry
2,4-Dimethylphenol	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0144	0.146	mg/kg dry
2,4-Dinitrophenol	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0211	0.732	mg/kg dry
2,4-Dinitrotoluene	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0156	0.146	mg/kg dry
2,6-Dinitrotoluene	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0349	0.146	mg/kg dry
2-Chloronaphthalene	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0168	0.146	mg/kg dry
2-Chlorophenol	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0193	0.146	mg/kg dry
2-Methylnaphthalene	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0350	0.220	mg/kg dry
2-Methylphenol	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0289	0.146	mg/kg dry
2-Nitroaniline	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0118	0.146	mg/kg dry
2-Nitrophenol	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0163	0.146	mg/kg dry
3,3'-Dichlorobenzidine	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0154	0.146	mg/kg dry
3+4-Methylphenol	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0268	0.146	mg/kg dry
3-Nitroaniline	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0271	0.146	mg/kg dry
4,6-Dinitro-2-methylphenol	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0276	0.366	mg/kg dry
4-Bromophenyl-phenyl ether	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0209	0.146	mg/kg dry
4-Chloro-3-methylphenol	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0231	0.146	mg/kg dry
4-Chloroaniline	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.00512	0.146	mg/kg dry
4-Chlorophenyl phenyl ether	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.00790	0.146	mg/kg dry
4-Nitroaniline	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0731	0.146	mg/kg dry
4-Nitrophenol	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.00936	0.146	mg/kg dry
Acenaphthene	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.00833	0.146	mg/kg dry
Acenaphthylene	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.00508	0.146	mg/kg dry
Acetophenone	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0145	0.146	mg/kg dry
Anthracene	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0212	0.146	mg/kg dry
Atrazine	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0137	0.146	mg/kg dry
Benzaldehyde	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0449	0.146	mg/kg dry
Benzo(a)anthracene	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0147	0.146	mg/kg dry
Benzo(a)pyrene	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0255	0.146	mg/kg dry
Benzo(b)fluoranthene	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0205	0.146	mg/kg dry
Benzo(g,h,i)perylene	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0119	0.146	mg/kg dry
Benzo(k)fluoranthene	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0168	0.146	mg/kg dry
Biphenyl	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0128	0.146	mg/kg dry

FootNotes

RL - Reporting limit  
 MDL - Minimum detection limit  
 ND, U - Indicates compound analyzed for but not detected  
 J - Indicates estimated value

B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard  
 D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 H - Indicates a Hold Time violation



AQUA PRO-TECH LABORATORIES  
Certified Environmental Testing

## Analytical Results Summary

### Conquest Contracting Engineers

#### 0090585-01 (Soil)

Williams St

<b>Collected</b> 09/14/2020 08:50	<b>Received</b> 09/14/2020 16:05	<b>Contact</b>
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Lab Section/ Analysis	Method	Prepared	Analyzed	Result	Qual	MDL	RL	Units
<b>BNA+25 Semivolatile Organics - GC/MS</b>								
bis(2-chloroethoxy)methane	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0202	0.146	mg/kg dry
bis(2-chloroethyl)ether	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0160	0.146	mg/kg dry
bis(2-chloroisopropyl)ether	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0526	0.146	mg/kg dry
bis(2-ethylhexyl)phthalate	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0292	0.146	mg/kg dry
Butylbenzylphthalate	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0133	0.146	mg/kg dry
Caprolactam	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0189	0.146	mg/kg dry
Carbazole	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0281	0.366	mg/kg dry
Chrysene	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0100	0.146	mg/kg dry
Dibenzo(a,h)anthracene	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0145	0.146	mg/kg dry
Dibenzofuran	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.00871	0.146	mg/kg dry
Diethylphthalate	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0283	0.146	mg/kg dry
<b>Dimethylphthalate</b>	<b>SW 846 8270D</b>	09/17/20 08:04	09/18/20 21:48	<b>0.0869</b>	<b>J</b>	<b>0.00907</b>	<b>0.146</b>	mg/kg dry
Di-n-butylphthalate	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0597	0.146	mg/kg dry
Di-n-octylphthalate	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0300	0.146	mg/kg dry
Fluoranthene	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0137	0.146	mg/kg dry
Fluorene	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0122	0.146	mg/kg dry
Hexachlorobenzene	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0191	0.146	mg/kg dry
Hexachlorobutadiene	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0702	0.146	mg/kg dry
Hexachlorocyclopentadiene	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0609	0.366	mg/kg dry
Hexachloroethane	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0160	0.146	mg/kg dry
Indeno(1,2,3-cd)pyrene	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0157	0.146	mg/kg dry
Isophorone	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.00958	0.146	mg/kg dry
Naphthalene	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0108	0.146	mg/kg dry
Nitrobenzene	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0248	0.146	mg/kg dry
n-Nitroso-di-n-propylamine	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.00783	0.146	mg/kg dry
n-Nitrosodiphenylamine	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0312	0.146	mg/kg dry
Pentachlorophenol	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0201	0.366	mg/kg dry
Phenanthrene	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0192	0.146	mg/kg dry
Phenol	SW 846 8270D	09/17/20 08:04	09/18/20 21:48	ND	U	0.0119	0.146	mg/kg dry
<b>Pyrene</b>	<b>SW 846 8270D</b>	09/17/20 08:04	09/18/20 21:48	<b>0.0408</b>	<b>J</b>	<b>0.0108</b>	<b>0.146</b>	mg/kg dry
<b>Pesticides</b>								
4,4'-DDD	SW 846 8081B	09/17/20 08:10	09/18/20 15:53	ND	U	0.000653	0.00143	mg/kg dry
4,4'-DDE	SW 846 8081B	09/17/20 08:10	09/18/20 15:53	ND	U	0.000781	0.00143	mg/kg dry
4,4'-DDT	SW 846 8081B	09/17/20 08:10	09/18/20 15:53	ND	U	0.00101	0.00143	mg/kg dry
Aldrin	SW 846 8081B	09/17/20 08:10	09/18/20 15:53	ND	U	0.000676	0.00143	mg/kg dry

FootNotes

RL - Reporting limit  
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D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
H - Indicates a Hold Time violation



AGUA PRO-TECH LABORATORIES  
Certified Environmental Testing

## Analytical Results Summary

### Conquest Contracting Engineers

#### 0090585-01 (Soil)

Williams St

<b>Collected</b> 09/14/2020 08:50	<b>Received</b> 09/14/2020 16:05	<b>Contact</b>
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Lab Section/ Analysis	Method	Prepared	Analyzed	Result	Qual	MDL	RL	Units
<b>Pesticides</b>								
alpha-BHC	SW 846 8081B	09/17/20 08:10	09/18/20 15:53	ND	U	0.000425	0.00143	mg/kg dry
beta-BHC	SW 846 8081B	09/17/20 08:10	09/18/20 15:53	ND	U	0.000682	0.00143	mg/kg dry
Chlordane	SW 846 8081B	09/17/20 08:10	09/18/20 15:53	ND	U	0.000635	0.00143	mg/kg dry
delta-BHC	SW 846 8081B	09/17/20 08:10	09/18/20 15:53	ND	U	0.000663	0.00143	mg/kg dry
Dieldrin	SW 846 8081B	09/17/20 08:10	09/18/20 15:53	ND	U	0.000747	0.00143	mg/kg dry
Endosulfan I	SW 846 8081B	09/17/20 08:10	09/18/20 15:53	ND	U	0.000674	0.00143	mg/kg dry
Endosulfan II	SW 846 8081B	09/17/20 08:10	09/18/20 15:53	ND	U	0.000649	0.00143	mg/kg dry
Endosulfan sulfate	SW 846 8081B	09/17/20 08:10	09/18/20 15:53	ND	U	0.000537	0.00143	mg/kg dry
Endrin	SW 846 8081B	09/17/20 08:10	09/18/20 15:53	ND	U	0.000493	0.00143	mg/kg dry
Endrin aldehyde	SW 846 8081B	09/17/20 08:10	09/18/20 15:53	ND	U	0.000569	0.00143	mg/kg dry
Endrin ketone	SW 846 8081B	09/17/20 08:10	09/18/20 15:53	ND	U	0.000503	0.00143	mg/kg dry
gamma-BHC (Lindane)	SW 846 8081B	09/17/20 08:10	09/18/20 15:53	ND	U	0.000452	0.00143	mg/kg dry
Heptachlor	SW 846 8081B	09/17/20 08:10	09/18/20 15:53	ND	U	0.000382	0.00143	mg/kg dry
Heptachlor Epoxide	SW 846 8081B	09/17/20 08:10	09/18/20 15:53	ND	U	0.000720	0.00143	mg/kg dry
Methoxychlor	SW 846 8081B	09/17/20 08:10	09/18/20 15:53	ND	U	0.000418	0.00143	mg/kg dry
Toxaphene	SW 846 8081B	09/17/20 08:10	09/18/20 15:53	ND	U	0.0688	0.0725	mg/kg dry
<b>PCBs</b>								
Aroclor-1016	SW 846 8082A	09/17/20 08:07	09/17/20 16:44	ND	U	0.00486	0.0362	mg/kg dry
Aroclor-1221	SW 846 8082A	09/17/20 08:07	09/17/20 16:44	ND	U	0.00956	0.0362	mg/kg dry
Aroclor-1232	SW 846 8082A	09/17/20 08:07	09/17/20 16:44	ND	U	0.0122	0.0362	mg/kg dry
Aroclor-1242	SW 846 8082A	09/17/20 08:07	09/17/20 16:44	ND	U	0.00712	0.0362	mg/kg dry
Aroclor-1248	SW 846 8082A	09/17/20 08:07	09/17/20 16:44	ND	U	0.00745	0.0362	mg/kg dry
Aroclor-1254	SW 846 8082A	09/17/20 08:07	09/17/20 16:44	ND	U	0.00585	0.0362	mg/kg dry
Aroclor-1260	SW 846 8082A	09/17/20 08:07	09/17/20 16:44	ND	U	0.00454	0.0362	mg/kg dry
Aroclor-1262	SW 846 8082A	09/17/20 08:07	09/17/20 16:44	ND	U	0.00975	0.0362	mg/kg dry
Aroclor-1268	SW 846 8082A	09/17/20 08:07	09/17/20 16:44	ND	U	0.00438	0.0362	mg/kg dry
Total PCBs	SW 846 8082A	09/17/20 08:07	09/17/20 16:44	ND	U	0.00338	0.0362	mg/kg dry
<b>VO+15 Volatile Organics - GC/MS</b>								
1,1,1-Trichloroethane	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000321	0.00220	mg/kg dry
1,1,2,2-Tetrachloroethane	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000303	0.00220	mg/kg dry
1,1,2-Trichloro-1,2,2-Trifluoroethane	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000940	0.00220	mg/kg dry
1,1,2-Trichloroethane	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000370	0.00220	mg/kg dry
1,1-Dichloroethane	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000321	0.00220	mg/kg dry

FootNotes

RL - Reporting limit  
MDL - Minimum detection limit  
ND, U - Indicates compound analyzed for but not detected  
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B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard  
D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
H - Indicates a Hold Time violation

**Analytical Results Summary**  
**Conquest Contracting Engineers**  
**0090585-01 (Soil)**  
**Williams St**

<b>Collected</b> 09/14/2020 08:50	<b>Received</b> 09/14/2020 16:05	<b>Contact</b>
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Lab Section/ Analysis	Method	Prepared	Analyzed	Result	Qual	MDL	RL	Units
<b>VO+15 Volatile Organics - GC/MS</b>								
1,1-Dichloroethene	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000406	0.00220	mg/kg dry
1,2,3-Trichlorobenzene	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000474	0.00220	mg/kg dry
1,2,4-Trichlorobenzene	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000585	0.00220	mg/kg dry
1,2,4-Trimethylbenzene	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000303	0.00220	mg/kg dry
1,2-Dibromo-3-chloropropane	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000536	0.00549	mg/kg dry
1,2-Dibromoethane	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000277	0.00220	mg/kg dry
1,2-Dichlorobenzene	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000388	0.00220	mg/kg dry
1,2-Dichloroethane	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000310	0.00220	mg/kg dry
1,2-Dichloropropane	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000360	0.00220	mg/kg dry
1,3-Dichlorobenzene	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000161	0.00220	mg/kg dry
1,4-Dichlorobenzene	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000316	0.00220	mg/kg dry
2-Butanone	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000358	0.00549	mg/kg dry
2-Hexanone	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000205	0.00220	mg/kg dry
4-Methyl-2-pentanone	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000275	0.00220	mg/kg dry
Acetone	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000665	0.00549	mg/kg dry
Benzene	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000200	0.00220	mg/kg dry
Bromochloromethane	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000405	0.00220	mg/kg dry
Bromodichloromethane	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000276	0.00220	mg/kg dry
Bromoform	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000385	0.00220	mg/kg dry
Bromomethane	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000634	0.00220	mg/kg dry
Carbon disulfide	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000315	0.00220	mg/kg dry
Carbon Tetrachloride	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000331	0.00220	mg/kg dry
Chlorobenzene	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000318	0.00220	mg/kg dry
Chlorodibromomethane	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000270	0.00220	mg/kg dry
Chloroethane	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000374	0.00220	mg/kg dry
Chloroform	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000369	0.00220	mg/kg dry
Chloromethane	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000846	0.00220	mg/kg dry
cis-1,2-Dichloroethene	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000106	0.00220	mg/kg dry
cis-1,3-Dichloropropene	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000278	0.00220	mg/kg dry
Cyclohexane	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000486	0.00220	mg/kg dry
Dichlorodifluoromethane	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000741	0.00220	mg/kg dry
EthylBenzene	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000298	0.00220	mg/kg dry
Isopropylbenzene	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000345	0.00220	mg/kg dry
<b>m+p-Xylenes</b>	<b>SW 846 8260C</b>	09/17/20 17:26	09/17/20 17:26	<b>0.00127</b>	<b>J</b>	<b>0.000555</b>	<b>0.00439</b>	mg/kg dry
Methyl Acetate	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000291	0.00220	mg/kg dry
Methyl tert-Butyl Ether	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000371	0.00220	mg/kg dry

FootNotes

RL - Reporting limit  
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 E - Concentration exceeds highest calibration standard  
 D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 H - Indicates a Hold Time violation





AQUA PRO-TECH LABORATORIES  
 Certified Environmental Testing

**Analytical Results Summary**  
**Conquest Contracting Engineers**  
**0090585-01 (Soil)**  
**Williams St**

<b>Collected</b> 09/14/2020 08:50	<b>Received</b> 09/14/2020 16:05	<b>Contact</b>
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Lab Section/ Analysis	Method	Prepared	Analyzed	Result	Qual	MDL	RL	Units
<b>VO+15 Volatile Organics - GC/MS</b>								
Methylcyclohexane	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000354	0.00220	mg/kg dry
Methylene Chloride	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000660	0.00220	mg/kg dry
<b>o-Xylene</b>	<b>SW 846 8260C</b>	09/17/20 17:26	09/17/20 17:26	<b>0.000734</b>	<b>J</b>	<b>0.000282</b>	<b>0.00220</b>	mg/kg dry
Styrene	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000314	0.00220	mg/kg dry
tert-Butyl alcohol	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.00461	0.0220	mg/kg dry
Tetrachloroethene	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000217	0.00220	mg/kg dry
Toluene	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000177	0.00220	mg/kg dry
<b>Total Xylenes</b>	<b>SW 846 8260C</b>	09/17/20 17:26	09/17/20 17:26	<b>0.00201</b>	<b>J</b>	<b>0.000282</b>	<b>0.00220</b>	mg/kg dry
trans-1,2-Dichloroethene	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000298	0.00220	mg/kg dry
trans-1,3-Dichloropropene	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000419	0.00220	mg/kg dry
Trichloroethene	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000323	0.00220	mg/kg dry
Trichlorofluoromethane	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000253	0.00220	mg/kg dry
Vinyl chloride	SW 846 8260C	09/17/20 17:26	09/17/20 17:26	ND	U	0.000417	0.00220	mg/kg dry

FootNotes

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 P - Greater than 25% diff. between 2 GC columns.  
 H - Indicates a Hold Time violation

**Analytical Results Summary**  
**Conquest Contracting Engineers**  
**0090585-02 (Soil)**  
 Jefferson St

<b>Collected</b> 09/14/2020 11:00	<b>Received</b> 09/14/2020 16:05	<b>Contact</b>
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Lab Section/ Analysis	Method	Prepared	Analyzed	Result	Qual	MDL	RL	Units
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**General Chemistry**

Chromium, Hexavalent	SW 846 7196A	09/16/20 07:40	09/16/20 09:30	ND	U		0.431	mg/kg dry
Cyanide	SW 846 9014	09/15/20 13:13	09/16/20 15:25	ND	U		0.267	mg/kg dry
<b>Percent Solids</b>	<b>Gravimetric</b>	09/14/20 17:55	09/15/20 10:40	<b>91.4</b>				%
pH	SW 846 9045D	09/21/20 15:50	09/21/20 15:50	<b>6.72</b>			<b>0.0100</b>	pH Units
Redox Potential	SM 2580 (mod)	09/21/20 13:35	09/21/20 13:55	<b>158</b>			<b>-1000</b>	mV

**Total Metals**

Aluminum	SW 846 6010D	09/16/20 06:38	09/18/20 11:49	<b>7350</b>			<b>2.76</b>	mg/kg dry
Antimony	SW 846 6010D	09/16/20 06:38	09/18/20 11:49	ND	U		1.38	mg/kg dry
Arsenic	SW 846 6010D	09/16/20 06:38	09/18/20 11:49	<b>2.13</b>			<b>1.38</b>	mg/kg dry
Barium	SW 846 6010D	09/16/20 06:38	09/18/20 11:49	<b>34.8</b>			<b>0.553</b>	mg/kg dry
Beryllium	SW 846 6010D	09/16/20 06:38	09/18/20 11:49	<b>0.338</b>			<b>0.0276</b>	mg/kg dry
Cadmium	SW 846 6010D	09/16/20 06:38	09/18/20 11:49	ND	U		0.276	mg/kg dry
Calcium	SW 846 6010D	09/16/20 06:38	09/18/20 11:49	<b>887</b>			<b>27.6</b>	mg/kg dry
Chromium	SW 846 6010D	09/16/20 06:38	09/18/20 11:49	<b>15.1</b>			<b>0.276</b>	mg/kg dry
Cobalt	SW 846 6010D	09/16/20 06:38	09/18/20 11:49	<b>3.54</b>			<b>0.221</b>	mg/kg dry
Copper	SW 846 6010D	09/16/20 06:38	09/18/20 11:49	<b>7.13</b>			<b>0.276</b>	mg/kg dry
Iron	SW 846 6010D	09/16/20 06:38	09/18/20 11:49	<b>12300</b>	B		<b>5.53</b>	mg/kg dry
Lead	SW 846 6010D	09/16/20 06:38	09/18/20 11:49	<b>4.26</b>			<b>1.38</b>	mg/kg dry
Magnesium	SW 846 6010D	09/16/20 06:38	09/18/20 11:49	<b>2270</b>			<b>55.3</b>	mg/kg dry
Manganese	SW 846 6010D	09/16/20 06:38	09/18/20 11:49	<b>147</b>			<b>0.276</b>	mg/kg dry
Mercury	SW 846 7471B	09/17/20 07:00	09/17/20 13:00	ND	U		0.0479	mg/kg dry
Nickel	SW 846 6010D	09/16/20 06:38	09/18/20 11:49	<b>11.9</b>			<b>0.138</b>	mg/kg dry
Potassium	SW 846 6010D	09/16/20 06:38	09/18/20 11:49	<b>633</b>			<b>111</b>	mg/kg dry
Selenium	SW 846 6010D	09/16/20 06:38	09/18/20 11:49	ND	U		1.38	mg/kg dry
Silver	SW 846 6010D	09/16/20 06:38	09/18/20 11:49	ND	U		0.553	mg/kg dry
Sodium	SW 846 6010D	09/16/20 06:38	09/18/20 11:49	<b>175</b>			<b>55.3</b>	mg/kg dry
Thallium	SW 846 6010D	09/16/20 06:38	09/18/20 11:49	ND	U		1.38	mg/kg dry
Vanadium	SW 846 6010D	09/16/20 06:38	09/18/20 11:49	<b>13.0</b>			<b>0.553</b>	mg/kg dry
Zinc	SW 846 6010D	09/16/20 06:38	09/18/20 11:49	<b>22.2</b>			<b>0.829</b>	mg/kg dry

**EPH Category 2 Extractable Petroleum Hydrocarbons Category 2**

<b>Total EPH</b>	<b>NJDEP-EPH-CAT2</b>	09/16/20 15:55	09/21/20 12:03	<b>22.3</b>		<b>10.9</b>	<b>21.9</b>	mg/kg dry
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**BNA+25 Semivolatile Organics - GC/MS**

FootNotes

RL - Reporting limit  
 MDL - Minimum detection limit  
 ND, U - Indicates compound analyzed for but not detected  
 J - Indicates estimated value

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 E - Concentration exceeds highest calibration standard  
 D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
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AQUA PRO-TECH LABORATORIES  
 Certified Environmental Testing

**Analytical Results Summary**  
**Conquest Contracting Engineers**  
**0090585-02 (Soil)**  
 Jefferson St

<b>Collected</b> 09/14/2020 11:00	<b>Received</b> 09/14/2020 16:05	<b>Contact</b>
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Lab Section/ Analysis	Method	Prepared	Analyzed	Result	Qual	MDL	RL	Units
<b>BNA+25 Semivolatile Organics - GC/MS</b>								
2,3,4,6-Tetrachlorophenol	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0224	0.146	mg/kg dry
2,4,5-Trichlorophenol	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0198	0.146	mg/kg dry
2,4,6-Trichlorophenol	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.00911	0.146	mg/kg dry
2,4-Dichlorophenol	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0147	0.146	mg/kg dry
2,4-Dimethylphenol	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0143	0.146	mg/kg dry
2,4-Dinitrophenol	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0210	0.730	mg/kg dry
2,4-Dinitrotoluene	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0155	0.146	mg/kg dry
2,6-Dinitrotoluene	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0348	0.146	mg/kg dry
2-Chloronaphthalene	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0167	0.146	mg/kg dry
2-Chlorophenol	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0193	0.146	mg/kg dry
2-Methylnaphthalene	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0349	0.219	mg/kg dry
2-Methylphenol	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0288	0.146	mg/kg dry
2-Nitroaniline	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0117	0.146	mg/kg dry
2-Nitrophenol	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0162	0.146	mg/kg dry
3,3'-Dichlorobenzidine	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0153	0.146	mg/kg dry
3+4-Methylphenol	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0267	0.146	mg/kg dry
3-Nitroaniline	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0270	0.146	mg/kg dry
4,6-Dinitro-2-methylphenol	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0275	0.364	mg/kg dry
4-Bromophenyl-phenyl ether	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0208	0.146	mg/kg dry
4-Chloro-3-methylphenol	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0230	0.146	mg/kg dry
4-Chloroaniline	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.00510	0.146	mg/kg dry
4-Chlorophenyl phenyl ether	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.00787	0.146	mg/kg dry
4-Nitroaniline	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0729	0.146	mg/kg dry
4-Nitrophenol	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.00932	0.146	mg/kg dry
Acenaphthene	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.00830	0.146	mg/kg dry
Acenaphthylene	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.00507	0.146	mg/kg dry
Acetophenone	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0144	0.146	mg/kg dry
Anthracene	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0211	0.146	mg/kg dry
Atrazine	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0137	0.146	mg/kg dry
Benzaldehyde	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0448	0.146	mg/kg dry
Benzo(a)anthracene	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0147	0.146	mg/kg dry
Benzo(a)pyrene	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0254	0.146	mg/kg dry
Benzo(b)fluoranthene	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0205	0.146	mg/kg dry
Benzo(g,h,i)perylene	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0118	0.146	mg/kg dry
Benzo(k)fluoranthene	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0167	0.146	mg/kg dry
Biphenyl	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0128	0.146	mg/kg dry

FootNotes

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**Analytical Results Summary**  
**Conquest Contracting Engineers**  
**0090585-02 (Soil)**  
 Jefferson St

<b>Collected</b> 09/14/2020 11:00	<b>Received</b> 09/14/2020 16:05	<b>Contact</b>
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Lab Section/ Analysis	Method	Prepared	Analyzed	Result	Qual	MDL	RL	Units
<b>BNA+25 Semivolatile Organics - GC/MS</b>								
bis(2-chloroethoxy)methane	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0201	0.146	mg/kg dry
bis(2-chloroethyl)ether	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0160	0.146	mg/kg dry
bis(2-chloroisopropyl)ether	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0524	0.146	mg/kg dry
bis(2-ethylhexyl)phthalate	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0291	0.146	mg/kg dry
Butylbenzylphthalate	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0132	0.146	mg/kg dry
Caprolactam	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0188	0.146	mg/kg dry
Carbazole	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0280	0.364	mg/kg dry
Chrysene	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.00998	0.146	mg/kg dry
Dibenzo(a,h)anthracene	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0144	0.146	mg/kg dry
Dibenzofuran	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.00868	0.146	mg/kg dry
Diethylphthalate	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0282	0.146	mg/kg dry
<b>Dimethylphthalate</b>	<b>SW 846 8270D</b>	09/17/20 08:04	09/18/20 22:17	<b>0.0561</b>	<b>J</b>	<b>0.00904</b>	<b>0.146</b>	mg/kg dry
Di-n-butylphthalate	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0595	0.146	mg/kg dry
Di-n-octylphthalate	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0299	0.146	mg/kg dry
Fluoranthene	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0137	0.146	mg/kg dry
Fluorene	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0121	0.146	mg/kg dry
Hexachlorobenzene	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0190	0.146	mg/kg dry
Hexachlorobutadiene	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0699	0.146	mg/kg dry
Hexachlorocyclopentadiene	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0607	0.364	mg/kg dry
Hexachloroethane	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0160	0.146	mg/kg dry
Indeno(1,2,3-cd)pyrene	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0156	0.146	mg/kg dry
Isophorone	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.00954	0.146	mg/kg dry
Naphthalene	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0108	0.146	mg/kg dry
Nitrobenzene	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0247	0.146	mg/kg dry
n-Nitroso-di-n-propylamine	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.00780	0.146	mg/kg dry
n-Nitrosodiphenylamine	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0311	0.146	mg/kg dry
Pentachlorophenol	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0200	0.364	mg/kg dry
Phenanthrene	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0191	0.146	mg/kg dry
Phenol	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0118	0.146	mg/kg dry
Pyrene	SW 846 8270D	09/17/20 08:04	09/18/20 22:17	ND	U	0.0107	0.146	mg/kg dry
<b>Pesticides</b>								
4,4'-DDD	SW 846 8081B	09/17/20 08:10	09/18/20 16:13	ND	U	0.000651	0.00142	mg/kg dry
4,4'-DDE	SW 846 8081B	09/17/20 08:10	09/18/20 16:13	ND	U	0.000778	0.00142	mg/kg dry
4,4'-DDT	SW 846 8081B	09/17/20 08:10	09/18/20 16:13	ND	U	0.00100	0.00142	mg/kg dry
Aldrin	SW 846 8081B	09/17/20 08:10	09/18/20 16:13	ND	U	0.000674	0.00142	mg/kg dry

FootNotes

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**Analytical Results Summary**  
**Conquest Contracting Engineers**  
**0090585-02 (Soil)**  
 Jefferson St

<b>Collected</b> 09/14/2020 11:00	<b>Received</b> 09/14/2020 16:05	<b>Contact</b>
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Lab Section/ Analysis	Method	Prepared	Analyzed	Result	Qual	MDL	RL	Units
<b>Pesticides</b>								
alpha-BHC	SW 846 8081B	09/17/20 08:10	09/18/20 16:13	ND	U	0.000423	0.00142	mg/kg dry
beta-BHC	SW 846 8081B	09/17/20 08:10	09/18/20 16:13	ND	U	0.000679	0.00142	mg/kg dry
Chlordane	SW 846 8081B	09/17/20 08:10	09/18/20 16:13	ND	U	0.000632	0.00142	mg/kg dry
delta-BHC	SW 846 8081B	09/17/20 08:10	09/18/20 16:13	ND	U	0.000661	0.00142	mg/kg dry
Dieldrin	SW 846 8081B	09/17/20 08:10	09/18/20 16:13	ND	U	0.000744	0.00142	mg/kg dry
Endosulfan I	SW 846 8081B	09/17/20 08:10	09/18/20 16:13	ND	U	0.000672	0.00142	mg/kg dry
Endosulfan II	SW 846 8081B	09/17/20 08:10	09/18/20 16:13	ND	U	0.000647	0.00142	mg/kg dry
Endosulfan sulfate	SW 846 8081B	09/17/20 08:10	09/18/20 16:13	ND	U	0.000535	0.00142	mg/kg dry
Endrin	SW 846 8081B	09/17/20 08:10	09/18/20 16:13	ND	U	0.000491	0.00142	mg/kg dry
Endrin aldehyde	SW 846 8081B	09/17/20 08:10	09/18/20 16:13	ND	U	0.000567	0.00142	mg/kg dry
Endrin ketone	SW 846 8081B	09/17/20 08:10	09/18/20 16:13	ND	U	0.000501	0.00142	mg/kg dry
gamma-BHC (Lindane)	SW 846 8081B	09/17/20 08:10	09/18/20 16:13	ND	U	0.000451	0.00142	mg/kg dry
Heptachlor	SW 846 8081B	09/17/20 08:10	09/18/20 16:13	ND	U	0.000381	0.00142	mg/kg dry
Heptachlor Epoxide	SW 846 8081B	09/17/20 08:10	09/18/20 16:13	ND	U	0.000718	0.00142	mg/kg dry
Methoxychlor	SW 846 8081B	09/17/20 08:10	09/18/20 16:13	ND	U	0.000417	0.00142	mg/kg dry
Toxaphene	SW 846 8081B	09/17/20 08:10	09/18/20 16:13	ND	U	0.0685	0.0722	mg/kg dry
<b>PCBs</b>								
Aroclor-1016	SW 846 8082A	09/17/20 08:07	09/17/20 17:05	ND	U	0.00484	0.0361	mg/kg dry
Aroclor-1221	SW 846 8082A	09/17/20 08:07	09/17/20 17:05	ND	U	0.00952	0.0361	mg/kg dry
Aroclor-1232	SW 846 8082A	09/17/20 08:07	09/17/20 17:05	ND	U	0.0121	0.0361	mg/kg dry
Aroclor-1242	SW 846 8082A	09/17/20 08:07	09/17/20 17:05	ND	U	0.00710	0.0361	mg/kg dry
Aroclor-1248	SW 846 8082A	09/17/20 08:07	09/17/20 17:05	ND	U	0.00742	0.0361	mg/kg dry
Aroclor-1254	SW 846 8082A	09/17/20 08:07	09/17/20 17:05	ND	U	0.00583	0.0361	mg/kg dry
Aroclor-1260	SW 846 8082A	09/17/20 08:07	09/17/20 17:05	ND	U	0.00452	0.0361	mg/kg dry
Aroclor-1262	SW 846 8082A	09/17/20 08:07	09/17/20 17:05	ND	U	0.00972	0.0361	mg/kg dry
Aroclor-1268	SW 846 8082A	09/17/20 08:07	09/17/20 17:05	ND	U	0.00437	0.0361	mg/kg dry
Total PCBs	SW 846 8082A	09/17/20 08:07	09/17/20 17:05	ND	U	0.00337	0.0361	mg/kg dry
<b>VO+15 Volatile Organics - GC/MS</b>								
1,1,1-Trichloroethane	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000319	0.00219	mg/kg dry
1,1,2,2-Tetrachloroethane	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000302	0.00219	mg/kg dry
1,1,2-Trichloro-1,2,2-Trifluoroethane	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000937	0.00219	mg/kg dry
1,1,2-Trichloroethane	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000369	0.00219	mg/kg dry
1,1-Dichloroethane	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000319	0.00219	mg/kg dry

FootNotes

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AQUA PRO-TECH LABORATORIES  
 Certified Environmental Testing

## Analytical Results Summary

### Conquest Contracting Engineers

#### 0090585-02 (Soil)

Jefferson St

<b>Collected</b> 09/14/2020 11:00	<b>Received</b> 09/14/2020 16:05	<b>Contact</b>
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Lab Section/ Analysis	Method	Prepared	Analyzed	Result	Qual	MDL	RL	Units
<b>VO+15 Volatile Organics - GC/MS</b>								
1,1-Dichloroethene	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000405	0.00219	mg/kg dry
1,2,3-Trichlorobenzene	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000473	0.00219	mg/kg dry
1,2,4-Trichlorobenzene	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000583	0.00219	mg/kg dry
1,2,4-Trimethylbenzene	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000302	0.00219	mg/kg dry
1,2-Dibromo-3-chloropropane	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000534	0.00547	mg/kg dry
1,2-Dibromoethane	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000276	0.00219	mg/kg dry
1,2-Dichlorobenzene	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000386	0.00219	mg/kg dry
1,2-Dichloroethane	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000309	0.00219	mg/kg dry
1,2-Dichloropropane	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000359	0.00219	mg/kg dry
1,3-Dichlorobenzene	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000161	0.00219	mg/kg dry
1,4-Dichlorobenzene	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000315	0.00219	mg/kg dry
2-Butanone	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000357	0.00547	mg/kg dry
2-Hexanone	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000205	0.00219	mg/kg dry
4-Methyl-2-pentanone	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000274	0.00219	mg/kg dry
Acetone	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000663	0.00547	mg/kg dry
Benzene	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000199	0.00219	mg/kg dry
Bromochloromethane	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000404	0.00219	mg/kg dry
Bromodichloromethane	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000275	0.00219	mg/kg dry
Bromoform	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000384	0.00219	mg/kg dry
Bromomethane	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000631	0.00219	mg/kg dry
Carbon disulfide	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000314	0.00219	mg/kg dry
Carbon Tetrachloride	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000329	0.00219	mg/kg dry
Chlorobenzene	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000317	0.00219	mg/kg dry
Chlorodibromomethane	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000269	0.00219	mg/kg dry
Chloroethane	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000373	0.00219	mg/kg dry
Chloroform	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000368	0.00219	mg/kg dry
Chloromethane	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000843	0.00219	mg/kg dry
cis-1,2-Dichloroethene	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000106	0.00219	mg/kg dry
cis-1,3-Dichloropropene	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000277	0.00219	mg/kg dry
Cyclohexane	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000485	0.00219	mg/kg dry
Dichlorodifluoromethane	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000739	0.00219	mg/kg dry
EthylBenzene	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000297	0.00219	mg/kg dry
Isopropylbenzene	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000344	0.00219	mg/kg dry
<b>m+p-Xylenes</b>	<b>SW 846 8260C</b>	09/17/20 17:56	09/17/20 17:56	<b>0.00115</b>	<b>J</b>	<b>0.000553</b>	<b>0.00438</b>	mg/kg dry
Methyl Acetate	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000290	0.00219	mg/kg dry
Methyl tert-Butyl Ether	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000370	0.00219	mg/kg dry

FootNotes

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**Analytical Results Summary**  
**Conquest Contracting Engineers**  
**0090585-02 (Soil)**  
 Jefferson St

<b>Collected</b> 09/14/2020 11:00	<b>Received</b> 09/14/2020 16:05	<b>Contact</b>
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Lab Section/ Analysis	Method	Prepared	Analyzed	Result	Qual	MDL	RL	Units
<b>VO+15 Volatile Organics - GC/MS</b>								
Methylcyclohexane	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000352	0.00219	mg/kg dry
Methylene Chloride	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000658	0.00219	mg/kg dry
o-Xylene	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000281	0.00219	mg/kg dry
Styrene	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000313	0.00219	mg/kg dry
tert-Butyl alcohol	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.00460	0.0219	mg/kg dry
Tetrachloroethene	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000217	0.00219	mg/kg dry
Toluene	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000176	0.00219	mg/kg dry
<b>Total Xylenes</b>	<b>SW 846 8260C</b>	09/17/20 17:56	09/17/20 17:56	<b>0.00115</b>	<b>J</b>	<b>0.000281</b>	<b>0.00219</b>	mg/kg dry
trans-1,2-Dichloroethene	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000297	0.00219	mg/kg dry
trans-1,3-Dichloropropene	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000418	0.00219	mg/kg dry
Trichloroethene	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000322	0.00219	mg/kg dry
Trichlorofluoromethane	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000252	0.00219	mg/kg dry
Vinyl chloride	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	ND	U	0.000416	0.00219	mg/kg dry
<b>VO+15 Volatile Organics - GC/MS TIC</b>								
Azuleno[4,5-b]furan-2(3H)-one, 9-(acetyl	SW 846 8260C	09/17/20 17:56	09/17/20 17:56	0.0188	J			mg/kg dry

TIC Total: 0.0188

FootNotes

RL - Reporting limit  
 MDL - Minimum detection limit  
 ND, U - Indicates compound analyzed for but not detected  
 J - Indicates estimated value

B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard  
 D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 H - Indicates a Hold Time violation



**Analytical Results Summary**  
**Conquest Contracting Engineers**  
**0090585-03 (Soil)**  
**Salem St**

<b>Collected</b> 09/14/2020 13:00	<b>Received</b> 09/14/2020 16:05	<b>Contact</b>
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Lab Section/ Analysis	Method	Prepared	Analyzed	Result	Qual	MDL	RL	Units
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**General Chemistry**

Chromium, Hexavalent	SW 846 7196A	09/16/20 07:40	09/16/20 09:30	ND	U		0.481	mg/kg dry
Cyanide	SW 846 9014	09/15/20 13:13	09/16/20 15:25	ND	U		0.307	mg/kg dry
<b>Percent Solids</b>	<b>Gravimetric</b>	09/14/20 17:55	09/15/20 10:40	<b>83.9</b>				%
pH	SW 846 9045D	09/21/20 15:50	09/21/20 15:50	<b>6.37</b>			<b>0.0100</b>	pH Units
Redox Potential	SM 2580 (mod)	09/21/20 13:35	09/21/20 13:55	<b>116</b>			<b>-1000</b>	mV

**Total Metals**

Aluminum	SW 846 6010D	09/16/20 06:38	09/18/20 11:52	<b>9440</b>			<b>3.00</b>	mg/kg dry
Antimony	SW 846 6010D	09/16/20 06:38	09/18/20 11:52	ND	U		1.50	mg/kg dry
Arsenic	SW 846 6010D	09/16/20 06:38	09/18/20 11:52	<b>3.15</b>			<b>1.50</b>	mg/kg dry
Barium	SW 846 6010D	09/16/20 06:38	09/18/20 11:52	<b>77.9</b>			<b>0.599</b>	mg/kg dry
Beryllium	SW 846 6010D	09/16/20 06:38	09/18/20 11:52	<b>0.465</b>			<b>0.0300</b>	mg/kg dry
Cadmium	SW 846 6010D	09/16/20 06:38	09/18/20 11:52	ND	U		0.300	mg/kg dry
Calcium	SW 846 6010D	09/16/20 06:38	09/18/20 11:52	<b>1270</b>			<b>30.0</b>	mg/kg dry
Chromium	SW 846 6010D	09/16/20 06:38	09/18/20 11:52	<b>15.3</b>			<b>0.300</b>	mg/kg dry
Cobalt	SW 846 6010D	09/16/20 06:38	09/18/20 11:52	<b>6.23</b>			<b>0.240</b>	mg/kg dry
Copper	SW 846 6010D	09/16/20 06:38	09/18/20 11:52	<b>7.73</b>			<b>0.300</b>	mg/kg dry
Iron	SW 846 6010D	09/16/20 06:38	09/18/20 11:52	<b>13500</b>	B		<b>5.99</b>	mg/kg dry
Lead	SW 846 6010D	09/16/20 06:38	09/18/20 11:52	<b>8.00</b>			<b>1.50</b>	mg/kg dry
Magnesium	SW 846 6010D	09/16/20 06:38	09/18/20 11:52	<b>2000</b>			<b>59.9</b>	mg/kg dry
Manganese	SW 846 6010D	09/16/20 06:38	09/18/20 11:52	<b>713</b>			<b>0.300</b>	mg/kg dry
Mercury	SW 846 7471B	09/17/20 07:00	09/17/20 13:04	<b>0.0623</b>			<b>0.0504</b>	mg/kg dry
Nickel	SW 846 6010D	09/16/20 06:38	09/18/20 11:52	<b>11.4</b>			<b>0.150</b>	mg/kg dry
Potassium	SW 846 6010D	09/16/20 06:38	09/18/20 11:52	<b>566</b>			<b>120</b>	mg/kg dry
Selenium	SW 846 6010D	09/16/20 06:38	09/18/20 11:52	ND	U		1.50	mg/kg dry
Silver	SW 846 6010D	09/16/20 06:38	09/18/20 11:52	ND	U		0.599	mg/kg dry
Sodium	SW 846 6010D	09/16/20 06:38	09/18/20 11:52	<b>252</b>			<b>59.9</b>	mg/kg dry
Thallium	SW 846 6010D	09/16/20 06:38	09/18/20 11:52	ND	U		1.50	mg/kg dry
Vanadium	SW 846 6010D	09/16/20 06:38	09/18/20 11:52	<b>19.8</b>			<b>0.599</b>	mg/kg dry
Zinc	SW 846 6010D	09/16/20 06:38	09/18/20 11:52	<b>30.0</b>			<b>0.899</b>	mg/kg dry

**EPH Category 2 Extractable Petroleum Hydrocarbons Category 2**

<b>Total EPH</b>	<b>NJDEP-EPH-CAT2</b>	09/16/20 15:55	09/21/20 12:20	<b>25.5</b>		<b>11.9</b>	<b>23.8</b>	mg/kg dry
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**BNA+25 Semivolatile Organics - GC/MS**

FootNotes

RL - Reporting limit  
MDL - Minimum detection limit  
ND, U - Indicates compound analyzed for but not detected  
J - Indicates estimated value

B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard  
D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
H - Indicates a Hold Time violation





**Analytical Results Summary**  
**Conquest Contracting Engineers**  
**0090585-03 (Soil)**  
**Salem St**

<b>Collected</b> 09/14/2020 13:00	<b>Received</b> 09/14/2020 16:05	<b>Contact</b>
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Lab Section/ Analysis	Method	Prepared	Analyzed	Result	Qual	MDL	RL	Units
<b>BNA+25 Semivolatile Organics - GC/MS</b>								
2,3,4,6-Tetrachlorophenol	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0244	0.159	mg/kg dry
2,4,5-Trichlorophenol	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0216	0.159	mg/kg dry
2,4,6-Trichlorophenol	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.00993	0.159	mg/kg dry
2,4-Dichlorophenol	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0160	0.159	mg/kg dry
2,4-Dimethylphenol	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0156	0.159	mg/kg dry
2,4-Dinitrophenol	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0229	0.795	mg/kg dry
2,4-Dinitrotoluene	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0169	0.159	mg/kg dry
2,6-Dinitrotoluene	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0379	0.159	mg/kg dry
2-Chloronaphthalene	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0182	0.159	mg/kg dry
2-Chlorophenol	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0210	0.159	mg/kg dry
2-Methylnaphthalene	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0380	0.238	mg/kg dry
2-Methylphenol	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0314	0.159	mg/kg dry
2-Nitroaniline	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0128	0.159	mg/kg dry
2-Nitrophenol	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0176	0.159	mg/kg dry
3,3'-Dichlorobenzidine	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0167	0.159	mg/kg dry
3+4-Methylphenol	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0291	0.159	mg/kg dry
3-Nitroaniline	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0294	0.159	mg/kg dry
4,6-Dinitro-2-methylphenol	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0299	0.397	mg/kg dry
4-Bromophenyl-phenyl ether	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0227	0.159	mg/kg dry
4-Chloro-3-methylphenol	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0250	0.159	mg/kg dry
4-Chloroaniline	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.00556	0.159	mg/kg dry
4-Chlorophenyl phenyl ether	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.00857	0.159	mg/kg dry
4-Nitroaniline	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0794	0.159	mg/kg dry
4-Nitrophenol	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0102	0.159	mg/kg dry
Acenaphthene	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.00905	0.159	mg/kg dry
Acenaphthylene	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.00552	0.159	mg/kg dry
Acetophenone	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0157	0.159	mg/kg dry
Anthracene	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0230	0.159	mg/kg dry
Atrazine	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0149	0.159	mg/kg dry
Benzaldehyde	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0488	0.159	mg/kg dry
Benzo(a)anthracene	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0160	0.159	mg/kg dry
Benzo(a)pyrene	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0277	0.159	mg/kg dry
Benzo(b)fluoranthene	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0223	0.159	mg/kg dry
Benzo(g,h,i)perylene	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0129	0.159	mg/kg dry
Benzo(k)fluoranthene	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0182	0.159	mg/kg dry
Biphenyl	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0139	0.159	mg/kg dry

FootNotes

RL - Reporting limit  
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B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard  
D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
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**Analytical Results Summary**  
**Conquest Contracting Engineers**  
**0090585-03 (Soil)**

Salem St

<b>Collected</b> 09/14/2020 13:00	<b>Received</b> 09/14/2020 16:05	<b>Contact</b>
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Lab Section/ Analysis	Method	Prepared	Analyzed	Result	Qual	MDL	RL	Units
<b>BNA+25 Semivolatile Organics - GC/MS</b>								
bis(2-chloroethoxy)methane	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0219	0.159	mg/kg dry
bis(2-chloroethyl)ether	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0174	0.159	mg/kg dry
bis(2-chloroisopropyl)ether	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0571	0.159	mg/kg dry
bis(2-ethylhexyl)phthalate	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0317	0.159	mg/kg dry
Butylbenzylphthalate	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0144	0.159	mg/kg dry
Caprolactam	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0205	0.159	mg/kg dry
Carbazole	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0305	0.397	mg/kg dry
Chrysene	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0109	0.159	mg/kg dry
Dibenzo(a,h)anthracene	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0157	0.159	mg/kg dry
Dibenzofuran	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.00945	0.159	mg/kg dry
Diethylphthalate	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0308	0.159	mg/kg dry
<b>Dimethylphthalate</b>	<b>SW 846 8270D</b>	09/17/20 08:04	09/18/20 22:45	<b>0.110</b>	<b>J</b>	<b>0.00985</b>	<b>0.159</b>	mg/kg dry
Di-n-butylphthalate	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0649	0.159	mg/kg dry
Di-n-octylphthalate	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0325	0.159	mg/kg dry
Fluoranthene	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0149	0.159	mg/kg dry
Fluorene	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0132	0.159	mg/kg dry
Hexachlorobenzene	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0207	0.159	mg/kg dry
Hexachlorobutadiene	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0762	0.159	mg/kg dry
Hexachlorocyclopentadiene	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0662	0.397	mg/kg dry
Hexachloroethane	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0174	0.159	mg/kg dry
Indeno(1,2,3-cd)pyrene	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0170	0.159	mg/kg dry
Isophorone	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0104	0.159	mg/kg dry
Naphthalene	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0118	0.159	mg/kg dry
Nitrobenzene	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0269	0.159	mg/kg dry
n-Nitroso-di-n-propylamine	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.00850	0.159	mg/kg dry
n-Nitrosodiphenylamine	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0339	0.159	mg/kg dry
Pentachlorophenol	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0218	0.397	mg/kg dry
Phenanthrene	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0209	0.159	mg/kg dry
Phenol	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0129	0.159	mg/kg dry
Pyrene	SW 846 8270D	09/17/20 08:04	09/18/20 22:45	ND	U	0.0117	0.159	mg/kg dry
<b>Pesticides</b>								
4,4'-DDD	SW 846 8081B	09/17/20 08:10	09/18/20 16:33	ND	U	0.000709	0.00155	mg/kg dry
4,4'-DDE	<b>SW 846 8081B</b>	09/17/20 08:10	09/18/20 16:33	<b>0.00276</b>		<b>0.000848</b>	<b>0.00155</b>	mg/kg dry
4,4'-DDT	<b>SW 846 8081B</b>	09/17/20 08:10	09/18/20 16:33	<b>0.00181</b>		<b>0.00109</b>	<b>0.00155</b>	mg/kg dry
Aldrin	SW 846 8081B	09/17/20 08:10	09/18/20 16:33	ND	U	0.000734	0.00155	mg/kg dry

FootNotes

RL - Reporting limit  
 MDL - Minimum detection limit  
 ND, U - Indicates compound analyzed for but not detected  
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B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard  
 D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 H - Indicates a Hold Time violation



**Analytical Results Summary**  
**Conquest Contracting Engineers**  
**0090585-03 (Soil)**  
**Salem St**

<b>Collected</b> 09/14/2020 13:00	<b>Received</b> 09/14/2020 16:05	<b>Contact</b>
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Lab Section/ Analysis	Method	Prepared	Analyzed	Result	Qual	MDL	RL	Units
<b>Pesticides</b>								
alpha-BHC	SW 846 8081B	09/17/20 08:10	09/18/20 16:33	ND	U	0.000461	0.00155	mg/kg dry
beta-BHC	SW 846 8081B	09/17/20 08:10	09/18/20 16:33	ND	U	0.000740	0.00155	mg/kg dry
Chlordane	SW 846 8081B	09/17/20 08:10	09/18/20 16:33	ND	U	0.000689	0.00155	mg/kg dry
delta-BHC	SW 846 8081B	09/17/20 08:10	09/18/20 16:33	ND	U	0.000720	0.00155	mg/kg dry
Dieldrin	SW 846 8081B	09/17/20 08:10	09/18/20 16:33	ND	U	0.000811	0.00155	mg/kg dry
Endosulfan I	SW 846 8081B	09/17/20 08:10	09/18/20 16:33	ND	U	0.000732	0.00155	mg/kg dry
Endosulfan II	SW 846 8081B	09/17/20 08:10	09/18/20 16:33	ND	U	0.000705	0.00155	mg/kg dry
Endosulfan sulfate	SW 846 8081B	09/17/20 08:10	09/18/20 16:33	ND	U	0.000583	0.00155	mg/kg dry
Endrin	SW 846 8081B	09/17/20 08:10	09/18/20 16:33	ND	U	0.000535	0.00155	mg/kg dry
Endrin aldehyde	SW 846 8081B	09/17/20 08:10	09/18/20 16:33	ND	U	0.000618	0.00155	mg/kg dry
Endrin ketone	SW 846 8081B	09/17/20 08:10	09/18/20 16:33	ND	U	0.000546	0.00155	mg/kg dry
gamma-BHC (Lindane)	SW 846 8081B	09/17/20 08:10	09/18/20 16:33	ND	U	0.000491	0.00155	mg/kg dry
Heptachlor	SW 846 8081B	09/17/20 08:10	09/18/20 16:33	ND	U	0.000415	0.00155	mg/kg dry
Heptachlor Epoxide	SW 846 8081B	09/17/20 08:10	09/18/20 16:33	ND	U	0.000782	0.00155	mg/kg dry
Methoxychlor	SW 846 8081B	09/17/20 08:10	09/18/20 16:33	ND	U	0.000454	0.00155	mg/kg dry
Toxaphene	SW 846 8081B	09/17/20 08:10	09/18/20 16:33	ND	U	0.0747	0.0787	mg/kg dry
<b>PCBs</b>								
Aroclor-1016	SW 846 8082A	09/17/20 08:07	09/17/20 17:27	ND	U	0.00528	0.0393	mg/kg dry
Aroclor-1221	SW 846 8082A	09/17/20 08:07	09/17/20 17:27	ND	U	0.0104	0.0393	mg/kg dry
Aroclor-1232	SW 846 8082A	09/17/20 08:07	09/17/20 17:27	ND	U	0.0132	0.0393	mg/kg dry
Aroclor-1242	SW 846 8082A	09/17/20 08:07	09/17/20 17:27	ND	U	0.00773	0.0393	mg/kg dry
Aroclor-1248	SW 846 8082A	09/17/20 08:07	09/17/20 17:27	ND	U	0.00809	0.0393	mg/kg dry
Aroclor-1254	SW 846 8082A	09/17/20 08:07	09/17/20 17:27	ND	U	0.00635	0.0393	mg/kg dry
Aroclor-1260	SW 846 8082A	09/17/20 08:07	09/17/20 17:27	ND	U	0.00493	0.0393	mg/kg dry
Aroclor-1262	SW 846 8082A	09/17/20 08:07	09/17/20 17:27	ND	U	0.0106	0.0393	mg/kg dry
Aroclor-1268	SW 846 8082A	09/17/20 08:07	09/17/20 17:27	ND	U	0.00476	0.0393	mg/kg dry
Total PCBs	SW 846 8082A	09/17/20 08:07	09/17/20 17:27	ND	U	0.00367	0.0393	mg/kg dry
<b>VO+15 Volatile Organics - GC/MS</b>								
1,1,1-Trichloroethane	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000348	0.00238	mg/kg dry
1,1,2,2-Tetrachloroethane	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000329	0.00238	mg/kg dry
1,1,2-Trichloro-1,2,2 Trifluoroethane	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.00102	0.00238	mg/kg dry
1,1,2-Trichloroethane	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000402	0.00238	mg/kg dry
1,1-Dichloroethane	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000348	0.00238	mg/kg dry

FootNotes

RL - Reporting limit  
MDL - Minimum detection limit  
ND, U - Indicates compound analyzed for but not detected  
J - Indicates estimated value

B - Indicates compound found in associated blank  
E - Concentration exceeds highest calibration standard  
D - Indicates result is based on a dilution  
P - Greater than 25% diff. between 2 GC columns.  
H - Indicates a Hold Time violation



AQUA PRO-TECH LABORATORIES  
 Certified Environmental Testing

## Analytical Results Summary

### Conquest Contracting Engineers

#### 0090585-03 (Soil)

Salem St

<b>Collected</b> 09/14/2020 13:00	<b>Received</b> 09/14/2020 16:05	<b>Contact</b>
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Lab Section/ Analysis	Method	Prepared	Analyzed	Result	Qual	MDL	RL	Units
<b>VO+15 Volatile Organics - GC/MS</b>								
1,1-Dichloroethene	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000441	0.00238	mg/kg dry
1,2,3-Trichlorobenzene	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000515	0.00238	mg/kg dry
1,2,4-Trichlorobenzene	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000635	0.00238	mg/kg dry
1,2,4-Trimethylbenzene	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000329	0.00238	mg/kg dry
1,2-Dibromo-3-chloropropane	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000582	0.00596	mg/kg dry
1,2-Dibromoethane	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000300	0.00238	mg/kg dry
1,2-Dichlorobenzene	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000421	0.00238	mg/kg dry
1,2-Dichloroethane	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000336	0.00238	mg/kg dry
1,2-Dichloropropane	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000391	0.00238	mg/kg dry
1,3-Dichlorobenzene	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000175	0.00238	mg/kg dry
1,4-Dichlorobenzene	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000343	0.00238	mg/kg dry
2-Butanone	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000389	0.00596	mg/kg dry
2-Hexanone	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000223	0.00238	mg/kg dry
4-Methyl-2-pentanone	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000298	0.00238	mg/kg dry
Acetone	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000722	0.00596	mg/kg dry
Benzene	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000217	0.00238	mg/kg dry
Bromochloromethane	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000440	0.00238	mg/kg dry
Bromodichloromethane	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000299	0.00238	mg/kg dry
Bromoform	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000418	0.00238	mg/kg dry
Bromomethane	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000688	0.00238	mg/kg dry
Carbon disulfide	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000342	0.00238	mg/kg dry
Carbon Tetrachloride	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000359	0.00238	mg/kg dry
Chlorobenzene	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000346	0.00238	mg/kg dry
Chlorodibromomethane	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000293	0.00238	mg/kg dry
Chloroethane	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000407	0.00238	mg/kg dry
Chloroform	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000401	0.00238	mg/kg dry
Chloromethane	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000918	0.00238	mg/kg dry
cis-1,2-Dichloroethene	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000115	0.00238	mg/kg dry
cis-1,3-Dichloropropene	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000302	0.00238	mg/kg dry
Cyclohexane	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000528	0.00238	mg/kg dry
Dichlorodifluoromethane	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000805	0.00238	mg/kg dry
EthylBenzene	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000323	0.00238	mg/kg dry
Isopropylbenzene	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000374	0.00238	mg/kg dry
m+p-Xylenes	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000602	0.00477	mg/kg dry
Methyl Acetate	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000316	0.00238	mg/kg dry
Methyl tert-Butyl Ether	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000403	0.00238	mg/kg dry

FootNotes

RL - Reporting limit  
 MDL - Minimum detection limit  
 ND, U - Indicates compound analyzed for but not detected  
 J - Indicates estimated value

B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard  
 D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 H - Indicates a Hold Time violation



AQUA PRO-TECH LABORATORIES  
 Certified Environmental Testing

**Analytical Results Summary**  
**Conquest Contracting Engineers**  
**0090585-03 (Soil)**

Salem St

<b>Collected</b> 09/14/2020 13:00	<b>Received</b> 09/14/2020 16:05	<b>Contact</b>
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Lab Section/ Analysis	Method	Prepared	Analyzed	Result	Qual	MDL	RL	Units
<b>VO+15 Volatile Organics - GC/MS</b>								
Methylcyclohexane	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000384	0.00238	mg/kg dry
Methylene Chloride	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000716	0.00238	mg/kg dry
o-Xylene	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000306	0.00238	mg/kg dry
Styrene	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000341	0.00238	mg/kg dry
tert-Butyl alcohol	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.00501	0.0238	mg/kg dry
Tetrachloroethene	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000236	0.00238	mg/kg dry
Toluene	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000192	0.00238	mg/kg dry
Total Xylenes	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000306	0.00238	mg/kg dry
trans-1,2-Dichloroethene	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000323	0.00238	mg/kg dry
trans-1,3-Dichloropropene	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000455	0.00238	mg/kg dry
Trichloroethene	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000350	0.00238	mg/kg dry
Trichlorofluoromethane	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000274	0.00238	mg/kg dry
Vinyl chloride	SW 846 8260C	09/17/20 18:27	09/17/20 18:27	ND	U	0.000453	0.00238	mg/kg dry

FootNotes

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B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard  
 D - Indicates result is based on a dilution  
 P - Greater than 25% diff. between 2 GC columns.  
 H - Indicates a Hold Time violation

**CHAIN OF CUSTODY**

TEL: 973.227.0422  
 FAX: 973.227.2813

CLIENT: **CONQUEST CONTRACTING ENTERPRISES**  
 ADDRESS: **20 CARVEY AVE**  
**WESTWOOD NJ**  
 PHONE: **201-666-2666**  
 E-MAIL: **F.PATRINO@CONQUESTINC.NET**  
 PROJECT NAME: **JEFFERSON ST. RIDGE WOOD**  
 PROJECT MGR: **FRANK DLETRINO**  
 PROJECT or PO #:

SEND REPORT TO:  
 ADDRESS:  
 PHONE:  
 FAX:  
 SEND INVOICE TO:  
 ADDRESS:  
 SAMPLED BY: **MM**

**TURN-AROUND TIME**

APL STANDARD 2 weeks  
 RUSH (choose one below)  
 24 hr. date & time required  
 48 hr. date & time required  
 72 hr. date & time required  
 1 week

**REPORT FORMAT**

RESULTS ONLY  
 NJ DEP REDUCED  
 NJ DEP FULL  
 STATE FORMS/E2 REPORTING

**ELECTRONIC FORMAT**

EMAIL DELIVERY  
 HAZSITE EDD  
 EXCEL  
 SRP#:

PWSID#:

**CONTAMINATION LEVEL**

HIGH  MEDIUM  LOW

MATRIX ABBREVIATIONS: D - DRINKING WATER G - GROUNDWATER W - WASTEWATER S - SOIL SL - SLUDGE C - CONCRETE L - LAKE

APL Lab ID#	Sample Source: Field ID	Date	Time	Sample Type			No. of Bottles	Preservative	Analysis Requested
				D	G	W			
0090585-2	WILLIAMS ST	9/14/20	8:50 am			S	1		TEC/TAL+30, EPH 2,
02	JEFFERSON ST	9/14/20	11:00 am			S	1		HEXAVALENT CH/ROD/UMM,
03	SALEM ST.	9/14/20	1:00 pm			S	1		VPH

RELINQUISHED BY (Print) <b>Michael Morena</b>	DATE <b>9/14/20</b>	RECEIVED BY (Print) <b>Frank Dletrino</b>
Signature <i>[Signature]</i>	Time	Signature <i>[Signature]</i>
RELINQUISHED BY (Print) <b>Frank Dletrino</b>	DATE <b>9/14/20</b>	RECEIVED BY (Print) <b>Frank Dletrino</b>
Signature <i>[Signature]</i>	Time <b>16:05</b>	Signature <i>[Signature]</i>
RELINQUISHED BY (Print)	DATE	RECEIVED BY (Print)
Signature	Time	Signature
COMMENTS/SPECIAL INSTRUCTIONS		Cooler Temp. upon receipt at lab <b>4.0</b>

**APPENDIX G**  
**RIDGEWOOD WATER COMPANY SPOIL PILE ANALYTICAL DATA**

## ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental  
2425 New Holland Pike  
Lancaster, PA 17601

Prepared for:

Eurofins QC Laboratories  
1205 Industrial Blvd.  
P.O. Box 514  
Southampton, PA 18966-0514

Report Date: December 22, 2016

Project: L6065481

Submission Date: 11/30/2016

Group Number: 1739018

SDG: EDR01

PO Number: L6065481

State of Sample Origin: NJ

Lancaster Labs

(LL) #

8721669

Client Sample Description

L6065481-1 Grab Soil

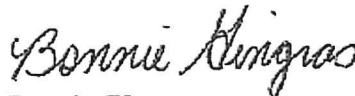
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our current scopes of accreditation can be viewed at <http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/>. To request copies of prior scopes of accreditation, contact your project manager.

Electronic Copy To Eurofins QC Laboratories

Attn: Nicki Smith

Respectfully Submitted,

Bonnie Gingras  
Manager

(201) 729-1907



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Project Name: L6065481  
LL Group #: 1739018

**General Comments:**

See the Laboratory Sample Analysis Record section of the Analysis Report for the method references.

All QC met criteria unless otherwise noted in an Analysis Specific Comment below. Refer to the QC Summary for specific values and acceptance criteria.

Project specific QC samples are not included in this data set

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Surrogate recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in an Analysis Specific Comment below.

The samples were received at the appropriate temperature and in accordance with the chain of custody unless otherwise noted.

**Analysis Specific Comments:****SW-846 8260B, GC/MS volatiles**

Batch #: B163421AA (Sample number(s): 8721669 UNSPK: P719335)

The recovery(ies) for the following analyte(s) in the MS was outside the acceptance window: chloromethane, vinyl chloride, chlorobenzene, Ethylbenzene, Styrene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,2-Dichlorobenzene, 1,2,4-Trichlorobenzene, Xylene (Total), Acrylonitrile

**SW-846 8270C, GC/MS Semivolatiles**

Sample #s: 8721669

Reporting limits were raised due to interference from the sample matrix. The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC/DoD Standards. The following analytes are accepted based on this allowance:  
Hexachlorocyclopentadiene

Batch #: 16337SLN026 (Sample number(s): 8721669 UNSPK: P720165)

The recovery(ies) for the following analyte(s) in the LCS were below the acceptance window: Hexachlorocyclopentadiene

The recovery(ies) for the following analyte(s) in the MS and/or MSD was outside the acceptance window: N-Nitroso-di-n-propylamine, 4-Chloro-3-methylphenol, Acenaphthene, Pentachlorophenol, Pyrene, 2,4-Dichlorophenol, 2,4,6-Trichlorophenol, 2,4-Dinitrophenol, Hexachloroethane, Nitrobenzene, Isophorone, Naphthalene, Hexachlorocyclopentadiene, Dimethylphthalate, Fluorene, Diethylphthalate, N-Nitrosodiphenylamine, Hexachlorobenzene, Anthracene, Di-n-butylphthalate, Fluoranthene, Butylbenzylphthalate, Benzo(a)anthracene, Chrysene, 3,3'-Dichlorobenzidine, bis(2-Ethylhexyl)phthalate, Di-n-octylphthalate, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Benzyl alcohol, 2-Methylphenol, 4-Chloroaniline, 2,4,5-Trichlorophenol, Phenol, 2,4-Dimethylphenol, bis(2-Chloroethyl)ether, bis(2-Chloroisopropyl)ether, Benzo(b)fluoranthene

The relative percent difference(s) for the following analyte(s) in the MS/MSD were outside outside acceptance windows: N-Nitroso-di-n-propylamine, Acenaphthene, 2,4-Dichlorophenol, 2,4,6-Trichlorophenol, bis(2-Chloroethyl)ether, bis(2-Chloroisopropyl)ether, Nitrobenzene, Isophorone, Fluorene, N-Nitrosodiphenylamine, Chrysene, 2,4,5-Trichlorophenol

The recovery(ies) for one or more surrogates were outside of the QC window for sample(s) MS, MSD

**SW-846 6010C, Metals**

Batch #: 163370637003 (Sample number(s): 8721669 UNSPK: 8721669 BKG: 8721669)

The recovery(ies) for the following analyte(s) in the MS and/or MSD was outside the acceptance window: Copper

The relative percent difference(s) for the following analyte(s) in the MS/MSD were outside outside acceptance windows: Copper

The duplicate RPD for the following analyte(s) exceeded the acceptance window: Arsenic, Antimony, Barium, Cadmium

Sample Description: L6065481-1 Grab Soil  
SOIL/DIRT

LL Sample # SW 8721669  
LL Group # 1739018  
Account # 26325

Project Name: L6065481

Collected: 11/28/2016 07:00 by BD

Eurofins QC Laboratories

Submitted: 11/30/2016 05:30

1205 Industrial Blvd.

Reported: 12/22/2016 14:05

P.O. Box 514

Southampton, PA 18966-0514

SOILD SDG#: EDR01-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
<b>GC/MS Volatiles SW-846 8260B</b>						
10237	Acetone	67-64-1	N.D.	8 ug/kg	22 ug/kg	0.97
10237	Acrylonitrile	107-13-1	N.D. Q4	4 ug/kg	22 ug/kg	0.97
10237	Benzene	71-43-2	N.D.	0.5 ug/kg	5 ug/kg	0.97
10237	Bromodichloromethane	75-27-4	N.D.	1 ug/kg	5 ug/kg	0.97
10237	Bromoform	75-25-2	N.D.	1 ug/kg	5 ug/kg	0.97
10237	Bromomethane	74-83-9	N.D.	2 ug/kg	5 ug/kg	0.97
10237	2-Butanone	78-93-3	N.D.	4 ug/kg	11 ug/kg	0.97
10237	Carbon Tetrachloride	56-23-5	N.D.	1 ug/kg	5 ug/kg	0.97
10237	Chlorobenzene	108-90-7	N.D. Q4	1 ug/kg	5 ug/kg	0.97
10237	Chloroform	67-66-3	N.D.	1 ug/kg	5 ug/kg	0.97
10237	Chloromethane	74-87-3	N.D. Q4	2 ug/kg	5 ug/kg	0.97
10237	Dibromochloromethane	124-48-1	N.D.	1 ug/kg	5 ug/kg	0.97
10237	1,2-Dichlorobenzene	95-50-1	N.D. Q4	1 ug/kg	5 ug/kg	0.97
10237	1,3-Dichlorobenzene	541-73-1	N.D. Q4	1 ug/kg	5 ug/kg	0.97
10237	1,4-Dichlorobenzene	106-46-7	N.D. Q4	1 ug/kg	5 ug/kg	0.97
10237	1,1-Dichloroethane	75-34-3	N.D.	1 ug/kg	5 ug/kg	0.97
10237	1,2-Dichloroethane	107-06-2	N.D.	1 ug/kg	5 ug/kg	0.97
10237	1,1-Dichloroethene	75-35-4	N.D.	1 ug/kg	5 ug/kg	0.97
10237	cis-1,2-Dichloroethene	156-59-2	N.D.	1 ug/kg	5 ug/kg	0.97
10237	trans-1,2-Dichloroethene	156-60-5	N.D.	1 ug/kg	5 ug/kg	0.97
10237	1,2-Dichloropropane	78-87-5	N.D.	1 ug/kg	5 ug/kg	0.97
10237	cis-1,3-Dichloropropene	10061-01-5	N.D.	1 ug/kg	5 ug/kg	0.97
10237	trans-1,3-Dichloropropene	10061-02-6	N.D.	1 ug/kg	5 ug/kg	0.97
10237	Ethylbenzene	100-41-4	N.D. Q4	1 ug/kg	5 ug/kg	0.97
10237	4-Methyl-2-pentanone	108-10-1	N.D.	3 ug/kg	11 ug/kg	0.97
10237	Methylene Chloride	75-09-2	N.D.	2 ug/kg	5 ug/kg	0.97
10237	Styrene	100-42-5	N.D. Q4	1 ug/kg	5 ug/kg	0.97
10237	1,1,1,2-Tetrachloroethane	630-20-6	N.D.	1 ug/kg	5 ug/kg	0.97
10237	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	1 ug/kg	5 ug/kg	0.97
10237	Tetrachloroethene	127-18-4	N.D.	1 ug/kg	5 ug/kg	0.97
10237	Toluene	108-88-3	N.D.	1 ug/kg	5 ug/kg	0.97
10237	1,2,4-Trichlorobenzene	120-82-1	N.D. Q4	1 ug/kg	5 ug/kg	0.97
10237	1,1,1-Trichloroethane	71-55-6	N.D.	1 ug/kg	5 ug/kg	0.97
10237	1,1,2-Trichloroethane	79-00-5	N.D.	1 ug/kg	5 ug/kg	0.97
10237	Trichloroethene	79-01-6	N.D.	1 ug/kg	5 ug/kg	0.97
10237	Vinyl Chloride	75-01-4	N.D. Q4	1 ug/kg	5 ug/kg	0.97
10237	Xylene (Total)	1330-20-7	N.D. Q4	1 ug/kg	5 ug/kg	0.97
<b>GC/MS Semivolatiles SW-846 8270C</b>						
10727	Acenaphthene	83-32-9	N.D. Q4Q9	180 ug/kg	940 ug/kg	10
10727	Anthracene	120-12-7	N.D. Q4	180 ug/kg	940 ug/kg	10
10727	Benzo(a)anthracene	56-55-3	N.D. Q4	180 ug/kg	940 ug/kg	10
10727	Benzo(a)pyrene	50-32-8	N.D. Q4	180 ug/kg	940 ug/kg	10
10727	Benzo(b)fluoranthene	205-99-2	N.D. Q4	180 ug/kg	940 ug/kg	10
10727	Benzo(k)fluoranthene	207-08-9	N.D.	180 ug/kg	940 ug/kg	10
10727	Benzyl alcohol	100-51-6	N.D. Q4	9,200 ug/kg	28,000 ug/kg	10
10727	Butylbenzylphthalate	85-68-7	N.D. Q4	3,700 ug/kg	9,200 ug/kg	10
10727	Di-n-butylphthalate	84-74-2	N.D. Q4	3,700 ug/kg	9,200 ug/kg	10
10727	4-Chloro-3-methylphenol	59-50-7	N.D. Q4	920 ug/kg	1,800 ug/kg	10

\*=This limit was used in the evaluation of the final result

Sample Description: L6065481-1 Grab Soil  
SOIL/DIRT

LL Sample # SW 8721669  
LL Group # 1739018  
Account # 26325

Project Name: L6065481

Collected: 11/28/2016 07:00 by BD

Eurofins QC Laboratories

1205 Industrial Blvd.

Submitted: 11/30/2016 05:30

P.O. Box 514

Reported: 12/22/2016 14:05

Southampton, PA 18966-0514

SOILD SDG#: EDR01-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS	Semivolatiles	SW-846 8270C	ug/kg	ug/kg	ug/kg	
10727	4-Chloroaniline	106-47-8	N.D. Q4	1,800	3,700	10
10727	bis(2-Chloroethyl) ether	111-44-4	N.D. Q4Q9	920	1,800	10
10727	bis(2-Chloroisopropyl) ether	39638-32-9	N.D. Q4Q9	920	1,800	10
Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10727	2-Chlorophenol	95-57-8	N.D.	920	1,800	10
10727	Chrysene	218-01-9	N.D. Q4Q9	180	940	10
10727	Dibenz(a,h)anthracene	53-70-3	N.D.	180	940	10
10727	3,3'-Dichlorobenzidine	91-94-1	N.D. Q4	5,500	18,000	10
10727	2,4-Dichlorophenol	120-83-2	N.D. Q4Q9	920	1,800	10
10727	Diethylphthalate	84-66-2	N.D. Q4	3,700	9,200	10
10727	2,4-Dimethylphenol	105-67-9	N.D. Q4	920	1,800	10
10727	Dimethylphthalate	131-11-3	N.D. Q4	3,700	9,200	10
10727	2,4-Dinitrophenol	51-28-5	N.D. Q4	17,000	55,000	10
10727	2,4,2,6-Dinitrotoluenes	25321-14-6	N.D.	1,800	9,200	10
10727	bis(2-Ethylhexyl)phthalate	117-81-7	N.D. Q4	3,700	9,400	10
10727	Fluoranthene	206-44-0	N.D. Q4	180	940	10
10727	Fluorene	86-73-7	N.D. Q4Q9	180	940	10
10727	Hexachlorobenzene	118-74-1	N.D. Q4	180	940	10
10727	Hexachlorobutadiene	87-68-3	N.D.	920	1,800	10
10727	Hexachlorocyclopentadiene	77-47-4	N.D. Q4Q4	9,200	28,000	10
10727	Hexachloroethane	67-72-1	N.D. Q4	1,800	9,200	10
10727	Indeno(1,2,3-cd)pyrene	193-39-5	N.D. Q4	180	940	10
10727	Isophorone	78-59-1	N.D. Q4Q9	920	1,800	10
10727	2-Methylphenol	95-48-7	N.D. Q4	920	1,800	10
10727	4-Methylphenol	106-44-5	N.D.	920	1,800	10
3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10727	Naphthalene	91-20-3	N.D. Q4	180	940	10
10727	Nitrobenzene	98-95-3	N.D. Q4Q9	920	1,800	10
10727	N-Nitroso-di-n-propylamine	621-64-7	N.D. Q4Q9	920	1,800	10
10727	N-Nitrosodiphenylamine	86-30-6	N.D. Q4Q9	920	1,800	10
N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10727	Di-n-octylphthalate	117-84-0	N.D. Q4	3,700	9,200	10
10727	Pentachlorophenol	87-86-5	N.D. Q4	1,800	9,400	10
10727	Phenol	108-95-2	N.D. Q4	920	1,800	10
10727	Pyrene	129-00-0	N.D. Q4	180	940	10
10727	2,4,5-Trichlorophenol	95-95-4	N.D. Q4Q9	920	1,800	10
10727	2,4,6-Trichlorophenol	88-06-2	N.D. Q4Q9	920	1,800	10

Reporting limits were raised due to interference from the sample matrix.

The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC/DoD Standards. The following analytes are accepted based on this allowance:

\*=This limit was used in the evaluation of the final result

Sample Description: L6065481-1 Grab Soil  
SOIL/DIRT

LL Sample # SW 8721669  
LL Group # 1739018  
Account # 26325

Project Name: L6065481

Collected: 11/28/2016 07:00 by BD

Eurofins QC Laboratories  
1205 Industrial Blvd.  
P.O. Box 514  
Southampton, PA 18966-0514

Submitted: 11/30/2016 05:30  
Reported: 12/22/2016 14:05

SOILD SDG#: EDR01-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Hexachlorocyclopentadiene						
<b>Pesticides/PCBs SW-846 8081A ug/kg</b>						
10738	Aldrin	309-00-2	N.D.	0.19	0.91	1
10738	Gamma BHC - Lindane	58-89-9	N.D.	0.19	0.91	1
10738	p,p-DDD	72-54-8	N.D.	0.36	1.9	1
10738	p,p-DDE	72-55-9	0.97 J	0.36	1.9	1
10738	p,p-DDT	50-29-3	1.1 J	0.38	1.9	1
10738	Dieldrin	60-57-1	N.D.	0.36	1.9	1
10738	Endosulfan I	959-98-8	N.D.	0.24	0.91	1
10738	Endosulfan II	33213-65-9	N.D.	0.36	1.9	1
10738	Endrin	72-20-8	N.D.	0.36	1.9	1
10738	Heptachlor	76-44-8	N.D.	0.19	0.91	1
10738	Methoxychlor	72-43-5	N.D.	1.9	7.3	1
10738	Toxaphene	8001-35-2	N.D.	15	36	1
<b>Pesticides/PCBs SW-846 8082A Feb 2007 ug/kg</b>						
Rev 1						
10885	PCB-1016	12674-11-2	N.D.	3.9	19	1
10885	PCB-1221	11104-28-2	N.D.	5.0	19	1
10885	PCB-1232	11141-16-5	N.D.	8.7	19	1
10885	PCB-1242	53469-21-9	N.D.	3.6	19	1
10885	PCB-1248	12672-29-6	N.D.	3.6	19	1
10885	PCB-1254	11097-69-1	N.D.	3.6	19	1
10885	PCB-1260	11096-82-5	N.D.	5.3	19	1
<b>Metals SW-846 6010C mg/kg</b>						
06944	Antimony	7440-36-0	0.854 J Q8	0.651	3.72	1
06935	Arsenic	7440-38-2	1.74 J Q8	0.903	3.72	1
06946	Barium	7440-39-3	33.5 Q8	0.0307	0.931	1
06947	Beryllium	7440-41-7	0.306 J	0.0624	0.931	1
06949	Cadmium	7440-43-9	0.0819 J Q8	0.0456	0.931	1
06951	Chromium	7440-47-3	10.8	0.130	2.79	1
02829	Trivalent Chromium soils	16065-83-1	10.8	0.55	2.8	1
The Trivalent Chromium result is calculated by subtracting Hexavalent Chromium from Total Chromium.						
06953	Copper	7440-50-8	9.72 Q4Q9	0.214	1.86	1
06955	Lead	7439-92-1	5.04 B	0.512	2.79	1
06961	Nickel	7440-02-0	8.08	0.279	1.86	1
06936	Selenium	7782-49-2	1.70 J	0.838	3.72	1
06966	Silver	7440-22-4	N.D.	0.140	0.931	1
06925	Thallium	7440-28-0	2.08 J	0.763	5.58	1
06971	Vanadium	7440-62-2	22.1	0.130	0.931	1
06972	Zinc	7440-66-6	16.8	0.633	3.72	1
<b>Wet Chemistry SW-846 9012B mg/kg</b>						
05895	Total Cyanide (solid)	57-12-5	N.D.	0.21	0.57	1
<b>SW-846 7196A mg/kg</b>						
00425	Hexavalent Chromium (SOLIDS)	18540-29-9	N.D.	0.55	1.7	1

\*=This limit was used in the evaluation of the final result

Sample Description: L6065481-1 Grab Soil  
SOIL/DIRT

LL Sample # SW 8721669  
LL Group # 1739018  
Account # 26325

Project Name: L6065481

Collected: 11/28/2016 07:00 by BD

Eurofins QC Laboratories

1205 Industrial Blvd.

Submitted: 11/30/2016 05:30

P.O. Box 514

Reported: 12/22/2016 14:05

Southampton, PA 18966-0514

SOILD SDG#: EDR01-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
<b>Wet Chemistry</b>						
		SM 2540 G-1997	%	%	%	
00111	Moisture	n.a.	9.7	0.50	0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					
07400	Percent Solids	n.a.	90.3	0.50	0.50	1
	The total residue is calculated by subtracting the moisture value from 100%.					

### Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	VOCs- Solid by 8260B	SW-846 8260B	1	B163421AA	12/08/2016 01:42	Patrick T Herres	0.97
00374	GC/MS - Bulk Soil Prep	SW-846 5035A	1	201633843627	12/03/2016 12:20	Katelyn C Shober	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201633843627	12/03/2016 12:20	Katelyn C Shober	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201633843627	12/03/2016 11:33	Katelyn C Shober	n.a.
10727	TCL 8270 (microwave)	SW-846 8270C	1	16337SLN026	12/08/2016 14:37	Linda M Hartenstine	10
10809	BNA Soil Microwave	SW-846 3546	1	16337SLN026	12/05/2016 09:30	Gladys Doddamani	1
10738	Pesticides in Soil (microwave)	SW-846 8081A	1	163410013A	12/21/2016 14:10	Andrea L Jones	1
10885	PCBs 8082A/3546	SW-846 8082A Feb 2007 Rev 1	1	163410014A	12/08/2016 00:43	Kirby B Turner	1
10497	PCB Microwave Soil Extraction	SW-846 3546	1	163410014A	12/07/2016 09:00	Michelle A Newswanger	1
10496	PPL Pest. Microwave Extraction	SW-846 3546	1	163410013A	12/07/2016 09:00	Michelle A Newswanger	1
06944	Antimony	SW-846 6010C	1	163370637003	12/08/2016 10:04	Katlin N Cataldi	1
06935	Arsenic	SW-846 6010C	1	163370637003	12/08/2016 10:04	Katlin N Cataldi	1
06946	Barium	SW-846 6010C	1	163370637003	12/08/2016 10:04	Katlin N Cataldi	1
06947	Beryllium	SW-846 6010C	1	163370637003	12/08/2016 10:04	Katlin N Cataldi	1
06949	Cadmium	SW-846 6010C	1	163370637003	12/08/2016 10:04	Katlin N Cataldi	1
06951	Chromium	SW-846 6010C	1	163370637003	12/08/2016 10:04	Katlin N Cataldi	1
02829	Trivalent Chromium soils	SW-846 6010C	1	163562829001	12/21/2016 08:35	Nina C Haller	1
06953	Copper	SW-846 6010C	1	163370637003	12/08/2016 10:04	Katlin N Cataldi	1
06955	Lead	SW-846 6010C	1	163370637003	12/09/2016 21:23	Cindy M Gehman	1
06961	Nickel	SW-846 6010C	1	163370637003	12/08/2016 10:04	Katlin N Cataldi	1

\*=This limit was used in the evaluation of the final result

Sample Description: L6065481-1 Grab Soil  
SOIL/DIRT

LL Sample # SW 8721669  
LL Group # 1739018  
Account # 26325

Project Name: L6065481

Collected: 11/28/2016 07:00 by BD

Eurofins QC Laboratories  
1205 Industrial Blvd.  
P.O. Box 514  
Southampton, PA 18966-0514

Submitted: 11/30/2016 05:30

Reported: 12/22/2016 14:05

SOILD SDG#: EDR01-01

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis		Analyst	Dilution Factor
					Date	Time		
06936	Selenium	SW-846 6010C	1	163370637003	12/08/2016	10:04	Katlin N Cataldi	1
06966	Silver	SW-846 6010C	1	163370637003	12/08/2016	10:04	Katlin N Cataldi	1
06925	Thallium	SW-846 6010C	1	163370637003	12/08/2016	10:04	Katlin N Cataldi	1
06971	Vanadium	SW-846 6010C	1	163370637003	12/08/2016	10:04	Katlin N Cataldi	1
06972	Zinc	SW-846 6010C	1	163370637003	12/08/2016	10:04	Katlin N Cataldi	1
10637	ICP/ICPMS-SW, 3050B - U4	SW-846 3050B	1	163370637003	12/04/2016	22:32	Annamaria Kuhns	1
05895	Total Cyanide (solid)	SW-846 9012B	1	16337102201A	12/03/2016	12:00	Brianna A White	1
05896	Cyanide Solid Distillation	SW-846 9012B	1	16337102201A	12/02/2016	18:45	Barbara A Washington	1
00425	Hexavalent Chromium (SOLIDS)	SW-846 7196A	1	16352042501A	12/18/2016	06:25	Daniel S Smith	1
07825	Hexavalent Cr (Extraction)	SW-846 3060A	1	16352042501A	12/17/2016	07:30	Daniel S Smith	1
00111	Moisture	SM 2540 G-1997	1	16337820001A	12/02/2016	11:38	Larry E Bevins	1
07400	Percent Solids	SM 2540 G-1997	1	16337820001A	12/02/2016	11:38	Larry E Bevins	1

\*=This limit was used in the evaluation of the final result

## Quality Control Summary

 Client Name: Eurofins QC Laboratories  
 Reported: 12/22/2016 14:05

Group Number: 1739018

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

### Method Blank

Analysis Name	Result	MDL**	LOQ
	ug/kg	ug/kg	ug/kg
Batch number: B163421AA	Sample number(s): 8721669		
Acetone	N.D.	7	20
Acrylonitrile	N.D.	4	20
Benzene	N.D.	0.5	5
Bromodichloromethane	N.D.	1	5
Bromoform	N.D.	1	5
Bromomethane	N.D.	2	5
2-Butanone	N.D.	4	10
Carbon Tetrachloride	N.D.	1	5
Chlorobenzene	N.D.	1	5
Chloroform	N.D.	1	5
Chloromethane	N.D.	2	5
Dibromochloromethane	N.D.	1	5
1,2-Dichlorobenzene	N.D.	1	5
1,3-Dichlorobenzene	N.D.	1	5
1,4-Dichlorobenzene	N.D.	1	5
1,1-Dichloroethane	N.D.	1	5
1,2-Dichloroethane	N.D.	1	5
1,1-Dichloroethene	N.D.	1	5
cis-1,2-Dichloroethene	N.D.	1	5
trans-1,2-Dichloroethene	N.D.	1	5
1,2-Dichloropropane	N.D.	1	5
cis-1,3-Dichloropropene	N.D.	1	5
trans-1,3-Dichloropropene	N.D.	1	5
Ethylbenzene	N.D.	1	5
4-Methyl-2-pentanone	N.D.	3	10
Methylene Chloride	N.D.	2	5
Styrene	N.D.	1	5
1,1,1,2-Tetrachloroethane	N.D.	1	5
1,1,2,2-Tetrachloroethane	N.D.	1	5
Tetrachloroethene	N.D.	1	5
Toluene	N.D.	1	5
1,2,4-Trichlorobenzene	N.D.	1	5
1,1,1-Trichloroethane	N.D.	1	5
1,1,2-Trichloroethane	N.D.	1	5
Trichloroethene	N.D.	1	5
Vinyl Chloride	N.D.	1	5
Xylene (Total)	N.D.	1	5
Batch number: 16337SLN026	Sample number(s): 8721669		
Acenaphthene	N.D.	3	17
Anthracene	N.D.	3	17

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.



## Quality Control Summary

Client Name: Eurofins QC Laboratories  
Reported: 12/22/2016 14:05

Group Number: 1739018

### Method Blank (continued)

Analysis Name	Result	MDL**	LOQ
	ug/kg	ug/kg	ug/kg
Benzo(a)anthracene	N.D.	3	17
Benzo(a)pyrene	N.D.	3	17
Benzo(b)fluoranthene	N.D.	3	17
Benzo(k)fluoranthene	N.D.	3	17
Benzyl alcohol	N.D.	170	500
Butylbenzylphthalate	N.D.	67	170
Di-n-butylphthalate	N.D.	67	170
4-Chloro-3-methylphenol	N.D.	17	33
4-Chloroaniline	N.D.	33	67
bis(2-Chloroethyl) ether	N.D.	17	33
bis(2-Chloroisopropyl) ether	N.D.	17	33
2-Chlorophenol	N.D.	17	33
Chrysene	N.D.	3	17
Dibenz(a,h)anthracene	N.D.	3	17
3,3'-Dichlorobenzidine	N.D.	100	330
2,4-Dichlorophenol	N.D.	17	33
Diethylphthalate	N.D.	67	170
2,4-Dimethylphenol	N.D.	17	33
Dimethylphthalate	N.D.	67	170
2,4-Dinitrophenol	N.D.	300	1,000
2,4,2,6-Dinitrotoluenes	N.D.	33	170
bis(2-Ethylhexyl)phthalate	N.D.	67	170
Fluoranthene	N.D.	3	17
Fluorene	N.D.	3	17
Hexachlorobenzene	N.D.	3	17
Hexachlorobutadiene	N.D.	17	33
Hexachlorocyclopentadiene	N.D.	170	500
Hexachloroethane	N.D.	33	170
Indeno(1,2,3-cd)pyrene	N.D.	3	17
Isophorone	N.D.	17	33
2-Methylphenol	N.D.	17	33
4-Methylphenol	N.D.	17	33
Naphthalene	N.D.	3	17
Nitrobenzene	N.D.	17	33
N-Nitroso-di-n-propylamine	N.D.	17	33
N-Nitrosodiphenylamine	N.D.	17	33
Di-n-octylphthalate	N.D.	67	170
Pentachlorophenol	N.D.	33	170
Phenol	N.D.	17	33
Pyrene	N.D.	3	17
2,4,5-Trichlorophenol	N.D.	17	33
2,4,6-Trichlorophenol	N.D.	17	33
Batch number: 163410013A	Sample number(s): 8721669		
Aldrin	N.D.	0.17	0.83
Gamma BHC - Lindane	N.D.	0.17	0.83
p,p-DDD	N.D.	0.33	1.7
p,p-DDE	N.D.	0.33	1.7
p,p-DDT	N.D.	0.35	1.7

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

## Quality Control Summary

Client Name: Eurofins QC Laboratories  
Reported: 12/22/2016 14:05

Group Number: 1739018

### Method Blank (continued)

Analysis Name	Result	MDL**	LOQ
	ug/kg	ug/kg	ug/kg
Dieldrin	N.D.	0.33	1.7
Endosulfan I	N.D.	0.22	0.83
Endosulfan II	N.D.	0.33	1.7
Endrin	N.D.	0.33	1.7
Heptachlor	N.D.	0.17	0.83
Methoxychlor	N.D.	1.7	6.7
Toxaphene	N.D.	14	33
Batch number: 163410014A			
Sample number(s): 8721669			
PCB-1016	N.D.	3.6	17
PCB-1221	N.D.	4.6	17
PCB-1232	N.D.	8.0	17
PCB-1242	N.D.	3.3	17
PCB-1248	N.D.	3.3	17
PCB-1254	N.D.	3.3	17
PCB-1260	N.D.	4.9	17
Batch number: 163370637003			
Sample number(s): 8721669			
Antimony	N.D.	0.700	4.00
Arsenic	N.D.	0.970	4.00
Barium	N.D.	0.0330	1.00
Beryllium	N.D.	0.0670	1.00
Cadmium	N.D.	0.0490	1.00
Chromium	N.D.	0.140	3.00
Copper	N.D.	0.230	2.00
Lead	0.666 J	0.550	3.00
Nickel	N.D.	0.300	2.00
Selenium	N.D.	0.900	4.00
Silver	N.D.	0.150	1.00
Thallium	N.D.	0.820	6.00
Vanadium	N.D.	0.140	1.00
Zinc	N.D.	0.680	4.00
Batch number: 16337102201A			
Sample number(s): 8721669			
Total Cyanide (solid)	N.D.	0.18	0.50
Batch number: 16352042501A			
Sample number(s): 8721669			
Hexavalent Chromium (SOLIDS)	N.D.	0.50	1.5

### LCS/LCSD

Analysis Name	LCS Spike Added	LCS Conc	LCSD Spike Added	LCSD Conc	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	ug/kg	ug/kg	ug/kg	ug/kg					
Batch number: B163421AA									
Sample number(s): 8721669									
Acetone	150	190.61	150	178.15	127	119	39-150	7	30

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

## Quality Control Summary

Client Name: Eurofins QC Laboratories  
Reported: 12/22/2016 14:05

Group Number: 1739018

### LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/kg	LCS Conc ug/kg	LCSD Spike Added ug/kg	LCSD Conc ug/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Acrylonitrile	100	104.61	100	102.23	105	102	66-120	2	30
Benzene	20	18.77	20	18.52	94	93	80-120	1	30
Bromodichloromethane	20	17.17	20	17.21	86	86	75-120	0	30
Bromoform	20	14.33	20	13.95	72	70	57-127	3	30
Bromomethane	20	18.33	20	18.24	92	91	21-165	0	30
2-Butanone	150	132.64	150	133.55	88	89	54-129	1	30
Carbon Tetrachloride	20	18.1	20	18.02	90	90	69-130	0	30
Chlorobenzene	20	17.9	20	17.64	90	88	80-120	1	30
Chloroform	20	19.03	20	18.9	95	95	80-120	1	30
Chloromethane	20	20.6	20	19.32	103	97	56-120	6	30
Dibromochloromethane	20	15.63	20	15.63	78	78	77-120	0	30
1,2-Dichlorobenzene	20	17.96	20	17.84	90	89	80-120	1	30
1,3-Dichlorobenzene	20	17.1	20	16.64	85	83	80-120	3	30
1,4-Dichlorobenzene	20	17.47	20	17.28	87	86	80-120	1	30
1,1-Dichloroethane	20	19.43	20	19.3	97	96	77-120	1	30
1,2-Dichloroethane	20	20.71	20	20.71	104	104	70-133	0	30
1,1-Dichloroethene	20	19.63	20	19.34	98	97	73-129	2	30
cis-1,2-Dichloroethene	20	18.19	20	18.17	91	91	80-120	0	30
trans-1,2-Dichloroethene	20	20.22	20	19.92	101	100	80-125	2	30
1,2-Dichloropropane	20	18.94	20	18.79	95	94	76-120	1	30
cis-1,3-Dichloropropene	20	17.23	20	17.16	86	86	74-120	0	30
trans-1,3-Dichloropropene	20	17.12	20	16.92	86	85	76-120	1	30
Ethylbenzene	20	18.01	20	17.84	90	89	80-120	1	30
4-Methyl-2-pentanone	100	95.29	100	93.29	95	93	48-136	2	30
Methylene Chloride	20	19.33	20	19.14	97	96	76-122	1	30
Styrene	20	16.84	20	16.86	84	84	76-120	0	30
1,1,1,2-Tetrachloroethane	20	16.86	20	16.79	84	84	75-120	0	30
1,1,2,2-Tetrachloroethane	20	15.51	20	15.04	78	75	67-121	3	30
Tetrachloroethene	20	20.07	20	18.77	100	94	78-120	7	30
Toluene	20	18.02	20	17.79	90	89	80-120	1	30
1,2,4-Trichlorobenzene	20	16.54	20	15.97	83	80	63-121	4	30
1,1,1-Trichloroethane	20	16.59	20	16.4	83	82	66-128	1	30
1,1,2-Trichloroethane	20	17.18	20	16.98	86	85	80-120	1	30
Trichloroethene	20	18.61	20	18.26	93	91	80-120	2	30
Vinyl Chloride	20	19.41	20	19.35	97	97	59-120	0	30
Xylene (Total)	60	54.63	60	53.79	91	90	80-120	2	30
	ug/kg	ug/kg	ug/kg	ug/kg					
Batch number: 16337SLN026	Sample number(s): 8721669								
Acenaphthene	1666.67	1575.23			95		83-116		
Anthracene	1666.67	1524.17			91		82-118		
Benzo(a)anthracene	1666.67	1604.8			96		76-119		
Benzo(a)pyrene	1666.67	1601			96		85-117		
Benzo(b)fluoranthene	1666.67	1735.32			104		79-121		
Benzo(k)fluoranthene	1666.67	1555.95			93		79-120		
Benzyl alcohol	1666.67	1756.94			105		64-119		
Butylbenzylphthalate	1666.67	1541.29			92		80-118		
Di-n-butylphthalate	1666.67	1510.28			91		84-120		

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

## Quality Control Summary

Client Name: Eurofins QC Laboratories  
Reported: 12/22/2016 14:05

Group Number: 1739018

### LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/kg	LCS Conc ug/kg	LCSD Spike Added ug/kg	LCSD Conc ug/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
4-Chloro-3-methylphenol	1666.67	1746.03			105		74-132		
4-Chloroaniline	1666.67	760.2			46		10-100		
bis(2-Chloroethyl)ether	1666.67	1679.49			101		77-115		
bis(2-Chloroisopropyl)ether	1666.67	1563.24			94		62-127		
2-Chlorophenol	1666.67	1688.52			101		85-123		
Chrysene	1666.67	1554.5			93		80-121		
Dibenz (a, h) anthracene	1666.67	1665.92			100		81-123		
3,3'-Dichlorobenzidine	1666.67	901.99			54		10-116		
2,4-Dichlorophenol	1666.67	1684.81			101		86-125		
Diethylphthalate	1666.67	1564.88			94		81-118		
2,4-Dimethylphenol	1666.67	1331.07			80		73-117		
Dimethylphthalate	1666.67	1576.81			95		82-113		
2,4-Dinitrophenol	3333.33	2112.86			63		16-132		
bis(2-Ethylhexyl)phthalate	1666.67	1551.53			93		81-121		
Fluoranthene	1666.67	1465.88			88		81-117		
Fluorene	1666.67	1637.71			98		86-118		
Hexachlorobenzene	1666.67	1601.85			96		79-116		
Hexachlorobutadiene	1666.67	1539.46			92		72-120		
Hexachlorocyclopentadiene	3333.33	1676.48			50*		57-142		
Hexachloroethane	1666.67	1488.81			89		78-114		
Indeno (1,2,3-cd)pyrene	1666.67	1589.47			95		75-118		
Isophorone	1666.67	1633.69			98		77-118		
2-Methylphenol	1666.67	1756.65			105		80-133		
4-Methylphenol	1666.67	1640.96			98		73-125		
Naphthalene	1666.67	1517.57			91		82-112		
Nitrobenzene	1666.67	1633.62			98		70-122		
N-Nitroso-di-n-propylamine	1666.67	1707.41			102		67-121		
N-Nitrosodiphenylamine	1666.67	1563.65			94		83-118		
Di-n-octylphthalate	1666.67	1788.28			107		80-140		
Pentachlorophenol	1666.67	1090.15			65		63-128		
Phenol	1666.67	1687.75			101		73-122		
Pyrene	1666.67	1496.73			90		80-120		
2,4,5-Trichlorophenol	1666.67	1705.04			102		86-123		
2,4,6-Trichlorophenol	1666.67	1729.72			104		81-123		
	ug/kg	ug/kg	ug/kg	ug/kg					
Batch number: 163410013A	Sample number(s): 8721669								
Aldrin	3.40	2.96			87		60-117		
Gamma BHC - Lindane	3.33	3.25			97		47-140		
p,p-DDD	6.60	6.70			102		69-138		
p,p-DDE	6.80	6.95			102		68-146		
p,p-DDT	6.60	6.61			100		67-135		
Dieldrin	6.60	5.98			91		63-126		
Endosulfan I	3.33	2.95			89		62-119		
Endosulfan II	6.77	5.98			88		65-126		
Endrin	6.67	6.18			93		65-125		
Heptachlor	3.33	3.02			91		66-118		
Methoxychlor	33.1	34.81			105		65-131		

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(2) The unspiked result was more than four times the spike added.

##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

## Quality Control Summary

Client Name: Eurofins QC Laboratories  
Reported: 12/22/2016 14:05

Group Number: 1739018

### LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/kg	LCS Conc ug/kg	LCSD Spike Added ug/kg	LCSD Conc ug/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 163410014A	Sample number(s): 8721669								
PCB-1016	168	163.14			97		76-121		
PCB-1260	167	166.89			100		79-130		
	mg/kg	mg/kg	mg/kg	mg/kg					
Batch number: 163370637003	Sample number(s): 8721669								
Antimony	50	51.16			102		80-120		
Arsenic	15	15.03			100		80-120		
Barium	200	204.75			102		80-120		
Beryllium	5.00	5.14			103		80-120		
Cadmium	5.00	5.16			103		80-120		
Chromium	20	20.2			101		80-120		
Copper	25	25.68			103		80-120		
Lead	15	15.26			102		80-120		
Nickel	50	52.1			104		80-120		
Selenium	15	15.6			104		80-120		
Silver	5.00	5.20			104		80-120		
Thallium	15	15.77			105		80-120		
Vanadium	50	50.97			102		80-120		
Zinc	50	50.71			101		80-120		
	mg/kg	mg/kg	mg/kg	mg/kg					
Batch number: 16337102201A	Sample number(s): 8721669								
Total Cyanide (solid)	10	10.15			101		90-110		
	mg/kg	mg/kg	mg/kg	mg/kg					
Batch number: 16352042501A	Sample number(s): 8721669								
Hexavalent Chromium (SOLIDS)	5.00	4.72			94		80-120		
	%	%	%	%					
Batch number: 16337820001A	Sample number(s): 8721669								
Moisture	89.5	89.45			100		99-101		

### MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/kg	MS Spike Added ug/kg	MS Conc ug/kg	MSD Spike Added ug/kg	MSD Conc ug/kg	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: B163421AA	Sample number(s): 8721669 UNSPK: P719335									
Acetone	N.D.	141.24	207.5			147		39-150		
Acrylonitrile	N.D.	94.16	118.21			126*		66-120		

\*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

## Quality Control Summary

Client Name: Eurofins QC Laboratories  
Reported: 12/22/2016 14:05

Group Number: 1739018

### MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/kg	MS Spike Added ug/kg	MS Conc ug/kg	MSD Spike Added ug/kg	MSD Conc ug/kg	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Benzene	N.D.	18.83	18.04			96		80-120		
Bromodichloromethane	N.D.	18.83	16.63			88		75-120		
Bromoform	N.D.	18.83	12.72			68		57-127		
Bromomethane	N.D.	18.83	19.65			104		21-165		
2-Butanone	N.D.	141.24	129.72			92		54-129		
Carbon Tetrachloride	N.D.	18.83	17.48			93		69-130		
Chlorobenzene	N.D.	18.83	13.96			74*		80-120		
Chloroform	N.D.	18.83	19.59			104		80-120		
Chloromethane	N.D.	18.83	25.37			135*		56-120		
Dibromochloromethane	N.D.	18.83	14.9			79		77-120		
1,2-Dichlorobenzene	N.D.	18.83	13.74			73*		80-120		
1,3-Dichlorobenzene	N.D.	18.83	11.92			63*		80-120		
1,4-Dichlorobenzene	N.D.	18.83	12.4			66*		80-120		
1,1-Dichloroethane	N.D.	18.83	20.51			109		77-120		
1,2-Dichloroethane	N.D.	18.83	21.91			116		70-133		
1,1-Dichloroethene	N.D.	18.83	21.78			116		73-129		
cis-1,2-Dichloroethene	N.D.	18.83	18.35			97		80-120		
trans-1,2-Dichloroethene	N.D.	18.83	20.66			110		80-125		
1,2-Dichloropropane	N.D.	18.83	18.73			99		76-120		
cis-1,3-Dichloropropene	N.D.	18.83	15.77			84		74-120		
trans-1,3-Dichloropropene	N.D.	18.83	15.43			82		76-120		
Ethylbenzene	N.D.	18.83	12.46			66*		80-120		
4-Methyl-2-pentanone	N.D.	94.16	97.24			103		48-136		
Methylene Chloride	N.D.	18.83	21			111		76-122		
Styrene	N.D.	18.83	12.71			68*		76-120		
1,1,1,2-Tetrachloroethane	N.D.	18.83	14.72			78		75-120		
1,1,2,2-Tetrachloroethane	N.D.	18.83	14.88			79		67-121		
Tetrachloroethene	N.D.	18.83	18.83			100		78-120		
Toluene	N.D.	18.83	15.05			80		80-120		
1,2,4-Trichlorobenzene	N.D.	18.83	11.42			61*		63-121		
1,1,1-Trichloroethane	N.D.	18.83	16.68			89		66-128		
1,1,2-Trichloroethane	N.D.	18.83	16.84			89		80-120		
Trichloroethene	N.D.	18.83	16.55			88		80-120		
Vinyl Chloride	N.D.	18.83	23.63			125*		59-120		
Xylene (Total)	N.D.	56.5	38.2			68*		80-120		
	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg					
Batch number: 16337SLN026	Sample number(s): 8721669 UNSPK: P720165									
Acenaphthene	8943.15	1642.58	5603.98	1651.25	3783.72	-202 (2)	-311 (2)	83-116	39*	30
Anthracene	9583.73	1642.58	4311.69	1651.25	3628.83	-320 (2)	-360 (2)	82-118	17	30
Benzo(a)anthracene	1977.83	1642.58	2242.87	1651.25	2191.12	16*	13*	76-119	2	30
Benzo(a)pyrene	1016.21	1642.58	2110.91	1651.25	1874.31	67*	52*	85-117	12	30
Benzo(b)fluoranthene	912.56	1642.58	2176.54	1651.25	2378.3	77*	89	79-121	9	30
Benzo(k)fluoranthene	381.74	1642.58	1897.14	1651.25	1751.65	92	83	79-120	8	30

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

## Quality Control Summary

Client Name: Eurofins QC Laboratories  
Reported: 12/22/2016 14:05

Group Number: 1739018

### MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/kg	MS Spike Added ug/kg	MS Conc ug/kg	MSD Spike Added ug/kg	MSD Conc ug/kg	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Benzyl alcohol	N.D.	1642.58	N.D.	1651.25	N.D.	0*	0*	64-119	0	30
Butylbenzylphthalate	N.D.	1642.58	N.D.	1651.25	N.D.	0*	0*	80-118	0	30
Di-n-butylphthalate	N.D.	1642.58	N.D.	1651.25	N.D.	0*	0*	84-120	0	30
4-Chloro-3-methylphenol	N.D.	1642.58	3897.44	1651.25	3225.17	237*	195*	74-132	19	30
4-Chloroaniline	N.D.	1642.58	N.D.	1651.25	N.D.	0*	0*	10-100	0	30
bis(2-Chloroethyl) ether	N.D.	1642.58	N.D.	1651.25	1893.46	0*	115	77-115	200*	30
bis(2-Chloroisopropyl) ether	N.D.	1642.58	N.D.	1651.25	1857.66	0*	113	62-127	200*	30
2-Chlorophenol	N.D.	1642.58	1757.72	1651.25	1773.71	107	107	85-123	1	30
Chrysene	5905.24	1642.58	4417.94	1651.25	3069.88	-90*	-171*	80-121	36*	30
Dibenz(a,h)anthracene	382.93	1642.58	2053.58	1651.25	1939.3	102	94	81-123	6	30
3,3'-Dichlorobenzidine	N.D.	1642.58	N.D.	1651.25	N.D.	0*	0*	10-116	0	30
2,4-Dichlorophenol	N.D.	1642.58	4427.1	1651.25	3053.57	270*	185*	86-125	37*	30
Diethylphthalate	N.D.	1642.58	N.D.	1651.25	N.D.	0*	0*	81-118	0	30
2,4-Dimethylphenol	N.D.	1642.58	1996.71	1651.25	1686.72	122*	102	73-117	17	30
Dimethylphthalate	N.D.	1642.58	N.D.	1651.25	N.D.	0*	0*	82-113	0	30
2,4-Dinitrophenol	N.D.	3285.15	N.D.	3302.51	N.D.	0*	0*	16-132	0	30
bis(2-Ethylhexyl)phthalate	N.D.	1642.58	N.D.	1651.25	N.D.	0*	0*	81-121	0	30
Fluoranthene	3059.23	1642.58	2941.16	1651.25	2271.43	-6*	-47*	81-117	26	30
Fluorene	17070.9	1642.58	8032.98	1651.25	5455.55	-549	-702	86-118	38*	30
						(2)	(2)			
Hexachlorobenzene	N.D.	1642.58	1682.52	1651.25	1936.33	102	117*	79-116	14	30
Hexachlorobutadiene	N.D.	1642.58	1866.69	1651.25	1883.36	114	114	72-120	1	30
Hexachlorocyclopentadiene	N.D.	3285.15	N.D.	3302.51	N.D.	0*	0*	57-142	0	30
Hexachloroethane	N.D.	1642.58	N.D.	1651.25	N.D.	0*	0*	78-114	0	30
Indeno(1,2,3-cd)pyrene	N.D.	1642.58	2011.14	1651.25	1971.83	122*	119*	75-118	2	30
Isophorone	N.D.	1642.58	4652.3	1651.25	3232.69	283*	196*	77-118	36*	30
2-Methylphenol	N.D.	1642.58	2715.74	1651.25	2471.66	165*	150*	80-133	9	30
4-Methylphenol	N.D.	1642.58	1804.5	1651.25	1985.11	110	120	73-125	10	30
Naphthalene	15027.34	1642.58	9353.22	1651.25	7515.95	-344	-454	82-112	22	30
						(2)	(2)			
Nitrobenzene	N.D.	1642.58	13639.91	1651.25	N.D.	830*	0*	70-122	200*	30
N-Nitroso-di-n-propylamine	N.D.	1642.58	N.D.	1651.25	4767.5	0*	289*	67-121	200*	30
N-Nitrosodiphenylamine	N.D.	1642.58	15492.48	1651.25	8354.56	943*	506*	83-118	60*	30
Di-n-octylphthalate	N.D.	1642.58	N.D.	1651.25	N.D.	0*	0*	80-140	0	30
Pentachlorophenol	N.D.	1642.58	N.D.	1651.25	N.D.	0*	0*	63-128	0	30
Phenol	N.D.	1642.58	2037.94	1651.25	1798.18	124*	109	73-122	13	30
Pyrene	9300.76	1642.58	4230.13	1651.25	3328.43	-308	-361	80-120	24	30
						(2)	(2)			
2,4,5-Trichlorophenol	N.D.	1642.58	4493.92	1651.25	2760.34	274*	167*	86-123	48*	30
2,4,6-Trichlorophenol	N.D.	1642.58	3733.05	1651.25	2385.8	227*	144*	81-123	44*	30
		ug/kg	ug/kg	ug/kg	ug/kg	ug/kg				
Batch number: 163410013A	Sample number(s): 8721669 UNSPK: P727347									
Aldrin	N.D.	3.38	2.88	3.36	2.70	85	80	60-117	6	50
Gamma BHC - Lindane	N.D.	3.30	3.08	3.28	2.88	93	88	47-140	7	50
p,p-DDD	N.D.	6.54	6.54	6.50	6.09	100	94	69-138	7	50

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(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

## Quality Control Summary

Client Name: Eurofins QC Laboratories  
Reported: 12/22/2016 14:05

Group Number: 1739018

### MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/kg	MS Spike Added ug/kg	MS Conc ug/kg	MSD Spike Added ug/kg	MSD Conc ug/kg	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
p,p-DDE	0.698	6.74	6.76	6.70	6.35	90	84	68-146	6	50
p,p-DDT	N.D.	6.54	6.37	6.50	5.95	97	92	67-135	7	50
Dieldrin	0.508	6.54	5.69	6.50	5.27	79	73	63-126	8	50
Endosulfan I	N.D.	3.30	2.83	3.28	2.63	86	80	62-119	7	50
Endosulfan II	N.D.	6.71	5.74	6.67	5.34	86	80	65-126	7	50
Endrin	N.D.	6.61	5.91	6.57	5.49	89	83	65-125	8	50
Heptachlor	N.D.	3.30	2.89	3.28	2.72	87	83	66-118	6	50
Methoxychlor	N.D.	32.8	33.79	32.6	30.71	103	94	65-131	10	50
Batch number: 163410014A	Sample number(s): 8721669 UNSPK: P716867									
PCB-1016	N.D.	166	155.97	167	158.7	94	95	76-121	2	50
PCB-1260	N.D.	166	157.1	166	158.27	95	95	79-130	1	50
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg					
Batch number: 163370637003	Sample number(s): 8721669 UNSPK: 8721669									
Antimony	0.771	37.04	31.38	42.02	37.22	83	87	75-125	17	20
Arsenic	1.57	11.11	11.81	12.61	13.68	92	96	75-125	15	20
Barium	30.25	148.15	166.19	168.07	199.29	92	101	75-125	18	20
Beryllium	0.276	3.70	3.90	4.20	4.45	98	99	75-125	13	20
Cadmium	0.0739	3.70	3.49	4.20	4.08	92	95	75-125	16	20
Chromium	9.79	14.81	26.92	16.81	27.75	116	107	75-125	3	20
Copper	8.78	18.52	35.31	21.01	28.46	143*	94	75-125	22*	20
Lead	4.55	11.11	14.1	12.61	15.85	86	90	75-125	12	20
Nickel	7.30	37.04	43.96	42.02	47.21	99	95	75-125	7	20
Selenium	1.53	11.11	12.2	12.61	13.25	96	93	75-125	8	20
Silver	N.D.	3.70	3.61	4.20	4.21	97	100	75-125	15	20
Thallium	1.87	11.11	12.74	12.61	13.94	98	96	75-125	9	20
Vanadium	19.93	37.04	62.49	42.02	61.92	115	100	75-125	1	20
Zinc	15.17	37.04	56.64	42.02	57.33	112	100	75-125	1	20
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg					
Batch number: 16337102201A	Sample number(s): 8721669 UNSPK: P716866									
Total Cyanide (solid)	N.D.	5.05	5.20			103		41-145		
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg					
Batch number: 16352042501A	Sample number(s): 8721669 UNSPK: P739841									
Hexavalent Chromium (SOLIDS)	141.44	39.8	177.89			92		75-125		

### Laboratory Duplicate

Background (BKG) = the sample used in conjunction with the duplicate

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.



## Quality Control Summary

Client Name: Eurofins QC Laboratories  
Reported: 12/22/2016 14:05

Group Number: 1739018

### Laboratory Duplicate

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc mg/kg	DUP Conc mg/kg	DUP RPD	DUP RPD Max
Batch number: 163370637003 Sample number(s): 8721669 BKG: 8721669				
Antimony	0.771	N.D.	200* (1)	20
Arsenic	1.57	2.30	38* (1)	20
Barium	30.25	24.11	23*	20
Beryllium	0.276	0.303	9 (1)	20
Cadmium	0.0739	0.0538	32* (1)	20
Chromium	9.79	10.16	4 (1)	20
Copper	8.78	7.35	18 (1)	20
Lead	4.55	4.57	0 (1)	20
Nickel	7.30	7.69	5 (1)	20
Selenium	1.53	1.61	5 (1)	20
Silver	N.D.	N.D.	0 (1)	20
Thallium	1.87	1.75	7 (1)	20
Vanadium	19.93	17.58	12	20
Zinc	15.17	16.65	9 (1)	20
mg/kg mg/kg				
Batch number: 16337102201A Sample number(s): 8721669 BKG: P716866				
Total Cyanide (solid)	N.D.	N.D.	0 (1)	20
mg/kg mg/kg				
Batch number: 16352042501A Sample number(s): 8721669 BKG: P739841				
Hexavalent Chromium (SOLIDS)	141.44	140.48	1	20
%				
Batch number: 16337820001A Sample number(s): 8721669 BKG: P721821				
Moisture	79.32	78.8	1	5

### Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: VOCs- Solid by 8260B

Batch number: B163421AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8721669	101	98	99	96
Blank	100	101	97	99
LCS	100	102	99	100
LCSD	101	100	99	100
MS	103	101	100	100
Limits:	50-141	54-135	52-141	50-131

\*- Outside of specification

\*\*-.This limit was used in the evaluation of the final result for the blank

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(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

## Quality Control Summary

Client Name: Eurofins QC Laboratories  
Reported: 12/22/2016 14:05

Group Number: 1739018

### Surrogate Quality Control (continued)

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: TCL 8270 (microwave)  
Batch number: 16337SLN026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
8721669	96	91	90	101	102	113
Blank	94	91	103	89	84	98
LCS	104	98	102	92	91	99
MS	113	99	98	246*	108	128
MSD	113	99	99	165*	108	118
Limits:	58-122	57-126	28-141	54-123	63-117	49-129

Analysis Name: Pesticides in Soil (microwave)  
Batch number: 163410013A

	Tetrachloro-m-xylene	Decachlorobiphenyl
8721669	85	94
Blank	90	104
LCS	89	99
MS	87	98
MSD	82	99
Limits:	26-145	39-152

Analysis Name: PCBs 8082A/3546  
Batch number: 163410014A

	Tetrachloro-m-xylene	Decachlorobiphenyl
8721669	112	97
Blank	111	103
LCS	113	111
MS	104	100
MSD	108	98
Limits:	53-140	45-143

\*- Outside of specification

\*\* - This limit was used in the evaluation of the final result for the blank

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P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.



QCLL LABORATORIES  
1205 Industrial Blvd.  
Southampton, PA 18966-0514

Phone: 215-355-3900  
Fax: 215-355-7231

### CHAIN OF CUSTODY

Page 1 of 1

Bill to/Report to: (if different)

Sampling Site Address: (if different)

Client/Acct. No. VILLAGE OF RIDGEWOOD

Address 31 N MAPLE AVE

City/State/Zip RIDGEWOOD NJ 07450

Phone/Fax 908-670-5577

Client Contact YAGHESH NYAS

P.O. No.

QC Contact

PROJECT	Collection		Matrix		Number of Containers		
	Date	Military Time	G A B P	C M P	H I J K L M N O P Q R S T U V W X Y Z	Total	
<b>FIELD ID</b> SOIL / DIRT SAMPLE	11/29/16	0700	X	SO2			X

### LAB USE ONLY

Lab LIMS No: L6665481

LAB USE ONLY:  
Ascorbic/HCl/Vials # HCl/Vials  
Na2S2O3  
NaOH/Znacetate/pH  
HNO3/pH  
H2SO4/pH  
NaOH/pH  
Unpreserved: SSA/1/10/16/16  
HCl/pH  
Temp control: SSA/1/10/16/16  
S/1/10/16/16

### MATRIX CODES

- DW: DRINKING WATER
  - GW: GROUND WATER
  - WW: WASTEWATER
  - SO: SOIL
  - SL: SLUDGE
  - OIL: OIL
  - SOL: NON SOIL SOLID
  - MI: MISCELLANEOUS
  - X: OTHER
- Field pH, Temp (C or F), DO, Cl<sub>2</sub>, S, Cond. etc.

### ANALYSIS REQUESTED

PLEASE TEST FOR ALL PARAMETERS LISTED ON ATTACHED SHEETS

SAMPLED BY: (Name/Company)	Verbal/fax data due:	Hardcopy due:	Report Format: <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Forms <input type="checkbox"/> Disk	Field Parameters Analyzed By:	Date/Time:
<u>[Signature]</u>			<input checked="" type="checkbox"/> Standard + QC <input type="checkbox"/> NJ Reduced <input type="checkbox"/> Disk		

SAMPLE CUSTODY EXCHANGES MUST BE DOCUMENTED BELOW. USE FULL LEGAL SIGNATURE, DATE AND MILITARY TIME (24 HOUR CLOCK, I.E. 8AM IS 0800, 4 PM IS 1600)		DELIVERY METHOD: <input type="checkbox"/> QC COURIER <input type="checkbox"/> CLIENT <input type="checkbox"/> UPS <input type="checkbox"/> FEDEX <input type="checkbox"/> OTHER	Custody Seal Number
RELINQUISHED BY SAMPLER	DATE	TIME	
1 X <u>[Signature]</u>	11-29-16	0900	
RELINQUISHED BY	DATE	TIME	
2 <u>[Signature]</u>	11-29-16	1300	
RELINQUISHED BY	DATE	TIME	
3 <u>[Signature]</u>	11/29/16	0700	
RELINQUISHED BY	DATE	TIME	
4 <u>[Signature]</u>			
RELINQUISHED BY	DATE	TIME	
5 <u>[Signature]</u>	11/30/16	1300	

COMMENTS:  
EMAIL ADDRESS -  
NYNAS@RIDGEWOODNJ.NET  
4.19/ATWA/1600  
Hazardous: yes/no

For example to aid completion, see reverse side.

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# Site Remediation Program

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► Guidance Documents ► Soil Cleanup Criteria

## Soil Cleanup Criteria (mg/kg)

**Table Last Revised:** 12 May 1999 to correct the impact to ground water criterion for bis(2-chloroethyl) ether. Please note that this table is for reference purpose and cases with Remedial Action Workplans approved prior to the May 7, 2012 amendments of the Remediation Standards at N.J.A.C. 7:26D.

This listing represents the combination of Tables 3-2 and 7-1 from the Department of Environmental Protection and Energy's February 3, 1992 proposed rule entitled Cleanup Standards for Contaminated Sites, N.J.A.C. 7:26D, as corrected based upon errors identified by the Department during or subsequent to the comment period as well as new toxicological or other information obtained since the rule proposal. Please refer to the respective footnotes for more detail. Notwithstanding, where the following criteria are based on human health impacts, the Department shall still consider environmental impacts when establishing site specific cleanup criteria. This along with other site-specific factors including background conditions may result in site specific cleanup criteria which differ from the criteria listed below. Therefore, this list shall not be assumed to represent approval by the Department of any remedial action or to represent the Department's opinion that a site requires remediation.

## Alternate Formats

This document is available in several other formats:

- Adobe Acrobat [pdf 45 Kb]
- Microsoft Word [doc 62 Kb]
- ZIP of the Word doc [zip 12 Kb]

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Note: Material bracketed [thus] is deleted and material underlined thus is added

Contaminant	CASRN	Residential Direct Contact Soil Cleanup Criteria (a) (b)	Non- Residential Direct Contact Soil Cleanup Criteria (a) (b)	Impact to Ground water Soil Cleanup Criteria (b)
		(RDCSCC)	(NRDCSCC)	(IGWSCC)
Acenaphthene	83-32-9	3400	10000(c)	100
Acetone (2-propanone)	67-64-1	1000(d)	1000(d)	100
Acrylonitrile	107-13-1	1	5	1
Aldrin	309-00-2	0.040	0.17	50
Anthracene	120-12-7	10000(c)	10000(c)	100
Antimony	7440-36-0	14	340	(h)
Arsenic	7440-38-2	20 (e)	20 (e)	(h)
Barium	7440-39-3	700	47000(n)	(h)
Benzene	71-43-2	3	13	1
Benzo(b)fluoranthene (3,4-Benzofluoranthene)	205-99-2	0.9	4	50
Benzo(a)anthracene (1,2-Benzanthracene)	56-55-3	0.9	4	500

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Benzo(a)pyrene (BaP)	50-32-8	0.66(f)	0.66(f)	100
Benzo(k)fluoranthene	207-08-9	0.9	4	500
Benzyl Alcohol	100-51-6	10000(c)	10000(c)	50
Beryllium	7440-41-7	[1(f)] 2.(e)	[1(f)] 2.(e)	(h)
Bis(2-chloroethyl) ether	111-44-4	0.66(f)	3	10
Bis(2-chloroisopropyl) ether	108-60-1	2300	10000(c)	10
Bis(2-ethylhexyl) phthalate	117-81-7	49	210	100
Bromodichloromethane (Dichlorobromomethane)	75-27-4	11	46	1
Bromoform	75-25-2	86	370	1
Bromomethane (Methyl bromide)	74-83-9	79	1000 (d)	1
2-Butanone (Methyl ethyl ketone) (MEK)	78-93-3	1000 (d)	1000 (d)	50
Butylbenzyl phthalate	85-68-7	1100	10000 (c)	100
Cadmium	7440-43-9	[1] 39	100	(h)
Carbon tetrachloride	56-23-5	2 (k)	4 (k)	1
4-Chloroaniline (p-Chloroaniline)	106-47-8	230	4200	(r)
Chlorobenzene	108-90-7	37	680	1
Chloroform	67-66-3	19 (k)	28 (k)	1
4-Chloro-3-methyl phenol (p-Chloro-m-cresol)	59-50-7	10000 (c)	10000 (c)	100
Chloromethane (Methyl chloride)	74-87-3	520	1000 (d)	10
2-Chlorophenol (o-Chlorophenol)	95-57-8	280	5200	10
Chromium - hexavalent (VI)	18540-29-9	240; 270 (g); (i)	6100; 20 (g); (i)	(h)
Chromium - trivalent (III)	16065-83-1	120,000	(j)	(l)
Chrysene	218-01-9	9	40	500
Copper	7440-50-8	600 (m)	600 (m)	(h)
Cyanide	57-12-5	1100	21000 (o)	(h)
4,4'-DDD (p,p'-TDE)	72-54-8	3	12	50
4,4'-DDE (p,p'-DDX)	72-55-9	2	9	50
4,4'-DDT	50-29-3	2	9	500
Dibenz(a,h)anthracene	53-70-3	0.66 (f)	0.66 (f)	100
Dibromochloromethane (Chlorodibromomethane)	124-48-1	110	1000 (d)	1
Di-n-butyl phthalate	84-74-2	5700	10000 (c)	100
Di-n-octyl phthalate	117-84-0	1100	10000 (c)	100
1,2-Dichlorobenzene (o-Dichlorobenzene)	95-50-1	5100	10000 (c)	50
1,3-Dichlorobenzene (m-Dichlorobenzene)	541-73-1	5100	10000 (c)	100
1,4-Dichlorobenzene (p-Dichlorobenzene)	106-46-7	570	10000 (c)	100
3,3'-Dichlorobenzidine	91-94-1	2	6	100
1,1-Dichloroethane	75-34-3	570	1000 (d)	10

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1,2-Dichloroethane	107-06-2	6	24	1
1,1-Dichloroethene	75-35-4	8	150	10
1,2-Dichloroethene (trans)	156-60-5	1000 (d)	1000 (d)	50
1,2-Dichloroethene (cis)	156-59-2	79	1000 (d)	1
2,4-Dichlorophenol	120-83-2	170	3100	10
1,2-Dichloropropane	78-87-5	10	43	(r)
1,3-Dichloropropene(cis and trans)	542-75-6	4	5 (k)	1
Dieldrin	60-57-1	0.042	0.18	50
Diethyl phthalate	84-66-2	10000 (c)	10000 (c)	50
2,4-Dimethyl phenol	105-67-9	1100	10000 (c)	10
Dimethyl phthalate	131-11-3	10000 (c)	10000 (c)	50
2,4-Dinitrophenol	51-28-5	110	2100	10
Dinitrotoluene(2,4-/2,6-mixture)	25321-14-6	1 (l)	4 (l)	10 (l)
Endosulfan	115-29-7	340	6200	50
Endrin	72-20-8	17	310	50
Ethylbenzene	100-41-4	1000 (d)	1000 (d)	100
Fluoranthene	206-44-0	2300	10000 (c)	100
Fluorene	86-73-7	2300	10000 (c)	100
Heptachlor	76-44-8	0.15	0.65	50
Hexachlorobenzene	118-74-1	0.66 (f)	2	100
Hexachlorobutadiene	87-68-3	1	21	100
Hexachlorocyclopentadiene	77-47-4	400	7300	100
Hexachloroethane	67-72-1	6	100	100
Indeno(1,2,3-cd)pyrene	193-39-5	0.9	4	500
Isophorone	78-59-1	1100	10000 (c)	50
Lead	7439-92-1	400 (p)	600 (q)	(h)
Lindane (gamma BHC) (gamma HCH)	58-89-9	0.52	2.2	50
2-Methylphenol (o-cresol)	95-48-7	2800	10000 (c)	(r)
4-Methylphenol (p-cresol)	106-44-5	2800	10000 (c)	(r)
Methoxychlor	72-43-5	280	5200	50
Mercury	7439-97-6	14	270	(h)
4-Methyl-2-pentanone (MIBK)	108-10-1	1000 (d)	1000 (d)	50
Methylene chloride (Dichloromethane)	75-09-2	49	210	1
Naphthalene	91-20-3	230	4200	100
Nickel	7440-02-0	250	2400 (k) (n)	(h)
Nitrobenzene	98-95-3	28	520	10
N-Nitrosodiphenylamine	86-30-6	140	600	100
N-Nitrosodi-n-propylamine	621-64-7	0.66 (f)	0.66 (f)	10
PCBs (Polychlorinated biphenyls)	1336-36-3	0.49	2	50
Pentachlorophenol	87-86-5	6	24	100
Phenol	108-95-2	10000 (c)	10000 (c)	50

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Pyrene	129-00-0	1700	10000 (c)	100
Selenium	7782-49-2	63	3100 (n)	(h)
Silver	7440-22-4	110	4100 (n)	(h)
Styrene	100-42-5	23	97	100
1,1,1,2-Tetrachloroethane	630-20-6	170	310	1
1,1,2,2-Tetrachloroethane	79-34-5	34	70 (k)	1
Tetrachloroethene (Tetrachloroethylene) (PCE)	127-18-4	4 (k)	6 (k)	1
Thallium	7440-28-0	2 (f)	2 (f)	(h)
Toluene	108-88-3	1000 (d)	1000 (d)	500
Toxaphene	8001-35-2	0.10 (k)	0.2 (k)	50
1,2,4-Trichlorobenzene	120-82-1	68	1200	100
1,1,1-Trichloroethane	71-55-6	210	1000 (d)	50
1,1,2-Trichloroethane	79-00-5	22	420	1
Trichloroethene (Trichloroethylene) (TCE)	79-01-6	23	54 (k)	1
2,4,5-Trichlorophenol	95-95-4	5600	10000 (c)	50
2,4,6-Trichlorophenol	88-06-2	62	270	10
Vanadium	7440-62-2	370	7100 (n)	(h)
Vinyl chloride	75-01-4	2	7	10
Xylenes (Total)	1330-20-7	410	1000 (d)	[10] 67 (s)
Zinc	7440-66-6	1500 (m)	1500 (m)	(h)

Footnotes:

- (a) Criteria are health based using an incidental ingestion exposure pathway except where noted below.
- (b) Criteria are subject to change based on site specific factors (e.g., aquifer classification, soil type, natural background, environmental impacts, etc.).
- (c) Health based criterion exceeds the 10,000 mg/kg maximum for total organic contaminants.
- (d) Health based criterion exceeds the 1000 mg/kg maximum for total volatile organic contaminants.
- (e) Cleanup standard proposal was based on natural background.
- (f) Health based criterion is lower than analytical limits; cleanup criterion based on practical quantitation level.
- (g) Criterion based on the Inhalation exposure pathway.
- (h) The impact to ground water values for inorganic constituents will be developed based upon site specific chemical and physical parameters.
- (i) Site specific determination required for SCC for the allergic contact dermatitis exposure pathway.
- (j) Contaminant not regulated for this exposure pathway.
- (k) Criteria based on inhalation exposure pathway, which yielded a more stringent criterion than the incidental ingestion exposure pathway.
- (l) No criterion derived for this contaminant.
- (m) Criterion based on ecological (phytotoxicity) effects.
- (n) Level of the human health based criterion is such that evaluation for potential environmental impacts on a site by site basis is recommended.
- (o) Level of the criterion is such that evaluation for potential acute exposure hazard is recommended.
- (p)

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Criterion based on the USEPA Integrated Exposure Uptake Biokinetic (IEUBK) model utilizing the default parameters. The concentration is considered to protect 95% of target population (children) at a blood lead level of 10 ug/dl.

- (q) Criteria were derived from a model developed by the Society for Environmental Geochemistry and Health (SEGH) and were designed to be protective for adults in the workplace.
- (r) Insufficient information available to calculate impact to ground water criteria.
- (s) Criterion based on new drinking water standard.

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To report an environmental incident impacting NJ, call the Toll-Free 24-Hour Hotline  
1-877-WARNDEP / 1-877-927-6337

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Department of Environmental Protection  
P. O. Box 402  
Trenton, NJ 08625-0402

Last Updated: September 29, 2015



Client: Eurofins QC

**Delivery and Receipt Information**

Delivery Method: EQCL Drop Off      Arrival Timestamp: 11/30/2016 5:30  
 Number of Packages: 1      Number of Projects: 6

**Arrival Condition Summary**

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	Yes	Sample Date/Times match COC:	Yes
Custody Seal Intact:	Yes	VOA Vial Headspace $\geq$ 6mm:	N/A
Samples Chilled:	Yes	Total Trip Blank Qty:	0
Paperwork Enclosed:	Yes	Air Quality Samples Present:	No
Samples Intact:	Yes		
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Joseph Huber (7831) at 06:25 on 11/30/2016

**Samples Chilled Details**

Thermometer Types:    DT = Digital (Temp. Bottle)    IR = Infrared (Surface Temp)    All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT146	2.2	DT	Wet	Y	Bagged	N

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# Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

<b>BMQL</b>	Below Minimum Quantitation Level	<b>mg</b>	milligram(s)
<b>C</b>	degrees Celsius	<b>mL</b>	milliliter(s)
<b>cfu</b>	colony forming units	<b>MPN</b>	Most Probable Number
<b>CP Units</b>	cobalt-chloroplatinate units	<b>N.D.</b>	none detected
<b>F</b>	degrees Fahrenheit	<b>ng</b>	nanogram(s)
<b>g</b>	gram(s)	<b>NTU</b>	nephelometric turbidity units
<b>IU</b>	International Units	<b>pg/L</b>	picogram/liter
<b>kg</b>	kilogram(s)	<b>RL</b>	Reporting Limit
<b>L</b>	liter(s)	<b>TNTC</b>	Too Numerous To Count
<b>lb.</b>	pound(s)	<b>µg</b>	microgram(s)
<b>m3</b>	cubic meter(s)	<b>µL</b>	microliter(s)
<b>meq</b>	milliequivalents	<b>umhos/cm</b>	micromhos/cm
<b>&lt;</b>	less than		
<b>&gt;</b>	greater than		
<b>ppm</b>	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.		
<b>ppb</b>	parts per billion		
<b>Dry weight basis</b>	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

## Laboratory Data Qualifiers:

- C - Result confirmed by reanalysis
- E - Concentration exceeds the calibration range
- J (or G, I, X) - estimated value  $\geq$  the Method Detection Limit (MDL or DL) and  $<$  the Limit of Quantitation (LOQ or RL)
- P - Concentration difference between the primary and confirmation column  $>40\%$ . The lower result is reported.
- U - Analyte was not detected at the value indicated
- V - Concentration difference between the primary and confirmation column  $>100\%$ . The reporting limit is raised due to this disparity and evident interference...
- W - The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

**Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.**

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" are not performed within 15 minutes.

**WARRANTY AND LIMITS OF LIABILITY** - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

## Additional Data Qualifiers

<b>Qualifier</b>	<b>Definition</b>
B	Detection in the Blank
Q0	LCS/LCSD Low
Q1	LCS/LCSD High
Q4	MS/MSD Out of Range
Q7	LCS/LCSD RPD
Q8	DUP RPD
Q9	MS/MSD RPD

The results set forth herein are provided by SGS North America Inc.

*e-Hardcopy 2.0*  
*Automated Report*

## Technical Report for

**WSP USA**

**Ridgewood Water, 579 Prospect Street, Glen Rock, NJ**

**31401544.002 11.00**

**SGS Job Number: JD18939**

**Sampling Date: 01/12/21**

**Report to:**

**WSP USA**

**szois@lbgnj.com**

**ATTN: Spiros Zois**

**Total number of pages in report: 172**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

A handwritten signature in black ink that reads "Caitlin Brice".

**Caitlin Brice, M.S.**  
**General Manager**

**Client Service contact: Victoria Pushkova 732-329-0200**

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

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Test results relate only to samples analyzed.

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## Sample Summary

WSP USA

**Job No:** JD18939

Ridgewood Water, 579 Prospect Street, Glen Rock, NJ  
 Project No: 31401544.002 11.00

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
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This report contains results reported as ND = Not detected. The following applies:  
 Organics ND = Not detected above the MDL

JD18939-1	01/12/21	10:15 SZ	01/12/21	SO	Soil	S-10R
JD18939-2	01/12/21	10:30 SZ	01/12/21	SO	Soil	S-15R
JD18939-3	01/12/21	10:45 SZ	01/12/21	SO	Soil	S-18R

---

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

## CASE NARRATIVE / CONFORMANCE SUMMARY

**Client:** WSP USA

**Job No:** JD18939

**Site:** Ridgewood Water, 579 Prospect Street, Glen Rock, NJ

**Report Date** 1/19/2021 4:12:39 PM

On 01/12/2021, 3 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 3.2 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JD18939 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

### MS Semi-volatiles By Method SW846 8270E

**Matrix:** SO

**Batch ID:** OP31540

- All samples were extracted within the recommended method holding time.
- Sample(s) JD18961-8MS, JD18961-8MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for 2,4-Dinitrophenol, 4,6-Dinitro-o-cresol, Hexachlorocyclopentadiene are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for 2,4-Dinitrophenol, 4,6-Dinitro-o-cresol, Hexachlorocyclopentadiene, Butyl benzyl phthalate, Di-n-butyl phthalate are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Recovery(s) for Phenanthrene are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- RPD(s) for MS/MSD for bis(2-Ethylhexyl)phthalate, Butyl benzyl phthalate, Di-n-butyl phthalate are outside control limits. Outside control limits due to matrix interference.
- JD18939-2 for 1,4-Dioxane: Associated CCV outside of control limits high, sample was ND.
- JD18939-1 for 1,4-Dioxane: Associated CCV outside of control limits high, sample was ND.
- JD18939-1 for Hexachlorocyclopentadiene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- Matrix Spike Duplicate Recovery(s) for Benzo(a)anthracene, Chrysene, Fluoranthene, Phenanthrene, Pyrene are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- JD18939-2 for 2-Nitroaniline: Associated CCV outside of control limits high, sample was ND.
- JD18939-2 for Di-n-octyl phthalate: Associated CCV outside of control limits high, sample was ND.
- JD18939-2 for Hexachlorocyclopentadiene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD18939-3 for 1,4-Dioxane: Associated CCV outside of control limits high, sample was ND.
- JD18939-3 for 2-Nitroaniline: Associated CCV outside of control limits high, sample was ND.
- JD18939-3 for Di-n-octyl phthalate: Associated CCV outside of control limits high, sample was ND.
- JD18939-3 for Hexachlorocyclopentadiene: Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
- JD18939-1 for 2-Nitroaniline: Associated CCV outside of control limits high, sample was ND.
- JD18939-1 for Di-n-octyl phthalate: Associated CCV outside of control limits high, sample was ND.

### General Chemistry By Method SM2540 G 18TH ED MOD

**Matrix:** SO

**Batch ID:** GN14813

- Sample(s) JD18877-7DUP were used as the QC samples for Solids, Percent.

Tuesday, January 19, 2021

Page 1 of 2

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover



## Summary of Hits

**Job Number:** JD18939  
**Account:** WSP USA  
**Project:** Ridgewood Water, 579 Prospect Street, Glen Rock, NJ  
**Collected:** 01/12/21



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
---------------	------------------	-----------------	----	-----	-------	--------

**JD18939-1 S-10R**

Acenaphthylene	46.5	37	19	ug/kg	SW846 8270E
Anthracene	45.6	37	23	ug/kg	SW846 8270E
Benzo(a)anthracene	218	37	10	ug/kg	SW846 8270E
Benzo(a)pyrene	213	37	17	ug/kg	SW846 8270E
Benzo(b)fluoranthene	260	37	16	ug/kg	SW846 8270E
Benzo(g,h,i)perylene	131	37	19	ug/kg	SW846 8270E
Benzo(k)fluoranthene	92.1	37	17	ug/kg	SW846 8270E
Carbazole	10.5 J	74	5.4	ug/kg	SW846 8270E
Chrysene	224	37	12	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene	35.2 J	37	16	ug/kg	SW846 8270E
Fluoranthene	333	37	17	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene	135	37	17	ug/kg	SW846 8270E
Naphthalene	17.6 J	37	10	ug/kg	SW846 8270E
Phenanthrene	130	37	12	ug/kg	SW846 8270E
Pyrene	381	37	12	ug/kg	SW846 8270E
Total TIC, Semi-Volatile	160 J			ug/kg	

**JD18939-2 S-15R**

Acenaphthene	102	41	14	ug/kg	SW846 8270E
Acenaphthylene	62.6	41	21	ug/kg	SW846 8270E
Anthracene	278	41	25	ug/kg	SW846 8270E
Benzo(a)anthracene	750	41	12	ug/kg	SW846 8270E
Benzo(a)pyrene	744	41	19	ug/kg	SW846 8270E
Benzo(b)fluoranthene	986	41	18	ug/kg	SW846 8270E
Benzo(g,h,i)perylene	511	41	21	ug/kg	SW846 8270E
Benzo(k)fluoranthene	302	41	19	ug/kg	SW846 8270E
1,1'-Biphenyl	11.2 J	83	5.7	ug/kg	SW846 8270E
Carbazole	105	83	6.0	ug/kg	SW846 8270E
Chrysene	853	41	13	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene	132	41	18	ug/kg	SW846 8270E
Dibenzofuran	58.5 J	83	17	ug/kg	SW846 8270E
bis(2-Ethylhexyl)phthalate	96.9	83	9.7	ug/kg	SW846 8270E
Fluoranthene	1620	41	18	ug/kg	SW846 8270E
Fluorene	130	41	19	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene	523	41	19	ug/kg	SW846 8270E
2-Methylnaphthalene	35.5 J	41	9.3	ug/kg	SW846 8270E
Naphthalene	26.8 J	41	12	ug/kg	SW846 8270E
Phenanthrene	981	41	14	ug/kg	SW846 8270E
Pyrene	1480	41	13	ug/kg	SW846 8270E
Total TIC, Semi-Volatile	47560 J			ug/kg	

## Summary of Hits

**Job Number:** JD18939  
**Account:** WSP USA  
**Project:** Ridgewood Water, 579 Prospect Street, Glen Rock, NJ  
**Collected:** 01/12/21



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
<b>JD18939-3</b>	<b>S-18R</b>					
Acenaphthene		18.8 J	45	15	ug/kg	SW846 8270E
Acenaphthylene		65.7	45	23	ug/kg	SW846 8270E
Anthracene		187	45	27	ug/kg	SW846 8270E
Benzo(a)anthracene		873	45	13	ug/kg	SW846 8270E
Benzo(a)pyrene		852	45	20	ug/kg	SW846 8270E
Benzo(b)fluoranthene		1040	45	20	ug/kg	SW846 8270E
Benzo(g,h,i)perylene		598	45	22	ug/kg	SW846 8270E
Benzo(k)fluoranthene		307	45	21	ug/kg	SW846 8270E
Carbazole		54.2 J	89	6.5	ug/kg	SW846 8270E
Chrysene		852	45	14	ug/kg	SW846 8270E
Dibenzo(a,h)anthracene		155	45	20	ug/kg	SW846 8270E
Fluoranthene		1580	45	20	ug/kg	SW846 8270E
Fluorene		26.0 J	45	21	ug/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		597	45	21	ug/kg	SW846 8270E
Phenanthrene		533	45	15	ug/kg	SW846 8270E
Pyrene		1570	45	14	ug/kg	SW846 8270E
Total TIC, Semi-Volatile		5030 J			ug/kg	

Sample Results

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Report of Analysis

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## Report of Analysis

<b>Client Sample ID:</b> S-10R		
<b>Lab Sample ID:</b> JD18939-1		<b>Date Sampled:</b> 01/12/21
<b>Matrix:</b> SO - Soil		<b>Date Received:</b> 01/12/21
<b>Method:</b> SW846 8270E SW846 3546		<b>Percent Solids:</b> 87.3
<b>Project:</b> Ridgewood Water, 579 Prospect Street, Glen Rock, NJ		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2P98996.D	1	01/15/21 20:00	HSS	01/15/21 10:15	OP31540	E2P4412
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	30.9 g	1.0 ml
Run #2		

## ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	74	18	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	190	23	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	190	32	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	190	66	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	190	140	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	190	40	ug/kg	
95-48-7	2-Methylphenol	ND	74	24	ug/kg	
	3&4-Methylphenol	ND	74	30	ug/kg	
88-75-5	2-Nitrophenol	ND	190	25	ug/kg	
100-02-7	4-Nitrophenol	ND	370	99	ug/kg	
87-86-5	Pentachlorophenol	ND	150	35	ug/kg	
108-95-2	Phenol	ND	74	19	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	190	25	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	190	28	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	190	22	ug/kg	
83-32-9	Acenaphthene	ND	37	13	ug/kg	
208-96-8	Acenaphthylene	46.5	37	19	ug/kg	
98-86-2	Acetophenone	ND	190	8.0	ug/kg	
120-12-7	Anthracene	45.6	37	23	ug/kg	
1912-24-9	Atrazine	ND	74	16	ug/kg	
56-55-3	Benzo(a)anthracene	218	37	10	ug/kg	
50-32-8	Benzo(a)pyrene	213	37	17	ug/kg	
205-99-2	Benzo(b)fluoranthene	260	37	16	ug/kg	
191-24-2	Benzo(g,h,i)perylene	131	37	19	ug/kg	
207-08-9	Benzo(k)fluoranthene	92.1	37	17	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	74	14	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	74	9.0	ug/kg	
92-52-4	1,1'-Biphenyl	ND	74	5.1	ug/kg	
100-52-7	Benzaldehyde	ND	190	9.2	ug/kg	
91-58-7	2-Chloronaphthalene	ND	74	8.8	ug/kg	
106-47-8	4-Chloroaniline	ND	190	13	ug/kg	
86-74-8	Carbazole	10.5	74	5.4	ug/kg	J

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	S-10R	<b>Date Sampled:</b>	01/12/21
<b>Lab Sample ID:</b>	JD18939-1	<b>Date Received:</b>	01/12/21
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	87.3
<b>Method:</b>	SW846 8270E SW846 3546		
<b>Project:</b>	Ridgewood Water, 579 Prospect Street, Glen Rock, NJ		

## ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	74	15	ug/kg	
218-01-9	Chrysene	224	37	12	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	74	7.9	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	74	16	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	74	13	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	74	12	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	37	11	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	37	19	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	74	31	ug/kg	
123-91-1	1,4-Dioxane <sup>a</sup>	ND	37	25	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	35.2	37	16	ug/kg	J
132-64-9	Dibenzofuran	ND	74	15	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	74	6.0	ug/kg	
117-84-0	Di-n-octyl phthalate <sup>a</sup>	ND	74	9.2	ug/kg	
84-66-2	Diethyl phthalate	ND	74	7.9	ug/kg	
131-11-3	Dimethyl phthalate	ND	74	6.6	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	74	8.7	ug/kg	
206-44-0	Fluoranthene	333	37	17	ug/kg	
86-73-7	Fluorene	ND	37	17	ug/kg	
118-74-1	Hexachlorobenzene	ND	74	9.4	ug/kg	
87-68-3	Hexachlorobutadiene	ND	37	15	ug/kg	
77-47-4	Hexachlorocyclopentadiene <sup>b</sup>	ND	370	15	ug/kg	
67-72-1	Hexachloroethane	ND	190	18	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	135	37	17	ug/kg	
78-59-1	Isophorone	ND	74	7.9	ug/kg	
91-57-6	2-Methylnaphthalene	ND	37	8.4	ug/kg	
88-74-4	2-Nitroaniline <sup>a</sup>	ND	190	8.7	ug/kg	
99-09-2	3-Nitroaniline	ND	190	9.3	ug/kg	
100-01-6	4-Nitroaniline	ND	190	9.6	ug/kg	
91-20-3	Naphthalene	17.6	37	10	ug/kg	J
98-95-3	Nitrobenzene	ND	74	14	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	74	11	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	190	14	ug/kg	
85-01-8	Phenanthrene	130	37	12	ug/kg	
129-00-0	Pyrene	381	37	12	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	190	9.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	52%		7-101%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> S-10R <b>Lab Sample ID:</b> JD18939-1 <b>Matrix:</b> SO - Soil <b>Method:</b> SW846 8270E SW846 3546 <b>Project:</b> Ridgewood Water, 579 Prospect Street, Glen Rock, NJ	<b>Date Sampled:</b> 01/12/21 <b>Date Received:</b> 01/12/21 <b>Percent Solids:</b> 87.3
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------

**ABN TCL List (SOM0 2.0)**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	50%		12-101%
118-79-6	2,4,6-Tribromophenol	64%		10-127%
4165-60-0	Nitrobenzene-d5	69%		15-114%
321-60-8	2-Fluorobiphenyl	58%		22-104%
1718-51-0	Terphenyl-d14	75%		23-121%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	System artifact/aldol-condensation	3.22	190	ug/kg	J
	Unknown PAH substance	15.58	160	ug/kg	J
	Total TIC, Semi-Volatile		160	ug/kg	J

- (a) Associated CCV outside of control limits high, sample was ND.
- (b) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

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ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> S-15R		
<b>Lab Sample ID:</b> JD18939-2		<b>Date Sampled:</b> 01/12/21
<b>Matrix:</b> SO - Soil		<b>Date Received:</b> 01/12/21
<b>Method:</b> SW846 8270E SW846 3546		<b>Percent Solids:</b> 78.8
<b>Project:</b> Ridgewood Water, 579 Prospect Street, Glen Rock, NJ		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2P99000.D	1	01/15/21 21:44	HSS	01/15/21 10:15	OP31540	E2P4412
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	30.7 g	1.0 ml
Run #2		

## ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	83	20	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	210	25	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	210	35	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	210	74	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	210	160	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	210	44	ug/kg	
95-48-7	2-Methylphenol	ND	83	26	ug/kg	
	3&4-Methylphenol	ND	83	34	ug/kg	
88-75-5	2-Nitrophenol	ND	210	27	ug/kg	
100-02-7	4-Nitrophenol	ND	410	110	ug/kg	
87-86-5	Pentachlorophenol	ND	170	39	ug/kg	
108-95-2	Phenol	ND	83	22	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	210	27	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	210	31	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	210	25	ug/kg	
83-32-9	Acenaphthene	102	41	14	ug/kg	
208-96-8	Acenaphthylene	62.6	41	21	ug/kg	
98-86-2	Acetophenone	ND	210	8.9	ug/kg	
120-12-7	Anthracene	278	41	25	ug/kg	
1912-24-9	Atrazine	ND	83	18	ug/kg	
56-55-3	Benzo(a)anthracene	750	41	12	ug/kg	
50-32-8	Benzo(a)pyrene	744	41	19	ug/kg	
205-99-2	Benzo(b)fluoranthene	986	41	18	ug/kg	
191-24-2	Benzo(g,h,i)perylene	511	41	21	ug/kg	
207-08-9	Benzo(k)fluoranthene	302	41	19	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	83	16	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	83	10	ug/kg	
92-52-4	1,1'-Biphenyl	11.2	83	5.7	ug/kg	J
100-52-7	Benzaldehyde	ND	210	10	ug/kg	
91-58-7	2-Chloronaphthalene	ND	83	9.8	ug/kg	
106-47-8	4-Chloroaniline	ND	210	15	ug/kg	
86-74-8	Carbazole	105	83	6.0	ug/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	S-15R	<b>Date Sampled:</b>	01/12/21
<b>Lab Sample ID:</b>	JD18939-2	<b>Date Received:</b>	01/12/21
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	78.8
<b>Method:</b>	SW846 8270E SW846 3546		
<b>Project:</b>	Ridgewood Water, 579 Prospect Street, Glen Rock, NJ		

## ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	83	16	ug/kg	
218-01-9	Chrysene	853	41	13	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	83	8.8	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	83	18	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	83	15	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	83	13	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	41	13	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	41	21	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	83	34	ug/kg	
123-91-1	1,4-Dioxane <sup>a</sup>	ND	41	27	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	132	41	18	ug/kg	
132-64-9	Dibenzofuran	58.5	83	17	ug/kg	J
84-74-2	Di-n-butyl phthalate	ND	83	6.7	ug/kg	
117-84-0	Di-n-octyl phthalate <sup>a</sup>	ND	83	10	ug/kg	
84-66-2	Diethyl phthalate	ND	83	8.8	ug/kg	
131-11-3	Dimethyl phthalate	ND	83	7.4	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	96.9	83	9.7	ug/kg	
206-44-0	Fluoranthene	1620	41	18	ug/kg	
86-73-7	Fluorene	130	41	19	ug/kg	
118-74-1	Hexachlorobenzene	ND	83	10	ug/kg	
87-68-3	Hexachlorobutadiene	ND	41	17	ug/kg	
77-47-4	Hexachlorocyclopentadiene <sup>b</sup>	ND	410	16	ug/kg	
67-72-1	Hexachloroethane	ND	210	20	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	523	41	19	ug/kg	
78-59-1	Isophorone	ND	83	8.8	ug/kg	
91-57-6	2-Methylnaphthalene	35.5	41	9.3	ug/kg	J
88-74-4	2-Nitroaniline <sup>a</sup>	ND	210	9.8	ug/kg	
99-09-2	3-Nitroaniline	ND	210	10	ug/kg	
100-01-6	4-Nitroaniline	ND	210	11	ug/kg	
91-20-3	Naphthalene	26.8	41	12	ug/kg	J
98-95-3	Nitrobenzene	ND	83	16	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	83	12	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	210	15	ug/kg	
85-01-8	Phenanthrene	981	41	14	ug/kg	
129-00-0	Pyrene	1480	41	13	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	210	10	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	45%		7-101%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



## Report of Analysis

<b>Client Sample ID:</b>	S-15R	<b>Date Sampled:</b>	01/12/21
<b>Lab Sample ID:</b>	JD18939-2	<b>Date Received:</b>	01/12/21
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	78.8
<b>Method:</b>	SW846 8270E SW846 3546		
<b>Project:</b>	Ridgewood Water, 579 Prospect Street, Glen Rock, NJ		

## ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	47%		12-101%
118-79-6	2,4,6-Tribromophenol	54%		10-127%
4165-60-0	Nitrobenzene-d5	58%		15-114%
321-60-8	2-Fluorobiphenyl	49%		22-104%
1718-51-0	Terphenyl-d14	57%		23-121%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Bisnorabieta-pentaene	11.48	650	ug/kg	J
	Alkane	14.68	1200	ug/kg	J
	Unknown	15.13	580	ug/kg	J
	Unknown	15.34	350	ug/kg	J
	Alkane	15.62	4100	ug/kg	J
	Unknown	16.06	490	ug/kg	J
	Unknown	16.26	680	ug/kg	J
	Unknown	16.46	880	ug/kg	J
	Alkane	16.50	3100	ug/kg	J
	Unknown	16.56	1500	ug/kg	J
	Unknown	16.83	450	ug/kg	J
	Unknown	16.93	460	ug/kg	J
83-48-7	Stigmasterol	17.36	620	ug/kg	JN
	Alkane	17.43	440	ug/kg	J
	Sitosterol	17.69	5800	ug/kg	J
	Unknown	17.85	1200	ug/kg	J
	Unknown	17.96	3400	ug/kg	J
	Unknown	18.04	3100	ug/kg	J
	Unknown	18.17	450	ug/kg	J
	Unknown	18.25	5000	ug/kg	J
	Unknown	18.34	1800	ug/kg	J
	Stigmastenone	18.46	2000	ug/kg	J
	Unknown	18.68	1200	ug/kg	J
	Unknown	18.77	710	ug/kg	J
	Unknown	19.19	7400	ug/kg	J
	Total TIC, Semi-Volatile		47560	ug/kg	J

(a) Associated CCV outside of control limits high, sample was ND.

(b) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> S-18R		
<b>Lab Sample ID:</b> JD18939-3		<b>Date Sampled:</b> 01/12/21
<b>Matrix:</b> SO - Soil		<b>Date Received:</b> 01/12/21
<b>Method:</b> SW846 8270E SW846 3546		<b>Percent Solids:</b> 70.8
<b>Project:</b> Ridgewood Water, 579 Prospect Street, Glen Rock, NJ		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2P99001.D	1	01/15/21 22:09	HSS	01/15/21 10:15	OP31540	E2P4412
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	31.6 g	1.0 ml
Run #2		

## ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	89	22	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	220	27	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	220	38	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	220	80	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	220	170	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	220	48	ug/kg	
95-48-7	2-Methylphenol	ND	89	29	ug/kg	
	3&4-Methylphenol	ND	89	37	ug/kg	
88-75-5	2-Nitrophenol	ND	220	30	ug/kg	
100-02-7	4-Nitrophenol	ND	450	120	ug/kg	
87-86-5	Pentachlorophenol	ND	180	42	ug/kg	
108-95-2	Phenol	ND	89	23	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	220	30	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	220	33	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	220	27	ug/kg	
83-32-9	Acenaphthene	18.8	45	15	ug/kg	J
208-96-8	Acenaphthylene	65.7	45	23	ug/kg	
98-86-2	Acetophenone	ND	220	9.6	ug/kg	
120-12-7	Anthracene	187	45	27	ug/kg	
1912-24-9	Atrazine	ND	89	19	ug/kg	
56-55-3	Benzo(a)anthracene	873	45	13	ug/kg	
50-32-8	Benzo(a)pyrene	852	45	20	ug/kg	
205-99-2	Benzo(b)fluoranthene	1040	45	20	ug/kg	
191-24-2	Benzo(g,h,i)perylene	598	45	22	ug/kg	
207-08-9	Benzo(k)fluoranthene	307	45	21	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	89	17	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	89	11	ug/kg	
92-52-4	1,1'-Biphenyl	ND	89	6.1	ug/kg	
100-52-7	Benzaldehyde	ND	220	11	ug/kg	
91-58-7	2-Chloronaphthalene	ND	89	11	ug/kg	
106-47-8	4-Chloroaniline	ND	220	16	ug/kg	
86-74-8	Carbazole	54.2	89	6.5	ug/kg	J

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	S-18R	<b>Date Sampled:</b>	01/12/21
<b>Lab Sample ID:</b>	JD18939-3	<b>Date Received:</b>	01/12/21
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	70.8
<b>Method:</b>	SW846 8270E SW846 3546		
<b>Project:</b>	Ridgewood Water, 579 Prospect Street, Glen Rock, NJ		

## ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	89	18	ug/kg	
218-01-9	Chrysene	852	45	14	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	89	9.6	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	89	19	ug/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	89	16	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	89	14	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	45	14	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	45	22	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	89	37	ug/kg	
123-91-1	1,4-Dioxane <sup>a</sup>	ND	45	30	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	155	45	20	ug/kg	
132-64-9	Dibenzofuran	ND	89	18	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	89	7.3	ug/kg	
117-84-0	Di-n-octyl phthalate <sup>a</sup>	ND	89	11	ug/kg	
84-66-2	Diethyl phthalate	ND	89	9.5	ug/kg	
131-11-3	Dimethyl phthalate	ND	89	8.0	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	89	10	ug/kg	
206-44-0	Fluoranthene	1580	45	20	ug/kg	
86-73-7	Fluorene	26.0	45	21	ug/kg	J
118-74-1	Hexachlorobenzene	ND	89	11	ug/kg	
87-68-3	Hexachlorobutadiene	ND	45	18	ug/kg	
77-47-4	Hexachlorocyclopentadiene <sup>b</sup>	ND	450	18	ug/kg	
67-72-1	Hexachloroethane	ND	220	22	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	597	45	21	ug/kg	
78-59-1	Isophorone	ND	89	9.6	ug/kg	
91-57-6	2-Methylnaphthalene	ND	45	10	ug/kg	
88-74-4	2-Nitroaniline <sup>a</sup>	ND	220	11	ug/kg	
99-09-2	3-Nitroaniline	ND	220	11	ug/kg	
100-01-6	4-Nitroaniline	ND	220	12	ug/kg	
91-20-3	Naphthalene	ND	45	13	ug/kg	
98-95-3	Nitrobenzene	ND	89	17	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	89	13	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	220	16	ug/kg	
85-01-8	Phenanthrene	533	45	15	ug/kg	
129-00-0	Pyrene	1570	45	14	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	220	11	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	46%		7-101%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> S-18R		<b>Date Sampled:</b> 01/12/21
<b>Lab Sample ID:</b> JD18939-3		<b>Date Received:</b> 01/12/21
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 70.8
<b>Method:</b> SW846 8270E SW846 3546		
<b>Project:</b> Ridgewood Water, 579 Prospect Street, Glen Rock, NJ		

**ABN TCL List (SOM0 2.0)**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	47%		12-101%
118-79-6	2,4,6-Tribromophenol	58%		10-127%
4165-60-0	Nitrobenzene-d5	60%		15-114%
321-60-8	2-Fluorobiphenyl	51%		22-104%
1718-51-0	Terphenyl-d14	63%		23-121%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	System artifact/aldol-condensation	3.22	730	ug/kg	J
	Unknown	4.00	190	ug/kg	J
	Cyclopentaphenanthrene	11.24	190	ug/kg	J
	Unknown PAH substance	15.61	1000	ug/kg	J
	Unknown	16.26	280	ug/kg	J
	Unknown	16.46	250	ug/kg	J
	Alkane	16.50	490	ug/kg	J
	Unknown	16.83	200	ug/kg	J
	Unknown	17.67	940	ug/kg	J
	Unknown	18.02	340	ug/kg	J
	Unknown	18.45	340	ug/kg	J
	Unknown	19.15	810	ug/kg	J
	Total TIC, Semi-Volatile		5030	ug/kg	J

- (a) Associated CCV outside of control limits high, sample was ND.
- (b) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.

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ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

4.3  
4

Misc. Forms

Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody



410  
SO

### CHAIN OF CUSTODY

SGS North America Inc. - Dayton  
2235 Route 130, Dayton, NJ 08810  
TEL: 732-329-0200 FAX: 732-329-3489/3480  
www.sgs.com/ehsusa

Client / Reporting Information		Project Information		Requested Analysis		Matrix Codes													
Company Name: <b>WSP USA</b>		Project Name: <b>Ridgewood Water Prospect Street Soil</b>				DW - Drinking Water GW - Ground Water WW - Wastewater SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LQ - Other Liquid AIR - Air SCL - Other Solid WP - Waste FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank													
Street Address: <b>600 E. Crescent Ave</b>		Street: <b>Rose St</b>																	
City: <b>USA NJ 07456</b>		City: <b>Glenn Brook NJ</b>																	
Project Contact: <b>Sonias-Hollis@wsp.com</b>		Billing Information (if different from Report to):																	
Phone #: <b>201-739-2367</b>		Client Purchase Order #:																	
Sampler(s) Name(s): <b>Spinos 2015</b>		Project Manager:																	
		Attention:																	
Lab Sample #	Field ID / Point of Collection	MEOHX Val #	Collection		Sampled by	Date (in Comp ID)	Matrix	# of bottles	Number of preserved bottles								LAB USE ONLY		
			Date	Time					MS	MSH	PHO	HAO	NONE	D Value	MEHQ	ENCLOS			
1	S-10R		1/12/21	10:15	SZ	10/15	GW	1											
2	S-15R			10:30														B10	
3	S-18R			10:45															
Turn Around Time (Business Days)		Deliverable		Comments / Special Instructions															
<input checked="" type="checkbox"/> 10 Business Days <input type="checkbox"/> 5 Business Days <input type="checkbox"/> 3 Business Days <input type="checkbox"/> 2 Business Days <input type="checkbox"/> 1 Business Day <input type="checkbox"/> Other		Approved By (DOB PIN): / Date: _____ <input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input checked="" type="checkbox"/> NJ Reduced (Level 3) <input type="checkbox"/> Full Tier 1 (Level 4) <input type="checkbox"/> Commercial "C" <input type="checkbox"/> NJ DRGP		<input type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category B <input type="checkbox"/> MA MCP Criteria <input type="checkbox"/> CT RCP Criteria <input checked="" type="checkbox"/> State Forms <input checked="" type="checkbox"/> EDO Format		INITIAL ASSESSMENT <b>3B-PP</b> LABEL VERIFICATION _____		Commercial "A" = Results only, Commercial "B" = Results + QC Summary Commercial "C" = Results + QC Summary + Full Test Results <a href="http://www.sgs.com/en/terms-and-conditions">http://www.sgs.com/en/terms-and-conditions</a>											
1. <b>[Signature]</b> Date / Time: <b>1/12/21 19:00</b>		2. <b>[Signature]</b> Date / Time: <b>1/12/21 17:06</b>		3. <b>[Signature]</b> Date / Time: _____		4. <b>[Signature]</b> Date / Time: _____		5. <b>[Signature]</b> Date / Time: _____		Intact <input type="checkbox"/> Not Intact <input type="checkbox"/> Preserved where applicable <input type="checkbox"/> Absent <input type="checkbox"/> Therm. ID: <b>3.7 CIP</b>									

EHS-04C-0023-02-FORM Dayton - Standard COC.doc



5.1  
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## SGS Sample Receipt Summary

Job Number: JD18939

Client: WSP USA

Project: RIDGEWOOD WATER

Date / Time Received: 1/12/2021 5:06:00 PM

Delivery Method: \_\_\_\_\_

Airbill #s: \_\_\_\_\_

Cooler Temps (Raw Measured) °C: Cooler 1: (3.7);

Cooler Temps (Corrected) °C: Cooler 1: (3.2);

**Cooler Security**

- |                           |                                     |           |                          |                       |                                     |           |                          |
|---------------------------|-------------------------------------|-----------|--------------------------|-----------------------|-------------------------------------|-----------|--------------------------|
|                           | <u>Y</u>                            | <u>or</u> | <u>N</u>                 |                       | <u>Y</u>                            | <u>or</u> | <u>N</u>                 |
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> |           | <input type="checkbox"/> | 3. COC Present:       | <input checked="" type="checkbox"/> |           | <input type="checkbox"/> |
| 2. Custody Seals Intact:  | <input checked="" type="checkbox"/> |           | <input type="checkbox"/> | 4. Smpl Dates/Time OK | <input checked="" type="checkbox"/> |           | <input type="checkbox"/> |

**Cooler Temperature**

- |                              |                                     |           |                          |
|------------------------------|-------------------------------------|-----------|--------------------------|
|                              | <u>Y</u>                            | <u>or</u> | <u>N</u>                 |
| 1. Temp criteria achieved:   | <input checked="" type="checkbox"/> |           | <input type="checkbox"/> |
| 2. Cooler temp verification: | IR Gun                              |           |                          |
| 3. Cooler media:             | Ice (Bag)                           |           |                          |
| 4. No. Coolers:              | 1                                   |           |                          |

**Quality Control Preservation**

- |                                 |                                     |           |                          |                                     |
|---------------------------------|-------------------------------------|-----------|--------------------------|-------------------------------------|
|                                 | <u>Y</u>                            | <u>or</u> | <u>N</u>                 | <u>N/A</u>                          |
| 1. Trip Blank present / cooler: | <input type="checkbox"/>            |           | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 2. Trip Blank listed on COC:    | <input type="checkbox"/>            |           | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3. Samples preserved properly:  | <input checked="" type="checkbox"/> |           | <input type="checkbox"/> |                                     |
| 4. VOCs headspace free:         | <input type="checkbox"/>            |           | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

**Sample Integrity - Documentation**

- |                                        |                                     |           |                          |
|----------------------------------------|-------------------------------------|-----------|--------------------------|
|                                        | <u>Y</u>                            | <u>or</u> | <u>N</u>                 |
| 1. Sample labels present on bottles:   | <input checked="" type="checkbox"/> |           | <input type="checkbox"/> |
| 2. Container labeling complete:        | <input checked="" type="checkbox"/> |           | <input type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> |           | <input type="checkbox"/> |

**Sample Integrity - Condition**

- |                                  |                                     |           |                          |
|----------------------------------|-------------------------------------|-----------|--------------------------|
|                                  | <u>Y</u>                            | <u>or</u> | <u>N</u>                 |
| 1. Sample recvd within HT:       | <input checked="" type="checkbox"/> |           | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> |           | <input type="checkbox"/> |
| 3. Condition of sample:          | Intact                              |           |                          |

**Sample Integrity - Instructions**

- |                                           |                                     |           |                                     |                                     |
|-------------------------------------------|-------------------------------------|-----------|-------------------------------------|-------------------------------------|
|                                           | <u>Y</u>                            | <u>or</u> | <u>N</u>                            | <u>N/A</u>                          |
| 1. Analysis requested is clear:           | <input checked="" type="checkbox"/> |           | <input type="checkbox"/>            |                                     |
| 2. Bottles received for unspecified tests | <input type="checkbox"/>            |           | <input checked="" type="checkbox"/> |                                     |
| 3. Sufficient volume recvd for analysis:  | <input checked="" type="checkbox"/> |           | <input type="checkbox"/>            |                                     |
| 4. Compositing instructions clear:        | <input type="checkbox"/>            |           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear:          | <input type="checkbox"/>            |           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

Test Strip Lot #s:      pH 1-12: 212820      pH 12+: 203117A      Other: (Specify) \_\_\_\_\_

Comments

SM089-03  
Rev. Date 12/7/17

JD18939: Chain of Custody

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### Internal Sample Tracking Chronicle

WSP USA

Job No: JD18939

Ridgewood Water, 579 Prospect Street, Glen Rock, NJ  
 Project No: 31401544.002 11.00

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD18939-1 Collected: 12-JAN-21 10:15 By: SZ Received: 12-JAN-21 By: JP S-10R						
JD18939-1	SM2540 G 18TH ED M	12-JAN-21 16:37	BG			SOL104
JD18939-1	SW846 8270E	15-JAN-21 20:00	HSS	15-JAN-21	BB	AB8270TCL20+
JD18939-2 Collected: 12-JAN-21 10:30 By: SZ Received: 12-JAN-21 By: JP S-15R						
JD18939-2	SM2540 G 18TH ED M	12-JAN-21 16:37	BG			SOL104
JD18939-2	SW846 8270E	15-JAN-21 21:44	HSS	15-JAN-21	BB	AB8270TCL20+
JD18939-3 Collected: 12-JAN-21 10:45 By: SZ Received: 12-JAN-21 By: JP S-18R						
JD18939-3	SM2540 G 18TH ED M	12-JAN-21 16:37	BG			SOL104
JD18939-3	SW846 8270E	15-JAN-21 22:09	HSS	15-JAN-21	BB	AB8270TCL20+

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# SGS Internal Chain of Custody

**Job Number:** JD18939  
**Account:** LBGNJ WSP USA  
**Project:** Ridgewood Water, 579 Prospect Street, Glen Rock, NJ  
**Received:** 01/12/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD18939-1.1	Manish Kewalramani	Secured Storage	01/12/21 21:12	Return to Storage
JD18939-1.1	Secured Storage	Benjamin Gaines	01/13/21 09:19	Retrieve from Storage
JD18939-1.1	Benjamin Gaines	Secured Staging Area	01/13/21 09:19	Return to Storage
JD18939-1.1	Secured Staging Area	Benjamin Gaines	01/13/21 09:20	Retrieve from Storage
JD18939-1.1	Benjamin Gaines	Secured Storage	01/13/21 13:04	Return to Storage
JD18939-1.1	Tyler Strong	Secured Staging Area	01/14/21 19:20	Return to Storage
Stage				
JD18939-1.1	Secured Staging Area	Chatiyah Canaday	01/15/21 08:26	Retrieve from Storage
JD18939-1.1	Chatiyah Canaday	Secured Storage	01/15/21 14:39	Return to Storage
JD18939-1.1.1	Chatiyah Canaday	Organics Prep	01/15/21 08:42	Extract from JD18939-1.1
JD18939-1.1.1	Organics Prep	Brian Bass	01/15/21 14:23	Extract from JD18939-1.1
JD18939-1.1.1	Brian Bass	Extract Storage	01/15/21 14:23	Return to Storage
JD18939-1.1.1	Extract Storage	Henny Salim	01/15/21 15:06	Retrieve from Storage
JD18939-1.1.1	Henny Salim	GCMS2P	01/15/21 15:06	Load on Instrument
JD18939-1.1.1	GCMS2P	Henny Salim	01/19/21 17:00	Unload from Instrument
JD18939-1.1.1	Henny Salim	Extract Freezer	01/19/21 17:00	Return to Storage
JD18939-2.1	Manish Kewalramani	Secured Storage	01/12/21 21:12	Return to Storage
JD18939-2.1	Secured Storage	Benjamin Gaines	01/13/21 09:19	Retrieve from Storage
JD18939-2.1	Benjamin Gaines	Secured Staging Area	01/13/21 09:19	Return to Storage
JD18939-2.1	Secured Staging Area	Benjamin Gaines	01/13/21 09:20	Retrieve from Storage
JD18939-2.1	Benjamin Gaines	Secured Storage	01/13/21 13:04	Return to Storage
JD18939-2.1	Tyler Strong	Secured Staging Area	01/14/21 19:20	Return to Storage
Stage				
JD18939-2.1	Secured Staging Area	Chatiyah Canaday	01/15/21 08:26	Retrieve from Storage
JD18939-2.1	Chatiyah Canaday	Secured Storage	01/15/21 14:39	Return to Storage
JD18939-2.1.1	Chatiyah Canaday	Organics Prep	01/15/21 08:42	Extract from JD18939-2.1
JD18939-2.1.1	Organics Prep	Brian Bass	01/15/21 14:23	Extract from JD18939-2.1
JD18939-2.1.1	Brian Bass	Extract Storage	01/15/21 14:23	Return to Storage
JD18939-2.1.1	Extract Storage	Henny Salim	01/15/21 15:06	Retrieve from Storage
JD18939-2.1.1	Henny Salim	GCMS2P	01/15/21 15:06	Load on Instrument
JD18939-2.1.1	GCMS2P	Henny Salim	01/19/21 17:00	Unload from Instrument
JD18939-2.1.1	Henny Salim	Extract Freezer	01/19/21 17:00	Return to Storage
JD18939-3.1	Manish Kewalramani	Secured Storage	01/12/21 21:12	Return to Storage
JD18939-3.1	Secured Storage	Benjamin Gaines	01/13/21 09:19	Retrieve from Storage
JD18939-3.1	Benjamin Gaines	Secured Staging Area	01/13/21 09:19	Return to Storage
JD18939-3.1	Secured Staging Area	Benjamin Gaines	01/13/21 09:20	Retrieve from Storage
JD18939-3.1	Benjamin Gaines	Secured Storage	01/13/21 13:04	Return to Storage
JD18939-3.1	Tyler Strong	Secured Staging Area	01/14/21 19:20	Return to Storage
Stage				
JD18939-3.1	Secured Staging Area	Chatiyah Canaday	01/15/21 08:26	Retrieve from Storage

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# SGS Internal Chain of Custody

**Job Number:** JD18939  
**Account:** LBGNJ WSP USA  
**Project:** Ridgewood Water, 579 Prospect Street, Glen Rock, NJ  
**Received:** 01/12/21

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD18939-3.1	Chadiyah Canaday	Secured Storage	01/15/21 14:39	Return to Storage
JD18939-3.1.1	Chadiyah Canaday	Organics Prep	01/15/21 08:42	Extract from JD18939-3.1
JD18939-3.1.1	Organics Prep	Brian Bass	01/15/21 14:23	Extract from JD18939-3.1
JD18939-3.1.1	Brian Bass	Extract Storage	01/15/21 14:23	Return to Storage
JD18939-3.1.1	Extract Storage	Henny Salim	01/15/21 15:06	Retrieve from Storage
JD18939-3.1.1	Henny Salim	GCMS2P	01/15/21 15:06	Load on Instrument
JD18939-3.1.1	GCMS2P	Henny Salim	01/19/21 17:00	Unload from Instrument
JD18939-3.1.1	Henny Salim	Extract Freezer	01/19/21 17:00	Return to Storage

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## MS Semi-volatiles

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### QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

**Method Blank Summary****Job Number:** JD18939**Account:** LBGNJ WSP USA**Project:** Ridgewood Water, 579 Prospect Street, Glen Rock, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP31540-MB1	2P98985.D	1	01/15/21	HSS	01/15/21	OP31540	E2P4412

**The QC reported here applies to the following samples:****Method:** SW846 8270E

JD18939-1, JD18939-2, JD18939-3

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	67	16	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	20	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	28	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	59	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	170	130	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	170	36	ug/kg	
95-48-7	2-Methylphenol	ND	67	21	ug/kg	
	3&4-Methylphenol	ND	67	27	ug/kg	
88-75-5	2-Nitrophenol	ND	170	22	ug/kg	
100-02-7	4-Nitrophenol	ND	330	89	ug/kg	
87-86-5	Pentachlorophenol	ND	130	31	ug/kg	
108-95-2	Phenol	ND	67	17	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	170	22	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	25	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	20	ug/kg	
83-32-9	Acenaphthene	ND	33	11	ug/kg	
208-96-8	Acenaphthylene	ND	33	17	ug/kg	
98-86-2	Acetophenone	ND	170	7.2	ug/kg	
120-12-7	Anthracene	ND	33	20	ug/kg	
1912-24-9	Atrazine	ND	67	14	ug/kg	
56-55-3	Benzo(a)anthracene	ND	33	9.4	ug/kg	
50-32-8	Benzo(a)pyrene	ND	33	15	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	33	15	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	33	17	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	33	16	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	67	13	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	67	8.1	ug/kg	
92-52-4	1,1'-Biphenyl	ND	67	4.6	ug/kg	
100-52-7	Benzaldehyde	ND	170	8.3	ug/kg	
91-58-7	2-Chloronaphthalene	ND	67	7.9	ug/kg	
106-47-8	4-Chloroaniline	ND	170	12	ug/kg	
86-74-8	Carbazole	ND	67	4.8	ug/kg	
105-60-2	Caprolactam	ND	67	13	ug/kg	
218-01-9	Chrysene	ND	33	10	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	67	7.1	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	67	14	ug/kg	

## Method Blank Summary

**Job Number:** JD18939

**Account:** LBGNJ WSP USA

**Project:** Ridgewood Water, 579 Prospect Street, Glen Rock, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP31540-MB1	2P98985.D	1	01/15/21	HSS	01/15/21	OP31540	E2P4412

The QC reported here applies to the following samples:

Method: SW846 8270E

JD18939-1, JD18939-2, JD18939-3

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	67	12	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	67	11	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	33	10	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	33	17	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	67	28	ug/kg	
123-91-1	1,4-Dioxane	ND	33	22	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	33	15	ug/kg	
132-64-9	Dibenzofuran	ND	67	14	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	67	5.4	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	67	8.3	ug/kg	
84-66-2	Diethyl phthalate	ND	67	7.1	ug/kg	
131-11-3	Dimethyl phthalate	ND	67	5.9	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	67	7.8	ug/kg	
206-44-0	Fluoranthene	ND	33	15	ug/kg	
86-73-7	Fluorene	ND	33	15	ug/kg	
118-74-1	Hexachlorobenzene	ND	67	8.4	ug/kg	
87-68-3	Hexachlorobutadiene	ND	33	13	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	330	13	ug/kg	
67-72-1	Hexachloroethane	ND	170	16	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	33	16	ug/kg	
78-59-1	Isophorone	ND	67	7.1	ug/kg	
91-57-6	2-Methylnaphthalene	ND	33	7.5	ug/kg	
88-74-4	2-Nitroaniline	ND	170	7.9	ug/kg	
99-09-2	3-Nitroaniline	ND	170	8.3	ug/kg	
100-01-6	4-Nitroaniline	ND	170	8.6	ug/kg	
91-20-3	Naphthalene	ND	33	9.4	ug/kg	
98-95-3	Nitrobenzene	ND	67	13	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	67	9.6	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	170	12	ug/kg	
85-01-8	Phenanthrene	ND	33	11	ug/kg	
129-00-0	Pyrene	ND	33	11	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	170	8.5	ug/kg	

## Method Blank Summary

**Job Number:** JD18939

**Account:** LBGNJ WSP USA

**Project:** Ridgewood Water, 579 Prospect Street, Glen Rock, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP31540-MB1	2P98985.D	1	01/15/21	HSS	01/15/21	OP31540	E2P4412

The QC reported here applies to the following samples:

Method: SW846 8270E

JD18939-1, JD18939-2, JD18939-3

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	71% 7-101%
4165-62-2	Phenol-d5	71% 12-101%
118-79-6	2,4,6-Tribromophenol	79% 10-127%
4165-60-0	Nitrobenzene-d5	90% 15-114%
321-60-8	2-Fluorobiphenyl	85% 22-104%
1718-51-0	Terphenyl-d14	84% 23-121%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	System artifact	1.90	340	ug/kg	J
	System artifact/aldol-condensation	3.21	210	ug/kg	J
	Total TIC, Semi-Volatile		0	ug/kg	

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** JD18939

**Account:** LBGNJ WSP USA

**Project:** Ridgewood Water, 579 Prospect Street, Glen Rock, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP31540-BS1	2P98987.D	1	01/15/21	HSS	01/15/21	OP31540	E2P4412
OP31540-BSD	2P98988.D	1	01/15/21	HSS	01/15/21	OP31540	E2P4412

The QC reported here applies to the following samples:

Method: SW846 8270E

JD18939-1, JD18939-2, JD18939-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	1670	1020	61	1030	62	1	26-121/16
59-50-7	4-Chloro-3-methyl phenol	1670	1130	68	1120	67	1	26-138/17
120-83-2	2,4-Dichlorophenol	1670	1100	66	1110	67	1	26-130/19
105-67-9	2,4-Dimethylphenol	1670	1190	71	1200	72	1	28-144/18
51-28-5	2,4-Dinitrophenol	3330	2390	72	2340	70	2	31-146/21
534-52-1	4,6-Dinitro-o-cresol	1670	1090	65	1080	65	1	22-150/20
95-48-7	2-Methylphenol	1670	1020	61	1000	60	2	23-128/20
	3&4-Methylphenol	1670	982	59	960	58	2	24-133/25
88-75-5	2-Nitrophenol	1670	1060	64	1070	64	1	29-137/20
100-02-7	4-Nitrophenol	1670	1390	83	1350	81	3	21-144/23
87-86-5	Pentachlorophenol	1670	973	58	1050	63	8	24-152/22
108-95-2	Phenol	1670	1060	64	1050	63	1	40-101/22
58-90-2	2,3,4,6-Tetrachlorophenol	1670	1210	73	1210	73	0	30-136/22
95-95-4	2,4,5-Trichlorophenol	1670	1230	74	1220	73	1	26-137/20
88-06-2	2,4,6-Trichlorophenol	1670	1170	70	1180	71	1	28-137/21
83-32-9	Acenaphthene	1670	1150	69	1160	70	1	24-129/16
208-96-8	Acenaphthylene	1670	1120	67	1110	67	1	25-130/17
98-86-2	Acetophenone	1670	1140	68	1140	68	0	44-100/24
120-12-7	Anthracene	1670	1120	67	1140	68	2	28-131/18
1912-24-9	Atrazine	1670	1300	78	1270	76	2	17-165/19
56-55-3	Benzo(a)anthracene	1670	1100	66	1090	65	1	30-130/20
50-32-8	Benzo(a)pyrene	1670	1160	70	1180	71	2	27-139/20
205-99-2	Benzo(b)fluoranthene	1670	1170	70	1260	76	7	32-133/21
191-24-2	Benzo(g,h,i)perylene	1670	1120	67	1140	68	2	24-141/23
207-08-9	Benzo(k)fluoranthene	1670	1210	73	1130	68	7	26-135/21
101-55-3	4-Bromophenyl phenyl ether	1670	1090	65	1110	67	2	25-137/19
85-68-7	Butyl benzyl phthalate	1670	1120	67	1110	67	1	28-142/23
92-52-4	1,1'-Biphenyl	1670	1210	73	1220	73	1	22-129/17
100-52-7	Benzaldehyde	1670	982	59	928	56	6	4-116/23
91-58-7	2-Chloronaphthalene	1670	1170	70	1180	71	1	22-126/20
106-47-8	4-Chloroaniline	1670	557	33	601	36	8	8-85/59
86-74-8	Carbazole	1670	1150	69	1140	68	1	29-135/18
105-60-2	Caprolactam	1670	1080	65	1030	62	5	21-138/20
218-01-9	Chrysene	1670	1030	62	1020	61	1	29-127/20
111-91-1	bis(2-Chloroethoxy)methane	1670	1010	61	1030	62	2	23-128/19
111-44-4	bis(2-Chloroethyl)ether	1670	992	60	1030	62	4	28-121/23

\* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** JD18939

**Account:** LBGNJ WSP USA

**Project:** Ridgewood Water, 579 Prospect Street, Glen Rock, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP31540-BS1	2P98987.D	1	01/15/21	HSS	01/15/21	OP31540	E2P4412
OP31540-BSD	2P98988.D	1	01/15/21	HSS	01/15/21	OP31540	E2P4412

The QC reported here applies to the following samples:

Method: SW846 8270E

JD18939-1, JD18939-2, JD18939-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
108-60-1	2,2'-Oxybis(1-chloropropane)	1670	1120	67	1110	67	1	25-147/18
7005-72-3	4-Chlorophenyl phenyl ether	1670	1190	71	1200	72	1	24-133/20
121-14-2	2,4-Dinitrotoluene	1670	1240	74	1230	74	1	31-135/20
606-20-2	2,6-Dinitrotoluene	1670	1230	74	1210	73	2	31-138/19
91-94-1	3,3'-Dichlorobenzidine	3330	1620	49	1800	54	11	16-110/41
123-91-1	1,4-Dioxane	1670	965	58	983	59	2	6-81/34
53-70-3	Dibenzo(a,h)anthracene	1670	1110	67	1130	68	2	24-135/23
132-64-9	Dibenzofuran	1670	1240	74	1240	74	0	26-133/17
84-74-2	Di-n-butyl phthalate	1670	1190	71	1210	73	2	27-141/24
117-84-0	Di-n-octyl phthalate	1670	1270	76	1310	79	3	28-143/21
84-66-2	Diethyl phthalate	1670	1280	77	1280	77	0	26-135/25
131-11-3	Dimethyl phthalate	1670	1200	72	1190	71	1	26-130/19
117-81-7	bis(2-Ethylhexyl)phthalate	1670	1170	70	1160	70	1	44-122/21
206-44-0	Fluoranthene	1670	1190	71	1180	71	1	31-134/23
86-73-7	Fluorene	1670	1230	74	1230	74	0	26-136/18
118-74-1	Hexachlorobenzene	1670	1140	68	1160	70	2	22-136/19
87-68-3	Hexachlorobutadiene	1670	1290	77	1340	80	4	18-137/18
77-47-4	Hexachlorocyclopentadiene	3330	2170	65	2280	68	5	22-131/21
67-72-1	Hexachloroethane	1670	1090	65	1090	65	0	19-121/25
193-39-5	Indeno(1,2,3-cd)pyrene	1670	1230	74	1240	74	1	26-137/25
78-59-1	Isophorone	1670	1150	69	1160	70	1	29-128/25
91-57-6	2-Methylnaphthalene	1670	1260	76	1290	77	2	28-132/16
88-74-4	2-Nitroaniline	1670	1580	95	1570	94	1	16-154/18
99-09-2	3-Nitroaniline	1670	894	54	947	57	6	20-105/62
100-01-6	4-Nitroaniline	1670	1220	73	1180	71	3	30-134/21
91-20-3	Naphthalene	1670	1150	69	1160	70	1	26-127/19
98-95-3	Nitrobenzene	1670	1260	76	1280	77	2	21-130/19
621-64-7	N-Nitroso-di-n-propylamine	1670	1130	68	1130	68	0	27-124/26
86-30-6	N-Nitrosodiphenylamine	1670	1060	64	1050	63	1	27-133/19
85-01-8	Phenanthrene	1670	1130	68	1140	68	1	26-131/19
129-00-0	Pyrene	1670	1060	64	1050	63	1	30-131/24
95-94-3	1,2,4,5-Tetrachlorobenzene	1670	1230	74	1270	76	3	8-129/20

\* = Outside of Control Limits.



# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** JD18939

**Account:** LBGNJ WSP USA

**Project:** Ridgewood Water, 579 Prospect Street, Glen Rock, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP31540-BS1	2P98987.D	1	01/15/21	HSS	01/15/21	OP31540	E2P4412
OP31540-BSD	2P98988.D	1	01/15/21	HSS	01/15/21	OP31540	E2P4412

The QC reported here applies to the following samples:

Method: SW846 8270E

JD18939-1, JD18939-2, JD18939-3

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	65%	65%	7-101%
4165-62-2	Phenol-d5	67%	66%	12-101%
118-79-6	2,4,6-Tribromophenol	69%	69%	10-127%
4165-60-0	Nitrobenzene-d5	82%	84%	15-114%
321-60-8	2-Fluorobiphenyl	76%	78%	22-104%
1718-51-0	Terphenyl-d14	70%	70%	23-121%

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** JD18939

**Account:** LBGNJ WSP USA

**Project:** Ridgewood Water, 579 Prospect Street, Glen Rock, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP31540-MS	2P99002.D	1	01/15/21	HSS	01/15/21	OP31540	E2P4412
OP31540-MSD	2P99003.D	1	01/15/21	HSS	01/15/21	OP31540	E2P4412
JD18961-8	2P99004.D	1	01/15/21	HSS	01/15/21	OP31540	E2P4412
JD18961-8	2P99009.D	10	01/19/21	KLS	01/15/21	OP31540	E2P4413

The QC reported here applies to the following samples:

Method: SW846 8270E

JD18939-1, JD18939-2, JD18939-3

CAS No.	Compound	JD18961-8 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	ND	1840	765	41	1860	946	51	21	10-129/65
59-50-7	4-Chloro-3-methyl phenol	ND	1840	860	47	1860	1100	59	24	10-147/63
120-83-2	2,4-Dichlorophenol	ND	1840	763	41	1860	1060	57	33	10-140/64
105-67-9	2,4-Dimethylphenol	ND	1840	902	49	1860	1120	60	22	10-151/64
51-28-5	2,4-Dinitrophenol	ND	3690	296	8* a	3710	277	7* a	7	10-127/71
534-52-1	4,6-Dinitro-o-cresol	ND	1840	144	8* a	1860	133	7* a	8	10-148/77
95-48-7	2-Methylphenol	ND	1840	791	43	1860	986	53	22	10-136/62
	3&4-Methylphenol	ND	1840	787	43	1860	1010	54	25	10-137/63
88-75-5	2-Nitrophenol	ND	1840	757	41	1860	931	50	21	10-147/69
100-02-7	4-Nitrophenol	ND	1840	921	50	1860	935	50	2	10-157/64
87-86-5	Pentachlorophenol	ND	1840	729	40	1860	954	51	27	10-164/65
108-95-2	Phenol	ND	1840	827	45	1860	995	54	18	3-110/61
58-90-2	2,3,4,6-Tetrachlorophenol	ND	1840	799	43	1860	980	53	20	10-146/67
95-95-4	2,4,5-Trichlorophenol	ND	1840	764	41	1860	911	49	18	10-144/66
88-06-2	2,4,6-Trichlorophenol	ND	1840	747	41	1860	959	52	25	10-148/67
83-32-9	Acenaphthene	1570	1840	2440	47	1860	2890	71	17	10-145/63
208-96-8	Acenaphthylene	4550 b	1840	7190	54	1860	7850	89	9	10-144/59
98-86-2	Acetophenone	ND	1840	894	48	1860	1160	62	26	5-120/56
120-12-7	Anthracene	5570 b	1840	8980	47	1860	10100	107	12	10-153/66
1912-24-9	Atrazine	ND	1840	941	51	1860	1050	57	11	10-163/50
56-55-3	Benzo(a)anthracene	10400 b	1840	13600	38	1860	15900	162* c	16	10-157/71
50-32-8	Benzo(a)pyrene	9440 b	1840	11600	43	1860	12100	70	4	10-164/67
205-99-2	Benzo(b)fluoranthene	10100 b	1840	14100	11	1860	15100	65	7	10-154/69
191-24-2	Benzo(g,h,i)perylene	5470 b	1840	6160	98	1860	5460	60	12	10-156/64
207-08-9	Benzo(k)fluoranthene	3280 b	1840	2800	20	1860	3370	51	18	10-156/62
101-55-3	4-Bromophenyl phenyl ether	ND	1840	807	44	1860	954	51	17	10-145/57
85-68-7	Butyl benzyl phthalate	ND	1840	913	50	1860	142000	7651* a	197* a	10-151/57
92-52-4	1,1'-Biphenyl	379	1840	1220	46	1860	1410	56	14	10-140/53
100-52-7	Benzaldehyde	ND	1840	890	48	1860	1040	56	16	10-135/56
91-58-7	2-Chloronaphthalene	ND	1840	751	41	1860	906	49	19	10-134/58
106-47-8	4-Chloroaniline	ND	1840	391	21	1860	419	23	7	10-97/62
86-74-8	Carbazole	2150	1840	3160	55	1860	3740	86	17	10-145/53
105-60-2	Caprolactam	ND	1840	1050	57	1860	1330	72	24	10-156/53
218-01-9	Chrysene	10100 b	1840	12300	60	1860	14100	156* c	14	10-148/70
111-91-1	bis(2-Chloroethoxy)methane	ND	1840	762	41	1860	967	52	24	10-130/57
111-44-4	bis(2-Chloroethyl)ether	ND	1840	772	42	1860	921	50	18	10-125/60

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** JD18939

**Account:** LBGNJ WSP USA

**Project:** Ridgewood Water, 579 Prospect Street, Glen Rock, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP31540-MS	2P99002.D	1	01/15/21	HSS	01/15/21	OP31540	E2P4412
OP31540-MSD	2P99003.D	1	01/15/21	HSS	01/15/21	OP31540	E2P4412
JD18961-8	2P99004.D	1	01/15/21	HSS	01/15/21	OP31540	E2P4412
JD18961-8	2P99009.D	10	01/19/21	KLS	01/15/21	OP31540	E2P4413

The QC reported here applies to the following samples:

Method: SW846 8270E

JD18939-1, JD18939-2, JD18939-3

CAS No.	Compound	JD18961-8 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	1840	871	47	1860	1100	59	23	10-151/58
7005-72-3	4-Chlorophenyl phenyl ether	ND	1840	819	44	1860	961	52	16	10-141/56
121-14-2	2,4-Dinitrotoluene	ND	1840	945	51	1860	1020	55	8	10-153/57
606-20-2	2,6-Dinitrotoluene	ND	1840	683	37	1860	835	45	20	10-147/59
91-94-1	3,3'-Dichlorobenzidine	ND	3690	794	22	3710	595	16	29	10-133/74
123-91-1	1,4-Dioxane	ND	1840	809	44	1860	798	43	1	10-81/57
53-70-3	Dibenzo(a,h)anthracene	1520	1840	2460	51	1860	2410	48	2	10-146/63
132-64-9	Dibenzofuran	1850	1840	2820	53	1860	3270	77	15	10-148/50
84-74-2	Di-n-butyl phthalate	ND	1840	806	44	1860	7720	416* a	162* a	10-152/59
117-84-0	Di-n-octyl phthalate	ND	1840	840	46	1860	1020	55	19	10-155/57
84-66-2	Diethyl phthalate	ND	1840	774	42	1860	928	50	18	10-145/56
131-11-3	Dimethyl phthalate	ND	1840	730	40	1860	902	49	21	10-138/56
117-81-7	bis(2-Ethylhexyl)phthalate	ND	1840	931	50	1860	1780	96	63* a	6-140/61
206-44-0	Fluoranthene	22800 <sup>b</sup>	1840	24700	81	1860	29400	334* c	17	10-171/80
86-73-7	Fluorene	5010 <sup>b</sup>	1840	7570	80	1860	8510	130	12	10-148/65
118-74-1	Hexachlorobenzene	ND	1840	801	43	1860	963	52	18	10-143/57
87-68-3	Hexachlorobutadiene	ND	1840	897	49	1860	1100	59	20	10-141/60
77-47-4	Hexachlorocyclopentadiene	ND	3690	29.6	1* a	3710	39.3	1* a	28	10-135/81
67-72-1	Hexachloroethane	ND	1840	514	28	1860	554	30	7	10-124/62
193-39-5	Indeno(1,2,3-cd)pyrene	5420 <sup>b</sup>	1840	6570	94	1860	6130	70	7	10-152/65
78-59-1	Isophorone	ND	1840	884	48	1860	1080	58	20	10-138/59
91-57-6	2-Methylnaphthalene	4030 <sup>b</sup>	1840	7000	84	1860	7840	128	11	10-150/51
88-74-4	2-Nitroaniline	ND	1840	1060	57	1860	1260	68	17	10-161/50
99-09-2	3-Nitroaniline	ND	1840	525	28	1860	551	30	5	10-126/54
100-01-6	4-Nitroaniline	ND	1840	613	33	1860	584	31	5	10-143/58
91-20-3	Naphthalene	4920 <sup>b</sup>	1840	7590	50	1860	8980	125	17	10-147/64
98-95-3	Nitrobenzene	ND	1840	945	51	1860	1100	59	15	10-143/58
621-64-7	N-Nitroso-di-n-propylamine	ND	1840	886	48	1860	1090	59	21	10-133/59
86-30-6	N-Nitrosodiphenylamine	ND	1840	1030	56	1860	1290	70	22	10-150/56
85-01-8	Phenanthrene	29300 <sup>b</sup>	1840	30000	195* c	1860	33900	404* c	12	10-162/81
129-00-0	Pyrene	24900 <sup>b</sup>	1840	28100	54	1860	34000	372* c	19	10-166/77
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	1840	734	40	1860	886	48	19	10-130/56

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** JD18939

**Account:** LBGNJ WSP USA

**Project:** Ridgewood Water, 579 Prospect Street, Glen Rock, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP31540-MS	2P99002.D	1	01/15/21	HSS	01/15/21	OP31540	E2P4412
OP31540-MSD	2P99003.D	1	01/15/21	HSS	01/15/21	OP31540	E2P4412
JD18961-8	2P99004.D	1	01/15/21	HSS	01/15/21	OP31540	E2P4412
JD18961-8	2P99009.D	10	01/19/21	KLS	01/15/21	OP31540	E2P4413

The QC reported here applies to the following samples:

Method: SW846 8270E

JD18939-1, JD18939-2, JD18939-3

CAS No.	Surrogate Recoveries	MS	MSD	JD18961-8	JD18961-8	Limits
367-12-4	2-Fluorophenol	57%	55%	54%	38%	7-101%
4165-62-2	Phenol-d5	58%	55%	53%	39%	12-101%
118-79-6	2,4,6-Tribromophenol	63%	61%	57%	43%	10-127%
4165-60-0	Nitrobenzene-d5	70%	65%	61%	50%	15-114%
321-60-8	2-Fluorobiphenyl	57%	54%	52%	46%	22-104%
1718-51-0	Terphenyl-d14	64%	65%	59%	46%	23-121%

- (a) Outside control limits due to matrix interference.
- (b) Result is from Run #2.
- (c) Outside control limits due to high level in sample relative to spike amount.

\* = Outside of Control Limits.

# Instrument Performance Check (DFTPP)

**Job Number:** JD18939  
**Account:** LBGNJ WSP USA  
**Project:** Ridgewood Water, 579 Prospect Street, Glen Rock, NJ

<b>Sample:</b> E2P4365-DFTPP	<b>Injection Date:</b> 12/03/20
<b>Lab File ID:</b> 2P97989.D	<b>Injection Time:</b> 16:26
<b>Instrument ID:</b> GCMS2P	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	172707	49.4	Pass
68	Less than 2.0% of mass 69	693	0.20 (0.34) <sup>a</sup>	Pass
69	Mass 69 relative abundance	202973	58.1	Pass
70	Less than 2.0% of mass 69	833	0.24 (0.41) <sup>a</sup>	Pass
127	40.0 - 60.0% of mass 198	188917	54.1	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	349431	100.0	Pass
199	5.0 - 9.0% of mass 198	23643	6.77	Pass
275	10.0 - 30.0% of mass 198	100072	28.6	Pass
365	1.0 - 100.0% of mass 198	14706	4.21	Pass
441	Present, but less than mass 443	55120	15.8 (89.7) <sup>b</sup>	Pass
442	40.0 - 100.0% of mass 198	321947	92.1	Pass
443	17.0 - 23.0% of mass 442	61429	17.6 (19.1) <sup>c</sup>	Pass

- (a) Value is % of mass 69
- (b) Value is % of mass 443
- (c) Value is % of mass 442

**This check applies to the following Samples, MS, MSD, Blanks, and Standards:**

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E2P4365-IC4365	2P97990.D	12/03/20	16:46	00:20	Initial cal 1
E2P4365-IC4365	2P97991.D	12/03/20	17:14	00:48	Initial cal 2
E2P4365-IC4365	2P97992.D	12/03/20	17:40	01:14	Initial cal 5
E2P4365-IC4365	2P97993.D	12/03/20	18:07	01:41	Initial cal 10
E2P4365-IC4365	2P97994.D	12/03/20	18:35	02:09	Initial cal 25
E2P4365-ICC4365	2P97995.D	12/03/20	19:01	02:35	Initial cal 50
E2P4365-IC4365	2P97996.D	12/03/20	19:27	03:01	Initial cal 80
E2P4365-IC4365	2P97997.D	12/03/20	19:54	03:28	Initial cal 100
E2P4365-ICV4365	2P97998.D	12/03/20	20:20	03:54	Initial cal verification 50
E2P4365-ICV4365	2P97999.D	12/03/20	20:46	04:20	Initial cal verification 50
E2P4365-ICV4365	2P98000.D	12/03/20	21:12	04:46	Initial cal verification 50
E2P4365-ICV4365	2P98001.D	12/03/20	21:38	05:12	Initial cal verification 50

# Instrument Performance Check (DFTPP)

**Job Number:** JD18939  
**Account:** LBGNJ WSP USA  
**Project:** Ridgewood Water, 579 Prospect Street, Glen Rock, NJ

<b>Sample:</b> E2P4366-DFTPP	<b>Injection Date:</b> 12/03/20
<b>Lab File ID:</b> 2P98002.D	<b>Injection Time:</b> 22:01
<b>Instrument ID:</b> GCMS2P	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	154226	50.4	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) <sup>a</sup>	Pass
69	Mass 69 relative abundance	184741	60.3	Pass
70	Less than 2.0% of mass 69	754	0.25 (0.41) <sup>a</sup>	Pass
127	40.0 - 60.0% of mass 198	162651	53.1	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	306176	100.0	Pass
199	5.0 - 9.0% of mass 198	20795	6.79	Pass
275	10.0 - 30.0% of mass 198	87875	28.7	Pass
365	1.0 - 100.0% of mass 198	12425	4.06	Pass
441	Present, but less than mass 443	45362	14.8 (89.1) <sup>b</sup>	Pass
442	40.0 - 100.0% of mass 198	256576	83.8	Pass
443	17.0 - 23.0% of mass 442	50887	16.6 (19.8) <sup>c</sup>	Pass

- (a) Value is % of mass 69
- (b) Value is % of mass 443
- (c) Value is % of mass 442

**This check applies to the following Samples, MS, MSD, Blanks, and Standards:**

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E2P4366-IC4366	2P98003.D	12/03/20	22:13	00:12	Initial cal 100
E2P4366-IC4366	2P98004.D	12/03/20	22:39	00:38	Initial cal 80
E2P4366-ICC4366	2P98005.D	12/03/20	23:05	01:04	Initial cal 50
E2P4366-IC4366	2P98006.D	12/03/20	23:31	01:30	Initial cal 25
E2P4366-IC4366	2P98007.D	12/03/20	23:57	01:56	Initial cal 10
E2P4366-IC4366	2P98008.D	12/04/20	00:23	02:22	Initial cal 5
E2P4366-IC4366	2P98009.D	12/04/20	00:50	02:49	Initial cal 2
E2P4366-IC4366	2P98010.D	12/04/20	01:16	03:15	Initial cal 1

# Instrument Performance Check (DFTPP)

**Job Number:** JD18939  
**Account:** LBGNJ WSP USA  
**Project:** Ridgewood Water, 579 Prospect Street, Glen Rock, NJ

<b>Sample:</b> E2P4367-DFTPP	<b>Injection Date:</b> 12/04/20
<b>Lab File ID:</b> 2P98012.D	<b>Injection Time:</b> 02:05
<b>Instrument ID:</b> GCMS2P	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	144561	50.9	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) <sup>a</sup>	Pass
69	Mass 69 relative abundance	165703	58.3	Pass
70	Less than 2.0% of mass 69	707	0.25 (0.43) <sup>a</sup>	Pass
127	40.0 - 60.0% of mass 198	149694	52.7	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	284181	100.0	Pass
199	5.0 - 9.0% of mass 198	19068	6.71	Pass
275	10.0 - 30.0% of mass 198	80880	28.5	Pass
365	1.0 - 100.0% of mass 198	12363	4.35	Pass
441	Present, but less than mass 443	40991	14.4 (93.4) <sup>b</sup>	Pass
442	40.0 - 100.0% of mass 198	240517	84.6	Pass
443	17.0 - 23.0% of mass 442	43883	15.4 (18.2) <sup>c</sup>	Pass

- (a) Value is % of mass 69
- (b) Value is % of mass 443
- (c) Value is % of mass 442

**This check applies to the following Samples, MS, MSD, Blanks, and Standards:**

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E2P4367-IC4367	2P98013.D	12/04/20	02:16	00:11	Initial cal 100
E2P4367-IC4367	2P98014.D	12/04/20	02:42	00:37	Initial cal 80
E2P4367-ICC4367	2P98015.D	12/04/20	03:08	01:03	Initial cal 50
E2P4367-IC4367	2P98016.D	12/04/20	03:34	01:29	Initial cal 25
E2P4367-IC4367	2P98017.D	12/04/20	04:00	01:55	Initial cal 10
E2P4367-IC4367	2P98018.D	12/04/20	04:26	02:21	Initial cal 5
E2P4367-IC4367	2P98019.D	12/04/20	04:53	02:48	Initial cal 2
E2P4367-IC4367	2P98020.D	12/04/20	05:19	03:14	Initial cal 1
E2P4367-ICV4367	2P98021.D	12/04/20	05:45	03:40	Initial cal verification 50
E2P4367-ICV4367	2P98022.D	12/04/20	06:11	04:06	Initial cal verification 50
E2P4367-ICV4366	2P98023A.D	12/04/20	06:37	04:32	Initial cal verification 50
E2P4367-ICV4367	2P98023.D	12/04/20	06:37	04:32	Initial cal verification 50

# Instrument Performance Check (DFTPP)

**Job Number:** JD18939  
**Account:** LBGNJ WSP USA  
**Project:** Ridgewood Water, 579 Prospect Street, Glen Rock, NJ

<b>Sample:</b> E2P4412-DFTPP	<b>Injection Date:</b> 01/15/21
<b>Lab File ID:</b> 2P98981.D	<b>Injection Time:</b> 12:35
<b>Instrument ID:</b> GCMS2P	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	310076	52.2	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) <sup>a</sup>	Pass
69	Mass 69 relative abundance	363456	61.2	Pass
70	Less than 2.0% of mass 69	1554	0.26 (0.43) <sup>a</sup>	Pass
127	40.0 - 60.0% of mass 198	315594	53.1	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	594098	100.0	Pass
199	5.0 - 9.0% of mass 198	38546	6.49	Pass
275	10.0 - 30.0% of mass 198	162015	27.3	Pass
365	1.0 - 100.0% of mass 198	25614	4.31	Pass
441	Present, but less than mass 443	84918	14.3 (88.7) <sup>b</sup>	Pass
442	40.0 - 100.0% of mass 198	497237	83.7	Pass
443	17.0 - 23.0% of mass 442	95691	16.1 (19.2) <sup>c</sup>	Pass

- (a) Value is % of mass 69
- (b) Value is % of mass 443
- (c) Value is % of mass 442

**This check applies to the following Samples, MS, MSD, Blanks, and Standards:**

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E2P4412-CC4365	2P98982.D	01/15/21	12:45	00:10	Continuing cal 25
E2P4412-CC4366	2P98983.D	01/15/21	13:11	00:36	Continuing cal 25
E2P4412-CC4367	2P98984.D	01/15/21	13:37	01:02	Continuing cal 25
OP31540-MB1	2P98985.D	01/15/21	14:46	02:11	Method Blank
OP31540-BS1	2P98987.D	01/15/21	15:41	03:06	Blank Spike
OP31540-BSD	2P98988.D	01/15/21	16:33	03:58	Blank Spike Duplicate
ZZZZZZ	2P98989.D	01/15/21	16:59	04:24	(unrelated sample)
ZZZZZZ	2P98990.D	01/15/21	17:24	04:49	(unrelated sample)
ZZZZZZ	2P98991.D	01/15/21	17:50	05:15	(unrelated sample)
ZZZZZZ	2P98992.D	01/15/21	18:16	05:41	(unrelated sample)
ZZZZZZ	2P98993.D	01/15/21	18:42	06:07	(unrelated sample)
ZZZZZZ	2P98994.D	01/15/21	19:08	06:33	(unrelated sample)
ZZZZZZ	2P98995.D	01/15/21	19:34	06:59	(unrelated sample)
JD18939-1	2P98996.D	01/15/21	20:00	07:25	S-10R
ZZZZZZ	2P98997.D	01/15/21	20:26	07:51	(unrelated sample)
ZZZZZZ	2P98998.D	01/15/21	20:52	08:17	(unrelated sample)
ZZZZZZ	2P98999.D	01/15/21	21:18	08:43	(unrelated sample)
JD18939-2	2P99000.D	01/15/21	21:44	09:09	S-15R
JD18939-3	2P99001.D	01/15/21	22:09	09:34	S-18R



# Instrument Performance Check (DFTPP)

**Job Number:** JD18939  
**Account:** LBGNJ WSP USA  
**Project:** Ridgewood Water, 579 Prospect Street, Glen Rock, NJ

<b>Sample:</b> E2P4412-DFTPP	<b>Injection Date:</b> 01/15/21
<b>Lab File ID:</b> 2P98981.D	<b>Injection Time:</b> 12:35
<b>Instrument ID:</b> GCMS2P	

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
OP31540-MS	2P99002.D	01/15/21	22:35	10:00	Matrix Spike
OP31540-MSD	2P99003.D	01/15/21	23:01	10:26	Matrix Spike Duplicate
JD18961-8	2P99004.D	01/15/21	23:27	10:52	(used for QC only; not part of job JD18939)
ZZZZZ	2P99005.D	01/15/21	23:53	11:18	(unrelated sample)

6.4.4

6

# Internal Standard Area Summary

**Job Number:** JD18939  
**Account:** LBGNJ WSP USA  
**Project:** Ridgewood Water, 579 Prospect Street, Glen Rock, NJ

<b>Check Std:</b> E2P4412-CC4365	<b>Injection Date:</b> 01/15/21
<b>Lab File ID:</b> 2P98982.D	<b>Injection Time:</b> 12:45
<b>Instrument ID:</b> GCMS2P	<b>Method:</b> SW846 8270E

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	348467	4.43	1232886	5.42	670748	7.34	1244584	9.46	1293421	13.62	1201043	15.73
Upper Limit <sup>a</sup>	696934	4.93	2465772	5.92	1341496	7.84	2489168	9.96	2586842	14.12	2402086	16.23
Lower Limit <sup>b</sup>	174234	3.93	616443	4.92	335374	6.84	622292	8.96	646711	13.12	600522	15.23

Lab Sample ID	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
OP31540-MB1	459581	4.43	1663653	5.42	836454	7.34	1586317	9.46	1674443	13.62	1720024	15.74
OP31540-BS1	513675	4.43	1752076	5.42	894882	7.35	1773040	9.47	1979276	13.63	1776299	15.74
OP31540-BSD	563754	4.43	1874466	5.42	957897	7.35	1855434	9.47	2091495	13.63	1828959	15.74
ZZZZZZ	486310	4.43	1722689	5.42	984443	7.34	1656514	9.46	1559254	13.62	1766166	15.74
ZZZZZZ	486947	4.43	1752134	5.42	1015314	7.34	1706524	9.46	1587168	13.62	1760278	15.74
ZZZZZZ	540610	4.43	1885090	5.42	1082181	7.34	1740582	9.46	1636694	13.62	1763064	15.74
ZZZZZZ	490965	4.43	1788516	5.42	1030373	7.34	1674580	9.46	1531179	13.62	1624821	15.74
ZZZZZZ	428144	4.43	1589384	5.42	923773	7.34	1578159	9.46	1520310	13.62	1669089	15.74
ZZZZZZ	529772	4.43	1917768	5.42	1106172	7.34	1807484	9.46	1665083	13.62	1779374	15.74
ZZZZZZ	519794	4.43	1805677	5.42	1010149	7.34	1625057	9.46	1497175	13.62	1545820	15.74
JD18939-1	494066	4.43	1732980	5.42	976985	7.34	1583724	9.46	1425848	13.62	1500111	15.74
ZZZZZZ	527854	4.43	1896700	5.42	1058953	7.34	1741931	9.46	1531576	13.63	1606714	15.74
ZZZZZZ	349668	4.43	1249936	5.42	728008	7.34	1230066	9.46	1164187	13.62	1239912	15.74
ZZZZZZ	261555	4.43	990958	5.42	581371	7.34	1015663	9.46	1004157	13.62	1125715	15.74
JD18939-2	350081	4.43	1281323	5.42	743837	7.34	1205170	9.46	1126776	13.63	1255285	15.75
JD18939-3	491760	4.43	1732455	5.42	994022	7.35	1587733	9.47	1429985	13.64	1579449	15.76
OP31540-MS	428547	4.43	1504048	5.42	865863	7.36	1415615	9.48	1316779	13.71	1405844	15.83
OP31540-MSD	329025	4.43	1173302	5.42	687898	7.37	1138206	9.49	1043937	13.73	1142768	15.84
JD18961-8	492283	4.44	1760190	5.43	983393	7.37	1554214	9.50	1432510	13.74	1474770	15.86
ZZZZZZ	484824	4.44	1744711	5.43	993554	7.38	1566606	9.54	1436150	13.74	1484934	15.87

- IS 1 = 1,4-Dichlorobenzene-d4
- IS 2 = Naphthalene-d8
- IS 3 = Acenaphthene-D10
- IS 4 = Phenanthrene-d10
- IS 5 = Chrysene-d12
- IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.  
 (b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

# Surrogate Recovery Summary

**Job Number:** JD18939  
**Account:** LBGNJ WSP USA  
**Project:** Ridgewood Water, 579 Prospect Street, Glen Rock, NJ

<b>Method:</b> SW846 8270E	<b>Matrix:</b> SO
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
JD18939-1	2P98996.D	52	50	64	69	58	75
JD18939-2	2P99000.D	45	47	54	58	49	57
JD18939-3	2P99001.D	46	47	58	60	51	63
OP31540-BS1	2P98987.D	65	67	69	82	76	70
OP31540-BSD	2P98988.D	65	66	69	84	78	70
OP31540-MB1	2P98985.D	71	71	79	90	85	84
OP31540-MS	2P99002.D	57	58	63	70	57	64
OP31540-MSD	2P99003.D	55	55	61	65	54	65

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	7-101%
S2 = Phenol-d5	12-101%
S3 = 2,4,6-Tribromophenol	10-127%
S4 = Nitrobenzene-d5	15-114%
S5 = 2-Fluorobiphenyl	22-104%
S6 = Terphenyl-d14	23-121%

6.6.1  
6

# Initial Calibration Summary

Job Number: JD18939

Sample: E2P4365-ICC4365

Account: LBGNJ WSP USA

Lab FileID: 2P97995.D

Project: Ridgewood Water, 579 Prospect Street, Glen Rock, NJ

## Response Factor Report MS2P

Method : C:\MSDCHEM\1\METHODS\M2P4365.M (RTE Integrator)  
Title : Semi Volatile Extractables by GC/MS  
Last Update : Fri Dec 04 14:04:08 2020  
Response via : Initial Calibration

### Calibration Files

2 =2p97991.D 5 =2p97992.D 25 =2p97994.D 80 =2p97996.D  
100 =2p97997.D 50 =2p97995.D 1 =2p97990.D 10 =2p97993.D

Compound	2	5	25	80	100	50	1	10	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	-----ISTD-----									
2) 1,4-Dioxane	0.573	0.639	0.653	0.683	0.717	0.669	0.725	0.635	0.662	7.38
3) Pyridine	1.447	1.728	1.717	1.815	1.875	1.781	1.341	1.725	1.678	11.07
4) N-Nitrosodim	0.858	0.917	0.971	1.003	1.054	0.987	0.908	0.902	0.950	6.79
5) 2-Fluorophen	1.229	1.304	1.384	1.456	1.528	1.425	1.242	1.336	1.363	7.71
6) Indene	2.323	2.421	2.400	2.428	2.459	2.447	2.460	2.425	2.420	1.83
7) Cumene	3.441	3.527	3.615	3.674	3.673	3.658	3.618	3.469	3.584	2.59
8) Phenol-d5	1.575	1.676	1.754	1.811	1.864	1.817	1.614	1.700	1.726	5.94
9) Phenol	1.798	1.886	1.993	2.030	2.123	2.047	1.844	1.880	1.950	5.85
10) Aniline	2.033	2.110	2.008	2.052	2.164	2.026	2.000	2.112	2.063	2.85
11) bis(2-Chloro	1.436	1.422	1.536	1.552	1.599	1.564	1.514	1.490	1.514	4.09
12) 2-Chlorophen	1.319	1.385	1.379	1.413	1.468	1.424	1.377	1.394	1.395	3.10
13) Decane	1.853	1.917	1.837	1.790	1.727	1.811	1.886	1.891	1.839	3.38
14) 1,3-Dichloro	1.485	1.505	1.501	1.515	1.521	1.538	1.592	1.491	1.518	2.26
15) 1,4-Dichloro	1.491	1.511	1.508	1.527	1.531	1.523	1.666	1.489	1.531	3.70
16) Benzyl alcoh	0.733	0.768	0.796	0.824	0.853	0.836	0.731	0.809	0.794	5.77
17) 1,2-Dichloro	1.395	1.388	1.426	1.435	1.461	1.436	1.473	1.404	1.427	2.13
18) Acetophenone	1.897	2.003	1.977	1.972	1.988	2.011	1.980	1.996	1.978	1.79
19) 2-Methylphen	1.210	1.252	1.249	1.237	1.261	1.236	1.197	1.230	1.234	1.75
20) 2,2'-oxybis(	0.343	0.345	0.336	0.335	0.340	0.331	0.405	0.343	0.347	6.87
21) 3&4-Methylph	1.221	1.328	1.314	1.327	1.379	1.342	1.319	1.290	1.315	3.49
22) n-Nitroso-di	1.102	1.144	1.116	1.121	1.129	1.139	1.081	1.136	1.121	1.88
23) Hexachloroet	0.529	0.519	0.503	0.509	0.510	0.512	0.568	0.510	0.520	4.01
24) I Naphthalene-d8	-----ISTD-----									
25) Nitrobenzene	0.422	0.457	0.455	0.457	0.460	0.462	0.424	0.455	0.449	3.67
26) Nitrobenzene	0.456	0.475	0.462	0.463	0.453	0.468	0.457	0.475	0.464	1.78
27) Quinoline	0.631	0.684	0.694	0.698	0.723	0.703	0.635	0.681	0.681	4.76
28) Isophorone	0.684	0.736	0.752	0.754	0.765	0.754	0.697	0.739	0.735	3.98
29) 2-Nitropheno	0.169	0.183	0.198	0.204	0.212	0.200	0.170	0.190	0.191	8.24
30) 2,4-Dimethyl	0.326	0.351	0.362	0.384	0.393	0.382	0.325	0.359	0.360	7.16
31) Benzoic acid		0.247	0.306	0.315	0.327	0.327		0.271	0.299	10.95
32) bis(2-Chloro	0.450	0.481	0.483	0.487	0.491	0.487	0.466	0.479	0.478	2.85
33) 2,4-Dichloro	0.283	0.300	0.305	0.309	0.320	0.309	0.275	0.299	0.300	4.89
34) 2,6-Dichloro	0.279	0.282	0.286	0.290	0.293	0.291	0.281	0.278	0.285	2.07
35) 1,3,5-Trichl	0.341	0.353	0.352	0.354	0.357	0.350	0.345	0.348	0.350	1.49
36) 1,2,4-Trichl	0.315	0.333	0.327	0.324	0.327	0.331	0.343	0.324	0.328	2.49
37) 1,2,3-Trichl	0.320	0.331	0.327	0.328	0.327	0.329	0.324	0.321	0.326	1.20
38) Naphthalene	0.958	0.994	1.004	1.000	0.993	0.992	1.032	0.985	0.995	2.06
39) 4-Chloroanil	0.394	0.415	0.412	0.414	0.425	0.410	0.413	0.419	0.413	2.13
40) 2,3-Dichloro	0.361	0.369	0.371	0.371	0.380	0.375	0.382	0.362	0.371	2.08
41) Caprolactam	0.089	0.103	0.108	0.111	0.114	0.112	0.089	0.106	0.104	9.50
42) Hexachlorobu	0.195	0.200	0.195	0.191	0.192	0.193	0.193	0.193	0.194	1.46
43) 4-Chloro-3-m	0.310	0.333	0.346	0.354	0.360	0.353	0.313	0.336	0.338	5.51
44) 2-Methylnaph	0.500	0.529	0.534	0.544	0.548	0.538	0.536	0.525	0.532	2.76
45) 1-Methylnaph	0.600	0.607	0.607	0.619	0.621	0.613	0.603	0.604	0.609	1.29

# Initial Calibration Summary

Job Number: JD18939

Sample: E2P4365-ICC4365

Account: LBGNJ WSP USA

Lab FileID: 2P97995.D

Project: Ridgewood Water, 579 Prospect Street, Glen Rock, NJ

46)	Dimethylnaph	0.561	0.594	0.598	0.591	0.598	0.592	0.588	0.589	0.589	2.03
47)	I Acenaphthene-d10	-----ISTD-----									
48)	Hexachlorocy	0.326	0.381	0.418	0.419	0.419	0.388		0.356	0.381	9.44
49)	2,4,6-Trichl	0.374	0.399	0.419	0.408	0.415	0.414	0.375	0.400	0.401	4.43
50)	2,4,5-Trichl	0.398	0.412	0.435	0.434	0.430	0.431	0.405	0.434	0.422	3.52
51)	2-Fluorobiph	1.291	1.331	1.341	1.309	1.303	1.290	1.356	1.304	1.316	1.84
52)	2-Chloronaph	1.149	1.195	1.225	1.165	1.161	1.170	1.212	1.209	1.186	2.37
53)	Biphenyl	1.486	1.581	1.581	1.542	1.537	1.542	1.613	1.578	1.558	2.50
54)	2-Nitroanili	0.434	0.483	0.508	0.501	0.495	0.504	0.418	0.498	0.480	7.17
55)	Dimethylphth	1.324	1.408	1.425	1.394	1.396	1.389	1.340	1.392	1.383	2.46
56)	Acenaphthyle	1.752	1.886	1.888	1.863	1.862	1.841	1.717	1.870	1.835	3.51
57)	2,6-Dinitrot	0.252	0.274	0.299	0.301	0.305	0.302	0.253	0.291	0.285	7.72
58)	3-Nitroanili	0.284	0.316	0.349	0.349	0.352	0.342	0.253	0.332	0.322	11.23
59)	Acenaphthene	1.176	1.218	1.231	1.197	1.211	1.212	1.252	1.217	1.214	1.85
60)	2,4-Dinitrop	0.067	0.108	0.183	0.203	0.212	0.196		0.141	0.159	34.72
----- Quadratic regression -----											
Response Ratio = -0.01398 + 0.18024 *A + 0.00702 *A^2										Coefficient = 0.9993	
61)	4-Nitropheno	0.177	0.223	0.232	0.232	0.226		0.195	0.214		10.71
62)	Dibenzofuran	1.593	1.661	1.646	1.637	1.614	1.607	1.631	1.641	1.629	1.39
63)	2,4-Dinitrot	0.352	0.376	0.415	0.417	0.413	0.412	0.310	0.402	0.387	10.04
64)	2,3,4,6-Tetr	0.288	0.324	0.342	0.346	0.350	0.347	0.286	0.325	0.326	7.96
65)	Diethylphtha	1.328	1.435	1.465	1.433	1.436	1.440	1.345	1.434	1.414	3.49
66)	Fluorene	1.258	1.314	1.338	1.307	1.317	1.321	1.295	1.321	1.309	1.83
67)	4-Chlorophen	0.615	0.656	0.650	0.642	0.639	0.641	0.658	0.656	0.645	2.17
68)	4-Nitroanili	0.267	0.301	0.336	0.330	0.333	0.329	0.209	0.321	0.303	14.62
69)	I Phenanthrene-d10	-----ISTD-----									
70)	4,6-Dinitro-	0.113	0.143	0.151	0.157	0.149		0.130	0.140		11.45
71)	n-Nitrosodip	0.500	0.528	0.528	0.517	0.531	0.522	0.494	0.521	0.517	2.59
72)	1,2-Diphenyl	0.860	0.930	0.928	0.895	0.988	0.911	0.876	0.925	0.914	4.31
73)	2,4,6-Tribro	0.127	0.145	0.155	0.155	0.164	0.153	0.114	0.145	0.145	11.42
74)	4-Bromopheny	0.225	0.240	0.240	0.240	0.249	0.240	0.238	0.237	0.239	2.86
75)	Hexachlorobe	0.261	0.281	0.279	0.277	0.289	0.277	0.280	0.275	0.277	2.83
76)	Pentachlorop	0.086	0.115	0.157	0.172	0.184	0.164		0.132	0.144	24.35
----- Quadratic regression -----											
Response Ratio = -0.00718 + 0.14837 *A + 0.00714 *A^2										Coefficient = 0.9996	
77)	Phenanthrene	1.029	1.078	1.066	1.040	1.061	1.046	1.141	1.047	1.063	3.29
78)	Anthracene	1.014	1.089	1.078	1.059	1.084	1.070	1.057	1.070	1.065	2.19
79)	Carbazole	0.960	1.007	1.011	1.008	1.032	1.005	0.981	1.004	1.001	2.16
80)	Di-n-butylph	1.198	1.352	1.400	1.387	1.420	1.393	1.166	1.357	1.334	7.26
81)	Fluoranthene	1.078	1.152	1.199	1.199	1.245	1.194	1.111	1.160	1.167	4.59
82)	Octadecane	0.422	0.439	0.431	0.411	0.410	0.417	0.412	0.425	0.421	2.45
83)	I Chrysene-d12	-----ISTD-----									
84)	Pyrene	1.136	1.229	1.198	1.188	1.206	1.187	1.143	1.206	1.187	2.67
85)	Terphenyl-d1	0.895	0.940	0.949	0.941	0.966	0.935	0.897	0.928	0.931	2.64
86)	Butylbenzylp	0.531	0.574	0.616	0.623	0.636	0.623	0.466	0.596	0.583	9.98
87)	Benzo[a]anth	1.118	1.158	1.179	1.154	1.190	1.160	1.194	1.149	1.163	2.13
88)	3,3'-Dichlor	0.366	0.421	0.444	0.461	0.474	0.448	0.353	0.425	0.424	10.30
89)	Chrysene	1.078	1.130	1.111	1.087	1.095	1.093	1.201	1.114	1.113	3.52
90)	bis(2-Ethylh	0.662	0.787	0.843	0.831	0.837	0.830	0.610	0.804	0.775	11.48
91)	I Perylene-d12	-----ISTD-----									
92)	Di-n-octylph	1.073	1.278	1.481	1.490	1.524	1.547		1.399	1.399	12.15
93)	Benzo[b]fluo	1.066	1.126	1.251	1.246	1.341	1.277	1.080	1.171	1.195	8.32
94)	Benzo[k]fluo	1.057	1.137	1.120	1.094	1.052	1.156	1.075	1.129	1.103	3.50
95)	Benzo[a]pyre	0.943	1.015	1.068	1.064	1.108	1.092	0.963	1.048	1.038	5.73

6.7.1  
6

# Initial Calibration Summary

**Job Number:** JD18939  
**Account:** LBGNJ WSP USA  
**Project:** Ridgewood Water, 579 Prospect Street, Glen Rock, NJ

**Sample:** E2P4365-ICC4365  
**Lab FileID:** 2P97995.D

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96)	Indeno[1,2,3	0.940	1.058	1.168	1.194	1.300	1.209	0.964	1.069	1.113	11.32
97)	Dibenz(a,h)a	0.903	0.986	1.084	1.084	1.140	1.102	0.937	1.022	1.032	8.16
98)	Dibenz[a,h]a	1.051	1.136	1.204	1.179	1.224	1.200	1.104	1.153	1.156	5.02
99)	7,12-Dimethy	0.265	0.300	0.386	0.549	0.580	0.488		0.367	0.419	29.07
	----- Quadratic regression -----								Coefficient =		0.9994
	Response Ratio = -0.00674 + 0.36647 *A + 0.08911 *A^2										
100)	Benzo[g,h,i]	0.993	1.072	1.147	1.120	1.162	1.143	1.027	1.104	1.096	5.54

-----  
(#) = Out of Range ### Number of calibration levels exceeded format ###

M2P4365.M                      Fri Dec 04 14:56:53 2020      RPT1

6.7.1

6

# Initial Calibration Verification

**Job Number:** JD18939  
**Account:** LBGNJ WSP USA  
**Project:** Ridgewood Water, 579 Prospect Street, Glen Rock, NJ

**Sample:** E2P4365-ICV4365  
**Lab FileID:** 2P97998.D

## Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E2P4365\2p97998.D Vial: 10  
 Acq On : 3 Dec 2020 8:20 pm Operator: hennys  
 Sample : icv4365-50 Inst : MS2P  
 Misc : op30791,e2p4365,1000,,,1,1 Multiplr: 1.00  
 MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M2P4365.M (RTE Integrator)  
 Title : Semi Volatile Extractables by GC/MS  
 Last Update : Fri Dec 04 14:04:08 2020  
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	83	0.00	4.52
3 t	Pyridine	1.678	1.606	4.3	75	0.01	2.37
10	Aniline	2.063	2.295	-11.2	95	0.00	4.30
16 t	Benzyl alcohol	0.794	0.937	-18.0	94	0.00	4.64
24 I	Naphthalene-d8	1.000	1.000	0.0	88	0.00	5.53
39 t	4-Chloroaniline	0.413	0.411	0.5	88	0.00	5.61
44 t	2-Methylnaphthalene	0.532	0.576	-8.3	94	0.00	6.24
47 I	Acenaphthene-d10	1.000	1.000	0.0	87	0.00	7.49
54 t	2-Nitroaniline	0.480	0.487	-1.5	84	0.00	6.94
58 t	3-Nitroaniline	0.322	0.336	-4.3	85	0.00	7.48
62 t	Dibenzofuran	1.629	1.682	-3.3	91	0.00	7.77
68 t	4-Nitroaniline	0.303	0.354	-16.8	93	-0.01	8.33
69 I	Phenanthrene-d10	1.000	1.000	0.0	87	0.00	9.61
79 t	Carbazole	1.001	1.055	-5.4	91	0.00	10.03

(#) = Out of Range SPCC's out = 0 CCC's out = 0  
 2p97995.D M2P4365.M Fri Dec 04 14:57:13 2020 RPT1

6.7.2  
6

# Initial Calibration Verification

**Job Number:** JD18939  
**Account:** LBGNJ WSP USA  
**Project:** Ridgewood Water, 579 Prospect Street, Glen Rock, NJ

**Sample:** E2P4365-ICV4365  
**Lab FileID:** 2P97999.D

## Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E2P4365\2p97999.D Vial: 11  
 Acq On : 3 Dec 2020 8:46 pm Operator: hennys  
 Sample : icv4365-50 Inst : MS2P  
 Misc : op30791,e2p4365,1000,,,1,1 Multiplr: 1.00  
 MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M2P4365.M (RTE Integrator)  
 Title : Semi Volatile Extractables by GC/MS  
 Last Update : Fri Dec 04 14:04:08 2020  
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	94	0.00	4.52
2 t	1,4-Dioxane	0.662	0.632	4.5	88	0.03	2.03
4 t	N-Nitrosodimethylamine	0.950	0.971	-2.2	92	0.02	2.36
6 t	Indene	2.420	2.292	5.3	88	0.00	4.71
7 t	Cumene	3.584	3.460	3.5	89	0.00	3.94
9 t	Phenol	1.950	1.931	1.0	88	0.00	4.36
11 t	bis(2-Chloroethyl)ether	1.514	1.370	9.5	82	0.00	4.34
12 t	2-Chlorophenol	1.395	1.362	2.4	90	0.00	4.40
13 t	Decane	1.839	1.707	7.2	88	0.00	4.42
14 t	1,3-Dichlorobenzene	1.518	1.468	3.3	89	0.00	4.48
15 t	1,4-Dichlorobenzene	1.531	1.461	4.6	90	0.00	4.54
17 t	1,2-Dichlorobenzene	1.427	1.400	1.9	91	0.00	4.64
18 t	Acetophenone	1.978	1.892	4.3	88	0.00	4.82
19 t	2-Methylphenol	1.234	1.194	3.2	90	0.00	4.77
20 t	2,2'-oxybis(1-Chloropropa	0.347	0.354	-2.0	100	0.00	4.72
21 t	3&4-Methylphenol	1.315	1.243	5.5	87	0.00	4.88
22 t	n-Nitroso-di-n-propylamin	1.121	1.071	4.5	88	0.00	4.82
23 t	Hexachloroethane	0.520	0.491	5.6	90	0.00	4.89
24 I	Naphthalene-d8	1.000	1.000	0.0	93	0.00	5.53
26 t	Nitrobenzene	0.464	0.454	2.2	90	0.00	4.95
27 t	Quinoline	0.681	0.654	4.0	86	-0.02	5.87
28 t	Isophorone	0.735	0.709	3.5	87	0.00	5.13
29 t	2-Nitrophenol	0.191	0.186	2.6	86	0.00	5.20
30 t	2,4-Dimethylphenol	0.360	0.356	1.1	86	0.00	5.28
31 t	Benzoic acid	0.299	0.318	-6.4	90	0.00	5.43
32 t	bis(2-Chloroethoxy)methan	0.478	0.437	8.6	83	0.00	5.32
33 t	2,4-Dichlorophenol	0.300	0.295	1.7	89	0.00	5.45
34 t	2,6-Dichlorophenol	0.285	0.286	-0.4	91	0.00	5.63
36 t	1,2,4-Trichlorobenzene	0.328	0.319	2.7	89	0.00	5.48
38 t	Naphthalene	0.995	0.979	1.6	91	0.00	5.55
40 t	2,3-Dichloroaniline	0.371	0.328	11.6	81	0.00	6.56
41 t	Caprolactam	0.104	0.104	0.0	86	0.00	5.97
42 t	Hexachlorobutadiene	0.194	0.199	-2.6	95	0.00	5.67
43 t	4-Chloro-3-methylphenol	0.338	0.327	3.3	86	0.00	6.16
45 t	1-Methylnaphthalene	0.609	0.550	9.7	83	0.00	6.34
46 t	Dimethylnaphthalene	0.589	0.569	3.4	89	0.00	6.96
47 I	Acenaphthene-d10	1.000	1.000	0.0	94	0.00	7.49
48 t	Hexachlorocyclopentadiene	0.381	0.379	0.5	92	0.00	6.42
49 t	2,4,6-Trichlorophenol	0.401	0.382	4.7	87	0.00	6.59
50 t	2,4,5-Trichlorophenol	0.422	0.410	2.8	89	0.00	6.66



# Initial Calibration Verification

**Job Number:** JD18939  
**Account:** LBGNJ WSP USA  
**Project:** Ridgewood Water, 579 Prospect Street, Glen Rock, NJ

**Sample:** E2P4365-ICV4365  
**Lab FileID:** 2P97999.D

52 t	2-Chloronaphthalene	1.186	1.106	6.7	89	0.00	6.79
53 t	Biphenyl	1.558	1.473	5.5	90	0.00	6.78
55 t	Dimethylphthalate	1.383	1.256	9.2	85	0.00	7.18
56 t	Acenaphthylene	1.835	1.682	8.3	86	0.00	7.30
57 t	2,6-Dinitrotoluene	0.285	0.278	2.5	86	0.00	7.25
59 t	Acenaphthene	1.214	1.131	6.8	88	0.00	7.53
		----- True	Calc.	% Drift	-----		
60 t	2,4-Dinitrophenol	100.000	92.580	7.4	84	0.00	7.62
		----- AvgRF	CCRF	% Dev	-----		
61 t	4-Nitrophenol	0.214	0.203	5.1	84	0.00	7.88
63 t	2,4-Dinitrotoluene	0.387	0.375	3.1	86	0.00	7.79
64	2,3,4,6-Tetrachlorophenol	0.326	0.335	-2.8	91	0.00	7.99
65 t	Diethylphthalate	1.414	1.315	7.0	86	0.00	8.16
66 t	Fluorene	1.309	1.257	4.0	89	0.00	8.25
67 t	4-Chlorophenyl-phenylethe	0.645	0.583	9.6	86	0.00	8.27
69 I	Phenanthrene-d10	1.000	1.000	0.0	94	0.00	9.62
70 t	4,6-Dinitro-2-methylpheno	0.140	0.120	14.3	76	0.00	8.37
71 t	n-Nitrosodiphenylamine	0.517	0.447	13.5	81	0.00	8.46
72 t	1,2-Diphenylhydrazine	0.914	0.881	3.6	91	0.00	8.50
74 t	4-Bromophenyl-phenylether	0.239	0.220	7.9	86	0.00	8.98
75 t	Hexachlorobenzene	0.277	0.264	4.7	90	0.00	9.06
		----- True	Calc.	% Drift	-----		
76 t	Pentachlorophenol	100.000	86.042	14.0	74	0.00	9.40
		----- AvgRF	CCRF	% Dev	-----		
77 t	Phenanthrene	1.063	1.008	5.2	91	0.00	9.65
78 t	Anthracene	1.065	0.991	6.9	87	0.00	9.73
80 t	Di-n-butylphthalate	1.334	1.266	5.1	86	0.00	10.65
81 t	Fluoranthene	1.167	1.151	1.4	91	0.00	11.49
82 t	Octadecane	0.421	0.389	7.6	88	0.00	9.61
83 I	Chrysene-d12	1.000	1.000	0.0	92	0.00	13.77
84 t	Pyrene	1.187	1.130	4.8	88	0.00	11.84
86 t	Butylbenzylphthalate	0.583	0.571	2.1	84	0.00	13.01
87 t	Benzo[a]anthracene	1.163	1.128	3.0	90	0.00	13.76
89 t	Chrysene	1.113	1.048	5.8	88	0.00	13.81
90 t	bis(2-Ethylhexyl)phthalat	0.775	0.765	1.3	85	0.00	13.99
91 I	Perylene-d12	1.000	1.000	0.0	93	0.00	15.88
92 t	Di-n-octylphthalate	1.399	1.386	0.9	84	0.00	14.97
93 t	Benzo[b]fluoranthene	1.195	1.203	-0.7	88	0.00	15.36
94 t	Benzo[k]fluoranthene	1.103	1.050	4.8	85	0.00	15.40
95 t	Benzo[a]pyrene	1.038	1.019	1.8	87	0.00	15.79
96 t	Indeno[1,2,3-cd]pyrene	1.113	1.127	-1.3	87	0.00	17.24
98 t	Dibenz[a,h]anthracene	1.156	1.099	4.9	85	0.00	17.28
		----- True	Calc.	% Drift	-----		
99 t	7,12-Dimethylbenz(a)anthr	50.000	44.618	10.8	79	0.00	15.37
		----- AvgRF	CCRF	% Dev	-----		
100 t	Benzo[g,h,i]perylene	1.096	1.082	1.3	88	0.00	17.61

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

# Initial Calibration Verification

**Job Number:** JD18939

**Sample:** E2P4365-ICV4365

**Account:** LBGNJ WSP USA

**Lab FileID:** 2P97999.D

**Project:** Ridgewood Water, 579 Prospect Street, Glen Rock, NJ

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2p97995.D M2P4365.M

Fri Dec 04 14:57:15 2020

RPT1

# Initial Calibration Verification

**Job Number:** JD18939  
**Account:** LBGNJ WSP USA  
**Project:** Ridgewood Water, 579 Prospect Street, Glen Rock, NJ

**Sample:** E2P4365-ICV4365  
**Lab FileID:** 2P98000.D

## Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E2P4365\2p98000.D Vial: 12  
Acq On : 3 Dec 2020 9:12 pm Operator: hennys  
Sample : icv4365-50 Inst : MS2P  
Misc : op30791,e2p4365,1000,,,1,1 Multiplr: 1.00  
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M2P4365.M (RTE Integrator)  
Title : Semi Volatile Extractables by GC/MS  
Last Update : Fri Dec 04 14:04:08 2020  
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	82	0.00	4.52
5 S	2-Fluorophenol	1.363	1.378	-1.1	79	0.00	3.64
8 S	Phenol-d5	1.726	1.737	-0.6	79	0.00	4.35
24 I	Naphthalene-d8	1.000	1.000	0.0	85	0.00	5.53
25 S	Nitrobenzene-d5	0.449	0.468	-4.2	86	0.00	4.93
47 I	Acenaphthene-d10	1.000	1.000	0.0	82	0.00	7.49
51 S	2-Fluorobiphenyl	1.316	1.337	-1.6	85	0.00	6.65
69 I	Phenanthrene-d10	1.000	1.000	0.0	83	0.00	9.61
73 S	2,4,6-Tribromophenol	0.145	0.149	-2.8	82	-0.01	8.60
83 I	Chrysene-d12	1.000	1.000	0.0	81	-0.01	13.76
85 S	Terphenyl-d14	0.931	0.967	-3.9	84	0.00	12.16

(#) = Out of Range SPCC's out = 0 CCC's out = 0  
2p97995.D M2P4365.M Fri Dec 04 14:57:17 2020 RPT1

# Initial Calibration Verification

**Job Number:** JD18939  
**Account:** LBGNJ WSP USA  
**Project:** Ridgewood Water, 579 Prospect Street, Glen Rock, NJ

**Sample:** E2P4365-ICV4365  
**Lab FileID:** 2P98001.D

## Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E2P4365\2p98001.D Vial: 13  
Acq On : 3 Dec 2020 9:38 pm Operator: hennys  
Sample : icv4365-50 Inst : MS2P  
Misc : op30791,e2p4365,1000,,,1,1 Multiplr: 1.00  
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M2P4365.M (RTE Integrator)  
Title : Semi Volatile Extractables by GC/MS  
Last Update : Fri Dec 04 14:04:08 2020  
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 30% Max. Rel. Area : 200%

Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
83 I Chrysene-d12	1.000	1.000	0.0	114	-0.01	13.76
88 t 3,3'-Dichlorobenzidine	0.424	0.446	-5.2	114	0.00	13.78

(#) = Out of Range SPCC's out = 0 CCC's out = 0  
2p97995.D M2P4365.M Fri Dec 04 14:57:19 2020 RPT1

6.7.5  
6

# Initial Calibration Summary

**Job Number:** JD18939  
**Account:** LBGNJ WSP USA  
**Project:** Ridgewood Water, 579 Prospect Street, Glen Rock, NJ

**Sample:** E2P4366-ICC4366  
**Lab FileID:** 2P98005.D

## Response Factor Report MS2P

Method : C:\MSDCHEM\1\METHODS\M2P4366.M (RTE Integrator)  
Title : Semi Volatile Extractables by GC/MS  
Last Update : Fri Dec 04 15:27:17 2020  
Response via : Initial Calibration

### Calibration Files

2 =2p98009.D 5 =2p98008.D 25 =2p98006.D 80 =2p98004.D  
100 =2p98003.D 50 =2p98005.D 1 =2p98010.D 10 =2p98007.D

Compound	2	5	25	80	100	50	1	10	Avg %RSD
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101) I 1,4-Dichlorobenzene-d -----ISTD-----  
102) Benzaldehyde 1.095 1.132 1.183 1.218 1.246 1.200 1.055 1.132 1.158 5.63

109) I Phenanthrene-d10a -----ISTD-----  
110) Pentachloron 0.038 0.045 0.048 0.049 0.047 0.043 0.045# 9.24  
111) Atrazine 0.079 0.094 0.100 0.107 0.109 0.104 0.079 0.095 0.096 12.17

(#) = Out of Range ### Number of calibration levels exceeded format ###

M2P4365.M Fri Dec 04 15:29:03 2020 RPT1

# Initial Calibration Summary

**Job Number:** JD18939  
**Account:** LBGNJ WSP USA  
**Project:** Ridgewood Water, 579 Prospect Street, Glen Rock, NJ

**Sample:** E2P4367-ICC4367  
**Lab FileID:** 2P98015.D

## Response Factor Report MS2P

Method : C:\MSDCHEM\1\METHODS\M2P4367.M (RTE Integrator)  
Title : Semi Volatile Extractables by GC/MS  
Last Update : Fri Dec 04 16:05:32 2020  
Response via : Initial Calibration

### Calibration Files

2 =2p98019.D 5 =2p98018.D 25 =2p98016.D 80 =2p98014.D  
100 =2p98013.D 50 =2p98015.D 1 =2p98020.D 10 =2p98017.D

Compound	2	5	25	80	100	50	1	10	Avg %RSD
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103) I Naphthalene-d8a -----ISTD-----  
104) Hydroquinone 0.220 0.310 0.338 0.350 0.345 0.210 0.295 21.72  
----- Quadratic regression ----- Coefficient = 0.9980  
Response Ratio = -0.01983 + 0.33622 \*A + 0.00867 \*A^2

105) I Acenaphthene-d10a -----ISTD-----  
106) 1,2,4,5-Tetr 0.569 0.572 0.593 0.606 0.631 0.613 0.599 0.597 0.598 3.42

107) I Chrysene-d12a -----ISTD-----  
108) Benzidine 0.558 0.728 0.742 0.735 0.755 0.672 0.698 10.65

117) I Phenanthrene-d10b -----ISTD-----  
118) 1-Chloroocta 0.383 0.398 0.427 0.412 0.421 0.430 0.358 0.417 0.406 6.08  
119) o-terphenyl 0.526 0.526 0.562 0.564 0.585 0.570 0.530 0.545 0.551 4.11

-----  
(#) = Out of Range ### Number of calibration levels exceeded format ###  
M2P4365.M Fri Dec 04 16:06:23 2020 RPT1

6.7.7  
6

# Initial Calibration Verification

**Job Number:** JD18939  
**Account:** LBGNJ WSP USA  
**Project:** Ridgewood Water, 579 Prospect Street, Glen Rock, NJ

**Sample:** E2P4367-ICV4367  
**Lab FileID:** 2P98021.D

## Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E2P4366\2p98021.D Vial: 31  
Acq On : 4 Dec 2020 5:45 am Operator: hennys  
Sample : icv4367-50 Inst : MS2P  
Misc : op30791,e2p4367,1000,,,1,1 Multiplr: 1.00  
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M2P4365.M (RTE Integrator)  
Title : Semi Volatile Extractables by GC/MS  
Last Update : Fri Dec 04 16:05:32 2020  
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 30% Max. Rel. Area : 200%

Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
107 I Chrysene-d12a	1.000	1.000	0.0	125	0.00	13.76
108 Benzidine	0.698	0.739	-5.9	122	0.00	11.78

(#) = Out of Range SPCC's out = 0 CCC's out = 0  
2p98015a.D M2P4365.M Fri Dec 04 16:07:33 2020 RPT1

6.7.8  
6

# Initial Calibration Verification

**Job Number:** JD18939  
**Account:** LBGNJ WSP USA  
**Project:** Ridgewood Water, 579 Prospect Street, Glen Rock, NJ

**Sample:** E2P4367-ICV4367  
**Lab FileID:** 2P98022.D

## Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E2P4366\2p98022.D Vial: 32  
Acq On : 4 Dec 2020 6:11 am Operator: hennys  
Sample : icv4367-50 Inst : MS2P  
Misc : op30791,e2p4367,1000,,,1,1 Multiplr: 1.00  
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M2P4365.M (RTE Integrator)  
Title : Semi Volatile Extractables by GC/MS  
Last Update : Fri Dec 04 16:05:32 2020  
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 30% Max. Rel. Area : 200%

Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
103 I Naphthalene-d8a	1.000	1.000	0.0	81	0.00	5.53
	True	Calc.	% Drift			
104 Hydroquinone	50.000	47.376	5.2	73	0.00	6.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0  
2p98015a.D M2P4365.M Fri Dec 04 16:07:35 2020 RPT1

6.7.9  
6



# Initial Calibration Verification

**Job Number:** JD18939  
**Account:** LBGNJ WSP USA  
**Project:** Ridgewood Water, 579 Prospect Street, Glen Rock, NJ

**Sample:** E2P4367-ICV4367  
**Lab FileID:** 2P98023.D

## Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E2P4366\2p98023.D Vial: 22  
Acq On : 4 Dec 2020 6:37 am Operator: hennys  
Sample : icv4367-50 Inst : MS2P  
Misc : op30791,e2p4367,1000,,,1,1 Multiplr: 1.00  
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M2P4365.M (RTE Integrator)  
Title : Semi Volatile Extractables by GC/MS  
Last Update : Fri Dec 04 16:05:32 2020  
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 30% Max. Rel. Area : 200%

Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
105 I Acenaphthene-d10a	1.000	1.000	0.0	76	0.00	7.48
106 1,2,4,5-Tetrachlorobenzen	0.598	0.637	-6.5	79	0.00	6.42

(#) = Out of Range SPCC's out = 0 CCC's out = 0  
2p98015a.D M2P4365.M Fri Dec 04 16:07:37 2020 RPT1

# Initial Calibration Verification

**Job Number:** JD18939  
**Account:** LBGNJ WSP USA  
**Project:** Ridgewood Water, 579 Prospect Street, Glen Rock, NJ

**Sample:** E2P4367-ICV4366  
**Lab FileID:** 2P98023A.D

## Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E2P4366\2p98023a.D Vial: 22  
Acq On : 4 Dec 2020 6:37 am Operator: hennys  
Sample : icv4366-50 Inst : MS2P  
Misc : op30791,e2p4367,1000,,,1,1 Multiplr: 1.00  
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M2P4365.M (RTE Integrator)  
Title : Semi Volatile Extractables by GC/MS  
Last Update : Fri Dec 04 16:05:32 2020  
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
101 I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	52	0.00	4.52
102	Benzaldehyde	1.158	1.246	-7.6	54	0.00	4.20
109 I	Phenanthrene-d10a	1.000	1.000	0.0	53	0.00	9.61
110	Pentachloronitrobenzene	0.045	0.053	-17.8	60	0.00	9.38
111	Atrazine	0.096	0.108	-12.5	55	-0.01	9.30

(#) = Out of Range  
2p98015a.D M2P4365.M SPCC's out = 0 CCC's out = 0  
Fri Dec 04 16:19:03 2020 RPT1

6.7.11  
6

# Continuing Calibration Summary

**Job Number:** JD18939  
**Account:** LBGNJ WSP USA  
**Project:** Ridgewood Water, 579 Prospect Street, Glen Rock, NJ

**Sample:** E2P4412-CC4365  
**Lab FileID:** 2P98982.D

## Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\jeryllr\e2p4412\2p98982.d Vial: 2  
 Acq On : 15 Jan 2021 12:45 pm Operator: hennys  
 Sample : cc4365-25 Inst : MS2P  
 Misc : op30791,e2p4412,1000,,,1,1 Multiplr: 1.00  
 MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M2P4365.M (RTE Integrator)  
 Title : Semi Volatile Extractables by GC/MS  
 Last Update : Thu Dec 31 03:26:22 2020  
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	51	0.00	4.43
2 t	1,4-Dioxane	0.662	0.926	-39.9#	72	-0.03	1.87
3 t	Pyridine	1.678	2.063	-22.9#	61	-0.02	2.23
4 t	N-Nitrosodimethylamine	0.950	1.204	-26.7#	63	-0.02	2.23
5 S	2-Fluorophenol	1.363	1.263	7.3	46#	0.00	3.50
6 t	Indene	2.420	2.360	2.5	50#	0.00	4.61
7 t	Cumene	3.584	3.563	0.6	50	0.00	3.84
8 S	Phenol-d5	1.726	1.602	7.2	46#	0.00	4.22
9 t	Phenol	1.950	1.869	4.2	48#	0.00	4.23
10	Aniline	2.063	1.857	10.0	47#	0.00	4.20
11 t	bis(2-Chloroethyl)ether	1.514	1.416	6.5	47#	0.00	4.25
12 t	2-Chlorophenol	1.395	1.311	6.0	48#	0.00	4.30
13 t	Decane	1.839	2.198	-19.5	61	0.00	4.32
14 t	1,3-Dichlorobenzene	1.518	1.449	4.5	49#	0.00	4.39
15 t	1,4-Dichlorobenzene	1.531	1.467	4.2	49#	0.00	4.44
16 t	Benzyl alcohol	0.794	0.684	13.9	44#	0.00	4.55
17 t	1,2-Dichlorobenzene	1.427	1.384	3.0	49#	0.00	4.55
18 t	Acetophenone	1.978	2.084	-5.4	53	0.00	4.73
19 t	2-Methylphenol	1.234	1.190	3.6	48#	0.00	4.65
20 t	2,2'-oxybis(1-Chloropropa	0.347	0.329	5.2	50#	0.00	4.63
21 t	3&4-Methylphenol	1.315	1.211	7.9	47#	0.00	4.76
22 t	n-Nitroso-di-n-propylamin	1.121	1.223	-9.1	56	0.00	4.73
23 t	Hexachloroethane	0.520	0.555	-6.7	56	0.00	4.79
24 I	Naphthalene-d8	1.000	1.000	0.0	52	0.00	5.42
25 S	Nitrobenzene-d5	0.449	0.510	-13.6	58	0.00	4.84
26 t	Nitrobenzene	0.464	0.531	-14.4	59	0.00	4.85
27 t	Quinoline	0.681	0.654	4.0	49#	0.00	5.76
28 t	Isophorone	0.735	0.807	-9.8	55	0.00	5.04
29 t	2-Nitrophenol	0.191	0.195	-2.1	51	0.00	5.10
30 t	2,4-Dimethylphenol	0.360	0.372	-3.3	53	0.00	5.16
31 t	Benzoic acid	0.299	0.293	2.0	49#	-0.01	5.30
32 t	bis(2-Chloroethoxy)methan	0.478	0.462	3.3	49#	0.00	5.22
33 t	2,4-Dichlorophenol	0.300	0.291	3.0	49#	0.00	5.33
34 t	2,6-Dichlorophenol	0.285	0.286	-0.4	52	0.00	5.51
35	1,3,5-Trichlorobenzene	0.350	0.359	-2.6	53	0.00	5.11
36 t	1,2,4-Trichlorobenzene	0.328	0.327	0.3	52	0.00	5.38
37	1,2,3-Trichlorobenzene	0.326	0.334	-2.5	53	0.00	5.57
38 t	Naphthalene	0.995	0.950	4.5	49#	0.00	5.43
39 t	4-Chloroaniline	0.413	0.390	5.6	49#	0.00	5.50
40 t	2,3-Dichloroaniline	0.371	0.365	1.6	51	0.00	6.43
41 t	Caprolactam	0.104	0.106	-1.9	51	-0.01	5.84

# Continuing Calibration Summary

**Job Number:** JD18939  
**Account:** LBGNJ WSP USA  
**Project:** Ridgewood Water, 579 Prospect Street, Glen Rock, NJ

**Sample:** E2P4412-CC4365  
**Lab FileID:** 2P98982.D

42 t	Hexachlorobutadiene	0.194	0.214	-10.3	57	0.00	5.55
43 t	4-Chloro-3-methylphenol	0.338	0.347	-2.7	52	-0.01	6.01
44 t	2-Methylnaphthalene	0.532	0.514	3.4	50#	0.00	6.11
45 t	1-Methylnaphthalene	0.609	0.608	0.2	52	0.00	6.22
46 t	Dimethylnaphthalene	0.589	0.596	-1.2	51	-0.01	6.83
47 I	Acenaphthene-d10	1.000	1.000	0.0	54	0.00	7.34
48 t	Hexachlorocyclopentadiene	0.381	0.174	54.3#	25#	0.00	6.28
49 t	2,4,6-Trichlorophenol	0.401	0.396	1.2	51	0.00	6.45
50 t	2,4,5-Trichlorophenol	0.422	0.421	0.2	52	0.00	6.51
51 S	2-Fluorobiphenyl	1.316	1.312	0.3	53	0.00	6.53
52 t	2-Chloronaphthalene	1.186	1.167	1.6	51	0.00	6.65
53 t	Biphenyl	1.558	1.526	2.1	52	0.00	6.64
54 t	2-Nitroaniline	0.480	0.609	-26.9#	65	0.00	6.80
55 t	Dimethylphthalate	1.383	1.432	-3.5	54	0.00	7.04
56 t	Acenaphthylene	1.835	1.771	3.5	51	0.00	7.16
57 t	2,6-Dinitrotoluene	0.285	0.290	-1.8	52	0.00	7.12
58 t	3-Nitroaniline	0.322	0.320	0.6	50#	0.00	7.34
59 t	Acenaphthene	1.214	1.200	1.2	53	0.00	7.39
		----- True	Calc.	% Drift	-----		
60 t	2,4-Dinitrophenol	50.000	44.357	11.3	46	0.02	7.50
		----- AvgRF	CCRF	% Dev	-----		
61 t	4-Nitrophenol	0.214	0.240	-12.1	58	0.00	7.68
62 t	Dibenzofuran	1.629	1.599	1.8	52	0.00	7.62
63 t	2,4-Dinitrotoluene	0.387	0.421	-8.8	55	0.01	7.67
64	2,3,4,6-Tetrachlorophenol	0.326	0.306	6.1	48#	0.00	7.83
65 t	Diethylphthalate	1.414	1.520	-7.5	56	0.00	8.01
66 t	Fluorene	1.309	1.297	0.9	52	0.00	8.09
67 t	4-Chlorophenyl-phenylethe	0.645	0.639	0.9	53	0.00	8.12
68 t	4-Nitroaniline	0.303	0.267	11.9	43#	0.00	8.18
69 I	Phenanthrene-d10	1.000	1.000	0.0	55	0.00	9.46
70 t	4,6-Dinitro-2-methylpheno	0.140	0.128	8.6	49#	0.00	8.25
71 t	n-Nitrosodiphenylamine	0.517	0.494	4.4	51	-0.01	8.30
72 t	1,2-Diphenylhydrazine	0.914	1.039	-13.7	61	0.00	8.34
73 S	2,4,6-Tribromophenol	0.145	0.138	4.8	49#	0.00	8.45
74 t	4-Bromophenyl-phenylether	0.239	0.230	3.8	53	-0.01	8.82
75 t	Hexachlorobenzene	0.277	0.268	3.2	53	0.00	8.91
		----- True	Calc.	% Drift	-----		
76 t	Pentachlorophenol	50.000	42.294	15.4	44	0.00	9.24
		----- AvgRF	CCRF	% Dev	-----		
77 t	Phenanthrene	1.063	1.025	3.6	53	0.00	9.49
78 t	Anthracene	1.065	1.030	3.3	52	0.00	9.57
79 t	Carbazole	1.001	0.931	7.0	51	0.00	9.86
80 t	Di-n-butylphthalate	1.334	1.421	-6.5	56	0.00	10.50
81 t	Fluoranthene	1.167	1.170	-0.3	54	0.00	11.34
82 t	Octadecane	0.421	0.670	-59.1#	85	0.00	9.46
83 I	Chrysene-d12	1.000	1.000	0.0	55	0.00	13.62
84 t	Pyrene	1.187	1.172	1.3	54	0.00	11.68
85 S	Terphenyl-d14	0.931	0.936	-0.5	54	0.00	12.01
86 t	Butylbenzylphthalate	0.583	0.640	-9.8	57	0.00	12.85
87 t	Benzo[a]anthracene	1.163	1.176	-1.1	55	0.00	13.60
88 t	3,3'-Dichlorobenzidine	0.424	0.429	-1.2	53	0.00	13.62
89 t	Chrysene	1.113	1.083	2.7	54	0.00	13.66
90 t	bis(2-Ethylhexyl)phthalat	0.775	0.895	-15.5	58	0.00	13.83

6.7.12  
6

# Continuing Calibration Summary

**Job Number:** JD18939  
**Account:** LBGNJ WSP USA  
**Project:** Ridgewood Water, 579 Prospect Street, Glen Rock, NJ

**Sample:** E2P4412-CC4365  
**Lab FileID:** 2P98982.D

91	I	Perylene-d12	1.000	1.000	0.0	50	0.00	15.73
92	t	Di-n-octylphthalate	1.399	1.702	-21.7#	58	0.00	14.81
93	t	Benzo[b]fluoranthene	1.195	1.319	-10.4	53	0.00	15.22
94	t	Benzo[k]fluoranthene	1.103	1.218	-10.4	55	0.00	15.25
95	t	Benzo[a]pyrene	1.038	1.154	-11.2	54	0.00	15.65
96	t	Indeno[1,2,3-cd]pyrene	1.113	1.224	-10.0	53	0.00	17.09
97	t	Dibenz(a,h)acridine	1.032	1.126	-9.1	52	0.00	16.81
98	t	Dibenz[a,h]anthracene	1.156	1.265	-9.4	53	0.00	17.12
----- True			Calc.	% Drift	-----			
99	t	7,12-Dimethylbenz(a)anthr	25.000	15.653	37.4#	31	-0.01	15.20
----- AvgRF			CCRF	% Dev	-----			
100	t	Benzo[g,h,i]perylene	1.096	1.188	-8.4	52	0.01	17.44

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 (#) = Out of Range                      SPCC's out = 0    CCC's out = 0  
 2p98615.d    M2P4365.M                      Mon Jan 18 03:02:00 2021

6.7.12

6

# Continuing Calibration Summary

**Job Number:** JD18939  
**Account:** LBGNJ WSP USA  
**Project:** Ridgewood Water, 579 Prospect Street, Glen Rock, NJ

**Sample:** E2P4412-CC4366  
**Lab FileID:** 2P98983.D

## Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\jeryllr\e2p4412\2p98983.d Vial: 3  
Acq On : 15 Jan 2021 1:11 pm Operator: hennys  
Sample : cc4366-25 Inst : MS2P  
Misc : op30791,e2p4412,1000,,,1,1 Multiplr: 1.00  
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M2P4365.M (RTE Integrator)  
Title : Semi Volatile Extractables by GC/MS  
Last Update : Thu Dec 31 03:26:22 2020  
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
101 I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	57	0.00	4.43
102	Benzaldehyde	1.158	1.039	10.3	50#	0.00	4.12
109 I	Phenanthrene-d10a	1.000	1.000	0.0	59	0.00	9.46
110	Pentachloronitrobenzene	0.045	0.049#	-8.9	66	0.00	9.24
111	Atrazine	0.096	0.095	1.0	57	0.00	9.15

(#) = Out of Range  
2p98615.d M2P4365.M SPCC's out = 0 CCC's out = 0  
Mon Jan 18 03:02:05 2021

# Continuing Calibration Summary

**Job Number:** JD18939  
**Account:** LBGNJ WSP USA  
**Project:** Ridgewood Water, 579 Prospect Street, Glen Rock, NJ

**Sample:** E2P4412-CC4367  
**Lab FileID:** 2P98984.D

## Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\jeryllr\e2p4412\2p98984.d Vial: 4  
 Acq On : 15 Jan 2021 1:37 pm Operator: hennys  
 Sample : cc4367-25 Inst : MS2P  
 Misc : op30791,e2p4412,1000,,,1,1 Multiplr: 1.00  
 MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M2P4365.M (RTE Integrator)  
 Title : Semi Volatile Extractables by GC/MS  
 Last Update : Thu Dec 31 03:26:22 2020  
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
103 I Naphthalene-d8a	1.000	1.000	0.0	80	0.00	5.42
	----- True	Calc.	% Drift	-----		
104 Hydroquinone	25.000	22.458	10.2	71	0.00	5.87
	----- AvgRF	CCRF	% Dev	-----		
105 I Acenaphthene-d10a	1.000	1.000	0.0	82	0.00	7.34
106 1,2,4,5-Tetrachlorobenzen	0.598	0.594	0.7	82	0.00	6.30
107 I Chrysene-d12a	1.000	1.000	0.0	85	0.00	13.62
108 Benzidine	0.698	0.575	17.6	67	0.00	11.62
117 I Phenanthrene-d10b	1.000	1.000	0.0	83	0.00	9.46
118 s 1-Chlorooctadecane	0.406	0.488	-20.2#	95	-0.06	11.33
119 s o-terphenyl	0.551	0.556	-0.9	82	-0.06	10.10

(#) = Out of Range SPCC's out = 0 CCC's out = 0  
 2p98615.d M2P4365.M Mon Jan 18 03:02:08 2021

# Run Sequence Report

**Job Number:** JD18939

**Account:** LBGNJ WSP USA

**Project:** Ridgewood Water, 579 Prospect Street, Glen Rock, NJ

<b>Run ID:</b> E2P4365	<b>Method:</b> SW846 8270E	<b>Instrument ID:</b> GCMS2P
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Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E2P4365-DFTPP	2P97989.D	12/03/20 16:26	n/a	DFTPP Tune
E2P4365-IC4365	2P97990.D	12/03/20 16:46	n/a	Initial cal 1
E2P4365-IC4365	2P97991.D	12/03/20 17:14	n/a	Initial cal 2
E2P4365-IC4365	2P97992.D	12/03/20 17:40	n/a	Initial cal 5
E2P4365-IC4365	2P97993.D	12/03/20 18:07	n/a	Initial cal 10
E2P4365-IC4365	2P97994.D	12/03/20 18:35	n/a	Initial cal 25
E2P4365-ICC4365	2P97995.D	12/03/20 19:01	n/a	Initial cal 50
E2P4365-IC4365	2P97996.D	12/03/20 19:27	n/a	Initial cal 80
E2P4365-IC4365	2P97997.D	12/03/20 19:54	n/a	Initial cal 100
E2P4365-ICV4365	2P97998.D	12/03/20 20:20	n/a	Initial cal verification 50
E2P4365-ICV4365	2P97999.D	12/03/20 20:46	n/a	Initial cal verification 50
E2P4365-ICV4365	2P98000.D	12/03/20 21:12	n/a	Initial cal verification 50
E2P4365-ICV4365	2P98001.D	12/03/20 21:38	n/a	Initial cal verification 50

6.8.1  
6



# Run Sequence Report

**Job Number:** JD18939

**Account:** LBGNJ WSP USA

**Project:** Ridgewood Water, 579 Prospect Street, Glen Rock, NJ

<b>Run ID:</b> E2P4366	<b>Method:</b> SW846 8270E	<b>Instrument ID:</b> GCMS2P
------------------------	----------------------------	------------------------------

<b>Lab Sample ID</b>	<b>Lab File ID</b>	<b>Date/Time Analyzed</b>	<b>Prep QC Batch</b>	<b>Client Sample ID</b>
E2P4366-DFTPP	2P98002.D	12/03/20 22:01	n/a	DFTPP Tune
E2P4366-IC4366	2P98003.D	12/03/20 22:13	n/a	Initial cal 100
E2P4366-IC4366	2P98004.D	12/03/20 22:39	n/a	Initial cal 80
E2P4366-ICC4366	2P98005.D	12/03/20 23:05	n/a	Initial cal 50
E2P4366-IC4366	2P98006.D	12/03/20 23:31	n/a	Initial cal 25
E2P4366-IC4366	2P98007.D	12/03/20 23:57	n/a	Initial cal 10
E2P4366-IC4366	2P98008.D	12/04/20 00:23	n/a	Initial cal 5
E2P4366-IC4366	2P98009.D	12/04/20 00:50	n/a	Initial cal 2
E2P4366-IC4366	2P98010.D	12/04/20 01:16	n/a	Initial cal 1

6.8.2

6

# Run Sequence Report

**Job Number:** JD18939

**Account:** LBGNJ WSP USA

**Project:** Ridgewood Water, 579 Prospect Street, Glen Rock, NJ

<b>Run ID:</b> E2P4367	<b>Method:</b> SW846 8270E	<b>Instrument ID:</b> GCMS2P
------------------------	----------------------------	------------------------------

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E2P4367-DFTPP	2P98012.D	12/04/20 02:05	n/a	DFTPP Tune
E2P4367-IC4367	2P98013.D	12/04/20 02:16	n/a	Initial cal 100
E2P4367-IC4367	2P98014.D	12/04/20 02:42	n/a	Initial cal 80
E2P4367-ICC4367	2P98015.D	12/04/20 03:08	n/a	Initial cal 50
E2P4367-IC4367	2P98016.D	12/04/20 03:34	n/a	Initial cal 25
E2P4367-IC4367	2P98017.D	12/04/20 04:00	n/a	Initial cal 10
E2P4367-IC4367	2P98018.D	12/04/20 04:26	n/a	Initial cal 5
E2P4367-IC4367	2P98019.D	12/04/20 04:53	n/a	Initial cal 2
E2P4367-IC4367	2P98020.D	12/04/20 05:19	n/a	Initial cal 1
E2P4367-ICV4367	2P98021.D	12/04/20 05:45	n/a	Initial cal verification 50
E2P4367-ICV4367	2P98022.D	12/04/20 06:11	n/a	Initial cal verification 50
E2P4367-ICV4366	2P98023A.D	12/04/20 06:37	n/a	Initial cal verification 50
E2P4367-ICV4367	2P98023.D	12/04/20 06:37	n/a	Initial cal verification 50

6.8.3

6

# Run Sequence Report

**Job Number:** JD18939  
**Account:** LBGNJ WSP USA  
**Project:** Ridgewood Water, 579 Prospect Street, Glen Rock, NJ

<b>Run ID:</b> E2P4412	<b>Method:</b> SW846 8270E	<b>Instrument ID:</b> GCMS2P
------------------------	----------------------------	------------------------------

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E2P4412-DFTPP	2P98981.D	01/15/21 12:35	n/a	DFTPP Tune
E2P4412-CC4365	2P98982.D	01/15/21 12:45	n/a	Continuing cal 25
E2P4412-CC4366	2P98983.D	01/15/21 13:11	n/a	Continuing cal 25
E2P4412-CC4367	2P98984.D	01/15/21 13:37	n/a	Continuing cal 25
OP31540-MB1	2P98985.D	01/15/21 14:46	OP31540	Method Blank
OP31540-BS1	2P98987.D	01/15/21 15:41	OP31540	Blank Spike
OP31540-BSD	2P98988.D	01/15/21 16:33	OP31540	Blank Spike Duplicate
ZZZZZZ	2P98989.D	01/15/21 16:59	OP31540	(unrelated sample)
ZZZZZZ	2P98990.D	01/15/21 17:24	OP31540	(unrelated sample)
ZZZZZZ	2P98991.D	01/15/21 17:50	OP31540	(unrelated sample)
ZZZZZZ	2P98992.D	01/15/21 18:16	OP31540	(unrelated sample)
ZZZZZZ	2P98993.D	01/15/21 18:42	OP31540	(unrelated sample)
ZZZZZZ	2P98994.D	01/15/21 19:08	OP31540	(unrelated sample)
ZZZZZZ	2P98995.D	01/15/21 19:34	OP31540	(unrelated sample)
JD18939-1	2P98996.D	01/15/21 20:00	OP31540	S-10R
ZZZZZZ	2P98997.D	01/15/21 20:26	OP31540	(unrelated sample)
ZZZZZZ	2P98998.D	01/15/21 20:52	OP31540	(unrelated sample)
ZZZZZZ	2P98999.D	01/15/21 21:18	OP31540	(unrelated sample)
JD18939-2	2P99000.D	01/15/21 21:44	OP31540	S-15R
JD18939-3	2P99001.D	01/15/21 22:09	OP31540	S-18R
OP31540-MS	2P99002.D	01/15/21 22:35	OP31540	Matrix Spike
OP31540-MSD	2P99003.D	01/15/21 23:01	OP31540	Matrix Spike Duplicate
JD18961-8	2P99004.D	01/15/21 23:27	OP31540	(used for QC only; not part of job JD18939)
ZZZZZZ	2P99005.D	01/15/21 23:53	OP31540	(unrelated sample)

6.8.4  
6

MS Semi-volatiles

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Raw Data

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7

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\e2p4412\  
 Data File : 2p98996.d  
 Acq On : 15 Jan 2021 8:00 pm  
 Operator : hennys  
 Sample : jd18939-1 Inst : MS2P  
 Misc : op31540,e2p4412,30.9,,,1,1  
 ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Results File: M2P4365.RES  
 Quant Time: Jan 18 03:52:18 2021  
 Quant Title : Semi Volatile Extractables by GC/MS  
 QLast Update : Mon Jan 18 03:08:11 2021  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	4.434	152	494066	40.00	ppm	0.00	
24) Naphthalene-d8	5.419	136	1732980	40.00	ppm	0.00	
47) Acenaphthene-d10	7.344	164	976985	40.00	ppm	0.00	
69) Phenanthrene-d10	9.462	188	1583724	40.00	ppm	0.00	
83) Chrysene-d12	13.623	240	1425848	40.00	ppm	0.00	
91) Perylene-d12	15.736	264	1500111	40.00	ppm	0.00	
101) 1,4-Dichlorobenzene-d4a	4.434	152	494066	40.00	ppm	0.00	
103) Naphthalene-d8a	5.419	136	1732980	40.00	ppm	0.00	
105) Acenaphthene-d10a	7.344	164	976985	40.00	ppm	0.00	
107) Chrysene-d12a	13.623	240	1425848	40.00	ppm	0.00	
109) Phenanthrene-d10a	9.462	188	1583724	40.00	ppm	0.00	
112) 1,4-Dichlorobenzene-d4b	4.434	152	494066	40.00	ppm	0.00	
115) Acenaphthene-d10b	7.344	164	976985	40.00	ppm	0.00	
117) Phenanthrene-d10b	9.462	188	1583724	40.00	ppm	0.00	
120) Chrysene-d12b	13.623	240	1425848	40.00	ppm	0.00	
System Monitoring Compounds							
5) 2-Fluorophenol	3.520	112	435867	25.89	ppm	0.02	
Spiked Amount	50.000	Range	11 - 58	Recovery	=	51.78%	
8) Phenol-d5	4.226	99	535604	25.12	ppm	0.00	
Spiked Amount	50.000	Range	10 - 59	Recovery	=	50.24%	
25) Nitrobenzene-d5	4.841	82	671342	34.51	ppm	0.00	
Spiked Amount	50.000	Range	19 - 61	Recovery	=	69.02%#	
51) 2-Fluorobiphenyl	6.526	172	935751	29.12	ppm	0.00	
Spiked Amount	50.000	Range	21 - 58	Recovery	=	58.24%#	
73) 2,4,6-Tribromophenol	8.451	330	184125	32.15	ppm	0.00	
Spiked Amount	50.000	Range	12 - 68	Recovery	=	64.30%	
85) Terphenyl-d14	12.013	244	1250491	37.66	ppm	0.00	
Spiked Amount	50.000	Range	16 - 65	Recovery	=	75.32%#	
118) 1-Chlorooctadecane	0.000	57	0d	0.00	ppm		
Spiked Amount	50.000	Range	15 - 64	Recovery	=	0.00%#	
119) o-terphenyl	0.000	230	0	0.00	ppm		
Spiked Amount	50.000	Range	15 - 64	Recovery	=	0.00%#	
Target Compounds							
38) Naphthalene	5.435	128	20460	0.47	ppm	99	Qvalue
44) 2-Methylnaphthalene	6.114	141	4307	0.19	ppm	90	
56) Acenaphthylene	7.157	152	56256	1.26	ppm	98	
59) Acenaphthene	7.387	153	5583	0.19	ppm	91	
62) Dibenzofuran	7.628	168	5847	0.15	ppm	91	
66) Fluorene	8.098	166	11160	0.35	ppm	96	
77) Phenanthrene	9.494	178	148089	3.52	ppm	99	
78) Anthracene	9.575	178	51864	1.23	ppm	99	
79) Carbazole	9.874	167	11263	0.28	ppm	96	
81) Fluoranthene	11.340	202	415366	8.99	ppm	99	
84) Pyrene	11.682	202	434333	10.27	ppm	99	
87) Benzo[a]anthracene	13.607	228	243560	5.88	ppm	99	
89) Chrysene	13.656	228	239895	6.04	ppm	96	
93) Benzo[b]fluoranthene	15.217	252	314425	7.02	ppm	98	
94) Benzo[k]fluoranthene	15.249	252	102775	2.49	ppm	94	
95) Benzo[a]pyrene	15.651	252	223256	5.74	ppm	98	
96) Indeno[1,2,3-cd]pyrene	17.095	276	152310	3.65	ppm	96	
98) Dibenz[a,h]anthracene	17.116	278	41167	0.95	ppm	99	
100) Benzo[g,h,i]perylene	17.437	276	144831	3.52	ppm	98	

7.1.1  
7

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\e2p4412\  
Data File : 2p98996.d  
Acq On : 15 Jan 2021 8:00 pm  
Operator : hennys  
Sample : jd18939-1 Inst : MS2P  
Misc : op31540,e2p4412,30.9,,,1,1  
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
Quant Results File: M2P4365.RES  
Quant Time: Jan 18 03:52:18 2021  
Quant Title : Semi Volatile Extractables by GC/MS  
QLast Update : Mon Jan 18 03:08:11 2021  
Response via : Initial Calibration

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Compound R.T. QIon Response Conc Units Dev(Min)  
-----  
(#) = qualifier out of range (m) = manual integration (+) = signals summed

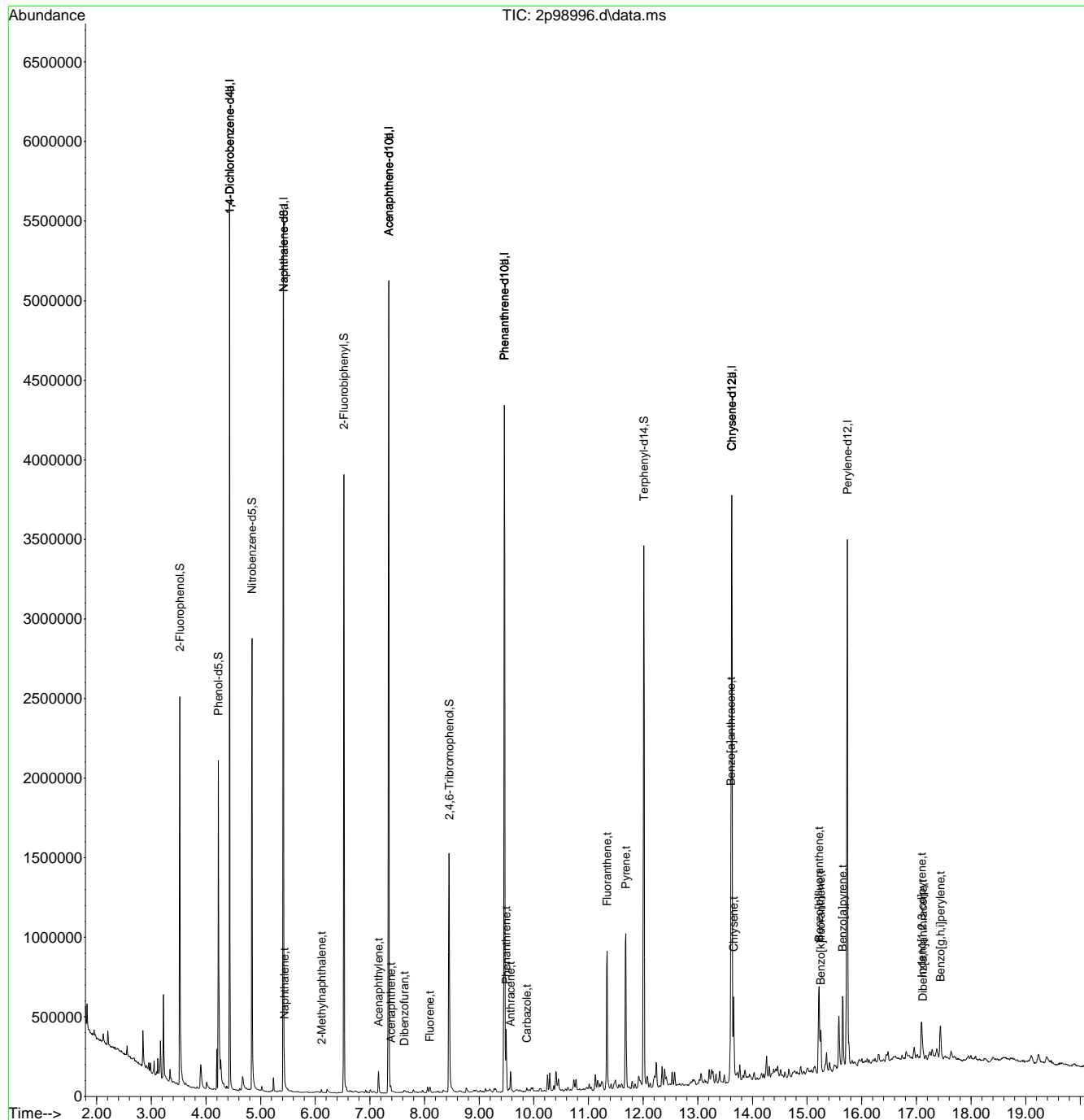
7.1.1  
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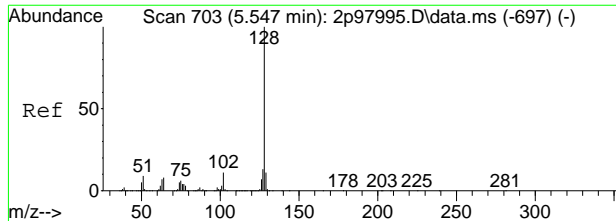
Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\2p4412\  
 Data File : 2p98996.d  
 Acq On : 15 Jan 2021 8:00 pm  
 Operator : hennys  
 Sample : jd18939-1  
 Misc : op31540,e2p4412,30.9,,,1,1  
 ALS Vial : 16 Sample Multiplier: 1

Inst : MS2P

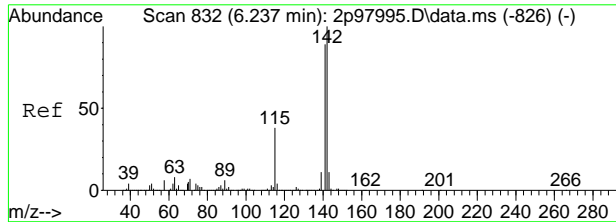
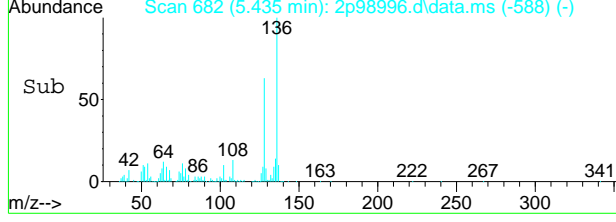
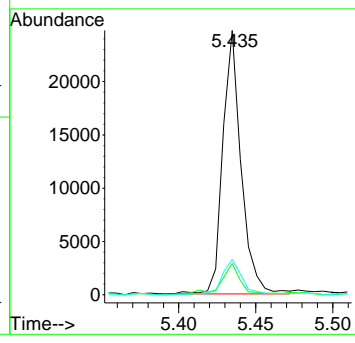
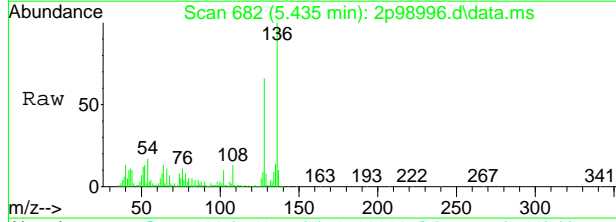
Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Results File: M2P4365.RES  
 Quant Time: Jan 18 03:52:18 2021  
 Quant Title : Semi Volatile Extractables by GC/MS  
 QLast Update : Mon Jan 18 03:08:11 2021  
 Response via : Initial Calibration





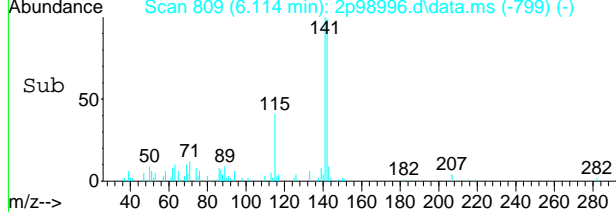
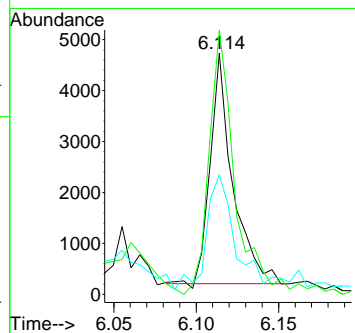
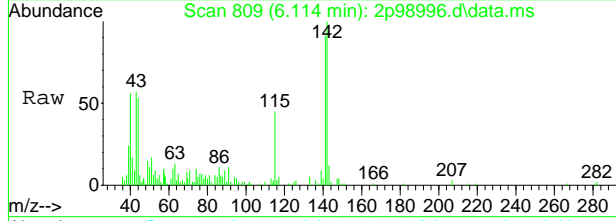
#38  
 Naphthalene  
 Concen: 0.47 ppm  
 RT: 5.435 min Scan# 682  
 Delta R.T. 0.000 min  
 Lab File: 2p98996.d  
 Acq: 15 Jan 2021 8:00 pm

Tgt Ion	Resp	Lower	Upper
128	20460		
128	100		
129	11.6	0.0	41.2
127	13.3	0.0	43.7



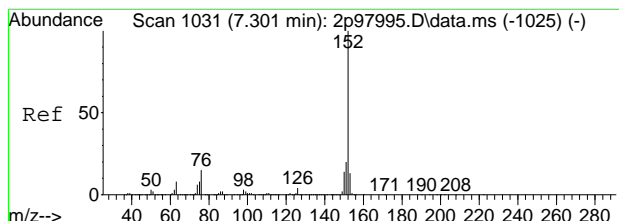
#44  
 2-Methylnaphthalene  
 Concen: 0.19 ppm  
 RT: 6.114 min Scan# 809  
 Delta R.T. 0.006 min  
 Lab File: 2p98996.d  
 Acq: 15 Jan 2021 8:00 pm

Tgt Ion	Resp	Lower	Upper
141	4307		
141	100		
142	111.7	88.6	148.6
115	45.0	27.1	87.1



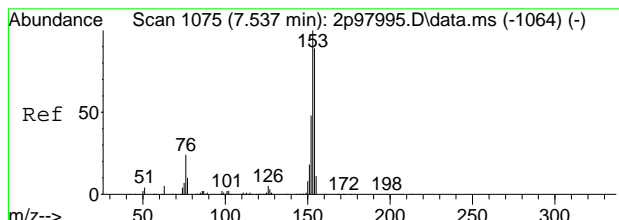
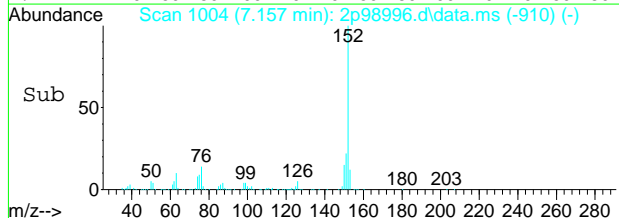
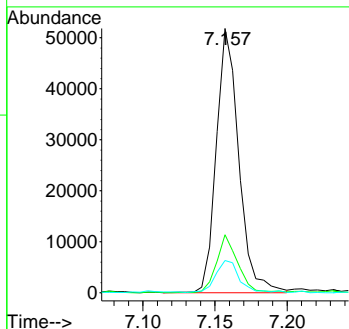
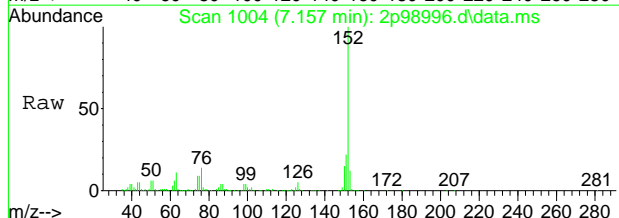
7.1.1  
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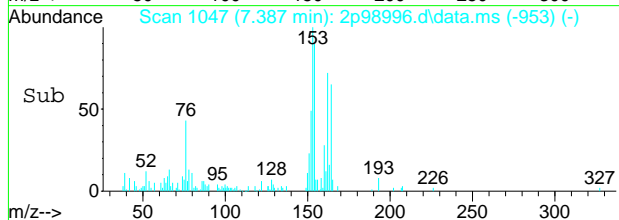
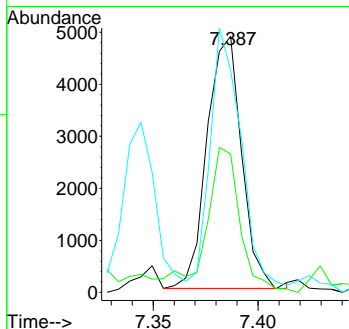
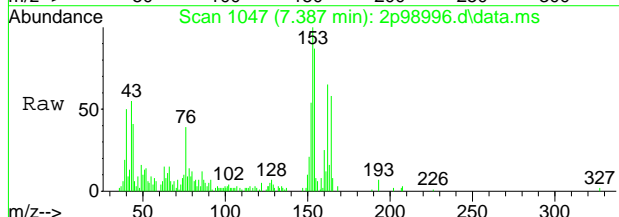
#56  
 Acenaphthylene  
 Concen: 1.26 ppm  
 RT: 7.157 min Scan# 1004  
 Delta R.T. 0.000 min  
 Lab File: 2p98996.d  
 Acq: 15 Jan 2021 8:00 pm

Tgt Ion	Resp	Lower	Upper
152	56256		
151	21.8	0.0	50.7
153	12.0	0.0	42.9

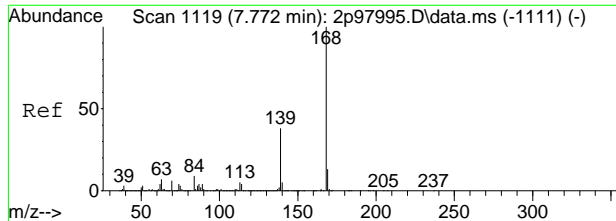


#59  
 Acenaphthene  
 Concen: 0.19 ppm  
 RT: 7.387 min Scan# 1047  
 Delta R.T. 0.000 min  
 Lab File: 2p98996.d  
 Acq: 15 Jan 2021 8:00 pm

Tgt Ion	Resp	Lower	Upper
153	5583		
152	52.1	18.0	78.0
154	80.8	60.1	120.1

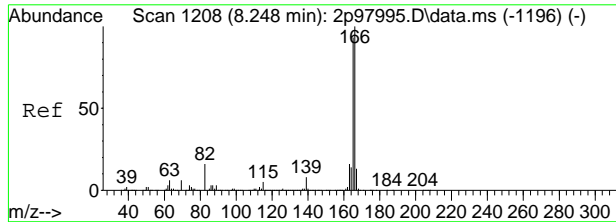
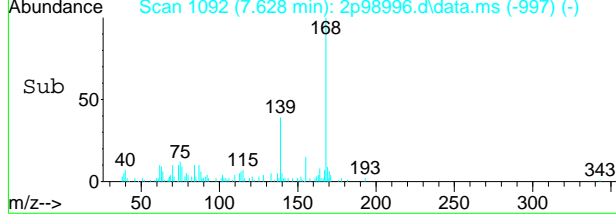
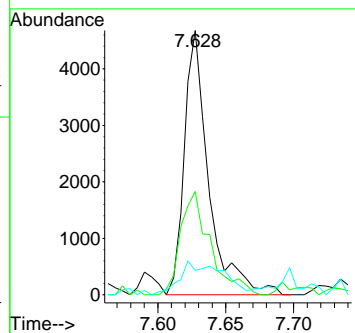
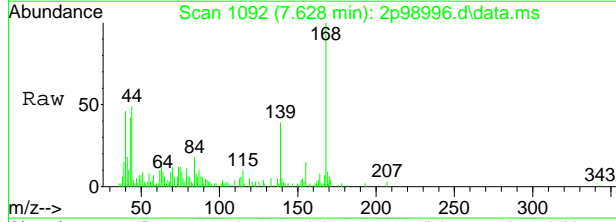


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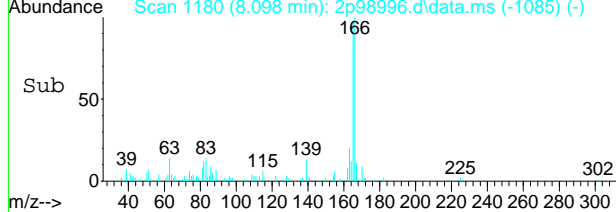
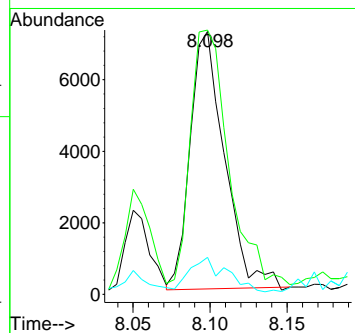
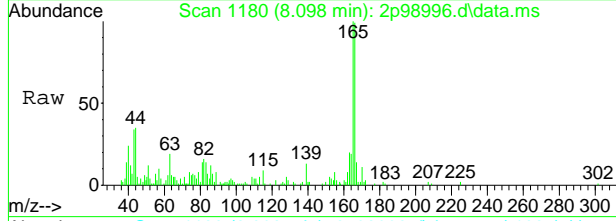
#62  
 Dibenzofuran  
 Concen: 0.15 ppm  
 RT: 7.628 min Scan# 1092  
 Delta R.T. 0.006 min  
 Lab File: 2p98996.d  
 Acq: 15 Jan 2021 8:00 pm

Tgt Ion	Ratio	Lower	Upper
168	100		
139	37.1	10.6	70.6
169	5.2	0.0	42.9

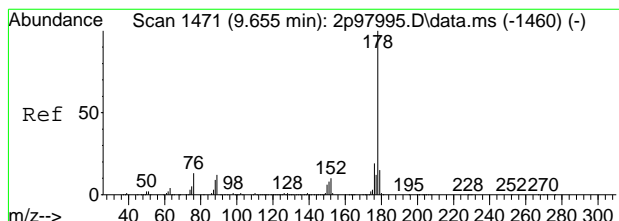


#66  
 Fluorene  
 Concen: 0.35 ppm  
 RT: 8.098 min Scan# 1180  
 Delta R.T. 0.006 min  
 Lab File: 2p98996.d  
 Acq: 15 Jan 2021 8:00 pm

Tgt Ion	Ratio	Lower	Upper
166	100		
165	99.7	65.3	125.3
167	11.9	0.0	43.3

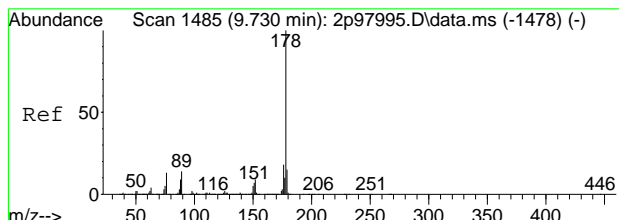
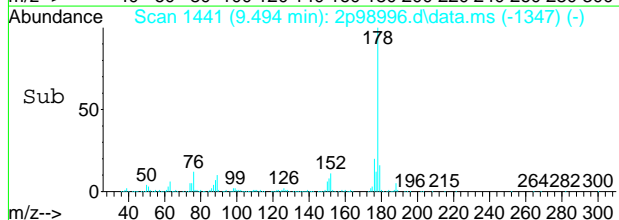
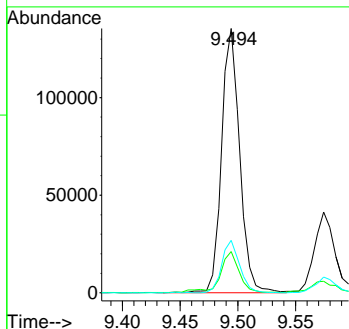
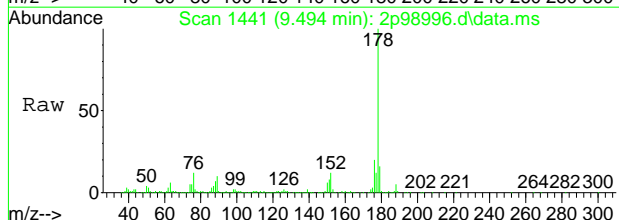


7.11  
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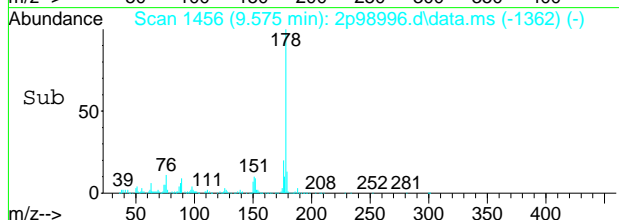
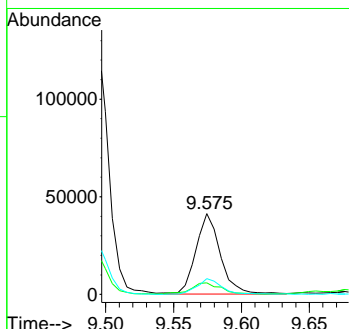
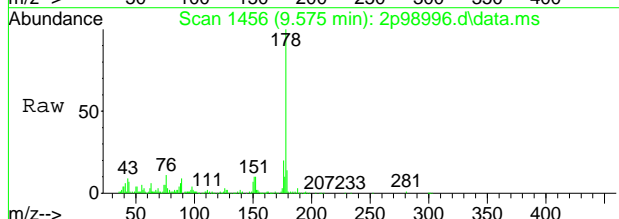
#77  
 Phenanthrene  
 Concen: 3.52 ppm  
 RT: 9.494 min Scan# 1441  
 Delta R.T. 0.000 min  
 Lab File: 2p98996.d  
 Acq: 15 Jan 2021 8:00 pm

Tgt Ion	Ratio	Lower	Upper
178	100		
179	15.5	0.0	44.9
176	19.9	0.0	49.2

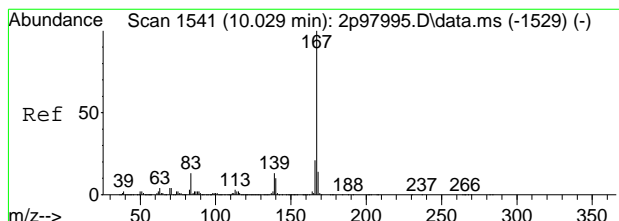


#78  
 Anthracene  
 Concen: 1.23 ppm  
 RT: 9.575 min Scan# 1456  
 Delta R.T. 0.000 min  
 Lab File: 2p98996.d  
 Acq: 15 Jan 2021 8:00 pm

Tgt Ion	Ratio	Lower	Upper
178	100		
179	13.8	0.0	44.8
176	19.4	0.0	49.1

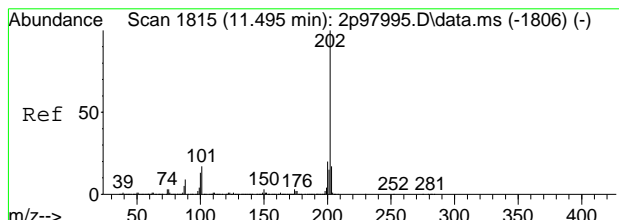
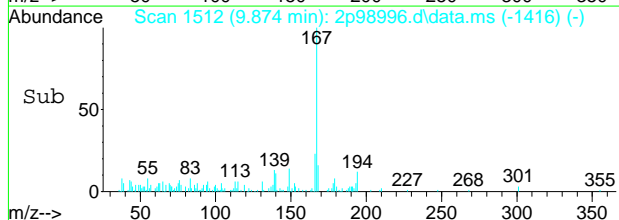
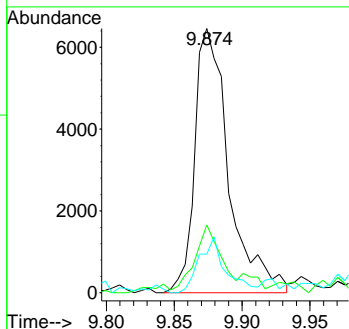
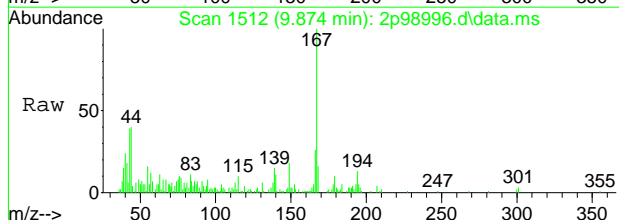


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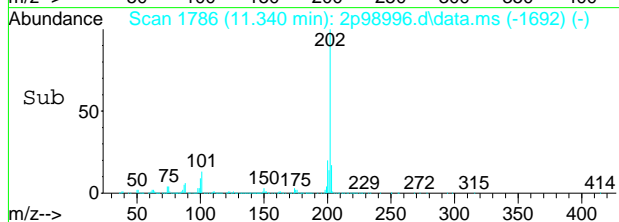
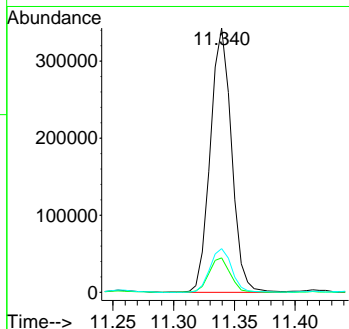
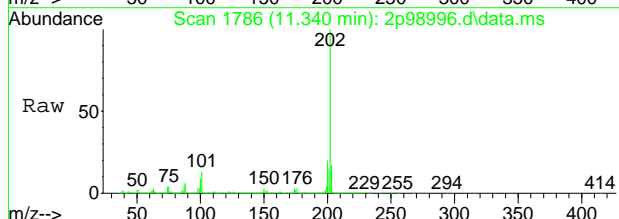
#79  
 Carbazole  
 Concen: 0.28 ppm  
 RT: 9.874 min Scan# 1512  
 Delta R.T. 0.011 min  
 Lab File: 2p98996.d  
 Acq: 15 Jan 2021 8:00 pm

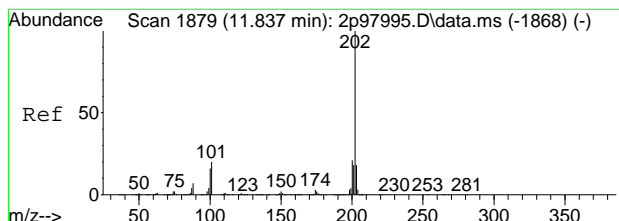
Tgt Ion	Resp	Lower	Upper
167	11263		
166	22.7	0.0	51.3
139	12.5	0.0	44.4



#81  
 Fluoranthene  
 Concen: 8.99 ppm  
 RT: 11.340 min Scan# 1786  
 Delta R.T. 0.000 min  
 Lab File: 2p98996.d  
 Acq: 15 Jan 2021 8:00 pm

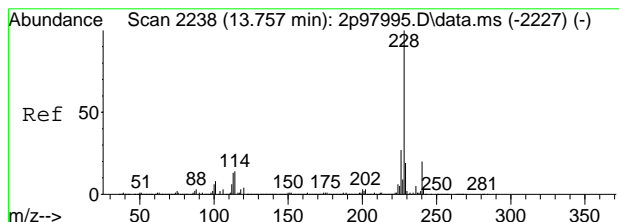
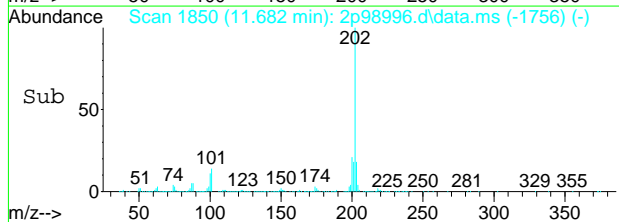
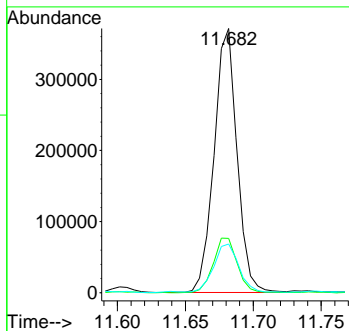
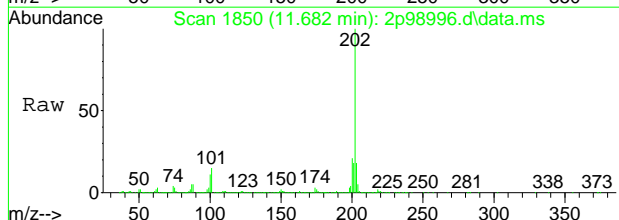
Tgt Ion	Resp	Lower	Upper
202	415366		
202	100		
101	13.0	0.0	43.7
203	16.6	0.0	46.5





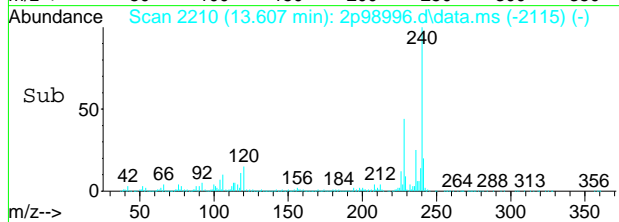
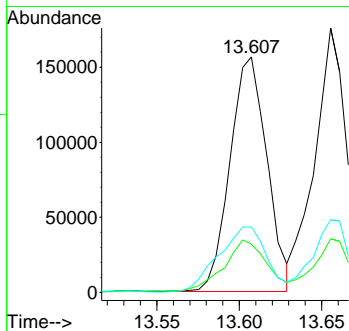
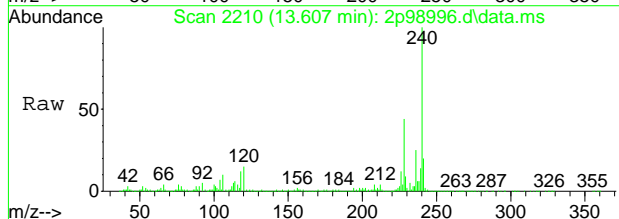
#84  
 Pyrene  
 Concen: 10.27 ppm  
 RT: 11.682 min Scan# 1850  
 Delta R.T. 0.000 min  
 Lab File: 2p98996.d  
 Acq: 15 Jan 2021 8:00 pm

Tgt Ion	Resp	Lower	Upper
202	434333		
200	20.5	0.0	50.9
203	18.2	0.0	47.9

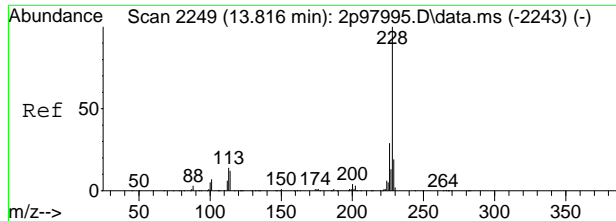


#87  
 Benzo[a]anthracene  
 Concen: 5.88 ppm  
 RT: 13.607 min Scan# 2210  
 Delta R.T. 0.006 min  
 Lab File: 2p98996.d  
 Acq: 15 Jan 2021 8:00 pm

Tgt Ion	Resp	Lower	Upper
228	243560		
229	19.4	0.0	50.0
226	27.2	0.0	56.8

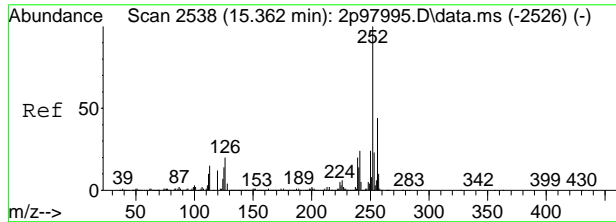
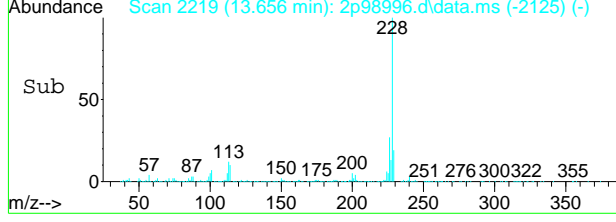
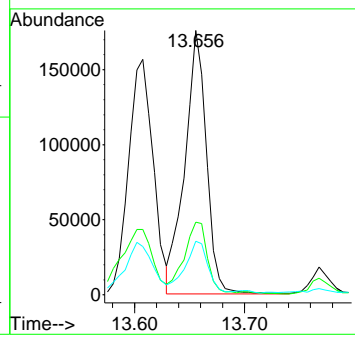
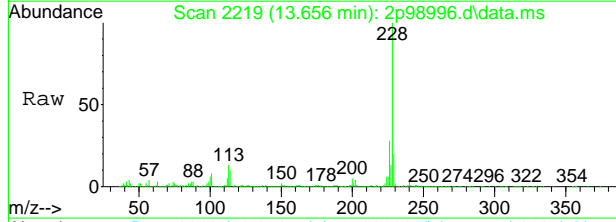


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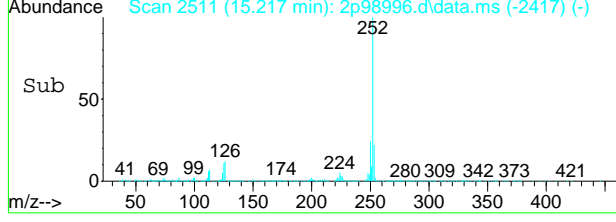
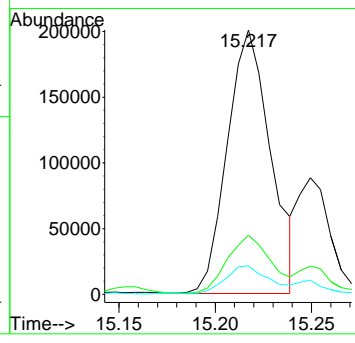
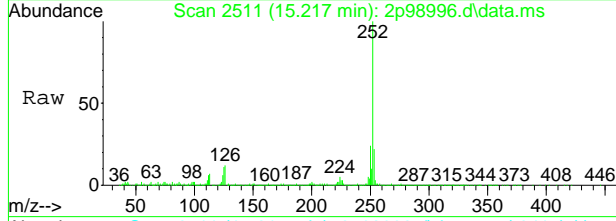
#89  
 Chrysene  
 Concen: 6.04 ppm  
 RT: 13.656 min Scan# 2219  
 Delta R.T. 0.000 min  
 Lab File: 2p98996.d  
 Acq: 15 Jan 2021 8:00 pm

Tgt Ion	Ratio	Lower	Upper
228	100		
226	26.9	0.3	60.3
229	19.0	0.0	49.6



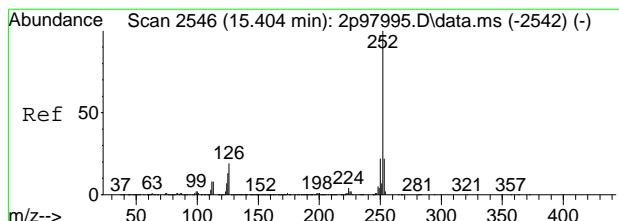
#93  
 Benzo[b]fluoranthene  
 Concen: 7.02 ppm  
 RT: 15.217 min Scan# 2511  
 Delta R.T. 0.000 min  
 Lab File: 2p98996.d  
 Acq: 15 Jan 2021 8:00 pm

Tgt Ion	Ratio	Lower	Upper
252	100		
253	22.1	0.0	51.4
125	10.5	0.0	39.2



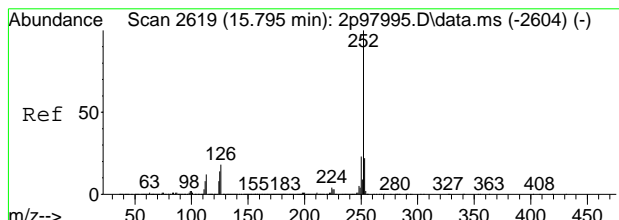
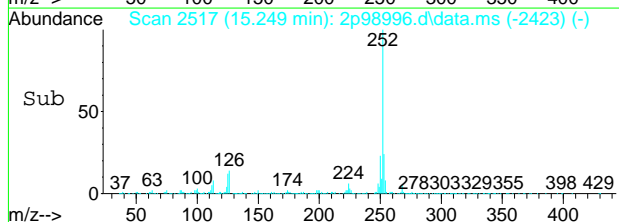
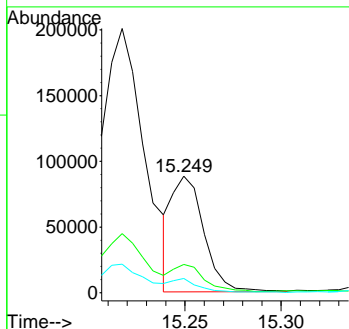
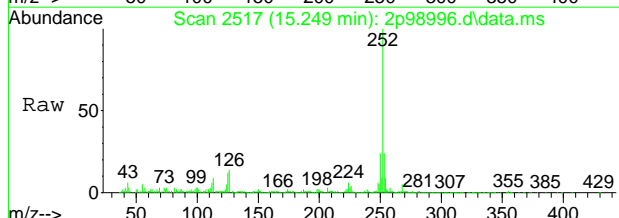
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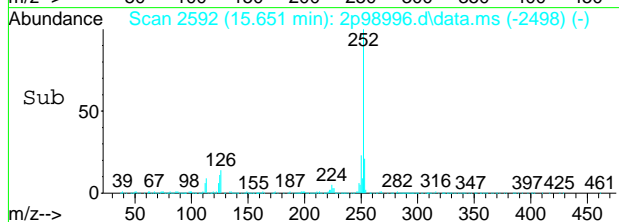
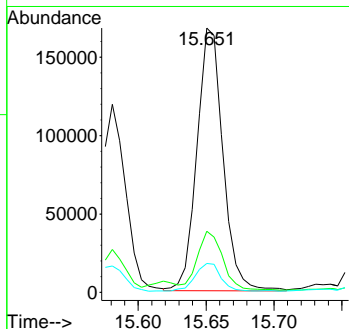
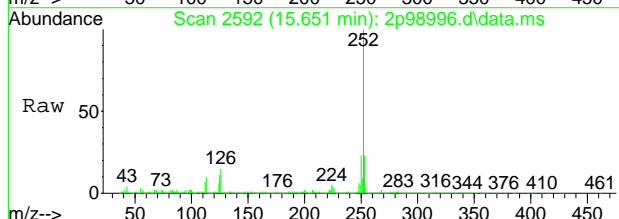
#94  
 Benzo[k]fluoranthene  
 Concen: 2.49 ppm  
 RT: 15.249 min Scan# 2517  
 Delta R.T. 0.000 min  
 Lab File: 2p98996.d  
 Acq: 15 Jan 2021 8:00 pm

Tgt Ion	Ratio	Lower	Upper
252	100		
253	24.5	0.0	51.6
125	12.5	0.0	40.9

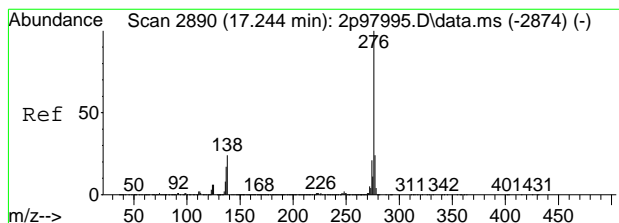


#95  
 Benzo[a]pyrene  
 Concen: 5.74 ppm  
 RT: 15.651 min Scan# 2592  
 Delta R.T. 0.000 min  
 Lab File: 2p98996.d  
 Acq: 15 Jan 2021 8:00 pm

Tgt Ion	Ratio	Lower	Upper
252	100		
253	20.8	0.0	51.7
125	10.6	0.0	41.0

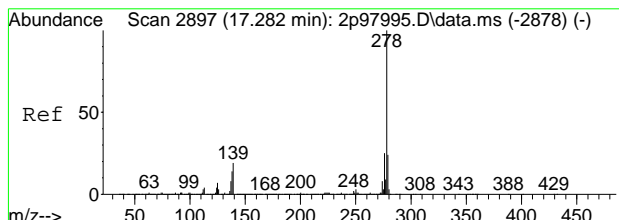
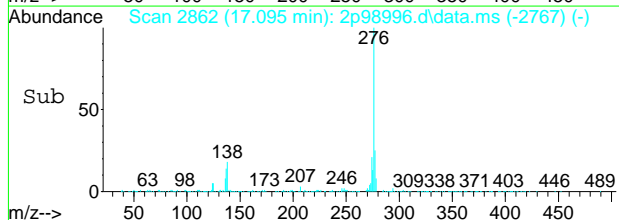
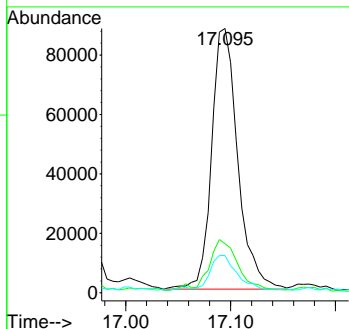
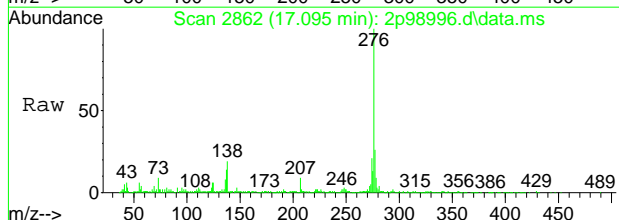


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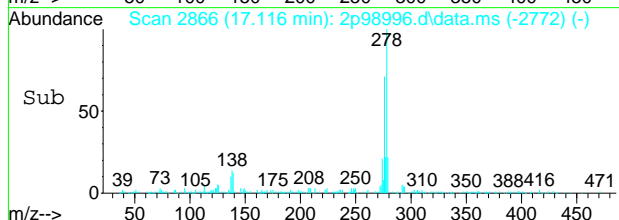
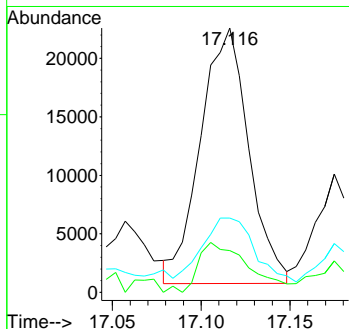
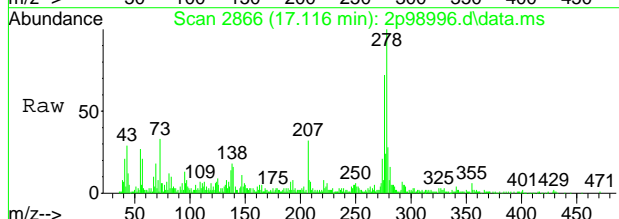
#96  
 Indeno[1,2,3-cd]pyrene  
 Concen: 3.65 ppm  
 RT: 17.095 min Scan# 2862  
 Delta R.T. 0.006 min  
 Lab File: 2p98996.d  
 Acq: 15 Jan 2021 8:00 pm

Tgt Ion	Resp	Lower	Upper
276	152310		
138	17.8	0.0	49.6
137	12.7	0.0	44.3



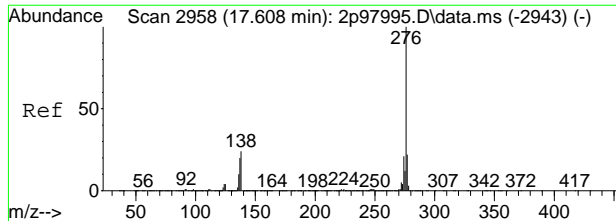
#98  
 Dibenz[a,h]anthracene  
 Concen: 0.95 ppm  
 RT: 17.116 min Scan# 2866  
 Delta R.T. 0.000 min  
 Lab File: 2p98996.d  
 Acq: 15 Jan 2021 8:00 pm

Tgt Ion	Resp	Lower	Upper
278	41167		
139	15.8	0.0	45.6
279	23.0	0.0	53.3



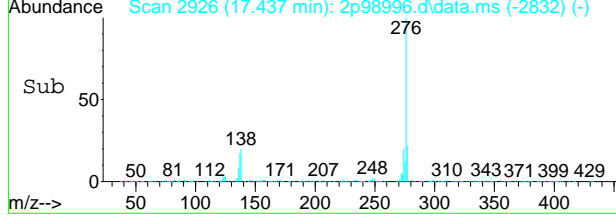
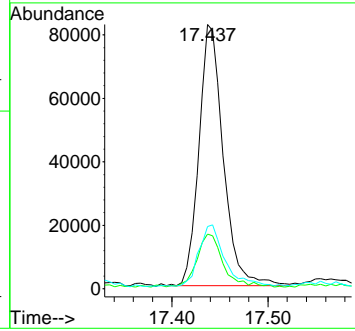
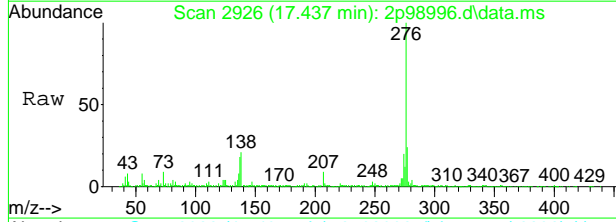
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#100  
 Benzo[g,h,i]perylene  
 Concen: 3.52 ppm  
 RT: 17.437 min Scan# 2926  
 Delta R.T. 0.000 min  
 Lab File: 2p98996.d  
 Acq: 15 Jan 2021 8:00 pm

Tgt Ion	Ratio	Lower	Upper
276	100		
138	20.1	0.0	51.4
277	22.7	0.0	53.7



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## LSC Area Percent Report

Data Path : C:\msdchem\1\data\jeryllr\2p4412\  
 Data File : 2p98996.d  
 Acq On : 15 Jan 2021 8:00 pm  
 Operator : hennys  
 Sample : jd18939-1  
 Misc : op31540,e2p4412,30.9,,,1,1  
 ALS Vial : 16 Sample Multiplier: 1

## Integration Parameters: lscint.p

Integrator: RTE  
 Smoothing : ON  
 Sampling : 1  
 Start Thrs: 0.02  
 Stop Thrs : 0

Filtering: 5  
 Min Area: 1000 Area counts  
 Max Peaks: 100  
 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 7

Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Title : Semi Volatile Extractables by GC/MS

Signal : TIC: 2p98996.d\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.824	5	7	23	rVB2	192857	258740	4.76%	0.430%
2	2.119	60	62	74	rVV2	63898	82918	1.52%	0.138%
3	2.204	75	78	89	rVB2	104262	126205	2.32%	0.210%
4	2.557	141	144	152	rVB3	70127	73006	1.34%	0.121%
5	2.846	194	198	208	rVB3	234877	256663	4.72%	0.426%
6	2.985	221	224	229	rVB3	67690	62649	1.15%	0.104%
7	3.049	231	236	241	rVB2	89795	91043	1.67%	0.151%
8	3.119	243	249	252	rBV2	105816	105433	1.94%	0.175%
9	3.167	253	258	263	rVB	235028	241551	4.44%	0.401%
10	3.220	264	268	285	rVB	543213	540664	9.94%	0.898%
11	3.343	287	291	299	rVB2	83801	101928	1.87%	0.169%
12	3.520	319	324	341	rVV	2439632	2183261	40.15%	3.627%
13	3.905	389	396	413	rVB	151594	280128	5.15%	0.465%
14	4.012	413	416	432	rVB	46574	96302	1.77%	0.160%
15	4.199	448	451	453	rBV	257279	155431	2.86%	0.258%
16	4.226	453	456	463	rBV	2058055	1995510	36.70%	3.315%
17	4.269	463	464	472	rVB	150287	149913	2.76%	0.249%
18	4.429	489	494	508	rVB	5574840	4187614	77.01%	6.957%
19	4.670	534	539	559	rVV2	91415	253628	4.66%	0.421%
20	4.841	565	571	598	rVV	2845549	2353392	43.28%	3.910%
21	5.237	641	645	656	rVB	89803	93251	1.71%	0.155%
22	5.419	671	679	700	rVV	5542754	4760396	87.55%	7.908%
23	6.526	877	886	899	rBV	3884451	3411770	62.74%	5.668%
24	7.157	998	1004	1015	rVB	138171	161804	2.98%	0.269%
25	7.344	1029	1039	1059	rBV	5106749	4911712	90.33%	8.160%
26	8.055	1167	1172	1176	rBV5	36823	51893	0.95%	0.086%
27	8.098	1176	1180	1189	rVB2	36311	60297	1.11%	0.100%
28	8.446	1240	1245	1268	rBV	1500068	1894595	34.84%	3.147%
29	8.767	1300	1305	1316	rBV3	29369	56696	1.04%	0.094%
30	9.462	1428	1435	1439	rVV2	4317631	4847321	89.14%	8.053%
31	9.494	1439	1441	1448	rVV	396962	399290	7.34%	0.663%
32	9.575	1448	1456	1467	rVV2	128621	198452	3.65%	0.330%
33	10.248	1576	1582	1586	rBV	104704	123632	2.27%	0.205%
34	10.291	1586	1590	1598	rVB	111379	124242	2.28%	0.206%
35	10.404	1606	1611	1616	rVV2	114193	182316	3.35%	0.303%
36	10.446	1616	1619	1628	rVB	72872	103841	1.91%	0.173%
37	10.730	1665	1672	1676	rBV	66068	104890	1.93%	0.174%
38	10.773	1676	1680	1690	rVB2	67459	94223	1.73%	0.157%
39	11.126	1738	1746	1750	rBV2	103062	154583	2.84%	0.257%
40	11.168	1750	1754	1758	rVB5	44450	56275	1.03%	0.093%

LSC Area Percent Report

Data Path : C:\msdchem\1\data\jeryllr\2p4412\  
 Data File : 2p98996.d  
 Acq On : 15 Jan 2021 8:00 pm  
 Operator : hennys  
 Sample : jd18939-1  
 Misc : op31540,e2p4412,30.9,,,1,1  
 ALS Vial : 16 Sample Multiplier: 1

Integration Parameters: lscint.p  
 Integrator: RTE  
 Smoothing : ON  
 Sampling : 1  
 Start Thrs: 0.02  
 Stop Thrs : 0  
 Filtering: 5  
 Min Area: 1000 Area counts  
 Max Peaks: 100  
 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 7

Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Title : Semi Volatile Extractables by GC/MS

41	11.238	1764	1767	1777	rVB4	54534	133495	2.46%	0.222%
42	11.340	1777	1786	1795	rBV	873826	1153859	21.22%	1.917%
43	11.489	1804	1814	1823	rBV2	57061	150830	2.77%	0.251%
44	11.682	1844	1850	1858	rBV	970563	1238010	22.77%	2.057%
45	11.800	1868	1872	1877	rBV3	47913	67522	1.24%	0.112%
46	11.917	1888	1894	1904	rBV6	78313	215006	3.95%	0.357%
47	12.013	1904	1912	1920	rBV	3387072	3921278	72.11%	6.514%
48	12.072	1920	1923	1929	rVB2	68569	116847	2.15%	0.194%
49	12.211	1939	1949	1951	rBV4	75969	159337	2.93%	0.265%
50	12.238	1951	1954	1961	rVB	154698	207827	3.82%	0.345%
51	12.345	1968	1974	1979	rBV	127538	170448	3.13%	0.283%
52	12.393	1979	1983	1987	rBV	100598	142237	2.62%	0.236%
53	12.425	1987	1989	1997	rVB3	51963	58023	1.07%	0.096%
54	12.532	2005	2009	2013	rVB	78901	100861	1.85%	0.168%
55	12.575	2013	2017	2023	rVB2	86107	110799	2.04%	0.184%
56	12.933	2082	2084	2092	rVB7	33597	59955	1.10%	0.100%
57	13.030	2092	2102	2104	rBV9	35684	67097	1.23%	0.111%
58	13.062	2104	2108	2117	rVB2	59312	93591	1.72%	0.155%
59	13.212	2130	2136	2139	rBV	88658	123574	2.27%	0.205%
60	13.254	2139	2144	2147	rBV2	62532	90283	1.66%	0.150%
61	13.335	2154	2159	2165	rVB3	58645	82025	1.51%	0.136%
62	13.399	2165	2171	2178	rBV	75701	113734	2.09%	0.189%
63	13.484	2184	2187	2192	rVB	53644	62308	1.15%	0.104%
64	13.623	2199	2213	2217	rBV	3692449	5437623	100.00%	9.033%
65	13.656	2217	2219	2226	rVV	505497	574033	10.56%	0.954%
66	13.768	2236	2240	2246	rVB	95314	114041	2.10%	0.189%
67	13.864	2254	2258	2265	rBV4	48296	68866	1.27%	0.114%
68	13.944	2271	2273	2283	rVB4	35422	64887	1.19%	0.108%
69	14.035	2283	2290	2296	rVB6	46689	75887	1.40%	0.126%
70	14.169	2309	2315	2319	rBV7	33399	56786	1.04%	0.094%
71	14.260	2325	2332	2337	rBV	139353	206189	3.79%	0.343%
72	14.308	2337	2341	2345	rVB	68361	77318	1.42%	0.128%
73	14.463	2366	2370	2376	rVB3	62522	90701	1.67%	0.151%
74	14.517	2376	2380	2385	rVB6	41255	53969	0.99%	0.090%
75	14.592	2391	2394	2401	rVB2	35958	53586	0.99%	0.089%
76	14.666	2403	2408	2417	rVB3	52122	84351	1.55%	0.140%
77	14.886	2444	2449	2455	rBV7	51066	70027	1.29%	0.116%
78	15.009	2466	2472	2479	rBV8	32188	78050	1.44%	0.130%
79	15.142	2490	2497	2505	rVB10	43122	107434	1.98%	0.178%
80	15.217	2505	2511	2515	rBV	545805	894386	16.45%	1.486%
81	15.249	2515	2517	2524	rVB	263607	298128	5.48%	0.495%
82	15.356	2527	2537	2542	rBV2	119457	219119	4.03%	0.364%
83	15.410	2544	2547	2556	rVB	60495	102490	1.88%	0.170%
84	15.501	2557	2564	2571	rBV5	43678	131421	2.42%	0.218%
85	15.581	2574	2579	2586	rBV	328009	488016	8.97%	0.811%

LSC Area Percent Report

Data Path : C:\msdchem\1\data\jeryllr\e2p4412\  
 Data File : 2p98996.d  
 Acq On : 15 Jan 2021 8:00 pm  
 Operator : hennys  
 Sample : jd18939-1  
 Misc : op31540,e2p4412,30.9,,,1,1  
 ALS Vial : 16 Sample Multiplier: 1

Integration Parameters: lscint.p  
 Integrator: RTE  
 Smoothing : ON Filtering: 5  
 Sampling : 1 Min Area: 1000 Area counts  
 Start Thrs: 0.02 Max Peaks: 100  
 Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 7

Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Title : Semi Volatile Extractables by GC/MS

86	15.651	2587	2592	2600	rVV	434180	586962	10.79%	0.975%
87	15.736	2600	2608	2620	rVV	3297275	4394558	80.82%	7.300%
88	15.955	2643	2649	2652	rBV7	41169	82597	1.52%	0.137%
89	16.303	2711	2714	2722	rVB4	46842	77621	1.43%	0.129%
90	16.448	2737	2741	2743	rBV5	45548	64101	1.18%	0.106%
91	16.480	2745	2747	2752	rVB2	58863	70782	1.30%	0.118%
92	16.811	2805	2809	2815	rBV7	46772	85888	1.58%	0.143%
93	16.961	2831	2837	2842	rBV4	74420	130348	2.40%	0.217%
94	17.095	2857	2862	2873	rVB3	232403	473137	8.70%	0.786%
95	17.287	2895	2898	2904	rVV3	42656	64416	1.18%	0.107%
96	17.373	2910	2914	2921	rVV9	56990	109809	2.02%	0.182%
97	17.442	2921	2927	2936	rVB	209248	371935	6.84%	0.618%
98	17.635	2958	2963	2969	rBV	51575	97425	1.79%	0.162%
99	19.234	3256	3262	3272	rVB2	51261	125145	2.30%	0.208%
100	19.384	3285	3290	3301	rVB4	32917	87744	1.61%	0.146%

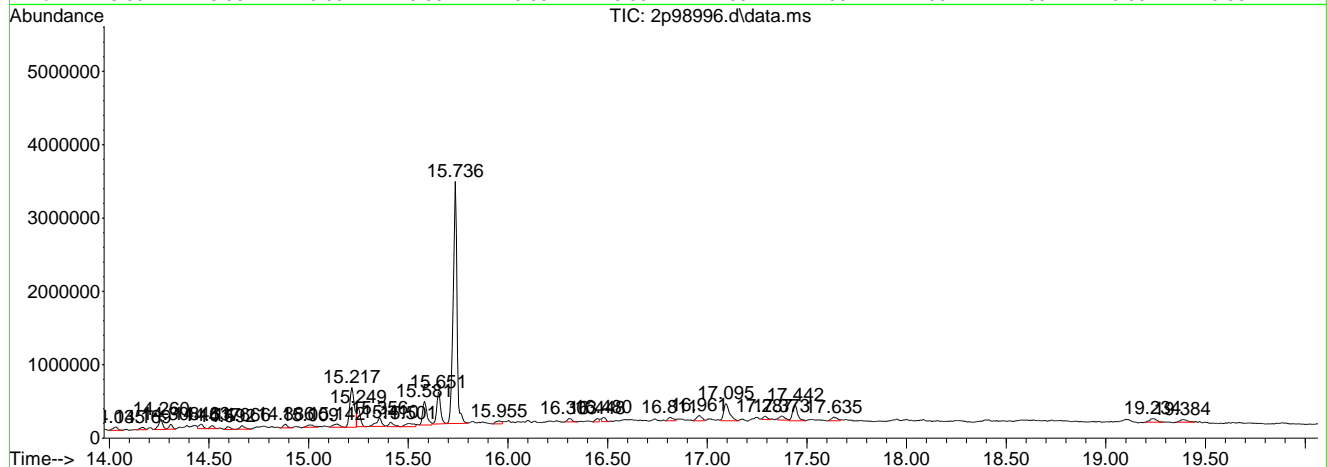
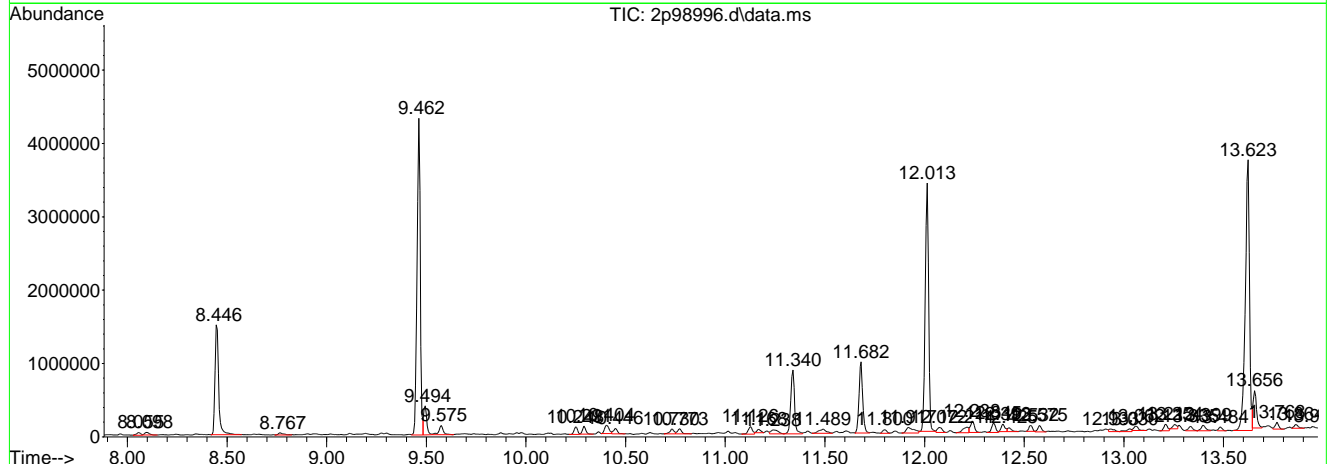
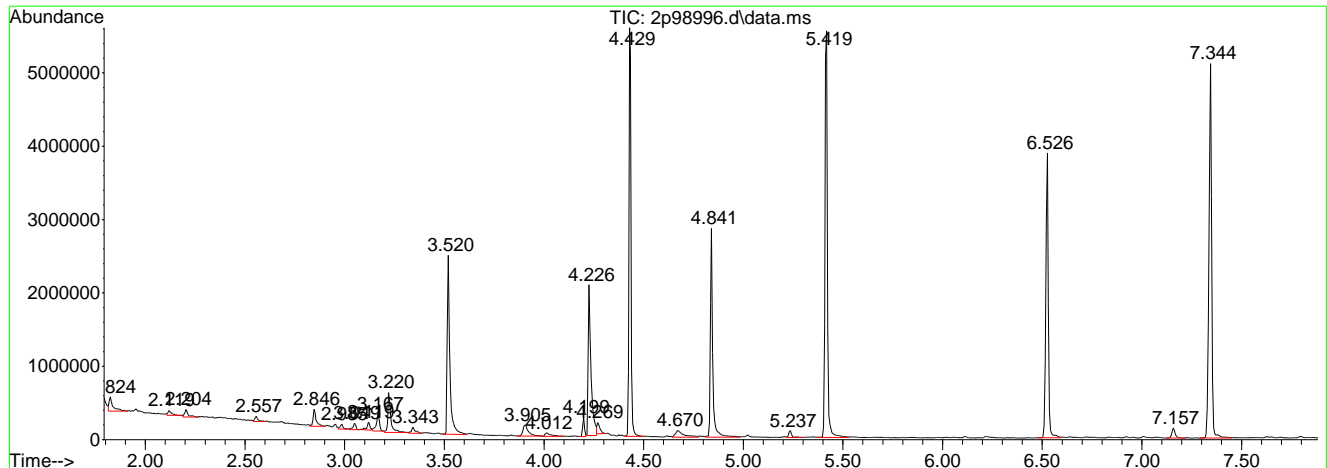
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LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\data\jeryllr\e2p4412\  
Data File : 2p98996.d  
Acq On : 15 Jan 2021 8:00 pm  
Operator : hennys  
Sample : jd18939-1  
Misc : op31540,e2p4412,30.9,,1,1  
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
Quant Title : Semi Volatile Extractables by GC/MS

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p



7.12  
7



Library Search Compound Report

Data Path : C:\msdchem\1\data\jeryllr\e2p4412\  
 Data File : 2p98996.d  
 Acq On : 15 Jan 2021 8:00 pm  
 Operator : hennys  
 Sample : jd18939-1  
 Misc : op31540,e2p4412,30.9,,1,1  
 ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Title : Semi Volatile Extractables by GC/MS

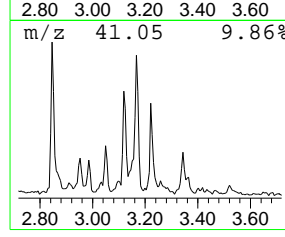
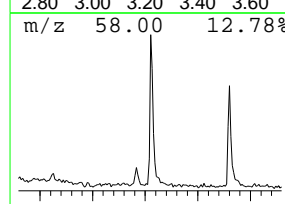
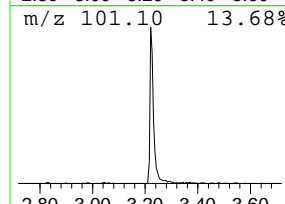
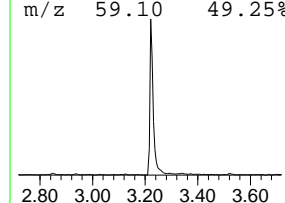
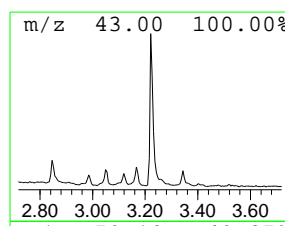
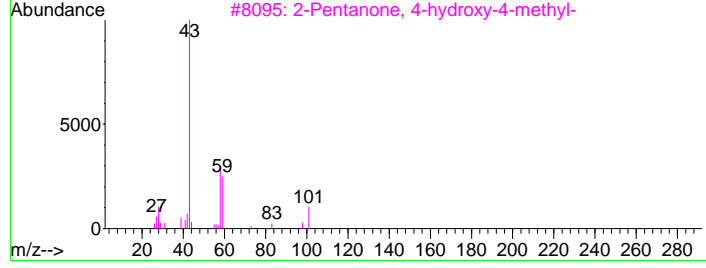
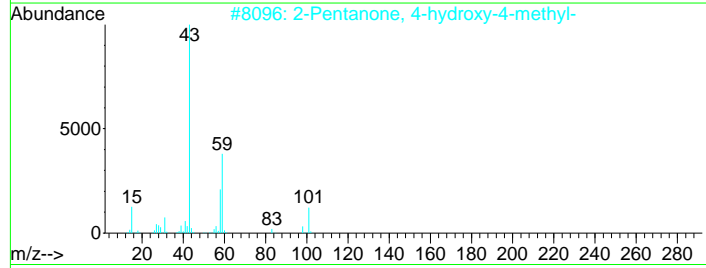
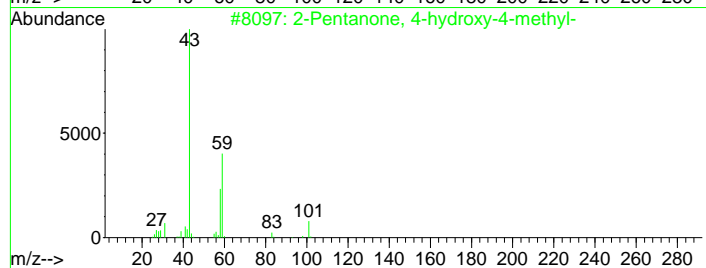
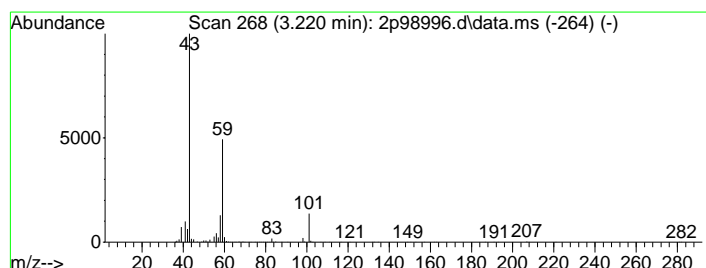
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 1 System artifact/aldol-conde... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.220	5.16 ppm	540664	1,4-Dichlorobenzene-d4a	4.434

Hit#	of 5	Tentative ID	MW	MolForm	CAS#	Qual
1		2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
2		2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
3		2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	25
4		1-Butene, 4-ethoxy-	100	C6H12O	044611-46-3	23
5		1-Propen-2-ol, acetate	100	C5H8O2	000108-22-5	10



Library Search Compound Report

Data Path : C:\msdchem\1\data\jeryllr\2p4412\  
 Data File : 2p98996.d  
 Acq On : 15 Jan 2021 8:00 pm  
 Operator : hennys  
 Sample : jd18939-1  
 Misc : op31540,e2p4412,30.9,,,1,1  
 ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Title : Semi Volatile Extractables by GC/MS

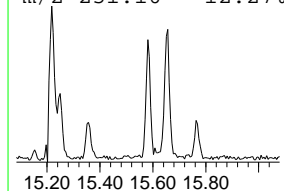
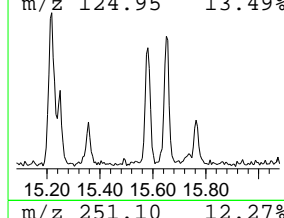
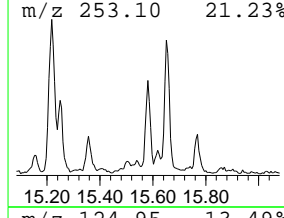
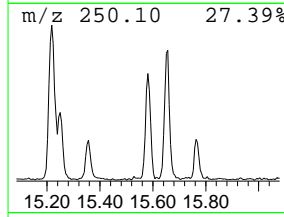
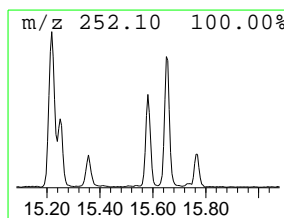
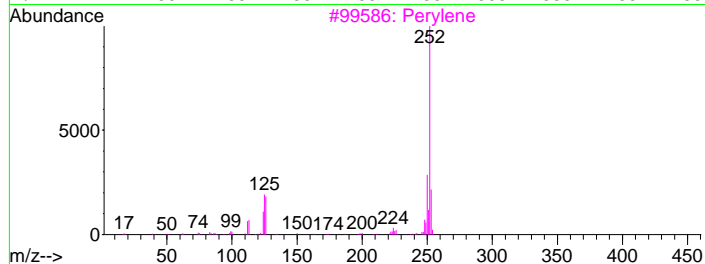
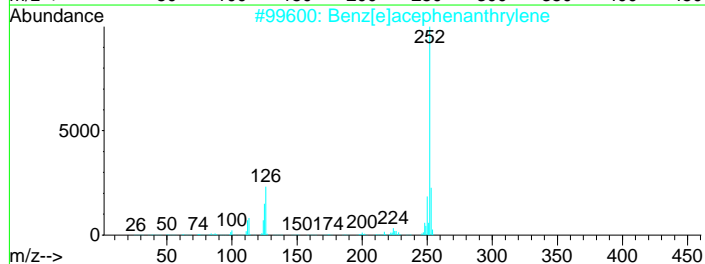
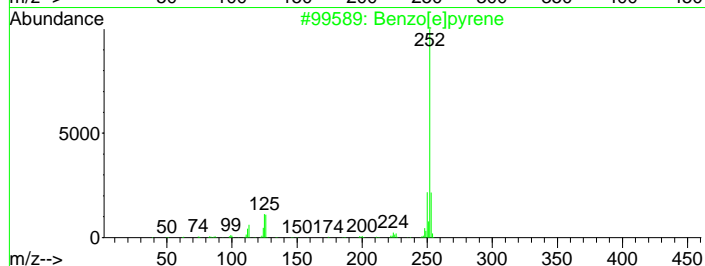
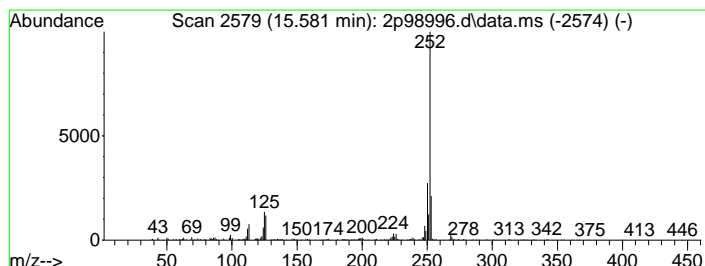
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 2 Unknown PAH substance Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.581	4.44 ppm	488016	Perylene-d12	15.736

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Benzo[e]pyrene	252	C20H12	000192-97-2	94
2		Benz[e]acephenanthrylene	252	C20H12	000205-99-2	93
3		Perylene	252	C20H12	000198-55-0	90
4		Benz[e]acephenanthrylene	252	C20H12	000205-99-2	90
5		Benzo[e]pyrene	252	C20H12	000192-97-2	90



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\data\jeryllr\e2p4412\  
 Data File : 2p98996.d  
 Acq On : 15 Jan 2021 8:00 pm  
 Operator : hennys  
 Sample : jd18939-1  
 Misc : op31540,e2p4412,30.9,,,1,1  
 ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Title : Semi Volatile Extractables by GC/MS

TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
System artifact...	3.220	5.2	ppm	540664	2	4.434	4187610	40.0
Unknown PAH sub...	15.581	4.4	ppm	488016	15	15.736	4394560	40.0



## Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\2p4412\  
 Data File : 2p99000.d  
 Acq On : 15 Jan 2021 9:44 pm  
 Operator : hennys  
 Sample : jd18939-2 Inst : MS2P  
 Misc : op31540,e2p4412,30.7,,,1,1  
 ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Results File: M2P4365.RES  
 Quant Time: Jan 18 04:05:25 2021  
 Quant Title : Semi Volatile Extractables by GC/MS  
 QLast Update : Mon Jan 18 03:08:11 2021  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.429	152	350081	40.00	ppm	0.00
24) Naphthalene-d8	5.419	136	1281323	40.00	ppm	0.00
47) Acenaphthene-d10	7.344	164	743837	40.00	ppm	0.00
69) Phenanthrene-d10	9.462	188	1205170	40.00	ppm	0.00
83) Chrysene-d12	13.629	240	1126776	40.00	ppm	0.01
91) Perylene-d12	15.752	264	1255285	40.00	ppm	0.02
101) 1,4-Dichlorobenzene-d4a	4.429	152	350081	40.00	ppm	0.00
103) Naphthalene-d8a	5.419	136	1281323	40.00	ppm	0.00
105) Acenaphthene-d10a	7.344	164	743837	40.00	ppm	0.00
107) Chrysene-d12a	13.629	240	1126776	40.00	ppm	0.01
109) Phenanthrene-d10a	9.462	188	1205170	40.00	ppm	0.00
112) 1,4-Dichlorobenzene-d4b	4.429	152	350081	40.00	ppm	0.00
115) Acenaphthene-d10b	7.344	164	743812	40.00	ppm	0.00
117) Phenanthrene-d10b	9.462	188	1205170	40.00	ppm	0.00
120) Chrysene-d12b	13.629	240	1126776	40.00	ppm	0.01
System Monitoring Compounds						
5) 2-Fluorophenol	3.515	112	271344	22.75	ppm	0.01
Spiked Amount	50.000	Range	11 - 58	Recovery	=	45.50%
8) Phenol-d5	4.231	99	357172	23.64	ppm	0.01
Spiked Amount	50.000	Range	10 - 59	Recovery	=	47.28%
25) Nitrobenzene-d5	4.841	82	416842	28.98	ppm	0.00
Spiked Amount	50.000	Range	19 - 61	Recovery	=	57.96%
51) 2-Fluorobiphenyl	6.526	172	601750	24.60	ppm	0.00
Spiked Amount	50.000	Range	21 - 58	Recovery	=	49.20%
73) 2,4,6-Tribromophenol	8.451	330	117043	26.86	ppm	0.00
Spiked Amount	50.000	Range	12 - 68	Recovery	=	53.72%
85) Terphenyl-d14	12.014	244	749146	28.55	ppm	0.00
Spiked Amount	50.000	Range	16 - 65	Recovery	=	57.10%
118) 1-Chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount	50.000	Range	15 - 64	Recovery	=	0.00%#
119) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount	50.000	Range	15 - 64	Recovery	=	0.00%#
Target Compounds						
38) Naphthalene	5.435	128	20649	0.65	ppm	98
44) 2-Methylnaphthalene	6.109	141	14634	0.86	ppm	96
53) Biphenyl	6.638	154	7816	0.27	ppm	98
56) Acenaphthylene	7.157	152	51633	1.51	ppm	97
59) Acenaphthene	7.387	153	55897m	2.48	ppm	
62) Dibenzofuran	7.622	168	42865	1.42	ppm	97
66) Fluorene	8.093	166	76595	3.15	ppm	100
77) Phenanthrene	9.500	178	760757	23.74	ppm	99
78) Anthracene	9.575	178	215957	6.73	ppm	99
79) Carbazole	9.869	167	76520	2.54	ppm	99
81) Fluoranthene	11.345	202	1381559	39.28	ppm	99
84) Pyrene	11.687	202	1197101	35.81	ppm	97
87) Benzo[a]anthracene	13.618	228	594358	18.15	ppm	98
89) Chrysene	13.666	228	647144	20.63	ppm	98
90) bis(2-Ethylhexyl)phtha...	13.837	149	51196	2.34	ppm	93
93) Benzo[b]fluoranthene	15.233	252	894896	23.86	ppm	97
94) Benzo[k]fluoranthene	15.265	252	252480	7.30	ppm	94
95) Benzo[a]pyrene	15.672	252	586479	18.01	ppm	97
96) Indeno[1,2,3-cd]pyrene	17.121	276	441450	12.64	ppm	99
98) Dibenz[a,h]anthracene	17.138	278	115840	3.19	ppm	97
100) Benzo[g,h,i]perylene	17.480	276	425144	12.36	ppm	99

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\e2p4412\  
Data File : 2p99000.d  
Acq On : 15 Jan 2021 9:44 pm  
Operator : hennys  
Sample : jd18939-2 Inst : MS2P  
Misc : op31540,e2p4412,30.7,,,1,1  
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
Quant Results File: M2P4365.RES  
Quant Time: Jan 18 04:05:25 2021  
Quant Title : Semi Volatile Extractables by GC/MS  
QLast Update : Mon Jan 18 03:08:11 2021  
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
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(#) = qualifier out of range (m) = manual integration (+) = signals summed

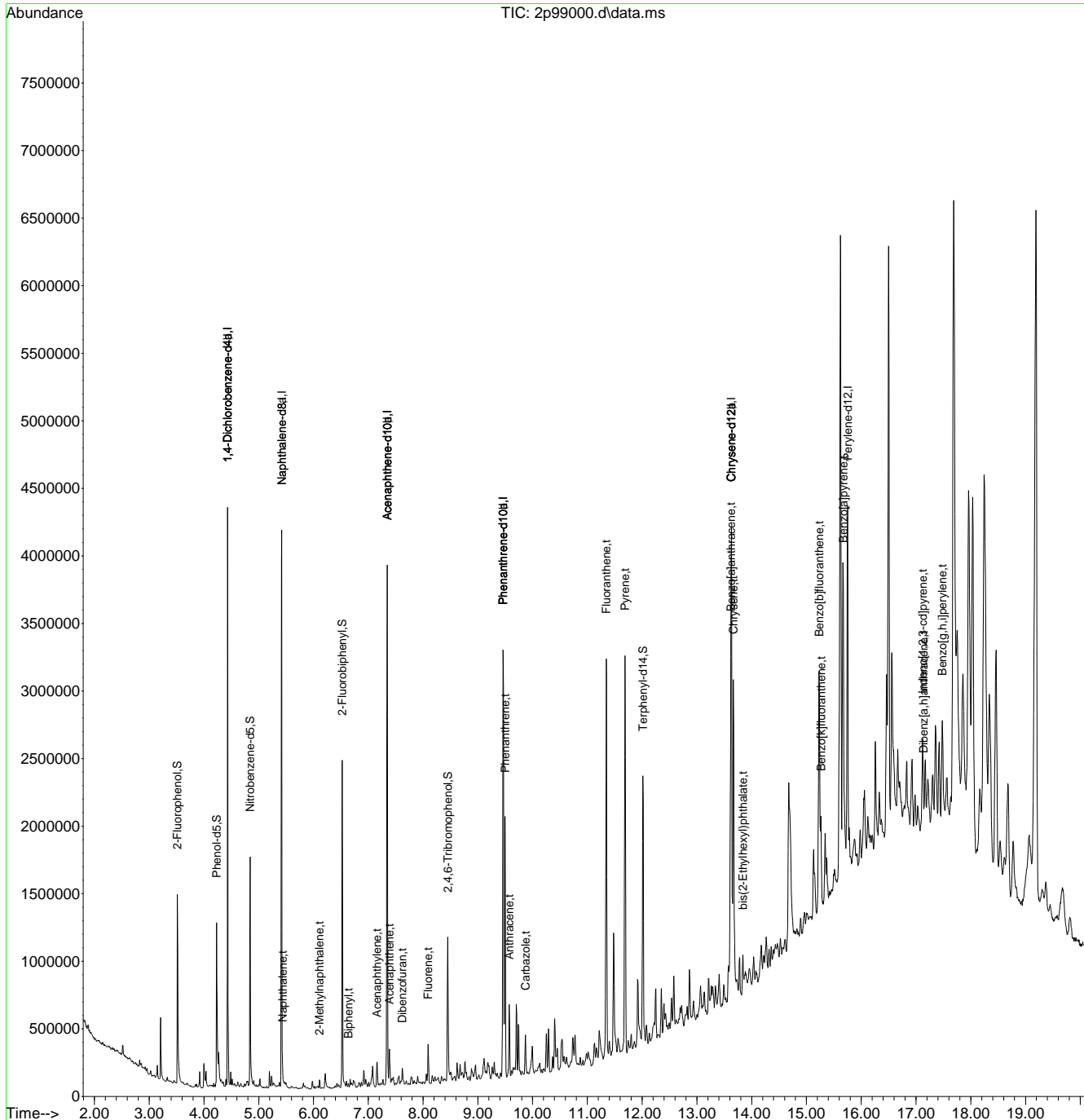
7.1.3  
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Quantitation Report (QT/LSC Reviewed)

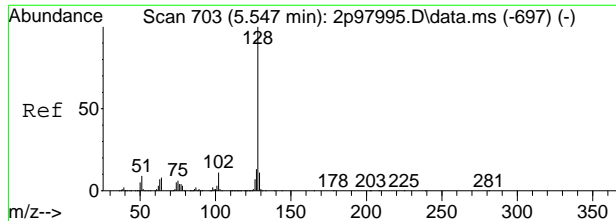
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Data File : 2p99000.d  
Acq On : 15 Jan 2021 9:44 pm  
Operator : hennys  
Sample : jd18939-2  
Misc : op31540,e2p4412,30.7,,1,1  
ALS Vial : 20 Sample Multiplier: 1

Inst : MS2P

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
Quant Results File: M2P4365.RES  
Quant Time: Jan 18 04:05:25 2021  
Quant Title : Semi Volatile Extractables by GC/MS  
QLast Update : Mon Jan 18 03:08:11 2021  
Response via : Initial Calibration

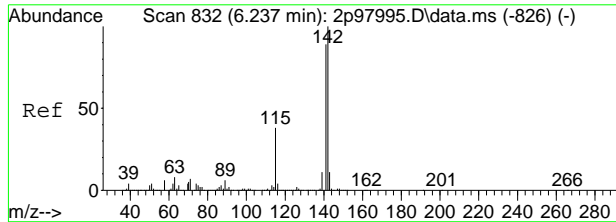
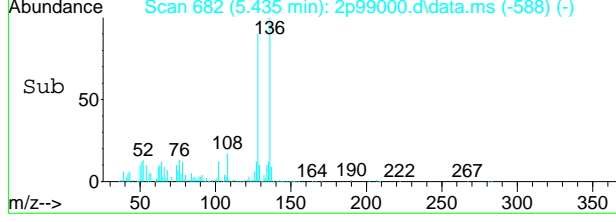
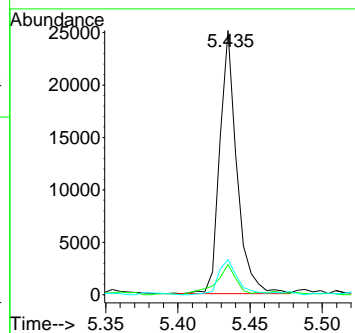
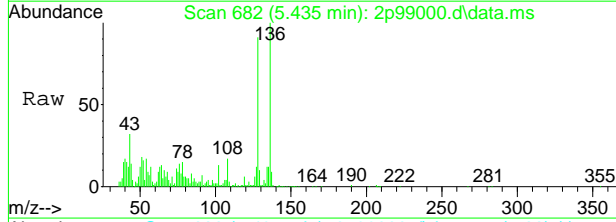


7.1.7



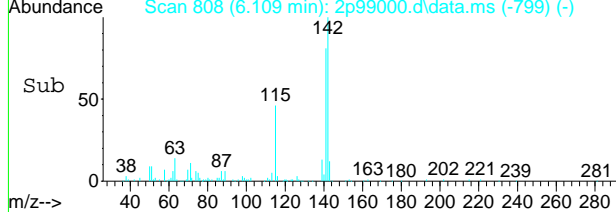
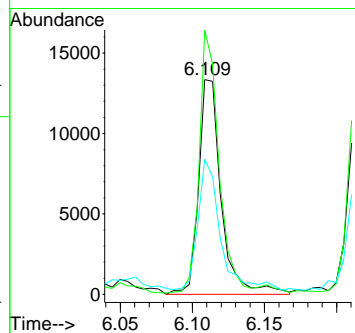
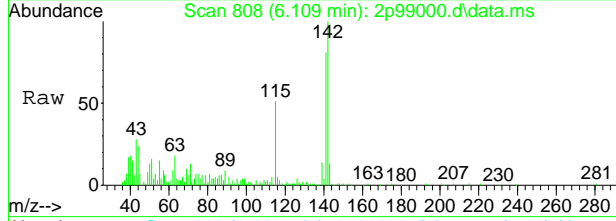
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 Naphthalene  
 Concen: 0.65 ppm  
 RT: 5.435 min Scan# 682  
 Delta R.T. 0.000 min  
 Lab File: 2p99000.d  
 Acq: 15 Jan 2021 9:44 pm

Tgt Ion	Resp	Lower	Upper
128	20649		
128	100		
129	10.9	0.0	41.2
127	12.5	0.0	43.7



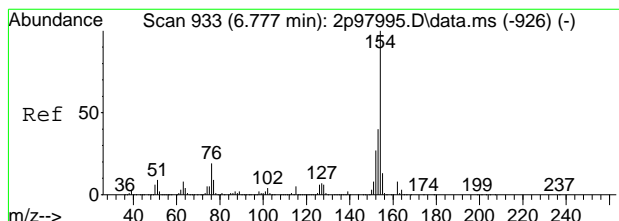
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 2-Methylnaphthalene  
 Concen: 0.86 ppm  
 RT: 6.109 min Scan# 808  
 Delta R.T. 0.000 min  
 Lab File: 2p99000.d  
 Acq: 15 Jan 2021 9:44 pm

Tgt Ion	Resp	Lower	Upper
141	14634		
141	100		
142	123.0	88.6	148.6
115	60.4	27.1	87.1



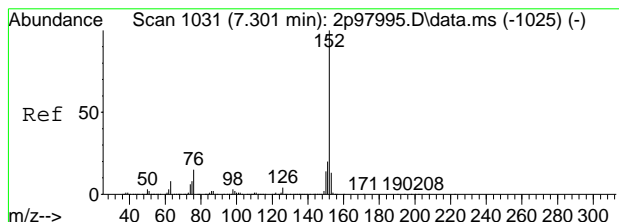
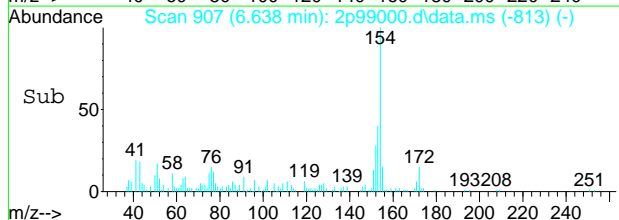
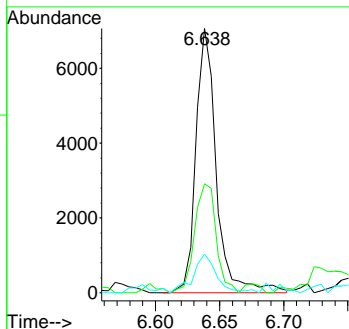
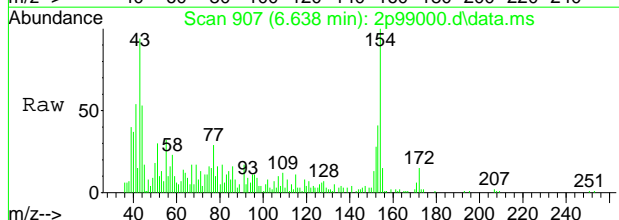
7.1.3  
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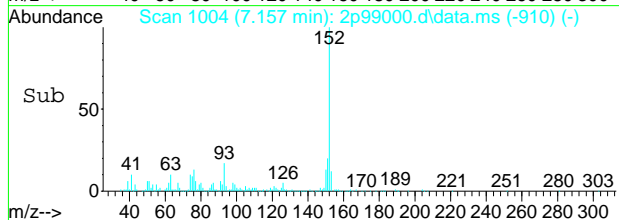
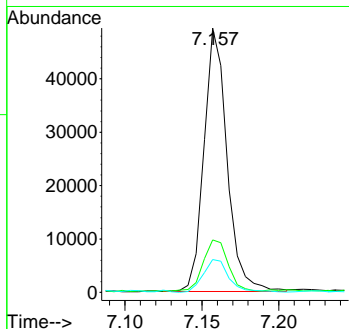
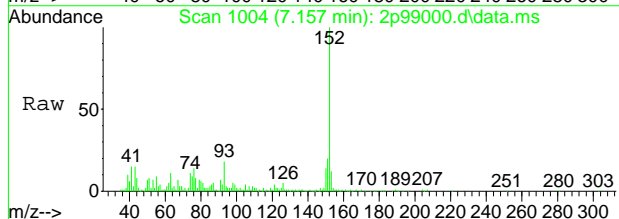
#53  
 Biphenyl  
 Concen: 0.27 ppm  
 RT: 6.638 min Scan# 907  
 Delta R.T. 0.000 min  
 Lab File: 2p99000.d  
 Acq: 15 Jan 2021 9:44 pm

Tgt Ion	Resp	Lower	Upper
154	7816	100	
153	39.9	11.2	71.2
155	13.0	0.0	42.9

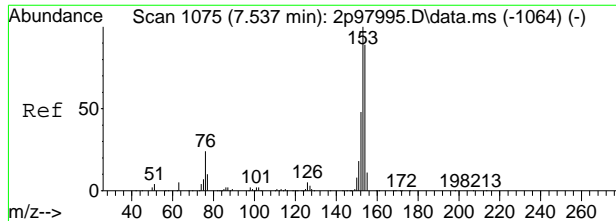


#56  
 Acenaphthylene  
 Concen: 1.51 ppm  
 RT: 7.157 min Scan# 1004  
 Delta R.T. 0.000 min  
 Lab File: 2p99000.d  
 Acq: 15 Jan 2021 9:44 pm

Tgt Ion	Resp	Lower	Upper
152	51633	100	
151	19.2	0.0	50.7
153	11.9	0.0	42.9

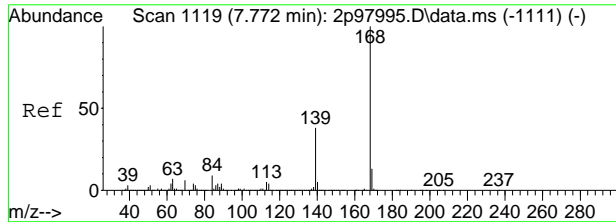
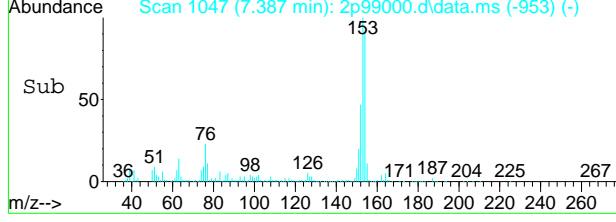
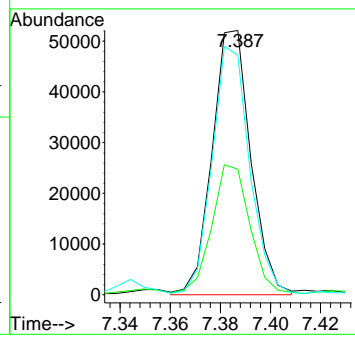
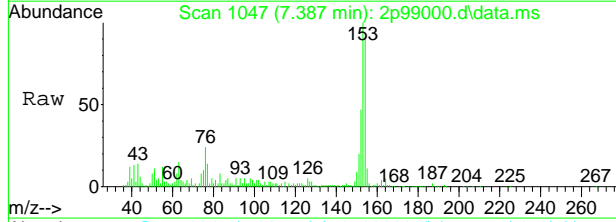


7.1.3  
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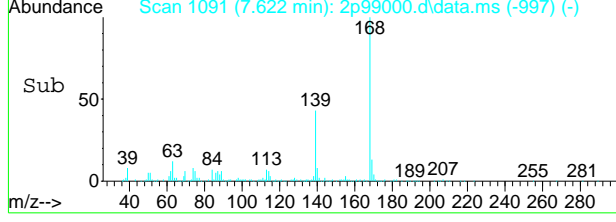
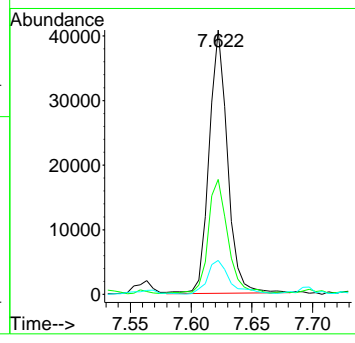
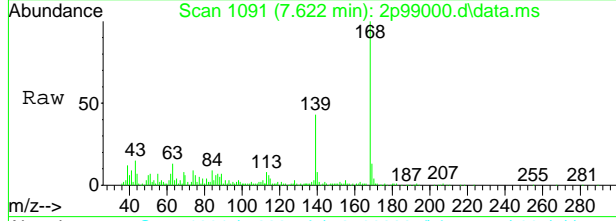
#59  
 Acenaphthene  
 Concen: 2.48 ppm m  
 RT: 7.387 min Scan# 1047  
 Delta R.T. 0.000 min  
 Lab File: 2p99000.d  
 Acq: 15 Jan 2021 9:44 pm

Tgt Ion	Resp	Lower	Upper
153	55897		
152	47.5	18.0	78.0
154	90.6	60.1	120.1



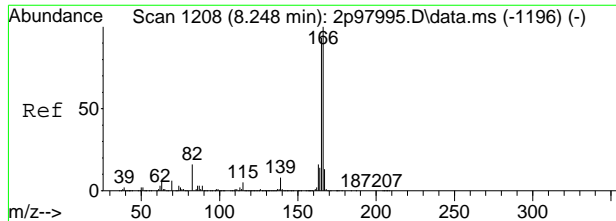
#62  
 Dibenzofuran  
 Concen: 1.42 ppm  
 RT: 7.622 min Scan# 1091  
 Delta R.T. 0.000 min  
 Lab File: 2p99000.d  
 Acq: 15 Jan 2021 9:44 pm

Tgt Ion	Resp	Lower	Upper
168	42865		
139	43.1	10.6	70.6
169	12.2	0.0	42.9



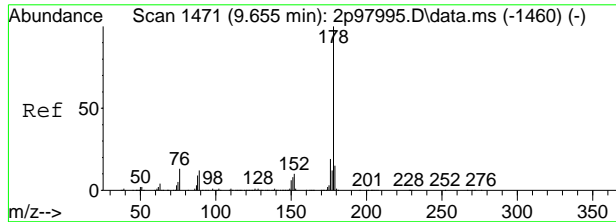
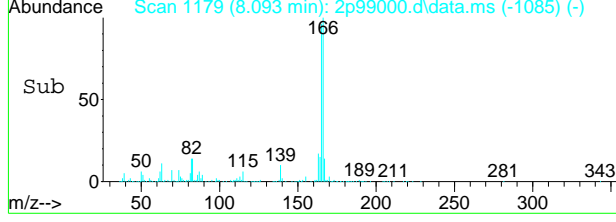
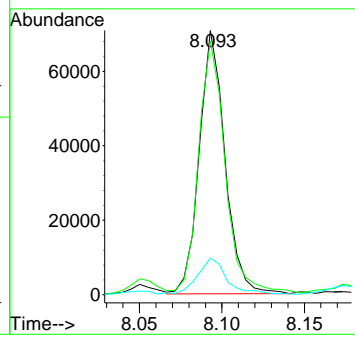
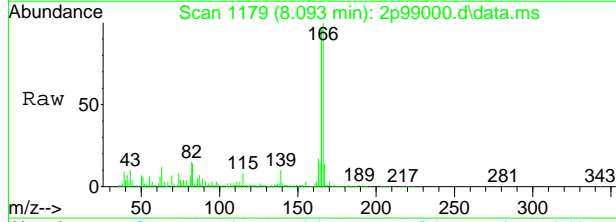
7.13  
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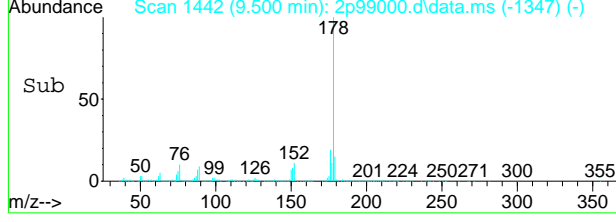
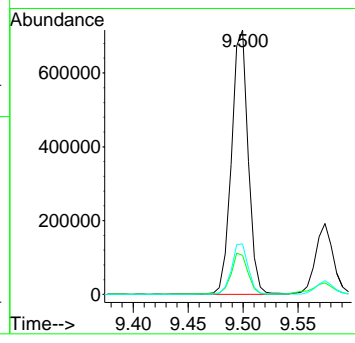
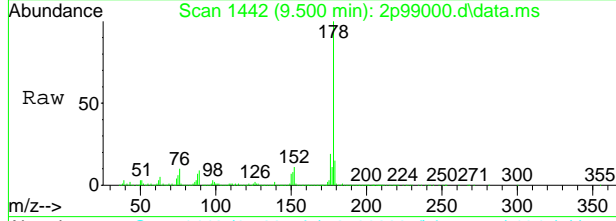
#66  
 Fluorene  
 Concen: 3.15 ppm  
 RT: 8.093 min Scan# 1179  
 Delta R.T. 0.000 min  
 Lab File: 2p99000.d  
 Acq: 15 Jan 2021 9:44 pm

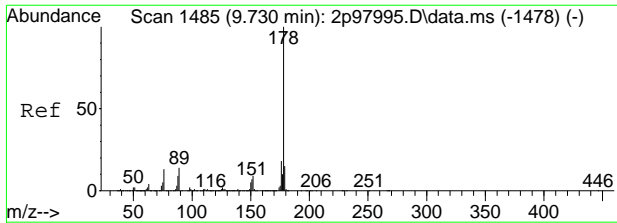
Tgt Ion	Ratio	Lower	Upper
166	100		
165	95.0	65.3	125.3
167	13.5	0.0	43.3



#77  
 Phenanthrene  
 Concen: 23.74 ppm  
 RT: 9.500 min Scan# 1442  
 Delta R.T. 0.006 min  
 Lab File: 2p99000.d  
 Acq: 15 Jan 2021 9:44 pm

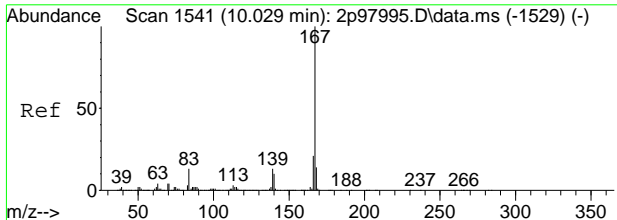
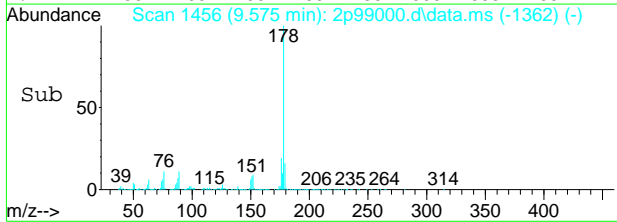
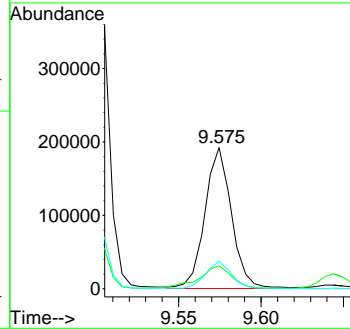
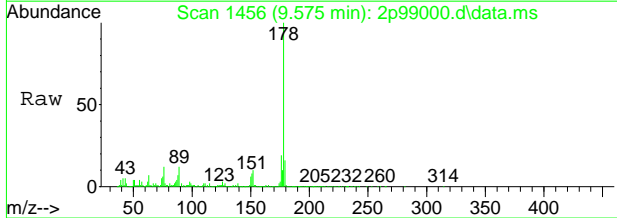
Tgt Ion	Ratio	Lower	Upper
178	100		
179	14.6	0.0	44.9
176	19.0	0.0	49.2





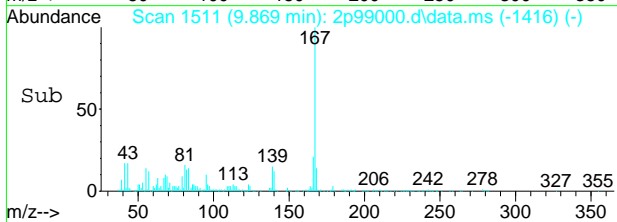
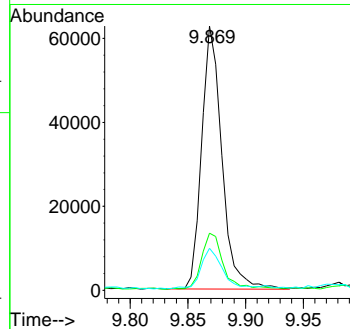
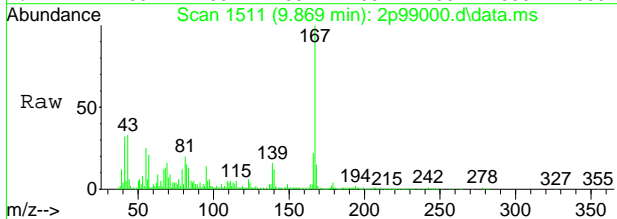
#78  
 Anthracene  
 Concen: 6.73 ppm  
 RT: 9.575 min Scan# 1456  
 Delta R.T. 0.000 min  
 Lab File: 2p99000.d  
 Acq: 15 Jan 2021 9:44 pm

Tgt Ion	Ratio	Lower	Upper
178	100		
179	15.7	0.0	44.8
176	19.2	0.0	49.1

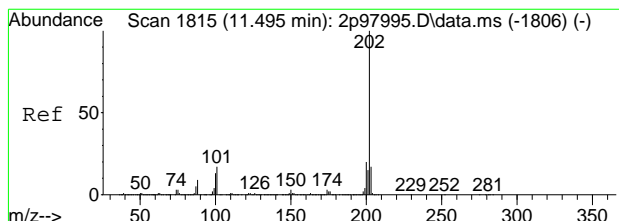


#79  
 Carbazole  
 Concen: 2.54 ppm  
 RT: 9.869 min Scan# 1511  
 Delta R.T. 0.006 min  
 Lab File: 2p99000.d  
 Acq: 15 Jan 2021 9:44 pm

Tgt Ion	Ratio	Lower	Upper
167	100		
166	21.1	0.0	51.3
139	15.2	0.0	44.4

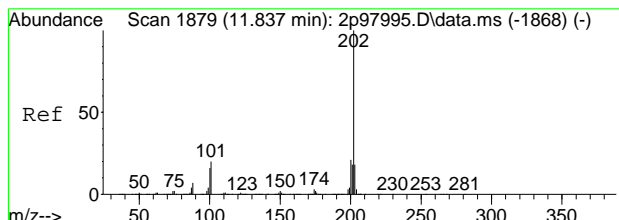
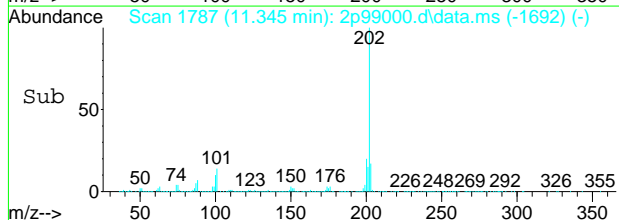
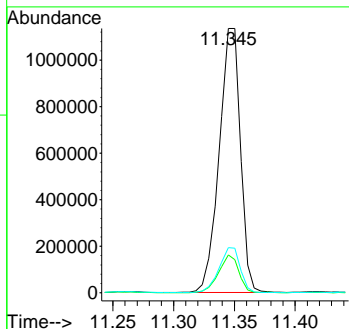
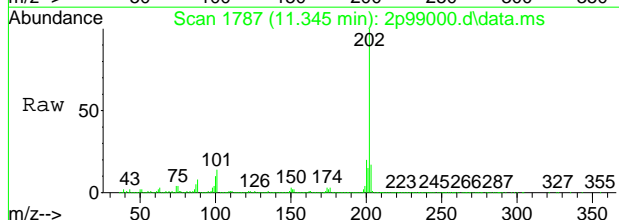






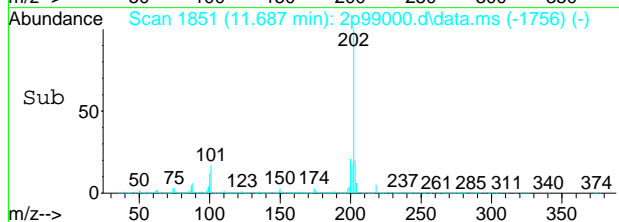
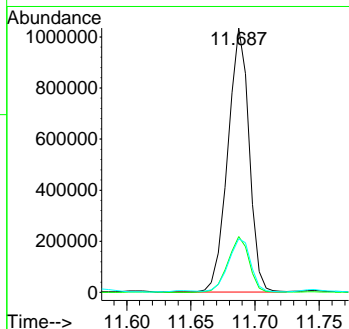
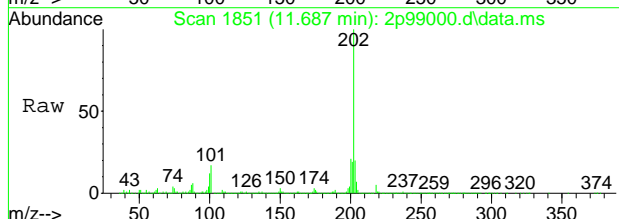
#81  
 Fluoranthene  
 Concen: 39.28 ppm  
 RT: 11.345 min Scan# 1787  
 Delta R.T. 0.006 min  
 Lab File: 2p99000.d  
 Acq: 15 Jan 2021 9:44 pm

Tgt Ion	Ratio	Lower	Upper
202	100		
101	14.3	0.0	43.7
203	17.0	0.0	46.5

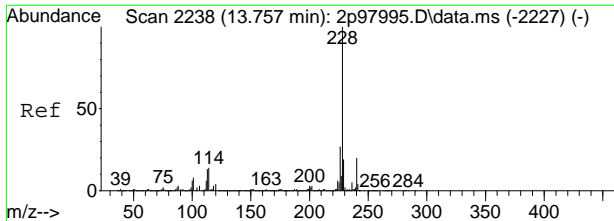


#84  
 Pyrene  
 Concen: 35.81 ppm  
 RT: 11.687 min Scan# 1851  
 Delta R.T. 0.006 min  
 Lab File: 2p99000.d  
 Acq: 15 Jan 2021 9:44 pm

Tgt Ion	Ratio	Lower	Upper
202	100		
200	21.1	0.0	50.9
203	20.1	0.0	47.9

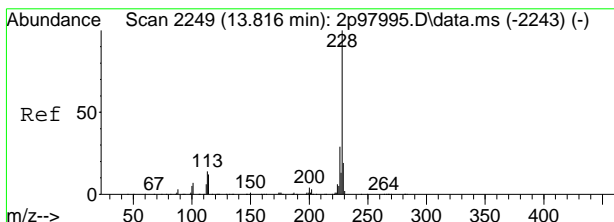
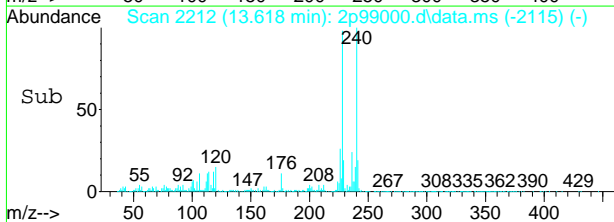
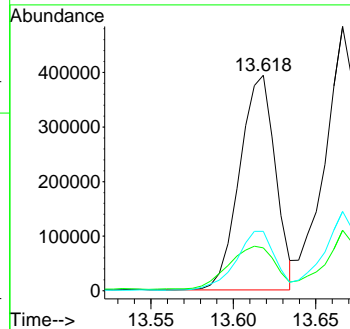
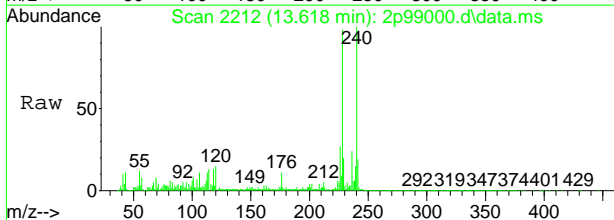


7.1.3  
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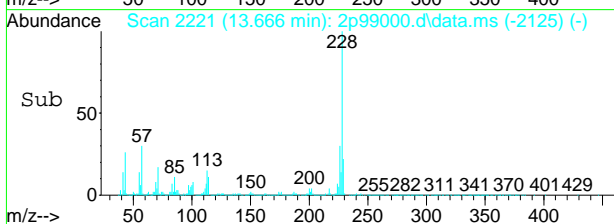
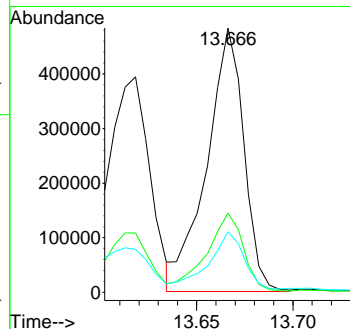
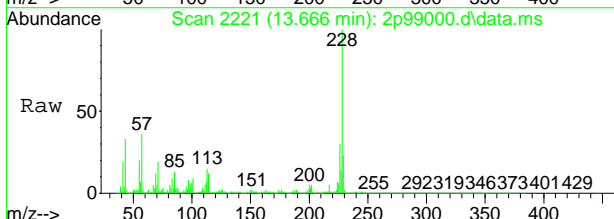
#87  
 Benzo[a]anthracene  
 Concen: 18.15 ppm  
 RT: 13.618 min Scan# 2212  
 Delta R.T. 0.016 min  
 Lab File: 2p99000.d  
 Acq: 15 Jan 2021 9:44 pm

Tgt Ion	Ratio	Lower	Upper
228	100		
229	18.8	0.0	50.0
226	27.4	0.0	56.8

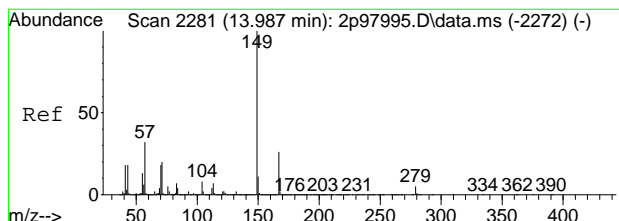


#89  
 Chrysene  
 Concen: 20.63 ppm  
 RT: 13.666 min Scan# 2221  
 Delta R.T. 0.011 min  
 Lab File: 2p99000.d  
 Acq: 15 Jan 2021 9:44 pm

Tgt Ion	Ratio	Lower	Upper
228	100		
226	30.0	0.3	60.3
229	21.9	0.0	49.6

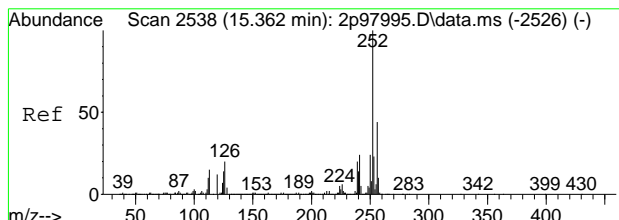
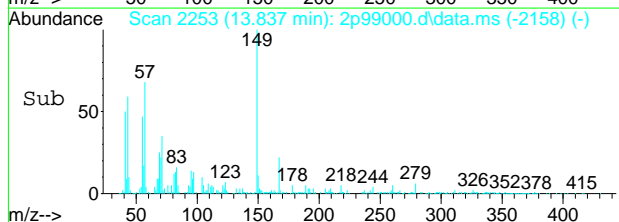
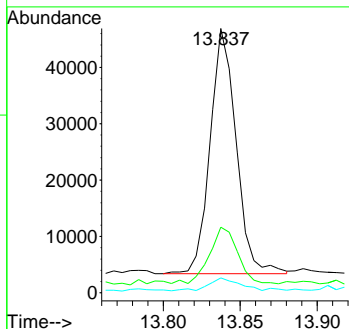
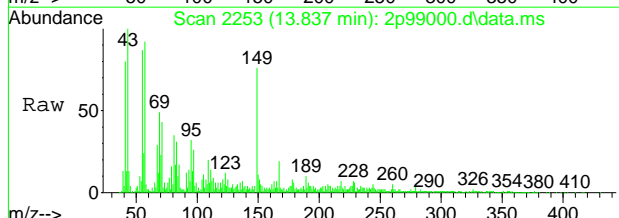


7.1.3  
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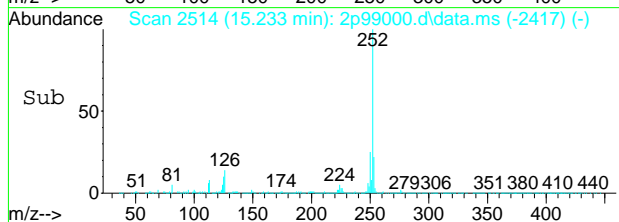
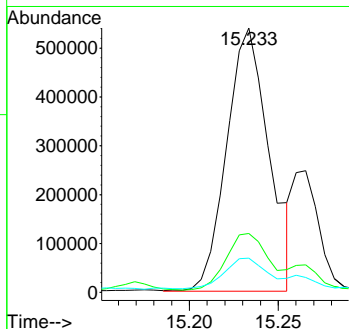
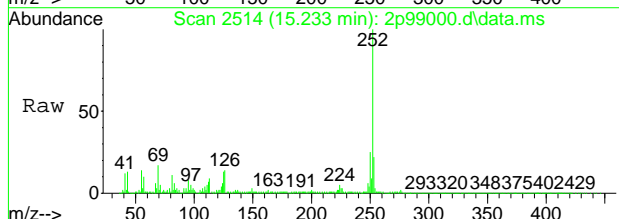
#90  
 bis(2-Ethylhexyl)phthalate  
 Concen: 2.34 ppm  
 RT: 13.837 min Scan# 2253  
 Delta R.T. 0.006 min  
 Lab File: 2p99000.d  
 Acq: 15 Jan 2021 9:44 pm

Tgt Ion	Resp	Lower	Upper
149	51196		
167	22.2	0.0	56.5
279	5.0	0.0	35.6

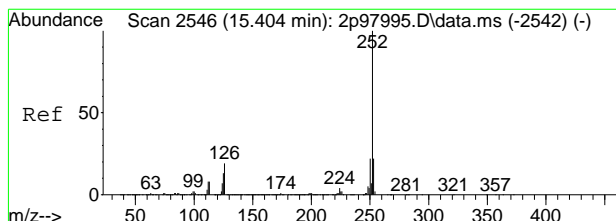


#93  
 Benzo[b]fluoranthene  
 Concen: 23.86 ppm  
 RT: 15.233 min Scan# 2514  
 Delta R.T. 0.016 min  
 Lab File: 2p99000.d  
 Acq: 15 Jan 2021 9:44 pm

Tgt Ion	Resp	Lower	Upper
252	894896		
253	20.9	0.0	51.4
125	11.5	0.0	39.2

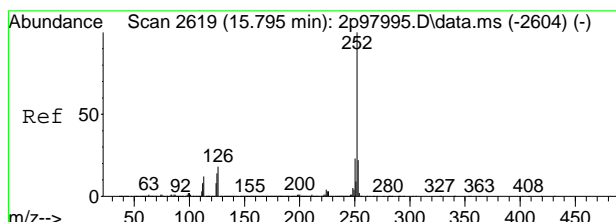
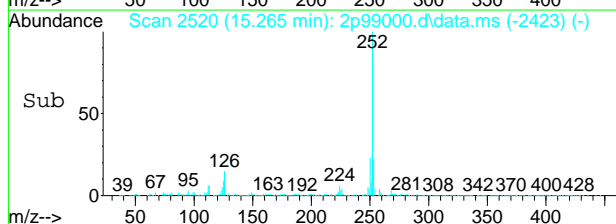
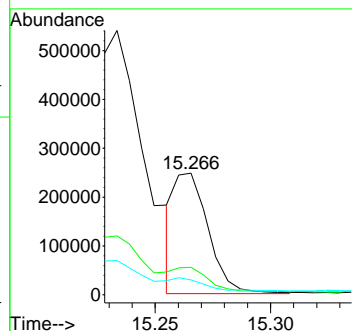
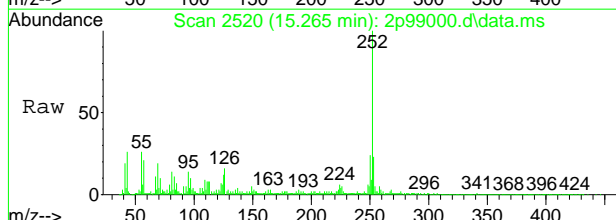


7.13  
7



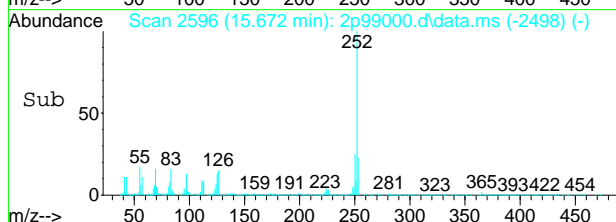
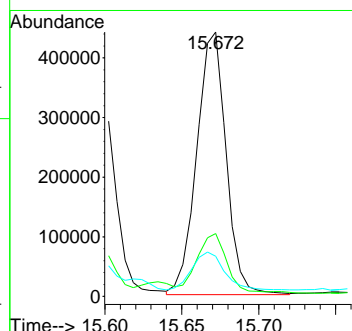
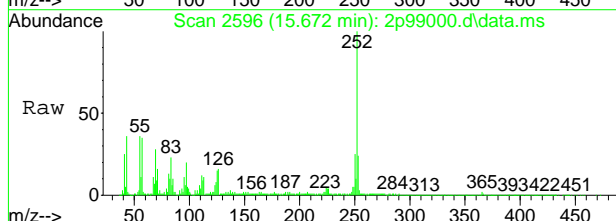
#94  
 Benzo[k]fluoranthene  
 Concen: 7.30 ppm  
 RT: 15.265 min Scan# 2520  
 Delta R.T. 0.016 min  
 Lab File: 2p99000.d  
 Acq: 15 Jan 2021 9:44 pm

Tgt Ion	Ratio	Lower	Upper
252	100		
253	19.4	0.0	51.6
125	7.8	0.0	40.9

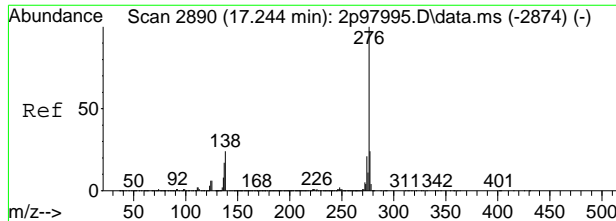


#95  
 Benzo[a]pyrene  
 Concen: 18.01 ppm  
 RT: 15.672 min Scan# 2596  
 Delta R.T. 0.022 min  
 Lab File: 2p99000.d  
 Acq: 15 Jan 2021 9:44 pm

Tgt Ion	Ratio	Lower	Upper
252	100		
253	20.8	0.0	51.7
125	13.0	0.0	41.0

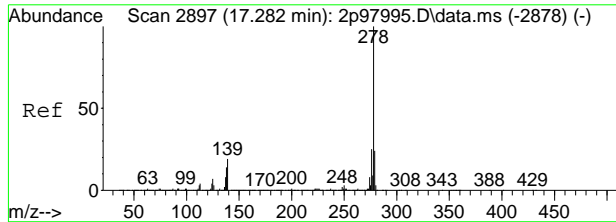
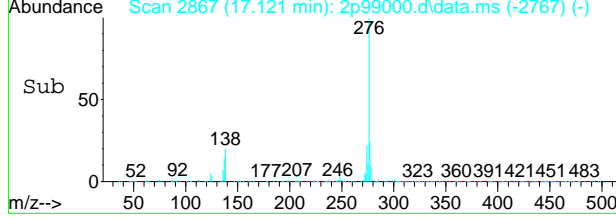
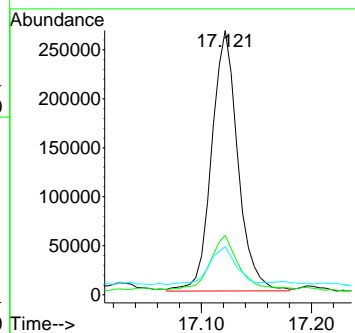
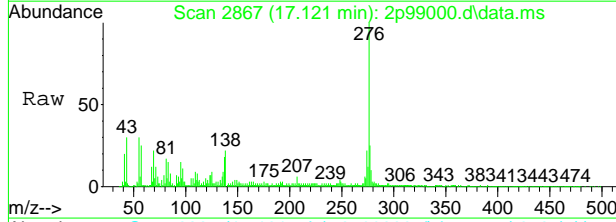


7.13  
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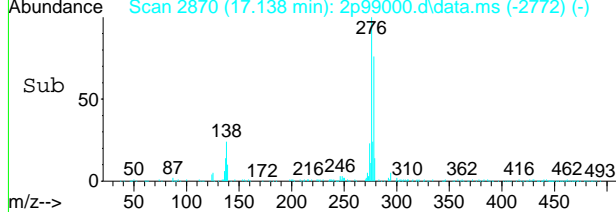
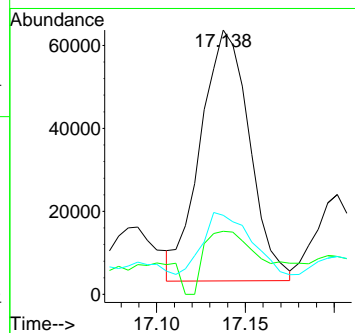
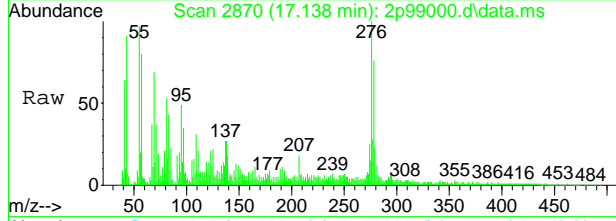
#96  
 Indeno[1,2,3-cd]pyrene  
 Concen: 12.64 ppm  
 RT: 17.121 min Scan# 2867  
 Delta R.T. 0.032 min  
 Lab File: 2p99000.d  
 Acq: 15 Jan 2021 9:44 pm

Tgt Ion	Resp	Lower	Upper
276	441450		
138	20.6	0.0	49.6
137	14.3	0.0	44.3



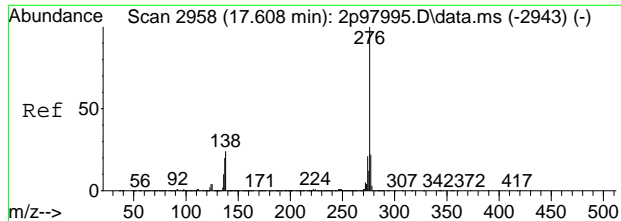
#98  
 Dibenz[a,h]anthracene  
 Concen: 3.19 ppm  
 RT: 17.138 min Scan# 2870  
 Delta R.T. 0.022 min  
 Lab File: 2p99000.d  
 Acq: 15 Jan 2021 9:44 pm

Tgt Ion	Resp	Lower	Upper
278	115840		
139	14.2	0.0	45.6
279	25.0	0.0	53.3



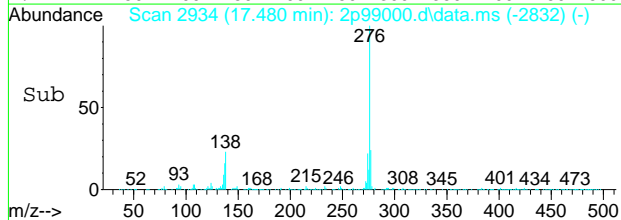
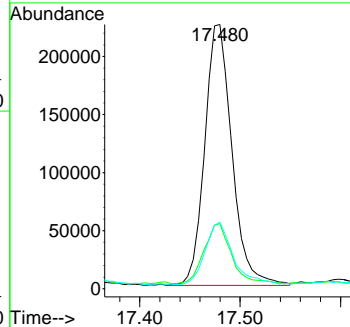
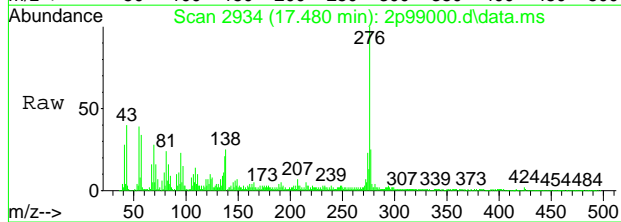
7.13  
7





#100  
 Benzo[g,h,i]perylene  
 Concen: 12.36 ppm  
 RT: 17.480 min Scan# 2934  
 Delta R.T. 0.043 min  
 Lab File: 2p99000.d  
 Acq: 15 Jan 2021 9:44 pm

Tgt Ion	Ratio	Lower	Upper
276	100		
138	22.6	0.0	51.4
277	23.9	0.0	53.7



7.1.3  
7

LSC Area Percent Report

Data Path : C:\msdchem\1\data\jeryllr\2p4412\  
 Data File : 2p99000.d  
 Acq On : 15 Jan 2021 9:44 pm  
 Operator : hennys  
 Sample : jd18939-2  
 Misc : op31540,e2p4412,30.7,,,1,1  
 ALS Vial : 20 Sample Multiplier: 1

Integration Parameters: lscint.p  
 Integrator: RTE  
 Smoothing : ON  
 Sampling : 1  
 Start Thrs: 0.02  
 Stop Thrs : 0  
 Filtering: 5  
 Min Area: 1000 Area counts  
 Max Peaks: 100  
 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 7

Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Title : Semi Volatile Extractables by GC/MS

Signal : TIC: 2p99000.d\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	3.210	262	266	282	rVB	473593	509416	3.55%	0.300%
2	3.515	320	323	341	rBV	1399272	1332237	9.28%	0.785%
3	4.001	407	414	418	rBV	183387	235036	1.64%	0.138%
4	4.231	452	457	462	rBV	1215121	1281694	8.93%	0.755%
5	4.269	462	464	470	rVV	229406	248024	1.73%	0.146%
6	4.429	491	494	502	rBV	4276957	3015272	21.00%	1.776%
7	4.841	566	571	581	rBV	1691938	1416106	9.86%	0.834%
8	5.419	674	679	687	rVV	4126898	3532775	24.61%	2.081%
9	6.216	821	828	842	rBV3	109824	185384	1.29%	0.109%
10	6.526	880	886	897	rBV	2424787	2259470	15.74%	1.331%
11	7.077	979	989	999	rVB4	155746	302666	2.11%	0.178%
12	7.157	999	1004	1009	rBV2	185692	236355	1.65%	0.139%
13	7.344	1030	1039	1044	rBV	3849855	3727687	25.96%	2.196%
14	7.382	1044	1046	1052	rVB	246907	278807	1.94%	0.164%
15	8.093	1175	1179	1188	rVB2	292568	332158	2.31%	0.196%
16	8.451	1241	1246	1253	rBV	1066051	1285942	8.96%	0.758%
17	8.767	1300	1305	1314	rVB3	134688	238997	1.66%	0.141%
18	9.115	1358	1370	1374	rBV9	150663	328684	2.29%	0.194%
19	9.184	1379	1383	1393	rVB6	121513	286367	1.99%	0.169%
20	9.462	1429	1435	1438	rBV2	3160372	3678153	25.62%	2.167%
21	9.494	1438	1441	1447	rVB	1929498	2104125	14.66%	1.240%
22	9.575	1448	1456	1461	rBV	537313	638850	4.45%	0.376%
23	9.703	1476	1480	1484	rVB	489391	500838	3.49%	0.295%
24	9.740	1484	1487	1497	rVB	376010	462673	3.22%	0.273%
25	9.869	1506	1511	1517	rBV	294661	357879	2.49%	0.211%
26	9.992	1523	1534	1541	rBV4	204865	393487	2.74%	0.232%
27	10.254	1578	1583	1586	rBV	281064	335075	2.33%	0.197%
28	10.291	1586	1590	1596	rVB	319132	382300	2.66%	0.225%
29	10.404	1607	1611	1616	rBV3	367109	516843	3.60%	0.304%
30	10.452	1616	1620	1626	rVB	162690	226195	1.58%	0.133%
31	10.537	1626	1636	1640	rBV4	228255	480531	3.35%	0.283%
32	10.735	1668	1673	1677	rBV	185500	270863	1.89%	0.160%
33	10.773	1677	1680	1689	rVB2	218178	313663	2.18%	0.185%
34	11.013	1722	1725	1736	rVB3	105448	254121	1.77%	0.150%
35	11.131	1740	1747	1751	rBV2	160197	290269	2.02%	0.171%
36	11.217	1759	1763	1776	rVB8	213036	485637	3.38%	0.286%
37	11.345	1777	1787	1794	rBV	2961251	3771132	26.27%	2.222%
38	11.479	1804	1812	1823	rBV4	905312	1453486	10.12%	0.856%
39	11.687	1842	1851	1858	rVB	2941220	3673051	25.58%	2.164%
40	11.917	1889	1894	1906	rBV3	498475	992834	6.92%	0.585%



7.14  
7

LSC Area Percent Report

Data Path : C:\msdchem\1\data\jeryllr\2p4412\  
 Data File : 2p99000.d  
 Acq On : 15 Jan 2021 9:44 pm  
 Operator : hennys  
 Sample : jd18939-2  
 Misc : op31540,e2p4412,30.7,,,1,1  
 ALS Vial : 20 Sample Multiplier: 1

Integration Parameters: lscint.p  
 Integrator: RTE  
 Smoothing : ON  
 Sampling : 1  
 Start Thrs: 0.02  
 Stop Thrs : 0

Filtering: 5  
 Min Area: 1000 Area counts  
 Max Peaks: 100  
 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 7

Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Title : Semi Volatile Extractables by GC/MS

41	12.014	1907	1912	1920	rVB	1961593	2494354	17.37%	1.469%
42	12.078	1920	1924	1929	rVB2	137093	226758	1.58%	0.134%
43	12.249	1942	1956	1960	rVV2	369590	732717	5.10%	0.432%
44	12.351	1970	1975	1979	rBV2	363770	473764	3.30%	0.279%
45	12.399	1980	1984	1987	rBV	209282	275602	1.92%	0.162%
46	12.538	2005	2010	2013	rBV2	227658	293563	2.04%	0.173%
47	12.580	2013	2018	2022	rVB2	360911	489980	3.41%	0.289%
48	12.720	2042	2044	2051	rVB5	152125	226905	1.58%	0.134%
49	12.864	2066	2071	2077	rVV2	372984	518092	3.61%	0.305%
50	12.939	2081	2085	2092	rVB6	141359	216456	1.51%	0.128%
51	13.067	2104	2109	2113	rVB3	167821	225445	1.57%	0.133%
52	13.131	2118	2121	2131	rVB2	169049	296341	2.06%	0.175%
53	13.212	2132	2136	2141	rBV	259921	399349	2.78%	0.235%
54	13.287	2148	2150	2156	rVB2	159428	240307	1.67%	0.142%
55	13.340	2156	2160	2165	rBV3	164065	246593	1.72%	0.145%
56	13.404	2166	2172	2179	rVB3	242490	418909	2.92%	0.247%
57	13.490	2184	2188	2193	rBV2	157483	248419	1.73%	0.146%
58	13.575	2200	2204	2206	rBV2	267420	356975	2.49%	0.210%
59	13.629	2206	2214	2218	rVV3	3389379	5818254	40.53%	3.427%
60	13.666	2218	2221	2230	rVB2	2239236	2907269	20.25%	1.713%
61	13.779	2238	2242	2249	rVB	279793	352890	2.46%	0.208%
62	13.837	2249	2253	2257	rBV3	298708	433234	3.02%	0.255%
63	14.035	2286	2290	2295	rBV2	175543	228349	1.59%	0.135%
64	14.174	2309	2316	2320	rBV3	231359	453853	3.16%	0.267%
65	14.265	2330	2333	2339	rVB2	230748	319335	2.22%	0.188%
66	14.677	2403	2410	2427	rBV2	1216298	4070994	28.36%	2.398%
67	15.132	2490	2495	2505	rBV4	514404	1137647	7.92%	0.670%
68	15.228	2507	2513	2518	rBV2	1764323	3201542	22.30%	1.886%
69	15.340	2529	2534	2537	rBV2	502886	682171	4.75%	0.402%
70	15.619	2577	2586	2591	rBV2	4771208	8012604	55.81%	4.720%
71	15.667	2591	2595	2605	rVV2	2183577	3861290	26.90%	2.275%
72	15.752	2605	2611	2615	rVV	2539424	3222697	22.45%	1.898%
73	15.982	2650	2654	2658	rVB6	210892	276016	1.92%	0.163%
74	16.057	2662	2668	2675	rVB3	451721	954698	6.65%	0.562%
75	16.121	2677	2680	2688	rVB8	200888	373231	2.60%	0.220%
76	16.260	2701	2706	2715	rBV2	771363	1325646	9.23%	0.781%
77	16.330	2715	2719	2724	rBV3	322337	500208	3.48%	0.295%
78	16.464	2738	2744	2746	rBV3	1176514	1716438	11.96%	1.011%
79	16.501	2746	2751	2757	rVV	4272232	6015640	41.90%	3.544%
80	16.560	2757	2762	2778	rVV2	1185053	2875664	20.03%	1.694%
81	16.667	2778	2782	2787	rBV	420079	665824	4.64%	0.392%
82	16.827	2809	2812	2823	rVB8	469967	880153	6.13%	0.518%
83	16.929	2825	2831	2836	rVB3	499426	905250	6.31%	0.533%
84	17.121	2862	2867	2871	rBV	606999	920768	6.41%	0.542%
85	17.170	2872	2876	2880	rVB	364965	482188	3.36%	0.284%



7.14  
7



LSC Area Percent Report

Data Path : C:\msdchem\1\data\jeryllr\e2p4412\  
Data File : 2p99000.d  
Acq On : 15 Jan 2021 9:44 pm  
Operator : hennys  
Sample : jd18939-2  
Misc : op31540,e2p4412,30.7,,,1,1  
ALS Vial : 20 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON Filtering: 5  
Sampling : 1 Min Area: 1000 Area counts  
Start Thrs: 0.02 Max Peaks: 100  
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 7

Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
Title : Semi Volatile Extractables by GC/MS

86	17.303	2898	2901	2906	rVB7	260411	391750	2.73%	0.231%
87	17.357	2906	2911	2918	rVB3	653729	1216085	8.47%	0.716%
88	17.426	2919	2924	2929	rVB	552306	866815	6.04%	0.511%
89	17.480	2929	2934	2943	rBV	709850	1358500	9.46%	0.800%
90	17.688	2965	2973	2981	rBV3	4452095	11346850	79.03%	6.684%
91	17.854	2998	3004	3015	rVV5	870605	2317892	16.14%	1.365%
92	17.961	3016	3024	3031	rVV3	2453073	6610419	46.04%	3.894%
93	18.036	3032	3038	3049	rVB3	2636901	6071329	42.29%	3.577%
94	18.164	3057	3062	3067	rBV9	378438	871524	6.07%	0.513%
95	18.245	3068	3077	3089	rVV4	2751220	9747118	67.89%	5.742%
96	18.341	3090	3095	3107	rVB4	1245726	3516613	24.49%	2.072%
97	18.464	3109	3118	3126	rVB2	1605746	3826449	26.65%	2.254%
98	18.678	3151	3158	3167	rVB4	839039	2279605	15.88%	1.343%
99	18.774	3170	3176	3196	rVB4	446609	1387717	9.67%	0.817%
100	19.191	3241	3254	3267	rVB	5119523	14356789	100.00%	8.457%

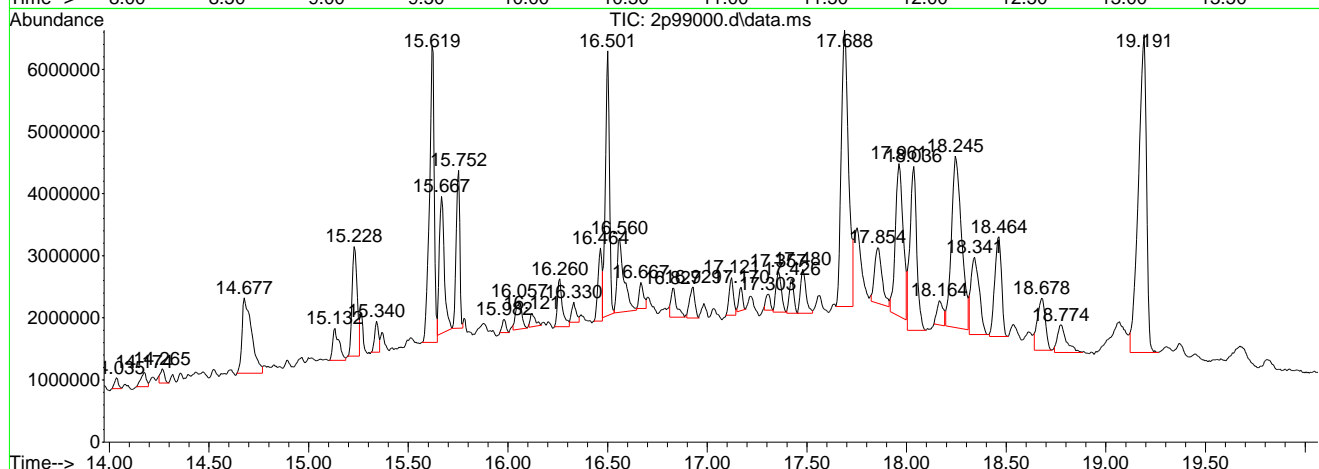
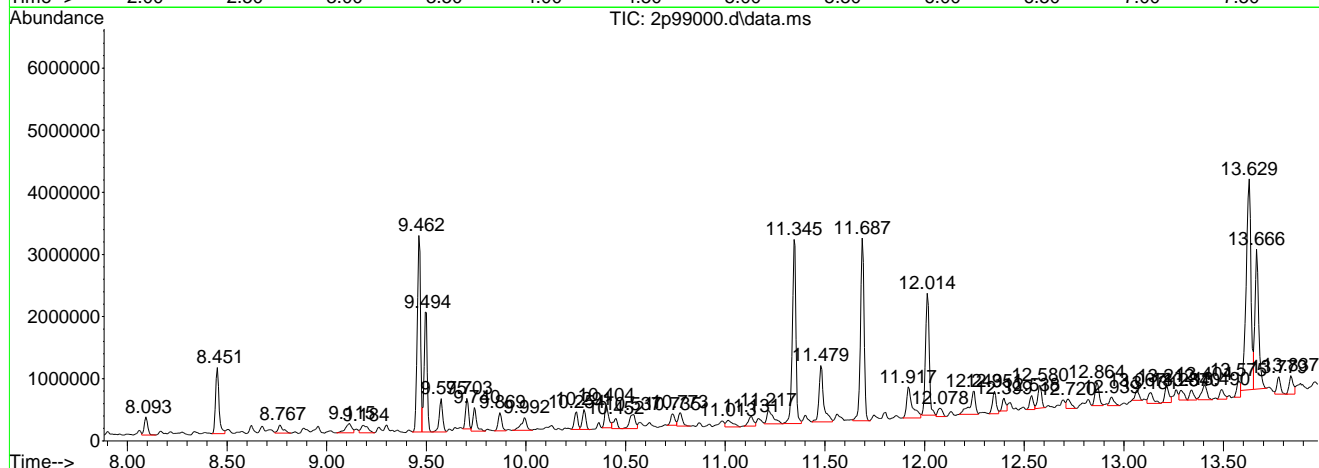
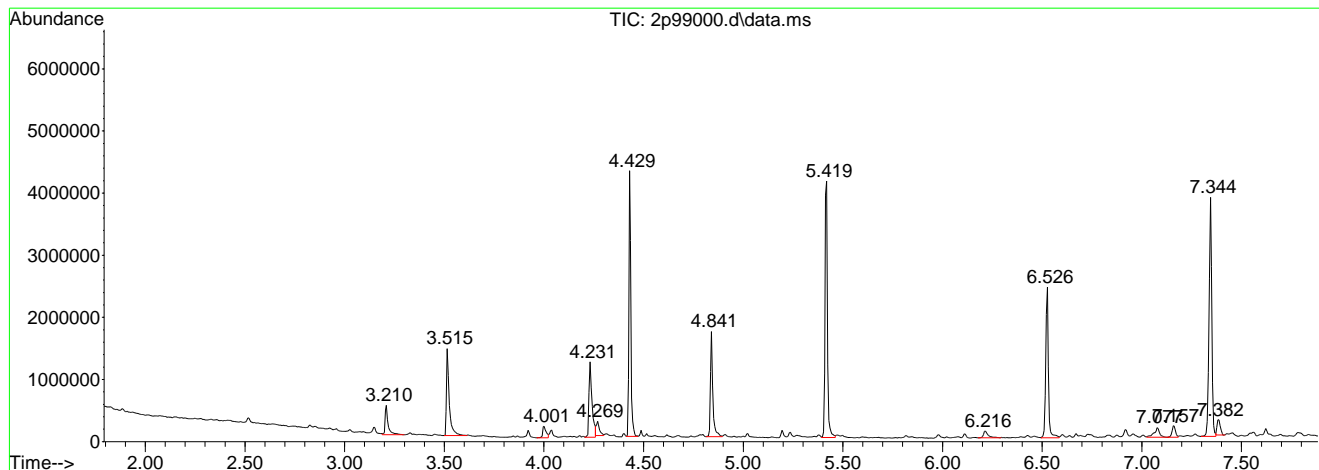
Sum of corrected areas: 169754919

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\data\jeryllr\e2p4412\  
 Data File : 2p99000.d  
 Acq On : 15 Jan 2021 9:44 pm  
 Operator : hennys  
 Sample : jd18939-2  
 Misc : op31540,e2p4412,30.7,,1,1  
 ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Title : Semi Volatile Extractables by GC/MS

TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p



7.1.4  
7

Library Search Compound Report

Data Path : C:\msdchem\1\data\jeryllr\2p4412\  
 Data File : 2p99000.d  
 Acq On : 15 Jan 2021 9:44 pm  
 Operator : hennys  
 Sample : jd18939-2  
 Misc : op31540,e2p4412,30.7,,1,1  
 ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Title : Semi Volatile Extractables by GC/MS

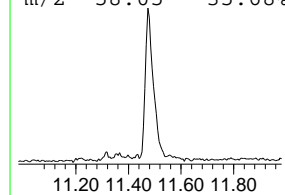
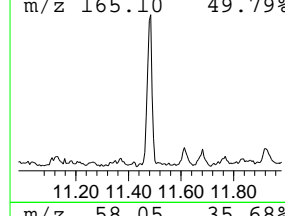
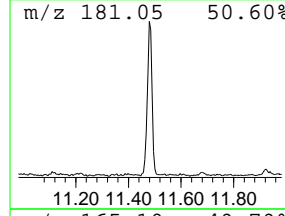
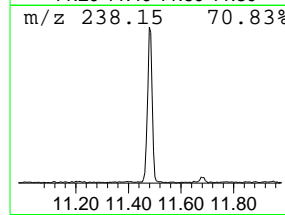
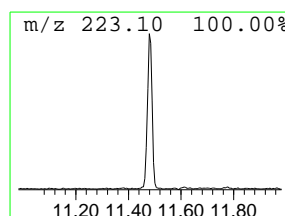
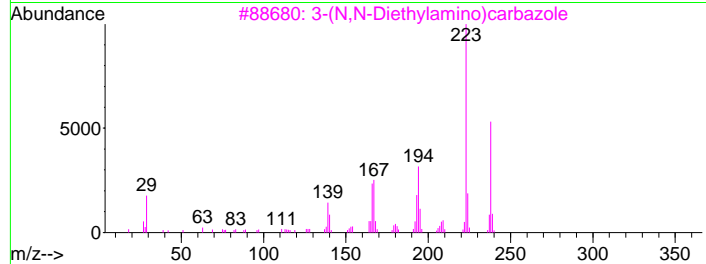
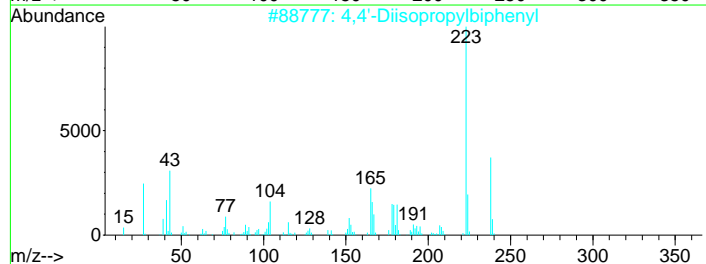
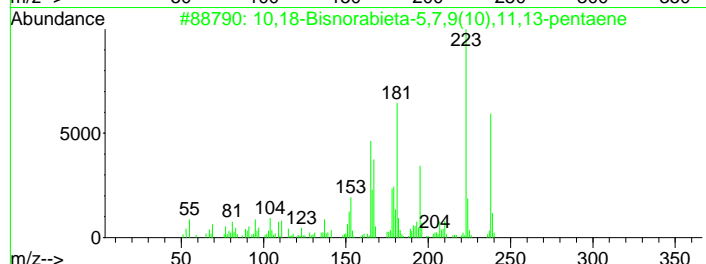
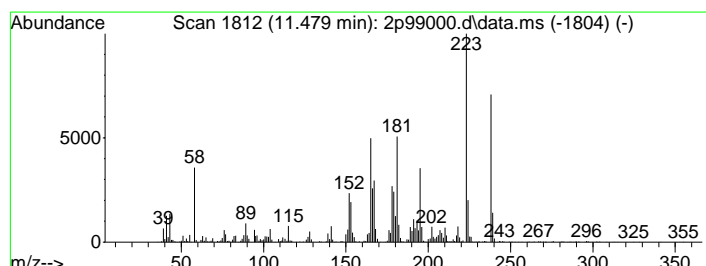
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 1 Bisnorabieta-pentaene Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.479	15.81 ppm	1453490	Phenanthrene-d10b	9.462

Hit#	of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	10,18-Bisnorabieta-5,7,9(10),11,...	238	C18H22	006566-19-4	99	
2	4,4'-Diisopropylbiphenyl	238	C18H22	018970-30-4	55	
3	3-(N,N-Diethylamino)carbazole	238	C16H18N2	054994-31-9	53	
4	4,4'-Diisopropylbiphenyl	238	C18H22	018970-30-4	50	
5	3,4'-Diisopropylbiphenyl	238	C18H22	061434-46-6	46	



7.1.4  
7

Library Search Compound Report

Data Path : C:\msdchem\1\data\jeryllr\e2p4412\  
 Data File : 2p99000.d  
 Acq On : 15 Jan 2021 9:44 pm  
 Operator : hennys  
 Sample : jd18939-2  
 Misc : op31540,e2p4412,30.7,,1,1  
 ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Title : Semi Volatile Extractables by GC/MS

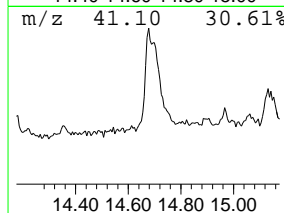
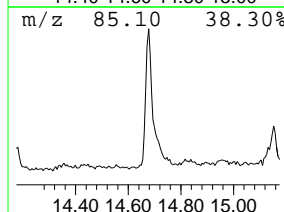
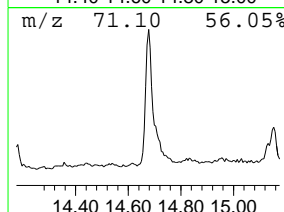
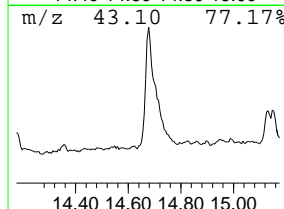
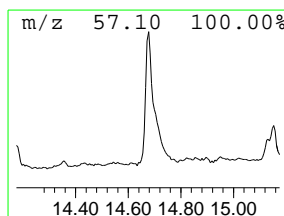
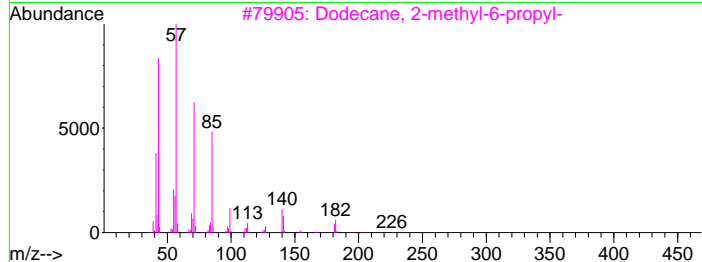
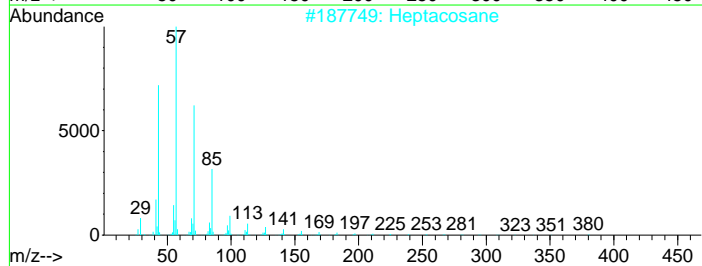
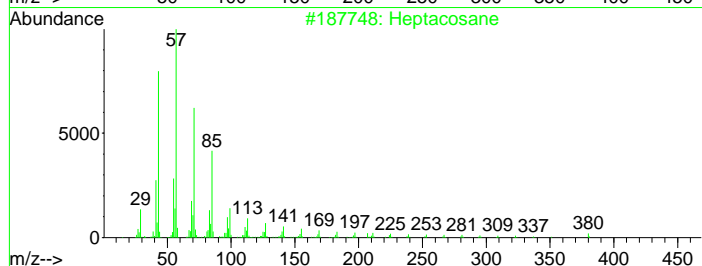
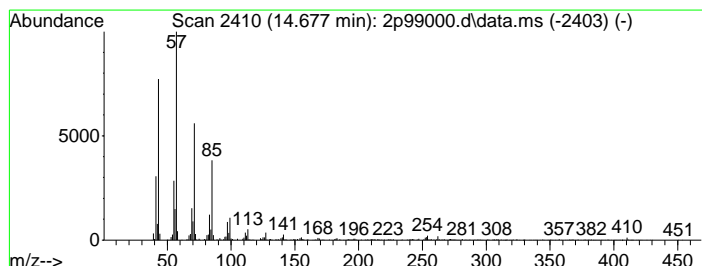
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 2 Alkane Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.677	27.99 ppm	4070990	Chrysene-d12b	13.629

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Heptacosane	380	C27H56	000593-49-7	95
2			Heptacosane	380	C27H56	000593-49-7	93
3			Dodecane, 2-methyl-6-propyl-	226	C16H34	055045-08-4	91
4			Docosane, 11-butyl-	366	C26H54	013475-76-8	90
5			Octadecane	254	C18H38	000593-45-3	90



Library Search Compound Report

Data Path : C:\msdchem\1\data\jeryllr\e2p4412\  
 Data File : 2p99000.d  
 Acq On : 15 Jan 2021 9:44 pm  
 Operator : hennys  
 Sample : jd18939-2  
 Misc : op31540,e2p4412,30.7,,1,1  
 ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Title : Semi Volatile Extractables by GC/MS

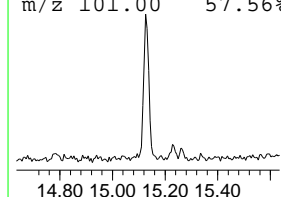
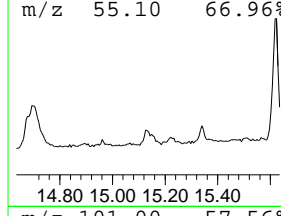
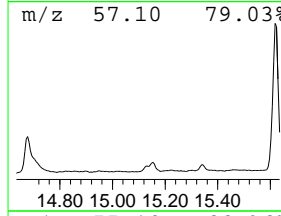
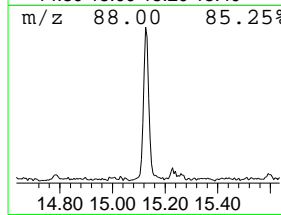
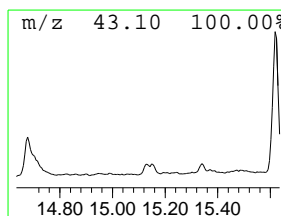
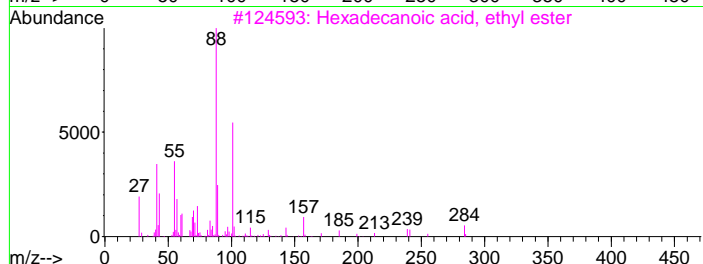
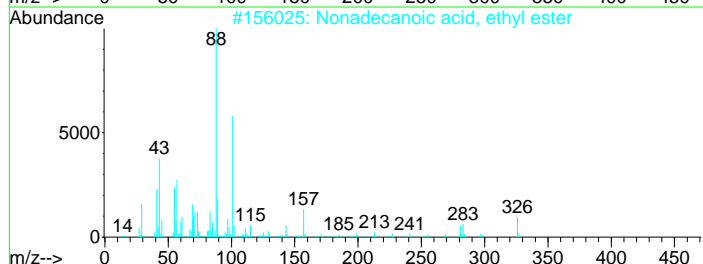
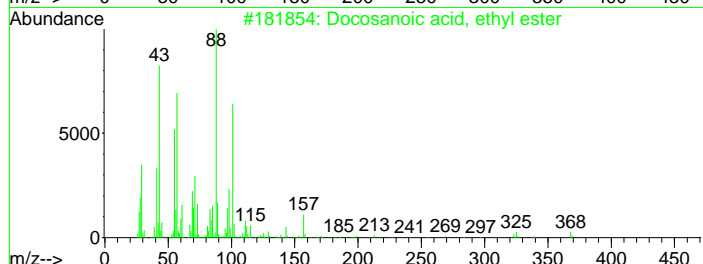
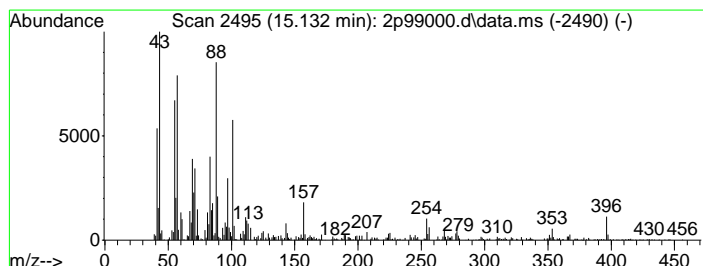
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 3 Unknown Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.132	14.12 ppm	1137650	Perylene-d12	15.752

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		Docosanoic acid, ethyl ester	368	C24H48O2	005908-87-2	52
2		Nonadecanoic acid, ethyl ester	326	C21H42O2	018281-04-4	50
3		Hexadecanoic acid, ethyl ester	284	C18H36O2	000628-97-7	47
4		Octadecanoic acid, ethyl ester	312	C20H40O2	000111-61-5	46
5		Tetradecanoic acid, 2-methyl-, m...	256	C16H32O2	055554-09-1	46



Library Search Compound Report

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 Data File : 2p99000.d  
 Acq On : 15 Jan 2021 9:44 pm  
 Operator : hennys  
 Sample : jd18939-2  
 Misc : op31540,e2p4412,30.7,,1,1  
 ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Title : Semi Volatile Extractables by GC/MS

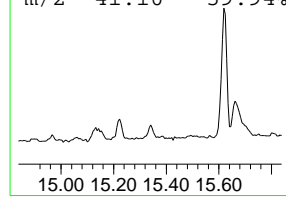
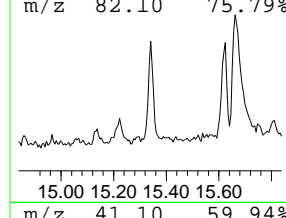
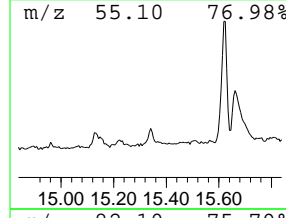
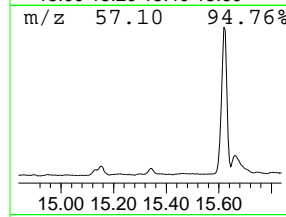
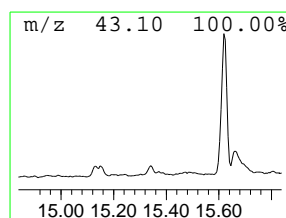
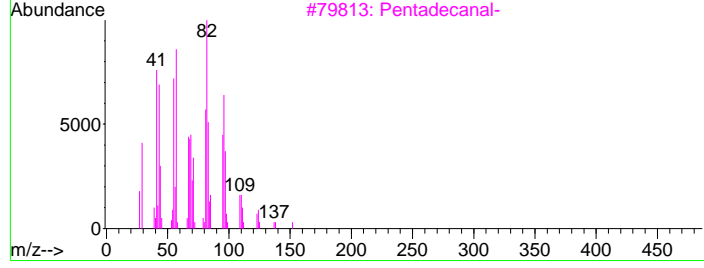
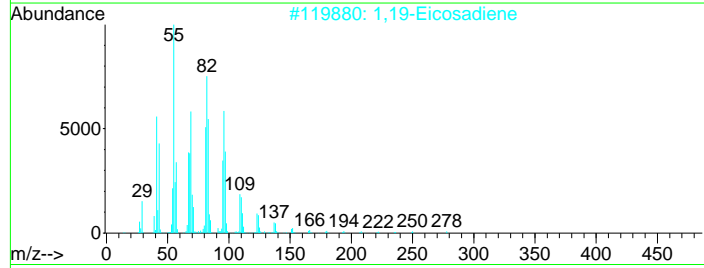
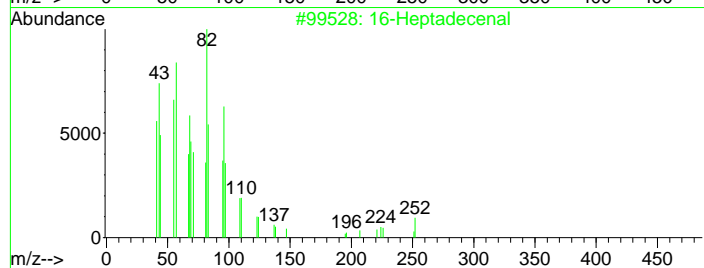
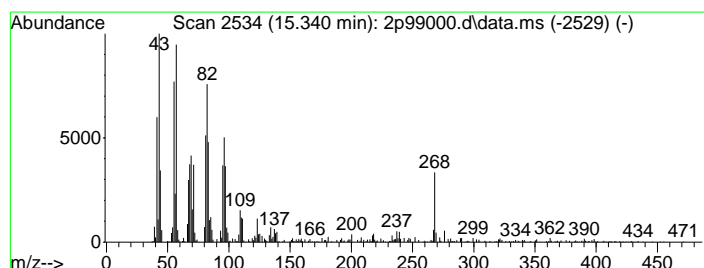
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 4 Unknown Concentration Rank 25

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.340	8.47 ppm	682171	Perylene-d12	15.752

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1	16-Heptadecenal		252	C17H32O	1000144-57-9	87
2	1,19-Eicosadiene		278	C20H38	014811-95-1	87
3	Pentadecanal-		226	C15H30O	002765-11-9	87
4	11-Tetradecyn-1-ol acetate		252	C16H28O2	033925-72-3	86
5	1,16-Hexadecanediol		258	C16H34O2	007735-42-4	83



Library Search Compound Report

Data Path : C:\msdchem\1\data\jeryllr\e2p4412\  
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 Operator : hennys  
 Sample : jd18939-2  
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 ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Title : Semi Volatile Extractables by GC/MS

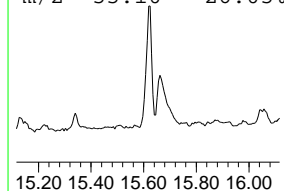
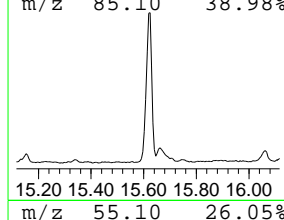
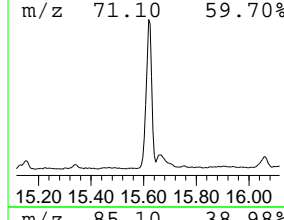
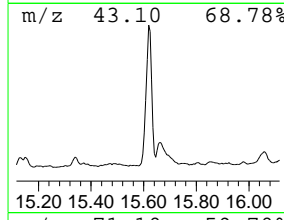
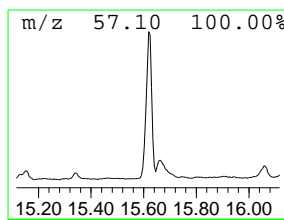
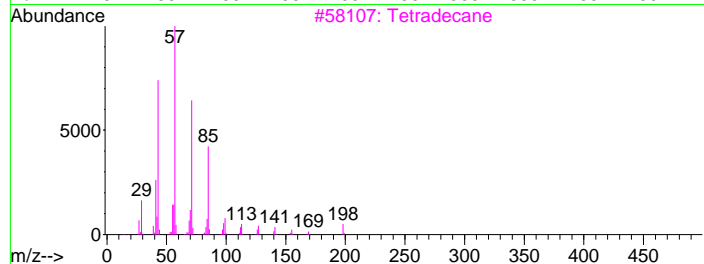
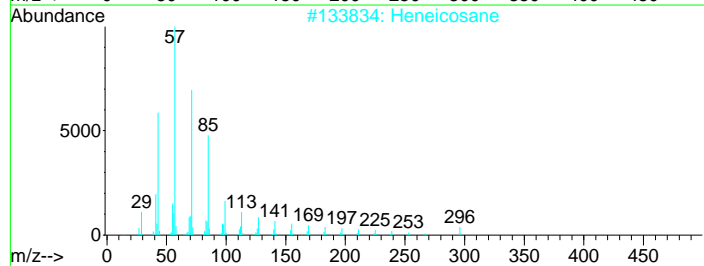
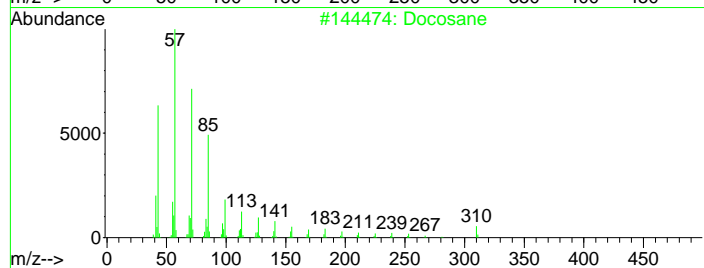
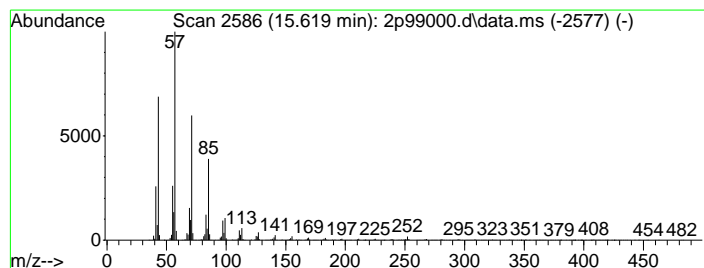
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 5 Alkane Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.618	99.45 ppm	8012600	Perylene-d12	15.752

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Docosane	310	C22H46	000629-97-0	95
2	Heneicosane	296	C21H44	000629-94-7	94
3	Tetradecane	198	C14H30	000629-59-4	94
4	Nonadecane	268	C19H40	000629-92-5	93
5	Hentriacontane	437	C31H64	000630-04-6	93



Library Search Compound Report

Data Path : C:\msdchem\1\data\jeryllr\e2p4412\  
 Data File : 2p99000.d  
 Acq On : 15 Jan 2021 9:44 pm  
 Operator : hennys  
 Sample : jd18939-2  
 Misc : op31540,e2p4412,30.7,,1,1  
 ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Title : Semi Volatile Extractables by GC/MS

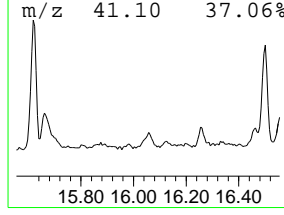
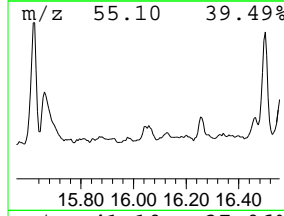
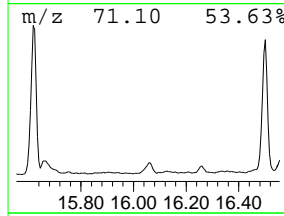
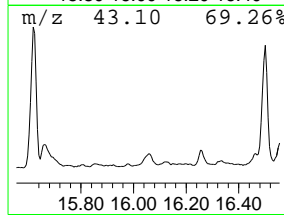
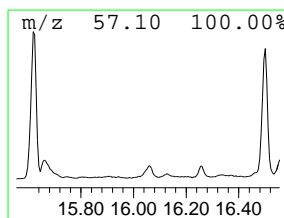
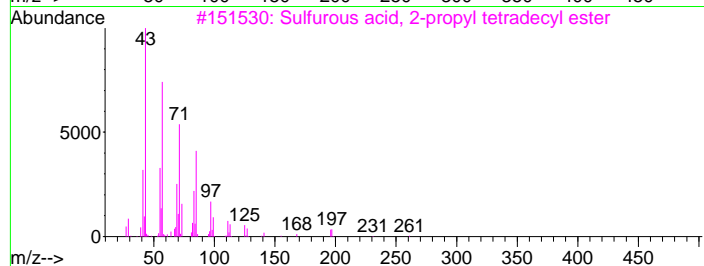
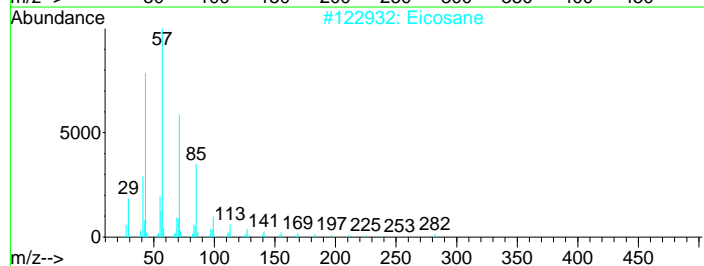
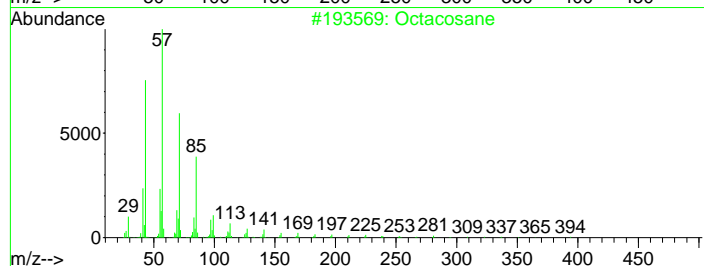
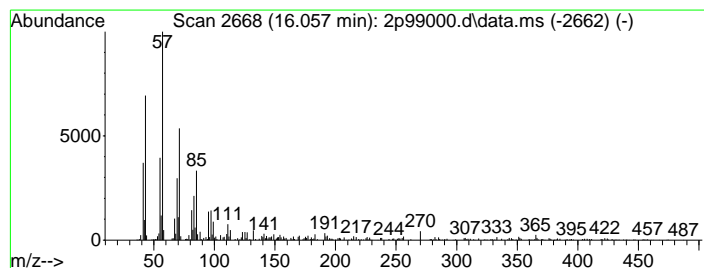
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 TIC Integration Parameters: lscint.p

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 Peak Number 6 Unknown Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.057	11.85 ppm	954698	Perylene-d12	15.752

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Octacosane	394	C28H58	000630-02-4	78
2		Eicosane	282	C20H42	000112-95-8	78
3		Sulfurous acid, 2-propyl tetradec...	320	C17H36O3S	1000309-12-5	68
4		Sulfurous acid, 2-propyl tridecy...	306	C16H34O3S	1000309-12-4	68
5		Dodecane	170	C12H26	000112-40-3	60





Library Search Compound Report

Data Path : C:\msdchem\1\data\jeryllr\e2p4412\  
 Data File : 2p99000.d  
 Acq On : 15 Jan 2021 9:44 pm  
 Operator : hennys  
 Sample : jd18939-2  
 Misc : op31540,e2p4412,30.7,,1,1  
 ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
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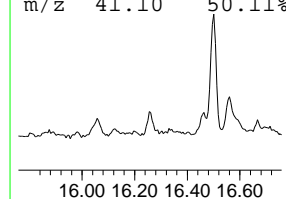
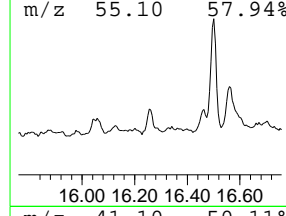
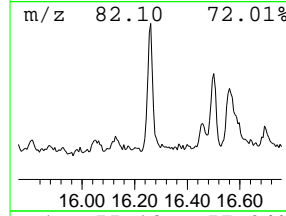
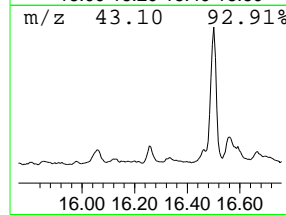
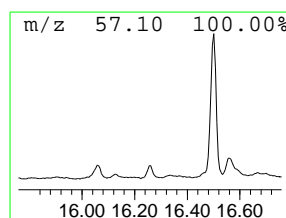
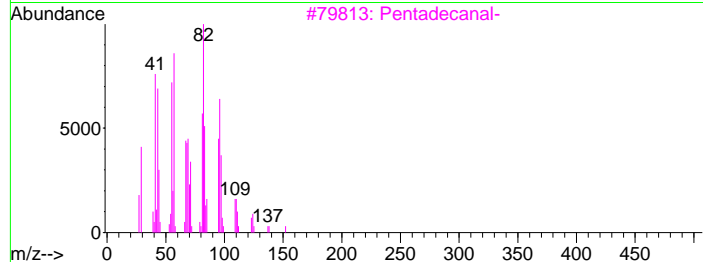
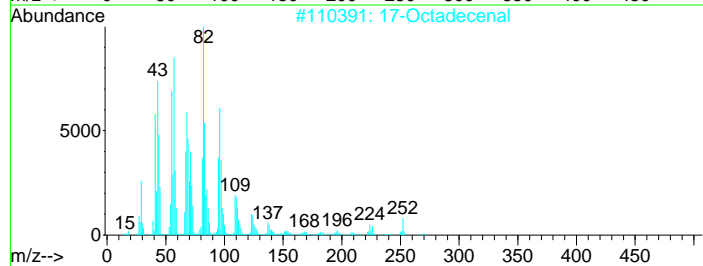
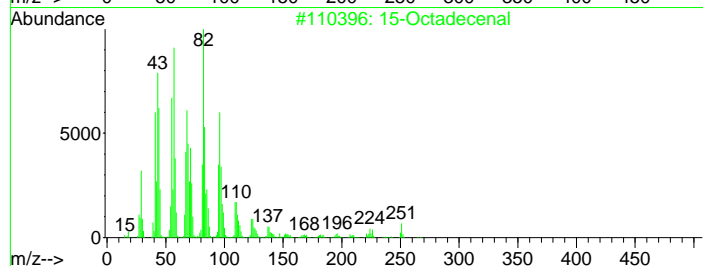
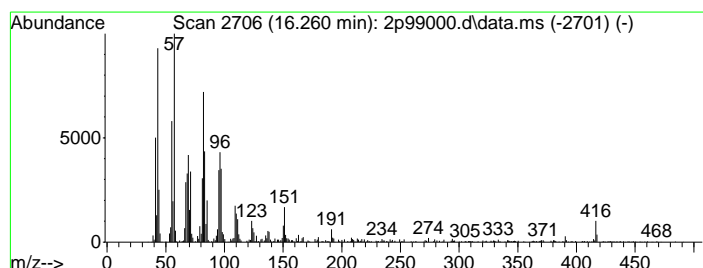
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 7 Unknown alcohols Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.260	16.45 ppm	1325650	Perylene-d12	15.752

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	15-Octadecenal	266	C18H34O	056554-93-9	83
2		17-Octadecenal	266	C18H34O	056554-86-0	83
3		Pentadecanal-	226	C15H30O	002765-11-9	74
4		1,19-Eicosadiene	278	C20H38	014811-95-1	72
5		(Z)-14-Tricosenyl formate	366	C24H46O2	077899-10-6	64



Library Search Compound Report

Data Path : C:\msdchem\1\data\jeryllr\e2p4412\  
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 Operator : hennys  
 Sample : jd18939-2  
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 ALS Vial : 20 Sample Multiplier: 1

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 Quant Title : Semi Volatile Extractables by GC/MS

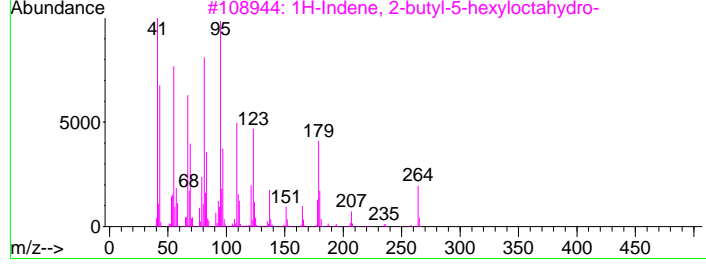
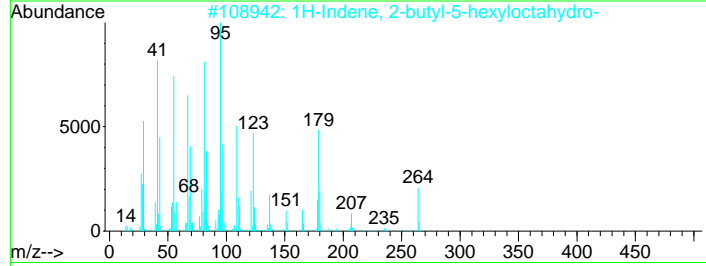
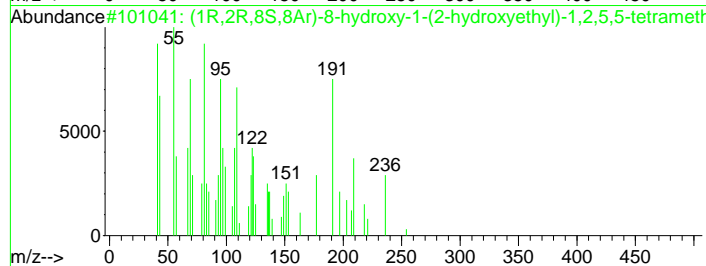
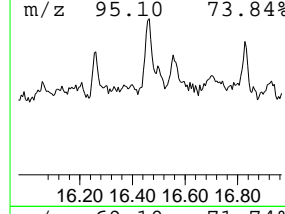
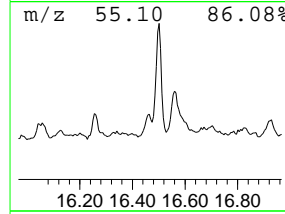
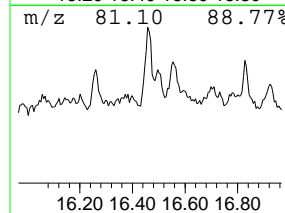
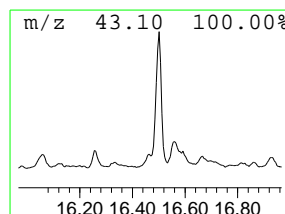
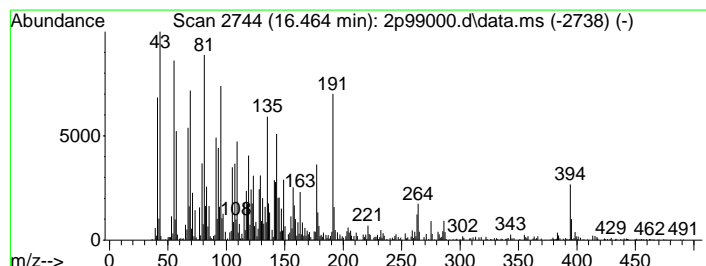
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 8 Unknown Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.464	21.30 ppm	1716440	Perylene-d12	15.752

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	(1R,2R,8S,8Ar)-8-hydroxy-1-(2-hy...	254	C16H30O2	1000298-98-6	70
2		1H-Indene, 2-butyl-5-hexyloctahy...	264	C19H36	055044-33-2	43
3		1H-Indene, 2-butyl-5-hexyloctahy...	264	C19H36	055044-33-2	41
4		28-Nor-17.alpha.(H)-hopane	398	C29H50	053584-60-4	38
5		(1R,2S,8R,8Ar)-8-acetoxy-1-(2-hy...	296	C18H32O3	1000298-98-4	35



Library Search Compound Report

Data Path : C:\msdchem\1\data\jeryllr\e2p4412\  
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 Sample : jd18939-2  
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Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Title : Semi Volatile Extractables by GC/MS

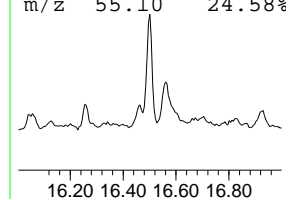
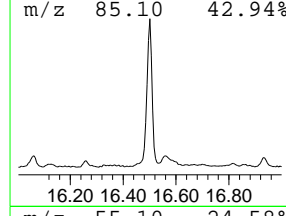
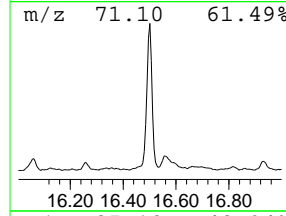
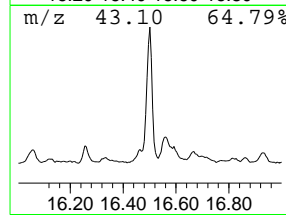
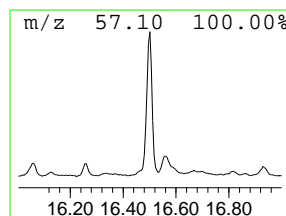
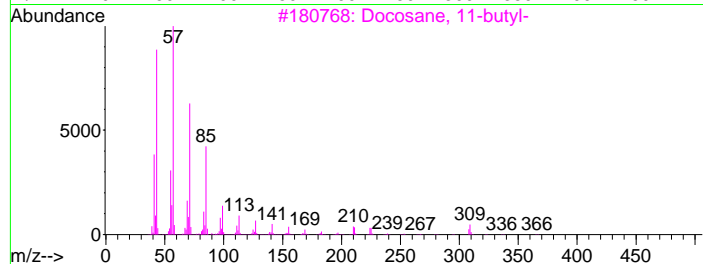
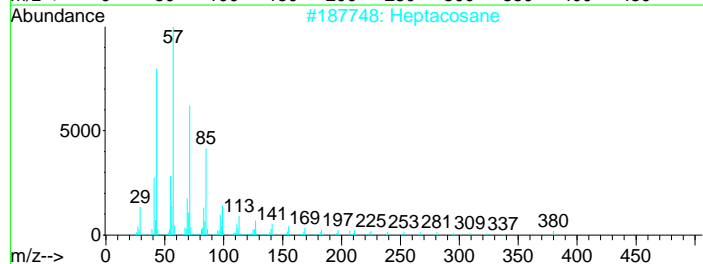
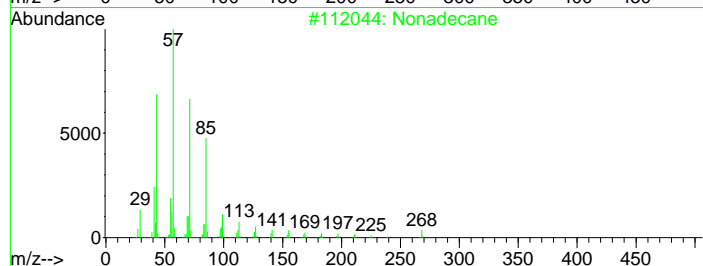
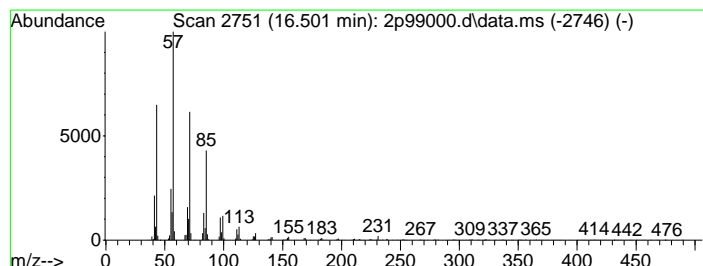
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 9 Alkane Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.501	74.67 ppm	6015640	Perylene-d12	15.752

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Nonadecane	268	C19H40	000629-92-5	95
2		Heptacosane	380	C27H56	000593-49-7	91
3		Docosane, 11-butyl-	366	C26H54	013475-76-8	90
4		Pentacosane	352	C25H52	000629-99-2	87
5		10-Methylnonadecane	282	C20H42	056862-62-5	86



Library Search Compound Report

Data Path : C:\msdchem\1\data\jeryllr\2p4412\  
 Data File : 2p99000.d  
 Acq On : 15 Jan 2021 9:44 pm  
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 ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Title : Semi Volatile Extractables by GC/MS

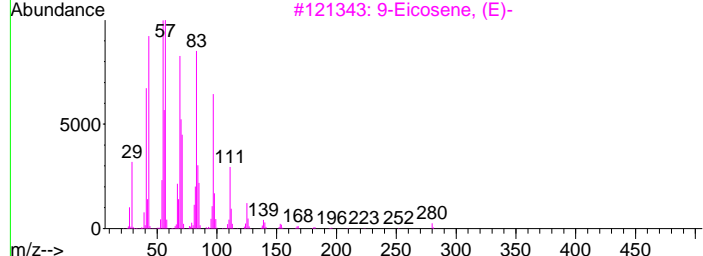
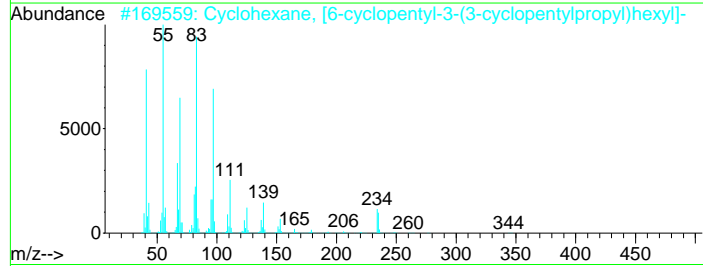
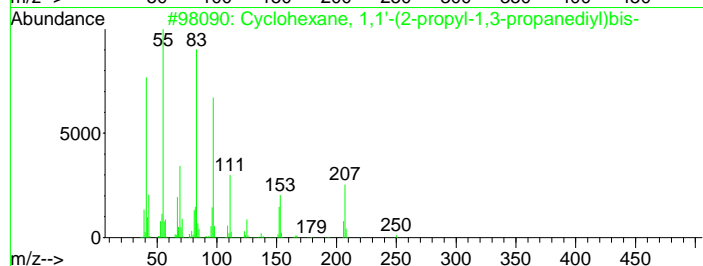
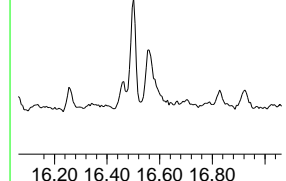
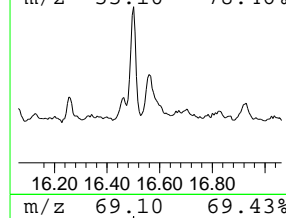
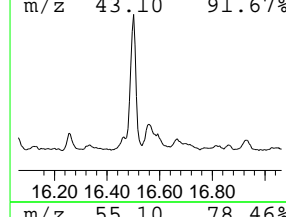
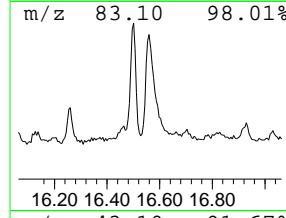
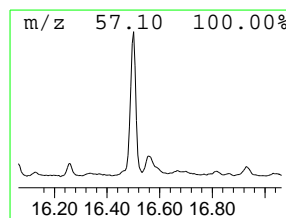
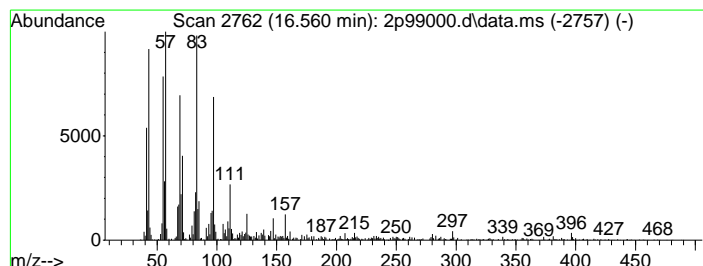
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 TIC Integration Parameters: lscint.p

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 Peak Number 10 Unknown Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.560	35.69 ppm	2875660	Perylene-d12	15.752

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Cyclohexane, 1,1'-(2-propyl-1,3-...	250	C18H34	055030-21-2	86
2			Cyclohexane, [6-cyclopentyl-3-(3...	346	C25H46	055401-72-4	86
3			9-Eicosene, (E)-	280	C20H40	074685-29-3	83
4			Cyclooctadecane, ethyl-	280	C20H40	1000151-22-5	78
5			Octadecane, 1-(ethenyl-oxo)-	296	C20H40O	000930-02-9	66



Library Search Compound Report

Data Path : C:\msdchem\1\data\jeryllr\e2p4412\  
 Data File : 2p99000.d  
 Acq On : 15 Jan 2021 9:44 pm  
 Operator : hennys  
 Sample : jd18939-2  
 Misc : op31540,e2p4412,30.7,,1,1  
 ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Title : Semi Volatile Extractables by GC/MS

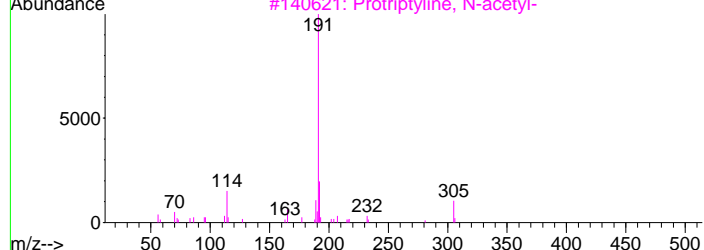
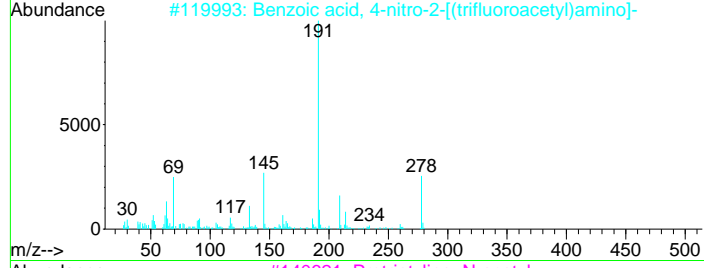
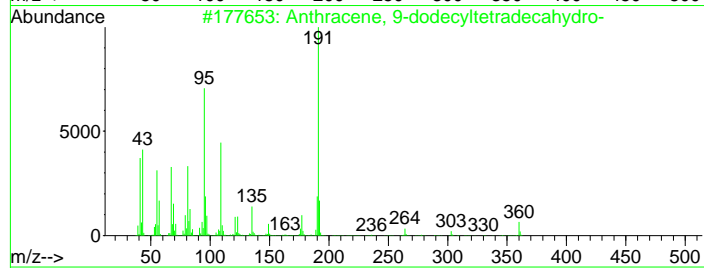
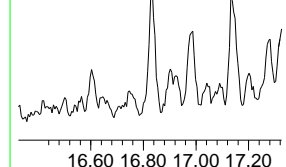
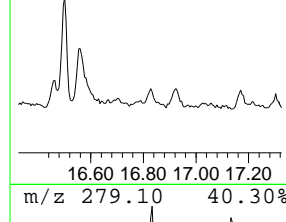
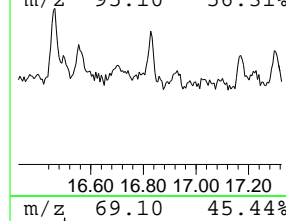
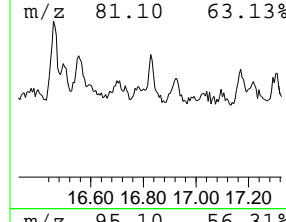
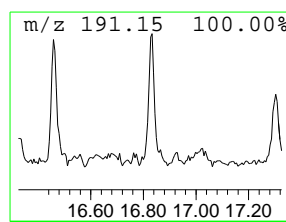
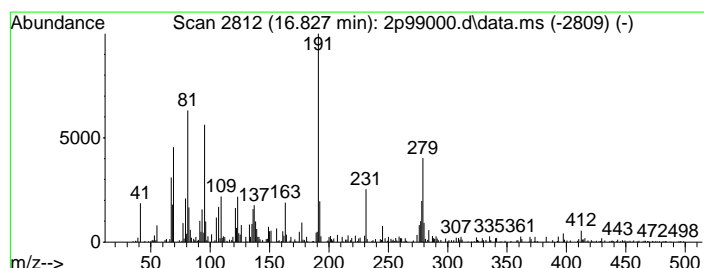
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 11 Unknown Concentration Rank 22

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.827	10.92 ppm	880153	Perylene-d12	15.752

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Anthracene, 9-dodecyltetradecahy...	360	C26H48	055401-75-7	37
2			Benzoic acid, 4-nitro-2-[(triflu...	278	C9H5F3N2O5	091533-09-4	30
3			Protriptyline, N-acetyl-	305	C21H23NO	023047-28-1	22
4			4(1H)-Pteridinone, 2-amino-6,7-d...	191	C8H9N5O	000611-55-2	22
5			5H-Benzo[def]carbazole	191	C14H9N	000203-65-6	22



7.1.4  
7

Library Search Compound Report

Data Path : C:\msdchem\1\data\jeryllr\e2p4412\  
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 Acq On : 15 Jan 2021 9:44 pm  
 Operator : hennys  
 Sample : jd18939-2  
 Misc : op31540,e2p4412,30.7,,1,1  
 ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Title : Semi Volatile Extractables by GC/MS

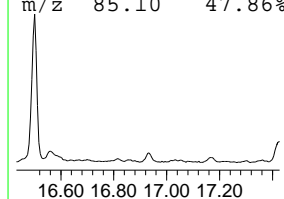
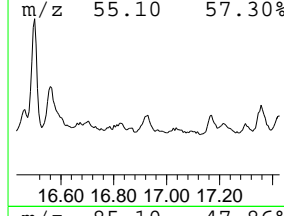
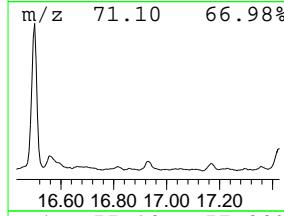
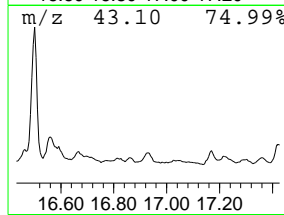
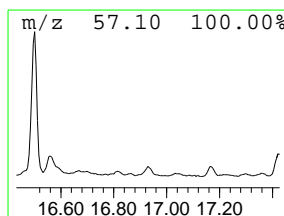
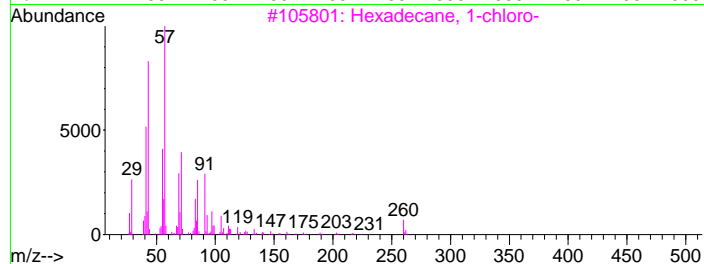
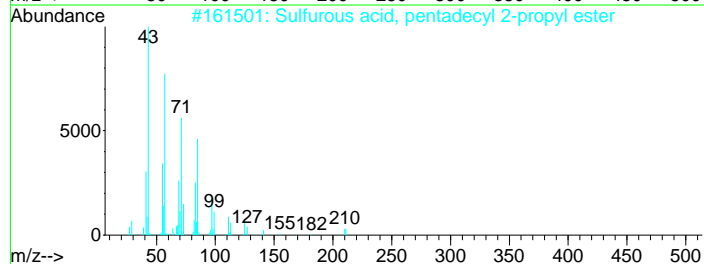
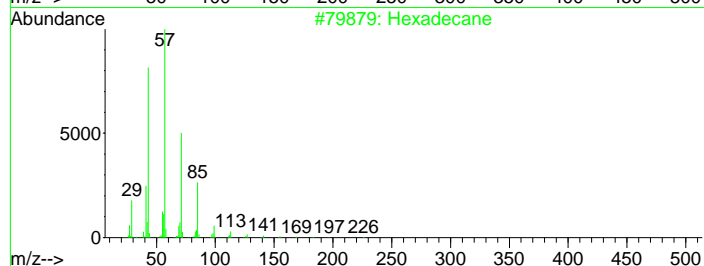
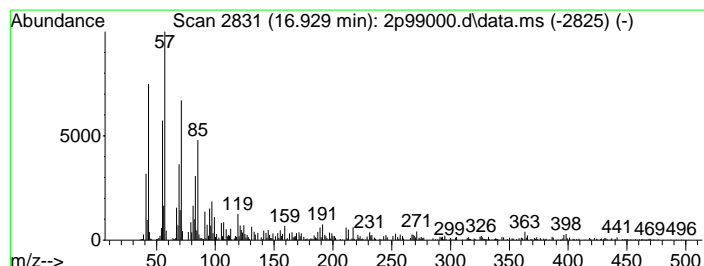
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 12 Unknown Concentration Rank 21

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.929	11.24 ppm	905250	Perylene-d12	15.752

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Hexadecane	226	C16H34	000544-76-3	83
2			Sulfurous acid, pentadecyl 2-pro...	334	C18H38O3S	1000309-12-6	72
3			Hexadecane, 1-chloro-	260	C16H33Cl	004860-03-1	72
4			Docosane, 1,22-dibromo-	466	C22H44Br2	034540-49-3	70
5			Tridecane, 6-propyl-	226	C16H34	055045-10-8	60



Library Search Compound Report

Data Path : C:\msdchem\1\data\jeryllr\e2p4412\  
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 Acq On : 15 Jan 2021 9:44 pm  
 Operator : hennys  
 Sample : jd18939-2  
 Misc : op31540,e2p4412,30.7,,1,1  
 ALS Vial : 20 Sample Multiplier: 1

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 Quant Title : Semi Volatile Extractables by GC/MS

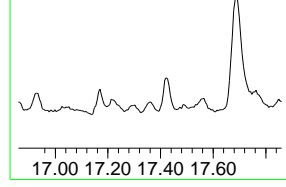
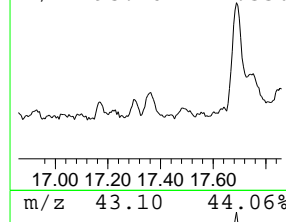
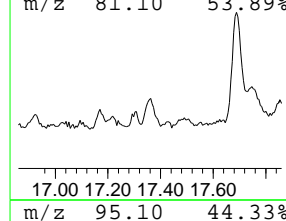
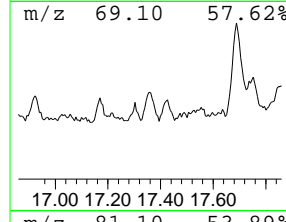
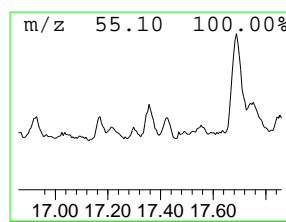
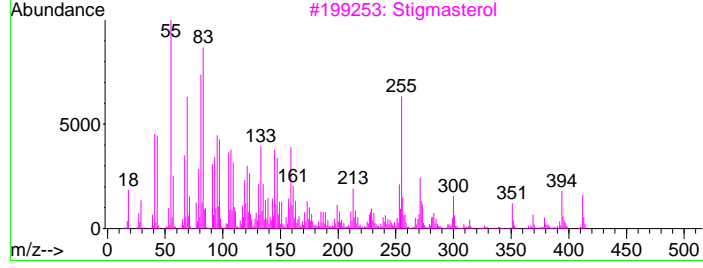
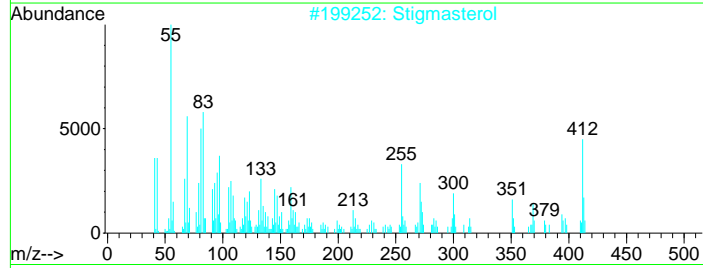
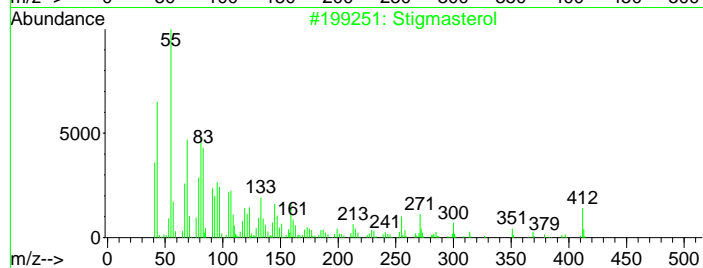
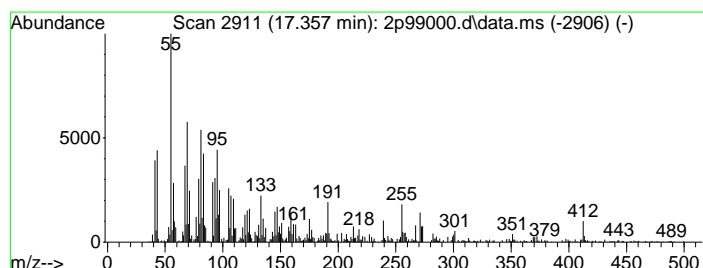
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 13 Stigmasterol Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.357	15.09 ppm	1216090	Perylene-d12	15.752

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Stigmasterol	412	C29H48O	000083-48-7	93
2			Stigmasterol	412	C29H48O	000083-48-7	83
3			Stigmasterol	412	C29H48O	000083-48-7	64
4			Cholesta-22,24-dien-5-ol, 4,4-di...	412	C29H48O	1000128-66-1	52
5			Ergost-25-ene-3,5,6,12-tetrol, (...)	448	C28H48O4	056052-97-2	32



Library Search Compound Report

Data Path : C:\msdchem\1\data\jeryllr\e2p4412\  
 Data File : 2p99000.d  
 Acq On : 15 Jan 2021 9:44 pm  
 Operator : hennys  
 Sample : jd18939-2  
 Misc : op31540,e2p4412,30.7,,,1,1  
 ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Title : Semi Volatile Extractables by GC/MS

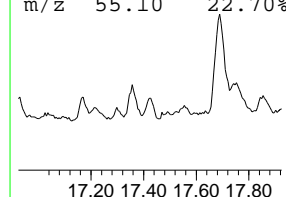
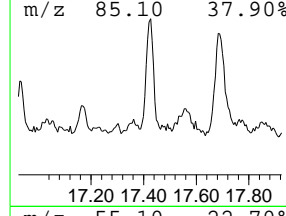
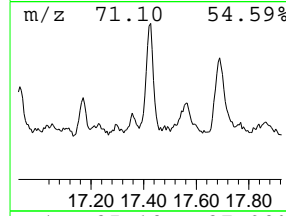
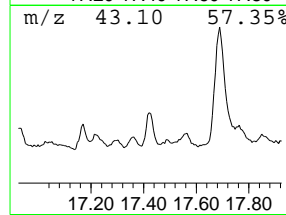
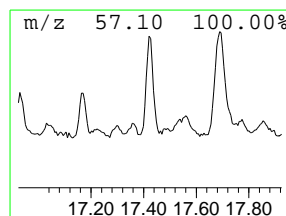
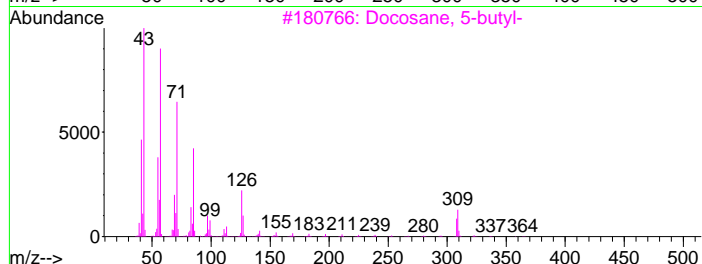
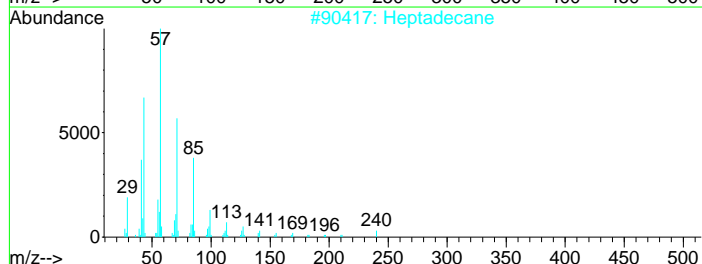
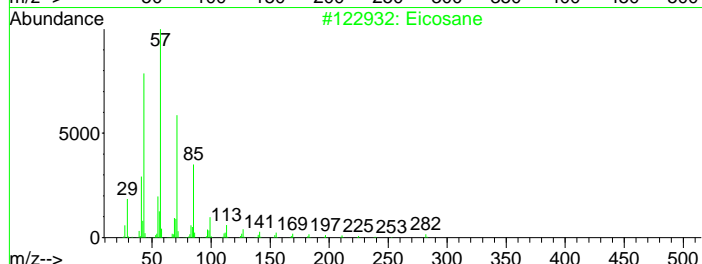
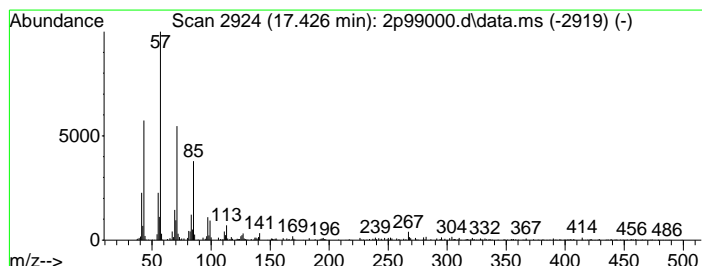
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 14 Alkane Concentration Rank 24

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.426	10.76 ppm	866815	Perylene-d12	15.752

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Eicosane	282	C20H42	000112-95-8	90
2		Heptadecane	240	C17H36	000629-78-7	90
3		Docosane, 5-butyl-	366	C26H54	055282-16-1	90
4		Octadecane, 5,14-dibutyl-	366	C26H54	055282-13-8	83
5		Tetratetracontane	619	C44H90	007098-22-8	83





Library Search Compound Report

Data Path : C:\msdchem\1\data\jeryllr\e2p4412\  
 Data File : 2p99000.d  
 Acq On : 15 Jan 2021 9:44 pm  
 Operator : hennys  
 Sample : jd18939-2  
 Misc : op31540,e2p4412,30.7,,1,1  
 ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Title : Semi Volatile Extractables by GC/MS

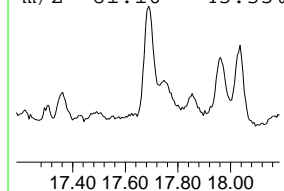
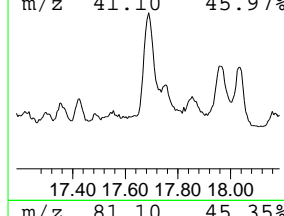
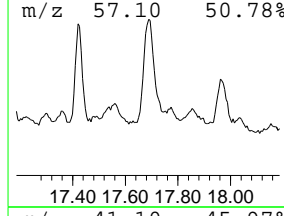
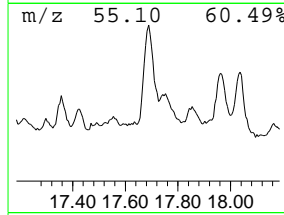
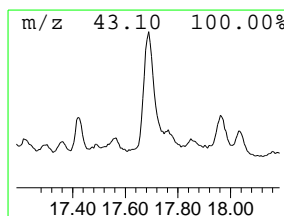
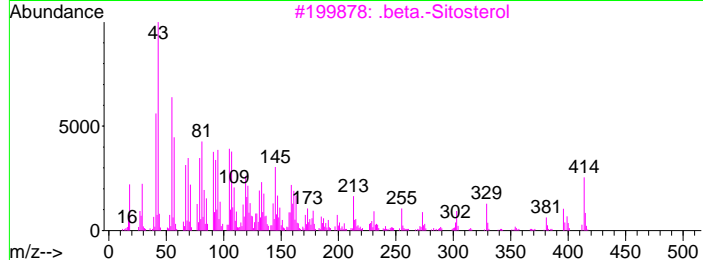
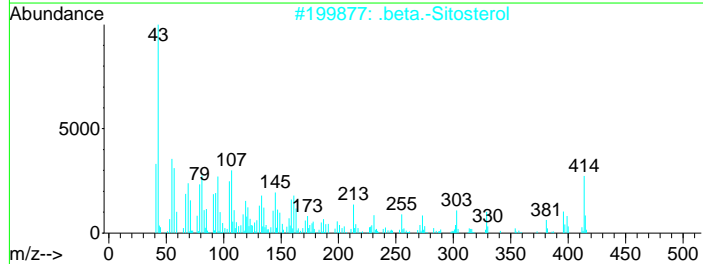
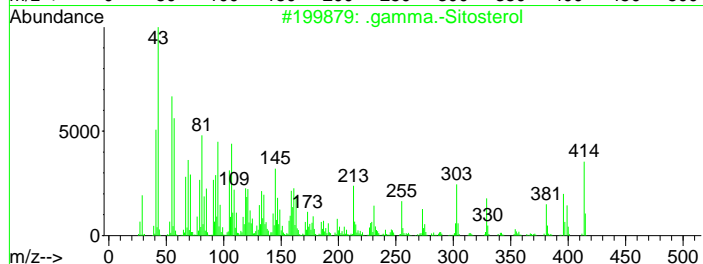
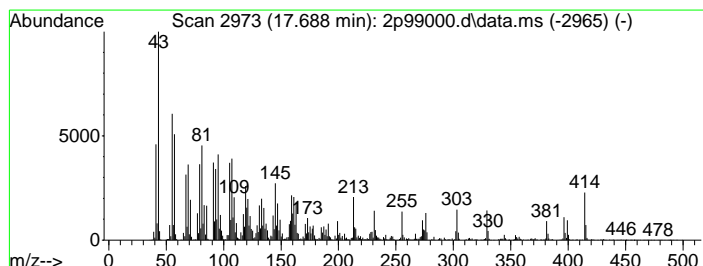
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 15 Sitosterol Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.688	140.84 ppm	11346900	Perylene-d12	15.752

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1	.	gamma.-	Sitosterol	414	C29H50O	000083-47-6	99
2	.	beta.-	Sitosterol	414	C29H50O	000083-46-5	95
3	.	beta.-	Sitosterol	414	C29H50O	000083-46-5	95
4	.	gamma.-	Sitosterol	414	C29H50O	000083-47-6	94
5	17-(1,5-		Dimethylhexyl)-10,13-dim...	414	C29H50O	1000210-86-9	86



Library Search Compound Report

Data Path : C:\msdchem\1\data\jeryllr\e2p4412\  
 Data File : 2p99000.d  
 Acq On : 15 Jan 2021 9:44 pm  
 Operator : hennys  
 Sample : jd18939-2  
 Misc : op31540,e2p4412,30.7,,1,1  
 ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Title : Semi Volatile Extractables by GC/MS

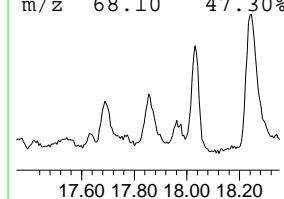
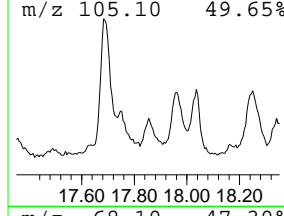
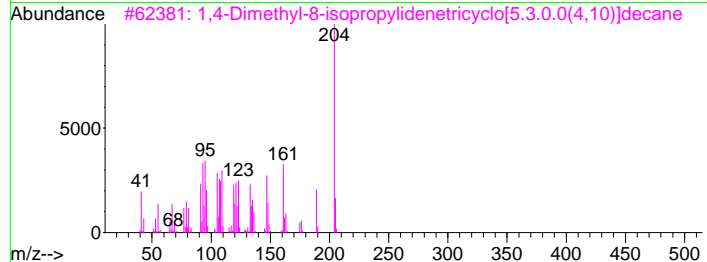
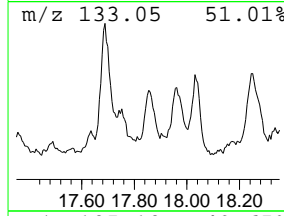
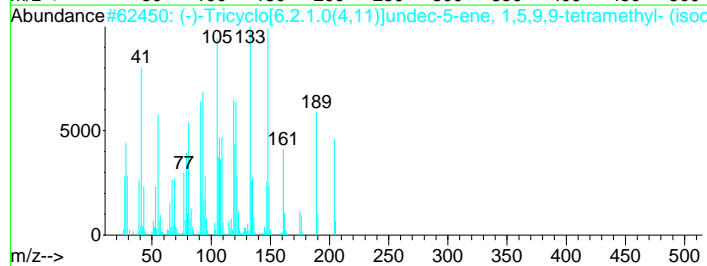
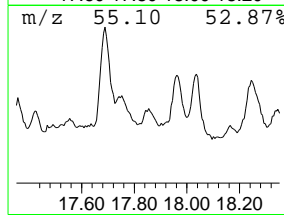
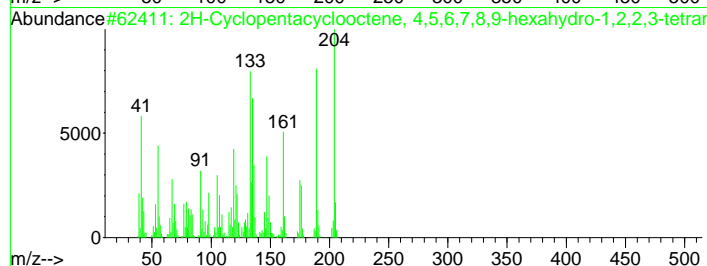
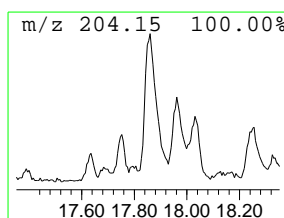
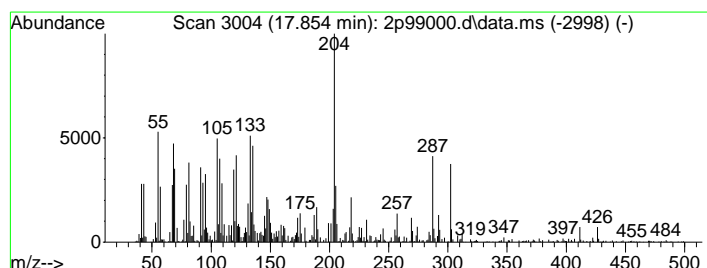
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 16 Unknown Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.854	28.77 ppm	2317890	Perylene-d12	15.752

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			2H-Cyclopentacyclooctene, 4,5,6,...	204	C15H24	1000221-85-8	53
2			(-)-Tricyclo[6.2.1.0(4,11)]undec...	204	C15H24	1000154-06-7	43
3			1,4-Dimethyl-8-isopropylidenetri...	204	C15H24	1000140-07-7	30
4			1,4-Naphthalenedione, 5,8-dihydr...	204	C11H8O4	014554-09-7	25
5			.beta.-D-Glucopyranoside, methyl...	482	C19H46O6Si4	002296-40-4	16



Library Search Compound Report

Data Path : C:\msdchem\1\data\jeryllr\2p4412\  
 Data File : 2p99000.d  
 Acq On : 15 Jan 2021 9:44 pm  
 Operator : hennys  
 Sample : jd18939-2  
 Misc : op31540,e2p4412,30.7,,1,1  
 ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Title : Semi Volatile Extractables by GC/MS

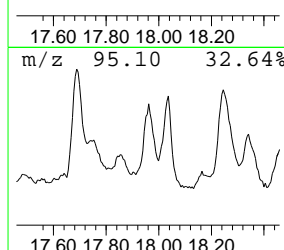
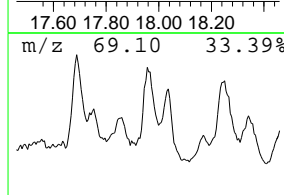
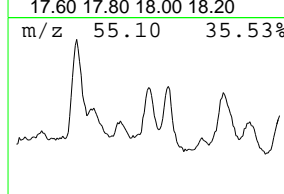
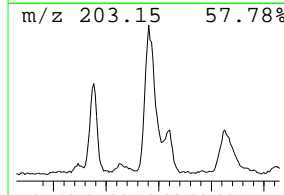
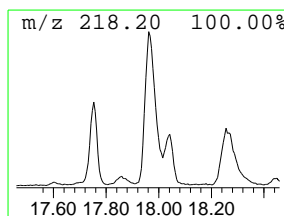
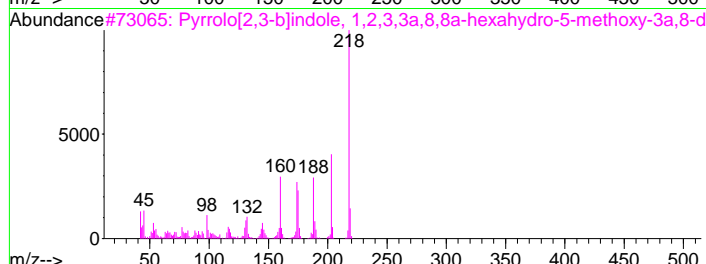
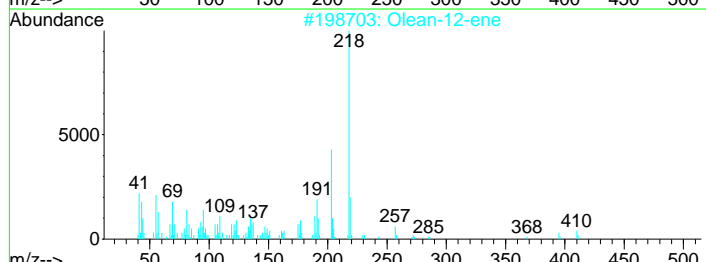
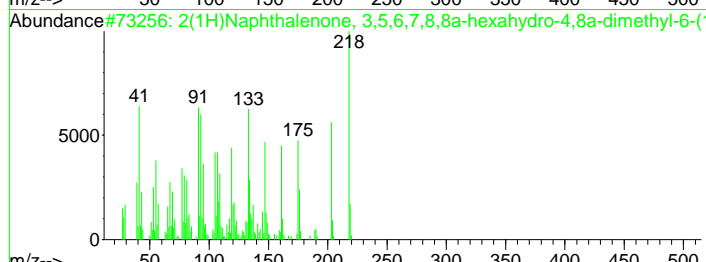
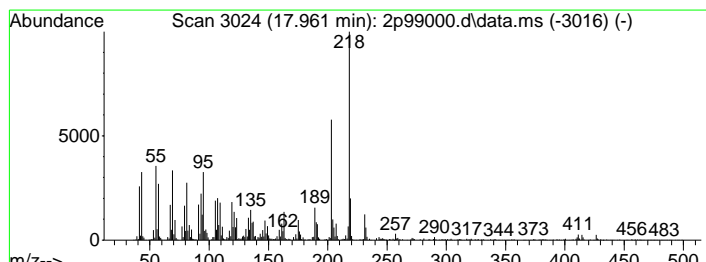
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 17 Unknown Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.961	82.05 ppm	6610420	Perylene-d12	15.752

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2(1H)Naphthalenone, 3,5,6,7,8,8a...	218	C15H22O	1000188-66-5	80
2		Olean-12-ene	410	C30H50	000471-68-1	72
3		Pyrrolo[2,3-b]indole, 1,2,3,3a,8...	218	C13H18N2O	046479-70-3	70
4		.alpha.-Amyrin	426	C30H50O	000638-95-9	60
5		(1S,6R,9S)-5,5,9,10-Tetramethylt...	218	C16H26	1000298-97-8	58



Library Search Compound Report

Data Path : C:\msdchem\1\data\jeryllr\e2p4412\  
 Data File : 2p99000.d  
 Acq On : 15 Jan 2021 9:44 pm  
 Operator : hennys  
 Sample : jd18939-2  
 Misc : op31540,e2p4412,30.7,,1,1  
 ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Title : Semi Volatile Extractables by GC/MS

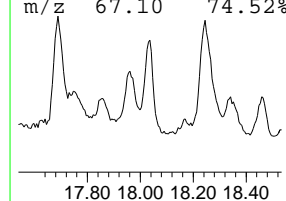
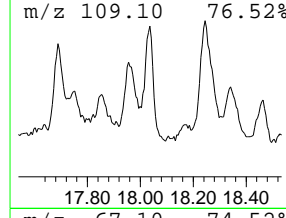
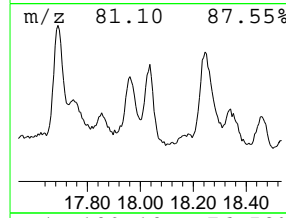
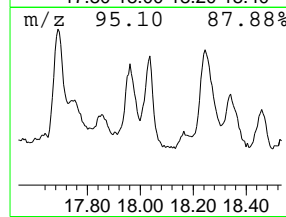
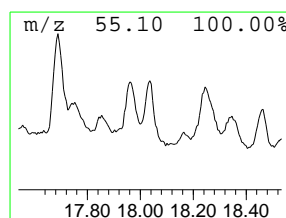
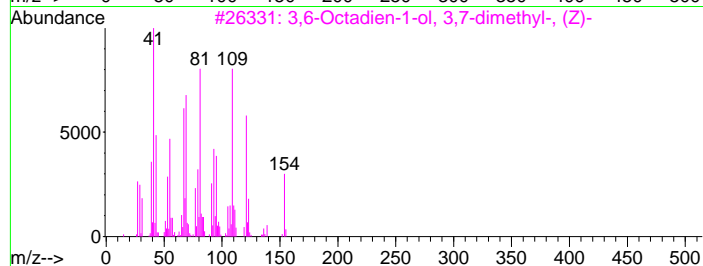
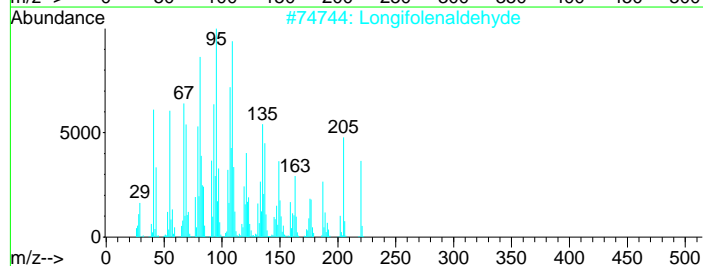
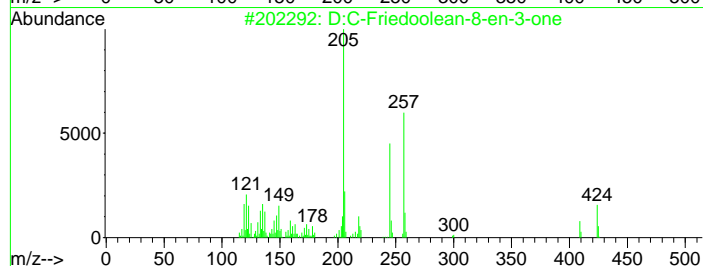
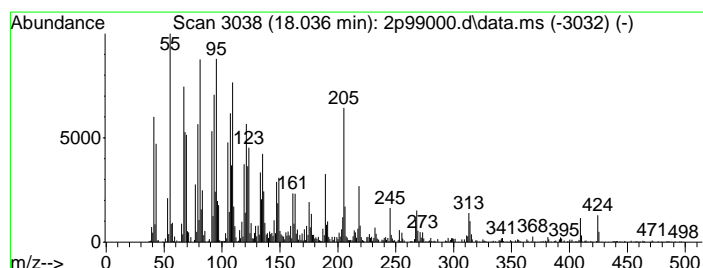
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 18 Unknown Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.036	75.36 ppm	6071330	Perylene-d12	15.752

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	D:C-Friedoolean-8-en-3-one	424	C30H48O	022611-26-3	94
2		Longifolenaldehyde	220	C15H24O	019890-84-7	50
3		3,6-Octadien-1-ol, 3,7-dimethyl-...	154	C10H18O	005944-20-7	49
4		Iridomyrcin	168	C10H16O2	000485-43-8	49
5		1,5-Dibromo-3-cyclohexylpentane	310	C11H20Br2	070928-50-6	46



Library Search Compound Report

Data Path : C:\msdchem\1\data\jeryllr\e2p4412\  
 Data File : 2p99000.d  
 Acq On : 15 Jan 2021 9:44 pm  
 Operator : hennys  
 Sample : jd18939-2  
 Misc : op31540,e2p4412,30.7,,1,1  
 ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Title : Semi Volatile Extractables by GC/MS

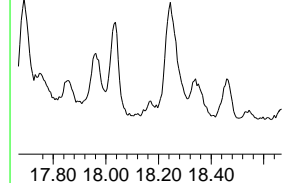
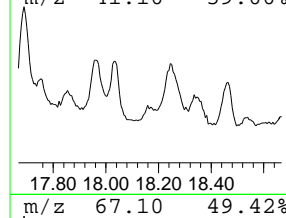
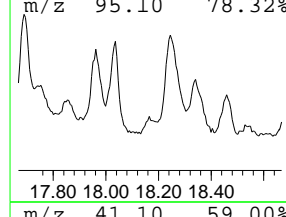
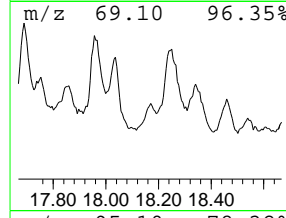
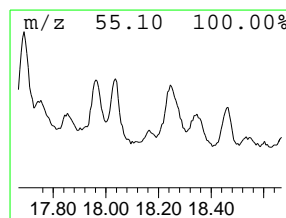
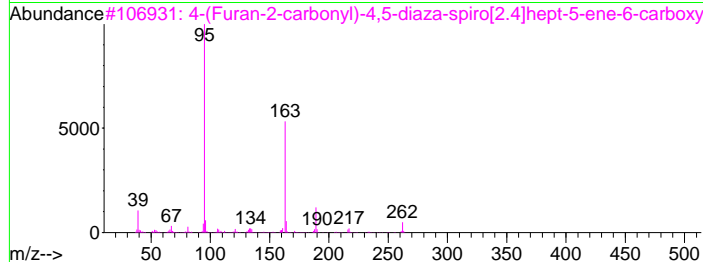
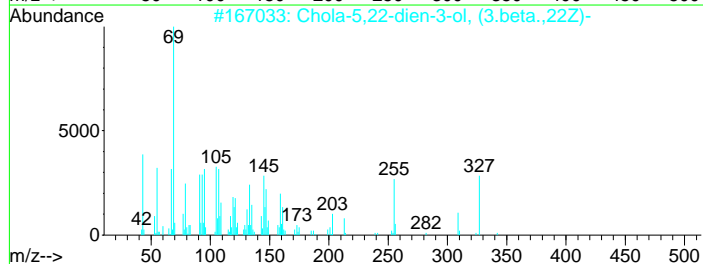
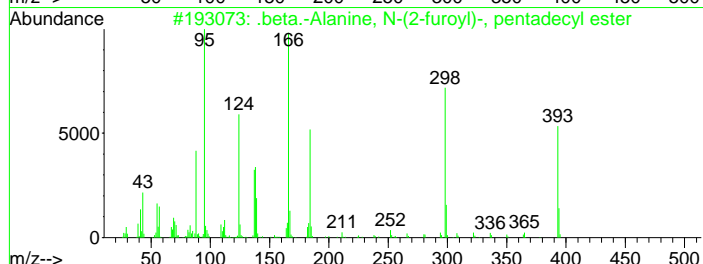
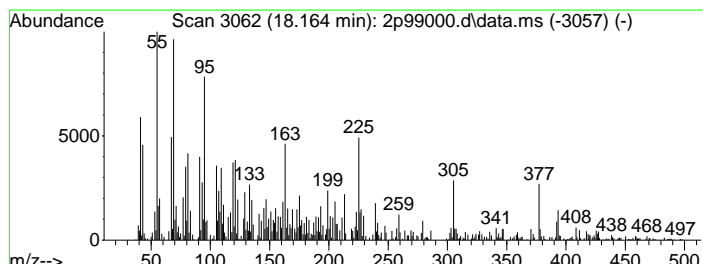
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 19 Unknown Concentration Rank 23

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.165	10.82 ppm	871524	Perylene-d12	15.752

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1	.	.beta.-Alanine, N-(2-furoyl)-, p...	393	C23H39NO4	1000321-98-4	59	
2	Chola-5,22-dien-3-ol, (3.beta.,2...	342	C24H38O	057597-14-5	18		
3	4-(Furan-2-carbonyl)-4,5-diaza-s...	262	C13H14N2O4	1000276-03-0	16		
4	1,3-Dioxolane, 4-butyl-5-ethyl-2...	294	C11H16F6O2	038363-90-5	12		
5	1,3-Dioxolane, 4-butyl-5-ethyl-2...	294	C11H16F6O2	038363-91-6	12		



Library Search Compound Report

Data Path : C:\msdchem\1\data\jeryllr\2p4412\  
 Data File : 2p99000.d  
 Acq On : 15 Jan 2021 9:44 pm  
 Operator : hennys  
 Sample : jd18939-2  
 Misc : op31540,e2p4412,30.7,,1,1  
 ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Title : Semi Volatile Extractables by GC/MS

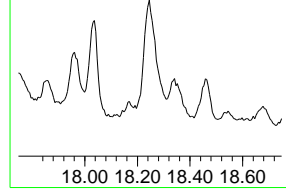
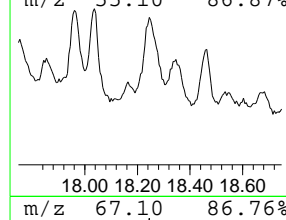
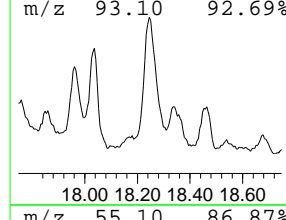
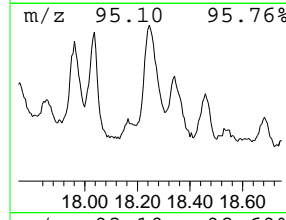
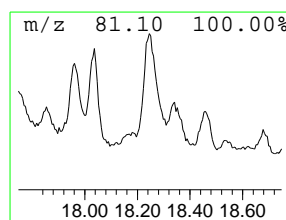
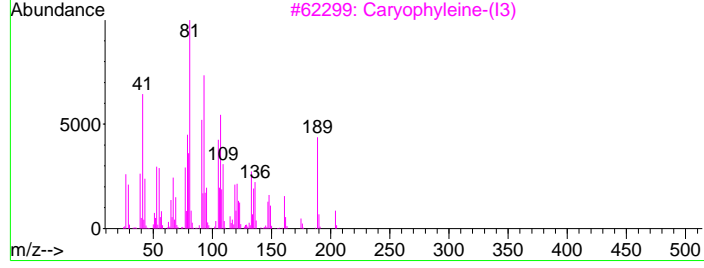
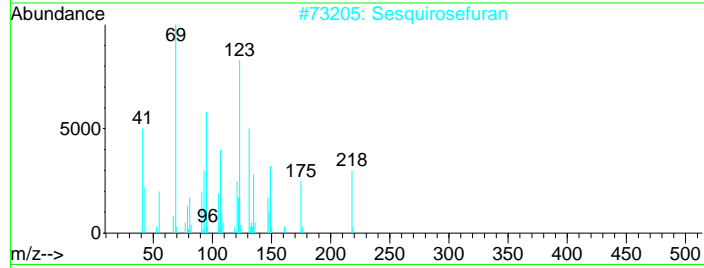
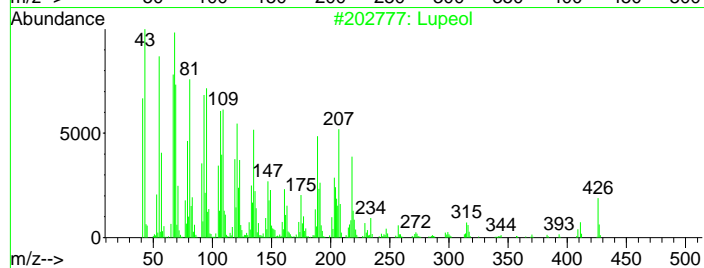
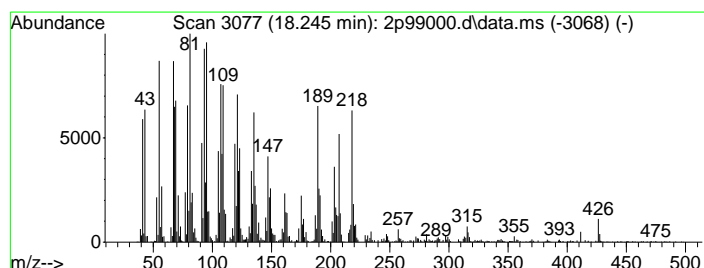
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 20 Unknown Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.245	120.98 ppm	9747120	Perylene-d12	15.752

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		Lupeol	426	C30H50O	000545-47-1	70
2		Sesquirosefuran	218	C15H22O	039007-93-7	55
3		Caryophyleine-(I3)	204	C15H24	136296-37-2	51
4		4,8-Methanoazulen-9-ol, decahydr...	222	C15H26O	004586-22-5	49
5		Taraxasterol	426	C30H50O	001059-14-9	47



Library Search Compound Report

Data Path : C:\msdchem\1\data\jeryllr\e2p4412\  
 Data File : 2p99000.d  
 Acq On : 15 Jan 2021 9:44 pm  
 Operator : hennys  
 Sample : jd18939-2  
 Misc : op31540,e2p4412,30.7,,1,1  
 ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Title : Semi Volatile Extractables by GC/MS

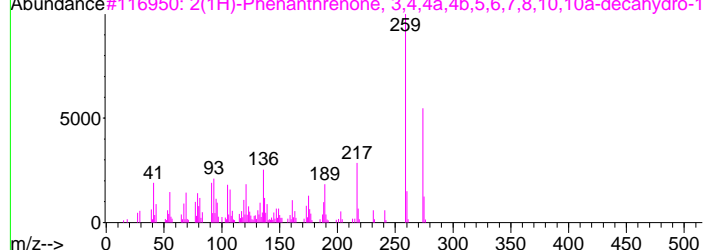
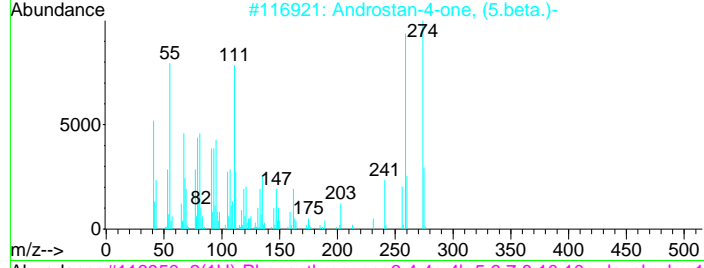
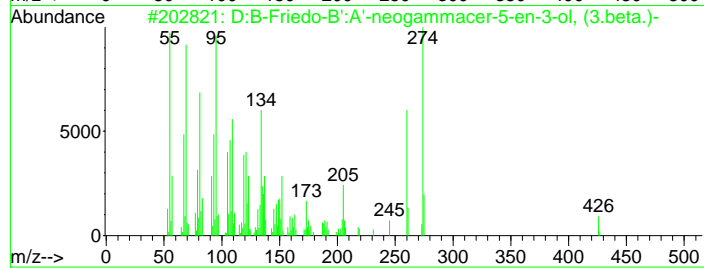
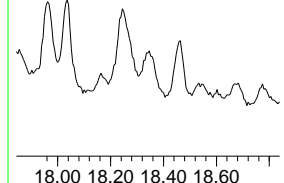
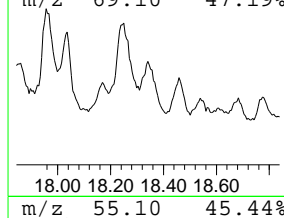
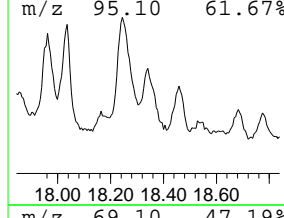
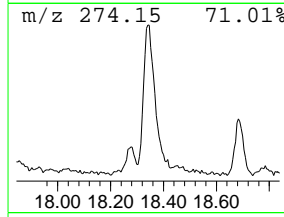
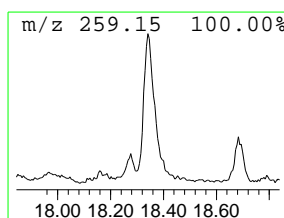
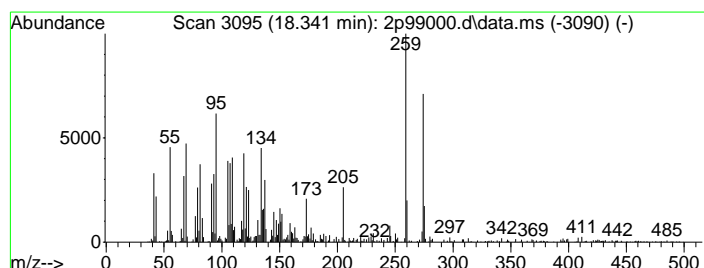
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 21 Unknown Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.341	43.65 ppm	3516610	Perylene-d12	15.752

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			D:B-Friedo-B':A'-neogammacer-5-e...	426	C30H50O	001615-94-7	43
2			Androstan-4-one, (5.beta.)-	274	C19H30O	013583-71-6	42
3			2(1H)-Phenanthrene, 3,4,4a,4b,...	274	C19H30O	007715-44-8	38
4			10H-Phenoxaphosphine, 2-ethyl-10...	274	C15H15O3P	036360-91-5	35
5			1-[p-Nitrophenyl]-3-[2-pyrimidyl...	259	C11H9N5O3	023656-31-7	27



Library Search Compound Report

Data Path : C:\msdchem\1\data\jeryllr\2p4412\  
 Data File : 2p99000.d  
 Acq On : 15 Jan 2021 9:44 pm  
 Operator : hennys  
 Sample : jd18939-2  
 Misc : op31540,e2p4412,30.7,,1,1  
 ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Title : Semi Volatile Extractables by GC/MS

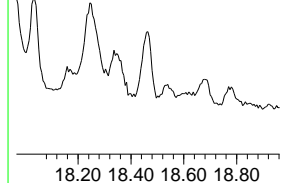
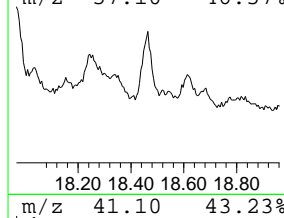
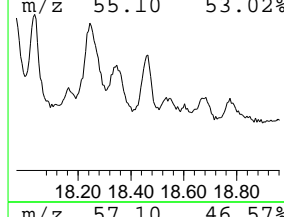
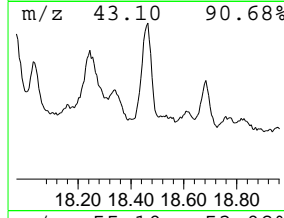
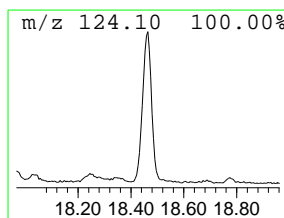
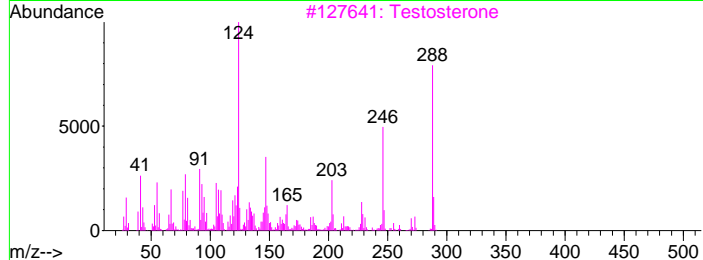
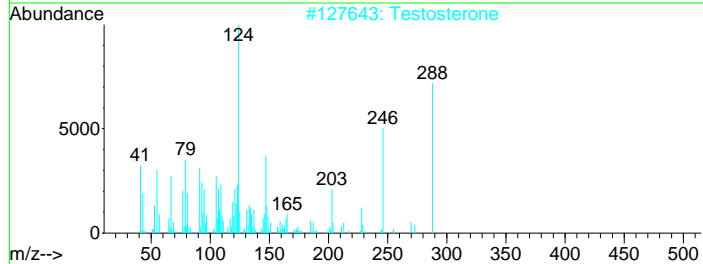
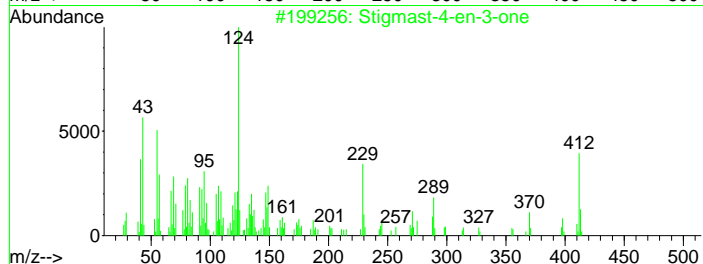
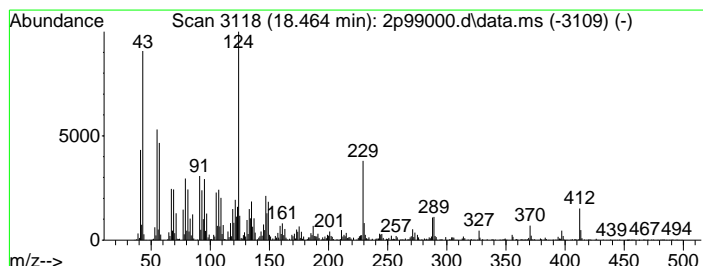
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 22 Stigmastenone Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.464	47.49 ppm	3826450	Perylene-d12	15.752

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Stigmast-4-en-3-one	412	C29H48O	001058-61-3	96
2		Testosterone	288	C19H28O2	000058-22-0	70
3		Testosterone	288	C19H28O2	000058-22-0	70
4		Androst-4-en-3-one, 17-hydroxy-, ...	288	C19H28O2	000604-39-7	49
5		5-Bromovaleric acid, 2,6-dimethy...	328	C16H25BrO2	1000292-56-9	49



7.1.4  
7



Library Search Compound Report

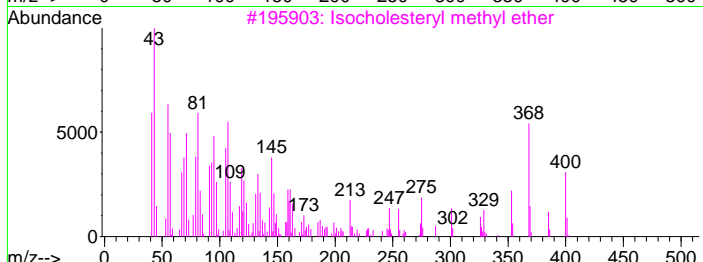
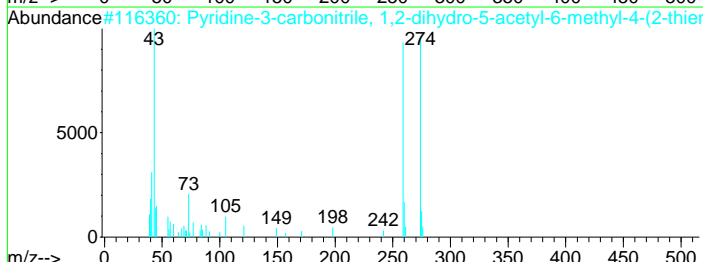
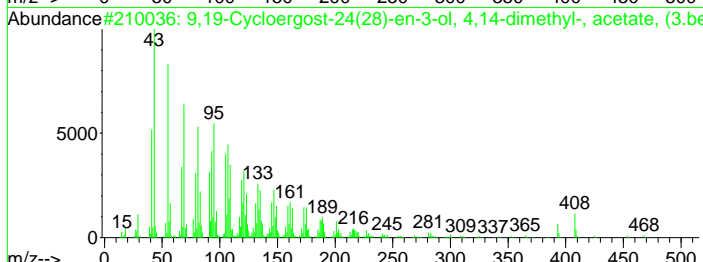
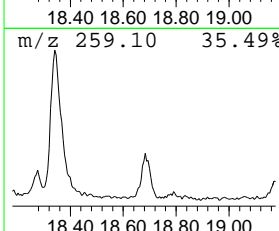
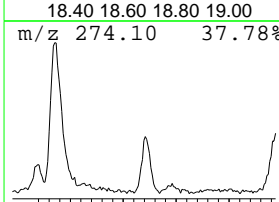
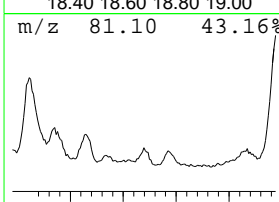
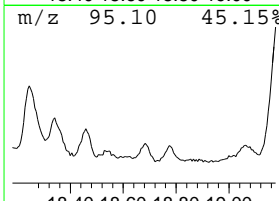
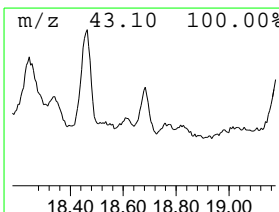
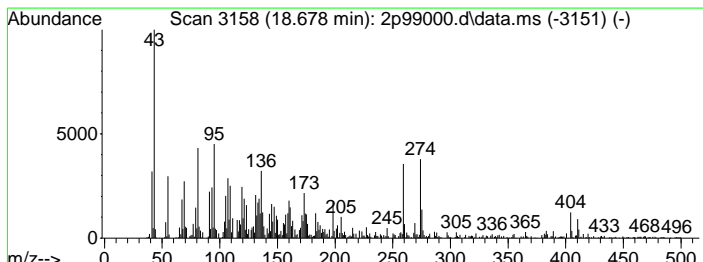
Data Path : C:\msdchem\1\data\jeryllr\2p4412\
Data File : 2p99000.d
Acq On : 15 Jan 2021 9:44 pm
Operator : hennys
Sample : jd18939-2
Misc : op31540,e2p4412,30.7,,1,1
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M
Quant Title : Semi Volatile Extractables by GC/MS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: lscint.p

\*\*\*\*\*
Peak Number 23 Unknown Concentration Rank 12

Table with 7 columns: R.T., EstConc, Area, Relative to ISTD, R.T., Hit# of 5, Tentative ID, MW, MolForm, CAS#, Qual. Row 1: 18.678, 28.29 ppm, 2279610, Perylene-d12, 15.752.



7.1.4
7

Library Search Compound Report

Data Path : C:\msdchem\1\data\jeryllr\e2p4412\  
 Data File : 2p99000.d  
 Acq On : 15 Jan 2021 9:44 pm  
 Operator : hennys  
 Sample : jd18939-2  
 Misc : op31540,e2p4412,30.7,,1,1  
 ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Title : Semi Volatile Extractables by GC/MS

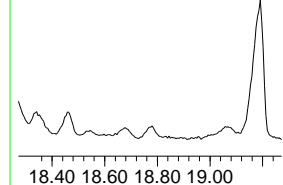
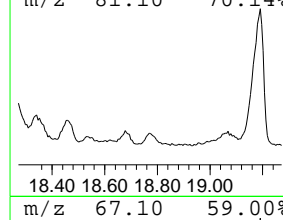
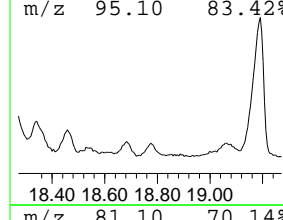
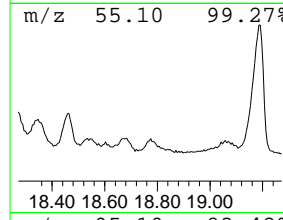
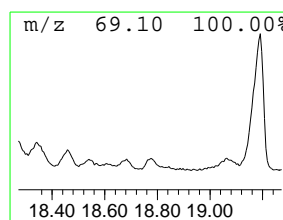
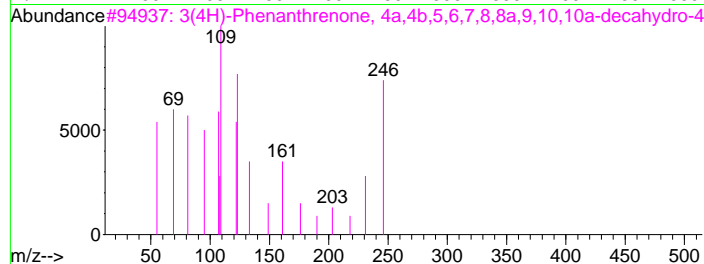
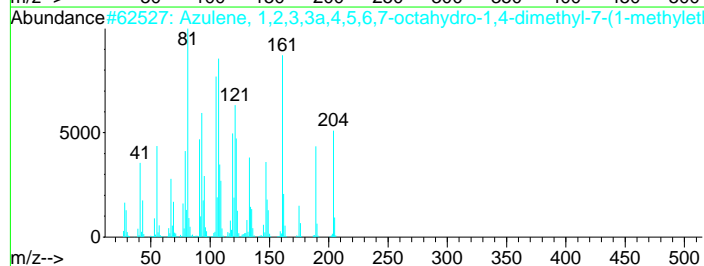
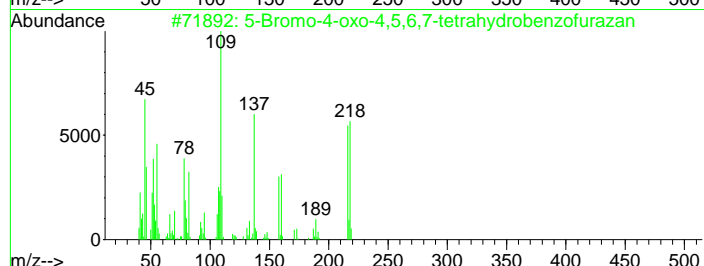
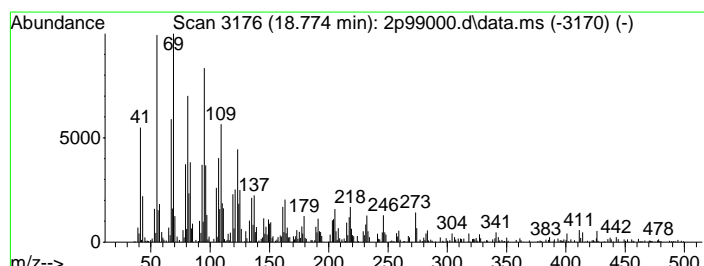
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 24 Unknown Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.774	17.22 ppm	1387720	Perylene-d12	15.752

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			5-Bromo-4-oxo-4,5,6,7-tetrahydro...	216	C6H5BrN2O2	300574-36-1	68
2			Azulene, 1,2,3,3a,4,5,6,7-octahy...	204	C15H24	022567-17-5	59
3			3(4H)-Phenanthrenone, 4a,4b,5,6,...	246	C17H26O	057684-12-5	52
4			Sandaracopimar-15-ene-6.beta.,8...	322	C20H34O3	041756-31-4	50
5			Bicyclo[3.1.1]heptane, 2,6,6-tri...	138	C10H18	000473-55-2	42



Library Search Compound Report

Data Path : C:\msdchem\1\data\jeryllr\2p4412\  
 Data File : 2p99000.d  
 Acq On : 15 Jan 2021 9:44 pm  
 Operator : hennys  
 Sample : jd18939-2  
 Misc : op31540,e2p4412,30.7,,1,1  
 ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Title : Semi Volatile Extractables by GC/MS

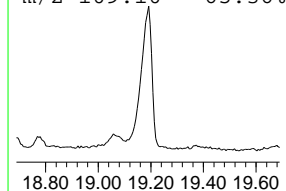
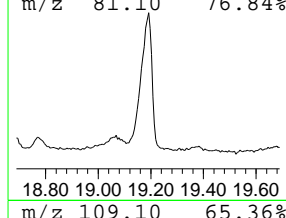
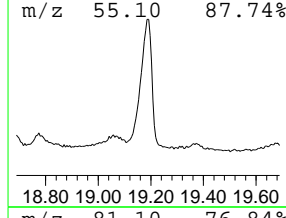
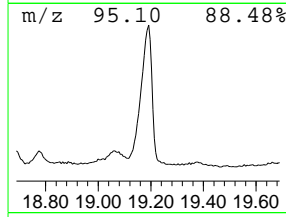
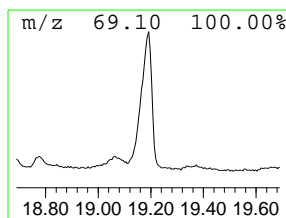
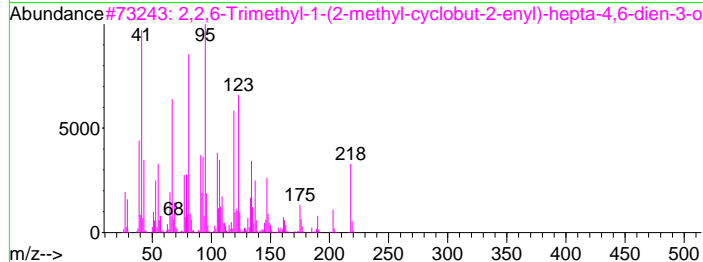
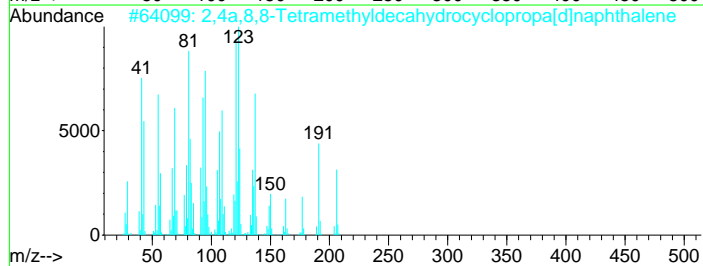
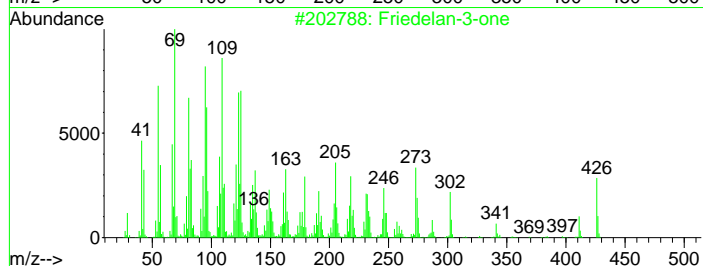
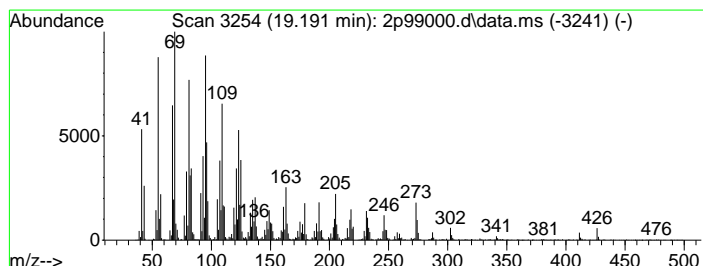
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 25 Unknown Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.191	178.20 ppm	14356800	Perylene-d12	15.752

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Friedelan-3-one	426	C30H50O	000559-74-0	96
2		2,4a,8,8-Tetramethyldecahydrocyc...	206	C15H26	074022-04-1	86
3		2,2,6-Trimethyl-1-(2-methyl-cycl...	218	C15H22O	1000188-72-8	64
4		5-Bromo-4-oxo-4,5,6,7-tetrahydro...	216	C6H5BrN2O2	300574-36-1	59
5		7-Tetradecyne	194	C14H26	035216-11-6	49



7.1.4  
7

Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\data\jeryllr\2p4412\
Data File : 2p99000.d
Acq On : 15 Jan 2021 9:44 pm
Operator : hennys
Sample : jd18939-2
Misc : op31540,e2p4412,30.7,,,1,1
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M
Quant Title : Semi Volatile Extractables by GC/MS

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: lscint.p

Table with columns: TIC Top Hit name, RT, EstConc, Units, Response, #, RT, Resp, Conc. Lists various compounds like Bisnorabieta-pe..., Alkane, Unknown, Stigmasterol, Sitosterol, etc.

7.14 7



Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\2p4412\  
 Data File : 2p99001.d  
 Acq On : 15 Jan 2021 10:09 pm  
 Operator : hennys  
 Sample : jd18939-3 Inst : MS2P  
 Misc : op31540,e2p4412,31.6,,,1,1  
 ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Results File: M2P4365.RES  
 Quant Time: Jan 18 04:09:12 2021  
 Quant Title : Semi Volatile Extractables by GC/MS  
 QLast Update : Mon Jan 18 03:08:11 2021  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	4.435	152	491760	40.00	ppm	0.00	
24) Naphthalene-d8	5.419	136	1732455	40.00	ppm	0.00	
47) Acenaphthene-d10	7.350	164	994022	40.00	ppm	0.00	
69) Phenanthrene-d10	9.468	188	1587733	40.00	ppm	0.00	
83) Chrysene-d12	13.640	240	1429985	40.00	ppm	0.02	
91) Perylene-d12	15.758	264	1579449	40.00	ppm	0.03	
101) 1,4-Dichlorobenzene-d4a	4.435	152	491760	40.00	ppm	0.00	
103) Naphthalene-d8a	5.419	136	1732455	40.00	ppm	0.00	
105) Acenaphthene-d10a	7.350	164	994022	40.00	ppm	0.00	
107) Chrysene-d12a	13.640	240	1429985	40.00	ppm	0.02	
109) Phenanthrene-d10a	9.468	188	1587733	40.00	ppm	0.00	
112) 1,4-Dichlorobenzene-d4b	4.435	152	491760	40.00	ppm	0.00	
115) Acenaphthene-d10b	7.350	164	994620	40.00	ppm	0.00	
117) Phenanthrene-d10b	9.468	188	1587733	40.00	ppm	0.00	
120) Chrysene-d12b	13.640	240	1429985	40.00	ppm	0.02	
System Monitoring Compounds							
5) 2-Fluorophenol	3.520	112	388169	23.16	ppm	0.02	
Spiked Amount	50.000	Range	11 - 58	Recovery	=	46.32%	
8) Phenol-d5	4.231	99	502615	23.68	ppm	0.01	
Spiked Amount	50.000	Range	10 - 59	Recovery	=	47.36%	
25) Nitrobenzene-d5	4.841	82	584213	30.04	ppm	0.00	
Spiked Amount	50.000	Range	19 - 61	Recovery	=	60.08%	
51) 2-Fluorobiphenyl	6.526	172	832652	25.47	ppm	0.00	
Spiked Amount	50.000	Range	21 - 58	Recovery	=	50.94%	
73) 2,4,6-Tribromophenol	8.457	330	167715	29.21	ppm	0.00	
Spiked Amount	50.000	Range	12 - 68	Recovery	=	58.42%	
85) Terphenyl-d14	12.024	244	1041964	31.29	ppm	0.02	
Spiked Amount	50.000	Range	16 - 65	Recovery	=	62.58%	
118) 1-Chlorooctadecane	0.000	57	0d	0.00	ppm		
Spiked Amount	50.000	Range	15 - 64	Recovery	=	0.00%#	
119) o-terphenyl	0.000	230	0	0.00	ppm		
Spiked Amount	50.000	Range	15 - 64	Recovery	=	0.00%#	
Target Compounds							
38) Naphthalene	5.440	128	10373	0.24	ppm	93	Qvalue
44) 2-Methylnaphthalene	6.114	141	4143	0.18	ppm	96	
56) Acenaphthylene	7.162	152	67041	1.47	ppm	97	
59) Acenaphthene	7.387	153	12714	0.42	ppm	98	
62) Dibenzofuran	7.628	168	10595	0.26	ppm	90	
66) Fluorene	8.098	166	18894	0.58	ppm	97	
77) Phenanthrene	9.500	178	503302	11.92	ppm	99	
78) Anthracene	9.580	178	177140	4.19	ppm	98	
79) Carbazole	9.874	167	48204	1.21	ppm	96	
81) Fluoranthene	11.356	202	1640041	35.39	ppm	98	
84) Pyrene	11.693	202	1492849	35.19	ppm	97	
87) Benzo[a]anthracene	13.623	228	811968	19.53	ppm	99	
89) Chrysene	13.672	228	758470	19.05	ppm	98	
93) Benzo[b]fluoranthene	15.239	252	1097761	23.27	ppm	97	
94) Benzo[k]fluoranthene	15.271	252	299074	6.87	ppm	96	
95) Benzo[a]pyrene	15.672	252	781225	19.07	ppm	96	
96) Indeno[1,2,3-cd]pyrene	17.122	276	586570	13.35	ppm	97	
98) Dibenz[a,h]anthracene	17.138	278	158747	3.48	ppm	95	
100) Benzo[g,h,i]perylene	17.475	276	578861	13.37	ppm	99	

7.15  
7

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\e2p4412\  
Data File : 2p99001.d  
Acq On : 15 Jan 2021 10:09 pm  
Operator : hennys  
Sample : jd18939-3 Inst : MS2P  
Misc : op31540,e2p4412,31.6,,,1,1  
ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
Quant Results File: M2P4365.RES  
Quant Time: Jan 18 04:09:12 2021  
Quant Title : Semi Volatile Extractables by GC/MS  
QLast Update : Mon Jan 18 03:08:11 2021  
Response via : Initial Calibration

-----  
Compound R.T. QIon Response Conc Units Dev(Min)  
-----  
(#) = qualifier out of range (m) = manual integration (+) = signals summed

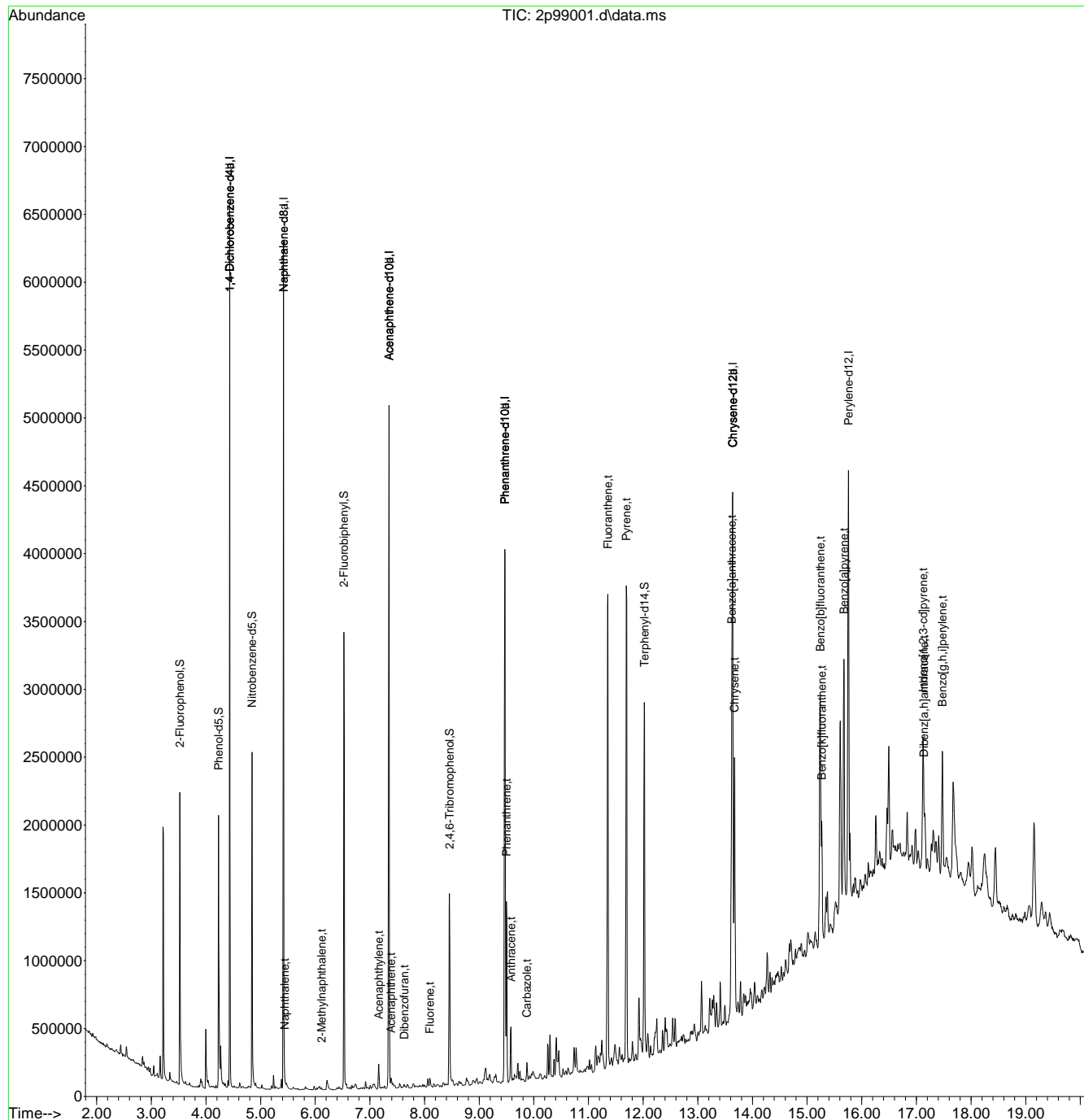
7.1.5  
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Quantitation Report (QT/LSC Reviewed)

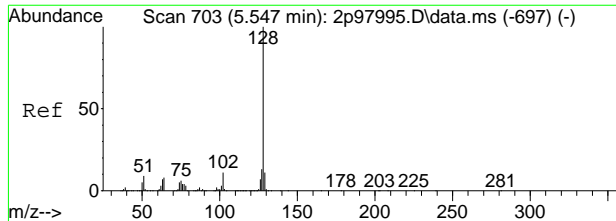
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 Acq On : 15 Jan 2021 10:09 pm  
 Operator : hennys  
 Sample : jd18939-3  
 Misc : op31540,e2p4412,31.6,,,1,1  
 ALS Vial : 21 Sample Multiplier: 1

Inst : MS2P

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Results File: M2P4365.RES  
 Quant Time: Jan 18 04:09:12 2021  
 Quant Title : Semi Volatile Extractables by GC/MS  
 QLast Update : Mon Jan 18 03:08:11 2021  
 Response via : Initial Calibration

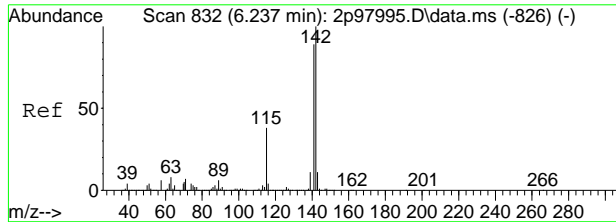
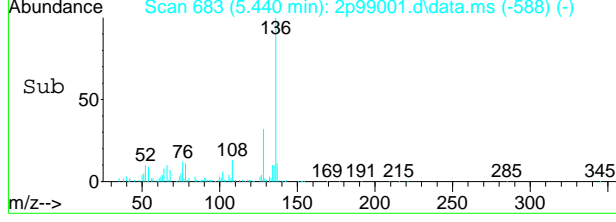
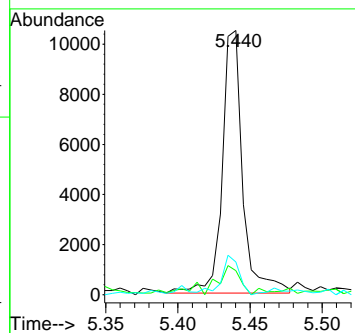
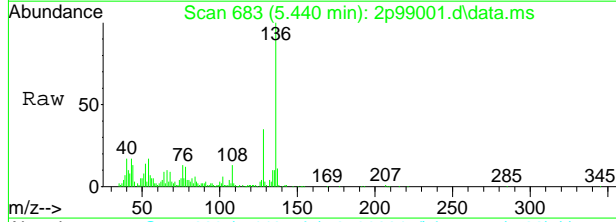


7.15  
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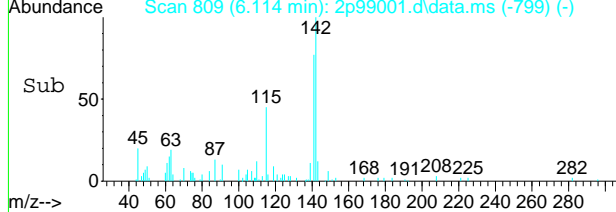
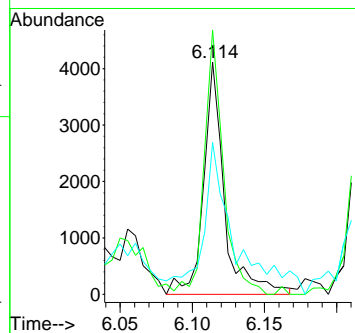
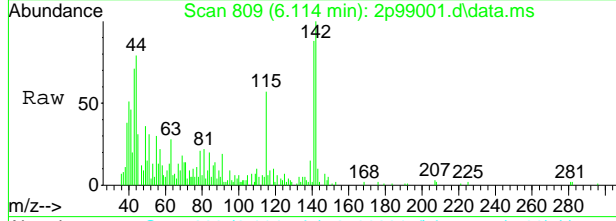
#38  
 Naphthalene  
 Concen: 0.24 ppm  
 RT: 5.440 min Scan# 683  
 Delta R.T. 0.006 min  
 Lab File: 2p99001.d  
 Acq: 15 Jan 2021 10:09 pm

Tgt Ion	Resp	Lower	Upper
128	10373		
128	100		
129	7.6	0.0	41.2
127	11.7	0.0	43.7



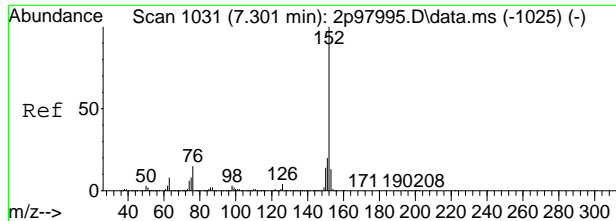
#44  
 2-Methylnaphthalene  
 Concen: 0.18 ppm  
 RT: 6.114 min Scan# 809  
 Delta R.T. 0.006 min  
 Lab File: 2p99001.d  
 Acq: 15 Jan 2021 10:09 pm

Tgt Ion	Resp	Lower	Upper
141	4143		
141	100		
142	113.0	88.6	148.6
115	58.2	27.1	87.1



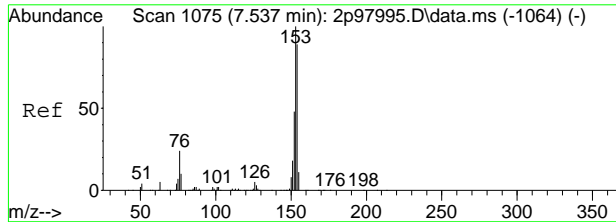
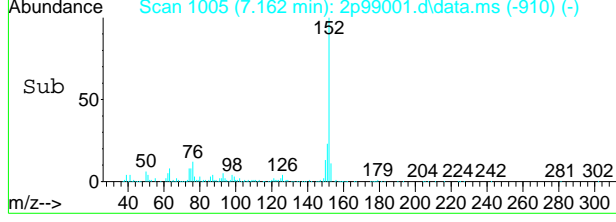
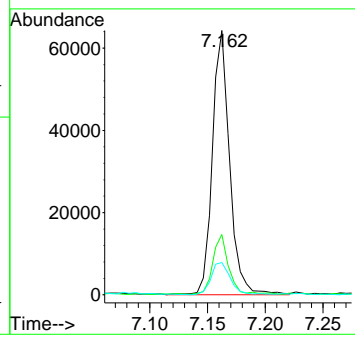
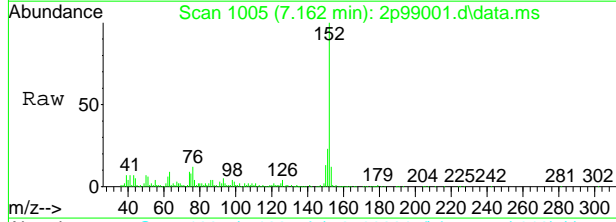
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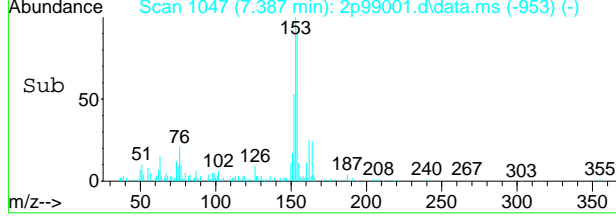
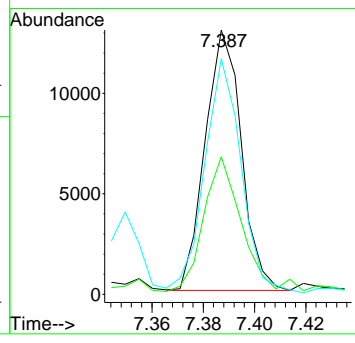
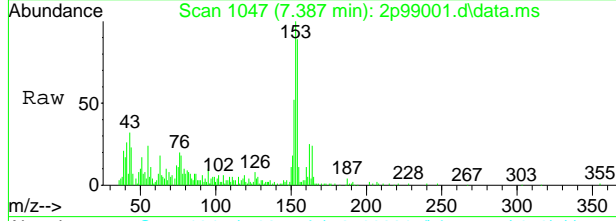
#56  
 Acenaphthylene  
 Concen: 1.47 ppm  
 RT: 7.162 min Scan# 1005  
 Delta R.T. 0.006 min  
 Lab File: 2p99001.d  
 Acq: 15 Jan 2021 10:09 pm

Tgt Ion	Resp	Lower	Upper
152	67041		
151	22.4	0.0	50.7
153	12.0	0.0	42.9



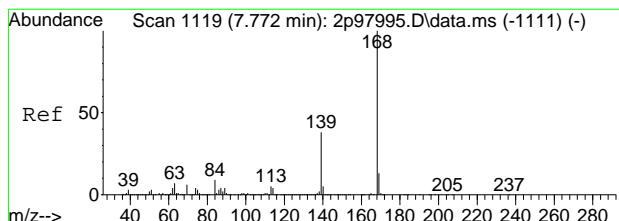
#59  
 Acenaphthene  
 Concen: 0.42 ppm  
 RT: 7.387 min Scan# 1047  
 Delta R.T. 0.000 min  
 Lab File: 2p99001.d  
 Acq: 15 Jan 2021 10:09 pm

Tgt Ion	Resp	Lower	Upper
153	12714		
152	49.4	18.0	78.0
154	88.5	60.1	120.1



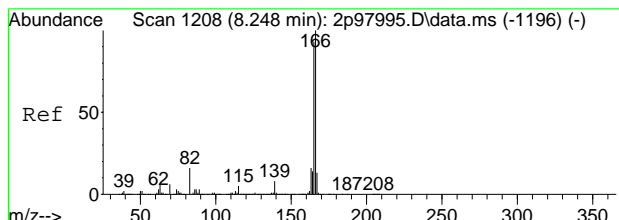
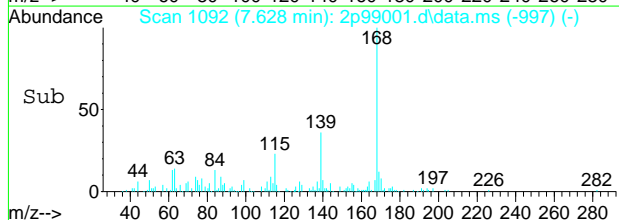
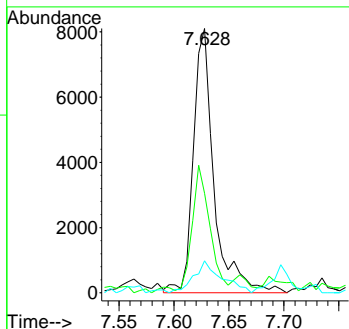
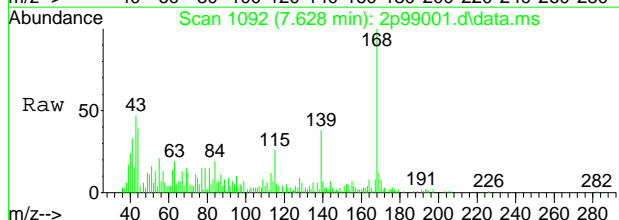
7.15  
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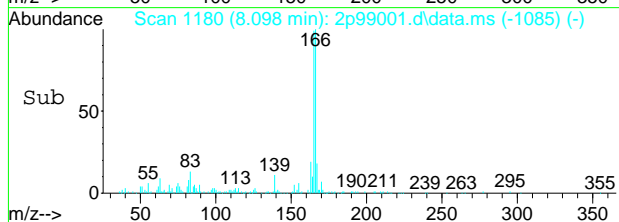
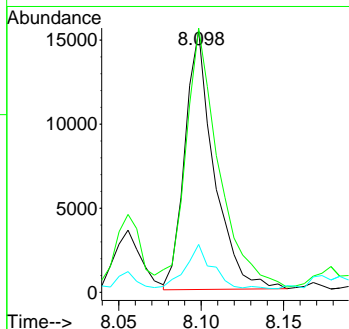
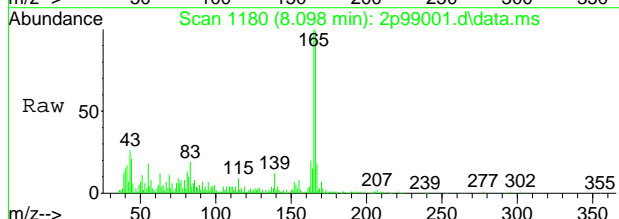
#62  
 Dibenzofuran  
 Concen: 0.26 ppm  
 RT: 7.628 min Scan# 1092  
 Delta R.T. 0.006 min  
 Lab File: 2p99001.d  
 Acq: 15 Jan 2021 10:09 pm

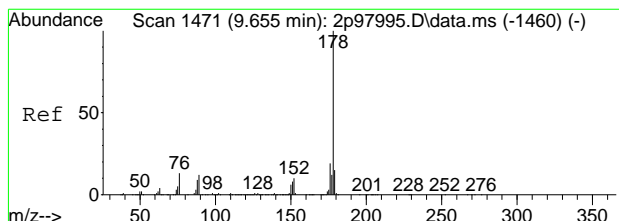
Tgt Ion	Resp	Lower	Upper
168	10595		
139	34.9	10.6	70.6
169	8.0	0.0	42.9



#66  
 Fluorene  
 Concen: 0.58 ppm  
 RT: 8.098 min Scan# 1180  
 Delta R.T. 0.006 min  
 Lab File: 2p99001.d  
 Acq: 15 Jan 2021 10:09 pm

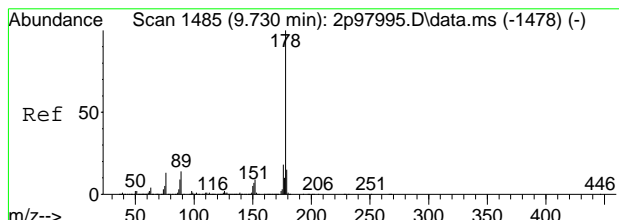
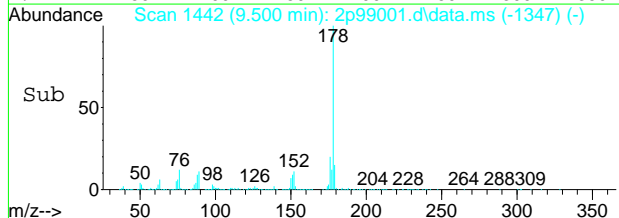
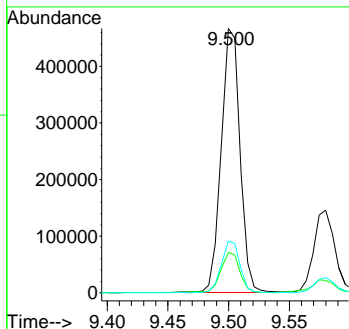
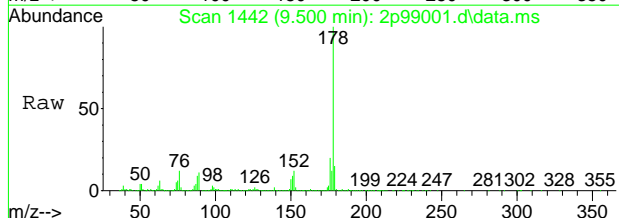
Tgt Ion	Resp	Lower	Upper
166	18894		
165	97.9	65.3	125.3
167	16.3	0.0	43.3





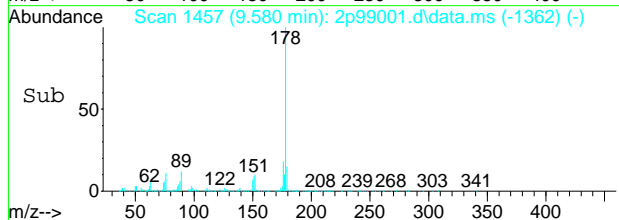
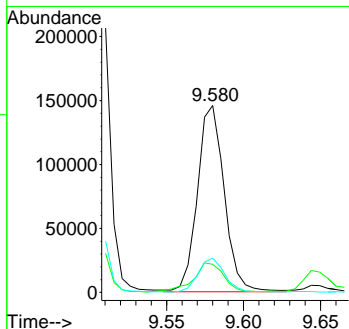
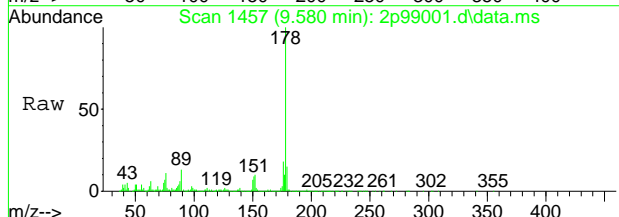
#77  
 Phenanthrene  
 Concen: 11.92 ppm  
 RT: 9.500 min Scan# 1442  
 Delta R.T. 0.006 min  
 Lab File: 2p99001.d  
 Acq: 15 Jan 2021 10:09 pm

Tgt Ion	Ratio	Lower	Upper
178	100		
179	15.0	0.0	44.9
176	19.6	0.0	49.2

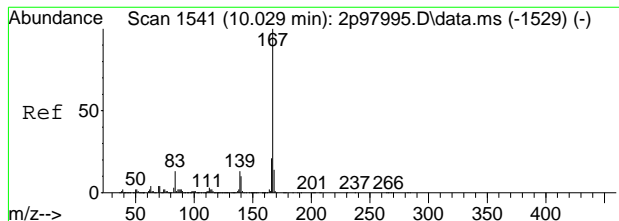


#78  
 Anthracene  
 Concen: 4.19 ppm  
 RT: 9.580 min Scan# 1457  
 Delta R.T. 0.006 min  
 Lab File: 2p99001.d  
 Acq: 15 Jan 2021 10:09 pm

Tgt Ion	Ratio	Lower	Upper
178	100		
179	14.4	0.0	44.8
176	18.2	0.0	49.1

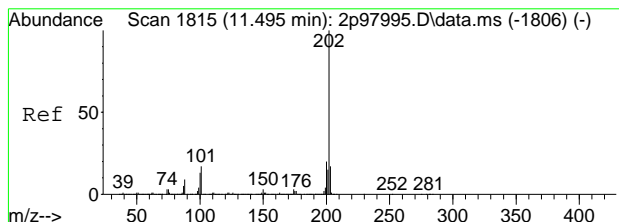
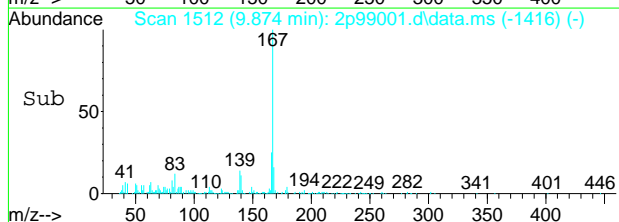
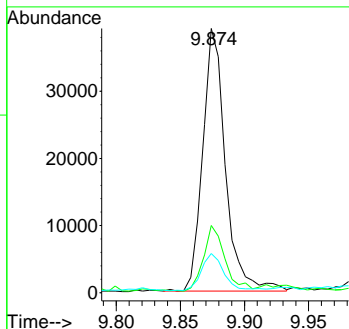
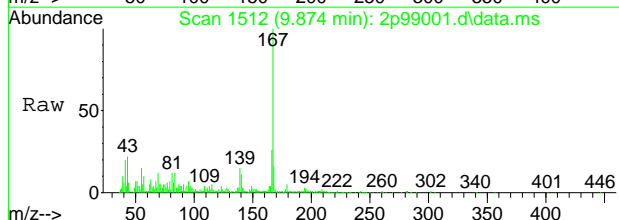


7.15  
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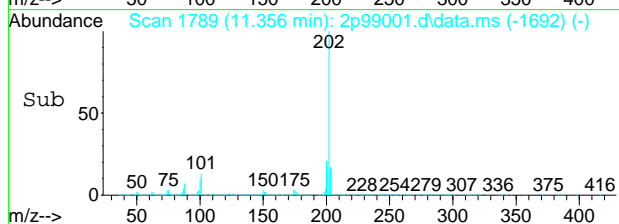
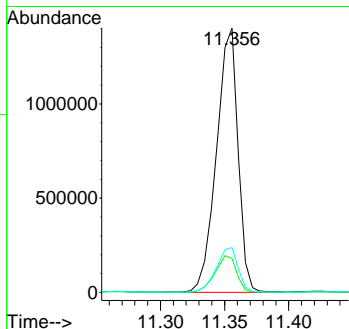
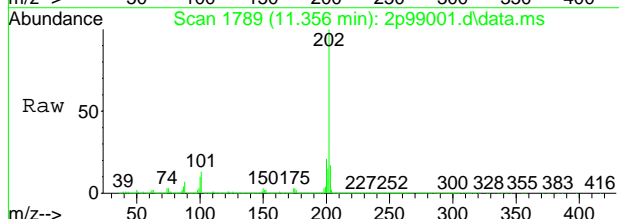
#79  
 Carbazole  
 Concen: 1.21 ppm  
 RT: 9.874 min Scan# 1512  
 Delta R.T. 0.011 min  
 Lab File: 2p99001.d  
 Acq: 15 Jan 2021 10:09 pm

Tgt Ion	Resp	Lower	Upper
167	48204		
166	23.7	0.0	51.3
139	13.5	0.0	44.4

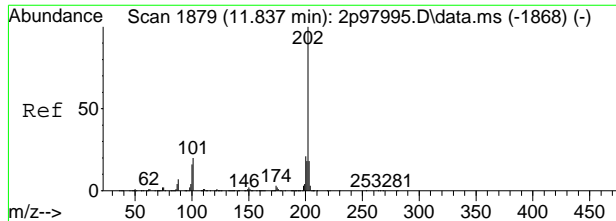


#81  
 Fluoranthene  
 Concen: 35.39 ppm  
 RT: 11.356 min Scan# 1789  
 Delta R.T. 0.016 min  
 Lab File: 2p99001.d  
 Acq: 15 Jan 2021 10:09 pm

Tgt Ion	Resp	Lower	Upper
202	1640041		
202	100		
101	12.8	0.0	43.7
203	16.9	0.0	46.5

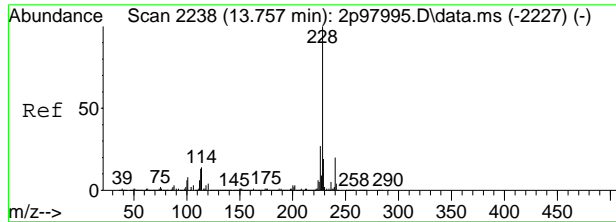
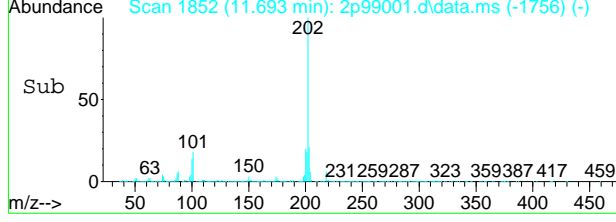
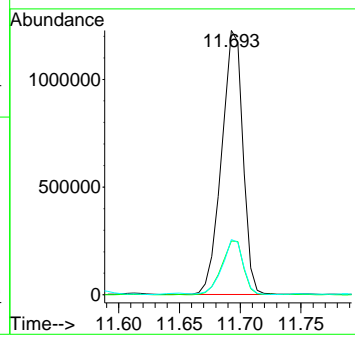
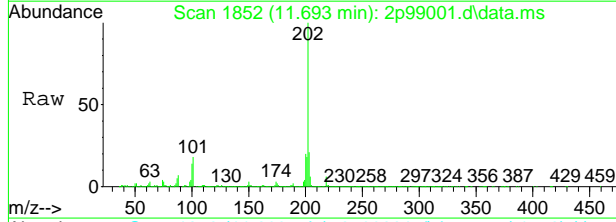


7.15  
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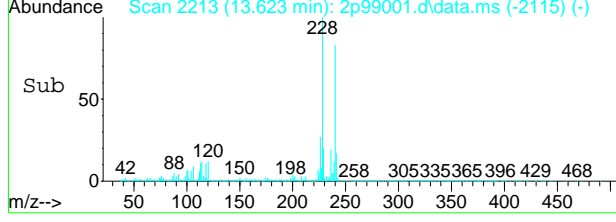
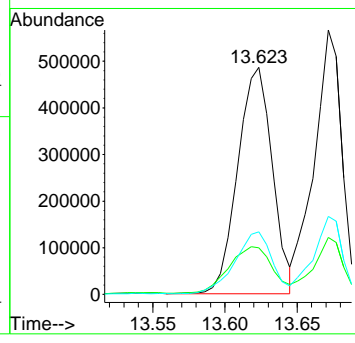
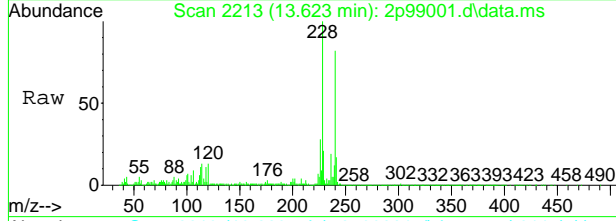
#84  
 Pyrene  
 Concen: 35.19 ppm  
 RT: 11.693 min Scan# 1852  
 Delta R.T. 0.011 min  
 Lab File: 2p99001.d  
 Acq: 15 Jan 2021 10:09 pm

Tgt Ion	Resp	Lower	Upper
202	1492849		
200	20.4	0.0	50.9
203	20.6	0.0	47.9



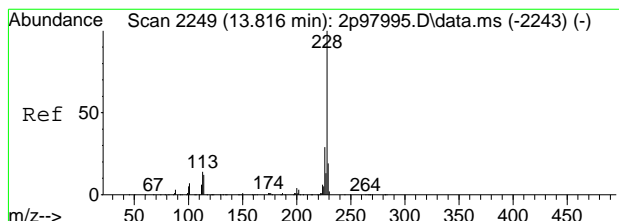
#87  
 Benzo[a]anthracene  
 Concen: 19.53 ppm  
 RT: 13.623 min Scan# 2213  
 Delta R.T. 0.022 min  
 Lab File: 2p99001.d  
 Acq: 15 Jan 2021 10:09 pm

Tgt Ion	Resp	Lower	Upper
228	811968		
229	19.3	0.0	50.0
226	27.2	0.0	56.8



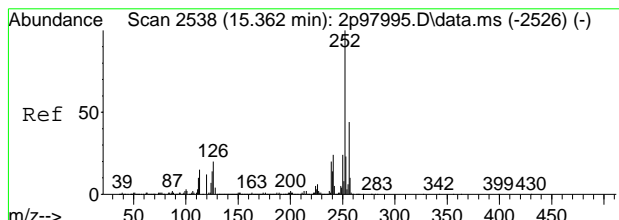
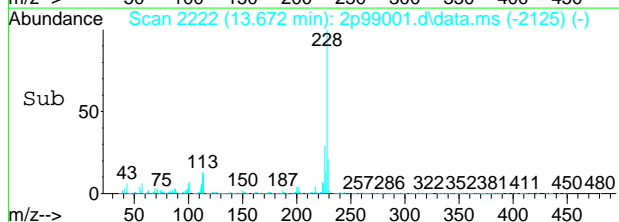
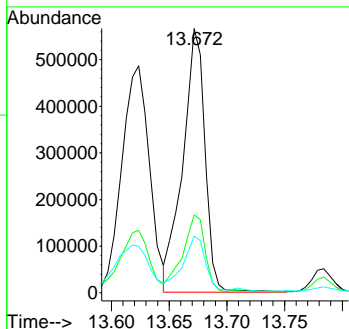
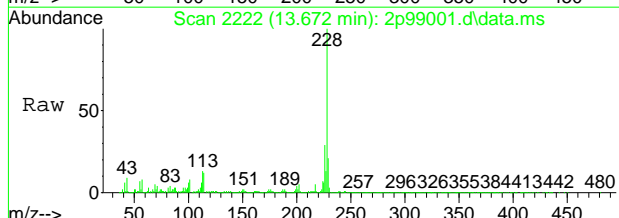
7.15  
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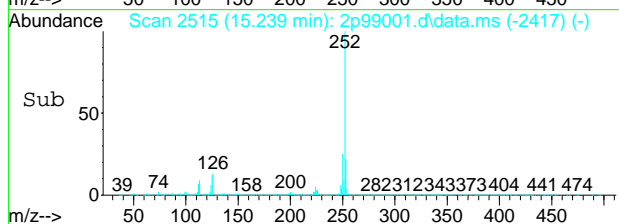
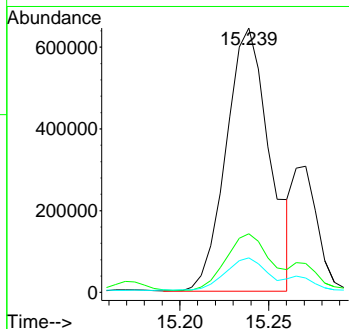
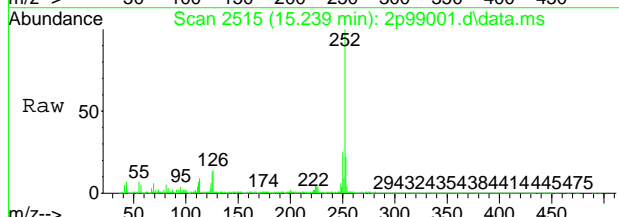
#89  
 Chrysene  
 Concen: 19.05 ppm  
 RT: 13.672 min Scan# 2222  
 Delta R.T. 0.016 min  
 Lab File: 2p99001.d  
 Acq: 15 Jan 2021 10:09 pm

Tgt Ion	Resp	Lower	Upper
228	758470		
226	29.2	0.3	60.3
229	20.3	0.0	49.6

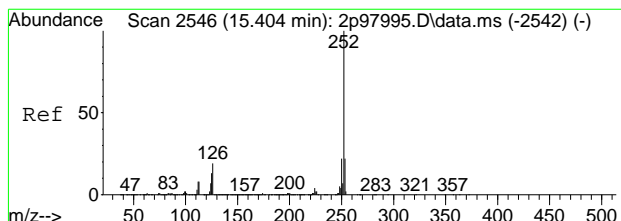


#93  
 Benzo[b]fluoranthene  
 Concen: 23.27 ppm  
 RT: 15.239 min Scan# 2515  
 Delta R.T. 0.022 min  
 Lab File: 2p99001.d  
 Acq: 15 Jan 2021 10:09 pm

Tgt Ion	Resp	Lower	Upper
252	1097761		
253	21.1	0.0	51.4
125	12.2	0.0	39.2

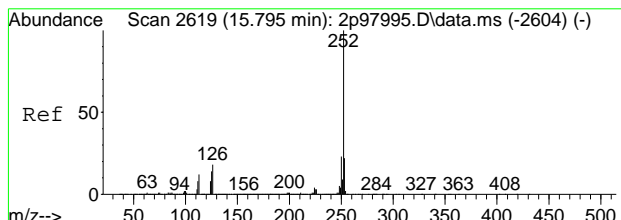
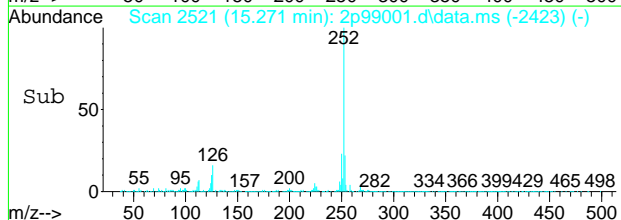
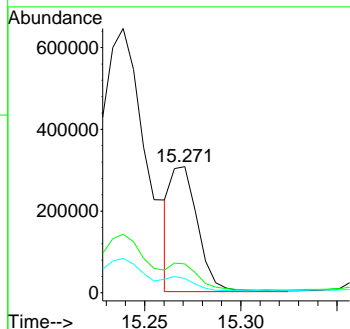
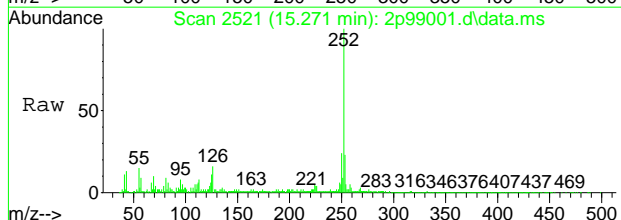


7.15  
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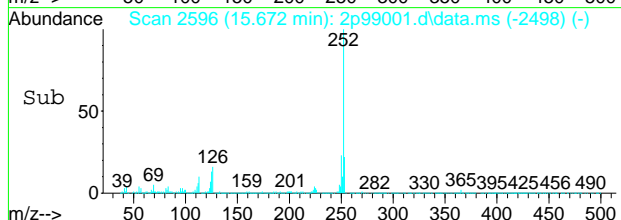
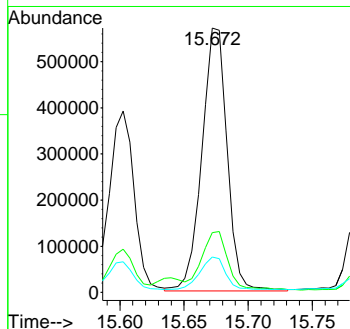
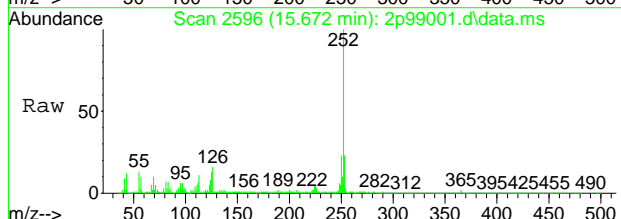
#94  
 Benzo[k]fluoranthene  
 Concen: 6.87 ppm  
 RT: 15.271 min Scan# 2521  
 Delta R.T. 0.022 min  
 Lab File: 2p99001.d  
 Acq: 15 Jan 2021 10:09 pm

Tgt Ion	Ratio	Lower	Upper
252	100		
253	20.5	0.0	51.6
125	8.0	0.0	40.9

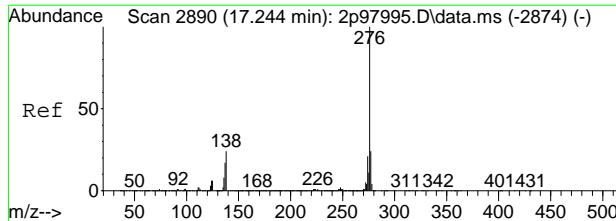


#95  
 Benzo[a]pyrene  
 Concen: 19.07 ppm  
 RT: 15.672 min Scan# 2596  
 Delta R.T. 0.022 min  
 Lab File: 2p99001.d  
 Acq: 15 Jan 2021 10:09 pm

Tgt Ion	Ratio	Lower	Upper
252	100		
253	19.6	0.0	51.7
125	12.4	0.0	41.0

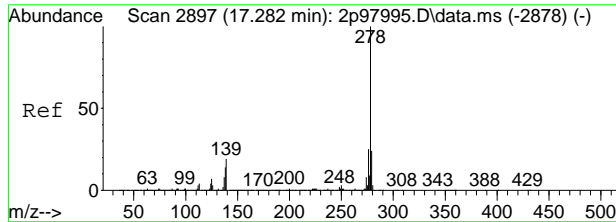
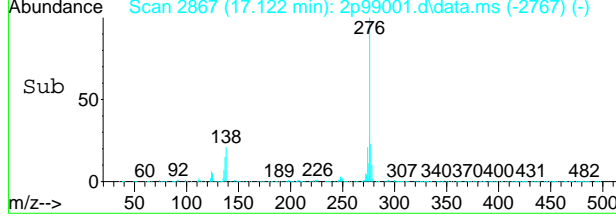
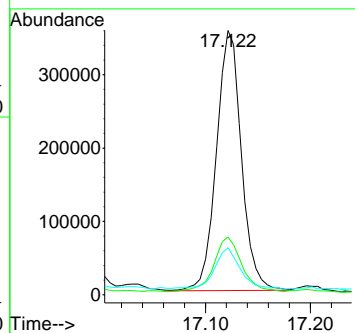
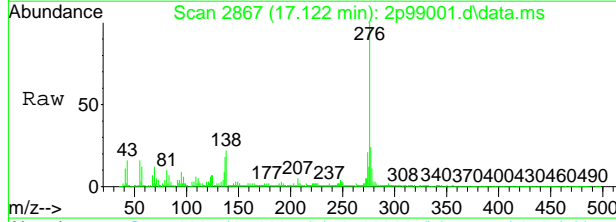


7.15  
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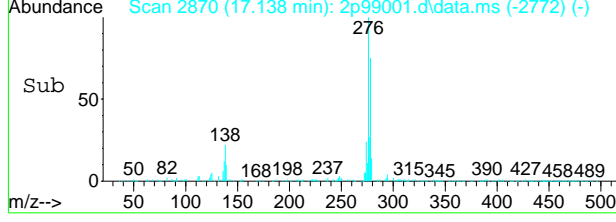
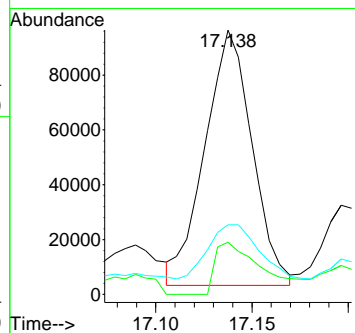
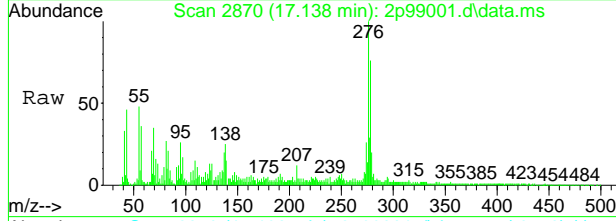
#96  
 Indeno[1,2,3-cd]pyrene  
 Concen: 13.35 ppm  
 RT: 17.122 min Scan# 2867  
 Delta R.T. 0.032 min  
 Lab File: 2p99001.d  
 Acq: 15 Jan 2021 10:09 pm

Tgt Ion	Resp	Lower	Upper
276	586570		
138	20.8	0.0	49.6
137	15.7	0.0	44.3



#98  
 Dibenz[a,h]anthracene  
 Concen: 3.48 ppm  
 RT: 17.138 min Scan# 2870  
 Delta R.T. 0.022 min  
 Lab File: 2p99001.d  
 Acq: 15 Jan 2021 10:09 pm

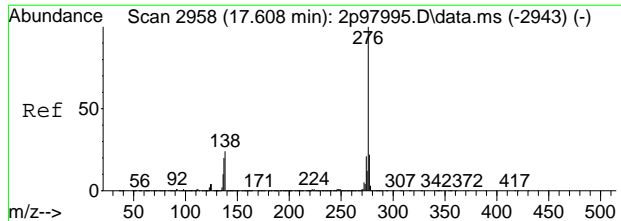
Tgt Ion	Resp	Lower	Upper
278	158747		
139	18.5	0.0	45.6
279	21.7	0.0	53.3



7.15  
7

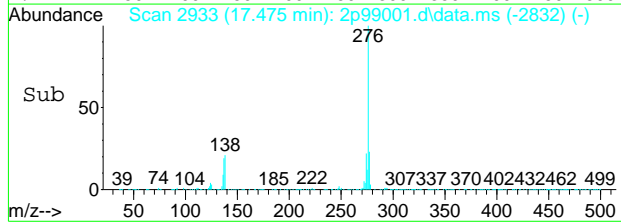
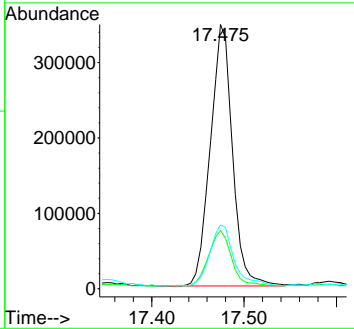
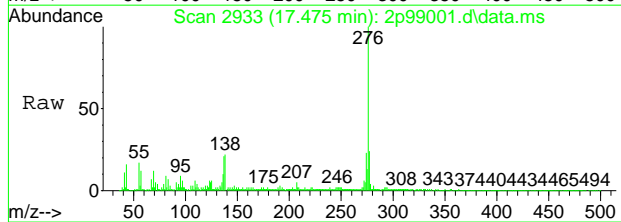






#100  
 Benzo[g,h,i]perylene  
 Concen: 13.37 ppm  
 RT: 17.475 min Scan# 2933  
 Delta R.T. 0.038 min  
 Lab File: 2p99001.d  
 Acq: 15 Jan 2021 10:09 pm

Tgt Ion	Ratio	Lower	Upper
276	100		
138	21.2	0.0	51.4
277	23.4	0.0	53.7



7.1.5  
7

LSC Area Percent Report

Data Path : C:\msdchem\1\data\jeryllr\2p4412\  
 Data File : 2p99001.d  
 Acq On : 15 Jan 2021 10:09 pm  
 Operator : hennys  
 Sample : jd18939-3  
 Misc : op31540,e2p4412,31.6,,,1,1  
 ALS Vial : 21 Sample Multiplier: 1

Integration Parameters: lscint.p  
 Integrator: RTE  
 Smoothing : ON  
 Sampling : 1  
 Start Thrs: 0.02  
 Stop Thrs : 0  
 Filtering: 5  
 Min Area: 1000 Area counts  
 Max Peaks: 100  
 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 7

Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Title : Semi Volatile Extractables by GC/MS

Signal : TIC: 2p99001.d\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.439	119	122	129	rVB2	85542	113379	1.61%	0.117%
2	2.541	138	141	157	rVB	101741	178555	2.54%	0.184%
3	3.162	251	257	264	rVV	169524	177564	2.52%	0.183%
4	3.215	264	267	285	rVB	1872306	1667609	23.70%	1.721%
5	3.338	285	290	299	rVB3	70083	92624	1.32%	0.096%
6	3.520	320	324	341	rVV	2156922	1942696	27.61%	2.005%
7	3.905	392	396	409	rVB2	69214	139728	1.99%	0.144%
8	3.996	409	413	420	rBV	435213	431180	6.13%	0.445%
9	4.231	453	457	462	rBV	2009134	1820453	25.87%	1.879%
10	4.269	462	464	471	rVV	310583	349035	4.96%	0.360%
11	4.435	491	495	508	rVV	6526772	4108914	58.39%	4.241%
12	4.841	566	571	582	rVV	2477634	1942386	27.60%	2.005%
13	5.419	675	679	687	rBV	6243621	4583049	65.13%	4.730%
14	6.216	824	828	841	rBV4	69852	131724	1.87%	0.136%
15	6.526	879	886	893	rBV	3368439	3003533	42.68%	3.100%
16	7.162	999	1005	1010	rBV	186172	210112	2.99%	0.217%
17	7.350	1030	1040	1045	rBV	5037320	4895821	69.57%	5.053%
18	8.098	1176	1180	1188	rVB2	67236	103729	1.47%	0.107%
19	8.457	1242	1247	1255	rBV	1411770	1684284	23.93%	1.738%
20	8.767	1299	1305	1316	rVB6	56914	130457	1.85%	0.135%
21	8.885	1316	1327	1334	rBV8	40714	114203	1.62%	0.118%
22	9.115	1358	1370	1375	rBV8	116247	292596	4.16%	0.302%
23	9.195	1380	1385	1394	rVB3	65210	131948	1.88%	0.136%
24	9.468	1430	1436	1440	rBV2	3924574	4878141	69.32%	5.035%
25	9.500	1440	1442	1448	rVB	1335026	1295690	18.41%	1.337%
26	9.580	1448	1457	1462	rBV	411816	528645	7.51%	0.546%
27	9.644	1467	1469	1476	rVV3	47547	92641	1.32%	0.096%
28	9.708	1476	1481	1485	rVV3	128977	168890	2.40%	0.174%
29	9.874	1506	1512	1517	rBV	141822	181564	2.58%	0.187%
30	9.986	1530	1533	1544	rVB6	57040	126160	1.79%	0.130%
31	10.115	1552	1557	1564	rVB7	42433	92937	1.32%	0.096%
32	10.254	1579	1583	1587	rBV	255304	300777	4.27%	0.310%
33	10.297	1587	1591	1597	rVV	315083	369162	5.25%	0.381%
34	10.372	1601	1605	1608	rBV	131825	147100	2.09%	0.152%
35	10.409	1608	1612	1616	rVV2	286714	424022	6.03%	0.438%
36	10.457	1618	1621	1630	rVB	196883	241620	3.43%	0.249%
37	10.735	1667	1673	1677	rVV	191270	270615	3.85%	0.279%
38	10.773	1677	1680	1691	rVB3	185789	265538	3.77%	0.274%
39	10.976	1712	1718	1723	rBV5	42253	104753	1.49%	0.108%
40	11.131	1741	1747	1751	rBV	189276	296060	4.21%	0.306%

LSC Area Percent Report

Data Path : C:\msdchem\1\data\jeryllr\2p4412\  
 Data File : 2p99001.d  
 Acq On : 15 Jan 2021 10:09 pm  
 Operator : hennys  
 Sample : jd18939-3  
 Misc : op31540,e2p4412,31.6,,,1,1  
 ALS Vial : 21 Sample Multiplier: 1

Integration Parameters: lscint.p

Integrator: RTE  
 Smoothing : ON  
 Sampling : 1  
 Start Thrs: 0.02  
 Stop Thrs : 0

Filtering: 5  
 Min Area: 1000 Area counts  
 Max Peaks: 100  
 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 7

Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Title : Semi Volatile Extractables by GC/MS

41	11.174	1751	1755	1761	rBV4	74102	141217	2.01%	0.146%
42	11.243	1761	1768	1779	rVB3	213617	517763	7.36%	0.534%
43	11.356	1779	1789	1795	rBV	3499626	4325977	61.47%	4.465%
44	11.425	1796	1802	1805	rVB2	60955	93780	1.33%	0.097%
45	11.484	1805	1813	1824	rBV5	158041	430044	6.11%	0.444%
46	11.564	1824	1828	1834	rBV2	126805	211746	3.01%	0.219%
47	11.693	1842	1852	1859	rVB	3517049	4424814	62.88%	4.567%
48	11.805	1868	1873	1878	rVB2	144282	202671	2.88%	0.209%
49	11.923	1889	1895	1899	rBV2	456947	668527	9.50%	0.690%
50	12.019	1907	1913	1921	rBV	2578612	3214517	45.68%	3.318%
51	12.083	1921	1925	1931	rVB3	179252	309197	4.39%	0.319%
52	12.137	1931	1935	1942	rBV4	87953	135090	1.92%	0.139%
53	12.249	1944	1956	1963	rBV3	264495	687567	9.77%	0.710%
54	12.356	1971	1976	1980	rBV2	166236	204723	2.91%	0.211%
55	12.404	1980	1985	1988	rBV	246575	351497	4.99%	0.363%
56	12.543	2006	2011	2015	rBV3	209631	279613	3.97%	0.289%
57	12.586	2015	2019	2023	rVB2	208287	269660	3.83%	0.278%
58	12.736	2044	2047	2052	rVB5	68317	113944	1.62%	0.118%
59	12.934	2081	2084	2092	rVB4	127360	247451	3.52%	0.255%
60	13.067	2105	2109	2114	rVB	386191	479447	6.81%	0.495%
61	13.222	2132	2138	2141	rBV	257300	397619	5.65%	0.410%
62	13.265	2143	2146	2149	rVV	218953	333465	4.74%	0.344%
63	13.292	2149	2151	2157	rVV3	245713	332003	4.72%	0.343%
64	13.340	2157	2160	2166	rVB3	182246	263702	3.75%	0.272%
65	13.410	2168	2173	2178	rVB	322176	429175	6.10%	0.443%
66	13.495	2185	2189	2194	rVB	147441	210477	2.99%	0.217%
67	13.640	2205	2216	2219	rBV2	3847429	7037192	100.00%	7.263%
68	13.672	2219	2222	2230	rVB2	1876884	2447379	34.78%	2.526%
69	13.736	2231	2234	2238	rVB3	81210	98038	1.39%	0.101%
70	13.784	2239	2243	2248	rVB	252890	313506	4.45%	0.324%
71	13.843	2249	2254	2256	rBV3	151107	230286	3.27%	0.238%
72	13.960	2273	2276	2284	rVB3	149458	291517	4.14%	0.301%
73	14.041	2286	2291	2296	rVV3	171300	265769	3.78%	0.274%
74	14.271	2328	2334	2339	rBV	306158	473259	6.73%	0.488%
75	14.324	2340	2344	2347	rVB	151356	183989	2.61%	0.190%
76	14.362	2348	2351	2354	rBV4	89394	111626	1.59%	0.115%
77	14.527	2379	2382	2386	rVB5	104315	128111	1.82%	0.132%
78	14.608	2394	2397	2404	rVB5	101949	156447	2.22%	0.161%
79	14.677	2406	2410	2412	rBV3	204050	268361	3.81%	0.277%
80	14.790	2428	2431	2435	rBV3	96033	116235	1.65%	0.120%
81	15.014	2469	2473	2479	rBV2	143249	308551	4.38%	0.318%
82	15.239	2508	2515	2519	rBV	1844330	3414083	48.51%	3.524%
83	15.346	2530	2535	2537	rVB3	277431	395874	5.63%	0.409%
84	15.373	2538	2540	2545	rVB	305294	316383	4.50%	0.327%
85	15.608	2577	2584	2590	rBV2	1400521	2548030	36.21%	2.630%



LSC Area Percent Report

Data Path : C:\msdchem\1\data\jeryllr\e2p4412\  
 Data File : 2p99001.d  
 Acq On : 15 Jan 2021 10:09 pm  
 Operator : hennys  
 Sample : jd18939-3  
 Misc : op31540,e2p4412,31.6,,,1,1  
 ALS Vial : 21 Sample Multiplier: 1

Integration Parameters: lscint.p  
 Integrator: RTE  
 Smoothing : ON Filtering: 5  
 Sampling : 1 Min Area: 1000 Area counts  
 Start Thrs: 0.02 Max Peaks: 100  
 Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 7

Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Title : Semi Volatile Extractables by GC/MS

86	15.672	2590	2596	2604	rVB	1738496	2547695	36.20%	2.630%
87	15.758	2605	2612	2616	rBV2	3122882	4363045	62.00%	4.503%
88	16.116	2677	2679	2683	rBV4	133387	161432	2.29%	0.167%
89	16.260	2701	2706	2711	rBV2	421849	680548	9.67%	0.702%
90	16.464	2739	2744	2746	rBV3	423327	620594	8.82%	0.641%
91	16.496	2746	2750	2756	rVB	846617	1201804	17.08%	1.240%
92	16.565	2759	2763	2771	rVV6	163567	343594	4.88%	0.355%
93	16.833	2809	2813	2818	rVB4	355488	494549	7.03%	0.510%
94	16.982	2837	2841	2846	rVB3	252717	428458	6.09%	0.442%
95	17.122	2862	2867	2879	rVB2	973018	2245490	31.91%	2.318%
96	17.475	2927	2933	2942	rBV	898761	1471937	20.92%	1.519%
97	17.672	2965	2970	2989	rVB7	711984	2286188	32.49%	2.360%
98	18.020	3031	3035	3045	rVB8	365594	817745	11.62%	0.844%
99	18.448	3109	3115	3122	rVB4	405911	823638	11.70%	0.850%
100	19.154	3240	3247	3260	rVB2	771163	1988113	28.25%	2.052%

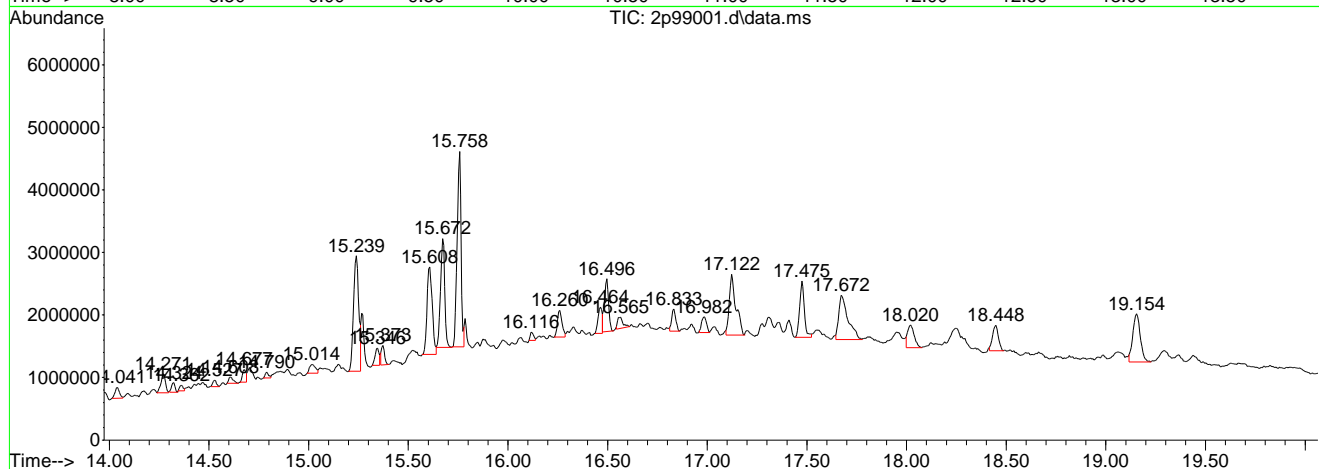
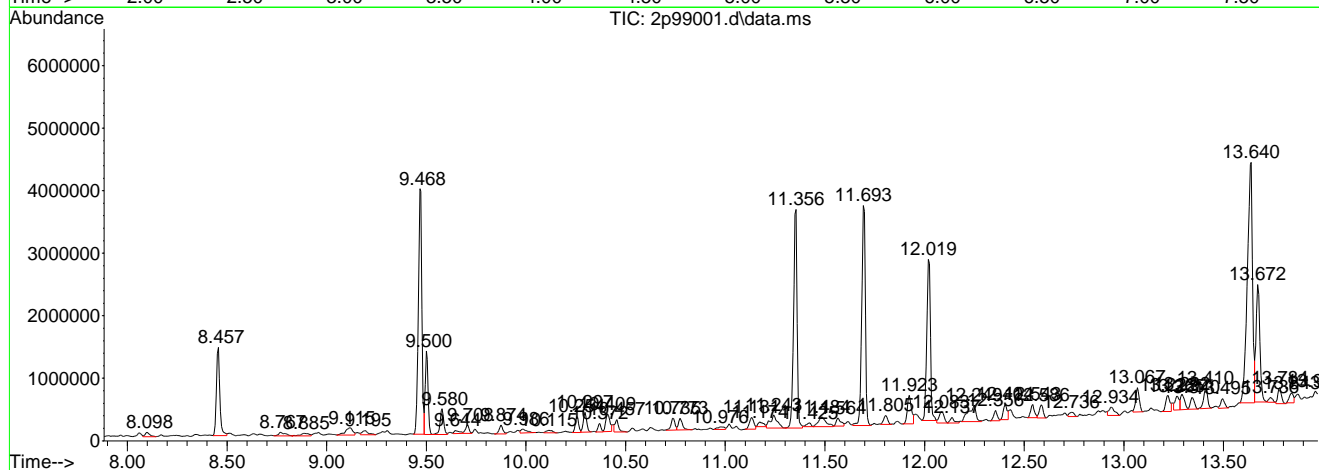
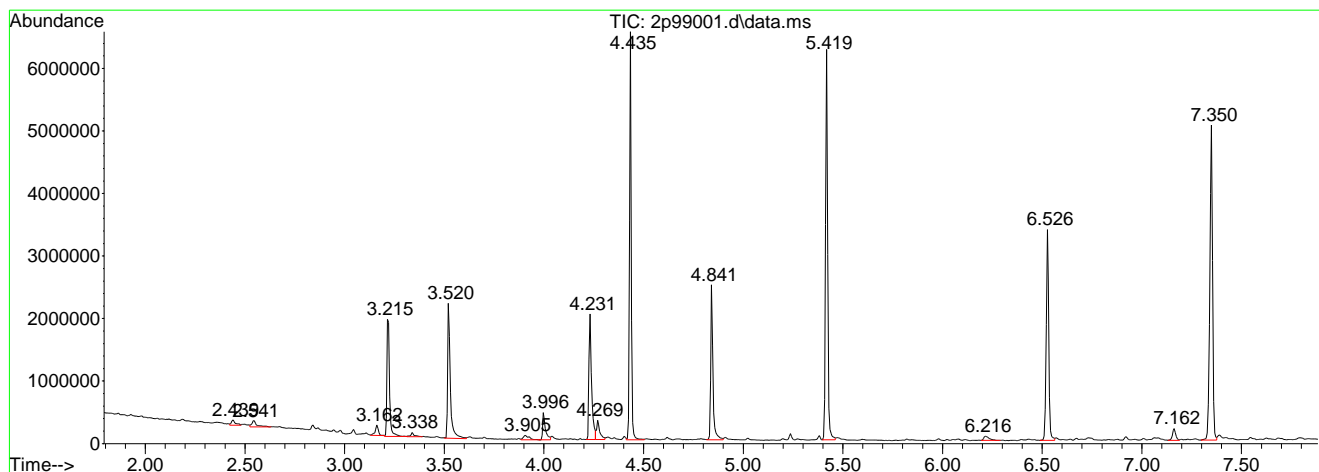
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LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\data\jeryllr\2p4412\  
 Data File : 2p99001.d  
 Acq On : 15 Jan 2021 10:09 pm  
 Operator : hennys  
 Sample : jd18939-3  
 Misc : op31540,e2p4412,31.6,,,1,1  
 ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Title : Semi Volatile Extractables by GC/MS

TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p



Library Search Compound Report

Data Path : C:\msdchem\1\data\jeryllr\e2p4412\  
 Data File : 2p99001.d  
 Acq On : 15 Jan 2021 10:09 pm  
 Operator : hennys  
 Sample : jd18939-3  
 Misc : op31540,e2p4412,31.6,,1,1  
 ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Title : Semi Volatile Extractables by GC/MS

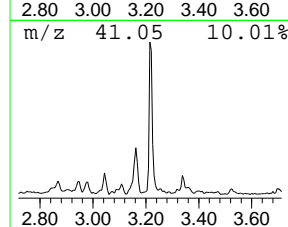
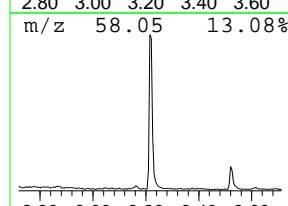
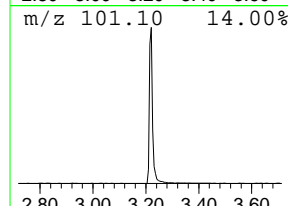
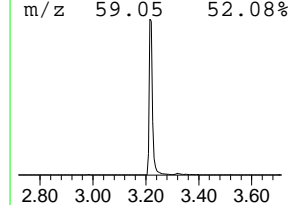
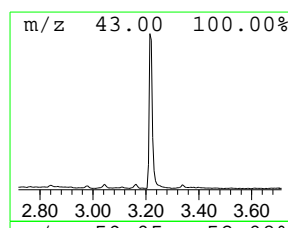
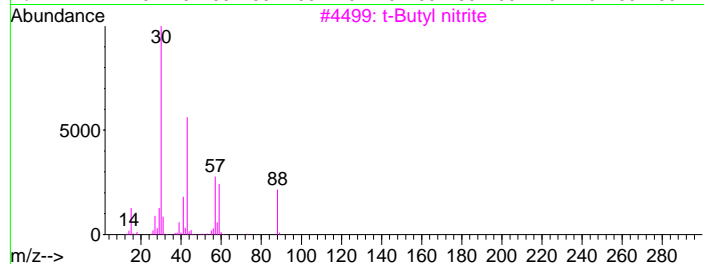
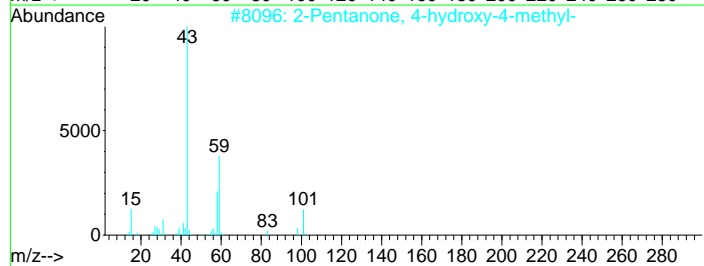
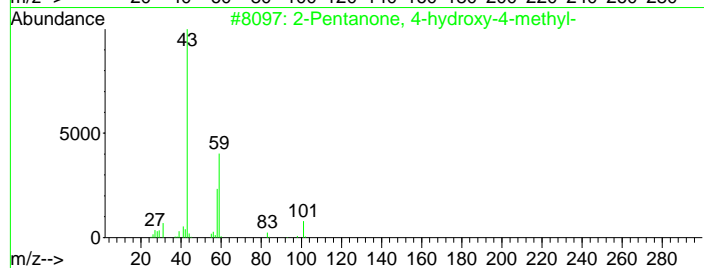
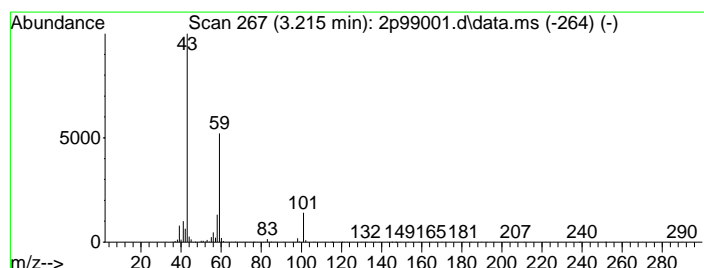
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 1 System artifact/aldol-conde... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.215	16.23 ppm	1667610	1,4-Dichlorobenzene-d4a	4.435

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	64
2		2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
3		t-Butyl nitrite	103	C4H9NO2	000540-80-7	39
4		2-Hexanol, 2-methyl-	116	C7H16O	000625-23-0	28
5		Butyl aldoxime, 3-methyl-, syn-	101	C5H11NO	005780-40-5	23



Library Search Compound Report

Data Path : C:\msdchem\1\data\jeryllr\e2p4412\  
 Data File : 2p99001.d  
 Acq On : 15 Jan 2021 10:09 pm  
 Operator : hennys  
 Sample : jd18939-3  
 Misc : op31540,e2p4412,31.6,,,1,1  
 ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Title : Semi Volatile Extractables by GC/MS

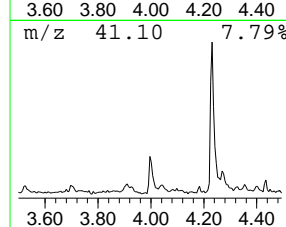
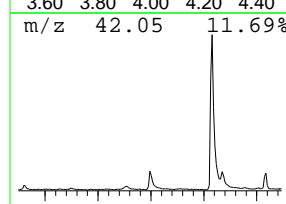
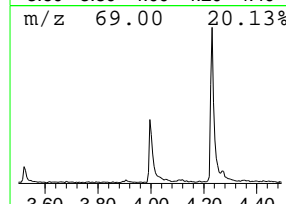
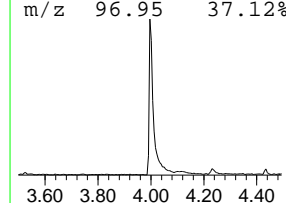
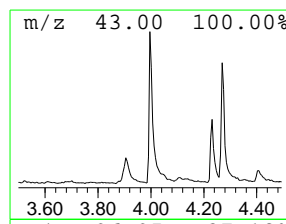
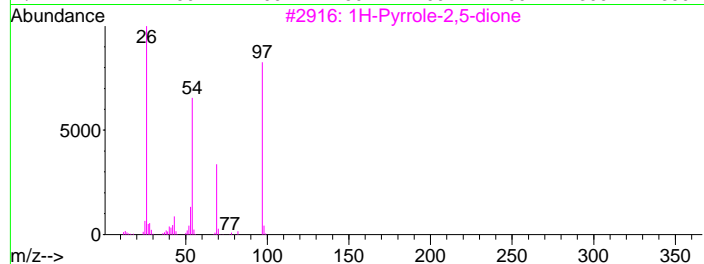
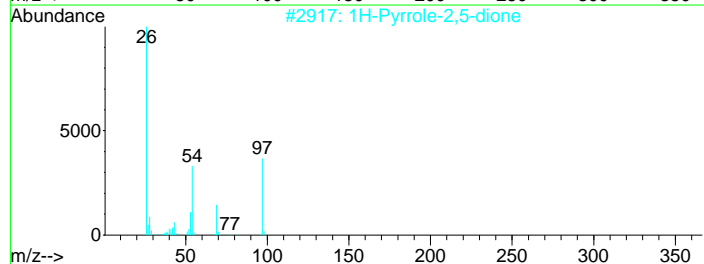
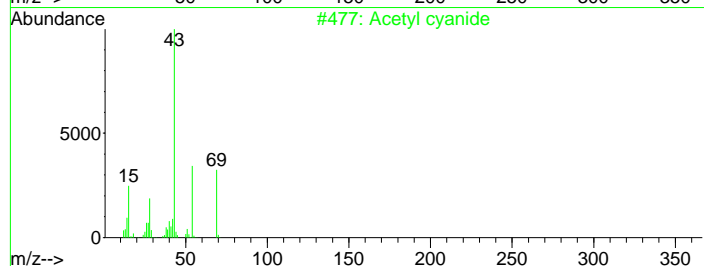
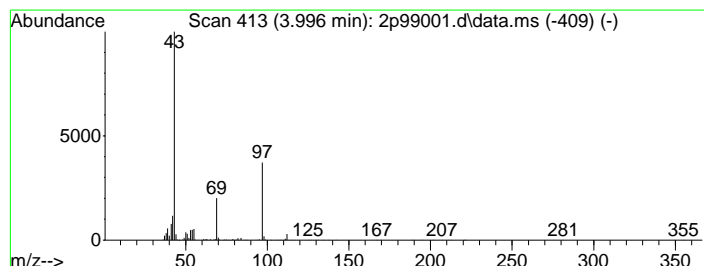
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 2 Unknown Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.996	4.20 ppm	431180	1,4-Dichlorobenzene-d4a	4.435

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Acetyl cyanide	69	C3H3NO	000631-57-2	9
2		1H-Pyrrole-2,5-dione	97	C4H3NO2	000541-59-3	9
3		1H-Pyrrole-2,5-dione	97	C4H3NO2	000541-59-3	9
4		4-Penten-2-one, 4-methyl-	98	C6H10O	003744-02-3	7
5		2-Propyn-1-ol, acetate	98	C5H6O2	000627-09-8	5



Library Search Compound Report

Data Path : C:\msdchem\1\data\jeryllr\2p4412\  
 Data File : 2p99001.d  
 Acq On : 15 Jan 2021 10:09 pm  
 Operator : hennys  
 Sample : jd18939-3  
 Misc : op31540,e2p4412,31.6,,1,1  
 ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Title : Semi Volatile Extractables by GC/MS

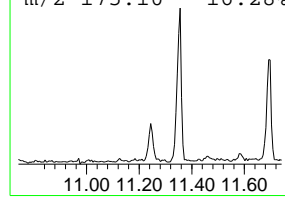
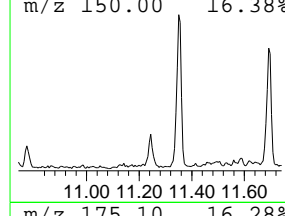
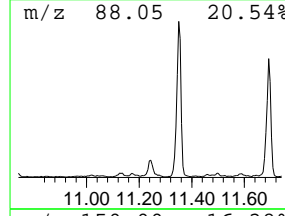
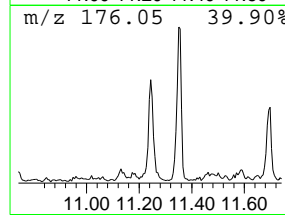
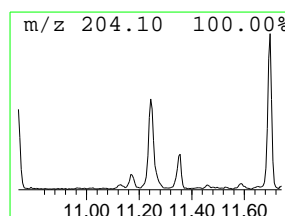
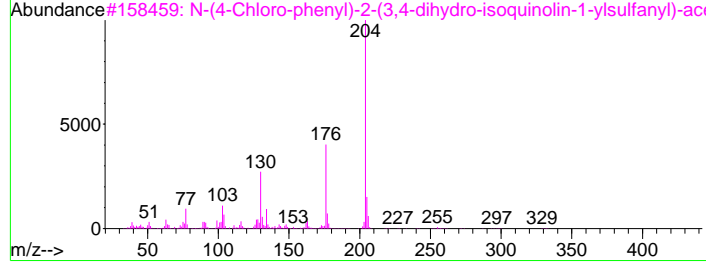
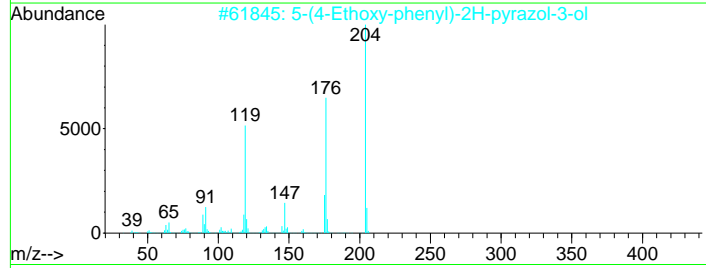
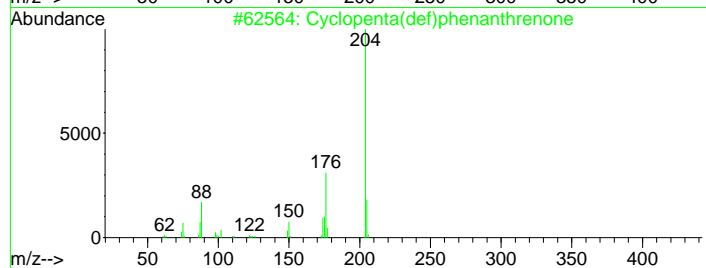
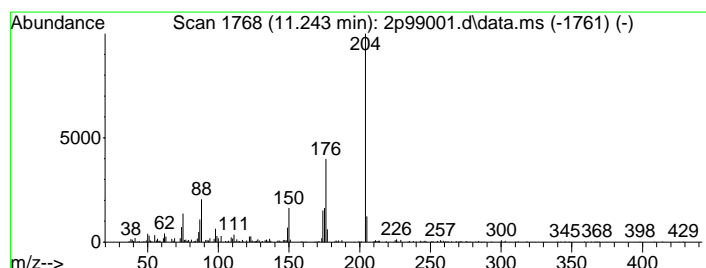
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 3 Cyclopentaphenanthrene Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.243	4.25 ppm	517763	Phenanthrene-d10b	9.468

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Cyclopenta(def)phenanthrene	204	C15H8O	005737-13-3	91
2		5-(4-Ethoxy-phenyl)-2H-pyrazol-3-ol	204	C11H12N2O2	1000278-26-8	53
3		N-(4-Chloro-phenyl)-2-(3,4-dihyd...	330	C17H15ClN2OS	1000296-34-3	40
4		Propanedinitrile, 2,2'-(2,5-cycl...	204	C12H4N4	001518-16-7	38
5		[1,1'-Biphenyl]-4,4'-dicarbonitrile	204	C14H8N2	001591-30-6	38





Library Search Compound Report

Data Path : C:\msdchem\1\data\jeryllr\e2p4412\  
 Data File : 2p99001.d  
 Acq On : 15 Jan 2021 10:09 pm  
 Operator : hennys  
 Sample : jd18939-3  
 Misc : op31540,e2p4412,31.6,,,1,1  
 ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Title : Semi Volatile Extractables by GC/MS

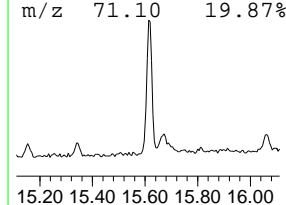
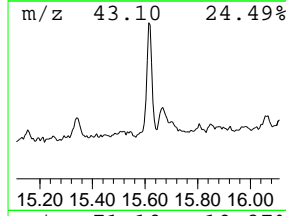
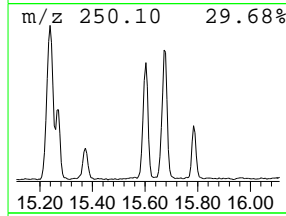
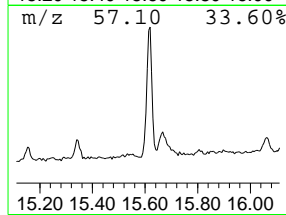
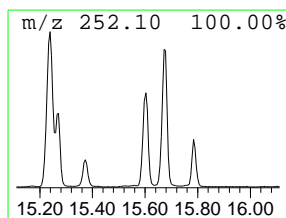
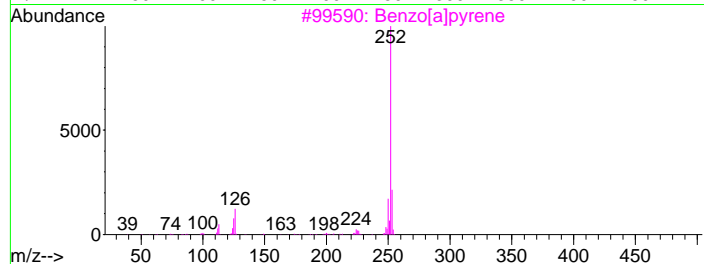
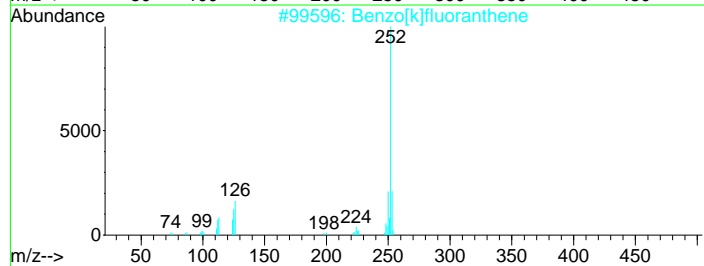
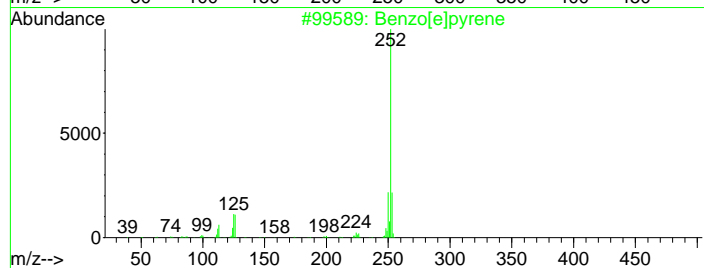
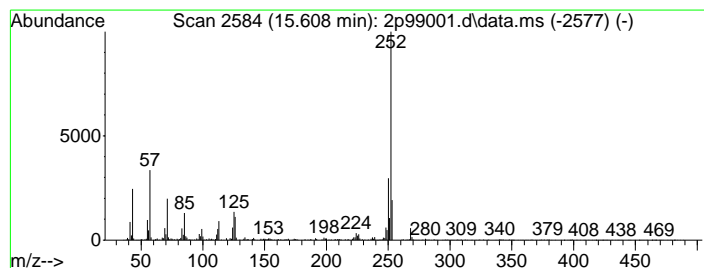
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 4 Unknown PAH substance Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
15.608	23.36 ppm	2548030	Perylene-d12	15.758

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Benzo[e]pyrene	252	C20H12	000192-97-2	97
2		Benzo[k]fluoranthene	252	C20H12	000207-08-9	95
3		Benzo[a]pyrene	252	C20H12	000050-32-8	95
4		Benzo[e]acephenanthrylene	252	C20H12	000205-99-2	93
5		Benzo[k]fluoranthene	252	C20H12	000207-08-9	93



Library Search Compound Report

Data Path : C:\msdchem\1\data\jeryllr\e2p4412\  
 Data File : 2p99001.d  
 Acq On : 15 Jan 2021 10:09 pm  
 Operator : hennys  
 Sample : jd18939-3  
 Misc : op31540,e2p4412,31.6,,,1,1  
 ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Title : Semi Volatile Extractables by GC/MS

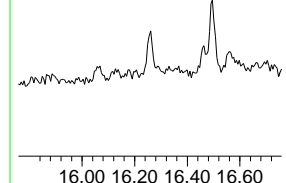
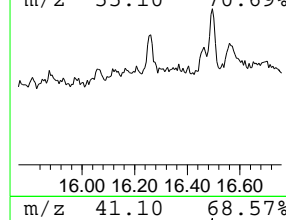
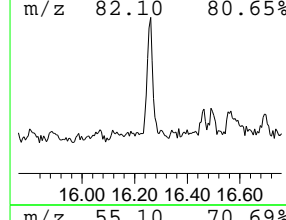
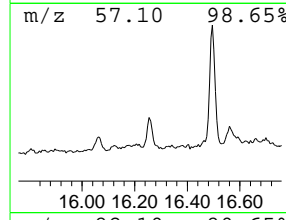
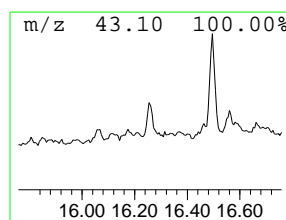
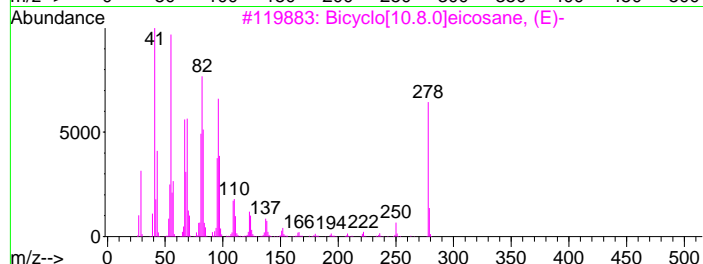
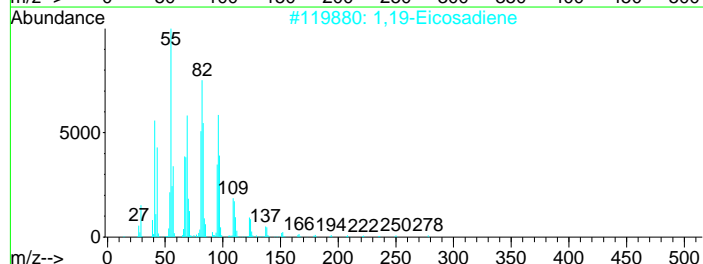
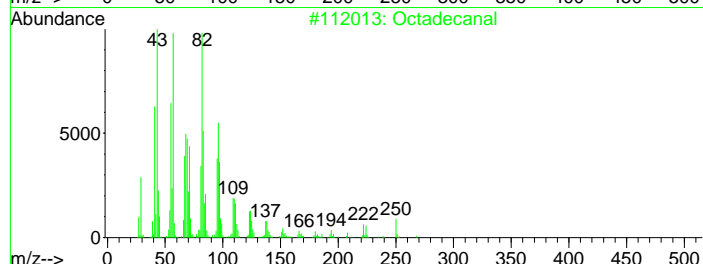
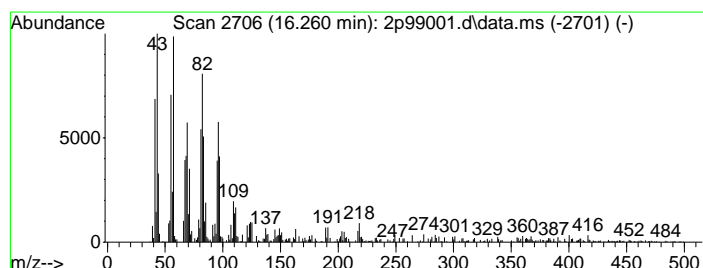
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 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 5 Unknown Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.260	6.24 ppm	680548	Perylene-d12	15.758

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanal	268	C18H36O	000638-66-4	91
2	1,19-Eicosadiene	278	C20H38	014811-95-1	91
3	Bicyclo[10.8.0]eicosane, (E)-	278	C20H38	1000155-85-0	90
4	Carbonic acid, isobutyl undec-10...	270	C16H30O3	1000314-60-8	90
5	Octadecanal	268	C18H36O	000638-66-4	87



Library Search Compound Report

Data Path : C:\msdchem\1\data\jeryllr\e2p4412\  
 Data File : 2p99001.d  
 Acq On : 15 Jan 2021 10:09 pm  
 Operator : hennys  
 Sample : jd18939-3  
 Misc : op31540,e2p4412,31.6,,1,1  
 ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Title : Semi Volatile Extractables by GC/MS

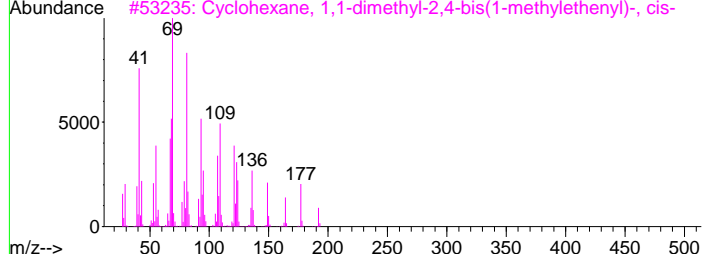
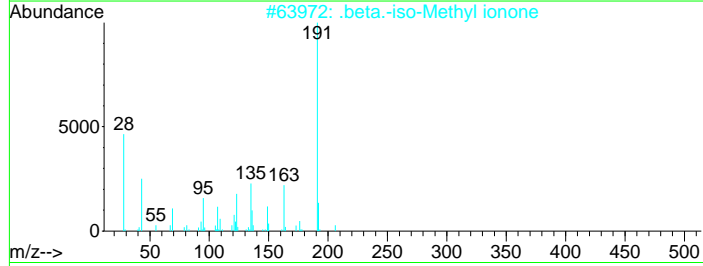
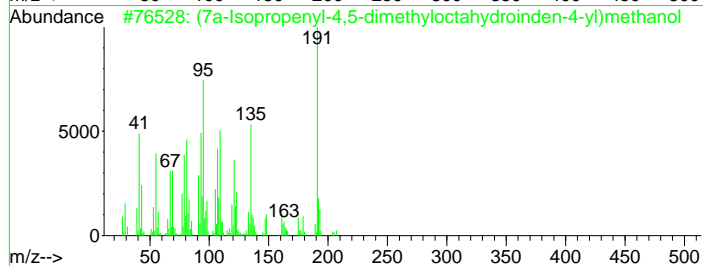
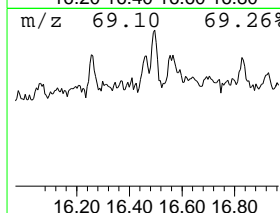
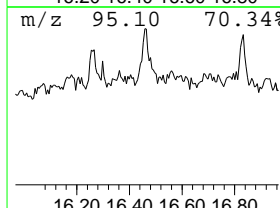
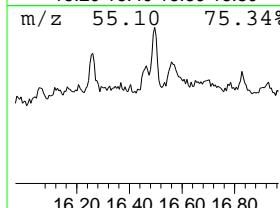
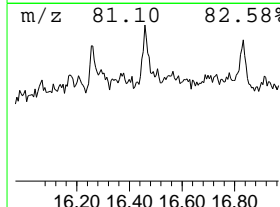
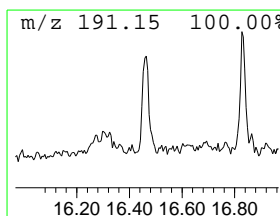
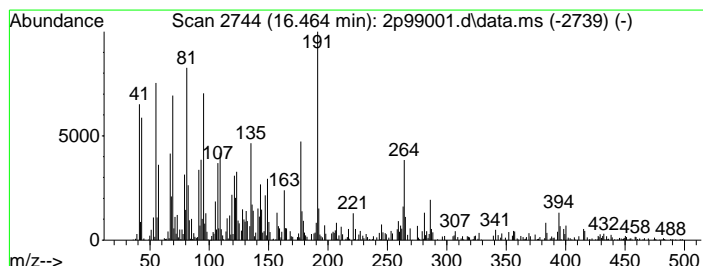
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 6 Unknown Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.464	5.69 ppm	620594	Perylene-d12	15.758

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			(7a-Isopropenyl-4,5-dimethylocta...	222	C15H26O	1000187-02-9	43
2			.beta.-iso-Methyl ionone	206	C14H22O	1000285-40-2	42
3			Cyclohexane, 1,1-dimethyl-2,4-bi...	192	C14H24	062337-98-8	30
4			Cyclohexane, 3,4-bis(1-methyleth...	192	C14H24	061142-74-3	30
5			Anthracene, 9-(4-methoxybutyl)-	264	C19H20O	144000-76-0	20



Library Search Compound Report

Data Path : C:\msdchem\1\data\jeryllr\e2p4412\  
 Data File : 2p99001.d  
 Acq On : 15 Jan 2021 10:09 pm  
 Operator : hennys  
 Sample : jd18939-3  
 Misc : op31540,e2p4412,31.6,,,1,1  
 ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Title : Semi Volatile Extractables by GC/MS

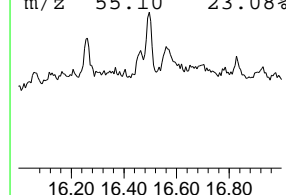
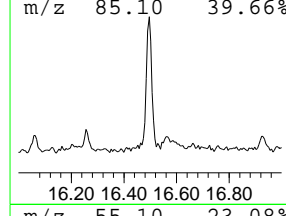
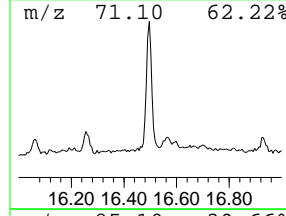
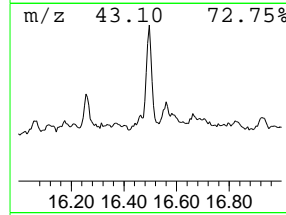
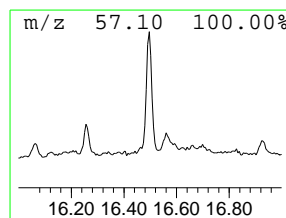
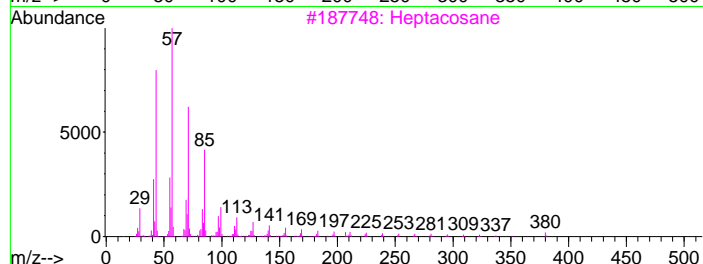
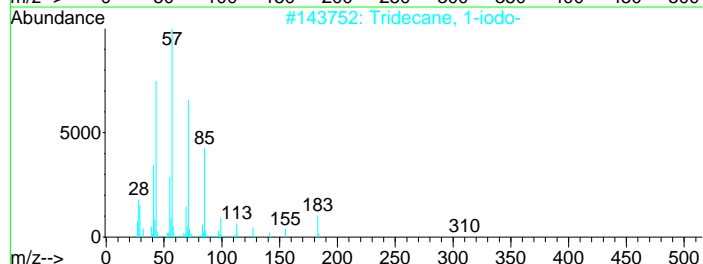
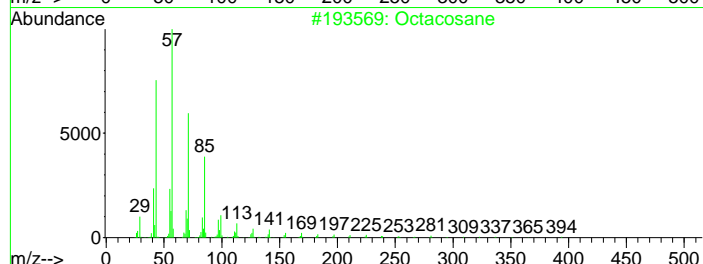
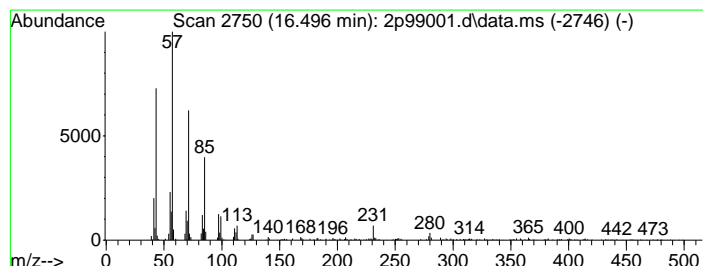
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 7 Alkane Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.496	11.02 ppm	1201800	Perylene-d12	15.758

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Octacosane	394	C28H58	000630-02-4	93
2		Tridecane, 1-iodo-	310	C13H27I	035599-77-0	91
3		Heptacosane	380	C27H56	000593-49-7	90
4		Tetratetracontane	619	C44H90	007098-22-8	87
5		Hexacosane, 9-octyl-	479	C34H70	055429-83-9	87



Library Search Compound Report

Data Path : C:\msdchem\1\data\jeryllr\2p4412\  
 Data File : 2p99001.d  
 Acq On : 15 Jan 2021 10:09 pm  
 Operator : hennys  
 Sample : jd18939-3  
 Misc : op31540,e2p4412,31.6,,1,1  
 ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Title : Semi Volatile Extractables by GC/MS

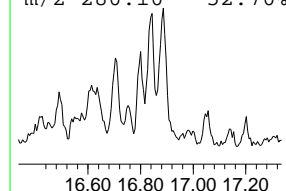
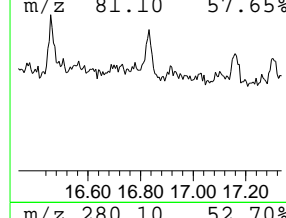
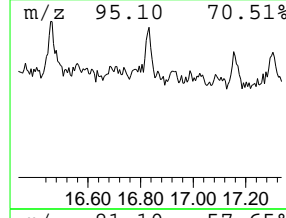
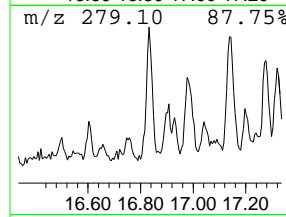
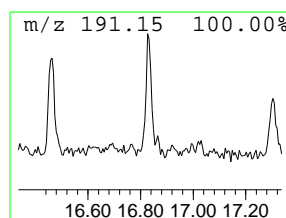
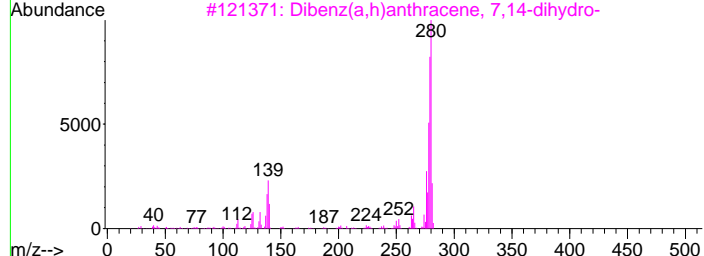
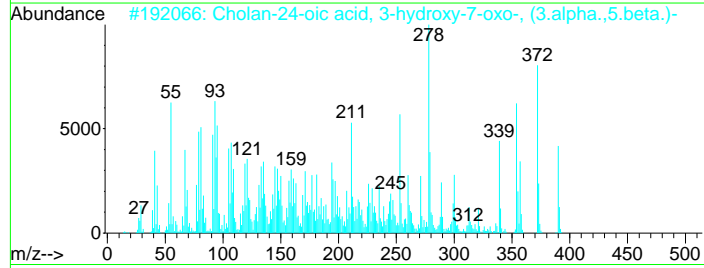
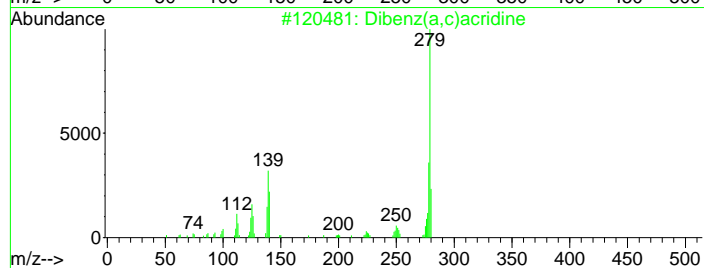
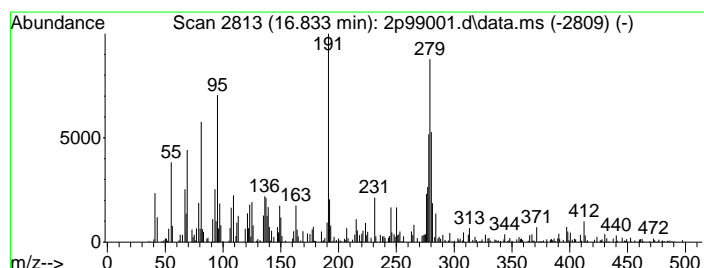
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 8 Unknown Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
16.833	4.53 ppm	494549	Perylene-d12	15.758

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Dibenz(a,c)acridine	279	C21H13N	000215-62-3	30
2		Cholan-24-oic acid, 3-hydroxy-7-...	390	C24H38O4	004651-67-6	25
3		Dibenz(a,h)anthracene, 7,14-dihy...	280	C22H16	057816-08-7	25
4		Cinnamic acid, 3,4-dimethoxy-, t...	280	C14H20O4Si	027750-71-6	22
5		Dibenz(a,h)acridine	279	C21H13N	000226-36-8	20



Library Search Compound Report

Data Path : C:\msdchem\1\data\jeryllr\2p4412\  
 Data File : 2p99001.d  
 Acq On : 15 Jan 2021 10:09 pm  
 Operator : hennys  
 Sample : jd18939-3  
 Misc : op31540,e2p4412,31.6,,,1,1  
 ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Title : Semi Volatile Extractables by GC/MS

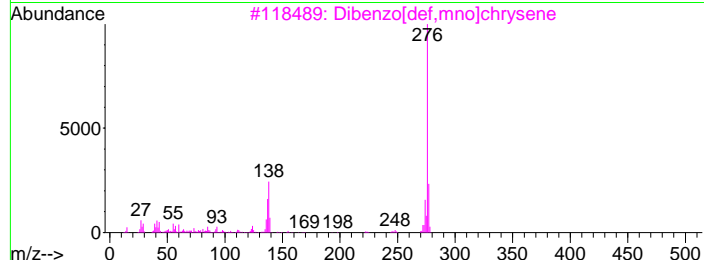
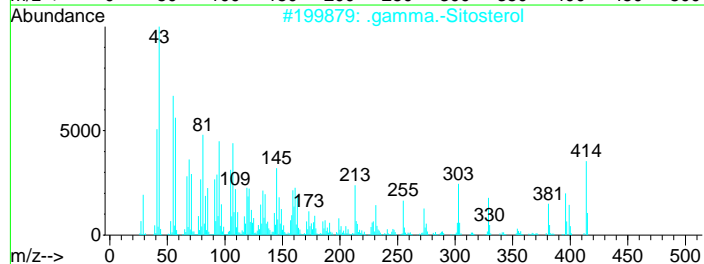
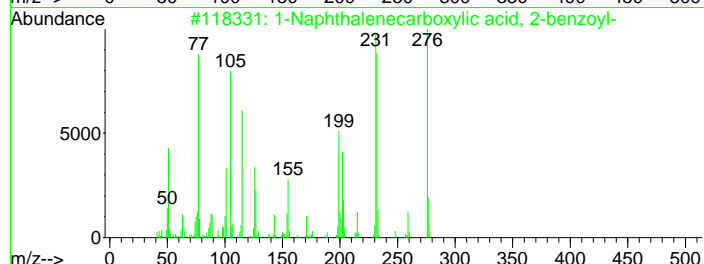
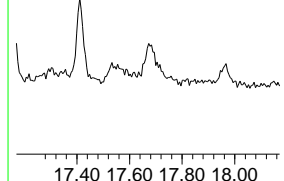
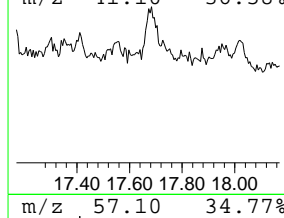
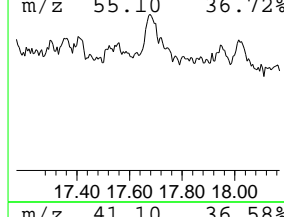
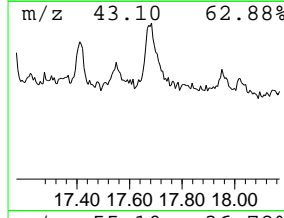
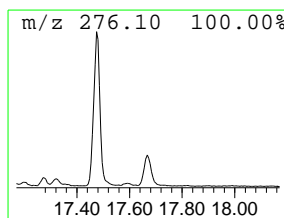
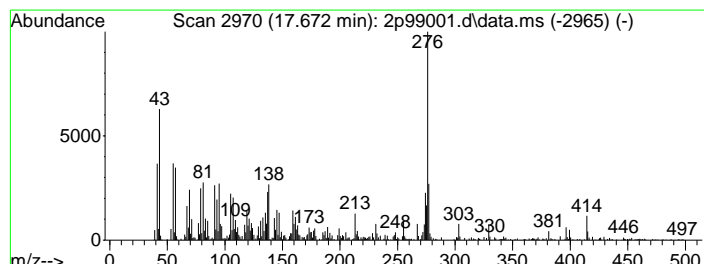
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 9 Unknown Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
17.672	20.96 ppm	2286190	Perylene-d12	15.758

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	1-Naphthalenecarboxylic acid, 2-...	276	C18H12O3	038119-11-8	94
2		.gamma.-Sitosterol	414	C29H50O	000083-47-6	91
3		Dibenzo[def,mno]chrysene	276	C22H12	000191-26-4	91
4		Benzo[ghi]perylene	276	C22H12	000191-24-2	64
5		Indeno[1,2,3-cd]pyrene	276	C22H12	000193-39-5	64



Library Search Compound Report

Data Path : C:\msdchem\1\data\jeryllr\2p4412\  
 Data File : 2p99001.d  
 Acq On : 15 Jan 2021 10:09 pm  
 Operator : hennys  
 Sample : jd18939-3  
 Misc : op31540,e2p4412,31.6,,1,1  
 ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Title : Semi Volatile Extractables by GC/MS

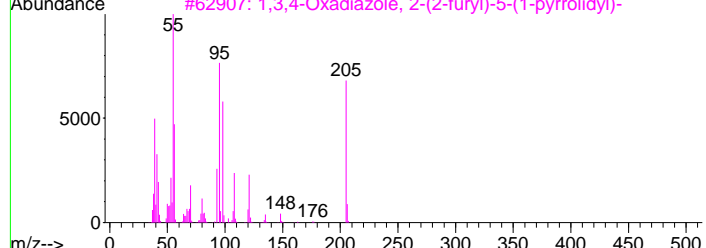
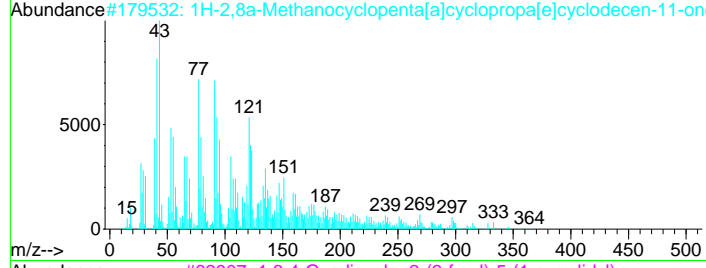
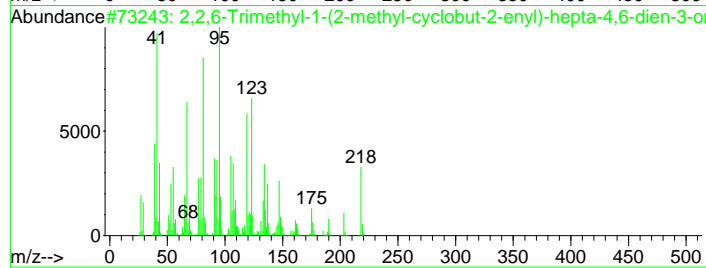
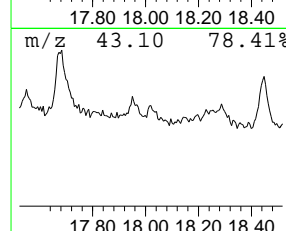
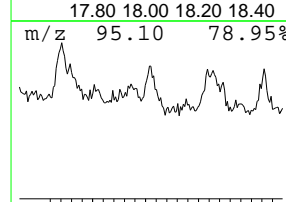
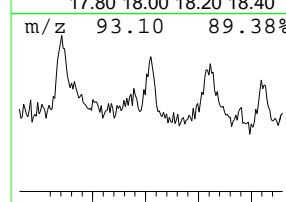
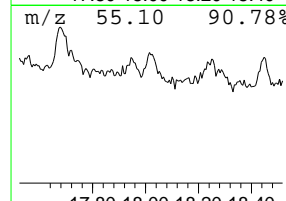
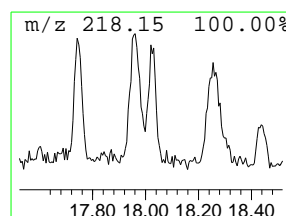
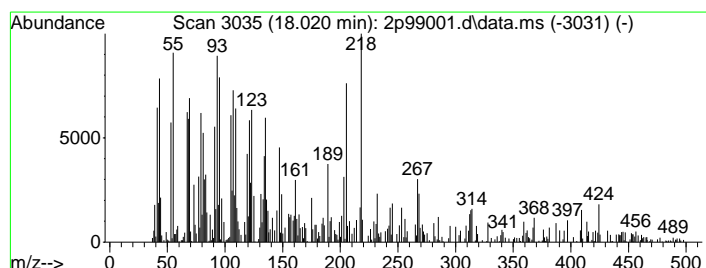
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 10 Unknown Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.020	7.50 ppm	817745	Perylene-d12	15.758

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			2,2,6-Trimethyl-1-(2-methyl-cycl...	218	C15H22O	1000188-72-8	42
2			1H-2,8a-Methanocyclopenta[alicycl...	364	C20H28O6	052557-29-6	37
3			1,3,4-Oxadiazole, 2-(2-furyl)-5-...	205	C10H11N3O2	284674-14-2	35
4			4,4,6a,6b,8a,11,11,14b-Octamethy...	424	C30H48O	1000194-62-4	22
5			Cyclopropanecarboxamide, 2,2-dib...	337	C11H17Br2NO	1000263-98-9	22



7.1.6  
7

Library Search Compound Report

Data Path : C:\msdchem\1\data\jeryllr\e2p4412\  
 Data File : 2p99001.d  
 Acq On : 15 Jan 2021 10:09 pm  
 Operator : hennys  
 Sample : jd18939-3  
 Misc : op31540,e2p4412,31.6,,1,1  
 ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Title : Semi Volatile Extractables by GC/MS

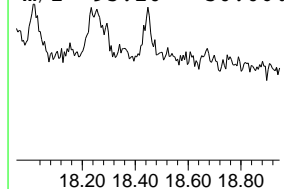
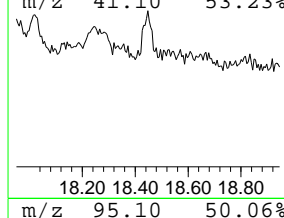
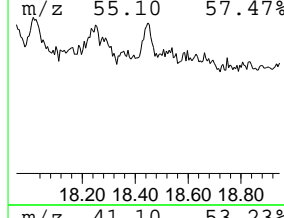
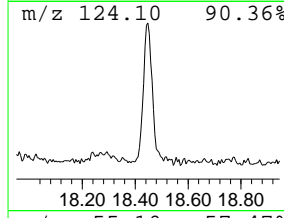
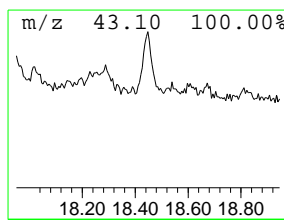
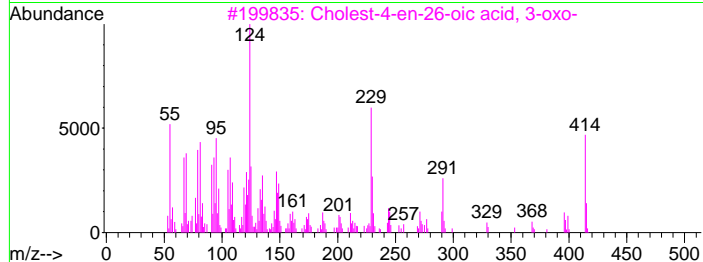
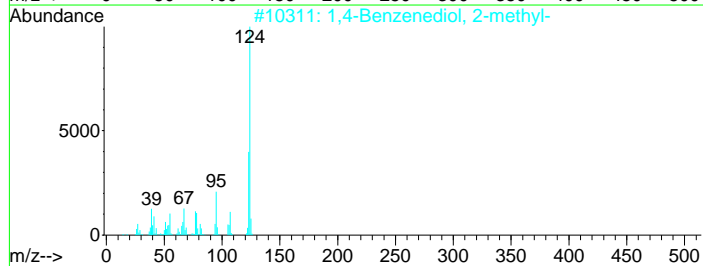
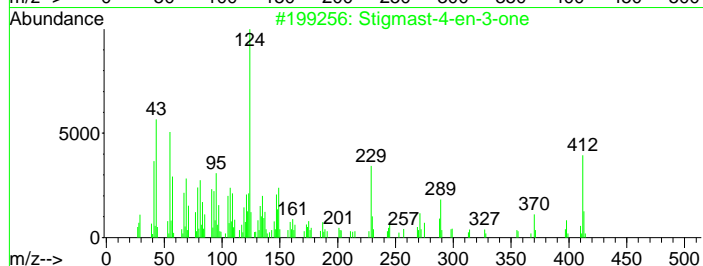
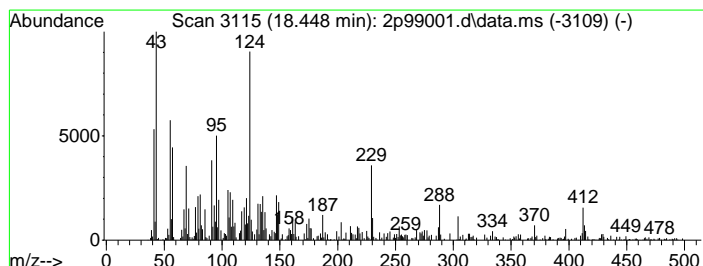
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 11 Unknown Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
18.448	7.55 ppm	823638	Perylene-d12	15.758

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Stigmast-4-en-3-one	412	C29H48O	001058-61-3	72
2		1,4-Benzenediol, 2-methyl-	124	C7H8O2	000095-71-6	55
3		Cholest-4-en-26-oic acid, 3-oxo-	414	C27H42O3	023017-97-2	53
4		Testosterone	288	C19H28O2	000058-22-0	50
5		Testosterone	288	C19H28O2	000058-22-0	49





Library Search Compound Report

Data Path : C:\msdchem\1\data\jeryllr\e2p4412\  
 Data File : 2p99001.d  
 Acq On : 15 Jan 2021 10:09 pm  
 Operator : hennys  
 Sample : jd18939-3  
 Misc : op31540,e2p4412,31.6,,1,1  
 ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Title : Semi Volatile Extractables by GC/MS

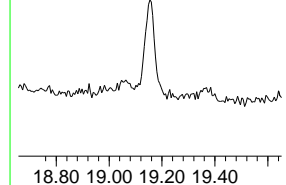
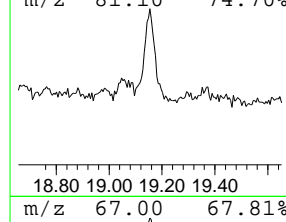
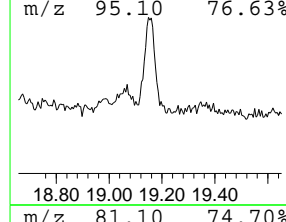
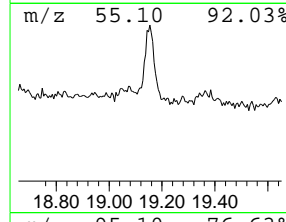
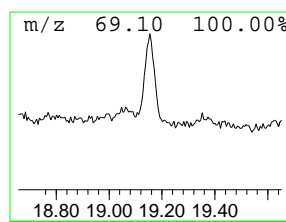
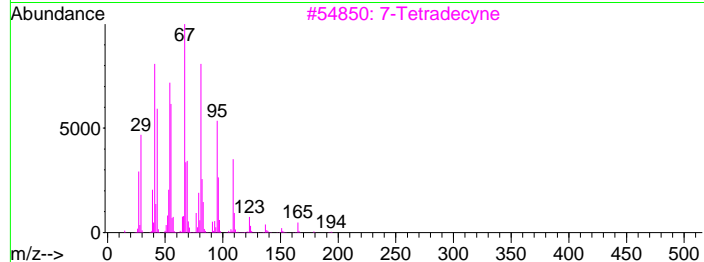
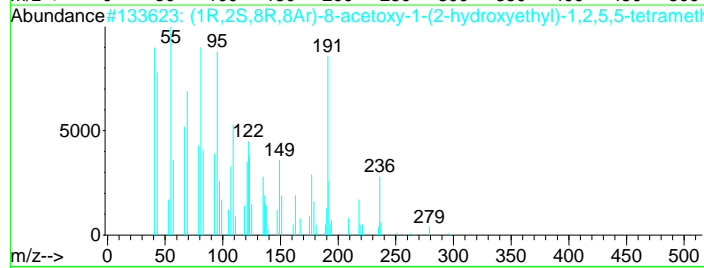
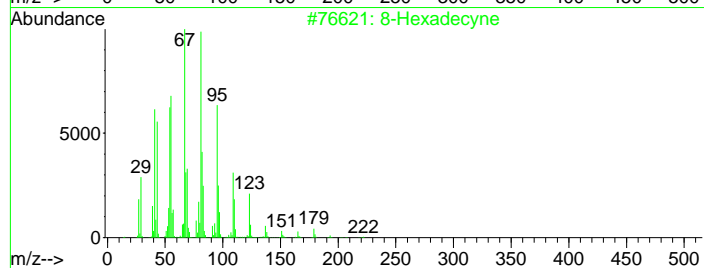
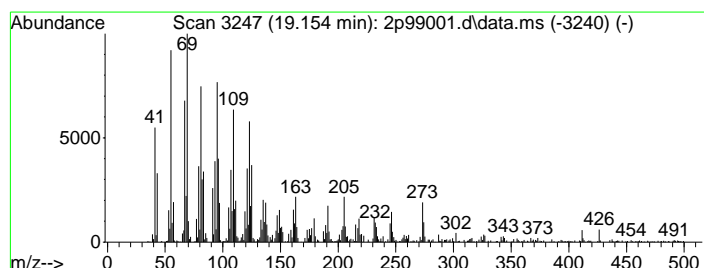
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 12 Unknown Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
19.154	18.23 ppm	1988110	Perylene-d12	15.758

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			8-Hexadecyne	222	C16H30	019781-86-3	86
2			(1R,2S,8R,8Ar)-8-acetoxy-1-(2-hy...	296	C18H32O3	1000298-98-4	70
3			7-Tetradecyne	194	C14H26	035216-11-6	64
4			7-Tetradecyne	194	C14H26	035216-11-6	58
5			7-Tetradecyne	194	C14H26	035216-11-6	58



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\data\jeryllr\e2p4412\  
 Data File : 2p99001.d  
 Acq On : 15 Jan 2021 10:09 pm  
 Operator : hennys  
 Sample : jd18939-3  
 Misc : op31540,e2p4412,31.6,,,1,1  
 ALS Vial : 21 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Title : Semi Volatile Extractables by GC/MS

TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
System artifact...	3.215	16.2	ppm	1667610	2	4.435	4108910	40.0
Unknown	3.996	4.2	ppm	431180	2	4.435	4108910	40.0
Cyclopentaphena...	11.243	4.3	ppm	517763	11	9.468	4878140	40.0
Unknown PAH sub...	15.608	23.4	ppm	2548030	15	15.758	4363050	40.0
Unknown	16.260	6.2	ppm	680548	15	15.758	4363050	40.0
Unknown	16.464	5.7	ppm	620594	15	15.758	4363050	40.0
Alkane	16.496	11.0	ppm	1201800	15	15.758	4363050	40.0
Unknown	16.833	4.5	ppm	494549	15	15.758	4363050	40.0
Unknown	17.672	21.0	ppm	2286190	15	15.758	4363050	40.0
Unknown	18.020	7.5	ppm	817745	15	15.758	4363050	40.0
Unknown	18.448	7.5	ppm	823638	15	15.758	4363050	40.0
Unknown	19.154	18.2	ppm	1988110	15	15.758	4363050	40.0

7.1.6

7

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\data\jeryllr\e2p4412\  
 Data File : 2p98985.d  
 Acq On : 15 Jan 2021 2:46 pm  
 Operator : hennys  
 Sample : op31540-mb1 Inst : MS2P  
 Misc : op31540,e2p4412,30.0,,,1,1  
 ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Results File: M2P4365.RES  
 Quant Time: Jan 18 03:21:22 2021  
 Quant Title : Semi Volatile Extractables by GC/MS  
 QLast Update : Mon Jan 18 03:08:11 2021  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
Internal Standards							
1) 1,4-Dichlorobenzene-d4	4.429	152	459581	40.00	ppm	0.00	
24) Naphthalene-d8	5.418	136	1663653	40.00	ppm	0.00	
47) Acenaphthene-d10	7.344	164	836454	40.00	ppm	0.00	
69) Phenanthrene-d10	9.462	188	1586317	40.00	ppm	0.00	
83) Chrysene-d12	13.618	240	1674443	40.00	ppm	0.00	
91) Perylene-d12	15.736	264	1720024	40.00	ppm	0.00	
101) 1,4-Dichlorobenzene-d4a	4.429	152	459581	40.00	ppm	0.00	
103) Naphthalene-d8a	5.418	136	1663653	40.00	ppm	0.00	
105) Acenaphthene-d10a	7.344	164	836454	40.00	ppm	0.00	
107) Chrysene-d12a	13.618	240	1674443	40.00	ppm	0.00	
109) Phenanthrene-d10a	9.462	188	1586317	40.00	ppm	0.00	
112) 1,4-Dichlorobenzene-d4b	4.429	152	459581	40.00	ppm	0.00	
115) Acenaphthene-d10b	7.344	164	836454	40.00	ppm	0.00	
117) Phenanthrene-d10b	9.462	188	1586317	40.00	ppm	0.00	
120) Chrysene-d12b	13.618	240	1674443	40.00	ppm	0.00	
System Monitoring Compounds							
5) 2-Fluorophenol	3.509	112	552254	35.26	ppm	0.00	
Spiked Amount	50.000	Range	11 - 58	Recovery	=	70.52%#	
8) Phenol-d5	4.220	99	699559	35.27	ppm	0.00	
Spiked Amount	50.000	Range	10 - 59	Recovery	=	70.54%#	
25) Nitrobenzene-d5	4.841	82	835923	44.76	ppm	0.00	
Spiked Amount	50.000	Range	19 - 61	Recovery	=	89.52%#	
51) 2-Fluorobiphenyl	6.526	172	1172124	42.60	ppm	0.00	
Spiked Amount	50.000	Range	21 - 58	Recovery	=	85.20%#	
73) 2,4,6-Tribromophenol	8.451	330	226553	39.49	ppm	0.00	
Spiked Amount	50.000	Range	12 - 68	Recovery	=	78.98%#	
85) Terphenyl-d14	12.013	244	1638211	42.02	ppm	0.00	
Spiked Amount	50.000	Range	16 - 65	Recovery	=	84.04%#	
118) 1-Chlorooctadecane	0.000	57	0	0.00	ppm		
Spiked Amount	50.000	Range	15 - 64	Recovery	=	0.00%#	
119) o-terphenyl	0.000	230	0	0.00	ppm		
Spiked Amount	50.000	Range	15 - 64	Recovery	=	0.00%#	
Target Compounds							Qvalue
53) Biphenyl	6.643	154	2570	0.08	ppm	85	
86) Butylbenzylphthalate	12.853	149	2601	0.11	ppm	77	
90) bis(2-Ethylhexyl)phtha...	13.827	149	1902	0.06	ppm	90	

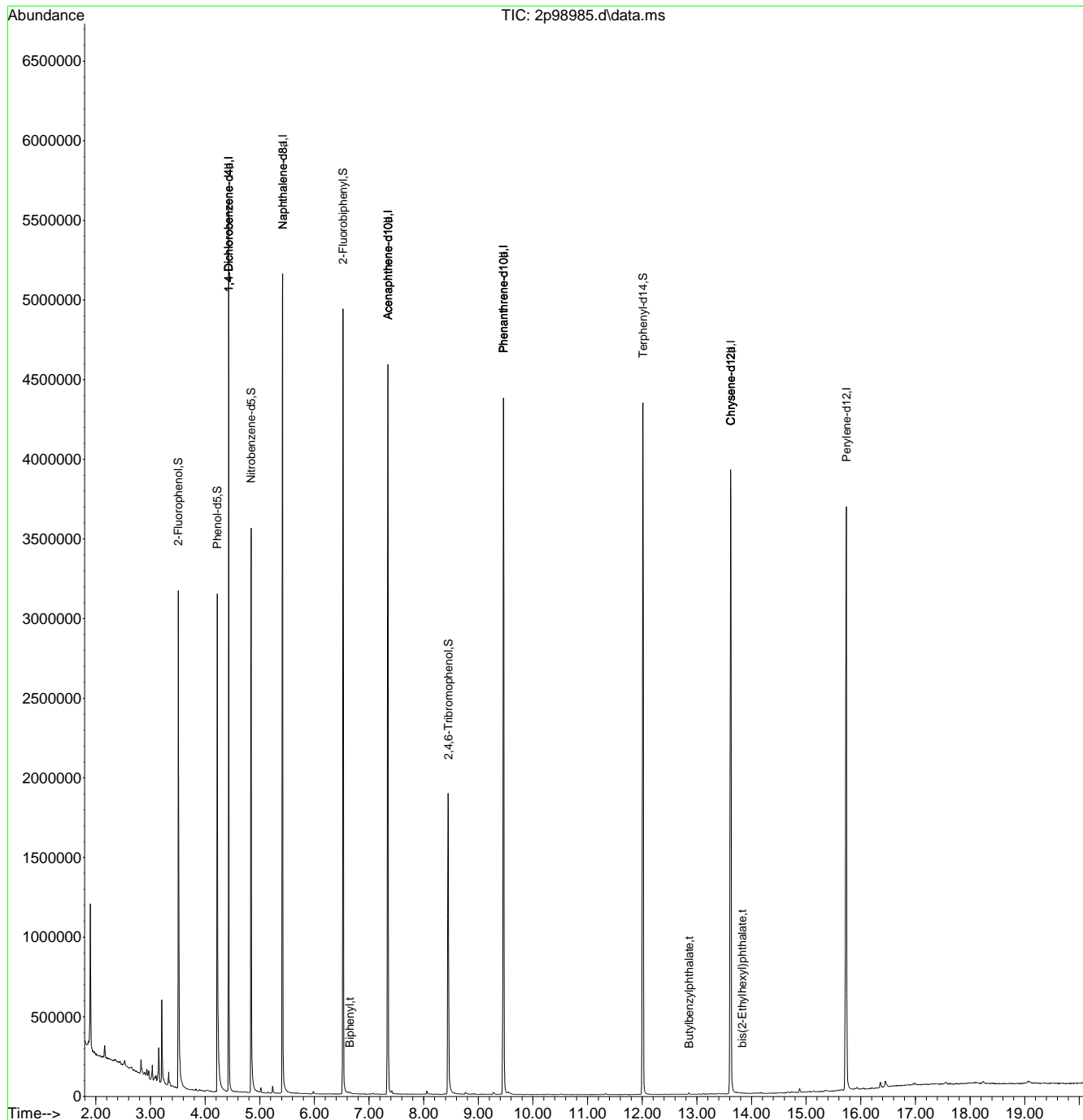
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT/LSC Reviewed)

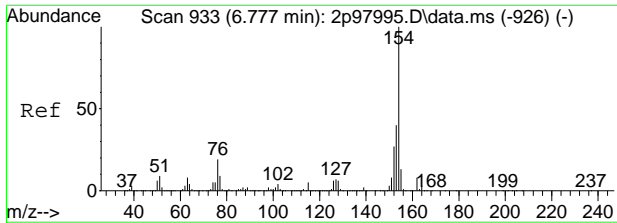
Data Path : C:\msdchem\1\data\jeryllr\e2p4412\  
 Data File : 2p98985.d  
 Acq On : 15 Jan 2021 2:46 pm  
 Operator : hennys  
 Sample : op31540-mb1  
 Misc : op31540,e2p4412,30.0,,,1,1  
 ALS Vial : 5 Sample Multiplier: 1

Inst : MS2P

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Results File: M2P4365.RES  
 Quant Time: Jan 18 03:21:22 2021  
 Quant Title : Semi Volatile Extractables by GC/MS  
 QLast Update : Mon Jan 18 03:08:11 2021  
 Response via : Initial Calibration

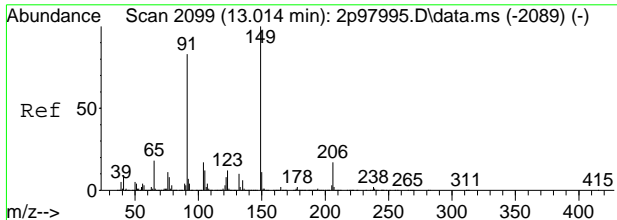
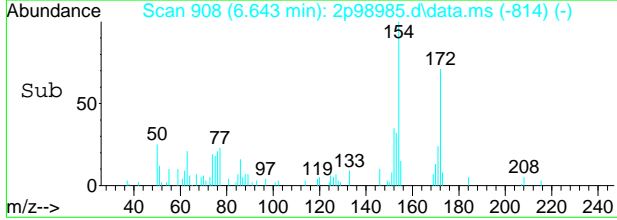
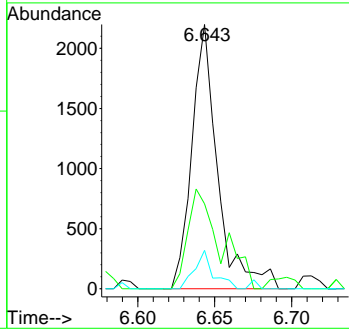
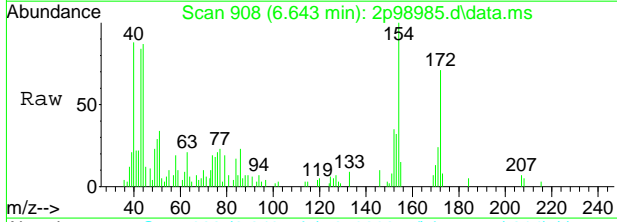


7.2.1  
7



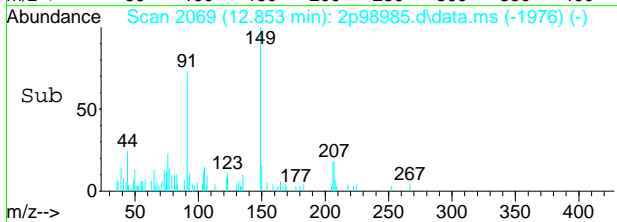
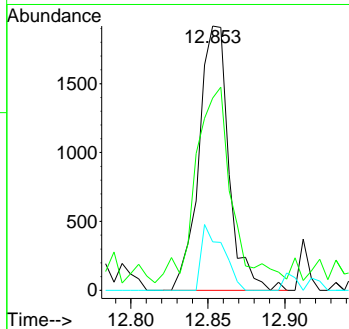
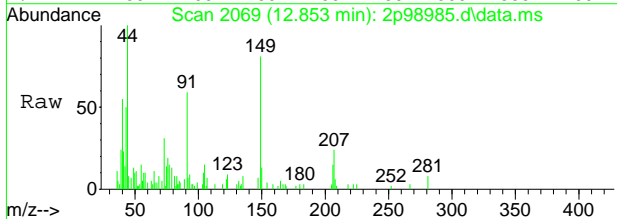
#53  
 Biphenyl  
 Concen: 0.08 ppm  
 RT: 6.643 min Scan# 908  
 Delta R.T. 0.005 min  
 Lab File: 2p98985.d  
 Acq: 15 Jan 2021 2:46 pm

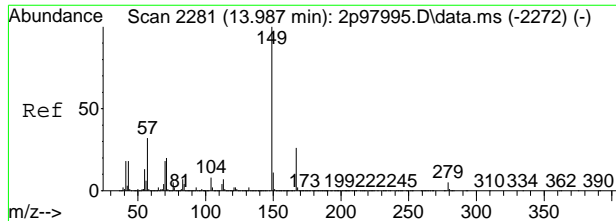
Tgt Ion	Resp	Lower	Upper
154	2570		
153	29.9	11.2	71.2
155	14.5	0.0	42.9



#86  
 Butylbenzylphthalate  
 Concen: 0.11 ppm  
 RT: 12.853 min Scan# 2069  
 Delta R.T. 0.000 min  
 Lab File: 2p98985.d  
 Acq: 15 Jan 2021 2:46 pm

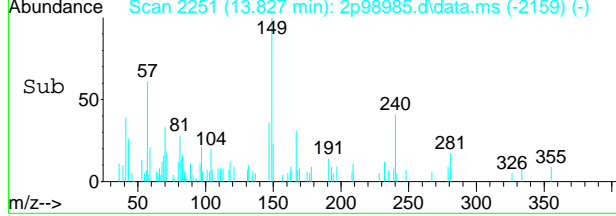
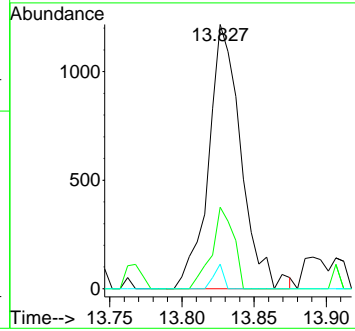
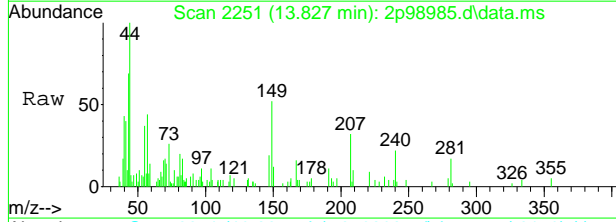
Tgt Ion	Resp	Lower	Upper
149	2601		
91	67.5	62.4	122.4
206	15.0	0.0	46.8





#90  
 bis(2-Ethylhexyl)phthalate  
 Concen: 0.06 ppm  
 RT: 13.827 min Scan# 2251  
 Delta R.T. -0.005 min  
 Lab File: 2p98985.d  
 Acq: 15 Jan 2021 2:46 pm

Tgt Ion	Ratio	Lower	Upper
149	100		
167	31.5	0.0	56.5
279	9.5	0.0	35.6



7.2.1  
7

## LSC Area Percent Report

Data Path : C:\msdchem\1\data\jeryllr\2p4412\  
 Data File : 2p98985.d  
 Acq On : 15 Jan 2021 2:46 pm  
 Operator : hennys  
 Sample : op31540-mb1  
 Misc : op31540,e2p4412,30.0,,,1,1  
 ALS Vial : 5 Sample Multiplier: 1

Integration Parameters: lscint.p

Integrator: RTE  
 Smoothing : ON  
 Sampling : 1  
 Start Thrs: 0.02  
 Stop Thrs : 0

Filtering: 5  
 Min Area: 1000 Area counts  
 Max Peaks: 100  
 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 7

Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Title : Semi Volatile Extractables by GC/MS

Signal : TIC: 2p98985.d\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.899	16	21	34	rVB	937405	941889	18.13%	1.829%
2	2.161	68	70	76	rVB2	76497	65404	1.26%	0.127%
3	2.525	136	138	154	rVB3	50182	93878	1.81%	0.182%
4	2.824	191	194	203	rVB3	91127	118217	2.28%	0.230%
5	2.931	211	214	217	rVV2	39536	40267	0.78%	0.078%
6	2.969	217	221	226	rVB2	55157	68211	1.31%	0.132%
7	3.033	227	233	237	rVB2	95644	94219	1.81%	0.183%
8	3.081	239	242	244	rBV4	17219	14978	0.29%	0.029%
9	3.103	244	246	248	rVB	32891	23710	0.46%	0.046%
10	3.151	249	255	260	rVB	218777	242542	4.67%	0.471%
11	3.210	261	266	282	rVB	535019	591211	11.38%	1.148%
12	3.333	284	289	298	rVB2	90989	115193	2.22%	0.224%
13	3.391	298	300	309	rVB6	12915	28029	0.54%	0.054%
14	3.509	318	322	362	rVB	3134099	2872932	55.31%	5.580%
15	3.835	380	383	387	rVB4	12726	12178	0.23%	0.024%
16	3.899	392	395	403	rVV7	11272	18506	0.36%	0.036%
17	3.953	403	405	413	rVB7	9257	14545	0.28%	0.028%
18	4.033	413	420	429	rBV5	10172	36533	0.70%	0.071%
19	4.108	433	434	438	rVB4	5776	4398	0.08%	0.009%
20	4.220	447	455	486	rBV	3126932	2858798	55.04%	5.553%
21	4.429	490	494	507	rBV	5581909	3741950	72.04%	7.268%
22	4.579	518	522	526	rVB5	5735	8795	0.17%	0.017%
23	4.750	549	554	557	rVB6	5618	8315	0.16%	0.016%
24	4.841	564	571	589	rBV	3545449	2847782	54.83%	5.531%
25	5.023	602	605	610	rVB	32698	29081	0.56%	0.056%
26	5.146	625	628	638	rVB10	6638	14877	0.29%	0.029%
27	5.237	638	645	650	rBV	46585	46561	0.90%	0.090%
28	5.418	669	679	708	rBV	5145735	4498110	86.60%	8.737%
29	5.718	733	735	741	rVB7	4213	5106	0.10%	0.010%
30	5.980	778	784	790	rBV2	17063	21581	0.42%	0.042%
31	6.130	808	812	815	rBV5	3124	4914	0.09%	0.010%
32	6.526	870	886	900	rBV	4931479	4264833	82.11%	8.284%
33	6.638	905	907	912	rVB6	7687	10515	0.20%	0.020%
34	6.750	923	928	932	rVB8	3004	4444	0.09%	0.009%
35	7.044	978	983	985	rBV6	2907	4548	0.09%	0.009%
36	7.082	985	990	996	rVV5	7491	11369	0.22%	0.022%
37	7.146	997	1002	1007	rVB8	3725	6299	0.12%	0.012%
38	7.344	1033	1039	1049	rBV2	4582612	4580766	88.19%	8.897%
39	7.414	1049	1052	1057	rVV5	20648	29870	0.58%	0.058%
40	7.446	1057	1058	1065	rVB7	5436	5120	0.10%	0.010%

LSC Area Percent Report

Data Path : C:\msdchem\1\data\jeryllr\2p4412\  
 Data File : 2p98985.d  
 Acq On : 15 Jan 2021 2:46 pm  
 Operator : hennys  
 Sample : op31540-mb1  
 Misc : op31540,e2p4412,30.0,,,1,1  
 ALS Vial : 5 Sample Multiplier: 1

Integration Parameters: lscint.p  
 Integrator: RTE  
 Smoothing : ON  
 Sampling : 1  
 Start Thrs: 0.02  
 Stop Thrs : 0  
 Filtering: 5  
 Min Area: 1000 Area counts  
 Max Peaks: 100  
 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 7

Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Title : Semi Volatile Extractables by GC/MS

41	8.061	1166	1173	1180	rBV4	21306	26951	0.52%	0.052%
42	8.120	1180	1184	1189	rVB8	3536	5805	0.11%	0.011%
43	8.227	1199	1204	1211	rVB9	4661	8066	0.16%	0.016%
44	8.376	1224	1232	1233	rBV7	4255	5595	0.11%	0.011%
45	8.446	1238	1245	1264	rBV	1888113	2305151	44.38%	4.477%
46	8.670	1281	1287	1291	rVB9	3866	7408	0.14%	0.014%
47	8.767	1301	1305	1315	rBV4	13284	23111	0.44%	0.045%
48	8.917	1330	1333	1339	rVB8	4636	5362	0.10%	0.010%
49	9.056	1355	1359	1366	rVB9	3339	5794	0.11%	0.011%
50	9.200	1383	1386	1393	rVB9	3600	6794	0.13%	0.013%
51	9.280	1395	1401	1410	rBV4	14586	26860	0.52%	0.052%
52	9.414	1422	1426	1428	rBV4	4095	5162	0.10%	0.010%
53	9.462	1428	1435	1447	rVV2	4372294	4815948	92.72%	9.354%
54	9.548	1447	1451	1460	rVB6	13231	33688	0.65%	0.065%
55	9.885	1508	1514	1521	rVB6	3140	6072	0.12%	0.012%
56	9.943	1521	1525	1530	rVB7	4213	6412	0.12%	0.012%
57	10.002	1533	1536	1539	rBV5	3782	5689	0.11%	0.011%
58	10.500	1620	1629	1630	rBV7	3393	4994	0.10%	0.010%
59	10.516	1630	1632	1641	rVB10	4229	9223	0.18%	0.018%
60	10.778	1675	1681	1685	rBV9	3765	5086	0.10%	0.010%
61	11.174	1749	1755	1758	rBV8	3238	5990	0.12%	0.012%
62	11.270	1767	1773	1778	rVB9	2949	6657	0.13%	0.013%
63	11.323	1778	1783	1787	rBV5	8447	12941	0.25%	0.025%
64	11.361	1787	1790	1794	rVB5	3122	4689	0.09%	0.009%
65	11.441	1801	1805	1812	rVB9	2468	4839	0.09%	0.009%
66	11.607	1831	1836	1839	rVB6	3574	6195	0.12%	0.012%
67	11.687	1845	1851	1859	rVB6	4335	8954	0.17%	0.017%
68	12.013	1903	1912	1928	rBV	4343579	5085653	97.92%	9.878%
69	12.120	1930	1932	1939	rVB8	3484	5074	0.10%	0.010%
70	12.564	2011	2015	2022	rBV10	3866	7146	0.14%	0.014%
71	12.853	2061	2069	2076	rBV9	9356	15991	0.31%	0.031%
72	13.040	2098	2104	2107	rBV8	3608	5051	0.10%	0.010%
73	13.121	2117	2119	2125	rVB7	4011	5405	0.10%	0.010%
74	13.276	2146	2148	2155	rVB8	4029	5532	0.11%	0.011%
75	13.468	2181	2184	2192	rVB10	2544	5066	0.10%	0.010%
76	13.618	2202	2212	2227	rBV	3918984	5193908	100.00%	10.088%
77	13.821	2247	2250	2256	rVB7	5574	8739	0.17%	0.017%
78	13.891	2261	2263	2270	rVB8	5126	5512	0.11%	0.011%
79	14.105	2300	2303	2310	rVV9	2760	6303	0.12%	0.012%
80	14.164	2310	2314	2318	rVB7	8723	13024	0.25%	0.025%
81	14.495	2369	2376	2379	rBV9	3272	5966	0.11%	0.012%
82	14.661	2403	2407	2415	rBV9	7499	15926	0.31%	0.031%
83	14.741	2415	2422	2423	rVB6	7237	10831	0.21%	0.021%
84	14.880	2441	2448	2456	rBV5	27538	42924	0.83%	0.083%
85	14.993	2463	2469	2470	rBV5	4537	7384	0.14%	0.014%



7.22  
7



LSC Area Percent Report

Data Path : C:\msdchem\1\data\jeryllr\e2p4412\  
 Data File : 2p98985.d  
 Acq On : 15 Jan 2021 2:46 pm  
 Operator : hennys  
 Sample : op31540-mb1  
 Misc : op31540,e2p4412,30.0,,,1,1  
 ALS Vial : 5 Sample Multiplier: 1

Integration Parameters: lscint.p  
 Integrator: RTE  
 Smoothing : ON  
 Sampling : 1  
 Start Thrs: 0.02  
 Stop Thrs : 0

Filtering: 5  
 Min Area: 1000 Area counts  
 Max Peaks: 100  
 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 7

Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Title : Semi Volatile Extractables by GC/MS

86	15.062	2478	2482	2487	rVB7	6169	8854	0.17%	0.017%
87	15.142	2488	2497	2504	rVV7	6927	15598	0.30%	0.030%
88	15.217	2506	2511	2514	rVV7	3516	5094	0.10%	0.010%
89	15.362	2527	2538	2539	rBV10	8655	20574	0.40%	0.040%
90	15.549	2569	2573	2575	rBV5	3755	4485	0.09%	0.009%
91	15.597	2580	2582	2587	rVV6	4875	6799	0.13%	0.013%
92	15.656	2588	2593	2596	rVB7	6774	9041	0.17%	0.018%
93	15.736	2597	2608	2623	rBV	3665301	5008231	96.43%	9.727%
94	15.891	2634	2637	2639	rBV4	6966	7392	0.14%	0.014%
95	15.934	2641	2645	2653	rVB10	12983	20440	0.39%	0.040%
96	16.207	2694	2696	2701	rVB6	5210	7312	0.14%	0.014%
97	16.362	2720	2725	2729	rBV8	35677	51982	1.00%	0.101%
98	16.453	2736	2742	2755	rVV8	37216	87646	1.69%	0.170%
99	16.972	2836	2839	2843	rVB6	9268	9110	0.18%	0.018%
100	19.058	3226	3229	3230	rBV3	9473	7430	0.14%	0.014%

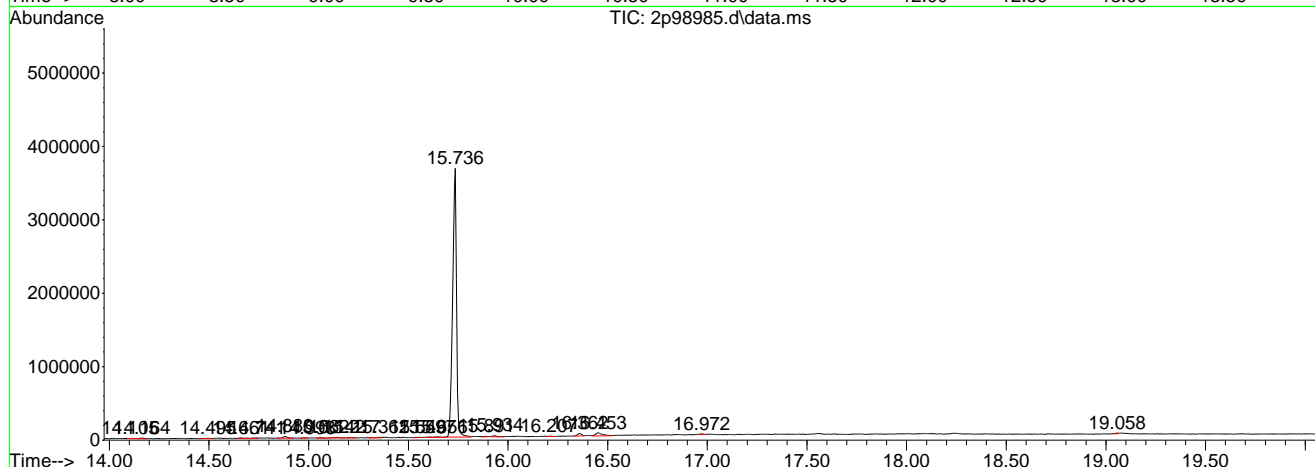
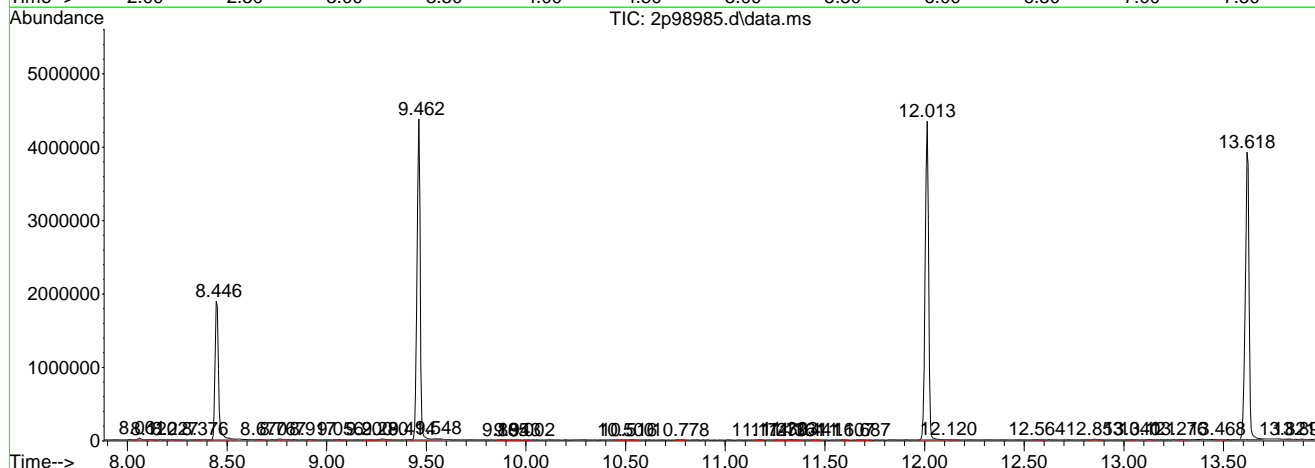
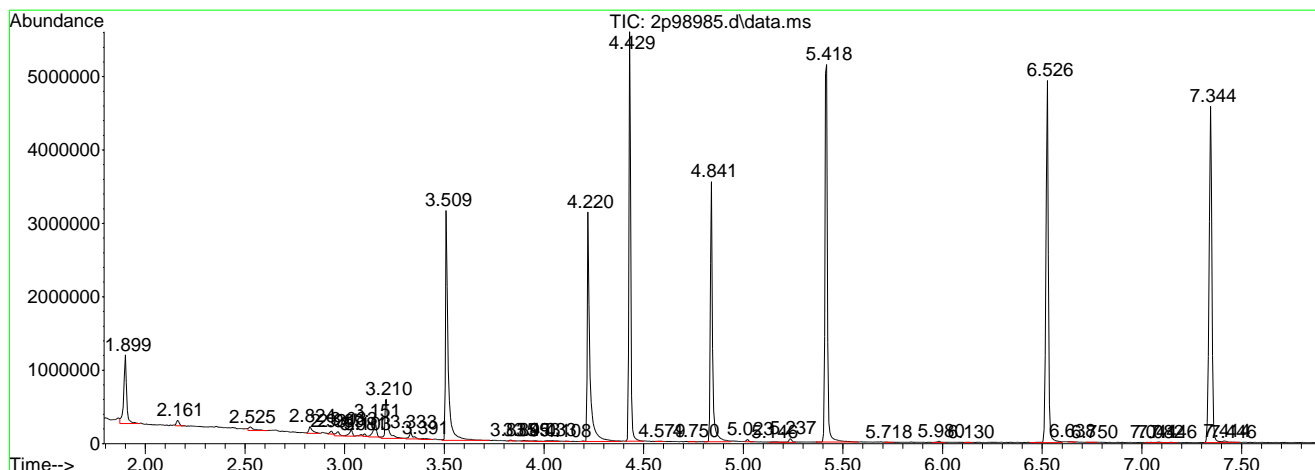
Sum of corrected areas: 51485333

LSC Report - Integrated Chromatogram

Data Path : C:\msdchem\1\data\jeryllr\e2p4412\  
 Data File : 2p98985.d  
 Acq On : 15 Jan 2021 2:46 pm  
 Operator : hennys  
 Sample : op31540-mb1  
 Misc : op31540,e2p4412,30.0,,,1,1  
 ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Title : Semi Volatile Extractables by GC/MS

TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p



7.22  
7

Library Search Compound Report

Data Path : C:\msdchem\1\data\jeryllr\e2p4412\  
 Data File : 2p98985.d  
 Acq On : 15 Jan 2021 2:46 pm  
 Operator : hennys  
 Sample : op31540-mb1  
 Misc : op31540,e2p4412,30.0,,1,1  
 ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Title : Semi Volatile Extractables by GC/MS

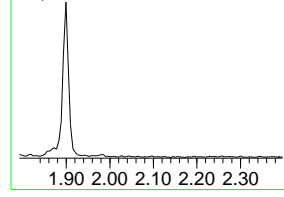
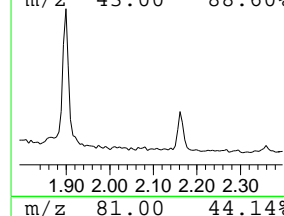
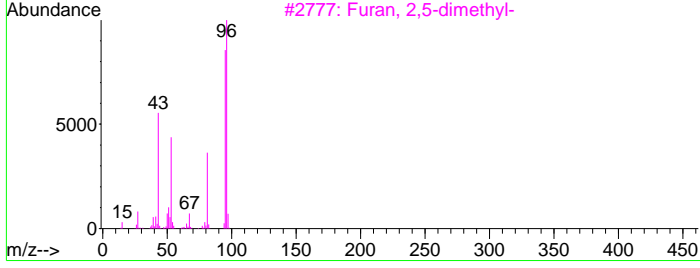
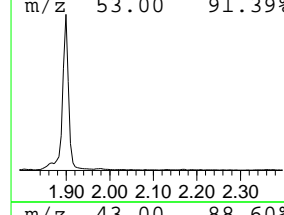
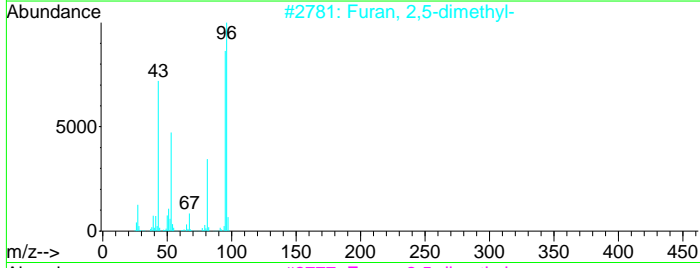
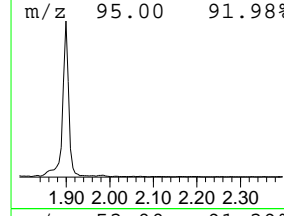
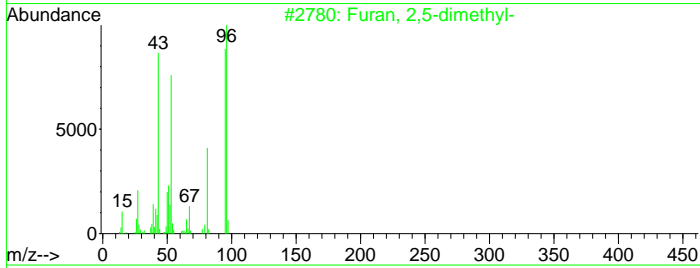
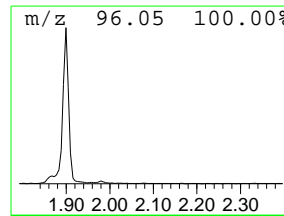
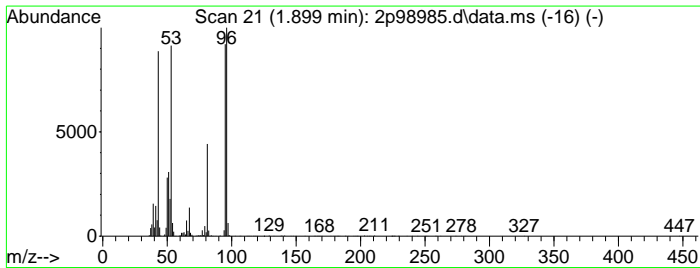
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 1 System artifact Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.899	10.07 ppm	941889	1,4-Dichlorobenzene-d4a	4.429

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1	Furan, 2,5-dimethyl-		96	C6H8O	000625-86-5	96	
2	Furan, 2,5-dimethyl-		96	C6H8O	000625-86-5	91	
3	Furan, 2,5-dimethyl-		96	C6H8O	000625-86-5	91	
4	Furan, 2,5-dimethyl-		96	C6H8O	000625-86-5	86	
5	Furan, 2,4-dimethyl-		96	C6H8O	003710-43-8	78	



Library Search Compound Report

Data Path : C:\msdchem\1\data\jeryllr\e2p4412\  
 Data File : 2p98985.d  
 Acq On : 15 Jan 2021 2:46 pm  
 Operator : hennys  
 Sample : op31540-mb1  
 Misc : op31540,e2p4412,30.0,,1,1  
 ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Title : Semi Volatile Extractables by GC/MS

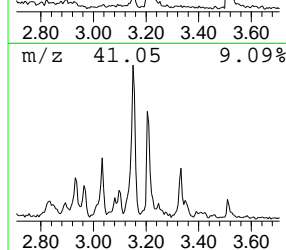
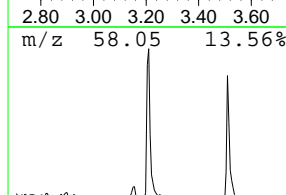
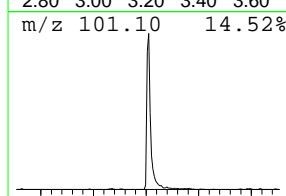
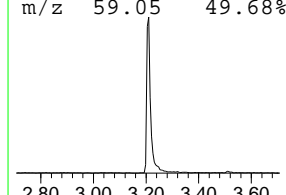
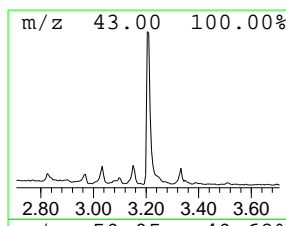
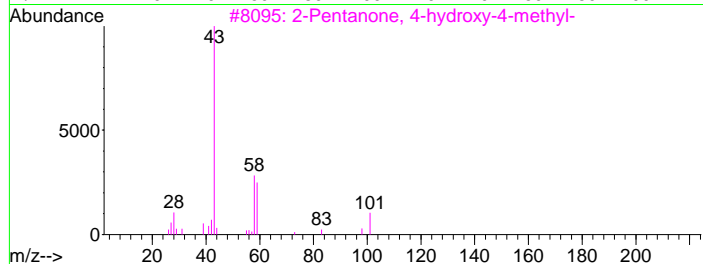
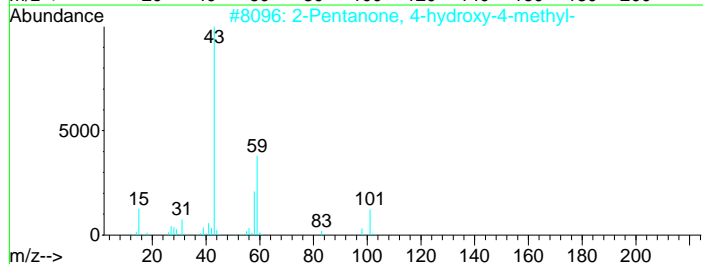
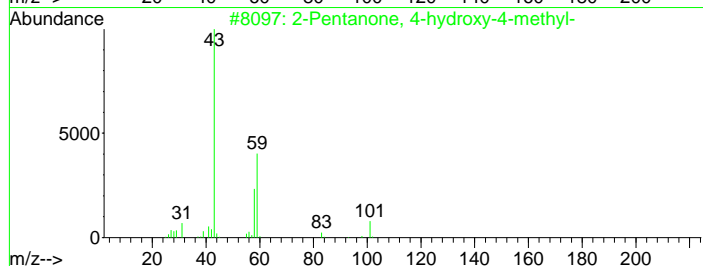
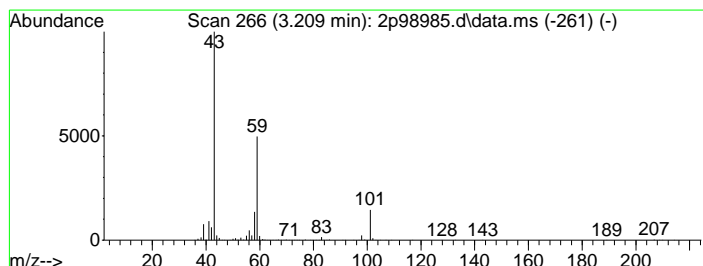
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 2 System artifact/aldol-conde... Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.209	6.32 ppm	591211	1,4-Dichlorobenzene-d4a	4.429

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	50
2			2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	39
3			2-Pentanone, 4-hydroxy-4-methyl-	116	C6H12O2	000123-42-2	28
4			2,3-Butanedione, monooxime	101	C4H7NO2	000057-71-6	16
5			1-Propen-2-ol, acetate	100	C5H8O2	000108-22-5	10



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\data\jeryllr\e2p4412\  
 Data File : 2p98985.d  
 Acq On : 15 Jan 2021 2:46 pm  
 Operator : hennys  
 Sample : op31540-mb1  
 Misc : op31540,e2p4412,30.0,,,1,1  
 ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2P4365.M  
 Quant Title : Semi Volatile Extractables by GC/MS

TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
System artifact	1.899	10.1	ppm	941889	2	4.429	3741950	40.0
System artifact...	3.209	6.3	ppm	591211	2	4.429	3741950	40.0

7.2.2

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## General Chemistry

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### QC Data Summaries

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Includes the following where applicable:

- Percent Solids Raw Data Summary

# Percent Solids Raw Data Summary

**Job Number:** JD18939  
**Account:** LBGNJ WSP USA  
**Project:** Ridgewood Water, 579 Prospect Street, Glen Rock, NJ

---

**Sample:** JD18939-1      **Analyzed:** 13-JAN-21 by BG      **Method:** SM2540 G 18TH ED MOD  
**ClientID:** S-10R

Wet Weight (Total)	31.5	g
Tare Weight	24.39	g
Dry Weight (Total)	30.6	g
Solids, Percent	87.3	%

---

**Sample:** JD18939-2      **Analyzed:** 13-JAN-21 by BG      **Method:** SM2540 G 18TH ED MOD  
**ClientID:** S-15R

Wet Weight (Total)	33.79	g
Tare Weight	26.58	g
Dry Weight (Total)	32.26	g
Solids, Percent	78.8	%

---

**Sample:** JD18939-3      **Analyzed:** 13-JAN-21 by BG      **Method:** SM2540 G 18TH ED MOD  
**ClientID:** S-18R

Wet Weight (Total)	31.73	g
Tare Weight	24.6	g
Dry Weight (Total)	29.65	g
Solids, Percent	70.8	%

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8.1  
8

**Table 2a**  
**Ridgewood Water**  
**Bergen County, New Jersey**  
Semi-Volatile Organic Compound (SVOC) Concentrations in Soil  
Water Main Break Spoils Pile - January 12, 2021

Compound	NJDEP Residential Direct Contact Soil Remediation Standard (RDCSRS) [mg/kg]	NJDEP Non-Residential Direct Contact Soil Remediation Standard (NRDCSRS) [mg/kg]	NJDEP Default Impact to Groundwater Soil Screening Level (IGWSSL) [mg/kg]	S-10 R (mg/kg)	S-15 R (mg/kg)	S-18 R (mg/kg)
2-Chlorophenol	310	2,200	N/A	ND	ND	ND
4-Chloro-3-methyl phenol	N/A	N/A	N/A	ND	ND	ND
2,4-Dichlorophenol	180	2,100	0.2	ND	ND	ND
2,4-Dimethylphenol	1,200	14,000	1	ND	ND	ND
2,4-Dinitrophenol	120	1,400	0.3	ND	ND	ND
4,6-Dinitro-o-cresol	6	68	0.3	ND	ND	ND
2-Methylphenol	310	3,400	N/A	ND	ND	ND
3&4-Methylphenol	31	340	N/A	ND	ND	ND
2-Nitrophenol	N/A	N/A	N/A	ND	ND	ND
4-Nitrophenol	N/A	N/A	N/A	ND	ND	ND
Pentachlorophenol	0.9	3	0.3	ND	ND	ND
Phenol	18,000	210,000	8	ND	ND	ND
2,3,4,6-Tetrachlorophenol	N/A	N/A	N/A	ND	ND	ND
2,4,5-Trichlorophenol	6,100	68,000	68	ND	ND	ND
2,4,6-Trichlorophenol	19	74	0.2	ND	ND	ND
Acenaphthene	3,400	37,000	74	ND	0.102	0.0188 J
Acenaphthylene	N/A	300,000	N/A	0.0465	0.0626	0.0657
Acetophenone	2	5	3	ND	ND	ND
Anthracene	17,000	30,000	1,500	0.0456	0.278	0.187
Atrazine	210	2,400	0.2	ND	ND	ND
Benzo(a)anthracene	5	17	0.5	0.218	0.750	0.873
Benzo(a)pyrene	0.5	2	0.2	0.213	0.744*	0.852*
Benzo(b)fluoranthene	5	17	2	0.260	0.986	1.040
Benzo(g,h,i)perylene	380,000	30,000	N/A	0.131	0.511	0.598
Benzo(k)fluoranthene	45	170	16	0.0921	0.302	0.307
4-Bromophenyl phenyl ether	N/A	N/A	N/A	ND	ND	ND
Butyl benzyl phthalate	1,200	14,000	230	ND	ND	ND
1,1'-Biphenyl	61	240	140	ND	0.0112 J	ND
Benzaldehyde	6,100	68,000	N/A	ND	ND	ND
2-Chloronaphthalene	N/A	N/A	N/A	ND	ND	ND
4-Chloroaniline	N/A	N/A	N/A	ND	ND	ND
Carbazole	24	96	N/A	0.0105 J	0.105	0.0542 J
Caprolactam	31,000	340,000	12	ND	ND	ND
Chrysene	450	1,700	52	0.224	0.853	0.852
bis(2-Chloroethoxy)methane	N/A	N/A	N/A	ND	ND	ND
bis(2-Chloroethyl)ether	0.4	2	0.2	ND	ND	ND
2,2'-Oxybis(1-chloropropane)	23	67	5	ND	ND	ND
4-Chlorophenyl phenyl ether	N/A	N/A	N/A	ND	ND	ND
2,4-Dinitrotoluene	0.7	3	N/A	ND	ND	ND
2,6-Dinitrotoluene	0.7	3	N/A	ND	ND	ND
3,3'-Dichlorobenzidine	1	4	0.2	ND	ND	ND
1,4-Dioxane	N/A	N/A	N/A	ND	ND	ND
Dibenzo(a,h)anthracene	0.5	2	0.5	0.0352 J	0.132	0.155
Dibenzofuran	N/A	N/A	N/A	ND	0.0585 J	ND
Di-n-butyl phthalate	6,100	68,000	760	ND	ND	ND
Di-n-octyl phthalate	2,400	27,000	N/A	ND	ND	ND
Diethyl phthalate	49,000	550,000	88	ND	ND	ND
Dimethyl phthalate	N/A	N/A	N/A	ND	ND	ND
bis(2-Ethylhexyl)phthalate	35	140	1,200	ND	0.0969	ND
Fluoranthene	2,300	24,000	840	0.333	1.62	1.58
Fluorene	2,300	24,000	110	ND	0.130	0.0260 J
Hexachlorobenzene	0.3	1	0.2	ND	ND	ND
Hexachlorobutadiene	6	25	0.9	ND	ND	ND
Hexachlorocyclopentadiene	45	110	320	ND	ND	ND
Hexachloroethane	12	48	0.2	ND	ND	ND
Indeno(1,2,3-cd)pyrene	5	17	5	0.135	0.523	0.597
Isophorone	510	2,000	0.2	ND	ND	ND
2-Methylnaphthalene	230	2,400	8	ND	0.0355 J	ND
2-Nitroaniline	39	23,000	N/A	ND	ND	ND
3-Nitroaniline	N/A	N/A	N/A	ND	ND	ND
4-Nitroaniline	N/A	N/A	N/A	ND	ND	ND
Naphthalene	6	17	16	0.0176 J	0.0268 J	ND
Nitrobenzene	5	14	0.2	ND	ND	ND
N-Nitroso-di-n-propylamine	0.2	0.3	0.2	ND	ND	ND
N-Nitrosodiphenylamine	99	390	0.4	ND	ND	ND
Phenanthrene	N/A	300,000	N/A	0.130	0.981	0.533
Pyrene	1,700	18,000	550	0.381	1.48	1.57
1,2,4,5-Tetrachlorobenzene	N/A	N/A	N/A	ND	ND	ND
Total TICs, Semi-Volatile	N/A	N/A	N/A	0.16 J	47.56 J	5.03 J

Notes: mg/kg - milligrams per kilogram

ND - not detected

J - indicates an estimated concentration

N/A - standard not available

Indicates soil concentration exceeds RDCSRS  
(\* indicates concentration also exceeds IGWSSL)

Indicates soil concentration exceeds IGWSSL



**APPENDIX C**  
**Soil Boring Logs**

# BORING LOG

BORING NO.: **SB-1**

SHEET **1** OF **1**

DATE: **5/3/2024**

PROJECT NO.: **23-1429** PROJECT: **Ridgewood Berm Sampling**

PROJECT LOCATION: **Schedler Property**

CLIENT: **Village of Ridgewood**

BORING LOCATION: **40°59'24.11"N 74°05'41.25"W**

DRILLER: \_\_\_\_\_

DRILLING CONTRACTOR: **EPI**

LOGGED BY: **Kerry Murphy**

DRILLING EQUIPMENT: **Geoprobe 7822DT**











DRILLING METHOD: **Direct Push**

GROUNDWATER LEVEL			
Date	Time	Depth	Casing Depth
		<b>0</b>	

BOREHOLE DEPTH (ft): **5** BOREHOLE DIAMETER (in): **2**

ELEV.: \_\_\_\_\_ DATUM: \_\_\_\_\_

Easting **527,315.488** Northing **709,799.908**

Depth Feet (Elev.)	Graphic	Description of Material	Sample Name	Sample Time	PID	Laboratory Tests
1		Mulch, wood chips	SB-1	8:30	0	TCLSVOC+20,TAL Metals, TCL Pesticides,PCBs,
		Silt, some Clay			0	
		Silt, some Clay			0	
2		Silt, some Clay			0	
		Sandy silt, gravel			0	
3		Sandy silt, gravel			0	
		Sandy silt, gravel			0	
4		Sandy silt, gravel			0	
		Sandy silt, gravel			0	
5		Sandy silt, gravel			0	

Notes:  
PID - Photoionization Detector NA - Not Applicable NE - Not Encountered  
ppm - parts per million ppb - parts per billion

# BORING LOG

BORING NO.: **SB-2**

SHEET **1** OF **1**

DATE: **5/3/2024**

PROJECT NO.: **23-1429** PROJECT: **Ridgewood Berm Sampling**

PROJECT LOCATION: **Schedler Property**

CLIENT: **Village of Ridgewood**

BORING LOCATION: **40°59'23.008"N 74°05'40.611"W**

DRILLER: \_\_\_\_\_

DRILLING CONTRACTOR: **EPI**

LOGGED BY: **Kerry Murphy**

DRILLING EQUIPMENT: **Geoprobe 7822DT**











DRILLING METHOD: **Direct Push**

GROUNDWATER LEVEL			
Date	Time	Depth	Casing Depth
		<b>0</b>	

BOREHOLE DEPTH (ft): **5** BOREHOLE DIAMETER (in): **2**

ELEV.: \_\_\_\_\_ DATUM: \_\_\_\_\_

Easting **527,309.176** Northing **709,815.075**

Depth Feet (Elev.)	Graphic	Description of Material	Sample Name	Sample Time	PID	Laboratory Tests
1		Mulch, wood chips	SB-2	8:35	0	TCLSVOC+20,TAL Metals,
		Silt, some Clay			0	
		Silt, some Clay			0	
2		Silt, some Clay			0	
		Sandy silt, gravel			0	
3		Sandy silt, gravel			0	
		Sandy silt, gravel			0	
4		Sandy silt, gravel			0	
		Sandy silt, gravel			0	
5		Sandy silt, gravel			0	

Notes:  
PID - Photoionization Detector NA - Not Applicable NE - Not Encountered  
ppm - parts per million ppb - parts per billion

# BORING LOG

BORING NO.: **SB-3**

SHEET **1** OF **1**

DATE: **5/3/2024**

PROJECT NO.: **23-1429** PROJECT: **Ridgewood Berm Sampling**

PROJECT LOCATION: **Schedler Property**

CLIENT: **Village of Ridgewood**

BORING LOCATION: **40°59'21.914"N 74°05'39.821"W**

DRILLER: \_\_\_\_\_

DRILLING CONTRACTOR: **EPI**

LOGGED BY: **Kerry Murphy**

DRILLING EQUIPMENT: **Geoprobe 7822DT**

**GROUNDWATER LEVEL**


DRILLING METHOD: **Direct Push**

Date	Time	Depth	Casing Depth
		<b>0</b>	

BOREHOLE DEPTH (ft): **5** BOREHOLE DIAMETER (in): **2**

ELEV.: \_\_\_\_\_ DATUM: \_\_\_\_\_

Easting **527,297.905** Northing **709,825.013**

Depth Feet (Elev.)	Graphic	Description of Material	Sample Name	Sample Time	PID	Laboratory Tests
		Mulch, wood chips			0	
1		Silt, some Clay			0	
		Silt, some Clay			0	
2		Silt, some Clay			0	
		Silt, some Clay			0	
3		Silt, some Clay	SB-3	8:33	0	TCLSVOC+20,TAL Metals, TCL Pesticides,PCBs,
		Silt, some Clay			0	
4		Silt, some Clay			0	
		Silt, some Clay			0	
5		Silt, some Clay			0	

# BORING LOG

BORING NO.: **SB-4**

SHEET **1** OF **1**

DATE: **5/3/2024**

PROJECT NO.: **23-1429** PROJECT: **Ridgewood Berm Sampling**

PROJECT LOCATION: **Schedler Property**

CLIENT: **Village of Ridgewood**

BORING LOCATION: **40°59'20.738"N 74°05'38.749"W**

DRILLER: \_\_\_\_\_

DRILLING CONTRACTOR: **EPI**

LOGGED BY: **Kerry Murphy**

DRILLING EQUIPMENT: **Geoprobe 7822DT**





















DRILLING METHOD: **Direct Push**

GROUNDWATER LEVEL			
Date	Time	Depth	Casing Depth
		<b>0</b>	

BOREHOLE DEPTH (ft): **10** BOREHOLE DIAMETER (in): **2**

ELEV.: \_\_\_\_\_ DATUM: \_\_\_\_\_

Easting **527,297.905** Northing **709,825.013**

Depth Feet (Elev.)	Graphic	Description of Material	Sample Name	Sample Time	PID	Laboratory Tests
		Mulch, wood chips			0	
1		Sandy silt, Clay, gravel			0	
		Sandy silt, Clay, gravel			0	
2		Sandy silt, Clay, gravel			0	
		Sandy silt, Clay, gravel			0	
3		Sandy silt, Clay, gravel	SB-4	9:00	0	TCLSVOC+20,TAL Metals, TCL Pesticides,PCBs,
		Sandy silt, Clay, gravel			0	
4		Sandy silt, Clay, gravel			0	
		Sandy silt, Clay, gravel			0	
5		Sandy silt, Clay, gravel			0	
		Grey Clay			0	
6		Grey Clay			0	
		Grey Clay			0	
7		Grey Clay			0	
		Gravel			0	
8		Gravel			0	
		Brown silt - native soil			0	
9		Brown silt - native soil			0	
		Brown silt - native soil			0	
10		Brown silt - native soil			0	

# BORING LOG

BORING NO.: **SB-5**

SHEET **1** OF **1**

DATE: **5/3/2024**

PROJECT NO.: **23-1429** PROJECT: **Ridgewood Berm Sampling**

PROJECT LOCATION: **Schedler Property**

CLIENT: **Village of Ridgewood**

BORING LOCATION: **40°59'19.889"N 74°05'38.157"W**

DRILLER: \_\_\_\_\_

DRILLING CONTRACTOR: **EPI**

LOGGED BY: **Kerry Murphy**

DRILLING EQUIPMENT: **Geoprobe 7822DT**

**GROUNDWATER LEVEL**











DRILLING METHOD: **Direct Push**

Date	Time	Depth	Casing Depth
		<b>0</b>	

BOREHOLE DEPTH (ft): **5** BOREHOLE DIAMETER (in): **2**

ELEV.: \_\_\_\_\_ DATUM: \_\_\_\_\_

Easting **527,297.905** Northing **709,825.013**

Depth Feet (Elev.)	Graphic	Description of Material	Sample Name	Sample Time	PID	Laboratory Tests
		Mulch, wood chips			0	
1		Brown Sandy silt, some Clay and gravel			0	
		Brown Sandy silt, some Clay and gravel			0	
2		Brown Sandy silt, some Clay and gravel			0	
		Brown Sandy silt, some Clay and gravel	SB-5	9:05	0	TCLSVOC+20,TAL Metals, TCL Pesticides,PCBs,
3		Brown Sandy silt, some Clay and gravel			0	
		Brown Sandy silt, some Clay and gravel			0	
4		Brown Sandy silt, some Clay and gravel			0	
		Brown Sandy silt, some Clay and gravel			0	
5		Brown Sandy silt, some Clay and gravel			0	

# BORING LOG

BORING NO.: **SB-6**

SHEET **1** OF **1**

DATE: **5/3/2024**

PROJECT NO.: **23-1429** PROJECT: **Ridgewood Berm Sampling**

PROJECT LOCATION: **Schedler Property**

CLIENT: **Village of Ridgewood**

BORING LOCATION: **40°59'19.031"N 74°05'37.500"W**

DRILLER: \_\_\_\_\_

DRILLING CONTRACTOR: **EPI**

LOGGED BY: **Kerry Murphy**

DRILLING EQUIPMENT: **Geoprobe 7822DT**











DRILLING METHOD: **Direct Push**

GROUNDWATER LEVEL			
Date	Time	Depth	Casing Depth
		<b>0</b>	

BOREHOLE DEPTH (ft): **5** BOREHOLE DIAMETER (in): **2**

ELEV.: \_\_\_\_\_ DATUM: \_\_\_\_\_

Easting **527,297.905** Northing **709,825.013**

Depth Feet (Elev.)	Graphic	Description of Material	Sample Name	Sample Time	PID	Laboratory Tests
		Mulch, wood chips			0	
1		Brown Sandy silt, some Clay and gravel			0	
		Brown Sandy silt, some Clay and gravel			0	
2		Brown Sandy silt, some Clay and gravel			0	
		Brown Sandy silt, some Clay and gravel			0	
3		Brown Sandy silt, some Clay and gravel	SB-6	9:10	0	TCLSVOC+20,TAL Metals,
		Brown Sandy silt, some Clay and gravel			0	
4		Brown Sandy silt, some Clay and gravel			0	
		Brown Sandy silt, some Clay and gravel			0	
5		Brown Sandy silt, some Clay and gravel			0	

# BORING LOG

BORING NO.: **SB-7**

SHEET **1** OF **1**

DATE: **5/3/2024**

PROJECT NO.: **23-1429** PROJECT: **Ridgewood Berm Sampling**

PROJECT LOCATION: **Schedler Property**

CLIENT: **Village of Ridgewood**

BORING LOCATION: **40°59'18.080"N 74°05'36.764"W**

DRILLER: \_\_\_\_\_

DRILLING CONTRACTOR: **EPI**

LOGGED BY: **Kerry Murphy**

DRILLING EQUIPMENT: **Geoprobe 7822DT**











DRILLING METHOD: **Direct Push**

GROUNDWATER LEVEL			
Date	Time	Depth	Casing Depth
		<b>0</b>	

BOREHOLE DEPTH (ft): **5** BOREHOLE DIAMETER (in): **2**

ELEV.: \_\_\_\_\_ DATUM: \_\_\_\_\_

Easting **527,297.905** Northing **709,825.013**

Depth Feet (Elev.)	Graphic	Description of Material	Sample Name	Sample Time	PID	Laboratory Tests
		Mulch, wood chips			0	
1		Brown Sandy silt, some Clay and gravel			0	
		Brown Sandy silt, some Clay and gravel			0	
2		Brown Sandy silt, some Clay and gravel			0	
		Brown Sandy silt, some Clay and gravel			0	
3		Brown Sandy silt, some Clay and gravel	SB-7 & Dupe -1	9:20	0	TCLSVOC+20, TAL Metals, TCL Pesticides, PCBs,
		Brown Sandy silt, some Clay and gravel			0	
4		Brown Sandy silt, some Clay and gravel			0	
		Brown Sandy silt, some Clay and gravel			0	
5		Brown Sandy silt, some Clay and gravel			0	



# BORING LOG

BORING NO.: **SB-8**  
 SHEET 1 OF 1  
 DATE: 5/3/2024

PROJECT NO.: 23-1429 PROJECT: Ridgewood Berm Sampling  
 PROJECT LOCATION: Schedler Property  
 BORING LOCATION: 40°59'17.365"N 74°05'36.138"W  
 DRILLING CONTRACTOR: EPI  
 DRILLING EQUIPMENT: Geoprobe 7822DT  
 DRILLING METHOD: Direct Push  
 BOREHOLE DEPTH (ft): 5 BOREHOLE DIAMETER (in): 2  
 ELEV.: \_\_\_\_\_ DATUM: \_\_\_\_\_  
 Easting 527,297.905 Northing 709,825.013

CLIENT: Village of Ridgewood  
 DRILLER: \_\_\_\_\_  
 LOGGED BY: Kerry Murphy

GROUNDWATER LEVEL			
Date	Time	Depth	Casing Depth
		<b>0</b>	

Depth Feet (Elev.)	Graphic	Description of Material	Sample Name	Sample Time	PID	Laboratory Tests
1		Wood chips, brown Sandy silt, some Clay and gravel	SB-8	9:30	0	TCLSVOC+20,TAL Metals, TCL Pesticides,PCBs,
		Wood chips, brown Sandy silt, some Clay and gravel			0	
		Wood chips, brown Sandy silt, some Clay and gravel			0	
2		Wood chips, brown Sandy silt, some Clay and gravel			0	
		Wood chips, brown Sandy silt, some Clay and gravel			0	
3		Wood chips, brown Sandy silt, some Clay and gravel			0	
		Wood chips, brown Sandy silt, some Clay and gravel			0	
4	Wood chips, brown Sandy silt, some Clay and gravel					
5	Wood chips, brown Sandy silt, some Clay and gravel					

# BORING LOG

BORING NO.: **SB-9**

SHEET **1** OF **1**

DATE: **5/3/2024**

PROJECT NO.: **23-1429** PROJECT: **Ridgewood Berm Sampling**

PROJECT LOCATION: **Schedler Property**

CLIENT: **Village of Ridgewood**

BORING LOCATION: **40°59'16.875"N 74°05'35.623"W**

DRILLER: \_\_\_\_\_

DRILLING CONTRACTOR: **EPI**

LOGGED BY: **Kerry Murphy**

DRILLING EQUIPMENT: **Geoprobe 7822DT**











DRILLING METHOD: **Direct Push**

GROUNDWATER LEVEL			
Date	Time	Depth	Casing Depth
		<b>0</b>	

BOREHOLE DEPTH (ft): **5** BOREHOLE DIAMETER (in): **2**

ELEV.: \_\_\_\_\_ DATUM: \_\_\_\_\_

Easting **527,297.905** Northing **709,825.013**

Depth Feet (Elev.)	Graphic	Description of Material	Sample Name	Sample Time	PID	Laboratory Tests
		Wood chips			0	
1		Brown Sandy silt, some Clay and gravel			0	
		Brown Sandy silt, some Clay and gravel			0	
2		Brown Sandy silt, some Clay and gravel			0	
		Brown Sandy silt, some Clay and gravel			0	
3		Brown Sandy silt, some Clay and gravel			0	
		Brown Sandy silt, some Clay and gravel			0	
4		Brown Sandy silt, some Clay and gravel	SB-9	9:35	0	TCLSVOC+20,TAL Metals,
		Brown Sandy silt, some Clay and gravel			0	
5		Brown Sandy silt, some Clay and gravel			0	

# BORING LOG

BORING NO.: **SB-10**

SHEET **1** OF **1**

DATE: **5/3/2024**

PROJECT NO.: **23-1429** PROJECT: **Ridgewood Berm Sampling**

PROJECT LOCATION: **Schedler Property**

CLIENT: **Village of Ridgewood**

BORING LOCATION: **40°59'16.236"N 74°05'35.117"W**

DRILLER: \_\_\_\_\_

DRILLING CONTRACTOR: **EPI**

LOGGED BY: **Kerry Murphy**

DRILLING EQUIPMENT: **Geoprobe 7822DT**

DRILLING METHOD: **Direct Push**

GROUNDWATER LEVEL			
Date	Time	Depth	Casing Depth
		<b>0</b>	

BOREHOLE DEPTH (ft): **10** BOREHOLE DIAMETER (in): **2**

ELEV.: \_\_\_\_\_ DATUM: \_\_\_\_\_

Easting **453,872.975** Northing **632,674.812**

Depth Feet (Elev.)	Graphic	Description of Material	Sample Name	Sample Time	PID	Laboratory Tests
		Wood chips			0	
1		Brown Sandy silt, some Clay and gravel			0	
		Brown Sandy silt, some Clay and gravel			0	
2		Brown Sandy silt, some Clay and gravel			0	
		Brown Sandy silt, some Clay and gravel			0	
3		Brown Sandy silt, some Clay and gravel			0	
		Brown Sandy silt, some Clay and gravel	SB-10	9:50	0	TCLSVOC+20,TAL Metals, TCL Pesticides,PCBs,
4		Brown Sandy silt, some Clay and gravel			0	
		Brown Sandy silt, some Clay and gravel			0	
5		Brown Sandy silt, some Clay and gravel			0	
		Brown coarse sand			0	
6		Brown coarse sand			0	
		Brown coarse sand, silt			0	
7		Brown coarse sand, silt			0	
		Brown coarse sand, silt			0	
8		Brown coarse sand, silt			0	
		Brown silt, some sand			0	
9		Brown silt, some sand			0	
		Brown silt, some sand			0	
10		Brown silt, some sand			0	

# BORING LOG

BORING NO.: **SB-11**

SHEET **1** OF **1**

DATE: **5/3/2024**

PROJECT NO.: **23-1429** PROJECT: **Ridgewood Berm Sampling**

PROJECT LOCATION: **Schedler Property**

CLIENT: **Village of Ridgewood**

BORING LOCATION: **40°59'15.738"N 74°05'34.692"W**

DRILLER: \_\_\_\_\_

DRILLING CONTRACTOR: **EPI**

LOGGED BY: **Kerry Murphy**

DRILLING EQUIPMENT: **Geoprobe 7822DT**

DRILLING METHOD: **Direct Push**

GROUNDWATER LEVEL			
Date	Time	Depth	Casing Depth
		<b>0</b>	

BOREHOLE DEPTH (ft): **5** BOREHOLE DIAMETER (in): **2**

ELEV.: \_\_\_\_\_ DATUM: \_\_\_\_\_

Easting **453,872.975** Northing **632,674.812**

Depth Feet (Elev.)	Graphic	Description of Material	Sample Name	Sample Time	PID	Laboratory Tests
		Wood chip			0	
1		Brown Sandy silt, some Clay and gravel			0	
		Brown Sandy silt, some Clay and gravel			0	
2		Brown Sandy silt, some Clay and gravel			0	
		Dark brown silt and gravel			0	
3		Dark brown silt and gravel	SB-12 & Dupe-2	10:00	0	TCLSVOC+20, TAL Metals, TCL Pesticides, PCBs,
		Brown silt, some gravel			0	
4		Brown silt, some gravel			0	
		Brown silt, some gravel			0	
5		Brown silt, some gravel			0	

# BORING LOG

BORING NO.: **SB-12**

SHEET **1** OF **1**

DATE: **5/3/2024**

PROJECT NO.: **23-1429** PROJECT: **Ridgewood Berm Sampling**

PROJECT LOCATION: **Schedler Property**

CLIENT: **Village of Ridgewood**

BORING LOCATION: **40°59'15.389"N 74°05'34.352"W**

DRILLER: \_\_\_\_\_

DRILLING CONTRACTOR: **EPI**

LOGGED BY: **Kerry Murphy**

DRILLING EQUIPMENT: **Geoprobe 7822DT**











DRILLING METHOD: **Direct Push**

GROUNDWATER LEVEL			
Date	Time	Depth	Casing Depth
		<b>0</b>	

BOREHOLE DEPTH (ft): **5** BOREHOLE DIAMETER (in): **2**

ELEV.: \_\_\_\_\_ DATUM: \_\_\_\_\_

Easting **453,872.975** Northing **632,674.812**

Depth Feet (Elev.)	Graphic	Description of Material	Sample Name	Sample Time	PID	Laboratory Tests
		Wood chips			0	
1		Dark brown Sandy silt			0	
		Dark brown Sandy silt			0	
2		Dark brown Sandy silt			0	
		Dark brown Sandy silt			0	
3		Dark brown Sandy silt			0	
		Dark brown Clay, some silt	SB-12	10:15	0	TCLSVOC+20,TAL Metals,
4		Dark brown Clay, some silt			67.3	TCL Pesticides,PCBs,
		Dark brown Clay			0	
5		Dark brown Clay			0	

# BORING LOG

BORING NO.: **SB-13**

SHEET **1** OF **1**

DATE: **5/3/2024**

PROJECT NO.: **23-1429** PROJECT: **Ridgewood Berm Sampling**

PROJECT LOCATION: **Schedler Property**

CLIENT: **Village of Ridgewood**

BORING LOCATION: **40°59'15.198"N 74°05'33.968"W**

DRILLER: \_\_\_\_\_

DRILLING CONTRACTOR: **EPI**

LOGGED BY: **Kerry Murphy**

DRILLING EQUIPMENT: **Geoprobe 7822DT**











DRILLING METHOD: **Direct Push**

GROUNDWATER LEVEL			
Date	Time	Depth	Casing Depth
		<b>0</b>	

BOREHOLE DEPTH (ft): **5** BOREHOLE DIAMETER (in): **2**

ELEV.: \_\_\_\_\_ DATUM: \_\_\_\_\_

Easting **453,872.975** Northing **632,674.812**

Depth Feet (Elev.)	Graphic	Description of Material	Sample Name	Sample Time	PID	Laboratory Tests
		Wood chips			0	
1		Brown Sandy silt, sandy clay and gravel			0	
		Brown Sandy silt, sandy clay and gravel			0	
2		Brown Sandy silt, sandy clay and gravel			0	
		Brown Sandy silt, sandy clay and gravel			0	
3		Brown Sandy silt, sandy clay and gravel			0	
		Brown Sandy silt, sandy clay and gravel	SB-13	10:30	0	TCLSVOC+20,TAL Metals,
4		Brown Sandy silt, sandy clay and gravel			0	
		Brown Sandy silt, sandy clay and gravel			0	
5		Brown Sandy silt, sandy clay and gravel			0	

# BORING LOG

BORING NO.: **SB-14**

SHEET **1** OF **1**

DATE: **5/3/2024**

PROJECT NO.: **23-1429** PROJECT: **Ridgewood Berm Sampling**

PROJECT LOCATION: **Schedler Property**

CLIENT: **Village of Ridgewood**

BORING LOCATION: **40°59'15.203"N 74°05'33.633"W**

DRILLER: \_\_\_\_\_

DRILLING CONTRACTOR: **EPI**

LOGGED BY: **Kerry Murphy**

DRILLING EQUIPMENT: **Geoprobe 7822DT**

DRILLING METHOD: **Direct Push**

GROUNDWATER LEVEL			
Date	Time	Depth	Casing Depth
		<b>0</b>	

BOREHOLE DEPTH (ft): **10** BOREHOLE DIAMETER (in): **2**

ELEV.: \_\_\_\_\_ DATUM: \_\_\_\_\_

Easting **453,872.975** Northing **632,674.812**

Depth Feet (Elev.)	Graphic	Description of Material	Sample Name	Sample Time	PID	Laboratory Tests
		Wood chip			0	
1		Brown coarse sand, some silt and gravel			0	
		Brown coarse sand, some silt and gravel			0	
2		Brown coarse sand, some silt and gravel			0	
		Brown coarse sand, some silt and gravel			0	
3		Brown coarse sand, some silt and gravel			0	
		Brown coarse sand, some silt and gravel	SB-14	10:35	0	TCLSVOC+20,TCL Pesticides, TAL Metals,PCBs
4		Brown coarse sand, some silt and gravel			0	
		Brown coarse sand, some silt and gravel			0	
5		Brown coarse sand, some silt and gravel			0	
		Light brown coarse sand			0	
6		Light brown coarse sand			0	
		Light brown coarse sand			0	
7		Light brown coarse sand			0	
		Light brown coarse sand			0	
8		Light brown coarse sand			0	
		Brown silt, sand			0	
9		Brown silt, sand			0	
		Brown silt, sand			0	
10		Brown silt, sand			0	

**APPENDIX D**  
**Data Validation Reports**



**RIDGEWOOD BERM SOIL SAMPLING**  
**VALIDATION OF LABORATORY RESULTS**  
**SGS LABORATORY (DAYTON, NJ)**

**LABORATORY REPORT # JD87833 DATED MAY 16, 2024**

**INTRODUCTION**

Matrix New World Engineering (Matrix) collected 14 soil samples, two field duplicate samples, and one aqueous field blank on May 3, 2024. Samples were relinquished to an SGS Laboratory courier, and then transported to SGS Laboratory, located in Dayton, New Jersey on the day of sampling. Sample identifications and requested analyses are listed below.

<b>Matrix Sample IDs</b>	<b>Laboratory Sample IDs</b>	<b>Analyses Requested and Methods</b>
SB-1	JD87833-1	TCL SVOCs – EPA Method 8270E TAL Metals – EPA Method 6010D and 7471B (Mercury) TCL Pesticides – EPA Method 8081B PCBs (Aroclors) – EPA Method 8082A
SB-3	JD87833-3	
SB-4	JD87833-4	
SB-5	JD87833-5	
SB-7	JD87833-7	
SB-8	JD87833-8	
SB-10	JD87833-10	
SB-11	JD87833-11	
SB-12	JD87833-12	
SB-14	JD87833-14	
DUPE 1	JD87833-15	
DUPE 2	JD87833-16	Duplicate of primary soil sample SB-11
SB-2	JD87833-2	TCL SVOCs – EPA Method 8270E Target Analyte List Metals – EPA Method 6010D
SB-6	JD87833-6	
SB-9	JD87833-9	
SB-13	JD87833-13	
Field Blank	JD87833-17	TCL SVOCs – EPA Method 8270E Target Analyte List Metals – EPA Method 6010D TCL Pesticides – EPA Method 8081B PCBs (Aroclors) – EPA Method 8082A
Field Blank	JD87833-17R	TCL Pesticides – EPA Method 8081B (re-analysis)

TAL = Target Analyte List                      TCL = Target Compound List  
 SVOC = Semi-Volatile Organic Compounds  
 PCBs = Polychlorinated Biphenyls

Samples were received under proper chain of custody in two coolers and were properly chilled at 2.1 to 2.2 degrees Celsius. Quality Control for the soil samples is evaluated in the

following checklist tables and comments. A summary of data quality for the samples analyzed is provided at the end of this validation report.

**VALIDATION CHECKLIST SUMMARY  
RIDGEWOOD BERM SOIL SAMPLING**

**SVOCs BY METHOD 8270E**

REQUIREMENTS	REPORTED		PERFORMANCE ACCEPTABLE		DATA QUALIFIED - COMMENTS
	NO	YES	NO	YES	
<b>GAS CHROMATOGRAPHY/ MASS SPECTROMETRY (GC/MS)</b>					
1. Holding times		X		X	
2. Detection limits		X		X	Yes, see notes
3. Blanks					
A. Laboratory Method Blanks		X	X		Yes
B. Field Blanks		X		X	
4. Laboratory Control Sample (LCS) %R		X		X	
5. LCS Duplicate %R and (RPD)		X	X		Field blank only.
6. Matrix Spike (MS) %R		X		X	
7. MS Duplicate (MSD) %R and (RPD)		X		X	
8. Surrogate Recoveries (%R)		X		X	
9. Field Duplicate Comparison		X	X		Yes
10. Results Quantitation		X		X	Yes, See notes

%R - percent recovery

RPD - relative percent difference

CCV – continuing calibration verification

COMMENTS: Performance was acceptable, with the following exceptions and/or notes.

- 1) The soil samples were extracted on May 9, 2024 within the required 14-day holding time. SVOC analyses were performed by May 13, 2024 within the 40 day holding time after extraction. Extraction and analysis holding times were met.
- 2) Samples SB-3 and SB-11 were diluted by a factor two times for all SVOCs. Sample SB-5 was diluted by a factor of five times for fluoranthene and pyrene only. Samples DUPE-1 was diluted by a factor of five times for fluoranthene only. No other sample dilutions were required for analysis of SVOCs. Several SVOCs were detected in soil samples at concentrations between the method detection limit (MDL) and the reporting limit. **Due to limited accuracy in this portion of the calibration range these SVOCs results are qualified as J/Estimated, as noted in the following pages:**

<b><u>Sample ID</u></b>	<b><u>Qualified SVOCs (ug/kg)</u></b>
SB-1	Acenaphthene = 18.0 <i>J</i>
SB-1	1,1'-Biphenyl = 6.2 <i>J</i>
SB-1	Benzaldehyde = 17.2 <i>J</i>
SB-1	Carbazole = 30.5 <i>J</i>
SB-1	Di-n-butyl phthalate = 14.3 <i>J</i>
SB-1	bis(2-Ethylhexyl)phthalate = 80.4 <i>J</i>
SB-1	Fluorene = 24.3 <i>J</i>
SB-2	1,1'-Biphenyl = 19.2 <i>J</i>
SB-2	Carbazole = 24.6 <i>J</i>
SB-2	Naphthalene = 20.9 <i>J</i>
SB-3	1,1'-Biphenyl = 14.2 <i>J</i>
SB-3	Carbazole = 11.4 <i>J</i>
SB-3	Dibenzofuran = 86.7 <i>J</i>
SB-3	2-Methylnaphthalene = 28.6 <i>J</i>
SB-3	Naphthalene = 34.5 <i>J</i>
SB-4	1,1'-Biphenyl = 8.7 <i>J</i>
SB-4	Carbazole = 69.0 <i>J</i>
SB-4	Dibenzofuran = 50.9 <i>J</i>
SB-4	2-Methylnaphthalene = 18.1 <i>J</i>
SB-4	Naphthalene = 23.8 <i>J</i>
SB-5	1,1'-Biphenyl = 13.0 <i>J</i>
SB-5	Carbazole = 72.3 <i>J</i>
SB-5	2-Methylnaphthalene = 20.0 <i>J</i>
SB-5	Naphthalene = 28.6 <i>J</i>
SB-6	1,1'-Biphenyl = 15.9 <i>J</i>
SB-6	Carbazole = 102 <i>J</i>
SB-6	2-Methylnaphthalene = 25.1 <i>J</i>
SB-7	1,1'-Biphenyl = 12.6 <i>J</i>
SB-7	Dibenzofuran = 66.3 <i>J</i>
SB-7	2-Methylnaphthalene = 26.5 <i>J</i>
SB-8	1,1'-Biphenyl = 6.2 <i>J</i>
SB-8	Carbazole = 34.2 <i>J</i>
SB-8	Dibenzofuran = 24.1 <i>J</i>
SB-8	2-Methylnaphthalene = 10.3 <i>J</i>
SB-8	Naphthalene = 17.1 <i>J</i>

<b><u>Sample ID</u></b>	<b><u>Qualified SVOCs (ug/kg)</u></b>
SB-9	Acenaphthene = 23.0 <i>J</i>
SB-9	1,1'-Biphenyl = 9.8 <i>J</i>
SB-9	Benzaldehyde = 23.2 <i>J</i>
SB-9	Carbazole = 40.0 <i>J</i>
SB-9	Dibenzofuran = 24.1 <i>J</i>
SB-9	Di-n-butyl phthalate = 10.8 <i>J</i>
SB-9	bis(2-Ethylhexyl)phthalate = 43.9 <i>J</i>
SB-9	2-Methylnaphthalene = 15.2 <i>J</i>
SB-9	Naphthalene = 23.9 <i>J</i>
SB-10	3&4-Methylphenol = 47.6 <i>J</i>
SB-10	Acenaphthylene = 30.4 <i>J</i>
SB-10	Benzo(k)fluoranthene = 38.7 <i>J</i>
SB-10	Carbazole = 7.2 <i>J</i>
SB-11	Benzo(k)fluoranthene= 41.2 <i>J</i>
SB-11	Butyl benzyl phthalate = 36.5 <i>J</i>
SB-11	Carbazole = 12.2 <i>J</i>
SB-11	bis(2-Ethylhexyl)phthalate = 28.1 <i>J</i>
SB-11	Indeno(1,2,3-cd)pyrene = 58.2 <i>J</i>
SB-12	Benzo(a)anthracene = 16.6 <i>J</i>
SB-12	Benzo(b)fluoranthene = 22.9 <i>J</i>
SB-12	Benzaldehyde = 10.3 <i>J</i>
SB-12	Chrysene = 18.0 <i>J</i>
SB-12	Fluoranthene = 28.6 <i>J</i>
SB-12	Phenanthrene= 16.3 <i>J</i>
SB-12	Pyrene = 28.4 <i>J</i>
SB-13	Benzo(a)anthracene = 37.0 <i>J</i>
SB-13	Benzo(g,h,i)perylene = 32.9 <i>J</i>
SB-13	Benzo(k)fluoranthene = 18.3 <i>J</i>
SB-13	Carbazole = 6.5 <i>J</i>
SB-13	bis(2-Ethylhexyl)phthalate = 10.7 <i>J</i>
SB-13	Indeno(1,2,3-cd)pyrene = 27.2 <i>J</i>
SB-14	1,1'-Biphenyl = 6.6 <i>J</i>
SB-14	Carbazole = 46.5 <i>J</i>
SB-14	Dibenzofuran = 17.2 <i>J</i>
SB-14	bis(2-Ethylhexyl)phthalate = 15.2 <i>J</i>
SB-14	Naphthalene = 10.9 <i>J</i>

<u>Sample ID</u>	<u>Qualified SVOCs (ug/kg)</u>
DUP 1	1,1'-Biphenyl = 9.6 <i>J</i>
DUP 1	Carbazole = 81.5 <i>J</i>
DUP 1	Dibenzofuran = 62.1 <i>J</i>
DUP 1	2-Methylnaphthalene = 18.9 <i>J</i>
DUP 1	Naphthalene = 32.2 <i>J</i>
DUP 2	1,1'-Biphenyl = 7.7 <i>J</i>
DUP 2	Benzaldehyde = 9.2 <i>J</i>
DUP 2	Carbazole = 41.6 <i>J</i>
DUP 2	Dibenzofuran = 25.1 <i>J</i>
DUP 2	2-Methylnaphthalene = 15.7 <i>J</i>
DUP 2	Naphthalene = 21.6 <i>J</i>

- 3) SGS provided results from one full suite solid matrix method blank in support of the SVOC analyses. No SVOCs were detected in the method blank, with one exception. Carbazole was detected in the method blank at an estimated concentration of 6.2 ug/Kg. Carbazole was detected in several soil samples at concentrations within five times the concentration detected in the method blank. Due to potential blank contamination bias, the following Carbazole results (detections less than 31 ug/Kg) are qualified as U/Non-detect at the concentrations reported, as follows:

<u>Sample ID</u>	<u>Qualified Results (ug/kg)</u>
SB-1	Carbazole = 30.5 <i>U</i>
SB-2	Carbazole = 24.6 <i>U</i>
SB-10	Carbazole = 7.2 <i>U</i>
SB-11	Carbazole = 12.2 <i>U</i>
SB-13	Carbazole = 6.5 <i>U</i>

Results from one aqueous field blank were provided. No SVOCs were detected in the field blank.

- 4-5) SGS provided results from one full set of solid matrix laboratory control sample (LCS) analyses (identified as blank spike analyses) in support of the SVOC analyses. All LCS recoveries were within laboratory specified control limits, ranging from 40 to 120 percent. Accuracy, as demonstrated by these analyses is acceptable.

One set of aqueous LCS and LCS duplicate analyses were provided in support of the field blank. LCS recoveries were low for several SVOCs. No action is taken based on the low LCS recoveries in support of the field blank.

- 6-7) SGS provided results from one set of project specific (spike on sample SB-1) matrix spike (MS) and MSD duplicate analyses in support of the SVOC analyses. MS and MSD recoveries ranged from 12 to 110 percent (various control limits). The maximum RPD between MS and MSD results was 55 percent. Precision and accuracy, as demonstrated by these analyses is acceptable.

8) Six surrogates were spiked into each soil sample in support of the SVOC analyses. Surrogate recoveries were acceptable, ranging from 61 to 103 percent (various control limits). Accuracy, as demonstrated by these analyses is acceptable.

9) Two sets of field duplicate samples were submitted in support of the SVOC analyses.

DUPE-1 was submitted as a blind field duplicate of primary sample SB-7.

Sample DUPE-2 was submitted as a blind field duplicate of primary sample SB-11.

Results of the field duplicate sampling for SVOCs that were detected in either of the primary or duplicate samples are presented below. Precision assessment is based on the RPD % between sample results. A 50 % RPD or less is used to define acceptable precision between the soil sample results. **Bold RPD values exceed this criterion. In such cases the primary and duplicate sample results are qualified as estimated.**

SVOCs	SB-7		DUP 1		RPD		SB-11 *		DUP 2		RPD
Acenaphthene	0.104		0.115		10.0		0.075	U	0.04		+/- RL
Acenaphthylene	0.345		0.285		19.0		0.075	U	0.192		<b>87.6</b>
Anthracene	0.495		0.566		13.4		0.075	U	0.25		<b>108</b>
Benzo(a)anthracene	1.38		1.82		27.5		0.0914		0.988		<b>166</b>
Benzo(a)pyrene	1.56		1.96		22.7		0.0985		1.01		<b>164</b>
Benzo(b)fluoranthene	1.64		2.28		32.7		0.116		1.26		<b>166</b>
Benzo(g,h,i)perylene	1		1.23		20.6		0.0842		0.624		<b>152</b>
Benzo(k)fluoranthene	0.603		0.71		16.3		0.0412	J	0.329		<b>156</b>
Butyl benzyl phthalate	0.071	U	0.069	U	+/- RL		0.0365	J	0.072	U	+/- RL
1,1'-Biphenyl	0.0126	J	0.0096	J	27.0		0.15	U	0.0077	J	+/- RL
Benzaldehyde	0.18	U	0.17	U	+/- RL		0.38	U	0.0092	J	+/- RL
Carbazole	0.0724		0.0815	B	11.8		0.0122	JB	0.0416	J	<b>109</b>
Chrysene	1.25		1.68		29.4		0.101		0.959		<b>162</b>
Dibenzo(a,h)anthracene	0.261		0.327		22.4		0.075	U	0.175		<b>80.0</b>
Dibenzofuran	0.0663	J	0.0621	J	6.5		0.15	U	0.0251	J	+/- RL
Fluoranthene	2.39		3.53		38.5		0.167		1.65		<b>163</b>
Fluorene	0.167		0.155		7.5		0.075	U	0.0613		+/- RL
Indeno(1,2,3-cd)pyrene	0.822		1.04		23.4		0.0582	J	0.535		<b>161</b>
2-Methylnaphthalene	0.0265	J	0.0189	J	33.5		0.075	U	0.0157	J	+/- RL
Naphthalene	0.0383		0.0322	J	17.3		0.075	U	0.0216	J	+/- RL
Phenanthrene	1.05		1.54		37.8		0.0899		0.572		<b>146</b>
Pyrene	2.64		3.35		23.7		0.176		1.66		<b>162</b>
Total TIC, Semi-Volatile	7.44	J	8.12	J	8.7		2.1	J	8.85	J	<b>123</b>

\* Sample SB-11 was analyzed at a 2 times dilution so reporting limits are two times higher than for duplicate sample DUP 2. The value of the detection limit was used in the RPD calculation for SB-11 when the concentration was non-detect (U).

+/- RL = Results agree within a reporting limit increment and precision is determined to be acceptable.

- 10) No anomalies were noted with respect to results SVOC quantitation or reporting. The laboratory noted that CCV recoveries were high or some SVOCs that were not detected in the associated samples. No bias to the sample results is indicated by the high CCVs. Numerous Tentatively Identified Compounds (TICs) were reported with each sample analyzed for SVOCs. Results for TICs are considered to be estimated in magnitude. In some cases, the identification of the TIC was verified against the library of SVOCs compounds associated with the method.

**VALIDATION CHECKLIST SUMMARY  
RIDGEWOOD BERM SOIL SAMPLING**

**PESTICIDES BY METHOD 8081B**

REQUIREMENTS	REPORTED		PERFORMANCE ACCEPTABLE		DATA QUALIFIED - COMMENTS
	NO	YES	NO	YES	
<b>GAS CHROMATOGRAPHY</b>					
1. Holding times		X		X	
2. Detection limits		X		X	Yes, see notes
3. Blanks					
A. Laboratory Method Blanks		X	X		Yes
4. Laboratory Control Sample (LCS) %R		X		X	
5. LCS Duplicate %R and (RPD)		X	X		Aqueous only
6. Matrix Spike (MS) %R		X		X	
7. MS Duplicate (MSD) %R and (RPD)		X		X	
8. Surrogate Recoveries (%R)		X		X	
9. DDT/Endrin Breakdown Check		X		X	
10. Field Duplicate Comparison		X	X		Yes
11. Results Quantitation		X		X	Yes, See notes

%R - percent recovery

RPD - relative percent difference

CCV – continuing calibration verification

COMMENTS: Performance was acceptable, with the following exceptions and/or notes.

- 1) The soil samples for analysis of pesticides were extracted on May 8, 2024 within the required 14-day holding time. Pesticide analyses were performed by May 10, 2024 within the 40-day holding time after extraction.
- 2) Sample SB-5 was analyzed at a 5 times dilution, though no pesticides were detected at concentrations greater than reporting limits. No explanation was provided for the dilution, and reporting limits were raised accordingly. Several pesticides were detected in soil samples at concentrations between the method detection limit (MDL) and the reporting limit. **Due to limited accuracy in this portion of the calibration range these pesticide results are qualified as J/Estimated, as follows:**

<b><u>Sample ID</u></b>	<b><u>Qualified Pesticides (ug/kg)</u></b>
SB-1	alpha-Chlordane = 0.48 <i>J</i>
SB-1	Chlordane = 0.48 <i>J</i>
SB-1	Dieldrin = 0.43 <i>J</i>
SB-1	Heptachlor epoxide = 0.35 <i>J</i>
SB-2	beta-BHC = 0.13 <i>J</i>
SB-2	Dieldrin = 0.12 <i>J</i>
SB-2	Heptachlor epoxide = 0.18 <i>J</i>
SB-4	beta-BHC = 0.14 <i>J</i>
SB-4	Dieldrin = 0.21 <i>J</i>
SB-4	4,4-DDD = 0.40 <i>J</i>
SB-4	4,4-DDE = 0.14 <i>J</i>
SB-4	Heptachlor epoxide = 0.24 <i>J</i>
SB-5	alpha-Chlordane = 0.63 <i>J</i>
SB-5	Chlordane = 0.63 <i>J</i>
SB-5	4,4-DDD = 0.73 <i>J</i>
SB-5	4,4-DDT = 0.13 <i>J</i>
SB-6	beta-BHC = 0.15 <i>J</i>
SB-6	Dieldrin = 0.15 <i>J</i>
SB-6	Heptachlor epoxide = 0.30 <i>J</i>
SB-8	beta-BHC = 0.13 <i>J</i>
SB-8	gamma-Chlordane = 0.21 <i>J</i>
SB-8	4,4-DDE = 0.22 <i>J</i>
SB-8	Heptachlor epoxide = 0.16 <i>J</i>
SB-10	beta-BHC = 0.15 <i>J</i>
SB-10	alpha-Chlordane = 0.17 <i>J</i>
SB-10	Chlordane = 0.17 <i>J</i>
SB-10	4,4-DDD = 0.17 <i>J</i>
SB-10	4,4-DDE = 0.24 <i>J</i>
SB-10	4,4-DDT = 0.09 <i>J</i>
SB-11	gamma-Chlordane = 0.34 <i>J</i>
SB-14	beta-BHC = 0.09 <i>J</i>
DUPE 1	beta-BHC = 0.13 <i>J</i>
DUPE 1	alpha-Chlordane = 0.15 <i>J</i>
DUPE 1	Chlordane = 0.15 <i>J</i>
DUPE 1	4,4-DDD = 0.21 <i>J</i>
DUPE 1	4,4-DDT = 0.27 <i>J</i>



<u>Sample ID</u>	<u>Qualified Results (ug/kg)</u>
DUPE 2	Dieldrin = 0.28 <i>J</i>
DUPE 2	Heptachlor epoxide = 0.34 <i>J</i>

- 3) SGS provided results from one full suite solid matrix method blank in support of the pesticide analyses. Three pesticides were detected in the method blank at estimated concentrations, as follows:

<u>Sample ID</u>	<u>Qualified Results (ug/kg)</u>
Method Blank	beta-BHC = 0.088 <i>J</i>
Method Blank	Delta-BHC = 0.11 <i>J</i>
Method Blank	Endosulfan sulfate = 0.080 <i>J</i>

Of these three, only beta-BHC was detected in any associated soil samples at concentration within 5 times that of the method blanks. **Due to potential blank contamination bias, the following beta-BHC detections in soil samples are qualified ad U/Non-detect at the concentrations reported.**

SB-2	beta-BHC = 0.13 <i>U</i>
SB-4	beta-BHC = 0.14 <i>U</i>
SB-6	beta-BHC = 0.15 <i>U</i>
SB-8	beta-BHC = 0.13 <i>U</i>
SB-10	beta-BHC = 0.15 <i>U</i>
SB-14	beta-BHC = 0.09 <i>U</i>
DUPE 1	beta-BHC = 0.13 <i>U</i>

One aqueous field blank was analyzed with the soil samples. 4,4-DDT was detected in the field blank at a concentration of 0.020 ug/L. The field blank was re-analyzed out of aqueous holding time and 4,4-DDT was detected at an estimated concentration of 0.0048 ug/L. SGS attributed these detections to lab contamination, as 4,4-DDT was also detected in the aqueous method blanks at similar concentrations. Because 4,4-DDT was not detected in the solid matrix method blank, no action is taken.

- 4-5) SGS provided results from one full set of solid matrix laboratory control sample (LCS) analyses (identified as blank spike analyses) in support of the pesticide analyses. All LCS recoveries were within laboratory specified control limits, ranging from 70 to 94 percent. Accuracy, as demonstrated by these analyses is acceptable. Some spike recoveries were reported from the 2<sup>nd</sup> analytical signal, as precision for the primary signal was poor.

LCS and LCS duplicate results were provided in support of the aqueous analyses (field blank) with acceptable precision and accuracy. Precision between LCS and LCSD analyses in support of the field blank re-analyses was poor for nearly all pesticides. This does not impact the soil sample results.

- 6-7) SGS provided results from one set of batch specific matrix spike (MS) and MSD duplicate analyses in support of the pesticide analyses. MS and MSD recoveries were within prescribed control limits for all target pesticides ranging from 40 to 115 percent. Precision between MS and MSD recoveries was acceptable, with a maximum RPD between MS and MSD results of 13 percent.
- 8) Two surrogates (tetrachloro-m-xylene and decachlorobiphenyl) were spiked into each soil sample in support of the solid matrix pesticide analyses. Surrogates were reported from each of the two columns used in the analyses. Surrogate recoveries were in control limits ranging from 44 to 127 % percent (control limits for tcmx are = 46-145% and are 29-163% for dcbp)
- 9) Several sets of DDT/Endrin breakdown check standards were analyzed coinciding with each analytical batch. DDT and Endrin breakdown levels were all less than the QAPP specific level of 15 percent.
- 10) Sample DUPE-1 was submitted as a blind field duplicate of primary sample SB-7. Sample DUPE-2 was submitted as a blind field duplicate of primary sample SB-11.

Results of the field duplicate sampling for pesticides that were detected in either of the primary or duplicate samples are presented below. Precision assessment is based on the RPD % between sample results. A 50 % RPD or less is used to define acceptable precision between the soil sample results. **Bold RPD values exceed this criterion. In such cases the primary and duplicate sample results are qualified as estimated.**

Pesticides	SB-7		DUP 1		RPD		SB-11		DUP 2		RPD
beta-BHC	0.00015	JB	0.00013	JB	NC		0.00043	U	0.00042	U	+/-RL
alpha-Chlordane	0.00086		0.00015	J	<b>141</b>		0.00099		0.0013		27.1
gamma-Chlordane	0.00044		0.00043	U	2.3		0.00034	J	0.00068		<b>66.7</b>
Chlordane	0.0013		0.00015	J	<b>159</b>		0.0013		0.002		42.4
Dieldrin	0.00015	J	0.00043	U	<b>96.6</b>		0.00043	U	0.00028	J	42.3
4,4'-DDD	0.00069		0.00021	J	<b>107</b>		0.00069		0.00073		5.6
4,4'-DDE	0.00057		0.00043	U	28.0		0.0055		0.0044		22.2
4,4'-DDT	0.00044		0.00027	J	47.9		0.0017		0.00093		<b>58.6</b>
Heptachlor epoxide	0.0003	J	0.00043	U	35.6		0.00043	U	0.00034	J	23.4

NC – Not calculated. Both results were qualified due to associated method blank contamination.

The value of the detection limit was used in the RPD calculation for samples when the primary or duplicate concentration was non-detect (U).

+/- RL = Results agree within a reporting limit increment and precision is determined to be acceptable.

- 11) No anomalies were noted with respect to results pesticide quantitation or reporting, with the following exceptions. Numerous pesticides were flagged by SGS due to an RPD of more than 40% between the dual GC columns used for quantitation and confirmation. This criterion is not addressed in the project QAPP. In almost all cases, the pesticides in question were already qualified as J/Estimated due to reporting limits and no further action is required.

**VALIDATION CHECKLIST SUMMARY  
RIDGEWOOD BERM SOIL SAMPLING**

**AROCLORS (PCBs) BY METHOD 8082A**

REQUIREMENTS	REPORTED		PERFORMANCE ACCEPTABLE		DATA QUALIFIED - COMMENTS
	NO	YES	NO	YES	
<b>GAS CHROMATOGRAPHY</b>					
1. Holding times		X		X	
2. Detection limits		X		X	
3. Blanks					
A. Laboratory Method Blanks		X		X	
4. Laboratory Control Sample (LCS) %R		X		X	
5. LCS Duplicate %R and (RPD)		X		X	Aqueous only
6. Matrix Spike (MS) %R		X		X	
7. MS Duplicate (MSD) %R and (RPD)		X		X	
8. Surrogate Recoveries (%R)		X		X	
9. Field Duplicate Comparison		X		X	
10. Results Quantitation		X		X	

%R - percent recovery

RPD - relative percent difference

CCV – continuing calibration verification

COMMENTS: Performance was acceptable, with the following exceptions and/or notes.

- 1) The soil samples for analysis of Aroclors were extracted on May 8, 2024 within the required 14-day holding time. Aroclor analyses were performed by May 9, 2024, within the 40 day holding time after extraction. Extraction and analysis holding times were met.
- 2) No soil samples were analyzed at dilutions to quantitate any Aroclors. No Aroclor detections were reported at concentrations between the MDL and RL. Aroclor reporting limits are determined to be acceptable.
- 3) SGS provided results from one full suite solid matrix method blank in support of the Aroclor analyses with no Aroclors detected. Results from one aqueous matrix field blank and from one aqueous matrix method blank were provided with no PCBs detected.

- 4-5) SGS provided results from one set of solid matrix laboratory control sample (LCS) analyses (identified as blank spike analyses) in support of the Aroclor analyses. Aroclors 1016 and 1260 were spiked with acceptable recoveries of 95 and 98 percent. Accuracy, as demonstrated by these analyses is acceptable.

Results from one aqueous matrix set of LCS and LCSD spikes were provide in support of the field blank, with acceptable precision and accuracy.

- 6-7) SGS provided results from one set of batch specific matrix spike (MS) and MSD duplicate analyses in support of the Aroclor analyses. MS spikes were performed on Aroclors 1016 and 1260. MS and MSD recoveries ranged from 90 to 103 percent and were within prescribed control limits. Precision between MS and MSD results was acceptable, with a maximum RPD of 6 percent.

- 8) Two surrogates (tetrachloro-m-xylene and decachlorobiphenyl) were spiked into each soil sample in support of the solid matrix Aroclor analyses. Surrogate recoveries were reported from both analytical columns and ranged from 54 to 123 percent. Accuracy, as demonstrated by these analyses is acceptable.

- 9) Sample DUPE-1 was submitted as a blind field duplicate of primary sample SB-7. Sample DUPE-2 was submitted as a blind field duplicate of primary sample SB-11.

No Aroclors were detected in either sample of the primary or duplicate pair. Field duplicate precision is determined to be acceptable.

- 10) No anomalies were noted with respect to results for Aroclor quantitation or reporting.

**VALIDATION CHECKLIST SUMMARY  
429 DELANCY STREET – SOIL SAMPLING**

**TARGET ANALYTE LIST METALS – EPA METHODS 6010D AND 7471B**

REQUIREMENTS	REPORTED / EVALUATED		PERFORMANCE ACCEPTABLE		DATA QUALIFIED - COMMENTS
	NO	YES	NO	YES	
<b>INDUCTIVELY COUPLED PLASMA / COLD VAPOR AA</b>					
1. Holding times / Preservation		X		X	
2. Detection limits / Dilutions		X		X	
3. Blanks					
A. Calibration Blanks		X		X	
B. Method Blanks		X		X	
4. Initial and Continuing Calibration %R		X		X	
5. Interference check sample recoveries		X		X	
6. Matrix Spike (MS) %R		X	X		Yes
7. MS Duplicate (MSD) %R and RPD		X	X		Yes
8. LCS and LCSD %R and RPD		X		X	LCS only
9. Serial Dilution Analyses		X		X	
10. Field/Lab Duplicate Comparison (RPD)		X	X		Yes
11. Results Quantitation		X		X	

%R - percent recovery

RPD - relative percent difference

COMMENTS: Performance was acceptable, with the following exceptions and/or notes:

- 1) The soil samples for analysis of TAL metals were prepared by May 8, 2024 and were analyzed within the 6 month holding times by May 9, 2024 (within 28 days for mercury). Extraction and analysis holding times were met.
- 2) No metal analyses were performed at dilutions. All metals results were reported to the RL. No metals detections were reported at concentrations between the MDL and RL. Reporting limits are determined to be acceptable.
- 3) Results from numerous sets of initial and continuing calibration blanks were provided in support of the TAL metals analyses. Results for these blanks were presented in aqueous units. No TAL metals were detected at concentrations exceeding the RL. Results from one set of solid matrix method blanks were also provided, with no metals detected at concentrations exceeding the RL.

Result from one aqueous field blank were provided with no metals detected.

- 4) Results from several sets of initial and continuing calibration analyses were provided for the TAL metals. All ICV and CCV standard recoveries were within control limits of 90-110 percent. Results from high end (typically 8,000 ug/L) calibration standards were provided with acceptable recoveries between 90 and 110 percent. Results from

low end calibration standards (CRI) were also reported. CRI control limits are 80-120 percent.

- 5) Results from several sets of ICP interference check samples were provided in support of the TAL metals. ICP interference check sample recoveries were acceptable, within control limits of 80-20 percent.
- 6-7) SGS provided results from one set of solid matrix project specific (spike on soil sample SB-14) matrix spike (MS) and MSD duplicate analyses in support of the TAL metals analyses. MS and MSD recoveries are evaluated herein when the sample concentration in the native sample does not exceed the spike concentration by more than 4 times. MS and MSD control limits were 75 – 125 percent.

**MS/MSD recoveries were out of control limits in the project spike as follows:**

<u>Metal spiked</u>	<u>MS / MSD Recovery %</u>	<u>Validation Action</u>
Aluminum	186.7 / 181.3	High bias – J/Estimated
Antimony	55.7 / 57.4	Low bias – UJ/Estimated at RL
Manganese	134.3 / 94.4	High bias – J/Estimated
Iron	121.9 / 129.5	High bias – J/Estimated

- 8) SGS provided results from one set of solid matrix LCS analyses in support of the TAL metals in soil samples. The LCS recoveries were acceptable ranging from 90.5 to 99.0 percent (control limits of 80-120 percent).
- 9) SGS provide results from one set of serial dilution analyses performed on project sample SB-14. Percent differences between the initial result and the 5 times serial dilution result were less the control limit of 10 percent for all metals results where the initial result was greater than 50 times the instrument detection limit.
- 10) Sample DUPE-1 was submitted as a blind field duplicate of primary sample SB-7. Sample DUPE-2 was submitted as a blind field duplicate of primary sample SB-11.

Results of the field duplicate sampling for TAL metals that were detected in either of the primary or duplicate samples are presented below. Precision assessment is based on the RPD % between sample results. A 50 % RPD or less is used to define acceptable precision between the soil sample results. **Bold RPD values exceed this criterion. In such cases the primary and duplicate sample results are qualified as estimated.**

	DUP 1	SB-7	RPD		DUP-2	SB-11	RPD
Aluminum	7590	8010	5.4		7630	8260	7.9
Antimony	2.3 U	2.3 U	+/- RL		2.1 U	2.3 U	+/- RL
Arsenic	2.5	2.7	7.7		3.2	3	6.5
Barium	24.8	33.7	30.4		31.3	36.3	14.8
Beryllium	0.29	0.31	6.7		0.3	0.35	15.4
Cadmium	0.58 U	0.58 U	+/- RL		0.53 U	0.57 U	+/- RL
Calcium	942	1710	<b>57.9</b>		2440	1840	28.0
Chromium	8.9	9.7	8.6		10.9	11.9	8.8
Cobalt	5.8 U	5.8 U	+/- RL		5.3 U	5.7 U	+/- RL
Copper	8	10.2	24.2		9.5	12.9	30.4
Iron	10600	12500	16.5		10500	13500	25.0
Lead	58.7	13.1	<b>127</b>		30.2	28.9	4.4
Magnesium	1440	1860	25.5		1550	1870	18.7
Manganese	144	255	<b>55.6</b>		211	225	6.4
Mercury	0.03 U	0.032 U	+/- RL		0.15	0.065	<b>79.1</b>
Nickel	7.7	8.6	11.0		7.6	9.1	18.0
Potassium	1200 U	1200 U	+/- RL		1100 U	1100 U	+/- RL
Selenium	2.3 U	2.3 U	+/- RL		2.1 U	2.3 U	+/- RL
Silver	0.58 U	0.58 U	+/- RL		0.53 U	0.57 U	+/- RL
Sodium	1200 U	1200 U	+/- RL		1100 U	1100 U	+/- RL
Thallium	1.2 U	1.2 U	+/- RL		1.1 U	1.1 U	+/- RL
Vanadium	21.9	20.5	6.6		17.4	20.5	16.4
Zinc	28.7	30	4.4		36.3	47.2	26.1

+/- RL = Results agree within a reporting limit increment and precision is determined to be acceptable.

11) No anomalies were noted with respect to the metals reporting.

**RIDGEWOOD BERM SOIL SAMPLING**  
**VALIDATION OF LABORATORY RESULTS**  
**SGS LABORATORY (DAYTON, NJ)**

**LABORATORY REPORT # JD87833 DATED MAY 16, 2024**

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Matrix New World Engineering (Matrix) collected 14 soil samples, two field duplicate samples, and one aqueous field blank on May 3, 2024. The sample results have been validated in accordance with the Project QAPP requirements, and professional judgment of the data reviewer.

The QC information evaluated has been described in the preceding pages. Based on this review, data provided for the soil samples collected are determined to be quantitative, with the exceptions noted in the following table.

<b>Sample Identification(s) / Analyte(s)</b>	<b>Data Qualifier(s)</b>	<b>Reason(s) For Qualification</b>
<b>SVOCs</b> All Samples / SVOC detections noted pages 3, 4, and 5 of this validation report.	J/Estimated	These SVOCs were reported at concentrations between the method detection limit and the reporting limit. Accuracy in this portion of the calibration curve may be limited.
<b>SVOCs</b> SB-1, SB-2, SB-10, SB-11, and SB-12 / <b>Carbazole</b>	U/Non-detect at the concentrations reported	Carbazole was detected in soil samples at concentrations within five times the concentration detected in the method blank. Due to potential blank contamination bias, Carbazole detections may be the result of blank contamination bias.
<b>SVOCs</b> SB-11 and DUP 2 / Duplicate samples with Bolded RPDs as shown in table on page 6 of this report.	J/Estimated for detections. UJ/Estimated and non-detect at the reporting limit stated for non-detects	Poor precision between results of primary and duplicate samples. RPDs exceed 50 percent.
<b>SVOCs</b> All samples / Tentatively Identified Compounds (TICs)	J/Estimated	Numerous TICs were reported with each sample analyzed for SVOCs. Results for TICs are considered to be estimated in magnitude. In some cases, the identification of the TIC was verified against the library of SVOCs compounds associated with the method.
<b>Pesticides</b> All Samples / Pesticide detections noted on pages 8 and 9 of this validation report.	J/Estimated	These pesticides were reported at concentrations between the method detection limit and the reporting limit. Accuracy in this portion of the calibration curve may be limited.



Sample Identification(s) / Analyte(s)	Data Qualifier(s)	Reason(s) For Qualification
<b>Pesticides</b> SB-2, SB-4, SB-6, SB-8, SB-10, SB-14 and DUP 1 / <b>beta-BHC</b>	U/Non-detect at the concentrations reported	beta-BHC was detected in soil samples at concentrations within five times the concentration detected in the method blank. Due to potential blank contamination bias, beta-BHC detections may be the result of blank contamination bias.
<b>Pesticides</b> SB-7 and DUP 1 SB-11 and DUP 2 / Duplicate samples with Bolded RPDs as shown in table on page 10 of this report.	J/Estimated for detections.  UJ/Estimated and non-detect at the reporting limit stated for non-detects	Poor precision between results of primary and duplicate samples. RPDs exceed 50 percent.
<b>TAL Metals</b> SB-7 and DUP 1 SB-11 and DUP 2 / Duplicate samples with Bolded RPDs as shown in table on page 15 of this report.	J/Estimated for detections.	Poor precision between results of primary and duplicate samples. RPDs exceed 50 percent.
<b>TAL Metals</b> All soil samples based on project specific matrix spike recoveries  <b>Aluminum / High bias</b> <b>Antimony / Low bias</b> <b>Manganese / High bias</b> <b>Iron / High bias</b>	J/Estimated for detections  “UJ/Estimated and non-detect at the reporting limits stated” for antimony NDs	MS and MSD recoveries for these metals are out of control limits. Sample results for the metals listed may be biased high or low (for antimony) as noted..

VALIDATION  
PERFORMED BY:

William W. Huskie, Consulting Geochemist

SIGNATURE: \_\_\_\_\_



DATE: June 20, 2024

# RIDGEWOOD BERM SOIL SAMPLING – LEACHATE RESULTS

## VALIDATION OF LABORATORY RESULTS SGS LABORATORY (DAYTON, NJ)

LABORATORY REPORT # JD87833R DATED JUNE 10, 2024

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### INTRODUCTION

Matrix New World Engineering (Matrix) collected several soil samples and associated field duplicates on May 3, 2024. Samples were relinquished to an SGS Laboratory (SGS) courier, and then transported to SGS Laboratory, located in Dayton, New Jersey on the day of sampling. After initial analyses, subsequent Synthetic Precipitation Leaching Procedure (SPLP) analyses were further requested for selected samples. The validation of these SPLP analyses is described in this report.

Sample identifications and requested analyses are listed below.

Matrix Sample IDs	Laboratory Sample IDs	Analyses Requested	Analytical Methods
SB-1 SB-9	JD87833-1R JD87833-9R	SPLP Lead and SPLP Mercury	SPLP SW846 1312 leaching followed by Method 6010D analysis for lead and 7470A analysis for mercury
SB-11	JD87833-11R	SPLP Lead	SPLP SW846 1312 leaching followed by Method 6010D analysis for lead
SB-4 SB-5 SB-6	JD87833-4R JD87833-5R JD87833-6R	SPLP SVOCs Benzo(a)anthracene only	SPLP SW846 1312 for leaching followed by Method 8270E SIM
SB-14	JD87833-14R	SPLP Mercury	SPLP SW846 1312 leaching followed by Method 7470A analysis for mercury

SPLP = Synthetic Precipitation Leaching Procedure  
SVOCs – Semi volatile Organic Compounds  
SIM – Selected ion monitoring

Samples were received under proper chain of custody in two coolers and were properly chilled at 2.1 to 2.2 degrees Celsius

Quality Control for the soil samples and SPLP extracts is evaluated in the following checklist tables and comments. A summary of data quality for the samples analyzed is provided at the end of this validation report.

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**VALIDATION CHECKLIST SUMMARY  
RIDGEWOOD BERM SOIL SAMPLING**

**SPLP SVOCs  
BENZO(A)ANTHRACENE BY METHOD 8270E**

REQUIREMENTS	REPORTED		PERFORMANCE ACCEPTABLE		DATA QUALIFIED - COMMENTS
	NO	YES	NO	YES	
<b>GAS CHROMATOGRAPHY/ MASS SPECTROMETRY (GC/MS)</b>					
1. Holding times		X	X		Yes
2. Detection limits		X		X	Yes – See note #2
3. Blanks					
A. Laboratory Method Blanks		X		X	
4. Laboratory Control Sample (LCS) %R		X	X		Yes
5. LCS Duplicate %R and (RPD)		X	X	X	Yes
6. Matrix Spike (MS) %R	X	X		X	
7. MS Duplicate (MSD) %R and (RPD)	X			X	
8. Surrogate Recoveries (%R)		X		X	See notes
9. Field Duplicate Comparison	X			X	
10. Results Quantitation		X		X	See notes

%R - percent recovery

RPD - relative percent difference

CCV – continuing calibration verification

COMMENTS: Performance was acceptable, with the following exceptions and/or notes.

- 1) Extractions for SPLP SVOC analyses were performed on May 27, 2024 and on May 31, 2024. The extraction holding time is 14 days from date of field collection. Therefore, all extraction times are exceeded by at least 10 days, and may compromise the sample results. SVOC analyses were performed by June 1, 2024, within the 40 day holding time after extraction. Analysis holding times were met.
- 2) No sample dilutions were required for analysis of SPLP SVOCs. All reporting limits are acceptable, with the following considerations. **Benzo(a)anthracene was reported at concentrations between the method detection limit (MDL) and the reporting limit in two soil sample. SGS laboratory flagged these samples with a J” qualifier. Due to limited accuracy in this portion of the calibration range, these SVOC result are qualified as J/Estimated (pending the results of the blank evaluation), as follows:**

<u>Sample ID</u>	<u>Qualified Result (ug/L)</u>
SB-4	Benzo(a)anthracene = 0.0785 <i>J</i>
SB-5	Benzo(a)anthracene = 0.0483 <i>J</i>

- 3) SGS provided results from two method blanks in support of the SPLP extract analyses for Benzo(a)anthracene. Results from two additional leachate blanks were also provided. No Benzo(a)anthracene was detected in any of the blanks. **Surrogate recoveries were low in some method blanks, demonstrating potential low bias for the method.**
  
- 4-5) SGS provided results from two sets of leachate matrix laboratory control sample (LCS) analyses (identified as blank spike analyses) in support of the Benzo(a)anthracene analyses. LCS recoveries were low at 23 to 29 percent (lower control limit of 33 percent). One LCS recovery was acceptable, resulting in poor precision between LCS and LCS duplicate results. **Precision and accuracy, as demonstrated by these analyses are not acceptable.**
  
- 6-7) SGS did not provide results from matrix spike (MS) or MSD duplicate analyses in support of the SVOC analyses.
  
- 8) Three surrogates were spiked into each soil sample in support of the SVOC leachate analyses. Surrogate recoveries were acceptable from run #1 analyses, ranging from 37 to 107 percent (various control limits). For run #2 of sample SB-4, two surrogate recoveries were low at 11 and 16 percent (lower control limit of 18 percent). Run #2 was a confirmation run due to low LCS and LSCD recoveries.
  
- 9) Field duplicate samples were not submitted in support of the leachate analyses.
  
- 10) No anomalies were noted with respect to results SVOC quantitation or reporting, other than instances of low bias noted and the missed extraction holding times.

**VALIDATION CHECKLIST SUMMARY  
RIDGEWOOD BERM SOIL SAMPLING**

**SPLP METALS  
EPA METHODS 6010D AND 7471B**

REQUIREMENTS	REPORTED / EVALUATED		PERFORMANCE ACCEPTABLE		DATA QUALIFIED - COMMENTS
	NO	YES	NO	YES	
<b>INDUCTIVELY COUPLED PLASMA / COLD VAPOR AA</b>					
1. Holding times / Preservation		X		X	
2. Detection limits / Dilutions		X		X	
3. Blanks					
A. Calibration Blanks		X		X	
B. Method Blanks		X		X	
4. Initial and Continuing Calibration %R		X		X	
5. Interference check sample recoveries		X		X	
6. Matrix Spike (MS) %R		X		X	
7. MS Duplicate (MSD) %R and RPD		X		X	
8. LCS and LCSD %R and RPD		X		X	
9. Serial Dilution Analyses		X		X	
10. Field/Lab Duplicate Comparison (RPD)	X			X	
11. Results Quantitation		X		X	

%R - percent recovery

RPD - relative percent difference

COMMENTS: Performance was acceptable, with the following exceptions and/or notes:

- 1) The soil samples for analysis of lead and mercury were prepared by May 24, 2024 (May 23, 2024 for mercury) and were analyzed within the 6 month holding times by May 30, 2024 (within 28 days for mercury on May 28, 2024). Extraction and analysis holding times were met.
- 2) No sample dilutions were required for lead or mercury in leachates. No metals detections were reported at concentrations between the MDL and RL.
- 3) Results from numerous sets of initial and continuing calibration blanks were provided in support of the lead and mercury analyses. Results for these blanks were presented in aqueous units. No metals were detected at concentrations exceeding the RL.  
  
One set of TCLP leachate blank results were provided with no target metals detected at concentrations exceeding the RL.
- 4) Results from several sets of initial and continuing calibration analyses were provided in support of the lead and mercury analyses. All ICV and CCV standard recoveries

were within control limits of 90-110 percent. Results from high end (typically 8,000 ug/L) calibration standards were provided with acceptable recoveries between 90 and 110 percent. Results from low end calibration standards were also reported and were within control limits.

- 5) Results from ICP interference check samples were provided in support of lead. ICP interference check sample recoveries were acceptable, within control limits of 80-20 percent.
- 6-7) SGS provided results from project specific (spikes on samples SB-1 and SB-14) matrix spike (MS) and MSD duplicate analyses in support of the lead and mercury analyses. MS and MSD recoveries were acceptable.
- 8) SGS provided results from aqueous matrix LCS analyses in support of the lead and mercury analyses. The LCS recoveries were acceptable (control limits of 80-120 percent).

SGS provided one set of TCLP LCS results. LCS recoveries were acceptable.

- 9) SGS provided results from one set of serial dilution analyses performed on project sample SB-1 in support of lead. Percent differences between the initial result and the 5 times serial dilution result were less the control limit of 10 percent for all metals results where the initial result was greater than 50 times the instrument detection limit,
- 10) Field duplicate samples were not submitted in support of the leachate analyses.
- 11) No anomalies were noted with respect to the lead or mercury reporting.

**RIDGEWOOD BERM SOIL SAMPLING – LEACHATE ANALYSES**

**VALIDATION OF LABORATORY RESULTS  
SGS LABORATORY (DAYTON, NJ)**

**LABORATORY REPORT # JD87833R DATED JUNE 10, 2024**

Matrix New World Engineering (Matrix) collected several soil samples and associated field duplicates on May 3, 2024. After initial analyses, subsequent Synthetic Precipitation Leaching Procedure (SPLP) analyses were further requested for selected samples. The validation of these SPLP analyses is described in this report. The sample results have been validated in accordance with the Project QAPP requirements, and professional judgment of the data reviewer.

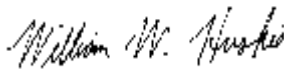
The QC information evaluated has been described in the preceding pages. Based on this review, data provided for the soil samples collected are determined to be quantitative, with the exceptions noted in the following table.

Validation Summary

<b>Sample Identification(s) / Analyte(s)</b>	<b>Data Qualifier(s)</b>	<b>Reason(s) For Qualification</b>
SB-4 and SB-5 / Benzo(a)anthracene	J/Estimated	Benzo(a)anthracene was reported at concentrations between the method detection limit and the reporting limit. Accuracy in this portion of the calibration curve may be limited.
SB-4, SB-5 and SB-6 / Benzo(a)anthracene	J/Estimated	Potential low bias demonstrated by missed extraction holding timers, low LCS recoveries, and low surrogate recoveries. Identification of benzo(a)anthracene may be accurate, but the magnitude of the sample results is not determined to be reliable.

VALIDATION  
PERFORMED BY:

William W. Huskie, Consulting Geochemist

SIGNATURE: 

DATE: June 13, 2024

**APPENDIX E**  
**Analytical Laboratory Reports**



The results set forth herein are provided by SGS North America Inc.

*e-Hardcopy 2.0*  
*Automated Report*

## Technical Report for

Matrix New World Engineering, Inc.

Ridgewood Berm Sampling, Ridgewood, NJ

23-1429

SGS Job Number: JD87833

Sampling Date: 05/03/24

Report to:

Matrix New World Engineering, Inc.  
26 Columbia Turnpike  
Florham Park, NJ 07932  
mclelland@mnwe.com

ATTN: Melissa Clelland

Total number of pages in report: **1695**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable unless noted in the narrative, comments or footnotes.

A handwritten signature in blue ink, appearing to read 'D. Chastain'.

David Chastain  
General Manager

Client Service contact: Tammy McCloskey 732-329-0200

Certifications: NJ(12129),NY(10983),CA,CO,CT,FL,HI,IL,IN,KY,LA (120428),MA,MD,ME,MN,NC,NH,NV,AK (UST-103),AZ (AZ0786),PA(68-00408),RI,SC,TX (T104704234),UT,VA,WA,WV

This report shall not be reproduced, except in its entirety, without the written approval of SGS.  
Test results relate only to samples analyzed.

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## Sample Summary

Matrix New World Engineering, Inc.

**Job No:** JD87833

Ridgewood Berm Sampling, Ridgewood, NJ

Project No: 23-1429

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
---------------	----------------	---------	----------	-------------	------	------------------

This report contains results reported as ND = Not detected. The following applies:  
 Organics ND = Not detected above the MDL

JD87833-1	05/03/24	08:30 KM	05/03/24	SO	Soil	SB-1
JD87833-2	05/03/24	08:35 KM	05/03/24	SO	Soil	SB-2
JD87833-3	05/03/24	08:40 KM	05/03/24	SO	Soil	SB-3
JD87833-4	05/03/24	09:00 KM	05/03/24	SO	Soil	SB-4
JD87833-5	05/03/24	09:05 KM	05/03/24	SO	Soil	SB-5
JD87833-6	05/03/24	09:10 KM	05/03/24	SO	Soil	SB-6
JD87833-7	05/03/24	09:20 KM	05/03/24	SO	Soil	SB-7
JD87833-8	05/03/24	09:30 KM	05/03/24	SO	Soil	SB-8
JD87833-9	05/03/24	09:35 KM	05/03/24	SO	Soil	SB-9
JD87833-10	05/03/24	09:50 KM	05/03/24	SO	Soil	SB-10
JD87833-11	05/03/24	10:00 KM	05/03/24	SO	Soil	SB-11
JD87833-12	05/03/24	10:15 KM	05/03/24	SO	Soil	SB-12

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



## Sample Summary

(continued)

Matrix New World Engineering, Inc.

**Job No:** JD87833

Ridgewood Berm Sampling, Ridgewood, NJ

Project No: 23-1429

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
JD87833-13	05/03/24	10:30 KM	05/03/24	SO	Soil	SB-13
JD87833-14	05/03/24	10:35 KM	05/03/24	SO	Soil	SB-14
JD87833-15	05/03/24	00:00 KM	05/03/24	SO	Soil	DUPE 1
JD87833-16	05/03/24	00:00 KM	05/03/24	SO	Soil	DUPE 2
JD87833-17	05/03/24	11:00 KM	05/03/24	AQ	Field Blank Soil	FIELD BLANK
JD87833-17R	05/03/24	11:00 KM	05/03/24	AQ	Field Blank Soil	FIELD BLANK

---

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

## CASE NARRATIVE / CONFORMANCE SUMMARY

2

**Client:** Matrix New World Engineering, Inc.

**Job No:** JD87833

**Site:** Ridgewood Berm Sampling, Ridgewood, NJ

**Report Date** 5/16/2024 7:38:31 AM

On 05/03/2024, 16 sample(s), 0 Trip Blank(s), 0 Equip. Blank(s) and 1 Field Blank(s) were received at SGS North America Inc. (SGS) at a temperature of 2.6 °C. The samples were intact and properly preserved, unless noted below. An SGS Job Number of JD87833 was assigned to the project. The lab sample ID, client sample ID, and date of sample collection are detailed in the report's Results Summary.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

### MS Semi-volatiles By Method SW846 8270E

**Matrix:** AQ

**Batch ID:** OP54467

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- The blank spike (BS) recovery(s) of 2,3,4,6-Tetrachlorophenol, 2,4-Dinitrophenol, 4,6-Dinitro-o-cresol, 4-Nitrophenol are outside control limits.
- OP54467-BSD for 3,3'-Dichlorobenzidine: Analytical precision exceeds in-house control limits.
- JD87833-17 for Pentachlorophenol: Associated CCV outside of control limits high, sample was ND.
- OP54467-BS1 for 2,3,4,6-Tetrachlorophenol: Outside of in house control limits.
- OP54467-BS1 for 2,4-Dinitrophenol: Outside of in house control limits.
- OP54467-BS1 for 4-Nitrophenol: Outside of in house control limits.
- JD87833-17 for 2,3,4,6-Tetrachlorophenol: Associated CCV outside of control limits high, sample was ND.
- JD87833-17 for 2,4-Dinitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD87833-17 for 2-Nitrophenol: Associated CCV outside of control limits high, sample was ND.
- JD87833-17 for 3,3'-Dichlorobenzidine: Associated CCV outside of control limits high, sample was ND.
- JD87833-17 for 4,6-Dinitro-o-cresol: Associated CCV outside of control limits high, sample was ND.
- JD87833-17 for Butyl benzyl phthalate: Associated CCV outside of control limits high, sample was ND.
- JD87833-17 for Di-n-octyl phthalate: Associated CCV outside of control limits high, sample was ND.
- OP54467-BS1 for 4,6-Dinitro-o-cresol: Outside of in house control limits.

**Matrix:** AQ

**Batch ID:** OP54618

- The data for SW846 8270E meets quality control requirements.
- The following samples were extracted outside of holding time for method SW846 8270E: JD87833-17 Sample extracted outside the holding time. Confirmation run.
- JD87833-17: Sample extracted outside the holding time. Confirmation run.

**Matrix:** SO

**Batch ID:** OP54460

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) JD87833-1MS, JD87833-1MSD were used as the QC samples indicated.
- Sample(s) JD87833-10, JD87833-11, JD87833-15, JD87833-2, JD87833-4, JD87833-5, JD87833-6, JD87833-8 have compound(s) reported with a "B" qualifier, indicating analyte is found in the associated method blank.
- JD87833-3: Dilution required due to matrix interference.
- JD87833-11: Dilution required due to matrix interference.

Thursday, May 16, 2024

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## MS Semi-volatiles By Method SW846 8270E

**Matrix:** SO

**Batch ID:** OP54460

- JD87833-3 for Butyl benzyl phthalate: Associated CCV outside of control limits high, sample was ND.
- JD87833-11 for Butyl benzyl phthalate: Associated CCV outside of control limits high. Estimated value, due to corresponding failure in the batch associated CCV.
- JD87833-11 for Pentachlorophenol: Associated CCV outside of control limits high, sample was ND.
- JD87833-15 for Butyl benzyl phthalate: Associated CCV outside of control limits high, sample was ND.
- JD87833-2 for Pentachlorophenol: Associated CCV outside of control limits high, sample was ND.
- JD87833-2 for Butyl benzyl phthalate: Associated CCV outside of control limits high, sample was ND.
- JD87833-9 for Pentachlorophenol: Associated CCV outside of control limits high, sample was ND.
- JD87833-4 for Butyl benzyl phthalate: Associated CCV outside of control limits high, sample was ND.
- JD87833-14 for Butyl benzyl phthalate: Associated CCV outside of control limits high, sample was ND.
- JD87833-15 for Pentachlorophenol: Associated CCV outside of control limits high, sample was ND.
- JD87833-9 for Butyl benzyl phthalate: Associated CCV outside of control limits high, sample was ND.
- JD87833-1 for Pentachlorophenol: Associated CCV outside of control limits high, sample was ND.
- JD87833-7 for Pentachlorophenol: Associated CCV outside of control limits high, sample was ND.
- JD87833-14 for Pentachlorophenol: Associated CCV outside of control limits high, sample was ND.
- JD87833-7 for Butyl benzyl phthalate: Associated CCV outside of control limits high, sample was ND.
- JD87833-4 for Pentachlorophenol: Associated CCV outside of control limits high, sample was ND.
- JD87833-1 for Butyl benzyl phthalate: Associated CCV outside of control limits high, sample was ND.
- JD87833-16 for Pentachlorophenol: Associated CCV outside of control limits high, sample was ND.
- JD87833-16 for Butyl benzyl phthalate: Associated CCV outside of control limits high, sample was ND.
- JD87833-13 for Pentachlorophenol: Associated CCV outside of control limits high, sample was ND.
- JD87833-13 for Butyl benzyl phthalate: Associated CCV outside of control limits high, sample was ND.
- JD87833-12 for Pentachlorophenol: Associated CCV outside of control limits high, sample was ND.
- JD87833-12 for Butyl benzyl phthalate: Associated CCV outside of control limits high, sample was ND.
- JD87833-6 for Butyl benzyl phthalate: Associated CCV outside of control limits high, sample was ND.
- JD87833-10 for Pentachlorophenol: Associated CCV outside of control limits high, sample was ND.
- JD87833-5 for Pentachlorophenol: Associated CCV outside of control limits high, sample was ND.
- JD87833-5 for Butyl benzyl phthalate: Associated CCV outside of control limits high, sample was ND.
- JD87833-6 for Pentachlorophenol: Associated CCV outside of control limits high, sample was ND.
- JD87833-8 for Butyl benzyl phthalate: Associated CCV outside of control limits high, sample was ND.
- JD87833-10 for Butyl benzyl phthalate: Associated CCV outside of control limits high, sample was ND.
- JD87833-8 for Pentachlorophenol: Associated CCV outside of control limits high, sample was ND.

Thursday, May 16, 2024

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## GC/LC Semi-volatiles By Method SW846 8081B

**Matrix:** AQ

**Batch ID:** OP54399

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) JD87833-17 have compound(s) reported with a “B” qualifier, indicating analyte is found in the associated method blank.
- JD87833-17: Detection likely due to lab contamination.
- OP54399-MB1: Detection due to lab contamination.

**Matrix:** AQ

**Batch ID:** OP54554

- All method blanks for this batch meet method specific criteria.
- The following samples were extracted outside of holding time for method SW846 8081B: JD87833-17R Sample extracted outside the holding time. Detections likely due to lab contamination.
- JD87833-17R: Sample extracted outside the holding time. Detections likely due to lab contamination.
- OP54554-MB1: Detection due to lab contamination.
- OP54554-BSD for Endosulfan sulfate: Analytical precision exceeds in-house control limits.
- OP54554-BSD for gamma-BHC (Lindane): Analytical precision exceeds in-house control limits.
- OP54554-BSD for 4,4'-DDE: Analytical precision exceeds in-house control limits.
- OP54554-BSD for Endrin ketone: Analytical precision exceeds in-house control limits.
- OP54554-BSD for Endrin aldehyde: Analytical precision exceeds in-house control limits.
- OP54554-BSD for Endrin: Analytical precision exceeds in-house control limits.
- OP54554-BSD for Endosulfan-II: Analytical precision exceeds in-house control limits.
- OP54554-BSD for Endosulfan-I: Analytical precision exceeds in-house control limits.
- OP54554-BSD for gamma-Chlordane: Analytical precision exceeds in-house control limits.
- OP54554-BSD for Dieldrin: Analytical precision exceeds in-house control limits.
- OP54554-BSD for delta-BHC: Analytical precision exceeds in-house control limits.
- OP54554-BSD for Chlordane (alpha and gamma): Analytical precision exceeds in-house control limits.
- OP54554-BSD for beta-BHC: Analytical precision exceeds in-house control limits.
- OP54554-BSD for alpha-Chlordane: Analytical precision exceeds in-house control limits.
- OP54554-BSD for alpha-BHC: Analytical precision exceeds in-house control limits.
- OP54554-BSD for 4,4'-DDT: Analytical precision exceeds in-house control limits.
- OP54554-BSD for 4,4'-DDD: Analytical precision exceeds in-house control limits.
- OP54554-BSD for Heptachlor epoxide: Analytical precision exceeds in-house control limits.
- OP54554-BSD for Aldrin: Analytical precision exceeds in-house control limits.
- OP54554-BSD for Heptachlor: Analytical precision exceeds in-house control limits.

**Matrix:** SO

**Batch ID:** OP54452

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) JD87772-1MS, JD87772-1MSD, OP54452-MSMSD were used as the QC samples indicated.
- Sample(s) JD87833-10, JD87833-14, JD87833-15, JD87833-3, JD87833-4, JD87833-7, JD87833-8 have compound(s) reported with a “B” qualifier, indicating analyte is found in the associated method blank.
- OP54452-MB1: Detections due to lab contamination.
- JD87833-16 for 4,4'-DDD: More than 40 % RPD for detected concentrations between the two GC columns.
- JD87833-5 for alpha-Chlordane: More than 40 % RPD for detected concentrations between the two GC columns.
- JD87833-10 for 4,4'-DDT: More than 40 % RPD for detected concentrations between the two GC columns.

Thursday, May 16, 2024

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## GC/LC Semi-volatiles By Method SW846 8081B

**Matrix:** SO

**Batch ID:** OP54452

- JD87833-10 for alpha-Chlordane: More than 40 % RPD for detected concentrations between the two GC columns.
- JD87833-14 for alpha-Chlordane: More than 40 % RPD for detected concentrations between the two GC columns.
- JD87833-14 for beta-BHC: More than 40 % RPD for detected concentrations between the two GC columns.
- JD87833-14 for Heptachlor epoxide: More than 40 % RPD for detected concentrations between the two GC columns.
- JD87833-14 for 4,4'-DDT: Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.
- JD87833-15 for 4,4'-DDD: More than 40 % RPD for detected concentrations between the two GC columns.
- JD87833-15 for beta-BHC: More than 40 % RPD for detected concentrations between the two GC columns.
- JD87833-8 for beta-BHC: More than 40 % RPD for detected concentrations between the two GC columns.
- JD87833-16 for 4,4'-DDT: Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only. More than 40% RPD for detected concentrations between the two GC columns.
- JD87833-11 for 4,4'-DDT: Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.
- JD87833-11 for gamma-Chlordane: More than 40 % RPD for detected concentrations between the two GC columns.
- JD87833-11 for alpha-Chlordane: More than 40 % RPD for detected concentrations between the two GC columns.
- JD87833-5 for 4,4'-DDD: More than 40 % RPD for detected concentrations between the two GC columns.
- JD87833-15 for 4,4'-DDT: More than 40 % RPD for detected concentrations between the two GC columns.
- JD87833-4 for 4,4'-DDE: More than 40 % RPD for detected concentrations between the two GC columns.
- OP54452-BS1 for 4,4'-DDT: Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.
- OP54452-BS1 for Methoxychlor: Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.
- JD87833-1 for alpha-Chlordane: More than 40 % RPD for detected concentrations between the two GC columns.
- JD87833-1 for 4,4'-DDT: Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only. More than 40% RPD for detected concentrations between the two GC columns.
- JD87833-3 for 4,4'-DDE: More than 40 % RPD for detected concentrations between the two GC columns.
- JD87833-3 for 4,4'-DDT: More than 40 % RPD for detected concentrations between the two GC columns.
- JD87833-3 for beta-BHC: More than 40 % RPD for detected concentrations between the two GC columns.
- JD87833-3 for Dieldrin: More than 40 % RPD for detected concentrations between the two GC columns.
- JD87833-8 for Heptachlor epoxide: More than 40 % RPD for detected concentrations between the two GC columns.
- JD87833-4 for 4,4'-DDD: More than 40 % RPD for detected concentrations between the two GC columns.
- JD87833-8 for gamma-Chlordane: More than 40 % RPD for detected concentrations between the two GC columns.
- JD87833-4 for 4,4'-DDT: More than 40 % RPD for detected concentrations between the two GC columns.
- JD87833-4 for beta-BHC: More than 40 % RPD for detected concentrations between the two GC columns.
- JD87833-4 for Heptachlor epoxide: More than 40 % RPD for detected concentrations between the two GC columns.
- JD87833-7 for 4,4'-DDT: More than 40 % RPD for detected concentrations between the two GC columns.
- JD87833-7 for beta-BHC: More than 40 % RPD for detected concentrations between the two GC columns.
- JD87833-7 for Dieldrin: More than 40 % RPD for detected concentrations between the two GC columns.
- JD87833-7 for Heptachlor epoxide: More than 40 % RPD for detected concentrations between the two GC columns.
- JD87833-8 for 4,4'-DDE: More than 40 % RPD for detected concentrations between the two GC columns.
- JD87833-8 for 4,4'-DDT: More than 40 % RPD for detected concentrations between the two GC columns.
- JD87833-3 for Heptachlor epoxide: More than 40 % RPD for detected concentrations between the two GC columns.

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## GC/LC Semi-volatiles By Method SW846 8082A

**Matrix:** AQ

**Batch ID:** OP54400

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- JD87833-17 for Aroclor 1260: Associated CCV outside of control limits high, sample was ND.

**Matrix:** SO

**Batch ID:** OP54453

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD87772-2MS, JD87772-2MSD, OP54453-MSMSD were used as the QC samples indicated.
- OP54453-BS1 for Aroclor 1260: Reported from the 1st signal. The %D of the CCV on the 2nd signal exceeds the method criteria of 20%, so it being used for confirmation only.
- OP54453-BS1 for Aroclor 1016: Reported from the 1st signal. The %D of the CCV on the 2nd signal exceeds the method criteria of 20%, so it being used for confirmation only.

## Metals Analysis By Method SW846 6010D

**Matrix:** AQ

**Batch ID:** MP46431

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD87831-1MS, JD87831-1MSD, JD87831-1SDL were used as the QC samples for the metals analysis.
- The matrix spike (MS) recovery(s) of Iron, Magnesium are outside control limits. Spike recovery indicates possible matrix interference.
- The matrix spike duplicate (MSD) recovery(s) of Calcium, Iron, Magnesium are outside control limits. Probable cause due to matrix interference.
- The serial dilution RPD(s) for Antimony, Beryllium, Cadmium, Copper, Zinc are outside control limits for sample MP46431-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- MP46431-SD1 for Zinc: Serial dilution indicates possible matrix interference.

**Matrix:** SO

**Batch ID:** MP46464

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD87833-14MS, JD87833-14MSD, JD87833-14PS, JD87833-14SDL were used as the QC samples for the metals analysis.
- The matrix spike (MS) recovery(s) of Aluminum, Antimony, Manganese are outside control limits. Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.
- The matrix spike duplicate (MSD) recovery(s) of Antimony are outside control limits. Probable cause due to matrix interference.
- The serial dilution RPD(s) for Beryllium, Cadmium, Silver are outside control limits for sample MP46464-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

## Metals Analysis By Method SW846 7470A

**Matrix:** AQ

**Batch ID:** MP46448

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD87813-1FMS, JD87813-1FMSD were used as the QC samples for the metals analysis.

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## Summary of Hits

**Job Number:** JD87833  
**Account:** Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Collected:** 05/03/24



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
<b>JD87833-1</b>	<b>SB-1</b>					
Phenol		0.118	0.090	0.023	mg/kg	SW846 8270E
Acenaphthene		0.0180 J	0.045	0.015	mg/kg	SW846 8270E
Acenaphthylene		0.0604	0.045	0.023	mg/kg	SW846 8270E
Anthracene		0.0715	0.045	0.028	mg/kg	SW846 8270E
Benzo(a)anthracene		0.233	0.045	0.013	mg/kg	SW846 8270E
Benzo(a)pyrene		0.243	0.045	0.020	mg/kg	SW846 8270E
Benzo(b)fluoranthene		0.342	0.045	0.020	mg/kg	SW846 8270E
Benzo(g,h,i)perylene		0.182	0.045	0.022	mg/kg	SW846 8270E
Benzo(k)fluoranthene		0.114	0.045	0.021	mg/kg	SW846 8270E
1,1'-Biphenyl		0.0062 J	0.090	0.0061	mg/kg	SW846 8270E
Benzaldehyde		0.0172 J	0.22	0.011	mg/kg	SW846 8270E
Carbazole		0.0305 J	0.090	0.0065	mg/kg	SW846 8270E
Chrysene		0.273	0.045	0.014	mg/kg	SW846 8270E
Dibenzo(a,h)anthracene		0.0482	0.045	0.020	mg/kg	SW846 8270E
Di-n-butyl phthalate		0.0143 J	0.090	0.0073	mg/kg	SW846 8270E
bis(2-Ethylhexyl)phthalate		0.0804 J	0.090	0.011	mg/kg	SW846 8270E
Fluoranthene		0.487	0.045	0.020	mg/kg	SW846 8270E
Fluorene		0.0243 J	0.045	0.021	mg/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		0.147	0.045	0.021	mg/kg	SW846 8270E
Phenanthrene		0.243	0.045	0.015	mg/kg	SW846 8270E
Pyrene		0.495	0.045	0.014	mg/kg	SW846 8270E
Total TIC, Semi-Volatile		42.67 J			mg/kg	
alpha-Chlordane <sup>a</sup>		0.00048 J	0.00053	0.000071	mg/kg	SW846 8081B
Chlordane (alpha and gamma)		0.00048 J	0.00053	0.000071	mg/kg	SW846 8081B
Dieldrin		0.00043 J	0.00053	0.000085	mg/kg	SW846 8081B
4,4' -DDD		0.0015	0.00053	0.000055	mg/kg	SW846 8081B
4,4' -DDE		0.0025	0.00053	0.000063	mg/kg	SW846 8081B
4,4' -DDT <sup>b</sup>		0.0022	0.00053	0.000092	mg/kg	SW846 8081B
Heptachlor epoxide		0.00035 J	0.00053	0.000095	mg/kg	SW846 8081B
Aluminum		11000	69		mg/kg	SW846 6010D
Arsenic		5.1	2.7		mg/kg	SW846 6010D
Barium		53.6	27		mg/kg	SW846 6010D
Beryllium		0.40	0.27		mg/kg	SW846 6010D
Calcium		3000	690		mg/kg	SW846 6010D
Chromium		18.0	1.4		mg/kg	SW846 6010D
Copper		18.4	3.4		mg/kg	SW846 6010D
Iron		15600	69		mg/kg	SW846 6010D
Lead		169	2.7		mg/kg	SW846 6010D
Magnesium		2070	690		mg/kg	SW846 6010D
Manganese		333	2.1		mg/kg	SW846 6010D
Mercury		0.29	0.044		mg/kg	SW846 7471B
Nickel		12.6	5.5		mg/kg	SW846 6010D
Vanadium		32.1	6.9		mg/kg	SW846 6010D

## Summary of Hits

**Job Number:** JD87833  
**Account:** Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Collected:** 05/03/24



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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Zinc		74.8	14		mg/kg	SW846 6010D
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**JD87833-2 SB-2**

Acenaphthene		0.0494	0.036	0.012	mg/kg	SW846 8270E
Acenaphthylene		0.122	0.036	0.018	mg/kg	SW846 8270E
Anthracene		0.213	0.036	0.022	mg/kg	SW846 8270E
Benzo(a)anthracene		0.519	0.036	0.010	mg/kg	SW846 8270E
Benzo(a)pyrene		0.481	0.036	0.016	mg/kg	SW846 8270E
Benzo(b)fluoranthene		0.534	0.036	0.016	mg/kg	SW846 8270E
Benzo(g,h,i)perylene		0.304	0.036	0.018	mg/kg	SW846 8270E
Benzo(k)fluoranthene		0.161	0.036	0.017	mg/kg	SW846 8270E
1,1'-Biphenyl		0.0192 J	0.072	0.0050	mg/kg	SW846 8270E
Carbazole		0.0246 JB	0.072	0.0052	mg/kg	SW846 8270E
Chrysene		0.496	0.036	0.011	mg/kg	SW846 8270E
Dibenzo(a,h)anthracene		0.0819	0.036	0.016	mg/kg	SW846 8270E
Fluoranthene		0.956	0.036	0.016	mg/kg	SW846 8270E
Fluorene		0.192	0.036	0.017	mg/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		0.250	0.036	0.017	mg/kg	SW846 8270E
2-Methylnaphthalene		0.0782	0.036	0.0082	mg/kg	SW846 8270E
Naphthalene		0.0209 J	0.036	0.010	mg/kg	SW846 8270E
Phenanthrene		0.956	0.036	0.012	mg/kg	SW846 8270E
Pyrene		1.12	0.036	0.012	mg/kg	SW846 8270E
Total TIC, Semi-Volatile		5.57 J			mg/kg	
Aluminum		5830	54		mg/kg	SW846 6010D
Arsenic		2.4	2.2		mg/kg	SW846 6010D
Barium		24.2	22		mg/kg	SW846 6010D
Beryllium		0.24	0.22		mg/kg	SW846 6010D
Calcium		1240	540		mg/kg	SW846 6010D
Chromium		8.7	1.1		mg/kg	SW846 6010D
Copper		7.5	2.7		mg/kg	SW846 6010D
Iron		10200	54		mg/kg	SW846 6010D
Lead		13.7	2.2		mg/kg	SW846 6010D
Magnesium		1340	540		mg/kg	SW846 6010D
Manganese		164	1.6		mg/kg	SW846 6010D
Mercury		0.054	0.030		mg/kg	SW846 7471B
Nickel		6.6	4.4		mg/kg	SW846 6010D
Vanadium		16.9	5.4		mg/kg	SW846 6010D
Zinc		26.9	11		mg/kg	SW846 6010D

**JD87833-3 SB-3**

Acenaphthene <sup>c</sup>		0.133	0.073	0.025	mg/kg	SW846 8270E
Acenaphthylene <sup>c</sup>		0.182	0.073	0.037	mg/kg	SW846 8270E
Anthracene <sup>c</sup>		0.539	0.073	0.045	mg/kg	SW846 8270E

## Summary of Hits

**Job Number:** JD87833  
**Account:** Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Collected:** 05/03/24



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Benzo(a)anthracene <sup>c</sup>		1.50	0.073	0.021	mg/kg	SW846 8270E
Benzo(a)pyrene <sup>c</sup>		1.46	0.073	0.033	mg/kg	SW846 8270E
Benzo(b)fluoranthene <sup>c</sup>		1.72	0.073	0.032	mg/kg	SW846 8270E
Benzo(g,h,i)perylene <sup>c</sup>		0.902	0.073	0.037	mg/kg	SW846 8270E
Benzo(k)fluoranthene <sup>c</sup>		0.485	0.073	0.034	mg/kg	SW846 8270E
1,1'-Biphenyl <sup>c</sup>		0.0142 J	0.15	0.010	mg/kg	SW846 8270E
Carbazole <sup>c</sup>		0.114 J	0.15	0.011	mg/kg	SW846 8270E
Chrysene <sup>c</sup>		1.29	0.073	0.023	mg/kg	SW846 8270E
Dibenzo(a,h)anthracene <sup>c</sup>		0.230	0.073	0.032	mg/kg	SW846 8270E
Dibenzofuran <sup>c</sup>		0.0867 J	0.15	0.030	mg/kg	SW846 8270E
Fluoranthene <sup>c</sup>		3.15	0.073	0.033	mg/kg	SW846 8270E
Fluorene <sup>c</sup>		0.206	0.073	0.034	mg/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene <sup>c</sup>		0.752	0.073	0.034	mg/kg	SW846 8270E
2-Methylnaphthalene <sup>c</sup>		0.0286 J	0.073	0.017	mg/kg	SW846 8270E
Naphthalene <sup>c</sup>		0.0345 J	0.073	0.021	mg/kg	SW846 8270E
Phenanthrene <sup>c</sup>		1.73	0.073	0.025	mg/kg	SW846 8270E
Pyrene <sup>c</sup>		3.14	0.073	0.023	mg/kg	SW846 8270E
Total TIC, Semi-Volatile		4.16 J			mg/kg	
beta-BHC <sup>a</sup>		0.00013 JB	0.00042	0.000061	mg/kg	SW846 8081B
alpha-Chlordane		0.00098	0.00042	0.000056	mg/kg	SW846 8081B
gamma-Chlordane		0.00051	0.00042	0.000063	mg/kg	SW846 8081B
Chlordane (alpha and gamma)		0.0015	0.00042	0.000056	mg/kg	SW846 8081B
Dieldrin <sup>a</sup>		0.00012 J	0.00042	0.000067	mg/kg	SW846 8081B
4,4'-DDD		0.00079	0.00042	0.000044	mg/kg	SW846 8081B
4,4'-DDE <sup>a</sup>		0.00045	0.00042	0.000050	mg/kg	SW846 8081B
4,4'-DDT <sup>a</sup>		0.0011	0.00042	0.000073	mg/kg	SW846 8081B
Heptachlor epoxide <sup>a</sup>		0.00018 J	0.00042	0.000075	mg/kg	SW846 8081B
Aluminum		7040	56		mg/kg	SW846 6010D
Arsenic		2.4	2.2		mg/kg	SW846 6010D
Barium		28.8	22		mg/kg	SW846 6010D
Beryllium		0.28	0.22		mg/kg	SW846 6010D
Calcium		1560	560		mg/kg	SW846 6010D
Chromium		9.4	1.1		mg/kg	SW846 6010D
Copper		9.3	2.8		mg/kg	SW846 6010D
Iron		11400	56		mg/kg	SW846 6010D
Lead		13.1	2.2		mg/kg	SW846 6010D
Magnesium		1600	560		mg/kg	SW846 6010D
Manganese		226	1.7		mg/kg	SW846 6010D
Nickel		7.9	4.5		mg/kg	SW846 6010D
Vanadium		20.2	5.6		mg/kg	SW846 6010D
Zinc		29.0	11		mg/kg	SW846 6010D

**JD87833-4      SB-4**

Acenaphthene		0.106	0.038	0.013	mg/kg	SW846 8270E
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## Summary of Hits

**Job Number:** JD87833  
**Account:** Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Collected:** 05/03/24



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Acenaphthylene		0.207	0.038	0.019	mg/kg	SW846 8270E
Anthracene		0.563	0.038	0.023	mg/kg	SW846 8270E
Benzo(a)anthracene		1.55	0.038	0.011	mg/kg	SW846 8270E
Benzo(a)pyrene		1.53	0.038	0.017	mg/kg	SW846 8270E
Benzo(b)fluoranthene		1.81	0.038	0.017	mg/kg	SW846 8270E
Benzo(g,h,i)perylene		0.941	0.038	0.019	mg/kg	SW846 8270E
Benzo(k)fluoranthene		0.505	0.038	0.018	mg/kg	SW846 8270E
1,1'-Biphenyl		0.0087 J	0.076	0.0052	mg/kg	SW846 8270E
Carbazole		0.0690 JB	0.076	0.0055	mg/kg	SW846 8270E
Chrysene		1.44	0.038	0.012	mg/kg	SW846 8270E
Dibenzo(a,h)anthracene		0.247	0.038	0.017	mg/kg	SW846 8270E
Dibenzofuran		0.0509 J	0.076	0.015	mg/kg	SW846 8270E
Fluoranthene		3.22	0.038	0.017	mg/kg	SW846 8270E
Fluorene		0.163	0.038	0.017	mg/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		0.796	0.038	0.018	mg/kg	SW846 8270E
2-Methylnaphthalene		0.0181 J	0.038	0.0085	mg/kg	SW846 8270E
Naphthalene		0.0238 J	0.038	0.011	mg/kg	SW846 8270E
Phenanthrene		1.53	0.038	0.013	mg/kg	SW846 8270E
Pyrene		3.12	0.038	0.012	mg/kg	SW846 8270E
Total TIC, Semi-Volatile		7.61 J			mg/kg	
beta-BHC <sup>a</sup>		0.00014 JB	0.00042	0.000061	mg/kg	SW846 8081B
alpha-Chlordane		0.0012	0.00042	0.000057	mg/kg	SW846 8081B
gamma-Chlordane		0.00046	0.00042	0.000063	mg/kg	SW846 8081B
Chlordane (alpha and gamma)		0.0017	0.00042	0.000057	mg/kg	SW846 8081B
Dieldrin		0.00021 J	0.00042	0.000068	mg/kg	SW846 8081B
4,4'-DDD <sup>a</sup>		0.00040 J	0.00042	0.000044	mg/kg	SW846 8081B
4,4'-DDE <sup>a</sup>		0.00014 J	0.00042	0.000051	mg/kg	SW846 8081B
4,4'-DDT <sup>a</sup>		0.00053	0.00042	0.000074	mg/kg	SW846 8081B
Heptachlor epoxide <sup>a</sup>		0.00024 J	0.00042	0.000076	mg/kg	SW846 8081B
Aluminum		6940	56		mg/kg	SW846 6010D
Arsenic		2.4	2.2		mg/kg	SW846 6010D
Barium		25.8	22		mg/kg	SW846 6010D
Beryllium		0.27	0.22		mg/kg	SW846 6010D
Calcium		1220	560		mg/kg	SW846 6010D
Chromium		8.6	1.1		mg/kg	SW846 6010D
Copper		8.3	2.8		mg/kg	SW846 6010D
Iron		10900	56		mg/kg	SW846 6010D
Lead		17.2	2.2		mg/kg	SW846 6010D
Magnesium		1510	560		mg/kg	SW846 6010D
Manganese		178	1.7		mg/kg	SW846 6010D
Nickel		7.2	4.5		mg/kg	SW846 6010D
Vanadium		18.7	5.6		mg/kg	SW846 6010D
Zinc		26.9	11		mg/kg	SW846 6010D

## Summary of Hits

**Job Number:** JD87833  
**Account:** Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Collected:** 05/03/24



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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**JD87833-5 SB-5**

Acenaphthene	0.147	0.037	0.013	mg/kg	SW846 8270E
Acenaphthylene	0.192	0.037	0.019	mg/kg	SW846 8270E
Anthracene	0.568	0.037	0.022	mg/kg	SW846 8270E
Benzo(a)anthracene	1.85	0.037	0.010	mg/kg	SW846 8270E
Benzo(a)pyrene	1.87	0.037	0.017	mg/kg	SW846 8270E
Benzo(b)fluoranthene	2.04	0.037	0.016	mg/kg	SW846 8270E
Benzo(g,h,i)perylene	1.20	0.037	0.018	mg/kg	SW846 8270E
Benzo(k)fluoranthene	0.728	0.037	0.017	mg/kg	SW846 8270E
1,1'-Biphenyl	0.0130 J	0.073	0.0050	mg/kg	SW846 8270E
Carbazole	0.0723 JB	0.073	0.0053	mg/kg	SW846 8270E
Chrysene	1.54	0.037	0.012	mg/kg	SW846 8270E
Dibenzo(a,h)anthracene	0.287	0.037	0.016	mg/kg	SW846 8270E
Dibenzofuran	0.0929	0.073	0.015	mg/kg	SW846 8270E
Fluoranthene	3.68	0.18	0.082	mg/kg	SW846 8270E
Fluorene	0.166	0.037	0.017	mg/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene	0.974	0.037	0.017	mg/kg	SW846 8270E
2-Methylnaphthalene	0.0200 J	0.037	0.0083	mg/kg	SW846 8270E
Naphthalene	0.0286 J	0.037	0.010	mg/kg	SW846 8270E
Phenanthrene	1.42	0.037	0.012	mg/kg	SW846 8270E
Pyrene	3.41	0.18	0.059	mg/kg	SW846 8270E
Total TIC, Semi-Volatile	9.72 J			mg/kg	
alpha-Chlordane <sup>a</sup>	0.00063 J	0.0021	0.00028	mg/kg	SW846 8081B
Chlordane (alpha and gamma)	0.00063 J	0.0021	0.00028	mg/kg	SW846 8081B
4,4'-DDD <sup>a</sup>	0.00073 J	0.0021	0.00022	mg/kg	SW846 8081B
4,4'-DDT	0.0013 J	0.0021	0.00036	mg/kg	SW846 8081B
Aluminum	7830	57		mg/kg	SW846 6010D
Arsenic	2.4	2.3		mg/kg	SW846 6010D
Barium	29.2	23		mg/kg	SW846 6010D
Beryllium	0.30	0.23		mg/kg	SW846 6010D
Calcium	1450	570		mg/kg	SW846 6010D
Chromium	9.8	1.1		mg/kg	SW846 6010D
Copper	9.1	2.8		mg/kg	SW846 6010D
Iron	11900	57		mg/kg	SW846 6010D
Lead	9.8	2.3		mg/kg	SW846 6010D
Magnesium	1880	570		mg/kg	SW846 6010D
Manganese	213	1.7		mg/kg	SW846 6010D
Nickel	8.5	4.6		mg/kg	SW846 6010D
Vanadium	18.7	5.7		mg/kg	SW846 6010D
Zinc	27.3	11		mg/kg	SW846 6010D

**JD87833-6 SB-6**

Acenaphthene	0.157	0.036	0.013	mg/kg	SW846 8270E
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## Summary of Hits

**Job Number:** JD87833  
**Account:** Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Collected:** 05/03/24



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Acenaphthylene		0.223	0.036	0.019	mg/kg	SW846 8270E
Anthracene		0.537	0.036	0.022	mg/kg	SW846 8270E
Benzo(a)anthracene		1.58	0.036	0.010	mg/kg	SW846 8270E
Benzo(a)pyrene		1.58	0.036	0.017	mg/kg	SW846 8270E
Benzo(b)fluoranthene		1.81	0.036	0.016	mg/kg	SW846 8270E
Benzo(g,h,i)perylene		0.994	0.036	0.018	mg/kg	SW846 8270E
Benzo(k)fluoranthene		0.574	0.036	0.017	mg/kg	SW846 8270E
1,1'-Biphenyl		0.0159 J	0.073	0.0050	mg/kg	SW846 8270E
Carbazole		0.102 B	0.073	0.0053	mg/kg	SW846 8270E
Chrysene		1.31	0.036	0.011	mg/kg	SW846 8270E
Dibenzo(a,h)anthracene		0.251	0.036	0.016	mg/kg	SW846 8270E
Dibenzofuran		0.0944	0.073	0.015	mg/kg	SW846 8270E
Fluoranthene		3.05	0.036	0.016	mg/kg	SW846 8270E
Fluorene		0.198	0.036	0.017	mg/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		0.826	0.036	0.017	mg/kg	SW846 8270E
2-Methylnaphthalene		0.0251 J	0.036	0.0082	mg/kg	SW846 8270E
Naphthalene		0.0401	0.036	0.010	mg/kg	SW846 8270E
Phenanthrene		1.47	0.036	0.012	mg/kg	SW846 8270E
Pyrene		3.01	0.036	0.012	mg/kg	SW846 8270E
Total TIC, Semi-Volatile		7.23 J			mg/kg	
Aluminum		7860	56		mg/kg	SW846 6010D
Arsenic		2.5	2.3		mg/kg	SW846 6010D
Barium		29.8	23		mg/kg	SW846 6010D
Beryllium		0.29	0.23		mg/kg	SW846 6010D
Calcium		1530	560		mg/kg	SW846 6010D
Chromium		16.0	1.1		mg/kg	SW846 6010D
Copper		60.6	2.8		mg/kg	SW846 6010D
Iron		12400	56		mg/kg	SW846 6010D
Lead		13.6	2.3		mg/kg	SW846 6010D
Magnesium		2740	560		mg/kg	SW846 6010D
Manganese		200	1.7		mg/kg	SW846 6010D
Nickel		9.7	4.5		mg/kg	SW846 6010D
Vanadium		20.8	5.6		mg/kg	SW846 6010D
Zinc		30.4	11		mg/kg	SW846 6010D

**JD87833-7 SB-7**

Acenaphthene		0.104	0.036	0.012	mg/kg	SW846 8270E
Acenaphthylene		0.345	0.036	0.018	mg/kg	SW846 8270E
Anthracene		0.495	0.036	0.022	mg/kg	SW846 8270E
Benzo(a)anthracene		1.38	0.036	0.010	mg/kg	SW846 8270E
Benzo(a)pyrene		1.56	0.036	0.016	mg/kg	SW846 8270E
Benzo(b)fluoranthene		1.64	0.036	0.016	mg/kg	SW846 8270E
Benzo(g,h,i)perylene		1.00	0.036	0.018	mg/kg	SW846 8270E
Benzo(k)fluoranthene		0.603	0.036	0.017	mg/kg	SW846 8270E

## Summary of Hits

**Job Number:** JD87833  
**Account:** Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Collected:** 05/03/24



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
1,1'-Biphenyl		0.0126 J	0.071	0.0049	mg/kg	SW846 8270E
Carbazole		0.0724	0.071	0.0052	mg/kg	SW846 8270E
Chrysene		1.25	0.036	0.011	mg/kg	SW846 8270E
Dibenzo(a,h)anthracene		0.261	0.036	0.016	mg/kg	SW846 8270E
Dibenzofuran		0.0663 J	0.071	0.015	mg/kg	SW846 8270E
Fluoranthene		2.39	0.036	0.016	mg/kg	SW846 8270E
Fluorene		0.167	0.036	0.016	mg/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		0.822	0.036	0.017	mg/kg	SW846 8270E
2-Methylnaphthalene		0.0265 J	0.036	0.0081	mg/kg	SW846 8270E
Naphthalene		0.0383	0.036	0.010	mg/kg	SW846 8270E
Phenanthrene		1.05	0.036	0.012	mg/kg	SW846 8270E
Pyrene		2.64	0.036	0.011	mg/kg	SW846 8270E
Total TIC, Semi-Volatile		7.44 J			mg/kg	
beta-BHC <sup>a</sup>		0.00015 JB	0.00044	0.000064	mg/kg	SW846 8081B
alpha-Chlordane		0.00086	0.00044	0.000059	mg/kg	SW846 8081B
gamma-Chlordane		0.00044	0.00044	0.000066	mg/kg	SW846 8081B
Chlordane (alpha and gamma)		0.0013	0.00044	0.000059	mg/kg	SW846 8081B
Dieldrin <sup>a</sup>		0.00015 J	0.00044	0.000070	mg/kg	SW846 8081B
4,4'-DDD		0.00069	0.00044	0.000046	mg/kg	SW846 8081B
4,4'-DDE		0.00057	0.00044	0.000053	mg/kg	SW846 8081B
4,4'-DDT <sup>a</sup>		0.00044	0.00044	0.000077	mg/kg	SW846 8081B
Heptachlor epoxide <sup>a</sup>		0.00030 J	0.00044	0.000079	mg/kg	SW846 8081B
Aluminum		8010	58		mg/kg	SW846 6010D
Arsenic		2.7	2.3		mg/kg	SW846 6010D
Barium		33.7	23		mg/kg	SW846 6010D
Beryllium		0.31	0.23		mg/kg	SW846 6010D
Calcium		1710	580		mg/kg	SW846 6010D
Chromium		9.7	1.2		mg/kg	SW846 6010D
Copper		10.2	2.9		mg/kg	SW846 6010D
Iron		12500	58		mg/kg	SW846 6010D
Lead		13.1	2.3		mg/kg	SW846 6010D
Magnesium		1860	580		mg/kg	SW846 6010D
Manganese		255	1.7		mg/kg	SW846 6010D
Nickel		8.6	4.6		mg/kg	SW846 6010D
Vanadium		20.5	5.8		mg/kg	SW846 6010D
Zinc		30.0	12		mg/kg	SW846 6010D

**JD87833-8 SB-8**

Acenaphthene		0.0510	0.036	0.012	mg/kg	SW846 8270E
Acenaphthylene		0.132	0.036	0.018	mg/kg	SW846 8270E
Anthracene		0.230	0.036	0.022	mg/kg	SW846 8270E
Benzo(a)anthracene		0.924	0.036	0.010	mg/kg	SW846 8270E
Benzo(a)pyrene		0.948	0.036	0.016	mg/kg	SW846 8270E
Benzo(b)fluoranthene		1.06	0.036	0.016	mg/kg	SW846 8270E

## Summary of Hits

**Job Number:** JD87833  
**Account:** Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Collected:** 05/03/24



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Benzo(g,h,i)perylene		0.607	0.036	0.018	mg/kg	SW846 8270E
Benzo(k)fluoranthene		0.418	0.036	0.017	mg/kg	SW846 8270E
1,1'-Biphenyl		0.0062 J	0.072	0.0049	mg/kg	SW846 8270E
Carbazole		0.0342 JB	0.072	0.0052	mg/kg	SW846 8270E
Chrysene		0.862	0.036	0.011	mg/kg	SW846 8270E
Dibenzo(a,h)anthracene		0.159	0.036	0.016	mg/kg	SW846 8270E
Dibenzofuran		0.0241 J	0.072	0.015	mg/kg	SW846 8270E
Fluoranthene		1.77	0.036	0.016	mg/kg	SW846 8270E
Fluorene		0.0679	0.036	0.017	mg/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		0.510	0.036	0.017	mg/kg	SW846 8270E
2-Methylnaphthalene		0.0103 J	0.036	0.0082	mg/kg	SW846 8270E
Naphthalene		0.0171 J	0.036	0.010	mg/kg	SW846 8270E
Phenanthrene		0.637	0.036	0.012	mg/kg	SW846 8270E
Pyrene		1.73	0.036	0.012	mg/kg	SW846 8270E
Total TIC, Semi-Volatile		2.66 J			mg/kg	
beta-BHC <sup>a</sup>		0.00013 JB	0.00041	0.000060	mg/kg	SW846 8081B
alpha-Chlordane		0.00055	0.00041	0.000056	mg/kg	SW846 8081B
gamma-Chlordane <sup>a</sup>		0.00021 J	0.00041	0.000062	mg/kg	SW846 8081B
Chlordane (alpha and gamma)		0.00076	0.00041	0.000056	mg/kg	SW846 8081B
4,4'-DDD		0.00050	0.00041	0.000043	mg/kg	SW846 8081B
4,4'-DDE <sup>a</sup>		0.00022 J	0.00041	0.000050	mg/kg	SW846 8081B
4,4'-DDT <sup>a</sup>		0.00045	0.00041	0.000072	mg/kg	SW846 8081B
Heptachlor epoxide <sup>a</sup>		0.00016 J	0.00041	0.000075	mg/kg	SW846 8081B
Aluminum		6880	55		mg/kg	SW846 6010D
Arsenic		2.6	2.2		mg/kg	SW846 6010D
Barium		24.1	22		mg/kg	SW846 6010D
Beryllium		0.29	0.22		mg/kg	SW846 6010D
Calcium		1120	550		mg/kg	SW846 6010D
Chromium		8.5	1.1		mg/kg	SW846 6010D
Copper		7.9	2.7		mg/kg	SW846 6010D
Iron		11000	55		mg/kg	SW846 6010D
Lead		10.2	2.2		mg/kg	SW846 6010D
Magnesium		1590	550		mg/kg	SW846 6010D
Manganese		197	1.6		mg/kg	SW846 6010D
Nickel		7.6	4.4		mg/kg	SW846 6010D
Vanadium		16.9	5.5		mg/kg	SW846 6010D
Zinc		25.8	11		mg/kg	SW846 6010D

**JD87833-9 SB-9**

3&4-Methylphenol		0.195	0.080	0.033	mg/kg	SW846 8270E
Acenaphthene		0.0435	0.040	0.014	mg/kg	SW846 8270E
Acenaphthylene		0.101	0.040	0.020	mg/kg	SW846 8270E
Acetophenone		0.0230 J	0.20	0.0086	mg/kg	SW846 8270E
Anthracene		0.159	0.040	0.024	mg/kg	SW846 8270E

## Summary of Hits

**Job Number:** JD87833  
**Account:** Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Collected:** 05/03/24



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Benzo(a)anthracene		0.415	0.040	0.011	mg/kg	SW846 8270E
Benzo(a)pyrene		0.480	0.040	0.018	mg/kg	SW846 8270E
Benzo(b)fluoranthene		0.587	0.040	0.018	mg/kg	SW846 8270E
Benzo(g,h,i)perylene		0.310	0.040	0.020	mg/kg	SW846 8270E
Benzo(k)fluoranthene		0.154	0.040	0.019	mg/kg	SW846 8270E
1,1'-Biphenyl		0.0098 J	0.080	0.0055	mg/kg	SW846 8270E
Benzaldehyde		0.0232 J	0.20	0.0099	mg/kg	SW846 8270E
Carbazole		0.0400 J	0.080	0.0058	mg/kg	SW846 8270E
Chrysene		0.453	0.040	0.013	mg/kg	SW846 8270E
Dibenzo(a,h)anthracene		0.0799	0.040	0.018	mg/kg	SW846 8270E
Dibenzofuran		0.0241 J	0.080	0.016	mg/kg	SW846 8270E
Di-n-butyl phthalate		0.0108 J	0.080	0.0065	mg/kg	SW846 8270E
bis(2-Ethylhexyl)phthalate		0.0439 J	0.080	0.0094	mg/kg	SW846 8270E
Fluoranthene		0.888	0.040	0.018	mg/kg	SW846 8270E
Fluorene		0.0546	0.040	0.018	mg/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		0.263	0.040	0.019	mg/kg	SW846 8270E
2-Methylnaphthalene		0.0152 J	0.040	0.0090	mg/kg	SW846 8270E
Naphthalene		0.0239 J	0.040	0.011	mg/kg	SW846 8270E
Phenanthrene		0.459	0.040	0.013	mg/kg	SW846 8270E
Pyrene		0.896	0.040	0.013	mg/kg	SW846 8270E
Total TIC, Semi-Volatile		29.3 J			mg/kg	
Aluminum		11300	63		mg/kg	SW846 6010D
Arsenic		4.8	2.5		mg/kg	SW846 6010D
Barium		54.4	25		mg/kg	SW846 6010D
Beryllium		0.43	0.25		mg/kg	SW846 6010D
Calcium		1760	630		mg/kg	SW846 6010D
Chromium		14.2	1.3		mg/kg	SW846 6010D
Copper		15.8	3.2		mg/kg	SW846 6010D
Iron		14200	63		mg/kg	SW846 6010D
Lead		71.1	2.5		mg/kg	SW846 6010D
Magnesium		1920	630		mg/kg	SW846 6010D
Manganese		314	1.9		mg/kg	SW846 6010D
Mercury		0.19	0.032		mg/kg	SW846 7471B
Nickel		11.3	5.1		mg/kg	SW846 6010D
Vanadium		25.2	6.3		mg/kg	SW846 6010D
Zinc		67.5	13		mg/kg	SW846 6010D

### JD87833-10 SB-10

3&4-Methylphenol		0.0476 J	0.078	0.032	mg/kg	SW846 8270E
Acenaphthylene		0.0304 J	0.039	0.020	mg/kg	SW846 8270E
Benzo(a)anthracene		0.0822	0.039	0.011	mg/kg	SW846 8270E
Benzo(a)pyrene		0.0861	0.039	0.018	mg/kg	SW846 8270E
Benzo(b)fluoranthene		0.0943	0.039	0.017	mg/kg	SW846 8270E
Benzo(g,h,i)perylene		0.0626	0.039	0.019	mg/kg	SW846 8270E

## Summary of Hits

**Job Number:** JD87833  
**Account:** Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Collected:** 05/03/24



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Benzo(k)fluoranthene		0.0387 J	0.039	0.018	mg/kg	SW846 8270E
Carbazole		0.0072 JB	0.078	0.0056	mg/kg	SW846 8270E
Chrysene		0.0664	0.039	0.012	mg/kg	SW846 8270E
Fluoranthene		0.143	0.039	0.017	mg/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		0.0507	0.039	0.018	mg/kg	SW846 8270E
Phenanthrene		0.0524	0.039	0.013	mg/kg	SW846 8270E
Pyrene		0.142	0.039	0.012	mg/kg	SW846 8270E
Total TIC, Semi-Volatile		8.83 J			mg/kg	
beta-BHC		0.00015 JB	0.00043	0.000063	mg/kg	SW846 8081B
alpha-Chlordane <sup>a</sup>		0.00017 J	0.00043	0.000058	mg/kg	SW846 8081B
Chlordane (alpha and gamma)		0.00017 J	0.00043	0.000058	mg/kg	SW846 8081B
4,4' -DDD		0.00017 J	0.00043	0.000045	mg/kg	SW846 8081B
4,4' -DDE		0.00024 J	0.00043	0.000052	mg/kg	SW846 8081B
4,4' -DDT <sup>a</sup>		0.000090 J	0.00043	0.000076	mg/kg	SW846 8081B
Aluminum		14000	58		mg/kg	SW846 6010D
Arsenic		4.3	2.3		mg/kg	SW846 6010D
Barium		37.8	23		mg/kg	SW846 6010D
Beryllium		0.45	0.23		mg/kg	SW846 6010D
Calcium		817	580		mg/kg	SW846 6010D
Chromium		13.8	1.2		mg/kg	SW846 6010D
Copper		6.8	2.9		mg/kg	SW846 6010D
Iron		14500	58		mg/kg	SW846 6010D
Lead		17.7	2.3		mg/kg	SW846 6010D
Magnesium		1770	580		mg/kg	SW846 6010D
Manganese		201	1.7		mg/kg	SW846 6010D
Mercury		0.041	0.033		mg/kg	SW846 7471B
Nickel		10.5	4.7		mg/kg	SW846 6010D
Vanadium		22.6	5.8		mg/kg	SW846 6010D
Zinc		35.2	12		mg/kg	SW846 6010D

### JD87833-11 SB-11

Benzo(a)anthracene <sup>c</sup>		0.0914	0.075	0.021	mg/kg	SW846 8270E
Benzo(a)pyrene <sup>c</sup>		0.0985	0.075	0.034	mg/kg	SW846 8270E
Benzo(b)fluoranthene <sup>c</sup>		0.116	0.075	0.033	mg/kg	SW846 8270E
Benzo(g,h,i)perylene <sup>c</sup>		0.0842	0.075	0.038	mg/kg	SW846 8270E
Benzo(k)fluoranthene <sup>c</sup>		0.0412 J	0.075	0.035	mg/kg	SW846 8270E
Butyl benzyl phthalate <sup>d</sup>		0.0365 J	0.15	0.018	mg/kg	SW846 8270E
Carbazole <sup>c</sup>		0.0122 JB	0.15	0.011	mg/kg	SW846 8270E
Chrysene <sup>c</sup>		0.101	0.075	0.024	mg/kg	SW846 8270E
bis(2-Ethylhexyl)phthalate <sup>c</sup>		0.0281 J	0.15	0.018	mg/kg	SW846 8270E
Fluoranthene <sup>c</sup>		0.167	0.075	0.034	mg/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene <sup>c</sup>		0.0582 J	0.075	0.035	mg/kg	SW846 8270E
Phenanthrene <sup>c</sup>		0.0899	0.075	0.025	mg/kg	SW846 8270E
Pyrene <sup>c</sup>		0.176	0.075	0.024	mg/kg	SW846 8270E

## Summary of Hits

**Job Number:** JD87833  
**Account:** Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Collected:** 05/03/24



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Total TIC, Semi-Volatile		2.1 J			mg/kg	
alpha-Chlordane <sup>a</sup>		0.00099	0.00043	0.000058	mg/kg	SW846 8081B
gamma-Chlordane <sup>a</sup>		0.00034 J	0.00043	0.000065	mg/kg	SW846 8081B
Chlordane (alpha and gamma)		0.0013	0.00043	0.000058	mg/kg	SW846 8081B
4,4' -DDD		0.00069	0.00043	0.000045	mg/kg	SW846 8081B
4,4' -DDE		0.0055	0.00043	0.000052	mg/kg	SW846 8081B
4,4' -DDT <sup>e</sup>		0.0017	0.00043	0.000075	mg/kg	SW846 8081B
Aluminum		8260	57		mg/kg	SW846 6010D
Arsenic		3.0	2.3		mg/kg	SW846 6010D
Barium		36.3	23		mg/kg	SW846 6010D
Beryllium		0.35	0.23		mg/kg	SW846 6010D
Calcium		1840	570		mg/kg	SW846 6010D
Chromium		11.9	1.1		mg/kg	SW846 6010D
Copper		12.9	2.9		mg/kg	SW846 6010D
Iron		13500	57		mg/kg	SW846 6010D
Lead		28.9	2.3		mg/kg	SW846 6010D
Magnesium		1870	570		mg/kg	SW846 6010D
Manganese		225	1.7		mg/kg	SW846 6010D
Mercury		0.065	0.030		mg/kg	SW846 7471B
Nickel		9.1	4.6		mg/kg	SW846 6010D
Vanadium		20.5	5.7		mg/kg	SW846 6010D
Zinc		47.2	11		mg/kg	SW846 6010D

### JD87833-12 SB-12

3&4-Methylphenol		0.0896	0.078	0.032	mg/kg	SW846 8270E
Benzo(a)anthracene		0.0166 J	0.039	0.011	mg/kg	SW846 8270E
Benzo(b)fluoranthene		0.0229 J	0.039	0.017	mg/kg	SW846 8270E
Benzaldehyde		0.0103 J	0.19	0.0096	mg/kg	SW846 8270E
Chrysene		0.0180 J	0.039	0.012	mg/kg	SW846 8270E
Fluoranthene		0.0286 J	0.039	0.017	mg/kg	SW846 8270E
Phenanthrene		0.0163 J	0.039	0.013	mg/kg	SW846 8270E
Pyrene		0.0284 J	0.039	0.012	mg/kg	SW846 8270E
Total TIC, Semi-Volatile		14.51 J			mg/kg	
Aluminum		16600	60		mg/kg	SW846 6010D
Arsenic		5.1	2.4		mg/kg	SW846 6010D
Barium		46.4	24		mg/kg	SW846 6010D
Beryllium		0.58	0.24		mg/kg	SW846 6010D
Chromium		15.6	1.2		mg/kg	SW846 6010D
Copper		7.6	3.0		mg/kg	SW846 6010D
Iron		17000	60		mg/kg	SW846 6010D
Lead		21.1	2.4		mg/kg	SW846 6010D
Magnesium		2110	600		mg/kg	SW846 6010D
Manganese		391	1.8		mg/kg	SW846 6010D
Mercury		0.072	0.037		mg/kg	SW846 7471B

## Summary of Hits

**Job Number:** JD87833  
**Account:** Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Collected:** 05/03/24



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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Nickel		12.3	4.8		mg/kg	SW846 6010D
Vanadium		25.8	6.0		mg/kg	SW846 6010D
Zinc		43.0	12		mg/kg	SW846 6010D

### JD87833-13 SB-13

Benzo(a)anthracene	0.0370 J	0.039	0.011	mg/kg	SW846 8270E
Benzo(a)pyrene	0.0404	0.039	0.018	mg/kg	SW846 8270E
Benzo(b)fluoranthene	0.0492	0.039	0.017	mg/kg	SW846 8270E
Benzo(g,h,i)perylene	0.0329 J	0.039	0.019	mg/kg	SW846 8270E
Benzo(k)fluoranthene	0.0183 J	0.039	0.018	mg/kg	SW846 8270E
Carbazole	0.0065 J	0.078	0.0056	mg/kg	SW846 8270E
Chrysene	0.0394	0.039	0.012	mg/kg	SW846 8270E
bis(2-Ethylhexyl)phthalate	0.0107 J	0.078	0.0091	mg/kg	SW846 8270E
Fluoranthene	0.0789	0.039	0.017	mg/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene	0.0272 J	0.039	0.018	mg/kg	SW846 8270E
Phenanthrene	0.0412	0.039	0.013	mg/kg	SW846 8270E
Pyrene	0.0759	0.039	0.012	mg/kg	SW846 8270E
Total TIC, Semi-Volatile	11.42 J			mg/kg	
Aluminum	18600	57		mg/kg	SW846 6010D
Arsenic	5.4	2.3		mg/kg	SW846 6010D
Barium	45.8	23		mg/kg	SW846 6010D
Beryllium	0.50	0.23		mg/kg	SW846 6010D
Calcium	905	570		mg/kg	SW846 6010D
Chromium	18.9	1.1		mg/kg	SW846 6010D
Cobalt	5.7	5.7		mg/kg	SW846 6010D
Copper	8.6	2.9		mg/kg	SW846 6010D
Iron	20200	57		mg/kg	SW846 6010D
Lead	16.0	2.3		mg/kg	SW846 6010D
Magnesium	2680	570		mg/kg	SW846 6010D
Manganese	257	1.7		mg/kg	SW846 6010D
Mercury	0.036	0.031		mg/kg	SW846 7471B
Nickel	13.5	4.6		mg/kg	SW846 6010D
Vanadium	31.5	5.7		mg/kg	SW846 6010D
Zinc	44.0	11		mg/kg	SW846 6010D

### JD87833-14 SB-14

Acenaphthene	0.0420	0.037	0.013	mg/kg	SW846 8270E
Acenaphthylene	0.0869	0.037	0.019	mg/kg	SW846 8270E
Anthracene	0.150	0.037	0.022	mg/kg	SW846 8270E
Benzo(a)anthracene	0.497	0.037	0.010	mg/kg	SW846 8270E
Benzo(a)pyrene	0.520	0.037	0.017	mg/kg	SW846 8270E
Benzo(b)fluoranthene	0.560	0.037	0.016	mg/kg	SW846 8270E
Benzo(g,h,i)perylene	0.355	0.037	0.018	mg/kg	SW846 8270E

## Summary of Hits

**Job Number:** JD87833  
**Account:** Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Collected:** 05/03/24



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Benzo(k)fluoranthene		0.227	0.037	0.017	mg/kg	SW846 8270E
1,1'-Biphenyl		0.0066 J	0.073	0.0050	mg/kg	SW846 8270E
Carbazole		0.0465 J	0.073	0.0053	mg/kg	SW846 8270E
Chrysene		0.481	0.037	0.011	mg/kg	SW846 8270E
Dibenzo(a,h)anthracene		0.0892	0.037	0.016	mg/kg	SW846 8270E
Dibenzofuran		0.0172 J	0.073	0.015	mg/kg	SW846 8270E
bis(2-Ethylhexyl)phthalate		0.0152 J	0.073	0.0085	mg/kg	SW846 8270E
Fluoranthene		0.973	0.037	0.016	mg/kg	SW846 8270E
Fluorene		0.0452	0.037	0.017	mg/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		0.289	0.037	0.017	mg/kg	SW846 8270E
Naphthalene		0.0109 J	0.037	0.010	mg/kg	SW846 8270E
Phenanthrene		0.492	0.037	0.012	mg/kg	SW846 8270E
Pyrene		0.974	0.037	0.012	mg/kg	SW846 8270E
Total TIC, Semi-Volatile		8.36 J			mg/kg	
beta-BHC <sup>a</sup>		0.000090 JB	0.00042	0.000060	mg/kg	SW846 8081B
alpha-Chlordane <sup>a</sup>		0.0044	0.00042	0.000056	mg/kg	SW846 8081B
gamma-Chlordane		0.0026	0.00042	0.000062	mg/kg	SW846 8081B
Chlordane (alpha and gamma)		0.0069	0.00042	0.000056	mg/kg	SW846 8081B
Dieldrin		0.00061	0.00042	0.000067	mg/kg	SW846 8081B
4,4'-DDD		0.0040	0.00042	0.000044	mg/kg	SW846 8081B
4,4'-DDE		0.0090	0.00042	0.000050	mg/kg	SW846 8081B
4,4'-DDT <sup>e</sup>		0.0029	0.00042	0.000073	mg/kg	SW846 8081B
Heptachlor epoxide <sup>a</sup>		0.00076	0.00042	0.000075	mg/kg	SW846 8081B
Aluminum		7700	54		mg/kg	SW846 6010D
Arsenic		3.8	2.1		mg/kg	SW846 6010D
Barium		33.0	21		mg/kg	SW846 6010D
Beryllium		0.29	0.21		mg/kg	SW846 6010D
Calcium		1770	540		mg/kg	SW846 6010D
Chromium		10.2	1.1		mg/kg	SW846 6010D
Copper		10.9	2.7		mg/kg	SW846 6010D
Iron		11200	54		mg/kg	SW846 6010D
Lead		26.5	2.1		mg/kg	SW846 6010D
Magnesium		1640	540		mg/kg	SW846 6010D
Manganese		225	1.6		mg/kg	SW846 6010D
Mercury		0.17	0.032		mg/kg	SW846 7471B
Nickel		8.1	4.3		mg/kg	SW846 6010D
Vanadium		17.8	5.4		mg/kg	SW846 6010D
Zinc		42.3	11		mg/kg	SW846 6010D

### JD87833-15 DUPE 1

Acenaphthene		0.115	0.035	0.012	mg/kg	SW846 8270E
Acenaphthylene		0.285	0.035	0.018	mg/kg	SW846 8270E
Anthracene		0.566	0.035	0.021	mg/kg	SW846 8270E
Benzo(a)anthracene		1.82	0.035	0.0098	mg/kg	SW846 8270E



## Summary of Hits

**Job Number:** JD87833  
**Account:** Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Collected:** 05/03/24



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Benzo(a)pyrene		1.96	0.035	0.016	mg/kg	SW846 8270E
Benzo(b)fluoranthene		2.28	0.035	0.015	mg/kg	SW846 8270E
Benzo(g,h,i)perylene		1.23	0.035	0.017	mg/kg	SW846 8270E
Benzo(k)fluoranthene		0.710	0.035	0.016	mg/kg	SW846 8270E
1,1'-Biphenyl		0.0096 J	0.069	0.0048	mg/kg	SW846 8270E
Carbazole		0.0815 B	0.069	0.0050	mg/kg	SW846 8270E
Chrysene		1.68	0.035	0.011	mg/kg	SW846 8270E
Dibenzo(a,h)anthracene		0.327	0.035	0.015	mg/kg	SW846 8270E
Dibenzofuran		0.0621 J	0.069	0.014	mg/kg	SW846 8270E
Fluoranthene		3.53	0.17	0.077	mg/kg	SW846 8270E
Fluorene		0.155	0.035	0.016	mg/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		1.04	0.035	0.016	mg/kg	SW846 8270E
2-Methylnaphthalene		0.0189 J	0.035	0.0078	mg/kg	SW846 8270E
Naphthalene		0.0322 J	0.035	0.0098	mg/kg	SW846 8270E
Phenanthrene		1.54	0.035	0.012	mg/kg	SW846 8270E
Pyrene		3.35	0.035	0.011	mg/kg	SW846 8270E
Total TIC, Semi-Volatile		8.12 J			mg/kg	
beta-BHC <sup>a</sup>		0.00013 JB	0.00043	0.000063	mg/kg	SW846 8081B
alpha-Chlordane		0.00015 J	0.00043	0.000058	mg/kg	SW846 8081B
Chlordane (alpha and gamma)		0.00015 J	0.00043	0.000058	mg/kg	SW846 8081B
4,4'-DDD <sup>a</sup>		0.00021 J	0.00043	0.000045	mg/kg	SW846 8081B
4,4'-DDT <sup>a</sup>		0.00027 J	0.00043	0.000075	mg/kg	SW846 8081B
Aluminum		7590	58		mg/kg	SW846 6010D
Arsenic		2.5	2.3		mg/kg	SW846 6010D
Barium		24.8	23		mg/kg	SW846 6010D
Beryllium		0.29	0.23		mg/kg	SW846 6010D
Calcium		942	580		mg/kg	SW846 6010D
Chromium		8.9	1.2		mg/kg	SW846 6010D
Copper		8.0	2.9		mg/kg	SW846 6010D
Iron		10600	58		mg/kg	SW846 6010D
Lead		58.7	2.3		mg/kg	SW846 6010D
Magnesium		1440	580		mg/kg	SW846 6010D
Manganese		144	1.7		mg/kg	SW846 6010D
Nickel		7.7	4.6		mg/kg	SW846 6010D
Vanadium		21.9	5.8		mg/kg	SW846 6010D
Zinc		28.7	12		mg/kg	SW846 6010D

### JD87833-16 DUPE 2

Acenaphthene		0.0400	0.036	0.012	mg/kg	SW846 8270E
Acenaphthylene		0.192	0.036	0.018	mg/kg	SW846 8270E
Anthracene		0.250	0.036	0.022	mg/kg	SW846 8270E
Benzo(a)anthracene		0.988	0.036	0.010	mg/kg	SW846 8270E
Benzo(a)pyrene		1.01	0.036	0.016	mg/kg	SW846 8270E
Benzo(b)fluoranthene		1.26	0.036	0.016	mg/kg	SW846 8270E

## Summary of Hits

**Job Number:** JD87833  
**Account:** Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Collected:** 05/03/24



Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Benzo(g,h,i)perylene		0.624	0.036	0.018	mg/kg	SW846 8270E
Benzo(k)fluoranthene		0.329	0.036	0.017	mg/kg	SW846 8270E
1,1'-Biphenyl		0.0077 J	0.072	0.0049	mg/kg	SW846 8270E
Benzaldehyde		0.0092 J	0.18	0.0089	mg/kg	SW846 8270E
Carbazole		0.0416 J	0.072	0.0052	mg/kg	SW846 8270E
Chrysene		0.959	0.036	0.011	mg/kg	SW846 8270E
Dibenzo(a,h)anthracene		0.175	0.036	0.016	mg/kg	SW846 8270E
Dibenzofuran		0.0251 J	0.072	0.015	mg/kg	SW846 8270E
Fluoranthene		1.65	0.036	0.016	mg/kg	SW846 8270E
Fluorene		0.0613	0.036	0.017	mg/kg	SW846 8270E
Indeno(1,2,3-cd)pyrene		0.535	0.036	0.017	mg/kg	SW846 8270E
2-Methylnaphthalene		0.0157 J	0.036	0.0081	mg/kg	SW846 8270E
Naphthalene		0.0216 J	0.036	0.010	mg/kg	SW846 8270E
Phenanthrene		0.572	0.036	0.012	mg/kg	SW846 8270E
Pyrene		1.66	0.036	0.012	mg/kg	SW846 8270E
Total TIC, Semi-Volatile		8.85 J			mg/kg	
alpha-Chlordane		0.0013	0.00042	0.000057	mg/kg	SW846 8081B
gamma-Chlordane		0.00068	0.00042	0.000063	mg/kg	SW846 8081B
Chlordane (alpha and gamma)		0.0020	0.00042	0.000057	mg/kg	SW846 8081B
Dieldrin		0.00028 J	0.00042	0.000067	mg/kg	SW846 8081B
4,4'-DDD <sup>a</sup>		0.00073	0.00042	0.000044	mg/kg	SW846 8081B
4,4'-DDE		0.0044	0.00042	0.000050	mg/kg	SW846 8081B
4,4'-DDT <sup>b</sup>		0.00093	0.00042	0.000073	mg/kg	SW846 8081B
Heptachlor epoxide		0.00034 J	0.00042	0.000075	mg/kg	SW846 8081B
Aluminum		7630	53		mg/kg	SW846 6010D
Arsenic		3.2	2.1		mg/kg	SW846 6010D
Barium		31.3	21		mg/kg	SW846 6010D
Beryllium		0.30	0.21		mg/kg	SW846 6010D
Calcium		2440	530		mg/kg	SW846 6010D
Chromium		10.9	1.1		mg/kg	SW846 6010D
Copper		9.5	2.6		mg/kg	SW846 6010D
Iron		10500	53		mg/kg	SW846 6010D
Lead		30.2	2.1		mg/kg	SW846 6010D
Magnesium		1550	530		mg/kg	SW846 6010D
Manganese		211	1.6		mg/kg	SW846 6010D
Mercury		0.15	0.032		mg/kg	SW846 7471B
Nickel		7.6	4.2		mg/kg	SW846 6010D
Vanadium		17.4	5.3		mg/kg	SW846 6010D
Zinc		36.3	11		mg/kg	SW846 6010D

**JD87833-17 FIELD BLANK**

Total TIC, Semi-Volatile	7.8 J				ug/l	
4,4'-DDT <sup>f</sup>	0.020 B	0.0080	0.0055		ug/l	SW846 8081B

## Summary of Hits

**Job Number:** JD87833  
**Account:** Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Collected:** 05/03/24



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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**JD87833-17R    FIELD BLANK**

4,4'-DDT <sup>g</sup>	0.0048 J	0.0067	0.0046	ug/l	SW846 8081B
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- (a) More than 40 % RPD for detected concentrations between the two GC columns.
- (b) Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20% , so it being used for confirmation only. More than 40% RPD for detected concentrations between the two GC columns.
- (c) Dilution required due to matrix interference.
- (d) Dilution required due to matrix interference. Associated CCV outside of control limits high. Estimated value, due to corresponding failure in the batch associated CCV.
- (e) Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20% , so it being used for confirmation only.
- (f) Detection likely due to lab contamination.
- (g) Sample extracted outside the holding time. Detections likely due to lab contamination.

Sample Results

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Report of Analysis

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SGS North America Inc.

## Report of Analysis

Page 1 of 3

<b>Client Sample ID:</b> SB-1		
<b>Lab Sample ID:</b> JD87833-1		<b>Date Sampled:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Date Received:</b> 05/03/24
<b>Method:</b> SW846 8270E SW846 3546		<b>Percent Solids:</b> 71.4
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CJ6538.D	1	05/10/24 00:16	RS	05/09/24 10:55	OP54460	ECJ297
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	31.2 g	1.0 ml
Run #2		

## ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	0.090	0.022	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.22	0.028	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.22	0.038	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.22	0.080	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	0.22	0.17	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	0.22	0.048	mg/kg	
95-48-7	2-Methylphenol	ND	0.090	0.029	mg/kg	
	3&4-Methylphenol	ND	0.090	0.037	mg/kg	
88-75-5	2-Nitrophenol	ND	0.22	0.030	mg/kg	
100-02-7	4-Nitrophenol	ND	0.45	0.12	mg/kg	
87-86-5	Pentachlorophenol <sup>a</sup>	ND	0.18	0.042	mg/kg	
108-95-2	Phenol	0.118	0.090	0.023	mg/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	0.22	0.030	mg/kg	
95-95-4	2,4,5-Trichlorophenol	ND	0.22	0.034	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.22	0.027	mg/kg	
83-32-9	Acenaphthene	0.0180	0.045	0.015	mg/kg	J
208-96-8	Acenaphthylene	0.0604	0.045	0.023	mg/kg	
98-86-2	Acetophenone	ND	0.22	0.0097	mg/kg	
120-12-7	Anthracene	0.0715	0.045	0.028	mg/kg	
1912-24-9	Atrazine	ND	0.090	0.019	mg/kg	
56-55-3	Benzo(a)anthracene	0.233	0.045	0.013	mg/kg	
50-32-8	Benzo(a)pyrene	0.243	0.045	0.020	mg/kg	
205-99-2	Benzo(b)fluoranthene	0.342	0.045	0.020	mg/kg	
191-24-2	Benzo(g,h,i)perylene	0.182	0.045	0.022	mg/kg	
207-08-9	Benzo(k)fluoranthene	0.114	0.045	0.021	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	0.090	0.017	mg/kg	
85-68-7	Butyl benzyl phthalate <sup>a</sup>	ND	0.090	0.011	mg/kg	
92-52-4	1,1'-Biphenyl	0.0062	0.090	0.0061	mg/kg	J
100-52-7	Benzaldehyde	0.0172	0.22	0.011	mg/kg	J
91-58-7	2-Chloronaphthalene	ND	0.090	0.011	mg/kg	
106-47-8	4-Chloroaniline	ND	0.22	0.016	mg/kg	
86-74-8	Carbazole	0.0305	0.090	0.0065	mg/kg	J

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	SB-1	<b>Date Sampled:</b>	05/03/24
<b>Lab Sample ID:</b>	JD87833-1	<b>Date Received:</b>	05/03/24
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	71.4
<b>Method:</b>	SW846 8270E SW846 3546		
<b>Project:</b>	Ridgewood Berm Sampling, Ridgewood, NJ		

## ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	0.090	0.018	mg/kg	
218-01-9	Chrysene	0.273	0.045	0.014	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	0.090	0.0096	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	0.090	0.019	mg/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	0.090	0.016	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.090	0.015	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	0.045	0.014	mg/kg	
606-20-2	2,6-Dinitrotoluene	ND	0.045	0.023	mg/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	0.090	0.037	mg/kg	
123-91-1	1,4-Dioxane	ND	0.045	0.030	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	0.0482	0.045	0.020	mg/kg	
132-64-9	Dibenzofuran	ND	0.090	0.018	mg/kg	
84-74-2	Di-n-butyl phthalate	0.0143	0.090	0.0073	mg/kg	J
117-84-0	Di-n-octyl phthalate	ND	0.090	0.011	mg/kg	
84-66-2	Diethyl phthalate	ND	0.090	0.0096	mg/kg	
131-11-3	Dimethyl phthalate	ND	0.090	0.0080	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	0.0804	0.090	0.011	mg/kg	J
206-44-0	Fluoranthene	0.487	0.045	0.020	mg/kg	
86-73-7	Fluorene	0.0243	0.045	0.021	mg/kg	J
118-74-1	Hexachlorobenzene	ND	0.090	0.011	mg/kg	
87-68-3	Hexachlorobutadiene	ND	0.045	0.018	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	0.45	0.018	mg/kg	
67-72-1	Hexachloroethane	ND	0.22	0.022	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	0.147	0.045	0.021	mg/kg	
78-59-1	Isophorone	ND	0.090	0.0096	mg/kg	
91-57-6	2-Methylnaphthalene	ND	0.045	0.010	mg/kg	
88-74-4	2-Nitroaniline	ND	0.22	0.011	mg/kg	
99-09-2	3-Nitroaniline	ND	0.22	0.011	mg/kg	
100-01-6	4-Nitroaniline	ND	0.22	0.012	mg/kg	
91-20-3	Naphthalene	ND	0.045	0.013	mg/kg	
98-95-3	Nitrobenzene	ND	0.090	0.017	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.090	0.013	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	0.22	0.016	mg/kg	
85-01-8	Phenanthrene	0.243	0.045	0.015	mg/kg	
129-00-0	Pyrene	0.495	0.045	0.014	mg/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	0.22	0.011	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	68%		10-99%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



SGS North America Inc.

## Report of Analysis

Page 1 of 2

<b>Client Sample ID:</b> SB-1		<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-1		<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 71.4
<b>Method:</b> SW846 8081B SW846 3570		
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	8G56351.D	1	05/09/24 06:24	CP	05/08/24 18:21	OP54452	G8G2470
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	5.3 g	10.0 ml
Run #2		

## Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.00053	0.00010	mg/kg	
319-84-6	alpha-BHC	ND	0.00053	0.000061	mg/kg	
319-85-7	beta-BHC	ND	0.00053	0.000077	mg/kg	
319-86-8	delta-BHC	ND	0.00053	0.000079	mg/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.00053	0.000092	mg/kg	
5103-71-9	alpha-Chlordane <sup>a</sup>	0.00048	0.00053	0.000071	mg/kg	J
5103-74-2	gamma-Chlordane	ND	0.00053	0.000079	mg/kg	
57-74-9	Chlordane (alpha and gamma)	0.00048	0.00053	0.000071	mg/kg	J
60-57-1	Dieldrin	0.00043	0.00053	0.000085	mg/kg	J
72-54-8	4,4'-DDD	0.0015	0.00053	0.000055	mg/kg	
72-55-9	4,4'-DDE	0.0025	0.00053	0.000063	mg/kg	
50-29-3	4,4'-DDT <sup>b</sup>	0.0022	0.00053	0.000092	mg/kg	
72-20-8	Endrin	ND	0.00053	0.000077	mg/kg	
1031-07-8	Endosulfan sulfate	ND	0.00053	0.000063	mg/kg	
7421-93-4	Endrin aldehyde	ND	0.00053	0.00015	mg/kg	
959-98-8	Endosulfan-I	ND	0.00053	0.000071	mg/kg	
33213-65-9	Endosulfan-II	ND	0.00053	0.000074	mg/kg	
76-44-8	Heptachlor	ND	0.00053	0.000069	mg/kg	
1024-57-3	Heptachlor epoxide	0.00035	0.00053	0.000095	mg/kg	J
72-43-5	Methoxychlor	ND	0.00053	0.00021	mg/kg	
53494-70-5	Endrin ketone	ND	0.00053	0.000085	mg/kg	
8001-35-2	Toxaphene	ND	0.0066	0.0044	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	80%		46-145%
877-09-8	Tetrachloro-m-xylene	83%		46-145%
2051-24-3	Decachlorobiphenyl	54%		29-163%
2051-24-3	Decachlorobiphenyl	86%		29-163%

(a) More than 40 % RPD for detected concentrations between the two GC columns.

(b) Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound



## Report of Analysis

<b>Client Sample ID:</b> SB-1		<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-1		<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 71.4
<b>Method:</b> SW846 8081B SW846 3570		
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

4.1  
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**Pesticide TCL List**

CAS No.	Compound	Result	RL	MDL	Units	Q
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being used for confirmation only. More than 40% RPD for detected concentrations between the two GC columns.

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ND = Not detected	MDL = Method Detection Limit	J = Indicates an estimated value
RL = Reporting Limit		B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range		N = Indicates presumptive evidence of a compound

SGS North America Inc.

## Report of Analysis

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<b>Client Sample ID:</b> SB-1		
<b>Lab Sample ID:</b> JD87833-1		<b>Date Sampled:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Date Received:</b> 05/03/24
<b>Method:</b> SW846 8082A SW846 3570		<b>Percent Solids:</b> 71.4
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G231737.D	1	05/09/24 06:27	MLC	05/08/24 18:21	OP54453	G2G6085
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	5.3 g	10.0 ml
Run #2		

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.026	0.011	mg/kg	
11104-28-2	Aroclor 1221	ND	0.026	0.0089	mg/kg	
11141-16-5	Aroclor 1232	ND	0.026	0.022	mg/kg	
53469-21-9	Aroclor 1242	ND	0.026	0.016	mg/kg	
12672-29-6	Aroclor 1248	ND	0.026	0.0057	mg/kg	
11097-69-1	Aroclor 1254	ND	0.026	0.0029	mg/kg	
11096-82-5	Aroclor 1260	ND	0.026	0.0091	mg/kg	
11100-14-4	Aroclor 1268	ND	0.026	0.0027	mg/kg	
37324-23-5	Aroclor 1262	ND	0.026	0.0022	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	95%		42-159%
877-09-8	Tetrachloro-m-xylene	90%		42-159%
2051-24-3	Decachlorobiphenyl	94%		18-154%
2051-24-3	Decachlorobiphenyl	103%		18-154%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> SB-1 <b>Lab Sample ID:</b> JD87833-1 <b>Matrix:</b> SO - Soil <b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ	<b>Date Sampled:</b> 05/03/24 <b>Date Received:</b> 05/03/24 <b>Percent Solids:</b> 71.4
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### Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	11000	69	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Antimony	< 2.7	2.7	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Arsenic	5.1	2.7	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Barium	53.6	27	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Beryllium	0.40	0.27	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Cadmium	< 0.69	0.69	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Calcium	3000	690	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Chromium	18.0	1.4	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Cobalt	< 6.9	6.9	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Copper	18.4	3.4	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Iron	15600	69	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Lead	169	2.7	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Magnesium	2070	690	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Manganese	333	2.1	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Mercury	0.29	0.044	mg/kg	1	05/08/24	05/09/24	CB SW846 7471B <sup>1</sup>	SW846 7471B <sup>4</sup>
Nickel	12.6	5.5	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Potassium	< 1400	1400	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Selenium	< 2.7	2.7	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Silver	< 0.69	0.69	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Sodium	< 1400	1400	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Thallium	< 1.4	1.4	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Vanadium	32.1	6.9	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Zinc	74.8	14	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>

(1) Instrument QC Batch: MA56033

(2) Instrument QC Batch: MA56049

(3) Prep QC Batch: MP46464

(4) Prep QC Batch: MP46496

RL = Reporting Limit

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SGS North America Inc.

## Report of Analysis

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<b>Client Sample ID:</b> SB-2		<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-2		<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 89.1
<b>Method:</b> SW846 8270E SW846 3546		
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CJ6529.D	1	05/09/24 21:26	RS	05/09/24 10:55	OP54460	ECJ297
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	31.0 g	1.0 ml
Run #2		

## ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	0.072	0.018	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.18	0.022	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.18	0.031	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.18	0.064	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	0.18	0.14	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	0.18	0.039	mg/kg	
95-48-7	2-Methylphenol	ND	0.072	0.023	mg/kg	
	3&4-Methylphenol	ND	0.072	0.030	mg/kg	
88-75-5	2-Nitrophenol	ND	0.18	0.024	mg/kg	
100-02-7	4-Nitrophenol	ND	0.36	0.097	mg/kg	
87-86-5	Pentachlorophenol <sup>a</sup>	ND	0.14	0.034	mg/kg	
108-95-2	Phenol	ND	0.072	0.019	mg/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	0.18	0.024	mg/kg	
95-95-4	2,4,5-Trichlorophenol	ND	0.18	0.027	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.18	0.022	mg/kg	
83-32-9	Acenaphthene	0.0494	0.036	0.012	mg/kg	
208-96-8	Acenaphthylene	0.122	0.036	0.018	mg/kg	
98-86-2	Acetophenone	ND	0.18	0.0078	mg/kg	
120-12-7	Anthracene	0.213	0.036	0.022	mg/kg	
1912-24-9	Atrazine	ND	0.072	0.015	mg/kg	
56-55-3	Benzo(a)anthracene	0.519	0.036	0.010	mg/kg	
50-32-8	Benzo(a)pyrene	0.481	0.036	0.016	mg/kg	
205-99-2	Benzo(b)fluoranthene	0.534	0.036	0.016	mg/kg	
191-24-2	Benzo(g,h,i)perylene	0.304	0.036	0.018	mg/kg	
207-08-9	Benzo(k)fluoranthene	0.161	0.036	0.017	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	0.072	0.014	mg/kg	
85-68-7	Butyl benzyl phthalate <sup>a</sup>	ND	0.072	0.0088	mg/kg	
92-52-4	1,1'-Biphenyl	0.0192	0.072	0.0050	mg/kg	J
100-52-7	Benzaldehyde	ND	0.18	0.0090	mg/kg	
91-58-7	2-Chloronaphthalene	ND	0.072	0.0086	mg/kg	
106-47-8	4-Chloroaniline	ND	0.18	0.013	mg/kg	
86-74-8	Carbazole	0.0246	0.072	0.0052	mg/kg	JB

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	SB-2	<b>Date Sampled:</b>	05/03/24
<b>Lab Sample ID:</b>	JD87833-2	<b>Date Received:</b>	05/03/24
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	89.1
<b>Method:</b>	SW846 8270E SW846 3546		
<b>Project:</b>	Ridgewood Berm Sampling, Ridgewood, NJ		

## ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	0.072	0.014	mg/kg	
218-01-9	Chrysene	0.496	0.036	0.011	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	0.072	0.0077	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	0.072	0.016	mg/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	0.072	0.013	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.072	0.012	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	0.036	0.011	mg/kg	
606-20-2	2,6-Dinitrotoluene	ND	0.036	0.018	mg/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	0.072	0.030	mg/kg	
123-91-1	1,4-Dioxane	ND	0.036	0.024	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	0.0819	0.036	0.016	mg/kg	
132-64-9	Dibenzofuran	ND	0.072	0.015	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	0.072	0.0059	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	0.072	0.0090	mg/kg	
84-66-2	Diethyl phthalate	ND	0.072	0.0077	mg/kg	
131-11-3	Dimethyl phthalate	ND	0.072	0.0064	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.072	0.0085	mg/kg	
206-44-0	Fluoranthene	0.956	0.036	0.016	mg/kg	
86-73-7	Fluorene	0.192	0.036	0.017	mg/kg	
118-74-1	Hexachlorobenzene	ND	0.072	0.0092	mg/kg	
87-68-3	Hexachlorobutadiene	ND	0.036	0.015	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	0.36	0.014	mg/kg	
67-72-1	Hexachloroethane	ND	0.18	0.018	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	0.250	0.036	0.017	mg/kg	
78-59-1	Isophorone	ND	0.072	0.0077	mg/kg	
91-57-6	2-Methylnaphthalene	0.0782	0.036	0.0082	mg/kg	
88-74-4	2-Nitroaniline	ND	0.18	0.0085	mg/kg	
99-09-2	3-Nitroaniline	ND	0.18	0.0091	mg/kg	
100-01-6	4-Nitroaniline	ND	0.18	0.0094	mg/kg	
91-20-3	Naphthalene	0.0209	0.036	0.010	mg/kg	J
98-95-3	Nitrobenzene	ND	0.072	0.014	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.072	0.010	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	0.18	0.013	mg/kg	
85-01-8	Phenanthrene	0.956	0.036	0.012	mg/kg	
129-00-0	Pyrene	1.12	0.036	0.012	mg/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	0.18	0.0092	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	74%		10-99%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

# Report of Analysis

<b>Client Sample ID:</b> SB-2		<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-2		<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 89.1
<b>Method:</b> SW846 8270E SW846 3546		
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

### ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	75%		10-96%
118-79-6	2,4,6-Tribromophenol	91%		10-123%
4165-60-0	Nitrobenzene-d5	74%		10-109%
321-60-8	2-Fluorobiphenyl	79%		11-109%
1718-51-0	Terphenyl-d14	81%		10-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Unknown	4.25	.28	mg/kg	J
	Unknown	4.76	.15	mg/kg	J
	Unknown	4.82	.16	mg/kg	J
	Naphthalene, dimethyl	6.40	.21	mg/kg	J
	9H-Fluorene, methyl	7.53	.16	mg/kg	J
	Anthracene, methyl	8.32	.39	mg/kg	J
	Phenanthrene, methyl	8.34	.36	mg/kg	J
	Unknown	8.42	.43	mg/kg	J
	Phenanthrene, methyl	8.44	.21	mg/kg	J
	Unknown	8.60	.29	mg/kg	J
	Phenanthrene, dimethyl	8.84	.26	mg/kg	J
52251-71-5	Anthracene, 2-ethyl-	8.91	.15	mg/kg	JN
	Unknown	9.04	.22	mg/kg	J
	Unknown	9.12	.15	mg/kg	J
	Unknown	9.52	.28	mg/kg	J
	Unknown	9.58	.18	mg/kg	J
	Pyrene, methyl	9.62	.15	mg/kg	J
239-35-0	Benzo[b]naphtho[2,1-d]thiophene	10.11	.16	mg/kg	JN
	Alkene	10.91	.15	mg/kg	J
	Unknown	11.05	.16	mg/kg	J
	Unknown	11.52	.22	mg/kg	J
	System artifact	12.21	.16	mg/kg	J
	Unknown	12.45	.4	mg/kg	J
	Unknown	13.08	.16	mg/kg	J
	Unknown	13.41	.29	mg/kg	J
	Total TIC, Semi-Volatile		5.57	mg/kg	J

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

4.2  
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## Report of Analysis

<b>Client Sample ID:</b> SB-2		<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-2		<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 89.1
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

### Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	5830	54	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Antimony	< 2.2	2.2	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Arsenic	2.4	2.2	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Barium	24.2	22	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Beryllium	0.24	0.22	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Cadmium	< 0.54	0.54	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Calcium	1240	540	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Chromium	8.7	1.1	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Cobalt	< 5.4	5.4	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Copper	7.5	2.7	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Iron	10200	54	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Lead	13.7	2.2	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Magnesium	1340	540	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Manganese	164	1.6	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Mercury	0.054	0.030	mg/kg	1	05/08/24	05/09/24	CB SW846 7471B <sup>1</sup>	SW846 7471B <sup>4</sup>
Nickel	6.6	4.4	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Potassium	< 1100	1100	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Selenium	< 2.2	2.2	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Silver	< 0.54	0.54	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Sodium	< 1100	1100	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Thallium	< 1.1	1.1	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Vanadium	16.9	5.4	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Zinc	26.9	11	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>

(1) Instrument QC Batch: MA56033

(2) Instrument QC Batch: MA56049

(3) Prep QC Batch: MP46464

(4) Prep QC Batch: MP46496

RL = Reporting Limit

4.2  
4

SGS North America Inc.

## Report of Analysis

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<b>Client Sample ID:</b> SB-3		<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-3		<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 88.5
<b>Method:</b> SW846 8270E SW846 3546		
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	CJ6525.D	2	05/09/24 20:11	RS	05/09/24 10:55	OP54460	ECJ297
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.9 g	1.0 ml
Run #2		

## ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	0.15	0.036	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.37	0.045	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.37	0.062	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.37	0.13	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	0.37	0.27	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	0.37	0.078	mg/kg	
95-48-7	2-Methylphenol	ND	0.15	0.047	mg/kg	
	3&4-Methylphenol	ND	0.15	0.060	mg/kg	
88-75-5	2-Nitrophenol	ND	0.37	0.048	mg/kg	
100-02-7	4-Nitrophenol	ND	0.73	0.20	mg/kg	
87-86-5	Pentachlorophenol <sup>b</sup>	ND	0.29	0.069	mg/kg	
108-95-2	Phenol	ND	0.15	0.038	mg/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	0.37	0.048	mg/kg	
95-95-4	2,4,5-Trichlorophenol	ND	0.37	0.055	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.37	0.044	mg/kg	
83-32-9	Acenaphthene	0.133	0.073	0.025	mg/kg	
208-96-8	Acenaphthylene	0.182	0.073	0.037	mg/kg	
98-86-2	Acetophenone	ND	0.37	0.016	mg/kg	
120-12-7	Anthracene	0.539	0.073	0.045	mg/kg	
1912-24-9	Atrazine	ND	0.15	0.031	mg/kg	
56-55-3	Benzo(a)anthracene	1.50	0.073	0.021	mg/kg	
50-32-8	Benzo(a)pyrene	1.46	0.073	0.033	mg/kg	
205-99-2	Benzo(b)fluoranthene	1.72	0.073	0.032	mg/kg	
191-24-2	Benzo(g,h,i)perylene	0.902	0.073	0.037	mg/kg	
207-08-9	Benzo(k)fluoranthene	0.485	0.073	0.034	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	0.15	0.028	mg/kg	
85-68-7	Butyl benzyl phthalate <sup>b</sup>	ND	0.15	0.018	mg/kg	
92-52-4	1,1'-Biphenyl	0.0142	0.15	0.010	mg/kg	J
100-52-7	Benzaldehyde	ND	0.37	0.018	mg/kg	
91-58-7	2-Chloronaphthalene	ND	0.15	0.017	mg/kg	
106-47-8	4-Chloroaniline	ND	0.37	0.026	mg/kg	
86-74-8	Carbazole	0.114	0.15	0.011	mg/kg	J

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound



## Report of Analysis

<b>Client Sample ID:</b> SB-3		<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-3		<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 88.5
<b>Method:</b> SW846 8270E SW846 3546		
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

## ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	0.15	0.029	mg/kg	
218-01-9	Chrysene	1.29	0.073	0.023	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	0.15	0.016	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	0.15	0.032	mg/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	0.15	0.026	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.15	0.024	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	0.073	0.023	mg/kg	
606-20-2	2,6-Dinitrotoluene	ND	0.073	0.037	mg/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	0.15	0.061	mg/kg	
123-91-1	1,4-Dioxane	ND	0.073	0.048	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	0.230	0.073	0.032	mg/kg	
132-64-9	Dibenzofuran	0.0867	0.15	0.030	mg/kg	J
84-74-2	Di-n-butyl phthalate	ND	0.15	0.012	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	0.15	0.018	mg/kg	
84-66-2	Diethyl phthalate	ND	0.15	0.016	mg/kg	
131-11-3	Dimethyl phthalate	ND	0.15	0.013	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.15	0.017	mg/kg	
206-44-0	Fluoranthene	3.15	0.073	0.033	mg/kg	
86-73-7	Fluorene	0.206	0.073	0.034	mg/kg	
118-74-1	Hexachlorobenzene	ND	0.15	0.019	mg/kg	
87-68-3	Hexachlorobutadiene	ND	0.073	0.029	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	0.73	0.029	mg/kg	
67-72-1	Hexachloroethane	ND	0.37	0.036	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	0.752	0.073	0.034	mg/kg	
78-59-1	Isophorone	ND	0.15	0.016	mg/kg	
91-57-6	2-Methylnaphthalene	0.0286	0.073	0.017	mg/kg	J
88-74-4	2-Nitroaniline	ND	0.37	0.017	mg/kg	
99-09-2	3-Nitroaniline	ND	0.37	0.018	mg/kg	
100-01-6	4-Nitroaniline	ND	0.37	0.019	mg/kg	
91-20-3	Naphthalene	0.0345	0.073	0.021	mg/kg	J
98-95-3	Nitrobenzene	ND	0.15	0.028	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.15	0.021	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	0.37	0.027	mg/kg	
85-01-8	Phenanthrene	1.73	0.073	0.025	mg/kg	
129-00-0	Pyrene	3.14	0.073	0.023	mg/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	0.37	0.019	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	65%		10-99%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> SB-3		<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-3		<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 88.5
<b>Method:</b> SW846 8270E SW846 3546		
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

**ABN TCL List (SOM0 2.0)**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	68%		10-96%
118-79-6	2,4,6-Tribromophenol	77%		10-123%
4165-60-0	Nitrobenzene-d5	67%		10-109%
321-60-8	2-Fluorobiphenyl	71%		11-109%
1718-51-0	Terphenyl-d14	75%		10-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Unknown	4.25	.37	mg/kg	J
203-64-5	4H-Cyclopenta[def]phenanthrene	8.42	.64	mg/kg	JN
	Unknown	8.60	.33	mg/kg	J
243-17-4	1H-Benzo[b]fluorene	9.52	.35	mg/kg	JN
	Unknown	10.46	.3	mg/kg	J
	unknown PAH Substances	11.44	.5	mg/kg	J
	unknown PAH substance	11.61	.87	mg/kg	J
	Unknown	11.86	.35	mg/kg	J
	Unknown	13.41	.45	mg/kg	J
	Total TIC, Semi-Volatile		4.16	mg/kg	J

- (a) Dilution required due to matrix interference.
- (b) Associated CCV outside of control limits high, sample was ND.

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ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

4.3  
4

SGS North America Inc.

## Report of Analysis

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<b>Client Sample ID:</b> SB-3		<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-3		<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 88.5
<b>Method:</b> SW846 8081B SW846 3570		
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	8G56352.D	1	05/09/24 06:46	CP	05/08/24 18:21	OP54452	G8G2470
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	5.4 g	10.0 ml
Run #2		

## Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.00042	0.000082	mg/kg	
319-84-6	alpha-BHC	ND	0.00042	0.000048	mg/kg	
319-85-7	beta-BHC <sup>a</sup>	0.00013	0.00042	0.000061	mg/kg	JB
319-86-8	delta-BHC	ND	0.00042	0.000063	mg/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.00042	0.000073	mg/kg	
5103-71-9	alpha-Chlordane	0.00098	0.00042	0.000056	mg/kg	
5103-74-2	gamma-Chlordane	0.00051	0.00042	0.000063	mg/kg	
57-74-9	Chlordane (alpha and gamma)	0.0015	0.00042	0.000056	mg/kg	
60-57-1	Dieldrin <sup>a</sup>	0.00012	0.00042	0.000067	mg/kg	J
72-54-8	4,4'-DDD	0.00079	0.00042	0.000044	mg/kg	
72-55-9	4,4'-DDE <sup>a</sup>	0.00045	0.00042	0.000050	mg/kg	
50-29-3	4,4'-DDT <sup>a</sup>	0.0011	0.00042	0.000073	mg/kg	
72-20-8	Endrin	ND	0.00042	0.000061	mg/kg	
1031-07-8	Endosulfan sulfate	ND	0.00042	0.000050	mg/kg	
7421-93-4	Endrin aldehyde	ND	0.00042	0.00012	mg/kg	
959-98-8	Endosulfan-I	ND	0.00042	0.000056	mg/kg	
33213-65-9	Endosulfan-II	ND	0.00042	0.000059	mg/kg	
76-44-8	Heptachlor	ND	0.00042	0.000054	mg/kg	
1024-57-3	Heptachlor epoxide <sup>a</sup>	0.00018	0.00042	0.000075	mg/kg	J
72-43-5	Methoxychlor	ND	0.00042	0.00017	mg/kg	
53494-70-5	Endrin ketone	ND	0.00042	0.000067	mg/kg	
8001-35-2	Toxaphene	ND	0.0052	0.0035	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	97%		46-145%
877-09-8	Tetrachloro-m-xylene	84%		46-145%
2051-24-3	Decachlorobiphenyl	55%		29-163%
2051-24-3	Decachlorobiphenyl	127%		29-163%

(a) More than 40 % RPD for detected concentrations between the two GC columns.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

SGS North America Inc.

## Report of Analysis

Page 1 of 1

<b>Client Sample ID:</b> SB-3		
<b>Lab Sample ID:</b> JD87833-3		<b>Date Sampled:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Date Received:</b> 05/03/24
<b>Method:</b> SW846 8082A SW846 3570		<b>Percent Solids:</b> 88.5
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G231738.D	1	05/09/24 06:51	MLC	05/08/24 18:21	OP54453	G2G6085
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	5.4 g	10.0 ml
Run #2		

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.021	0.0089	mg/kg	
11104-28-2	Aroclor 1221	ND	0.021	0.0070	mg/kg	
11141-16-5	Aroclor 1232	ND	0.021	0.017	mg/kg	
53469-21-9	Aroclor 1242	ND	0.021	0.013	mg/kg	
12672-29-6	Aroclor 1248	ND	0.021	0.0045	mg/kg	
11097-69-1	Aroclor 1254	ND	0.021	0.0023	mg/kg	
11096-82-5	Aroclor 1260	ND	0.021	0.0072	mg/kg	
11100-14-4	Aroclor 1268	ND	0.021	0.0021	mg/kg	
37324-23-5	Aroclor 1262	ND	0.021	0.0017	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	81%		42-159%
877-09-8	Tetrachloro-m-xylene	78%		42-159%
2051-24-3	Decachlorobiphenyl	80%		18-154%
2051-24-3	Decachlorobiphenyl	123%		18-154%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> SB-3 <b>Lab Sample ID:</b> JD87833-3 <b>Matrix:</b> SO - Soil <b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ	<b>Date Sampled:</b> 05/03/24 <b>Date Received:</b> 05/03/24 <b>Percent Solids:</b> 88.5
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### Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	7040	56	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Antimony	< 2.2	2.2	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Arsenic	2.4	2.2	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Barium	28.8	22	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Beryllium	0.28	0.22	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Cadmium	< 0.56	0.56	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Calcium	1560	560	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Chromium	9.4	1.1	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Cobalt	< 5.6	5.6	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Copper	9.3	2.8	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Iron	11400	56	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Lead	13.1	2.2	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Magnesium	1600	560	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Manganese	226	1.7	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Mercury	< 0.032	0.032	mg/kg	1	05/08/24	05/09/24	CB SW846 7471B <sup>1</sup>	SW846 7471B <sup>4</sup>
Nickel	7.9	4.5	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Potassium	< 1100	1100	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Selenium	< 2.2	2.2	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Silver	< 0.56	0.56	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Sodium	< 1100	1100	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Thallium	< 1.1	1.1	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Vanadium	20.2	5.6	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Zinc	29.0	11	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>

(1) Instrument QC Batch: MA56033

(2) Instrument QC Batch: MA56049

(3) Prep QC Batch: MP46464

(4) Prep QC Batch: MP46496

RL = Reporting Limit

4.3  
4

SGS North America Inc.

## Report of Analysis

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<b>Client Sample ID:</b> SB-4		<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-4		<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 87.6
<b>Method:</b> SW846 8270E SW846 3546		
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CJ6530.D	1	05/09/24 21:45	RS	05/09/24 10:55	OP54460	ECJ297
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

## ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	0.076	0.019	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.19	0.023	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.19	0.032	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.19	0.067	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	0.19	0.14	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	0.19	0.040	mg/kg	
95-48-7	2-Methylphenol	ND	0.076	0.024	mg/kg	
	3&4-Methylphenol	ND	0.076	0.031	mg/kg	
88-75-5	2-Nitrophenol	ND	0.19	0.025	mg/kg	
100-02-7	4-Nitrophenol	ND	0.38	0.10	mg/kg	
87-86-5	Pentachlorophenol <sup>a</sup>	ND	0.15	0.035	mg/kg	
108-95-2	Phenol	ND	0.076	0.020	mg/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	0.19	0.025	mg/kg	
95-95-4	2,4,5-Trichlorophenol	ND	0.19	0.028	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.19	0.023	mg/kg	
83-32-9	Acenaphthene	0.106	0.038	0.013	mg/kg	
208-96-8	Acenaphthylene	0.207	0.038	0.019	mg/kg	
98-86-2	Acetophenone	ND	0.19	0.0081	mg/kg	
120-12-7	Anthracene	0.563	0.038	0.023	mg/kg	
1912-24-9	Atrazine	ND	0.076	0.016	mg/kg	
56-55-3	Benzo(a)anthracene	1.55	0.038	0.011	mg/kg	
50-32-8	Benzo(a)pyrene	1.53	0.038	0.017	mg/kg	
205-99-2	Benzo(b)fluoranthene	1.81	0.038	0.017	mg/kg	
191-24-2	Benzo(g,h,i)perylene	0.941	0.038	0.019	mg/kg	
207-08-9	Benzo(k)fluoranthene	0.505	0.038	0.018	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	0.076	0.015	mg/kg	
85-68-7	Butyl benzyl phthalate <sup>a</sup>	ND	0.076	0.0092	mg/kg	
92-52-4	1,1'-Biphenyl	0.0087	0.076	0.0052	mg/kg	J
100-52-7	Benzaldehyde	ND	0.19	0.0094	mg/kg	
91-58-7	2-Chloronaphthalene	ND	0.076	0.0090	mg/kg	
106-47-8	4-Chloroaniline	ND	0.19	0.014	mg/kg	
86-74-8	Carbazole	0.0690	0.076	0.0055	mg/kg	JB

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

# Report of Analysis

<b>Client Sample ID:</b> SB-4		<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-4		<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 87.6
<b>Method:</b> SW846 8270E SW846 3546		
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

**ABN TCL List (SOM0 2.0)**

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	0.076	0.015	mg/kg	
218-01-9	Chrysene	1.44	0.038	0.012	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	0.076	0.0081	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	0.076	0.016	mg/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	0.076	0.014	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.076	0.012	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	0.038	0.012	mg/kg	
606-20-2	2,6-Dinitrotoluene	ND	0.038	0.019	mg/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	0.076	0.032	mg/kg	
123-91-1	1,4-Dioxane	ND	0.038	0.025	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	0.247	0.038	0.017	mg/kg	
132-64-9	Dibenzofuran	0.0509	0.076	0.015	mg/kg	J
84-74-2	Di-n-butyl phthalate	ND	0.076	0.0062	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	0.076	0.0094	mg/kg	
84-66-2	Diethyl phthalate	ND	0.076	0.0081	mg/kg	
131-11-3	Dimethyl phthalate	ND	0.076	0.0067	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.076	0.0088	mg/kg	
206-44-0	Fluoranthene	3.22	0.038	0.017	mg/kg	
86-73-7	Fluorene	0.163	0.038	0.017	mg/kg	
118-74-1	Hexachlorobenzene	ND	0.076	0.0096	mg/kg	
87-68-3	Hexachlorobutadiene	ND	0.038	0.015	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	0.38	0.015	mg/kg	
67-72-1	Hexachloroethane	ND	0.19	0.019	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	0.796	0.038	0.018	mg/kg	
78-59-1	Isophorone	ND	0.076	0.0081	mg/kg	
91-57-6	2-Methylnaphthalene	0.0181	0.038	0.0085	mg/kg	J
88-74-4	2-Nitroaniline	ND	0.19	0.0089	mg/kg	
99-09-2	3-Nitroaniline	ND	0.19	0.0094	mg/kg	
100-01-6	4-Nitroaniline	ND	0.19	0.0098	mg/kg	
91-20-3	Naphthalene	0.0238	0.038	0.011	mg/kg	J
98-95-3	Nitrobenzene	ND	0.076	0.015	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.076	0.011	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	0.19	0.014	mg/kg	
85-01-8	Phenanthrene	1.53	0.038	0.013	mg/kg	
129-00-0	Pyrene	3.12	0.038	0.012	mg/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	0.19	0.0096	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	74%		10-99%

ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

# Report of Analysis

<b>Client Sample ID:</b> SB-4		
<b>Lab Sample ID:</b> JD87833-4		<b>Date Sampled:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Date Received:</b> 05/03/24
<b>Method:</b> SW846 8270E SW846 3546		<b>Percent Solids:</b> 87.6
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

**ABN TCL List (SOM0 2.0)**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	76%		10-96%
118-79-6	2,4,6-Tribromophenol	95%		10-123%
4165-60-0	Nitrobenzene-d5	79%		10-109%
321-60-8	2-Fluorobiphenyl	83%		11-109%
1718-51-0	Terphenyl-d14	87%		10-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Unknown	4.25	.44	mg/kg	J
	Unknown	4.48	.2	mg/kg	J
	Unknown	4.76	.18	mg/kg	J
	Phenanthrene, methyl	8.32	.23	mg/kg	J
	Phenanthrene, methyl	8.34	.2	mg/kg	J
203-64-5	4H-Cyclopenta[def]phenanthrene	8.42	.65	mg/kg	JN
	Unknown	8.60	.29	mg/kg	J
	Anthracene, dimethyl	8.83	.19	mg/kg	J
	Unknown	8.91	.19	mg/kg	J
	Fluoranthene, methyl	9.52	.31	mg/kg	J
	Unknown	9.58	.19	mg/kg	J
	Unknown	10.46	.16	mg/kg	J
	Unknown	10.75	.15	mg/kg	J
	Unknown	11.05	.33	mg/kg	J
	Unknown	11.11	.28	mg/kg	J
	Unknown	11.21	.43	mg/kg	J
	Unknown PHA Substance	11.45	.46	mg/kg	J
	Unknown	11.52	.21	mg/kg	J
	Unknown PHA Substance	11.61	.92	mg/kg	J
	H-Indeno phenanthrene	11.87	.21	mg/kg	J
	Unknown	12.77	.38	mg/kg	J
	Unknown	13.05	.21	mg/kg	J
	Unknown	13.09	.23	mg/kg	J
	Unknown	13.13	.17	mg/kg	J
	Unknown	13.42	.4	mg/kg	J
	Total TIC, Semi-Volatile		7.61	mg/kg	J

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

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## Report of Analysis

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<b>Client Sample ID:</b> SB-4		<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-4		<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 87.6
<b>Method:</b> SW846 8081B SW846 3570		
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	8G56353.D	1	05/09/24 07:08	CP	05/08/24 18:21	OP54452	G8G2470
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	5.4 g	10.0 ml
Run #2		

## Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.00042	0.000082	mg/kg	
319-84-6	alpha-BHC	ND	0.00042	0.000049	mg/kg	
319-85-7	beta-BHC <sup>a</sup>	0.00014	0.00042	0.000061	mg/kg	JB
319-86-8	delta-BHC	ND	0.00042	0.000063	mg/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.00042	0.000074	mg/kg	
5103-71-9	alpha-Chlordane	0.0012	0.00042	0.000057	mg/kg	
5103-74-2	gamma-Chlordane	0.00046	0.00042	0.000063	mg/kg	
57-74-9	Chlordane (alpha and gamma)	0.0017	0.00042	0.000057	mg/kg	
60-57-1	Dieldrin	0.00021	0.00042	0.000068	mg/kg	J
72-54-8	4,4'-DDD <sup>a</sup>	0.00040	0.00042	0.000044	mg/kg	J
72-55-9	4,4'-DDE <sup>a</sup>	0.00014	0.00042	0.000051	mg/kg	J
50-29-3	4,4'-DDT <sup>a</sup>	0.00053	0.00042	0.000074	mg/kg	
72-20-8	Endrin	ND	0.00042	0.000061	mg/kg	
1031-07-8	Endosulfan sulfate	ND	0.00042	0.000051	mg/kg	
7421-93-4	Endrin aldehyde	ND	0.00042	0.00012	mg/kg	
959-98-8	Endosulfan-I	ND	0.00042	0.000057	mg/kg	
33213-65-9	Endosulfan-II	ND	0.00042	0.000059	mg/kg	
76-44-8	Heptachlor	ND	0.00042	0.000055	mg/kg	
1024-57-3	Heptachlor epoxide <sup>a</sup>	0.00024	0.00042	0.000076	mg/kg	J
72-43-5	Methoxychlor	ND	0.00042	0.00017	mg/kg	
53494-70-5	Endrin ketone	ND	0.00042	0.000068	mg/kg	
8001-35-2	Toxaphene	ND	0.0053	0.0035	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	75%		46-145%
877-09-8	Tetrachloro-m-xylene	75%		46-145%
2051-24-3	Decachlorobiphenyl	44%		29-163%
2051-24-3	Decachlorobiphenyl	112%		29-163%

(a) More than 40 % RPD for detected concentrations between the two GC columns.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

SGS North America Inc.

## Report of Analysis

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<b>Client Sample ID:</b> SB-4		
<b>Lab Sample ID:</b> JD87833-4		<b>Date Sampled:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Date Received:</b> 05/03/24
<b>Method:</b> SW846 8082A SW846 3570		<b>Percent Solids:</b> 87.6
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G231739.D	1	05/09/24 07:15	MLC	05/08/24 18:21	OP54453	G2G6085
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	5.4 g	10.0 ml
Run #2		

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.021	0.0090	mg/kg	
11104-28-2	Aroclor 1221	ND	0.021	0.0071	mg/kg	
11141-16-5	Aroclor 1232	ND	0.021	0.018	mg/kg	
53469-21-9	Aroclor 1242	ND	0.021	0.013	mg/kg	
12672-29-6	Aroclor 1248	ND	0.021	0.0046	mg/kg	
11097-69-1	Aroclor 1254	ND	0.021	0.0023	mg/kg	
11096-82-5	Aroclor 1260	ND	0.021	0.0073	mg/kg	
11100-14-4	Aroclor 1268	ND	0.021	0.0021	mg/kg	
37324-23-5	Aroclor 1262	ND	0.021	0.0018	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	81%		42-159%
877-09-8	Tetrachloro-m-xylene	77%		42-159%
2051-24-3	Decachlorobiphenyl	73%		18-154%
2051-24-3	Decachlorobiphenyl	118%		18-154%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> SB-4 <b>Lab Sample ID:</b> JD87833-4 <b>Matrix:</b> SO - Soil <b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ	<b>Date Sampled:</b> 05/03/24 <b>Date Received:</b> 05/03/24 <b>Percent Solids:</b> 87.6
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### Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	6940	56	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Antimony	< 2.2	2.2	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Arsenic	2.4	2.2	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Barium	25.8	22	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Beryllium	0.27	0.22	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Cadmium	< 0.56	0.56	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Calcium	1220	560	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Chromium	8.6	1.1	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Cobalt	< 5.6	5.6	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Copper	8.3	2.8	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Iron	10900	56	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Lead	17.2	2.2	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Magnesium	1510	560	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Manganese	178	1.7	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Mercury	< 0.029	0.029	mg/kg	1	05/08/24	05/09/24	CB SW846 7471B <sup>1</sup>	SW846 7471B <sup>4</sup>
Nickel	7.2	4.5	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Potassium	< 1100	1100	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Selenium	< 2.2	2.2	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Silver	< 0.56	0.56	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Sodium	< 1100	1100	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Thallium	< 1.1	1.1	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Vanadium	18.7	5.6	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Zinc	26.9	11	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>

(1) Instrument QC Batch: MA56033

(2) Instrument QC Batch: MA56049

(3) Prep QC Batch: MP46464

(4) Prep QC Batch: MP46496

RL = Reporting Limit

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## Report of Analysis

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<b>Client Sample ID:</b> SB-5		<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-5		<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 89.7
<b>Method:</b> SW846 8270E SW846 3546		
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CJ6531.D	1	05/09/24 22:03	RS	05/09/24 10:55	OP54460	ECJ297
Run #2	CJ6680.D	5	05/13/24 10:04	KH	05/09/24 10:55	OP54460	ECJ302

Run #	Initial Weight	Final Volume
Run #1	30.4 g	1.0 ml
Run #2	30.4 g	1.0 ml

## ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	0.073	0.018	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.18	0.022	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.18	0.031	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.18	0.065	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	0.18	0.14	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	0.18	0.039	mg/kg	
95-48-7	2-Methylphenol	ND	0.073	0.023	mg/kg	
	3&4-Methylphenol	ND	0.073	0.030	mg/kg	
88-75-5	2-Nitrophenol	ND	0.18	0.024	mg/kg	
100-02-7	4-Nitrophenol	ND	0.37	0.098	mg/kg	
87-86-5	Pentachlorophenol <sup>a</sup>	ND	0.15	0.034	mg/kg	
108-95-2	Phenol	ND	0.073	0.019	mg/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	0.18	0.024	mg/kg	
95-95-4	2,4,5-Trichlorophenol	ND	0.18	0.027	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.18	0.022	mg/kg	
83-32-9	Acenaphthene	0.147	0.037	0.013	mg/kg	
208-96-8	Acenaphthylene	0.192	0.037	0.019	mg/kg	
98-86-2	Acetophenone	ND	0.18	0.0079	mg/kg	
120-12-7	Anthracene	0.568	0.037	0.022	mg/kg	
1912-24-9	Atrazine	ND	0.073	0.016	mg/kg	
56-55-3	Benzo(a)anthracene	1.85	0.037	0.010	mg/kg	
50-32-8	Benzo(a)pyrene	1.87	0.037	0.017	mg/kg	
205-99-2	Benzo(b)fluoranthene	2.04	0.037	0.016	mg/kg	
191-24-2	Benzo(g,h,i)perylene	1.20	0.037	0.018	mg/kg	
207-08-9	Benzo(k)fluoranthene	0.728	0.037	0.017	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	0.073	0.014	mg/kg	
85-68-7	Butyl benzyl phthalate <sup>a</sup>	ND	0.073	0.0089	mg/kg	
92-52-4	1,1'-Biphenyl	0.0130	0.073	0.0050	mg/kg	J
100-52-7	Benzaldehyde	ND	0.18	0.0091	mg/kg	
91-58-7	2-Chloronaphthalene	ND	0.073	0.0087	mg/kg	
106-47-8	4-Chloroaniline	ND	0.18	0.013	mg/kg	
86-74-8	Carbazole	0.0723	0.073	0.0053	mg/kg	JB

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

# Report of Analysis

<b>Client Sample ID:</b> SB-5		<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-5		<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 89.7
<b>Method:</b> SW846 8270E SW846 3546		
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

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**ABN TCL List (SOM0 2.0)**

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	0.073	0.014	mg/kg	
218-01-9	Chrysene	1.54	0.037	0.012	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	0.073	0.0078	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	0.073	0.016	mg/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	0.073	0.013	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.073	0.012	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	0.037	0.011	mg/kg	
606-20-2	2,6-Dinitrotoluene	ND	0.037	0.018	mg/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	0.073	0.031	mg/kg	
123-91-1	1,4-Dioxane	ND	0.037	0.024	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	0.287	0.037	0.016	mg/kg	
132-64-9	Dibenzofuran	0.0929	0.073	0.015	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	0.073	0.0060	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	0.073	0.0091	mg/kg	
84-66-2	Diethyl phthalate	ND	0.073	0.0078	mg/kg	
131-11-3	Dimethyl phthalate	ND	0.073	0.0065	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.073	0.0086	mg/kg	
206-44-0	Fluoranthene	3.68 <sup>b</sup>	0.18	0.082	mg/kg	
86-73-7	Fluorene	0.166	0.037	0.017	mg/kg	
118-74-1	Hexachlorobenzene	ND	0.073	0.0093	mg/kg	
87-68-3	Hexachlorobutadiene	ND	0.037	0.015	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	0.37	0.015	mg/kg	
67-72-1	Hexachloroethane	ND	0.18	0.018	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	0.974	0.037	0.017	mg/kg	
78-59-1	Isophorone	ND	0.073	0.0078	mg/kg	
91-57-6	2-Methylnaphthalene	0.0200	0.037	0.0083	mg/kg	J
88-74-4	2-Nitroaniline	ND	0.18	0.0087	mg/kg	
99-09-2	3-Nitroaniline	ND	0.18	0.0092	mg/kg	
100-01-6	4-Nitroaniline	ND	0.18	0.0095	mg/kg	
91-20-3	Naphthalene	0.0286	0.037	0.010	mg/kg	J
98-95-3	Nitrobenzene	ND	0.073	0.014	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.073	0.011	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	0.18	0.013	mg/kg	
85-01-8	Phenanthrene	1.42	0.037	0.012	mg/kg	
129-00-0	Pyrene	3.41 <sup>b</sup>	0.18	0.059	mg/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	0.18	0.0093	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	75%	71%	10-99%

ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

# Report of Analysis

<b>Client Sample ID:</b> SB-5		<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-5		<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 89.7
<b>Method:</b> SW846 8270E SW846 3546		
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

**ABN TCL List (SOM0 2.0)**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	80%	74%	10-96%
118-79-6	2,4,6-Tribromophenol	103%	95%	10-123%
4165-60-0	Nitrobenzene-d5	79%	73%	10-109%
321-60-8	2-Fluorobiphenyl	87%	82%	11-109%
1718-51-0	Terphenyl-d14	92%	86%	10-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Unknown	4.25	.29	mg/kg	J
13798-23-7	Sulfur	6.89	.37	mg/kg	JN
	Anthracene, methyl	8.32	.21	mg/kg	J
203-64-5	4H-Cyclopenta[def]phenanthrene	8.42	.61	mg/kg	JN
	Naphthalene, phenyl	8.60	.28	mg/kg	J
	Unknown	8.91	.24	mg/kg	J
	Unknown	9.12	.22	mg/kg	J
	Pyrene, methyl	9.52	.29	mg/kg	J
	Unknown	11.05	.32	mg/kg	J
	Unknown	11.11	.28	mg/kg	J
	Unknown	11.21	.38	mg/kg	J
	Unknown PHA Substance	11.45	.42	mg/kg	J
	Unknown	11.52	.65	mg/kg	J
	Unknown PHA Substance	11.61	1.1	mg/kg	J
	Unknown	11.87	.25	mg/kg	J
	Unknown	12.01	.46	mg/kg	J
	Alkane	12.21	.26	mg/kg	J
	Unknown	12.24	.23	mg/kg	J
	Unknown	12.68	.25	mg/kg	J
	Unknown	12.77	.39	mg/kg	J
	Unknown	13.05	.28	mg/kg	J
	Unknown	13.09	.63	mg/kg	J
	Unknown	13.43	.82	mg/kg	J
	Unknown	13.85	.23	mg/kg	J
	Unknown	14.02	.26	mg/kg	J
	Total TIC, Semi-Volatile		9.72	mg/kg	J

- (a) Associated CCV outside of control limits high, sample was ND.
- (b) Result is from Run# 2

ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

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SGS North America Inc.

## Report of Analysis

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<b>Client Sample ID:</b> SB-5		
<b>Lab Sample ID:</b> JD87833-5		<b>Date Sampled:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Date Received:</b> 05/03/24
<b>Method:</b> SW846 8081B SW846 3570		<b>Percent Solids:</b> 89.7
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	8G56401.D	5	05/10/24 01:27	TP	05/08/24 18:21	OP54452	G8G2471
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	5.4 g	10.0 ml
Run #2		

## Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0021	0.00040	mg/kg	
319-84-6	alpha-BHC	ND	0.0021	0.00024	mg/kg	
319-85-7	beta-BHC	ND	0.0021	0.00030	mg/kg	
319-86-8	delta-BHC	ND	0.0021	0.00031	mg/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.0021	0.00036	mg/kg	
5103-71-9	alpha-Chlordane <sup>a</sup>	0.00063	0.0021	0.00028	mg/kg	J
5103-74-2	gamma-Chlordane	ND	0.0021	0.00031	mg/kg	
57-74-9	Chlordane (alpha and gamma)	0.00063	0.0021	0.00028	mg/kg	J
60-57-1	Dieldrin	ND	0.0021	0.00033	mg/kg	
72-54-8	4,4'-DDD <sup>a</sup>	0.00073	0.0021	0.00022	mg/kg	J
72-55-9	4,4'-DDE	ND	0.0021	0.00025	mg/kg	
50-29-3	4,4'-DDT	0.0013	0.0021	0.00036	mg/kg	J
72-20-8	Endrin	ND	0.0021	0.00030	mg/kg	
1031-07-8	Endosulfan sulfate	ND	0.0021	0.00025	mg/kg	
7421-93-4	Endrin aldehyde	ND	0.0021	0.00060	mg/kg	
959-98-8	Endosulfan-I	ND	0.0021	0.00028	mg/kg	
33213-65-9	Endosulfan-II	ND	0.0021	0.00029	mg/kg	
76-44-8	Heptachlor	ND	0.0021	0.00027	mg/kg	
1024-57-3	Heptachlor epoxide	ND	0.0021	0.00037	mg/kg	
72-43-5	Methoxychlor	ND	0.0021	0.00082	mg/kg	
53494-70-5	Endrin ketone	ND	0.0021	0.00033	mg/kg	
8001-35-2	Toxaphene	ND	0.026	0.017	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	90%		46-145%
877-09-8	Tetrachloro-m-xylene	84%		46-145%
2051-24-3	Decachlorobiphenyl	54%		29-163%
2051-24-3	Decachlorobiphenyl	104%		29-163%

(a) More than 40 % RPD for detected concentrations between the two GC columns.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

SGS North America Inc.

## Report of Analysis

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<b>Client Sample ID:</b> SB-5		
<b>Lab Sample ID:</b> JD87833-5		<b>Date Sampled:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Date Received:</b> 05/03/24
<b>Method:</b> SW846 8082A SW846 3570		<b>Percent Solids:</b> 89.7
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G231744.D	1	05/09/24 09:16	MLC	05/08/24 18:21	OP54453	G2G6085
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	5.4 g	10.0 ml
Run #2		

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.021	0.0088	mg/kg	
11104-28-2	Aroclor 1221	ND	0.021	0.0069	mg/kg	
11141-16-5	Aroclor 1232	ND	0.021	0.017	mg/kg	
53469-21-9	Aroclor 1242	ND	0.021	0.012	mg/kg	
12672-29-6	Aroclor 1248	ND	0.021	0.0045	mg/kg	
11097-69-1	Aroclor 1254	ND	0.021	0.0022	mg/kg	
11096-82-5	Aroclor 1260	ND	0.021	0.0071	mg/kg	
11100-14-4	Aroclor 1268	ND	0.021	0.0021	mg/kg	
37324-23-5	Aroclor 1262	ND	0.021	0.0017	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	78%		42-159%
877-09-8	Tetrachloro-m-xylene	75%		42-159%
2051-24-3	Decachlorobiphenyl	76%		18-154%
2051-24-3	Decachlorobiphenyl	122%		18-154%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



## Report of Analysis

<b>Client Sample ID:</b> SB-5 <b>Lab Sample ID:</b> JD87833-5 <b>Matrix:</b> SO - Soil <b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ	<b>Date Sampled:</b> 05/03/24 <b>Date Received:</b> 05/03/24 <b>Percent Solids:</b> 89.7
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### Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	7830	57	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Antimony	< 2.3	2.3	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Arsenic	2.4	2.3	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Barium	29.2	23	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Beryllium	0.30	0.23	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Cadmium	< 0.57	0.57	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Calcium	1450	570	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Chromium	9.8	1.1	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Cobalt	< 5.7	5.7	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Copper	9.1	2.8	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Iron	11900	57	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Lead	9.8	2.3	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Magnesium	1880	570	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Manganese	213	1.7	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Mercury	< 0.029	0.029	mg/kg	1	05/08/24	05/09/24	CB SW846 7471B <sup>1</sup>	SW846 7471B <sup>4</sup>
Nickel	8.5	4.6	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Potassium	< 1100	1100	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Selenium	< 2.3	2.3	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Silver	< 0.57	0.57	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Sodium	< 1100	1100	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Thallium	< 1.1	1.1	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Vanadium	18.7	5.7	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Zinc	27.3	11	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>

(1) Instrument QC Batch: MA56033

(2) Instrument QC Batch: MA56049

(3) Prep QC Batch: MP46464

(4) Prep QC Batch: MP46496

RL = Reporting Limit

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SGS North America Inc.

## Report of Analysis

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<b>Client Sample ID:</b> SB-6		
<b>Lab Sample ID:</b> JD87833-6		<b>Date Sampled:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Date Received:</b> 05/03/24
<b>Method:</b> SW846 8270E SW846 3546		<b>Percent Solids:</b> 88.8
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CJ6532.D	1	05/09/24 22:22	RS	05/09/24 10:55	OP54460	ECJ297
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	30.9 g	1.0 ml
Run #2		

## ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	0.073	0.018	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.18	0.022	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.18	0.031	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.18	0.065	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	0.18	0.14	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	0.18	0.039	mg/kg	
95-48-7	2-Methylphenol	ND	0.073	0.023	mg/kg	
	3&4-Methylphenol	ND	0.073	0.030	mg/kg	
88-75-5	2-Nitrophenol	ND	0.18	0.024	mg/kg	
100-02-7	4-Nitrophenol	ND	0.36	0.097	mg/kg	
87-86-5	Pentachlorophenol <sup>a</sup>	ND	0.15	0.034	mg/kg	
108-95-2	Phenol	ND	0.073	0.019	mg/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	0.18	0.024	mg/kg	
95-95-4	2,4,5-Trichlorophenol	ND	0.18	0.027	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.18	0.022	mg/kg	
83-32-9	Acenaphthene	0.157	0.036	0.013	mg/kg	
208-96-8	Acenaphthylene	0.223	0.036	0.019	mg/kg	
98-86-2	Acetophenone	ND	0.18	0.0078	mg/kg	
120-12-7	Anthracene	0.537	0.036	0.022	mg/kg	
1912-24-9	Atrazine	ND	0.073	0.016	mg/kg	
56-55-3	Benzo(a)anthracene	1.58	0.036	0.010	mg/kg	
50-32-8	Benzo(a)pyrene	1.58	0.036	0.017	mg/kg	
205-99-2	Benzo(b)fluoranthene	1.81	0.036	0.016	mg/kg	
191-24-2	Benzo(g,h,i)perylene	0.994	0.036	0.018	mg/kg	
207-08-9	Benzo(k)fluoranthene	0.574	0.036	0.017	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	0.073	0.014	mg/kg	
85-68-7	Butyl benzyl phthalate <sup>a</sup>	ND	0.073	0.0089	mg/kg	
92-52-4	1,1'-Biphenyl	0.0159	0.073	0.0050	mg/kg	J
100-52-7	Benzaldehyde	ND	0.18	0.0090	mg/kg	
91-58-7	2-Chloronaphthalene	ND	0.073	0.0087	mg/kg	
106-47-8	4-Chloroaniline	ND	0.18	0.013	mg/kg	
86-74-8	Carbazole	0.102	0.073	0.0053	mg/kg	B

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> SB-6		<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-6		<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 88.8
<b>Method:</b> SW846 8270E SW846 3546		
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

## ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	0.073	0.014	mg/kg	
218-01-9	Chrysene	1.31	0.036	0.011	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	0.073	0.0078	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	0.073	0.016	mg/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	0.073	0.013	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.073	0.012	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	0.036	0.011	mg/kg	
606-20-2	2,6-Dinitrotoluene	ND	0.036	0.018	mg/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	0.073	0.030	mg/kg	
123-91-1	1,4-Dioxane	ND	0.036	0.024	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	0.251	0.036	0.016	mg/kg	
132-64-9	Dibenzofuran	0.0944	0.073	0.015	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	0.073	0.0059	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	0.073	0.0091	mg/kg	
84-66-2	Diethyl phthalate	ND	0.073	0.0078	mg/kg	
131-11-3	Dimethyl phthalate	ND	0.073	0.0065	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.073	0.0085	mg/kg	
206-44-0	Fluoranthene	3.05	0.036	0.016	mg/kg	
86-73-7	Fluorene	0.198	0.036	0.017	mg/kg	
118-74-1	Hexachlorobenzene	ND	0.073	0.0092	mg/kg	
87-68-3	Hexachlorobutadiene	ND	0.036	0.015	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	0.36	0.015	mg/kg	
67-72-1	Hexachloroethane	ND	0.18	0.018	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	0.826	0.036	0.017	mg/kg	
78-59-1	Isophorone	ND	0.073	0.0078	mg/kg	
91-57-6	2-Methylnaphthalene	0.0251	0.036	0.0082	mg/kg	J
88-74-4	2-Nitroaniline	ND	0.18	0.0086	mg/kg	
99-09-2	3-Nitroaniline	ND	0.18	0.0091	mg/kg	
100-01-6	4-Nitroaniline	ND	0.18	0.0094	mg/kg	
91-20-3	Naphthalene	0.0401	0.036	0.010	mg/kg	
98-95-3	Nitrobenzene	ND	0.073	0.014	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.073	0.011	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	0.18	0.013	mg/kg	
85-01-8	Phenanthrene	1.47	0.036	0.012	mg/kg	
129-00-0	Pyrene	3.01	0.036	0.012	mg/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	0.18	0.0093	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	72%		10-99%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

**Report of Analysis**

<b>Client Sample ID:</b> SB-6	
<b>Lab Sample ID:</b> JD87833-6	<b>Date Sampled:</b> 05/03/24
<b>Matrix:</b> SO - Soil	<b>Date Received:</b> 05/03/24
<b>Method:</b> SW846 8270E SW846 3546	<b>Percent Solids:</b> 88.8
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ	

**ABN TCL List (SOM0 2.0)**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	76%		10-96%
118-79-6	2,4,6-Tribromophenol	93%		10-123%
4165-60-0	Nitrobenzene-d5	73%		10-109%
321-60-8	2-Fluorobiphenyl	80%		11-109%
1718-51-0	Terphenyl-d14	84%		10-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Unknown ketone	4.25	.38	mg/kg	J
	Unknown	4.49	.22	mg/kg	J
	Anthracene, methyl	8.32	.2	mg/kg	J
	Anthracene, methyl	8.34	.22	mg/kg	J
203-64-5	4H-Cyclopenta[def]phenanthrene	8.42	.56	mg/kg	JN
	Naphthalene, phenyl	8.60	.25	mg/kg	J
	Phenanthrene, dimethyl	8.84	.18	mg/kg	J
	Unknown	8.91	.19	mg/kg	J
	Unknown	9.12	.18	mg/kg	J
	Pyrene, methyl	9.52	.29	mg/kg	J
	Fluoranthene, methyl	9.58	.18	mg/kg	J
	Unknown	10.47	.18	mg/kg	J
	Unknown	11.05	.26	mg/kg	J
	Unknown	11.13	.29	mg/kg	J
	Unknown	11.21	.34	mg/kg	J
	Unknown PHA substances	11.45	.35	mg/kg	J
	Unknown	11.53	.17	mg/kg	J
	Unknown PHA Substance	11.61	.96	mg/kg	J
	Unknown	11.87	.19	mg/kg	J
	Unknown	12.65	.19	mg/kg	J
	Unknown	12.77	.4	mg/kg	J
	Unknown	13.05	.24	mg/kg	J
	Unknown	13.09	.27	mg/kg	J
	Unknown	13.13	.17	mg/kg	J
	Unknown	13.43	.37	mg/kg	J
	Total TIC, Semi-Volatile		7.23	mg/kg	J

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> SB-6 <b>Lab Sample ID:</b> JD87833-6 <b>Matrix:</b> SO - Soil <b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ	<b>Date Sampled:</b> 05/03/24 <b>Date Received:</b> 05/03/24 <b>Percent Solids:</b> 88.8
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### Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	7860	56	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Antimony	< 2.3	2.3	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Arsenic	2.5	2.3	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Barium	29.8	23	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Beryllium	0.29	0.23	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Cadmium	< 0.56	0.56	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Calcium	1530	560	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Chromium	16.0	1.1	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Cobalt	< 5.6	5.6	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Copper	60.6	2.8	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Iron	12400	56	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Lead	13.6	2.3	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Magnesium	2740	560	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Manganese	200	1.7	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Mercury	< 0.029	0.029	mg/kg	1	05/08/24	05/09/24	CB SW846 7471B <sup>1</sup>	SW846 7471B <sup>4</sup>
Nickel	9.7	4.5	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Potassium	< 1100	1100	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Selenium	< 2.3	2.3	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Silver	< 0.56	0.56	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Sodium	< 1100	1100	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Thallium	< 1.1	1.1	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Vanadium	20.8	5.6	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Zinc	30.4	11	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>

(1) Instrument QC Batch: MA56033

(2) Instrument QC Batch: MA56049

(3) Prep QC Batch: MP46464

(4) Prep QC Batch: MP46496

RL = Reporting Limit

4.6  
4

SGS North America Inc.

## Report of Analysis

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<b>Client Sample ID:</b> SB-7		
<b>Lab Sample ID:</b> JD87833-7		<b>Date Sampled:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Date Received:</b> 05/03/24
<b>Method:</b> SW846 8270E SW846 3546		<b>Percent Solids:</b> 91.2
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CJ6539.D	1	05/10/24 00:35	RS	05/09/24 10:55	OP54460	ECJ297
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	30.7 g	1.0 ml
Run #2		

## ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	0.071	0.018	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.18	0.022	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.18	0.030	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.18	0.064	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	0.18	0.13	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	0.18	0.038	mg/kg	
95-48-7	2-Methylphenol	ND	0.071	0.023	mg/kg	
	3&4-Methylphenol	ND	0.071	0.029	mg/kg	
88-75-5	2-Nitrophenol	ND	0.18	0.024	mg/kg	
100-02-7	4-Nitrophenol	ND	0.36	0.095	mg/kg	
87-86-5	Pentachlorophenol <sup>a</sup>	ND	0.14	0.034	mg/kg	
108-95-2	Phenol	ND	0.071	0.019	mg/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	0.18	0.024	mg/kg	
95-95-4	2,4,5-Trichlorophenol	ND	0.18	0.027	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.18	0.021	mg/kg	
83-32-9	Acenaphthene	0.104	0.036	0.012	mg/kg	
208-96-8	Acenaphthylene	0.345	0.036	0.018	mg/kg	
98-86-2	Acetophenone	ND	0.18	0.0077	mg/kg	
120-12-7	Anthracene	0.495	0.036	0.022	mg/kg	
1912-24-9	Atrazine	ND	0.071	0.015	mg/kg	
56-55-3	Benzo(a)anthracene	1.38	0.036	0.010	mg/kg	
50-32-8	Benzo(a)pyrene	1.56	0.036	0.016	mg/kg	
205-99-2	Benzo(b)fluoranthene	1.64	0.036	0.016	mg/kg	
191-24-2	Benzo(g,h,i)perylene	1.00	0.036	0.018	mg/kg	
207-08-9	Benzo(k)fluoranthene	0.603	0.036	0.017	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	0.071	0.014	mg/kg	
85-68-7	Butyl benzyl phthalate <sup>a</sup>	ND	0.071	0.0087	mg/kg	
92-52-4	1,1'-Biphenyl	0.0126	0.071	0.0049	mg/kg	J
100-52-7	Benzaldehyde	ND	0.18	0.0089	mg/kg	
91-58-7	2-Chloronaphthalene	ND	0.071	0.0085	mg/kg	
106-47-8	4-Chloroaniline	ND	0.18	0.013	mg/kg	
86-74-8	Carbazole	0.0724	0.071	0.0052	mg/kg	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	SB-7	<b>Date Sampled:</b>	05/03/24
<b>Lab Sample ID:</b>	JD87833-7	<b>Date Received:</b>	05/03/24
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	91.2
<b>Method:</b>	SW846 8270E SW846 3546		
<b>Project:</b>	Ridgewood Berm Sampling, Ridgewood, NJ		

## ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	0.071	0.014	mg/kg	
218-01-9	Chrysene	1.25	0.036	0.011	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	0.071	0.0076	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	0.071	0.015	mg/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	0.071	0.013	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.071	0.012	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	0.036	0.011	mg/kg	
606-20-2	2,6-Dinitrotoluene	ND	0.036	0.018	mg/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	0.071	0.030	mg/kg	
123-91-1	1,4-Dioxane	ND	0.036	0.024	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	0.261	0.036	0.016	mg/kg	
132-64-9	Dibenzofuran	0.0663	0.071	0.015	mg/kg	J
84-74-2	Di-n-butyl phthalate	ND	0.071	0.0058	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	0.071	0.0089	mg/kg	
84-66-2	Diethyl phthalate	ND	0.071	0.0076	mg/kg	
131-11-3	Dimethyl phthalate	ND	0.071	0.0064	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.071	0.0084	mg/kg	
206-44-0	Fluoranthene	2.39	0.036	0.016	mg/kg	
86-73-7	Fluorene	0.167	0.036	0.016	mg/kg	
118-74-1	Hexachlorobenzene	ND	0.071	0.0090	mg/kg	
87-68-3	Hexachlorobutadiene	ND	0.036	0.014	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	0.36	0.014	mg/kg	
67-72-1	Hexachloroethane	ND	0.18	0.018	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	0.822	0.036	0.017	mg/kg	
78-59-1	Isophorone	ND	0.071	0.0076	mg/kg	
91-57-6	2-Methylnaphthalene	0.0265	0.036	0.0081	mg/kg	J
88-74-4	2-Nitroaniline	ND	0.18	0.0084	mg/kg	
99-09-2	3-Nitroaniline	ND	0.18	0.0089	mg/kg	
100-01-6	4-Nitroaniline	ND	0.18	0.0093	mg/kg	
91-20-3	Naphthalene	0.0383	0.036	0.010	mg/kg	
98-95-3	Nitrobenzene	ND	0.071	0.014	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.071	0.010	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	0.18	0.013	mg/kg	
85-01-8	Phenanthrene	1.05	0.036	0.012	mg/kg	
129-00-0	Pyrene	2.64	0.036	0.011	mg/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	0.18	0.0091	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	66%		10-99%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

# Report of Analysis

<b>Client Sample ID:</b> SB-7		<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-7		<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 91.2
<b>Method:</b> SW846 8270E SW846 3546		
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

**ABN TCL List (SOM0 2.0)**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	72%		10-96%
118-79-6	2,4,6-Tribromophenol	89%		10-123%
4165-60-0	Nitrobenzene-d5	72%		10-109%
321-60-8	2-Fluorobiphenyl	79%		11-109%
1718-51-0	Terphenyl-d14	79%		10-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Unknown	4.25	.43	mg/kg	J
	Phenanthrene, methyl	8.32	.21	mg/kg	J
	Phenanthrene, methyl	8.35	.17	mg/kg	J
	Unknown	8.42	.62	mg/kg	J
	Unknown	8.60	.32	mg/kg	J
	Alkene	8.84	.3	mg/kg	J
	Unknown	8.91	.23	mg/kg	J
	Unknown	9.12	.28	mg/kg	J
	Pyrene, methyl	9.52	.33	mg/kg	J
	Pyrene, methyl	9.59	.18	mg/kg	J
243-46-9	Benzo[b]naphtho[2,3-d]thiophene	10.11	.18	mg/kg	JN
	Unknown	10.28	.18	mg/kg	J
	Unknown	11.05	.22	mg/kg	J
	Unknown	11.20	.25	mg/kg	J
	Unknown PHA Substane	11.45	.37	mg/kg	J
	Unknown	11.52	.2	mg/kg	J
	Unknown PHA substance	11.61	.83	mg/kg	J
	Unknown	11.87	.22	mg/kg	J
	Unknown	12.18	.18	mg/kg	J
	Unknown	12.67	.31	mg/kg	J
	Unknown	12.77	.34	mg/kg	J
	Unknown	13.06	.21	mg/kg	J
	Unknown	13.43	.45	mg/kg	J
	Unknown	13.85	.18	mg/kg	J
	Unknown	13.98	.25	mg/kg	J
	Total TIC, Semi-Volatile		7.44	mg/kg	J

(a) Associated CCV outside of control limits high, sample was ND.

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ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit                                                  B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range                                                  N = Indicates presumptive evidence of a compound



SGS North America Inc.

## Report of Analysis

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<b>Client Sample ID:</b> SB-7		<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-7		<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 91.2
<b>Method:</b> SW846 8081B SW846 3570		
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	8G56355.D	1	05/09/24 07:52	CP	05/08/24 18:21	OP54452	G8G2470
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	5.0 g	10.0 ml
Run #2		

## Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.00044	0.000086	mg/kg	
319-84-6	alpha-BHC	ND	0.00044	0.000050	mg/kg	
319-85-7	beta-BHC <sup>a</sup>	0.00015	0.00044	0.000064	mg/kg	JB
319-86-8	delta-BHC	ND	0.00044	0.000066	mg/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.00044	0.000077	mg/kg	
5103-71-9	alpha-Chlordane	0.00086	0.00044	0.000059	mg/kg	
5103-74-2	gamma-Chlordane	0.00044	0.00044	0.000066	mg/kg	
57-74-9	Chlordane (alpha and gamma)	0.0013	0.00044	0.000059	mg/kg	
60-57-1	Dieldrin <sup>a</sup>	0.00015	0.00044	0.000070	mg/kg	J
72-54-8	4,4' -DDD	0.00069	0.00044	0.000046	mg/kg	
72-55-9	4,4' -DDE	0.00057	0.00044	0.000053	mg/kg	
50-29-3	4,4' -DDT <sup>a</sup>	0.00044	0.00044	0.000077	mg/kg	
72-20-8	Endrin	ND	0.00044	0.000064	mg/kg	
1031-07-8	Endosulfan sulfate	ND	0.00044	0.000053	mg/kg	
7421-93-4	Endrin aldehyde	ND	0.00044	0.00013	mg/kg	
959-98-8	Endosulfan-I	ND	0.00044	0.000059	mg/kg	
33213-65-9	Endosulfan-II	ND	0.00044	0.000061	mg/kg	
76-44-8	Heptachlor	ND	0.00044	0.000057	mg/kg	
1024-57-3	Heptachlor epoxide <sup>a</sup>	0.00030	0.00044	0.000079	mg/kg	J
72-43-5	Methoxychlor	ND	0.00044	0.00017	mg/kg	
53494-70-5	Endrin ketone	ND	0.00044	0.000070	mg/kg	
8001-35-2	Toxaphene	ND	0.0055	0.0036	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	87%		46-145%
877-09-8	Tetrachloro-m-xylene	84%		46-145%
2051-24-3	Decachlorobiphenyl	58%		29-163%
2051-24-3	Decachlorobiphenyl	111%		29-163%

(a) More than 40 % RPD for detected concentrations between the two GC columns.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

SGS North America Inc.

## Report of Analysis

Page 1 of 1

<b>Client Sample ID:</b> SB-7		
<b>Lab Sample ID:</b> JD87833-7		<b>Date Sampled:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Date Received:</b> 05/03/24
<b>Method:</b> SW846 8082A SW846 3570		<b>Percent Solids:</b> 91.2
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G231745.D	1	05/09/24 09:40	MLC	05/08/24 18:21	OP54453	G2G6085
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	5.0 g	10.0 ml
Run #2		

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.022	0.0093	mg/kg	
11104-28-2	Aroclor 1221	ND	0.022	0.0074	mg/kg	
11141-16-5	Aroclor 1232	ND	0.022	0.018	mg/kg	
53469-21-9	Aroclor 1242	ND	0.022	0.013	mg/kg	
12672-29-6	Aroclor 1248	ND	0.022	0.0047	mg/kg	
11097-69-1	Aroclor 1254	ND	0.022	0.0024	mg/kg	
11096-82-5	Aroclor 1260	ND	0.022	0.0076	mg/kg	
11100-14-4	Aroclor 1268	ND	0.022	0.0022	mg/kg	
37324-23-5	Aroclor 1262	ND	0.022	0.0018	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	77%		42-159%
877-09-8	Tetrachloro-m-xylene	77%		42-159%
2051-24-3	Decachlorobiphenyl	67%		18-154%
2051-24-3	Decachlorobiphenyl	110%		18-154%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> SB-7 <b>Lab Sample ID:</b> JD87833-7 <b>Matrix:</b> SO - Soil <b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ	<b>Date Sampled:</b> 05/03/24 <b>Date Received:</b> 05/03/24 <b>Percent Solids:</b> 91.2
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### Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	8010	58	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Antimony	< 2.3	2.3	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Arsenic	2.7	2.3	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Barium	33.7	23	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Beryllium	0.31	0.23	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Cadmium	< 0.58	0.58	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Calcium	1710	580	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Chromium	9.7	1.2	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Cobalt	< 5.8	5.8	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Copper	10.2	2.9	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Iron	12500	58	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Lead	13.1	2.3	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Magnesium	1860	580	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Manganese	255	1.7	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Mercury	< 0.032	0.032	mg/kg	1	05/08/24	05/09/24	CB SW846 7471B <sup>1</sup>	SW846 7471B <sup>4</sup>
Nickel	8.6	4.6	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Potassium	< 1200	1200	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Selenium	< 2.3	2.3	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Silver	< 0.58	0.58	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Sodium	< 1200	1200	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Thallium	< 1.2	1.2	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Vanadium	20.5	5.8	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Zinc	30.0	12	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>

(1) Instrument QC Batch: MA56033

(2) Instrument QC Batch: MA56049

(3) Prep QC Batch: MP46464

(4) Prep QC Batch: MP46496

RL = Reporting Limit

4.7  
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## Report of Analysis

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<b>Client Sample ID:</b> SB-8		<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-8		<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 91.1
<b>Method:</b> SW846 8270E SW846 3546		
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CJ6533.D	1	05/09/24 22:41	RS	05/09/24 10:55	OP54460	ECJ297
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	30.4 g	1.0 ml
Run #2		

## ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	0.072	0.018	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.18	0.022	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.18	0.031	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.18	0.064	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	0.18	0.14	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	0.18	0.039	mg/kg	
95-48-7	2-Methylphenol	ND	0.072	0.023	mg/kg	
	3&4-Methylphenol	ND	0.072	0.030	mg/kg	
88-75-5	2-Nitrophenol	ND	0.18	0.024	mg/kg	
100-02-7	4-Nitrophenol	ND	0.36	0.096	mg/kg	
87-86-5	Pentachlorophenol <sup>a</sup>	ND	0.14	0.034	mg/kg	
108-95-2	Phenol	ND	0.072	0.019	mg/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	0.18	0.024	mg/kg	
95-95-4	2,4,5-Trichlorophenol	ND	0.18	0.027	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.18	0.022	mg/kg	
83-32-9	Acenaphthene	0.0510	0.036	0.012	mg/kg	
208-96-8	Acenaphthylene	0.132	0.036	0.018	mg/kg	
98-86-2	Acetophenone	ND	0.18	0.0078	mg/kg	
120-12-7	Anthracene	0.230	0.036	0.022	mg/kg	
1912-24-9	Atrazine	ND	0.072	0.015	mg/kg	
56-55-3	Benzo(a)anthracene	0.924	0.036	0.010	mg/kg	
50-32-8	Benzo(a)pyrene	0.948	0.036	0.016	mg/kg	
205-99-2	Benzo(b)fluoranthene	1.06	0.036	0.016	mg/kg	
191-24-2	Benzo(g,h,i)perylene	0.607	0.036	0.018	mg/kg	
207-08-9	Benzo(k)fluoranthene	0.418	0.036	0.017	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	0.072	0.014	mg/kg	
85-68-7	Butyl benzyl phthalate <sup>a</sup>	ND	0.072	0.0088	mg/kg	
92-52-4	1,1'-Biphenyl	0.0062	0.072	0.0049	mg/kg	J
100-52-7	Benzaldehyde	ND	0.18	0.0090	mg/kg	
91-58-7	2-Chloronaphthalene	ND	0.072	0.0086	mg/kg	
106-47-8	4-Chloroaniline	ND	0.18	0.013	mg/kg	
86-74-8	Carbazole	0.0342	0.072	0.0052	mg/kg	JB

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> SB-8		<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-8		<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 91.1
<b>Method:</b> SW846 8270E SW846 3546		
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

## ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	0.072	0.014	mg/kg	
218-01-9	Chrysene	0.862	0.036	0.011	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	0.072	0.0077	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	0.072	0.016	mg/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	0.072	0.013	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.072	0.012	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	0.036	0.011	mg/kg	
606-20-2	2,6-Dinitrotoluene	ND	0.036	0.018	mg/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	0.072	0.030	mg/kg	
123-91-1	1,4-Dioxane	ND	0.036	0.024	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	0.159	0.036	0.016	mg/kg	
132-64-9	Dibenzofuran	0.0241	0.072	0.015	mg/kg	J
84-74-2	Di-n-butyl phthalate	ND	0.072	0.0059	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	0.072	0.0090	mg/kg	
84-66-2	Diethyl phthalate	ND	0.072	0.0077	mg/kg	
131-11-3	Dimethyl phthalate	ND	0.072	0.0064	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.072	0.0084	mg/kg	
206-44-0	Fluoranthene	1.77	0.036	0.016	mg/kg	
86-73-7	Fluorene	0.0679	0.036	0.017	mg/kg	
118-74-1	Hexachlorobenzene	ND	0.072	0.0091	mg/kg	
87-68-3	Hexachlorobutadiene	ND	0.036	0.015	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	0.36	0.014	mg/kg	
67-72-1	Hexachloroethane	ND	0.18	0.018	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	0.510	0.036	0.017	mg/kg	
78-59-1	Isophorone	ND	0.072	0.0077	mg/kg	
91-57-6	2-Methylnaphthalene	0.0103	0.036	0.0082	mg/kg	J
88-74-4	2-Nitroaniline	ND	0.18	0.0085	mg/kg	
99-09-2	3-Nitroaniline	ND	0.18	0.0090	mg/kg	
100-01-6	4-Nitroaniline	ND	0.18	0.0094	mg/kg	
91-20-3	Naphthalene	0.0171	0.036	0.010	mg/kg	J
98-95-3	Nitrobenzene	ND	0.072	0.014	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.072	0.010	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	0.18	0.013	mg/kg	
85-01-8	Phenanthrene	0.637	0.036	0.012	mg/kg	
129-00-0	Pyrene	1.73	0.036	0.012	mg/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	0.18	0.0092	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	61%		10-99%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> SB-8		<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-8		<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 91.1
<b>Method:</b> SW846 8270E SW846 3546		
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

**ABN TCL List (SOM0 2.0)**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	65%		10-96%
118-79-6	2,4,6-Tribromophenol	79%		10-123%
4165-60-0	Nitrobenzene-d5	64%		10-109%
321-60-8	2-Fluorobiphenyl	69%		11-109%
1718-51-0	Terphenyl-d14	74%		10-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Unknown	4.25	.27	mg/kg	J
203-64-5	4H-Cyclopenta[def]phenanthrene	8.42	.31	mg/kg	JN
	Unknown	8.60	.15	mg/kg	J
	Pyrene methyl	9.52	.21	mg/kg	J
	Unknown	11.05	.16	mg/kg	J
	Unknown	11.13	.18	mg/kg	J
	Unknown	11.20	.22	mg/kg	J
	Unknown PAH substance	11.45	.24	mg/kg	J
	Unknown PAH substance	11.61	.47	mg/kg	J
	Unknown PAH substance	12.77	.23	mg/kg	J
	Unknown PAH substance	13.42	.22	mg/kg	J
	Total TIC, Semi-Volatile		2.66	mg/kg	J

(a) Associated CCV outside of control limits high, sample was ND.

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ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

4.8  
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## Report of Analysis

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<b>Client Sample ID:</b> SB-8		<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-8		<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 91.1
<b>Method:</b> SW846 8081B SW846 3570		
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	8G56356.D	1	05/09/24 08:13	CP	05/08/24 18:21	OP54452	G8G2470
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	5.3 g	10.0 ml
Run #2		

## Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.00041	0.000081	mg/kg	
319-84-6	alpha-BHC	ND	0.00041	0.000048	mg/kg	
319-85-7	beta-BHC <sup>a</sup>	0.00013	0.00041	0.000060	mg/kg	JB
319-86-8	delta-BHC	ND	0.00041	0.000062	mg/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.00041	0.000072	mg/kg	
5103-71-9	alpha-Chlordane	0.00055	0.00041	0.000056	mg/kg	
5103-74-2	gamma-Chlordane <sup>a</sup>	0.00021	0.00041	0.000062	mg/kg	J
57-74-9	Chlordane (alpha and gamma)	0.00076	0.00041	0.000056	mg/kg	
60-57-1	Dieldrin	ND	0.00041	0.000066	mg/kg	
72-54-8	4,4'-DDD	0.00050	0.00041	0.000043	mg/kg	
72-55-9	4,4'-DDE <sup>a</sup>	0.00022	0.00041	0.000050	mg/kg	J
50-29-3	4,4'-DDT <sup>a</sup>	0.00045	0.00041	0.000072	mg/kg	
72-20-8	Endrin	ND	0.00041	0.000060	mg/kg	
1031-07-8	Endosulfan sulfate	ND	0.00041	0.000050	mg/kg	
7421-93-4	Endrin aldehyde	ND	0.00041	0.00012	mg/kg	
959-98-8	Endosulfan-I	ND	0.00041	0.000056	mg/kg	
33213-65-9	Endosulfan-II	ND	0.00041	0.000058	mg/kg	
76-44-8	Heptachlor	ND	0.00041	0.000054	mg/kg	
1024-57-3	Heptachlor epoxide <sup>a</sup>	0.00016	0.00041	0.000075	mg/kg	J
72-43-5	Methoxychlor	ND	0.00041	0.00016	mg/kg	
53494-70-5	Endrin ketone	ND	0.00041	0.000066	mg/kg	
8001-35-2	Toxaphene	ND	0.0052	0.0034	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	89%		46-145%
877-09-8	Tetrachloro-m-xylene	81%		46-145%
2051-24-3	Decachlorobiphenyl	50%		29-163%
2051-24-3	Decachlorobiphenyl	108%		29-163%

(a) More than 40 % RPD for detected concentrations between the two GC columns.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

SGS North America Inc.

## Report of Analysis

Page 1 of 1

<b>Client Sample ID:</b> SB-8		
<b>Lab Sample ID:</b> JD87833-8		<b>Date Sampled:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Date Received:</b> 05/03/24
<b>Method:</b> SW846 8082A SW846 3570		<b>Percent Solids:</b> 91.1
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G231746.D	1	05/09/24 10:04	MLC	05/08/24 18:21	OP54453	G2G6085
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	5.3 g	10.0 ml
Run #2		

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.021	0.0088	mg/kg	
11104-28-2	Aroclor 1221	ND	0.021	0.0070	mg/kg	
11141-16-5	Aroclor 1232	ND	0.021	0.017	mg/kg	
53469-21-9	Aroclor 1242	ND	0.021	0.012	mg/kg	
12672-29-6	Aroclor 1248	ND	0.021	0.0045	mg/kg	
11097-69-1	Aroclor 1254	ND	0.021	0.0022	mg/kg	
11096-82-5	Aroclor 1260	ND	0.021	0.0071	mg/kg	
11100-14-4	Aroclor 1268	ND	0.021	0.0021	mg/kg	
37324-23-5	Aroclor 1262	ND	0.021	0.0017	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	80%		42-159%
877-09-8	Tetrachloro-m-xylene	76%		42-159%
2051-24-3	Decachlorobiphenyl	66%		18-154%
2051-24-3	Decachlorobiphenyl	108%		18-154%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



## Report of Analysis

<b>Client Sample ID:</b> SB-8		<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-8		<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 91.1
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

### Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	6880	55	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Antimony	< 2.2	2.2	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Arsenic	2.6	2.2	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Barium	24.1	22	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Beryllium	0.29	0.22	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Cadmium	< 0.55	0.55	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Calcium	1120	550	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Chromium	8.5	1.1	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Cobalt	< 5.5	5.5	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Copper	7.9	2.7	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Iron	11000	55	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Lead	10.2	2.2	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Magnesium	1590	550	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Manganese	197	1.6	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Mercury	< 0.035	0.035	mg/kg	1	05/08/24	05/09/24	CB SW846 7471B <sup>1</sup>	SW846 7471B <sup>4</sup>
Nickel	7.6	4.4	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Potassium	< 1100	1100	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Selenium	< 2.2	2.2	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Silver	< 0.55	0.55	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Sodium	< 1100	1100	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Thallium	< 1.1	1.1	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Vanadium	16.9	5.5	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Zinc	25.8	11	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>

(1) Instrument QC Batch: MA56033

(2) Instrument QC Batch: MA56049

(3) Prep QC Batch: MP46464

(4) Prep QC Batch: MP46496

RL = Reporting Limit

4.8  
4

SGS North America Inc.

## Report of Analysis

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<b>Client Sample ID:</b> SB-9		<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-9		<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 81.5
<b>Method:</b> SW846 8270E SW846 3546		
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CJ6540.D	1	05/10/24 00:54	RS	05/09/24 10:55	OP54460	ECJ297
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	30.7 g	1.0 ml
Run #2		

## ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	0.080	0.020	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.20	0.024	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.20	0.034	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.20	0.071	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	0.20	0.15	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	0.20	0.043	mg/kg	
95-48-7	2-Methylphenol	ND	0.080	0.026	mg/kg	
	3&4-Methylphenol	0.195	0.080	0.033	mg/kg	
88-75-5	2-Nitrophenol	ND	0.20	0.026	mg/kg	
100-02-7	4-Nitrophenol	ND	0.40	0.11	mg/kg	
87-86-5	Pentachlorophenol <sup>a</sup>	ND	0.16	0.038	mg/kg	
108-95-2	Phenol	ND	0.080	0.021	mg/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	0.20	0.026	mg/kg	
95-95-4	2,4,5-Trichlorophenol	ND	0.20	0.030	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.20	0.024	mg/kg	
83-32-9	Acenaphthene	0.0435	0.040	0.014	mg/kg	
208-96-8	Acenaphthylene	0.101	0.040	0.020	mg/kg	
98-86-2	Acetophenone	0.0230	0.20	0.0086	mg/kg	J
120-12-7	Anthracene	0.159	0.040	0.024	mg/kg	
1912-24-9	Atrazine	ND	0.080	0.017	mg/kg	
56-55-3	Benzo(a)anthracene	0.415	0.040	0.011	mg/kg	
50-32-8	Benzo(a)pyrene	0.480	0.040	0.018	mg/kg	
205-99-2	Benzo(b)fluoranthene	0.587	0.040	0.018	mg/kg	
191-24-2	Benzo(g,h,i)perylene	0.310	0.040	0.020	mg/kg	
207-08-9	Benzo(k)fluoranthene	0.154	0.040	0.019	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	0.080	0.015	mg/kg	
85-68-7	Butyl benzyl phthalate <sup>a</sup>	ND	0.080	0.0098	mg/kg	
92-52-4	1,1'-Biphenyl	0.0098	0.080	0.0055	mg/kg	J
100-52-7	Benzaldehyde	0.0232	0.20	0.0099	mg/kg	J
91-58-7	2-Chloronaphthalene	ND	0.080	0.0095	mg/kg	
106-47-8	4-Chloroaniline	ND	0.20	0.014	mg/kg	
86-74-8	Carbazole	0.0400	0.080	0.0058	mg/kg	J

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> SB-9		<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-9		<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 81.5
<b>Method:</b> SW846 8270E SW846 3546		
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

## ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	0.080	0.016	mg/kg	
218-01-9	Chrysene	0.453	0.040	0.013	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	0.080	0.0086	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	0.080	0.017	mg/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	0.080	0.014	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.080	0.013	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	0.040	0.012	mg/kg	
606-20-2	2,6-Dinitrotoluene	ND	0.040	0.020	mg/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	0.080	0.033	mg/kg	
123-91-1	1,4-Dioxane	ND	0.040	0.026	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	0.0799	0.040	0.018	mg/kg	
132-64-9	Dibenzofuran	0.0241	0.080	0.016	mg/kg	J
84-74-2	Di-n-butyl phthalate	0.0108	0.080	0.0065	mg/kg	J
117-84-0	Di-n-octyl phthalate	ND	0.080	0.010	mg/kg	
84-66-2	Diethyl phthalate	ND	0.080	0.0085	mg/kg	
131-11-3	Dimethyl phthalate	ND	0.080	0.0071	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	0.0439	0.080	0.0094	mg/kg	J
206-44-0	Fluoranthene	0.888	0.040	0.018	mg/kg	
86-73-7	Fluorene	0.0546	0.040	0.018	mg/kg	
118-74-1	Hexachlorobenzene	ND	0.080	0.010	mg/kg	
87-68-3	Hexachlorobutadiene	ND	0.040	0.016	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	0.40	0.016	mg/kg	
67-72-1	Hexachloroethane	ND	0.20	0.020	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	0.263	0.040	0.019	mg/kg	
78-59-1	Isophorone	ND	0.080	0.0086	mg/kg	
91-57-6	2-Methylnaphthalene	0.0152	0.040	0.0090	mg/kg	J
88-74-4	2-Nitroaniline	ND	0.20	0.0094	mg/kg	
99-09-2	3-Nitroaniline	ND	0.20	0.010	mg/kg	
100-01-6	4-Nitroaniline	ND	0.20	0.010	mg/kg	
91-20-3	Naphthalene	0.0239	0.040	0.011	mg/kg	J
98-95-3	Nitrobenzene	ND	0.080	0.015	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.080	0.012	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	0.20	0.015	mg/kg	
85-01-8	Phenanthrene	0.459	0.040	0.013	mg/kg	
129-00-0	Pyrene	0.896	0.040	0.013	mg/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	0.20	0.010	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	70%		10-99%

ND = Not detected    MDL = Method Detection Limit    J = Indicates an estimated value  
RL = Reporting Limit    B = Indicates analyte found in associated method blank  
E = Indicates value exceeds calibration range    N = Indicates presumptive evidence of a compound

# Report of Analysis

<b>Client Sample ID:</b> SB-9		
<b>Lab Sample ID:</b> JD87833-9		<b>Date Sampled:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Date Received:</b> 05/03/24
<b>Method:</b> SW846 8270E SW846 3546		<b>Percent Solids:</b> 81.5
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

**ABN TCL List (SOM0 2.0)**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	75%		10-96%
118-79-6	2,4,6-Tribromophenol	94%		10-123%
4165-60-0	Nitrobenzene-d5	75%		10-109%
321-60-8	2-Fluorobiphenyl	80%		11-109%
1718-51-0	Terphenyl-d14	83%		10-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Unknown acid	8.34	.48	mg/kg	J
	Unknown alcohol	9.05	1.2	mg/kg	J
57-11-4	Octadecanoic acid	9.12	.46	mg/kg	JN
	Unknown acid	9.84	.59	mg/kg	J
	Unknown	10.07	.48	mg/kg	J
1000267-71-7	Butanoic acid, 2-(cyano)(2,4,6-trimethyl	10.19	.55	mg/kg	JN
	Unknown alcohol	10.27	.55	mg/kg	J
112-85-6	Docosanoic acid	10.50	1.1	mg/kg	JN
	Unknown	10.91	.88	mg/kg	J
	Unknown acid	11.12	1.7	mg/kg	J
	Unknown	11.21	.43	mg/kg	J
	Alkane	11.52	2.4	mg/kg	J
	Unknown	12.01	1	mg/kg	J
	Unknown	12.13	.54	mg/kg	J
	Alkane	12.22	2.2	mg/kg	J
	Unknown	12.25	2.2	mg/kg	J
	Unknown	12.37	.45	mg/kg	J
	Unknown acid	12.54	.44	mg/kg	J
	Unknown	13.09	3	mg/kg	J
	Unknown	13.18	1.1	mg/kg	J
	Unknown	13.43	3.4	mg/kg	J
	Unknown	13.74	.64	mg/kg	J
	Unknown	14.01	.95	mg/kg	J
	Unknown	14.23	1.6	mg/kg	J
18206-97-8	Octacosyl acetate	14.44	.96	mg/kg	JN
	Total TIC, Semi-Volatile		29.3	mg/kg	J

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

4.9  
 4

## Report of Analysis

<b>Client Sample ID:</b> SB-9	<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-9	<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> 81.5
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ	

### Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	11300	63	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Antimony	< 2.5	2.5	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Arsenic	4.8	2.5	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Barium	54.4	25	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Beryllium	0.43	0.25	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Cadmium	< 0.63	0.63	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Calcium	1760	630	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Chromium	14.2	1.3	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Cobalt	< 6.3	6.3	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Copper	15.8	3.2	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Iron	14200	63	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Lead	71.1	2.5	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Magnesium	1920	630	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Manganese	314	1.9	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Mercury	0.19	0.032	mg/kg	1	05/08/24	05/09/24	CB SW846 7471B <sup>1</sup>	SW846 7471B <sup>4</sup>
Nickel	11.3	5.1	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Potassium	< 1300	1300	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Selenium	< 2.5	2.5	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Silver	< 0.63	0.63	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Sodium	< 1300	1300	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Thallium	< 1.3	1.3	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Vanadium	25.2	6.3	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Zinc	67.5	13	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>

(1) Instrument QC Batch: MA56033

(2) Instrument QC Batch: MA56049

(3) Prep QC Batch: MP46464

(4) Prep QC Batch: MP46496

RL = Reporting Limit

4.9  
4

SGS North America Inc.

## Report of Analysis

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<b>Client Sample ID:</b> SB-10		<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-10		<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 84.2
<b>Method:</b> SW846 8270E SW846 3546		
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CJ6534.D	1	05/09/24 23:00	RS	05/09/24 10:55	OP54460	ECJ297
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	30.6 g	1.0 ml
Run #2		

## ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	0.078	0.019	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.19	0.024	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.19	0.033	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.19	0.069	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	0.19	0.15	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	0.19	0.042	mg/kg	
95-48-7	2-Methylphenol	ND	0.078	0.025	mg/kg	
	3&4-Methylphenol	0.0476	0.078	0.032	mg/kg	J
88-75-5	2-Nitrophenol	ND	0.19	0.026	mg/kg	
100-02-7	4-Nitrophenol	ND	0.39	0.10	mg/kg	
87-86-5	Pentachlorophenol <sup>a</sup>	ND	0.16	0.036	mg/kg	
108-95-2	Phenol	ND	0.078	0.020	mg/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	0.19	0.026	mg/kg	
95-95-4	2,4,5-Trichlorophenol	ND	0.19	0.029	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.19	0.023	mg/kg	
83-32-9	Acenaphthene	ND	0.039	0.013	mg/kg	
208-96-8	Acenaphthylene	0.0304	0.039	0.020	mg/kg	J
98-86-2	Acetophenone	ND	0.19	0.0083	mg/kg	
120-12-7	Anthracene	ND	0.039	0.024	mg/kg	
1912-24-9	Atrazine	ND	0.078	0.017	mg/kg	
56-55-3	Benzo(a)anthracene	0.0822	0.039	0.011	mg/kg	
50-32-8	Benzo(a)pyrene	0.0861	0.039	0.018	mg/kg	
205-99-2	Benzo(b)fluoranthene	0.0943	0.039	0.017	mg/kg	
191-24-2	Benzo(g,h,i)perylene	0.0626	0.039	0.019	mg/kg	
207-08-9	Benzo(k)fluoranthene	0.0387	0.039	0.018	mg/kg	J
101-55-3	4-Bromophenyl phenyl ether	ND	0.078	0.015	mg/kg	
85-68-7	Butyl benzyl phthalate <sup>a</sup>	ND	0.078	0.0095	mg/kg	
92-52-4	1,1'-Biphenyl	ND	0.078	0.0053	mg/kg	
100-52-7	Benzaldehyde	ND	0.19	0.0096	mg/kg	
91-58-7	2-Chloronaphthalene	ND	0.078	0.0092	mg/kg	
106-47-8	4-Chloroaniline	ND	0.19	0.014	mg/kg	
86-74-8	Carbazole	0.0072	0.078	0.0056	mg/kg	JB

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> SB-10	
<b>Lab Sample ID:</b> JD87833-10	<b>Date Sampled:</b> 05/03/24
<b>Matrix:</b> SO - Soil	<b>Date Received:</b> 05/03/24
<b>Method:</b> SW846 8270E SW846 3546	<b>Percent Solids:</b> 84.2
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ	

## ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	0.078	0.015	mg/kg	
218-01-9	Chrysene	0.0664	0.039	0.012	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	0.078	0.0083	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	0.078	0.017	mg/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	0.078	0.014	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.078	0.013	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	0.039	0.012	mg/kg	
606-20-2	2,6-Dinitrotoluene	ND	0.039	0.019	mg/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	0.078	0.032	mg/kg	
123-91-1	1,4-Dioxane	ND	0.039	0.026	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	0.039	0.017	mg/kg	
132-64-9	Dibenzofuran	ND	0.078	0.016	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	0.078	0.0063	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	0.078	0.0097	mg/kg	
84-66-2	Diethyl phthalate	ND	0.078	0.0083	mg/kg	
131-11-3	Dimethyl phthalate	ND	0.078	0.0069	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.078	0.0091	mg/kg	
206-44-0	Fluoranthene	0.143	0.039	0.017	mg/kg	
86-73-7	Fluorene	ND	0.039	0.018	mg/kg	
118-74-1	Hexachlorobenzene	ND	0.078	0.0098	mg/kg	
87-68-3	Hexachlorobutadiene	ND	0.039	0.016	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	0.39	0.015	mg/kg	
67-72-1	Hexachloroethane	ND	0.19	0.019	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	0.0507	0.039	0.018	mg/kg	
78-59-1	Isophorone	ND	0.078	0.0083	mg/kg	
91-57-6	2-Methylnaphthalene	ND	0.039	0.0088	mg/kg	
88-74-4	2-Nitroaniline	ND	0.19	0.0092	mg/kg	
99-09-2	3-Nitroaniline	ND	0.19	0.0097	mg/kg	
100-01-6	4-Nitroaniline	ND	0.19	0.010	mg/kg	
91-20-3	Naphthalene	ND	0.039	0.011	mg/kg	
98-95-3	Nitrobenzene	ND	0.078	0.015	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.078	0.011	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	0.19	0.014	mg/kg	
85-01-8	Phenanthrene	0.0524	0.039	0.013	mg/kg	
129-00-0	Pyrene	0.142	0.039	0.012	mg/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	0.19	0.0099	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	74%		10-99%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> SB-10		<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-10		<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 84.2
<b>Method:</b> SW846 8270E SW846 3546		
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

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**ABN TCL List (SOM0 2.0)**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	79%		10-96%
118-79-6	2,4,6-Tribromophenol	98%		10-123%
4165-60-0	Nitrobenzene-d5	76%		10-109%
321-60-8	2-Fluorobiphenyl	82%		11-109%
1718-51-0	Terphenyl-d14	89%		10-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q	
	Unknown	4.25	.38	mg/kg	J	
57-10-3	n-Hexadecanoic acid	8.37	.67	mg/kg	JN	
	Unknown acid	9.05	.2	mg/kg	J	
57-11-4	Octadecanoic acid	9.12	.32	mg/kg	JN	
506-30-9	Eicosanoic acid	9.83	.22	mg/kg	JN	
	Unknown	10.07	.17	mg/kg	J	
	Unknown	10.19	.18	mg/kg	J	
	Cyclohexane alkyl	10.27	.32	mg/kg	J	
	57-11-4	Octadecanoic acid	10.49	.51	mg/kg	JN
	Alkene	10.91	.51	mg/kg	J	
	Unknown	11.05	.18	mg/kg	J	
	Unknown acid	11.11	.68	mg/kg	J	
	Unknown	11.21	.3	mg/kg	J	
	Unknown	11.52	.61	mg/kg	J	
	Unknown	12.01	.23	mg/kg	J	
	Unknown acid	12.12	.17	mg/kg	J	
	Alkane	12.21	.21	mg/kg	J	
	Unknown	13.04	.17	mg/kg	J	
	Unknown	13.08	.9	mg/kg	J	
	Unknown	13.17	.18	mg/kg	J	
	Unknown	13.42	.78	mg/kg	J	
	Unknown	13.72	.19	mg/kg	J	
Unknown	14.01	.22	mg/kg	J		
Unknown	14.08	.21	mg/kg	J		
Unknown	14.21	.32	mg/kg	J		
	Total TIC, Semi-Volatile		8.83	mg/kg	J	

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound



SGS North America Inc.

## Report of Analysis

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<b>Client Sample ID:</b> SB-10		<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-10		<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 84.2
<b>Method:</b> SW846 8081B SW846 3570		
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	8G56357.D	1	05/09/24 08:35	CP	05/08/24 18:21	OP54452	G8G2470
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	5.5 g	10.0 ml
Run #2		

## Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.00043	0.000084	mg/kg	
319-84-6	alpha-BHC	ND	0.00043	0.000050	mg/kg	
319-85-7	beta-BHC	0.00015	0.00043	0.000063	mg/kg	JB
319-86-8	delta-BHC	ND	0.00043	0.000065	mg/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.00043	0.000076	mg/kg	
5103-71-9	alpha-Chlordane <sup>a</sup>	0.00017	0.00043	0.000058	mg/kg	J
5103-74-2	gamma-Chlordane	ND	0.00043	0.000065	mg/kg	
57-74-9	Chlordane (alpha and gamma)	0.00017	0.00043	0.000058	mg/kg	J
60-57-1	Dieldrin	ND	0.00043	0.000069	mg/kg	
72-54-8	4,4' -DDD	0.00017	0.00043	0.000045	mg/kg	J
72-55-9	4,4' -DDE	0.00024	0.00043	0.000052	mg/kg	J
50-29-3	4,4' -DDT <sup>a</sup>	0.000090	0.00043	0.000076	mg/kg	J
72-20-8	Endrin	ND	0.00043	0.000063	mg/kg	
1031-07-8	Endosulfan sulfate	ND	0.00043	0.000052	mg/kg	
7421-93-4	Endrin aldehyde	ND	0.00043	0.00013	mg/kg	
959-98-8	Endosulfan-I	ND	0.00043	0.000058	mg/kg	
33213-65-9	Endosulfan-II	ND	0.00043	0.000060	mg/kg	
76-44-8	Heptachlor	ND	0.00043	0.000056	mg/kg	
1024-57-3	Heptachlor epoxide	ND	0.00043	0.000078	mg/kg	
72-43-5	Methoxychlor	ND	0.00043	0.00017	mg/kg	
53494-70-5	Endrin ketone	ND	0.00043	0.000069	mg/kg	
8001-35-2	Toxaphene	ND	0.0054	0.0036	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	81%		46-145%
877-09-8	Tetrachloro-m-xylene	86%		46-145%
2051-24-3	Decachlorobiphenyl	58%		29-163%
2051-24-3	Decachlorobiphenyl	88%		29-163%

(a) More than 40 % RPD for detected concentrations between the two GC columns.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

SGS North America Inc.

## Report of Analysis

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<b>Client Sample ID:</b> SB-10		<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-10		<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 84.2
<b>Method:</b> SW846 8082A SW846 3570		
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G231747.D	1	05/09/24 10:28	MLC	05/08/24 18:21	OP54453	G2G6085
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	5.5 g	10.0 ml
Run #2		

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.022	0.0092	mg/kg	
11104-28-2	Aroclor 1221	ND	0.022	0.0073	mg/kg	
11141-16-5	Aroclor 1232	ND	0.022	0.018	mg/kg	
53469-21-9	Aroclor 1242	ND	0.022	0.013	mg/kg	
12672-29-6	Aroclor 1248	ND	0.022	0.0047	mg/kg	
11097-69-1	Aroclor 1254	ND	0.022	0.0023	mg/kg	
11096-82-5	Aroclor 1260	ND	0.022	0.0074	mg/kg	
11100-14-4	Aroclor 1268	ND	0.022	0.0022	mg/kg	
37324-23-5	Aroclor 1262	ND	0.022	0.0018	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	89%		42-159%
877-09-8	Tetrachloro-m-xylene	81%		42-159%
2051-24-3	Decachlorobiphenyl	68%		18-154%
2051-24-3	Decachlorobiphenyl	91%		18-154%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> SB-10	<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-10	<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> 84.2
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ	

### Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	14000	58	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Antimony	< 2.3	2.3	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Arsenic	4.3	2.3	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Barium	37.8	23	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Beryllium	0.45	0.23	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Cadmium	< 0.58	0.58	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Calcium	817	580	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Chromium	13.8	1.2	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Cobalt	< 5.8	5.8	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Copper	6.8	2.9	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Iron	14500	58	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Lead	17.7	2.3	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Magnesium	1770	580	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Manganese	201	1.7	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Mercury	0.041	0.033	mg/kg	1	05/08/24	05/09/24	CB SW846 7471B <sup>1</sup>	SW846 7471B <sup>4</sup>
Nickel	10.5	4.7	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Potassium	< 1200	1200	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Selenium	< 2.3	2.3	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Silver	< 0.58	0.58	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Sodium	< 1200	1200	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Thallium	< 1.2	1.2	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Vanadium	22.6	5.8	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Zinc	35.2	12	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>

(1) Instrument QC Batch: MA56033

(2) Instrument QC Batch: MA56049

(3) Prep QC Batch: MP46464

(4) Prep QC Batch: MP46496

RL = Reporting Limit

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SGS North America Inc.

## Report of Analysis

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<b>Client Sample ID:</b> SB-11		
<b>Lab Sample ID:</b> JD87833-11		<b>Date Sampled:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Date Received:</b> 05/03/24
<b>Method:</b> SW846 8270E SW846 3546		<b>Percent Solids:</b> 87.7
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	CJ6526.D	2	05/09/24 20:30	RS	05/09/24 10:55	OP54460	ECJ297
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

## ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	0.15	0.037	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.38	0.046	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.38	0.064	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.38	0.13	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	0.38	0.28	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	0.38	0.081	mg/kg	
95-48-7	2-Methylphenol	ND	0.15	0.048	mg/kg	
	3&4-Methylphenol	ND	0.15	0.062	mg/kg	
88-75-5	2-Nitrophenol	ND	0.38	0.050	mg/kg	
100-02-7	4-Nitrophenol	ND	0.75	0.20	mg/kg	
87-86-5	Pentachlorophenol <sup>b</sup>	ND	0.30	0.071	mg/kg	
108-95-2	Phenol	ND	0.15	0.039	mg/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	0.38	0.050	mg/kg	
95-95-4	2,4,5-Trichlorophenol	ND	0.38	0.056	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.38	0.045	mg/kg	
83-32-9	Acenaphthene	ND	0.075	0.026	mg/kg	
208-96-8	Acenaphthylene	ND	0.075	0.038	mg/kg	
98-86-2	Acetophenone	ND	0.38	0.016	mg/kg	
120-12-7	Anthracene	ND	0.075	0.046	mg/kg	
1912-24-9	Atrazine	ND	0.15	0.032	mg/kg	
56-55-3	Benzo(a)anthracene	0.0914	0.075	0.021	mg/kg	
50-32-8	Benzo(a)pyrene	0.0985	0.075	0.034	mg/kg	
205-99-2	Benzo(b)fluoranthene	0.116	0.075	0.033	mg/kg	
191-24-2	Benzo(g,h,i)perylene	0.0842	0.075	0.038	mg/kg	
207-08-9	Benzo(k)fluoranthene	0.0412	0.075	0.035	mg/kg	J
101-55-3	4-Bromophenyl phenyl ether	ND	0.15	0.029	mg/kg	
85-68-7	Butyl benzyl phthalate <sup>c</sup>	0.0365	0.15	0.018	mg/kg	J
92-52-4	1,1'-Biphenyl	ND	0.15	0.010	mg/kg	
100-52-7	Benzaldehyde	ND	0.38	0.019	mg/kg	
91-58-7	2-Chloronaphthalene	ND	0.15	0.018	mg/kg	
106-47-8	4-Chloroaniline	ND	0.38	0.027	mg/kg	
86-74-8	Carbazole	0.0122	0.15	0.011	mg/kg	JB

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB-11
Lab Sample ID: JD87833-11
Matrix: SO - Soil
Method: SW846 8270E SW846 3546
Project: Ridgewood Berm Sampling, Ridgewood, NJ
Date Sampled: 05/03/24
Date Received: 05/03/24
Percent Solids: 87.7

4.11
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ABN TCL List (SOM0 2.0)

Table with columns: CAS No., Compound, Result, RL, MDL, Units, Q. Lists various compounds like Caprolactam, Chrysene, bis(2-Chloroethoxy)methane, etc., with their respective results and limits.

Table with columns: CAS No., Surrogate Recoveries, Run# 1, Run# 2, Limits. Shows recovery data for 2-Fluorophenol.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> SB-11		<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-11		<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 87.7
<b>Method:</b> SW846 8270E SW846 3546		
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

**ABN TCL List (SOM0 2.0)**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	71%		10-96%
118-79-6	2,4,6-Tribromophenol	83%		10-123%
4165-60-0	Nitrobenzene-d5	69%		10-109%
321-60-8	2-Fluorobiphenyl	76%		11-109%
1718-51-0	Terphenyl-d14	80%		10-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Unknown	4.25	.31	mg/kg	J
	Unknown	10.75	.38	mg/kg	J
	Unknown	11.11	.31	mg/kg	J
593-45-3	Octadecane	11.20	.42	mg/kg	JN
	Alkane	11.51	.36	mg/kg	J
	Alkane	12.21	.32	mg/kg	J
	Total TIC, Semi-Volatile		2.1	mg/kg	J

- (a) Dilution required due to matrix interference.
- (b) Associated CCV outside of control limits high, sample was ND.
- (c) Associated CCV outside of control limits high. Estimated value, due to corresponding failure in the batch associated CCV.

---

ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

4.11  
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SGS North America Inc.

## Report of Analysis

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<b>Client Sample ID:</b> SB-11		<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-11		<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 87.7
<b>Method:</b> SW846 8081B SW846 3570		
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	8G56434.D	1	05/10/24 15:41	CP	05/08/24 18:21	OP54452	G8G2472
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	5.3 g	10.0 ml
Run #2		

## Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.00043	0.000084	mg/kg	
319-84-6	alpha-BHC	ND	0.00043	0.000049	mg/kg	
319-85-7	beta-BHC	ND	0.00043	0.000062	mg/kg	
319-86-8	delta-BHC	ND	0.00043	0.000065	mg/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.00043	0.000075	mg/kg	
5103-71-9	alpha-Chlordane <sup>a</sup>	0.00099	0.00043	0.000058	mg/kg	
5103-74-2	gamma-Chlordane <sup>a</sup>	0.00034	0.00043	0.000065	mg/kg	J
57-74-9	Chlordane (alpha and gamma)	0.0013	0.00043	0.000058	mg/kg	
60-57-1	Dieldrin	ND	0.00043	0.000069	mg/kg	
72-54-8	4,4' -DDD	0.00069	0.00043	0.000045	mg/kg	
72-55-9	4,4' -DDE	0.0055	0.00043	0.000052	mg/kg	
50-29-3	4,4' -DDT <sup>b</sup>	0.0017	0.00043	0.000075	mg/kg	
72-20-8	Endrin	ND	0.00043	0.000062	mg/kg	
1031-07-8	Endosulfan sulfate	ND	0.00043	0.000052	mg/kg	
7421-93-4	Endrin aldehyde	ND	0.00043	0.00012	mg/kg	
959-98-8	Endosulfan-I	ND	0.00043	0.000058	mg/kg	
33213-65-9	Endosulfan-II	ND	0.00043	0.000060	mg/kg	
76-44-8	Heptachlor	ND	0.00043	0.000056	mg/kg	
1024-57-3	Heptachlor epoxide	ND	0.00043	0.000077	mg/kg	
72-43-5	Methoxychlor	ND	0.00043	0.00017	mg/kg	
53494-70-5	Endrin ketone	ND	0.00043	0.000069	mg/kg	
8001-35-2	Toxaphene	ND	0.0054	0.0035	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	98%		46-145%
877-09-8	Tetrachloro-m-xylene	80%		46-145%
2051-24-3	Decachlorobiphenyl	68%		29-163%
2051-24-3	Decachlorobiphenyl	83%		29-163%

(a) More than 40 % RPD for detected concentrations between the two GC columns.

(b) Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> SB-11		<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-11		<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 87.7
<b>Method:</b> SW846 8081B SW846 3570		
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

4.11  
4

**Pesticide TCL List**

CAS No.	Compound	Result	RL	MDL	Units	Q
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being used for confirmation only.

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ND = Not detected	MDL = Method Detection Limit	J = Indicates an estimated value
RL = Reporting Limit		B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range		N = Indicates presumptive evidence of a compound



SGS North America Inc.

## Report of Analysis

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<b>Client Sample ID:</b> SB-11		
<b>Lab Sample ID:</b> JD87833-11		<b>Date Sampled:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Date Received:</b> 05/03/24
<b>Method:</b> SW846 8082A SW846 3570		<b>Percent Solids:</b> 87.7
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G231748.D	1	05/09/24 10:52	MLC	05/08/24 18:21	OP54453	G2G6085
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	5.3 g	10.0 ml
Run #2		

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.022	0.0091	mg/kg	
11104-28-2	Aroclor 1221	ND	0.022	0.0072	mg/kg	
11141-16-5	Aroclor 1232	ND	0.022	0.018	mg/kg	
53469-21-9	Aroclor 1242	ND	0.022	0.013	mg/kg	
12672-29-6	Aroclor 1248	ND	0.022	0.0046	mg/kg	
11097-69-1	Aroclor 1254	ND	0.022	0.0023	mg/kg	
11096-82-5	Aroclor 1260	ND	0.022	0.0074	mg/kg	
11100-14-4	Aroclor 1268	ND	0.022	0.0022	mg/kg	
37324-23-5	Aroclor 1262	ND	0.022	0.0018	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	79%		42-159%
877-09-8	Tetrachloro-m-xylene	80%		42-159%
2051-24-3	Decachlorobiphenyl	63%		18-154%
2051-24-3	Decachlorobiphenyl	96%		18-154%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

# Report of Analysis

<b>Client Sample ID:</b> SB-11	<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-11	<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> 87.7
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ	

## Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	8260	57	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Antimony	< 2.3	2.3	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Arsenic	3.0	2.3	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Barium	36.3	23	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Beryllium	0.35	0.23	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Cadmium	< 0.57	0.57	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Calcium	1840	570	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Chromium	11.9	1.1	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Cobalt	< 5.7	5.7	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Copper	12.9	2.9	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Iron	13500	57	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Lead	28.9	2.3	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Magnesium	1870	570	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Manganese	225	1.7	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Mercury	0.065	0.030	mg/kg	1	05/08/24	05/09/24	CB SW846 7471B <sup>1</sup>	SW846 7471B <sup>4</sup>
Nickel	9.1	4.6	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Potassium	< 1100	1100	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Selenium	< 2.3	2.3	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Silver	< 0.57	0.57	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Sodium	< 1100	1100	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Thallium	< 1.1	1.1	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Vanadium	20.5	5.7	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Zinc	47.2	11	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>

(1) Instrument QC Batch: MA56033

(2) Instrument QC Batch: MA56049

(3) Prep QC Batch: MP46464

(4) Prep QC Batch: MP46496

RL = Reporting Limit

4.11  
4

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## Report of Analysis

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<b>Client Sample ID:</b> SB-12		<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-12		<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 85.7
<b>Method:</b> SW846 8270E SW846 3546		
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CJ6535.D	1	05/09/24 23:19	RS	05/09/24 10:55	OP54460	ECJ297
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

## ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	0.078	0.019	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.19	0.024	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.19	0.033	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.19	0.069	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	0.19	0.15	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	0.19	0.042	mg/kg	
95-48-7	2-Methylphenol	ND	0.078	0.025	mg/kg	
	3&4-Methylphenol	0.0896	0.078	0.032	mg/kg	
88-75-5	2-Nitrophenol	ND	0.19	0.026	mg/kg	
100-02-7	4-Nitrophenol	ND	0.39	0.10	mg/kg	
87-86-5	Pentachlorophenol <sup>a</sup>	ND	0.16	0.037	mg/kg	
108-95-2	Phenol	ND	0.078	0.020	mg/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	0.19	0.026	mg/kg	
95-95-4	2,4,5-Trichlorophenol	ND	0.19	0.029	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.19	0.023	mg/kg	
83-32-9	Acenaphthene	ND	0.039	0.013	mg/kg	
208-96-8	Acenaphthylene	ND	0.039	0.020	mg/kg	
98-86-2	Acetophenone	ND	0.19	0.0084	mg/kg	
120-12-7	Anthracene	ND	0.039	0.024	mg/kg	
1912-24-9	Atrazine	ND	0.078	0.017	mg/kg	
56-55-3	Benzo(a)anthracene	0.0166	0.039	0.011	mg/kg	J
50-32-8	Benzo(a)pyrene	ND	0.039	0.018	mg/kg	
205-99-2	Benzo(b)fluoranthene	0.0229	0.039	0.017	mg/kg	J
191-24-2	Benzo(g,h,i)perylene	ND	0.039	0.019	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	0.039	0.018	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	0.078	0.015	mg/kg	
85-68-7	Butyl benzyl phthalate <sup>a</sup>	ND	0.078	0.0095	mg/kg	
92-52-4	1,1'-Biphenyl	ND	0.078	0.0053	mg/kg	
100-52-7	Benzaldehyde	0.0103	0.19	0.0096	mg/kg	J
91-58-7	2-Chloronaphthalene	ND	0.078	0.0093	mg/kg	
106-47-8	4-Chloroaniline	ND	0.19	0.014	mg/kg	
86-74-8	Carbazole	ND	0.078	0.0056	mg/kg	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound





SGS North America Inc.

## Report of Analysis

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<b>Client Sample ID:</b> SB-12		<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-12		<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 85.7
<b>Method:</b> SW846 8081B SW846 3570		
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	8G56359.D	1	05/09/24 09:19	CP	05/08/24 18:21	OP54452	G8G2470
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	5.4 g	10.0 ml
Run #2		

## Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.00043	0.000084	mg/kg	
319-84-6	alpha-BHC	ND	0.00043	0.000050	mg/kg	
319-85-7	beta-BHC	ND	0.00043	0.000063	mg/kg	
319-86-8	delta-BHC	ND	0.00043	0.000065	mg/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.00043	0.000076	mg/kg	
5103-71-9	alpha-Chlordane	ND	0.00043	0.000058	mg/kg	
5103-74-2	gamma-Chlordane	ND	0.00043	0.000065	mg/kg	
57-74-9	Chlordane (alpha and gamma)	ND	0.00043	0.000058	mg/kg	
60-57-1	Dieldrin	ND	0.00043	0.000069	mg/kg	
72-54-8	4,4'-DDD	ND	0.00043	0.000045	mg/kg	
72-55-9	4,4'-DDE	ND	0.00043	0.000052	mg/kg	
50-29-3	4,4'-DDT	ND	0.00043	0.000076	mg/kg	
72-20-8	Endrin	ND	0.00043	0.000063	mg/kg	
1031-07-8	Endosulfan sulfate	ND	0.00043	0.000052	mg/kg	
7421-93-4	Endrin aldehyde	ND	0.00043	0.00013	mg/kg	
959-98-8	Endosulfan-I	ND	0.00043	0.000058	mg/kg	
33213-65-9	Endosulfan-II	ND	0.00043	0.000061	mg/kg	
76-44-8	Heptachlor	ND	0.00043	0.000056	mg/kg	
1024-57-3	Heptachlor epoxide	ND	0.00043	0.000078	mg/kg	
72-43-5	Methoxychlor	ND	0.00043	0.00017	mg/kg	
53494-70-5	Endrin ketone	ND	0.00043	0.000069	mg/kg	
8001-35-2	Toxaphene	ND	0.0054	0.0036	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	68%		46-145%
877-09-8	Tetrachloro-m-xylene	89%		46-145%
2051-24-3	Decachlorobiphenyl	47%		29-163%
2051-24-3	Decachlorobiphenyl	81%		29-163%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

SGS North America Inc.

## Report of Analysis

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<b>Client Sample ID:</b> SB-12		
<b>Lab Sample ID:</b> JD87833-12		<b>Date Sampled:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Date Received:</b> 05/03/24
<b>Method:</b> SW846 8082A SW846 3570		<b>Percent Solids:</b> 85.7
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G231749.D	1	05/09/24 11:15	MLC	05/08/24 18:21	OP54453	G2G6085
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	5.4 g	10.0 ml
Run #2		

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.022	0.0092	mg/kg	
11104-28-2	Aroclor 1221	ND	0.022	0.0073	mg/kg	
11141-16-5	Aroclor 1232	ND	0.022	0.018	mg/kg	
53469-21-9	Aroclor 1242	ND	0.022	0.013	mg/kg	
12672-29-6	Aroclor 1248	ND	0.022	0.0047	mg/kg	
11097-69-1	Aroclor 1254	ND	0.022	0.0023	mg/kg	
11096-82-5	Aroclor 1260	ND	0.022	0.0075	mg/kg	
11100-14-4	Aroclor 1268	ND	0.022	0.0022	mg/kg	
37324-23-5	Aroclor 1262	ND	0.022	0.0018	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	66%		42-159%
877-09-8	Tetrachloro-m-xylene	71%		42-159%
2051-24-3	Decachlorobiphenyl	54%		18-154%
2051-24-3	Decachlorobiphenyl	89%		18-154%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> SB-12 <b>Lab Sample ID:</b> JD87833-12 <b>Matrix:</b> SO - Soil <b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ	<b>Date Sampled:</b> 05/03/24 <b>Date Received:</b> 05/03/24 <b>Percent Solids:</b> 85.7
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### Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analized By	Method	Prep Method
Aluminum	16600	60	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Antimony	< 2.4	2.4	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Arsenic	5.1	2.4	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Barium	46.4	24	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Beryllium	0.58	0.24	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Cadmium	< 0.60	0.60	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Calcium	< 600	600	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Chromium	15.6	1.2	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Cobalt	< 6.0	6.0	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Copper	7.6	3.0	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Iron	17000	60	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Lead	21.1	2.4	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Magnesium	2110	600	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Manganese	391	1.8	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Mercury	0.072	0.037	mg/kg	1	05/08/24	05/09/24	CB SW846 7471B <sup>1</sup>	SW846 7471B <sup>4</sup>
Nickel	12.3	4.8	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Potassium	< 1200	1200	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Selenium	< 2.4	2.4	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Silver	< 0.60	0.60	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Sodium	< 1200	1200	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Thallium	< 1.2	1.2	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Vanadium	25.8	6.0	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Zinc	43.0	12	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>

(1) Instrument QC Batch: MA56033

(2) Instrument QC Batch: MA56049

(3) Prep QC Batch: MP46464

(4) Prep QC Batch: MP46496

RL = Reporting Limit

4.12  
4



SGS North America Inc.

## Report of Analysis

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<b>Client Sample ID:</b> SB-13		<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-13		<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 85.7
<b>Method:</b> SW846 8270E SW846 3546		
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CJ6536.D	1	05/09/24 23:38	RS	05/09/24 10:55	OP54460	ECJ297
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

## ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	0.078	0.019	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.19	0.024	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.19	0.033	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.19	0.069	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	0.19	0.15	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	0.19	0.042	mg/kg	
95-48-7	2-Methylphenol	ND	0.078	0.025	mg/kg	
	3&4-Methylphenol	ND	0.078	0.032	mg/kg	
88-75-5	2-Nitrophenol	ND	0.19	0.026	mg/kg	
100-02-7	4-Nitrophenol	ND	0.39	0.10	mg/kg	
87-86-5	Pentachlorophenol <sup>a</sup>	ND	0.16	0.037	mg/kg	
108-95-2	Phenol	ND	0.078	0.020	mg/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	0.19	0.026	mg/kg	
95-95-4	2,4,5-Trichlorophenol	ND	0.19	0.029	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.19	0.023	mg/kg	
83-32-9	Acenaphthene	ND	0.039	0.013	mg/kg	
208-96-8	Acenaphthylene	ND	0.039	0.020	mg/kg	
98-86-2	Acetophenone	ND	0.19	0.0084	mg/kg	
120-12-7	Anthracene	ND	0.039	0.024	mg/kg	
1912-24-9	Atrazine	ND	0.078	0.017	mg/kg	
56-55-3	Benzo(a)anthracene	0.0370	0.039	0.011	mg/kg	J
50-32-8	Benzo(a)pyrene	0.0404	0.039	0.018	mg/kg	
205-99-2	Benzo(b)fluoranthene	0.0492	0.039	0.017	mg/kg	
191-24-2	Benzo(g,h,i)perylene	0.0329	0.039	0.019	mg/kg	J
207-08-9	Benzo(k)fluoranthene	0.0183	0.039	0.018	mg/kg	J
101-55-3	4-Bromophenyl phenyl ether	ND	0.078	0.015	mg/kg	
85-68-7	Butyl benzyl phthalate <sup>a</sup>	ND	0.078	0.0095	mg/kg	
92-52-4	1,1'-Biphenyl	ND	0.078	0.0053	mg/kg	
100-52-7	Benzaldehyde	ND	0.19	0.0096	mg/kg	
91-58-7	2-Chloronaphthalene	ND	0.078	0.0093	mg/kg	
106-47-8	4-Chloroaniline	ND	0.19	0.014	mg/kg	
86-74-8	Carbazole	0.0065	0.078	0.0056	mg/kg	J

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound





# Report of Analysis

<b>Client Sample ID:</b> SB-13	<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-13	<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> 85.7
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ	

## Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	18600	57	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Antimony	< 2.3	2.3	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Arsenic	5.4	2.3	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Barium	45.8	23	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Beryllium	0.50	0.23	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Cadmium	< 0.57	0.57	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Calcium	905	570	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Chromium	18.9	1.1	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Cobalt	5.7	5.7	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Copper	8.6	2.9	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Iron	20200	57	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Lead	16.0	2.3	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Magnesium	2680	570	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Manganese	257	1.7	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Mercury	0.036	0.031	mg/kg	1	05/08/24	05/09/24	CB SW846 7471B <sup>1</sup>	SW846 7471B <sup>4</sup>
Nickel	13.5	4.6	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Potassium	< 1100	1100	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Selenium	< 2.3	2.3	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Silver	< 0.57	0.57	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Sodium	< 1100	1100	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Thallium	< 1.1	1.1	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Vanadium	31.5	5.7	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Zinc	44.0	11	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>

(1) Instrument QC Batch: MA56033

(2) Instrument QC Batch: MA56049

(3) Prep QC Batch: MP46464

(4) Prep QC Batch: MP46496

RL = Reporting Limit

SGS North America Inc.

## Report of Analysis

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<b>Client Sample ID:</b> SB-14		<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-14		<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 90.7
<b>Method:</b> SW846 8270E SW846 3546		
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CJ6541.D	1	05/10/24 01:13	RS	05/09/24 10:55	OP54460	ECJ297
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

## ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	0.073	0.018	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.18	0.022	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.18	0.031	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.18	0.065	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	0.18	0.14	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	0.18	0.039	mg/kg	
95-48-7	2-Methylphenol	ND	0.073	0.023	mg/kg	
	3&4-Methylphenol	ND	0.073	0.030	mg/kg	
88-75-5	2-Nitrophenol	ND	0.18	0.024	mg/kg	
100-02-7	4-Nitrophenol	ND	0.37	0.097	mg/kg	
87-86-5	Pentachlorophenol <sup>a</sup>	ND	0.15	0.034	mg/kg	
108-95-2	Phenol	ND	0.073	0.019	mg/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	0.18	0.024	mg/kg	
95-95-4	2,4,5-Trichlorophenol	ND	0.18	0.027	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.18	0.022	mg/kg	
83-32-9	Acenaphthene	0.0420	0.037	0.013	mg/kg	
208-96-8	Acenaphthylene	0.0869	0.037	0.019	mg/kg	
98-86-2	Acetophenone	ND	0.18	0.0078	mg/kg	
120-12-7	Anthracene	0.150	0.037	0.022	mg/kg	
1912-24-9	Atrazine	ND	0.073	0.016	mg/kg	
56-55-3	Benzo(a)anthracene	0.497	0.037	0.010	mg/kg	
50-32-8	Benzo(a)pyrene	0.520	0.037	0.017	mg/kg	
205-99-2	Benzo(b)fluoranthene	0.560	0.037	0.016	mg/kg	
191-24-2	Benzo(g,h,i)perylene	0.355	0.037	0.018	mg/kg	
207-08-9	Benzo(k)fluoranthene	0.227	0.037	0.017	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	0.073	0.014	mg/kg	
85-68-7	Butyl benzyl phthalate <sup>a</sup>	ND	0.073	0.0089	mg/kg	
92-52-4	1,1'-Biphenyl	0.0066	0.073	0.0050	mg/kg	J
100-52-7	Benzaldehyde	ND	0.18	0.0091	mg/kg	
91-58-7	2-Chloronaphthalene	ND	0.073	0.0087	mg/kg	
106-47-8	4-Chloroaniline	ND	0.18	0.013	mg/kg	
86-74-8	Carbazole	0.0465	0.073	0.0053	mg/kg	J

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound





SGS North America Inc.

## Report of Analysis

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<b>Client Sample ID:</b> SB-14		<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-14		<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 90.7
<b>Method:</b> SW846 8081B SW846 3570		
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	8G56360.D	1	05/09/24 09:40	CP	05/08/24 18:21	OP54452	G8G2470
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	5.3 g	10.0 ml
Run #2		

## Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.00042	0.000081	mg/kg	
319-84-6	alpha-BHC	ND	0.00042	0.000048	mg/kg	
319-85-7	beta-BHC <sup>a</sup>	0.000090	0.00042	0.000060	mg/kg	JB
319-86-8	delta-BHC	ND	0.00042	0.000062	mg/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.00042	0.000073	mg/kg	
5103-71-9	alpha-Chlordane <sup>a</sup>	0.0044	0.00042	0.000056	mg/kg	
5103-74-2	gamma-Chlordane	0.0026	0.00042	0.000062	mg/kg	
57-74-9	Chlordane (alpha and gamma)	0.0069	0.00042	0.000056	mg/kg	
60-57-1	Dieldrin	0.00061	0.00042	0.000067	mg/kg	
72-54-8	4,4'-DDD	0.0040	0.00042	0.000044	mg/kg	
72-55-9	4,4'-DDE	0.0090	0.00042	0.000050	mg/kg	
50-29-3	4,4'-DDT <sup>b</sup>	0.0029	0.00042	0.000073	mg/kg	
72-20-8	Endrin	ND	0.00042	0.000060	mg/kg	
1031-07-8	Endosulfan sulfate	ND	0.00042	0.000050	mg/kg	
7421-93-4	Endrin aldehyde	ND	0.00042	0.00012	mg/kg	
959-98-8	Endosulfan-I	ND	0.00042	0.000056	mg/kg	
33213-65-9	Endosulfan-II	ND	0.00042	0.000058	mg/kg	
76-44-8	Heptachlor	ND	0.00042	0.000054	mg/kg	
1024-57-3	Heptachlor epoxide <sup>a</sup>	0.00076	0.00042	0.000075	mg/kg	
72-43-5	Methoxychlor	ND	0.00042	0.00016	mg/kg	
53494-70-5	Endrin ketone	ND	0.00042	0.000067	mg/kg	
8001-35-2	Toxaphene	ND	0.0052	0.0034	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	99%		46-145%
877-09-8	Tetrachloro-m-xylene	88%		46-145%
2051-24-3	Decachlorobiphenyl	61%		29-163%
2051-24-3	Decachlorobiphenyl	88%		29-163%

(a) More than 40 % RPD for detected concentrations between the two GC columns.

(b) Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound



# Report of Analysis

<b>Client Sample ID:</b> SB-14		<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-14		<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 90.7
<b>Method:</b> SW846 8081B SW846 3570		
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

4.14  
4

## Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
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being used for confirmation only.

ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
RL = Reporting Limit      B = Indicates analyte found in associated method blank  
E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

SGS North America Inc.

## Report of Analysis

Page 1 of 1

<b>Client Sample ID:</b> SB-14		
<b>Lab Sample ID:</b> JD87833-14		<b>Date Sampled:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Date Received:</b> 05/03/24
<b>Method:</b> SW846 8082A SW846 3570		<b>Percent Solids:</b> 90.7
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G231750.D	1	05/09/24 11:39	MLC	05/08/24 18:21	OP54453	G2G6085
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	5.3 g	10.0 ml
Run #2		

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.021	0.0088	mg/kg	
11104-28-2	Aroclor 1221	ND	0.021	0.0070	mg/kg	
11141-16-5	Aroclor 1232	ND	0.021	0.017	mg/kg	
53469-21-9	Aroclor 1242	ND	0.021	0.012	mg/kg	
12672-29-6	Aroclor 1248	ND	0.021	0.0045	mg/kg	
11097-69-1	Aroclor 1254	ND	0.021	0.0022	mg/kg	
11096-82-5	Aroclor 1260	ND	0.021	0.0072	mg/kg	
11100-14-4	Aroclor 1268	ND	0.021	0.0021	mg/kg	
37324-23-5	Aroclor 1262	ND	0.021	0.0017	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	87%		42-159%
877-09-8	Tetrachloro-m-xylene	79%		42-159%
2051-24-3	Decachlorobiphenyl	61%		18-154%
2051-24-3	Decachlorobiphenyl	96%		18-154%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> SB-14		<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-14		<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 90.7
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

### Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	7700	54	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Antimony	< 2.1	2.1	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Arsenic	3.8	2.1	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Barium	33.0	21	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Beryllium	0.29	0.21	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Cadmium	< 0.54	0.54	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Calcium	1770	540	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Chromium	10.2	1.1	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Cobalt	< 5.4	5.4	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Copper	10.9	2.7	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Iron	11200	54	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Lead	26.5	2.1	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Magnesium	1640	540	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Manganese	225	1.6	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Mercury	0.17	0.032	mg/kg	1	05/08/24	05/09/24	CB SW846 7471B <sup>1</sup>	SW846 7471B <sup>4</sup>
Nickel	8.1	4.3	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Potassium	< 1100	1100	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Selenium	< 2.1	2.1	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Silver	< 0.54	0.54	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Sodium	< 1100	1100	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Thallium	< 1.1	1.1	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Vanadium	17.8	5.4	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Zinc	42.3	11	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>

(1) Instrument QC Batch: MA56033

(2) Instrument QC Batch: MA56049

(3) Prep QC Batch: MP46464

(4) Prep QC Batch: MP46496

RL = Reporting Limit

4.14  
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## Report of Analysis

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<b>Client Sample ID:</b>	DUPE 1	<b>Date Sampled:</b>	05/03/24
<b>Lab Sample ID:</b>	JD87833-15	<b>Date Received:</b>	05/03/24
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	90.9
<b>Method:</b>	SW846 8270E SW846 3546		
<b>Project:</b>	Ridgewood Berm Sampling, Ridgewood, NJ		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CJ6542.D	1	05/10/24 01:32	RS	05/09/24 10:55	OP54460	ECJ297
Run #2	CJ6681.D	5	05/13/24 10:23	KH	05/09/24 10:55	OP54460	ECJ302

Run #1	Initial Weight	Final Volume
Run #1	31.7 g	1.0 ml
Run #2	31.7 g	1.0 ml

## ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	0.069	0.017	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.17	0.021	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.17	0.030	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.17	0.062	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	0.17	0.13	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	0.17	0.037	mg/kg	
95-48-7	2-Methylphenol	ND	0.069	0.022	mg/kg	
	3&4-Methylphenol	ND	0.069	0.029	mg/kg	
88-75-5	2-Nitrophenol	ND	0.17	0.023	mg/kg	
100-02-7	4-Nitrophenol	ND	0.35	0.093	mg/kg	
87-86-5	Pentachlorophenol <sup>a</sup>	ND	0.14	0.033	mg/kg	
108-95-2	Phenol	ND	0.069	0.018	mg/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	0.17	0.023	mg/kg	
95-95-4	2,4,5-Trichlorophenol	ND	0.17	0.026	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.17	0.021	mg/kg	
83-32-9	Acenaphthene	0.115	0.035	0.012	mg/kg	
208-96-8	Acenaphthylene	0.285	0.035	0.018	mg/kg	
98-86-2	Acetophenone	ND	0.17	0.0075	mg/kg	
120-12-7	Anthracene	0.566	0.035	0.021	mg/kg	
1912-24-9	Atrazine	ND	0.069	0.015	mg/kg	
56-55-3	Benzo(a)anthracene	1.82	0.035	0.0098	mg/kg	
50-32-8	Benzo(a)pyrene	1.96	0.035	0.016	mg/kg	
205-99-2	Benzo(b)fluoranthene	2.28	0.035	0.015	mg/kg	
191-24-2	Benzo(g,h,i)perylene	1.23	0.035	0.017	mg/kg	
207-08-9	Benzo(k)fluoranthene	0.710	0.035	0.016	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	0.069	0.013	mg/kg	
85-68-7	Butyl benzyl phthalate <sup>a</sup>	ND	0.069	0.0085	mg/kg	
92-52-4	1,1'-Biphenyl	0.0096	0.069	0.0048	mg/kg	J
100-52-7	Benzaldehyde	ND	0.17	0.0086	mg/kg	
91-58-7	2-Chloronaphthalene	ND	0.069	0.0083	mg/kg	
106-47-8	4-Chloroaniline	ND	0.17	0.012	mg/kg	
86-74-8	Carbazole	0.0815	0.069	0.0050	mg/kg	B

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b>	DUPE 1	<b>Date Sampled:</b>	05/03/24
<b>Lab Sample ID:</b>	JD87833-15	<b>Date Received:</b>	05/03/24
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	90.9
<b>Method:</b>	SW846 8270E SW846 3546		
<b>Project:</b>	Ridgewood Berm Sampling, Ridgewood, NJ		

## ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	0.069	0.014	mg/kg	
218-01-9	Chrysene	1.68	0.035	0.011	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	0.069	0.0074	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	0.069	0.015	mg/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	0.069	0.012	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	0.069	0.011	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	0.035	0.011	mg/kg	
606-20-2	2,6-Dinitrotoluene	ND	0.035	0.017	mg/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	0.069	0.029	mg/kg	
123-91-1	1,4-Dioxane	ND	0.035	0.023	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	0.327	0.035	0.015	mg/kg	
132-64-9	Dibenzofuran	0.0621	0.069	0.014	mg/kg	J
84-74-2	Di-n-butyl phthalate	ND	0.069	0.0057	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	0.069	0.0086	mg/kg	
84-66-2	Diethyl phthalate	ND	0.069	0.0074	mg/kg	
131-11-3	Dimethyl phthalate	ND	0.069	0.0062	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	0.069	0.0081	mg/kg	
206-44-0	Fluoranthene	3.53 <sup>b</sup>	0.17	0.077	mg/kg	
86-73-7	Fluorene	0.155	0.035	0.016	mg/kg	
118-74-1	Hexachlorobenzene	ND	0.069	0.0088	mg/kg	
87-68-3	Hexachlorobutadiene	ND	0.035	0.014	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	0.35	0.014	mg/kg	
67-72-1	Hexachloroethane	ND	0.17	0.017	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	1.04	0.035	0.016	mg/kg	
78-59-1	Isophorone	ND	0.069	0.0074	mg/kg	
91-57-6	2-Methylnaphthalene	0.0189	0.035	0.0078	mg/kg	J
88-74-4	2-Nitroaniline	ND	0.17	0.0082	mg/kg	
99-09-2	3-Nitroaniline	ND	0.17	0.0087	mg/kg	
100-01-6	4-Nitroaniline	ND	0.17	0.0090	mg/kg	
91-20-3	Naphthalene	0.0322	0.035	0.0098	mg/kg	J
98-95-3	Nitrobenzene	ND	0.069	0.013	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	0.069	0.010	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	0.17	0.013	mg/kg	
85-01-8	Phenanthrene	1.54	0.035	0.012	mg/kg	
129-00-0	Pyrene	3.35	0.035	0.011	mg/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	0.17	0.0088	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	74%	66%	10-99%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

## Report of Analysis

**4.15  
4**

<b>Client Sample ID:</b> DUPE 1	<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-15	<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> 90.9
<b>Method:</b> SW846 8270E SW846 3546	
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ	

**ABN TCL List (SOM0 2.0)**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	77%	70%	10-96%
118-79-6	2,4,6-Tribromophenol	93%	84%	10-123%
4165-60-0	Nitrobenzene-d5	75%	67%	10-109%
321-60-8	2-Fluorobiphenyl	82%	75%	11-109%
1718-51-0	Terphenyl-d14	82%	80%	10-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Unknown	4.25	.39	mg/kg	J
	Unknown	4.49	.19	mg/kg	J
	Unknown	4.82	.16	mg/kg	J
	Anthracene, methyl	8.32	.22	mg/kg	J
	Phenanthrene, methyl	8.35	.17	mg/kg	J
203-64-5	4H-Cyclopenta[def]phenanthrene	8.42	.61	mg/kg	JN
	Unknown	8.60	.3	mg/kg	J
	Phenanthrene, dimethyl	8.84	.2	mg/kg	J
	Unknown	8.91	.2	mg/kg	J
	Fluoranthene, methyl	9.52	.26	mg/kg	J
	Unknown	10.47	.16	mg/kg	J
	Unknown	11.05	.24	mg/kg	J
	Unknown	11.22	.26	mg/kg	J
	Unknown PHA Substance	11.45	.46	mg/kg	J
	Unknown	11.53	.2	mg/kg	J
	Unknown PHA Substance	11.62	1.1	mg/kg	J
	Unknown	11.88	.26	mg/kg	J
	Unknown	12.18	.16	mg/kg	J
	Unknown	12.66	.48	mg/kg	J
	Unknown	12.78	.45	mg/kg	J
	Unknown	13.06	.31	mg/kg	J
	Unknown	13.10	.29	mg/kg	J
	Unknown	13.14	.2	mg/kg	J
	Unknown	13.44	.61	mg/kg	J
	Unknown	13.98	.24	mg/kg	J
	Total TIC, Semi-Volatile		8.12	mg/kg	J

- (a) Associated CCV outside of control limits high, sample was ND.  
 (b) Result is from Run# 2

ND = Not detected	MDL = Method Detection Limit	J = Indicates an estimated value
RL = Reporting Limit		B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range		N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

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Client Sample ID: DUPE 1
Lab Sample ID: JD87833-15
Matrix: SO - Soil
Method: SW846 8081B SW846 3570
Project: Ridgewood Berm Sampling, Ridgewood, NJ
Date Sampled: 05/03/24
Date Received: 05/03/24
Percent Solids: 90.9

Table with 8 columns: Run #, File ID, DF, Analyzed, By, Prep Date, Prep Batch, Analytical Batch. Row 1: Run #1, 8G56361.D, 1, 05/09/24 10:02, CP, 05/08/24 18:21, OP54452, G8G2470.

Table with 3 columns: Run #, Initial Weight, Final Volume. Row 1: Run #1, 5.1 g, 10.0 ml.

Pesticide TCL List

Table with 7 columns: CAS No., Compound, Result, RL, MDL, Units, Q. Lists pesticides such as Aldrin, alpha-BHC, beta-BHC, etc.

Table with 5 columns: CAS No., Surrogate Recoveries, Run# 1, Run# 2, Limits. Lists Tetrachloro-m-xylene, Decachlorobiphenyl with their respective recovery rates.

(a) More than 40 % RPD for detected concentrations between the two GC columns.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

4.15
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## Report of Analysis

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<b>Client Sample ID:</b>	DUPE 1	<b>Date Sampled:</b>	05/03/24
<b>Lab Sample ID:</b>	JD87833-15	<b>Date Received:</b>	05/03/24
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	90.9
<b>Method:</b>	SW846 8082A SW846 3570		
<b>Project:</b>	Ridgewood Berm Sampling, Ridgewood, NJ		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G231755.D	1	05/09/24 13:39	MLC	05/08/24 18:21	OP54453	G2G6085
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	5.1 g	10.0 ml
Run #2		

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.022	0.0092	mg/kg	
11104-28-2	Aroclor 1221	ND	0.022	0.0072	mg/kg	
11141-16-5	Aroclor 1232	ND	0.022	0.018	mg/kg	
53469-21-9	Aroclor 1242	ND	0.022	0.013	mg/kg	
12672-29-6	Aroclor 1248	ND	0.022	0.0047	mg/kg	
11097-69-1	Aroclor 1254	ND	0.022	0.0023	mg/kg	
11096-82-5	Aroclor 1260	ND	0.022	0.0074	mg/kg	
11100-14-4	Aroclor 1268	ND	0.022	0.0022	mg/kg	
37324-23-5	Aroclor 1262	ND	0.022	0.0018	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	82%		42-159%
877-09-8	Tetrachloro-m-xylene	82%		42-159%
2051-24-3	Decachlorobiphenyl	68%		18-154%
2051-24-3	Decachlorobiphenyl	109%		18-154%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



# Report of Analysis

<b>Client Sample ID:</b> DUPE 1	<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-15	<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> 90.9
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ	

## Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	7590	58	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Antimony	< 2.3	2.3	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Arsenic	2.5	2.3	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Barium	24.8	23	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Beryllium	0.29	0.23	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Cadmium	< 0.58	0.58	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Calcium	942	580	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Chromium	8.9	1.2	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Cobalt	< 5.8	5.8	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Copper	8.0	2.9	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Iron	10600	58	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Lead	58.7	2.3	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Magnesium	1440	580	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Manganese	144	1.7	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Mercury	< 0.030	0.030	mg/kg	1	05/08/24	05/09/24	CB SW846 7471B <sup>1</sup>	SW846 7471B <sup>4</sup>
Nickel	7.7	4.6	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Potassium	< 1200	1200	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Selenium	< 2.3	2.3	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Silver	< 0.58	0.58	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Sodium	< 1200	1200	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Thallium	< 1.2	1.2	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Vanadium	21.9	5.8	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Zinc	28.7	12	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>

- (1) Instrument QC Batch: MA56033
- (2) Instrument QC Batch: MA56049
- (3) Prep QC Batch: MP46464
- (4) Prep QC Batch: MP46496

RL = Reporting Limit

SGS North America Inc.

## Report of Analysis

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<b>Client Sample ID:</b>	DUPE 2	<b>Date Sampled:</b>	05/03/24
<b>Lab Sample ID:</b>	JD87833-16	<b>Date Received:</b>	05/03/24
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	91.8
<b>Method:</b>	SW846 8270E SW846 3546		
<b>Project:</b>	Ridgewood Berm Sampling, Ridgewood, NJ		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CJ6537.D	1	05/09/24 23:57	RS	05/09/24 10:55	OP54460	ECJ297
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

## ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	0.072	0.018	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	0.18	0.022	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	0.18	0.031	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	0.18	0.064	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	0.18	0.14	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	0.18	0.038	mg/kg	
95-48-7	2-Methylphenol	ND	0.072	0.023	mg/kg	
	3&4-Methylphenol	ND	0.072	0.030	mg/kg	
88-75-5	2-Nitrophenol	ND	0.18	0.024	mg/kg	
100-02-7	4-Nitrophenol	ND	0.36	0.096	mg/kg	
87-86-5	Pentachlorophenol <sup>a</sup>	ND	0.14	0.034	mg/kg	
108-95-2	Phenol	ND	0.072	0.019	mg/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	0.18	0.024	mg/kg	
95-95-4	2,4,5-Trichlorophenol	ND	0.18	0.027	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	0.18	0.021	mg/kg	
83-32-9	Acenaphthene	0.0400	0.036	0.012	mg/kg	
208-96-8	Acenaphthylene	0.192	0.036	0.018	mg/kg	
98-86-2	Acetophenone	ND	0.18	0.0077	mg/kg	
120-12-7	Anthracene	0.250	0.036	0.022	mg/kg	
1912-24-9	Atrazine	ND	0.072	0.015	mg/kg	
56-55-3	Benzo(a)anthracene	0.988	0.036	0.010	mg/kg	
50-32-8	Benzo(a)pyrene	1.01	0.036	0.016	mg/kg	
205-99-2	Benzo(b)fluoranthene	1.26	0.036	0.016	mg/kg	
191-24-2	Benzo(g,h,i)perylene	0.624	0.036	0.018	mg/kg	
207-08-9	Benzo(k)fluoranthene	0.329	0.036	0.017	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	0.072	0.014	mg/kg	
85-68-7	Butyl benzyl phthalate <sup>a</sup>	ND	0.072	0.0088	mg/kg	
92-52-4	1,1'-Biphenyl	0.0077	0.072	0.0049	mg/kg	J
100-52-7	Benzaldehyde	0.0092	0.18	0.0089	mg/kg	J
91-58-7	2-Chloronaphthalene	ND	0.072	0.0086	mg/kg	
106-47-8	4-Chloroaniline	ND	0.18	0.013	mg/kg	
86-74-8	Carbazole	0.0416	0.072	0.0052	mg/kg	J

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound





SGS North America Inc.

## Report of Analysis

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<b>Client Sample ID:</b>	DUPE 2	<b>Date Sampled:</b>	05/03/24
<b>Lab Sample ID:</b>	JD87833-16	<b>Date Received:</b>	05/03/24
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	91.8
<b>Method:</b>	SW846 8081B SW846 3570		
<b>Project:</b>	Ridgewood Berm Sampling, Ridgewood, NJ		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	8G56362.D	1	05/09/24 10:24	CP	05/08/24 18:21	OP54452	G8G2470
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	5.2 g	10.0 ml
Run #2		

## Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.00042	0.000082	mg/kg	
319-84-6	alpha-BHC	ND	0.00042	0.000048	mg/kg	
319-85-7	beta-BHC	ND	0.00042	0.000061	mg/kg	
319-86-8	delta-BHC	ND	0.00042	0.000063	mg/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.00042	0.000073	mg/kg	
5103-71-9	alpha-Chlordane	0.0013	0.00042	0.000057	mg/kg	
5103-74-2	gamma-Chlordane	0.00068	0.00042	0.000063	mg/kg	
57-74-9	Chlordane (alpha and gamma)	0.0020	0.00042	0.000057	mg/kg	
60-57-1	Dieldrin	0.00028	0.00042	0.000067	mg/kg	J
72-54-8	4,4'-DDD <sup>a</sup>	0.00073	0.00042	0.000044	mg/kg	
72-55-9	4,4'-DDE	0.0044	0.00042	0.000050	mg/kg	
50-29-3	4,4'-DDT <sup>b</sup>	0.00093	0.00042	0.000073	mg/kg	
72-20-8	Endrin	ND	0.00042	0.000061	mg/kg	
1031-07-8	Endosulfan sulfate	ND	0.00042	0.000050	mg/kg	
7421-93-4	Endrin aldehyde	ND	0.00042	0.00012	mg/kg	
959-98-8	Endosulfan-I	ND	0.00042	0.000057	mg/kg	
33213-65-9	Endosulfan-II	ND	0.00042	0.000059	mg/kg	
76-44-8	Heptachlor	ND	0.00042	0.000054	mg/kg	
1024-57-3	Heptachlor epoxide	0.00034	0.00042	0.000075	mg/kg	J
72-43-5	Methoxychlor	ND	0.00042	0.00017	mg/kg	
53494-70-5	Endrin ketone	ND	0.00042	0.000067	mg/kg	
8001-35-2	Toxaphene	ND	0.0052	0.0035	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	59%		46-145%
877-09-8	Tetrachloro-m-xylene	89%		46-145%
2051-24-3	Decachlorobiphenyl	46%		29-163%
2051-24-3	Decachlorobiphenyl	106%		29-163%

(a) More than 40 % RPD for detected concentrations between the two GC columns.

(b) Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

# Report of Analysis

<b>Client Sample ID:</b> DUPE 2		<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-16		<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Percent Solids:</b> 91.8
<b>Method:</b> SW846 8081B SW846 3570		
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

4.16  
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## Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
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being used for confirmation only. More than 40% RPD for detected concentrations between the two GC columns.

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ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
RL = Reporting Limit      B = Indicates analyte found in associated method blank  
E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

SGS North America Inc.

## Report of Analysis

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<b>Client Sample ID:</b>	DUPE 2	<b>Date Sampled:</b>	05/03/24
<b>Lab Sample ID:</b>	JD87833-16	<b>Date Received:</b>	05/03/24
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	91.8
<b>Method:</b>	SW846 8082A SW846 3570		
<b>Project:</b>	Ridgewood Berm Sampling, Ridgewood, NJ		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2G231756.D	1	05/09/24 14:03	MLC	05/08/24 18:21	OP54453	G2G6085
Run #2							

Run #1	Initial Weight	Final Volume
Run #1	5.2 g	10.0 ml
Run #2		

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.021	0.0089	mg/kg	
11104-28-2	Aroclor 1221	ND	0.021	0.0070	mg/kg	
11141-16-5	Aroclor 1232	ND	0.021	0.017	mg/kg	
53469-21-9	Aroclor 1242	ND	0.021	0.013	mg/kg	
12672-29-6	Aroclor 1248	ND	0.021	0.0045	mg/kg	
11097-69-1	Aroclor 1254	ND	0.021	0.0023	mg/kg	
11096-82-5	Aroclor 1260	ND	0.021	0.0072	mg/kg	
11100-14-4	Aroclor 1268	ND	0.021	0.0021	mg/kg	
37324-23-5	Aroclor 1262	ND	0.021	0.0017	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	80%		42-159%
877-09-8	Tetrachloro-m-xylene	78%		42-159%
2051-24-3	Decachlorobiphenyl	67%		18-154%
2051-24-3	Decachlorobiphenyl	88%		18-154%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> DUPE 2 <b>Lab Sample ID:</b> JD87833-16 <b>Matrix:</b> SO - Soil <b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ	<b>Date Sampled:</b> 05/03/24 <b>Date Received:</b> 05/03/24 <b>Percent Solids:</b> 91.8
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### Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Aluminum	7630	53	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Antimony	< 2.1	2.1	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Arsenic	3.2	2.1	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Barium	31.3	21	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Beryllium	0.30	0.21	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Cadmium	< 0.53	0.53	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Calcium	2440	530	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Chromium	10.9	1.1	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Cobalt	< 5.3	5.3	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Copper	9.5	2.6	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Iron	10500	53	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Lead	30.2	2.1	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Magnesium	1550	530	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Manganese	211	1.6	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Mercury	0.15	0.032	mg/kg	1	05/08/24	05/09/24	CB SW846 7471B <sup>1</sup>	SW846 7471B <sup>4</sup>
Nickel	7.6	4.2	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Potassium	< 1100	1100	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Selenium	< 2.1	2.1	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Silver	< 0.53	0.53	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Sodium	< 1100	1100	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Thallium	< 1.1	1.1	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Vanadium	17.4	5.3	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>
Zinc	36.3	11	mg/kg	1	05/08/24	05/09/24	MM SW846 6010D <sup>2</sup>	SW846 3050B <sup>3</sup>

(1) Instrument QC Batch: MA56033

(2) Instrument QC Batch: MA56049

(3) Prep QC Batch: MP46464

(4) Prep QC Batch: MP46497

RL = Reporting Limit

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## Report of Analysis

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<b>Client Sample ID:</b>	FIELD BLANK	<b>Date Sampled:</b>	05/03/24
<b>Lab Sample ID:</b>	JD87833-17	<b>Date Received:</b>	05/03/24
<b>Matrix:</b>	AQ - Field Blank Soil	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8270E SW846 3510C		
<b>Project:</b>	Ridgewood Berm Sampling, Ridgewood, NJ		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CJ6555.D	1	05/10/24 12:26	KM	05/09/24 11:00	OP54467	ECJ298
Run #2 <sup>a</sup>	M195578.D	1	05/14/24 12:23	KH	05/13/24 20:30	OP54618	EM8483

Run #	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2	1000 ml	1.0 ml

## ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	0.82	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	0.89	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	1.3	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	2.4	ug/l	
51-28-5	2,4-Dinitrophenol <sup>b</sup>	ND	5.0	1.6	ug/l	
534-52-1	4,6-Dinitro-o-cresol <sup>b</sup>	ND	5.0	1.3	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.89	ug/l	
	3&4-Methylphenol	ND	2.0	0.88	ug/l	
88-75-5	2-Nitrophenol <sup>b</sup>	ND	5.0	0.96	ug/l	
100-02-7	4-Nitrophenol	ND	10	1.2	ug/l	
87-86-5	Pentachlorophenol <sup>b</sup>	ND	4.0	1.4	ug/l	
108-95-2	Phenol	ND	2.0	0.39	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol <sup>b</sup>	ND	5.0	1.5	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.3	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.92	ug/l	
83-32-9	Acenaphthene	ND	1.0	0.19	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.14	ug/l	
98-86-2	Acetophenone	ND	2.0	0.21	ug/l	
120-12-7	Anthracene	ND	1.0	0.21	ug/l	
1912-24-9	Atrazine	ND	2.0	0.45	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.29	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.0	0.20	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.0	0.21	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.0	0.21	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.0	0.34	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.0	0.21	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.40	ug/l	
85-68-7	Butyl benzyl phthalate <sup>b</sup>	ND	2.0	0.46	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.21	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.24	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.34	ug/l	
86-74-8	Carbazole	ND	1.0	0.23	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



## Report of Analysis

<b>Client Sample ID:</b> FIELD BLANK <b>Lab Sample ID:</b> JD87833-17 <b>Matrix:</b> AQ - Field Blank Soil <b>Method:</b> SW846 8270E SW846 3510C <b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ	<b>Date Sampled:</b> 05/03/24 <b>Date Received:</b> 05/03/24 <b>Percent Solids:</b> n/a
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**ABN TCL List (SOM0 2.0)**

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	25%	26%	10-58%
118-79-6	2,4,6-Tribromophenol	75%	83%	22-144%
4165-60-0	Nitrobenzene-d5	66%	74%	28-118%
321-60-8	2-Fluorobiphenyl	65%	83%	34-116%
1718-51-0	Terphenyl-d14	52%	67%	10-127%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	unknown	11.02	7.8	ug/l	J
	Total TIC, Semi-Volatile		7.8	ug/l	J

- (a) Sample extracted outside the holding time. Confirmation run.
- (b) Associated CCV outside of control limits high, sample was ND.

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ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 RL = Reporting Limit      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

4.17  
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SGS North America Inc.

## Report of Analysis

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<b>Client Sample ID:</b>	FIELD BLANK	<b>Date Sampled:</b>	05/03/24
<b>Lab Sample ID:</b>	JD87833-17	<b>Date Received:</b>	05/03/24
<b>Matrix:</b>	AQ - Field Blank Soil	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8081B SW846 3510C		
<b>Project:</b>	Ridgewood Berm Sampling, Ridgewood, NJ		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	1G196210.D	1	05/08/24 04:14	CP	05/07/24 11:00	OP54399	G1G7004
Run #2							

Run #	Initial Volume	Final Volume
Run #1	250 ml	2.0 ml
Run #2		

## Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0080	0.0041	ug/l	
319-84-6	alpha-BHC	ND	0.0080	0.0042	ug/l	
319-85-7	beta-BHC	ND	0.0080	0.0064	ug/l	
319-86-8	delta-BHC	ND	0.0080	0.0053	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0080	0.0048	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0080	0.0039	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0080	0.0034	ug/l	
57-74-9	Chlordane (alpha and gamma)	ND	0.0080	0.0034	ug/l	
60-57-1	Dieldrin	ND	0.0080	0.0061	ug/l	
72-54-8	4,4'-DDD	ND	0.0080	0.0046	ug/l	
72-55-9	4,4'-DDE	ND	0.0080	0.0040	ug/l	
50-29-3	4,4'-DDT	0.020	0.0080	0.0055	ug/l	B
72-20-8	Endrin	ND	0.0080	0.0048	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0080	0.0044	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0080	0.0054	ug/l	
53494-70-5	Endrin ketone	ND	0.0080	0.0050	ug/l	
959-98-8	Endosulfan-I	ND	0.0080	0.0042	ug/l	
33213-65-9	Endosulfan-II	ND	0.0080	0.0039	ug/l	
76-44-8	Heptachlor	ND	0.0080	0.0036	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0080	0.0048	ug/l	
72-43-5	Methoxychlor	ND	0.016	0.0054	ug/l	
8001-35-2	Toxaphene	ND	0.20	0.13	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	54%		10-175%
877-09-8	Tetrachloro-m-xylene	55%		10-175%
2051-24-3	Decachlorobiphenyl	28%		10-128%
2051-24-3	Decachlorobiphenyl	25%		10-128%

(a) Detection likely due to lab contamination.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

SGS North America Inc.

## Report of Analysis

Page 1 of 1

<b>Client Sample ID:</b>	FIELD BLANK	<b>Date Sampled:</b>	05/03/24
<b>Lab Sample ID:</b>	JD87833-17	<b>Date Received:</b>	05/03/24
<b>Matrix:</b>	AQ - Field Blank Soil	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8082A SW846 3510C		
<b>Project:</b>	Ridgewood Berm Sampling, Ridgewood, NJ		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3G141341.D	1	05/08/24 04:26	CP	05/07/24 11:00	OP54400	G3G5173
Run #2							

Run #1	Initial Volume	Final Volume
Run #1	250 ml	2.0 ml
Run #2		

## PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.40	0.16	ug/l	
11104-28-2	Aroclor 1221	ND	0.40	0.34	ug/l	
11141-16-5	Aroclor 1232	ND	0.40	0.21	ug/l	
53469-21-9	Aroclor 1242	ND	0.40	0.37	ug/l	
12672-29-6	Aroclor 1248	ND	0.40	0.35	ug/l	
11097-69-1	Aroclor 1254	ND	0.40	0.33	ug/l	
11096-82-5	Aroclor 1260 <sup>a</sup>	ND	0.40	0.33	ug/l	
11100-14-4	Aroclor 1268	ND	0.40	0.14	ug/l	
37324-23-5	Aroclor 1262	ND	0.40	0.36	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	46%		10-169%
877-09-8	Tetrachloro-m-xylene	46%		10-169%
2051-24-3	Decachlorobiphenyl	19%		10-130%
2051-24-3	Decachlorobiphenyl	18%		10-130%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected      MDL = Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> FIELD BLANK <b>Lab Sample ID:</b> JD87833-17 <b>Matrix:</b> AQ - Field Blank Soil <b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ	<b>Date Sampled:</b> 05/03/24 <b>Date Received:</b> 05/03/24 <b>Percent Solids:</b> n/a
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### Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analized By	Method	Prep Method
Aluminum	< 200	200	ug/l	1	05/07/24	05/08/24	MM SW846 6010D <sup>2</sup>	SW846 3010A <sup>3</sup>
Antimony	< 6.0	6.0	ug/l	1	05/07/24	05/08/24	MM SW846 6010D <sup>2</sup>	SW846 3010A <sup>3</sup>
Arsenic	< 3.0	3.0	ug/l	1	05/07/24	05/08/24	MM SW846 6010D <sup>2</sup>	SW846 3010A <sup>3</sup>
Barium	< 200	200	ug/l	1	05/07/24	05/08/24	MM SW846 6010D <sup>2</sup>	SW846 3010A <sup>3</sup>
Beryllium	< 1.0	1.0	ug/l	1	05/07/24	05/08/24	MM SW846 6010D <sup>2</sup>	SW846 3010A <sup>3</sup>
Cadmium	< 3.0	3.0	ug/l	1	05/07/24	05/08/24	MM SW846 6010D <sup>2</sup>	SW846 3010A <sup>3</sup>
Calcium	< 5000	5000	ug/l	1	05/07/24	05/08/24	MM SW846 6010D <sup>2</sup>	SW846 3010A <sup>3</sup>
Chromium	< 10	10	ug/l	1	05/07/24	05/08/24	MM SW846 6010D <sup>2</sup>	SW846 3010A <sup>3</sup>
Cobalt	< 50	50	ug/l	1	05/07/24	05/08/24	MM SW846 6010D <sup>2</sup>	SW846 3010A <sup>3</sup>
Copper	< 10	10	ug/l	1	05/07/24	05/08/24	MM SW846 6010D <sup>2</sup>	SW846 3010A <sup>3</sup>
Iron	< 100	100	ug/l	1	05/07/24	05/08/24	MM SW846 6010D <sup>2</sup>	SW846 3010A <sup>3</sup>
Lead	< 3.0	3.0	ug/l	1	05/07/24	05/08/24	MM SW846 6010D <sup>2</sup>	SW846 3010A <sup>3</sup>
Magnesium	< 5000	5000	ug/l	1	05/07/24	05/08/24	MM SW846 6010D <sup>2</sup>	SW846 3010A <sup>3</sup>
Manganese	< 15	15	ug/l	1	05/07/24	05/08/24	MM SW846 6010D <sup>2</sup>	SW846 3010A <sup>3</sup>
Mercury	< 0.20	0.20	ug/l	1	05/07/24	05/08/24	MK SW846 7470A <sup>1</sup>	SW846 7470A <sup>4</sup>
Nickel	< 10	10	ug/l	1	05/07/24	05/08/24	MM SW846 6010D <sup>2</sup>	SW846 3010A <sup>3</sup>
Potassium	< 10000	10000	ug/l	1	05/07/24	05/08/24	MM SW846 6010D <sup>2</sup>	SW846 3010A <sup>3</sup>
Selenium	< 10	10	ug/l	1	05/07/24	05/08/24	MM SW846 6010D <sup>2</sup>	SW846 3010A <sup>3</sup>
Silver	< 10	10	ug/l	1	05/07/24	05/08/24	MM SW846 6010D <sup>2</sup>	SW846 3010A <sup>3</sup>
Sodium	< 10000	10000	ug/l	1	05/07/24	05/08/24	MM SW846 6010D <sup>2</sup>	SW846 3010A <sup>3</sup>
Thallium	< 10	10	ug/l	1	05/07/24	05/08/24	MM SW846 6010D <sup>2</sup>	SW846 3010A <sup>3</sup>
Vanadium	< 50	50	ug/l	1	05/07/24	05/08/24	MM SW846 6010D <sup>2</sup>	SW846 3010A <sup>3</sup>
Zinc	< 20	20	ug/l	1	05/07/24	05/08/24	MM SW846 6010D <sup>2</sup>	SW846 3010A <sup>3</sup>

(1) Instrument QC Batch: MA56021

(2) Instrument QC Batch: MA56025

(3) Prep QC Batch: MP46431

(4) Prep QC Batch: MP46448

RL = Reporting Limit

4.17  
4

SGS North America Inc.

## Report of Analysis

Page 1 of 1

<b>Client Sample ID:</b>	FIELD BLANK	<b>Date Sampled:</b>	05/03/24
<b>Lab Sample ID:</b>	JD87833-17R	<b>Date Received:</b>	05/03/24
<b>Matrix:</b>	AQ - Field Blank Soil	<b>Percent Solids:</b>	n/a
<b>Method:</b>	SW846 8081B SW846 3510C		
<b>Project:</b>	Ridgewood Berm Sampling, Ridgewood, NJ		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	1G196431.D	1	05/15/24 11:49	MLC	05/13/24 14:30	OP54554	G1G7016
Run #2							

Run #	Initial Volume	Final Volume
Run #1	300 ml	2.0 ml
Run #2		

## Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0067	0.0034	ug/l	
319-84-6	alpha-BHC	ND	0.0067	0.0035	ug/l	
319-85-7	beta-BHC	ND	0.0067	0.0053	ug/l	
319-86-8	delta-BHC	ND	0.0067	0.0044	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0067	0.0040	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0067	0.0033	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0067	0.0028	ug/l	
57-74-9	Chlordane (alpha and gamma)	ND	0.0067	0.0028	ug/l	
60-57-1	Dieldrin	ND	0.0067	0.0051	ug/l	
72-54-8	4,4'-DDD	ND	0.0067	0.0038	ug/l	
72-55-9	4,4'-DDE	ND	0.0067	0.0034	ug/l	
50-29-3	4,4'-DDT	0.0048	0.0067	0.0046	ug/l	J
72-20-8	Endrin	ND	0.0067	0.0040	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0067	0.0036	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0067	0.0045	ug/l	
53494-70-5	Endrin ketone	ND	0.0067	0.0041	ug/l	
959-98-8	Endosulfan-I	ND	0.0067	0.0035	ug/l	
33213-65-9	Endosulfan-II	ND	0.0067	0.0033	ug/l	
76-44-8	Heptachlor	ND	0.0067	0.0030	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0067	0.0040	ug/l	
72-43-5	Methoxychlor	ND	0.013	0.0045	ug/l	
8001-35-2	Toxaphene	ND	0.17	0.11	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	88%		10-175%
877-09-8	Tetrachloro-m-xylene	92%		10-175%
2051-24-3	Decachlorobiphenyl	29%		10-128%
2051-24-3	Decachlorobiphenyl	27%		10-128%

(a) Sample extracted outside the holding time. Detections likely due to lab contamination.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody





CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200
www.sgs.com/ehsusa

FED-EX Tracking #
SGS Quote #
Bottle Control #
SGS Job #

S AQ FB

PREM-TM-05124-184
JD87833

Client / Reporting Information
Project Information
Billing Information (if different from Report to)

Matrix Codes
DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Waste
FB - Field Blank
EB - Equipment Blank
RB - Rinse Blank
TB - Trip Blank

Table with columns: Field ID / Point of Collection, Date, Time, Matrix, # of bottles, HCl, HNO3, H2SO4, NONE, DI Water, MESH, ENCORE, pH Check (Lab Use Only), LAB USE ONLY

Turn Around Time (Business Days)
Deliverable
Comments / Special Instructions

Sample Custody must be documented below each time samples change possession, including courier delivery.
Received By:
Date / Time:
Received By:
Date / Time:

2.1 C 2.2 C 1R50



# CHAIN OF CUSTODY

SGS North America Inc. - Dayton  
2235 Route 130, Dayton, NJ 08810  
TEL. 732-329-0200  
www.sgs.com/ehsusa

FED-EX Tracking #	Bottle Order Control #
SGS Quote #	SGS Job #

<b>Client / Reporting Information</b>		<b>Project Information</b>						<b>Matrix Codes</b>									
Company Name: <b>Matrix New World</b>		Project Name: <b>Ridgewood Berm Sampling</b>						<b>TCL SVOC's</b> <b>TAL METALS</b> <b>TCL PESTICIDES</b> <b>PCB's</b>									
Street Address: <b>26 Columbia Tpk</b>		Street: _____															
City: <b>Flyham Park NJ</b>		Billing Information (if different from Report to): Company Name: _____															
Project Contact: <b>mfeury @ mnw.com</b>		Project #: <b>23-1429</b>															
Phone #: <b>201-657-2638</b>		Client Purchase Order #: _____															
Sample(s) Name(s): <b>K. Murphy</b>		Project Manager: <b>Melissa Feury</b>						Matrix Codes Legend: DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OL - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank									

SGS Sample #	Field ID / Point of Collection	MEQHDI Val #	Date	Time	Collection		Matrix	Number of Bottles										pH Check (Lab Use Only)	LAB USE ONLY						
					Sampled by	Source (Cont. Comp. (C))		# of bottles	NO	NO2	NO3	H-SO4	NONE	D/Water	MEDH	ENDORE									
13	SB-13		5/3/24	1030	KM	G	N	S	1											X					
14	SB-14			1035	KM	G	N	S	1											X	X				
15	Dupe 1				KM	G	N	S	1											X	X	X	X		
16	Dupe 2				KM	G	N	S	1											X	X	X	X		
17	Field Blank			1100	KM	N	W	S	1				4							X	X	X	X		

<b>Turn Around Time (Business Days)</b>		<b>Deliverable</b>				<b>Comments / Special Instructions</b>			
<input checked="" type="checkbox"/> 10 Business Days <input type="checkbox"/> 5 Business Days <input type="checkbox"/> 3 Business Days* <input type="checkbox"/> 2 Business Days* <input type="checkbox"/> 1 Business Day* <input type="checkbox"/> Other _____ <small>All data available via SGS Engage</small>		Approved By (SGS PM) / Date: _____ <small>* Approval needed for 1-3 BD TAT</small>		<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input checked="" type="checkbox"/> NJ Reduced (Level 3) <input type="checkbox"/> Full Tier 1 (Level 4) <input type="checkbox"/> Commercial "C" <input type="checkbox"/> NJ DKQP		<input type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category B <input type="checkbox"/> MA MCP Criteria <input type="checkbox"/> CT RCP Criteria <input type="checkbox"/> State Forms <input type="checkbox"/> EDD Format		• 2x300mL AMMBGR  <a href="http://www.sgs.com/en/terms-and-conditions">http://www.sgs.com/en/terms-and-conditions</a>	

Sample Custody must be documented below each time samples change possession, including courier delivery.							
1	Relinquished By: <i>[Signature]</i>	Date / Time: 5/3/24 1530	Received By: <i>[Signature]</i>	Date / Time: 5/3/24 1530	Relinquished By: <i>[Signature]</i>	Date / Time: 5/3/24 17:08	Received By: 2
3	Relinquished By:	Date / Time:	Received By: 3	Date / Time:	Relinquished By:	Date / Time:	Received By: 4
5	Relinquished By:	Date / Time:	Received By: 5	Date / Time:	Custody Seal #	<input type="checkbox"/> Intact <input type="checkbox"/> Not intact <input type="checkbox"/> Absent	

2 containers / 1 TR to 21x21 / SGS Courier

EHSA-QAC-0023-05 Rev. Date 8/5/22

### JD87833: Chain of Custody

### Page 2 of 3



5.1  
5

## SGS Sample Receipt Summary

**Job Number:** JD87833

**Client:** MATRIX NEW WORLD ENGINEERING, IN

**Project:** RIDGEWOOD BERM SAMPLING, RIDGE

**Date / Time Received:** 5/3/2024 5:08:00 PM

**Delivery Method:** SGS COURIER

**Airbill #s:** \_\_\_\_\_

**Cooler Temps (Raw Measured) °C:** Cooler 1: (2.1); Cooler 2: (2.2);

**Cooler Temps (Corrected) °C:** Cooler 1: (2.5); Cooler 2: (2.6);

<u>Cooler Security</u>	<u>Y or N</u>		<u>Y or N</u>	
1. Custody Seals Present:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. COC Present:	<input checked="" type="checkbox"/> <input type="checkbox"/>
2. Custody Seals Intact:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. Smpl Dates/Time OK	<input checked="" type="checkbox"/> <input type="checkbox"/>

<u>Cooler Temperature</u>	<u>Y or N</u>	
1. Temp criteria achieved:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Cooler temp verification:	IR-50	
3. Cooler media:	Ice (Bag)	
4. No. Coolers:	2	

<u>Quality Control Preservation</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Trip Blank present / cooler:	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Trip Blank listed on COC:	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Samples preserved properly:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. VOCs headspace free:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

<u>Sample Integrity - Documentation</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample labels present on bottles:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. Container labeling complete:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Sample container label / COC agree:	<input checked="" type="checkbox"/>		<input type="checkbox"/>

<u>Sample Integrity - Condition</u>	<u>Y</u>	<u>or</u>	<u>N</u>
1. Sample recvd within HT:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
2. All containers accounted for:	<input checked="" type="checkbox"/>		<input type="checkbox"/>
3. Condition of sample:	Intact		

<u>Sample Integrity - Instructions</u>	<u>Y</u>	<u>or</u>	<u>N</u>	<u>N/A</u>
1. Analysis requested is clear:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
2. Bottles received for unspecified tests	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
3. Sufficient volume recvd for analysis:	<input checked="" type="checkbox"/>		<input type="checkbox"/>	
4. Compositing instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Filtering instructions clear:	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Test Strip Lot #s:	pH 1-12: 231619	pH 12+: 203117A	Other: (Specify) _____
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Comments

SM089-03  
Rev. Date 12/7/17

**JD87833: Chain of Custody**

**Page 3 of 3**

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5

### Internal Sample Tracking Chronicle

Matrix New World Engineering, Inc.

Job No: JD87833

Ridgewood Berm Sampling, Ridgewood, NJ  
 Project No: 23-1429

5.2  
5

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD87833-1 Collected: 03-MAY-24 08:30 By: KM Received: 03-MAY-24 By: AR SB-1						
JD87833-1	SM2540 G 18TH ED MOD	08-MAY-24 17:00	SC			SOL104
JD87833-1	SW846 8081B	09-MAY-24 06:24	CP	08-MAY-24 ED		P8081PESTTCL
JD87833-1	SW846 8082A	09-MAY-24 06:27	MLC	08-MAY-24 ED		P8082PCB11AO
JD87833-1	SW846 7471B	09-MAY-24 17:05	CB	08-MAY-24 MK		HG
JD87833-1	SW846 6010D	09-MAY-24 19:25	MM	08-MAY-24 BP		AG,AL,AS,BA,BE,CA,CD,CO,CR, CU,FE,K,MG,MN,NA,NI,PB,SB, SE,TL,V,ZN
JD87833-1	SW846 8270E	10-MAY-24 00:16	RS	09-MAY-24 EB		AB8270TCL20+
JD87833-2 Collected: 03-MAY-24 08:35 By: KM Received: 03-MAY-24 By: AR SB-2						
JD87833-2	SM2540 G 18TH ED MOD	08-MAY-24 17:00	SC			SOL104
JD87833-2	SW846 7471B	09-MAY-24 17:07	CB	08-MAY-24 MK		HG
JD87833-2	SW846 6010D	09-MAY-24 19:40	MM	08-MAY-24 BP		AG,AL,AS,BA,BE,CA,CD,CO,CR, CU,FE,K,MG,MN,NA,NI,PB,SB, SE,TL,V,ZN
JD87833-2	SW846 8270E	09-MAY-24 21:26	RS	09-MAY-24 EB		AB8270TCL20+
JD87833-3 Collected: 03-MAY-24 08:40 By: KM Received: 03-MAY-24 By: AR SB-3						
JD87833-3	SM2540 G 18TH ED MOD	08-MAY-24 17:00	SC			SOL104
JD87833-3	SW846 8081B	09-MAY-24 06:46	CP	08-MAY-24 ED		P8081PESTTCL
JD87833-3	SW846 8082A	09-MAY-24 06:51	MLC	08-MAY-24 ED		P8082PCB11AO
JD87833-3	SW846 7471B	09-MAY-24 17:08	CB	08-MAY-24 MK		HG
JD87833-3	SW846 6010D	09-MAY-24 19:45	MM	08-MAY-24 BP		AG,AL,AS,BA,BE,CA,CD,CO,CR, CU,FE,K,MG,MN,NA,NI,PB,SB, SE,TL,V,ZN
JD87833-3	SW846 8270E	09-MAY-24 20:11	RS	09-MAY-24 EB		AB8270TCL20+
JD87833-4 Collected: 03-MAY-24 09:00 By: KM Received: 03-MAY-24 By: AR SB-4						
JD87833-4	SM2540 G 18TH ED MOD	08-MAY-24 17:00	SC			SOL104
JD87833-4	SW846 8081B	09-MAY-24 07:08	CP	08-MAY-24 ED		P8081PESTTCL
JD87833-4	SW846 8082A	09-MAY-24 07:15	MLC	08-MAY-24 ED		P8082PCB11AO

### Internal Sample Tracking Chronicle

Matrix New World Engineering, Inc.

Job No: JD87833

Ridgewood Berm Sampling, Ridgewood, NJ  
Project No: 23-1429

5.2  
5

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD87833-4	SW846 7471B	09-MAY-24 17:10	CB	08-MAY-24	MK	HG
JD87833-4	SW846 6010D	09-MAY-24 19:50	MM	08-MAY-24	BP	AG,AL,AS,BA,BE,CA,CD,CO,CR, CU,FE,K,MG,MN,NA,NI,PB,SB, SE,TL,V,ZN
JD87833-4	SW846 8270E	09-MAY-24 21:45	RS	09-MAY-24	EB	AB8270TCL20+
JD87833-5 Collected: 03-MAY-24 09:05 By: KM Received: 03-MAY-24 By: AR SB-5						
JD87833-5	SM2540 G 18TH ED MOD	09-MAY-24 17:00	SC			SOL104
JD87833-5	SW846 8082A	09-MAY-24 09:16	MLC	08-MAY-24	ED	P8082PCB11AO
JD87833-5	SW846 7471B	09-MAY-24 17:12	CB	08-MAY-24	MK	HG
JD87833-5	SW846 6010D	09-MAY-24 19:55	MM	08-MAY-24	BP	AG,AL,AS,BA,BE,CA,CD,CO,CR, CU,FE,K,MG,MN,NA,NI,PB,SB, SE,TL,V,ZN
JD87833-5	SW846 8270E	09-MAY-24 22:03	RS	09-MAY-24	EB	AB8270TCL20+
JD87833-5	SW846 8081B	10-MAY-24 01:27	TP	08-MAY-24	ED	P8081PESTTCL
JD87833-5	SW846 8270E	13-MAY-24 10:04	KH	09-MAY-24	EB	AB8270TCL20+
JD87833-6 Collected: 03-MAY-24 09:10 By: KM Received: 03-MAY-24 By: AR SB-6						
JD87833-6	SM2540 G 18TH ED MOD	09-MAY-24 17:00	SC			SOL104
JD87833-6	SW846 7471B	09-MAY-24 17:17	CB	08-MAY-24	MK	HG
JD87833-6	SW846 6010D	09-MAY-24 20:00	MM	08-MAY-24	BP	AG,AL,AS,BA,BE,CA,CD,CO,CR, CU,FE,K,MG,MN,NA,NI,PB,SB, SE,TL,V,ZN
JD87833-6	SW846 8270E	09-MAY-24 22:22	RS	09-MAY-24	EB	AB8270TCL20+
JD87833-7 Collected: 03-MAY-24 09:20 By: KM Received: 03-MAY-24 By: AR SB-7						
JD87833-7	SM2540 G 18TH ED MOD	09-MAY-24 17:00	SC			SOL104
JD87833-7	SW846 8081B	09-MAY-24 07:52	CP	08-MAY-24	ED	P8081PESTTCL
JD87833-7	SW846 8082A	09-MAY-24 09:40	MLC	08-MAY-24	ED	P8082PCB11AO
JD87833-7	SW846 7471B	09-MAY-24 17:18	CB	08-MAY-24	MK	HG
JD87833-7	SW846 6010D	09-MAY-24 20:05	MM	08-MAY-24	BP	AG,AL,AS,BA,BE,CA,CD,CO,CR, CU,FE,K,MG,MN,NA,NI,PB,SB, SE,TL,V,ZN
JD87833-7	SW846 8270E	10-MAY-24 00:35	RS	09-MAY-24	EB	AB8270TCL20+

### Internal Sample Tracking Chronicle

Matrix New World Engineering, Inc.

Job No: JD87833

Ridgewood Berm Sampling, Ridgewood, NJ  
 Project No: 23-1429

5.2  
5

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
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JD87833-8 Collected: 03-MAY-24 09:30 By: KM Received: 03-MAY-24 By: AR  
 SB-8

JD87833-8	SM2540 G 18TH ED MOD	09-MAY-24 17:00	SC			SOL104
JD87833-8	SW846 8081B	09-MAY-24 08:13	CP	08-MAY-24 ED		P8081PESTTCL
JD87833-8	SW846 8082A	09-MAY-24 10:04	MLC	08-MAY-24 ED		P8082PCB11AO
JD87833-8	SW846 7471B	09-MAY-24 17:20	CB	08-MAY-24 MK		HG
JD87833-8	SW846 6010D	09-MAY-24 20:10	MM	08-MAY-24 BP		AG,AL,AS,BA,BE,CA,CD,CO,CR, CU,FE,K,MG,MN,NA,NI,PB,SB, SE,TL,V,ZN
JD87833-8	SW846 8270E	09-MAY-24 22:41	RS	09-MAY-24 EB		AB8270TCL20+

JD87833-9 Collected: 03-MAY-24 09:35 By: KM Received: 03-MAY-24 By: AR  
 SB-9

JD87833-9	SM2540 G 18TH ED MOD	09-MAY-24 17:00	SC			SOL104
JD87833-9	SW846 7471B	09-MAY-24 17:22	CB	08-MAY-24 MK		HG
JD87833-9	SW846 6010D	09-MAY-24 20:15	MM	08-MAY-24 BP		AG,AL,AS,BA,BE,CA,CD,CO,CR, CU,FE,K,MG,MN,NA,NI,PB,SB, SE,TL,V,ZN
JD87833-9	SW846 8270E	10-MAY-24 00:54	RS	09-MAY-24 EB		AB8270TCL20+

JD87833-10 Collected: 03-MAY-24 09:50 By: KM Received: 03-MAY-24 By: AR  
 SB-10

JD87833-10	SM2540 G 18TH ED MOD	09-MAY-24 17:00	SC			SOL104
JD87833-10	SW846 8081B	09-MAY-24 08:35	CP	08-MAY-24 ED		P8081PESTTCL
JD87833-10	SW846 8082A	09-MAY-24 10:28	MLC	08-MAY-24 ED		P8082PCB11AO
JD87833-10	SW846 7471B	09-MAY-24 17:23	CB	08-MAY-24 MK		HG
JD87833-10	SW846 6010D	09-MAY-24 20:20	MM	08-MAY-24 BP		AG,AL,AS,BA,BE,CA,CD,CO,CR, CU,FE,K,MG,MN,NA,NI,PB,SB, SE,TL,V,ZN
JD87833-10	SW846 8270E	09-MAY-24 23:00	RS	09-MAY-24 EB		AB8270TCL20+

JD87833-11 Collected: 03-MAY-24 10:00 By: KM Received: 03-MAY-24 By: AR  
 SB-11

JD87833-11	SM2540 G 18TH ED MOD	09-MAY-24 17:00	SC			SOL104
JD87833-11	SW846 8082A	09-MAY-24 10:52	MLC	08-MAY-24 ED		P8082PCB11AO

### Internal Sample Tracking Chronicle

Matrix New World Engineering, Inc.

Job No: JD87833

Ridgewood Berm Sampling, Ridgewood, NJ  
 Project No: 23-1429

5.2  
5

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD87833-11 SW846 7471B		09-MAY-24 17:25	CB	08-MAY-24 MK		HG
JD87833-11 SW846 6010D		09-MAY-24 20:25	MM	08-MAY-24 BP		AG,AL,AS,BA,BE,CA,CD,CO,CR, CU,FE,K,MG,MN,NA,NI,PB,SB, SE,TL,V,ZN
JD87833-11 SW846 8270E		09-MAY-24 20:30	RS	09-MAY-24 EB		AB8270TCL20+
JD87833-11 SW846 8081B		10-MAY-24 15:41	CP	08-MAY-24 ED		P8081PESTTCL
JD87833-12 Collected: 03-MAY-24 10:15 By: KM Received: 03-MAY-24 By: AR SB-12						
JD87833-12 SM2540 G 18TH ED MOD		09-MAY-24 17:00	SC			SOL104
JD87833-12 SW846 8081B		09-MAY-24 09:19	CP	08-MAY-24 ED		P8081PESTTCL
JD87833-12 SW846 8082A		09-MAY-24 11:15	MLC	08-MAY-24 ED		P8082PCB11AO
JD87833-12 SW846 7471B		09-MAY-24 17:27	CB	08-MAY-24 MK		HG
JD87833-12 SW846 6010D		09-MAY-24 20:39	MM	08-MAY-24 BP		AG,AL,AS,BA,BE,CA,CD,CO,CR, CU,FE,K,MG,MN,NA,NI,PB,SB, SE,TL,V,ZN
JD87833-12 SW846 8270E		09-MAY-24 23:19	RS	09-MAY-24 EB		AB8270TCL20+
JD87833-13 Collected: 03-MAY-24 10:30 By: KM Received: 03-MAY-24 By: AR SB-13						
JD87833-13 SM2540 G 18TH ED MOD		09-MAY-24 17:00	SC			SOL104
JD87833-13 SW846 7471B		09-MAY-24 17:47	CB	08-MAY-24 MK		HG
JD87833-13 SW846 6010D		09-MAY-24 20:45	MM	08-MAY-24 BP		AG,AL,AS,BA,BE,CA,CD,CO,CR, CU,FE,K,MG,MN,NA,NI,PB,SB, SE,TL,V,ZN
JD87833-13 SW846 8270E		09-MAY-24 23:38	RS	09-MAY-24 EB		AB8270TCL20+
JD87833-14 Collected: 03-MAY-24 10:35 By: KM Received: 03-MAY-24 By: AR SB-14						
JD87833-14 SM2540 G 18TH ED MOD		09-MAY-24 17:00	SC			SOL104
JD87833-14 SW846 8081B		09-MAY-24 09:40	CP	08-MAY-24 ED		P8081PESTTCL
JD87833-14 SW846 8082A		09-MAY-24 11:39	MLC	08-MAY-24 ED		P8082PCB11AO
JD87833-14 SW846 7471B		09-MAY-24 17:52	CB	08-MAY-24 MK		HG
JD87833-14 SW846 6010D		09-MAY-24 19:05	MM	08-MAY-24 BP		AG,AL,AS,BA,BE,CA,CD,CO,CR, CU,FE,K,MG,MN,NA,NI,PB,SB, SE,TL,V,ZN
JD87833-14 SW846 8270E		10-MAY-24 01:13	RS	09-MAY-24 EB		AB8270TCL20+

### Internal Sample Tracking Chronicle

Matrix New World Engineering, Inc.

Job No: JD87833

Ridgewood Berm Sampling, Ridgewood, NJ  
 Project No: 23-1429

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Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
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JD87833-15 Collected: 03-MAY-24 00:00 By: KM Received: 03-MAY-24 By: AR  
 DUPE 1

JD87833-15 SM2540 G 18TH ED MOD		09-MAY-24 17:00	SC			SOL104
JD87833-15 SW846 8081B		09-MAY-24 10:02	CP	08-MAY-24 ED		P8081PESTTCL
JD87833-15 SW846 8082A		09-MAY-24 13:39	MLC	08-MAY-24 ED		P8082PCB11AO
JD87833-15 SW846 7471B		09-MAY-24 17:53	CB	08-MAY-24 MK		HG
JD87833-15 SW846 6010D		09-MAY-24 20:50	MM	08-MAY-24 BP		AG,AL,AS,BA,BE,CA,CD,CO,CR, CU,FE,K,MG,MN,NA,NI,PB,SB, SE,TL,V,ZN
JD87833-15 SW846 8270E		10-MAY-24 01:32	RS	09-MAY-24 EB		AB8270TCL20+
JD87833-15 SW846 8270E		13-MAY-24 10:23	KH	09-MAY-24 EB		AB8270TCL20+

JD87833-16 Collected: 03-MAY-24 00:00 By: KM Received: 03-MAY-24 By: AR  
 DUPE 2

JD87833-16 SM2540 G 18TH ED MOD		09-MAY-24 17:00	SC			SOL104
JD87833-16 SW846 8081B		09-MAY-24 10:24	CP	08-MAY-24 ED		P8081PESTTCL
JD87833-16 SW846 8082A		09-MAY-24 14:03	MLC	08-MAY-24 ED		P8082PCB11AO
JD87833-16 SW846 7471B		09-MAY-24 18:02	CB	08-MAY-24 MK		HG
JD87833-16 SW846 6010D		09-MAY-24 20:54	MM	08-MAY-24 BP		AG,AL,AS,BA,BE,CA,CD,CO,CR, CU,FE,K,MG,MN,NA,NI,PB,SB, SE,TL,V,ZN
JD87833-16 SW846 8270E		09-MAY-24 23:57	RS	09-MAY-24 EB		AB8270TCL20+

JD87833-17 Collected: 03-MAY-24 11:00 By: KM Received: 03-MAY-24 By: AR  
 FIELD BLANK

JD87833-17 SW846 8081B		08-MAY-24 04:14	CP	07-MAY-24 NT		P8081PESTTCL
JD87833-17 SW846 6010D		08-MAY-24 04:22	MM	07-MAY-24 SS		AG,AL,AS,BA,BE,CA,CD,CO,CR, CU,FE,K,MG,MN,NA,NI,PB,SB, SE,TL,V,ZN
JD87833-17 SW846 8082A		08-MAY-24 04:26	CP	07-MAY-24 DS		P8082PCB11AO
JD87833-17 SW846 7470A		08-MAY-24 12:16	MK	07-MAY-24 MK		HG
JD87833-17 SW846 8270E		10-MAY-24 12:26	KM	09-MAY-24 TG		AB8270TCL20+
JD87833-17 SW846 8270E		14-MAY-24 12:23	KH	13-MAY-24 TG		AB8270TCL20+



### Internal Sample Tracking Chronicle

Matrix New World Engineering, Inc.

Job No: JD87833

Ridgewood Berm Sampling, Ridgewood, NJ  
Project No: 23-1429

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
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JD87833-17C Collected: 03-MAY-24 11:00 By: KM Received: 03-MAY-24 By: AR  
FIELD BLANK

JD87833-17SW846 8081B 15-MAY-24 11:49 MLC 13-MAY-24 TG P8081PESTTCL

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# SGS Internal Chain of Custody

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Received:** 05/03/24

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD87833-1.1	Haleigh Rosado	Secured Storage	05/04/24 17:02	Return to Storage
JD87833-1.1	Secured Storage	Todd Shoemaker	05/06/24 14:42	Retrieve from Storage
JD87833-1.1	Todd Shoemaker	Secured Staging Area	05/06/24 14:43	Return to Storage
JD87833-1.1	Secured Staging Area	Saloni Chauhan	05/06/24 15:32	Retrieve from Storage
JD87833-1.1	Saloni Chauhan	Secured Storage	05/06/24 22:47	Return to Storage
JD87833-1.1	Secured Storage	Aleandi Rodriguez	05/07/24 22:26	Retrieve from Storage
JD87833-1.1	Aleandi Rodriguez	Secured Staging Area	05/07/24 22:26	Return to Storage
JD87833-1.1	Secured Staging Area	Lauren Halloran	05/08/24 07:57	Retrieve from Storage
JD87833-1.1	Secured Storage	Brianna Perez	05/08/24 12:30	Retrieve from Storage
Analyst chain of custody update error.				
JD87833-1.1	Brianna Perez	Secured Storage	05/08/24 15:25	Return to Storage
JD87833-1.1	Secured Storage	Ellen Dondeo	05/08/24 16:10	Retrieve from Storage
JD87833-1.1	Ellen Dondeo	Secured Storage	05/08/24 19:05	Return to Storage
JD87833-1.1	Secured Storage	Joshua Reitan	05/08/24 23:47	Retrieve from Storage
JD87833-1.1	Joshua Reitan	Secured Staging Area	05/08/24 23:47	Return to Storage
JD87833-1.1	Secured Staging Area	Lauren Halloran	05/09/24 07:48	Retrieve from Storage
JD87833-1.1	Lauren Halloran	Secured Storage	05/09/24 16:50	Return to Storage
JD87833-1.1.1	Brianna Perez	Metals Digestion	05/08/24 12:31	Digestate from JD87833-1.1
JD87833-1.1.1	Metals Digestion	Brianna Perez	05/08/24 12:32	Digestate from JD87833-1.1
JD87833-1.1.1	Brianna Perez	Metals Digestate Storage	05/08/24 12:32	Return to Storage
JD87833-1.1.2	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-1.1
JD87833-1.1.2	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-1.1
JD87833-1.1.2	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-1.1.2	Extract Storage	Christine Phillips	05/09/24 01:52	Retrieve from Storage
JD87833-1.1.2	Christine Phillips	GC8G	05/09/24 01:52	Load on Instrument
JD87833-1.1.3	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-1.1
JD87833-1.1.3	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-1.1
JD87833-1.1.3	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-1.1.3	Extract Storage	Christine Phillips	05/09/24 04:52	Retrieve from Storage
JD87833-1.1.3	Christine Phillips	GC2G	05/09/24 04:52	Load on Instrument
JD87833-1.1.4	Lauren Halloran	Organics Prep	05/09/24 08:10	Extract from JD87833-1.1
JD87833-1.1.4	Organics Prep	Erin Burke	05/09/24 15:00	Extract from JD87833-1.1
JD87833-1.1.4	Erin Burke	Extract Storage	05/09/24 15:00	Return to Storage
JD87833-2.1	Haleigh Rosado	Secured Storage	05/04/24 17:02	Return to Storage
JD87833-2.1	Secured Storage	Todd Shoemaker	05/06/24 14:42	Retrieve from Storage
JD87833-2.1	Todd Shoemaker	Secured Staging Area	05/06/24 14:43	Return to Storage
JD87833-2.1	Secured Staging Area	Saloni Chauhan	05/06/24 15:32	Retrieve from Storage
JD87833-2.1	Saloni Chauhan	Secured Storage	05/06/24 22:47	Return to Storage
JD87833-2.1	Secured Storage	Brianna Perez	05/08/24 12:30	Retrieve from Storage

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# SGS Internal Chain of Custody

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Received:** 05/03/24

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD87833-2.1	Brianna Perez	Secured Storage	05/08/24 15:25	Return to Storage
JD87833-2.1	Secured Storage	Ellen Dondeo	05/08/24 16:10	Retrieve from Storage
JD87833-2.1	Ellen Dondeo	Secured Storage	05/08/24 19:05	Return to Storage
JD87833-2.1	Secured Storage	Joshua Reitan	05/08/24 23:47	Retrieve from Storage
JD87833-2.1	Joshua Reitan	Secured Staging Area	05/08/24 23:47	Return to Storage
JD87833-2.1	Secured Staging Area	Lauren Halloran	05/09/24 07:48	Retrieve from Storage
JD87833-2.1	Lauren Halloran	Secured Storage	05/09/24 16:50	Return to Storage
JD87833-2.1.1	Brianna Perez	Metals Digestion	05/08/24 12:31	Digestate from JD87833-2.1
JD87833-2.1.1	Metals Digestion	Brianna Perez	05/08/24 12:32	Digestate from JD87833-2.1
JD87833-2.1.1	Brianna Perez	Metals Digestate Storage	05/08/24 12:32	Return to Storage
JD87833-2.1.2	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-2.1
JD87833-2.1.2	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-2.1.2	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-2.1
JD87833-2.1.2	Extract Storage	Christine Phillips	05/09/24 01:52	Retrieve from Storage
JD87833-2.1.2	Christine Phillips	GC8G	05/09/24 01:52	Load on Instrument
JD87833-2.1.3	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-2.1
JD87833-2.1.3	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-2.1
JD87833-2.1.3	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-2.1.4	Lauren Halloran	Organics Prep	05/09/24 08:10	Extract from JD87833-2.1
JD87833-2.1.4	Organics Prep	Erin Burke	05/09/24 15:00	Extract from JD87833-2.1
JD87833-2.1.4	Erin Burke	Extract Storage	05/09/24 15:00	Return to Storage
JD87833-3.1	Haleigh Rosado	Secured Storage	05/04/24 17:02	Return to Storage
JD87833-3.1	Secured Storage	Todd Shoemaker	05/06/24 14:42	Retrieve from Storage
JD87833-3.1	Todd Shoemaker	Secured Staging Area	05/06/24 14:43	Return to Storage
JD87833-3.1	Secured Staging Area	Saloni Chauhan	05/06/24 15:32	Retrieve from Storage
JD87833-3.1	Saloni Chauhan	Secured Storage	05/06/24 22:47	Return to Storage
JD87833-3.1	Secured Storage	Aleandi Rodriguez	05/07/24 22:26	Retrieve from Storage
JD87833-3.1	Aleandi Rodriguez	Secured Staging Area	05/07/24 22:26	Return to Storage
JD87833-3.1	Secured Staging Area	Lauren Halloran	05/08/24 07:57	Retrieve from Storage
JD87833-3.1	Secured Storage	Brianna Perez	05/08/24 12:30	Retrieve from Storage
Analyst chain of custody update error.				
JD87833-3.1	Brianna Perez	Secured Storage	05/08/24 15:25	Return to Storage
JD87833-3.1	Secured Storage	Ellen Dondeo	05/08/24 16:10	Retrieve from Storage
JD87833-3.1	Ellen Dondeo	Secured Storage	05/08/24 19:05	Return to Storage
JD87833-3.1	Secured Storage	Joshua Reitan	05/08/24 23:47	Retrieve from Storage
JD87833-3.1	Joshua Reitan	Secured Staging Area	05/08/24 23:47	Return to Storage
JD87833-3.1	Secured Staging Area	Lauren Halloran	05/09/24 07:48	Retrieve from Storage
JD87833-3.1	Lauren Halloran	Secured Storage	05/09/24 16:50	Return to Storage

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# SGS Internal Chain of Custody

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Received:** 05/03/24

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD87833-3.1.1	Brianna Perez	Metals Digestion	05/08/24 12:31	Digestate from JD87833-3.1
JD87833-3.1.1	Metals Digestion	Brianna Perez	05/08/24 12:32	Digestate from JD87833-3.1
JD87833-3.1.1	Brianna Perez	Metals Digestate Storage	05/08/24 12:32	Return to Storage
JD87833-3.1.2	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-3.1
JD87833-3.1.2	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-3.1
JD87833-3.1.2	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-3.1.2	Extract Storage	Christine Phillips	05/09/24 01:52	Retrieve from Storage
JD87833-3.1.2	Christine Phillips	GC8G	05/09/24 01:52	Load on Instrument
JD87833-3.1.3	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-3.1
JD87833-3.1.3	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-3.1
JD87833-3.1.3	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-3.1.3	Extract Storage	Christine Phillips	05/09/24 04:52	Retrieve from Storage
JD87833-3.1.3	Christine Phillips	GC2G	05/09/24 04:52	Load on Instrument
JD87833-3.1.4	Lauren Halloran	Organics Prep	05/09/24 08:10	Extract from JD87833-3.1
JD87833-3.1.4	Organics Prep	Erin Burke	05/09/24 15:00	Extract from JD87833-3.1
JD87833-3.1.4	Erin Burke	Extract Storage	05/09/24 15:00	Return to Storage
JD87833-4.1	Haleigh Rosado	Secured Storage	05/04/24 17:02	Return to Storage
JD87833-4.1	Secured Storage	Todd Shoemaker	05/06/24 14:42	Retrieve from Storage
JD87833-4.1	Todd Shoemaker	Secured Staging Area	05/06/24 14:43	Return to Storage
JD87833-4.1	Secured Staging Area	Saloni Chauhan	05/06/24 15:32	Retrieve from Storage
JD87833-4.1	Saloni Chauhan	Secured Storage	05/06/24 22:47	Return to Storage
JD87833-4.1	Secured Storage	Aleandi Rodriguez	05/07/24 22:26	Retrieve from Storage
JD87833-4.1	Aleandi Rodriguez	Secured Staging Area	05/07/24 22:26	Return to Storage
JD87833-4.1	Secured Staging Area	Lauren Halloran	05/08/24 07:57	Retrieve from Storage
JD87833-4.1	Secured Storage	Brianna Perez	05/08/24 12:30	Retrieve from Storage
Analyst chain of custody update error.				
JD87833-4.1	Brianna Perez	Secured Storage	05/08/24 15:25	Return to Storage
JD87833-4.1	Secured Storage	Ellen Dondeo	05/08/24 16:10	Retrieve from Storage
JD87833-4.1	Ellen Dondeo	Secured Storage	05/08/24 19:05	Return to Storage
JD87833-4.1	Secured Storage	Joshua Reitan	05/08/24 23:47	Retrieve from Storage
JD87833-4.1	Joshua Reitan	Secured Staging Area	05/08/24 23:47	Return to Storage
JD87833-4.1	Secured Staging Area	Lauren Halloran	05/09/24 07:48	Retrieve from Storage
JD87833-4.1	Lauren Halloran	Secured Storage	05/09/24 16:50	Return to Storage
JD87833-4.1.1	Brianna Perez	Metals Digestion	05/08/24 12:31	Digestate from JD87833-4.1
JD87833-4.1.1	Metals Digestion	Brianna Perez	05/08/24 12:32	Digestate from JD87833-4.1
JD87833-4.1.1	Brianna Perez	Metals Digestate Storage	05/08/24 12:32	Return to Storage
JD87833-4.1.2	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-4.1
JD87833-4.1.2	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-4.1

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# SGS Internal Chain of Custody

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Received:** 05/03/24

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD87833-4.1.2	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-4.1.2	Extract Storage	Christine Phillips	05/09/24 01:52	Retrieve from Storage
JD87833-4.1.2	Christine Phillips	GC8G	05/09/24 01:52	Load on Instrument
JD87833-4.1.3	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-4.1
JD87833-4.1.3	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-4.1
JD87833-4.1.3	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-4.1.3	Extract Storage	Christine Phillips	05/09/24 04:52	Retrieve from Storage
JD87833-4.1.3	Christine Phillips	GC2G	05/09/24 04:52	Load on Instrument
JD87833-4.1.4	Lauren Halloran	Organics Prep	05/09/24 08:10	Extract from JD87833-4.1
JD87833-4.1.4	Organics Prep	Erin Burke	05/09/24 15:00	Extract from JD87833-4.1
JD87833-4.1.4	Erin Burke	Extract Storage	05/09/24 15:00	Return to Storage
JD87833-5.1	Haleigh Rosado	Secured Storage	05/04/24 17:02	Return to Storage
JD87833-5.1	Secured Storage	Todd Shoemaker	05/06/24 14:42	Retrieve from Storage
JD87833-5.1	Todd Shoemaker	Secured Staging Area	05/06/24 14:43	Return to Storage
JD87833-5.1	Secured Staging Area	Saloni Chauhan	05/06/24 15:32	Retrieve from Storage
JD87833-5.1	Saloni Chauhan	Secured Storage	05/06/24 22:47	Return to Storage
JD87833-5.1	Secured Storage	Aleandi Rodriguez	05/07/24 22:26	Retrieve from Storage
JD87833-5.1	Aleandi Rodriguez	Secured Staging Area	05/07/24 22:26	Return to Storage
JD87833-5.1	Secured Staging Area	Lauren Halloran	05/08/24 07:57	Retrieve from Storage
JD87833-5.1	Secured Storage	Brianna Perez	05/08/24 12:30	Retrieve from Storage
Analyst chain of custody update error.				
JD87833-5.1	Brianna Perez	Secured Storage	05/08/24 15:25	Return to Storage
JD87833-5.1	Secured Storage	Ellen Dondeo	05/08/24 16:10	Retrieve from Storage
JD87833-5.1	Ellen Dondeo	Secured Storage	05/08/24 19:05	Return to Storage
JD87833-5.1	Secured Storage	Joshua Reitan	05/08/24 23:47	Retrieve from Storage
JD87833-5.1	Joshua Reitan	Secured Staging Area	05/08/24 23:47	Return to Storage
JD87833-5.1	Secured Staging Area	Lauren Halloran	05/09/24 07:48	Retrieve from Storage
JD87833-5.1	Lauren Halloran	Secured Storage	05/09/24 16:50	Return to Storage
JD87833-5.1.1	Brianna Perez	Metals Digestion	05/08/24 12:31	Digestate from JD87833-5.1
JD87833-5.1.1	Metals Digestion	Brianna Perez	05/08/24 12:32	Digestate from JD87833-5.1
JD87833-5.1.1	Brianna Perez	Metals Digestate Storage	05/08/24 12:32	Return to Storage
JD87833-5.1.2	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-5.1
JD87833-5.1.2	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-5.1
JD87833-5.1.2	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-5.1.2	Extract Storage	Christine Phillips	05/09/24 01:52	Retrieve from Storage
JD87833-5.1.2	Christine Phillips	GC8G	05/09/24 01:52	Load on Instrument
JD87833-5.1.3	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-5.1
JD87833-5.1.3	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-5.1

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# SGS Internal Chain of Custody

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Received:** 05/03/24

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD87833-5.1.3	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-5.1.3	Extract Storage	Christine Phillips	05/09/24 04:52	Retrieve from Storage
JD87833-5.1.3	Christine Phillips	GC2G	05/09/24 04:52	Load on Instrument
JD87833-5.1.4	Lauren Halloran	Organics Prep	05/09/24 08:10	Extract from JD87833-5.1
JD87833-5.1.4	Organics Prep	Erin Burke	05/09/24 15:00	Extract from JD87833-5.1
JD87833-5.1.4	Erin Burke	Extract Storage	05/09/24 15:00	Return to Storage
JD87833-6.1	Haleigh Rosado	Secured Storage	05/04/24 17:02	Return to Storage
JD87833-6.1	Secured Storage	Todd Shoemaker	05/06/24 14:42	Retrieve from Storage
JD87833-6.1	Todd Shoemaker	Secured Staging Area	05/06/24 14:43	Return to Storage
JD87833-6.1	Secured Staging Area	Saloni Chauhan	05/06/24 15:32	Retrieve from Storage
JD87833-6.1	Saloni Chauhan	Secured Storage	05/06/24 22:47	Return to Storage
JD87833-6.1	Secured Storage	Aleandi Rodriguez	05/07/24 22:26	Retrieve from Storage
JD87833-6.1	Aleandi Rodriguez	Secured Staging Area	05/07/24 22:26	Return to Storage
JD87833-6.1	Secured Staging Area	Lauren Halloran	05/08/24 07:57	Retrieve from Storage
JD87833-6.1	Secured Storage	Brianna Perez	05/08/24 12:30	Retrieve from Storage
Analyst chain of custody update error.				
JD87833-6.1	Brianna Perez	Secured Storage	05/08/24 15:25	Return to Storage
JD87833-6.1	Secured Storage	Ellen Dondeo	05/08/24 16:10	Retrieve from Storage
JD87833-6.1	Ellen Dondeo	Secured Storage	05/08/24 19:05	Return to Storage
JD87833-6.1	Secured Storage	Joshua Reitan	05/08/24 23:47	Retrieve from Storage
JD87833-6.1	Joshua Reitan	Secured Staging Area	05/08/24 23:47	Return to Storage
JD87833-6.1	Secured Staging Area	Lauren Halloran	05/09/24 07:48	Retrieve from Storage
JD87833-6.1	Lauren Halloran	Secured Storage	05/09/24 16:50	Return to Storage
JD87833-6.1.1	Brianna Perez	Metals Digestion	05/08/24 12:31	Digestate from JD87833-6.1
JD87833-6.1.1	Metals Digestion	Brianna Perez	05/08/24 12:32	Digestate from JD87833-6.1
JD87833-6.1.1	Brianna Perez	Metals Digestate Storage	05/08/24 12:32	Return to Storage
JD87833-6.1.2	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-6.1
JD87833-6.1.2	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-6.1
JD87833-6.1.2	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-6.1.2	Extract Storage	Christine Phillips	05/09/24 01:52	Retrieve from Storage
JD87833-6.1.2	Christine Phillips	GC8G	05/09/24 01:52	Load on Instrument
JD87833-6.1.3	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-6.1
JD87833-6.1.3	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-6.1
JD87833-6.1.3	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-6.1.4	Lauren Halloran	Organics Prep	05/09/24 08:10	Extract from JD87833-6.1
JD87833-6.1.4	Organics Prep	Erin Burke	05/09/24 15:00	Extract from JD87833-6.1
JD87833-6.1.4	Erin Burke	Extract Storage	05/09/24 15:00	Return to Storage

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# SGS Internal Chain of Custody

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Received:** 05/03/24

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD87833-7.1	Haleigh Rosado	Secured Storage	05/04/24 17:02	Return to Storage
JD87833-7.1	Secured Storage	Todd Shoemaker	05/06/24 14:42	Retrieve from Storage
JD87833-7.1	Todd Shoemaker	Secured Staging Area	05/06/24 14:43	Return to Storage
JD87833-7.1	Secured Staging Area	Saloni Chauhan	05/06/24 15:32	Retrieve from Storage
JD87833-7.1	Saloni Chauhan	Secured Storage	05/06/24 22:47	Return to Storage
JD87833-7.1	Secured Storage	Aleandi Rodriguez	05/07/24 22:26	Retrieve from Storage
JD87833-7.1	Aleandi Rodriguez	Secured Staging Area	05/07/24 22:26	Return to Storage
JD87833-7.1	Secured Staging Area	Lauren Halloran	05/08/24 07:57	Retrieve from Storage
JD87833-7.1	Secured Storage	Brianna Perez	05/08/24 12:30	Retrieve from Storage
Analyst chain of custody update error.				
JD87833-7.1	Brianna Perez	Secured Storage	05/08/24 15:25	Return to Storage
JD87833-7.1	Secured Storage	Ellen Dondeo	05/08/24 16:10	Retrieve from Storage
JD87833-7.1	Ellen Dondeo	Secured Storage	05/08/24 19:05	Return to Storage
JD87833-7.1	Secured Storage	Joshua Reitan	05/08/24 23:47	Retrieve from Storage
JD87833-7.1	Joshua Reitan	Secured Staging Area	05/08/24 23:47	Return to Storage
JD87833-7.1	Secured Staging Area	Lauren Halloran	05/09/24 07:48	Retrieve from Storage
JD87833-7.1	Lauren Halloran	Secured Storage	05/09/24 16:50	Return to Storage
JD87833-7.1.1	Brianna Perez	Metals Digestion	05/08/24 12:31	Digestate from JD87833-7.1
JD87833-7.1.1	Metals Digestion	Brianna Perez	05/08/24 12:32	Digestate from JD87833-7.1
JD87833-7.1.1	Brianna Perez	Metals Digestate Storage	05/08/24 12:32	Return to Storage
JD87833-7.1.2	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-7.1
JD87833-7.1.2	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-7.1
JD87833-7.1.2	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-7.1.2	Extract Storage	Christine Phillips	05/09/24 01:52	Retrieve from Storage
JD87833-7.1.2	Christine Phillips	GC8G	05/09/24 01:52	Load on Instrument
JD87833-7.1.3	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-7.1
JD87833-7.1.3	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-7.1
JD87833-7.1.3	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-7.1.3	Extract Storage	Christine Phillips	05/09/24 04:52	Retrieve from Storage
JD87833-7.1.3	Christine Phillips	GC2G	05/09/24 04:52	Load on Instrument
JD87833-7.1.4	Lauren Halloran	Organics Prep	05/09/24 08:10	Extract from JD87833-7.1
JD87833-7.1.4	Organics Prep	Erin Burke	05/09/24 15:00	Extract from JD87833-7.1
JD87833-7.1.4	Erin Burke	Extract Storage	05/09/24 15:00	Return to Storage
JD87833-8.1	Haleigh Rosado	Secured Storage	05/04/24 17:02	Return to Storage
JD87833-8.1	Secured Storage	Todd Shoemaker	05/06/24 14:42	Retrieve from Storage
JD87833-8.1	Todd Shoemaker	Secured Staging Area	05/06/24 14:43	Return to Storage
JD87833-8.1	Secured Staging Area	Saloni Chauhan	05/06/24 15:32	Retrieve from Storage
JD87833-8.1	Saloni Chauhan	Secured Storage	05/06/24 22:47	Return to Storage
JD87833-8.1	Secured Storage	Aleandi Rodriguez	05/07/24 22:26	Retrieve from Storage

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# SGS Internal Chain of Custody

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Received:** 05/03/24

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD87833-8.1	Aleandi Rodriguez	Secured Staging Area	05/07/24 22:26	Return to Storage
JD87833-8.1	Secured Staging Area	Lauren Halloran	05/08/24 07:57	Retrieve from Storage
JD87833-8.1	Secured Storage	Brianna Perez	05/08/24 12:30	Retrieve from Storage
Analyst chain of custody update error.				
JD87833-8.1	Brianna Perez	Secured Storage	05/08/24 15:25	Return to Storage
JD87833-8.1	Secured Storage	Ellen Dondeo	05/08/24 16:10	Retrieve from Storage
JD87833-8.1	Ellen Dondeo	Secured Storage	05/08/24 19:05	Return to Storage
JD87833-8.1	Secured Storage	Joshua Reitan	05/08/24 23:47	Retrieve from Storage
JD87833-8.1	Joshua Reitan	Secured Staging Area	05/08/24 23:47	Return to Storage
JD87833-8.1	Secured Staging Area	Lauren Halloran	05/09/24 07:48	Retrieve from Storage
JD87833-8.1	Lauren Halloran	Secured Storage	05/09/24 16:50	Return to Storage
JD87833-8.1.1	Brianna Perez	Metals Digestion	05/08/24 12:31	Digestate from JD87833-8.1
JD87833-8.1.1	Metals Digestion	Brianna Perez	05/08/24 12:32	Digestate from JD87833-8.1
JD87833-8.1.1	Brianna Perez	Metals Digestate Storage	05/08/24 12:32	Return to Storage
JD87833-8.1.2	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-8.1
JD87833-8.1.2	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-8.1
JD87833-8.1.2	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-8.1.2	Extract Storage	Christine Phillips	05/09/24 01:52	Retrieve from Storage
JD87833-8.1.2	Christine Phillips	GC8G	05/09/24 01:52	Load on Instrument
JD87833-8.1.3	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-8.1
JD87833-8.1.3	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-8.1
JD87833-8.1.3	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-8.1.3	Extract Storage	Christine Phillips	05/09/24 04:52	Retrieve from Storage
JD87833-8.1.3	Christine Phillips	GC2G	05/09/24 04:52	Load on Instrument
JD87833-8.1.4	Lauren Halloran	Organics Prep	05/09/24 08:10	Extract from JD87833-8.1
JD87833-8.1.4	Organics Prep	Erin Burke	05/09/24 15:00	Extract from JD87833-8.1
JD87833-8.1.4	Erin Burke	Extract Storage	05/09/24 15:00	Return to Storage
JD87833-9.1	Haleigh Rosado	Secured Storage	05/04/24 17:02	Return to Storage
JD87833-9.1	Secured Storage	Todd Shoemaker	05/06/24 14:42	Retrieve from Storage
JD87833-9.1	Todd Shoemaker	Secured Staging Area	05/06/24 14:43	Return to Storage
JD87833-9.1	Secured Staging Area	Saloni Chauhan	05/06/24 15:32	Retrieve from Storage
JD87833-9.1	Saloni Chauhan	Secured Storage	05/06/24 22:47	Return to Storage
JD87833-9.1	Secured Storage	Aleandi Rodriguez	05/07/24 22:26	Retrieve from Storage
JD87833-9.1	Aleandi Rodriguez	Secured Staging Area	05/07/24 22:26	Return to Storage
JD87833-9.1	Secured Staging Area	Lauren Halloran	05/08/24 07:57	Retrieve from Storage
JD87833-9.1	Secured Storage	Brianna Perez	05/08/24 12:30	Retrieve from Storage
Analyst chain of custody update error.				
JD87833-9.1	Brianna Perez	Secured Storage	05/08/24 15:25	Return to Storage
JD87833-9.1	Secured Storage	Ellen Dondeo	05/08/24 16:10	Retrieve from Storage

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# SGS Internal Chain of Custody

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Received:** 05/03/24

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD87833-9.1	Ellen Dondeo	Secured Storage	05/08/24 19:05	Return to Storage
JD87833-9.1	Secured Storage	Joshua Reitan	05/08/24 23:47	Retrieve from Storage
JD87833-9.1	Joshua Reitan	Secured Staging Area	05/08/24 23:47	Return to Storage
JD87833-9.1	Secured Staging Area	Lauren Halloran	05/09/24 07:48	Retrieve from Storage
JD87833-9.1	Lauren Halloran	Secured Storage	05/09/24 16:50	Return to Storage
JD87833-9.1.1	Brianna Perez	Metals Digestion	05/08/24 12:31	Digestate from JD87833-9.1
JD87833-9.1.1	Metals Digestion	Brianna Perez	05/08/24 12:32	Digestate from JD87833-9.1
JD87833-9.1.1	Brianna Perez	Metals Digestate Storage	05/08/24 12:32	Return to Storage
JD87833-9.1.2	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-9.1
JD87833-9.1.2	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-9.1
JD87833-9.1.2	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-9.1.2	Extract Storage	Christine Phillips	05/09/24 01:52	Retrieve from Storage
JD87833-9.1.2	Christine Phillips	GC8G	05/09/24 01:52	Load on Instrument
JD87833-9.1.3	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-9.1
JD87833-9.1.3	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-9.1
JD87833-9.1.3	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-9.1.4	Lauren Halloran	Organics Prep	05/09/24 08:10	Extract from JD87833-9.1
JD87833-9.1.4	Organics Prep	Erin Burke	05/09/24 15:00	Extract from JD87833-9.1
JD87833-9.1.4	Erin Burke	Extract Storage	05/09/24 15:00	Return to Storage
JD87833-10.1	Haleigh Rosado	Secured Storage	05/04/24 17:02	Return to Storage
JD87833-10.1	Secured Storage	Todd Shoemaker	05/06/24 14:42	Retrieve from Storage
JD87833-10.1	Todd Shoemaker	Secured Staging Area	05/06/24 14:43	Return to Storage
JD87833-10.1	Secured Staging Area	Saloni Chauhan	05/06/24 15:32	Retrieve from Storage
JD87833-10.1	Saloni Chauhan	Secured Storage	05/06/24 22:47	Return to Storage
JD87833-10.1	Secured Storage	Aleandi Rodriguez	05/07/24 22:26	Retrieve from Storage
JD87833-10.1	Aleandi Rodriguez	Secured Staging Area	05/07/24 22:26	Return to Storage
JD87833-10.1	Secured Staging Area	Lauren Halloran	05/08/24 07:57	Retrieve from Storage
JD87833-10.1	Secured Storage	Brianna Perez	05/08/24 12:30	Retrieve from Storage
Analyst chain of custody update error.				
JD87833-10.1	Brianna Perez	Secured Storage	05/08/24 15:25	Return to Storage
JD87833-10.1	Secured Storage	Ellen Dondeo	05/08/24 16:10	Retrieve from Storage
JD87833-10.1	Ellen Dondeo	Secured Storage	05/08/24 19:05	Return to Storage
JD87833-10.1	Secured Storage	Joshua Reitan	05/08/24 23:47	Retrieve from Storage
JD87833-10.1	Joshua Reitan	Secured Staging Area	05/08/24 23:47	Return to Storage
JD87833-10.1	Secured Staging Area	Lauren Halloran	05/09/24 07:48	Retrieve from Storage
JD87833-10.1	Lauren Halloran	Secured Storage	05/09/24 16:50	Return to Storage
JD87833-10.1.1	Brianna Perez	Metals Digestion	05/08/24 12:31	Digestate from JD87833-10.1
JD87833-10.1.1	Metals Digestion	Brianna Perez	05/08/24 12:32	Digestate from JD87833-10.1

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# SGS Internal Chain of Custody

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Received:** 05/03/24

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD87833-10.1.1	Brianna Perez	Metals Digestate Storage	05/08/24 12:32	Return to Storage
JD87833-10.1.2	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-10.1
JD87833-10.1.2	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-10.1
JD87833-10.1.2	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-10.1.2	Extract Storage	Christine Phillips	05/09/24 01:52	Retrieve from Storage
JD87833-10.1.2	Christine Phillips	GC8G	05/09/24 01:52	Load on Instrument
JD87833-10.1.3	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-10.1
JD87833-10.1.3	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-10.1
JD87833-10.1.3	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-10.1.3	Extract Storage	Christine Phillips	05/09/24 04:52	Retrieve from Storage
JD87833-10.1.3	Christine Phillips	GC2G	05/09/24 04:52	Load on Instrument
JD87833-10.1.4	Lauren Halloran	Organics Prep	05/09/24 08:10	Extract from JD87833-10.1
JD87833-10.1.4	Organics Prep	Erin Burke	05/09/24 15:00	Extract from JD87833-10.1
JD87833-10.1.4	Erin Burke	Extract Storage	05/09/24 15:00	Return to Storage
JD87833-11.1	Haleigh Rosado	Secured Storage	05/04/24 17:02	Return to Storage
JD87833-11.1	Secured Storage	Todd Shoemaker	05/06/24 14:42	Retrieve from Storage
JD87833-11.1	Todd Shoemaker	Secured Staging Area	05/06/24 14:43	Return to Storage
JD87833-11.1	Secured Staging Area	Saloni Chauhan	05/06/24 15:32	Retrieve from Storage
JD87833-11.1	Saloni Chauhan	Secured Storage	05/06/24 22:47	Return to Storage
JD87833-11.1	Secured Storage	Aleandi Rodriguez	05/07/24 22:26	Retrieve from Storage
JD87833-11.1	Aleandi Rodriguez	Secured Staging Area	05/07/24 22:26	Return to Storage
JD87833-11.1	Secured Staging Area	Lauren Halloran	05/08/24 07:57	Retrieve from Storage
JD87833-11.1	Secured Storage	Brianna Perez	05/08/24 12:30	Retrieve from Storage
Analyst chain of custody update error.				
JD87833-11.1	Brianna Perez	Secured Storage	05/08/24 15:25	Return to Storage
JD87833-11.1	Secured Storage	Ellen Dondeo	05/08/24 16:10	Retrieve from Storage
JD87833-11.1	Ellen Dondeo	Secured Storage	05/08/24 19:05	Return to Storage
JD87833-11.1	Secured Storage	Joshua Reitan	05/08/24 23:47	Retrieve from Storage
JD87833-11.1	Joshua Reitan	Secured Staging Area	05/08/24 23:47	Return to Storage
JD87833-11.1	Secured Staging Area	Lauren Halloran	05/09/24 07:48	Retrieve from Storage
JD87833-11.1	Lauren Halloran	Secured Storage	05/09/24 16:50	Return to Storage
JD87833-11.1.1	Brianna Perez	Metals Digestion	05/08/24 12:31	Digestate from JD87833-11.1
JD87833-11.1.1	Metals Digestion	Brianna Perez	05/08/24 12:32	Digestate from JD87833-11.1
JD87833-11.1.1	Brianna Perez	Metals Digestate Storage	05/08/24 12:32	Return to Storage
JD87833-11.1.2	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-11.1
JD87833-11.1.2	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-11.1
JD87833-11.1.2	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-11.1.2	Extract Storage	Christine Phillips	05/09/24 01:52	Retrieve from Storage

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# SGS Internal Chain of Custody

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Received:** 05/03/24

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD87833-11.1.2	Christine Phillips	GC8G	05/09/24 01:52	Load on Instrument
JD87833-11.1.3	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-11.1
JD87833-11.1.3	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-11.1
JD87833-11.1.3	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-11.1.3	Extract Storage	Christine Phillips	05/09/24 04:52	Retrieve from Storage
JD87833-11.1.3	Christine Phillips	GC2G	05/09/24 04:52	Load on Instrument
JD87833-11.1.4	Lauren Halloran	Organics Prep	05/09/24 08:10	Extract from JD87833-11.1
JD87833-11.1.4	Organics Prep	Erin Burke	05/09/24 15:00	Extract from JD87833-11.1
JD87833-11.1.4	Erin Burke	Extract Storage	05/09/24 15:00	Return to Storage
JD87833-12.1	Haleigh Rosado	Secured Storage	05/04/24 17:02	Return to Storage
JD87833-12.1	Secured Storage	Todd Shoemaker	05/06/24 14:42	Retrieve from Storage
JD87833-12.1	Todd Shoemaker	Secured Staging Area	05/06/24 14:43	Return to Storage
JD87833-12.1	Secured Staging Area	Saloni Chauhan	05/06/24 15:32	Retrieve from Storage
JD87833-12.1	Saloni Chauhan	Secured Storage	05/06/24 22:47	Return to Storage
JD87833-12.1	Secured Storage	Aleandi Rodriguez	05/07/24 22:26	Retrieve from Storage
JD87833-12.1	Aleandi Rodriguez	Secured Staging Area	05/07/24 22:26	Return to Storage
JD87833-12.1	Secured Staging Area	Lauren Halloran	05/08/24 07:57	Retrieve from Storage
JD87833-12.1	Secured Storage	Brianna Perez	05/08/24 12:30	Retrieve from Storage
Analyst chain of custody update error.				
JD87833-12.1	Brianna Perez	Secured Storage	05/08/24 15:25	Return to Storage
JD87833-12.1	Secured Storage	Ellen Dondeo	05/08/24 16:10	Retrieve from Storage
JD87833-12.1	Ellen Dondeo	Secured Storage	05/08/24 19:05	Return to Storage
JD87833-12.1	Secured Storage	Joshua Reitan	05/08/24 23:47	Retrieve from Storage
JD87833-12.1	Joshua Reitan	Secured Staging Area	05/08/24 23:47	Return to Storage
JD87833-12.1	Secured Staging Area	Lauren Halloran	05/09/24 07:48	Retrieve from Storage
JD87833-12.1	Lauren Halloran	Secured Storage	05/09/24 16:50	Return to Storage
JD87833-12.1.1	Brianna Perez	Metals Digestion	05/08/24 12:31	Digestate from JD87833-12.1
JD87833-12.1.1	Metals Digestion	Brianna Perez	05/08/24 12:32	Digestate from JD87833-12.1
JD87833-12.1.1	Brianna Perez	Metals Digestate Storage	05/08/24 12:32	Return to Storage
JD87833-12.1.2	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-12.1
JD87833-12.1.2	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-12.1.2	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-12.1
JD87833-12.1.2	Extract Storage	Christine Phillips	05/09/24 01:52	Retrieve from Storage
JD87833-12.1.2	Christine Phillips	GC8G	05/09/24 01:52	Load on Instrument
JD87833-12.1.3	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-12.1
JD87833-12.1.3	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-12.1
JD87833-12.1.3	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-12.1.3	Extract Storage	Christine Phillips	05/09/24 04:52	Retrieve from Storage

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# SGS Internal Chain of Custody

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Received:** 05/03/24

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD87833-12.1.3	Christine Phillips	GC2G	05/09/24 04:52	Load on Instrument
JD87833-12.1.4	Lauren Halloran	Organics Prep	05/09/24 08:10	Extract from JD87833-12.1
JD87833-12.1.4	Organics Prep	Erin Burke	05/09/24 15:00	Extract from JD87833-12.1
JD87833-12.1.4	Erin Burke	Extract Storage	05/09/24 15:00	Return to Storage
JD87833-13.1	Haleigh Rosado	Secured Storage	05/04/24 17:02	Return to Storage
JD87833-13.1	Secured Storage	Todd Shoemaker	05/06/24 14:42	Retrieve from Storage
JD87833-13.1	Todd Shoemaker	Secured Staging Area	05/06/24 14:43	Return to Storage
JD87833-13.1	Secured Staging Area	Saloni Chauhan	05/06/24 15:32	Retrieve from Storage
JD87833-13.1	Saloni Chauhan	Secured Storage	05/06/24 22:47	Return to Storage
JD87833-13.1	Secured Storage	Aleandi Rodriguez	05/07/24 22:26	Retrieve from Storage
JD87833-13.1	Aleandi Rodriguez	Secured Staging Area	05/07/24 22:26	Return to Storage
JD87833-13.1	Secured Staging Area	Lauren Halloran	05/08/24 07:57	Retrieve from Storage
JD87833-13.1	Secured Storage	Brianna Perez	05/08/24 12:30	Retrieve from Storage
Analyst chain of custody update error.				
JD87833-13.1	Brianna Perez	Secured Storage	05/08/24 15:25	Return to Storage
JD87833-13.1	Secured Storage	Ellen Dondeo	05/08/24 16:10	Retrieve from Storage
JD87833-13.1	Ellen Dondeo	Secured Storage	05/08/24 19:05	Return to Storage
JD87833-13.1	Secured Storage	Joshua Reitan	05/08/24 23:47	Retrieve from Storage
JD87833-13.1	Joshua Reitan	Secured Staging Area	05/08/24 23:47	Return to Storage
JD87833-13.1	Secured Staging Area	Lauren Halloran	05/09/24 07:48	Retrieve from Storage
JD87833-13.1	Lauren Halloran	Secured Storage	05/09/24 16:50	Return to Storage
JD87833-13.1.1	Brianna Perez	Metals Digestion	05/08/24 12:31	Digestate from JD87833-13.1
JD87833-13.1.1	Metals Digestion	Brianna Perez	05/08/24 12:32	Digestate from JD87833-13.1
JD87833-13.1.1	Brianna Perez	Metals Digestate Storage	05/08/24 12:32	Return to Storage
JD87833-13.1.2	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-13.1
JD87833-13.1.2	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-13.1
JD87833-13.1.2	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-13.1.2	Extract Storage	Christine Phillips	05/09/24 01:52	Retrieve from Storage
JD87833-13.1.2	Christine Phillips	GC8G	05/09/24 01:52	Load on Instrument
JD87833-13.1.3	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-13.1
JD87833-13.1.3	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-13.1
JD87833-13.1.3	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-13.1.4	Lauren Halloran	Organics Prep	05/09/24 08:10	Extract from JD87833-13.1
JD87833-13.1.4	Organics Prep	Erin Burke	05/09/24 15:00	Extract from JD87833-13.1
JD87833-13.1.4	Erin Burke	Extract Storage	05/09/24 15:00	Return to Storage
JD87833-14.1	Haleigh Rosado	Secured Storage	05/04/24 17:02	Return to Storage
JD87833-14.1	Secured Storage	Todd Shoemaker	05/06/24 14:42	Retrieve from Storage

5.3  
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# SGS Internal Chain of Custody

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Received:** 05/03/24

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD87833-14.1	Todd Shoemaker	Secured Staging Area	05/06/24 14:43	Return to Storage
JD87833-14.1	Secured Staging Area	Saloni Chauhan	05/06/24 15:32	Retrieve from Storage
JD87833-14.1	Saloni Chauhan	Secured Storage	05/06/24 22:47	Return to Storage
JD87833-14.1	Secured Storage	Aleandi Rodriguez	05/07/24 22:26	Retrieve from Storage
JD87833-14.1	Aleandi Rodriguez	Secured Staging Area	05/07/24 22:26	Return to Storage
JD87833-14.1	Secured Staging Area	Lauren Halloran	05/08/24 07:57	Retrieve from Storage
JD87833-14.1	Secured Storage	Brianna Perez	05/08/24 12:30	Retrieve from Storage
Analyst chain of custody update error.				
JD87833-14.1	Brianna Perez	Secured Storage	05/08/24 15:25	Return to Storage
JD87833-14.1	Secured Storage	Ellen Dondeo	05/08/24 16:10	Retrieve from Storage
JD87833-14.1	Ellen Dondeo	Secured Storage	05/08/24 19:05	Return to Storage
JD87833-14.1	Secured Storage	Joshua Reitan	05/08/24 23:47	Retrieve from Storage
JD87833-14.1	Joshua Reitan	Secured Staging Area	05/08/24 23:47	Return to Storage
JD87833-14.1	Secured Staging Area	Lauren Halloran	05/09/24 07:48	Retrieve from Storage
JD87833-14.1	Lauren Halloran	Secured Storage	05/09/24 16:50	Return to Storage
JD87833-14.1.1	Brianna Perez	Metals Digestion	05/08/24 12:31	Digestate from JD87833-14.1
JD87833-14.1.1	Metals Digestion	Brianna Perez	05/08/24 12:32	Digestate from JD87833-14.1
JD87833-14.1.1	Brianna Perez	Metals Digestate Storage	05/08/24 12:32	Return to Storage
JD87833-14.1.2	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-14.1
JD87833-14.1.2	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-14.1
JD87833-14.1.2	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-14.1.2	Extract Storage	Christine Phillips	05/09/24 01:52	Retrieve from Storage
JD87833-14.1.2	Christine Phillips	GC8G	05/09/24 01:52	Load on Instrument
JD87833-14.1.3	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-14.1
JD87833-14.1.3	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-14.1
JD87833-14.1.3	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-14.1.3	Extract Storage	Christine Phillips	05/09/24 04:52	Retrieve from Storage
JD87833-14.1.3	Christine Phillips	GC2G	05/09/24 04:52	Load on Instrument
JD87833-14.1.4	Lauren Halloran	Organics Prep	05/09/24 08:10	Extract from JD87833-14.1
JD87833-14.1.4	Organics Prep	Erin Burke	05/09/24 15:00	Extract from JD87833-14.1
JD87833-14.1.4	Erin Burke	Extract Storage	05/09/24 15:00	Return to Storage
JD87833-15.1	Haleigh Rosado	Secured Storage	05/04/24 17:02	Return to Storage
JD87833-15.1	Secured Storage	Todd Shoemaker	05/06/24 14:42	Retrieve from Storage
JD87833-15.1	Todd Shoemaker	Secured Staging Area	05/06/24 14:43	Return to Storage
JD87833-15.1	Secured Staging Area	Saloni Chauhan	05/06/24 15:32	Retrieve from Storage
JD87833-15.1	Saloni Chauhan	Secured Storage	05/06/24 22:47	Return to Storage
JD87833-15.1	Secured Storage	Aleandi Rodriguez	05/07/24 22:26	Retrieve from Storage
JD87833-15.1	Aleandi Rodriguez	Secured Staging Area	05/07/24 22:26	Return to Storage
JD87833-15.1	Secured Staging Area	Lauren Halloran	05/08/24 07:57	Retrieve from Storage

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# SGS Internal Chain of Custody

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Received:** 05/03/24

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD87833-15.1	Secured Storage	Brianna Perez	05/08/24 12:30	Retrieve from Storage
Analyst chain of custody update error.				
JD87833-15.1	Brianna Perez	Secured Storage	05/08/24 15:25	Return to Storage
JD87833-15.1	Secured Storage	Ellen Dondeo	05/08/24 16:10	Retrieve from Storage
JD87833-15.1	Ellen Dondeo	Secured Storage	05/08/24 19:05	Return to Storage
JD87833-15.1	Secured Storage	Joshua Reitan	05/08/24 23:47	Retrieve from Storage
JD87833-15.1	Joshua Reitan	Secured Staging Area	05/08/24 23:47	Return to Storage
JD87833-15.1	Secured Staging Area	Lauren Halloran	05/09/24 07:48	Retrieve from Storage
JD87833-15.1	Lauren Halloran	Secured Storage	05/09/24 16:50	Return to Storage
JD87833-15.1.1	Brianna Perez	Metals Digestion	05/08/24 12:31	Digestate from JD87833-15.1
JD87833-15.1.1	Metals Digestion	Brianna Perez	05/08/24 12:32	Digestate from JD87833-15.1
JD87833-15.1.1	Brianna Perez	Metals Digestate Storage	05/08/24 12:32	Return to Storage
JD87833-15.1.2	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-15.1
JD87833-15.1.2	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-15.1
JD87833-15.1.2	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-15.1.2	Extract Storage	Christine Phillips	05/09/24 01:52	Retrieve from Storage
JD87833-15.1.2	Christine Phillips	GC8G	05/09/24 01:52	Load on Instrument
JD87833-15.1.3	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-15.1
JD87833-15.1.3	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-15.1
JD87833-15.1.3	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-15.1.3	Extract Storage	Christine Phillips	05/09/24 04:52	Retrieve from Storage
JD87833-15.1.3	Christine Phillips	GC2G	05/09/24 04:52	Load on Instrument
JD87833-15.1.4	Lauren Halloran	Organics Prep	05/09/24 08:10	Extract from JD87833-15.1
JD87833-15.1.4	Organics Prep	Erin Burke	05/09/24 15:00	Extract from JD87833-15.1
JD87833-15.1.4	Erin Burke	Extract Storage	05/09/24 15:00	Return to Storage
JD87833-16.1	Haleigh Rosado	Secured Storage	05/04/24 17:02	Return to Storage
JD87833-16.1	Secured Storage	Todd Shoemaker	05/06/24 14:42	Retrieve from Storage
JD87833-16.1	Todd Shoemaker	Secured Staging Area	05/06/24 14:43	Return to Storage
JD87833-16.1	Secured Staging Area	Saloni Chauhan	05/06/24 15:32	Retrieve from Storage
JD87833-16.1	Saloni Chauhan	Secured Storage	05/06/24 22:47	Return to Storage
JD87833-16.1	Secured Storage	Aleandi Rodriguez	05/07/24 22:26	Retrieve from Storage
JD87833-16.1	Aleandi Rodriguez	Secured Staging Area	05/07/24 22:26	Return to Storage
JD87833-16.1	Secured Staging Area	Lauren Halloran	05/08/24 07:57	Retrieve from Storage
JD87833-16.1	Secured Storage	Brianna Perez	05/08/24 12:30	Retrieve from Storage
Analyst chain of custody update error.				
JD87833-16.1	Brianna Perez	Secured Storage	05/08/24 15:25	Return to Storage
JD87833-16.1	Secured Storage	Ellen Dondeo	05/08/24 16:10	Retrieve from Storage
JD87833-16.1	Ellen Dondeo	Secured Storage	05/08/24 19:05	Return to Storage
JD87833-16.1	Secured Storage	Joshua Reitan	05/08/24 23:47	Retrieve from Storage

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# SGS Internal Chain of Custody

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Received:** 05/03/24

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD87833-16.1	Joshua Reitan	Secured Staging Area	05/08/24 23:47	Return to Storage
JD87833-16.1	Secured Staging Area	Lauren Halloran	05/09/24 07:48	Retrieve from Storage
JD87833-16.1	Lauren Halloran	Secured Storage	05/09/24 16:50	Return to Storage
JD87833-16.1.1	Brianna Perez	Metals Digestion	05/08/24 12:31	Digestate from JD87833-16.1
JD87833-16.1.1	Metals Digestion	Brianna Perez	05/08/24 12:32	Digestate from JD87833-16.1
JD87833-16.1.1	Brianna Perez	Metals Digestate Storage	05/08/24 12:32	Return to Storage
JD87833-16.1.2	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-16.1
JD87833-16.1.2	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-16.1
JD87833-16.1.2	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-16.1.2	Extract Storage	Christine Phillips	05/09/24 01:52	Retrieve from Storage
JD87833-16.1.2	Christine Phillips	GC8G	05/09/24 01:52	Load on Instrument
JD87833-16.1.3	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-16.1
JD87833-16.1.3	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-16.1
JD87833-16.1.3	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-16.1.3	Extract Storage	Christine Phillips	05/09/24 04:52	Retrieve from Storage
JD87833-16.1.3	Christine Phillips	GC2G	05/09/24 04:52	Load on Instrument
JD87833-16.1.4	Lauren Halloran	Organics Prep	05/09/24 08:10	Extract from JD87833-16.1
JD87833-16.1.4	Organics Prep	Erin Burke	05/09/24 15:00	Extract from JD87833-16.1
JD87833-16.1.4	Erin Burke	Extract Storage	05/09/24 15:00	Return to Storage
JD87833-17.1	Secured Storage	Joshua Reitan	05/08/24 19:10	Retrieve from Storage
JD87833-17.1	Joshua Reitan	Secured Staging Area	05/08/24 19:10	Return to Storage
JD87833-17.1	Secured Staging Area	Doaa Salem	05/09/24 07:23	Retrieve from Storage
JD87833-17.2	Secured Storage	Taylor Gorman	05/13/24 08:07	Retrieve from Storage
JD87833-17.2	Taylor Gorman		05/15/24 05:56	Depleted
JD87833-17.2.1	Taylor Gorman	Organics Prep	05/13/24 08:31	Extract from JD87833-17.2
JD87833-17.2.1	Angel Guzman	Extract Storage	05/14/24 01:37	Return to Storage
JD87833-17.2.1	Organics Prep	Angel Guzman	05/14/24 01:37	Extract from JD87833-17.2
JD87833-17.3	Secured Storage	Taylor Gorman	05/13/24 08:07	Retrieve from Storage
JD87833-17.3	Taylor Gorman		05/15/24 05:56	Depleted
JD87833-17.3.1	Taylor Gorman	Organics Prep	05/13/24 08:43	Extract from JD87833-17.3
JD87833-17.3.1	Organics Prep	Doaa Salem	05/14/24 10:55	Extract from JD87833-17.3
JD87833-17.3.1	Doaa Salem	Extract Storage	05/14/24 10:55	Return to Storage
JD87833-17.4	Secured Storage	Joe Waddington	05/06/24 23:25	Retrieve from Storage
JD87833-17.4	Joe Waddington	Secured Staging Area	05/06/24 23:26	Return to Storage

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# SGS Internal Chain of Custody

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Received:** 05/03/24

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD87833-17.4	Secured Staging Area	Doaa Salem	05/07/24 07:23	Retrieve from Storage
JD87833-17.4.1	Doaa Salem	Organics Prep	05/07/24 07:35	Extract from JD87833-17.4
JD87833-17.4.1	Organics Prep	Doaa Salem	05/07/24 17:16	Extract from JD87833-17.4
JD87833-17.4.1	Doaa Salem	Extract Storage	05/07/24 17:16	Return to Storage
JD87833-17.4.1	Extract Storage	Christine Phillips	05/08/24 01:19	Retrieve from Storage
JD87833-17.4.1	Christine Phillips	GC1G	05/08/24 01:19	Load on Instrument
JD87833-17.4.2	Doaa Salem	Organics Prep	05/07/24 07:35	Extract from JD87833-17.4
JD87833-17.4.3	Doaa Salem	Organics Prep	05/08/24 08:43	Extract from JD87833-17.4
JD87833-17.5	Secured Storage	Joe Waddington	05/06/24 22:58	Retrieve from Storage
JD87833-17.5	Joe Waddington	Secured Staging Area	05/06/24 22:58	Return to Storage
JD87833-17.5	Secured Staging Area	Brianna Perez	05/07/24 06:14	Retrieve from Storage
JD87833-17.5	Brianna Perez	Secured Storage	05/07/24 12:26	Return to Storage
JD87833-17.5.1	Brianna Perez	Metals Digestion	05/07/24 11:54	Digestate from JD87833-17.5
JD87833-17.5.1	Metals Digestion	Brianna Perez	05/07/24 11:54	Digestate from JD87833-17.5
JD87833-17.5.1	Brianna Perez	Metals Digestate Storage	05/07/24 11:54	Return to Storage

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## MS Semi-volatiles

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### QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

## Method Blank Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54460-MB1	CJ6516.D	1	05/09/24	RS	05/09/24	OP54460	ECJ297

The QC reported here applies to the following samples:

Method: SW846 8270E

JD87833-1, JD87833-2, JD87833-3, JD87833-4, JD87833-5, JD87833-6, JD87833-7, JD87833-8, JD87833-9, JD87833-10, JD87833-11, JD87833-12, JD87833-13, JD87833-14, JD87833-15, JD87833-16

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	67	16	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	20	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	28	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	59	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	170	130	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	170	36	ug/kg	
95-48-7	2-Methylphenol	ND	67	21	ug/kg	
	3&4-Methylphenol	ND	67	27	ug/kg	
88-75-5	2-Nitrophenol	ND	170	22	ug/kg	
100-02-7	4-Nitrophenol	ND	330	89	ug/kg	
87-86-5	Pentachlorophenol	ND	130	31	ug/kg	
108-95-2	Phenol	ND	67	17	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	170	22	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	25	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	20	ug/kg	
83-32-9	Acenaphthene	ND	33	11	ug/kg	
208-96-8	Acenaphthylene	ND	33	17	ug/kg	
98-86-2	Acetophenone	ND	170	7.2	ug/kg	
120-12-7	Anthracene	ND	33	20	ug/kg	
1912-24-9	Atrazine	ND	67	14	ug/kg	
56-55-3	Benzo(a)anthracene	ND	33	9.4	ug/kg	
50-32-8	Benzo(a)pyrene	ND	33	15	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	33	15	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	33	17	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	33	16	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	67	13	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	67	8.1	ug/kg	
92-52-4	1,1'-Biphenyl	ND	67	4.6	ug/kg	
100-52-7	Benzaldehyde	ND	170	8.3	ug/kg	
91-58-7	2-Chloronaphthalene	ND	67	7.9	ug/kg	
106-47-8	4-Chloroaniline	ND	170	12	ug/kg	
86-74-8	Carbazole	6.2	67	4.8	ug/kg	J
105-60-2	Caprolactam	ND	67	13	ug/kg	
218-01-9	Chrysene	ND	33	10	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	67	7.1	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	67	14	ug/kg	

## Method Blank Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54460-MB1	CJ6516.D	1	05/09/24	RS	05/09/24	OP54460	ECJ297

The QC reported here applies to the following samples:

Method: SW846 8270E

JD87833-1, JD87833-2, JD87833-3, JD87833-4, JD87833-5, JD87833-6, JD87833-7, JD87833-8, JD87833-9, JD87833-10, JD87833-11, JD87833-12, JD87833-13, JD87833-14, JD87833-15, JD87833-16

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	67	12	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	67	11	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	33	10	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	33	17	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	67	28	ug/kg	
123-91-1	1,4-Dioxane	ND	33	22	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	33	15	ug/kg	
132-64-9	Dibenzofuran	ND	67	14	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	67	5.4	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	67	8.3	ug/kg	
84-66-2	Diethyl phthalate	ND	67	7.1	ug/kg	
131-11-3	Dimethyl phthalate	ND	67	5.9	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	67	7.8	ug/kg	
206-44-0	Fluoranthene	ND	33	15	ug/kg	
86-73-7	Fluorene	ND	33	15	ug/kg	
118-74-1	Hexachlorobenzene	ND	67	8.4	ug/kg	
87-68-3	Hexachlorobutadiene	ND	33	13	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	330	13	ug/kg	
67-72-1	Hexachloroethane	ND	170	16	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	33	16	ug/kg	
78-59-1	Isophorone	ND	67	7.1	ug/kg	
91-57-6	2-Methylnaphthalene	ND	33	7.5	ug/kg	
88-74-4	2-Nitroaniline	ND	170	7.9	ug/kg	
99-09-2	3-Nitroaniline	ND	170	8.3	ug/kg	
100-01-6	4-Nitroaniline	ND	170	8.6	ug/kg	
91-20-3	Naphthalene	ND	33	9.4	ug/kg	
98-95-3	Nitrobenzene	ND	67	13	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	67	9.6	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	170	12	ug/kg	
85-01-8	Phenanthrene	ND	33	11	ug/kg	
129-00-0	Pyrene	ND	33	11	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	170	8.5	ug/kg	

## Method Blank Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54460-MB1	CJ6516.D	1	05/09/24	RS	05/09/24	OP54460	ECJ297

The QC reported here applies to the following samples:

Method: SW846 8270E

JD87833-1, JD87833-2, JD87833-3, JD87833-4, JD87833-5, JD87833-6, JD87833-7, JD87833-8, JD87833-9, JD87833-10, JD87833-11, JD87833-12, JD87833-13, JD87833-14, JD87833-15, JD87833-16

CAS No.	Surrogate Recoveries	Limits	
367-12-4	2-Fluorophenol	75%	10-99%
4165-62-2	Phenol-d5	78%	10-96%
118-79-6	2,4,6-Tribromophenol	79%	10-123%
4165-60-0	Nitrobenzene-d5	74%	10-109%
321-60-8	2-Fluorobiphenyl	79%	11-109%
1718-51-0	Terphenyl-d14	85%	10-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/kg	

**Method Blank Summary**

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54467-MB1	CJ6550.D	1	05/10/24	KM	05/09/24	OP54467	ECJ298

The QC reported here applies to the following samples:

Method: SW846 8270E

JD87833-17

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	0.82	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	0.89	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	1.3	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	2.4	ug/l	
51-28-5	2,4-Dinitrophenol	ND	5.0	1.6	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	5.0	1.3	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.89	ug/l	
	3&4-Methylphenol	ND	2.0	0.88	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.96	ug/l	
100-02-7	4-Nitrophenol	ND	10	1.2	ug/l	
87-86-5	Pentachlorophenol	ND	4.0	1.4	ug/l	
108-95-2	Phenol	ND	2.0	0.39	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	1.5	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	1.3	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.92	ug/l	
83-32-9	Acenaphthene	ND	1.0	0.19	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.14	ug/l	
98-86-2	Acetophenone	ND	2.0	0.21	ug/l	
120-12-7	Anthracene	ND	1.0	0.21	ug/l	
1912-24-9	Atrazine	ND	2.0	0.45	ug/l	
100-52-7	Benzaldehyde	ND	5.0	0.29	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.0	0.20	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.0	0.21	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.0	0.21	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.0	0.34	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.0	0.21	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.40	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.46	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.21	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.24	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.34	ug/l	
86-74-8	Carbazole	ND	1.0	0.23	ug/l	
105-60-2	Caprolactam	ND	2.0	0.65	ug/l	
218-01-9	Chrysene	ND	1.0	0.18	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.28	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.25	ug/l	

## Method Blank Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54467-MB1	CJ6550.D	1	05/10/24	KM	05/09/24	OP54467	ECJ298

The QC reported here applies to the following samples:

Method: SW846 8270E

JD87833-17

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	2.0	0.40	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.37	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.48	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	0.51	ug/l	
123-91-1	1,4-Dioxane	ND	1.0	0.66	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.33	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.22	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.50	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.23	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.26	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.22	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.7	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.17	ug/l	
86-73-7	Fluorene	ND	1.0	0.17	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.49	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	2.8	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.39	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.33	ug/l	
78-59-1	Isophorone	ND	2.0	0.28	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.21	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.28	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.39	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.44	ug/l	
91-20-3	Naphthalene	ND	1.0	0.23	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.64	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.48	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.18	ug/l	
129-00-0	Pyrene	ND	1.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.37	ug/l	

## Method Blank Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54467-MB1	CJ6550.D	1	05/10/24	KM	05/09/24	OP54467	ECJ298

The QC reported here applies to the following samples:

Method: SW846 8270E

JD87833-17

CAS No.	Surrogate Recoveries	Limits
367-12-4	2-Fluorophenol	34% 10-71%
4165-62-2	Phenol-d5	26% 10-58%
118-79-6	2,4,6-Tribromophenol	60% 22-144%
4165-60-0	Nitrobenzene-d5	87% 28-118%
321-60-8	2-Fluorobiphenyl	83% 34-116%
1718-51-0	Terphenyl-d14	55% 10-127%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Internal standard added for SIM te	4.75	4.4	ug/l	J
	unknown	5.95	4.6	ug/l	J
	system artifact	7.04	4.9	ug/l	J
	unknown	8.94	4.6	ug/l	J
	system artifact	10.46	5.2	ug/l	J
	unknown	11.03	5.7	ug/l	J
	Internal standard added for SIM test	11.61	4.6	ug/l	J
	Total TIC, Semi-Volatile		14.9	ug/l	J

# Blank Spike Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54460-BS1	CJ6517.D	1	05/09/24	RS	05/09/24	OP54460	ECJ297

The QC reported here applies to the following samples:

Method: SW846 8270E

JD87833-1, JD87833-2, JD87833-3, JD87833-4, JD87833-5, JD87833-6, JD87833-7, JD87833-8, JD87833-9, JD87833-10, JD87833-11, JD87833-12, JD87833-13, JD87833-14, JD87833-15, JD87833-16

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
95-57-8	2-Chlorophenol	1670	1270	76	10-135
59-50-7	4-Chloro-3-methyl phenol	1670	1450	87	10-141
120-83-2	2,4-Dichlorophenol	1670	1400	84	10-139
105-67-9	2,4-Dimethylphenol	1670	1390	83	10-141
51-28-5	2,4-Dinitrophenol	3330	2610	78	10-138
534-52-1	4,6-Dinitro-o-cresol	1670	1530	92	10-156
95-48-7	2-Methylphenol	1670	1330	80	10-139
	3&4-Methylphenol	3330	2700	81	10-174
88-75-5	2-Nitrophenol	1670	1350	81	10-142
100-02-7	4-Nitrophenol	1670	1530	92	10-144
87-86-5	Pentachlorophenol	3330	3330	100	10-165
108-95-2	Phenol	1670	1290	77	23-115
58-90-2	2,3,4,6-Tetrachlorophenol	1670	1520	91	10-146
95-95-4	2,4,5-Trichlorophenol	1670	1490	89	13-136
88-06-2	2,4,6-Trichlorophenol	1670	1530	92	10-142
83-32-9	Acenaphthene	1670	1420	85	10-141
208-96-8	Acenaphthylene	1670	1460	88	10-133
98-86-2	Acetophenone	1670	1220	73	23-115
120-12-7	Anthracene	1670	1510	91	10-144
1912-24-9	Atrazine	1670	1500	90	17-149
56-55-3	Benzo(a)anthracene	1670	1420	85	11-139
50-32-8	Benzo(a)pyrene	1670	1500	90	13-141
205-99-2	Benzo(b)fluoranthene	1670	1440	86	14-140
191-24-2	Benzo(g,h,i)perylene	1670	1470	88	13-138
207-08-9	Benzo(k)fluoranthene	1670	1530	92	12-140
101-55-3	4-Bromophenyl phenyl ether	1670	1510	91	10-146
85-68-7	Butyl benzyl phthalate	1670	1570	94	10-150
92-52-4	1,1'-Biphenyl	1670	1390	83	10-141
100-52-7	Benzaldehyde	1670	1100	66	10-146
91-58-7	2-Chloronaphthalene	1670	1380	83	10-142
106-47-8	4-Chloroaniline	1670	936	56	10-108
86-74-8	Carbazole	1670	1520	91	10-145
105-60-2	Caprolactam	1670	1510	91	10-187
218-01-9	Chrysene	1670	1470	88	11-139
111-91-1	bis(2-Chloroethoxy)methane	1670	1290	77	10-144
111-44-4	bis(2-Chloroethyl)ether	1670	1200	72	10-145

\* = Outside of Control Limits.



# Blank Spike Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54460-BS1	CJ6517.D	1	05/09/24	RS	05/09/24	OP54460	ECJ297

The QC reported here applies to the following samples:

Method: SW846 8270E

JD87833-1, JD87833-2, JD87833-3, JD87833-4, JD87833-5, JD87833-6, JD87833-7, JD87833-8, JD87833-9, JD87833-10, JD87833-11, JD87833-12, JD87833-13, JD87833-14, JD87833-15, JD87833-16

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
108-60-1	2,2'-Oxybis(1-chloropropane)	1670	1220	73	10-145
7005-72-3	4-Chlorophenyl phenyl ether	1670	1480	89	10-145
121-14-2	2,4-Dinitrotoluene	1670	1540	92	10-148
606-20-2	2,6-Dinitrotoluene	1670	1540	92	12-145
91-94-1	3,3'-Dichlorobenzidine	1670	1070	64	10-100
123-91-1	1,4-Dioxane	1670	671	40	10-97
53-70-3	Dibenzo(a,h)anthracene	1670	1500	90	14-142
132-64-9	Dibenzofuran	1670	1420	85	10-140
84-74-2	Di-n-butyl phthalate	1670	1560	94	11-147
117-84-0	Di-n-octyl phthalate	1670	1530	92	15-145
84-66-2	Diethyl phthalate	1670	1460	88	10-145
131-11-3	Dimethyl phthalate	1670	1460	88	10-144
117-81-7	bis(2-Ethylhexyl)phthalate	1670	1500	90	26-132
206-44-0	Fluoranthene	1670	1530	92	10-147
86-73-7	Fluorene	1670	1430	86	12-139
118-74-1	Hexachlorobenzene	1670	1500	90	10-144
87-68-3	Hexachlorobutadiene	1670	1220	73	10-142
77-47-4	Hexachlorocyclopentadiene	3330	2720	82	10-120
67-72-1	Hexachloroethane	1670	1160	70	10-141
193-39-5	Indeno(1,2,3-cd)pyrene	1670	1510	91	13-144
78-59-1	Isophorone	1670	1330	80	10-139
91-57-6	2-Methylnaphthalene	1670	1320	79	10-140
88-74-4	2-Nitroaniline	1670	1390	83	10-148
99-09-2	3-Nitroaniline	1670	1110	67	10-127
100-01-6	4-Nitroaniline	1670	1450	87	10-143
91-20-3	Naphthalene	1670	1250	75	10-141
98-95-3	Nitrobenzene	1670	1230	74	10-139
621-64-7	N-Nitroso-di-n-propylamine	1670	1160	70	10-143
86-30-6	N-Nitrosodiphenylamine	1670	1430	86	10-145
85-01-8	Phenanthrene	1670	1480	89	10-142
129-00-0	Pyrene	1670	1490	89	13-141
95-94-3	1,2,4,5-Tetrachlorobenzene	1670	1350	81	10-143

\* = Outside of Control Limits.

# Blank Spike Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54460-BS1	CJ6517.D	1	05/09/24	RS	05/09/24	OP54460	ECJ297

The QC reported here applies to the following samples:

Method: SW846 8270E

JD87833-1, JD87833-2, JD87833-3, JD87833-4, JD87833-5, JD87833-6, JD87833-7, JD87833-8, JD87833-9, JD87833-10, JD87833-11, JD87833-12, JD87833-13, JD87833-14, JD87833-15, JD87833-16

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	75%	10-99%
4165-62-2	Phenol-d5	80%	10-96%
118-79-6	2,4,6-Tribromophenol	95%	10-123%
4165-60-0	Nitrobenzene-d5	76%	10-109%
321-60-8	2-Fluorobiphenyl	84%	11-109%
1718-51-0	Terphenyl-d14	87%	10-120%

\* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54467-BS1	CJ6551.D	1	05/10/24	KM	05/09/24	OP54467	ECJ298
OP54467-BSD	CJ6552.D	1	05/10/24	KM	05/09/24	OP54467	ECJ298

The QC reported here applies to the following samples:

Method: SW846 8270E

JD87833-17

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	50	22.6	45	29.2	58	25	17-111/59
59-50-7	4-Chloro-3-methyl phenol	50	29.2	58	36.2	72	21	30-118/47
120-83-2	2,4-Dichlorophenol	50	25.8	52	31.7	63	21	30-119/50
105-67-9	2,4-Dimethylphenol	50	25.6	51	33.7	67	27	20-114/49
51-28-5	2,4-Dinitrophenol	100	ND	0* a	ND	0* a	nc	11-141/72
534-52-1	4,6-Dinitro-o-cresol	50	3.1	6* a	2.1	4* a	38	30-142/51
95-48-7	2-Methylphenol	50	20.7	41	28.4	57	31	10-110/56
	3&4-Methylphenol	100	40.2	40	53.7	54	29	10-164/59
88-75-5	2-Nitrophenol	50	23.6	47	29.8	60	23	33-123/49
100-02-7	4-Nitrophenol	50	3.2	6* a	2.3	5* a	33	10-84/61
87-86-5	Pentachlorophenol	100	26.6	27	20.7	21	25	10-171/41
108-95-2	Phenol	50	11.4	23	15.3	31	29	10-85/57
58-90-2	2,3,4,6-Tetrachlorophenol	50	15.5	31* a	13.0	26* a	18	36-130/44
95-95-4	2,4,5-Trichlorophenol	50	26.4	53	29.1	58	10	38-124/44
88-06-2	2,4,6-Trichlorophenol	50	18.7	37	17.2	34* a	8	37-122/46
83-32-9	Acenaphthene	50	32.7	65	38.6	77	17	52-115/30
208-96-8	Acenaphthylene	50	34.0	68	39.9	80	16	30-114/31
98-86-2	Acetophenone	50	31.5	63	39.6	79	23	40-115/39
120-12-7	Anthracene	50	38.5	77	43.8	88	13	55-122/29
1912-24-9	Atrazine	50	34.3	69	35.3	71	3	54-140/33
100-52-7	Benzaldehyde	50	26.8	54	32.4	65	19	35-121/35
56-55-3	Benzo(a)anthracene	50	35.4	71	41.1	82	15	55-122/29
50-32-8	Benzo(a)pyrene	50	35.2	70	41.4	83	16	50-123/30
205-99-2	Benzo(b)fluoranthene	50	35.7	71	43.3	87	19	57-124/28
191-24-2	Benzo(g,h,i)perylene	50	34.1	68	39.7	79	15	55-125/30
207-08-9	Benzo(k)fluoranthene	50	35.8	72	43.0	86	18	53-124/28
101-55-3	4-Bromophenyl phenyl ether	50	38.3	77	42.6	85	11	55-124/29
85-68-7	Butyl benzyl phthalate	50	41.0	82	48.4	97	17	54-134/29
92-52-4	1,1'-Biphenyl	50	29.6	59	35.7	71	19	46-115/32
91-58-7	2-Chloronaphthalene	50	28.9	58	34.7	69	18	44-113/32
106-47-8	4-Chloroaniline	50	12.7	25	13.9	28	9	10-100/92
86-74-8	Carbazole	50	38.2	76	42.1	84	10	56-123/29
105-60-2	Caprolactam	50	10.3	21	12.9	26	22	10-85/35
218-01-9	Chrysene	50	35.3	71	41.5	83	16	54-122/29
111-91-1	bis(2-Chloroethoxy)methane	50	31.5	63	39.8	80	23	39-116/36
111-44-4	bis(2-Chloroethyl)ether	50	29.8	60	38.9	78	26	31-118/45

\* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54467-BS1	CJ6551.D	1	05/10/24	KM	05/09/24	OP54467	ECJ298
OP54467-BSD	CJ6552.D	1	05/10/24	KM	05/09/24	OP54467	ECJ298

The QC reported here applies to the following samples:

Method: SW846 8270E

JD87833-17

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
108-60-1	2,2'-Oxybis(1-chloropropane)	50	30.2	60	39.2	78	26	34-117/43
7005-72-3	4-Chlorophenyl phenyl ether	50	35.4	71	41.2	82	15	53-119/28
121-14-2	2,4-Dinitrotoluene	50	41.6	83	47.8	96	14	58-129/29
606-20-2	2,6-Dinitrotoluene	50	41.0	82	47.8	96	15	56-128/30
91-94-1	3,3'-Dichlorobenzidine	50	20.4	41	1.8	4* a	168* b	23-122/44
123-91-1	1,4-Dioxane	50	13.6	27	18.4	37	30	10-88/49
53-70-3	Dibenzo(a,h)anthracene	50	34.8	70	41.8	84	18	55-127/29
132-64-9	Dibenzofuran	50	34.3	69	39.9	80	15	53-116/29
84-74-2	Di-n-butyl phthalate	50	40.3	81	46.6	93	14	57-129/30
117-84-0	Di-n-octyl phthalate	50	39.7	79	49.4	99	22	45-139/28
84-66-2	Diethyl phthalate	50	38.0	76	45.4	91	18	53-123/30
131-11-3	Dimethyl phthalate	50	35.0	70	42.1	84	18	50-122/35
117-81-7	bis(2-Ethylhexyl)phthalate	50	37.7	75	45.1	90	18	49-137/30
206-44-0	Fluoranthene	50	38.4	77	43.9	88	13	58-125/30
86-73-7	Fluorene	50	36.4	73	41.8	84	14	56-119/28
118-74-1	Hexachlorobenzene	50	36.2	72	42.8	86	17	53-125/29
87-68-3	Hexachlorobutadiene	50	22.4	45	29.6	59	28	21-109/47
77-47-4	Hexachlorocyclopentadiene	100	41.9	42	55.5	56	28	10-96/52
67-72-1	Hexachloroethane	50	22.5	45	30.2	60	29	19-105/40
193-39-5	Indeno(1,2,3-cd)pyrene	50	34.6	69	40.7	81	16	50-132/30
78-59-1	Isophorone	50	32.5	65	41.0	82	23	41-117/33
91-57-6	2-Methylnaphthalene	50	27.5	55	34.5	69	23	41-112/35
88-74-4	2-Nitroaniline	50	38.8	78	44.8	90	14	48-128/31
99-09-2	3-Nitroaniline	50	26.0	52	26.4	53	2	30-115/51
100-01-6	4-Nitroaniline	50	36.7	73	37.1	74	1	43-121/34
91-20-3	Naphthalene	50	27.3	55	34.5	69	23	37-112/39
98-95-3	Nitrobenzene	50	30.9	62	39.1	78	23	35-119/39
621-64-7	N-Nitroso-di-n-propylamine	50	32.0	64	40.6	81	24	34-121/36
86-30-6	N-Nitrosodiphenylamine	50	38.3	77	42.4	85	10	52-121/29
85-01-8	Phenanthrene	50	37.7	75	42.5	85	12	56-121/28
129-00-0	Pyrene	50	37.7	75	44.2	88	16	55-125/29
95-94-3	1,2,4,5-Tetrachlorobenzene	50	25.6	51	32.1	64	23	40-110/35

\* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54467-BS1	CJ6551.D	1	05/10/24	KM	05/09/24	OP54467	ECJ298
OP54467-BSD	CJ6552.D	1	05/10/24	KM	05/09/24	OP54467	ECJ298

The QC reported here applies to the following samples:

Method: SW846 8270E

JD87833-17

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	28%	34%	10-71%
4165-62-2	Phenol-d5	22%	29%	10-58%
118-79-6	2,4,6-Tribromophenol	56%	60%	22-144%
4165-60-0	Nitrobenzene-d5	64%	82%	28-118%
321-60-8	2-Fluorobiphenyl	66%	81%	34-116%
1718-51-0	Terphenyl-d14	40%	56%	10-127%

- (a) Outside of in house control limits.
- (b) Analytical precision exceeds in-house control limits.

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54460-MS	CJ6527.D	1	05/09/24	RS	05/09/24	OP54460	ECJ297
OP54460-MSD	CJ6528.D	1	05/09/24	RS	05/09/24	OP54460	ECJ297
JD87833-1	CJ6538.D	1	05/10/24	RS	05/09/24	OP54460	ECJ297

The QC reported here applies to the following samples:

Method: SW846 8270E

JD87833-1, JD87833-2, JD87833-3, JD87833-4, JD87833-5, JD87833-6, JD87833-7, JD87833-8, JD87833-9, JD87833-10, JD87833-11, JD87833-12, JD87833-13, JD87833-14, JD87833-15, JD87833-16

CAS No.	Compound	JD87833-1		Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
		ug/kg	Q								
95-57-8	2-Chlorophenol	ND		2330	1480	64	2270	1350	59	9	10-137/86
59-50-7	4-Chloro-3-methyl phenol	ND		2330	1660	71	2270	1440	63	14	10-146/84
120-83-2	2,4-Dichlorophenol	ND		2330	1670	72	2270	1440	63	15	10-145/86
105-67-9	2,4-Dimethylphenol	ND		2330	1630	70	2270	1420	62	14	10-148/87
51-28-5	2,4-Dinitrophenol	ND		4650	2070	44	4550	1880	41	10	10-118/90
534-52-1	4,6-Dinitro-o-cresol	ND		2330	1340	58	2270	1210	53	10	10-131/97
95-48-7	2-Methylphenol	ND		2330	1540	66	2270	1400	62	10	10-143/86
	3&4-Methylphenol	ND		4650	3110	67	4550	2840	62	9	10-162/87
88-75-5	2-Nitrophenol	ND		2330	1640	70	2270	1470	65	11	10-147/93
100-02-7	4-Nitrophenol	ND		2330	1730	74	2270	1550	68	11	10-152/85
87-86-5	Pentachlorophenol	ND		4650	3750	81	4550	3390	75	10	10-146/89
108-95-2	Phenol	118		2330	1500	59	2270	1410	57	6	10-118/84
58-90-2	2,3,4,6-Tetrachlorophenol	ND		2330	1750	75	2270	1550	68	12	10-139/87
95-95-4	2,4,5-Trichlorophenol	ND		2330	1700	73	2270	1520	67	11	10-140/86
88-06-2	2,4,6-Trichlorophenol	ND		2330	1800	77	2270	1580	69	13	10-141/86
83-32-9	Acenaphthene	18.0	J	2330	1650	70	2270	1470	64	12	10-156/87
208-96-8	Acenaphthylene	60.4		2330	1760	73	2270	1510	64	15	10-143/84
98-86-2	Acetophenone	ND		2330	1410	61	2270	1310	58	7	10-130/90
120-12-7	Anthracene	71.5		2330	1850	76	2270	1590	67	15	10-166/88
1912-24-9	Atrazine	ND		2330	1630	70	2270	1510	66	8	10-148/86
56-55-3	Benzo(a)anthracene	233		2330	2220	85	2270	1710	65	26	10-163/88
50-32-8	Benzo(a)pyrene	243		2330	2280	88	2270	1760	67	26	10-163/89
205-99-2	Benzo(b)fluoranthene	342		2330	2230	81	2270	1810	65	21	10-156/91
191-24-2	Benzo(g,h,i)perylene	182		2330	2020	79	2270	1620	63	22	10-158/89
207-08-9	Benzo(k)fluoranthene	114		2330	1950	79	2270	1520	62	25	10-157/86
101-55-3	4-Bromophenyl phenyl ether	ND		2330	1690	73	2270	1540	68	9	10-143/87
85-68-7	Butyl benzyl phthalate	ND		2330	1930	83	2270	1700	75	13	10-161/89
92-52-4	1,1'-Biphenyl	6.2	J	2330	1600	69	2270	1400	61	13	10-143/86
100-52-7	Benzaldehyde	17.2	J	2330	1220	52	2270	1180	51	3	10-148/88
91-58-7	2-Chloronaphthalene	ND		2330	1580	68	2270	1400	62	12	10-145/86
106-47-8	4-Chloroaniline	ND		2330	1020	44	2270	885	39	14	10-109/87
86-74-8	Carbazole	30.5	J	2330	1660	70	2270	1490	64	11	10-158/87
105-60-2	Caprolactam	ND		2330	1510	65	2270	1310	58	14	10-150/82
218-01-9	Chrysene	273		2330	2260	85	2270	1760	65	25	10-164/87
111-91-1	bis(2-Chloroethoxy)methane	ND		2330	1520	65	2270	1340	59	13	10-152/86
111-44-4	bis(2-Chloroethyl)ether	ND		2330	1330	57	2270	1270	56	5	10-147/86

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54460-MS	CJ6527.D	1	05/09/24	RS	05/09/24	OP54460	ECJ297
OP54460-MSD	CJ6528.D	1	05/09/24	RS	05/09/24	OP54460	ECJ297
JD87833-1	CJ6538.D	1	05/10/24	RS	05/09/24	OP54460	ECJ297

The QC reported here applies to the following samples:

Method: SW846 8270E

JD87833-1, JD87833-2, JD87833-3, JD87833-4, JD87833-5, JD87833-6, JD87833-7, JD87833-8, JD87833-9, JD87833-10, JD87833-11, JD87833-12, JD87833-13, JD87833-14, JD87833-15, JD87833-16

CAS No.	Compound	JD87833-1 ug/kg	Spike Q	ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
108-60-1	2,2'-Oxybis(1-chloropropane)	ND		2330	1390	60	2270	1310	58	6	10-134/88
7005-72-3	4-Chlorophenyl phenyl ether	ND		2330	1650	71	2270	1450	64	13	10-142/87
121-14-2	2,4-Dinitrotoluene	ND		2330	1720	74	2270	1540	68	11	10-147/86
606-20-2	2,6-Dinitrotoluene	ND		2330	1740	75	2270	1540	68	12	10-147/88
91-94-1	3,3'-Dichlorobenzidine	ND		2330	391	17	2270	274	12	35	10-106/93
123-91-1	1,4-Dioxane	ND		2330	655	28	2270	641	28	2	10-102/85
53-70-3	Dibenzo(a,h)anthracene	48.2		2330	1730	72	2270	1490	63	15	10-149/89
132-64-9	Dibenzofuran	ND		2330	1630	70	2270	1460	64	11	10-155/86
84-74-2	Di-n-butyl phthalate	14.3	J	2330	1760	75	2270	1580	69	11	10-158/86
117-84-0	Di-n-octyl phthalate	ND		2330	1830	79	2270	1630	72	12	10-154/84
84-66-2	Diethyl phthalate	ND		2330	1680	72	2270	1490	66	12	10-148/84
131-11-3	Dimethyl phthalate	ND		2330	1680	72	2270	1470	65	13	10-144/85
117-81-7	bis(2-Ethylhexyl)phthalate	80.4	J	2330	1860	76	2270	1660	69	11	10-153/84
206-44-0	Fluoranthene	487		2330	2840	101	2270	2120	72	29	10-165/93
86-73-7	Fluorene	24.3	J	2330	1690	72	2270	1470	64	14	10-158/87
118-74-1	Hexachlorobenzene	ND		2330	1640	70	2270	1460	64	12	10-139/85
87-68-3	Hexachlorobutadiene	ND		2330	1420	61	2270	1280	56	10	10-139/88
77-47-4	Hexachlorocyclopentadiene	ND		4650	2180	47	4550	1670	37	26	10-116/30
67-72-1	Hexachloroethane	ND		2330	1250	54	2270	1180	52	6	10-141/93
193-39-5	Indeno(1,2,3-cd)pyrene	147		2330	2000	80	2270	1600	64	22	10-160/91
78-59-1	Isophorone	ND		2330	1550	67	2270	1370	60	12	10-150/86
91-57-6	2-Methylnaphthalene	ND		2330	1540	66	2270	1370	60	12	10-145/86
88-74-4	2-Nitroaniline	ND		2330	1660	71	2270	1400	62	17	10-152/77
99-09-2	3-Nitroaniline	ND		2330	1280	55	2270	1090	48	16	10-136/83
100-01-6	4-Nitroaniline	ND		2330	1260	54	2270	1110	49	13	10-140/81
91-20-3	Naphthalene	ND		2330	1470	63	2270	1320	58	11	10-146/87
98-95-3	Nitrobenzene	ND		2330	1450	62	2270	1320	58	9	10-146/88
621-64-7	N-Nitroso-di-n-propylamine	ND		2330	1400	60	2270	1260	55	11	10-147/77
86-30-6	N-Nitrosodiphenylamine	ND		2330	1650	71	2270	1450	64	13	10-159/78
85-01-8	Phenanthrene	243		2330	2110	80	2270	1740	66	19	10-158/95
129-00-0	Pyrene	495		2330	3050	110	2270	2210	75	32	10-176/90
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		2330	1550	67	2270	1380	61	12	10-137/87

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54460-MS	CJ6527.D	1	05/09/24	RS	05/09/24	OP54460	ECJ297
OP54460-MSD	CJ6528.D	1	05/09/24	RS	05/09/24	OP54460	ECJ297
JD87833-1	CJ6538.D	1	05/10/24	RS	05/09/24	OP54460	ECJ297

The QC reported here applies to the following samples:

Method: SW846 8270E

JD87833-1, JD87833-2, JD87833-3, JD87833-4, JD87833-5, JD87833-6, JD87833-7, JD87833-8, JD87833-9, JD87833-10, JD87833-11, JD87833-12, JD87833-13, JD87833-14, JD87833-15, JD87833-16

CAS No.	Surrogate Recoveries	MS	MSD	JD87833-1	Limits
367-12-4	2-Fluorophenol	62%	57%	68%	10-99%
4165-62-2	Phenol-d5	66%	60%	72%	10-96%
118-79-6	2,4,6-Tribromophenol	78%	72%	90%	10-123%
4165-60-0	Nitrobenzene-d5	64%	59%	72%	10-109%
321-60-8	2-Fluorobiphenyl	70%	62%	77%	11-109%
1718-51-0	Terphenyl-d14	74%	65%	81%	10-120%

\* = Outside of Control Limits.



# Instrument Performance Check (DFTPP)

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Sample:</b> ECJ296-DFTPP	<b>Injection Date:</b> 05/08/24
<b>Lab File ID:</b> CJ6488.D	<b>Injection Time:</b> 14:56
<b>Instrument ID:</b> GCMSCJ	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	127437	43.4	Pass
68	Less than 2.0% of mass 69	263	0.09 (0.18) <sup>a</sup>	Pass
69	Mass 69 relative abundance	145224	49.5	Pass
70	Less than 2.0% of mass 69	743	0.25 (0.51) <sup>a</sup>	Pass
127	40.0 - 60.0% of mass 198	154005	52.5	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	293525	100.0	Pass
199	5.0 - 9.0% of mass 198	19452	6.63	Pass
275	10.0 - 31.0% of mass 198	66797	22.8	Pass
365	1.0 - 100.0% of mass 198	8388	2.86	Pass
441	Present, but less than mass 443	28606	9.75 (77.4) <sup>b</sup>	Pass
442	40.0 - 100.0% of mass 198	195269	66.5	Pass
443	17.0 - 23.0% of mass 442	36968	12.6 (18.9) <sup>c</sup>	Pass

- (a) Value is % of mass 69
- (b) Value is % of mass 443
- (c) Value is % of mass 442

**This check applies to the following Samples, MS, MSD, Blanks, and Standards:**

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ECJ296-ICC296	CJ6490.D	05/08/24	16:42	01:46	Initial cal 50
ECJ296-IC296	CJ6491.D	05/08/24	17:20	02:24	Initial cal 1
ECJ296-IC296	CJ6492.D	05/08/24	17:39	02:43	Initial cal 2
ECJ296-IC296	CJ6493.D	05/08/24	17:58	03:02	Initial cal 5
ECJ296-IC296	CJ6494.D	05/08/24	18:17	03:21	Initial cal 10
ECJ296-IC296	CJ6495.D	05/08/24	18:36	03:40	Initial cal 25
ECJ296-IC296	CJ6496.D	05/08/24	18:54	03:58	Initial cal 80
ECJ296-IC296	CJ6497.D	05/08/24	19:13	04:17	Initial cal 100
ECJ296-IC296	CJ6498.D	05/08/24	19:32	04:36	Initial cal 50
ECJ296-IC296	CJ6499.D	05/08/24	19:51	04:55	Initial cal 1
ECJ296-IC296	CJ6500.D	05/08/24	20:10	05:14	Initial cal 2
ECJ296-IC296	CJ6501.D	05/08/24	20:29	05:33	Initial cal 5
ECJ296-IC296	CJ6502.D	05/08/24	20:47	05:51	Initial cal 10
ECJ296-IC296	CJ6503.D	05/08/24	21:06	06:10	Initial cal 25
ECJ296-IC296	CJ6504.D	05/08/24	21:25	06:29	Initial cal 80
ECJ296-IC296	CJ6505.D	05/08/24	21:43	06:47	Initial cal 100
ECJ296-ICV296	CJ6506.D	05/08/24	22:02	07:06	Initial cal verification 50
ECJ296-ICV296	CJ6507.D	05/08/24	22:20	07:24	Initial cal verification 50
ECJ296-ICV296	CJ6508.D	05/08/24	22:39	07:43	Initial cal verification 50

6.5.1  
6

# Instrument Performance Check (DFTPP)

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Sample:</b> ECJ296-DFTPP	<b>Injection Date:</b> 05/08/24
<b>Lab File ID:</b> CJ6488.D	<b>Injection Time:</b> 14:56
<b>Instrument ID:</b> GCMSCJ	

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ECJ296-ICV296	CJ6509.D	05/08/24	22:58	08:02	Initial cal verification 50

6.5.1

6

# Instrument Performance Check (DFTPP)

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Sample:</b> ECJ297-DFTPP	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> CJ6510.D	<b>Injection Time:</b> 15:28
<b>Instrument ID:</b> GCMSCJ	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	80064	41.0	Pass
68	Less than 2.0% of mass 69	778	0.40 (0.83) <sup>a</sup>	Pass
69	Mass 69 relative abundance	93747	48.0	Pass
70	Less than 2.0% of mass 69	190	0.10 (0.20) <sup>a</sup>	Pass
127	40.0 - 60.0% of mass 198	102120	52.2	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	195475	100.0	Pass
199	5.0 - 9.0% of mass 198	12772	6.53	Pass
275	10.0 - 31.0% of mass 198	44600	22.8	Pass
365	1.0 - 100.0% of mass 198	5593	2.86	Pass
441	Present, but less than mass 443	20928	10.7 (78.3) <sup>b</sup>	Pass
442	40.0 - 100.0% of mass 198	134872	69.0	Pass
443	17.0 - 23.0% of mass 442	26713	13.7 (19.8) <sup>c</sup>	Pass

- (a) Value is % of mass 69
- (b) Value is % of mass 443
- (c) Value is % of mass 442

**This check applies to the following Samples, MS, MSD, Blanks, and Standards:**

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ECJ297-CC296	CJ6511.D	05/09/24	15:40	00:12	Continuing cal 50
ECJ297-CC296	CJ6512.D	05/09/24	15:59	00:31	Continuing cal 50
OP54484B-MB1	CJ6513.D	05/09/24	16:26	00:58	Method Blank
OP54484B-BS1	CJ6514.D	05/09/24	16:44	01:16	Blank Spike
OP54484B-BSD	CJ6515.D	05/09/24	17:03	01:35	Blank Spike Duplicate
OP54460-MB1	CJ6516.D	05/09/24	17:22	01:54	Method Blank
OP54460-BS1	CJ6517.D	05/09/24	17:41	02:13	Blank Spike
ZZZZZZ	CJ6518.D	05/09/24	18:00	02:32	(unrelated sample)
ZZZZZZ	CJ6519.D	05/09/24	18:18	02:50	(unrelated sample)
ZZZZZZ	CJ6520.D	05/09/24	18:37	03:09	(unrelated sample)
ZZZZZZ	CJ6521.D	05/09/24	18:56	03:28	(unrelated sample)
ZZZZZZ	CJ6522.D	05/09/24	19:15	03:47	(unrelated sample)
ZZZZZZ	CJ6523.D	05/09/24	19:34	04:06	(unrelated sample)
ZZZZZZ	CJ6524.D	05/09/24	19:52	04:24	(unrelated sample)
JD87833-3	CJ6525.D	05/09/24	20:11	04:43	SB-3
JD87833-11	CJ6526.D	05/09/24	20:30	05:02	SB-11
OP54460-MS	CJ6527.D	05/09/24	20:49	05:21	Matrix Spike
OP54460-MSD	CJ6528.D	05/09/24	21:07	05:39	Matrix Spike Duplicate
JD87833-2	CJ6529.D	05/09/24	21:26	05:58	SB-2

6.5.2  
6

# Instrument Performance Check (DFTPP)

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Sample:</b> ECJ297-DFTPP	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> CJ6510.D	<b>Injection Time:</b> 15:28
<b>Instrument ID:</b> GCMSCJ	

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
JD87833-4	CJ6530.D	05/09/24	21:45	06:17	SB-4
JD87833-5	CJ6531.D	05/09/24	22:03	06:35	SB-5
JD87833-6	CJ6532.D	05/09/24	22:22	06:54	SB-6
JD87833-8	CJ6533.D	05/09/24	22:41	07:13	SB-8
JD87833-10	CJ6534.D	05/09/24	23:00	07:32	SB-10
JD87833-12	CJ6535.D	05/09/24	23:19	07:51	SB-12
JD87833-13	CJ6536.D	05/09/24	23:38	08:10	SB-13
JD87833-16	CJ6537.D	05/09/24	23:57	08:29	DUPE 2
JD87833-1	CJ6538.D	05/10/24	00:16	08:48	SB-1
JD87833-7	CJ6539.D	05/10/24	00:35	09:07	SB-7
JD87833-9	CJ6540.D	05/10/24	00:54	09:26	SB-9
JD87833-14	CJ6541.D	05/10/24	01:13	09:45	SB-14
JD87833-15	CJ6542.D	05/10/24	01:32	10:04	DUPE 1

6.5.2

6

# Instrument Performance Check (DFTPP)

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Sample:</b> ECJ298-DFTPP	<b>Injection Date:</b> 05/10/24
<b>Lab File ID:</b> CJ6545.D	<b>Injection Time:</b> 09:19
<b>Instrument ID:</b> GCMSCJ	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	140691	42.2	Pass
68	Less than 2.0% of mass 69	1422	0.43 (0.89) <sup>a</sup>	Pass
69	Mass 69 relative abundance	158990	47.7	Pass
70	Less than 2.0% of mass 69	770	0.23 (0.48) <sup>a</sup>	Pass
127	40.0 - 60.0% of mass 198	173715	52.2	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	333013	100.0	Pass
199	5.0 - 9.0% of mass 198	22951	6.89	Pass
275	10.0 - 30.0% of mass 198	78293	23.5	Pass
365	1.0 - 100.0% of mass 198	9817	2.95	Pass
441	Present, but less than mass 443	35977	10.8 (78.6) <sup>b</sup>	Pass
442	40.0 - 100.0% of mass 198	227379	68.3	Pass
443	17.0 - 23.0% of mass 442	45787	13.7 (20.1) <sup>c</sup>	Pass

- (a) Value is % of mass 69
- (b) Value is % of mass 443
- (c) Value is % of mass 442

**This check applies to the following Samples, MS, MSD, Blanks, and Standards:**

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ECJ298-CC296	CJ6546.D	05/10/24	09:29	00:10	Continuing cal 50
ECJ298-CC296	CJ6547.D	05/10/24	09:48	00:29	Continuing cal 50
ECJ298-CC296	CJ6549.D	05/10/24	10:27	01:08	Continuing cal 5
OP54467-MB1	CJ6550.D	05/10/24	10:50	01:31	Method Blank
OP54467B-MB1	CJ6550.D	05/10/24	10:50	01:31	Method Blank
OP54467-BS1	CJ6551.D	05/10/24	11:09	01:50	Blank Spike
OP54467B-BS1	CJ6551.D	05/10/24	11:09	01:50	Blank Spike
OP54467-BSD	CJ6552.D	05/10/24	11:28	02:09	Blank Spike Duplicate
OP54467B-BSD	CJ6552.D	05/10/24	11:28	02:09	Blank Spike Duplicate
ZZZZZZ	CJ6553.D	05/10/24	11:48	02:29	(unrelated sample)
ZZZZZZ	CJ6554.D	05/10/24	12:07	02:48	(unrelated sample)
JD87833-17	CJ6555.D	05/10/24	12:26	03:07	FIELD BLANK
ZZZZZZ	CJ6556.D	05/10/24	12:45	03:26	(unrelated sample)
ZZZZZZ	CJ6557.D	05/10/24	13:04	03:45	(unrelated sample)
ZZZZZZ	CJ6558.D	05/10/24	13:23	04:04	(unrelated sample)
ZZZZZZ	CJ6559.D	05/10/24	13:42	04:23	(unrelated sample)
ZZZZZZ	CJ6560.D	05/10/24	14:00	04:41	(unrelated sample)
ZZZZZZ	CJ6561.D	05/10/24	14:19	05:00	(unrelated sample)
ZZZZZZ	CJ6562.D	05/10/24	14:38	05:19	(unrelated sample)

6.5.3  
6

# Instrument Performance Check (DFTPP)

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Sample:</b>	ECJ298-DFTPP	<b>Injection Date:</b>	05/10/24
<b>Lab File ID:</b>	CJ6545.D	<b>Injection Time:</b>	09:19
<b>Instrument ID:</b>	GCMSCJ		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	CJ6563.D	05/10/24	14:57	05:38	(unrelated sample)
ZZZZZZ	CJ6564.D	05/10/24	15:16	05:57	(unrelated sample)
ZZZZZZ	CJ6565.D	05/10/24	15:35	06:16	(unrelated sample)
ZZZZZZ	CJ6566.D	05/10/24	15:54	06:35	(unrelated sample)
ZZZZZZ	CJ6575.D	05/10/24	16:12	06:53	(unrelated sample)
ZZZZZZ	CJ6576.D	05/10/24	16:31	07:12	(unrelated sample)
ZZZZZZ	CJ6577.D	05/10/24	16:50	07:31	(unrelated sample)
ZZZZZZ	CJ6567.D	05/10/24	17:50	08:31	(unrelated sample)
ZZZZZZ	CJ6568.D	05/10/24	18:27	09:08	(unrelated sample)
ZZZZZZ	CJ6569.D	05/10/24	18:46	09:27	(unrelated sample)
ZZZZZZ	CJ6570.D	05/10/24	19:05	09:46	(unrelated sample)
ZZZZZZ	CJ6571.D	05/10/24	19:24	10:05	(unrelated sample)
ZZZZZZ	CJ6572.D	05/10/24	19:43	10:24	(unrelated sample)
ZZZZZZ	CJ6573.D	05/10/24	20:02	10:43	(unrelated sample)
ZZZZZZ	CJ6574.D	05/10/24	20:21	11:02	(unrelated sample)
ECJ299-CC296	CJ6583.D	05/10/24	23:40	14:21	Continuing cal 50
ECJ299-CC296	CJ6584.D	05/10/24	23:59	14:40	Continuing cal 50
OP54493-MB1	CJ6585.D	05/11/24	00:46	15:27	Method Blank
OP54493-BS1	CJ6586.D	05/11/24	01:06	15:47	Blank Spike
ZZZZZZ	CJ6587.D	05/11/24	01:24	16:05	(unrelated sample)
ZZZZZZ	CJ6588.D	05/11/24	01:43	16:24	(unrelated sample)
OP54493-MS	CJ6589.D	05/11/24	02:02	16:43	Matrix Spike
OP54493-MSD	CJ6590.D	05/11/24	02:21	17:02	Matrix Spike Duplicate
OP54493-MS2	CJ6591.D	05/11/24	02:40	17:21	Matrix Spike
OP54493-MSD2	CJ6592.D	05/11/24	02:59	17:40	Matrix Spike Duplicate
ZZZZZZ	CJ6593.D	05/11/24	03:18	17:59	(unrelated sample)
ZZZZZZ	CJ6594.D	05/11/24	03:37	18:18	(unrelated sample)
ZZZZZZ	CJ6595.D	05/11/24	03:56	18:37	(unrelated sample)
ZZZZZZ	CJ6596.D	05/11/24	04:15	18:56	(unrelated sample)
ZZZZZZ	CJ6597.D	05/11/24	04:33	19:14	(unrelated sample)
ZZZZZZ	CJ6598.D	05/11/24	04:52	19:33	(unrelated sample)
ZZZZZZ	CJ6599.D	05/11/24	05:11	19:52	(unrelated sample)
ZZZZZZ	CJ6600.D	05/11/24	05:30	20:11	(unrelated sample)
ZZZZZZ	CJ6601.D	05/11/24	05:49	20:30	(unrelated sample)
ZZZZZZ	CJ6602.D	05/11/24	06:08	20:49	(unrelated sample)
ZZZZZZ	CJ6603.D	05/11/24	06:27	21:08	(unrelated sample)
ZZZZZZ	CJ6604.D	05/11/24	06:46	21:27	(unrelated sample)
ZZZZZZ	CJ6605.D	05/11/24	07:05	21:46	(unrelated sample)
ZZZZZZ	CJ6606.D	05/11/24	07:24	22:05	(unrelated sample)
JD87898-4	CJ6607.D	05/11/24	07:43	22:24	(used for QC only; not part of job JD87833)
ZZZZZZ	CJ6608.D	05/11/24	08:02	22:43	(unrelated sample)
ZZZZZZ	CJ6609.D	05/11/24	08:21	23:02	(unrelated sample)

# Instrument Performance Check (DFTPP)

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Sample:</b> ECJ298-DFTPP	<b>Injection Date:</b> 05/10/24
<b>Lab File ID:</b> CJ6545.D	<b>Injection Time:</b> 09:19
<b>Instrument ID:</b> GCMSCJ	

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
JD87898-7	CJ6610.D	05/11/24	08:40	23:21	(used for QC only; not part of job JD87833)
ZZZZZZ	CJ6611.D	05/11/24	08:59	23:40	(unrelated sample)
ZZZZZZ	CJ6612.D	05/11/24	09:19	24:00	(unrelated sample)

6.5.3

6

# Instrument Performance Check (DFTPP)

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Sample:</b> EM8478-DFTPP	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> M195470.D	<b>Injection Time:</b> 16:29
<b>Instrument ID:</b> GCMSM	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	93242	53.4	Pass
68	Less than 2.0% of mass 69	616	0.35 (0.66) <sup>a</sup>	Pass
69	Mass 69 relative abundance	93962	53.8	Pass
70	Less than 2.0% of mass 69	651	0.37 (0.69) <sup>a</sup>	Pass
127	40.0 - 60.0% of mass 198	95493	54.7	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	174672	100.0	Pass
199	5.0 - 9.0% of mass 198	11956	6.84	Pass
275	10.0 - 30.0% of mass 198	43509	24.9	Pass
365	1.0 - 100.0% of mass 198	4883	2.80	Pass
441	Present, but less than mass 443	25278	14.5 (76.7) <sup>b</sup>	Pass
442	40.0 - 100.0% of mass 198	165106	94.5	Pass
443	17.0 - 23.0% of mass 442	32950	18.9 (20.0) <sup>c</sup>	Pass

- (a) Value is % of mass 69
- (b) Value is % of mass 443
- (c) Value is % of mass 442

**This check applies to the following Samples, MS, MSD, Blanks, and Standards:**

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EM8478-ICC8478	M195471.D	05/09/24	16:41	00:12	Initial cal 50
EM8478-IC8478	M195472.D	05/09/24	17:04	00:35	Initial cal 1
EM8478-IC8478	M195473.D	05/09/24	17:27	00:58	Initial cal 2
EM8478-IC8478	M195474.D	05/09/24	17:51	01:22	Initial cal 5
EM8478-IC8478	M195475.D	05/09/24	18:12	01:43	Initial cal 10
EM8478-IC8478	M195476.D	05/09/24	18:33	02:04	Initial cal 25
EM8478-IC8478	M195477.D	05/09/24	18:55	02:26	Initial cal 80
EM8478-IC8478	M195478.D	05/09/24	19:16	02:47	Initial cal 100
EM8478-IC8478	M195479.D	05/09/24	19:39	03:10	Initial cal 50
EM8478-IC8478	M195480.D	05/09/24	20:00	03:31	Initial cal 1
EM8478-IC8478	M195481.D	05/09/24	20:23	03:54	Initial cal 2
EM8478-IC8478	M195482.D	05/09/24	20:46	04:17	Initial cal 5
EM8478-IC8478	M195483.D	05/09/24	21:07	04:38	Initial cal 10
EM8478-IC8478	M195484.D	05/09/24	21:28	04:59	Initial cal 25
EM8478-IC8478	M195485.D	05/09/24	21:50	05:21	Initial cal 80
EM8478-IC8478	M195486.D	05/09/24	22:11	05:42	Initial cal 100
EM8478-ICV8478	M195487.D	05/09/24	22:33	06:04	Initial cal verification 50
EM8478-ICV8478	M195488.D	05/09/24	22:54	06:25	Initial cal verification 50
EM8478-ICV8478	M195489.D	05/09/24	23:15	06:46	Initial cal verification 50



# Instrument Performance Check (DFTPP)

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Sample:</b> EM8478-DFTPP	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> M195470.D	<b>Injection Time:</b> 16:29
<b>Instrument ID:</b> GCMSM	

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EM8478-ICV8478	M195490.D	05/09/24	23:37	07:08	Initial cal verification 50
EM8479-CC8467	M195493.D	05/10/24	10:44	18:15	Continuing cal 10
EM8479-CC8467	M195494.D	05/10/24	11:07	18:38	Continuing cal 10
ZZZZZZ	M195495.D	05/10/24	11:38	19:09	(unrelated sample)
ZZZZZZ	M195496.D	05/10/24	11:59	19:30	(unrelated sample)
ZZZZZZ	M195497.D	05/10/24	12:19	19:50	(unrelated sample)
ZZZZZZ	M195498.D	05/10/24	12:40	20:11	(unrelated sample)
ZZZZZZ	M195499.D	05/10/24	13:01	20:32	(unrelated sample)
ZZZZZZ	M195500.D	05/10/24	13:22	20:53	(unrelated sample)
ZZZZZZ	M195501.D	05/10/24	13:43	21:14	(unrelated sample)

6.5.4  
6

# Internal Standard Area Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> ECJ297-CC296	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> CJ6511.D	<b>Injection Time:</b> 15:40
<b>Instrument ID:</b> GCMSCJ	<b>Method:</b> SW846 8270E

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Initial Cal <sup>a</sup>	388362	4.66	1338976	5.47	756975	6.66	1383515	7.87	1108712	10.37	1144889	11.72
Check Std <sup>b</sup>	440228	4.66	1508153	5.47	838569	6.66	1511581	7.87	1205841	10.37	1235821	11.71
Upper Limit <sup>c</sup>	880456	4.83	3016306	5.64	1677138	6.83	3023162	8.04	2411682	10.54	2471642	11.88
Lower Limit <sup>d</sup>	220114	4.49	754077	5.30	419285	6.49	755791	7.70	602921	10.20	617911	11.54

Lab Sample ID	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
OP54484B-MB1	493223	4.66	1734467	5.47	962181	6.66	1793779	7.87	1414607	10.37	807858	11.71
OP54484B-BS1	415367	4.66	1435584	5.47	797039	6.65	1440399	7.87	1184193	10.36	1236259	11.71
OP54484B-BSD	419385	4.66	1423259	5.47	777749	6.65	1415760	7.87	1134249	10.36	669819	11.71
OP54460-MB1	406045	4.66	1462855	5.47	806560	6.65	1445161	7.86	1127868	10.36	1169922	11.70
OP54460-BS1	378398	4.66	1302512	5.47	715238	6.65	1267255	7.87	1042701	10.36	1063367	11.71
ZZZZZZ	400232	4.66	1382782	5.47	795430	6.65	1357386	7.87	1045273	10.36	1097968	11.71
ZZZZZZ	288723	4.66	1037937	5.47	584952	6.65	1075812	7.86	806554	10.36	810045	11.70
ZZZZZZ	302758	4.66	1075692	5.47	607705	6.65	1095840	7.86	825680	10.35	840689	11.70
ZZZZZZ	420830	4.66	1500810	5.47	842138	6.65	1504206	7.87	1093302	10.36	1098131	11.71
ZZZZZZ	410335	4.66	1462160	5.47	832053	6.65	1498116	7.87	1056017	10.37	1082901	11.71
ZZZZZZ	400872	4.66	1448847	5.47	825068	6.65	1517736	7.87	1067402	10.36	1059682	11.71
ZZZZZZ	371101	4.66	1350565	5.47	759204	6.65	1354660	7.87	965225	10.37	962116	11.71
JD87833-3 <sup>e</sup>	371394	4.66	1320304	5.47	765413	6.66	1361747	7.87	942754	10.37	959803	11.71
JD87833-11 <sup>e</sup>	383650	4.66	1365898	5.47	775833	6.66	1398054	7.87	982335	10.36	979342	11.71
OP54460-MS	368084	4.66	1260425	5.47	702967	6.66	1248334	7.87	875560	10.37	909220	11.72
OP54460-MSD	325780	4.66	1155021	5.47	643949	6.66	1125742	7.87	812237	10.37	833402	11.72
JD87833-2	351757	4.66	1255598	5.47	704743	6.66	1217997	7.87	860982	10.37	881333	11.71
JD87833-4	366062	4.66	1274378	5.47	720354	6.66	1262132	7.87	880759	10.37	914016	11.72
JD87833-5	353722	4.66	1237394	5.47	691359	6.66	1218173	7.87	857333	10.37	895253	11.72
JD87833-6	342593	4.66	1228725	5.47	681462	6.66	1201770	7.87	855342	10.37	877926	11.72
JD87833-8	351776	4.66	1236733	5.47	689793	6.66	1237774	7.87	873540	10.37	899719	11.72
JD87833-10	338801	4.66	1197453	5.47	671880	6.66	1193602	7.87	852283	10.37	867275	11.71
JD87833-12	345198	4.66	1198124	5.47	666886	6.66	1177594	7.87	836561	10.37	874160	11.71
JD87833-13	353006	4.66	1238601	5.47	688785	6.66	1211117	7.87	877322	10.37	876016	11.71
JD87833-16	350487	4.66	1242220	5.47	702587	6.66	1226551	7.87	877665	10.37	892449	11.72
JD87833-1	341096	4.66	1195650	5.47	664891	6.66	1157966	7.87	835035	10.37	838133	11.72
JD87833-7	337378	4.66	1172941	5.47	648873	6.66	1146583	7.87	810452	10.37	846065	11.72
JD87833-9	330644	4.66	1153413	5.47	653496	6.66	1145424	7.87	810050	10.37	823369	11.72
JD87833-14	321346	4.67	1128839	5.47	623856	6.66	1083567	7.87	777218	10.37	804995	11.72
JD87833-15	327409	4.67	1164205	5.47	641642	6.66	1128523	7.87	807431	10.37	826260	11.72

**IS 1** = 1,4-Dichlorobenzene-d4  
**IS 2** = Naphthalene-d8

6.6.1  
6

## Internal Standard Area Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> ECJ297-CC296	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> CJ6511.D	<b>Injection Time:</b> 15:40
<b>Instrument ID:</b> GCMSCJ	<b>Method:</b> SW846 8270E

Lab	IS 1	IS 2	IS 3	IS 4	IS 5	IS 6				
Sample ID	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT

**IS 3** = Acenaphthene-D10  
**IS 4** = Phenanthrene-d10  
**IS 5** = Chrysene-d12  
**IS 6** = Perylene-d12

- (a) Initial Cal is: ECJ296-ICC296 CJ6490.D 05/08/24 16:42
- (b) Check Std Limit = -50 to + 100% of initial cal area.
- (c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
- (d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.
- (e) Dilution required due to matrix interference.

# Internal Standard Area Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> ECJ298-CC296	<b>Injection Date:</b> 05/10/24
<b>Lab File ID:</b> CJ6546.D	<b>Injection Time:</b> 09:29
<b>Instrument ID:</b> GCMSCJ	<b>Method:</b> SW846 8270E

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Initial Cal <sup>a</sup>	388362	4.66	1338976	5.47	756975	6.66	1383515	7.87	1108712	10.37	1144889	11.72
Check Std <sup>b</sup>	355070	4.65	1258341	5.46	724883	6.64	1338967	7.86	1030003	10.35	962481	11.69
Upper Limit <sup>c</sup>	710140	4.82	2516682	5.63	1449766	6.81	2677934	8.03	2060006	10.52	1924962	11.86
Lower Limit <sup>d</sup>	177535	4.48	629171	5.29	362442	6.47	669484	7.69	515002	10.18	481241	11.52

Lab Sample ID	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
OP54467-MB1	306406	4.65	1119253	5.46	658396	6.64	1238122	7.85	974687	10.34	956983	11.69
OP54467B-MB1	306406	4.65	1119253	5.46	658396	6.64	1238122	7.85	974687	10.34	956983	11.69
OP54467-BS1	330173	4.65	1171530	5.46	682211	6.64	1265481	7.85	1026959	10.34	1002617	11.69
OP54467B-BS1	330173	4.65	1171530	5.46	682211	6.64	1265481	7.85	1026959	10.34	1002617	11.69
OP54467B-BSD	314961	4.65	1124994	5.46	649094	6.64	1215664	7.85	961769	10.34	913472	11.69
OP54467-BSD	314961	4.65	1124994	5.46	649094	6.64	1215664	7.85	961769	10.34	913472	11.69
ZZZZZZ	351485	4.65	1286016	5.46	747977	6.64	1380596	7.85	1050574	10.34	961234	11.69
ZZZZZZ	385916	4.65	1438954	5.46	844167	6.64	1549152	7.85	1215197	10.34	1153030	11.69
JD87833-17	373478	4.65	1363075	5.46	803570	6.64	1500212	7.85	1166943	10.34	1162453	11.69
ZZZZZZ	401139	4.65	1434631	5.46	847859	6.64	1550143	7.85	1236514	10.34	1186246	11.69
ZZZZZZ	324569	4.65	1199479	5.46	683345	6.64	1316671	7.85	1032126	10.34	352781 <sup>e</sup>	11.68
ZZZZZZ	346303	4.65	1267176	5.46	739873	6.64	1345141	7.85	1071543	10.34	1071898	11.69
ZZZZZZ	349229	4.65	1301920	5.46	760483	6.64	1417852	7.85	1108680	10.34	1128252	11.69
ZZZZZZ	373010	4.65	1371406	5.46	795860	6.64	1480874	7.85	1146749	10.34	836038	11.68
ZZZZZZ	365773	4.65	1321072	5.46	772627	6.64	1415204	7.85	1109242	10.34	1098852	11.68
ZZZZZZ	388595	4.65	1439879	5.46	826886	6.64	1507199	7.85	1188407	10.34	1162316	11.68
ZZZZZZ	373578	4.65	1349717	5.46	786792	6.64	1452282	7.85	1150545	10.34	1132347	11.68
ZZZZZZ	399192	4.65	1460536	5.46	834978	6.64	1546064	7.85	1229873	10.34	863823	11.68
ZZZZZZ	388657	4.65	1427705	5.46	815447	6.64	1473994	7.85	1143778	10.34	1052261	11.68
ZZZZZZ	372851	4.65	1365704	5.46	804039	6.64	1489490	7.85	1172522	10.34	826689	11.68
ZZZZZZ	312278	4.65	1148873	5.46	661814	6.64	1186771	7.85	920196	10.34	939178	11.68
ZZZZZZ	356038	4.65	1293405	5.46	738757	6.64	1329235	7.85	1015768	10.34	1034890	11.69
ZZZZZZ	368433	4.65	1350574	5.46	787209	6.64	1478202	7.85	1159542	10.34	1138964	11.68
ZZZZZZ	318327	4.66	1185348	5.46	664454	6.65	1135925	7.86	805627	10.35	729190	11.70
ZZZZZZ	326347	4.65	1192216	5.46	683906	6.65	1227371	7.86	796786	10.35	804754	11.70
ZZZZZZ	288044	4.65	950702	5.46	526690	6.65	953638	7.87	725828	10.35	768419	11.71
ZZZZZZ	309073	4.65	1076000	5.46	596235	6.65	1059240	7.86	761313	10.36	809439	11.71
ZZZZZZ	274690	4.65	1055190	5.46	649930	6.65	1188683	7.86	806736	10.35	815636	11.70
ZZZZZZ	269066	4.65	930096	5.46	561973	6.65	1039793	7.87	788142	10.35	790427	11.70
ZZZZZZ	291340	4.65	1072862	5.46	647621	6.65	1178119	7.86	806232	10.35	786365	11.70
ZZZZZZ	291804	4.65	1090343	5.46	661288	6.65	1215383	7.86	828649	10.35	818143	11.70

IS 1 = 1,4-Dichlorobenzene-d4

6.6.2  
6

# Internal Standard Area Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> ECJ298-CC296	<b>Injection Date:</b> 05/10/24
<b>Lab File ID:</b> CJ6546.D	<b>Injection Time:</b> 09:29
<b>Instrument ID:</b> GCMSCJ	<b>Method:</b> SW846 8270E

Lab	IS 1	IS 2	IS 3	IS 4	IS 5	IS 6				
Sample ID	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT

- IS 2 = Naphthalene-d8
- IS 3 = Acenaphthene-D10
- IS 4 = Phenanthrene-d10
- IS 5 = Chrysene-d12
- IS 6 = Perylene-d12

- (a) Initial Cal is: ECJ296-ICC296 CJ6490.D 05/08/24 16:42
- (b) Check Std Limit = -50 to + 100% of initial cal area.
- (c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
- (d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.
- (e) Internal standard failing low.

6.6.2  
6

# Internal Standard Area Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> ECJ302-CC296	<b>Injection Date:</b> 05/13/24
<b>Lab File ID:</b> CJ6675.D	<b>Injection Time:</b> 08:25
<b>Instrument ID:</b> GCMSCJ	<b>Method:</b> SW846 8270E

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Initial Cal <sup>a</sup>	388362	4.66	1338976	5.47	756975	6.66	1383515	7.87	1108712	10.37	1144889	11.72
Check Std <sup>b</sup>	263007	4.60	917221	5.41	528254	6.59	992188	7.79	747065	10.28	697707	11.61
Upper Limit <sup>c</sup>	526014	4.77	1834442	5.58	1056508	6.76	1984376	7.96	1494130	10.45	1395414	11.78
Lower Limit <sup>d</sup>	131504	4.43	458611	5.24	264127	6.42	496094	7.62	373533	10.11	348854	11.44

Lab Sample ID	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
OP54535-MB1	248846	4.60	897613	5.40	514303	6.59	921926	7.79	673204	10.28	614308	11.61
OP54535-BS1	261958	4.60	894083	5.41	512309	6.59	917202	7.79	721857	10.28	669215	11.61
ZZZZZZ	221151	4.60	800690	5.40	468396	6.59	880595	7.79	682368	10.28	650683	11.61
JD87833-5	253902	4.60	891714	5.40	515076	6.59	942003	7.79	719748	10.28	698307	11.61
JD87833-15	248539	4.60	902996	5.40	516050	6.59	929339	7.79	702274	10.28	684568	11.61
OP54535-MS	229337	4.60	792837	5.40	442343	6.59	783531	7.79	639317	10.28	660117	11.61
OP54535-MSD	280414	4.60	937850	5.41	499639	6.59	821280	7.79	605384	10.28	653410	11.62
JD88080-1	232220	4.60	808753	5.40	459505	6.59	805299	7.79	617208	10.28	640254	11.62
ZZZZZZ	259883	4.60	884529	5.40	477603	6.59	810654	7.79	556027	10.28	591991	11.62
ZZZZZZ	240763	4.61	835275	5.41	480465	6.59	857669	7.79	615339	10.29	644913	11.62
ZZZZZZ	243349	4.61	836558	5.41	478005	6.59	852935	7.79	595447	10.28	607016	11.62
ZZZZZZ	271370	4.61	921955	5.41	495438	6.59	860631	7.79	589219	10.28	617843	11.62
ZZZZZZ	430274	4.61	1491022	5.41	811338	6.59	1454384	7.79	1090797	10.32	1159423	11.70
ZZZZZZ	379234	4.61	1330996	5.41	740930	6.60	1130363	7.81	977623	10.32	1043266	11.69
ZZZZZZ	374356	4.61	1249483	5.41	644386	6.60	1100907	7.82	1001862	10.34	1098666	11.72
ZZZZZZ	235091	4.61	784668	5.41	409110	6.60	627734	7.81	457619	10.30	533015	11.64
ZZZZZZ	234692	4.61	807633	5.41	431908	6.60	692601	7.80	438564	10.29	498546	11.63
ZZZZZZ	248635	4.61	842293	5.41	463005	6.59	759216	7.80	457466	10.29	505524	11.63
ZZZZZZ	248980	4.61	856777	5.41	461581	6.59	773402	7.80	457478	10.29	505989	11.63
JD87882-1	458846	4.61	1535133	5.41	849057	6.59	1443946	7.80	926789	10.29	985310	11.63
ZZZZZZ	419610	4.61	1427252	5.41	770717	6.59	1301744	7.80	912540	10.30	975970	11.65
ZZZZZZ	351239	4.61	1228519	5.41	674148	6.59	1139907	7.80	825062	10.30	875717	11.65
ZZZZZZ	385338	4.61	1346978	5.41	749070	6.60	1336302	7.81	941746	10.30	948169	11.65
ZZZZZZ	229114	4.61	789844	5.41	439643	6.59	748695	7.80	511713	10.29	527262	11.64
ZZZZZZ	234781	4.61	800644	5.41	443865	6.60	760246	7.80	528723	10.29	549077	11.63
ZZZZZZ	230249	4.61	809165	5.41	462272	6.59	809893	7.80	536253	10.29	547312	11.63
ZZZZZZ	217830	4.61	752836	5.41	435527	6.59	778552	7.80	567441	10.29	556176	11.63
ZZZZZZ	236234	4.61	805822	5.41	451316	6.59	793541	7.80	561149	10.29	564626	11.63
ZZZZZZ	224566	4.61	765099	5.41	436312	6.59	768044	7.80	558900	10.29	555037	11.63
ZZZZZZ	226477	4.61	775220	5.41	436660	6.59	770818	7.80	571038	10.29	575388	11.63
ZZZZZZ	206825	4.61	719646	5.41	411940	6.59	741643	7.80	538577	10.29	537727	11.64
ZZZZZZ	226967	4.61	819211	5.41	471323	6.60	833792	7.80	594495	10.30	603413	11.64

6.6.3  
6

# Internal Standard Area Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> ECJ302-CC296	<b>Injection Date:</b> 05/13/24
<b>Lab File ID:</b> CJ6675.D	<b>Injection Time:</b> 08:25
<b>Instrument ID:</b> GCMSCJ	<b>Method:</b> SW846 8270E

Lab	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
Sample ID	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT

- IS 1 = 1,4-Dichlorobenzene-d4
- IS 2 = Naphthalene-d8
- IS 3 = Acenaphthene-D10
- IS 4 = Phenanthrene-d10
- IS 5 = Chrysene-d12
- IS 6 = Perylene-d12

- (a) Initial Cal is: ECJ296-ICC296 CJ6490.D 05/08/24 16:42
- (b) Check Std Limit = -50 to + 100% of initial cal area.
- (c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
- (d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.

6.6.3  
6

# Internal Standard Area Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> EM8483-CC8478	<b>Injection Date:</b> 05/14/24
<b>Lab File ID:</b> M195571.D	<b>Injection Time:</b> 09:54
<b>Instrument ID:</b> GCMSM	<b>Method:</b> SW846 8270E

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Initial Cal <sup>a</sup>	144180	3.70	612564	4.44	347459	5.67	744423	7.04	701301	10.03	789044	11.63
Check Std <sup>b</sup>	140797	3.69	600728	4.43	341816	5.66	717599	7.02	653385	10.02	691122	11.63
Upper Limit <sup>c</sup>	281594	3.86	1201456	4.60	683632	5.83	1435198	7.19	1306770	10.19	1382244	11.80
Lower Limit <sup>d</sup>	70399	3.52	300364	4.26	170908	5.49	358800	6.85	326693	9.85	345561	11.46

Lab Sample ID	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
ZZZZZZ	125462	3.69	511502	4.43	281497	5.66	585116	7.02	545118	10.02	622671	11.62
ZZZZZZ	124489	3.69	503483	4.43	283692	5.66	589741	7.02	546389	10.01	635679	11.62
ZZZZZZ	117784	3.69	491416	4.43	275576	5.66	576862	7.02	541115	10.02	622089	11.62
ZZZZZZ	136471	3.69	538744	4.43	295595	5.66	587254	7.02	540879	10.01	616041	11.62
JD87833-17 <sup>e</sup>	130260	3.69	522071	4.43	281784	5.66	563768	7.02	512881	10.01	589730	11.62
ZZZZZZ	130673	3.69	514431	4.43	284614	5.66	589711	7.02	557569	10.01	631669	11.62
ZZZZZZ	124309	3.69	490867	4.43	276154	5.66	592101	7.02	559373	10.02	639113	11.62
ZZZZZZ	125097	3.69	521087	4.43	293103	5.66	592845	7.02	584784	10.01	671614	11.62
ZZZZZZ	127561	3.69	520382	4.43	289187	5.66	599264	7.02	563913	10.02	659103	11.62
ZZZZZZ	137392	3.69	550916	4.43	305562	5.66	616167	7.02	560823	10.02	642478	11.62
ZZZZZZ	115306	3.69	470016	4.43	262184	5.66	541995	7.02	502774	10.02	592361	11.62
ZZZZZZ	124730	3.69	491377	4.43	277414	5.66	564284	7.02	518729	10.01	616549	11.62
ZZZZZZ	129732	3.69	511322	4.43	287578	5.66	594245	7.02	553539	10.02	638531	11.62
ZZZZZZ	274540	3.69	1133743	4.43	583000	5.66	1231349	7.02	1095490	10.05	1203468	11.69
ZZZZZZ	279399	3.69	1103152	4.44	562233	5.67	1093458	7.03	901635	10.03	914517	11.64
ZZZZZZ	249480	3.69	1006929	4.43	548348	5.66	1042960	7.03	821521	10.03	912610	11.63
ZZZZZZ	117862	3.69	479083	4.43	192642	5.66	510375	7.02	313615 <sup>f</sup>	10.02	29445 <sup>f</sup>	11.62
ZZZZZZ	249424	3.69	1003551	4.43	546153	5.66	1049571	7.02	820823	10.02	826021	11.63
ZZZZZZ	262097	3.69	1083096	4.43	589034	5.66	1121880	7.03	823792	10.02	863358	11.63
ZZZZZZ	266099	3.69	1065461	4.43	561950	5.66	1112473	7.02	841869	10.02	862282	11.63
ZZZZZZ	126357	3.69	515524	4.43	325597	5.66	675648	7.02	613590	10.02	659732	11.63

- IS 1 = 1,4-Dichlorobenzene-d4
- IS 2 = Naphthalene-d8
- IS 3 = Acenaphthene-D10
- IS 4 = Phenanthrene-d10
- IS 5 = Chrysene-d12
- IS 6 = Perylene-d12

(a) Initial Cal is: EM8478-ICC8478 M195471.D 05/09/24 16:41  
 (b) Check Std Limit = -50 to + 100% of initial cal area.  
 (c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.  
 (d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.

6.6.4  
6



# Internal Standard Area Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> EM8483-CC8478	<b>Injection Date:</b> 05/14/24
<b>Lab File ID:</b> M195571.D	<b>Injection Time:</b> 09:54
<b>Instrument ID:</b> GCMSM	<b>Method:</b> SW846 8270E

Lab	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
Sample ID	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT

- (e) Sample extracted outside the holding time. Confirmation run.
- (f) Response outside of control limits; ISTD does not reference any reported target analytes.

6.6.4  
6

# Surrogate Recovery Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Method:</b> SW846 8270E	<b>Matrix:</b> AQ
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
JD87833-17	CJ6555.D	35	25	75	66	65	52
JD87833-17	M195578.D	39	26	83	74	83	67
OP54467-BS1	CJ6551.D	28	22	56	64	66	40
OP54467-BSD	CJ6552.D	34	29	60	82	81	56
OP54467-MB1	CJ6550.D	34	26	60	87	83	55

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	10-71%
S2 = Phenol-d5	10-58%
S3 = 2,4,6-Tribromophenol	22-144%
S4 = Nitrobenzene-d5	28-118%
S5 = 2-Fluorobiphenyl	34-116%
S6 = Terphenyl-d14	10-127%

# Surrogate Recovery Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Method:</b> SW846 8270E	<b>Matrix:</b> SO
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
JD87833-1	CJ6538.D	68	72	90	72	77	81
JD87833-2	CJ6529.D	74	75	91	74	79	81
JD87833-3	CJ6525.D	65	68	77	67	71	75
JD87833-4	CJ6530.D	74	76	95	79	83	87
JD87833-5	CJ6680.D	71	74	95	73	82	86
JD87833-5	CJ6531.D	75	80	103	79	87	92
JD87833-6	CJ6532.D	72	76	93	73	80	84
JD87833-7	CJ6539.D	66	72	89	72	79	79
JD87833-8	CJ6533.D	61	65	79	64	69	74
JD87833-9	CJ6540.D	70	75	94	75	80	83
JD87833-10	CJ6534.D	74	79	98	76	82	89
JD87833-11	CJ6526.D	69	71	83	69	76	80
JD87833-12	CJ6535.D	73	75	95	76	79	86
JD87833-13	CJ6536.D	74	76	97	77	82	88
JD87833-14	CJ6541.D	71	74	91	71	78	80
JD87833-15	CJ6681.D	66	70	84	67	75	80
JD87833-15	CJ6542.D	74	77	93	75	82	82
JD87833-16	CJ6537.D	70	74	90	72	76	80
OP54460-BS1	CJ6517.D	75	80	95	76	84	87
OP54460-MB1	CJ6516.D	75	78	79	74	79	85
OP54460-MS	CJ6527.D	62	66	78	64	70	74
OP54460-MSD	CJ6528.D	57	60	72	59	62	65

**Surrogate Compounds**

**Recovery Limits**

<b>S1</b> = 2-Fluorophenol	10-99%
<b>S2</b> = Phenol-d5	10-96%
<b>S3</b> = 2,4,6-Tribromophenol	10-123%
<b>S4</b> = Nitrobenzene-d5	10-109%
<b>S5</b> = 2-Fluorobiphenyl	11-109%
<b>S6</b> = Terphenyl-d14	10-120%

6.7.2  
6

# Initial Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** ECJ296-ICC296  
**Lab FileID:** CJ6490.D

## Response Factor Report GCMSCJ

Method : D:\MassHunter\GC...methods\mCJ296.m (RTE Integrator)  
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
Last Update : Thu May 09 12:05:48 2024  
Response via : Initial Calibration

### Calibration Files

2 =cj6492.D 5 =cj6493.D 25 =cj6495.D 80 =cj6496.D  
100 =cj6497.D 50 =cj6490.D 1 =cj6491.D 10 =cj6494.D

Compound	2	5	25	80	100	50	1	10	Avg	%RSD
-----										
1) I 1,4-Dichlorobenzene-d	-----ISTD-----									
2) 1,4-Dioxane	0.508	0.548	0.573	0.538	0.583	0.588	0.495	0.508	0.543	6.75
3) Pyridine	1.223	1.320	1.506	1.441	1.592	1.597	1.230	1.339	1.406	10.71
4) N-Nitrosodim	0.702	0.710	0.800	0.745	0.822	0.824	0.675	0.722	0.750	7.73
5) 2-Fluorophen	1.045	1.147	1.215	1.156	1.267	1.279	0.991	1.097	1.150	8.94
6) Indene	1.978	2.113	2.152	1.917	2.058	2.189	2.027	2.024	2.057	4.40
7) Cumene	2.454	2.685	2.803	2.559	2.819	2.866	2.478	2.530	2.649	6.23
8) Phenol-d5	1.353	1.505	1.559	1.452	1.604	1.627	1.333	1.431	1.483	7.42
9) Phenol	1.470	1.595	1.675	1.568	1.731	1.751	1.447	1.544	1.598	7.10
10) Aniline	1.799	1.966	2.096	1.903	2.056	2.150	1.888	1.872	1.966	6.24
11) bis(2-Chloro	1.221	1.310	1.340	1.227	1.343	1.400	1.191	1.262	1.287	5.65
12) 2-Chlorophen	1.109	1.206	1.272	1.178	1.288	1.333	1.090	1.160	1.205	7.22
13) Decane	1.545	1.598	1.635	1.469	1.569	1.694	1.514	1.504	1.566	4.73
14) 1,3-Dichloro	1.308	1.421	1.467	1.335	1.438	1.493	1.265	1.367	1.387	5.82
15) 1,4-Dichloro	1.333	1.451	1.468	1.315	1.448	1.514	1.352	1.357	1.405	5.27
16) Benzyl alcoh	0.749	0.806	0.853	0.805	0.888	0.898	0.730	0.788	0.815	7.50
17) 1,2-Dichloro	1.326	1.369	1.421	1.252	1.389	1.425	1.239	1.310	1.341	5.34
18) Acetophenone	1.833	1.893	1.941	1.679	1.842	1.944	1.758	1.820	1.839	4.90
19) 2-Methylphen	1.045	1.134	1.162	1.057	1.163	1.195	1.053	1.062	1.109	5.49
20) 2,2'-oxybis(	0.345	0.367	0.383	0.345	0.376	0.390	0.348	0.348	0.363	5.13
21) 3&4-Methylph	1.082	1.174	1.215	1.061	1.176	1.217	1.071	1.135	1.141	5.58
22) n-Nitroso-di	0.877	0.951	0.966	0.871	0.959	0.984	0.897	0.917	0.928	4.66
23) Hexachloroet	0.468	0.550	0.559	0.504	0.561	0.582	0.499	0.522	0.531	7.29
-----										
24) I Naphthalene-d8	-----ISTD-----									
25) Nitrobenzene	0.373	0.400	0.439	0.393	0.435	0.462	0.372	0.403	0.410	7.92
26) Nitrobenzene	0.403	0.424	0.443	0.398	0.438	0.471	0.379	0.405	0.420	7.07
27) Quinoline	0.563	0.608	0.657	0.588	0.656	0.688	0.569	0.611	0.618	7.32
28) Isophorone	0.676	0.707	0.768	0.686	0.754	0.790	0.679	0.703	0.720	6.13
29) 2-Nitropheno	0.141	0.153	0.180	0.168	0.184	0.196	0.143	0.157	0.165	12.23
30) 2,4-Dimethyl	0.336	0.370	0.391	0.350	0.381	0.405	0.336	0.360	0.366	6.93
31) Benzoic acid	0.213	0.300	0.286	0.321	0.320	0.240	0.280	0.280	0.280	15.75
32) bis(2-Chloro	0.437	0.462	0.484	0.419	0.454	0.495	0.407	0.445	0.450	6.66
33) 2,4-Dichloro	0.255	0.282	0.306	0.271	0.295	0.316	0.255	0.280	0.283	7.85
34) 2,6-Dichloro	0.258	0.278	0.298	0.264	0.287	0.301	0.242	0.272	0.275	7.36
35) 1,3,5-Trichl	0.322	0.339	0.358	0.316	0.343	0.363	0.319	0.334	0.337	5.29
36) 1,2,4-Trichl	0.306	0.325	0.340	0.308	0.333	0.348	0.291	0.320	0.321	5.96
37) 1,2,3-Trichl	0.304	0.316	0.338	0.295	0.323	0.340	0.294	0.305	0.314	5.69
38) Naphthalene	0.938	0.980	1.030	0.883	0.955	1.022	0.902	0.955	0.958	5.43
39) 4-Chloroanil	0.378	0.403	0.434	0.379	0.414	0.444	0.376	0.396	0.403	6.48
40) 2,3-Dichloro	0.307	0.329	0.349	0.312	0.342	0.363	0.305	0.321	0.329	6.44
41) Hydroquinone	0.259	0.297	0.331	0.259	0.260	0.308	0.269	0.287	0.284	9.37
42) Hexachlorobu	0.185	0.204	0.210	0.188	0.207	0.220	0.179	0.193	0.198	7.14
43) 4-Chloro-3-m	0.278	0.302	0.331	0.299	0.328	0.342	0.269	0.300	0.306	8.51
44) 2-Methylnaph	0.554	0.569	0.607	0.534	0.575	0.625	0.522	0.559	0.568	6.07
45) 1-Methylnaph	0.517	0.543	0.582	0.513	0.551	0.590	0.506	0.543	0.543	5.70

6.8.1  
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# Initial Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** ECJ296-ICC296  
**Lab FileID:** CJ6490.D

46) I	Acenaphthene-d10	-----ISTD-----									
47)	Hexachlorocy	0.351	0.381	0.434	0.371	0.368	0.440	0.334	0.375	0.382	9.75
48)	1,2,4,5-tetr	0.559	0.599	0.619	0.543	0.570	0.624	0.546	0.563	0.578	5.50
49)	2,4,6-Trichl	0.304	0.348	0.385	0.346	0.364	0.406	0.305	0.347	0.351	10.05
50)	2,4,5-Trichl	0.334	0.386	0.428	0.381	0.402	0.442	0.338	0.379	0.386	9.88
51)	2-Fluorobiph	1.195	1.304	1.352	1.189	1.234	1.367	1.183	1.244	1.259	5.84
52)	2-Chloronaph	1.021	1.137	1.170	1.015	1.060	1.173	1.045	1.067	1.086	5.95
53)	Biphenyl	1.315	1.421	1.471	1.283	1.324	1.473	1.349	1.359	1.374	5.26
54)	2-Nitroanili	0.324	0.362	0.408	0.364	0.385	0.420	0.322	0.354	0.367	9.65
55)	Dimethylphth	1.148	1.262	1.360	1.186	1.232	1.384	1.191	1.237	1.250	6.66
56)	Acenaphthyle	1.411	1.577	1.698	1.467	1.525	1.719	1.492	1.523	1.551	6.98
57)	2,6-Dinitrot	0.216	0.255	0.289	0.268	0.284	0.305	0.231	0.252	0.262	11.44
58)	3-Nitroanili	0.248	0.287	0.332	0.298	0.316	0.345	0.251	0.288	0.296	11.91
59)	Acenaphthene	1.068	1.134	1.185	1.031	1.084	1.198	1.030	1.095	1.103	5.81
60)	2,4-Dinitrop	0.068	0.093	0.148	0.159	0.174	0.176		0.109	0.132	32.19
---- Quadratic regression ---- Coefficient = 0.9956											
Response Ratio = -0.01185 + 0.15424 *A + 0.00410 *A^2											
61)	4-Nitropheno	0.147	0.180	0.212	0.199	0.211	0.231		0.184	0.195	13.98
62)	Dibenzofuran	1.485	1.572	1.641	1.432	1.485	1.665	1.454	1.514	1.531	5.63
63)	2,4-Dinitrot	0.294	0.350	0.413	0.375	0.388	0.426	0.298	0.356	0.363	13.40
64)	2,3,4,6-Tetr	0.248	0.291	0.331	0.310	0.326	0.345	0.227	0.295	0.297	13.85
65)	Diethylphtha	1.182	1.290	1.392	1.221	1.284	1.412	1.173	1.242	1.275	7.02
66)	Fluorene	1.138	1.238	1.300	1.138	1.185	1.318	1.160	1.199	1.209	5.79
67)	4-Chlorophen	0.542	0.591	0.628	0.553	0.573	0.637	0.542	0.557	0.578	6.53
68)	4-Nitroanili	0.256	0.293	0.339	0.306	0.321	0.348	0.245	0.297	0.301	12.06
69) I	Phenanthrene-d10	-----ISTD-----									
70)	4,6-Dinitro-	0.074	0.106	0.110	0.116	0.121		0.081	0.101	19.24	
71)	n-Nitrosodip	0.514	0.566	0.600	0.525	0.530	0.605	0.492	0.536	0.546	7.43
72)	1,2-Diphenyl	0.717	0.784	0.838	0.732	0.746	0.852	0.694	0.761	0.766	7.34
73)	pentachloron	0.032	0.034	0.037	0.034	0.036	0.039	0.032	0.033	0.035#	7.17
74)	2,4,6-Tribro	0.073	0.084	0.098	0.091	0.094	0.103	0.072	0.086	0.088	12.55
75)	4-Bromopheny	0.162	0.182	0.198	0.177	0.183	0.202	0.180	0.173	0.182	7.07
76)	Hexachlorobe	0.194	0.212	0.217	0.194	0.204	0.221	0.194	0.191	0.203	5.84
77)	Pentachlorop	0.087	0.108	0.137	0.134	0.138	0.149		0.115	0.124	17.41
78)	Phenanthrene	0.925	1.008	1.036	0.910	0.932	1.040	0.942	0.940	0.967	5.45
79)	Anthracene	0.900	0.985	1.056	0.920	0.954	1.070	0.908	0.950	0.968	6.70
80)	Carbazole	0.835	0.913	0.988	0.861	0.879	1.001	0.857	0.881	0.902	6.80
81)	Di-n-butylph	0.974	1.093	1.239	1.109	1.146	1.280	0.962	1.112	1.114	10.04
82)	Fluoranthene	0.948	1.041	1.147	1.035	1.059	1.168	0.935	1.039	1.047	7.87
83)	Octadecane	0.494	0.539	0.601	0.533	0.540	0.625	0.519	0.541	0.549	7.82
84) I	Chrysene-d12	-----ISTD-----									
85)	benzidine	0.682	0.695	0.790	0.699	0.641	0.839		0.674	0.717	9.82
86)	Pyrene	1.282	1.405	1.483	1.327	1.309	1.519	1.223	1.335	1.360	7.43
87)	Terphenyl-dl	0.937	0.993	1.086	0.958	0.971	1.103	0.913	0.945	0.988	7.04
88)	Butylbenzylp	0.505	0.574	0.689	0.643	0.641	0.725	0.490	0.588	0.607	13.77
89)	Benzo[a]anth	1.231	1.289	1.391	1.248	1.251	1.419	1.232	1.226	1.286	5.94
90)	3,3'-Dichlor	0.372	0.417	0.496	0.473	0.485	0.531	0.352	0.434	0.445	14.06
91)	Chrysene	1.136	1.209	1.269	1.145	1.138	1.317	1.121	1.158	1.187	6.06
92)	bis(2-Ethylh	0.727	0.838	0.997	0.907	0.910	1.059		0.855	0.899	12.08
93) I	Perylene-d12	-----ISTD-----									
94)	Di-n-octylph	1.081	1.330	1.659	1.555	1.515	1.750		1.383	1.468	15.29
95)	Benzo[b]fluo	1.049	1.180	1.280	1.314	1.253	1.431	1.030	1.131	1.208	11.36
96)	Benzo[k]fluo	1.052	1.145	1.244	1.000	0.975	1.154	1.016	1.113	1.087	8.49
97)	Benzo[a]pyre	0.873	0.986	1.112	1.027	1.008	1.151	0.880	0.965	1.000	9.88
98)	Indeno[1,2,3	1.047	1.192	1.355	1.237	1.206	1.395	1.080	1.163	1.209	9.98

# Initial Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** ECJ296-ICC296  
**Lab FileID:** CJ6490.D

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99)	Dibenz(a,h)a	0.673	0.782	0.909	0.854	0.839	0.963	0.655	0.758	0.804	13.46
100)	Dibenz[a,h]a	0.859	0.962	1.079	0.987	0.957	1.120	0.831	0.935	0.966	10.19
101)	7,12-Dimethy	0.399	0.469	0.530	0.511	0.489	0.569	0.407	0.472	0.481	12.03
102)	Benzo[g,h,i]	0.828	0.919	1.013	0.930	0.900	1.055	1.000	0.873	0.940	8.20
103)	1,4-Dichlorobenzene-d	-----ISTD-----									
104)	Benzaldehyde	1.109	1.175	1.058	1.169	1.113	1.188	1.124	1.224	1.145	4.65
105)	Phenanthrene-d10a	-----ISTD-----									
106)	Atrazine	0.089	0.087	0.084	0.098	0.096	0.099	0.080	0.095	0.091	7.47
107)	I Naphthalene-d8a	-----ISTD-----									
108)	Caprolactam	0.138	0.166	0.158	0.186	0.183	0.195	0.155	0.178	0.170	11.23
109)	Phenanthrene-d10b	-----ISTD-----									
110)	1-chloroocta	0.337	0.381	0.363	0.395	0.384	0.414	0.335	0.409	0.377	8.07
111)	o-terphenyl	0.495	0.510	0.466	0.514	0.507	0.522	0.468	0.546	0.503	5.35

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(#) = Out of Range ### Number of calibration levels exceeded format ###

mCJ296.m

Thu May 09 12:07:52 2024

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** ECJ296-ICV296  
**Lab FileID:** CJ6506.D

Evaluate Continuing Calibration Report

Data File : D:\MassHunter\GCMS\1\data\ecj296\cj6506.D Vial: 18  
 Acq On : 08 May 2024 10:02 pm Operator: rocquans  
 Sample : icv296-50 Inst : GCMSMJ  
 Misc : op53120,ecj296,30.0,,1,1 Multiplr: 1.00  
 MS Integration Params: lscint.p

Method : D:\MassHunter\GCMS\1\data\ecj296\mCJ296.m (RTE Integrator)  
 Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
 Last Update : Thu May 09 11:29:25 2024  
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 200%

Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I 1,4-Dichlorobenzene-d4	1.000	1.000	0.0	123	0.00	4.66
2 t 1,4-Dioxane	0.543	0.546	-0.6	114	0.00	2.45
6 t Indene	2.057	2.023	1.7	113	0.00	4.82
7 t Cumene	2.649	2.665	-0.6	114	0.00	4.15
11 t bis(2-Chloroethyl)ether	1.287	1.294	-0.5	113	0.00	4.49
13 t Decane	1.566	1.550	1.0	112	0.00	4.56
14 t 1,3-Dichlorobenzene	1.387	1.406	-1.4	116	0.00	4.63
15 t 1,4-Dichlorobenzene	1.405	1.394	0.8	113	0.00	4.67
16 t Benzyl alcohol	0.815	0.812	0.4	111	0.00	4.74
17 t 1,2-Dichlorobenzene	1.341	1.324	1.3	114	0.00	4.77
18 t Acetophenone	1.839	1.781	3.2	112	0.00	4.92
20 t 2,2'-oxybis(1-Chloropropa	0.363	0.358	1.4	113	0.00	4.83
23 t Hexachloroethane	0.531	0.538	-1.3	113	0.00	4.98
24 I Naphthalene-d8	1.000	1.000	0.0	124	0.00	5.47
26 t Nitrobenzene	0.420	0.403	4.0	106	0.00	5.02
27 t Quinoline	0.618	0.599	3.1	108	-0.01	5.69
28 t Isophorone	0.720	0.713	1.0	112	0.00	5.17
32 t bis(2-Chloroethoxy)methan	0.450	0.447	0.7	112	0.00	5.30
35 1,3,5-Trichlorobenzene	0.337	0.340	-0.9	116	0.00	5.23
36 t 1,2,4-Trichlorobenzene	0.321	0.321	0.0	114	0.00	5.43
37 1,2,3-Trichlorobenzene	0.314	0.313	0.3	114	0.00	5.57
38 t Naphthalene	0.958	0.950	0.8	115	0.00	5.48
40 t 2,3-Dichloroaniline	0.329	0.317	3.6	108	0.00	6.11
42 t Hexachlorobutadiene	0.198	0.198	0.0	112	0.00	5.55
44 t 2-Methylnaphthalene	0.568	0.566	0.4	112	0.00	5.92
45 t 1-Methylnaphthalene	0.543	0.536	1.3	113	0.00	5.99
46 I Acenaphthene-d10	1.000	1.000	0.0	122	0.00	6.65
47 t Hexachlorocyclopentadiene	0.382	0.420	-9.9	117	0.00	6.03
48 1,2,4,5-tetrachlorobenzen	0.578	0.569	1.6	112	0.00	6.03

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** ECJ296-ICV296  
**Lab FileID:** CJ6506.D

52	t	2-Chloronaphthalene	1.086	1.077	0.8	112	0.00	6.25
53	t	Biphenyl	1.374	1.343	2.3	112	0.00	6.24
55	t	Dimethylphthalate	1.250	1.258	-0.6	111	0.00	6.45
56	t	Acenaphthylene	1.551	1.597	-3.0	114	0.00	6.55
57	t	2,6-Dinitrotoluene	0.262	0.269	-2.7	108	0.00	6.49
59	t	Acenaphthene	1.103	1.101	0.2	113	0.00	6.68
			AvgRF	CCRF	% Dev			
62	t	Dibenzofuran	1.531	1.514	1.1	111	0.00	6.81
63	t	2,4-Dinitrotoluene	0.363	0.365	-0.6	105	0.00	6.79
65	t	Diethylphthalate	1.275	1.273	0.2	110	0.00	6.97
66	t	Fluorene	1.209	1.209	0.0	112	0.00	7.08
67	t	4-Chlorophenyl-phenylethe	0.578	0.583	-0.9	112	0.00	7.08
69	I	Phenanthrene-d10	1.000	1.000	0.0	121	0.00	7.87
72	t	1,2-Diphenylhydrazine	0.766	0.778	-1.6	110	-0.01	7.20
73	t	pentachloronitrobenzene	0.035	0.034#	2.9	106	0.00	7.71
75	t	4-Bromophenyl-phenylether	0.182	0.190	-4.4	114	0.00	7.48
76	t	Hexachlorobenzene	0.203	0.201	1.0	110	0.00	7.53
78	t	Phenanthrene	0.967	0.962	0.5	112	0.00	7.89
79	t	Anthracene	0.968	0.979	-1.1	111	0.00	7.94
80	t	Carbazole	0.902	0.904	-0.2	109	0.00	8.07
81	t	Di-n-butylphthalate	1.114	1.170	-5.0	110	0.00	8.40
82	t	Fluoranthene	1.047	1.074	-2.6	111	-0.01	8.98
83	t	Octadecane	0.549	0.560	-2.0	108	0.00	7.77
84	I	Chrysene-d12	1.000	1.000	0.0	122	-0.01	10.36
86	t	Pyrene	1.360	1.347	1.0	108	0.00	9.19
88	t	Butylbenzylphthalate	0.607	0.645	-6.3	109	-0.01	9.83
89	t	Benzo[a]anthracene	1.286	1.255	2.4	108	-0.01	10.35
91	t	Chrysene	1.187	1.196	-0.8	111	-0.01	10.39
92	t	bis(2-Ethylhexyl)phthalat	0.899	0.930	-3.4	107	-0.01	10.40
93	I	Perylene-d12	1.000	1.000	0.0	119	-0.01	11.71
94	t	Di-n-octylphthalate	1.468	1.583	-7.8	107	-0.01	11.01
95	t	Benzo[b]fluoranthene	1.208	1.252	-3.6	104	0.00	11.35
96	t	Benzo[k]fluoranthene	1.087	1.136	-4.5	117	0.00	11.38
97	t	Benzo[a]pyrene	1.000	1.063	-6.3	110	-0.01	11.65
98	t	Indeno[1,2,3-cd]pyrene	1.209	1.298	-7.4	111	-0.01	12.90
99	t	Dibenz(a,h)acridine	0.804	0.882	-9.7	109	-0.01	12.61
100	t	Dibenz[a,h]anthracene	0.966	1.035	-7.1	110	-0.01	12.92
101	t	7,12-Dimethylbenz(a)anthr	0.481	0.470	2.3	98	0.00	11.34
102	t	Benzo[g,h,i]perylene	0.940	0.980	-4.3	110	-0.01	13.24



# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** ECJ296-ICV296  
**Lab FileID:** CJ6506.D

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(#) = Out of Range                      SPCC's out = 0    CCC's out = 0  
cj6490.D    mCJ296.m                      Thu May 09 11:35:01 2024

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** ECJ296-ICV296  
**Lab FileID:** CJ6507.D

Evaluate Continuing Calibration Report

Data File : D:\MassHunter\GCMS\1\data\ecj296\cj6507.D Vial: 19  
 Acq On : 08 May 2024 10:20 pm Operator: rocquans  
 Sample : icv296-50 Inst : GCMSMJ  
 Misc : op53120,ecj296,30.0,,1,1 Multiplr: 1.00  
 MS Integration Params: lscint.p

Method : D:\MassHunter\GCMS\1\data\ecj296\mCJ296.m (RTE Integrator)  
 Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
 Last Update : Thu May 09 11:29:25 2024  
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 200%

Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I 1,4-Dichlorobenzene-d4	1.000	1.000	0.0	136	0.00	4.66
9 t Phenol	1.598	1.485	7.1	116	0.00	4.42
12 t 2-Chlorophenol	1.205	1.151	4.5	118	0.00	4.52
19 t 2-Methylphenol	1.109	1.031	7.0	118	0.00	4.81
21 t 3&4-Methylphenol	1.141	1.077	5.6	121	0.00	4.90
24 I Naphthalene-d8	1.000	1.000	0.0	136	0.00	5.47
29 t 2-Nitrophenol	0.165	0.164	0.6	114	0.00	5.22
30 t 2,4-Dimethylphenol	0.366	0.354	3.3	119	0.00	5.24
31 t Benzoic acid	0.280	0.263	6.1	112	0.00	5.31
33 t 2,4-Dichlorophenol	0.283	0.278	1.8	120	0.00	5.37
34 t 2,6-Dichlorophenol	0.275	0.268	2.5	122	0.00	5.51
41 t Hydroquinone	0.284	0.336	-18.3	149	0.00	5.70
43 t 4-Chloro-3-methylphenol	0.306	0.297	2.9	118	0.00	5.80
46 I Acenaphthene-d10	1.000	1.000	0.0	138	0.00	6.65
49 t 2,4,6-Trichlorophenol	0.351	0.351	0.0	119	0.00	6.10
50 t 2,4,5-Trichlorophenol	0.386	0.382	1.0	119	0.00	6.13
60 t 2,4-Dinitrophenol	100.000	88.281	11.7	110	0.00	6.69
61 t 4-Nitrophenol	0.195	0.193	1.0	116	0.00	6.72
64 2,3,4,6-Tetrachlorophenol	0.297	0.303	-2.0	121	0.00	6.89
69 I Phenanthrene-d10	1.000	1.000	0.0	139	0.00	7.87
70 t 4,6-Dinitro-2-methylpheno	0.101	0.094	6.9	108	-0.01	7.10
77 t Pentachlorophenol	0.124	0.124	0.0	116	0.00	7.69

6.8.3  
 6

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** ECJ296-ICV296  
**Lab FileID:** CJ6507.D

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(#) = Out of Range                      SPCC's out = 0    CCC's out = 0  
cj6490.D    mCJ296.m                      Thu May 09 11:39:49 2024

6.8.3

6

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** ECJ296-ICV296  
**Lab FileID:** CJ6508.D

Evaluate Continuing Calibration Report

Data File : D:\MassHunter\GCMS\1\data\ecj296\cj6508.D Vial: 20  
 Acq On : 08 May 2024 10:39 pm Operator: rocquans  
 Sample : icv296-50 Inst : GCMSMJ  
 Misc : op53120,ecj296,30.0,,,1,1 Multiplr: 1.00  
 MS Integration Params: lscint.p

Method : D:\MassHunter\GC...methods\mCJ296.m (RTE Integrator)  
 Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
 Last Update : Thu May 09 11:29:25 2024  
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 200%

Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I 1,4-Dichlorobenzene-d4	1.000	1.000	0.0	145	0.00	4.66
3 t Pyridine	1.406	1.384	1.6	126	0.00	2.75
4 t N-Nitrosodimethylamine	0.750	0.798	-6.4	141	0.00	2.74
10 Aniline	1.966	1.914	2.6	130	0.00	4.45
22 t n-Nitroso-di-n-propylamin	0.928	0.889	4.2	131	-0.01	4.91
24 I Naphthalene-d8	1.000	1.000	0.0	147	0.00	5.47
39 t 4-Chloroaniline	0.403	0.394	2.2	131	0.00	5.51
46 I Acenaphthene-d10	1.000	1.000	0.0	149	0.00	6.65
54 t 2-Nitroaniline	0.367	0.362	1.4	128	0.00	6.32
58 t 3-Nitroaniline	0.296	0.296	0.0	128	0.00	6.62
68 t 4-Nitroaniline	0.301	0.293	2.7	125	0.00	7.09
69 I Phenanthrene-d10	1.000	1.000	0.0	150	0.00	7.87
71 t n-Nitrosodiphenylamine	0.546	0.531	2.7	132	0.00	7.17
84 I Chrysene-d12	1.000	1.000	0.0	147	-0.01	10.36
85 benzidine	0.717	0.878	-22.5	154	0.00	9.11
90 t 3,3'-Dichlorobenzidine	0.445	0.458	-2.9	127	0.00	10.33

(#) = Out of Range SPCC's out = 0 CCC's out = 0  
 cj6490.D mCJ296.m Thu May 09 11:41:41 2024

6.8.4  
6

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** ECJ296-ICV296  
**Lab FileID:** CJ6509.D

## Evaluate Continuing Calibration Report

Data File : D:\MassHunter\GCMS\1\data\ecj296\cj6509.D Vial: 21  
Acq On : 08 May 2024 10:58 pm Operator: rocquans  
Sample : icv296-50 Inst : GCMSMJ  
Misc : op53120,ecj296,30.0,,,1,1 Multiplr: 1.00  
MS Integration Params: lscint.p

Method : D:\MassHunter\GCMS\1\data\ecj296\mCJ296.m (RTE Integrator)  
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
Last Update : Thu May 09 12:05:48 2024  
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
103	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	100	0.00	4.66
104	Benzaldehyde	1.145	1.152	-0.6	97	0.00	4.38
105	Phenanthrene-d10a	1.000	1.000	0.0	96	0.00	7.86
106	Atrazine	0.091	0.095	-4.4	92	0.00	7.61
107 I	Naphthalene-d8a	1.000	1.000	0.0	97	0.00	5.47
108 T	Caprolactam	0.170	0.183	-7.6	91	0.00	5.72

(#) = Out of Range SPPC's out = 0 CCC's out = 0  
cj6498A.D mCJ296.m Thu May 09 12:07:31 2024

6.8.5  
6

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** ECJ297-CC296  
**Lab FileID:** CJ6511.D

Evaluate Continuing Calibration Report

Data File : X:\Dayton SVOA GCMS\...\Mayo\ecj297\cj6511.D Vial: 2  
 Acq On : 09 May 2024 03:40 pm Operator: rocquans  
 Sample : cc296-50 Inst : GCMSMJ  
 Misc : op53120,ecj297,30.0,,1,1 Multiplr: 1.00  
 MS Integration Params: lscint.p

Method : X:\Dayton SVOA G...methods\mCJ296.m (RTE Integrator)  
 Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
 Last Update : Thu May 09 12:05:48 2024  
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I 1,4-Dichlorobenzene-d4	1.000	1.000	0.0	113	0.00	4.66
2 t 1,4-Dioxane	0.543	0.613	-12.9	118	0.00	2.45
3 t Pyridine	1.406	1.612	-14.7	114	0.00	2.75
4 t N-Nitrosodimethylamine	0.750	0.849	-13.2	117	0.00	2.73
5 S 2-Fluorophenol	1.150	1.307	-13.7	116	0.00	3.80
6 t Indene	2.057	2.145	-4.3	111	0.00	4.82
7 t Cumene	2.649	2.921	-10.3	116	0.00	4.15
8 S Phenol-d5	1.483	1.651	-11.3	115	0.00	4.42
9 t Phenol	1.598	1.753	-9.7	113	0.00	4.43
10 Aniline	1.966	2.149	-9.3	113	0.00	4.45
11 t bis(2-Chloroethyl)ether	1.287	1.386	-7.7	112	0.00	4.49
12 t 2-Chlorophenol	1.205	1.323	-9.8	112	0.00	4.52
13 t Decane	1.566	1.622	-3.6	109	0.00	4.56
14 t 1,3-Dichlorobenzene	1.387	1.522	-9.7	116	0.00	4.63
15 t 1,4-Dichlorobenzene	1.405	1.535	-9.3	115	0.00	4.67
16 t Benzyl alcohol	0.815	0.888	-9.0	112	0.00	4.75
17 t 1,2-Dichlorobenzene	1.341	1.439	-7.3	114	0.00	4.77
18 t Acetophenone	1.839	1.912	-4.0	111	0.00	4.92
19 t 2-Methylphenol	1.109	1.187	-7.0	113	0.00	4.81
20 t 2,2'-oxybis(1-Chloropropa	0.363	0.390	-7.4	113	0.00	4.83
21 t 3&4-Methylphenol	1.141	1.196	-4.8	111	0.00	4.91
22 t n-Nitroso-di-n-propylamin	0.928	0.953	-2.7	110	0.00	4.92
23 t Hexachloroethane	0.531	0.584	-10.0	114	0.00	4.99
24 I Naphthalene-d8	1.000	1.000	0.0	113	0.00	5.47
25 S Nitrobenzene-d5	0.410	0.447	-9.0	109	0.00	5.01
26 t Nitrobenzene	0.420	0.460	-9.5	110	0.00	5.03
27 t Quinoline	0.618	0.668	-8.1	109	0.00	5.70
28 t Isophorone	0.720	0.779	-8.2	111	0.00	5.18
29 t 2-Nitrophenol	0.165	0.187	-13.3	108	0.00	5.23
30 t 2,4-Dimethylphenol	0.366	0.395	-7.9	110	0.00	5.24
31 t Benzoic acid	0.280	0.310	-10.7	109	0.00	5.32
32 t bis(2-Chloroethoxy)methan	0.450	0.479	-6.4	109	0.00	5.31
33 t 2,4-Dichlorophenol	0.283	0.316	-11.7	112	0.00	5.38
34 t 2,6-Dichlorophenol	0.275	0.302	-9.8	113	0.00	5.51
35 1,3,5-Trichlorobenzene	0.337	0.362	-7.4	112	0.00	5.23
36 t 1,2,4-Trichlorobenzene	0.321	0.350	-9.0	113	0.00	5.43
37 1,2,3-Trichlorobenzene	0.314	0.336	-7.0	112	0.00	5.57
38 t Naphthalene	0.958	1.015	-5.9	112	0.00	5.48
39 t 4-Chloroaniline	0.403	0.435	-7.9	110	0.00	5.51
40 t 2,3-Dichloroaniline	0.329	0.352	-7.0	109	0.00	6.11
41 t Hydroquinone	0.284	0.299	-5.3	109	0.00	5.70

6.8.6  
6

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** ECJ297-CC296  
**Lab FileID:** CJ6511.D

42 t	Hexachlorobutadiene	0.198	0.218	-10.1	112	0.00	5.56
43 t	4-Chloro-3-methylphenol	0.306	0.336	-9.8	111	0.00	5.81
44 t	2-Methylnaphthalene	0.568	0.612	-7.7	110	0.00	5.93
45 t	1-Methylnaphthalene	0.543	0.582	-7.2	111	0.00	5.99
46 I	Acenaphthene-d10	1.000	1.000	0.0	111	0.00	6.66
47 t	Hexachlorocyclopentadiene	0.382	0.443	-16.0	112	0.00	6.03
48	1,2,4,5-tetrachlorobenzen	0.578	0.628	-8.7	111	0.00	6.03
49 t	2,4,6-Trichlorophenol	0.351	0.397	-13.1	108	0.00	6.11
50 t	2,4,5-Trichlorophenol	0.386	0.436	-13.0	109	0.00	6.13
51 S	2-Fluorobiphenyl	1.259	1.363	-8.3	110	0.00	6.17
52 t	2-Chloronaphthalene	1.086	1.175	-8.2	111	0.00	6.26
53 t	Biphenyl	1.374	1.486	-8.2	112	0.00	6.24
54 t	2-Nitroaniline	0.367	0.412	-12.3	109	0.00	6.32
55 t	Dimethylphthalate	1.250	1.370	-9.6	110	0.00	6.45
56 t	Acenaphthylene	1.551	1.719	-10.8	111	0.00	6.56
57 t	2,6-Dinitrotoluene	0.262	0.306	-16.8	111	0.00	6.49
58 t	3-Nitroaniline	0.296	0.341	-15.2	109	0.00	6.62
59 t	Acenaphthene	1.103	1.204	-9.2	111	0.00	6.69
	----- True Calc. % Drift -----						
60 t	2,4-Dinitrophenol	100.000	105.308	-5.3	107	0.00	6.70
	----- AvgRF CCRF % Dev -----						
61 t	4-Nitrophenol	0.195	0.222	-13.8	106	0.00	6.72
62 t	Dibenzofuran	1.531	1.655	-8.1	110	0.00	6.81
63 t	2,4-Dinitrotoluene	0.363	0.426	-17.4	111	0.00	6.79
64	2,3,4,6-Tetrachlorophenol	0.297	0.349	-17.5	112	0.00	6.90
65 t	Diethylphthalate	1.275	1.396	-9.5	110	0.00	6.98
66 t	Fluorene	1.209	1.308	-8.2	110	0.00	7.08
67 t	4-Chlorophenyl-phenylethe	0.578	0.638	-10.4	111	0.00	7.08
68 t	4-Nitroaniline	0.301	0.347	-15.3	110	0.00	7.09
69 I	Phenanthrene-d10	1.000	1.000	0.0	109	0.00	7.87
70 t	4,6-Dinitro-2-methylpheno	0.101	0.120	-18.8	108	0.00	7.11
71 t	n-Nitrosodiphenylamine	0.546	0.613	-12.3	111	0.00	7.17
72 t	1,2-Diphenylhydrazine	0.766	0.844	-10.2	108	0.00	7.20
73	pentachloronitrobenzene	0.035	0.039#	-11.4	108	0.00	7.71
74 S	2,4,6-Tribromophenol	0.088	0.101	-14.8	107	0.00	7.27
75 t	4-Bromophenyl-phenylether	0.182	0.205	-12.6	111	0.00	7.48
76 t	Hexachlorobenzene	0.203	0.226	-11.3	111	0.00	7.53
77 t	Pentachlorophenol	0.124	0.149	-20.2#	109	0.00	7.70
78 t	Phenanthrene	0.967	1.047	-8.3	110	0.00	7.89
79 t	Anthracene	0.968	1.063	-9.8	109	0.00	7.94
80 t	Carbazole	0.902	0.988	-9.5	108	0.00	8.08
81 t	Di-n-butylphthalate	1.114	1.277	-14.6	109	0.00	8.40
82 t	Fluoranthene	1.047	1.166	-11.4	109	0.00	8.98
83 t	Octadecane	0.549	0.603	-9.8	106	0.00	7.77
84 I	Chrysene-d12	1.000	1.000	0.0	109	0.00	10.37
85	benzidine	0.717	0.834	-16.3	108	0.00	9.11
86 t	Pyrene	1.360	1.514	-11.3	108	0.00	9.20
87 S	Terphenyl-d14	0.988	1.115	-12.9	110	0.00	9.35
88 t	Butylbenzylphthalate	0.607	0.735	-21.1#	110	0.00	9.84
89 t	Benzo[a]anthracene	1.286	1.406	-9.3	108	0.00	10.35
90 t	3,3'-Dichlorobenzidine	0.445	0.527	-18.4	108	0.00	10.34
91 t	Chrysene	1.187	1.328	-11.9	110	0.00	10.39
92 t	bis(2-Ethylhexyl)phthalat	0.899	1.036	-15.2	106	0.00	10.41
93 I	Perylene-d12	1.000	1.000	0.0	108	0.00	11.71

6.8.6  
6

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** ECJ297-CC296  
**Lab FileID:** CJ6511.D

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94	t	Di-n-octylphthalate	1.468	1.729	-17.8	107	0.00	11.02
95	t	Benzo[b]fluoranthene	1.208	1.328	-9.9	100	0.00	11.36
96	t	Benzo[k]fluoranthene	1.087	1.274	-17.2	119	0.00	11.38
97	t	Benzo[a]pyrene	1.000	1.151	-15.1	108	0.00	11.66
98	t	Indeno[1,2,3-cd]pyrene	1.209	1.412	-16.8	109	0.00	12.90
99	t	Dibenz(a,h)acridine	0.804	0.958	-19.2	107	0.00	12.62
100	t	Dibenz[a,h]anthracene	0.966	1.114	-15.3	107	0.00	12.93
101	t	7,12-Dimethylbenz(a)anthr	0.481	0.558	-16.0	106	0.00	11.35
102	t	Benzo[g,h,i]perylene	0.940	1.072	-14.0	110	0.00	13.25

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(#) = Out of Range                      SPC's out = 0    CCC's out = 0  
cj6498A.D    mCJ296.m                      Fri May 10 14:22:10 2024

6.8.6

6



# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** ECJ297-CC296  
**Lab FileID:** CJ6512.D

## Evaluate Continuing Calibration Report

Data File : X:\Dayton SVOA GCMS\...\Mayo\ecj297\cj6512.D Vial: 3  
Acq On : 09 May 2024 03:59 pm Operator: rocquans  
Sample : cc296-50 Inst : GCMSMJ  
Misc : op53120,ecj297,30.0,,,1,1 Multiplr: 1.00  
MS Integration Params: lscint.p

Method : X:\Dayton SVOA G...methods\mCJ296.m (RTE Integrator)  
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
Last Update : Thu May 09 12:05:48 2024  
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
103	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	117	0.00	4.66
104	Benzaldehyde	1.145	1.176	-2.7	116	0.00	4.38
105	Phenanthrene-d10a	1.000	1.000	0.0	113	0.00	7.87
106	Atrazine	0.091	0.099	-8.8	113	0.00	7.61
107 I	Naphthalene-d8a	1.000	1.000	0.0	116	0.00	5.47
108 T	Caprolactam	0.170	0.190	-11.8	112	0.00	5.72
109	Phenanthrene-d10b	1.000	1.000	0.0	113	0.00	7.87
110 s	1-chlorooctadecane	0.377	0.402	-6.6	110	0.00	8.88
111 s	o-terphenyl	0.503	0.532	-5.8	116	0.00	8.21
112 I	Chrysene-d12a	1.000	1.000	0.0	113	0.00	10.36

(#) = Out of Range SPCC's out = 0 CCC's out = 0  
cj6498A.D mCJ296.m Fri May 10 14:22:12 2024

6.8.7  
6

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** ECJ298-CC296  
**Lab FileID:** CJ6546.D

Evaluate Continuing Calibration Report

Data File : X:\Dayton SVOA GCMS\danielas\ECJ298\cj6546.D Vial: 2  
 Acq On : 10 May 2024 09:29 am Operator: karimam  
 Sample : cc296-50 Inst : GCMSCJ  
 Misc : op53120,ecj298,30.0,,1,1 Multiplr: 1.00  
 MS Integration Params: lscint.p

Method : X:\Dayton SVOA G...METHODS\mCJ296.m (RTE Integrator)  
 Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
 Last Update : Thu May 09 12:05:48 2024  
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I 1,4-Dichlorobenzene-d4	1.000	1.000	0.0	91	-0.01	4.65
2 t 1,4-Dioxane	0.543	0.547	-0.7	85	-0.01	2.44
3 t Pyridine	1.406	1.493	-6.2	85	0.00	2.75
4 t N-Nitrosodimethylamine	0.750	0.781	-4.1	87	0.00	2.73
5 S 2-Fluorophenol	1.150	1.277	-11.0	91	0.00	3.79
6 t Indene	2.057	2.171	-5.5	91	-0.01	4.81
7 t Cumene	2.649	2.823	-6.6	90	-0.01	4.14
8 S Phenol-d5	1.483	1.601	-8.0	90	0.00	4.41
9 t Phenol	1.598	1.869	-17.0	98	0.00	4.42
10 Aniline	1.966	2.166	-10.2	92	-0.01	4.44
11 t bis(2-Chloroethyl)ether	1.287	1.357	-5.4	89	-0.01	4.48
12 t 2-Chlorophenol	1.205	1.318	-9.4	90	0.00	4.52
13 t Decane	1.566	1.607	-2.6	87	-0.01	4.55
14 t 1,3-Dichlorobenzene	1.387	1.488	-7.3	91	-0.01	4.62
15 t 1,4-Dichlorobenzene	1.405	1.502	-6.9	91	-0.01	4.66
16 t Benzyl alcohol	0.815	0.919	-12.8	94	-0.01	4.74
17 t 1,2-Dichlorobenzene	1.341	1.426	-6.3	92	-0.01	4.76
18 t Acetophenone	1.839	1.960	-6.6	92	0.00	4.91
19 t 2-Methylphenol	1.109	1.196	-7.8	91	0.00	4.81
20 t 2,2'-oxybis(1-Chloropropa	0.363	0.394	-8.5	92	-0.01	4.82
21 t 3&4-Methylphenol	1.141	1.228	-7.6	92	0.00	4.90
22 t n-Nitroso-di-n-propylamin	0.928	0.992	-6.9	92	-0.01	4.91
23 t Hexachloroethane	0.531	0.597	-12.4	94	-0.02	4.97
24 I Naphthalene-d8	1.000	1.000	0.0	94	-0.02	5.46
25 S Nitrobenzene-d5	0.410	0.447	-9.0	91	-0.01	5.00
26 t Nitrobenzene	0.420	0.455	-8.3	91	-0.01	5.02
27 t Quinoline	0.618	0.684	-10.7	93	-0.01	5.69
28 t Isophorone	0.720	0.783	-8.8	93	-0.01	5.17
29 t 2-Nitrophenol	0.165	0.199	-20.6#	95	-0.01	5.21
30 t 2,4-Dimethylphenol	0.366	0.399	-9.0	93	0.00	5.24
31 t Benzoic acid	0.280	0.322	-15.0	95	0.00	5.31
32 t bis(2-Chloroethoxy)methan	0.450	0.476	-5.8	90	-0.01	5.30
33 t 2,4-Dichlorophenol	0.283	0.319	-12.7	95	-0.01	5.36
34 t 2,6-Dichlorophenol	0.275	0.309	-12.4	96	0.00	5.51
35 1,3,5-Trichlorobenzene	0.337	0.363	-7.7	94	-0.01	5.22
36 t 1,2,4-Trichlorobenzene	0.321	0.349	-8.7	94	-0.01	5.42
37 1,2,3-Trichlorobenzene	0.314	0.341	-8.6	94	-0.02	5.56
38 t Naphthalene	0.958	1.021	-6.6	94	-0.01	5.47
39 t 4-Chloroaniline	0.403	0.446	-10.7	94	-0.01	5.50
40 t 2,3-Dichloroaniline	0.329	0.363	-10.3	94	-0.02	6.10
41 t Hydroquinone	0.284	0.319	-12.3	97	0.00	5.70

6.8.8

6

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** ECJ298-CC296  
**Lab FileID:** CJ6546.D

42 t	Hexachlorobutadiene	0.198	0.214	-8.1	92	-0.02	5.54
43 t	4-Chloro-3-methylphenol	0.306	0.347	-13.4	95	0.00	5.80
44 t	2-Methylnaphthalene	0.568	0.628	-10.6	94	-0.01	5.92
45 t	1-Methylnaphthalene	0.543	0.588	-8.3	94	-0.01	5.98
46 I	Acenaphthene-d10	1.000	1.000	0.0	96	-0.02	6.64
47 t	Hexachlorocyclopentadiene	0.382	0.451	-18.1	98	-0.01	6.02
48	1,2,4,5-tetrachlorobenzen	0.578	0.628	-8.7	96	-0.01	6.02
49 t	2,4,6-Trichlorophenol	0.351	0.406	-15.7	96	-0.01	6.10
50 t	2,4,5-Trichlorophenol	0.386	0.437	-13.2	95	0.00	6.12
51 S	2-Fluorobiphenyl	1.259	1.345	-6.8	94	-0.01	6.16
52 t	2-Chloronaphthalene	1.086	1.165	-7.3	95	-0.01	6.25
53 t	Biphenyl	1.374	1.464	-6.6	95	-0.02	6.23
54 t	2-Nitroaniline	0.367	0.414	-12.8	95	-0.01	6.31
55 t	Dimethylphthalate	1.250	1.373	-9.8	95	-0.02	6.43
56 t	Acenaphthylene	1.551	1.693	-9.2	94	-0.02	6.54
57 t	2,6-Dinitrotoluene	0.262	0.314	-19.8	99	-0.01	6.48
58 t	3-Nitroaniline	0.296	0.343	-15.9	95	-0.01	6.61
59 t	Acenaphthene	1.103	1.194	-8.3	95	-0.02	6.67
		----- True	Calc.	% Drift	-----		
60 t	2,4-Dinitrophenol	100.000	123.928	-23.9#	110	-0.01	6.69
		----- AvgRF	CCRF	% Dev	-----		
61 t	4-Nitrophenol	0.195	0.228	-16.9	95	0.00	6.72
62 t	Dibenzofuran	1.531	1.664	-8.7	96	-0.02	6.80
63 t	2,4-Dinitrotoluene	0.363	0.424	-16.8	95	-0.01	6.78
64	2,3,4,6-Tetrachlorophenol	0.297	0.362	-21.9#	100	-0.01	6.89
65 t	Diethylphthalate	1.275	1.436	-12.6	97	-0.01	6.97
66 t	Fluorene	1.209	1.322	-9.3	96	-0.02	7.07
67 t	4-Chlorophenyl-phenylethe	0.578	0.645	-11.6	97	-0.02	7.06
68 t	4-Nitroaniline	0.301	0.351	-16.6	97	-0.01	7.08
69 I	Phenanthrene-d10	1.000	1.000	0.0	97	-0.02	7.86
70 t	4,6-Dinitro-2-methylpheno	0.101	0.137	-35.6#	109	-0.01	7.10
71 t	n-Nitrosodiphenylamine	0.546	0.605	-10.8	97	-0.02	7.16
72 t	1,2-Diphenylhydrazine	0.766	0.826	-7.8	94	-0.02	7.19
73	pentachloronitrobenzene	0.035	0.040#	-14.3	97	-0.02	7.70
74 S	2,4,6-Tribromophenol	0.088	0.107	-21.6#	101	-0.01	7.26
75 t	4-Bromophenyl-phenylether	0.182	0.208	-14.3	100	-0.02	7.47
76 t	Hexachlorobenzene	0.203	0.224	-10.3	98	-0.01	7.52
77 t	Pentachlorophenol	0.124	0.154	-24.2#	100	-0.01	7.69
78 t	Phenanthrene	0.967	1.045	-8.1	97	-0.02	7.88
79 t	Anthracene	0.968	1.054	-8.9	95	-0.02	7.92
80 t	Carbazole	0.902	0.995	-10.3	96	-0.02	8.06
81 t	Di-n-butylphthalate	1.114	1.312	-17.8	99	-0.02	8.38
82 t	Fluoranthene	1.047	1.163	-11.1	96	-0.02	8.96
83 t	Octadecane	0.549	0.599	-9.1	93	-0.02	7.76
84 I	Chrysene-d12	1.000	1.000	0.0	93	-0.02	10.35
85	benzidine	0.717	0.898	-25.2#	99	-0.02	9.10
86 t	Pyrene	1.360	1.559	-14.6	95	-0.02	9.18
87 S	Terphenyl-d14	0.988	1.130	-14.4	95	-0.02	9.33
88 t	Butylbenzylphthalate	0.607	0.772	-27.2#	99	-0.02	9.82
89 t	Benzo[a]anthracene	1.286	1.410	-9.6	92	-0.02	10.34
90 t	3,3'-Dichlorobenzidine	0.445	0.542	-21.8#	95	-0.02	10.32
91 t	Chrysene	1.187	1.283	-8.1	91	-0.02	10.38
92 t	bis(2-Ethylhexyl)phthalat	0.899	1.075	-19.6	94	-0.03	10.39
93 I	Perylene-d12	1.000	1.000	0.0	84	-0.03	11.69

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** ECJ298-CC296  
**Lab FileID:** CJ6546.D

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94	t	Di-n-octylphthalate	1.468	1.943	-32.4#	93	-0.02	11.00
95	t	Benzo[b]fluoranthene	1.208	1.431	-18.5	84	-0.02	11.33
96	t	Benzo[k]fluoranthene	1.087	1.173	-7.9	85	-0.02	11.36
97	t	Benzo[a]pyrene	1.000	1.149	-14.9	84	-0.03	11.64
98	t	Indeno[1,2,3-cd]pyrene	1.209	1.385	-14.6	84	-0.03	12.87
99	t	Dibenz(a,h)acridine	0.804	0.956	-18.9	83	-0.03	12.59
100	t	Dibenz[a,h]anthracene	0.966	1.111	-15.0	83	-0.03	12.90
101	t	7,12-Dimethylbenz(a)anthr	0.481	0.576	-19.8	85	-0.02	11.33
102	t	Benzo[g,h,i]perylene	0.940	1.067	-13.5	85	-0.03	13.22

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(#) = Out of Range                      SPC's out = 0    CCC's out = 0  
cj6498A.D    mCJ296.m                      Fri May 10 15:45:54 2024

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** ECJ298-CC296  
**Lab FileID:** CJ6547.D

## Evaluate Continuing Calibration Report

Data File : X:\Dayton SVOA GCMS\danielas\ECJ298\cj6547.D Vial: 3  
Acq On : 10 May 2024 09:48 am Operator: karimam  
Sample : cc296-50 Inst : GCMSCJ  
Misc : op53120,ecj298,30.0,,,1,1 Multiplr: 1.00  
MS Integration Params: lscint.p

Method : X:\Dayton SVOA G...METHODS\mCJ296.m (RTE Integrator)  
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
Last Update : Thu May 09 12:05:48 2024  
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
103	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	94	-0.01	4.65
104	Benzaldehyde	1.145	1.192	-4.1	95	-0.01	4.37
105	Phenanthrene-d10a	1.000	1.000	0.0	101	-0.02	7.85
106	Atrazine	0.091	0.102	-12.1	104	-0.01	7.60
107 I	Naphthalene-d8a	1.000	1.000	0.0	98	-0.01	5.46
108 T	Caprolactam	0.170	0.196	-15.3	98	0.00	5.71
109	Phenanthrene-d10b	1.000	1.000	0.0	101	-0.02	7.85
110 s	1-chlorooctadecane	0.377	0.411	-9.0	100	-0.02	8.86
111 s	o-terphenyl	0.503	0.543	-8.0	105	-0.02	8.19

(#) = Out of Range                      SPPC's out = 0    CCC's out = 0  
cj6498A.D    mCJ296.m                      Fri May 10 15:45:59 2024

6.8.9

6

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** ECJ298-CC296  
**Lab FileID:** CJ6549.D

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Evaluate Continuing Calibration Report

Data File : X:\Dayton SVOA GCMS\danielas\ECJ298\cj6549.D Vial: 5  
Acq On : 10 May 2024 10:27 am Operator: karimam  
Sample : cc296-5 Inst : GCMSMJ  
Misc : op53120,ecj298,30.0,,,1,1 Multiplr: 1.00  
MS Integration Params: lscint.p

Method : X:\Dayton SVOA G...METHODS\mCJ296.m (RTE Integrator)  
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
Last Update : Fri May 10 16:21:25 2024  
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 20% Max. Rel. Area : 200%

Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
112 I Chrysene-d12a	1.000	1.000	0.0	100	-0.02	10.34
113 2,3,7,8-TCDD	0.162	0.162	0.0	100	0.00	9.95

(#) = Out of Range SPCC's out = 0 CCC's out = 0  
cj6501A.D mCJ296.m Fri May 10 16:27:58 2024

6.8.10  
6

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** ECJ302-CC296  
**Lab FileID:** CJ6675.D

Evaluate Continuing Calibration Report

Data File : X:\Dayton SVOA GCMS\nerirose\ecj302\cj6675.D Vial: 2  
 Acq On : 13 May 2024 08:25 am Operator: kaleigh  
 Sample : cc296-50 Inst : GCMSCJ  
 Misc : op53120,ecj302,30.0,,1,1 Multiplr: 1.00  
 MS Integration Params: lscint.p

Method : X:\Dayton SVOA G...methods\mCJ296.m (RTE Integrator)  
 Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
 Last Update : Mon May 13 14:35:16 2024  
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I 1,4-Dichlorobenzene-d4	1.000	1.000	0.0	68	0.00	4.60
2 t 1,4-Dioxane	0.543	0.488	10.1	56	0.00	2.37
3 t Pyridine	1.406	1.332	5.3	56	0.00	2.69
4 t N-Nitrosodimethylamine	0.750	0.690	8.0	57	0.00	2.67
5 S 2-Fluorophenol	1.150	1.225	-6.5	65	0.00	3.75
6 t Indene	2.057	2.132	-3.6	66	0.00	4.77
7 t Cumene	2.649	2.796	-5.5	66	0.00	4.09
8 S Phenol-d5	1.483	1.546	-4.2	64	0.00	4.38
9 t Phenol	1.598	1.775	-11.1	69	0.00	4.39
10 Aniline	1.966	1.994	-1.4	63	0.00	4.39
11 t bis(2-Chloroethyl)ether	1.287	1.301	-1.1	63	0.00	4.44
12 t 2-Chlorophenol	1.205	1.295	-7.5	66	0.00	4.47
13 t Decane	1.566	1.513	3.4	61	0.00	4.49
14 t 1,3-Dichlorobenzene	1.387	1.498	-8.0	68	0.00	4.56
15 t 1,4-Dichlorobenzene	1.405	1.500	-6.8	67	0.00	4.61
16 t Benzyl alcohol	0.815	0.866	-6.3	65	0.00	4.69
17 t 1,2-Dichlorobenzene	1.341	1.413	-5.4	67	0.00	4.71
18 t Acetophenone	1.839	1.921	-4.5	67	0.00	4.86
19 t 2-Methylphenol	1.109	1.150	-3.7	65	0.00	4.77
20 t 2,2'-oxybis(1-Chloropropa	0.363	0.379	-4.4	66	0.00	4.77
21 t 3&4-Methylphenol	1.141	1.194	-4.6	66	0.00	4.86
22 t n-Nitroso-di-n-propylamin	0.928	0.922	0.6	63	0.00	4.86
23 t Hexachloroethane	0.531	0.617	-16.2	72	0.00	4.92
24 I Naphthalene-d8	1.000	1.000	0.0	69	0.00	5.41
25 S Nitrobenzene-d5	0.410	0.434	-5.9	64	0.00	4.95
26 t Nitrobenzene	0.420	0.442	-5.2	64	0.00	4.97
27 t Quinoline	0.618	0.668	-8.1	66	0.00	5.64
28 t Isophorone	0.720	0.752	-4.4	65	0.00	5.12
29 t 2-Nitrophenol	0.165	0.200	-21.2#	70	0.00	5.17
30 t 2,4-Dimethylphenol	0.366	0.396	-8.2	67	0.00	5.19
31 t Benzoic acid	0.280	0.269	3.9	58	0.00	5.27
32 t bis(2-Chloroethoxy)methan	0.450	0.464	-3.1	64	0.00	5.25
33 t 2,4-Dichlorophenol	0.283	0.321	-13.4	70	0.00	5.32
34 t 2,6-Dichlorophenol	0.275	0.310	-12.7	71	0.00	5.46
35 1,3,5-Trichlorobenzene	0.337	0.377	-11.9	71	0.00	5.17
36 t 1,2,4-Trichlorobenzene	0.321	0.362	-12.8	71	0.00	5.37
37 1,2,3-Trichlorobenzene	0.314	0.347	-10.5	70	0.00	5.51
38 t Naphthalene	0.958	1.009	-5.3	68	0.00	5.42
39 t 4-Chloroaniline	0.403	0.429	-6.5	66	0.00	5.45
40 t 2,3-Dichloroaniline	0.329	0.366	-11.2	69	0.00	6.05
41 t Hydroquinone	0.284	0.298	-4.9	66	0.00	5.66

6.8.11  
6

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** ECJ302-CC296  
**Lab FileID:** CJ6675.D

42	t	Hexachlorobutadiene	0.198	0.230	-16.2	72	0.00	5.49
43	t	4-Chloro-3-methylphenol	0.306	0.336	-9.8	67	0.00	5.76
44	t	2-Methylnaphthalene	0.568	0.622	-9.5	68	0.00	5.86
45	t	1-Methylnaphthalene	0.543	0.601	-10.7	70	0.00	5.93
46	I	Acenaphthene-d10	1.000	1.000	0.0	70	0.00	6.59
47	t	Hexachlorocyclopentadiene	0.382	0.372	2.6	59	0.00	5.96
48		1,2,4,5-tetrachlorobenzen	0.578	0.650	-12.5	73	0.00	5.97
49	t	2,4,6-Trichlorophenol	0.351	0.420	-19.7	72	0.00	6.05
50	t	2,4,5-Trichlorophenol	0.386	0.446	-15.5	70	0.00	6.07
51	S	2-Fluorobiphenyl	1.259	1.397	-11.0	71	0.00	6.10
52	t	2-Chloronaphthalene	1.086	1.173	-8.0	70	0.00	6.19
53	t	Biphenyl	1.374	1.491	-8.5	71	0.00	6.17
54	t	2-Nitroaniline	0.367	0.402	-9.5	67	0.00	6.26
55	t	Dimethylphthalate	1.250	1.391	-11.3	70	0.00	6.38
56	t	Acenaphthylene	1.551	1.722	-11.0	70	0.00	6.48
57	t	2,6-Dinitrotoluene	0.262	0.309	-17.9	71	0.00	6.43
58	t	3-Nitroaniline	0.296	0.339	-14.5	68	0.00	6.55
59	t	Acenaphthene	1.103	1.205	-9.2	70	0.00	6.61
			----- True	Calc.	% Drift	-----		
60	t	2,4-Dinitrophenol	100.000	111.926	-11.9	72	0.00	6.63
			----- AvgRF	CCRF	% Dev	-----		
61	t	4-Nitrophenol	0.195	0.226	-15.9	68	0.00	6.68
62	t	Dibenzofuran	1.531	1.675	-9.4	70	0.00	6.74
63	t	2,4-Dinitrotoluene	0.363	0.439	-20.9#	72	0.00	6.72
64		2,3,4,6-Tetrachlorophenol	0.297	0.366	-23.2#	74	0.00	6.83
65	t	Diethylphthalate	1.275	1.454	-14.0	72	0.00	6.91
66	t	Fluorene	1.209	1.344	-11.2	71	0.00	7.01
67	t	4-Chlorophenyl-phenylethe	0.578	0.673	-16.4	74	0.00	7.00
68	t	4-Nitroaniline	0.301	0.348	-15.6	70	0.00	7.02
69	I	Phenanthrene-d10	1.000	1.000	0.0	72	0.00	7.79
70	t	4,6-Dinitro-2-methylpheno	0.101	0.131	-29.7#	78	0.00	7.05
71	t	n-Nitrosodiphenylamine	0.546	0.603	-10.4	71	0.00	7.10
72	t	1,2-Diphenylhydrazine	0.766	0.786	-2.6	66	0.00	7.13
73		pentachloronitrobenzene	0.035	0.041#	-17.1	76	0.00	7.63
74	S	2,4,6-Tribromophenol	0.088	0.112	-27.3#	78	0.00	7.20
75	t	4-Bromophenyl-phenylether	0.182	0.212	-16.5	76	0.00	7.40
76	t	Hexachlorobenzene	0.203	0.240	-18.2	78	0.00	7.46
77	t	Pentachlorophenol	0.124	0.139	-12.1	67	0.00	7.63
78	t	Phenanthrene	0.967	1.041	-7.7	72	0.00	7.82
79	t	Anthracene	0.968	1.060	-9.5	71	0.00	7.86
80	t	Carbazole	0.902	0.982	-8.9	70	0.00	8.00
81	t	Di-n-butylphthalate	1.114	1.293	-16.1	72	0.00	8.32
82	t	Fluoranthene	1.047	1.180	-12.7	72	0.00	8.90
83	t	Octadecane	0.549	0.558	-1.6	64	0.00	7.69
84	I	Chrysene-d12	1.000	1.000	0.0	67	0.00	10.28
85		benzidine	0.717	0.881	-22.9#	71	0.00	9.03
86	t	Pyrene	1.360	1.614	-18.7	72	0.00	9.12
87	S	Terphenyl-d14	0.988	1.180	-19.4	72	0.00	9.27
88	t	Butylbenzylphthalate	0.607	0.775	-27.7#	72	0.00	9.75
89	t	Benzo[a]anthracene	1.286	1.423	-10.7	68	0.00	10.27
90	t	3,3'-Dichlorobenzidine	0.445	0.551	-23.8#	70	0.00	10.25
91	t	Chrysene	1.187	1.320	-11.2	68	0.00	10.31
92	t	bis(2-Ethylhexyl)phthalat	0.899	1.049	-16.7	67	0.00	10.32
93	I	Perylene-d12	1.000	1.000	0.0	61	0.00	11.61

6.8.11  
6



# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** ECJ302-CC296  
**Lab FileID:** CJ6675.D

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94	t	Di-n-octylphthalate	1.468	1.869	-27.3#	65	0.00	10.93
95	t	Benzo[b]fluoranthene	1.208	1.374	-13.7	58	0.00	11.27
96	t	Benzo[k]fluoranthene	1.087	1.195	-9.9	63	0.00	11.29
97	t	Benzo[a]pyrene	1.000	1.140	-14.0	60	0.00	11.56
98	t	Indeno[1,2,3-cd]pyrene	1.209	1.367	-13.1	60	0.00	12.77
99	t	Dibenz(a,h)acridine	0.804	0.934	-16.2	59	0.00	12.49
100	t	Dibenz[a,h]anthracene	0.966	1.098	-13.7	60	0.00	12.79
101	t	7,12-Dimethylbenz(a)anthr	0.481	0.571	-18.7	61	0.00	11.26
102	t	Benzo[g,h,i]perylene	0.940	1.039	-10.5	60	0.00	13.10

-----  
-----

(#) = Out of Range                      SPCC's out = 0    CCC's out = 0  
cj6675.D    mCJ296.m                      Mon May 13 14:35:37 2024

6.8.11  
6

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** ECJ302-CC296  
**Lab FileID:** CJ6676.D

## Evaluate Continuing Calibration Report

Data File : X:\Dayton SVOA GCMS\nerirose\ecj302\cj6676.D Vial: 3  
Acq On : 13 May 2024 08:48 am Operator: kaleigh  
Sample : cc296-50 Inst : GCMSCJ  
Misc : op53120,ecj302,30.0,,,1,1 Multiplr: 1.00  
MS Integration Params: lscint.p

Method : X:\Dayton SVOA G...methods\mCJ296.m (RTE Integrator)  
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
Last Update : Mon May 13 14:35:16 2024  
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
103	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	72	0.00	4.60
104	Benzaldehyde	1.145	1.154	-0.8	70	0.02	4.32
105	Phenanthrene-d10a	1.000	1.000	0.0	75	0.00	7.79
106	Atrazine	0.091	0.104	-14.3	79	0.00	7.54
107 I	Naphthalene-d8a	1.000	1.000	0.0	74	0.00	5.41
108 T	Caprolactam	0.170	0.177	-4.1	67	0.00	5.67
109	Phenanthrene-d10b	1.000	1.000	0.0	75	0.00	7.79
110 s	1-chlorooctadecane	0.377	0.374	0.8	68	0.00	8.80
111 s	o-terphenyl	0.503	0.553	-9.9	80	0.00	8.13

(#) = Out of Range SPCC's out = 0 CCC's out = 0  
cj6675.D mCJ296.m Mon May 13 14:35:40 2024

# Initial Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** EM8478-ICC8478  
**Lab FileID:** M195471.D

## Response Factor Report MSM

Method : C:\MSDCHEM\1\METHODS\MM8478.M (RTE Integrator)  
Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um  
Last Update : Fri May 10 12:22:01 2024  
Response via : Initial Calibration

### Calibration Files

2 =m195473.D 5 =m195474.D 100 =m195478.D 50 =m195472.D  
1 =m195472.D 10 =m195475.D 80 =m195477.D 25 =m195476.D

Compound	2	5	100	50	1	10	80	25	Avg	%RSD
-----										
1) I 1,4-Dichlorobenzene-d	-----ISTD-----									
2) 1,4-Dioxane	0.603	0.485	0.527	0.558	0.722	0.567	0.466	0.554	0.560	14.12
3) Pyridine	1.131	1.436	1.533	1.517	1.363	1.243	1.352	1.465	1.380	10.04
4) N-Nitrosodim	0.718	0.725	0.815	0.800	0.729	0.713	0.732	0.805	0.755	5.82
5) 2-Fluorophen	1.002	1.068	1.203	1.217	0.738	1.087	1.056	1.152	1.065	14.24
6) Indene	2.177	2.242	2.378	2.451	1.891	2.210	2.118	2.347	2.227	7.87
7) Cumene	2.379	2.623	2.876	2.945	2.810	2.707	2.587	3.011	2.742	7.64
8) Phenol-d5	1.386	1.375	1.670	1.712	1.652	1.528	1.506	1.623	1.557	8.26
9) Phenol	1.386	1.509	1.774	1.824	1.561	1.604	1.619	1.751	1.628	9.07
10) Aniline	1.679	2.034	2.126	2.230	1.694	1.940	1.924	2.186	1.977	10.58
11) bis(2-Chloro	1.065	1.175	1.264	1.227	1.227	1.182	1.147	1.261	1.194	5.56
12) 2-Chlorophen	1.245	1.206	1.354	1.415	1.321	1.229	1.230	1.350	1.294	5.88
13) Decane	1.408	1.517	1.533	1.620	1.506	1.499	1.379	1.636	1.512	5.93
14) 1,3-Dichloro	1.270	1.350	1.495	1.501	1.494	1.389	1.292	1.496	1.411	6.96
15) 1,4-Dichloro	1.394	1.434	1.502	1.542	1.385	1.385	1.363	1.516	1.440	4.86
16) Benzyl alcoh	0.538	0.738	0.942	0.944	0.844	0.781	0.832	0.911	0.816	16.47
17) 1,2-Dichloro	1.194	1.429	1.474	1.469	1.275	1.385	1.305	1.531	1.383	8.34
18) Acetophenone	1.907	2.163	2.323	2.345	2.109	2.143	2.102	2.338	2.179	6.93
19) 2-Methylphen	1.333	1.306	1.383	1.444	1.253	1.380	1.255	1.388	1.343	5.07
20) 2,2'-oxybis(	0.330	0.381	0.381	0.371	0.283	0.332	0.348	0.396	0.353	10.49
21) 3&4-Methylph	1.226	1.343	1.506	1.504	1.362	1.348	1.349	1.498	1.392	7.25
22) n-Nitroso-di	1.158	1.102	1.200	1.200	1.064	1.101	1.069	1.197	1.136	5.20
23) Hexachloroet	0.499	0.495	0.541	0.530	0.489	0.469	0.480	0.541	0.506	5.57
-----										
24) I Naphthalene-d8	-----ISTD-----									
25) Nitrobenzene	0.352	0.398	0.448	0.413	0.384	0.399	0.406	0.437	0.404	7.41
26) Nitrobenzene	0.388	0.390	0.408	0.423	0.434	0.366	0.372	0.413	0.399	6.05
27) Quinoline	0.628	0.646	0.720	0.723	0.627	0.638	0.670	0.706	0.670	6.17
28) Isophorone	0.647	0.692	0.763	0.782	0.741	0.665	0.711	0.742	0.718	6.62
29) 2-Nitropheno	0.102	0.135	0.177	0.163	0.152	0.140	0.158	0.166	0.149	15.75
30) 2,4-Dimethyl	0.359	0.360	0.402	0.410	0.398	0.351	0.365	0.394	0.380	6.09
31) Benzoic acid		0.136	0.307	0.279		0.188	0.280	0.251	0.240	27.09
---- Quadratic regression ---- Coefficient = 0.9990										
Response Ratio = -0.01683 + 0.26216 *A + 0.01847 *A^2										
-----										
32) bis(2-Chloro	0.404	0.398	0.416	0.422	0.445	0.382	0.391	0.397	0.407	4.92
33) 2,4-Dichloro	0.263	0.248	0.291	0.287	0.346	0.237	0.254	0.272	0.275	12.45
34) 2,6-Dichloro	0.202	0.262	0.281	0.279	0.223	0.260	0.257	0.273	0.255	10.99
35) 1,3,5-Trichl	0.287	0.317	0.318	0.328	0.353	0.293	0.295	0.326	0.315	6.99
36) 1,2,4-Trichl	0.262	0.316	0.304	0.317	0.267	0.272	0.292	0.309	0.292	7.66
37) 1,2,3-Trichl	0.311	0.300	0.315	0.319	0.332	0.280	0.292	0.314	0.308	5.34
38) Naphthalene	0.884	0.955	1.037	1.041	0.946	0.929	0.956	1.018	0.971	5.76
39) 4-Chloroanil	0.367	0.385	0.428	0.435	0.440	0.366	0.399	0.427	0.406	7.51
40) 2,3-Dichloro	0.274	0.313	0.357	0.355	0.425	0.317	0.321	0.340	0.338	13.12
41) Hydroquinone	0.261	0.307	0.295	0.329	0.305	0.285	0.289	0.344	0.302	8.51
42) Hexachlorobu	0.168	0.177	0.185	0.186	0.187	0.167	0.168	0.184	0.178	4.95

# Initial Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** EM8478-ICC8478  
**Lab FileID:** M195471.D

43)	4-Chloro-3-m	0.303	0.315	0.366	0.364	0.332	0.323	0.329	0.356	0.336	6.98
44)	2-Methylnaph	0.510	0.592	0.640	0.624	0.616	0.555	0.595	0.599	0.591	7.02
45)	1-Methylnaph	0.574	0.639	0.669	0.653	0.646	0.598	0.606	0.653	0.630	5.25
46)	I Acenaphthene-d10	-----ISTD-----									
47)	Hexachlorocy	0.279	0.286	0.319	0.365	0.267	0.298	0.324	0.351	0.311	11.15
48)	1,2,4,5-Tetr	0.475	0.554	0.542	0.585	0.594	0.521	0.510	0.539	0.540	7.23
49)	2,4,6-Trichl	0.298	0.350	0.358	0.391	0.344	0.340	0.336	0.367	0.348	7.65
50)	2,4,5-Trichl	0.382	0.379	0.410	0.441	0.337	0.363	0.386	0.406	0.388	8.11
51)	2-Fluorobiph	1.082	1.220	1.253	1.397	1.412	1.207	1.212	1.340	1.265	8.79
52)	2-Chloronaph	0.963	1.024	1.084	1.182	1.035	1.073	1.038	1.127	1.066	6.32
53)	Biphenyl	1.268	1.369	1.424	1.556	1.545	1.355	1.380	1.512	1.426	7.20
54)	2-Nitroanili	0.273	0.351	0.413	0.439	0.404	0.373	0.397	0.429	0.385	13.86
55)	Dimethylphth	1.141	1.336	1.329	1.460	1.480	1.237	1.298	1.369	1.331	8.34
56)	Acenaphthyle	1.353	1.537	1.693	1.824	1.590	1.591	1.602	1.722	1.614	8.69
57)	2,6-Dinitrot	0.182	0.227	0.270	0.284	0.204	0.211	0.254	0.269	0.238	15.49
58)	3-Nitroanili	0.221	0.260	0.333	0.347	0.308	0.287	0.311	0.325	0.299	13.93
59)	Acenaphthene	1.094	1.121	1.179	1.278	1.317	1.133	1.140	1.231	1.186	6.77
60)	2,4-Dinitrop	0.055	0.085	0.189	0.174		0.100	0.173	0.146	0.132	39.36
---- Quadratic regression ---- Coefficient = 0.9976											
Response Ratio = -0.01179 + 0.14252 *A + 0.00966 *A^2											
61)	4-Nitropheno	0.204	0.255	0.267		0.224	0.235	0.254	0.240		9.67
62)	Dibenzofuran	1.391	1.553	1.638	1.725	1.919	1.555	1.546	1.660	1.623	9.56
63)	2,4-Dinitrot	0.228	0.271	0.404	0.411	0.324	0.352	0.379	0.401	0.346	19.49
64)	2,3,4,6-Tetr	0.241	0.263	0.352	0.358	0.301	0.304	0.321	0.338	0.310	13.43
65)	Diethylphtha	1.256	1.347	1.456	1.560	1.578	1.353	1.399	1.455	1.425	7.69
66)	Fluorene	1.113	1.225	1.328	1.454	1.447	1.211	1.270	1.369	1.302	9.18
67)	4-Chlorophen	0.646	0.567	0.623	0.679	0.582	0.603	0.600	0.635	0.617	5.91
68)	4-Nitroanili	0.274	0.270	0.336	0.379	0.261	0.323	0.326	0.359	0.316	13.81
69)	I Phenanthrene-d10	-----ISTD-----									
70)	4,6-Dinitro-	0.068	0.108	0.107		0.076	0.106	0.097	0.093		18.82
71)	n-Nitrosodip	0.473	0.529	0.514	0.560	0.560	0.493	0.500	0.544	0.522	6.17
72)	Pentachloron	0.025	0.026	0.033	0.036	0.036	0.030	0.031	0.035	0.032#	13.33
73)	1,2-Diphenyl	0.602	0.717	0.707	0.777	0.753	0.686	0.687	0.755	0.710	7.77
74)	2,4,6-Tribr	0.062	0.091	0.089	0.099	0.069	0.082	0.088	0.096	0.084	15.22
75)	4-Bromopheny	0.151	0.171	0.168	0.184	0.213	0.161	0.167	0.178	0.174	10.71
76)	Hexachlorobe	0.167	0.206	0.194	0.208	0.219	0.183	0.188	0.210	0.197	8.69
77)	Pentachlorop	0.073	0.098	0.129	0.135		0.100	0.124	0.124	0.112	19.94
---- Quadratic regression ---- Coefficient = 0.9980											
Response Ratio = -0.00718 + 0.13001 *A + -0.00000 *A^2											
78)	Phenanthrene	0.906	1.026	0.999	1.110	1.223	0.946	0.973	1.038	1.028	9.75
79)	Anthracene	0.895	0.987	1.027	1.111	1.068	0.944	1.007	1.072	1.014	7.05
80)	Carbazole	0.834	0.857	0.920	1.013	0.971	0.847	0.888	0.960	0.911	7.19
81)	Di-n-butylph	0.991	1.080	1.196	1.298	1.145	1.065	1.165	1.213	1.144	8.45
82)	Fluoranthene	1.028	1.041	1.148	1.244	1.180	1.039	1.081	1.181	1.118	7.25
83)	Octadecane	0.430	0.468	0.484	0.541	0.556	0.459	0.480	0.530	0.494	8.97
84)	I Chrysene-d12	-----ISTD-----									
85)	Benzidine	0.389	0.591	0.689		0.545	0.626	0.717	0.593		19.91
---- Quadratic regression ---- Coefficient = 0.9995											
Response Ratio = -0.06095 + 0.85875 *A + -0.09835 *A^2											
86)	Pyrene	1.021	1.168	1.251	1.387	1.406	1.190	1.228	1.318	1.246	10.10
87)	Terphenyl-d1	0.759	0.820	0.908	1.010	0.939	0.836	0.878	0.951	0.888	9.13
88)	Butylbenzylp	0.440	0.467	0.575	0.633	0.472	0.500	0.568	0.594	0.531	13.20
89)	Benzo[a]anth	1.160	1.240	1.257	1.337	1.555	1.193	1.193	1.326	1.283	9.89
90)	3,3'-Dichlor	0.391	0.395	0.455	0.491	0.449	0.401	0.432	0.476	0.436	8.70

# Initial Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** EM8478-ICC8478  
**Lab FileID:** M195471.D

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91)	Chrysene	1.180	1.213	1.173	1.307	1.329	1.116	1.145	1.262	1.216	6.33
92)	bis(2-Ethylh	0.653	0.776	0.861	0.967	0.841	0.795	0.849	0.912	0.832	11.36
93)	I Perylene-d12										
94)	Di-n-octylph	1.072	1.184	1.285	1.512	1.294	1.189	1.307	1.395	1.280	10.61
95)	Benzo[b]fluo	0.926	1.076	1.134	1.221	1.293	1.058	1.139	1.181	1.129	9.89
96)	Benzo[k]fluo	1.017	1.062	1.013	1.228	1.175	1.054	1.025	1.191	1.095	8.01
97)	Benzo[alpyre	0.824	0.965	0.992	1.126	1.103	0.945	0.989	1.039	0.998	9.53
98)	Indeno[1,2,3	1.125	1.279	1.302	1.458	1.551	1.233	1.312	1.392	1.331	10.00
99)	Dibenz(a,h)a	0.788	0.886	0.877	0.970	0.908	0.821	0.896	0.916	0.883	6.40
100)	Dibenz[a,h]a	0.990	1.043	1.063	1.182	1.150	1.015	1.074	1.121	1.080	6.16
101)	7,12-Dimethy	0.369	0.416	0.432	0.499	0.483	0.425	0.436	0.474	0.442	9.53
102)	Benzo[g,h,i]	0.859	0.999	0.994	1.139	1.111	0.947	1.022	1.064	1.017	8.84
103)	I 1,4-Dichlorobenzene-d										
104)	Benzaldehyde	1.170	1.283	1.210	1.193	1.405	1.212	1.237	1.105	1.227	7.19
105)	I Acenaphthene-d10a										
106)	Atrazine	0.138	0.172	0.190	0.190	0.220	0.184	0.188	0.167	0.181	12.91
107)	I Chrysene-d12a										
108)	1-chloroocta	0.342	0.400	0.427	0.416	0.433	0.421	0.427	0.375	0.405	7.81
109)	Phenanthrene-d10a										
110)	o-terphenyl	0.509	0.522	0.529	0.546	0.759	0.537	0.548	0.499	0.556	15.07
111)	I Naphthalene-d8a										
112)	Caprolactam	0.168	0.172	0.190	0.199	0.275	0.181	0.198	0.171	0.194	17.98

-----  
(#) = Out of Range ### Number of calibration levels exceeded format ###

MM8478.M

Fri May 10 12:25:19 2024

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** EM8478-ICV8478  
**Lab FileID:** M195487.D

## Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EM8478\m195487.D Vial: 18  
 Acq On : 9 May 2024 10:33 pm Operator: karimam  
 Sample : icv8478-50 Inst : MSM  
 Misc : op51889,em8478,30.0,,,1,1 Multiplr: 1.00  
 MS Integration Params: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\MM8478.M (RTE Integrator)  
 Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um  
 Last Update : Fri May 10 11:24:07 2024  
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	90	0.00	3.70
2 t	1,4-Dioxane	0.560	0.530	5.4	86	0.00	2.33
6 t	Indene	2.227	2.280	-2.4	84	0.00	3.84
7 t	Cumene	2.742	2.833	-3.3	87	0.00	3.28
11 t	bis(2-Chloroethyl)ether	1.194	1.198	-0.3	88	0.00	3.54
13 t	Decane	1.512	1.543	-2.1	86	0.00	3.58
14 t	1,3-Dichlorobenzene	1.411	1.463	-3.7	88	0.00	3.67
15 t	1,4-Dichlorobenzene	1.440	1.462	-1.5	86	0.00	3.71
16 t	Benzyl alcohol	0.816	0.895	-9.7	86	0.00	3.76
17 t	1,2-Dichlorobenzene	1.383	1.413	-2.2	87	0.00	3.80
18 t	Acetophenone	2.179	2.139	1.8	82	0.00	3.92
20 t	2,2'-oxybis(1-Chloropropa	0.353	0.369	-4.5	90	0.00	3.83
23 t	Hexachloroethane	0.506	0.523	-3.4	89	0.00	3.99
24 I	Naphthalene-d8	1.000	1.000	0.0	92	0.00	4.44
26 t	Nitrobenzene	0.399	0.382	4.3	83	0.00	4.02
27 t	Quinoline	0.670	0.635	5.2	81	-0.01	4.67
28 t	Isophorone	0.718	0.704	1.9	83	0.00	4.15
	----- AvgRF CCRF % Dev -----						
32 t	bis(2-Chloroethoxy)methan	0.407	0.387	4.9	84	0.00	4.27
35 t	1,3,5-Trichlorobenzene	0.315	0.311	1.3	87	0.00	4.21
36 t	1,2,4-Trichlorobenzene	0.292	0.300	-2.7	87	0.00	4.40
37 t	1,2,3-Trichlorobenzene	0.308	0.308	0.0	89	0.00	4.54
38 t	Naphthalene	0.971	0.998	-2.8	88	0.00	4.45
40 t	2,3-Dichloroaniline	0.338	0.323	4.4	84	0.00	5.09
42 t	Hexachlorobutadiene	0.178	0.186	-4.5	92	0.00	4.52
44 t	2-Methylnaphthalene	0.591	0.593	-0.3	88	0.00	4.90
45 t	1-Methylnaphthalene	0.630	0.612	2.9	86	0.00	4.97
46 I	Acenaphthene-d10	1.000	1.000	0.0	96	0.00	5.67
47 t	Hexachlorocyclopentadiene	0.311	0.360	-15.8	95	0.00	5.00
48	1,2,4,5-Tetrachlorobenzen	0.540	0.525	2.8	86	0.00	5.01
52 t	2-Chloronaphthalene	1.066	1.061	0.5	86	0.00	5.24
53 t	Biphenyl	1.426	1.406	1.4	87	0.00	5.22
55 t	Dimethylphthalate	1.331	1.298	2.5	85	0.00	5.45
56 t	Acenaphthylene	1.614	1.706	-5.7	90	0.00	5.56

6.8.14

6

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** EM8478-ICV8478  
**Lab FileID:** M195487.D

57 t	2,6-Dinitrotoluene	0.238	0.247	-3.8	83	0.00	5.50
59 t	Acenaphthene	1.186	1.178	0.7	88	0.00	5.70
62 t	Dibenzofuran	1.623	1.593	1.8	88	0.00	5.84
63 t	2,4-Dinitrotoluene	0.346	0.363	-4.9	85	0.00	5.82
65 t	Diethylphthalate	1.425	1.403	1.5	86	0.00	6.02
66 t	Fluorene	1.302	1.293	0.7	85	0.00	6.14
67 t	4-Chlorophenyl-phenylethe	0.617	0.611	1.0	86	0.00	6.13
69 I	Phenanthrene-d10	1.000	1.000	0.0	94	0.00	7.03
72	Pentachloronitrobenzene	0.032	0.033#	-3.1	86	0.00	6.85
73 t	1,2-Diphenylhydrazine	0.710	0.716	-0.8	86	0.00	6.27
75 t	4-Bromophenyl-phenylether	0.174	0.170	2.3	87	0.00	6.58
76 t	Hexachlorobenzene	0.197	0.198	-0.5	89	0.00	6.64
	----- AvgRF	CCRF	% Dev	-----			
78 t	Phenanthrene	1.028	1.012	1.6	85	0.00	7.05
79 t	Anthracene	1.014	1.025	-1.1	86	0.00	7.11
80 t	Carbazole	0.911	0.906	0.5	84	0.00	7.28
81 t	Di-n-butylphthalate	1.144	1.171	-2.4	84	0.00	7.66
82 t	Fluoranthene	1.118	1.138	-1.8	86	0.00	8.35
83 t	Octadecane	0.494	0.490	0.8	85	0.00	6.91
84 I	Chrysene-d12	1.000	1.000	0.0	97	0.00	10.03
	----- AvgRF	CCRF	% Dev	-----			
86 t	Pyrene	1.246	1.211	2.8	85	0.00	8.60
88 t	Butylbenzylphthalate	0.531	0.563	-6.0	87	0.00	9.39
89 t	Benzo[a]anthracene	1.283	1.193	7.0	87	0.00	10.01
91 t	Chrysene	1.216	1.183	2.7	88	0.00	10.06
92 t	bis(2-Ethylhexyl)phthalat	0.832	0.835	-0.4	84	0.00	10.09
93 I	Perylene-d12	1.000	1.000	0.0	97	0.00	11.63
94 t	Di-n-octylphthalate	1.280	1.355	-5.9	87	0.00	10.84
95 t	Benzo[b]fluoranthene	1.129	1.134	-0.4	90	0.00	11.23
96 t	Benzo[k]fluoranthene	1.095	1.130	-3.2	89	0.00	11.26
97 t	Benzo[a]pyrene	0.998	1.022	-2.4	88	0.00	11.57
98 t	Indeno[1,2,3-cd]pyrene	1.331	1.367	-2.7	91	0.00	12.91
99 t	Dibenz(a,h)acridine	0.883	0.913	-3.4	91	0.00	12.61
100 t	Dibenz[a,h]anthracene	1.080	1.106	-2.4	91	0.00	12.94
101 t	7,12-Dimethylbenz(a)anthr	0.442	0.411	7.0	80	0.00	11.22
102 t	Benzo[g,h,i]perylene	1.017	1.054	-3.6	90	0.00	13.27

(#) = Out of Range  
 m195471.D MM8478.M

SPCC's out = 0 CCC's out = 0  
 Fri May 10 11:28:45 2024

6.8.14  
 6

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** EM8478-ICV8478  
**Lab FileID:** M195488.D

## Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EM8478\m195488.D Vial: 19  
 Acq On : 9 May 2024 10:54 pm Operator: karimam  
 Sample : icv8478-50 Inst : MSM  
 Misc : op51889,em8478,30.0,,,1,1 Multiplr: 1.00  
 MS Integration Params: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\MM8478.M (RTE Integrator)  
 Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um  
 Last Update : Fri May 10 11:24:07 2024  
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	102	0.00	3.70
9 t	Phenol	1.628	1.566	3.8	88	0.00	3.48
12 t	2-Chlorophenol	1.294	1.238	4.3	89	0.00	3.58
19 t	2-Methylphenol	1.343	1.208	10.1	86	0.00	3.81
21 t	3&4-Methylphenol	1.392	1.308	6.0	89	0.00	3.90
24 I	Naphthalene-d8	1.000	1.000	0.0	104	0.00	4.44
29 t	2-Nitrophenol	0.149	0.151	-1.3	96	0.00	4.21
30 t	2,4-Dimethylphenol	0.380	0.367	3.4	93	0.00	4.21
	----- True	Calc.	% Drift	-----			
31 t	Benzoic acid	50.000	47.295	5.4	95	-0.01	4.28
	----- AvgRF	CCRF	% Dev	-----			
33 t	2,4-Dichlorophenol	0.275	0.246	10.5	89	0.00	4.35
34 t	2,6-Dichlorophenol	0.255	0.247	3.1	92	0.00	4.49
41 t	Hydroquinone	0.302	0.351	-16.2	111	0.00	4.71
43 t	4-Chloro-3-methylphenol	0.336	0.321	4.5	91	0.00	4.78
46 I	Acenaphthene-d10	1.000	1.000	0.0	105	0.00	5.67
49 t	2,4,6-Trichlorophenol	0.348	0.346	0.6	93	0.00	5.09
50 t	2,4,5-Trichlorophenol	0.388	0.371	4.4	88	0.00	5.12
	----- True	Calc.	% Drift	-----			
60 t	2,4-Dinitrophenol	100.000	93.824	6.2	91	0.00	5.72
	----- AvgRF	CCRF	% Dev	-----			
61 t	4-Nitrophenol	0.240	0.249	-3.8	98	0.00	5.76
64 t	2,3,4,6-Tetrachlorophenol	0.310	0.322	-3.9	94	0.00	5.93
69 I	Phenanthrene-d10	1.000	1.000	0.0	108	0.00	7.03
70 t	4,6-Dinitro-2-methylpheno	0.093	0.090	3.2	92	-0.01	6.17

6.8.15

6



# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** EM8478-ICV8478  
**Lab FileID:** M195488.D

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	True	Calc.	% Drift			
77 t Pentachlorophenol	100.000	90.442	9.6	92	0.00	6.83

2,3,7,8-TCDD

-----NA-----

(#) = Out of Range  
m195471.D MM8478.M

SPCC's out = 0 CCC's out = 0  
Fri May 10 11:47:46 2024

6.8.15

6

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** EM8478-ICV8478  
**Lab FileID:** M195489.D

## Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EM8478\m195489.D Vial: 20  
 Acq On : 9 May 2024 11:15 pm Operator: karimam  
 Sample : icv8478-50 Inst : MSM  
 Misc : op51889,em8478,30.0,,,1,1 Multiplr: 1.00  
 MS Integration Params: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\MM8478.M (RTE Integrator)  
 Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um  
 Last Update : Fri May 10 11:24:07 2024  
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	100	0.00	3.70
3 t	Pyridine	1.380	1.337	3.1	88	0.00	2.47
4 t	N-Nitrosodimethylamine	0.755	0.823	-9.0	102	0.00	2.44
10 t	Aniline	1.977	2.102	-6.3	94	0.00	3.52
22 t	n-Nitroso-di-n-propylamin	1.136	1.124	1.1	93	0.00	3.91
24 I	Naphthalene-d8	1.000	1.000	0.0	105	0.00	4.44
39 t	4-Chloroaniline	0.406	0.386	4.9	93	0.00	4.48
46 I	Acenaphthene-d10	1.000	1.000	0.0	109	0.00	5.67
54 t	2-Nitroaniline	0.385	0.385	0.0	96	0.00	5.32
58 t	3-Nitroaniline	0.299	0.306	-2.3	96	0.00	5.64
68 t	4-Nitroaniline	0.316	0.328	-3.8	94	-0.01	6.15
69 I	Phenanthrene-d10	1.000	1.000	0.0	109	0.00	7.03
71 t	n-Nitrosodiphenylamine	0.522	0.494	5.4	96	0.00	6.24
84 I	Chrysene-d12	1.000	1.000	0.0	111	0.00	10.03
	----- True Calc. % Drift -----						
85	Benzidine	50.000	61.659	-23.3	132	0.00	8.52
90 t	3,3'-Dichlorobenzidine	0.436	0.449	-3.0	101	0.00	10.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0  
 m195471.D MM8478.M Fri May 10 11:50:06 2024

6.8.16  
6

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** EM8478-ICV8478  
**Lab FileID:** M195490.D

## Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EM8478\m195490.D Vial: 21  
Acq On : 9 May 2024 11:37 pm Operator: karimam  
Sample : icv8478-50 Inst : MSM  
Misc : op51889,em8478,30.0,,,1,1 Multiplr: 1.00  
MS Integration Params: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\MM8478.M (RTE Integrator)  
Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um  
Last Update : Fri May 10 12:22:01 2024  
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
103 I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	77	0.00	3.70
104 t	Benzaldehyde	1.227	1.278	-4.2	83	0.00	3.47
105 I	Acenaphthene-d10a	1.000	1.000	0.0	82	0.00	5.67
106 t	Atrazine	0.181	0.185	-2.2	80	0.00	6.74
111 I	Naphthalene-d8a	1.000	1.000	0.0	81	0.00	4.44
112	Caprolactam	0.194	0.191	1.5	78	0.00	4.71

(#) = Out of Range SPCC's out = 0 CCC's out = 0  
m195479a.D MM8478.M Fri May 10 12:25:34 2024

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** EM8483-CC8478  
**Lab FileID:** M195571.D

## Evaluate Continuing Calibration Report

Data File : X:\Dayton SVOA GCMS\...rose\em8309\m195571.D Vial: 1  
 Acq On : 14 May 2024 9:54 am Operator: kaleigh  
 Sample : cc8478-50 Inst : MSM  
 Misc : op51889,em8483,30.0,,,1,1 Multiplr: 1.00  
 MS Integration Params: LSCINT.P

Method : X:\Dayton SVOA G...methods\MM8478.M (RTE Integrator)  
 Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um  
 Last Update : Mon May 13 16:54:19 2024  
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	98	0.00	3.69
2 t	1,4-Dioxane	0.560	0.543	3.0	95	-0.01	2.30
3 t	Pyridine	1.380	1.395	-1.1	90	-0.01	2.45
4 t	N-Nitrosodimethylamine	0.755	0.662	12.3	81	-0.01	2.42
5 S	2-Fluorophenol	1.065	1.202	-12.9	96	0.00	3.01
6 t	Indene	2.227	2.340	-5.1	93	0.00	3.84
7 t	Cumene	2.742	2.937	-7.1	97	0.00	3.26
8 S	Phenol-d5	1.557	1.655	-6.3	94	0.00	3.47
9 t	Phenol	1.628	1.730	-6.3	93	0.00	3.47
10 t	Aniline	1.977	2.155	-9.0	94	0.00	3.51
11 t	bis(2-Chloroethyl)ether	1.194	1.177	1.4	94	0.00	3.53
12 t	2-Chlorophenol	1.294	1.403	-8.4	97	0.00	3.57
13 t	Decane	1.512	1.343	11.2	81	0.00	3.57
14 t	1,3-Dichlorobenzene	1.411	1.537	-8.9	100	0.00	3.66
15 t	1,4-Dichlorobenzene	1.440	1.561	-8.4	99	0.00	3.70
16 t	Benzyl alcohol	0.816	1.003	-22.9#	104	0.00	3.76
17 t	1,2-Dichlorobenzene	1.383	1.503	-8.7	100	0.00	3.78
18 t	Acetophenone	2.179	2.314	-6.2	96	0.00	3.91
19 t	2-Methylphenol	1.343	1.345	-0.1	91	0.00	3.81
20 t	2,2'-oxybis(1-Chloropropa	0.353	0.377	-6.8	99	0.00	3.82
21 t	3&4-Methylphenol	1.392	1.434	-3.0	93	0.00	3.90
22 t	n-Nitroso-di-n-propylamin	1.136	1.096	3.5	89	0.00	3.90
23 t	Hexachloroethane	0.506	0.565	-11.7	104	0.00	3.98
24 I	Naphthalene-d8	1.000	1.000	0.0	98	0.00	4.43
25 S	Nitrobenzene-d5	0.404	0.408	-1.0	97	0.00	4.00
26 t	Nitrobenzene	0.399	0.405	-1.5	94	0.00	4.01
27 t	Quinoline	0.670	0.732	-9.3	99	0.00	4.67
28 t	Isophorone	0.718	0.739	-2.9	93	0.00	4.15
29 t	2-Nitrophenol	0.149	0.184	-23.5#	111	0.00	4.20
30 t	2,4-Dimethylphenol	0.380	0.402	-5.8	96	0.00	4.21
31 t	Benzoic acid	50.000	55.151	-10.3	107	0.00	4.29
32 t	bis(2-Chloroethoxy)methan	0.407	0.405	0.5	94	0.00	4.27
33 t	2,4-Dichlorophenol	0.275	0.293	-6.5	100	0.00	4.34
34 t	2,6-Dichlorophenol	0.255	0.290	-13.7	102	0.00	4.48
35 t	1,3,5-Trichlorobenzene	0.315	0.325	-3.2	97	0.00	4.20
36 t	1,2,4-Trichlorobenzene	0.292	0.321	-9.9	99	0.00	4.39
37 t	1,2,3-Trichlorobenzene	0.308	0.321	-4.2	99	0.00	4.54

6.8.18  
6

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** EM8483-CC8478  
**Lab FileID:** M195571.D

38 t	Naphthalene	0.971	1.038	-6.9	98	0.00	4.44
39 t	4-Chloroaniline	0.406	0.450	-10.8	102	0.00	4.48
40 t	2,3-Dichloroaniline	0.338	0.351	-3.8	97	0.00	5.09
41 t	Hydroquinone	0.302	0.311	-3.0	93	0.00	4.70
42 t	Hexachlorobutadiene	0.178	0.188	-5.6	99	0.00	4.51
43 t	4-Chloro-3-methylphenol	0.336	0.362	-7.7	97	0.00	4.78
44 t	2-Methylnaphthalene	0.591	0.632	-6.9	99	0.00	4.89
45 t	1-Methylnaphthalene	0.630	0.656	-4.1	98	0.00	4.96
46 I	Acenaphthene-d10	1.000	1.000	0.0	98	0.00	5.66
47 t	Hexachlorocyclopentadiene	0.311	0.357	-14.8	96	0.00	4.99
48	1,2,4,5-Tetrachlorobenzen	0.540	0.572	-5.9	96	0.00	5.00
49 t	2,4,6-Trichlorophenol	0.348	0.393	-12.9	99	0.00	5.09
50 t	2,4,5-Trichlorophenol	0.388	0.417	-7.5	93	0.00	5.11
51 S	2-Fluorobiphenyl	1.265	1.344	-6.2	95	0.00	5.14
52 t	2-Chloronaphthalene	1.066	1.167	-9.5	97	0.00	5.23
53 t	Biphenyl	1.426	1.510	-5.9	95	0.00	5.21
54 t	2-Nitroaniline	0.385	0.433	-12.5	97	0.00	5.31
55 t	Dimethylphthalate	1.331	1.434	-7.7	97	0.00	5.44
56 t	Acenaphthylene	1.614	1.809	-12.1	98	0.00	5.55
57 t	2,6-Dinitrotoluene	0.238	0.306	-28.6#	106	0.00	5.49
58 t	3-Nitroaniline	0.299	0.354	-18.4	100	0.00	5.64
59 t	Acenaphthene	1.186	1.260	-6.2	97	0.00	5.69
		----- True	Calc.	% Drift	-----		
60 t	2,4-Dinitrophenol	100.000	123.216	-23.2#	118	0.00	5.72
		----- AvgRF	CCRF	% Dev	-----		
61 t	4-Nitrophenol	0.240	0.261	-8.8	96	0.00	5.76
62 t	Dibenzofuran	1.623	1.736	-7.0	99	0.00	5.83
63 t	2,4-Dinitrotoluene	0.346	0.442	-27.7#	106	0.00	5.82
64 t	2,3,4,6-Tetrachlorophenol	0.310	0.359	-15.8	99	0.00	5.93
65 t	Diethylphthalate	1.425	1.572	-10.3	99	0.00	6.01
66 t	Fluorene	1.302	1.380	-6.0	93	0.00	6.13
67 t	4-Chlorophenyl-phenylethe	0.617	0.624	-1.1	90	0.00	6.12
68 t	4-Nitroaniline	0.316	0.399	-26.3#	103	0.00	6.15
69 I	Phenanthrene-d10	1.000	1.000	0.0	96	0.00	7.02
70 t	4,6-Dinitro-2-methylpheno	0.093	0.126	-35.5#	114	0.00	6.17
71 t	n-Nitrosodiphenylamine	0.522	0.569	-9.0	98	0.00	6.22
72	Pentachloronitrobenzene	0.032	0.033#	-3.1	90	0.00	6.84
73 t	1,2-Diphenylhydrazine	0.710	0.743	-4.6	92	0.00	6.26
74 S	2,4,6-Tribromophenol	0.084	0.095	-13.1	93	0.00	6.35
75 t	4-Bromophenyl-phenylether	0.174	0.178	-2.3	93	0.00	6.57
76 t	Hexachlorobenzene	0.197	0.207	-5.1	96	0.00	6.63
		----- True	Calc.	% Drift	-----		
77 t	Pentachlorophenol	100.000	106.901	-6.9	97	0.00	6.83
		----- AvgRF	CCRF	% Dev	-----		
78 t	Phenanthrene	1.028	1.107	-7.7	96	0.00	7.05
79 t	Anthracene	1.014	1.139	-12.3	99	0.00	7.10
80 t	Carbazole	0.911	1.000	-9.8	95	0.00	7.27
81 t	Di-n-butylphthalate	1.144	1.320	-15.4	98	0.00	7.65
82 t	Fluoranthene	1.118	1.239	-10.8	96	0.00	8.34
83 t	Octadecane	0.494	0.472	4.5	84	0.00	6.90
84 I	Chrysene-d12	1.000	1.000	0.0	93	0.00	10.02
		----- True	Calc.	% Drift	-----		

6.8.18

6

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** EM8483-CC8478  
**Lab FileID:** M195571.D

85	Benzidine	50.000	43.666	12.7	82	0.00	8.51
----- AvgRF		CCRF	% Dev	-----			
86 t	Pyrene	1.246	1.424	-14.3	96	0.00	8.60
87 S	Terphenyl-d14	0.888	0.976	-9.9	90	0.00	8.79
88 t	Butylbenzylphthalate	0.531	0.699	-31.6#	103	0.00	9.38
89 t	Benzo[a]anthracene	1.283	1.383	-7.8	96	0.00	10.01
90 t	3,3'-Dichlorobenzidine	0.436	0.499	-14.4	95	0.00	9.99
91 t	Chrysene	1.216	1.316	-8.2	94	0.00	10.05
92 t	bis(2-Ethylhexyl)phthalat	0.832	1.003	-20.6#	97	0.00	10.08
93 I	Perylene-d12	1.000	1.000	0.0	88	0.00	11.63
94 t	Di-n-octylphthalate	1.280	1.698	-32.7#	98	0.00	10.83
95 t	Benzo[b]fluoranthene	1.129	1.267	-12.2	91	0.00	11.23
96 t	Benzo[k]fluoranthene	1.095	1.241	-13.3	89	0.00	11.25
97 t	Benzo[a]pyrene	0.998	1.139	-14.1	89	0.00	11.56
98 t	Indeno[1,2,3-cd]pyrene	1.331	1.375	-3.3	83	0.00	12.90
99 t	Dibenz(a,h)acridine	0.883	0.944	-6.9	85	0.00	12.61
100 t	Dibenz[a,h]anthracene	1.080	1.118	-3.5	83	0.00	12.93
101 t	7,12-Dimethylbenz(a)anthr	0.442	0.538	-21.7#	94	0.00	11.22
102 t	Benzo[g,h,i]perylene	1.017	1.053	-3.5	81	0.01	13.27

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(#) = Out of Range  
 m195532.D MM8478.M

SPCC's out = 0 CCC's out = 0  
 Tue May 14 16:24:30 2024

6.8.18

6

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** EM8483-CC8478  
**Lab FileID:** M195572.D

## Evaluate Continuing Calibration Report

Data File : X:\Dayton SVOA GCMS\...rose\em8309\m195572.D Vial: 2  
Acq On : 14 May 2024 10:15 am Operator: kaleigh  
Sample : cc8478-50 Inst : MSM  
Misc : op51889,em8483,30.0,,,1,1 Multiplr: 1.00  
MS Integration Params: LSCINT.P

Method : X:\Dayton SVOA G...methods\MM8478.M (RTE Integrator)  
Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um  
Last Update : Mon May 13 16:54:19 2024  
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 20% Max. Rel. Area : 200%

Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
103 I 1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	115	0.00	3.69
104 t Benzaldehyde	1.227	1.186	3.3	115	0.00	3.46
105 I Acenaphthene-d10a	1.000	1.000	0.0	111	0.00	5.66
106 t Atrazine	0.181	0.189	-4.4	110	0.00	6.74
107 I Chrysene-d12a	1.000	1.000	0.0	104	0.00	10.02
108 s 1-chlorooctadecane	0.405	0.386	4.7	96	0.00	8.22
109 Phenanthrene-d10a	1.000	1.000	0.0	108	0.00	7.02
110 s o-terphenyl	0.556	0.531	4.5	105	0.00	7.42
111 I Naphthalene-d8a	1.000	1.000	0.0	115	0.00	4.43
112 Caprolactam	0.194	0.180	7.2	104	0.00	4.70

(#) = Out of Range SPCC's out = 0 CCC's out = 0  
m195532.D MM8478.M Tue May 14 16:24:33 2024

# Run Sequence Report

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Run ID:</b> ECJ296	<b>Method:</b> SW846 8270E	<b>Instrument ID:</b> GCMSMJ
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Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
ECJ296-DFTPP	CJ6488.D	05/08/24 14:56	n/a	DFTPP Tune
ECJ296-ICC296	CJ6490.D	05/08/24 16:42	n/a	Initial cal 50
ECJ296-IC296	CJ6491.D	05/08/24 17:20	n/a	Initial cal 1
ECJ296-IC296	CJ6492.D	05/08/24 17:39	n/a	Initial cal 2
ECJ296-IC296	CJ6493.D	05/08/24 17:58	n/a	Initial cal 5
ECJ296-IC296	CJ6494.D	05/08/24 18:17	n/a	Initial cal 10
ECJ296-IC296	CJ6495.D	05/08/24 18:36	n/a	Initial cal 25
ECJ296-IC296	CJ6496.D	05/08/24 18:54	n/a	Initial cal 80
ECJ296-IC296	CJ6497.D	05/08/24 19:13	n/a	Initial cal 100
ECJ296-IC296	CJ6498.D	05/08/24 19:32	n/a	Initial cal 50
ECJ296-IC296	CJ6499.D	05/08/24 19:51	n/a	Initial cal 1
ECJ296-IC296	CJ6500.D	05/08/24 20:10	n/a	Initial cal 2
ECJ296-IC296	CJ6501.D	05/08/24 20:29	n/a	Initial cal 5
ECJ296-IC296	CJ6502.D	05/08/24 20:47	n/a	Initial cal 10
ECJ296-IC296	CJ6503.D	05/08/24 21:06	n/a	Initial cal 25
ECJ296-IC296	CJ6504.D	05/08/24 21:25	n/a	Initial cal 80
ECJ296-IC296	CJ6505.D	05/08/24 21:43	n/a	Initial cal 100
ECJ296-ICV296	CJ6506.D	05/08/24 22:02	n/a	Initial cal verification 50
ECJ296-ICV296	CJ6507.D	05/08/24 22:20	n/a	Initial cal verification 50
ECJ296-ICV296	CJ6508.D	05/08/24 22:39	n/a	Initial cal verification 50
ECJ296-ICV296	CJ6509.D	05/08/24 22:58	n/a	Initial cal verification 50

6.9.1  
6



# Run Sequence Report

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Run ID:</b> ECJ297	<b>Method:</b> SW846 8270E	<b>Instrument ID:</b> GCMSCJ
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Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
ECJ297-DFTPP	CJ6510.D	05/09/24 15:28	n/a	DFTPP Tune
ECJ297-CC296	CJ6511.D	05/09/24 15:40	n/a	Continuing cal 50
ECJ297-CC296	CJ6512.D	05/09/24 15:59	n/a	Continuing cal 50
OP54484B-MB1	CJ6513.D	05/09/24 16:26	OP54484B	Method Blank
OP54484B-BS1	CJ6514.D	05/09/24 16:44	OP54484B	Blank Spike
OP54484B-BSD	CJ6515.D	05/09/24 17:03	OP54484B	Blank Spike Duplicate
OP54460-MB1	CJ6516.D	05/09/24 17:22	OP54460	Method Blank
OP54460-BS1	CJ6517.D	05/09/24 17:41	OP54460	Blank Spike
ZZZZZZ	CJ6518.D	05/09/24 18:00	OP54484B	(unrelated sample)
ZZZZZZ	CJ6519.D	05/09/24 18:18	OP53945A	(unrelated sample)
ZZZZZZ	CJ6520.D	05/09/24 18:37	OP53945A	(unrelated sample)
ZZZZZZ	CJ6521.D	05/09/24 18:56	OP54455	(unrelated sample)
ZZZZZZ	CJ6522.D	05/09/24 19:15	OP54455	(unrelated sample)
ZZZZZZ	CJ6523.D	05/09/24 19:34	OP54455	(unrelated sample)
ZZZZZZ	CJ6524.D	05/09/24 19:52	OP54455	(unrelated sample)
JD87833-3	CJ6525.D	05/09/24 20:11	OP54460	SB-3
JD87833-11	CJ6526.D	05/09/24 20:30	OP54460	SB-11
OP54460-MS	CJ6527.D	05/09/24 20:49	OP54460	Matrix Spike
OP54460-MSD	CJ6528.D	05/09/24 21:07	OP54460	Matrix Spike Duplicate
JD87833-2	CJ6529.D	05/09/24 21:26	OP54460	SB-2
JD87833-4	CJ6530.D	05/09/24 21:45	OP54460	SB-4
JD87833-5	CJ6531.D	05/09/24 22:03	OP54460	SB-5
JD87833-6	CJ6532.D	05/09/24 22:22	OP54460	SB-6
JD87833-8	CJ6533.D	05/09/24 22:41	OP54460	SB-8
JD87833-10	CJ6534.D	05/09/24 23:00	OP54460	SB-10
JD87833-12	CJ6535.D	05/09/24 23:19	OP54460	SB-12
JD87833-13	CJ6536.D	05/09/24 23:38	OP54460	SB-13
JD87833-16	CJ6537.D	05/09/24 23:57	OP54460	DUPE 2
JD87833-1	CJ6538.D	05/10/24 00:16	OP54460	SB-1
JD87833-7	CJ6539.D	05/10/24 00:35	OP54460	SB-7
JD87833-9	CJ6540.D	05/10/24 00:54	OP54460	SB-9
JD87833-14	CJ6541.D	05/10/24 01:13	OP54460	SB-14
JD87833-15	CJ6542.D	05/10/24 01:32	OP54460	DUPE 1

6.9.2  
6

# Run Sequence Report

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Run ID:</b> ECJ298	<b>Method:</b> SW846 8270E	<b>Instrument ID:</b> GCMSCJ
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Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
ECJ298-DFTPP	CJ6545.D	05/10/24 09:19	n/a	DFTPP Tune
ECJ298-CC296	CJ6546.D	05/10/24 09:29	n/a	Continuing cal 50
ECJ298-CC296	CJ6547.D	05/10/24 09:48	n/a	Continuing cal 50
ECJ298-CC296	CJ6549.D	05/10/24 10:27	n/a	Continuing cal 5
OP54467B-MB1	CJ6550.D	05/10/24 10:50	OP54467B	Method Blank
OP54467-MB1	CJ6550.D	05/10/24 10:50	OP54467	Method Blank
OP54467B-BS1	CJ6551.D	05/10/24 11:09	OP54467B	Blank Spike
OP54467-BS1	CJ6551.D	05/10/24 11:09	OP54467	Blank Spike
OP54467B-BSD	CJ6552.D	05/10/24 11:28	OP54467B	Blank Spike Duplicate
OP54467-BSD	CJ6552.D	05/10/24 11:28	OP54467	Blank Spike Duplicate
ZZZZZZ	CJ6553.D	05/10/24 11:48	OP54467B	(unrelated sample)
ZZZZZZ	CJ6554.D	05/10/24 12:07	OP54467	(unrelated sample)
JD87833-17	CJ6555.D	05/10/24 12:26	OP54467	FIELD BLANK
ZZZZZZ	CJ6556.D	05/10/24 12:45	OP54467	(unrelated sample)
ZZZZZZ	CJ6557.D	05/10/24 13:04	OP54467B	(unrelated sample)
ZZZZZZ	CJ6558.D	05/10/24 13:23	OP54467B	(unrelated sample)
ZZZZZZ	CJ6559.D	05/10/24 13:42	OP54467B	(unrelated sample)
ZZZZZZ	CJ6560.D	05/10/24 14:00	OP54467B	(unrelated sample)
ZZZZZZ	CJ6561.D	05/10/24 14:19	OP54467B	(unrelated sample)
ZZZZZZ	CJ6562.D	05/10/24 14:38	OP54467B	(unrelated sample)
ZZZZZZ	CJ6563.D	05/10/24 14:57	OP54467B	(unrelated sample)
ZZZZZZ	CJ6564.D	05/10/24 15:16	OP54467B	(unrelated sample)
ZZZZZZ	CJ6565.D	05/10/24 15:35	OP54467B	(unrelated sample)
ZZZZZZ	CJ6566.D	05/10/24 15:54	OP54467B	(unrelated sample)
ZZZZZZ	CJ6575.D	05/10/24 16:12	OP54478	(unrelated sample)
ZZZZZZ	CJ6576.D	05/10/24 16:31	OP54478	(unrelated sample)
ZZZZZZ	CJ6577.D	05/10/24 16:50	OP54455	(unrelated sample)
ZZZZZZ	CJ6567.D	05/10/24 17:50	OP54467B	(unrelated sample)
ZZZZZZ	CJ6568.D	05/10/24 18:27	OP54467B	(unrelated sample)
ZZZZZZ	CJ6569.D	05/10/24 18:46	OP54458	(unrelated sample)
ZZZZZZ	CJ6570.D	05/10/24 19:05	OP54458	(unrelated sample)
ZZZZZZ	CJ6571.D	05/10/24 19:24	OP54458	(unrelated sample)
ZZZZZZ	CJ6572.D	05/10/24 19:43	OP54458	(unrelated sample)
ZZZZZZ	CJ6573.D	05/10/24 20:02	OP54457	(unrelated sample)
ZZZZZZ	CJ6574.D	05/10/24 20:21	OP54457	(unrelated sample)

6.9.3  
6

# Run Sequence Report

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Run ID:</b> ECJ302	<b>Method:</b> SW846 8270E	<b>Instrument ID:</b> GCMSCJ
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Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
ECJ302-CC296	CJ6675.D	05/13/24 08:25	n/a	Continuing cal 50
ECJ302-CC296	CJ6676.D	05/13/24 08:48	n/a	Continuing cal 50
OP54535-MB1	CJ6677.D	05/13/24 09:07	OP54535	Method Blank
OP54535-BS1	CJ6678.D	05/13/24 09:25	OP54535	Blank Spike
ZZZZZZ	CJ6679.D	05/13/24 09:45	OP54478	(unrelated sample)
JD87833-5	CJ6680.D	05/13/24 10:04	OP54460	SB-5
JD87833-15	CJ6681.D	05/13/24 10:23	OP54460	DUPE 1
OP54535-MS	CJ6682.D	05/13/24 10:42	OP54535	Matrix Spike
OP54535-MSD	CJ6683.D	05/13/24 11:01	OP54535	Matrix Spike Duplicate
JD88080-1	CJ6684.D	05/13/24 11:20	OP54535	(used for QC only; not part of job JD87833)
ZZZZZZ	CJ6685.D	05/13/24 11:38	OP54535	(unrelated sample)
ZZZZZZ	CJ6686.D	05/13/24 11:57	OP54535	(unrelated sample)
ZZZZZZ	CJ6687.D	05/13/24 12:16	OP54535	(unrelated sample)
ZZZZZZ	CJ6688.D	05/13/24 12:34	OP54535	(unrelated sample)
ZZZZZZ	CJ6689.D	05/13/24 12:53	OP54495	(unrelated sample)
ZZZZZZ	CJ6690.D	05/13/24 13:12	OP54495	(unrelated sample)
ZZZZZZ	CJ6691.D	05/13/24 13:31	OP54495	(unrelated sample)
ZZZZZZ	CJ6692.D	05/13/24 13:50	OP54535	(unrelated sample)
ZZZZZZ	CJ6693.D	05/13/24 14:09	OP54535	(unrelated sample)
ZZZZZZ	CJ6694.D	05/13/24 14:27	OP54535	(unrelated sample)
ZZZZZZ	CJ6695.D	05/13/24 14:46	OP54535	(unrelated sample)
JD87882-1	CJ6696.D	05/13/24 15:05	OP54495	(used for QC only; not part of job JD87833)
ZZZZZZ	CJ6697.D	05/13/24 15:24	OP54495	(unrelated sample)
ZZZZZZ	CJ6698.D	05/13/24 15:43	OP54495	(unrelated sample)
ZZZZZZ	CJ6699.D	05/13/24 16:01	OP54495	(unrelated sample)
ZZZZZZ	CJ6700.D	05/13/24 16:20	OP54535	(unrelated sample)
ZZZZZZ	CJ6701.D	05/13/24 16:39	OP54535	(unrelated sample)
ZZZZZZ	CJ6702.D	05/13/24 16:58	OP54535	(unrelated sample)
ZZZZZZ	CJ6703.D	05/13/24 17:16	OP54535	(unrelated sample)
ZZZZZZ	CJ6704.D	05/13/24 17:35	OP54535	(unrelated sample)
ZZZZZZ	CJ6705.D	05/13/24 17:54	OP54535	(unrelated sample)
ZZZZZZ	CJ6706.D	05/13/24 18:13	OP54535	(unrelated sample)
ZZZZZZ	CJ6707.D	05/13/24 18:32	OP54535	(unrelated sample)
ZZZZZZ	CJ6708.D	05/13/24 18:51	OP54535	(unrelated sample)

6.9.4  
6

# Run Sequence Report

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Run ID:</b> EM8478	<b>Method:</b> SW846 8270E	<b>Instrument ID:</b> GCMSM
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Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
EM8478-DFTPP	M195470.D	05/09/24 16:29	n/a	DFTPP Tune
EM8478-ICC8478	M195471.D	05/09/24 16:41	n/a	Initial cal 50
EM8478-IC8478	M195472.D	05/09/24 17:04	n/a	Initial cal 1
EM8478-IC8478	M195473.D	05/09/24 17:27	n/a	Initial cal 2
EM8478-IC8478	M195474.D	05/09/24 17:51	n/a	Initial cal 5
EM8478-IC8478	M195475.D	05/09/24 18:12	n/a	Initial cal 10
EM8478-IC8478	M195476.D	05/09/24 18:33	n/a	Initial cal 25
EM8478-IC8478	M195477.D	05/09/24 18:55	n/a	Initial cal 80
EM8478-IC8478	M195478.D	05/09/24 19:16	n/a	Initial cal 100
EM8478-IC8478	M195479.D	05/09/24 19:39	n/a	Initial cal 50
EM8478-IC8478	M195480.D	05/09/24 20:00	n/a	Initial cal 1
EM8478-IC8478	M195481.D	05/09/24 20:23	n/a	Initial cal 2
EM8478-IC8478	M195482.D	05/09/24 20:46	n/a	Initial cal 5
EM8478-IC8478	M195483.D	05/09/24 21:07	n/a	Initial cal 10
EM8478-IC8478	M195484.D	05/09/24 21:28	n/a	Initial cal 25
EM8478-IC8478	M195485.D	05/09/24 21:50	n/a	Initial cal 80
EM8478-IC8478	M195486.D	05/09/24 22:11	n/a	Initial cal 100
EM8478-ICV8478	M195487.D	05/09/24 22:33	n/a	Initial cal verification 50
EM8478-ICV8478	M195488.D	05/09/24 22:54	n/a	Initial cal verification 50
EM8478-ICV8478	M195489.D	05/09/24 23:15	n/a	Initial cal verification 50
EM8478-ICV8478	M195490.D	05/09/24 23:37	n/a	Initial cal verification 50

6.9.5

6

# Run Sequence Report

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Run ID:</b> EM8483	<b>Method:</b> SW846 8270E	<b>Instrument ID:</b> GCMSM
-----------------------	----------------------------	-----------------------------

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
EM8483-CC8478	M195571.D	05/14/24 09:54	n/a	Continuing cal 50
EM8483-CC8478	M195572.D	05/14/24 10:15	n/a	Continuing cal 50
ZZZZZZ	M195574.D	05/14/24 10:58	OP54622	(unrelated sample)
ZZZZZZ	M195575.D	05/14/24 11:19	OP54622	(unrelated sample)
ZZZZZZ	M195576.D	05/14/24 11:41	OP54622	(unrelated sample)
ZZZZZZ	M195577.D	05/14/24 12:02	OP54618	(unrelated sample)
JD87833-17	M195578.D	05/14/24 12:23	OP54618	FIELD BLANK
ZZZZZZ	M195579.D	05/14/24 12:45	OP54618	(unrelated sample)
ZZZZZZ	M195580.D	05/14/24 13:09	OP54622	(unrelated sample)
ZZZZZZ	M195581.D	05/14/24 13:31	OP54622	(unrelated sample)
ZZZZZZ	M195582.D	05/14/24 13:53	OP54622	(unrelated sample)
ZZZZZZ	M195583.D	05/14/24 14:14	OP54622	(unrelated sample)
ZZZZZZ	M195584.D	05/14/24 14:35	OP54622	(unrelated sample)
ZZZZZZ	M195585.D	05/14/24 14:57	OP54622	(unrelated sample)
ZZZZZZ	M195586.D	05/14/24 15:18	OP54622	(unrelated sample)
ZZZZZZ	M195587.D	05/14/24 15:39	OP54495	(unrelated sample)
ZZZZZZ	M195588.D	05/14/24 16:01	OP54495	(unrelated sample)
ZZZZZZ	M195589.D	05/14/24 16:24	OP54495	(unrelated sample)
ZZZZZZ	M195590.D	05/14/24 16:48	OP54622	(unrelated sample)
ZZZZZZ	M195591.D	05/14/24 17:09	OP54495	(unrelated sample)
ZZZZZZ	M195592.D	05/14/24 17:30	OP54495	(unrelated sample)
ZZZZZZ	M195593.D	05/14/24 17:52	OP54495	(unrelated sample)
ZZZZZZ	M195600.D	05/14/24 20:24	OP54570	(unrelated sample)

6.9.6

6

MS Semi-volatiles

Raw Data

7

Quantitation Report (QT/LSC Reviewed)

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6538.D  
 Acq On : 10 May 2024 12:16 am  
 Operator : rocquans  
 Sample : jd87833-1 Inst : GCMSMJ  
 Misc : op54460,ecj297,31.2,,,1,1  
 ALS Vial : 29 Sample Multiplier: 1

Quant Time: May 10 19:55:46 2024  
 Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
 QLast Update : Thu May 09 12:05:48 2024  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	4.664	152	341096	40.00	ppm	0.00
24) Naphthalene-d8	5.466	136	1195650	40.00	ppm	0.00
46) Acenaphthene-d10	6.659	164	664891	40.00	ppm	0.00
69) Phenanthrene-d10	7.873	188	1157966	40.00	ppm	0.00
84) Chrysene-d12	10.366	240	835035	40.00	ppm	0.00
93) Perylene-d12	11.719	264	838133	40.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.664	152	341096	40.00	ppm	0.00
105) Phenanthrene-d10a	7.873	188	1157966	40.00	ppm	0.00
107) Naphthalene-d8a	5.466	136	1195650	40.00	ppm	0.00
109) Phenanthrene-d10b	7.873	188	1157966	40.00	ppm	0.00
112) Chrysene-d12a	10.366	240	835035	40.00	ppm	0.00
<b>System Monitoring Compounds</b>						
5) 2-Fluorophenol	3.808	112	333220	33.99	ppm	0.01
Spiked Amount 50.000			Recovery =	67.98%		
8) Phenol-d5	4.423	99	457577	36.18	ppm	0.00
Spiked Amount 50.000			Recovery =	72.36%		
25) Nitrobenzene-d5	5.012	82	440153	35.95	ppm	0.00
Spiked Amount 50.000			Recovery =	71.90%		
51) 2-Fluorobiphenyl	6.167	172	801392	38.30	ppm	0.00
Spiked Amount 50.000			Recovery =	76.60%		
74) 2,4,6-Tribromophenol	7.274	330	114159	44.96	ppm	0.00
Spiked Amount 50.000			Recovery =	89.92%		
87) Terphenyl-d14	9.355	244	837568	40.60	ppm	0.00
Spiked Amount 50.000			Recovery =	81.20%		
110) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
<b>Target Compounds</b>						
9) Phenol	4.439	94	35903	2.6352	ppm	# 54
21) 3&4-Methylphenol	4.910	108	4585	0.4711	ppm	97
38) Naphthalene	5.482	128	6360	0.2221	ppm	93
44) 2-Methylnaphthalene	5.926	141	3264	0.1922	ppm	93
53) Biphenyl	6.236	154	3130	0.1370	ppm	87
56) Acenaphthylene	6.557	152	34726	1.3466	ppm	96
59) Acenaphthene	6.680	153	7361	0.4014	ppm	81
66) Fluorene	7.082	166	10892m	0.5418	ppm	
78) Phenanthrene	7.889	178	151221	5.4037	ppm	99
79) Anthracene	7.937	178	44621	1.5924	ppm	97
80) Carbazole	8.076	167	17767	0.6804	ppm	98
81) Di-n-butylphthalate	8.397	149	10308	0.3195	ppm	94
82) Fluoranthene	8.980	202	328787	10.8522	ppm	98
86) Pyrene	9.194	202	313216	11.0294	ppm	99
89) Benzo[a]anthracene	10.355	228	139541	5.1974	ppm	93
91) Chrysene	10.387	228	150700	6.0837	ppm	98
92) bis(2-Ethylhexyl)phtha...	10.408	149	33593	1.7900	ppm	98
95) Benzo[b]fluoranthene	11.350	252	192968m	7.6215	ppm	
96) Benzo[k]fluoranthene	11.377	252	58053m	2.5481	ppm	
97) Benzo[a]pyrene	11.660	252	113636	5.4217	ppm	100
98) Indeno[1,2,3-cd]pyrene	12.901	276	83252	3.2856	ppm	98
100) Dibenz[a,h]anthracene	12.922	278	21735	1.0735	ppm	89
102) Benzo[g,h,i]perylene	13.243	276	79736	4.0494	ppm	98
104) Benzaldehyde	4.386	105	3733	0.3823	ppm	88

7.1.1  
7

Quantitation Report (QT/LSC Reviewed)

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6538.D  
Acq On : 10 May 2024 12:16 am  
Operator : rocquans  
Sample : jd87833-1 Inst : GCMSCJ  
Misc : op54460,ecj297,31.2,,,1,1  
ALS Vial : 29 Sample Multiplier: 1

Quant Time: May 10 19:55:46 2024  
Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
QLast Update : Thu May 09 12:05:48 2024  
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
(#) = qualifier out of range (m) = manual integration (+) = signals summed						

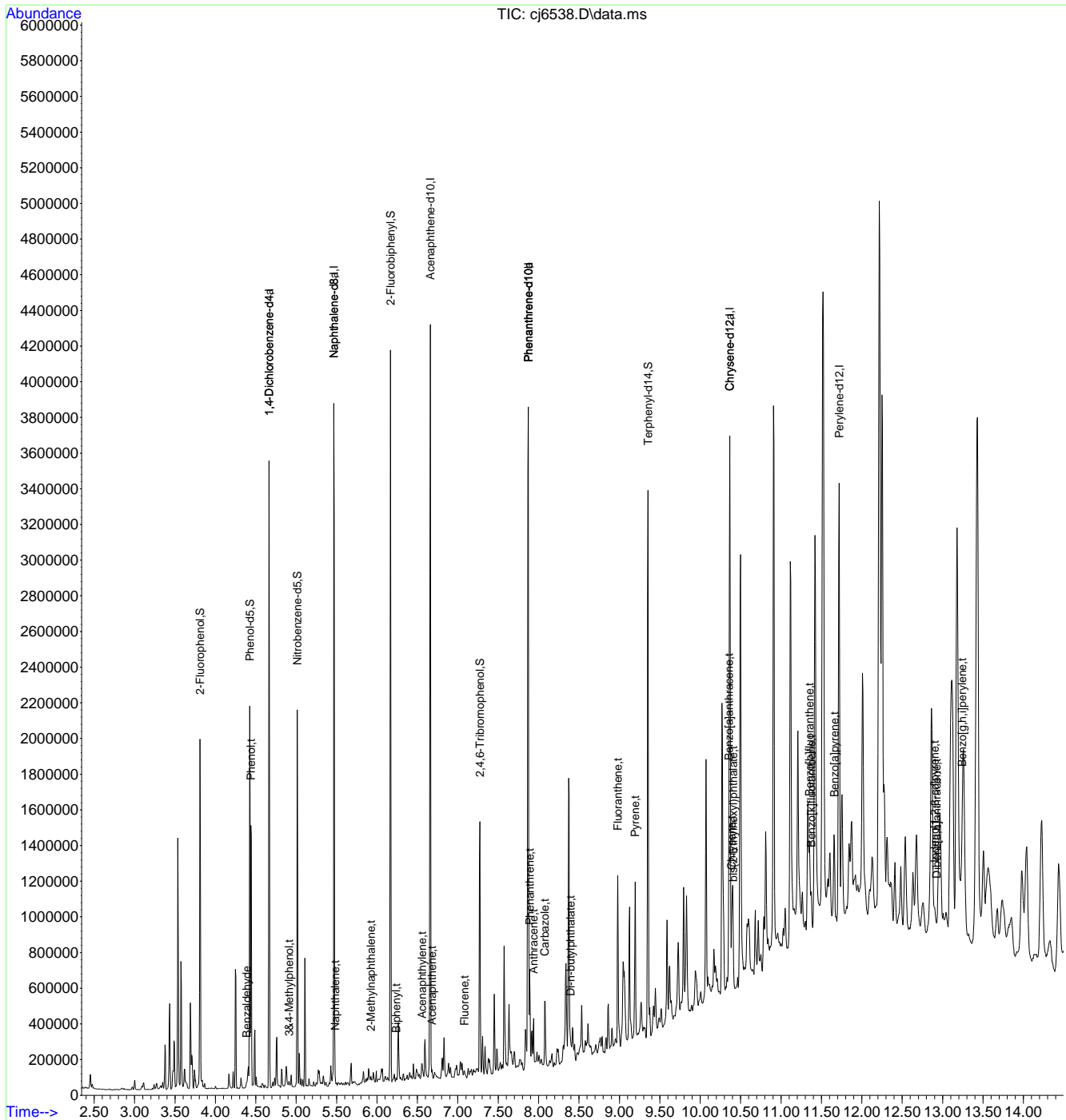
7.1.1  
7

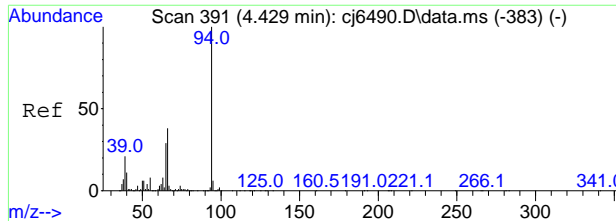


Quantitation Report (QT/LSC Reviewed)

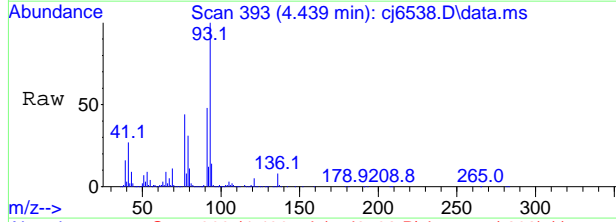
Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6538.D  
Acq On : 10 May 2024 12:16 am  
Operator : rocquans  
Sample : jd87833-1 Inst : GCMS CJ  
Misc : op54460,ecj297,31.2,,,1,1  
ALS Vial : 29 Sample Multiplier: 1

Quant Time: May 10 19:55:46 2024  
Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
QLast Update : Thu May 09 12:05:48 2024  
Response via : Initial Calibration



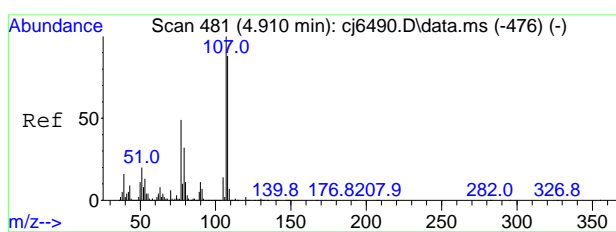
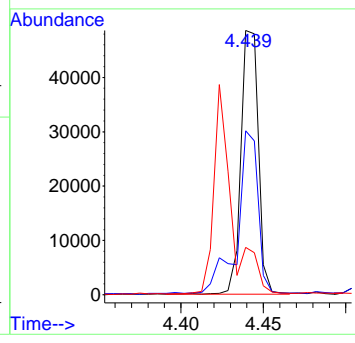
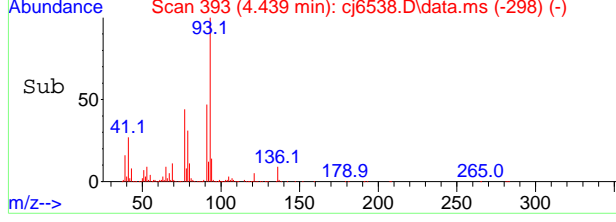


#9  
 Phenol  
 Concen: 2.6352 ppm  
 RT: 4.439 min Scan# 393  
 Delta R.T. 0.010 min  
 Lab File: cj6538.D  
 Acq: 10 May 2024 12:16 am

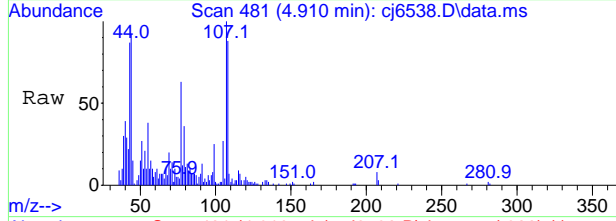


Tgt Ion: 94 Resp: 35903

Ion	Ratio	Lower	Upper
94	100		
65	61.7	0.0	58.1#
66	17.5	6.6	66.6

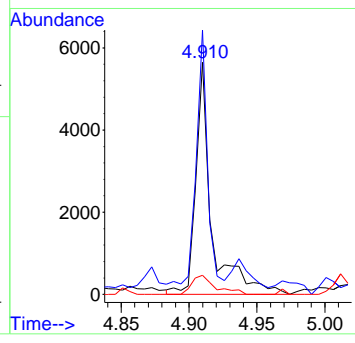
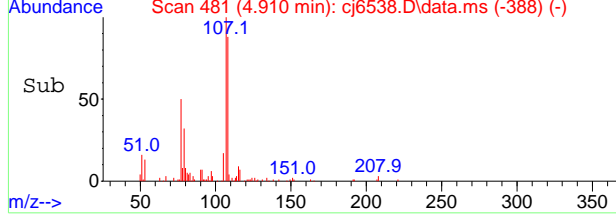


#21  
 3&4-Methylphenol  
 Concen: 0.4711 ppm  
 RT: 4.910 min Scan# 481  
 Delta R.T. -0.000 min  
 Lab File: cj6538.D  
 Acq: 10 May 2024 12:16 am



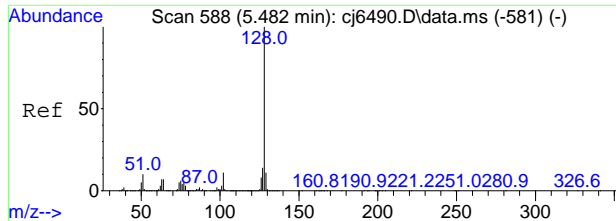
Tgt Ion: 108 Resp: 4585

Ion	Ratio	Lower	Upper
108	100		
107	110.4	83.2	143.2
90	8.3	0.0	42.4



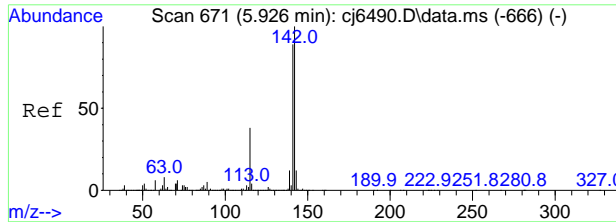
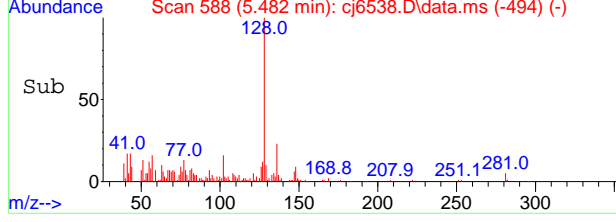
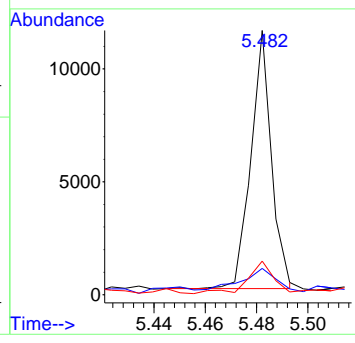
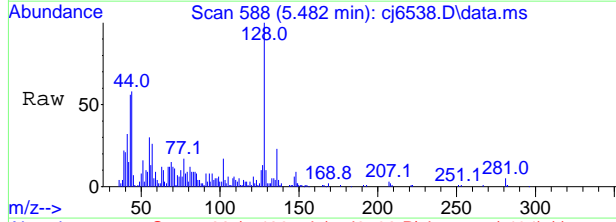
7.1.1  
 7





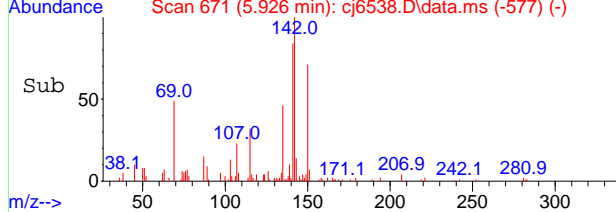
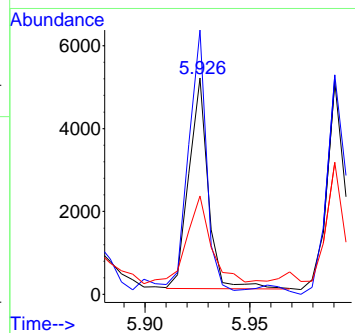
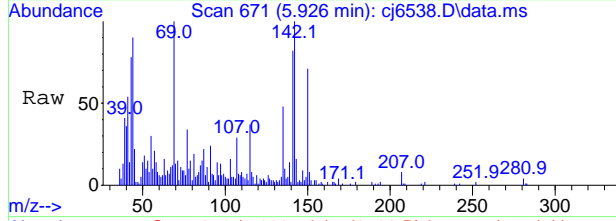
#38  
 Naphthalene  
 Concen: 0.2221 ppm  
 RT: 5.482 min Scan# 588  
 Delta R.T. 0.000 min  
 Lab File: cj6538.D  
 Acq: 10 May 2024 12:16 am

Tgt Ion	Ratio	Lower	Upper
128	100		
129	7.9	0.0	41.4
127	11.5	0.0	43.3

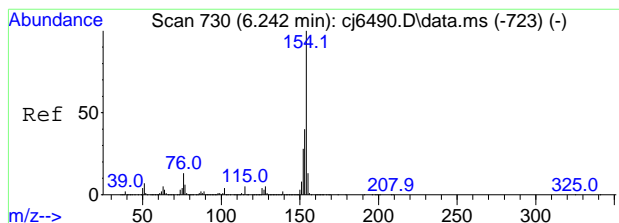


#44  
 2-Methylnaphthalene  
 Concen: 0.1922 ppm  
 RT: 5.926 min Scan# 671  
 Delta R.T. 0.000 min  
 Lab File: cj6538.D  
 Acq: 10 May 2024 12:16 am

Tgt Ion	Ratio	Lower	Upper
141	100		
142	120.4	82.7	142.7
115	37.7	12.4	72.4

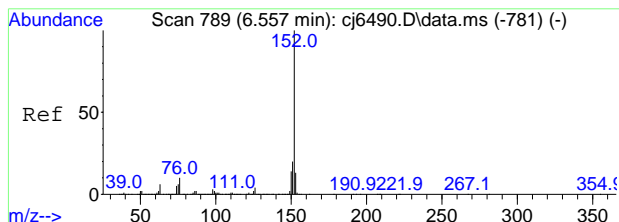
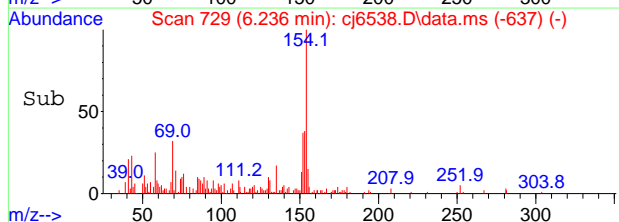
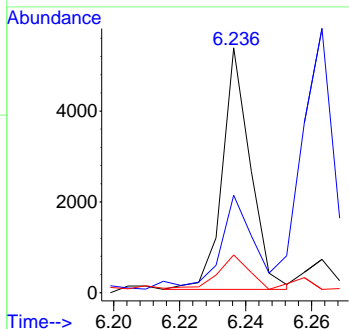
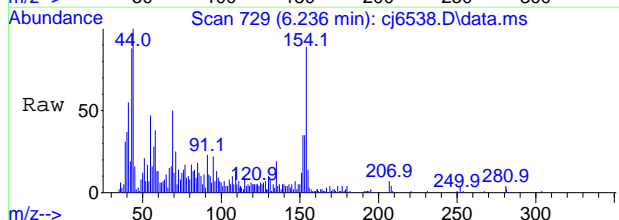


7.1.1  
 7



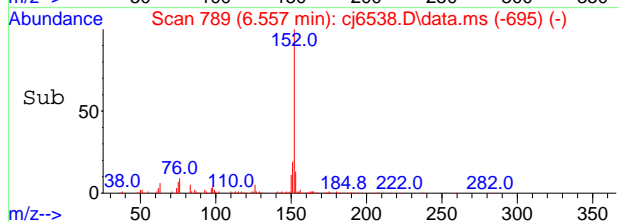
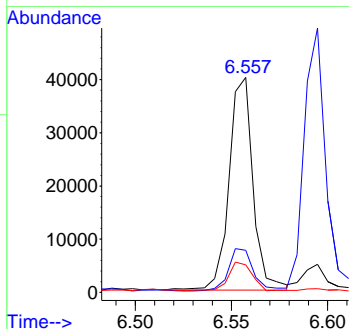
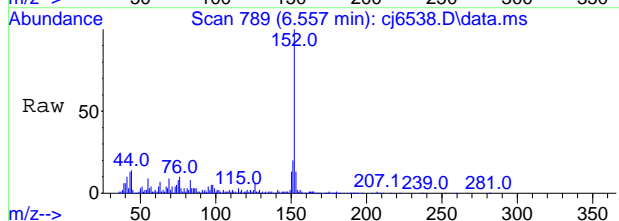
#53  
 Biphenyl  
 Concen: 0.1370 ppm  
 RT: 6.236 min Scan# 729  
 Delta R.T. -0.006 min  
 Lab File: cj6538.D  
 Acq: 10 May 2024 12:16 am

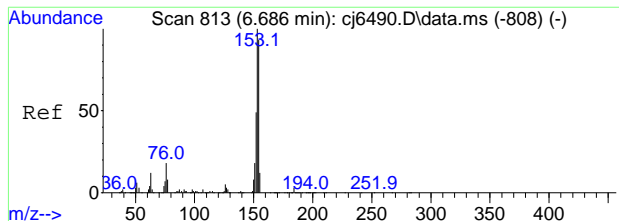
Tgt Ion	Ratio	Lower	Upper
154	100		
153	30.3	10.5	70.5
155	13.1	0.0	42.8



#56  
 Acenaphthylene  
 Concen: 1.3466 ppm  
 RT: 6.557 min Scan# 789  
 Delta R.T. 0.000 min  
 Lab File: cj6538.D  
 Acq: 10 May 2024 12:16 am

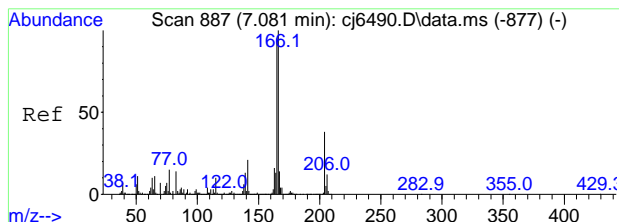
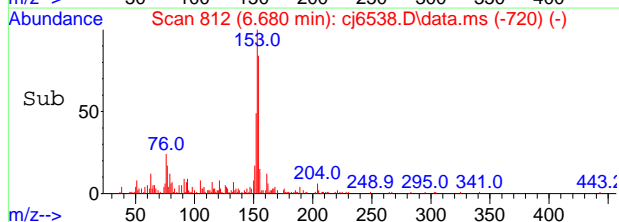
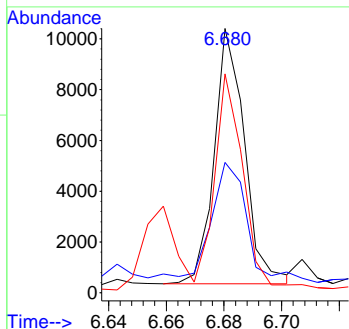
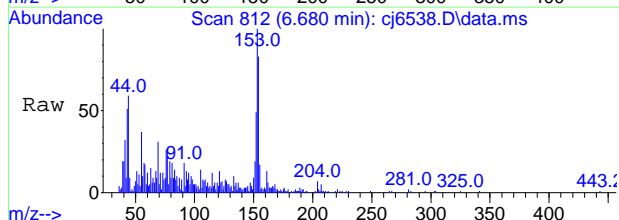
Tgt Ion	Ratio	Lower	Upper
152	100		
151	18.4	0.0	50.3
153	11.6	0.0	43.4





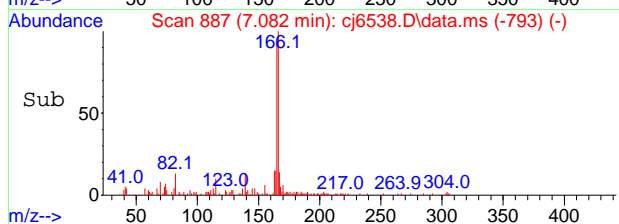
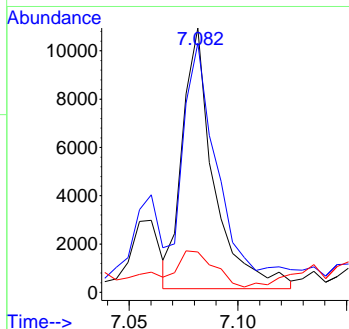
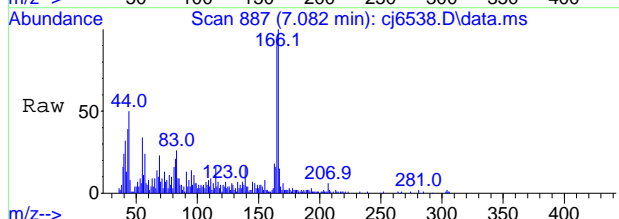
#59  
 Acenaphthene  
 Concen: 0.4014 ppm  
 RT: 6.680 min Scan# 812  
 Delta R.T. -0.006 min  
 Lab File: cj6538.D  
 Acq: 10 May 2024 12:16 am

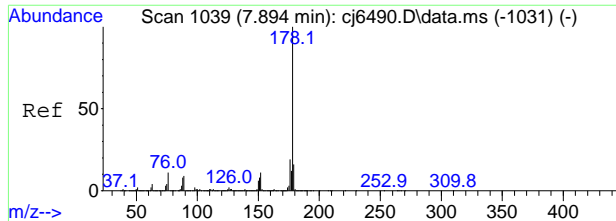
Tgt Ion	Resp	Lower	Upper
153	7361		
152	44.0	18.8	78.8
154	68.4	62.9	122.9



#66  
 Fluorene  
 Concen: 0.5418 ppm m  
 RT: 7.082 min Scan# 887  
 Delta R.T. 0.000 min  
 Lab File: cj6538.D  
 Acq: 10 May 2024 12:16 am

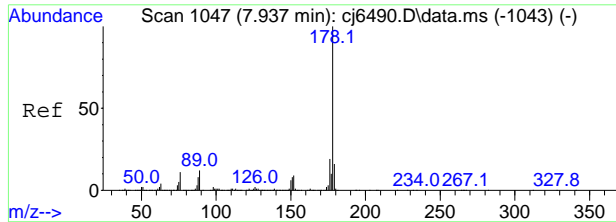
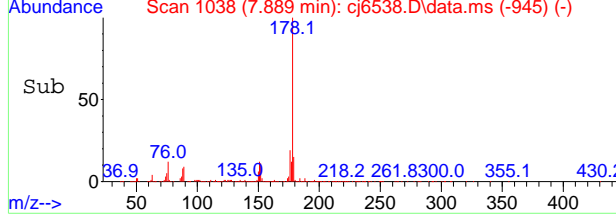
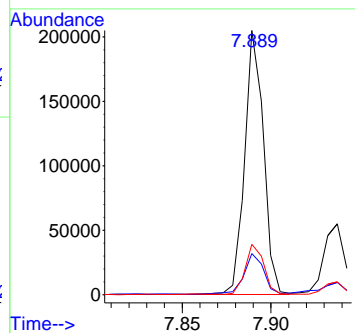
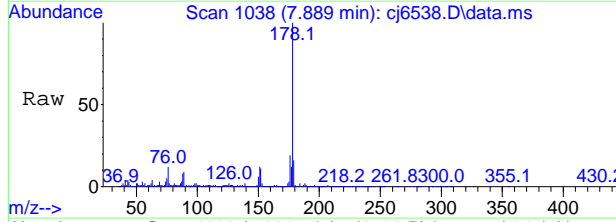
Tgt Ion	Resp	Lower	Upper
166	10892		
165	94.2	65.4	125.4
167	15.3	0.0	43.8





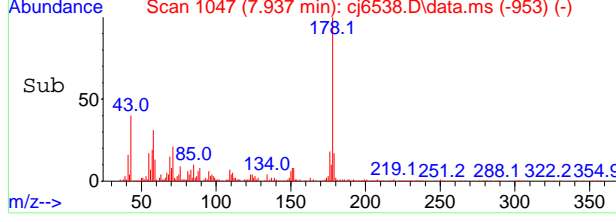
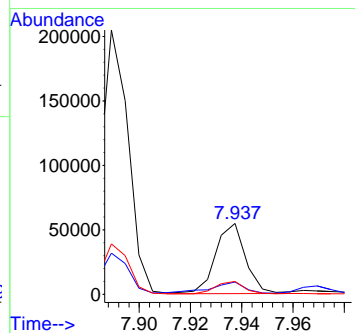
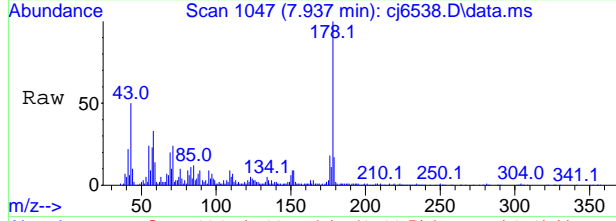
#78  
 Phenanthrene  
 Concen: 5.4037 ppm  
 RT: 7.889 min Scan# 1038  
 Delta R.T. -0.005 min  
 Lab File: cj6538.D  
 Acq: 10 May 2024 12:16 am

Tgt Ion	Ratio	Lower	Upper
178	100		
179	15.1	0.0	45.5
176	19.0	0.0	49.2

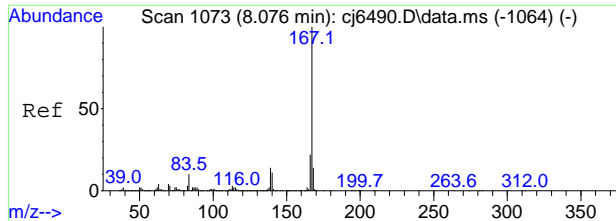


#79  
 Anthracene  
 Concen: 1.5924 ppm  
 RT: 7.937 min Scan# 1047  
 Delta R.T. 0.000 min  
 Lab File: cj6538.D  
 Acq: 10 May 2024 12:16 am

Tgt Ion	Ratio	Lower	Upper
178	100		
179	14.7	0.0	46.1
176	17.7	0.0	48.7

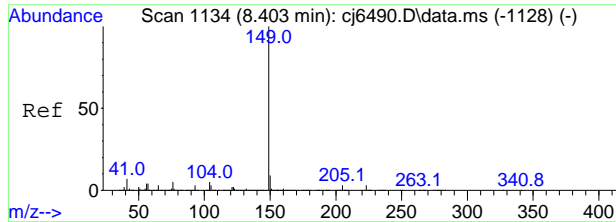
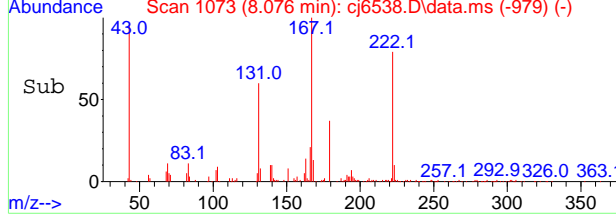
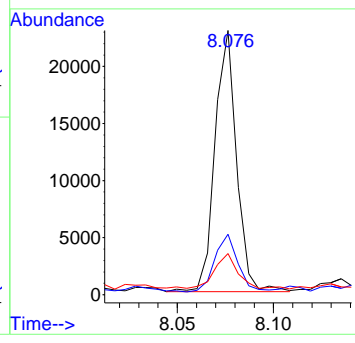
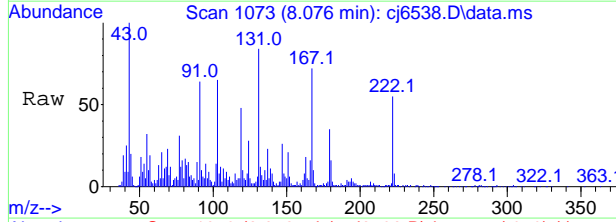


7.1.1  
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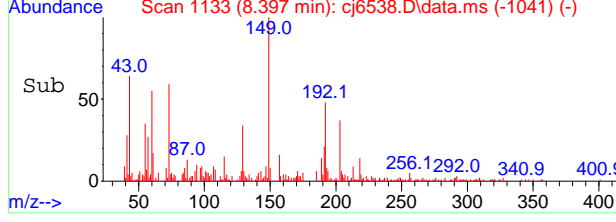
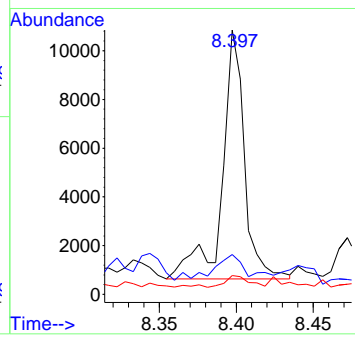
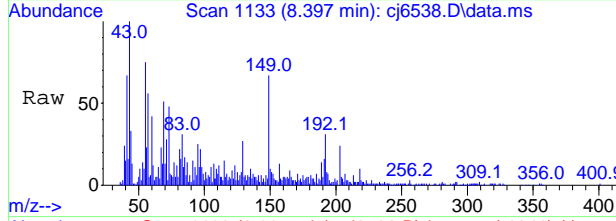
#80  
 Carbazole  
 Concen: 0.6804 ppm  
 RT: 8.076 min Scan# 1073  
 Delta R.T. 0.000 min  
 Lab File: cj6538.D  
 Acq: 10 May 2024 12:16 am

Tgt Ion	Ratio	Lower	Upper
167	100		
166	20.8	0.0	51.7
139	13.3	0.0	43.8

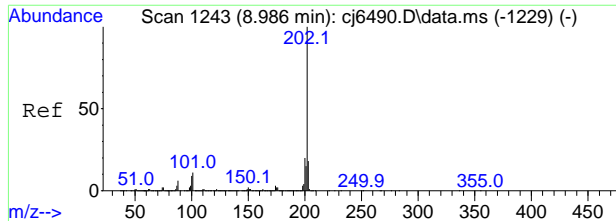


#81  
 Di-n-butylphthalate  
 Concen: 0.3195 ppm  
 RT: 8.397 min Scan# 1133  
 Delta R.T. -0.006 min  
 Lab File: cj6538.D  
 Acq: 10 May 2024 12:16 am

Tgt Ion	Ratio	Lower	Upper
149	100		
150	6.9	0.0	39.3
104	3.4	0.0	35.2

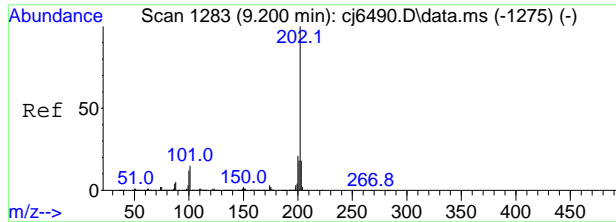
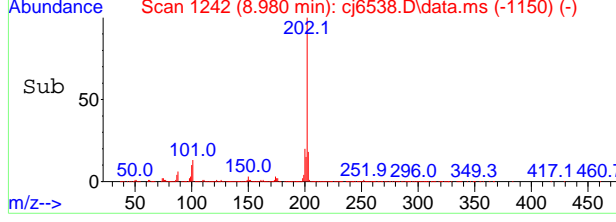
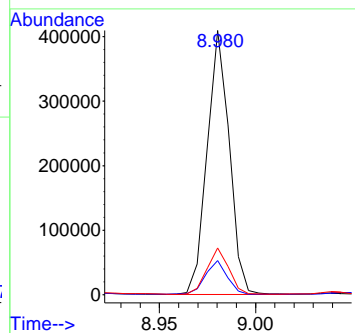
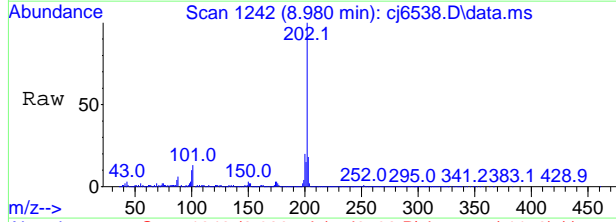


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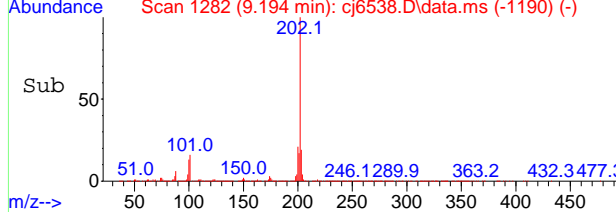
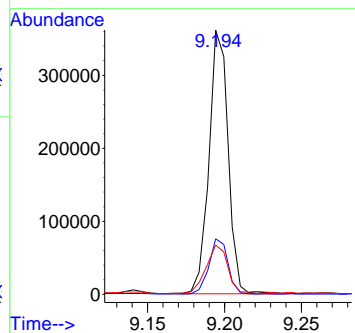
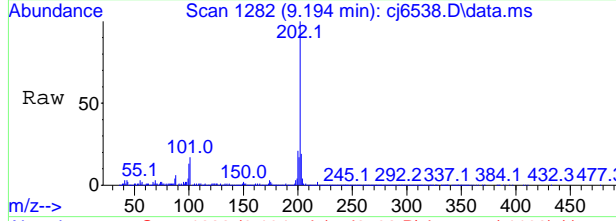
#82  
 Fluoranthene  
 Concen: 10.8522 ppm  
 RT: 8.980 min Scan# 1242  
 Delta R.T. -0.006 min  
 Lab File: cj6538.D  
 Acq: 10 May 2024 12:16 am

Tgt Ion	Ratio	Lower	Upper
202	100		
101	12.7	0.0	41.4
203	17.5	0.0	47.6



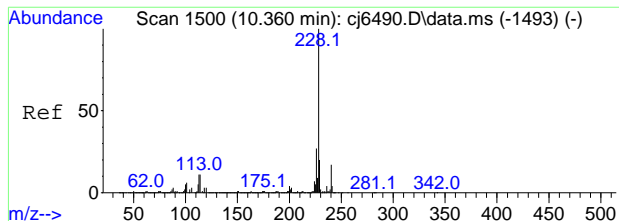
#86  
 Pyrene  
 Concen: 11.0294 ppm  
 RT: 9.194 min Scan# 1282  
 Delta R.T. -0.006 min  
 Lab File: cj6538.D  
 Acq: 10 May 2024 12:16 am

Tgt Ion	Ratio	Lower	Upper
202	100		
200	20.8	0.0	51.4
203	18.2	0.0	47.8



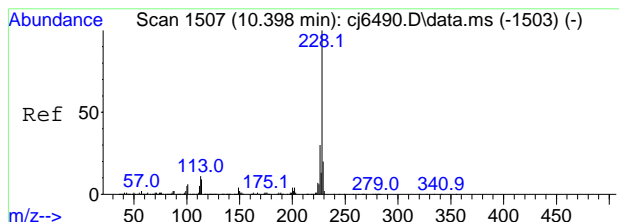
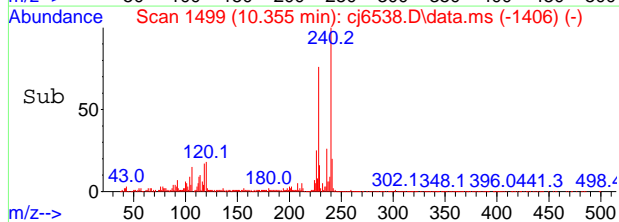
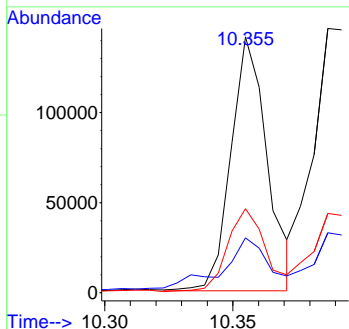
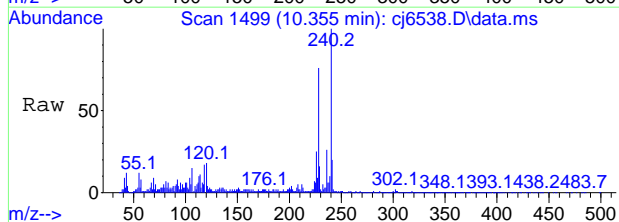
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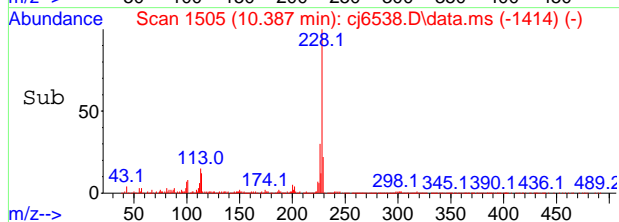
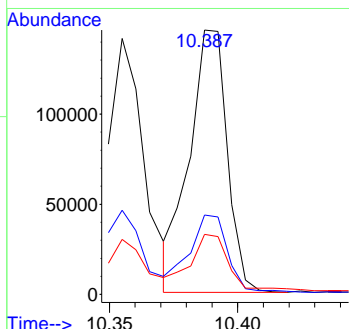
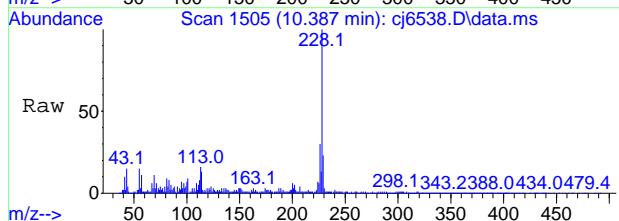
#89  
 Benzo[a]anthracene  
 Concen: 5.1974 ppm  
 RT: 10.355 min Scan# 1499  
 Delta R.T. -0.005 min  
 Lab File: cj6538.D  
 Acq: 10 May 2024 12:16 am

Tgt Ion	Ratio	Lower	Upper
228	100		
229	19.3	0.0	49.8
226	32.6	0.0	57.1

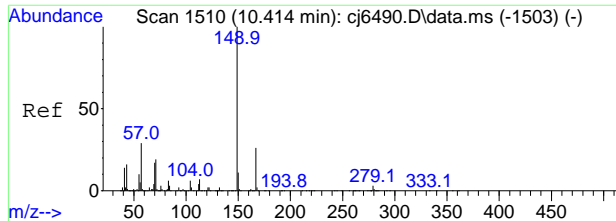


#91  
 Chrysene  
 Concen: 6.0837 ppm  
 RT: 10.387 min Scan# 1505  
 Delta R.T. -0.011 min  
 Lab File: cj6538.D  
 Acq: 10 May 2024 12:16 am

Tgt Ion	Ratio	Lower	Upper
228	100		
226	29.0	0.0	59.9
229	20.5	0.0	49.8

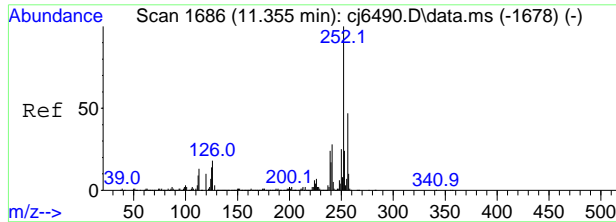
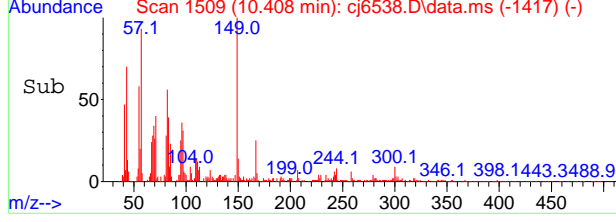
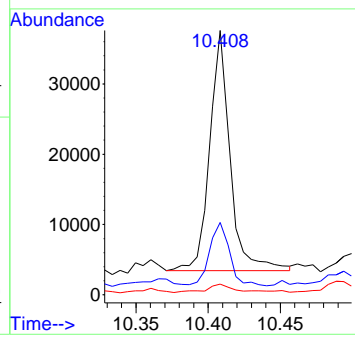
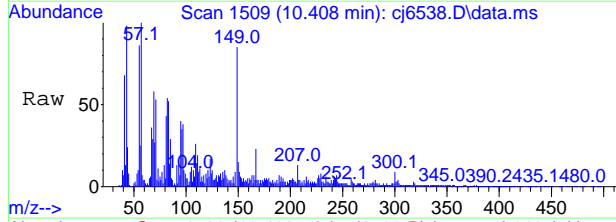


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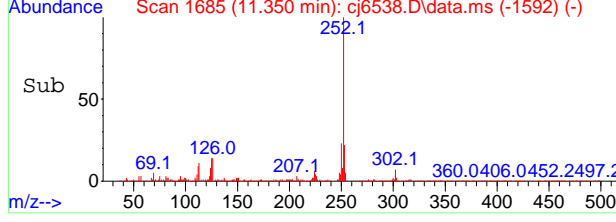
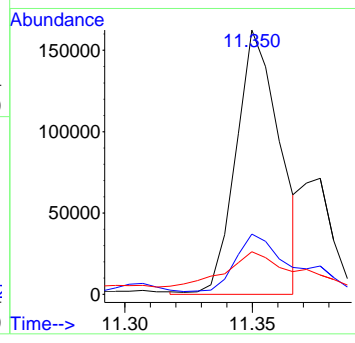
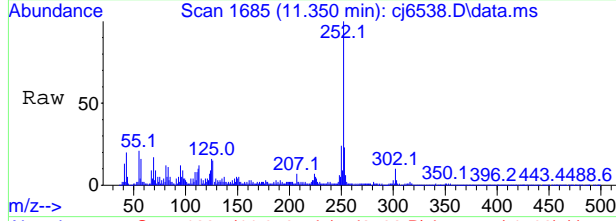
#92  
bis(2-Ethylhexyl)phthalate  
Concen: 1.7900 ppm  
RT: 10.408 min Scan# 1509  
Delta R.T. -0.006 min  
Lab File: cj6538.D  
Acq: 10 May 2024 12:16 am

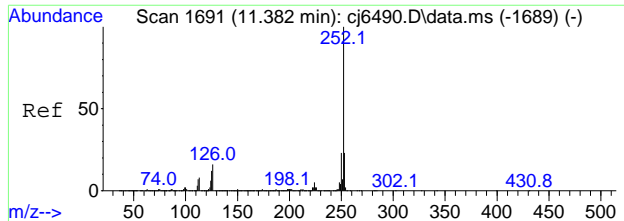
Tgt Ion	Ratio	Lower	Upper
149	100		
167	24.8	0.0	56.1
279	3.2	0.0	33.2



#95  
Benzo[b]fluoranthene  
Concen: 7.6215 ppm m  
RT: 11.350 min Scan# 1685  
Delta R.T. -0.005 min  
Lab File: cj6538.D  
Acq: 10 May 2024 12:16 am

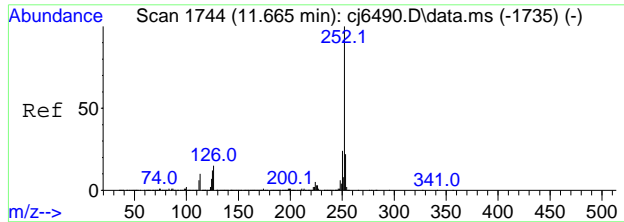
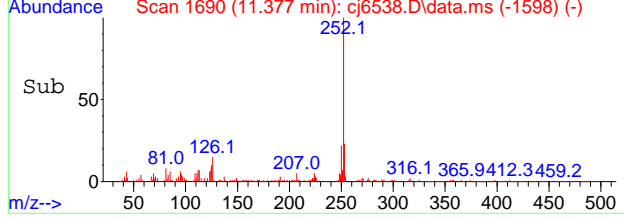
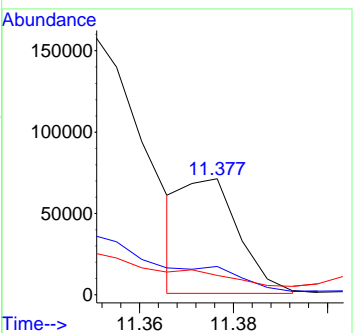
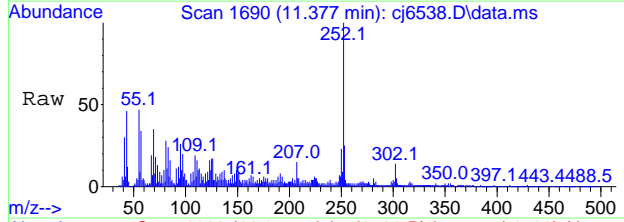
Tgt Ion	Ratio	Lower	Upper
252	100		
253	22.8	0.0	54.7
125	16.1	0.0	44.2





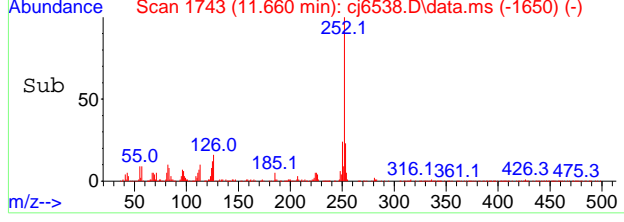
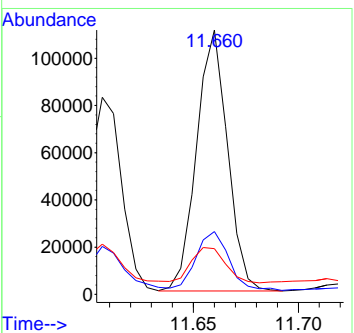
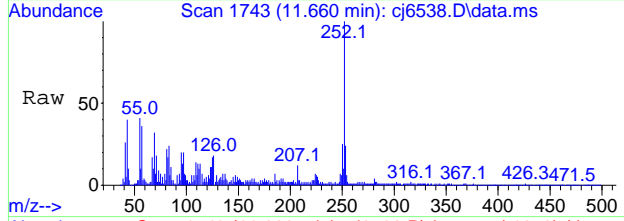
#96  
 Benzo[k]fluoranthene  
 Concen: 2.5481 ppm m  
 RT: 11.377 min Scan# 1690  
 Delta R.T. -0.005 min  
 Lab File: cj6538.D  
 Acq: 10 May 2024 12:16 am

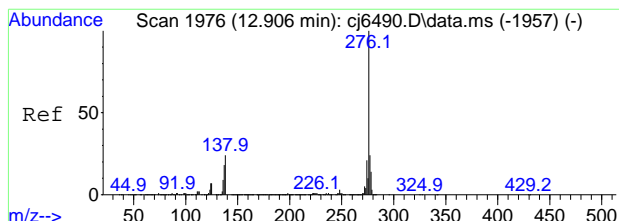
Tgt Ion	Ratio	Lower	Upper
252	100		
253	24.5	0.0	52.6
125	16.7	0.0	42.4



#97  
 Benzo[a]pyrene  
 Concen: 5.4217 ppm  
 RT: 11.660 min Scan# 1743  
 Delta R.T. -0.005 min  
 Lab File: cj6538.D  
 Acq: 10 May 2024 12:16 am

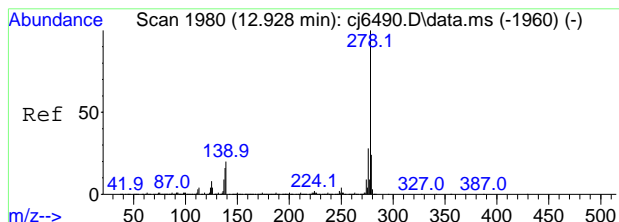
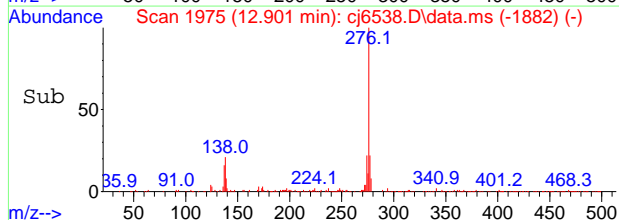
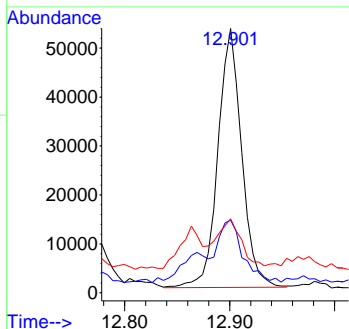
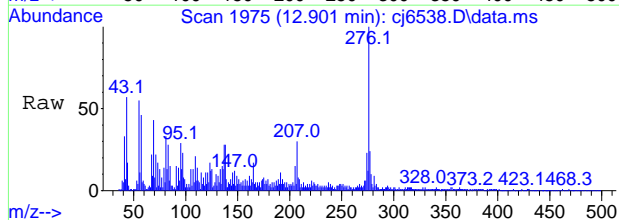
Tgt Ion	Ratio	Lower	Upper
252	100		
253	22.0	0.0	51.9
125	12.5	0.0	42.1





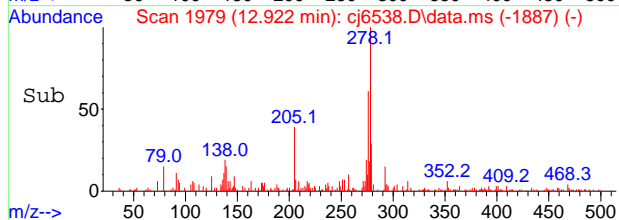
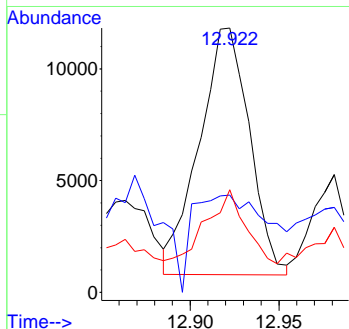
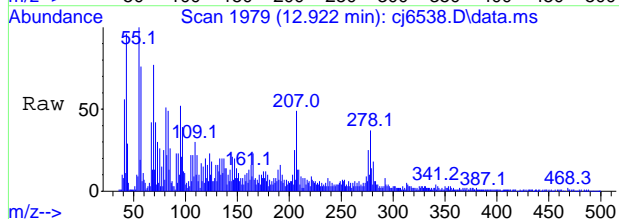
#98  
 Indeno[1,2,3-cd]pyrene  
 Concen: 3.2856 ppm  
 RT: 12.901 min Scan# 1975  
 Delta R.T. -0.005 min  
 Lab File: cj6538.D  
 Acq: 10 May 2024 12:16 am

Tgt Ion	Ratio	Lower	Upper
276	100		
138	22.9	0.0	54.2
137	17.3	0.0	47.9

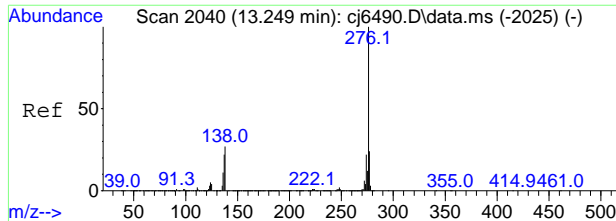


#100  
 Dibenz[a,h]anthracene  
 Concen: 1.0735 ppm  
 RT: 12.922 min Scan# 1979  
 Delta R.T. -0.006 min  
 Lab File: cj6538.D  
 Acq: 10 May 2024 12:16 am

Tgt Ion	Ratio	Lower	Upper
278	100		
139	14.0	0.0	49.8
279	29.2	0.0	54.1

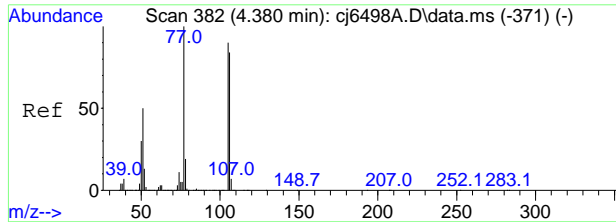
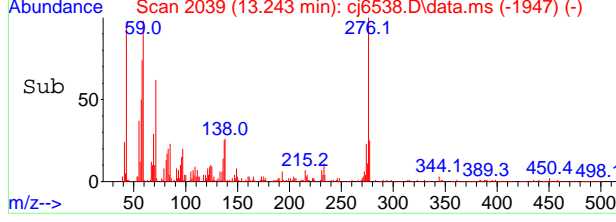
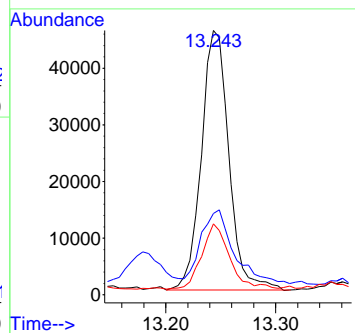
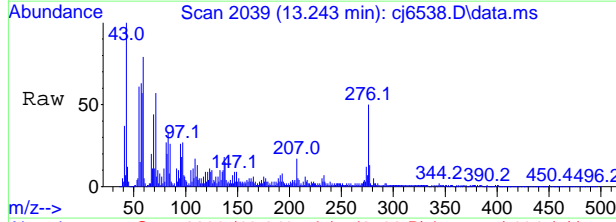


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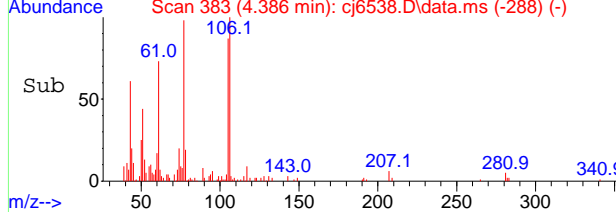
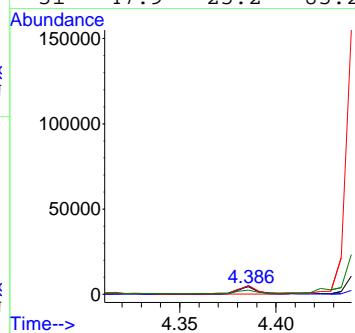
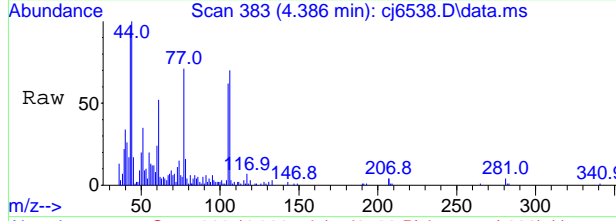
#102  
 Benzo[g,h,i]perylene  
 Concen: 4.0494 ppm  
 RT: 13.243 min Scan# 2039  
 Delta R.T. -0.006 min  
 Lab File: cj6538.D  
 Acq: 10 May 2024 12:16 am

Tgt Ion	Resp	Lower	Upper
276	79736	100	
138	24.9	0.0	56.7
277	24.6	0.0	54.1



#104  
 Benzaldehyde  
 Concen: 0.3823 ppm  
 RT: 4.386 min Scan# 383  
 Delta R.T. 0.005 min  
 Lab File: cj6538.D  
 Acq: 10 May 2024 12:16 am

Tgt Ion	Resp	Lower	Upper
105	3733	100	
106	118.0	62.5	122.5
77	112.5	80.6	140.6
51	47.9	25.2	85.2



7.1.1  
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LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6538.D  
Acq On : 10 May 2024 12:16 am  
Operator : rocquans  
Sample : jd87833-1  
Misc : op54460,ecj297,31.2,,,1,1  
ALS Vial : 29 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON  
Sampling : 1  
Start Thrs: 0.02  
Stop Thrs : 0  
Filtering: 5  
Min Area: 1000 Area counts  
Max Peaks: 100  
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

Signal : TIC: cj6538.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.247	354	357	361	rVB	666780	470066	7.42%	0.368%
2	4.423	378	390	392	rBV	2142154	1539089	24.31%	1.206%
3	4.439	392	393	397	rVV	1463443	982698	15.52%	0.770%
4	4.487	397	402	404	rVV	314805	210064	3.32%	0.165%
5	4.664	431	435	440	rBV	3517257	2095325	33.10%	1.641%
6	4.760	446	453	462	rVB2	281797	276557	4.37%	0.217%
7	5.012	491	500	503	rBV	2115281	1280040	20.22%	1.003%
8	5.108	515	518	525	rBV	720263	417735	6.60%	0.327%
9	5.466	581	585	593	rVB	3823669	2634224	41.61%	2.063%
10	6.167	711	716	720	rVB	4094356	2392882	37.80%	1.874%
11	6.263	727	734	738	rBV2	329761	290517	4.59%	0.228%
12	6.595	793	796	803	rVB3	212577	201385	3.18%	0.158%
13	6.659	803	808	815	rVB	4227556	2984278	47.14%	2.338%
14	6.830	837	840	845	rVB	219151	181270	2.86%	0.142%
15	7.274	919	923	926	rVB	1405482	1093643	17.27%	0.857%
16	7.306	926	929	932	rVB2	212852	160549	2.54%	0.126%
17	7.376	940	942	950	rVB3	89743	147849	2.34%	0.116%
18	7.451	950	956	959	rBV	449900	349297	5.52%	0.274%
19	7.574	972	979	986	rBV2	691231	643278	10.16%	0.504%
20	7.632	986	990	999	rVV	345618	446919	7.06%	0.350%
21	7.836	1024	1028	1031	rBV	230962	255720	4.04%	0.200%
22	7.873	1031	1035	1041	rVB2	3640541	3199471	50.54%	2.506%
23	7.937	1045	1047	1052	rVB	242912	166754	2.63%	0.131%
24	8.076	1070	1073	1080	rVB3	364066	359714	5.68%	0.282%
25	8.226	1097	1101	1108	rBV5	93457	161379	2.55%	0.126%
26	8.338	1108	1122	1125	rBV3	565332	822763	13.00%	0.644%
27	8.371	1125	1128	1135	rVB	1506662	1409831	22.27%	1.104%
28	8.531	1151	1158	1164	rBV3	278161	335583	5.30%	0.263%
29	8.611	1169	1173	1183	rVB6	173996	272120	4.30%	0.213%
30	8.863	1217	1220	1224	rBV2	252448	229405	3.62%	0.180%
31	8.980	1238	1242	1248	rVB	960134	837268	13.23%	0.656%
32	9.044	1248	1254	1264	rBV4	477036	1047332	16.54%	0.820%
33	9.125	1264	1269	1276	rBV	748029	755393	11.93%	0.592%
34	9.194	1276	1282	1287	rBV	875428	824817	13.03%	0.646%
35	9.269	1287	1296	1300	rBV3	186141	276223	4.36%	0.216%
36	9.355	1307	1312	1319	rBV	3071851	2688736	42.47%	2.106%
37	9.419	1319	1324	1327	rBV5	165026	241633	3.82%	0.189%
38	9.446	1327	1329	1333	rVB2	226625	188343	2.97%	0.148%
39	9.590	1347	1356	1359	rBV2	597517	626839	9.90%	0.491%
40	9.622	1359	1362	1370	rVB2	300469	398957	6.30%	0.313%



7.12  
7

LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6538.D  
Acq On : 10 May 2024 12:16 am  
Operator : rocquans  
Sample : jd87833-1  
Misc : op54460,ecj297,31.2,,,1,1  
ALS Vial : 29 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON  
Sampling : 1  
Start Thrs: 0.02  
Stop Thrs : 0  
Filtering: 5  
Min Area: 1000 Area counts  
Max Peaks: 100  
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS, zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

Table with 10 columns: Peak Number, Retention Time, and various detector response values. It lists 85 peaks with their respective retention times and percentages.



7.12  
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LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6538.D  
Acq On : 10 May 2024 12:16 am  
Operator : rocquans  
Sample : jd87833-1  
Misc : op54460,ecj297,31.2,,,1,1  
ALS Vial : 29 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON Filtering: 5  
Sampling : 1 Min Area: 1000 Area counts  
Start Thrs: 0.02 Max Peaks: 100  
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

86	13.040	1998	2001	2006	rVV7	111235	190744	3.01%	0.149%
87	13.115	2006	2015	2021	rVV3	1418974	3797703	59.99%	2.975%
88	13.179	2021	2027	2035	rVV	2278996	4426798	69.92%	3.468%
89	13.259	2035	2042	2053	rVB3	1045183	2368526	37.41%	1.855%
90	13.430	2061	2074	2082	rBV	2951433	6279529	99.19%	4.919%
91	13.505	2082	2088	2092	rVV4	531128	1102074	17.41%	0.863%
92	13.564	2092	2099	2114	rVV8	443612	1900602	30.02%	1.489%
93	13.676	2114	2120	2124	rVV7	222737	470540	7.43%	0.369%
94	13.741	2124	2132	2141	rVV9	276799	975955	15.42%	0.764%
95	13.853	2142	2153	2162	rVB8	219349	804606	12.71%	0.630%
96	13.981	2168	2177	2182	rVV2	460852	1099466	17.37%	0.861%
97	14.040	2182	2188	2200	rVB6	643119	1558658	24.62%	1.221%
98	14.227	2213	2223	2233	rBV2	765421	1720921	27.18%	1.348%
99	14.329	2235	2242	2253	rVB2	174664	545325	8.61%	0.427%
100	14.436	2253	2262	2269	rBV2	605145	1523393	24.06%	1.193%

Sum of corrected areas: 127660161

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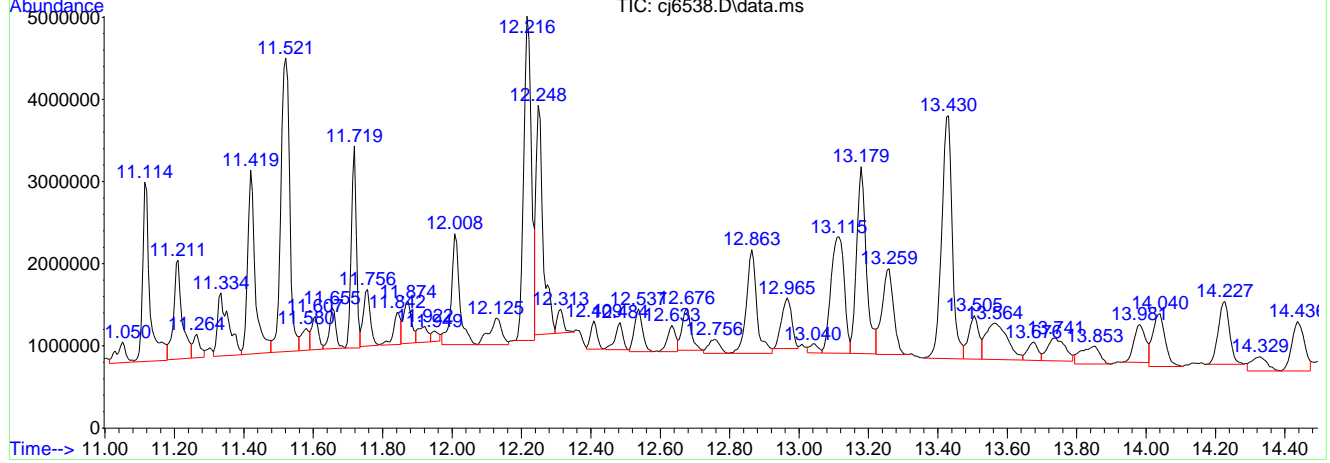
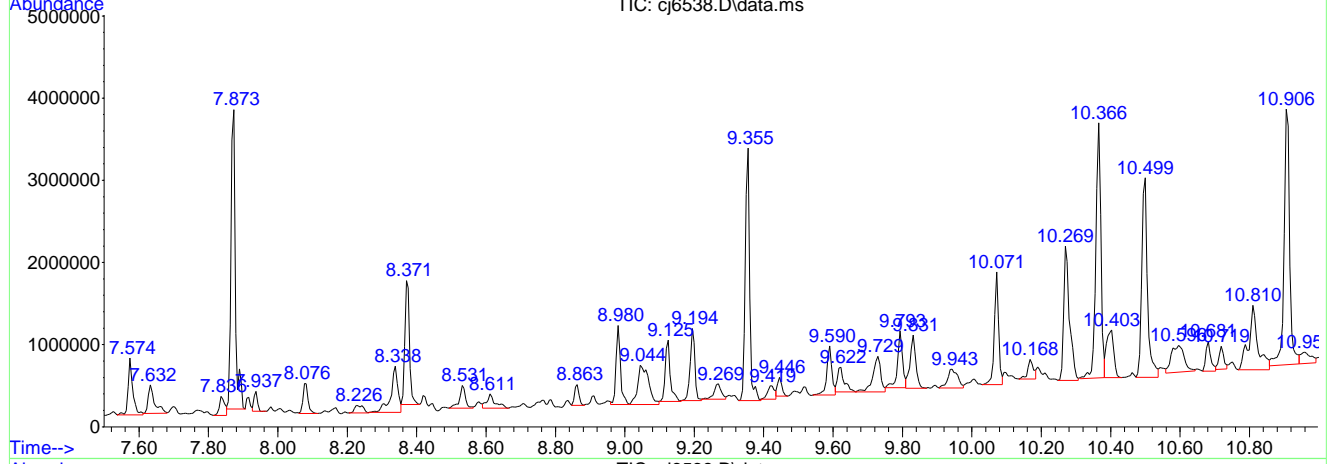
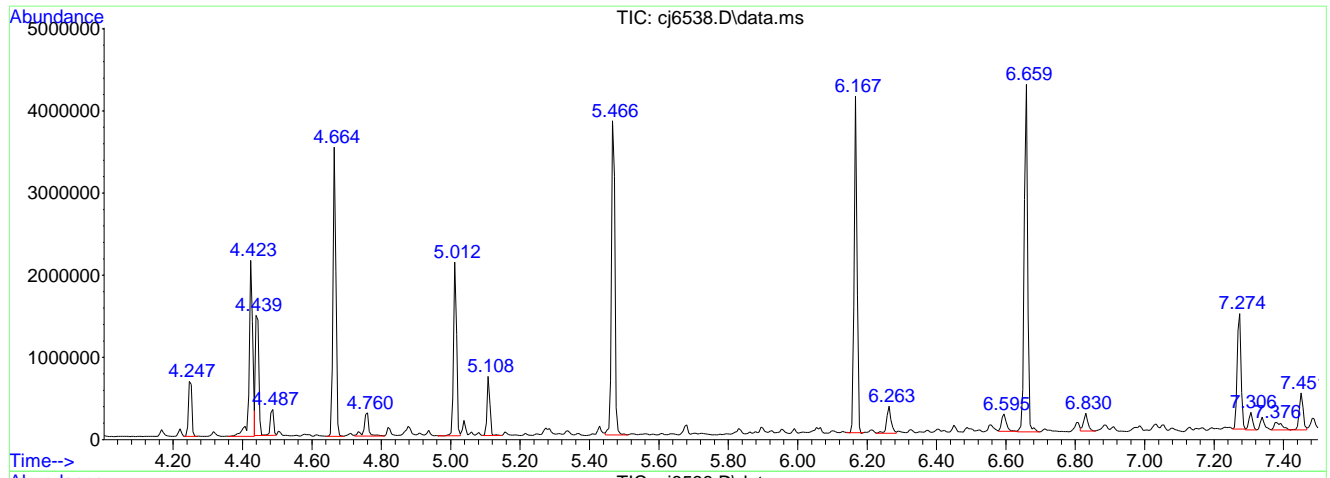


LSC Report - Integrated Chromatogram

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6538.D  
Acq On : 10 May 2024 12:16 am  
Operator : rocquans  
Sample : jd87833-1  
Misc : op54460,ecj297,31.2,,1,1  
ALS Vial : 29 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p



7.12  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6538.D  
 Acq On : 10 May 2024 12:16 am  
 Operator : rocquans  
 Sample : jd87833-1  
 Misc : op54460,ecj297,31.2,,1,1  
 ALS Vial : 29 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

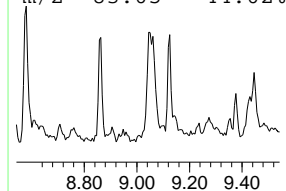
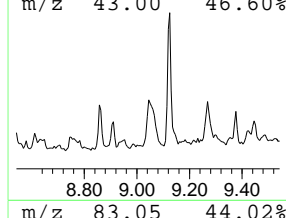
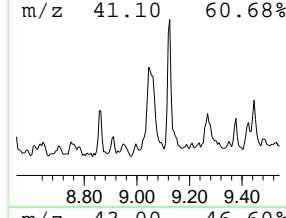
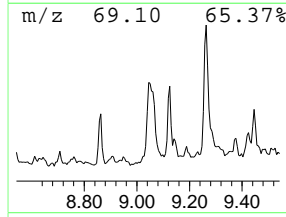
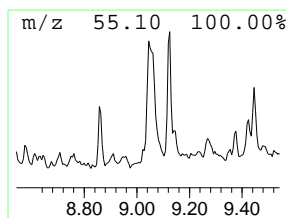
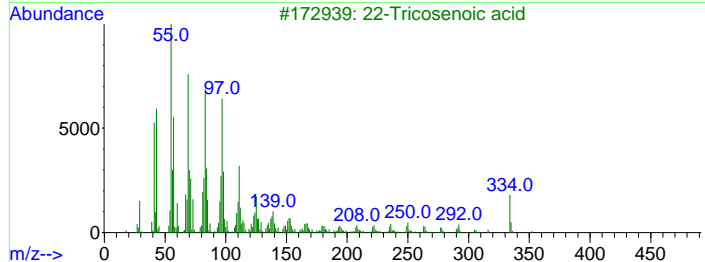
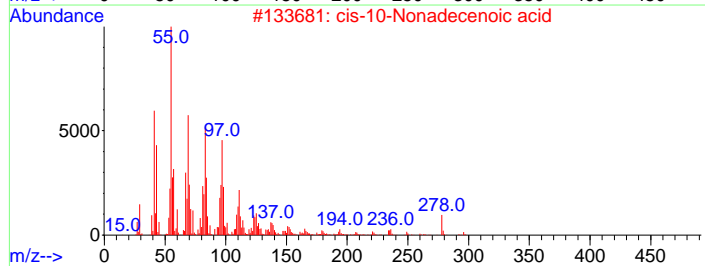
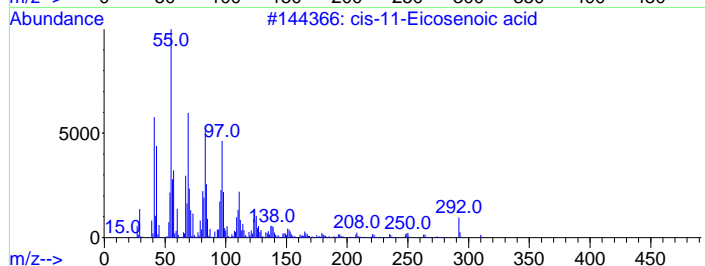
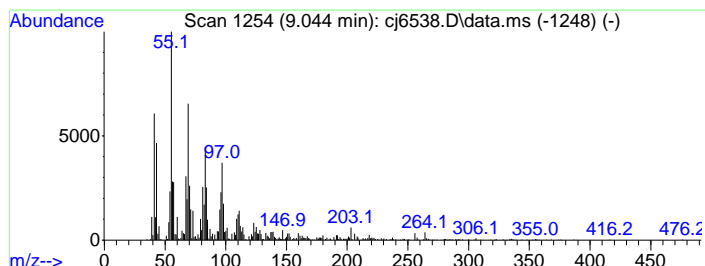
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 1 Unknown acid Concentration Rank 25

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.044	13.09 ppm	1047330	Phenanthrene-d10b	7.873

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		cis-11-Eicosenoic acid	310	C20H38O2	005561-99-9	94
2		cis-10-Nonadecenoic acid	296	C19H36O2	073033-09-7	91
3		22-Tricosenoic acid	352	C23H44O2	065119-95-1	91
4		cis-Vaccenic acid	282	C18H34O2	000506-17-2	91
5		6-Octadecenoic acid, (Z)-	282	C18H34O2	000593-39-5	91



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6538.D  
Acq On : 10 May 2024 12:16 am  
Operator : rocquans  
Sample : jd87833-1  
Misc : op54460,ecj297,31.2,,1,1  
ALS Vial : 29 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

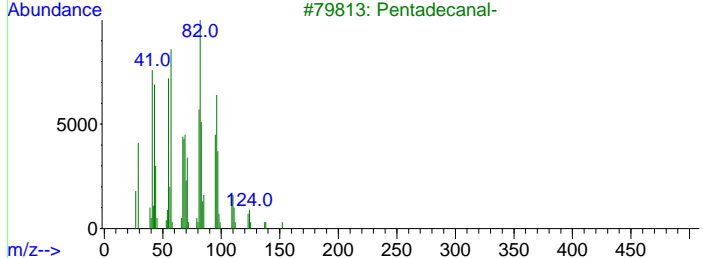
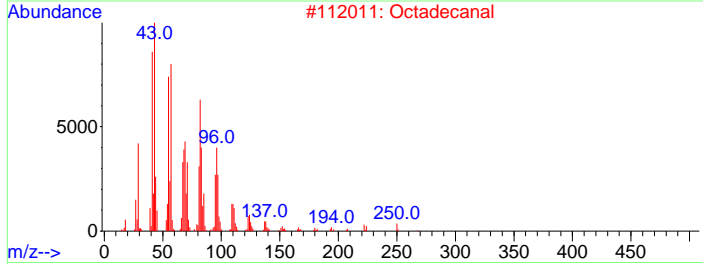
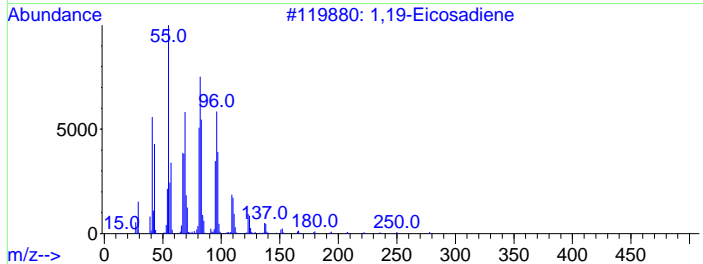
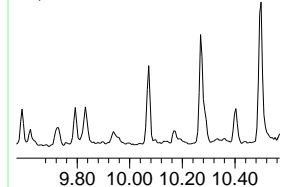
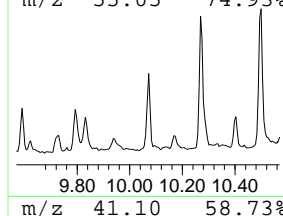
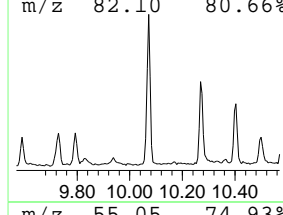
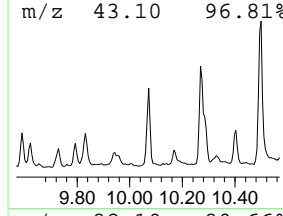
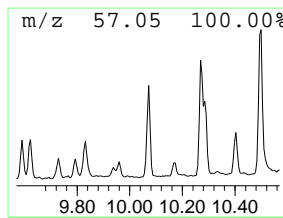
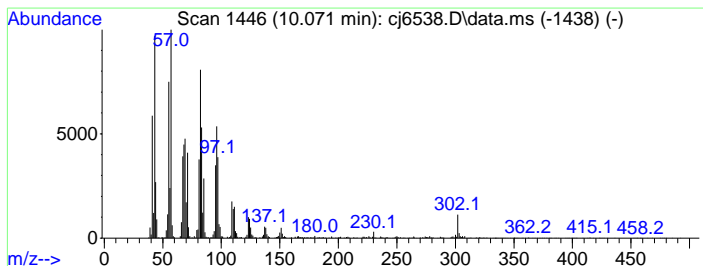
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 2 Unknown Concentration Rank 21

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.071	15.17 ppm	1199220	Chrysene-d12	10.366

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,19-Eicosadiene	278	C20H38	014811-95-1	95
2	Octadecanal	268	C18H36O	000638-66-4	94
3	Pentadecanal-	226	C15H30O	002765-11-9	90
4	Octadecanal	268	C18H36O	000638-66-4	90
5	Oxirane, tridecyl-	226	C15H30O	018633-25-5	89



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Library Search Compound Report

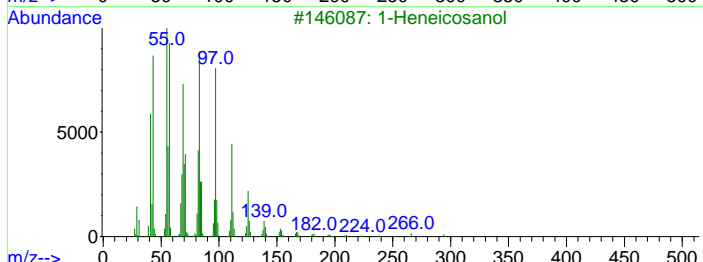
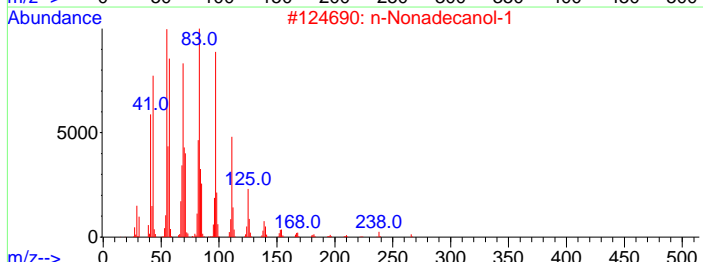
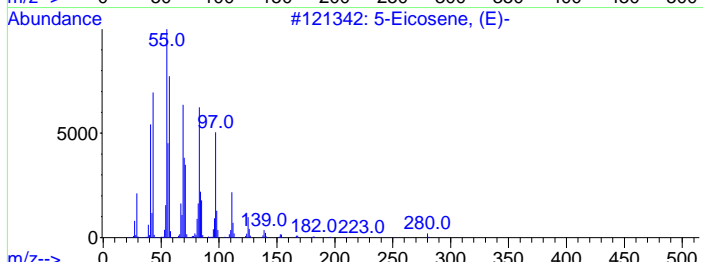
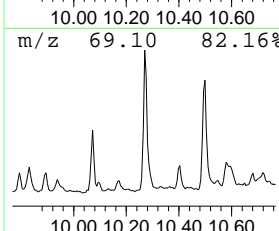
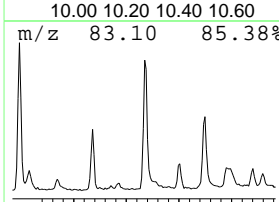
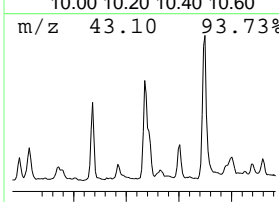
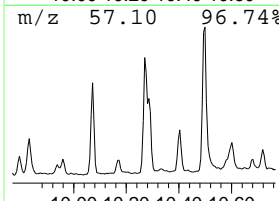
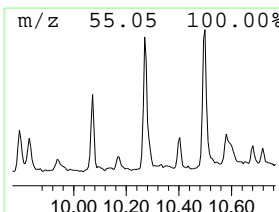
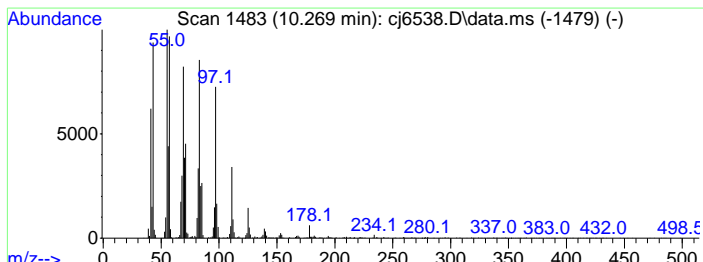
Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\
Data File : cj6538.D
Acq On : 10 May 2024 12:16 am
Operator : rocquans
Sample : jd87833-1
Misc : op54460,ecj297,31.2,,1,1
ALS Vial : 29 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: lscint.p

\*\*\*\*\*
Peak Number 3 Unknown Concentration Rank 16

Table with 7 columns: R.T., EstConc, Area, Relative to ISTD, R.T., Hit# of, Tentative ID, MW, MolForm, CAS#, Qual. Row 1: 10.269, 23.99 ppm, 1896430, Chrysene-d12, 10.366, 5, 5-Eicosene, (E)-, 280, C20H40, 074685-30-6, 99.



Library Search Compound Report

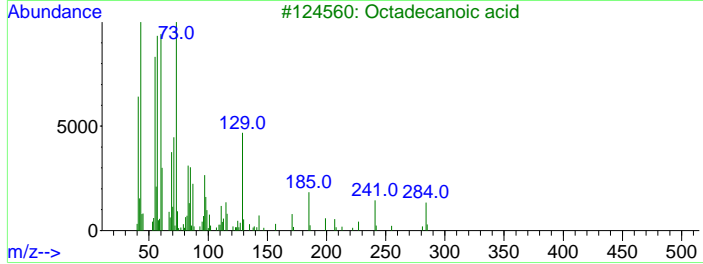
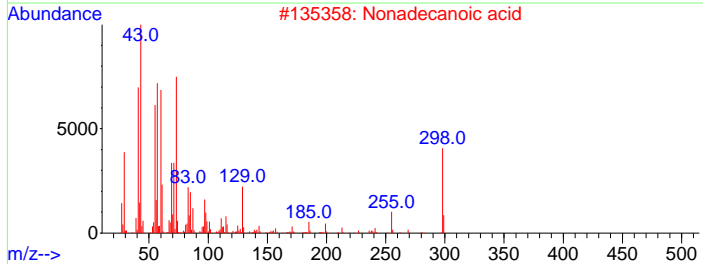
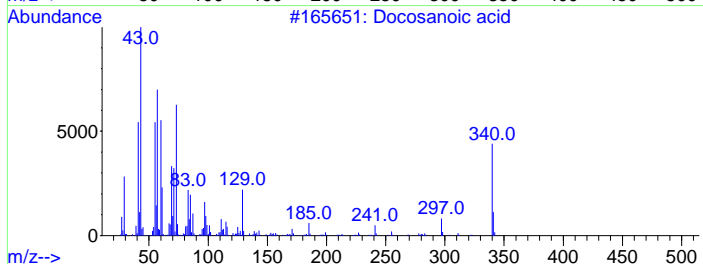
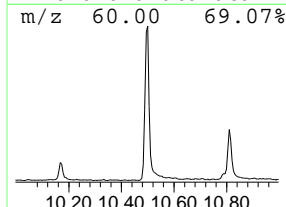
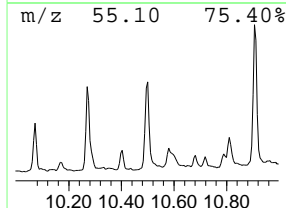
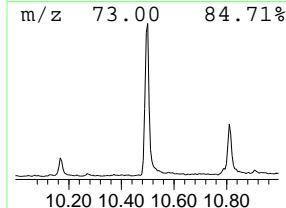
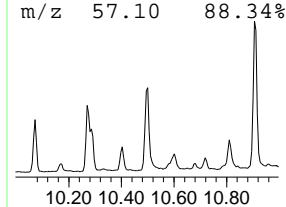
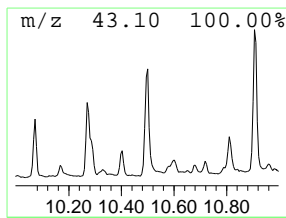
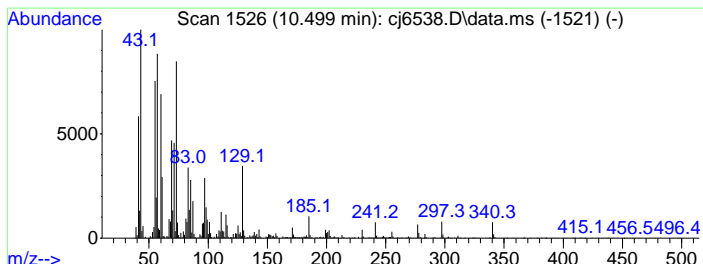
Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6538.D  
Acq On : 10 May 2024 12:16 am  
Operator : rocquans  
Sample : jd87833-1  
Misc : op54460,ecj297,31.2,,1,1  
ALS Vial : 29 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 4 Docosanoic acid Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.	
10.499	34.97 ppm	2763860	Chrysene-d12a	10.366	
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Docosanoic acid	340	C22H44O2	000112-85-6	99
2	Nonadecanoic acid	298	C19H38O2	000646-30-0	93
3	Octadecanoic acid	284	C18H36O2	000057-11-4	90
4	n-Decanoic acid	172	C10H20O2	000334-48-5	62
5	Octatriacontyl pentafluoropropio...	697	C41H77F5O2	1000351-89-1	38



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6538.D  
Acq On : 10 May 2024 12:16 am  
Operator : rocquans  
Sample : jd87833-1  
Misc : op54460,ecj297,31.2,,1,1  
ALS Vial : 29 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

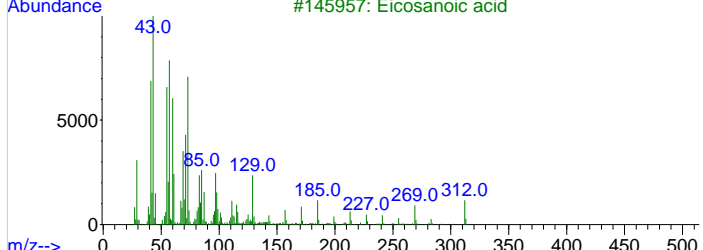
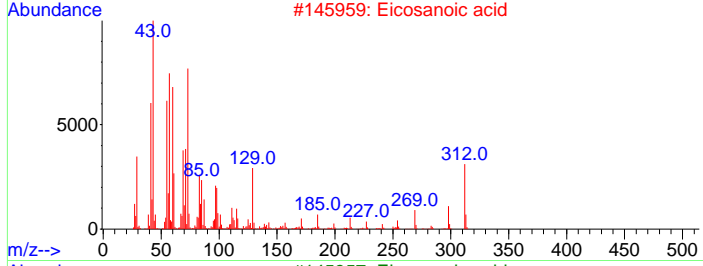
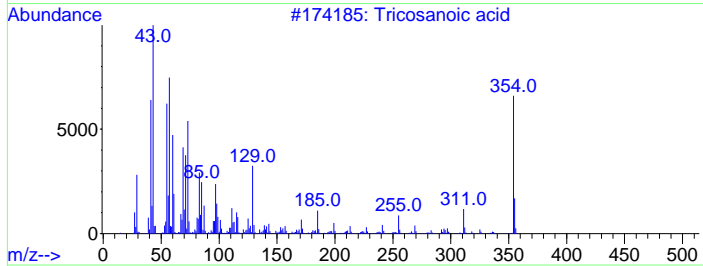
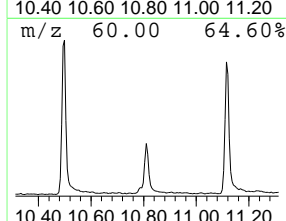
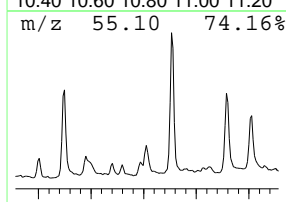
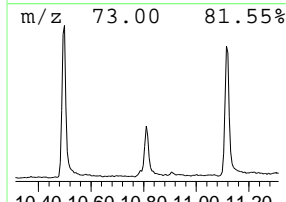
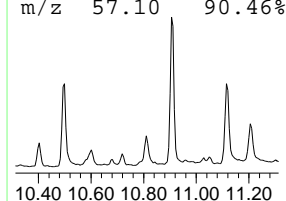
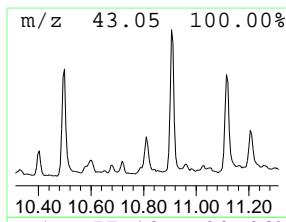
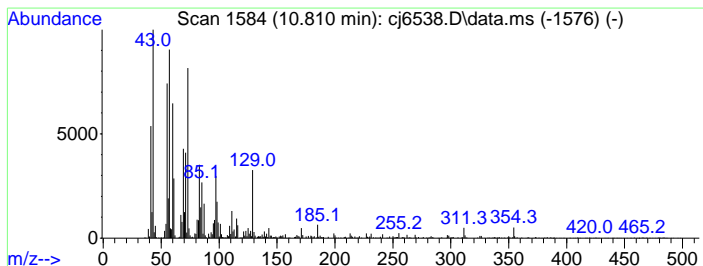
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 5 Unknown acid Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.810	18.54 ppm	1465830	Chrysene-d12a	10.366

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Tricosanoic acid	354	C23H46O2	002433-96-7	93
2		Eicosanoic acid	312	C20H40O2	000506-30-9	93
3		Eicosanoic acid	312	C20H40O2	000506-30-9	91
4		Octadecanoic acid	284	C18H36O2	000057-11-4	90
5		n-Decanoic acid	172	C10H20O2	000334-48-5	58



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6538.D  
Acq On : 10 May 2024 12:16 am  
Operator : rocquans  
Sample : jd87833-1  
Misc : op54460,ecj297,31.2,,1,1  
ALS Vial : 29 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

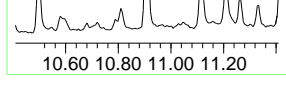
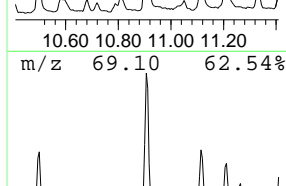
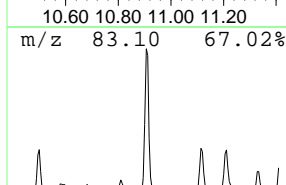
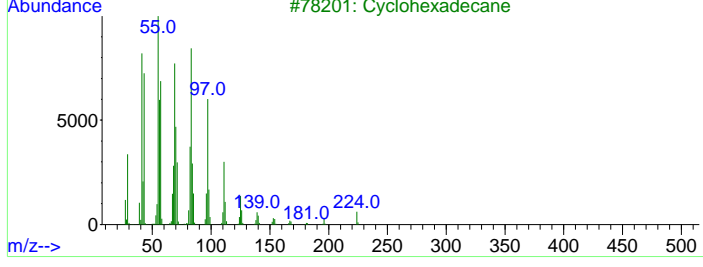
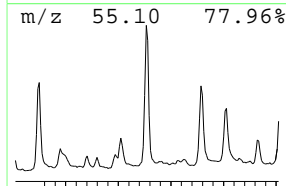
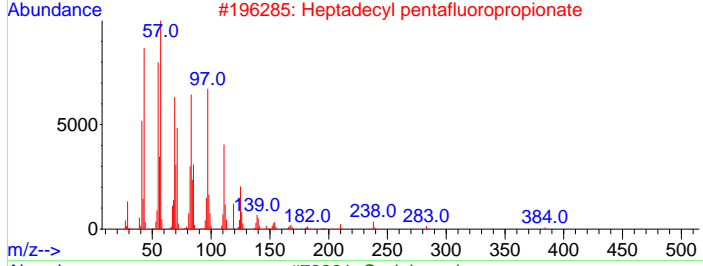
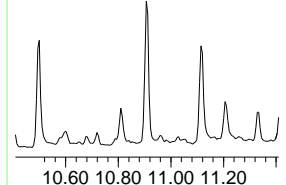
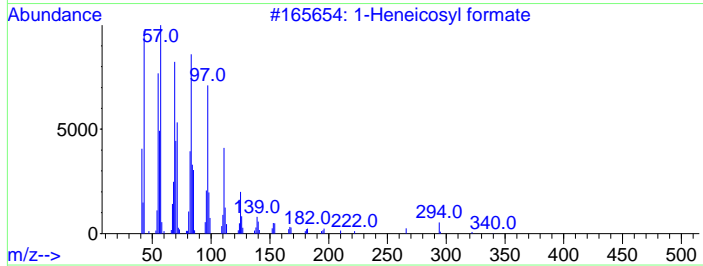
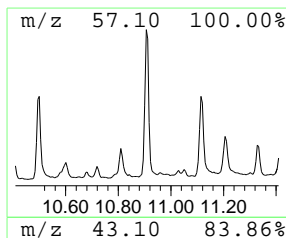
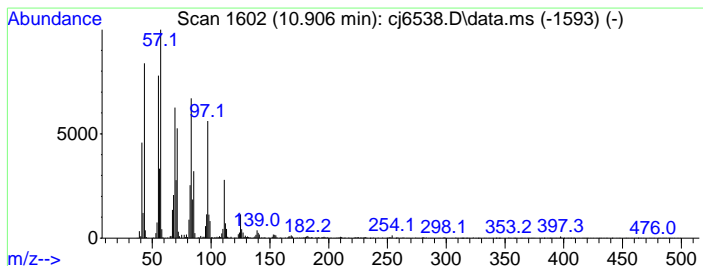
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 6 Unknown Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.906	44.54 ppm	3520930	Chrysene-d12a	10.366

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		1-Heneicosyl formate	340	C22H44O2	077899-03-7	97
2		Heptadecyl pentafluoropropionate	402	C20H35F5O2	1000351-80-6	94
3		Cyclohexadecane	224	C16H32	000295-65-8	93
4		Nonadecyl trifluoroacetate	380	C21H39F3O2	1000351-76-3	91
5		Docosyl trifluoroacetate	422	C24H45F3O2	1000351-75-5	91



7.12  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6538.D  
Acq On : 10 May 2024 12:16 am  
Operator : rocquans  
Sample : jd87833-1  
Misc : op54460,ecj297,31.2,,1,1  
ALS Vial : 29 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

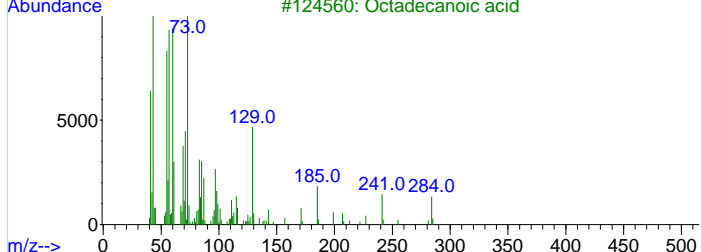
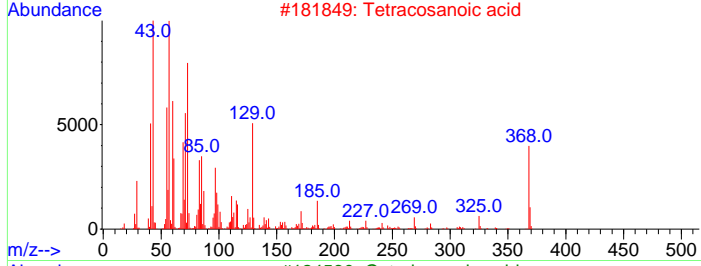
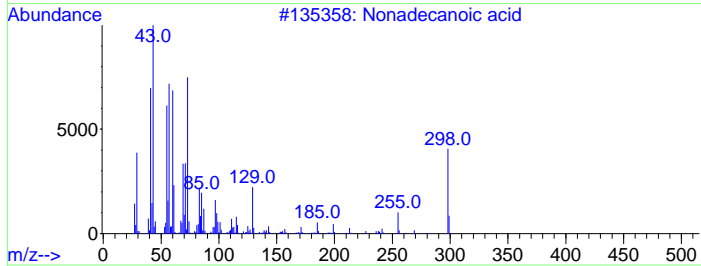
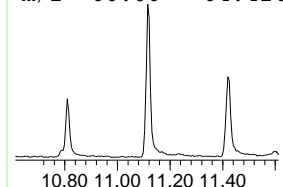
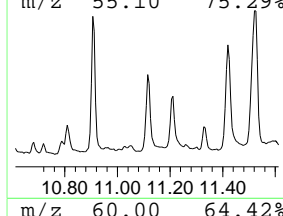
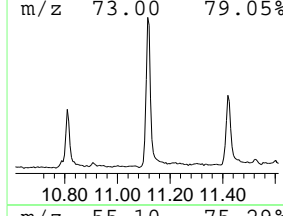
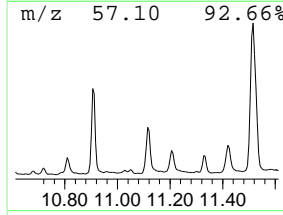
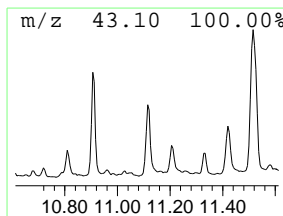
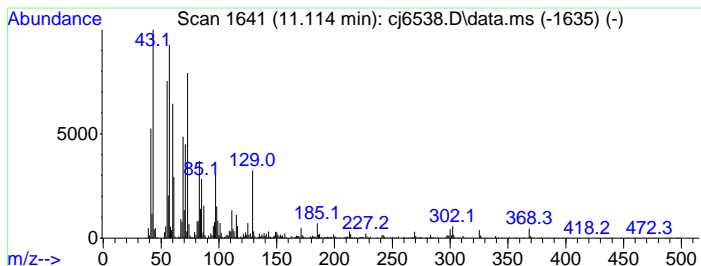
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 7 Unknown acid Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.114	50.68 ppm	3213800	Perylene-d12	11.719

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Nonadecanoic acid	298	C19H38O2	000646-30-0	91
2		Tetracosanoic acid	368	C24H48O2	000557-59-5	76
3		Octadecanoic acid	284	C18H36O2	000057-11-4	68
4		1-Pentadecanol acetate	270	C17H34O2	000629-58-3	42
5		Oxalic acid, allyl octadecyl ester	382	C23H42O4	1000309-24-5	42



7.12  
7



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6538.D  
Acq On : 10 May 2024 12:16 am  
Operator : rocquans  
Sample : jd87833-1  
Misc : op54460,ecj297,31.2,,1,1  
ALS Vial : 29 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

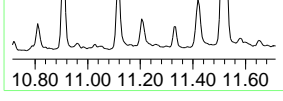
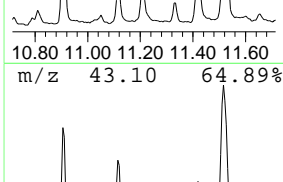
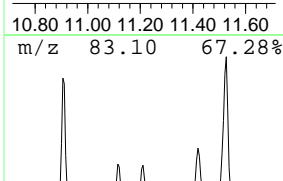
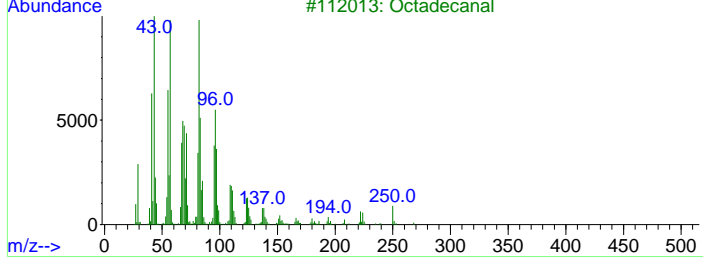
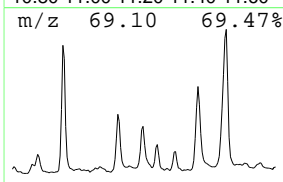
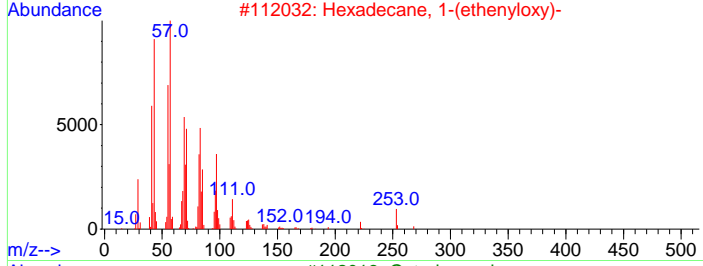
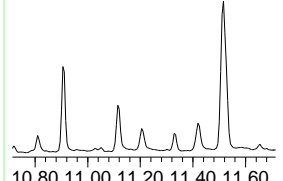
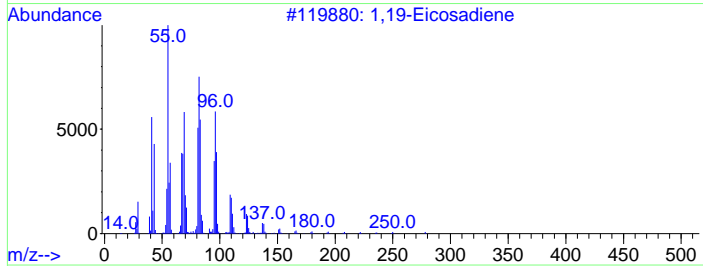
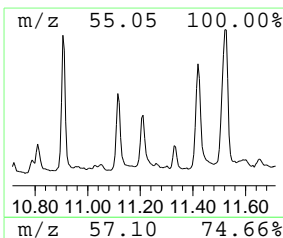
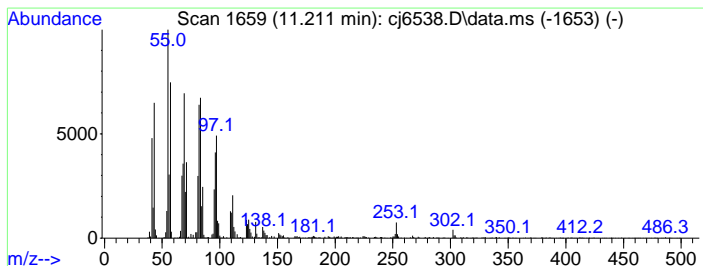
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 8 Unknown Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.211	32.30 ppm	2047960	Perylene-d12	11.719

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	1,19-Eicosadiene	278	C20H38	014811-95-1	96
2		Hexadecane, 1-(ethenyloxy)-	268	C18H36O	000822-28-6	89
3		Octadecanal	268	C18H36O	000638-66-4	83
4		Z-2-Octadecen-1-ol	268	C18H36O	1000131-11-0	83
5		Cyclododecanemethanol	198	C13H26O	001892-12-2	74



7.12  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6538.D  
Acq On : 10 May 2024 12:16 am  
Operator : rocquans  
Sample : jd87833-1  
Misc : op54460,ecj297,31.2,,1,1  
ALS Vial : 29 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

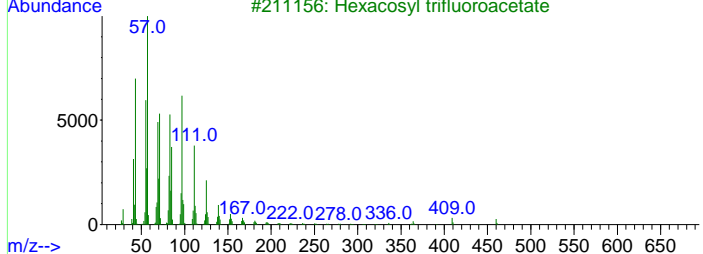
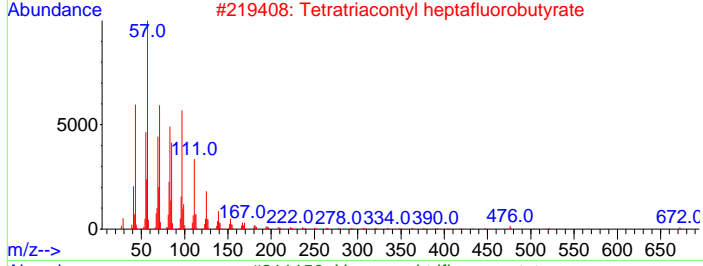
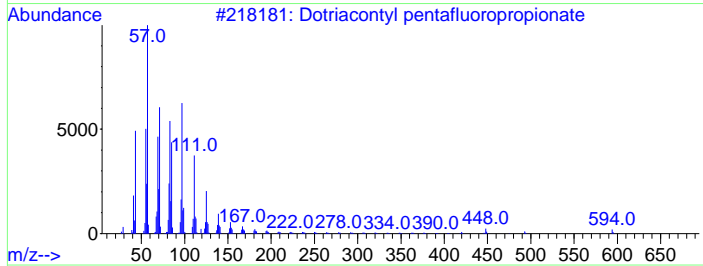
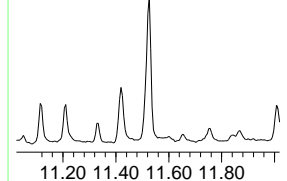
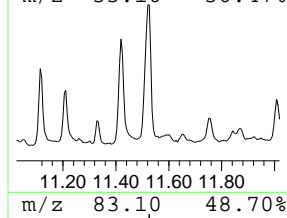
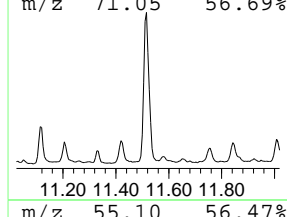
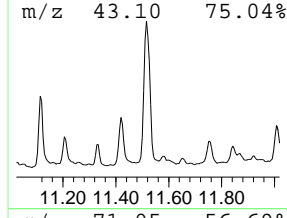
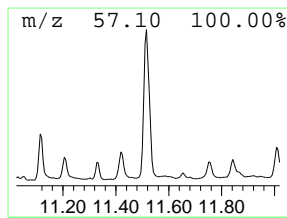
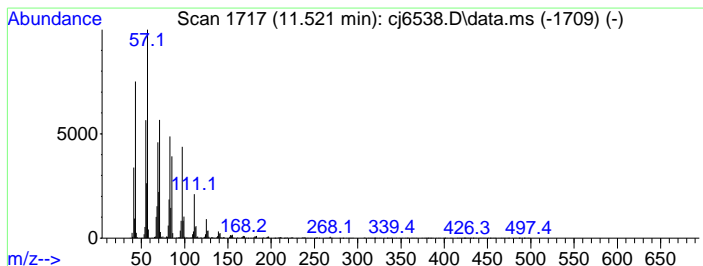
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 9 Unknown Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.521	99.84 ppm	6330920	Perylene-d12	11.719

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Dotriacontyl pentafluoropropionate	612	C35H65F5O2	1000351-81-4	91
2		Tetratriacontyl heptafluorobutyrate	691	C38H69F7O2	1000351-84-1	90
3		Hexacosyl trifluoroacetate	478	C28H53F3O2	1000351-75-0	87
4		Oxalic acid, isobutyl pentadecyl...	356	C21H40O4	1000309-38-0	87
5		Oxalic acid, isobutyl hexadecyl ...	370	C22H42O4	1000309-38-1	87



7.1.2  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6538.D  
 Acq On : 10 May 2024 12:16 am  
 Operator : rocquans  
 Sample : jd87833-1  
 Misc : op54460,ecj297,31.2,,1,1  
 ALS Vial : 29 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

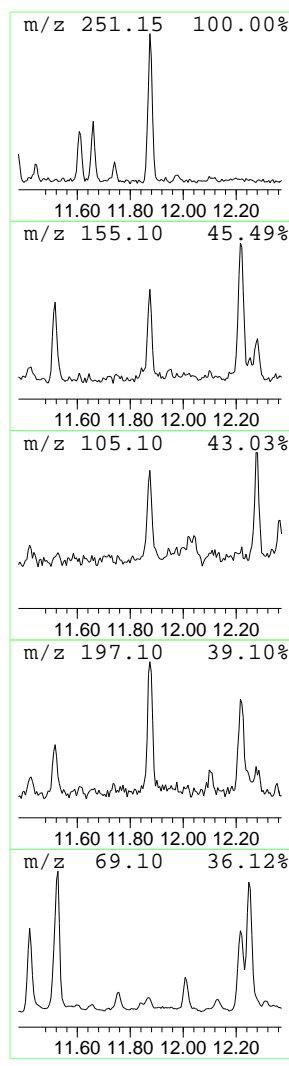
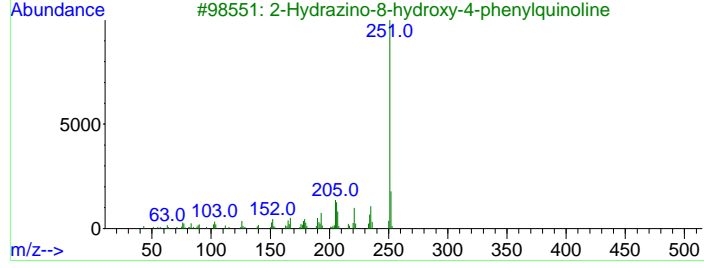
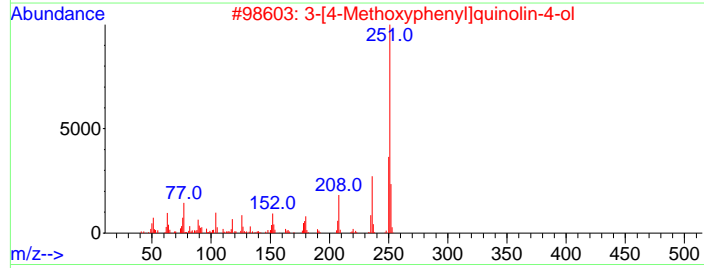
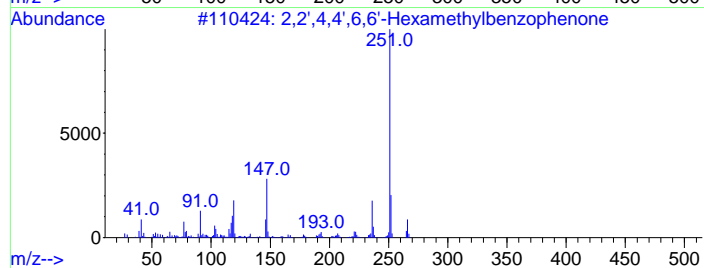
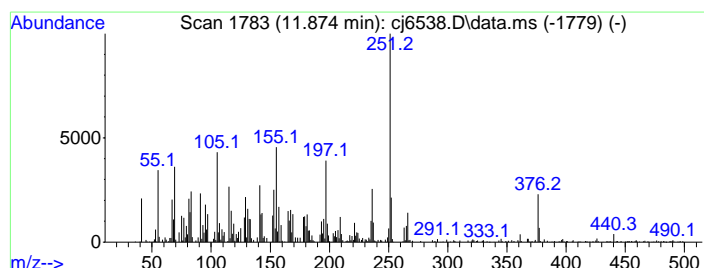
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 10 Unknown Concentration Rank 24

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.874	13.20 ppm	837241	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,2',4,4',6,6'-Hexamethylbenzoph...	266	C19H22O	005623-45-0	50		
2	3-[4-Methoxyphenyl]quinolin-4-ol	251	C16H13NO2	1000254-66-9	45		
3	2-Hydrazino-8-hydroxy-4-phenylqu...	251	C15H13N3O	104926-85-4	42		
4	Ethyl 2-cyano-trans-3-(2-naphthy...	251	C16H13NO2	029708-01-8	30		
5	6-(2-Imino-3-oxazolidinyl)-N,N,N...	251	C10H17N7O	087166-33-4	30		



7.12  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6538.D  
 Acq On : 10 May 2024 12:16 am  
 Operator : rocquans  
 Sample : jd87833-1  
 Misc : op54460,ecj297,31.2,,,1,1  
 ALS Vial : 29 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

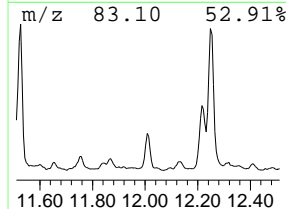
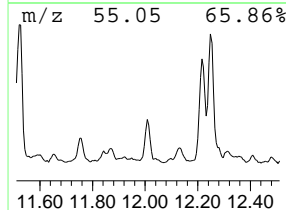
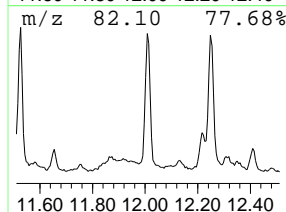
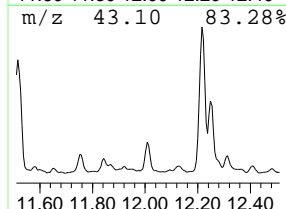
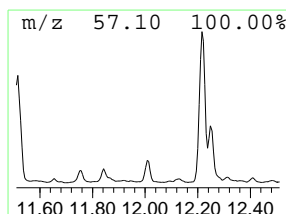
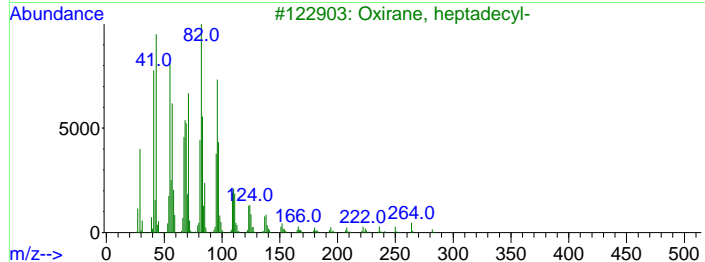
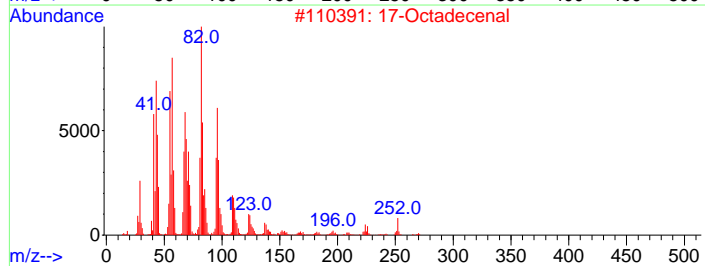
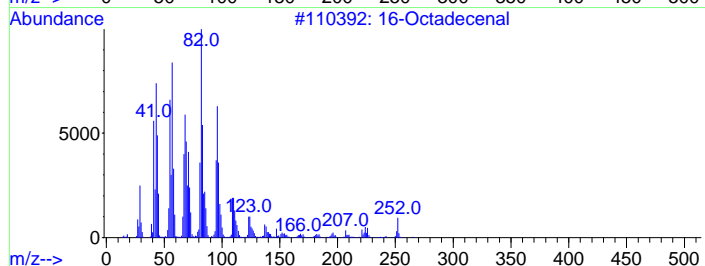
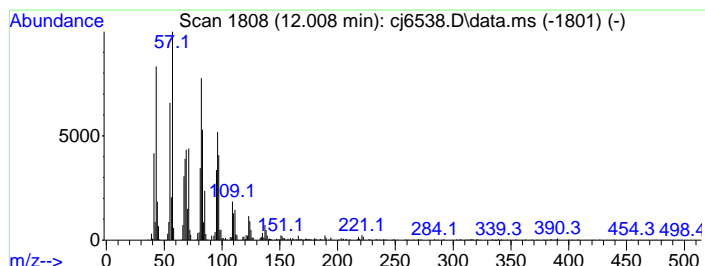
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 11 Unknown Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.008	35.44 ppm	2247400	Perylene-d12	11.719

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	16-Octadecenal	266	C18H34O	056554-87-1	91
2		17-Octadecenal	266	C18H34O	056554-86-0	91
3		Oxirane, heptadecyl-	282	C19H38O	067860-04-2	87
4		Oxirane, hexadecyl-	268	C18H36O	007390-81-0	87
5		Octadecanal	268	C18H36O	000638-66-4	87



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6538.D  
Acq On : 10 May 2024 12:16 am  
Operator : rocquans  
Sample : jd87833-1  
Misc : op54460,ecj297,31.2,,,1,1  
ALS Vial : 29 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

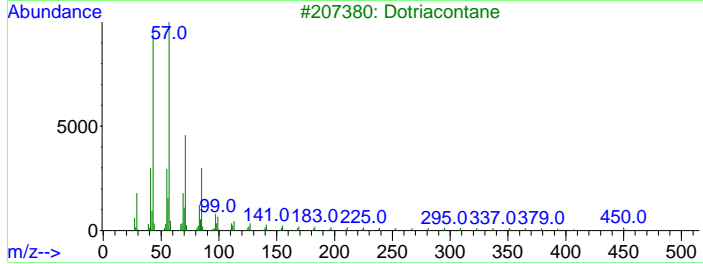
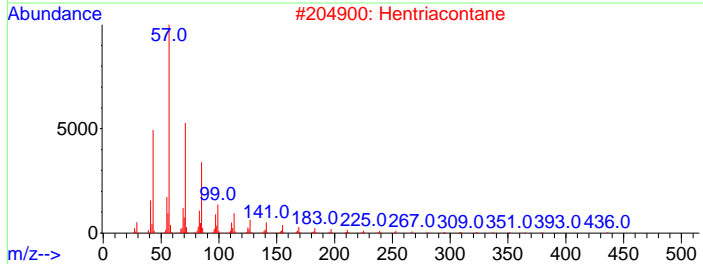
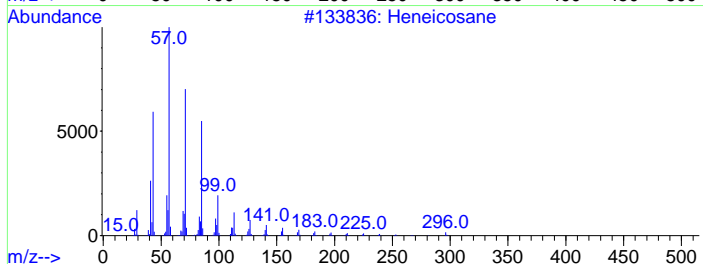
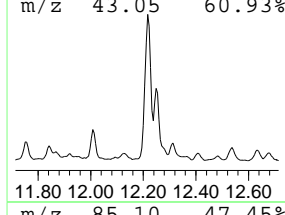
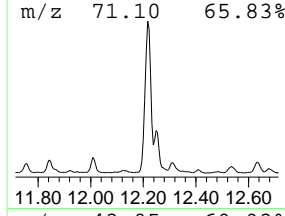
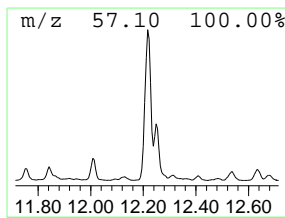
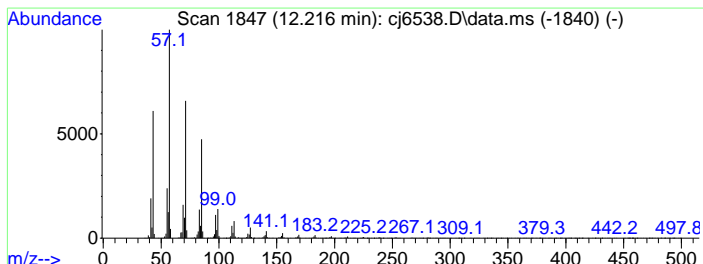
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 12 Alkane Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.216	97.62 ppm	6190070	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Heneicosane	296	C21H44	000629-94-7	97
2			Hentriacontane	437	C31H64	000630-04-6	95
3			Dotriacontane	451	C32H66	000544-85-4	93
4			Octacosane	394	C28H58	000630-02-4	91
5			Tetracosane	338	C24H50	000646-31-1	86



7.12  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6538.D  
 Acq On : 10 May 2024 12:16 am  
 Operator : rocquans  
 Sample : jd87833-1  
 Misc : op54460,ecj297,31.2,,,1,1  
 ALS Vial : 29 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

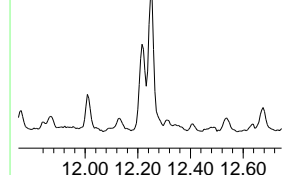
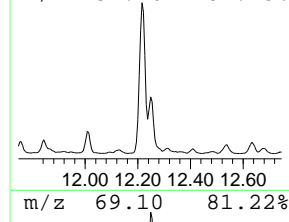
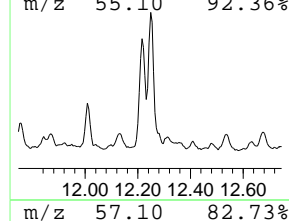
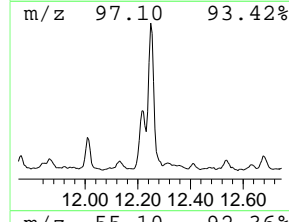
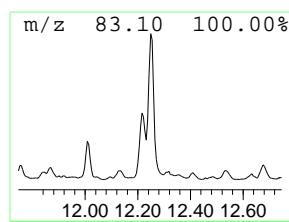
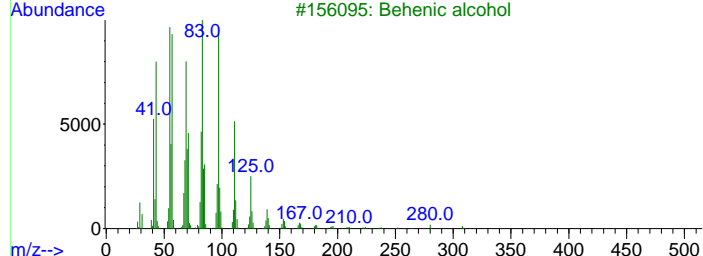
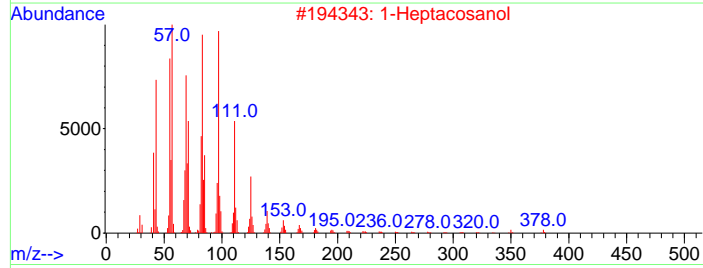
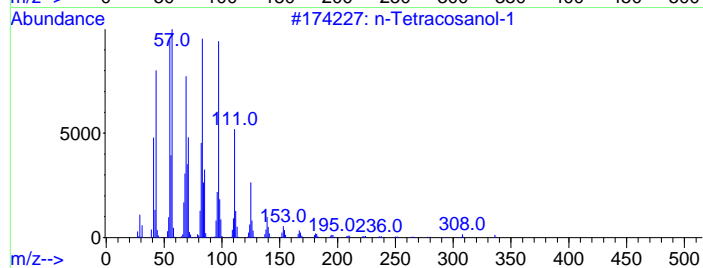
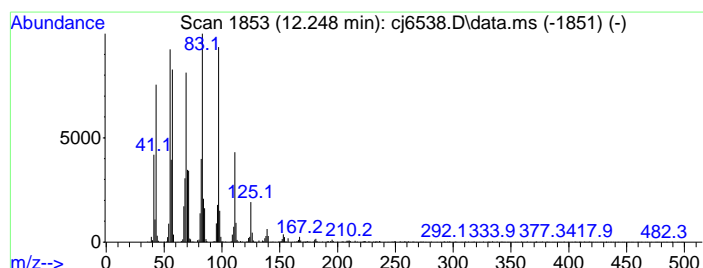
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 13 Unknown alcohol Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.248	61.15 ppm	3877510	Perylene-d12	11.719

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Tetracosanol-1	354	C24H50O	000506-51-4	91
2	1-Heptacosanol	396	C27H56O	002004-39-9	91
3	Behenic alcohol	326	C22H46O	000661-19-8	90
4	Trifluoroacetoxy hexadecane	338	C18H33F3O2	006222-03-3	86
5	n-Heptadecanol-1	256	C17H36O	001454-85-9	62



Library Search Compound Report

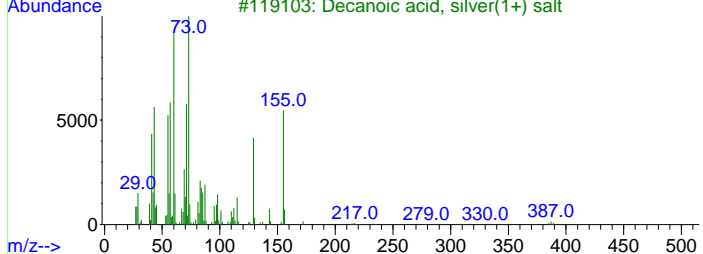
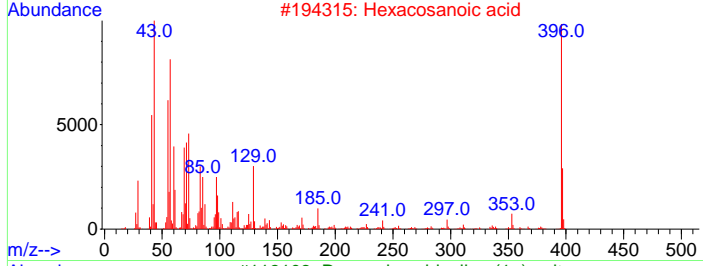
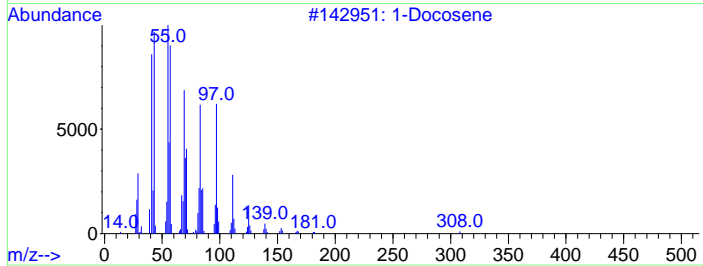
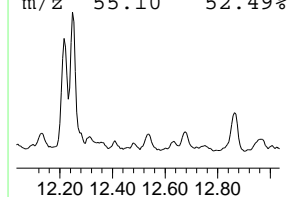
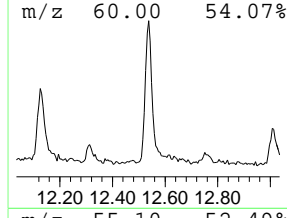
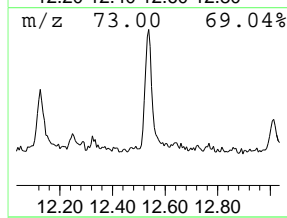
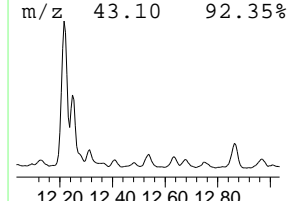
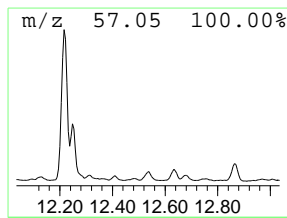
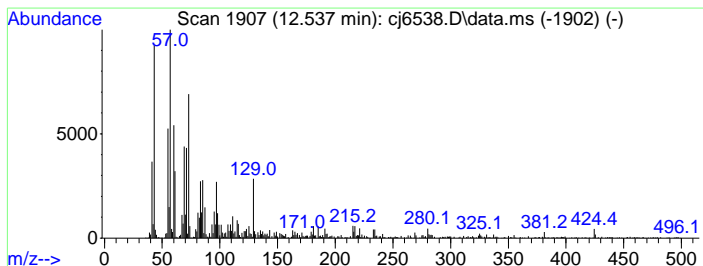
Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\
Data File : cj6538.D
Acq On : 10 May 2024 12:16 am
Operator : rocquans
Sample : jd87833-1
Misc : op54460,ecj297,31.2,,1,1
ALS Vial : 29 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: lscint.p

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Peak Number 14 Unknown Concentration Rank 23

Table with 7 columns: R.T., EstConc, Area, Relative to ISTD, R.T., Hit# of, and Qual. It lists peak data for Perylene-d12 and a list of 5 tentative hits including 1-Docosene, Hexacosanoic acid, Decanoic acid, Octadecanoic acid, and Eicosane.



7.12
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6538.D  
Acq On : 10 May 2024 12:16 am  
Operator : rocquans  
Sample : jd87833-1  
Misc : op54460,ecj297,31.2,,1,1  
ALS Vial : 29 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

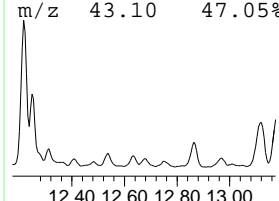
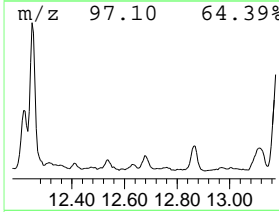
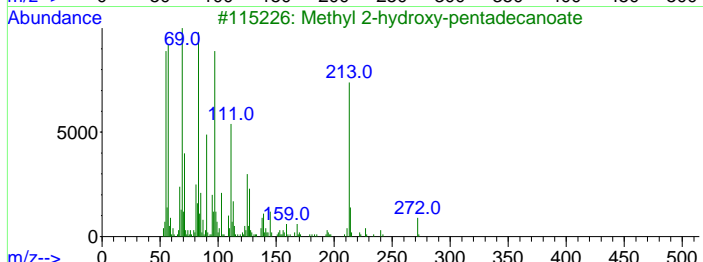
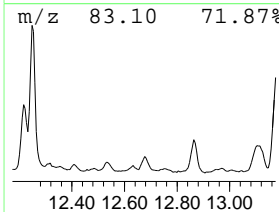
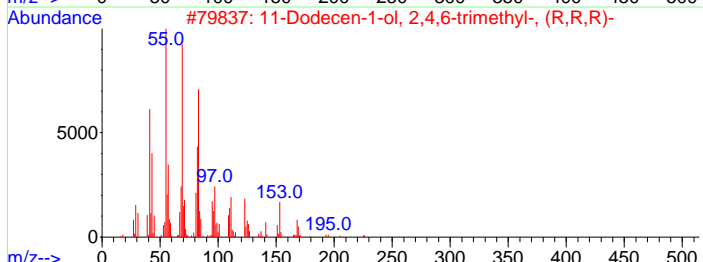
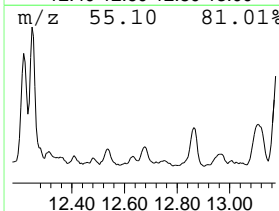
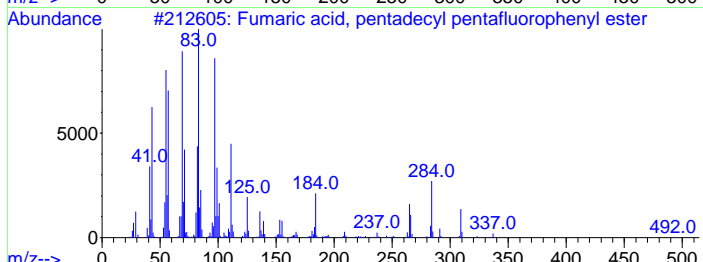
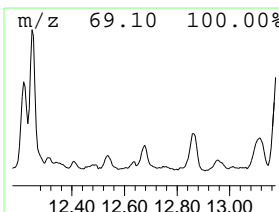
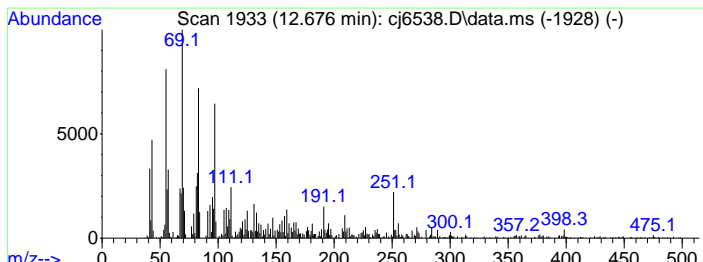
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 15 Unknown Concentration Rank 22

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.676	14.21 ppm	900806	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Fumaric acid, pentadecyl pentafl...	492	C25H33F5O4	1000348-10-7	89
2			11-Dodecen-1-ol, 2,4,6-trimethyl...	226	C15H30O	027829-54-5	86
3			Methyl 2-hydroxy-pentadecanoate	272	C16H32O3	1000336-35-7	72
4			9-Octadecene, (E)-	252	C18H36	007206-25-9	64
5			Dodecyl trifluoroacetate	282	C14H25F3O2	1000351-74-5	64



7.12  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6538.D  
Acq On : 10 May 2024 12:16 am  
Operator : rocquans  
Sample : jd87833-1  
Misc : op54460,ecj297,31.2,,,1,1  
ALS Vial : 29 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

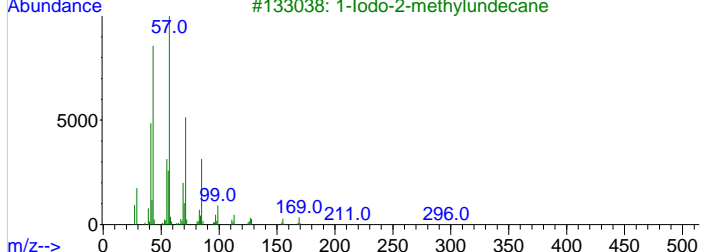
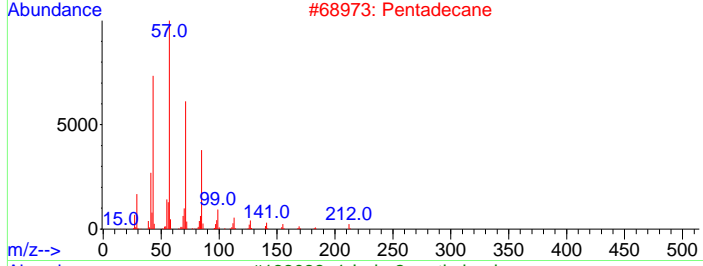
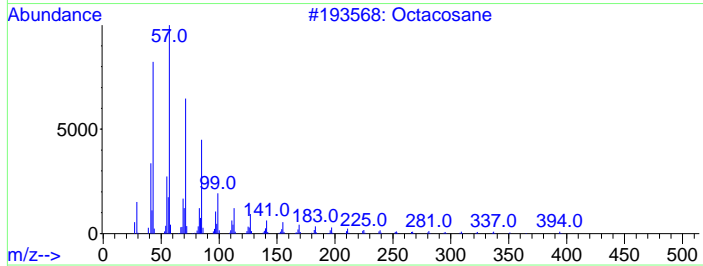
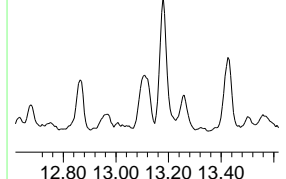
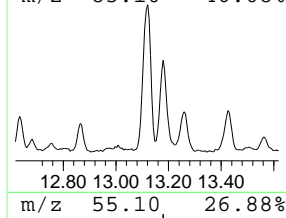
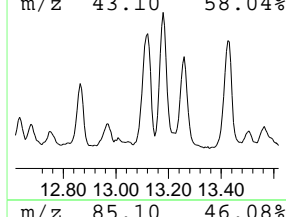
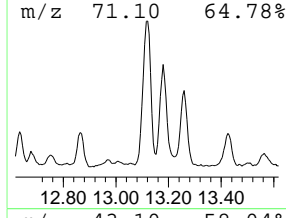
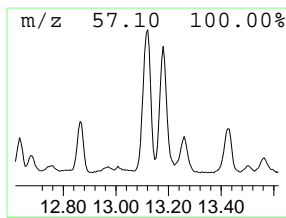
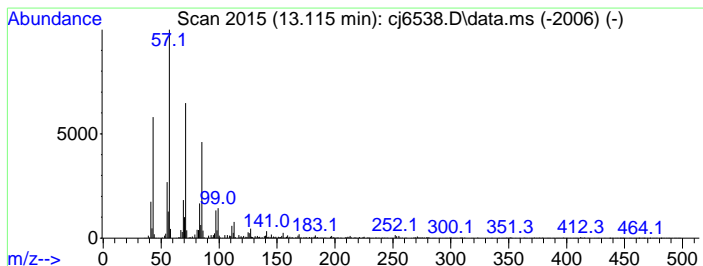
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 16 Alkane Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.115	59.89 ppm	3797700	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Octacosane	394	C28H58	000630-02-4	96
2			Pentadecane	212	C15H32	000629-62-9	95
3			1-Iodo-2-methylundecane	296	C12H25I	073105-67-6	91
4			Sulfurous acid, butyl tetradecyl...	334	C18H38O3S	1000309-18-1	90
5			Hexacosane	366	C26H54	000630-01-3	86



7.12  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6538.D  
 Acq On : 10 May 2024 12:16 am  
 Operator : rocquans  
 Sample : jd87833-1  
 Misc : op54460,ecj297,31.2,,,1,1  
 ALS Vial : 29 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

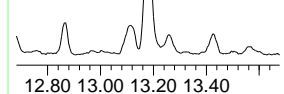
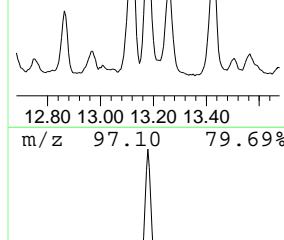
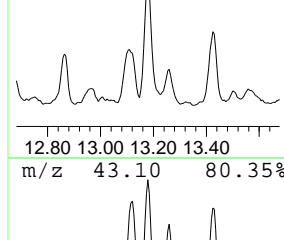
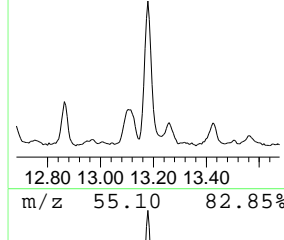
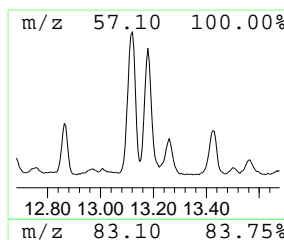
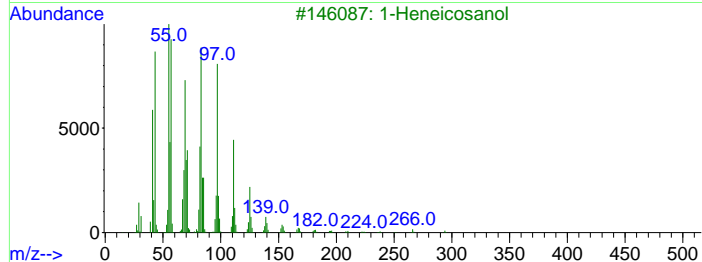
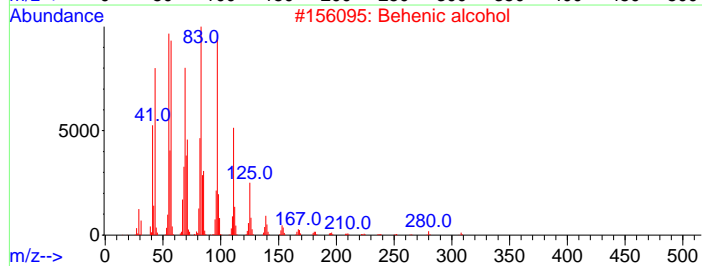
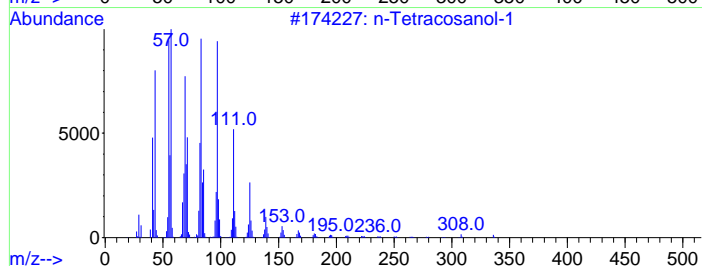
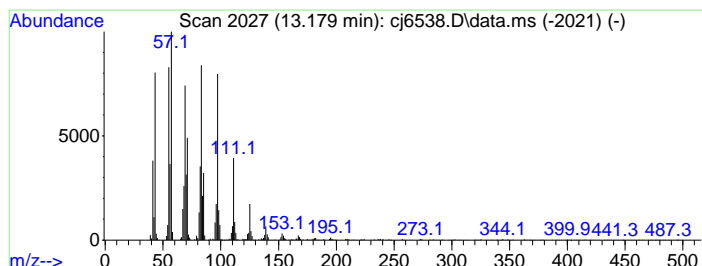
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 17 Unknown alcohol Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.179	69.81 ppm	4426800	Perylene-d12	11.719

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	n-Tetracosanol-1	354	C24H50O	000506-51-4	94
2		Behenic alcohol	326	C22H46O	000661-19-8	94
3		1-Heneicosanol	312	C21H44O	015594-90-8	91
4		Cyclopentadecane	210	C15H30	000295-48-7	90
5		Pentafluoropropionic acid, tetra...	360	C17H29F5O2	006222-06-6	87



7.1.2  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6538.D  
 Acq On : 10 May 2024 12:16 am  
 Operator : rocquans  
 Sample : jd87833-1  
 Misc : op54460,ecj297,31.2,,1,1  
 ALS Vial : 29 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

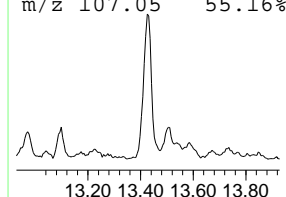
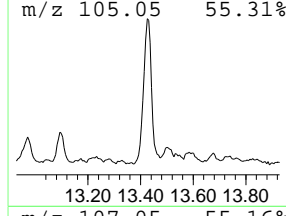
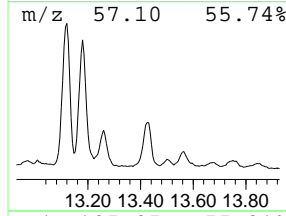
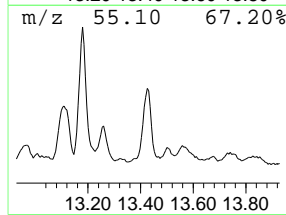
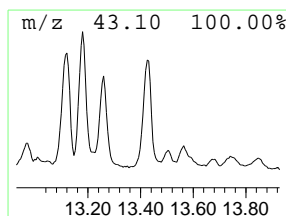
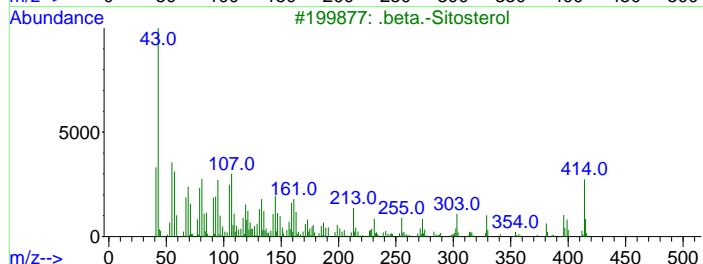
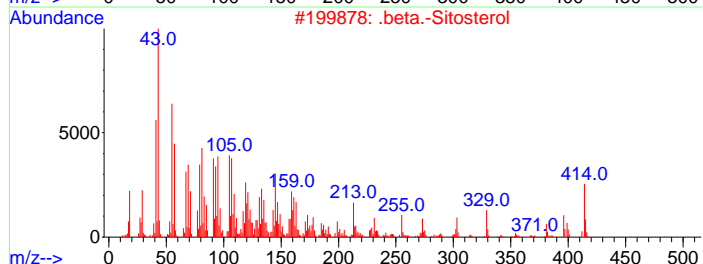
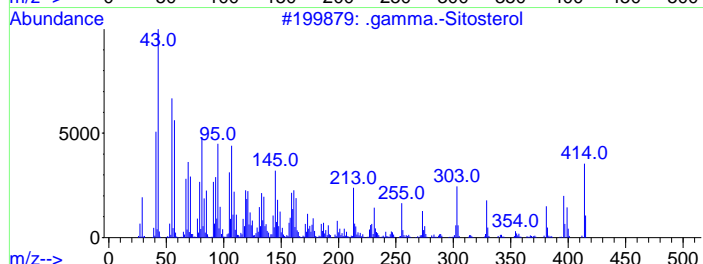
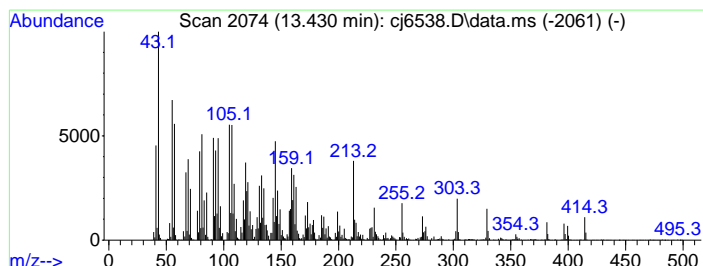
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 18 Unknown Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.430	99.03 ppm	6279530	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1	.	gamma.-	Sitosterol	414	C29H50O	000083-47-6	99
2	.	beta.-	Sitosterol	414	C29H50O	000083-46-5	95
3	.	beta.-	Sitosterol	414	C29H50O	000083-46-5	93
4	.	gamma.-	Sitosterol	414	C29H50O	000083-47-6	91
5		Campesterol		400	C28H48O	000474-62-4	62



7.12  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6538.D  
 Acq On : 10 May 2024 12:16 am  
 Operator : rocquans  
 Sample : jd87833-1  
 Misc : op54460,ecj297,31.2,,1,1  
 ALS Vial : 29 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

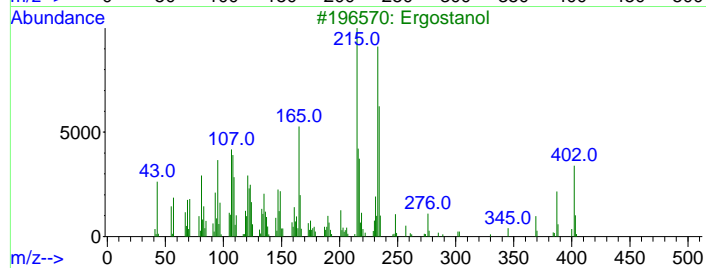
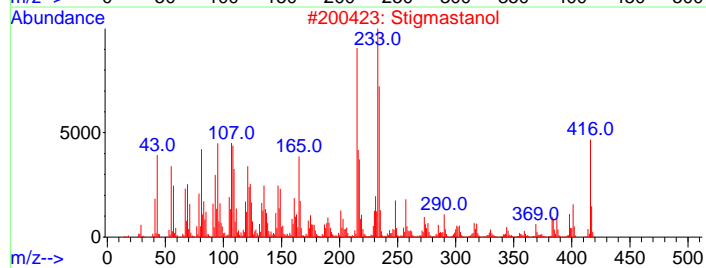
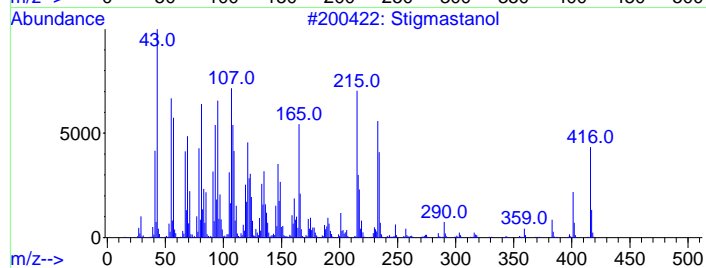
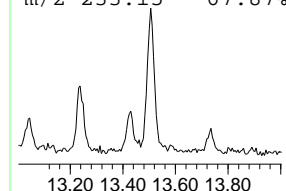
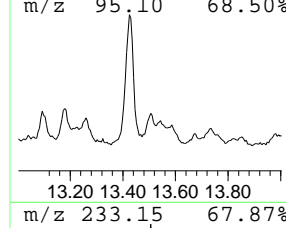
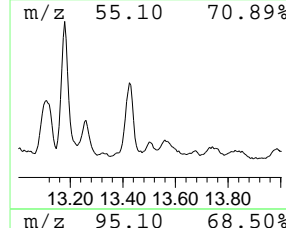
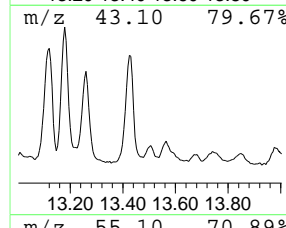
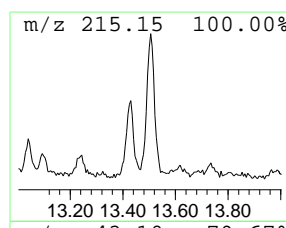
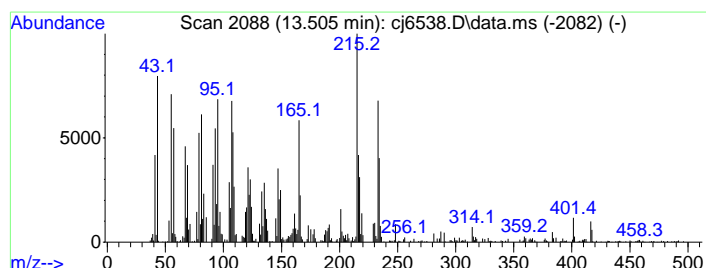
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 19 Unknown Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.505	17.38 ppm	1102070	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Stigmastanol	416	C29H52O	019466-47-8	99
2			Stigmastanol	416	C29H52O	019466-47-8	89
3			Ergostanol	402	C28H50O	006538-02-9	83
4			Bufa-20,22-dienolide, 14,15-epox...	400	C24H32O5	004026-95-3	53
5			Cholestane, 3-ethoxy-, (3.beta.,...	416	C29H52O	002089-02-3	46



7.12  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6538.D  
Acq On : 10 May 2024 12:16 am  
Operator : rocquans  
Sample : jd87833-1  
Misc : op54460,ecj297,31.2,,1,1  
ALS Vial : 29 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

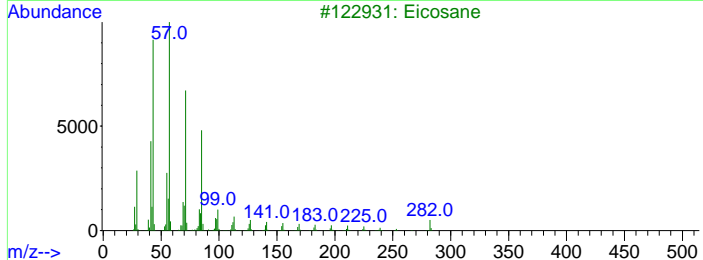
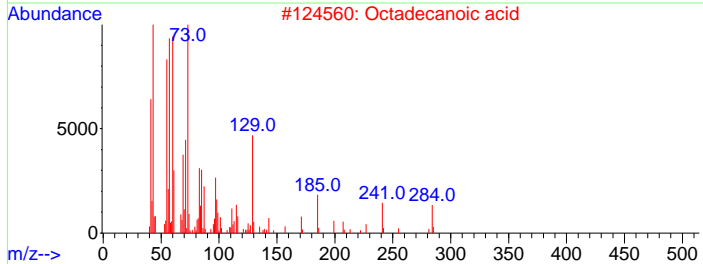
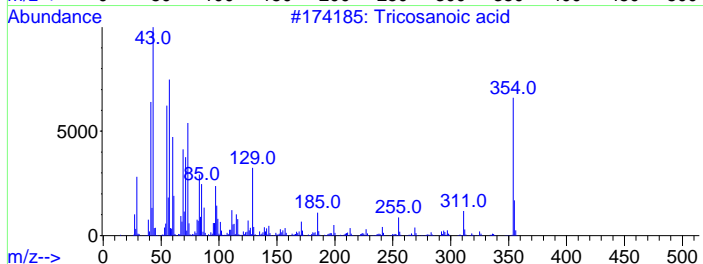
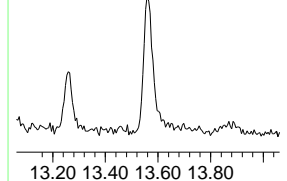
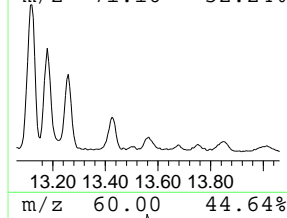
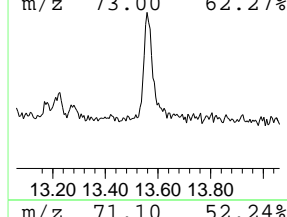
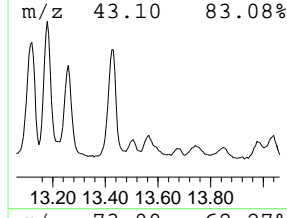
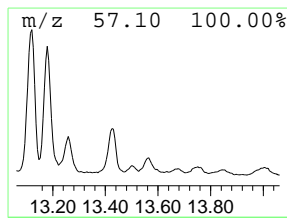
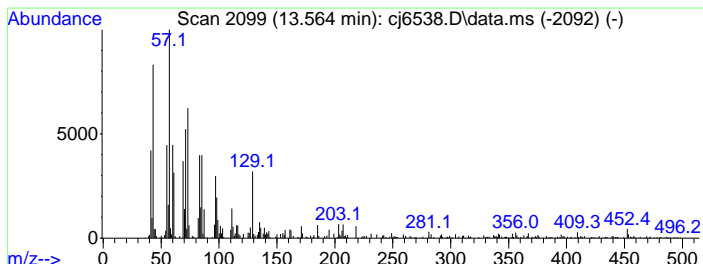
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 20 Unknown acid Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.564	29.97 ppm	1900600	Perylene-d12	11.719

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Tricosanoic acid	354	C23H46O2	002433-96-7	80
2		Octadecanoic acid	284	C18H36O2	000057-11-4	58
3		Eicosane	282	C20H42	000112-95-8	52
4		Sulfurous acid, octadecyl 2-prop...	376	C21H44O3S	1000309-12-7	46
5		Octacosane	394	C28H58	000630-02-4	38



7.12  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6538.D  
 Acq On : 10 May 2024 12:16 am  
 Operator : rocquans  
 Sample : jd87833-1  
 Misc : op54460,ecj297,31.2,,1,1  
 ALS Vial : 29 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

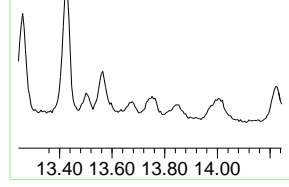
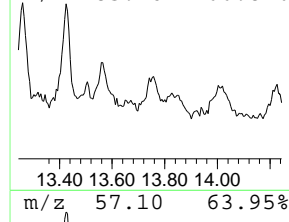
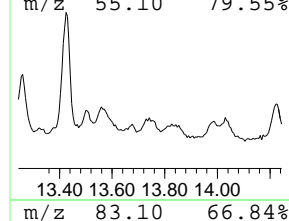
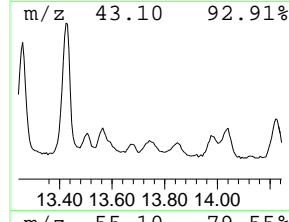
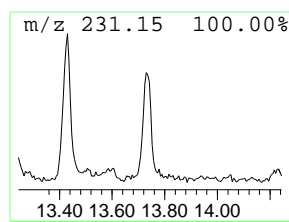
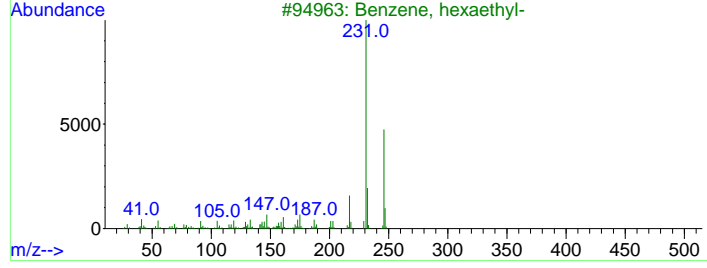
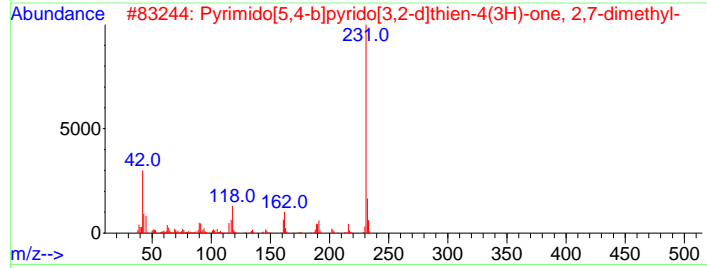
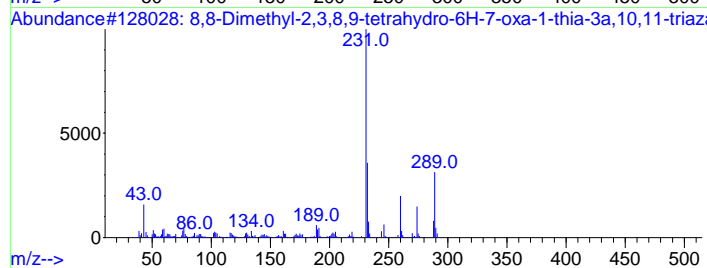
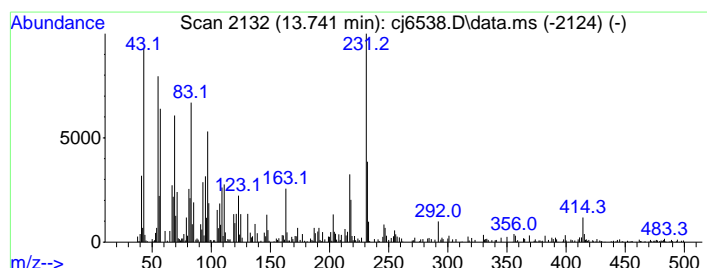
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 21 Unknown Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.741	15.39 ppm	975955	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			8,8-Dimethyl-2,3,8,9-tetrahydro-...	289	C14H15N3O2S	1000258-95-0	32
2			Pyrimido[5,4-b]pyrido[3,2-d]thie...	231	C11H9N3OS	201681-22-3	27
3			Benzene, hexaethyl-	246	C18H30	000604-88-6	25
4			Benzene, 1,3,5-tri-tert-butyl-	246	C18H30	001460-02-2	25
5			1-Chlorobenzene, 4-(2-hydroxyben...	231	C13H10ClNO	1000221-93-4	25



7.1.2  
7

Library Search Compound Report

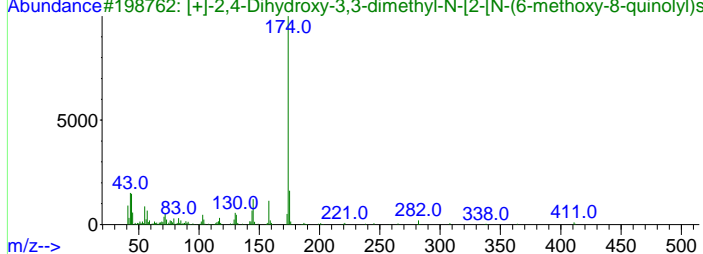
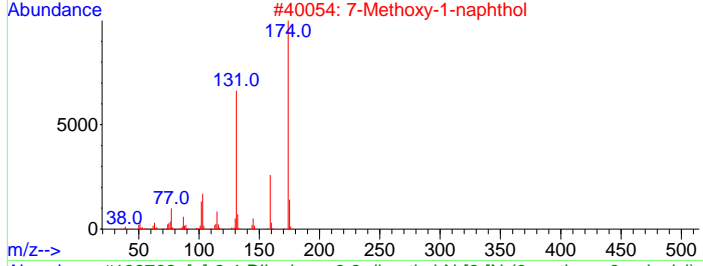
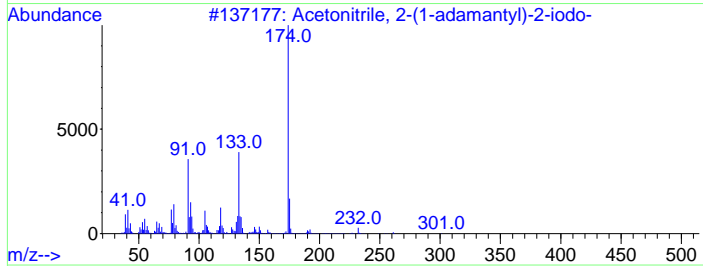
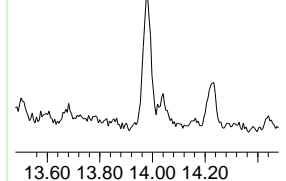
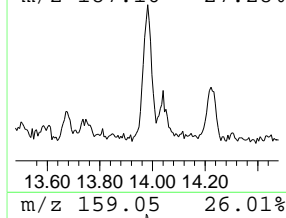
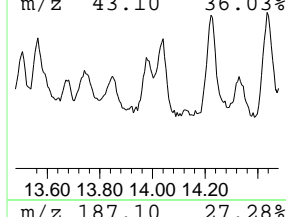
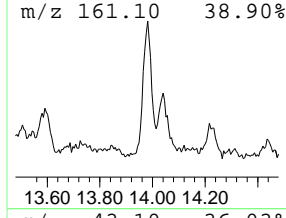
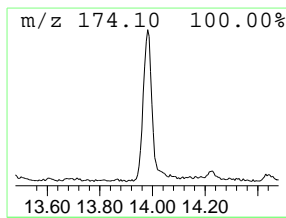
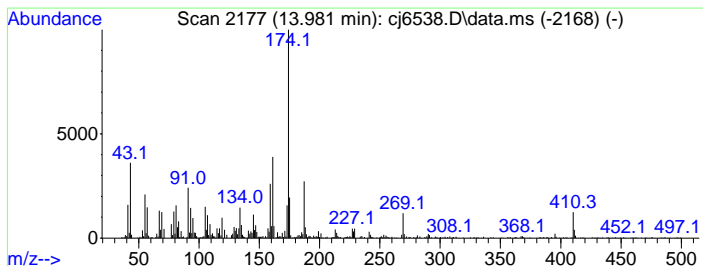
Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\
Data File : cj6538.D
Acq On : 10 May 2024 12:16 am
Operator : rocquans
Sample : jd87833-1
Misc : op54460,ecj297,31.2,,1,1
ALS Vial : 29 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: lscint.p

\*\*\*\*\*
Peak Number 22 Unknown Concentration Rank 19

Table with 7 columns: R.T., EstConc, Area, Relative to ISTD, R.T., Hit# of 5, Tentative ID, MW, MolForm, CAS#, Qual. Row 1: 13.981, 17.34 ppm, 1099470, Perylene-d12, 11.719.



7.1.2
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6538.D  
 Acq On : 10 May 2024 12:16 am  
 Operator : rocquans  
 Sample : jd87833-1  
 Misc : op54460,ecj297,31.2,,1,1  
 ALS Vial : 29 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

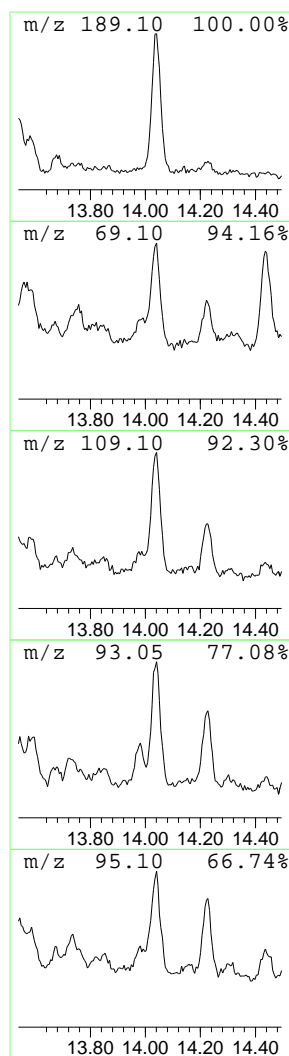
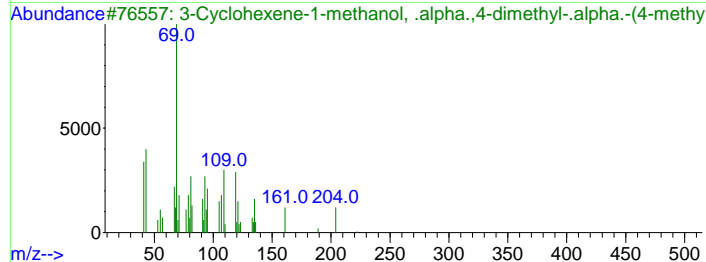
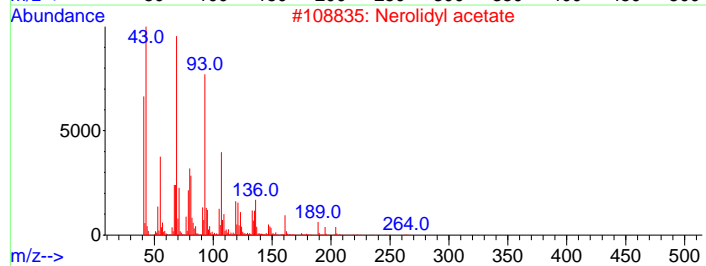
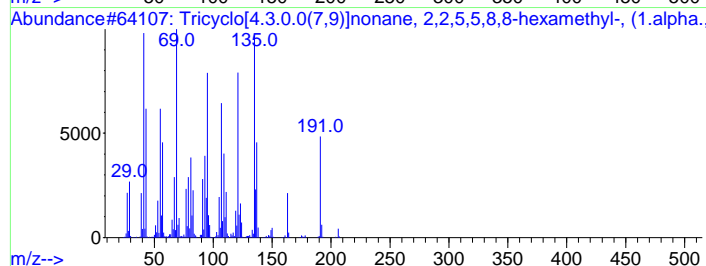
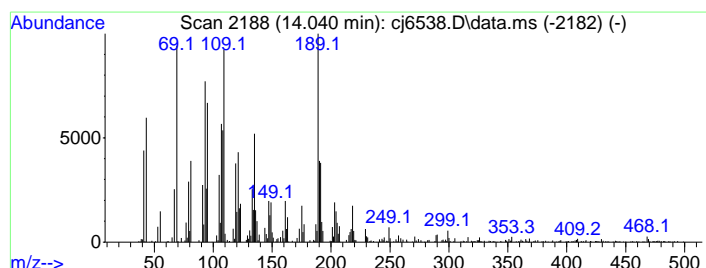
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 23 Unknown Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.040	24.58 ppm	1558660	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Tricyclo[4.3.0.0(7,9)]nonane, 2,...	206	C15H26	054832-82-5	46
2			Nerolidyl acetate	264	C17H28O2	002306-78-7	42
3			3-Cyclohexene-1-methanol, .alpha...	222	C15H26O	023178-88-3	38
4			Cyclohexene, 1-methyl-4-(5-methy...	204	C15H24	000495-61-4	25
5			9,19-Cycloergost-24(28)-en-3-ol,...	468	C32H52O2	010376-42-8	25





Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6538.D  
 Acq On : 10 May 2024 12:16 am  
 Operator : rocquans  
 Sample : jd87833-1  
 Misc : op54460,ecj297,31.2,,,1,1  
 ALS Vial : 29 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

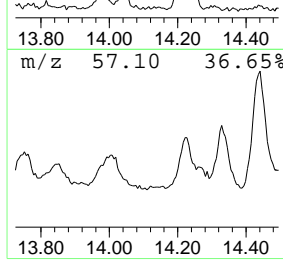
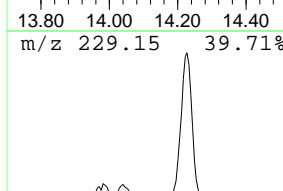
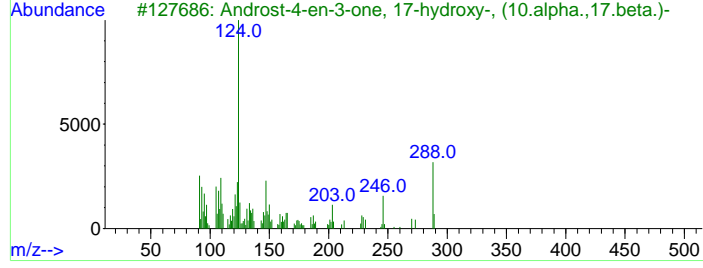
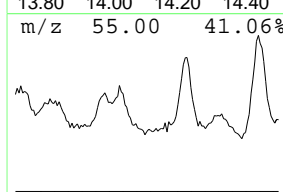
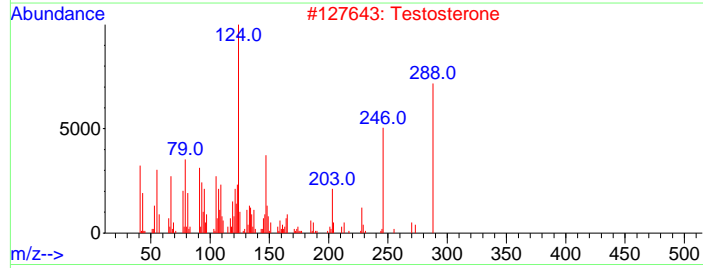
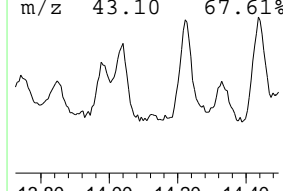
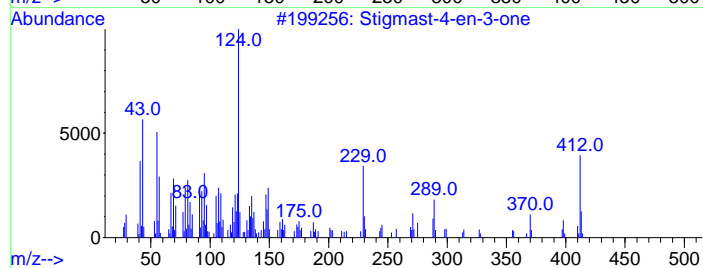
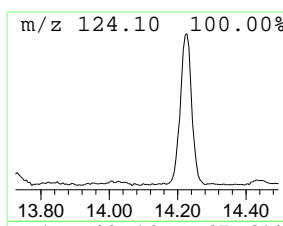
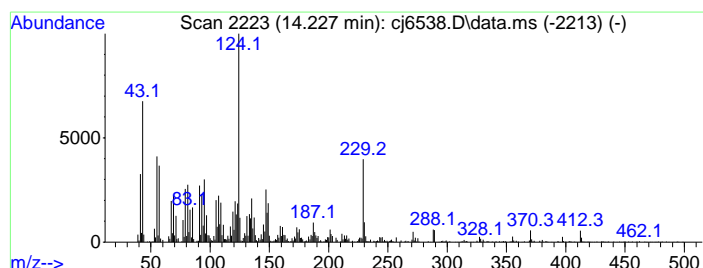
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 24 Unknown Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.227	27.14 ppm	1720920	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Stigmast-4-en-3-one	412	C29H48O	001058-61-3	91
2			Testosterone	288	C19H28O2	000058-22-0	80
3			Androst-4-en-3-one, 17-hydroxy-, ...	288	C19H28O2	000604-39-7	62
4			Androst-4-en-3-one, 17-hydroxy-, ...	288	C19H28O2	000481-30-1	42
5			Phenol, 2,6-diamino-	124	C6H8N2O	022440-82-0	35



7.1.2  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6538.D  
Acq On : 10 May 2024 12:16 am  
Operator : rocquans  
Sample : jd87833-1  
Misc : op54460,ecj297,31.2,,1,1  
ALS Vial : 29 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

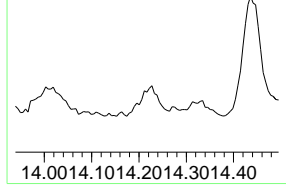
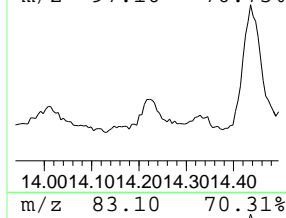
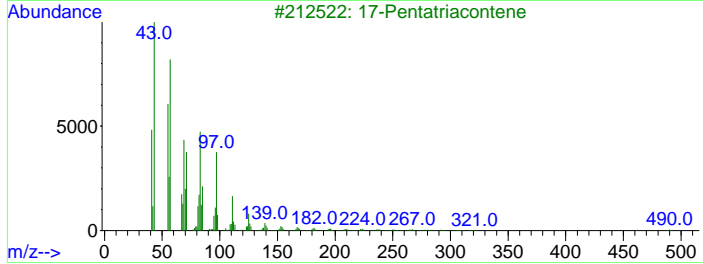
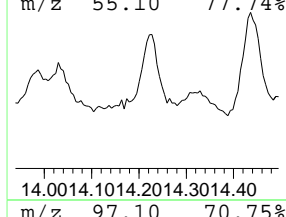
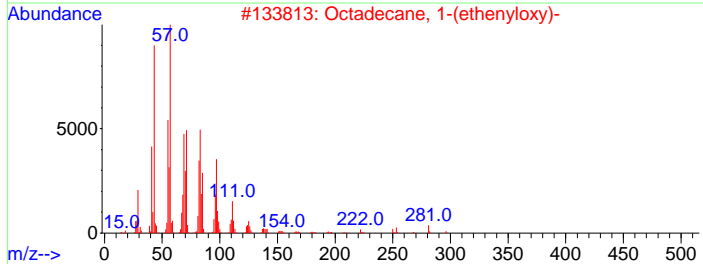
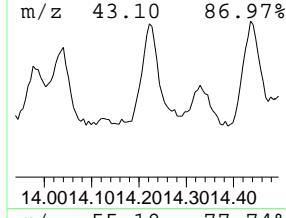
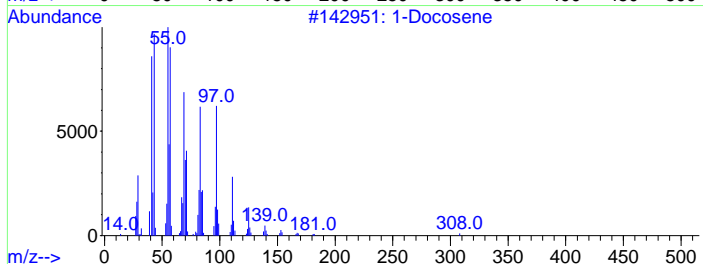
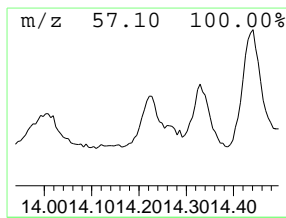
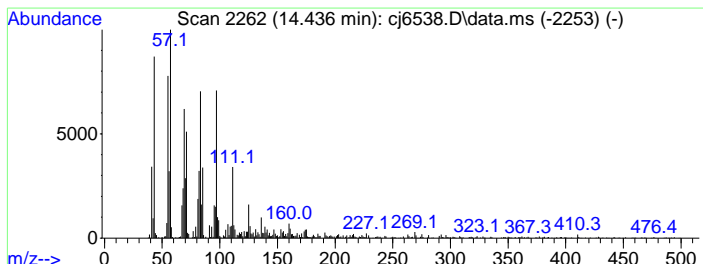
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 25 Unknown Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.436	24.02 ppm	1523390	Perylene-d12	11.719

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	1-Docosene	308	C22H44	001599-67-3	90
2		Octadecane, 1-(ethenylloxy)-	296	C20H40O	000930-02-9	89
3		17-Pentatriacontene	491	C35H70	006971-40-0	87
4		1-Hentetracontanol	593	C41H84O	040710-42-7	83
5		1-Octacosanol	410	C28H58O	1000351-79-2	81



7.12  
7

Tentatively Identified Compound (LSC) summary

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6538.D  
Acq On : 10 May 2024 12:16 am  
Operator : rocquans  
Sample : jd87833-1  
Misc : op54460,ecj297,31.2,,,1,1  
ALS Vial : 29 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
Unknown acid	9.044	13.1	ppm	1047330	8	7.873	3199470	40.0
Unknown	10.071	15.2	ppm	1199220	9	10.366	3161770	40.0
Unknown	10.269	24.0	ppm	1896430	9	10.366	3161770	40.0
Docosanoic acid	10.499	35.0	ppm	2763860	10	10.366	3161770	40.0
Unknown acid	10.810	18.5	ppm	1465830	10	10.366	3161770	40.0
Unknown	10.906	44.5	ppm	3520930	10	10.366	3161770	40.0
Unknown acid	11.114	50.7	ppm	3213800	11	11.719	2536470	40.0
Unknown	11.211	32.3	ppm	2047960	11	11.719	2536470	40.0
Unknown	11.521	99.8	ppm	6330920	11	11.719	2536470	40.0
Unknown	11.874	13.2	ppm	837241	11	11.719	2536470	40.0
Unknown	12.008	35.4	ppm	2247400	11	11.719	2536470	40.0
Alkane	12.216	97.6	ppm	6190070	11	11.719	2536470	40.0
Unknown alcohol	12.248	61.1	ppm	3877510	11	11.719	2536470	40.0
Unknown	12.537	13.2	ppm	839049	11	11.719	2536470	40.0
Unknown	12.676	14.2	ppm	900806	11	11.719	2536470	40.0
Alkane	13.115	59.9	ppm	3797700	11	11.719	2536470	40.0
Unknown alcohol	13.179	69.8	ppm	4426800	11	11.719	2536470	40.0
Unknown	13.430	99.0	ppm	6279530	11	11.719	2536470	40.0
Unknown	13.505	17.4	ppm	1102070	11	11.719	2536470	40.0
Unknown acid	13.564	30.0	ppm	1900600	11	11.719	2536470	40.0
Unknown	13.741	15.4	ppm	975955	11	11.719	2536470	40.0
Unknown	13.981	17.3	ppm	1099470	11	11.719	2536470	40.0
Unknown	14.040	24.6	ppm	1558660	11	11.719	2536470	40.0
Unknown	14.227	27.1	ppm	1720920	11	11.719	2536470	40.0
Unknown	14.436	24.0	ppm	1523390	11	11.719	2536470	40.0

7.12  
7



## Quantitation Report (QT/LSC Reviewed)

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6529.D  
 Acq On : 09 May 2024 09:26 pm  
 Operator : rocquans  
 Sample : jd87833-2 Inst : GCMSJCJ  
 Misc : op54460,ecj297,31.0,,,1,1  
 ALS Vial : 20 Sample Multiplier: 1

Quant Time: May 10 18:58:47 2024  
 Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
 QLast Update : Thu May 09 12:05:48 2024  
 Response via : Initial Calibration

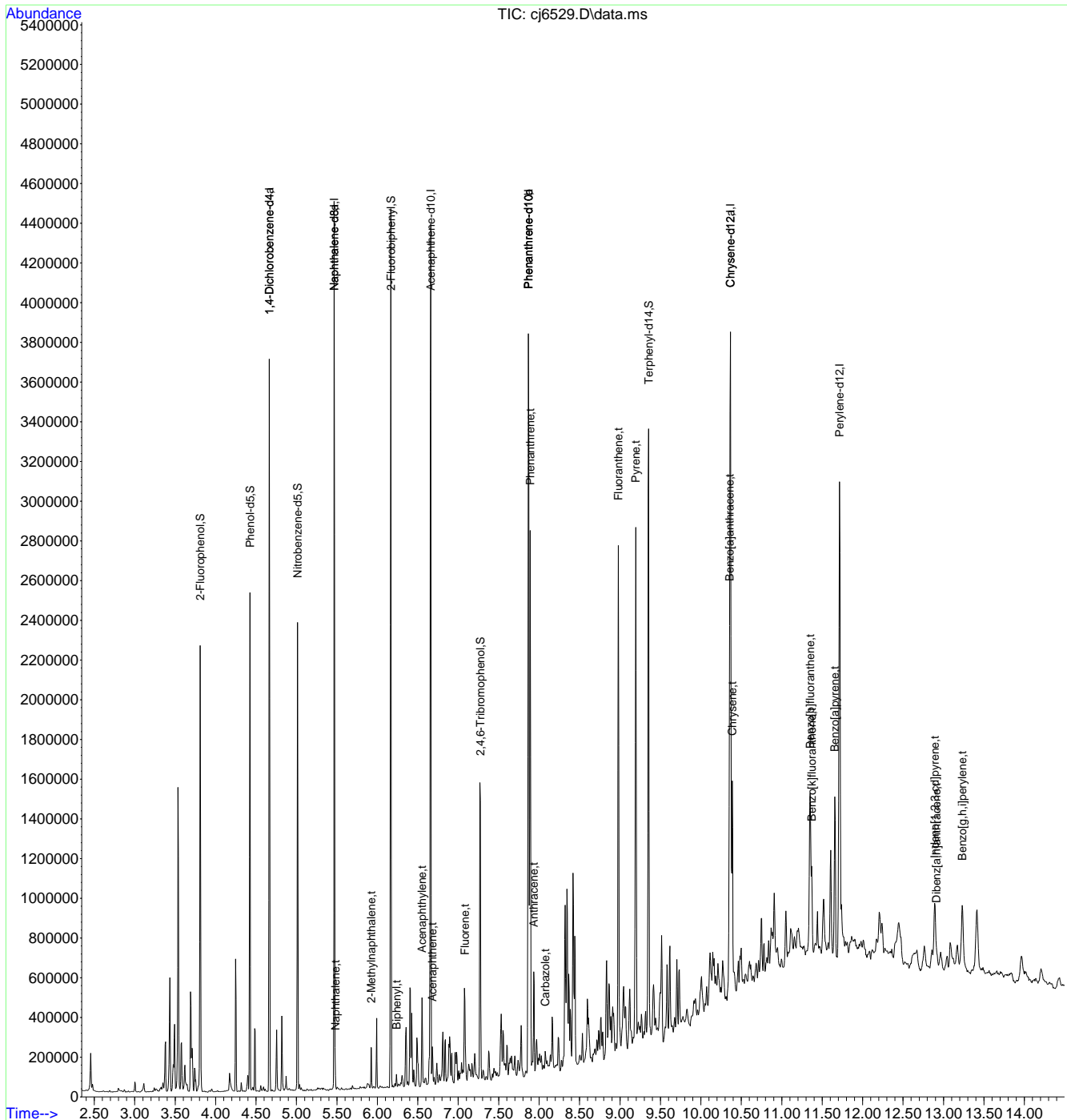
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.664	152	351757	40.00	ppm	0.00
24) Naphthalene-d8	5.466	136	1255598	40.00	ppm	0.00
46) Acenaphthene-d10	6.659	164	704743	40.00	ppm	0.00
69) Phenanthrene-d10	7.868	188	1217997	40.00	ppm	0.00
84) Chrysene-d12	10.366	240	860982	40.00	ppm	0.00
93) Perylene-d12	11.713	264	881333	40.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.664	152	351757	40.00	ppm	0.00
105) Phenanthrene-d10a	7.868	188	1217997	40.00	ppm	0.00
107) Naphthalene-d8a	5.466	136	1255598	40.00	ppm	0.00
109) Phenanthrene-d10b	7.868	188	1217997	40.00	ppm	0.00
112) Chrysene-d12a	10.366	240	860982	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.808	112	372189	36.81	ppm	0.01
Spiked Amount 50.000			Recovery =	73.62%		
8) Phenol-d5	4.423	99	490550	37.62	ppm	0.00
Spiked Amount 50.000			Recovery =	75.24%		
25) Nitrobenzene-d5	5.012	82	477253	37.12	ppm	0.00
Spiked Amount 50.000			Recovery =	74.24%		
51) 2-Fluorobiphenyl	6.167	172	875011	39.46	ppm	0.00
Spiked Amount 50.000			Recovery =	78.92%		
74) 2,4,6-Tribromophenol	7.274	330	121341	45.44	ppm	0.00
Spiked Amount 50.000			Recovery =	90.88%		
87) Terphenyl-d14	9.355	244	856776	40.28	ppm	0.00
Spiked Amount 50.000			Recovery =	80.56%		
110) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						
						Qvalue
38) Naphthalene	5.482	128	17328	0.5761	ppm	99
44) 2-Methylnaphthalene	5.926	141	38495	2.1586	ppm	92
53) Biphenyl	6.236	154	12868	0.5314	ppm	94
56) Acenaphthylene	6.552	152	92222	3.3739	ppm	95
59) Acenaphthene	6.680	153	26529	1.3648	ppm	92
66) Fluorene	7.081	166	112744	5.2908	ppm	96
78) Phenanthrene	7.889	178	777303	26.4069	ppm	100
79) Anthracene	7.932	178	173779	5.8960	ppm	98
80) Carbazole	8.076	167	18663	0.6795	ppm	94
82) Fluoranthene	8.980	202	841340	26.4013	ppm	99
86) Pyrene	9.194	202	906185	30.9482	ppm	99
89) Benzo[a]anthracene	10.355	228	396545	14.3246	ppm	95
91) Chrysene	10.387	228	350152	13.7095	ppm	97
95) Benzo[b]fluoranthene	11.350	252	392534m	14.7437	ppm	
96) Benzo[k]fluoranthene	11.371	252	106445m	4.4432	ppm	
97) Benzo[a]pyrene	11.655	252	292931	13.2909	ppm	98
98) Indeno[1,2,3-cd]pyrene	12.890	276	183960	6.9043	ppm	99
100) Dibenz[a,h]anthracene	12.912	278	48145	2.2614	ppm	91
102) Benzo[g,h,i]perylene	13.233	276	174052	8.4060	ppm	98
-----						

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT/LSC Reviewed)

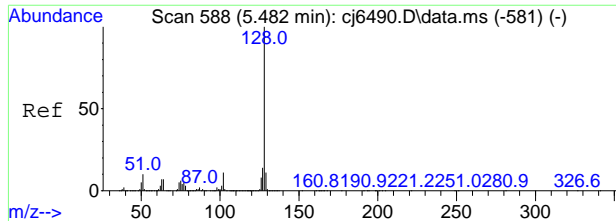
Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6529.D  
Acq On : 09 May 2024 09:26 pm  
Operator : rocquans  
Sample : jd87833-2 Inst : GCMS CJ  
Misc : op54460,ecj297,31.0,,,1,1  
ALS Vial : 20 Sample Multiplier: 1

Quant Time: May 10 18:58:47 2024  
Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
QLast Update : Thu May 09 12:05:48 2024  
Response via : Initial Calibration



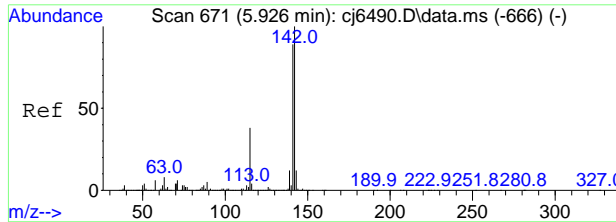
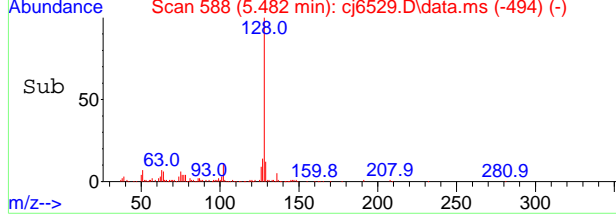
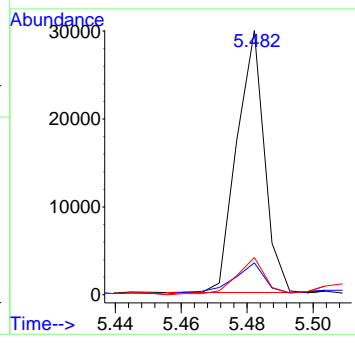
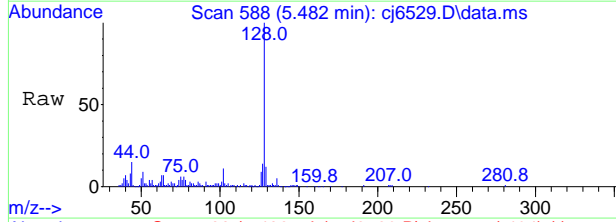
7.1.3  
7





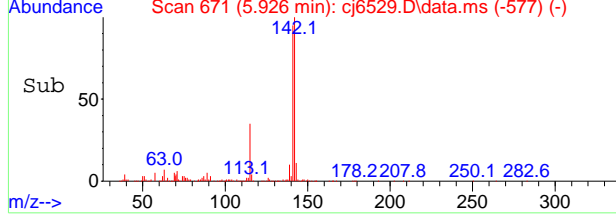
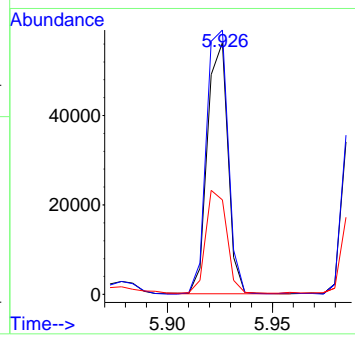
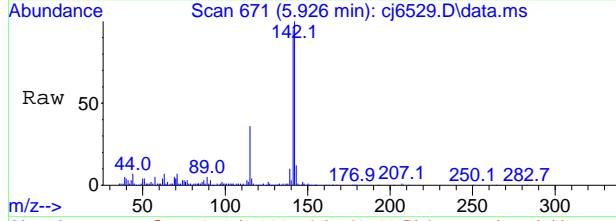
#38  
Naphthalene  
Concen: 0.5761 ppm  
RT: 5.482 min Scan# 588  
Delta R.T. 0.000 min  
Lab File: cj6529.D  
Acq: 09 May 2024 09:26 pm

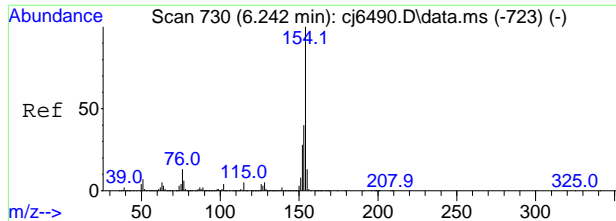
Tgt Ion	Ratio	Lower	Upper
128	100		
129	11.7	0.0	41.4
127	14.0	0.0	43.3



#44  
2-Methylnaphthalene  
Concen: 2.1586 ppm  
RT: 5.926 min Scan# 671  
Delta R.T. 0.000 min  
Lab File: cj6529.D  
Acq: 09 May 2024 09:26 pm

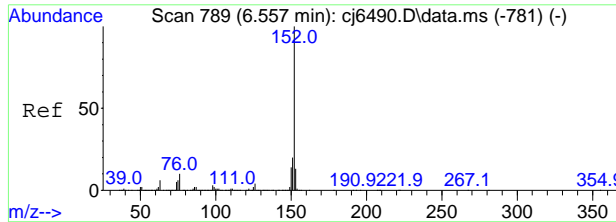
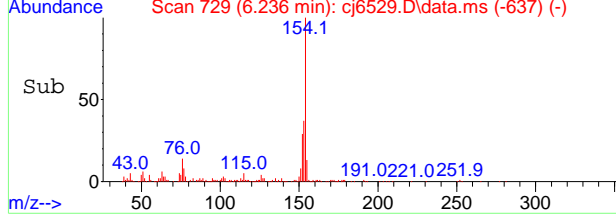
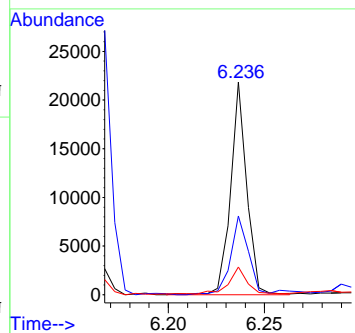
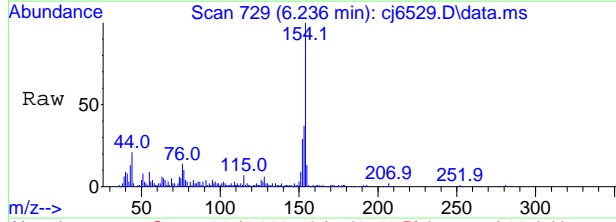
Tgt Ion	Ratio	Lower	Upper
141	100		
142	105.0	82.7	142.7
115	36.9	12.4	72.4





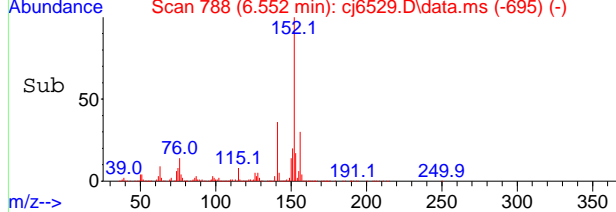
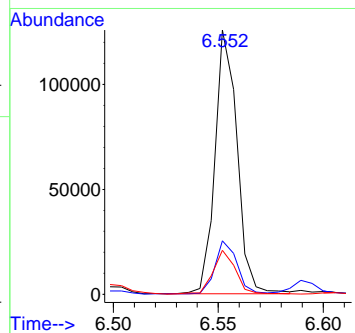
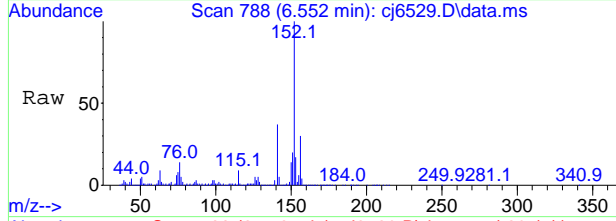
#53  
 Biphenyl  
 Concen: 0.5314 ppm  
 RT: 6.236 min Scan# 729  
 Delta R.T. -0.006 min  
 Lab File: cj6529.D  
 Acq: 09 May 2024 09:26 pm

Tgt Ion	Ratio	Lower	Upper
154	100		
153	36.0	10.5	70.5
155	12.7	0.0	42.8

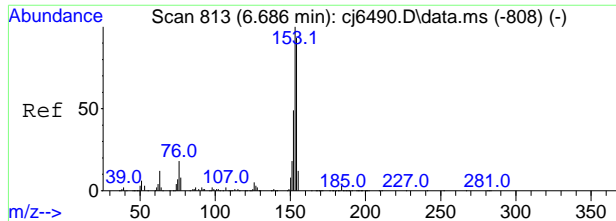


#56  
 Acenaphthylene  
 Concen: 3.3739 ppm  
 RT: 6.552 min Scan# 788  
 Delta R.T. -0.005 min  
 Lab File: cj6529.D  
 Acq: 09 May 2024 09:26 pm

Tgt Ion	Ratio	Lower	Upper
152	100		
151	19.1	0.0	50.3
153	16.6	0.0	43.4

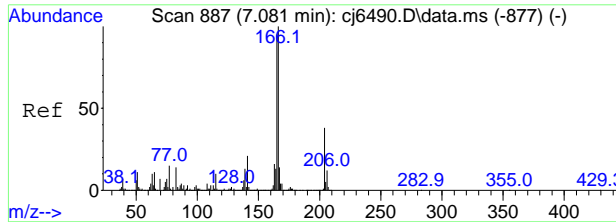
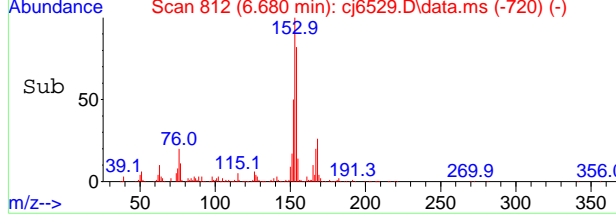
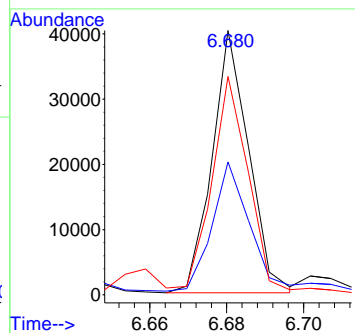
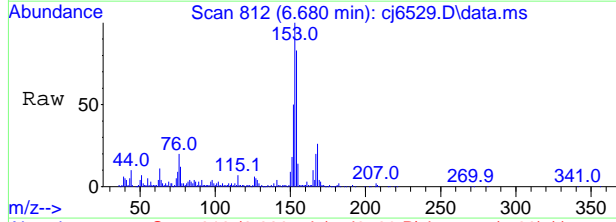


7.13  
7



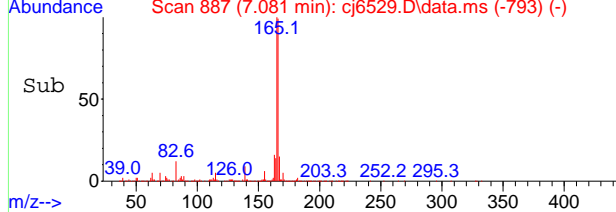
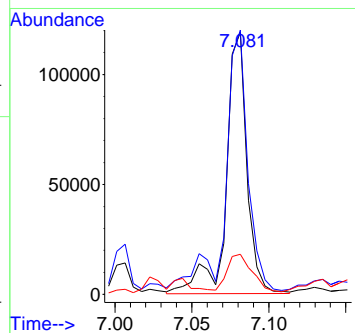
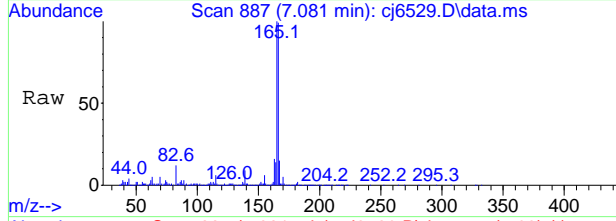
#59  
 Acenaphthene  
 Concen: 1.3648 ppm  
 RT: 6.680 min Scan# 812  
 Delta R.T. -0.006 min  
 Lab File: cj6529.D  
 Acq: 09 May 2024 09:26 pm

Tgt Ion	Ratio	Lower	Upper
153	100		
152	48.6	18.8	78.8
154	81.9	62.9	122.9



#66  
 Fluorene  
 Concen: 5.2908 ppm  
 RT: 7.081 min Scan# 887  
 Delta R.T. 0.000 min  
 Lab File: cj6529.D  
 Acq: 09 May 2024 09:26 pm

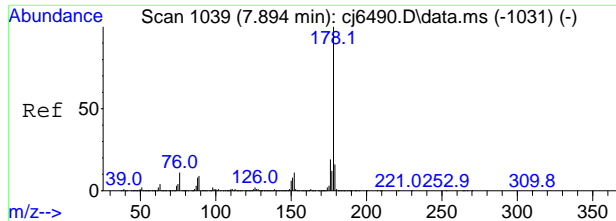
Tgt Ion	Ratio	Lower	Upper
166	100		
165	99.7	65.4	125.4
167	13.5	0.0	43.8



7.1.3  
7

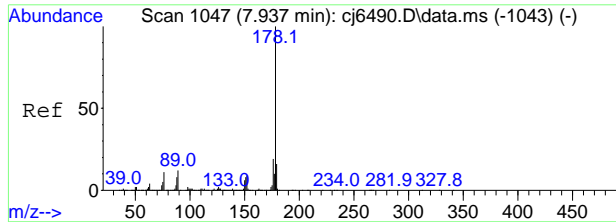
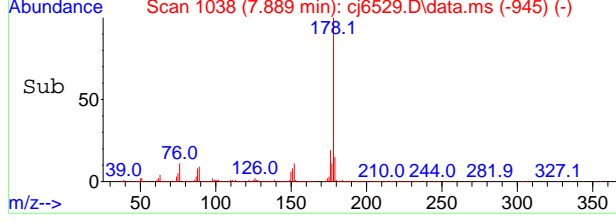
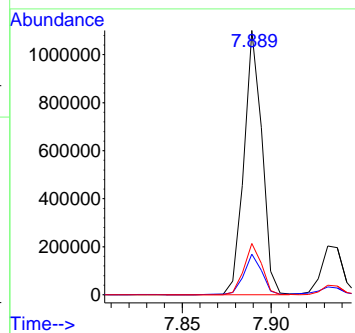
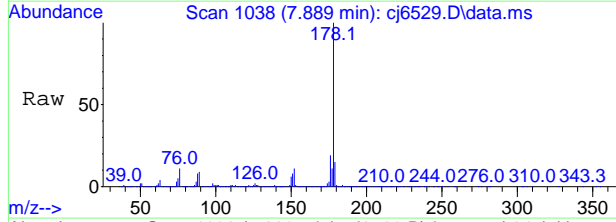






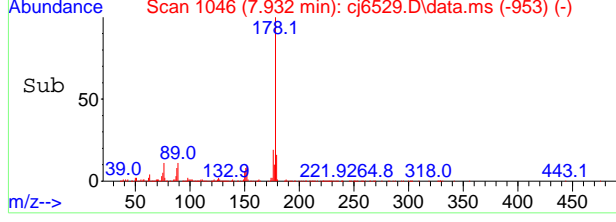
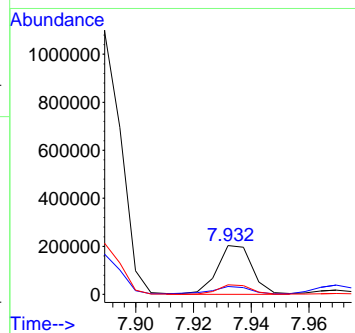
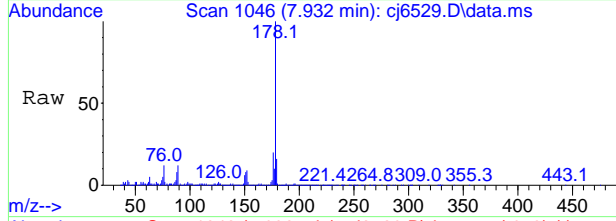
#78  
 Phenanthrene  
 Concen: 26.4069 ppm  
 RT: 7.889 min Scan# 1038  
 Delta R.T. -0.005 min  
 Lab File: cj6529.D  
 Acq: 09 May 2024 09:26 pm

Tgt Ion	Ratio	Lower	Upper
178	100		
179	15.2	0.0	45.5
176	19.4	0.0	49.2

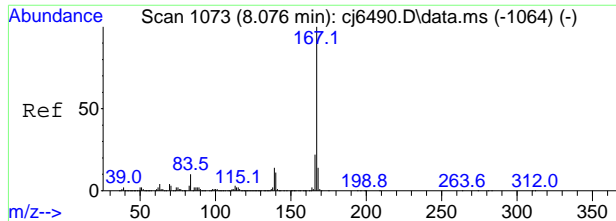


#79  
 Anthracene  
 Concen: 5.8960 ppm  
 RT: 7.932 min Scan# 1046  
 Delta R.T. -0.005 min  
 Lab File: cj6529.D  
 Acq: 09 May 2024 09:26 pm

Tgt Ion	Ratio	Lower	Upper
178	100		
179	14.9	0.0	46.1
176	19.4	0.0	48.7

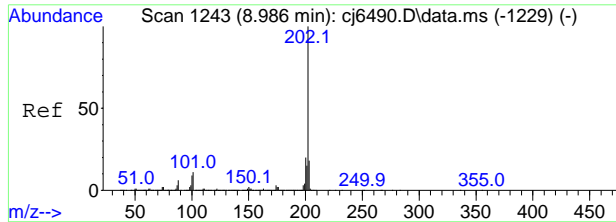
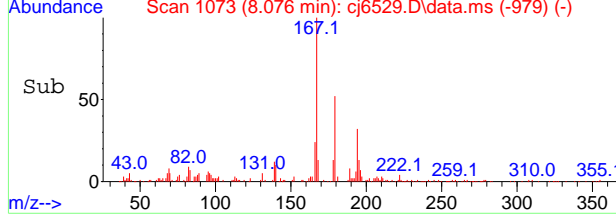
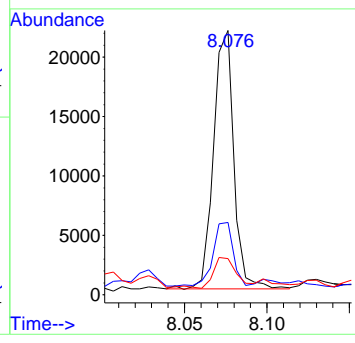
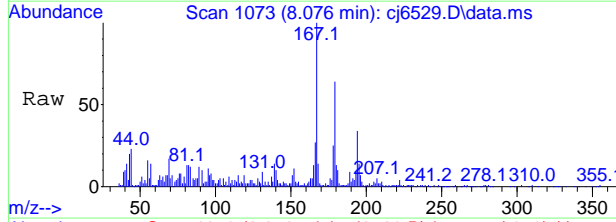


7.13  
7



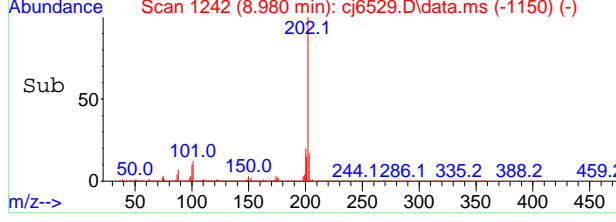
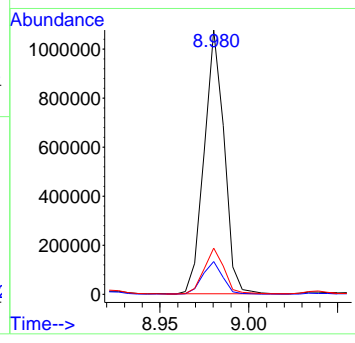
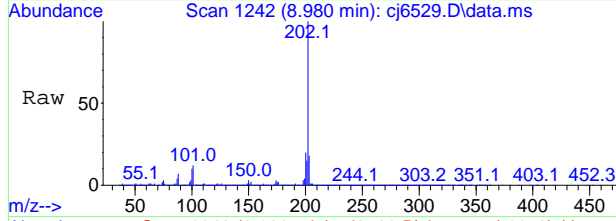
#80  
 Carbazole  
 Concen: 0.6795 ppm  
 RT: 8.076 min Scan# 1073  
 Delta R.T. 0.000 min  
 Lab File: cj6529.D  
 Acq: 09 May 2024 09:26 pm

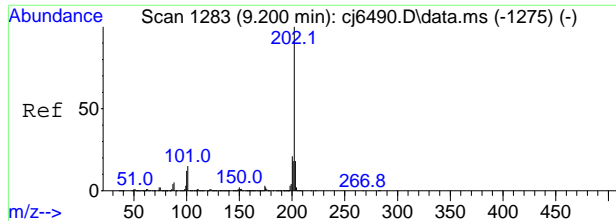
Tgt Ion	Ratio	Lower	Upper
167	100		
166	24.0	0.0	51.7
139	10.7	0.0	43.8



#82  
 Fluoranthene  
 Concen: 26.4013 ppm  
 RT: 8.980 min Scan# 1242  
 Delta R.T. -0.006 min  
 Lab File: cj6529.D  
 Acq: 09 May 2024 09:26 pm

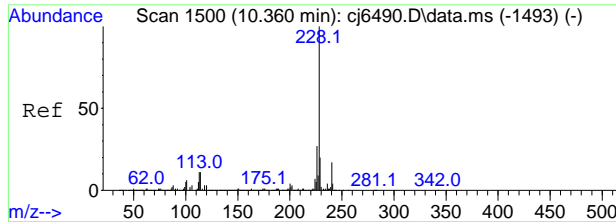
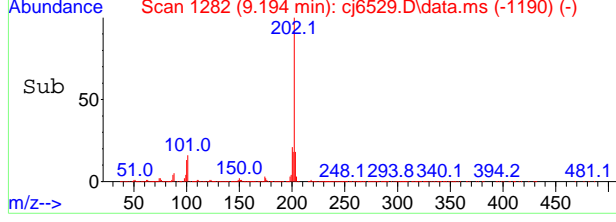
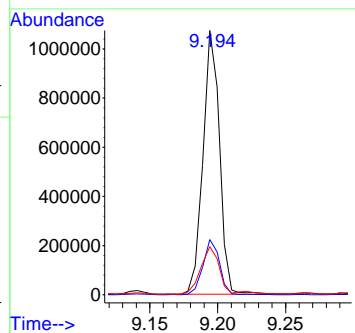
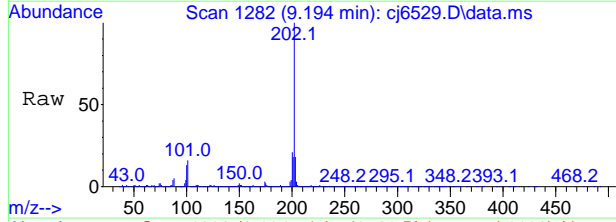
Tgt Ion	Ratio	Lower	Upper
202	100		
101	12.3	0.0	41.4
203	17.4	0.0	47.6





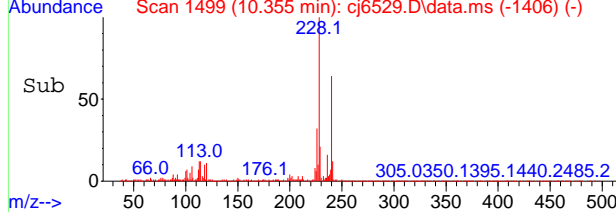
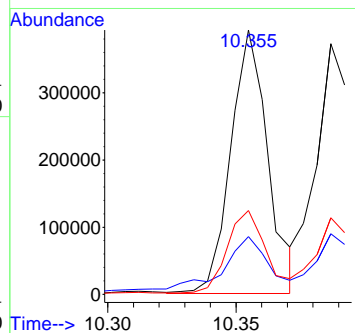
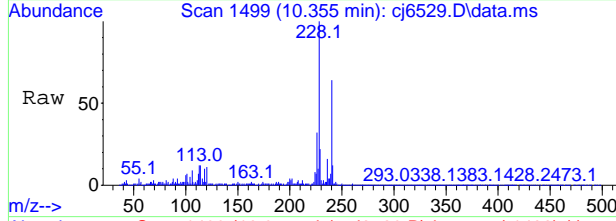
#86  
 Pyrene  
 Concen: 30.9482 ppm  
 RT: 9.194 min Scan# 1282  
 Delta R.T. -0.006 min  
 Lab File: cj6529.D  
 Acq: 09 May 2024 09:26 pm

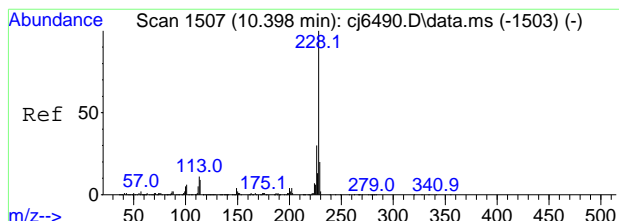
Tgt Ion	Ratio	Lower	Upper
202	100		
200	20.9	0.0	51.4
203	18.0	0.0	47.8



#89  
 Benzo[a]anthracene  
 Concen: 14.3246 ppm  
 RT: 10.355 min Scan# 1499  
 Delta R.T. -0.005 min  
 Lab File: cj6529.D  
 Acq: 09 May 2024 09:26 pm

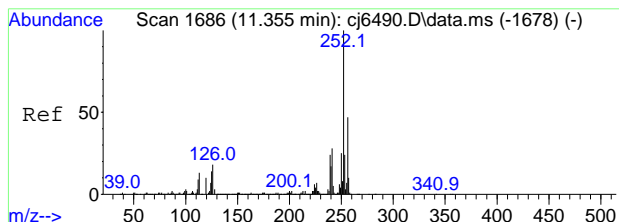
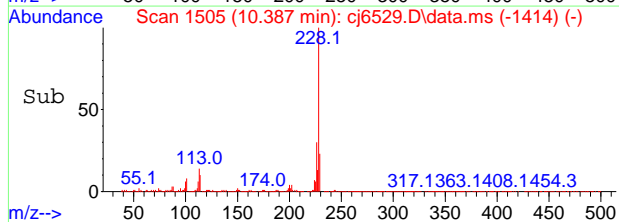
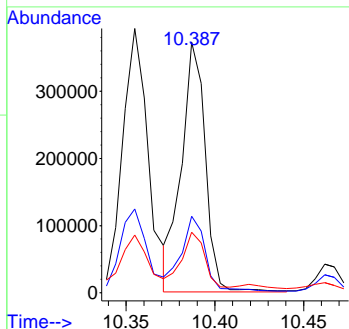
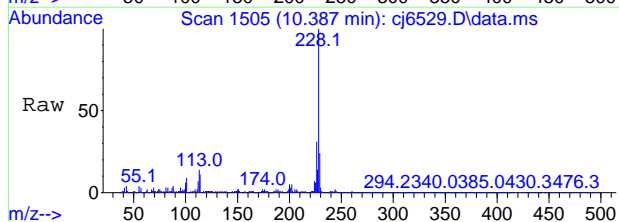
Tgt Ion	Ratio	Lower	Upper
228	100		
229	20.1	0.0	49.8
226	31.4	0.0	57.1





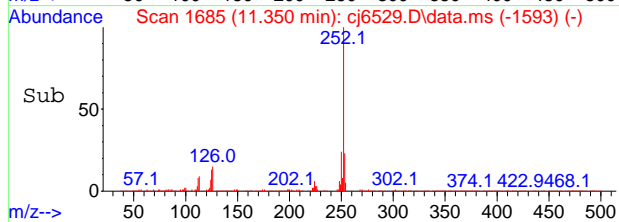
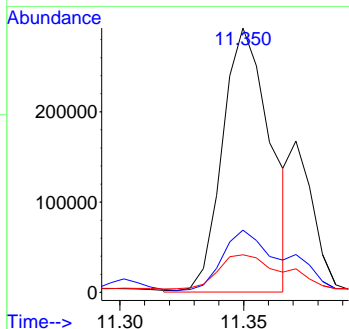
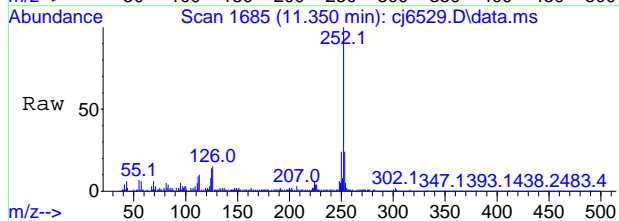
#91  
 Chrysene  
 Concen: 13.7095 ppm  
 RT: 10.387 min Scan# 1505  
 Delta R.T. -0.011 min  
 Lab File: cj6529.D  
 Acq: 09 May 2024 09:26 pm

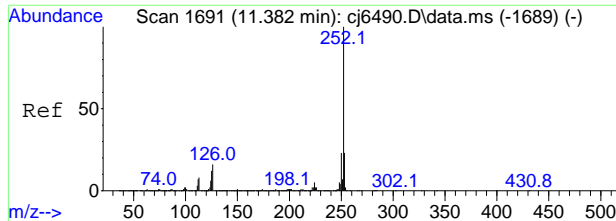
Tgt Ion	Ratio	Lower	Upper
228	100		
226	30.1	0.0	59.9
229	22.8	0.0	49.8



#95  
 Benzo[b]fluoranthene  
 Concen: 14.7437 ppm m  
 RT: 11.350 min Scan# 1685  
 Delta R.T. -0.005 min  
 Lab File: cj6529.D  
 Acq: 09 May 2024 09:26 pm

Tgt Ion	Ratio	Lower	Upper
252	100		
253	23.5	0.0	54.7
125	14.2	0.0	44.2

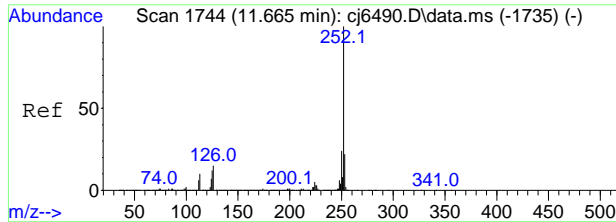
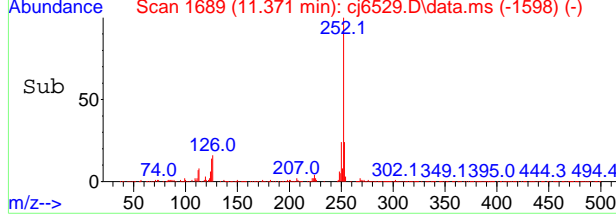
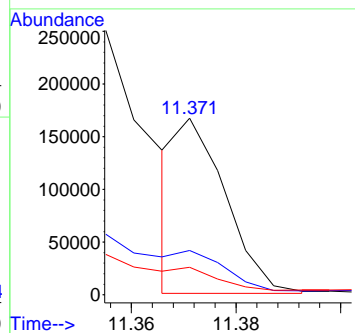
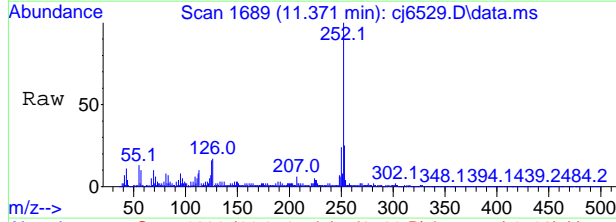




#96  
 Benzo[k]fluoranthene  
 Concen: 4.4432 ppm m  
 RT: 11.371 min Scan# 1689  
 Delta R.T. -0.011 min  
 Lab File: cj6529.D  
 Acq: 09 May 2024 09:26 pm

Tgt Ion: 252 Resp: 106445

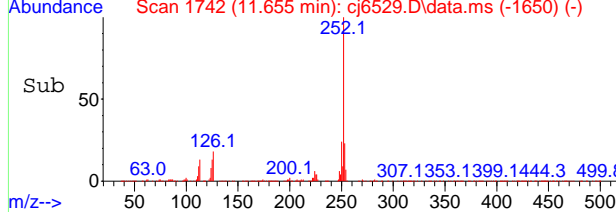
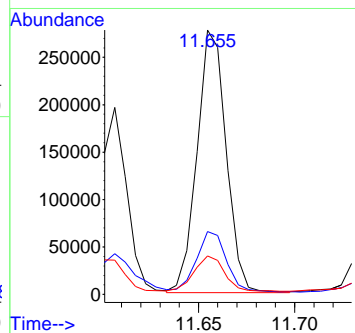
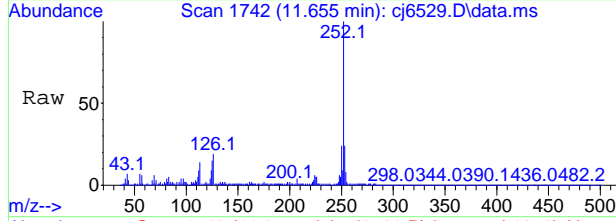
Ion	Ratio	Lower	Upper
252	100		
253	25.1	0.0	52.6
125	15.7	0.0	42.4



#97  
 Benzo[a]pyrene  
 Concen: 13.2909 ppm  
 RT: 11.655 min Scan# 1742  
 Delta R.T. -0.010 min  
 Lab File: cj6529.D  
 Acq: 09 May 2024 09:26 pm

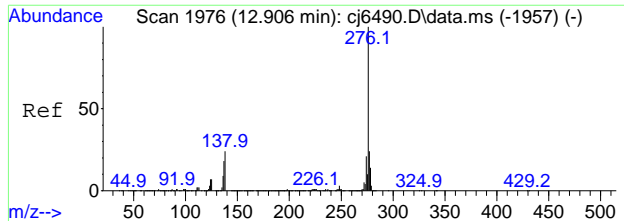
Tgt Ion: 252 Resp: 292931

Ion	Ratio	Lower	Upper
252	100		
253	22.5	0.0	51.9
125	13.5	0.0	42.1



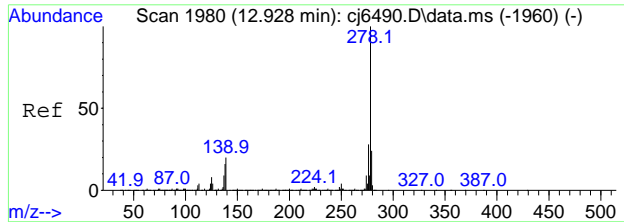
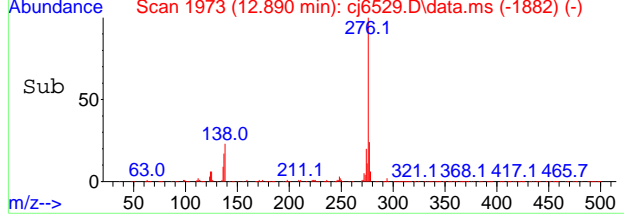
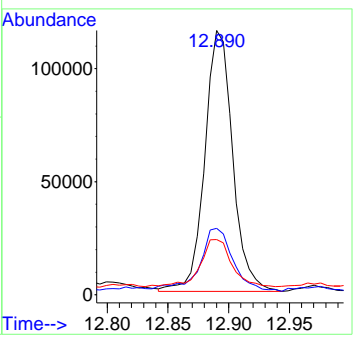
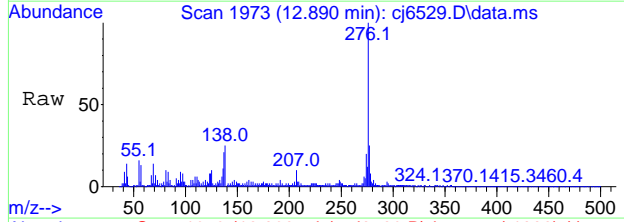
7.1.3  
7





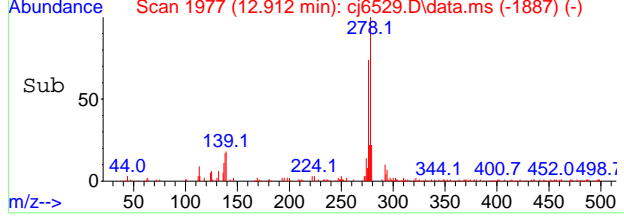
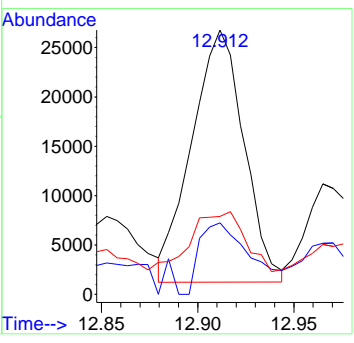
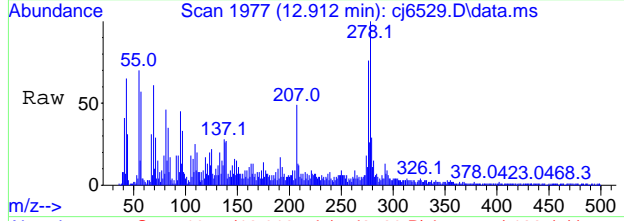
#98  
 Indeno[1,2,3-cd]pyrene  
 Concen: 6.9043 ppm  
 RT: 12.890 min Scan# 1973  
 Delta R.T. -0.016 min  
 Lab File: cj6529.D  
 Acq: 09 May 2024 09:26 pm

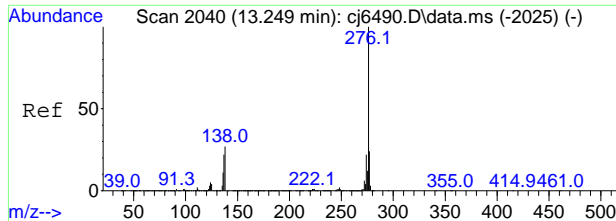
Tgt Ion	Ratio	Lower	Upper
276	100		
138	23.3	0.0	54.2
137	17.9	0.0	47.9



#100  
 Dibenz[a,h]anthracene  
 Concen: 2.2614 ppm  
 RT: 12.912 min Scan# 1977  
 Delta R.T. -0.016 min  
 Lab File: cj6529.D  
 Acq: 09 May 2024 09:26 pm

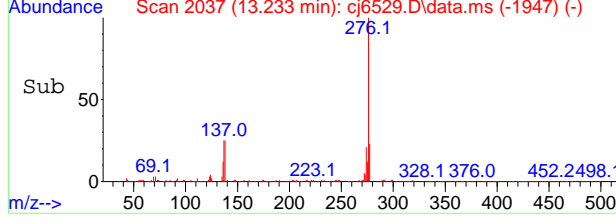
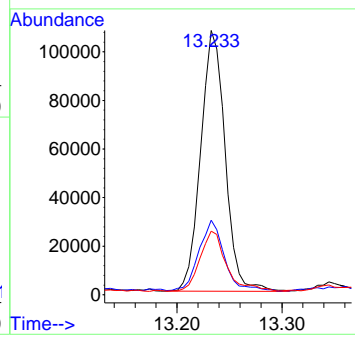
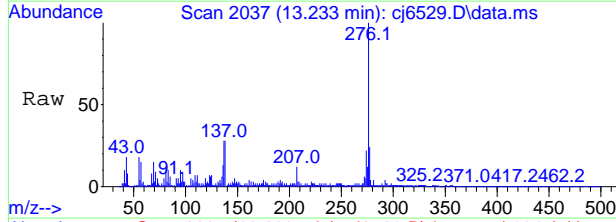
Tgt Ion	Ratio	Lower	Upper
278	100		
139	25.4	0.0	49.8
279	21.2	0.0	54.1





#102  
 Benzo[g,h,i]perylene  
 Concen: 8.4060 ppm  
 RT: 13.233 min Scan# 2037  
 Delta R.T. -0.017 min  
 Lab File: cj6529.D  
 Acq: 09 May 2024 09:26 pm

Tgt Ion	Ratio	Lower	Upper
276	100		
138	27.0	0.0	56.7
277	22.8	0.0	54.1



7.1.3  
7



LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6529.D  
 Acq On : 09 May 2024 09:26 pm  
 Operator : rocquans  
 Sample : jd87833-2  
 Misc : op54460,ecj297,31.0,,,1,1  
 ALS Vial : 20 Sample Multiplier: 1

Integration Parameters: lscint.p  
 Integrator: RTE  
 Smoothing : ON  
 Sampling : 1  
 Start Thrs: 0.02  
 Stop Thrs : 0  
 Filtering: 5  
 Min Area: 1000 Area counts  
 Max Peaks: 100  
 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

Signal : TIC: cj6529.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.247	353	357	361	rVB	667510	423953	10.26%	0.658%
2	4.423	387	390	394	rVV	2510915	1427980	34.55%	2.216%
3	4.482	399	401	405	rVB	314853	217066	5.25%	0.337%
4	4.664	431	435	439	rBV	3690029	2185253	52.87%	3.392%
5	4.755	447	452	460	rBV	310384	223566	5.41%	0.347%
6	4.819	460	464	469	rBV	376041	242155	5.86%	0.376%
7	5.012	493	500	504	rBV	2356743	1370722	33.16%	2.127%
8	5.466	577	585	590	rVB	4475013	2730228	66.06%	4.237%
9	5.921	667	670	674	rVB	204648	148858	3.60%	0.231%
10	5.990	680	683	688	rVB	353069	213889	5.18%	0.332%
11	6.167	712	716	722	rBV	4429234	2632708	63.70%	4.086%
12	6.354	746	751	754	rBV	300284	290237	7.02%	0.450%
13	6.402	757	760	763	rBV	491870	453196	10.97%	0.703%
14	6.424	763	764	767	rVB	349976	176257	4.26%	0.274%
15	6.488	773	776	783	rVB	247305	259154	6.27%	0.402%
16	6.552	783	788	793	rBV	449723	338721	8.20%	0.526%
17	6.659	800	808	811	rVB	4333572	3157694	76.40%	4.901%
18	6.809	831	836	839	rVB	247261	215088	5.20%	0.334%
19	6.841	839	842	845	rVB	210077	156465	3.79%	0.243%
20	6.894	845	852	855	rBV3	224615	321733	7.78%	0.499%
21	6.980	861	868	871	rBV4	156070	294203	7.12%	0.457%
22	7.076	883	886	892	rVB2	465666	453743	10.98%	0.704%
23	7.130	892	896	901	rBV3	82591	142815	3.46%	0.222%
24	7.205	906	910	918	rVB4	128458	149202	3.61%	0.232%
25	7.269	918	922	927	rBV	1492318	1242121	30.05%	1.928%
26	7.376	939	942	948	rVB2	148523	145745	3.53%	0.226%
27	7.531	966	971	973	rBV	312832	333347	8.07%	0.517%
28	7.552	973	975	982	rVB	200637	191506	4.63%	0.297%
29	7.777	1013	1017	1023	rVB	259095	261749	6.33%	0.406%
30	7.868	1030	1034	1036	rBV	3725199	3067313	74.21%	4.761%
31	7.889	1036	1038	1042	rVV	2695825	1828263	44.23%	2.838%
32	7.932	1042	1046	1049	rVB	500781	417146	10.09%	0.647%
33	7.969	1049	1053	1056	rVB2	160045	172566	4.18%	0.268%
34	8.162	1082	1089	1094	rVB2	256309	294104	7.12%	0.456%
35	8.237	1094	1103	1107	rVB	171500	234482	5.67%	0.364%
36	8.322	1112	1119	1121	rBV	813878	818042	19.79%	1.270%
37	8.344	1121	1123	1126	rVV	857150	769855	18.63%	1.195%
38	8.365	1126	1127	1130	rVV	423604	303445	7.34%	0.471%
39	8.387	1130	1131	1134	rVB	241292	149883	3.63%	0.233%
40	8.419	1134	1137	1140	rBV	923218	908922	21.99%	1.411%



LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6529.D  
Acq On : 09 May 2024 09:26 pm  
Operator : rocquans  
Sample : jd87833-2  
Misc : op54460,ecj297,31.0,,,1,1  
ALS Vial : 20 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON  
Sampling : 1  
Start Thrs: 0.02  
Stop Thrs : 0  
Filtering: 5  
Min Area: 1000 Area counts  
Max Peaks: 100  
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

Table with 10 columns: Retention Time, Abundance, and various peak identification codes (rVB, rBV, rBV3, rBV4, rBV5, rVB9, rVB3, rVB2, rVB7, rVB8). Rows 41-85.



7.14  
7

LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6529.D  
Acq On : 09 May 2024 09:26 pm  
Operator : rocquans  
Sample : jd87833-2  
Misc : op54460,ecj297,31.0,,,1,1  
ALS Vial : 20 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON Filtering: 5  
Sampling : 1 Min Area: 1000 Area counts  
Start Thrs: 0.02 Max Peaks: 100  
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

86	12.008	1806	1808	1817	rVB5	90008	148618	3.60%	0.231%
87	12.206	1841	1845	1849	rVV	200767	337867	8.17%	0.524%
88	12.238	1849	1851	1856	rVV3	148733	170824	4.13%	0.265%
89	12.446	1878	1890	1901	rVB3	210532	847091	20.50%	1.315%
90	12.639	1915	1926	1927	rBV9	71159	177929	4.30%	0.276%
91	12.762	1942	1949	1962	rBV5	122177	281384	6.81%	0.437%
92	12.858	1962	1967	1969	rVV4	103011	164102	3.97%	0.255%
93	12.890	1969	1973	1982	rVV3	338193	632063	15.29%	0.981%
94	12.965	1982	1987	1995	rVB7	92413	166486	4.03%	0.258%
95	13.083	2005	2009	2019	rVV6	138431	330505	8.00%	0.513%
96	13.174	2020	2026	2030	rVV4	126342	239699	5.80%	0.372%
97	13.233	2030	2037	2056	rVB	345923	774171	18.73%	1.202%
98	13.414	2061	2071	2080	rBV2	307507	613717	14.85%	0.953%
99	13.965	2167	2174	2180	rBV4	122363	297465	7.20%	0.462%
100	14.206	2212	2219	2234	rVB4	79863	220865	5.34%	0.343%

Sum of corrected areas: 64430898



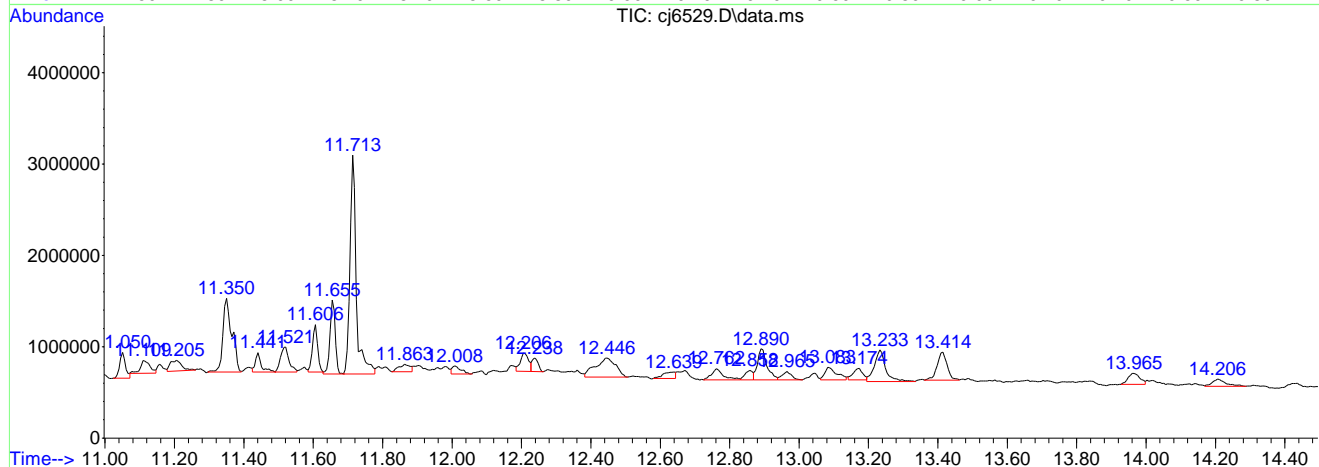
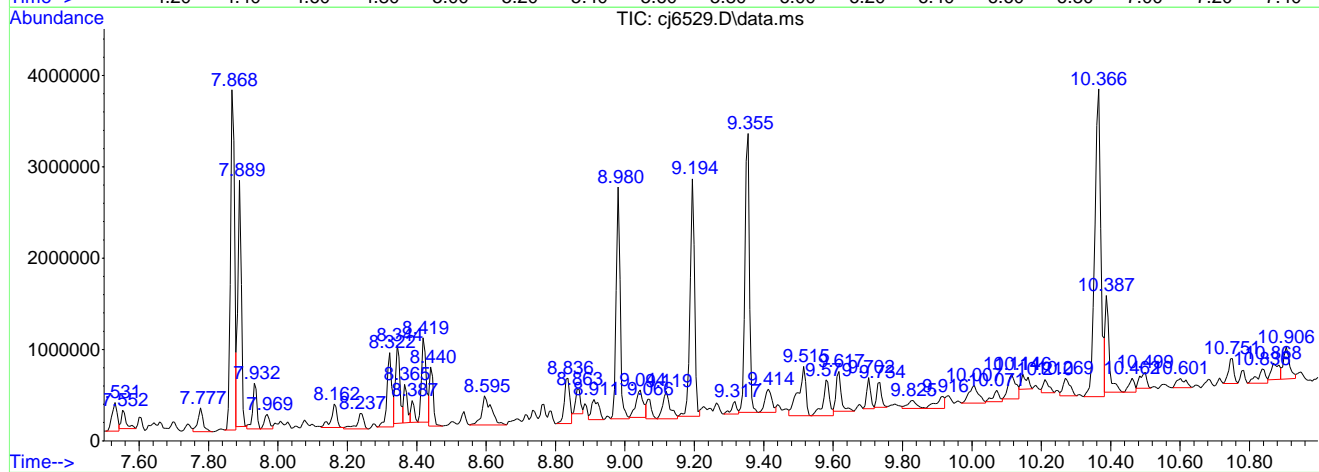
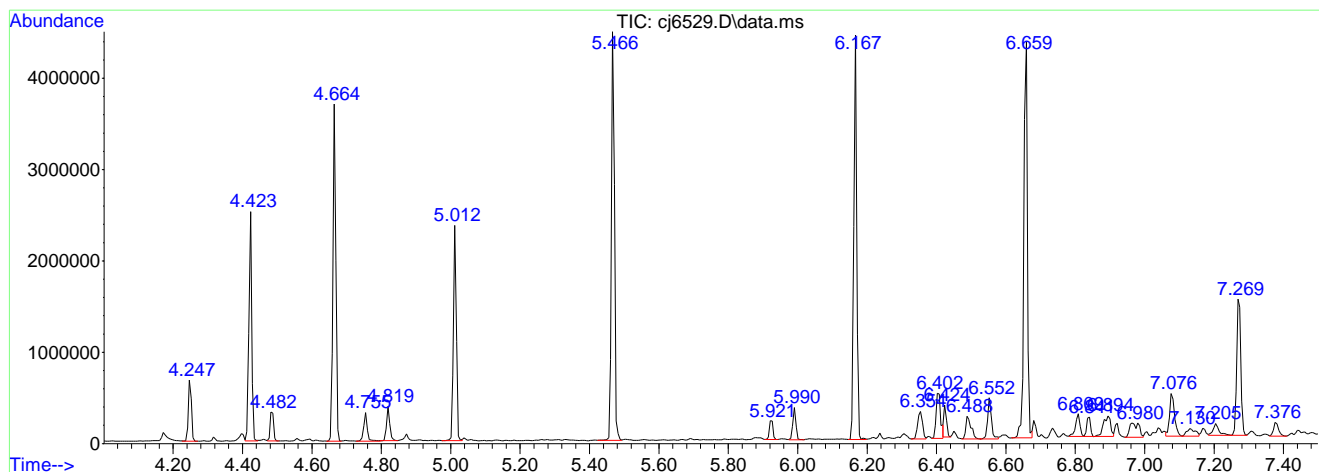
7.14  
7

LSC Report - Integrated Chromatogram

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6529.D  
Acq On : 09 May 2024 09:26 pm  
Operator : rocquans  
Sample : jd87833-2  
Misc : op54460,ecj297,31.0,,,1,1  
ALS Vial : 20 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p



7.1.4  
7



Library Search Compound Report

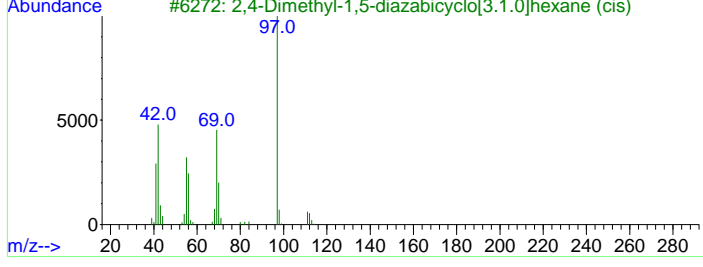
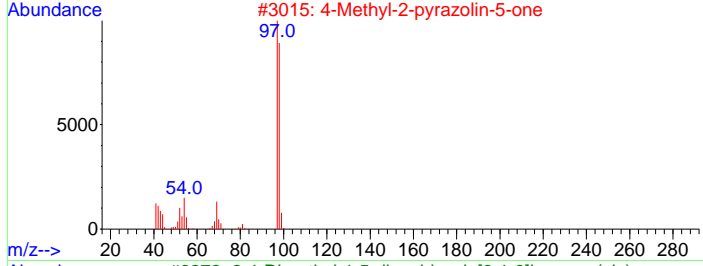
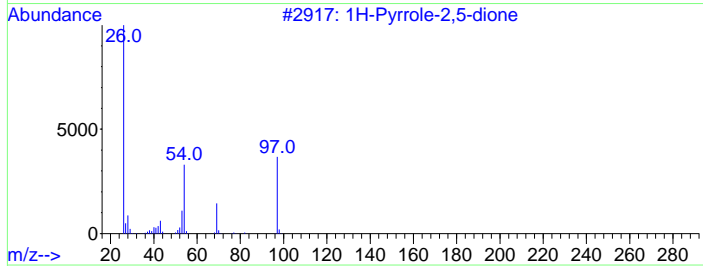
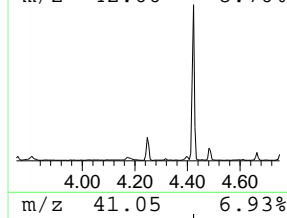
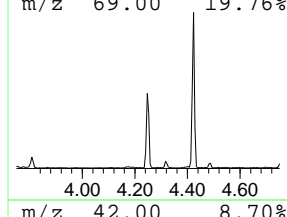
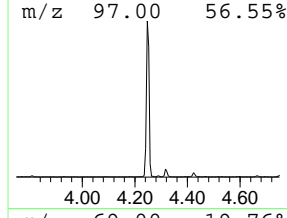
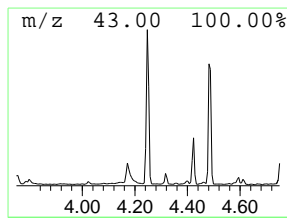
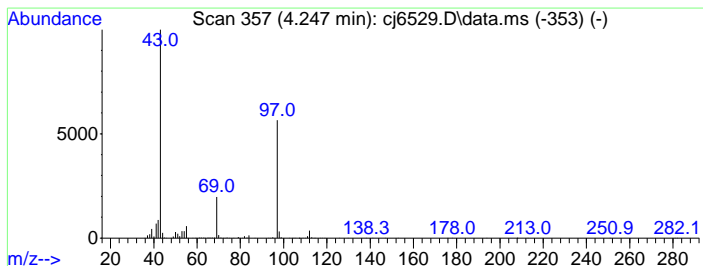
Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\
Data File : cj6529.D
Acq On : 09 May 2024 09:26 pm
Operator : rocquans
Sample : jd87833-2
Misc : op54460,ecj297,31.0,,,1,1
ALS Vial : 20 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: lscint.p

\*\*\*\*\*
Peak Number 1 Unknown Concentration Rank 8

Table with 7 columns: R.T., EstConc, Area, Relative to ISTD, R.T., Hit# of 5, Tentative ID, MW, MolForm, CAS#, Qual. Row 1: 4.247, 7.76 ppm, 423953, 1,4-Dichlorobenzene-d4a, 4.664, 1, 1H-Pyrrole-2,5-dione, 97, C4H3NO2, 000541-59-3, 42.



7.1.4
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6529.D  
 Acq On : 09 May 2024 09:26 pm  
 Operator : rocquans  
 Sample : jd87833-2  
 Misc : op54460,ecj297,31.0,,,1,1  
 ALS Vial : 20 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

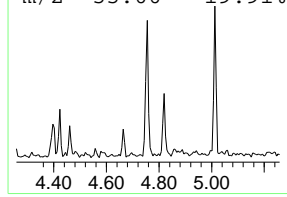
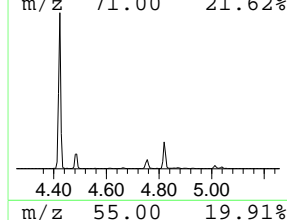
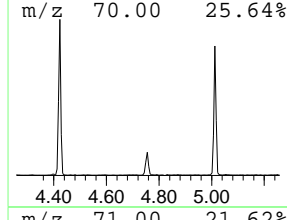
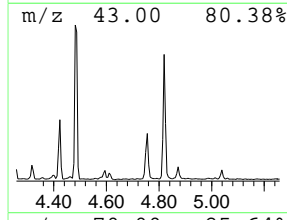
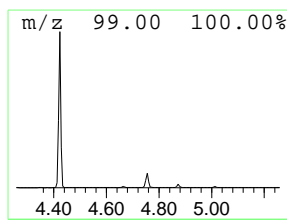
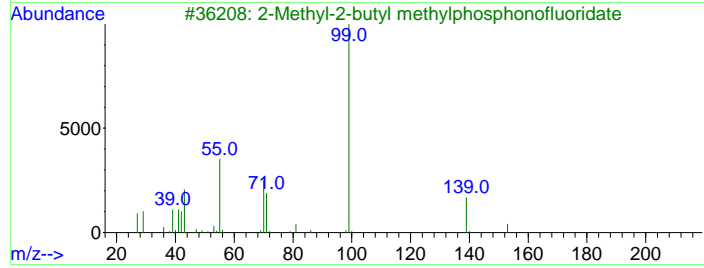
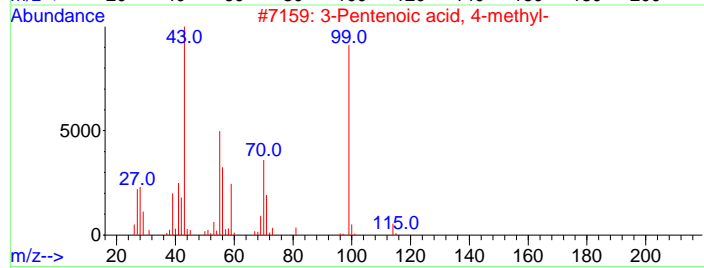
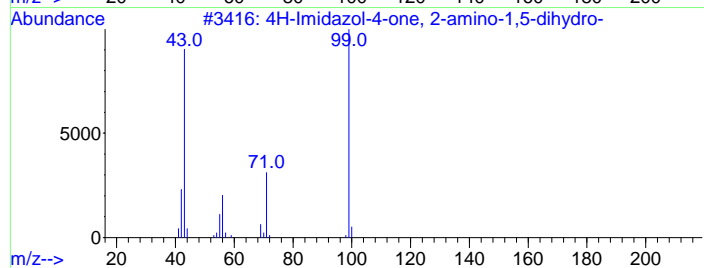
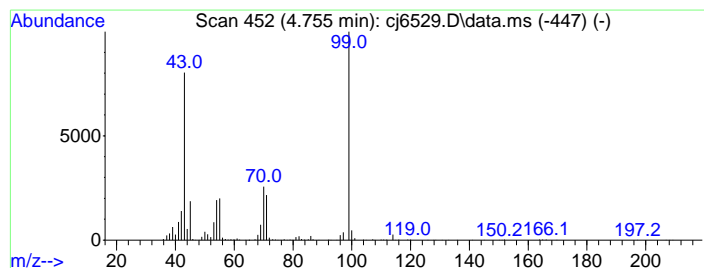
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 2 Unknown Concentration Rank 25

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.755	4.09 ppm	223566	1,4-Dichlorobenzene-d4a	4.664

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	4H-Imidazol-4-one, 2-amino-1,5-d...	99	C3H5N3O	000503-86-6	53
2		3-Pentenoic acid, 4-methyl-	114	C6H10O2	000504-85-8	53
3		2-Methyl-2-butyl methylphosphono...	168	C6H14FO2P	159395-77-4	50
4		2(3H)-Furanone, 5-butylidihydro-4...	156	C9H16O2	055013-32-6	47
5		3,5-Diamino-1,2,4-triazole	99	C2H5N5	001455-77-2	43



Library Search Compound Report

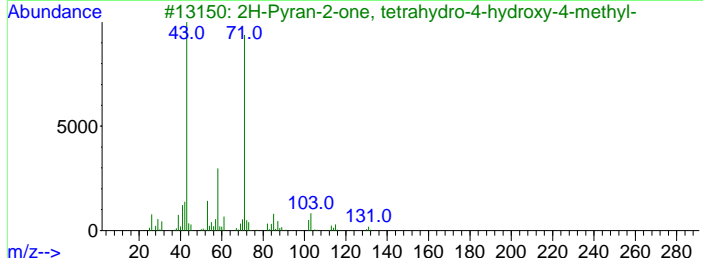
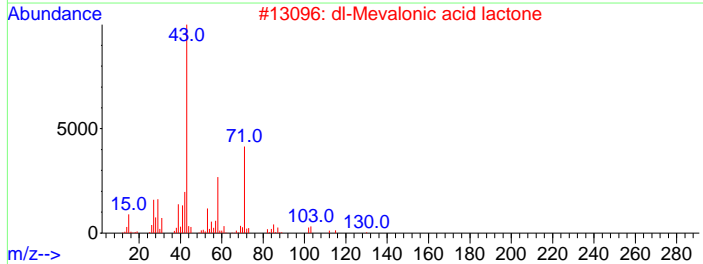
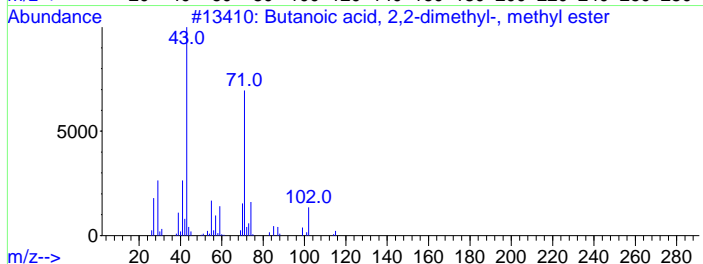
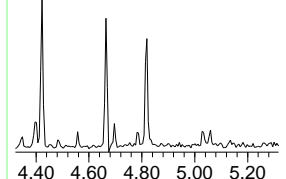
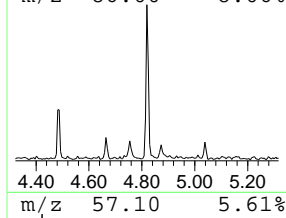
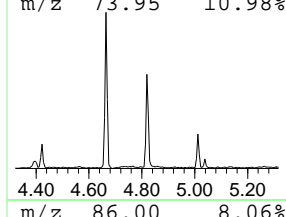
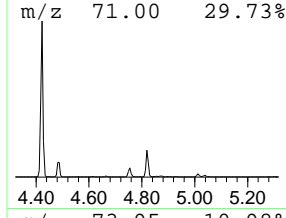
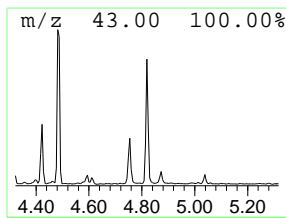
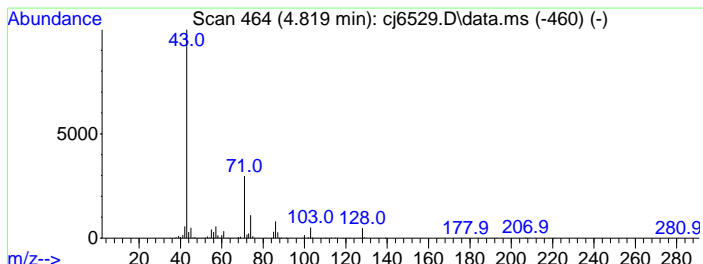
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Data File : cj6529.D
Acq On : 09 May 2024 09:26 pm
Operator : rocquans
Sample : jd87833-2
Misc : op54460,ecj297,31.0,,,1,1
ALS Vial : 20 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: lscint.p

\*\*\*\*\*
Peak Number 3 Unknown Concentration Rank 15

Table with 7 columns: R.T., EstConc, Area, Relative to ISTD, R.T., Hit# of, and Tentative ID. It lists several chemical compounds like Butanoic acid, dl-Mevalonic acid lactone, etc.



7.1.4
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6529.D  
Acq On : 09 May 2024 09:26 pm  
Operator : rocquans  
Sample : jd87833-2  
Misc : op54460,ecj297,31.0,,,1,1  
ALS Vial : 20 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

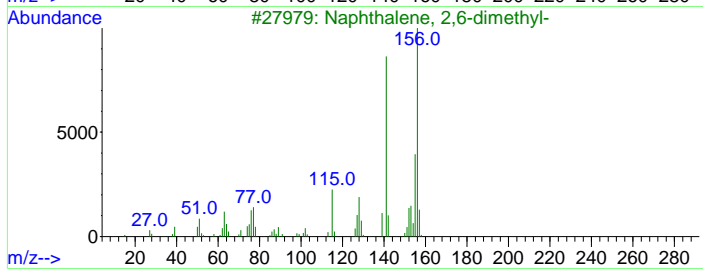
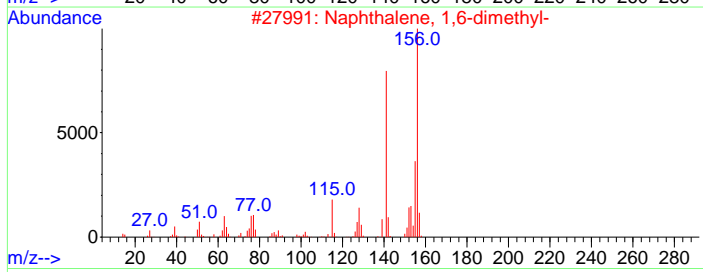
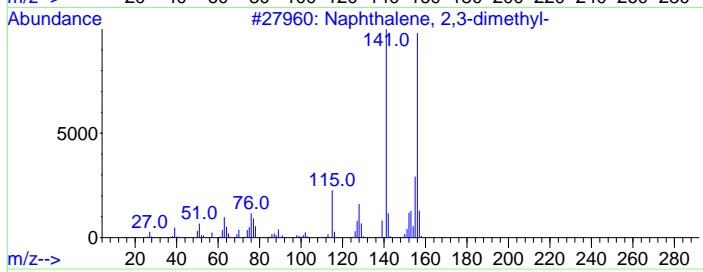
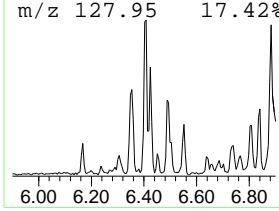
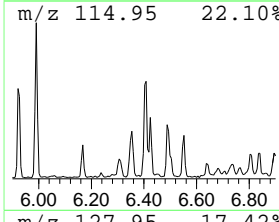
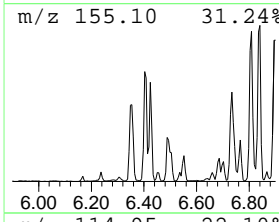
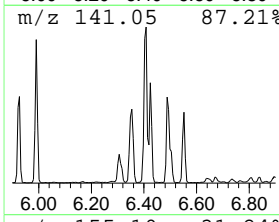
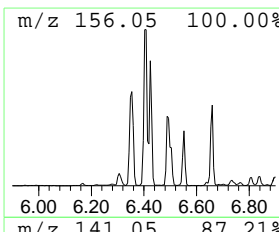
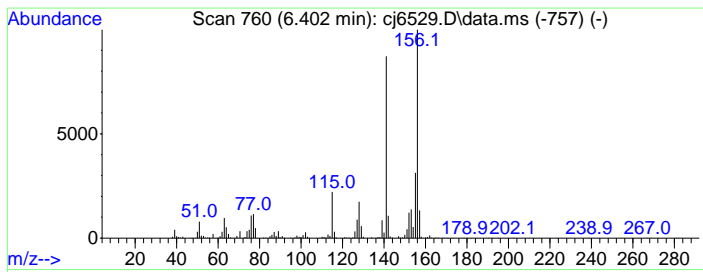
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 4 Naphthalene, dimethyl Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.402	5.74 ppm	453196	Acenaphthene-d10	6.659

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Naphthalene, 2,3-dimethyl-	156	C12H12	000581-40-8	98
2		Naphthalene, 1,6-dimethyl-	156	C12H12	000575-43-9	98
3		Naphthalene, 2,6-dimethyl-	156	C12H12	000581-42-0	98
4		Naphthalene, 1,7-dimethyl-	156	C12H12	000575-37-1	98
5		Naphthalene, 2,6-dimethyl-	156	C12H12	000581-42-0	97



7.14  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6529.D  
 Acq On : 09 May 2024 09:26 pm  
 Operator : rocquans  
 Sample : jd87833-2  
 Misc : op54460,ecj297,31.0,,,1,1  
 ALS Vial : 20 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

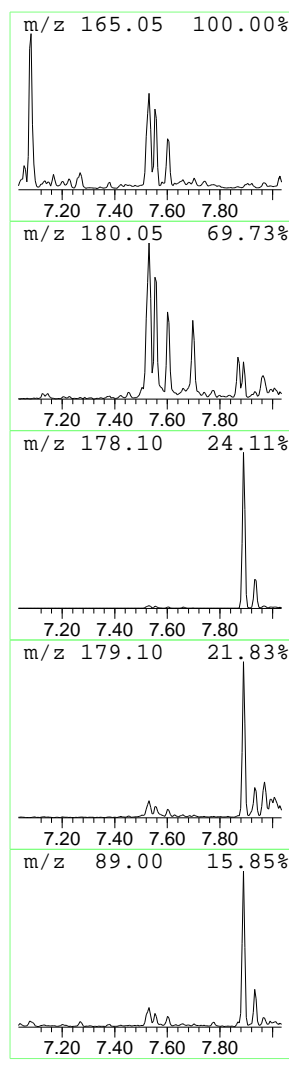
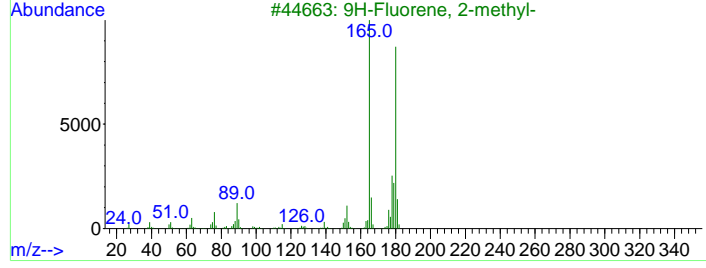
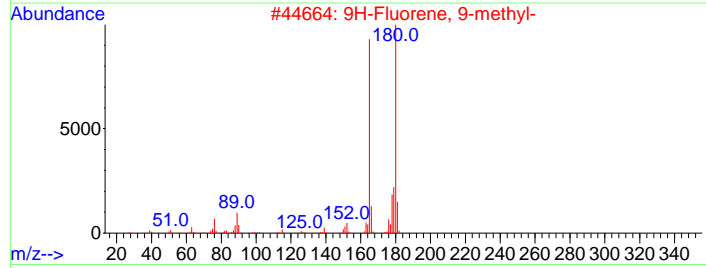
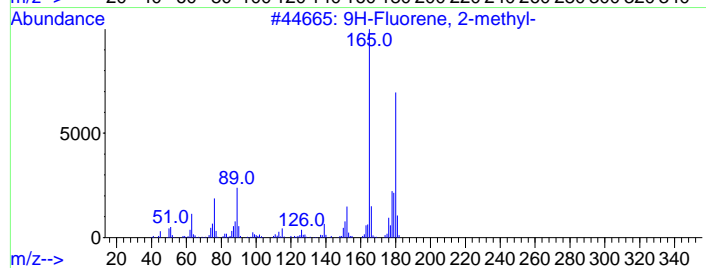
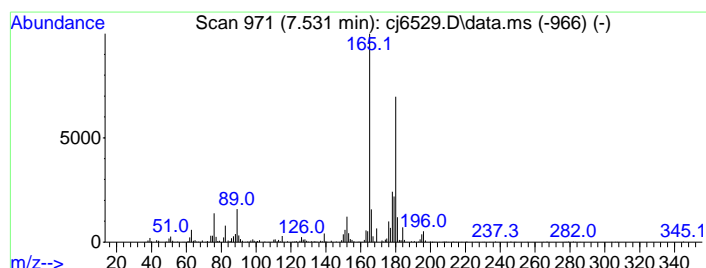
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 5 9H-Fluorene, methyl Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.531	4.35 ppm	333347	Phenanthrene-d10	7.868

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	9H-Fluorene, 2-methyl-	180	C14H12	001430-97-3	96
2		9H-Fluorene, 9-methyl-	180	C14H12	002523-37-7	90
3		9H-Fluorene, 2-methyl-	180	C14H12	001430-97-3	90
4		9H-Fluorene, 1-methyl-	180	C14H12	001730-37-6	90
5		9H-Fluorene, 1-methyl-	180	C14H12	001730-37-6	90





Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6529.D  
Acq On : 09 May 2024 09:26 pm  
Operator : rocquans  
Sample : jd87833-2  
Misc : op54460,ecj297,31.0,,,1,1  
ALS Vial : 20 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

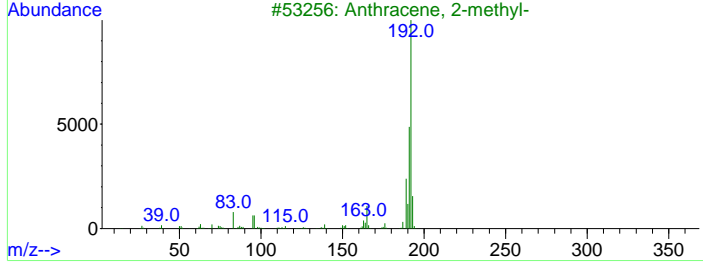
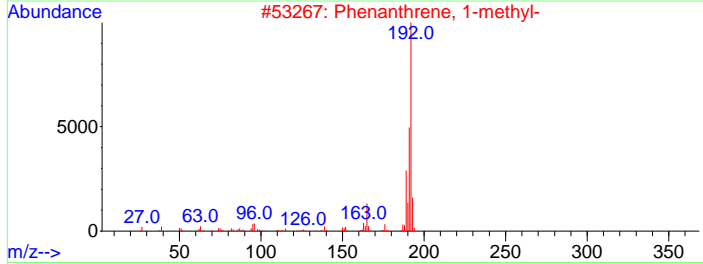
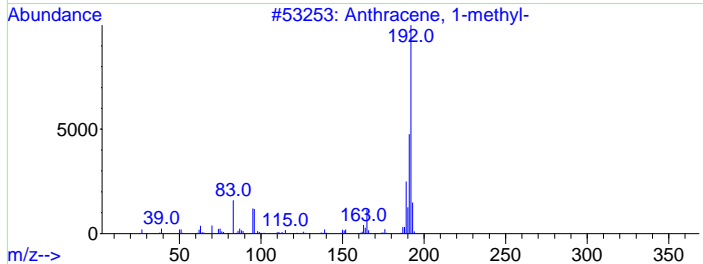
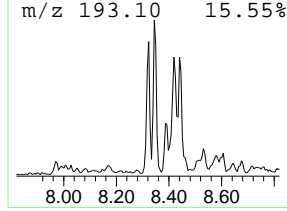
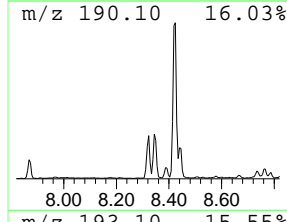
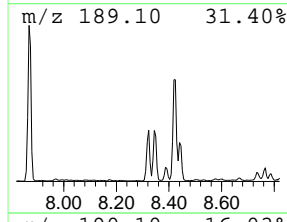
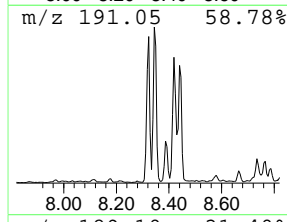
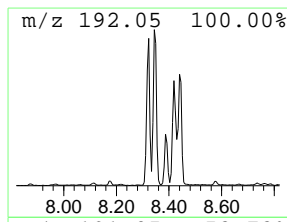
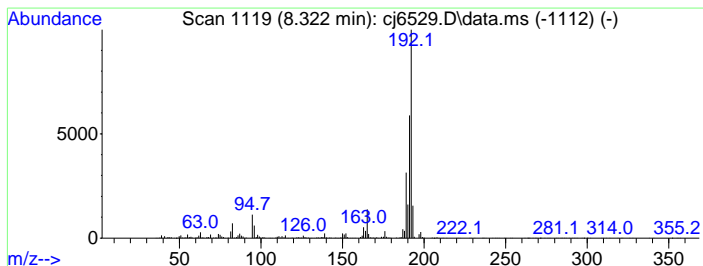
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 6 Anthracene, methyl Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.322	10.67 ppm	818042	Phenanthrene-d10b	7.868

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Anthracene, 1-methyl-	192	C15H12	000610-48-0	93
2		Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	93
3		Anthracene, 2-methyl-	192	C15H12	000613-12-7	93
4		Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	93
5		Anthracene, 2-methyl-	192	C15H12	000613-12-7	93



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6529.D  
Acq On : 09 May 2024 09:26 pm  
Operator : rocquans  
Sample : jd87833-2  
Misc : op54460,ecj297,31.0,,,1,1  
ALS Vial : 20 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

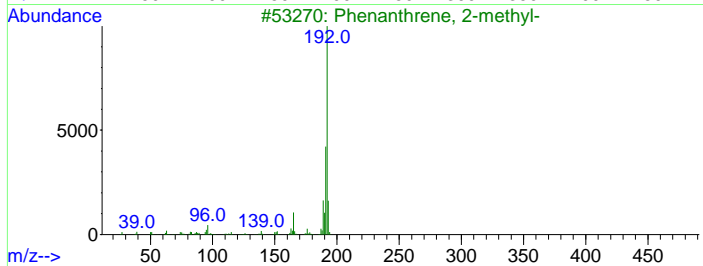
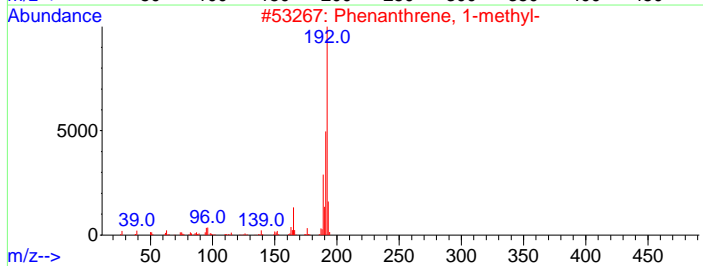
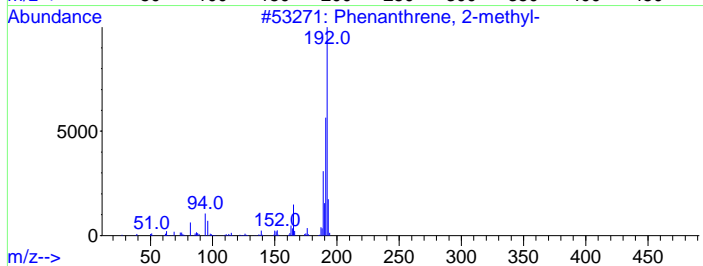
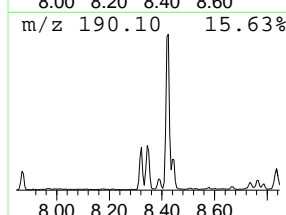
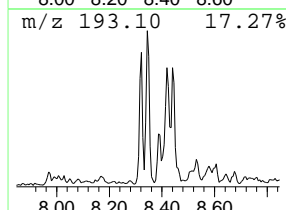
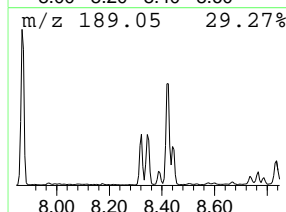
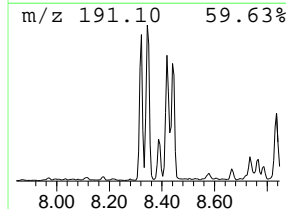
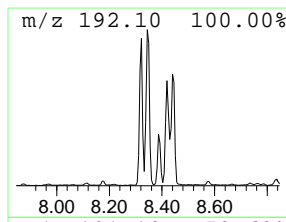
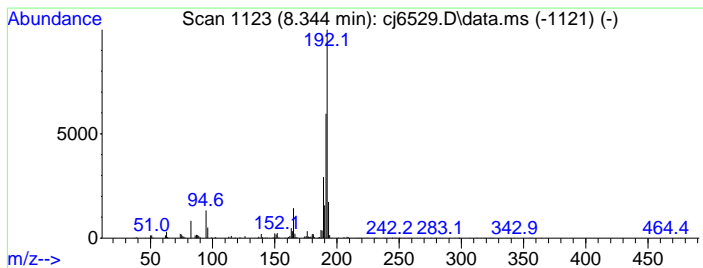
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 7 Phenanthrene, methyl Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.344	10.04 ppm	769855	Phenanthrene-d10b	7.868

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	98
2		Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	97
3		Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	96
4		1H-Cyclopropa[1]phenanthrene,1a,...	192	C15H12	000949-41-7	96
5		Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	95



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6529.D  
Acq On : 09 May 2024 09:26 pm  
Operator : rocquans  
Sample : jd87833-2  
Misc : op54460,ecj297,31.0,,,1,1  
ALS Vial : 20 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

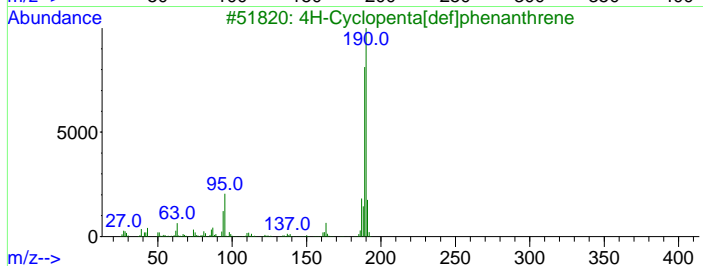
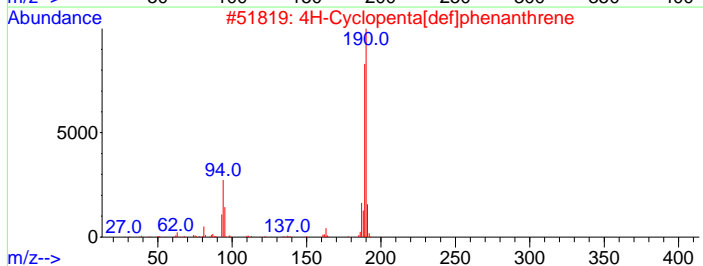
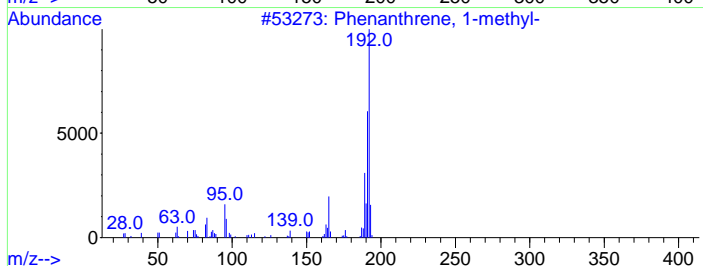
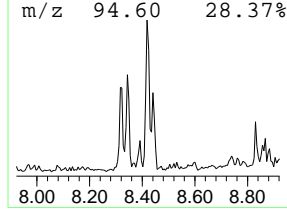
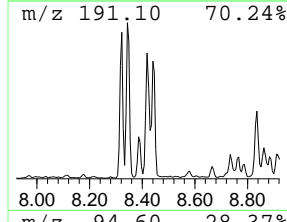
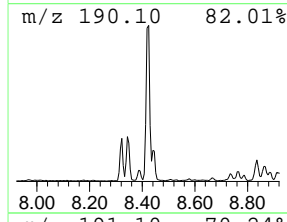
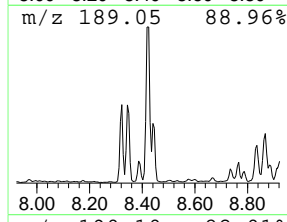
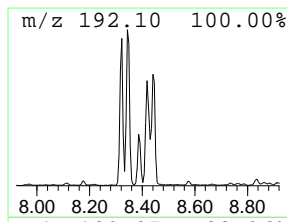
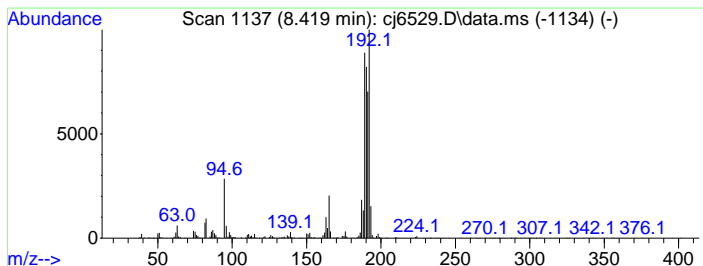
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 8 Unknown Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.419	11.85 ppm	908922	Phenanthrene-d10b	7.868

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	60
2		4H-Cyclopenta[def]phenanthrene	190	C15H10	000203-64-5	60
3		4H-Cyclopenta[def]phenanthrene	190	C15H10	000203-64-5	55
4		Anthracene, 1-methyl-	192	C15H12	000610-48-0	46
5		1H-Indene, 2-phenyl-	192	C15H12	004505-48-0	46



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6529.D  
 Acq On : 09 May 2024 09:26 pm  
 Operator : rocquans  
 Sample : jd87833-2  
 Misc : op54460,ecj297,31.0,,,1,1  
 ALS Vial : 20 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

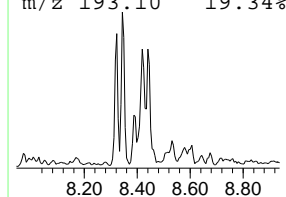
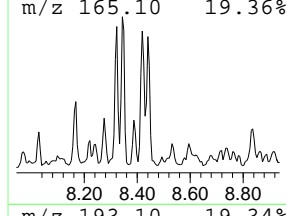
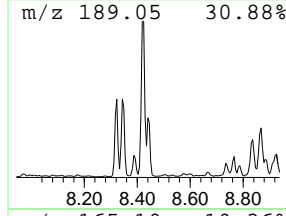
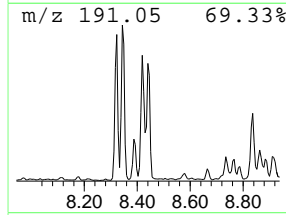
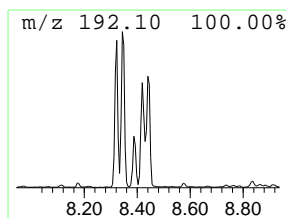
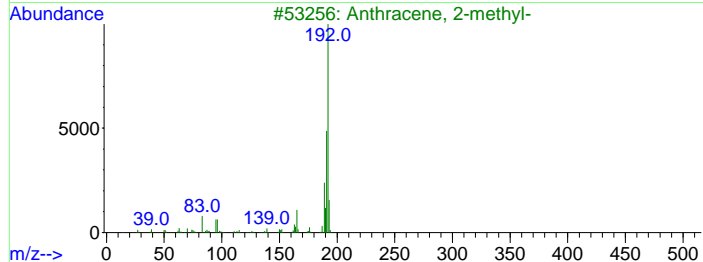
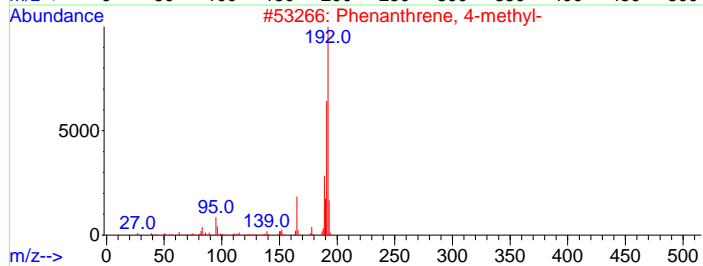
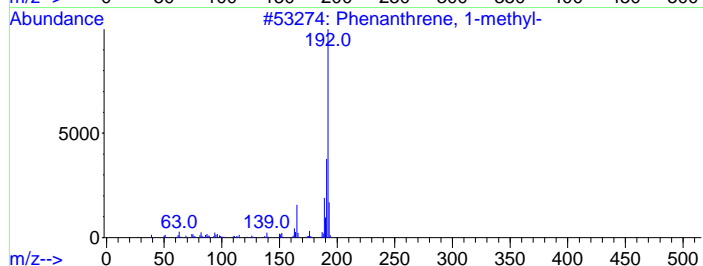
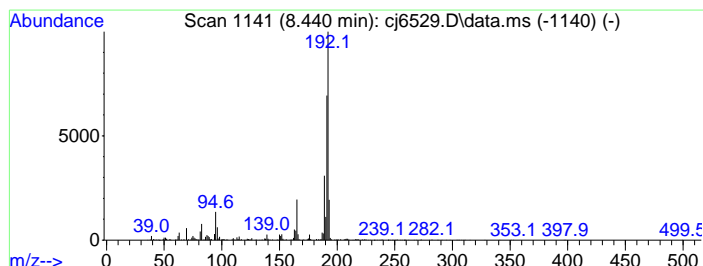
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 9 Phenanthrene, methyl Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.440	5.73 ppm	439341	Phenanthrene-d10b	7.868

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	95
2		Phenanthrene, 4-methyl-	192	C15H12	000832-64-4	95
3		Anthracene, 2-methyl-	192	C15H12	000613-12-7	94
4		Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	94
5		Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	93



7.14  
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Library Search Compound Report

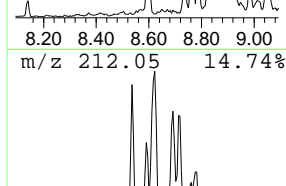
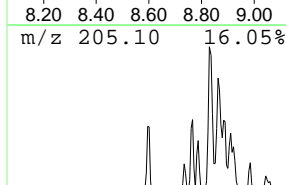
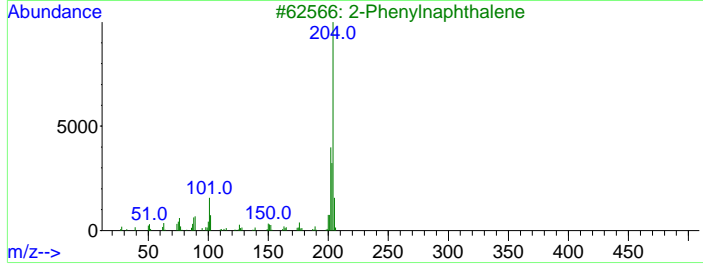
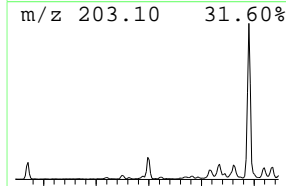
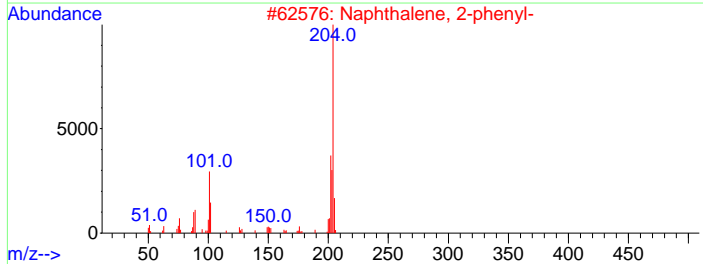
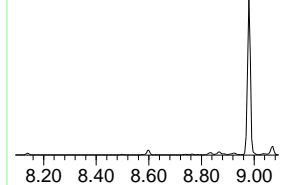
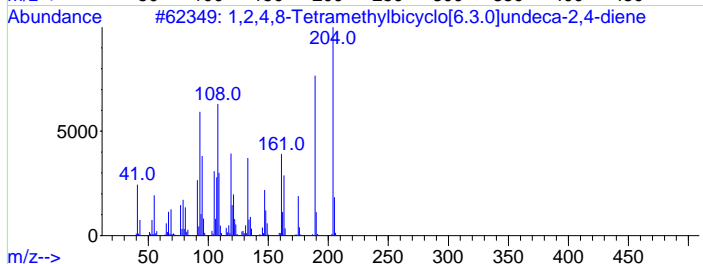
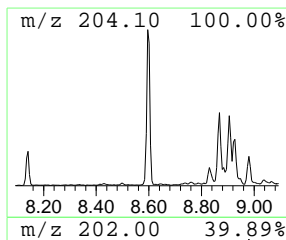
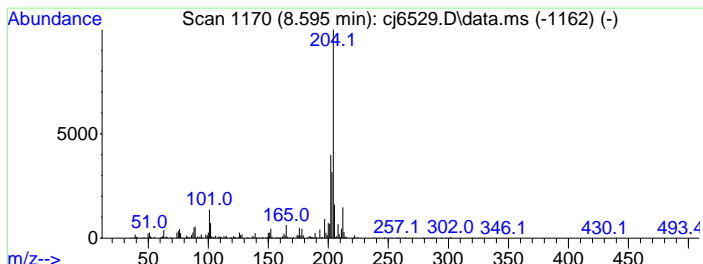
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Data File : cj6529.D
Acq On : 09 May 2024 09:26 pm
Operator : rocquans
Sample : jd87833-2
Misc : op54460,ecj297,31.0,,1,1
ALS Vial : 20 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: lscint.p

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Peak Number 10 Unknown Concentration Rank 6

Table with 7 columns: R.T., EstConc, Area, Relative to ISTD, R.T., Hit# of 5, Tentative ID, MW, MolForm, CAS#, Qual. It lists search results for peak 10, including Phenanthrene-d10b and several bicyclic compounds.



7.1.4
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
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 Acq On : 09 May 2024 09:26 pm  
 Operator : rocquans  
 Sample : jd87833-2  
 Misc : op54460,ecj297,31.0,,,1,1  
 ALS Vial : 20 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

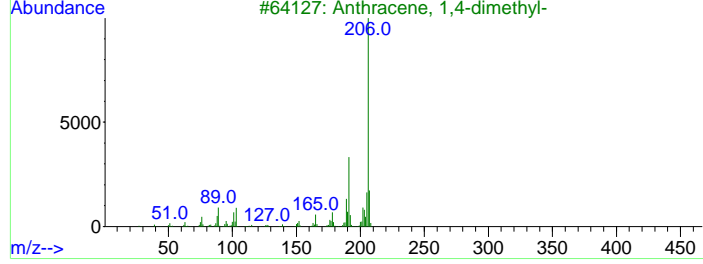
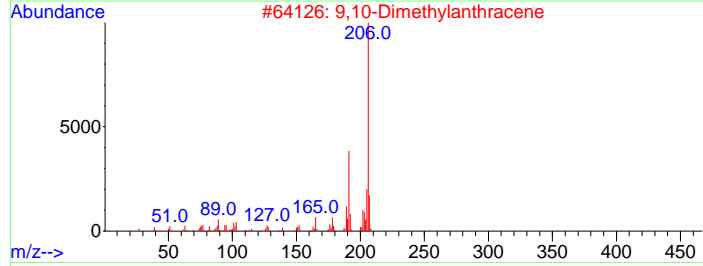
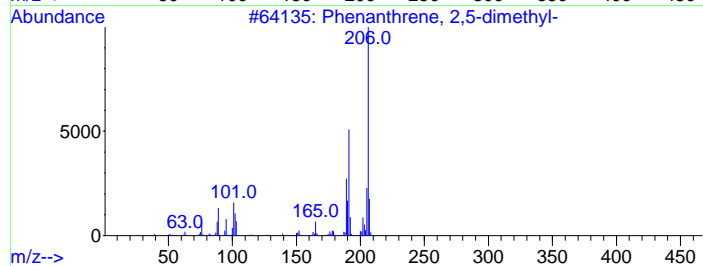
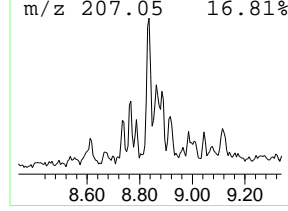
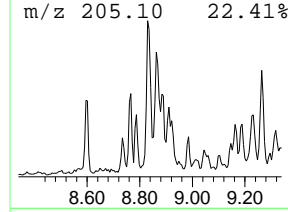
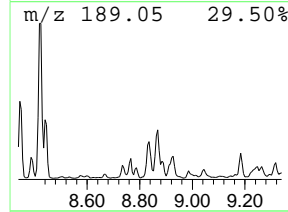
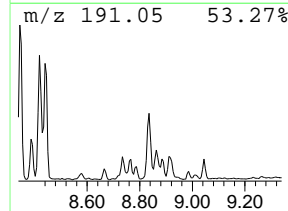
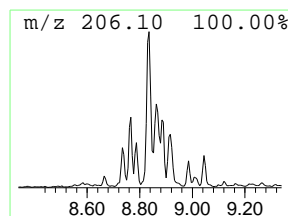
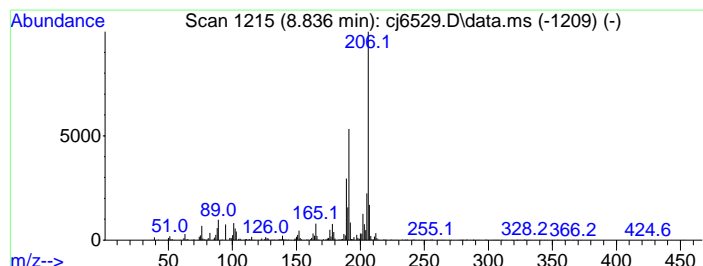
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 11 Phenanthrene, dimethyl Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.836	7.16 ppm	549269	Phenanthrene-d10b	7.868

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Phenanthrene, 2,5-dimethyl-	206	C16H14	003674-66-6	96
2		9,10-Dimethylanthracene	206	C16H14	000781-43-1	94
3		Anthracene, 1,4-dimethyl-	206	C16H14	000781-92-0	93
4		Phenanthrene, 2,3-dimethyl-	206	C16H14	003674-65-5	93
5		9,10-Dimethylanthracene	206	C16H14	000781-43-1	93



7.14  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6529.D  
 Acq On : 09 May 2024 09:26 pm  
 Operator : rocquans  
 Sample : jd87833-2  
 Misc : op54460,ecj297,31.0,,,1,1  
 ALS Vial : 20 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

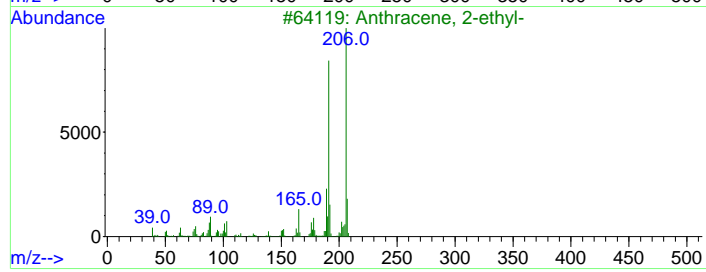
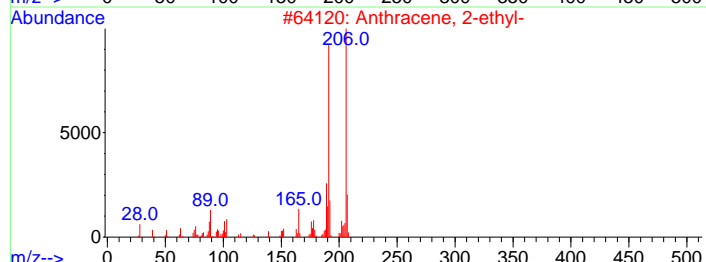
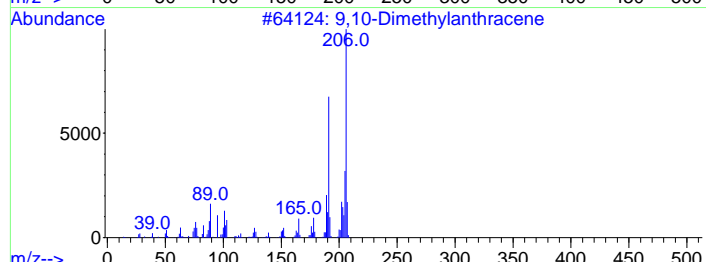
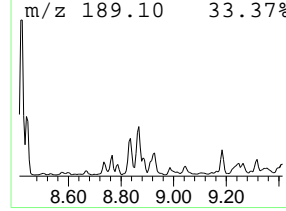
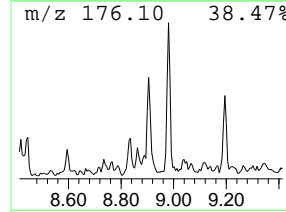
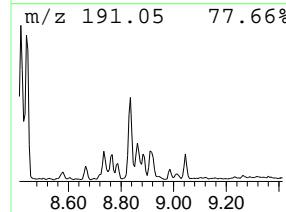
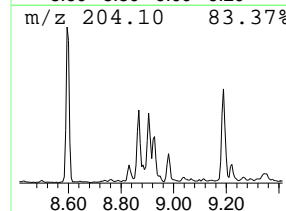
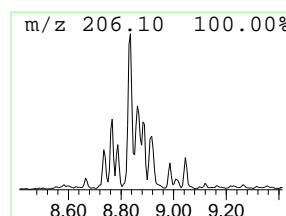
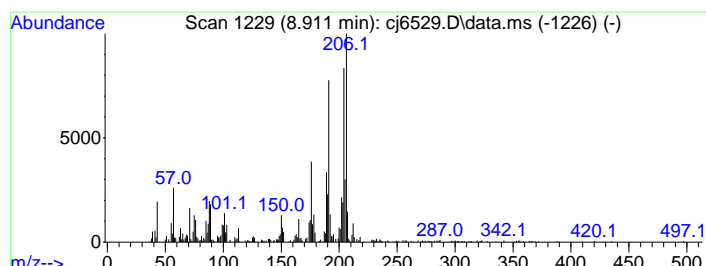
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 12 Anthracene, 2-ethyl- Concentration Rank 22

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.911	4.22 ppm	323415	Phenanthrene-d10b	7.868

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	9,10-Dimethylantracene	206	C16H14	000781-43-1	89
2		Anthracene, 2-ethyl-	206	C16H14	052251-71-5	86
3		Anthracene, 2-ethyl-	206	C16H14	052251-71-5	86
4		Anthracene, 2-ethyl-	206	C16H14	052251-71-5	70
5		Phenanthrene, 4,5-dimethyl-	206	C16H14	003674-69-9	55



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6529.D  
Acq On : 09 May 2024 09:26 pm  
Operator : rocquans  
Sample : jd87833-2  
Misc : op54460,ecj297,31.0,,,1,1  
ALS Vial : 20 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

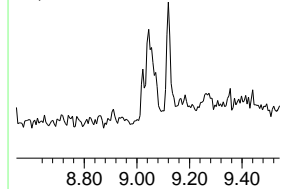
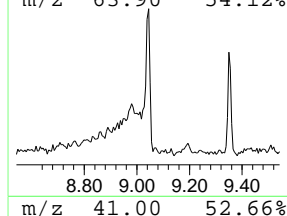
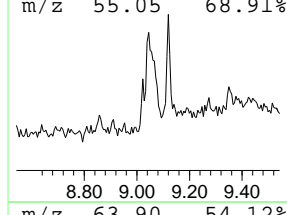
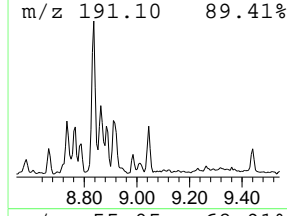
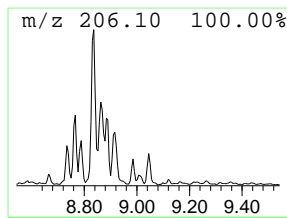
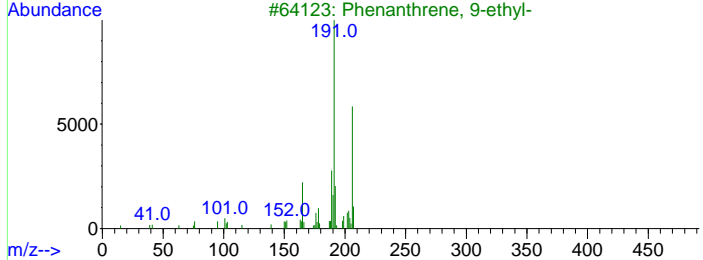
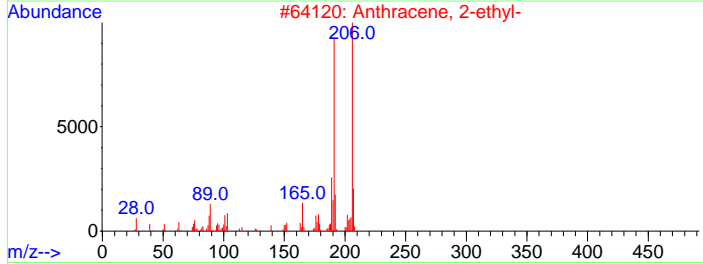
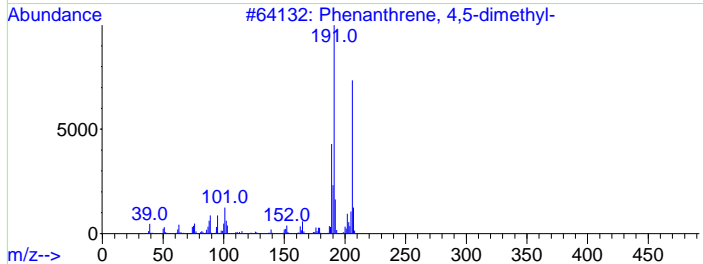
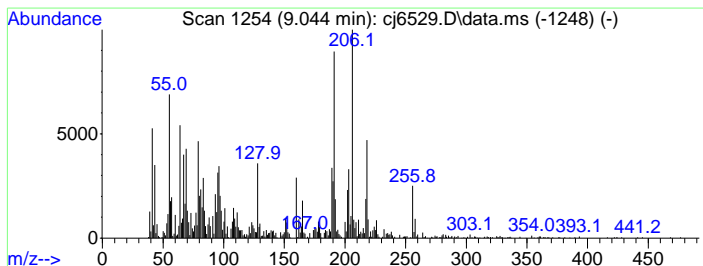
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TIC Integration Parameters: lscint.p

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Peak Number 13 Unknown Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.044	6.13 ppm	469777	Phenanthrene-d10b	7.868

Hit#	of 5	Tentative ID	MW	MolForm	CAS#	Qual
1		Phenanthrene, 4,5-dimethyl-	206	C16H14	003674-69-9	55
2		Anthracene, 2-ethyl-	206	C16H14	052251-71-5	42
3		Phenanthrene, 9-ethyl-	206	C16H14	003674-75-7	42
4		Anthracene, 2-ethyl-	206	C16H14	052251-71-5	42
5		Phenanthrene, 4,5-dimethyl-	206	C16H14	003674-69-9	42



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6529.D  
 Acq On : 09 May 2024 09:26 pm  
 Operator : rocquans  
 Sample : jd87833-2  
 Misc : op54460,ecj297,31.0,,,1,1  
 ALS Vial : 20 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

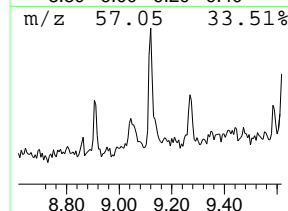
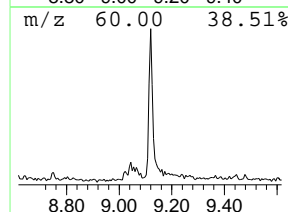
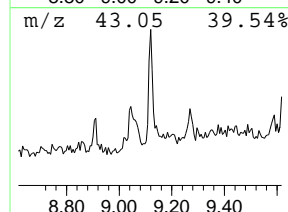
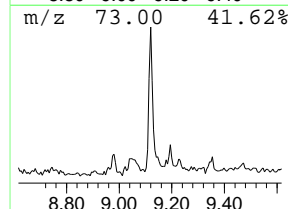
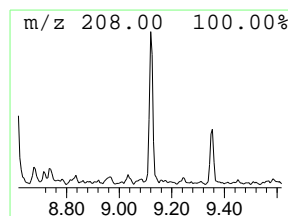
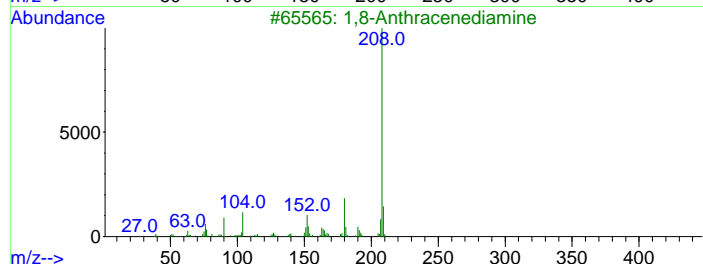
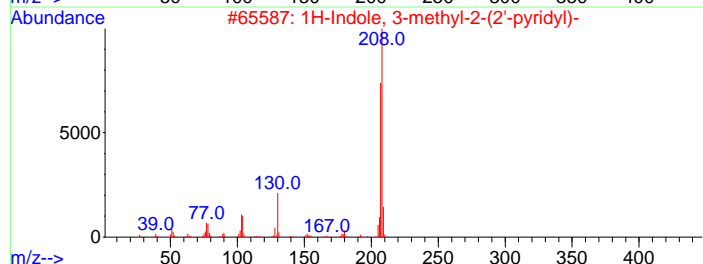
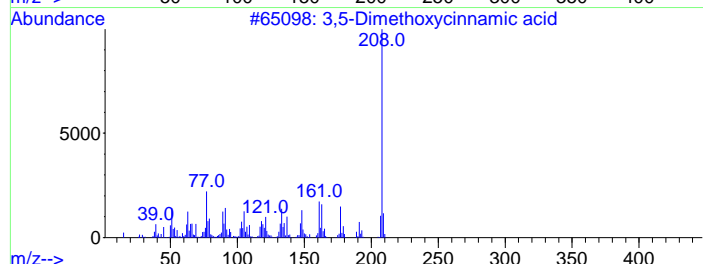
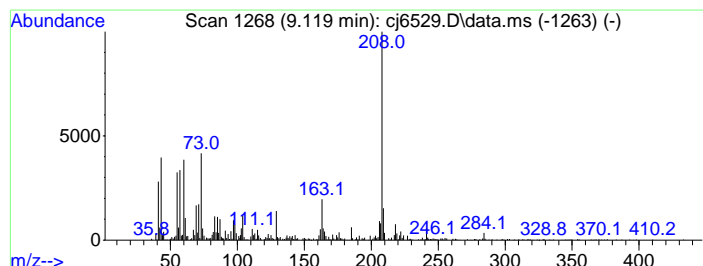
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 14 Unknown Concentration Rank 21

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.119	4.24 ppm	437661	Chrysene-d12	10.366

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			3,5-Dimethoxycinnamic acid	208	C11H12O4	016909-11-8	43
2			1H-Indole, 3-methyl-2-(2'-pyridyl)-	208	C14H12N2	000951-25-7	43
3			1,8-Anthracenediamine	208	C14H12N2	139312-39-3	43
4			1H-Indazole, 6-methyl-1-phenyl-	208	C14H12N2	1000305-65-6	43
5			4,7-Dimethyl-1,10-phenanthroline	208	C14H12N2	003248-05-3	43



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6529.D  
Acq On : 09 May 2024 09:26 pm  
Operator : rocquans  
Sample : jd87833-2  
Misc : op54460,ecj297,31.0,,,1,1  
ALS Vial : 20 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

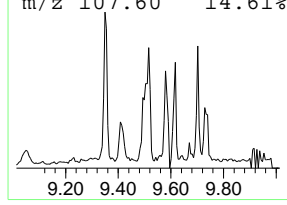
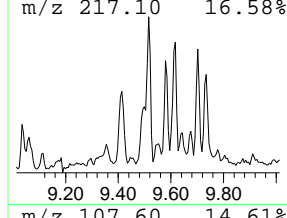
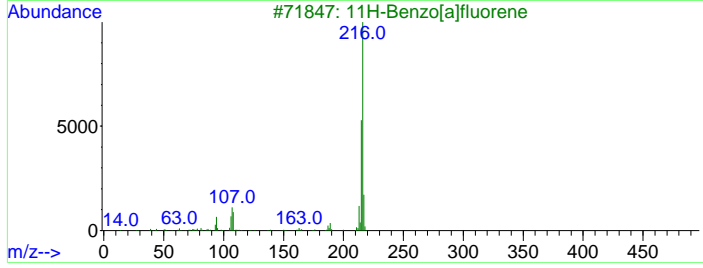
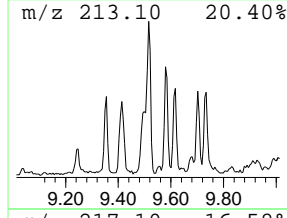
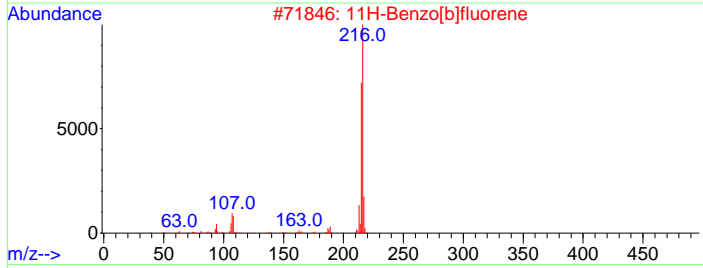
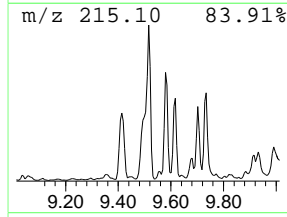
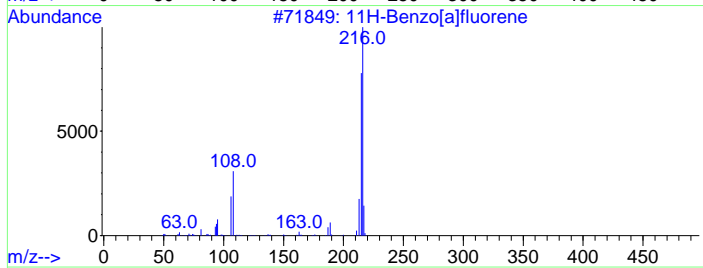
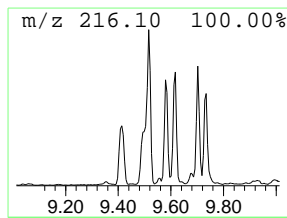
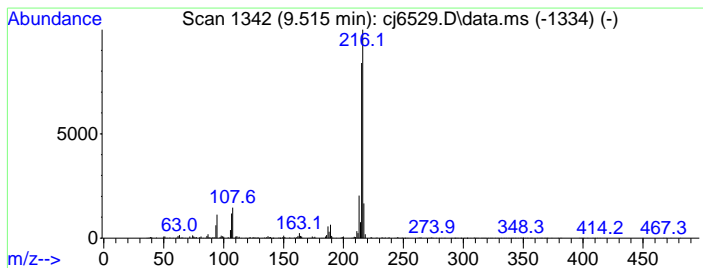
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 15 Unknown Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.515	7.86 ppm	812471	Chrysene-d12	10.366

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	11H-Benzo[a]fluorene	216	C17H12	000238-84-6	94
2		11H-Benzo[b]fluorene	216	C17H12	000243-17-4	94
3		11H-Benzo[a]fluorene	216	C17H12	000238-84-6	94
4		Fluoranthene, 2-methyl-	216	C17H12	033543-31-6	93
5		Pyrene, 1-methyl-	216	C17H12	002381-21-7	93



7.14  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6529.D  
Acq On : 09 May 2024 09:26 pm  
Operator : rocquans  
Sample : jd87833-2  
Misc : op54460,ecj297,31.0,,,1,1  
ALS Vial : 20 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

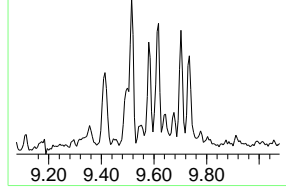
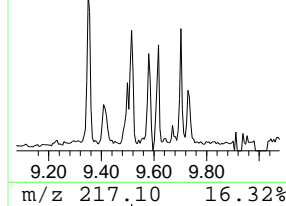
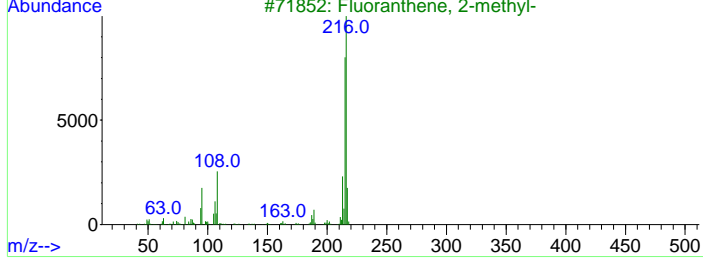
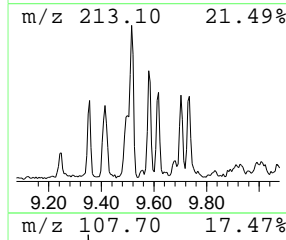
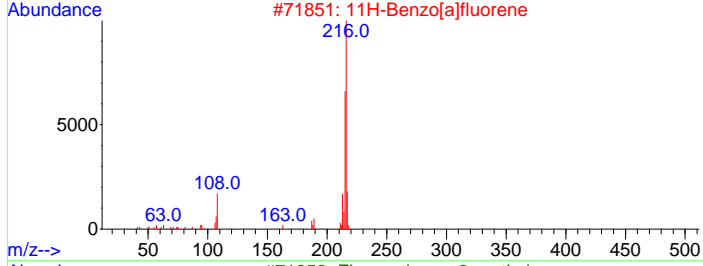
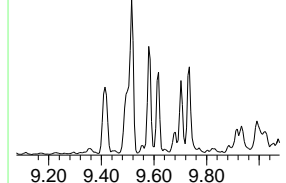
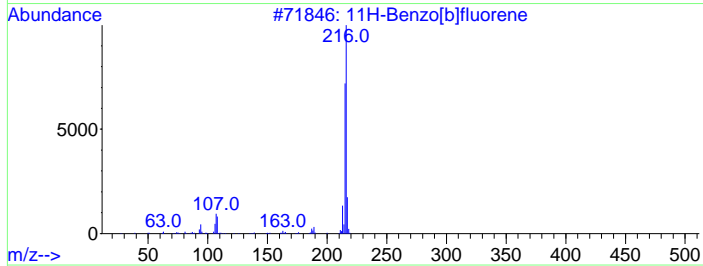
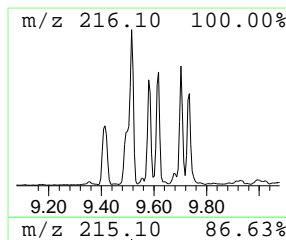
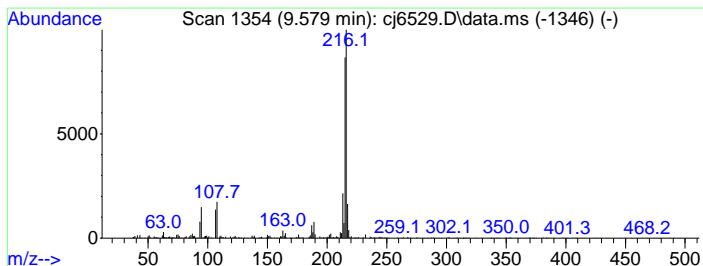
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 16 Unknown Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.579	5.04 ppm	520402	Chrysene-d12	10.366

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	11H-Benzo[b]fluorene	216	C17H12	000243-17-4	96
2		11H-Benzo[a]fluorene	216	C17H12	000238-84-6	94
3		Fluoranthene, 2-methyl-	216	C17H12	033543-31-6	91
4		Pyrene, 1-methyl-	216	C17H12	002381-21-7	90
5		Pyrene, 1-methyl-	216	C17H12	002381-21-7	87



7.14  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6529.D  
Acq On : 09 May 2024 09:26 pm  
Operator : rocquans  
Sample : jd87833-2  
Misc : op54460,ecj297,31.0,,,1,1  
ALS Vial : 20 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

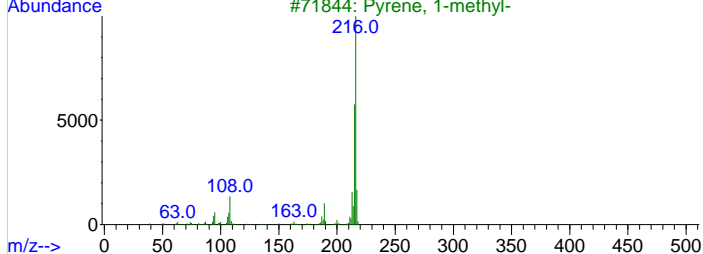
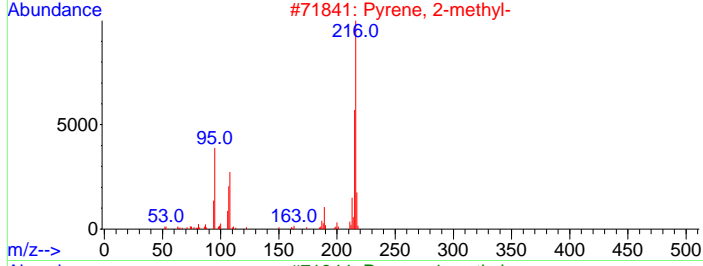
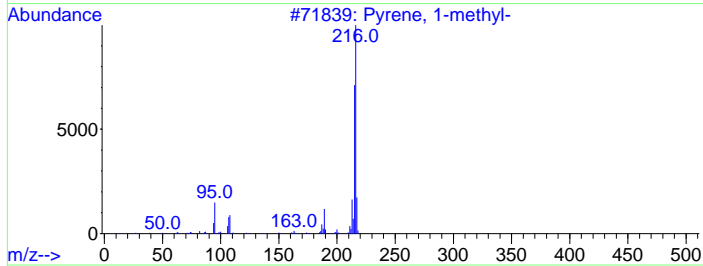
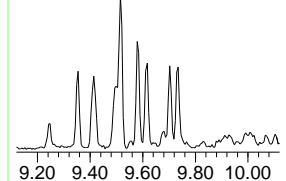
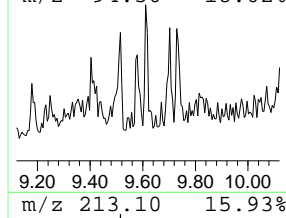
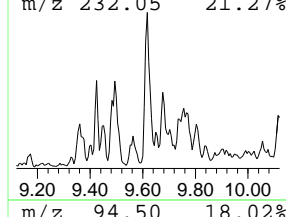
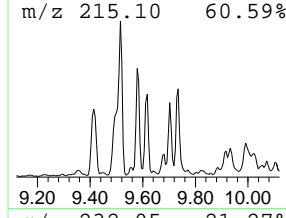
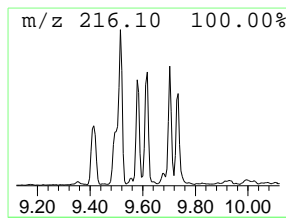
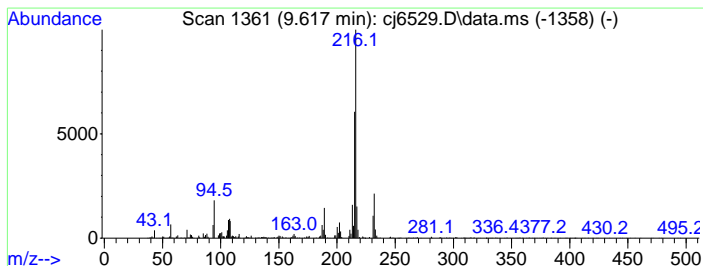
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 17 Pyrene, methyl Concentration Rank 23

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.617	4.20 ppm	433563	Chrysene-d12	10.366

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Pyrene, 1-methyl-	216	C17H12	002381-21-7	95
2		Pyrene, 2-methyl-	216	C17H12	003442-78-2	95
3		Pyrene, 1-methyl-	216	C17H12	002381-21-7	90
4		Pyrene, 1-methyl-	216	C17H12	002381-21-7	89
5		Pyrene, 2-methyl-	216	C17H12	003442-78-2	89



7.14  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6529.D  
 Acq On : 09 May 2024 09:26 pm  
 Operator : rocquans  
 Sample : jd87833-2  
 Misc : op54460,ecj297,31.0,,,1,1  
 ALS Vial : 20 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

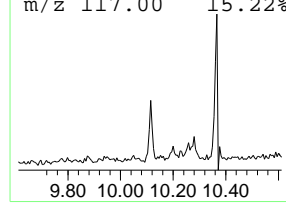
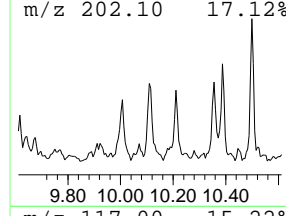
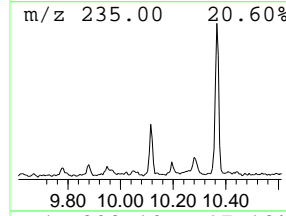
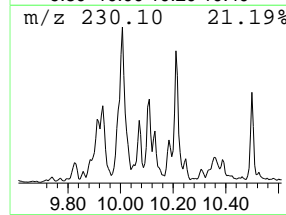
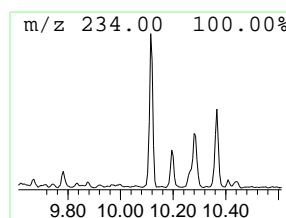
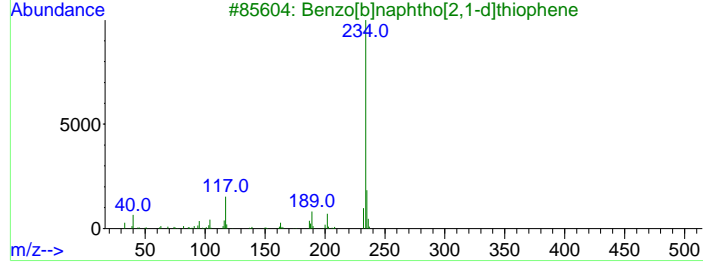
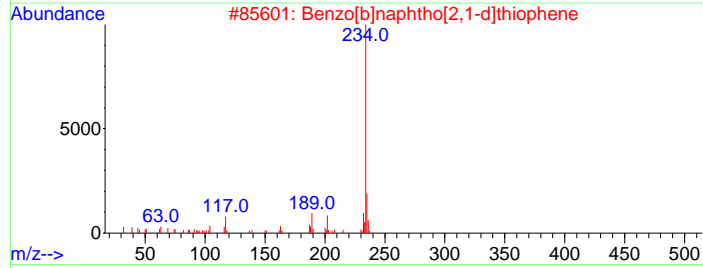
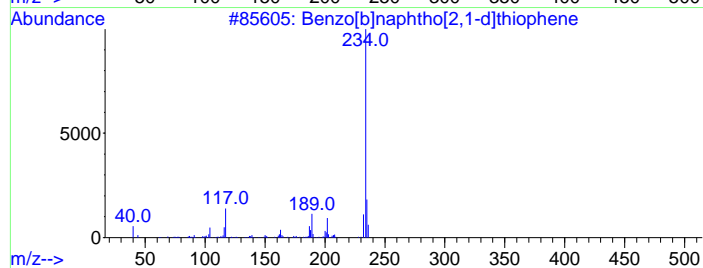
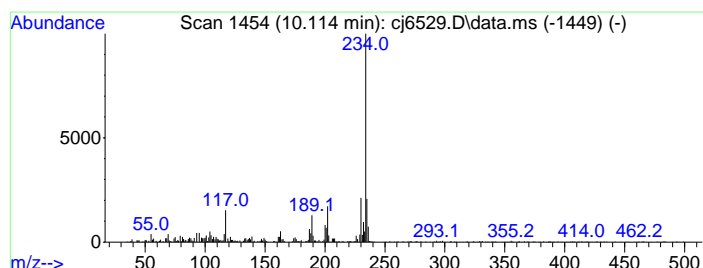
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 18 Benzo[b]naphtho[2,1-d]thiop... Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.114	4.29 ppm	443407	Chrysene-d12	10.366

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Benzo[b]naphtho[2,1-d]thiophene	234	C16H10S	000239-35-0	95
2			Benzo[b]naphtho[2,1-d]thiophene	234	C16H10S	000239-35-0	95
3			Benzo[b]naphtho[2,1-d]thiophene	234	C16H10S	000239-35-0	95
4			Anthra(2,3-b)thiophene	234	C16H10S	022108-55-0	94
5			Anthra(1,2-b)thiophene	234	C16H10S	000227-86-1	93



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6529.D  
Acq On : 09 May 2024 09:26 pm  
Operator : rocquans  
Sample : jd87833-2  
Misc : op54460,ecj297,31.0,,,1,1  
ALS Vial : 20 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

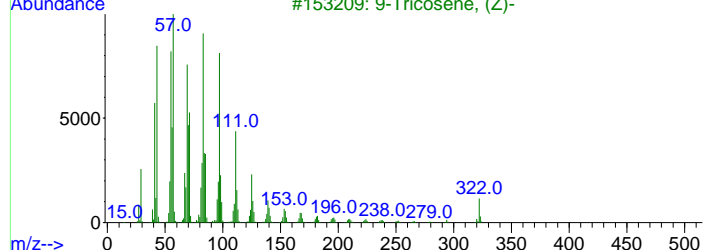
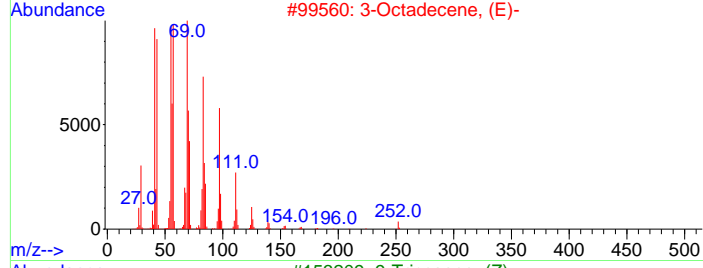
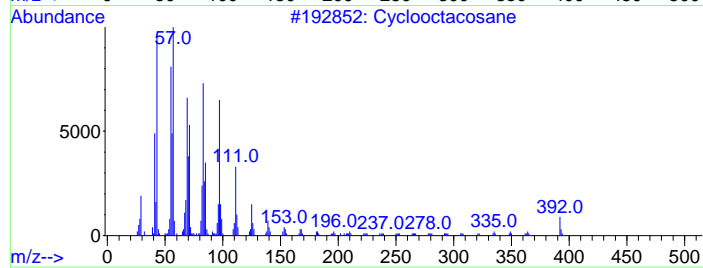
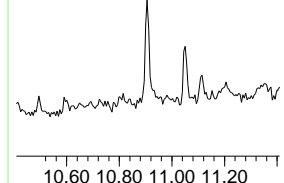
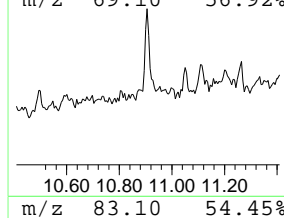
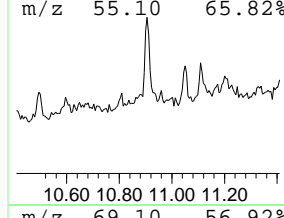
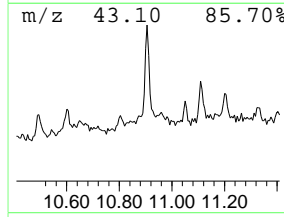
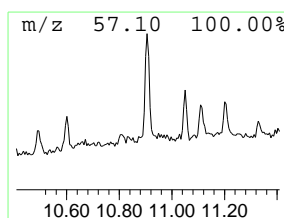
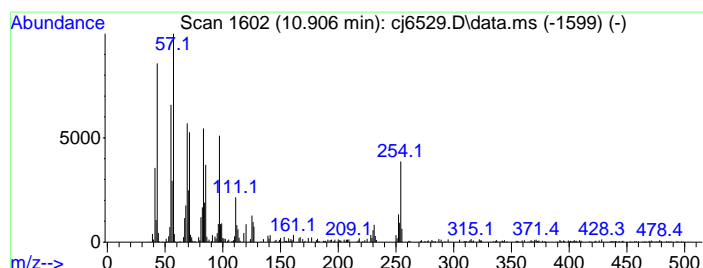
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 19 Alkene Concentration Rank 24

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.906	4.10 ppm	423492	Chrysene-d12a	10.366

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Cyclooctacosane	392	C28H56	000297-24-5	91
2			3-Octadecene, (E)-	252	C18H36	007206-19-1	81
3			9-Tricosene, (Z)-	322	C23H46	027519-02-4	64
4			1-Tricosene	322	C23H46	018835-32-0	64
5			1-Heptacosanol	396	C27H56O	002004-39-9	62



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6529.D  
 Acq On : 09 May 2024 09:26 pm  
 Operator : rocquans  
 Sample : jd87833-2  
 Misc : op54460,ecj297,31.0,,,1,1  
 ALS Vial : 20 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

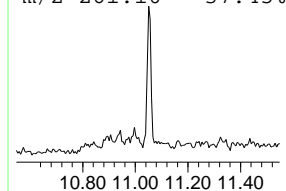
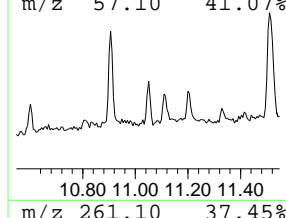
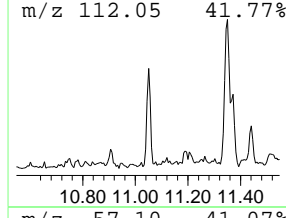
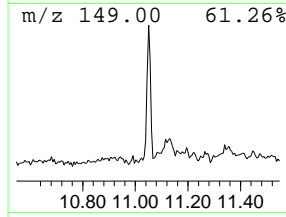
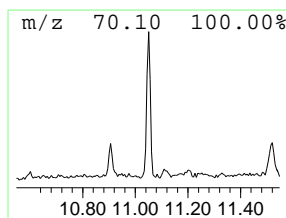
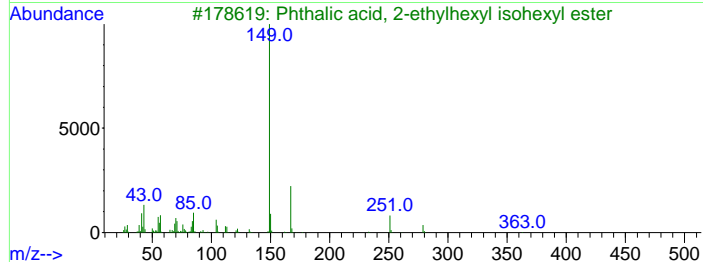
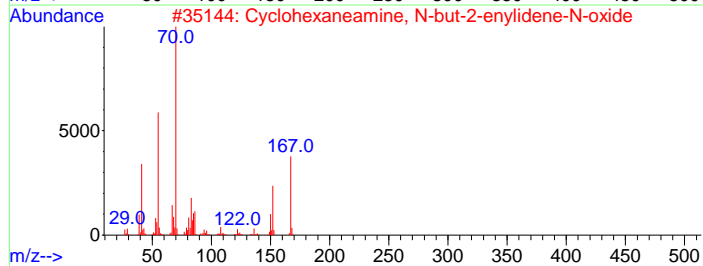
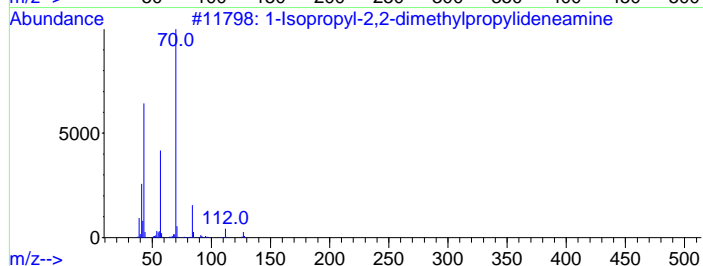
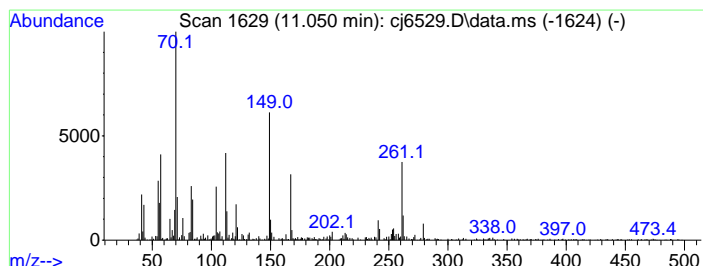
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 TIC Integration Parameters: lscint.p

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 Peak Number 20 Unknown Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.050	4.42 ppm	338279	Perylene-d12	11.714

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			1-Isopropyl-2,2-dimethylpropylid...	127	C8H17N	1000210-05-3	27
2			Cyclohexaneamine, N-but-2-enylid...	167	C10H17NO	068048-01-1	27
3			Phthalic acid, 2-ethylhexyl isoh...	362	C22H34O4	1000308-98-5	22
4			Acetic acid, [4-(4-methyl-1-pipe...	262	C14H18N2O3	346699-90-9	22
5			Di-n-octyl phthalate	390	C24H38O4	000117-84-0	18



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6529.D  
Acq On : 09 May 2024 09:26 pm  
Operator : rocquans  
Sample : jd87833-2  
Misc : op54460,ecj297,31.0,,,1,1  
ALS Vial : 20 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

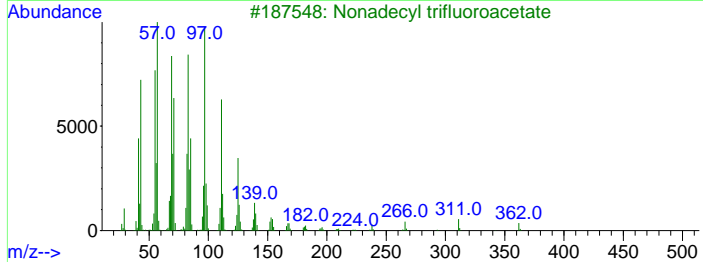
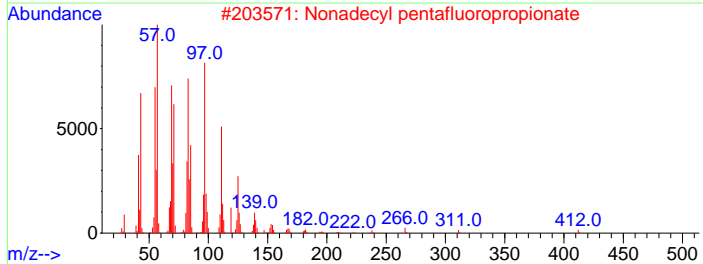
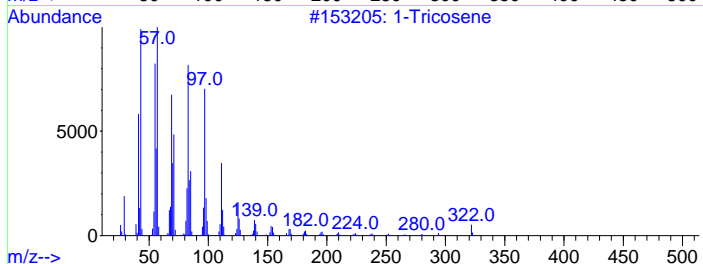
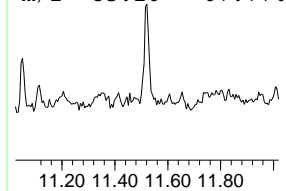
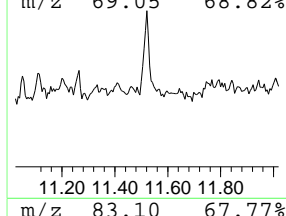
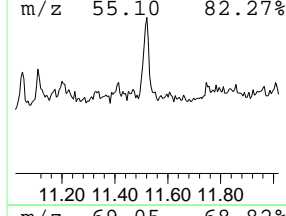
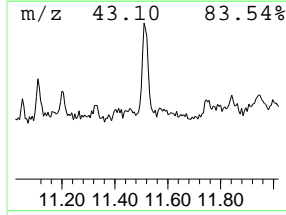
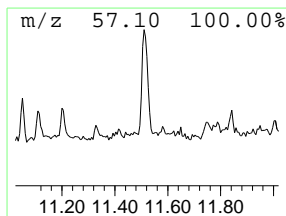
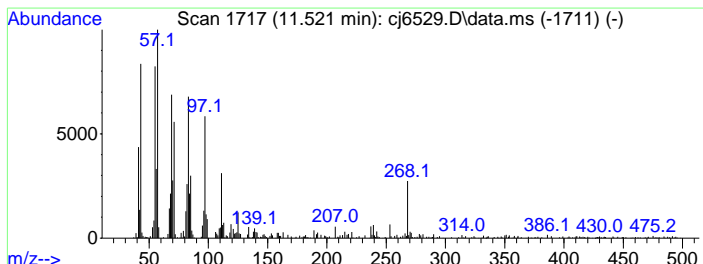
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 21 Unknown Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.521	6.18 ppm	472497	Perylene-d12	11.714

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		1-Tricosene	322	C23H46	018835-32-0	87
2		Nonadecyl pentafluoropropionate	430	C22H39F5O2	1000351-88-8	87
3		Nonadecyl trifluoroacetate	380	C21H39F3O2	1000351-76-3	87
4		Octadecyl pentafluoropropionate	416	C21H37F5O2	1000351-80-7	83
5		Heneicosyl trifluoroacetate	408	C23H43F3O2	1000351-76-5	83



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6529.D  
Acq On : 09 May 2024 09:26 pm  
Operator : rocquans  
Sample : jd87833-2  
Misc : op54460,ecj297,31.0,,,1,1  
ALS Vial : 20 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

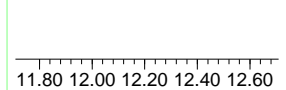
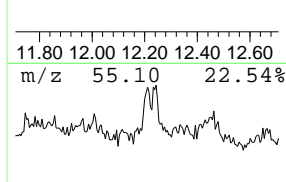
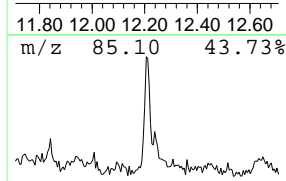
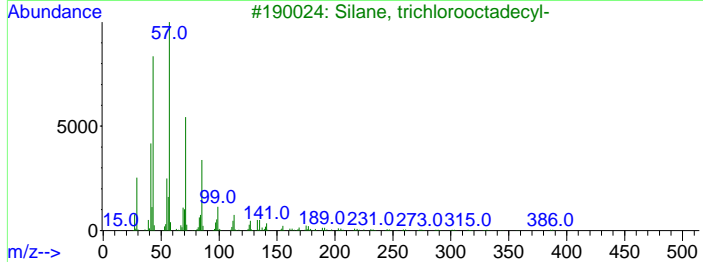
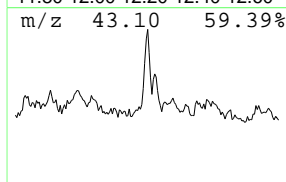
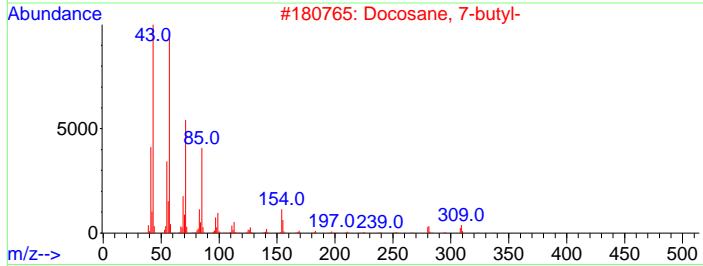
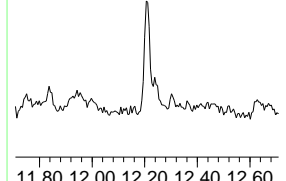
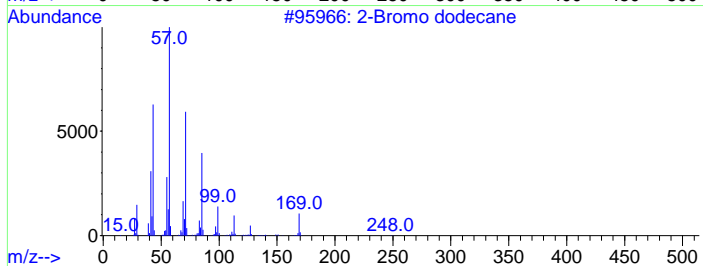
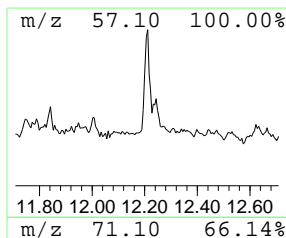
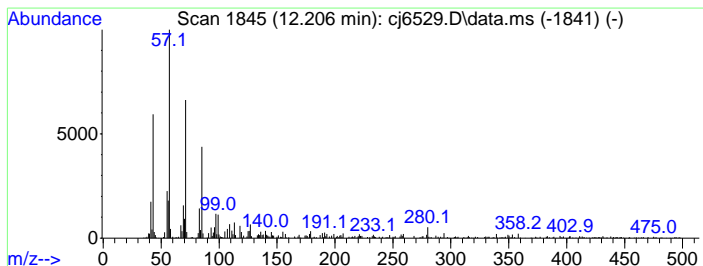
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 22 System artifact Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.206	4.42 ppm	337867	Perylene-d12	11.714

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2-Bromo dodecane	248	C12H25Br	013187-99-0	91
2		Docosane, 7-butyl-	366	C26H54	055282-15-0	86
3		Silane, trichlorooctadecyl-	386	C18H37Cl3Si	000112-04-9	83
4		Docosane, 11-butyl-	366	C26H54	013475-76-8	80
5		Sulfurous acid, butyl decyl ester	278	C14H30O3S	1000309-17-7	80



7.14  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6529.D  
 Acq On : 09 May 2024 09:26 pm  
 Operator : rocquans  
 Sample : jd87833-2  
 Misc : op54460,ecj297,31.0,,,1,1  
 ALS Vial : 20 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

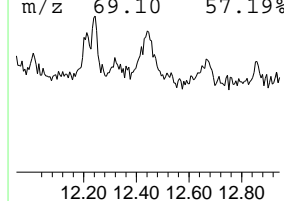
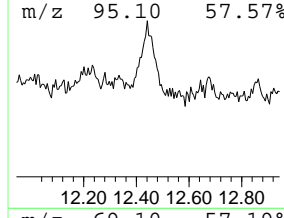
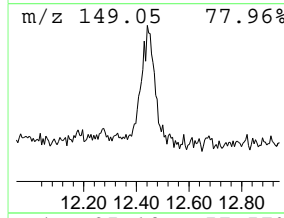
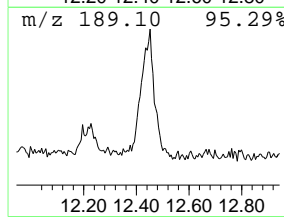
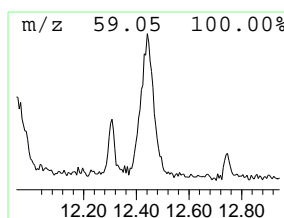
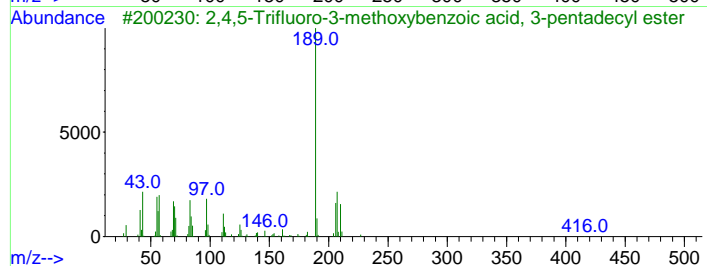
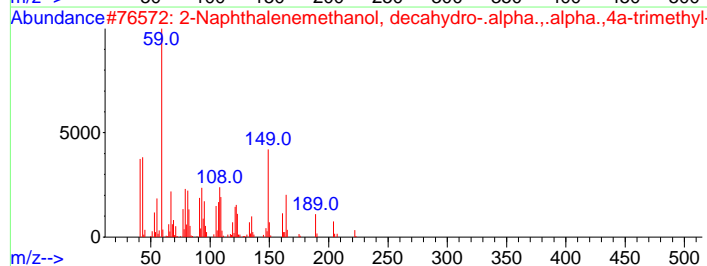
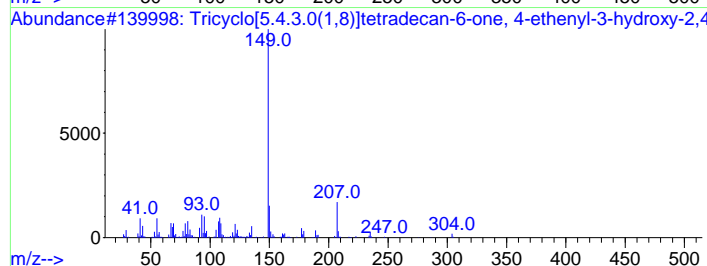
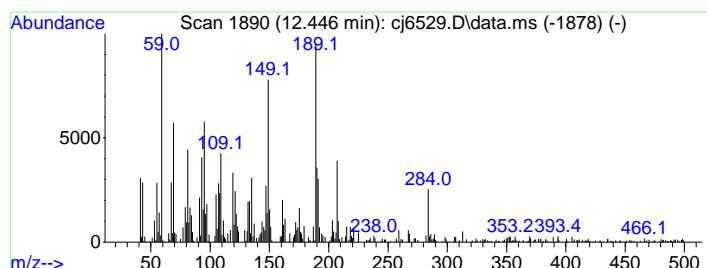
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 23 Unknown Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.446	11.07 ppm	847091	Perylene-d12	11.714

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Tricyclo[5.4.3.0(1,8)]tetradecan...	304	C20H32O2	1000197-61-7	22
2			2-Naphthalenemethanol, decahydro...	222	C15H26O	000473-15-4	14
3			2,4,5-Trifluoro-3-methoxybenzoic...	416	C23H35F3O3	1000338-46-6	11
4			2,4,7,14-Tetramethyl-4-vinyl-tri...	290	C20H34O	1000193-31-2	11
5			Benzothiazole, 2-methyl-	149	C8H7NS	000120-75-2	11



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6529.D  
 Acq On : 09 May 2024 09:26 pm  
 Operator : rocquans  
 Sample : jd87833-2  
 Misc : op54460,ecj297,31.0,,,1,1  
 ALS Vial : 20 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

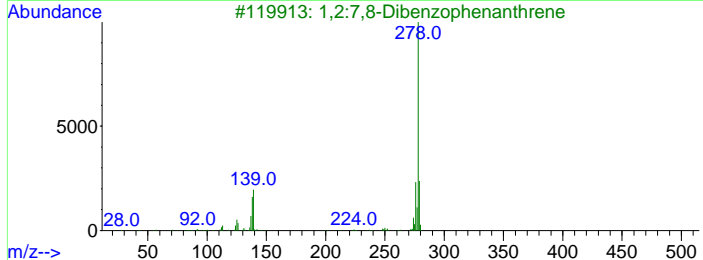
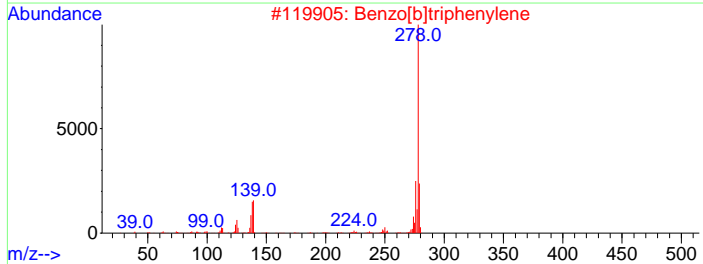
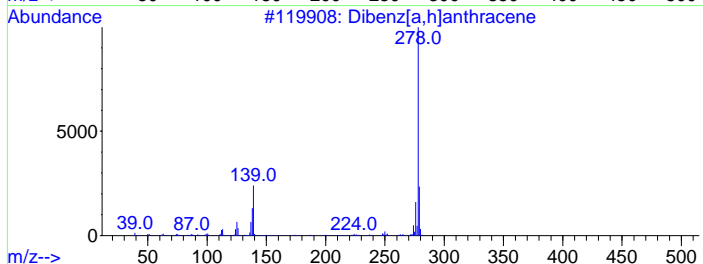
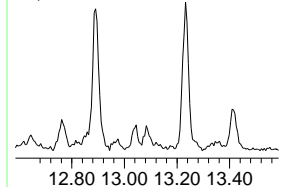
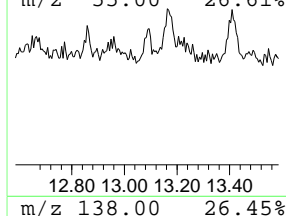
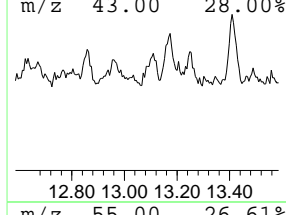
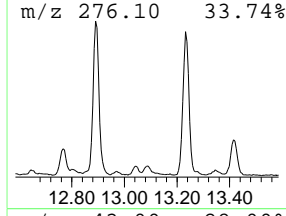
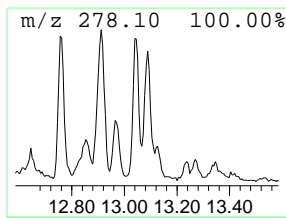
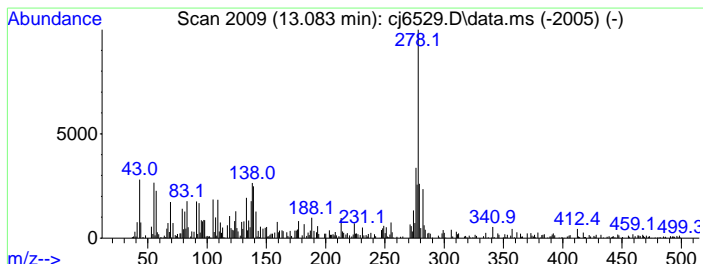
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 24 Unknown Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.083	4.32 ppm	330505	Perylene-d12	11.714

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Dibenz[a,h]anthracene	278	C22H14	000053-70-3	60
2		Benzo[b]triphenylene	278	C22H14	000215-58-7	58
3		1,2:7,8-Dibenzophenanthrene	278	C22H14	000213-46-7	58
4		Benzo[b]triphenylene	278	C22H14	000215-58-7	58
5		Dibenzo[b,h][1,6]naphthyridine, ...	278	C17H11ClN2	004240-91-9	49



7.14  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6529.D  
 Acq On : 09 May 2024 09:26 pm  
 Operator : rocquans  
 Sample : jd87833-2  
 Misc : op54460,ecj297,31.0,,,1,1  
 ALS Vial : 20 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

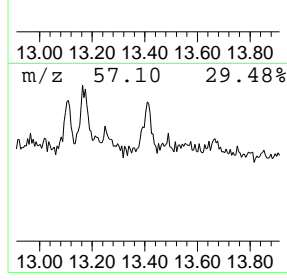
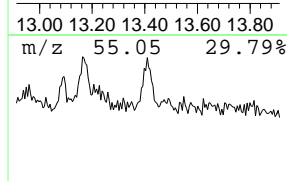
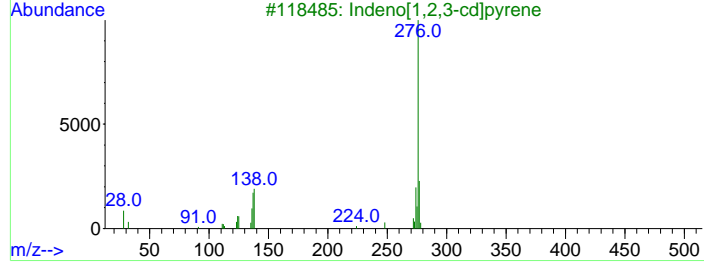
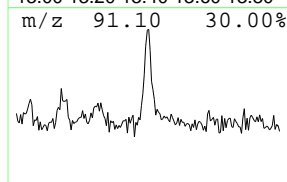
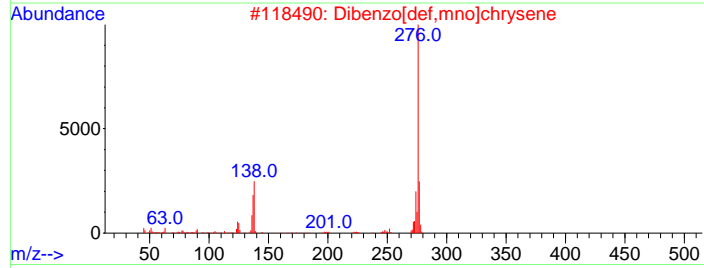
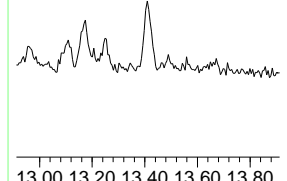
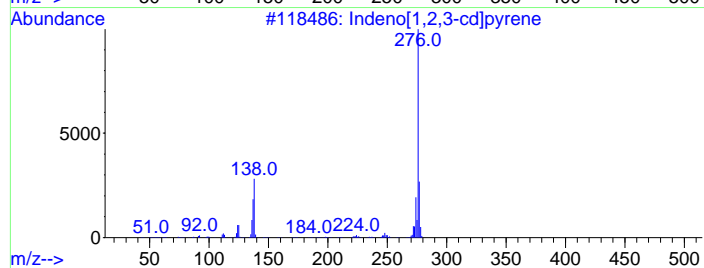
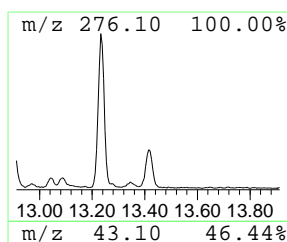
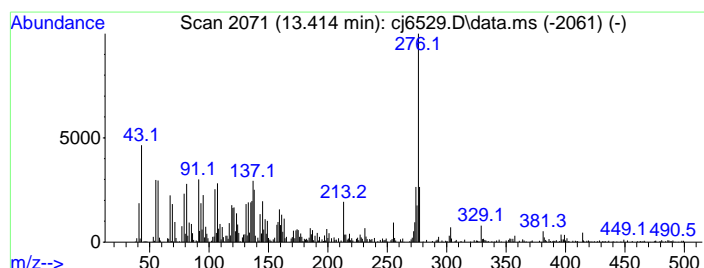
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 25 Unknown Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.414	8.02 ppm	613717	Perylene-d12	11.714

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Indeno[1,2,3-cd]pyrene	276	C22H12	000193-39-5	64
2		Dibenzo[def,mno]chrysene	276	C22H12	000191-26-4	64
3		Indeno[1,2,3-cd]pyrene	276	C22H12	000193-39-5	49
4		Benzo[ghi]perylene	276	C22H12	000191-24-2	49
5		Indeno[1,2,3-cd]fluoranthene	276	C22H12	000193-43-1	47



7.1.4  
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Tentatively Identified Compound (LSC) summary

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6529.D  
 Acq On : 09 May 2024 09:26 pm  
 Operator : rocquans  
 Sample : jd87833-2  
 Misc : op54460,ecj297,31.0,,,1,1  
 ALS Vial : 20 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
Unknown	4.247	7.8	ppm	423953	2	4.664	2185250	40.0
Unknown	4.755	4.1	ppm	223566	2	4.664	2185250	40.0
Unknown	4.819	4.4	ppm	242155	2	4.664	2185250	40.0
Naphthalene, di...	6.402	5.7	ppm	453196	5	6.659	3157690	40.0
9H-Fluorene, me...	7.531	4.3	ppm	333347	6	7.868	3067310	40.0
Anthracene, methyl	8.322	10.7	ppm	818042	8	7.868	3067310	40.0
Phenanthrene, m...	8.344	10.0	ppm	769855	8	7.868	3067310	40.0
Unknown	8.419	11.9	ppm	908922	8	7.868	3067310	40.0
Phenanthrene, m...	8.440	5.7	ppm	439341	8	7.868	3067310	40.0
Unknown	8.595	7.9	ppm	608443	8	7.868	3067310	40.0
Phenanthrene, d...	8.836	7.2	ppm	549269	8	7.868	3067310	40.0
Anthracene, 2-e...	8.911	4.2	ppm	323415	8	7.868	3067310	40.0
Unknown	9.044	6.1	ppm	469777	8	7.868	3067310	40.0
Unknown	9.119	4.2	ppm	437661	9	10.366	4133100	40.0
Unknown	9.515	7.9	ppm	812471	9	10.366	4133100	40.0
Unknown	9.579	5.0	ppm	520402	9	10.366	4133100	40.0
Pyrene, methyl	9.617	4.2	ppm	433563	9	10.366	4133100	40.0
Benzo[b]naphtho...	10.114	4.3	ppm	443407	9	10.366	4133100	40.0
Alkene	10.906	4.1	ppm	423492	10	10.366	4133100	40.0
Unknown	11.050	4.4	ppm	338279	11	11.714	3060170	40.0
Unknown	11.521	6.2	ppm	472497	11	11.714	3060170	40.0
System artifact	12.206	4.4	ppm	337867	11	11.714	3060170	40.0
Unknown	12.446	11.1	ppm	847091	11	11.714	3060170	40.0
Unknown	13.083	4.3	ppm	330505	11	11.714	3060170	40.0
Unknown	13.414	8.0	ppm	613717	11	11.714	3060170	40.0

7.14  
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Quantitation Report (QT/LSC Reviewed)

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6525.D  
Acq On : 09 May 2024 08:11 pm  
Operator : rocquans  
Sample : jd87833-3 Inst : GCMSJC  
Misc : op54460,ecj297,30.9,,,1,2  
ALS Vial : 16 Sample Multiplier: 1

Quant Time: May 10 18:39:31 2024  
Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
QLast Update : Thu May 09 12:05:48 2024  
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.664	152	371394	40.00	ppm	0.00
24) Naphthalene-d8	5.466	136	1320304	40.00	ppm	0.00
46) Acenaphthene-d10	6.659	164	765413	40.00	ppm	0.00
69) Phenanthrene-d10	7.868	188	1361747	40.00	ppm	0.00
84) Chrysene-d12	10.366	240	942754	40.00	ppm	0.00
93) Perylene-d12	11.714	264	959803	40.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.664	152	371394	40.00	ppm	0.00
105) Phenanthrene-d10a	7.868	188	1361747	40.00	ppm	0.00
107) Naphthalene-d8a	5.466	136	1320304	40.00	ppm	0.00
109) Phenanthrene-d10b	7.868	188	1361747	40.00	ppm	0.00
112) Chrysene-d12a	10.366	240	942754	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.803	112	174507	16.35	ppm	0.00
Spiked Amount 50.000			Recovery =	32.70%		
8) Phenol-d5	4.418	99	233185	16.94	ppm	0.00
Spiked Amount 50.000			Recovery =	33.88%		
25) Nitrobenzene-d5	5.012	82	227204	16.81	ppm	0.00
Spiked Amount 50.000			Recovery =	33.62%		
51) 2-Fluorobiphenyl	6.167	172	428799	17.80	ppm	0.00
Spiked Amount 50.000			Recovery =	35.60%		
74) 2,4,6-Tribromophenol	7.269	330	57277	19.18	ppm	0.00
Spiked Amount 50.000			Recovery =	38.36%		
87) Terphenyl-d14	9.349	244	435670	18.70	ppm	0.00
Spiked Amount 50.000			Recovery =	37.40%		
110) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						
						Qvalue
38) Naphthalene	5.482	128	14902	0.4712	ppm	98
44) 2-Methylnaphthalene	5.921	141	7338	0.3913	ppm	90
53) Biphenyl	6.236	154	5103	0.1940	ppm	87
56) Acenaphthylene	6.552	152	73751	2.4843	ppm	99
59) Acenaphthene	6.680	153	38391	1.8185	ppm	98
62) Dibenzofuran	6.809	168	34731	1.1855	ppm	98
66) Fluorene	7.076	166	65318	2.8223	ppm	98
78) Phenanthrene	7.889	178	779881	23.6976	ppm	99
79) Anthracene	7.932	178	242660	7.3639	ppm	98
80) Carbazole	8.071	167	47697	1.5533	ppm	99
82) Fluoranthene	8.980	202	1532240	43.0062	ppm	99
86) Pyrene	9.194	202	1375233	42.8934	ppm	98
89) Benzo[a]anthracene	10.355	228	619873	20.4498	ppm	97
91) Chrysene	10.387	228	494809	17.6929	ppm	98
95) Benzo[b]fluoranthene	11.350	252	680593m	23.4733	ppm	
96) Benzo[k]fluoranthene	11.371	252	173014m	6.6314	ppm	
97) Benzo[a]pyrene	11.660	252	478307	19.9276	ppm	99
98) Indeno[1,2,3-cd]pyrene	12.890	276	298394	10.2836	ppm	98
100) Dibenz[a,h]anthracene	12.912	278	73052	3.1508	ppm	95
102) Benzo[g,h,i]perylene	13.233	276	278104	12.3332	ppm	98
-----						

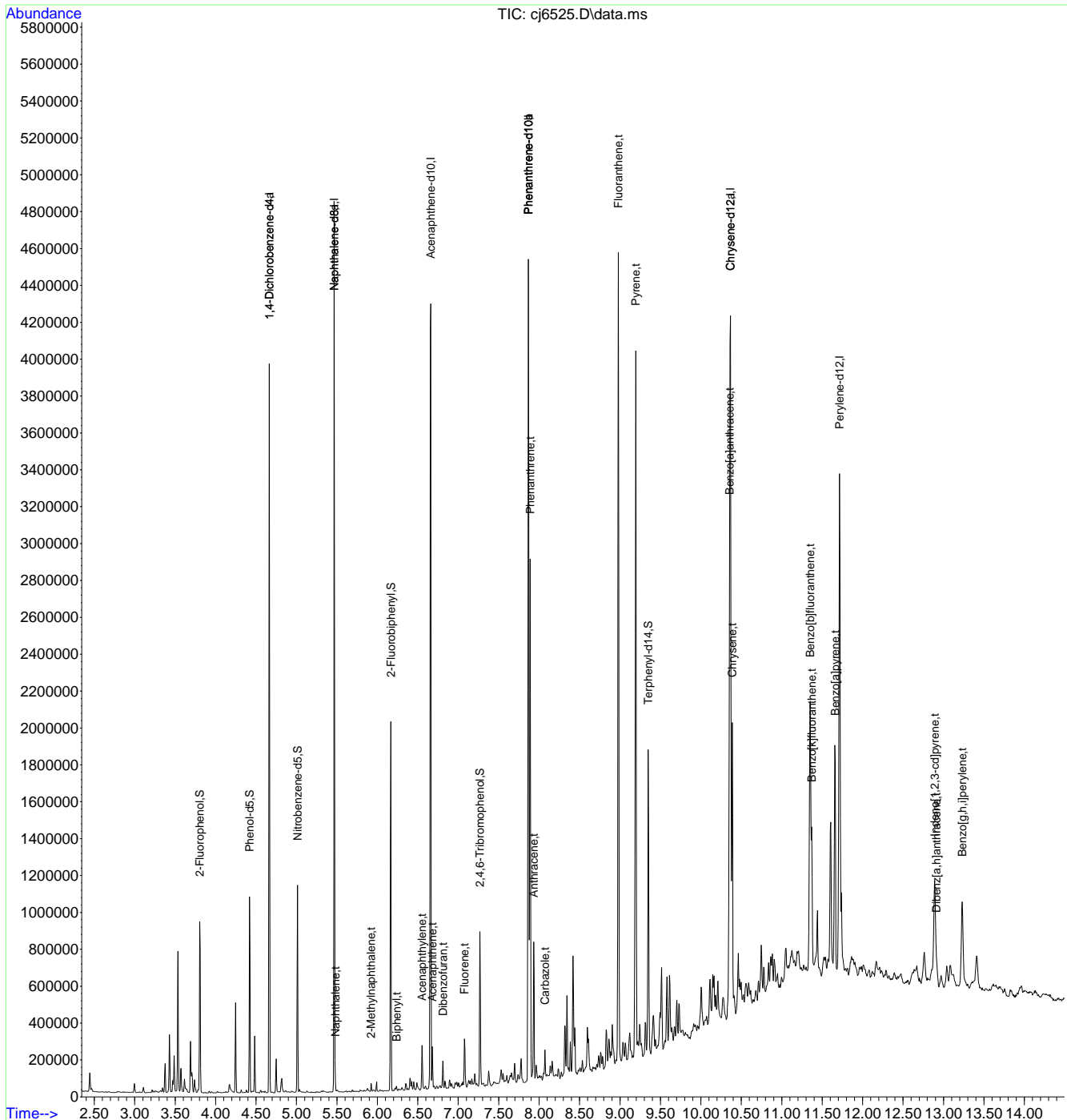
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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7

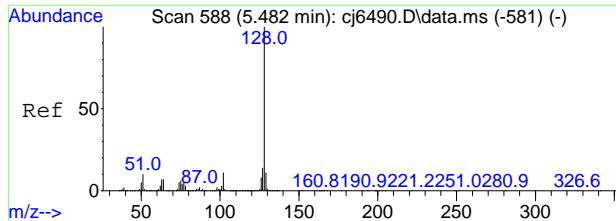
Quantitation Report (QT/LSC Reviewed)

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6525.D  
Acq On : 09 May 2024 08:11 pm  
Operator : rocquans  
Sample : jd87833-3 Inst : GCMSCJ  
Misc : op54460,ecj297,30.9,,,1,2  
ALS Vial : 16 Sample Multiplier: 1

Quant Time: May 10 18:39:31 2024  
Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
QLast Update : Thu May 09 12:05:48 2024  
Response via : Initial Calibration

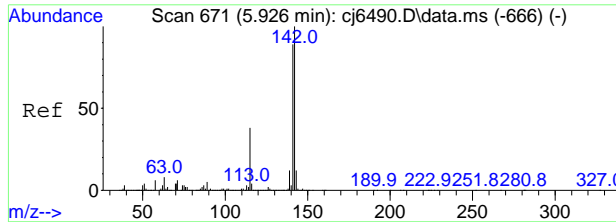
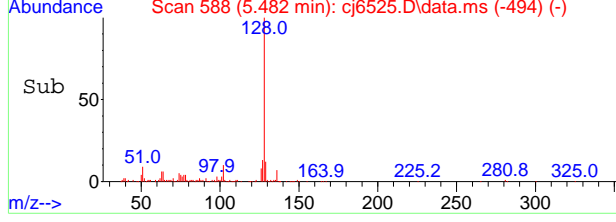
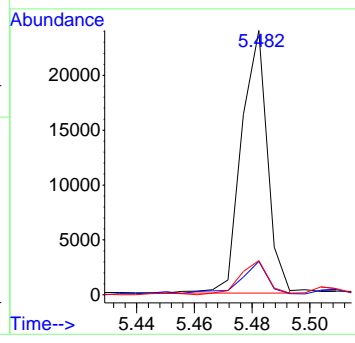
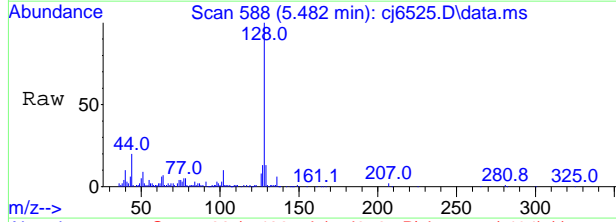


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7



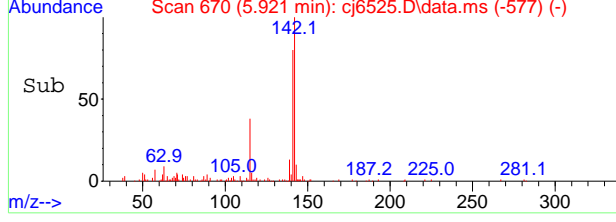
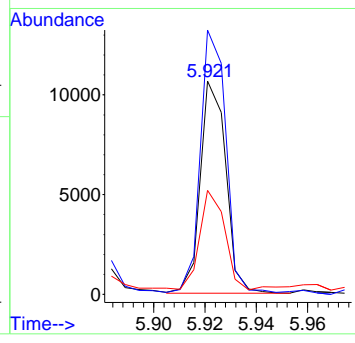
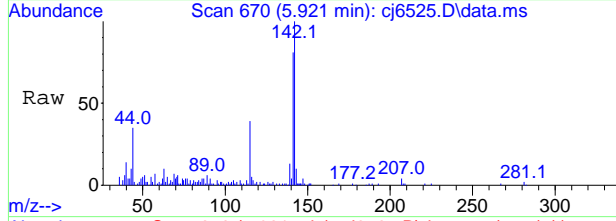
#38  
 Naphthalene  
 Concen: 0.4712 ppm  
 RT: 5.482 min Scan# 588  
 Delta R.T. 0.000 min  
 Lab File: cj6525.D  
 Acq: 09 May 2024 08:11 pm

Tgt Ion	Ratio	Lower	Upper
128	100		
129	12.0	0.0	41.4
127	12.5	0.0	43.3

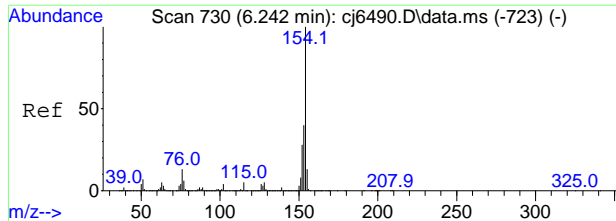


#44  
 2-Methylnaphthalene  
 Concen: 0.3913 ppm  
 RT: 5.921 min Scan# 670  
 Delta R.T. -0.005 min  
 Lab File: cj6525.D  
 Acq: 09 May 2024 08:11 pm

Tgt Ion	Ratio	Lower	Upper
141	100		
142	124.7	82.7	142.7
115	45.9	12.4	72.4

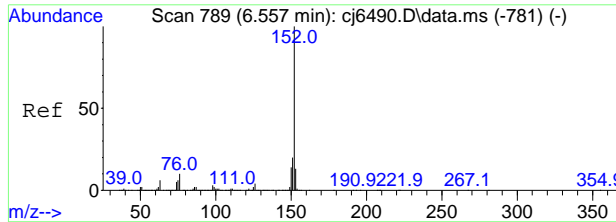
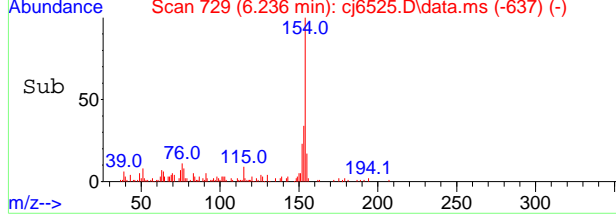
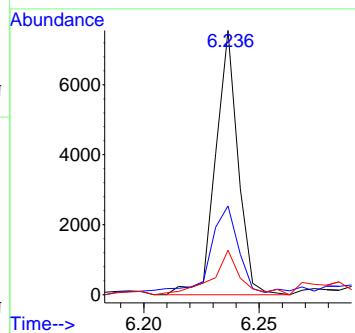
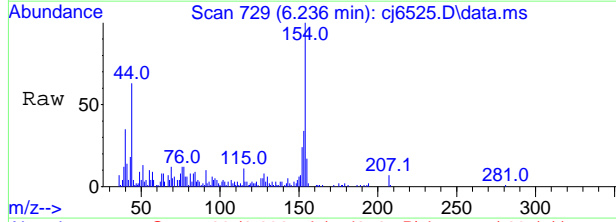






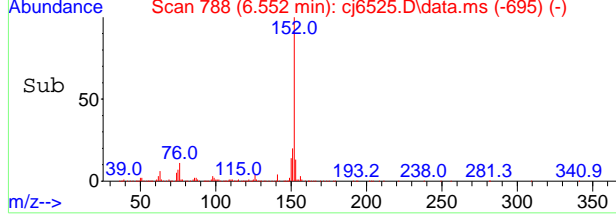
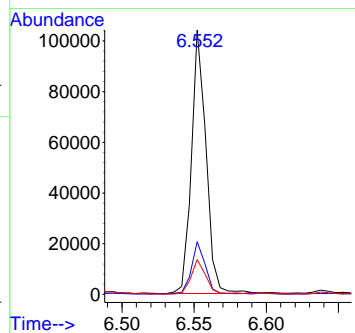
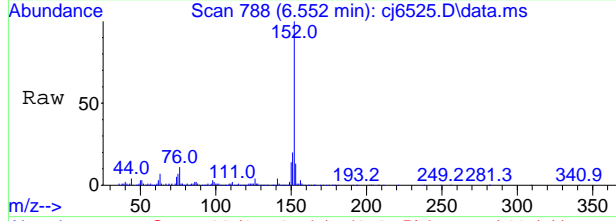
#53  
 Biphenyl  
 Concen: 0.1940 ppm  
 RT: 6.236 min Scan# 729  
 Delta R.T. -0.006 min  
 Lab File: cj6525.D  
 Acq: 09 May 2024 08:11 pm

Tgt Ion	Ratio	Lower	Upper
154	100		
153	31.7	10.5	70.5
155	16.5	0.0	42.8



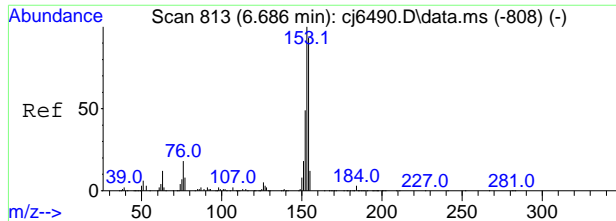
#56  
 Acenaphthylene  
 Concen: 2.4843 ppm  
 RT: 6.552 min Scan# 788  
 Delta R.T. -0.005 min  
 Lab File: cj6525.D  
 Acq: 09 May 2024 08:11 pm

Tgt Ion	Ratio	Lower	Upper
152	100		
151	19.9	0.0	50.3
153	13.1	0.0	43.4



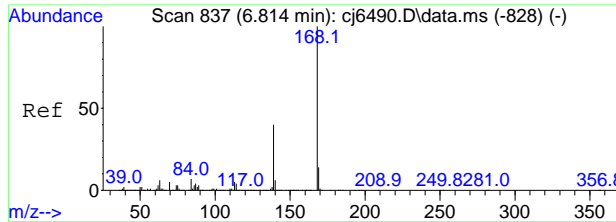
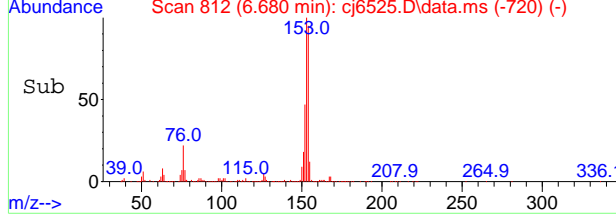
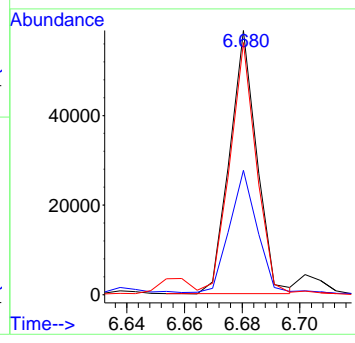
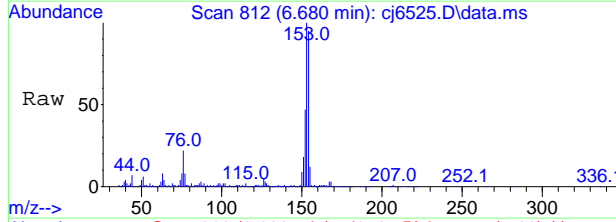
7.15  
7





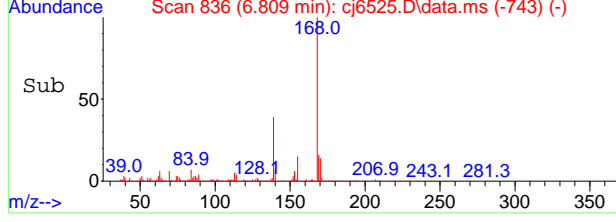
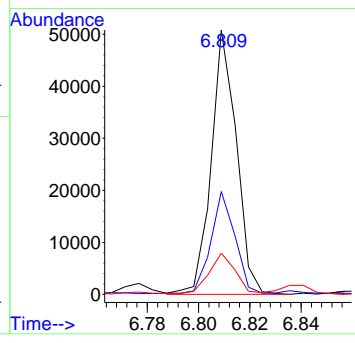
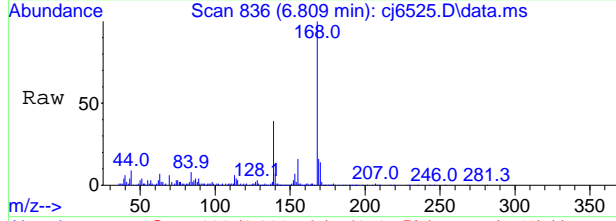
#59  
 Acenaphthene  
 Concen: 1.8185 ppm  
 RT: 6.680 min Scan# 812  
 Delta R.T. -0.006 min  
 Lab File: cj6525.D  
 Acq: 09 May 2024 08:11 pm

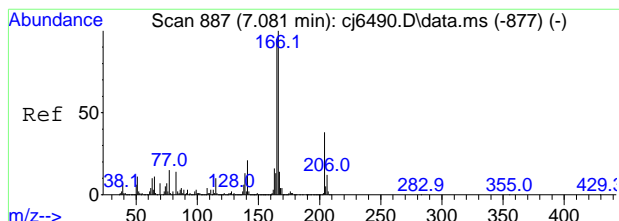
Tgt Ion	Resp	Lower	Upper
153	38391		
152	46.5	18.8	78.8
154	93.4	62.9	122.9



#62  
 Dibenzofuran  
 Concen: 1.1855 ppm  
 RT: 6.809 min Scan# 836  
 Delta R.T. -0.005 min  
 Lab File: cj6525.D  
 Acq: 09 May 2024 08:11 pm

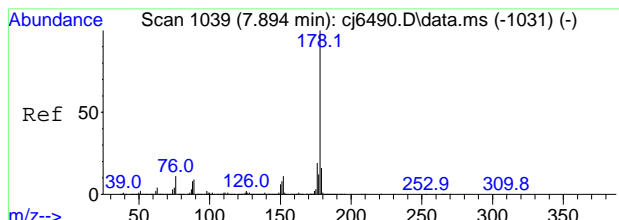
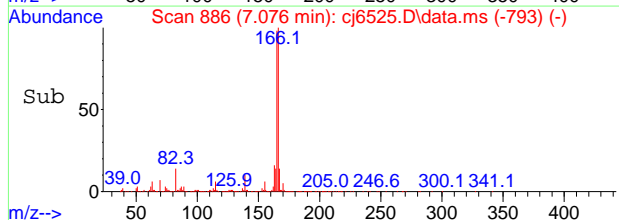
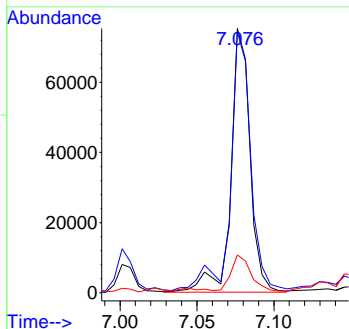
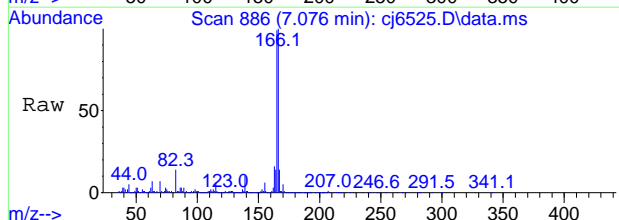
Tgt Ion	Resp	Lower	Upper
168	34731		
139	38.1	10.0	70.0
169	13.8	0.0	43.7





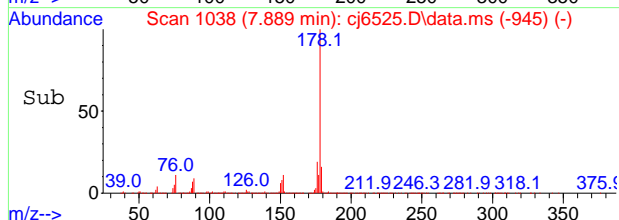
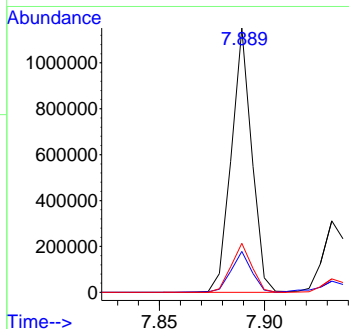
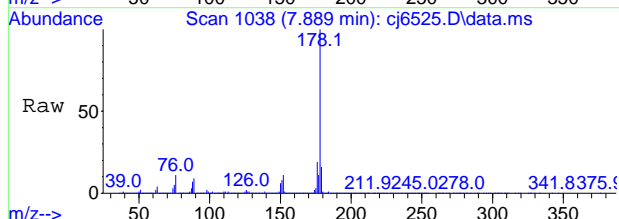
#66  
 Fluorene  
 Concen: 2.8223 ppm  
 RT: 7.076 min Scan# 886  
 Delta R.T. -0.005 min  
 Lab File: cj6525.D  
 Acq: 09 May 2024 08:11 pm

Tgt Ion	Ratio	Lower	Upper
166	100		
165	97.9	65.4	125.4
167	13.5	0.0	43.8

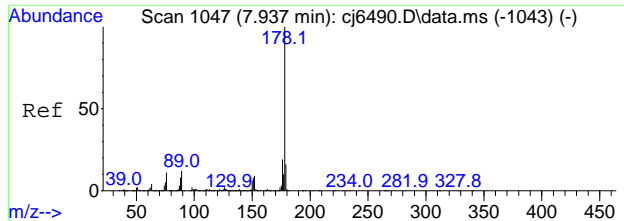


#78  
 Phenanthrene  
 Concen: 23.6976 ppm  
 RT: 7.889 min Scan# 1038  
 Delta R.T. -0.005 min  
 Lab File: cj6525.D  
 Acq: 09 May 2024 08:11 pm

Tgt Ion	Ratio	Lower	Upper
178	100		
179	15.4	0.0	45.5
176	18.6	0.0	49.2

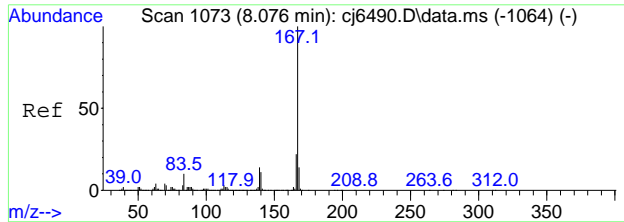
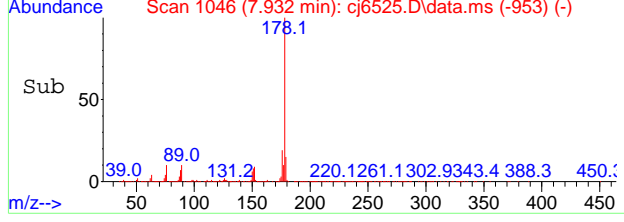
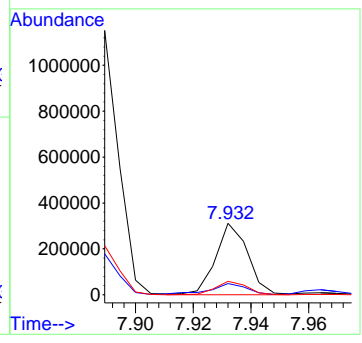
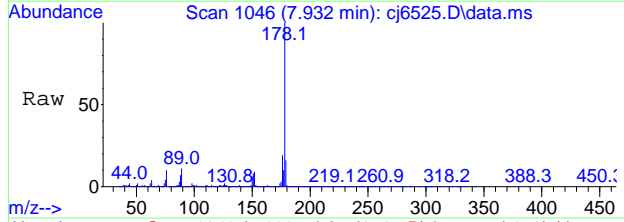


7.15  
7



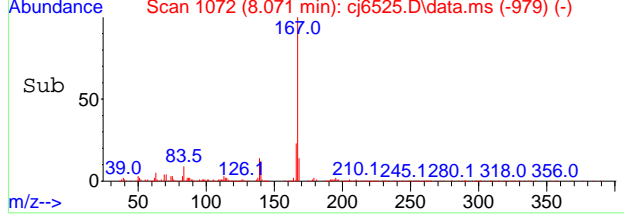
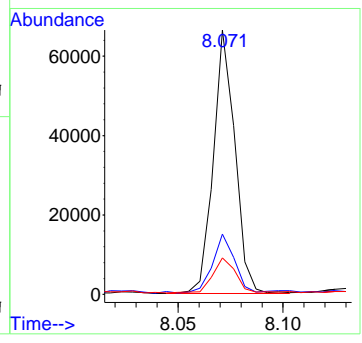
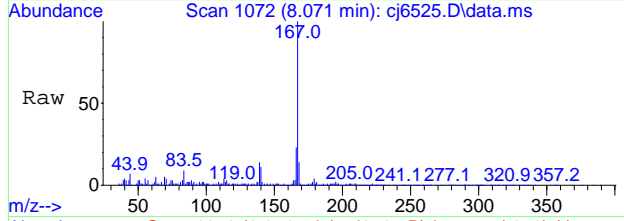
#79  
 Anthracene  
 Concen: 7.3639 ppm  
 RT: 7.932 min Scan# 1046  
 Delta R.T. -0.005 min  
 Lab File: cj6525.D  
 Acq: 09 May 2024 08:11 pm

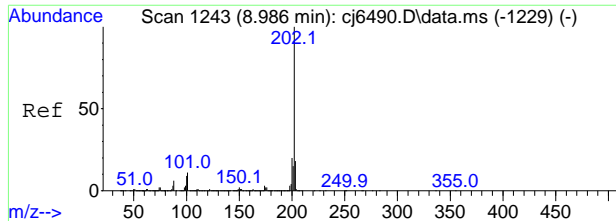
Tgt Ion	Ratio	Lower	Upper
178	100		
179	14.4	0.0	46.1
176	19.0	0.0	48.7



#80  
 Carbazole  
 Concen: 1.5533 ppm  
 RT: 8.071 min Scan# 1072  
 Delta R.T. -0.005 min  
 Lab File: cj6525.D  
 Acq: 09 May 2024 08:11 pm

Tgt Ion	Ratio	Lower	Upper
167	100		
166	21.6	0.0	51.7
139	13.1	0.0	43.8

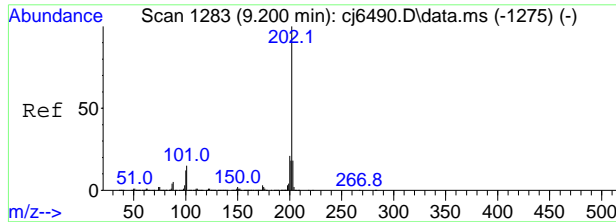
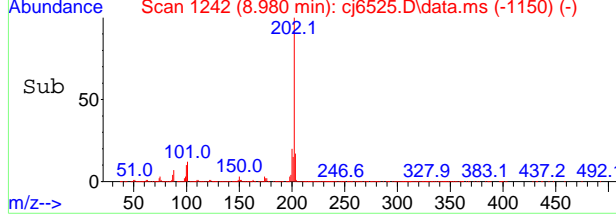
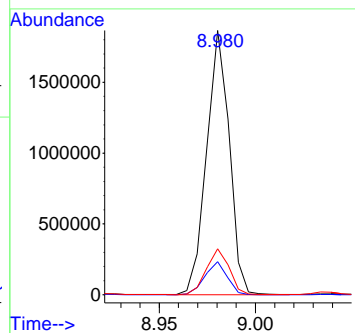
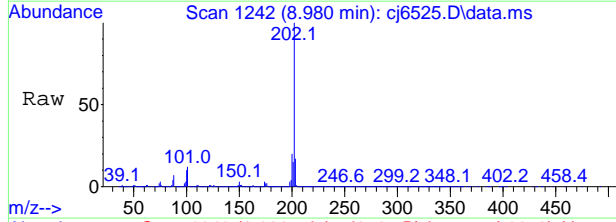




#82  
Fluoranthene  
Concen: 43.0062 ppm  
RT: 8.980 min Scan# 1242  
Delta R.T. -0.006 min  
Lab File: cj6525.D  
Acq: 09 May 2024 08:11 pm

Tgt Ion:202 Resp: 1532240

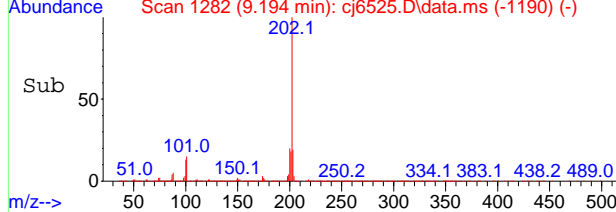
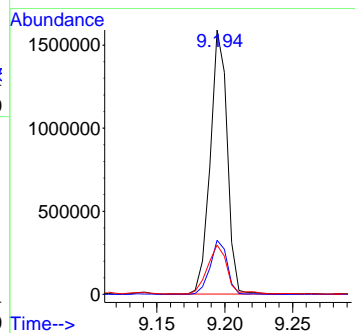
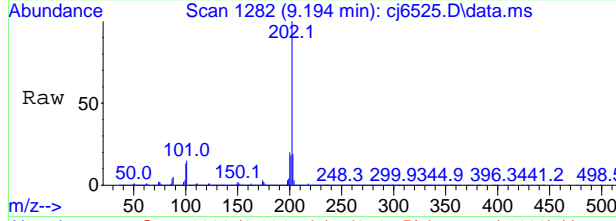
Ion	Ratio	Lower	Upper
202	100		
101	12.5	0.0	41.4
203	17.3	0.0	47.6

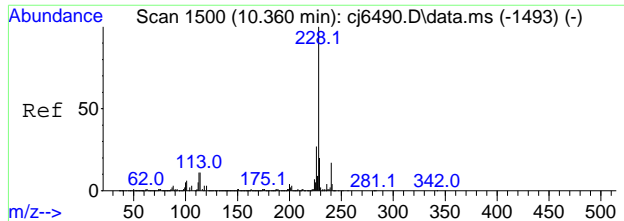


#86  
Pyrene  
Concen: 42.8934 ppm  
RT: 9.194 min Scan# 1282  
Delta R.T. -0.006 min  
Lab File: cj6525.D  
Acq: 09 May 2024 08:11 pm

Tgt Ion:202 Resp: 1375233

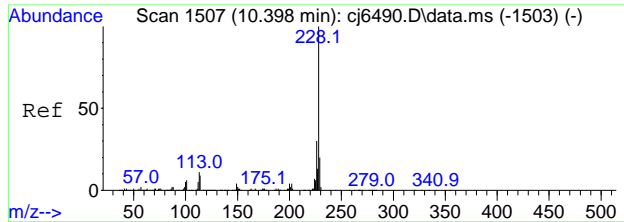
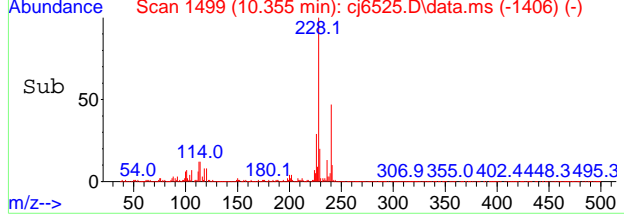
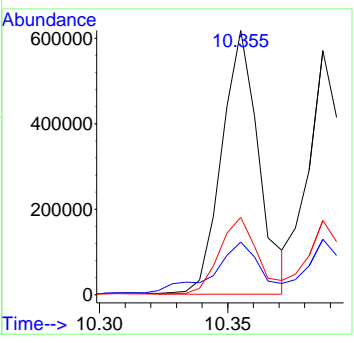
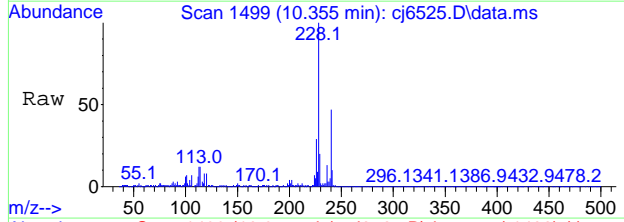
Ion	Ratio	Lower	Upper
202	100		
200	20.5	0.0	51.4
203	18.5	0.0	47.8





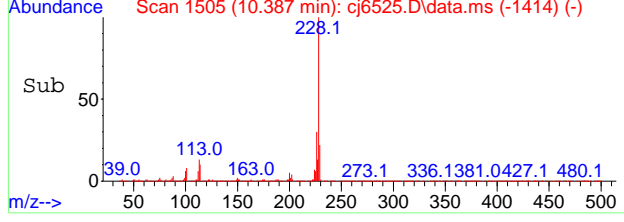
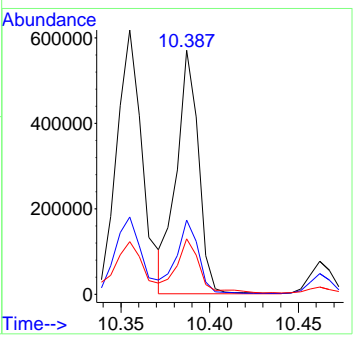
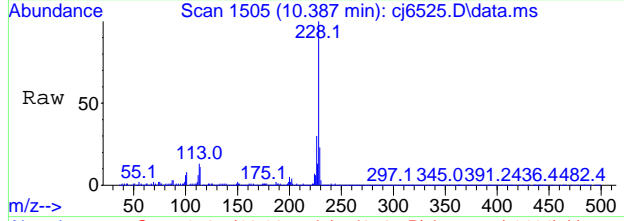
#89  
Benzo[a]anthracene  
Concen: 20.4498 ppm  
RT: 10.355 min Scan# 1499  
Delta R.T. -0.005 min  
Lab File: cj6525.D  
Acq: 09 May 2024 08:11 pm

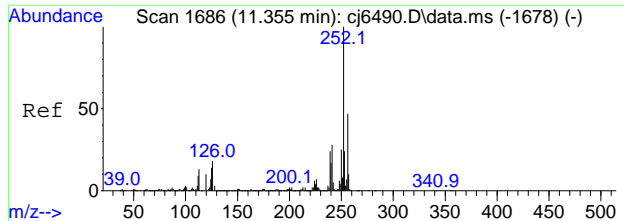
Tgt Ion	Ratio	Lower	Upper
228	100		
229	18.6	0.0	49.8
226	28.9	0.0	57.1



#91  
Chrysene  
Concen: 17.6929 ppm  
RT: 10.387 min Scan# 1505  
Delta R.T. -0.011 min  
Lab File: cj6525.D  
Acq: 09 May 2024 08:11 pm

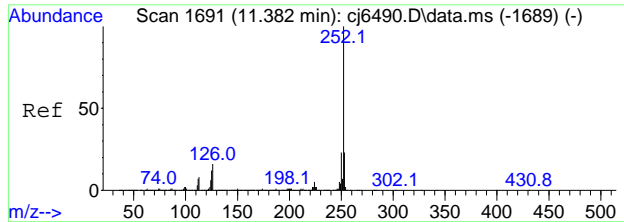
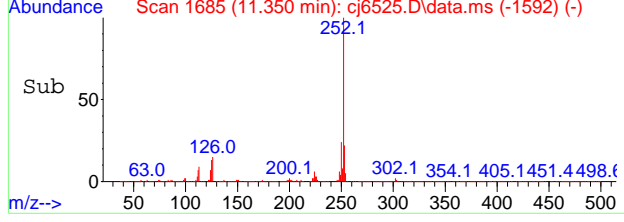
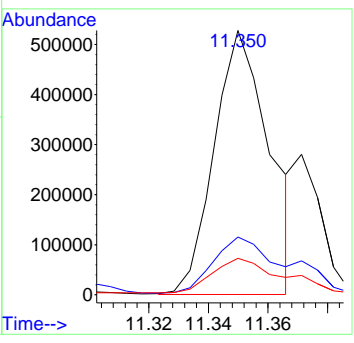
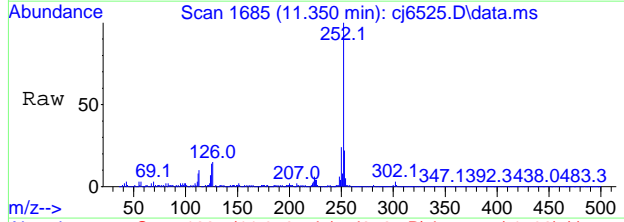
Tgt Ion	Ratio	Lower	Upper
228	100		
226	30.1	0.0	59.9
229	22.1	0.0	49.8





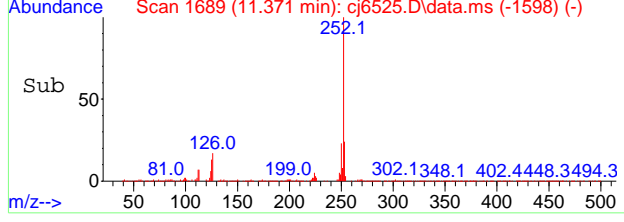
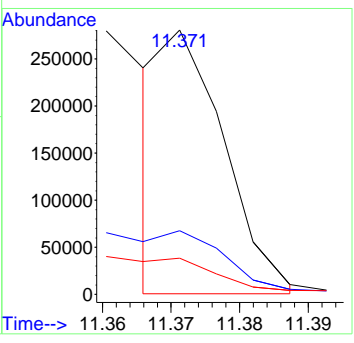
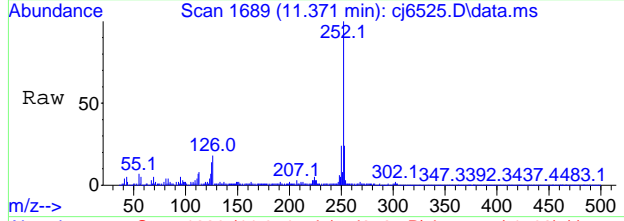
#95  
Benzo[b]fluoranthene  
Concen: 23.4733 ppm m  
RT: 11.350 min Scan# 1685  
Delta R.T. -0.005 min  
Lab File: cj6525.D  
Acq: 09 May 2024 08:11 pm

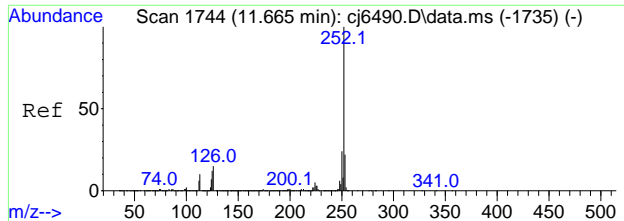
Tgt Ion	Ratio	Lower	Upper
252	100		
253	21.9	0.0	54.7
125	13.8	0.0	44.2



#96  
Benzo[k]fluoranthene  
Concen: 6.6314 ppm m  
RT: 11.371 min Scan# 1689  
Delta R.T. -0.011 min  
Lab File: cj6525.D  
Acq: 09 May 2024 08:11 pm

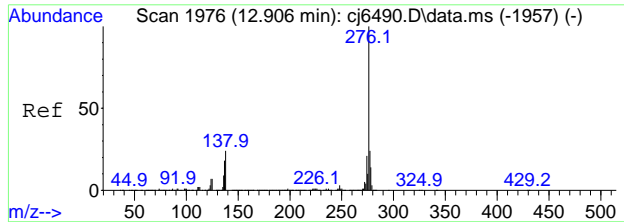
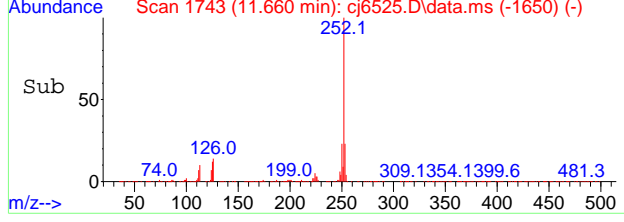
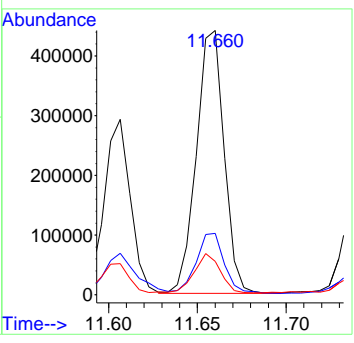
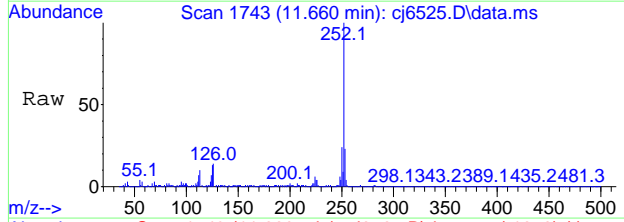
Tgt Ion	Ratio	Lower	Upper
252	100		
253	24.1	0.0	52.6
125	13.7	0.0	42.4





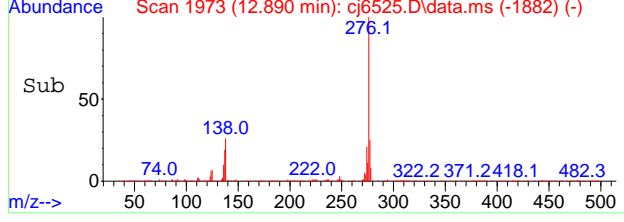
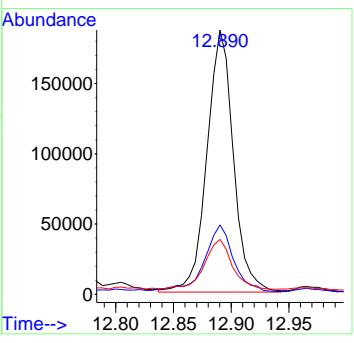
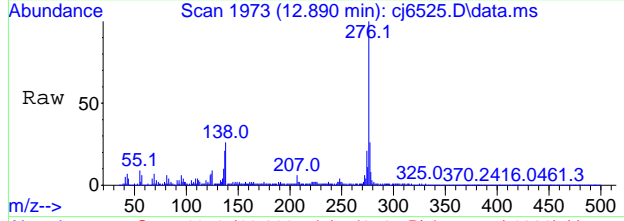
#97  
Benzo[a]pyrene  
Concen: 19.9276 ppm  
RT: 11.660 min Scan# 1743  
Delta R.T. -0.005 min  
Lab File: cj6525.D  
Acq: 09 May 2024 08:11 pm

Tgt Ion	Ratio	Lower	Upper
252	100		
253	22.1	0.0	51.9
125	11.8	0.0	42.1

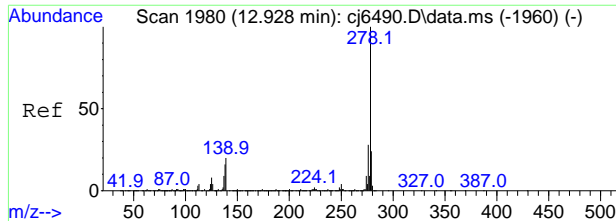


#98  
Indeno[1,2,3-cd]pyrene  
Concen: 10.2836 ppm  
RT: 12.890 min Scan# 1973  
Delta R.T. -0.016 min  
Lab File: cj6525.D  
Acq: 09 May 2024 08:11 pm

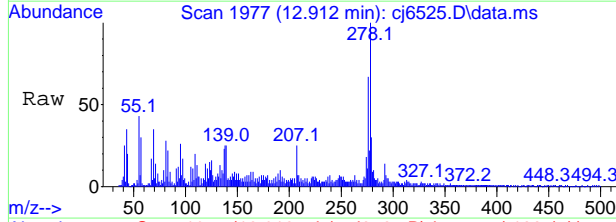
Tgt Ion	Ratio	Lower	Upper
276	100		
138	25.1	0.0	54.2
137	19.0	0.0	47.9





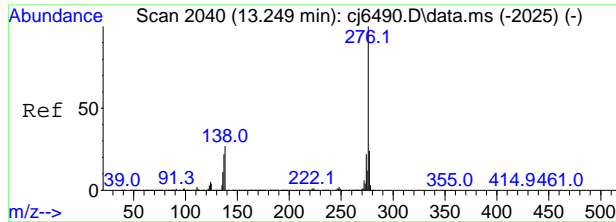
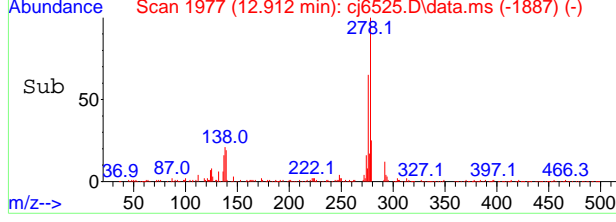
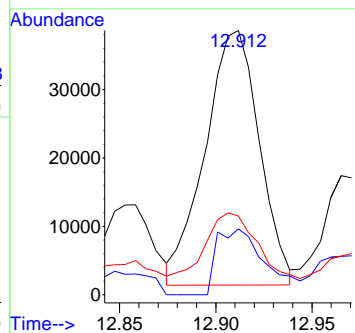


#100  
 Dibenz[a,h]anthracene  
 Concen: 3.1508 ppm  
 RT: 12.912 min Scan# 1977  
 Delta R.T. -0.016 min  
 Lab File: cj6525.D  
 Acq: 09 May 2024 08:11 pm

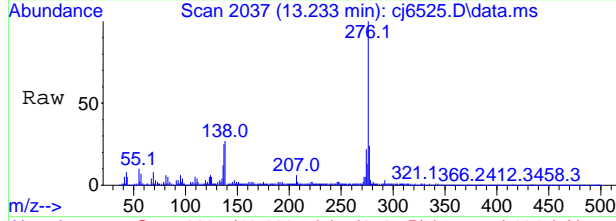


Tgt Ion: 278 Resp: 73052

Ion	Ratio	Lower	Upper
278	100		
139	23.9	0.0	49.8
279	25.1	0.0	54.1

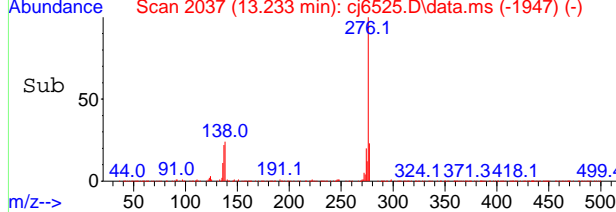
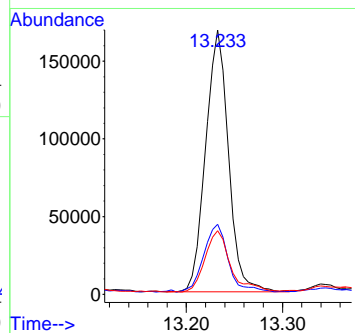


#102  
 Benzo[g,h,i]perylene  
 Concen: 12.3332 ppm  
 RT: 13.233 min Scan# 2037  
 Delta R.T. -0.016 min  
 Lab File: cj6525.D  
 Acq: 09 May 2024 08:11 pm



Tgt Ion: 276 Resp: 278104

Ion	Ratio	Lower	Upper
276	100		
138	25.6	0.0	56.7
277	23.1	0.0	54.1



7.15  
7



LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6525.D  
Acq On : 09 May 2024 08:11 pm  
Operator : rocquans  
Sample : jd87833-3  
Misc : op54460,ecj297,30.9,,,1,2  
ALS Vial : 16 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON  
Sampling : 1  
Start Thrs: 0.02  
Stop Thrs : 0  
Filtering: 5  
Min Area: 1000 Area counts  
Max Peaks: 100  
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

Signal : TIC: cj6525.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.247	352	357	367	rVB	488756	286489	5.52%	0.489%
2	4.418	386	389	394	rBV	1062797	689136	13.27%	1.177%
3	4.482	398	401	405	rVB	307375	169946	3.27%	0.290%
4	4.664	429	435	439	rBV	3953784	2284831	44.01%	3.902%
5	4.750	447	451	455	rBV	184593	125627	2.42%	0.215%
6	4.819	458	464	469	rBV3	74888	76333	1.47%	0.130%
7	5.012	494	500	503	rBV	1123500	646948	12.46%	1.105%
8	5.466	578	585	590	rBV	4831919	2859647	55.08%	4.884%
9	6.167	710	716	720	rBV	2002499	1278872	24.63%	2.184%
10	6.402	757	760	763	rBV	64448	60764	1.17%	0.104%
11	6.552	783	788	793	rBV	243068	181937	3.50%	0.311%
12	6.659	799	808	811	rBV	4260322	3373010	64.97%	5.761%
13	6.680	811	812	819	rVB	229510	118820	2.29%	0.203%
14	6.809	832	836	839	rBV	146831	104364	2.01%	0.178%
15	7.076	875	886	892	rVB	262967	255513	4.92%	0.436%
16	7.269	918	922	927	rBV	840136	637438	12.28%	1.089%
17	7.376	938	942	949	rVB4	81483	82060	1.58%	0.140%
18	7.531	964	971	973	rBV3	76519	88900	1.71%	0.152%
19	7.659	987	995	999	rBV5	57624	114037	2.20%	0.195%
20	7.697	999	1002	1006	rVB	104768	89031	1.71%	0.152%
21	7.777	1012	1017	1025	rVB	130416	146910	2.83%	0.251%
22	7.868	1025	1034	1036	rBV	4465763	3475696	66.95%	5.936%
23	7.889	1036	1038	1042	rVB	2804390	1826009	35.17%	3.119%
24	7.932	1042	1046	1050	rVB	730951	540477	10.41%	0.923%
25	8.071	1066	1072	1075	rBV2	164923	166300	3.20%	0.284%
26	8.162	1086	1089	1094	rVB3	82550	77050	1.48%	0.132%
27	8.317	1112	1118	1121	rBV	275205	273728	5.27%	0.467%
28	8.344	1121	1123	1128	rVB	412707	288960	5.57%	0.493%
29	8.387	1128	1131	1134	rBV	162038	104662	2.02%	0.179%
30	8.419	1134	1137	1147	rVB2	643490	760443	14.65%	1.299%
31	8.595	1162	1170	1181	rVB3	241242	388752	7.49%	0.664%
32	8.734	1190	1196	1199	rBV2	76701	100084	1.93%	0.171%
33	8.761	1199	1201	1204	rBV	82780	73510	1.42%	0.126%
34	8.831	1208	1214	1217	rBV	215503	249994	4.82%	0.427%
35	8.863	1217	1220	1223	rBV	120233	114810	2.21%	0.196%
36	8.906	1223	1228	1234	rVB2	213546	283089	5.45%	0.483%
37	8.980	1234	1242	1249	rBV	4399523	3663975	70.57%	6.257%
38	9.034	1249	1252	1256	rBV3	101544	116963	2.25%	0.200%
39	9.066	1256	1258	1263	rVB	91815	80358	1.55%	0.137%
40	9.119	1263	1268	1274	rBV4	145865	228539	4.40%	0.390%



7.1.6  
7

LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6525.D  
Acq On : 09 May 2024 08:11 pm  
Operator : rocquans  
Sample : jd87833-3  
Misc : op54460,ecj297,30.9,,,1,2  
ALS Vial : 16 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON  
Sampling : 1  
Start Thrs: 0.02  
Stop Thrs : 0  
Filtering: 5  
Min Area: 1000 Area counts  
Max Peaks: 100  
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS, zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

Table with 10 columns: Retention Time, Abundance, and Percent. Rows 41-85 showing peak data for various compounds.



7.16  
7

LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6525.D  
Acq On : 09 May 2024 08:11 pm  
Operator : rocquans  
Sample : jd87833-3  
Misc : op54460,ecj297,30.9,,,1,2  
ALS Vial : 16 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON Filtering: 5  
Sampling : 1 Min Area: 1000 Area counts  
Start Thrs: 0.02 Max Peaks: 100  
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

86	12.008	1806	1808	1817	rVB7	62253	116208	2.24%	0.198%
87	12.168	1834	1838	1843	rBV4	83268	151768	2.92%	0.259%
88	12.473	1892	1895	1903	rVB10	54809	90288	1.74%	0.154%
89	12.639	1915	1926	1928	rBV6	76362	201484	3.88%	0.344%
90	12.671	1929	1932	1937	rVB6	85891	116110	2.24%	0.198%
91	12.762	1942	1949	1955	rBV5	170318	317122	6.11%	0.542%
92	12.890	1962	1973	1983	rVB2	575694	1218638	23.47%	2.081%
93	12.971	1983	1988	1994	rVB2	64928	105899	2.04%	0.181%
94	13.040	1996	2001	2005	rBV	114792	173139	3.33%	0.296%
95	13.083	2005	2009	2014	rBV4	87046	153198	2.95%	0.262%
96	13.233	2029	2037	2048	rBV	457966	794022	15.29%	1.356%
97	13.409	2054	2070	2082	rVB2	185986	513344	9.89%	0.877%
98	13.618	2102	2109	2111	rBV8	37326	64132	1.24%	0.110%
99	13.826	2144	2148	2157	rVB8	39085	81307	1.57%	0.139%
100	13.960	2162	2173	2177	rBV8	53377	145714	2.81%	0.249%

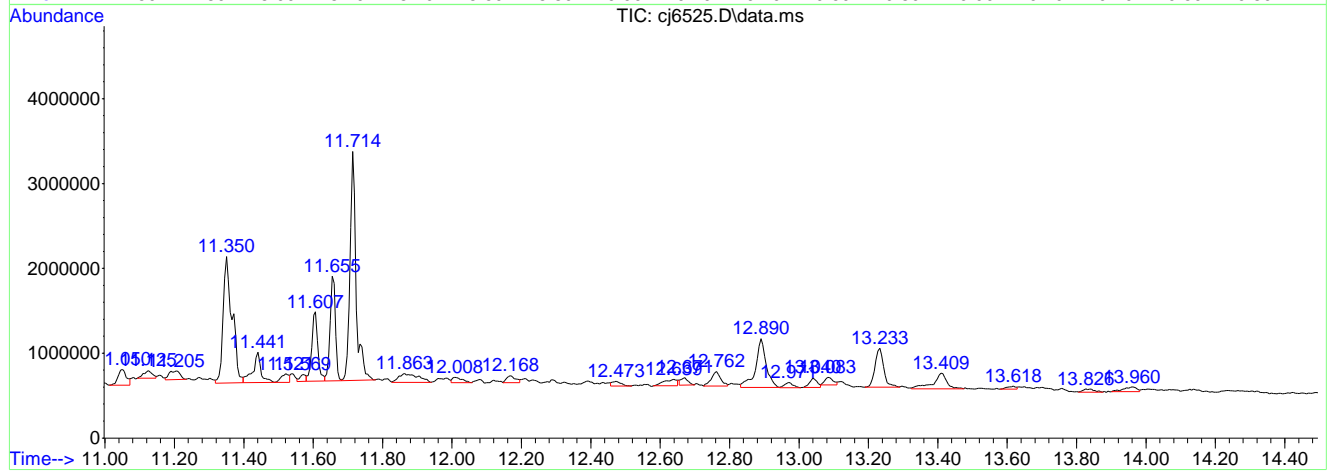
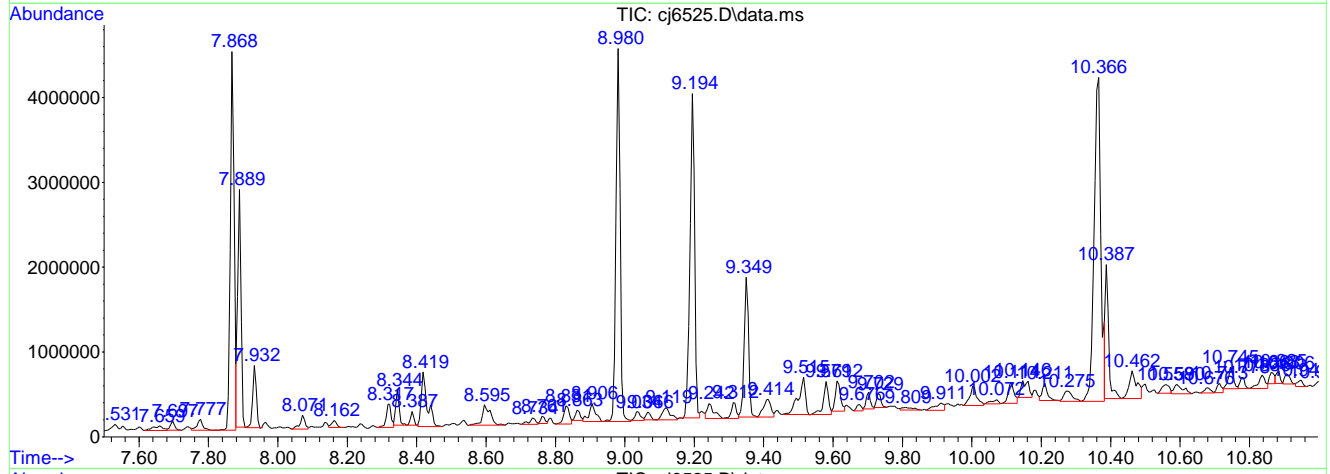
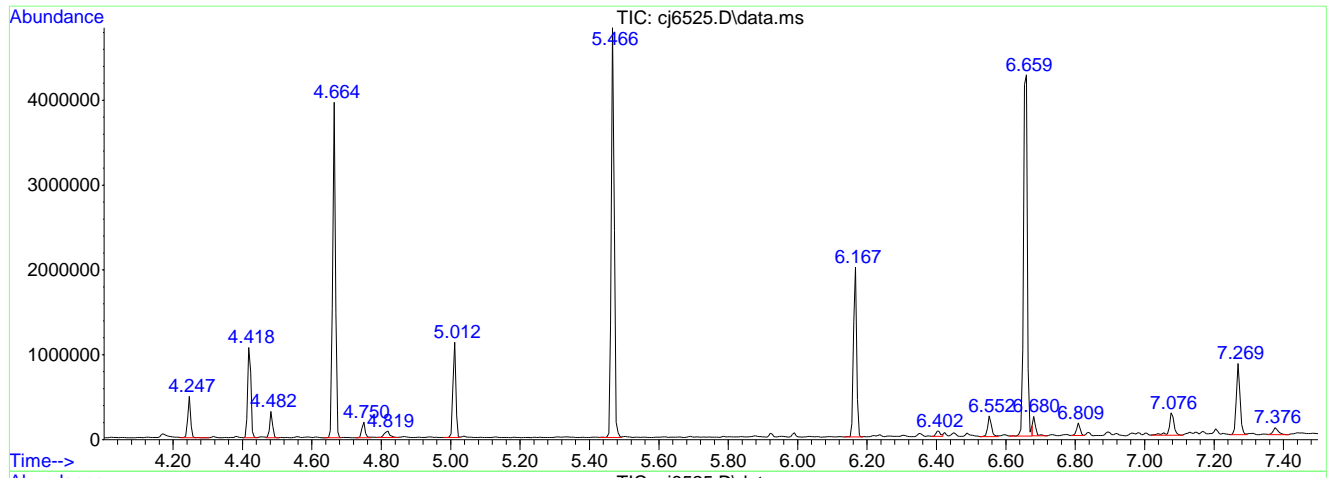
Sum of corrected areas: 58553894

LSC Report - Integrated Chromatogram

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6525.D  
Acq On : 09 May 2024 08:11 pm  
Operator : rocquans  
Sample : jd87833-3  
Misc : op54460,ecj297,30.9,,,1,2  
ALS Vial : 16 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p



7.1.6  
7



Library Search Compound Report

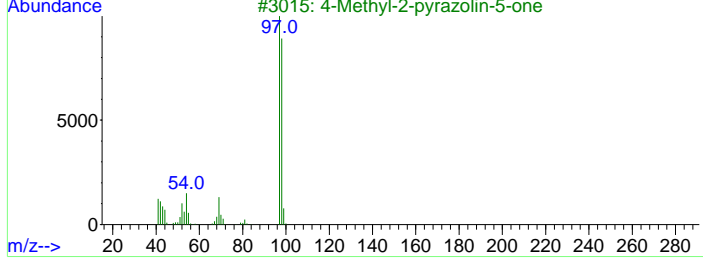
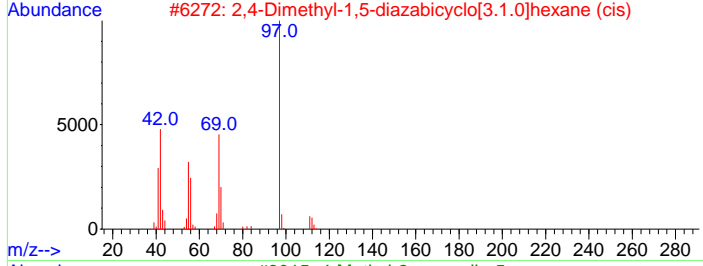
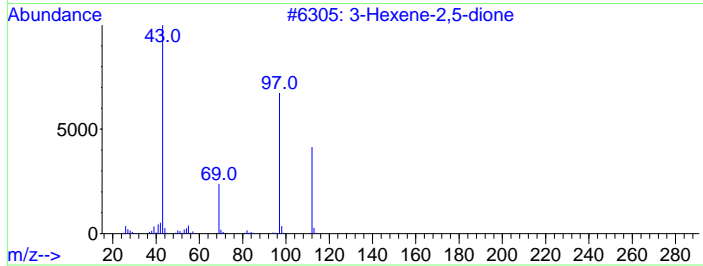
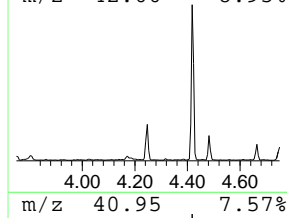
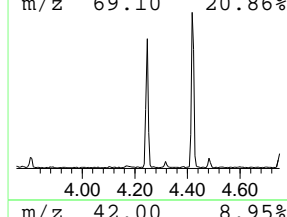
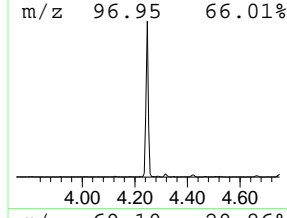
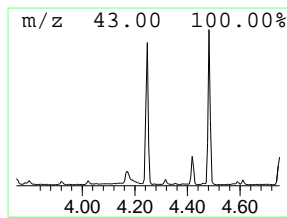
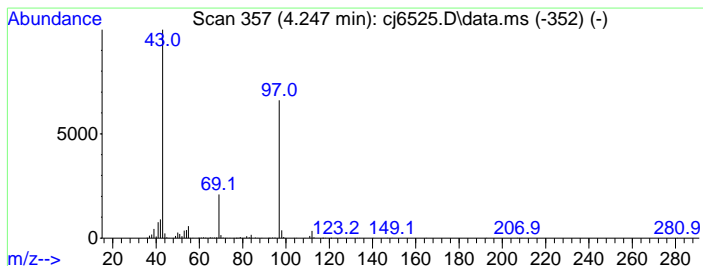
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Data File : cj6525.D
Acq On : 09 May 2024 08:11 pm
Operator : rocquans
Sample : jd87833-3
Misc : op54460,ecj297,30.9,,,1,2
ALS Vial : 16 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: lscint.p

\*\*\*\*\*
Peak Number 1 Unknown Concentration Rank 5

Table with 7 columns: R.T., EstConc, Area, Relative to ISTD, R.T., Hit# of 5, Tentative ID, MW, MolForm, CAS#, Qual. Row 1: 4.247, 5.02 ppm, 286489, 1,4-Dichlorobenzene-d4a, 4.664, 1, 3-Hexene-2,5-dione, 112, C6H8O2, 004436-75-3, 72.



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6525.D  
 Acq On : 09 May 2024 08:11 pm  
 Operator : rocquans  
 Sample : jd87833-3  
 Misc : op54460,ecj297,30.9,,,1,2  
 ALS Vial : 16 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

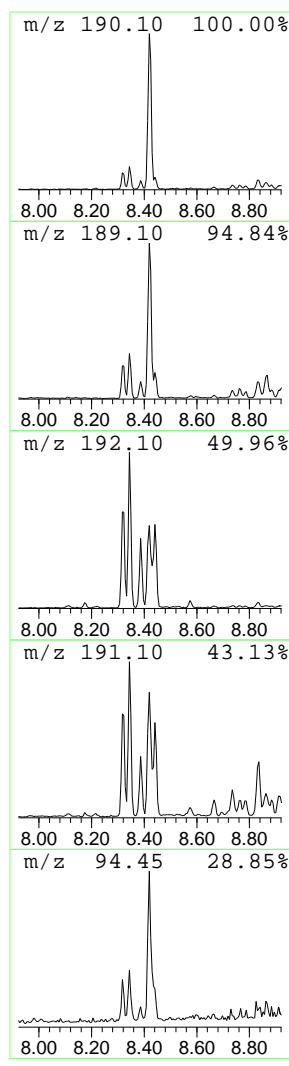
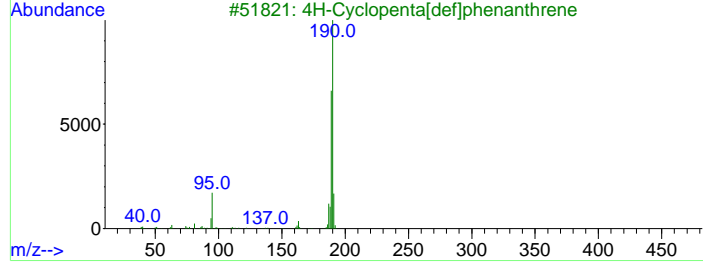
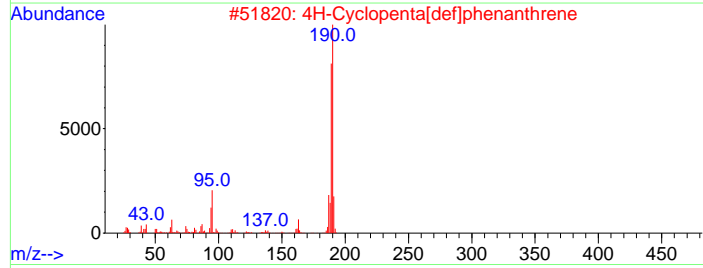
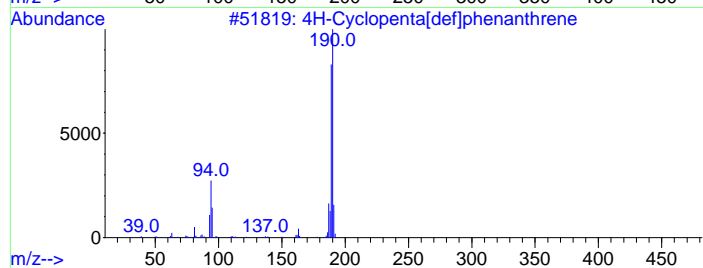
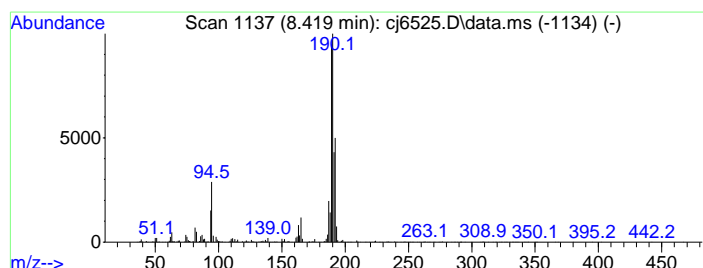
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 2 4H-Cyclopenta[def]phenanthrene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.419	8.75 ppm	760443	Phenanthrene-d10b	7.868

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	4H-Cyclopenta[def]phenanthrene	190	C15H10	000203-64-5	64
2		4H-Cyclopenta[def]phenanthrene	190	C15H10	000203-64-5	60
3		4H-Cyclopenta[def]phenanthrene	190	C15H10	000203-64-5	47
4		Carbonic acid, ethyl 2-formyl-4,...	262	C10H8Cl2O4	1000331-34-4	38
5		Methyl diselenide	190	C2H6Se2	007101-31-7	38



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6525.D  
 Acq On : 09 May 2024 08:11 pm  
 Operator : rocquans  
 Sample : jd87833-3  
 Misc : op54460,ecj297,30.9,,,1,2  
 ALS Vial : 16 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

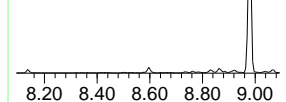
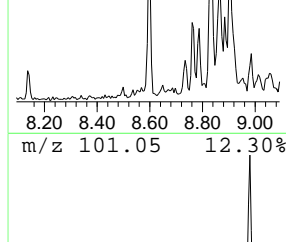
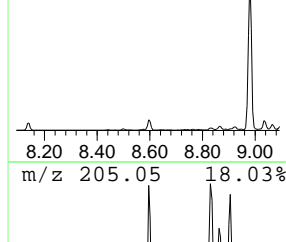
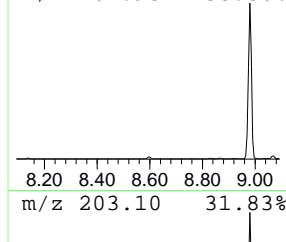
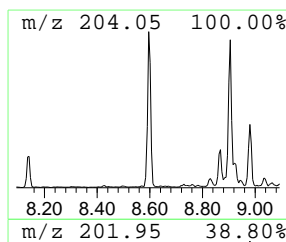
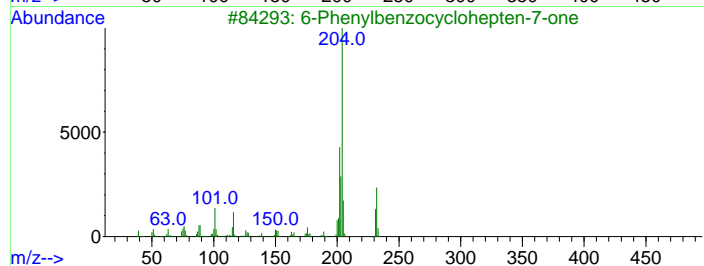
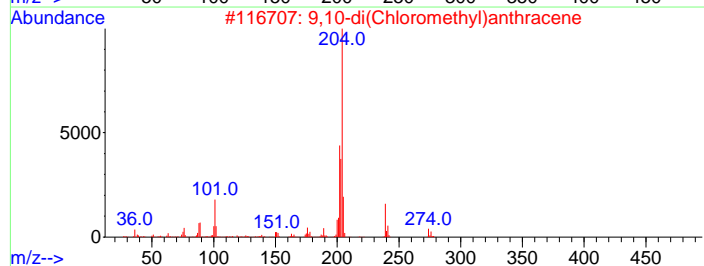
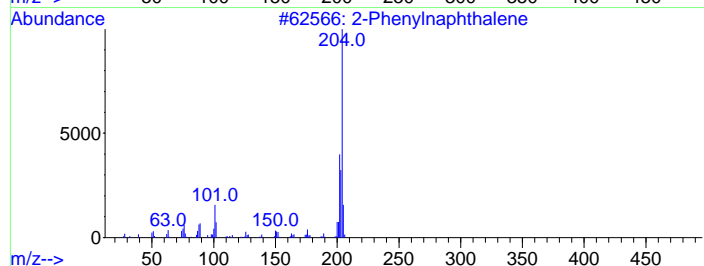
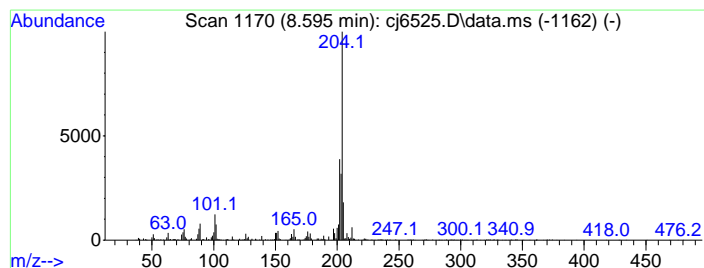
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 3 Unknown Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.595	4.47 ppm	388752	Phenanthrene-d10b	7.868

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2-Phenyl-naphthalene	204	C16H12	035465-71-5	92
2		9,10-di(Chloromethyl)anthracene	274	C16H12Cl2	010387-13-0	90
3		6-Phenylbenzocyclohepten-7-one	232	C17H12O	093327-56-1	86
4		Naphthalene, 2-phenyl-	204	C16H12	000612-94-2	83
5		5,16[1',2'] : 8,13[1'',2'']-Dibenz...	408	C32H24	005672-97-9	78





Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6525.D  
 Acq On : 09 May 2024 08:11 pm  
 Operator : rocquans  
 Sample : jd87833-3  
 Misc : op54460,ecj297,30.9,,,1,2  
 ALS Vial : 16 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

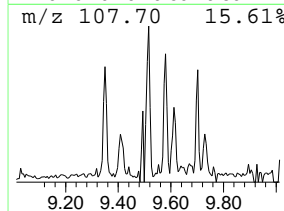
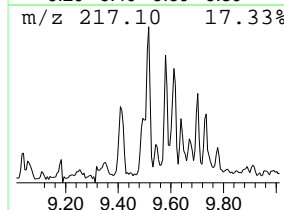
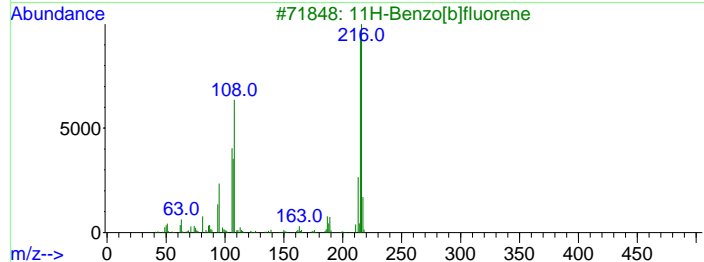
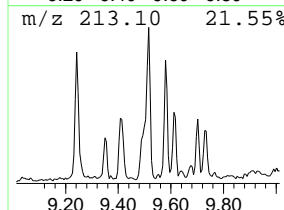
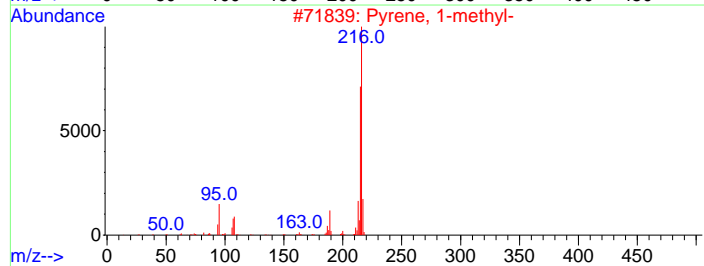
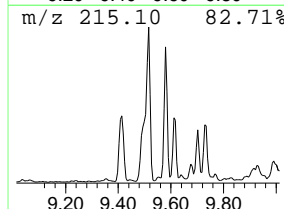
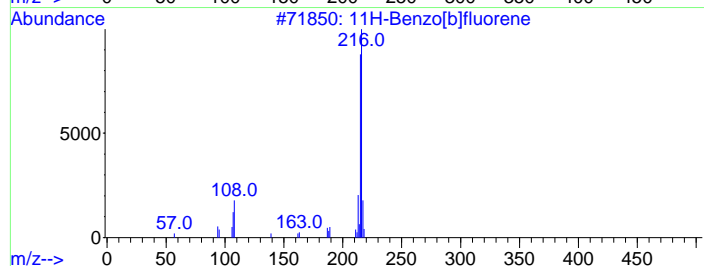
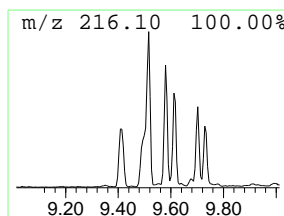
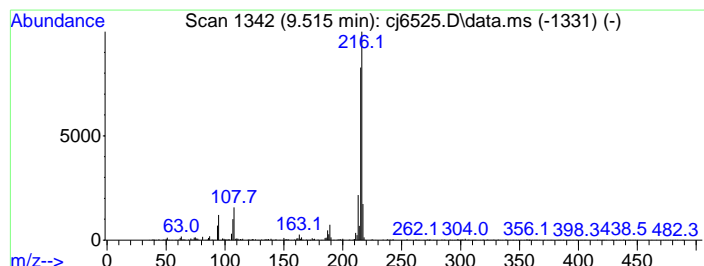
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 4 11H-Benzo[b]fluorene Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.515	4.74 ppm	615520	Chrysene-d12	10.366

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	11H-Benzo[b]fluorene	216	C17H12	000243-17-4	94
2		Pyrene, 1-methyl-	216	C17H12	002381-21-7	94
3		11H-Benzo[b]fluorene	216	C17H12	000243-17-4	93
4		11H-Benzo[b]fluorene	216	C17H12	000243-17-4	93
5		11H-Benzo[a]fluorene	216	C17H12	000238-84-6	91



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6525.D  
 Acq On : 09 May 2024 08:11 pm  
 Operator : rocquans  
 Sample : jd87833-3  
 Misc : op54460,ecj297,30.9,,,1,2  
 ALS Vial : 16 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

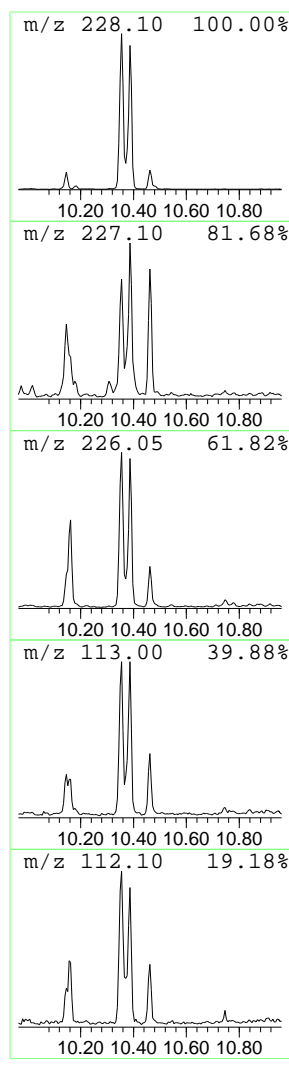
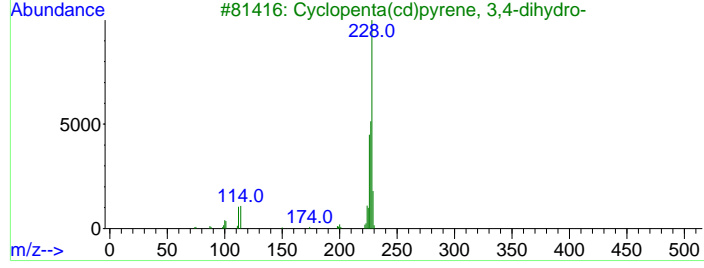
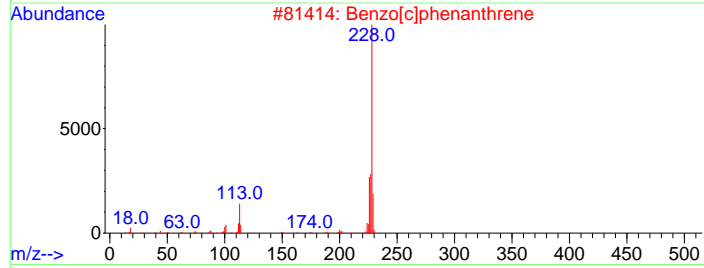
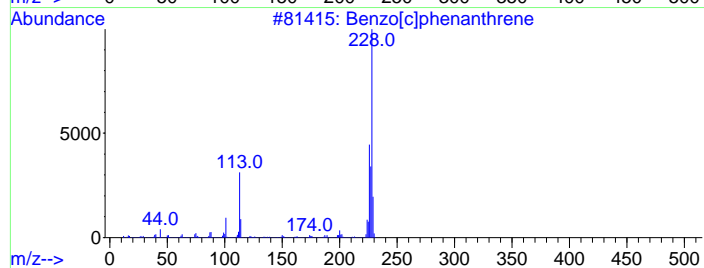
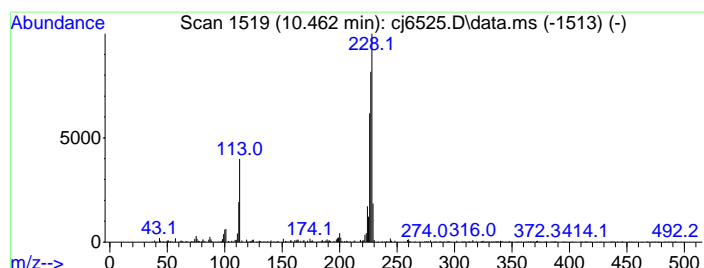
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 5 Unknown Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.462	4.11 ppm	533875	Chrysene-d12a	10.366

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Benzo[c]phenanthrene	228	C18H12	000195-19-7	49
2		Benzo[c]phenanthrene	228	C18H12	000195-19-7	47
3		Cyclopenta(cd)pyrene, 3,4-dihydro-	228	C18H12	025732-74-5	45
4		1,3,5-Triazine-2(1H)-thione, 4-(...	227	C9H17N5S	023613-02-7	38
5		Dimethyl-[4-[2-(3-methylisoxazol...	228	C14H16N2O	1000306-39-6	37



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6525.D  
Acq On : 09 May 2024 08:11 pm  
Operator : rocquans  
Sample : jd87833-3  
Misc : op54460,ecj297,30.9,,,1,2  
ALS Vial : 16 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

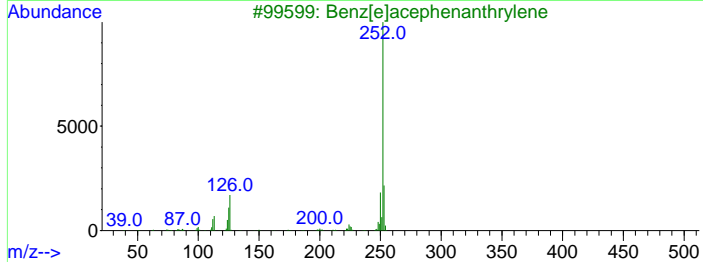
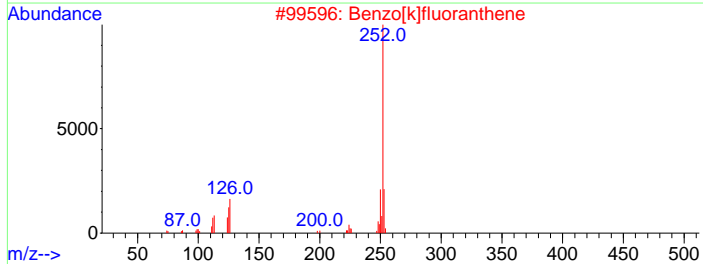
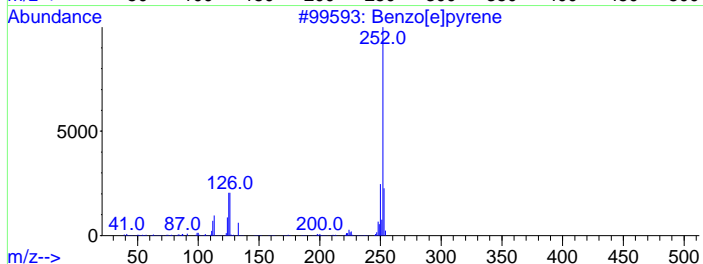
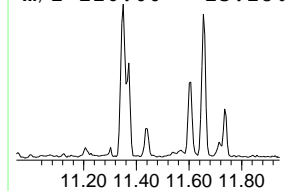
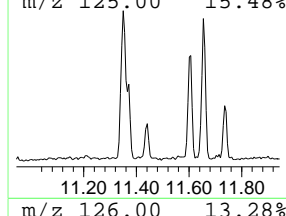
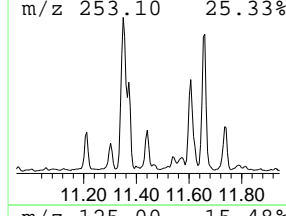
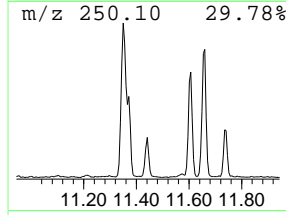
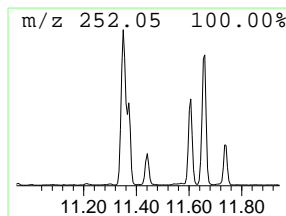
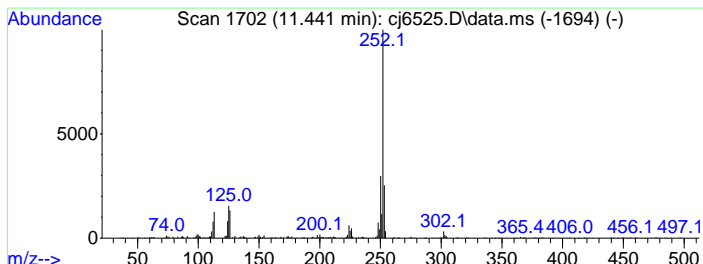
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 6 unknown PAH Substances Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.441	6.84 ppm	567266	Perylene-d12	11.714

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Benzo[e]pyrene	252	C20H12	000192-97-2	94
2		Benzo[k]fluoranthene	252	C20H12	000207-08-9	93
3		Benz[e]acephenanthrylene	252	C20H12	000205-99-2	93
4		Benzo[e]pyrene	252	C20H12	000192-97-2	91
5		Benz[e]acephenanthrylene	252	C20H12	000205-99-2	90



7.1.6  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6525.D  
Acq On : 09 May 2024 08:11 pm  
Operator : rocquans  
Sample : jd87833-3  
Misc : op54460,ecj297,30.9,,,1,2  
ALS Vial : 16 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

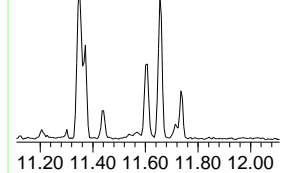
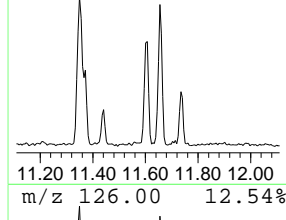
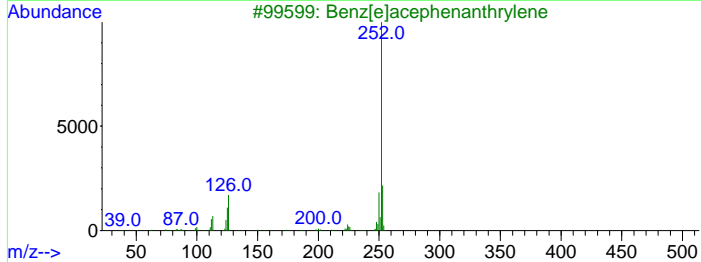
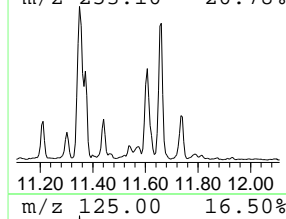
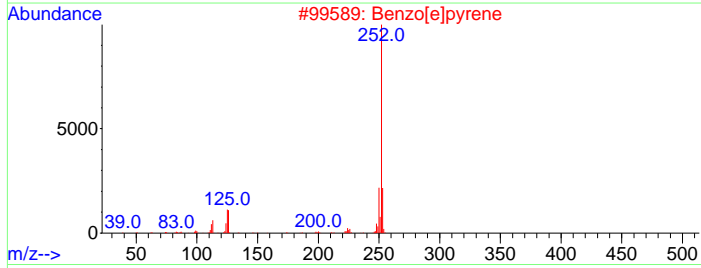
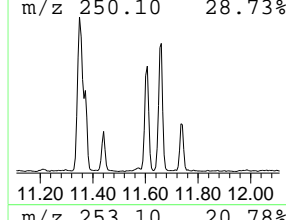
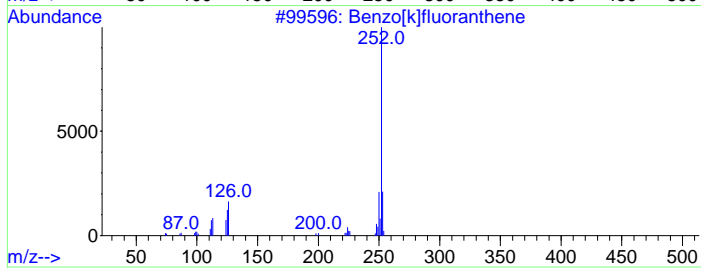
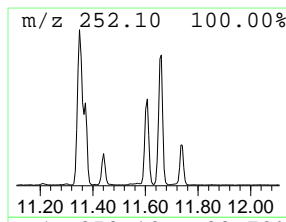
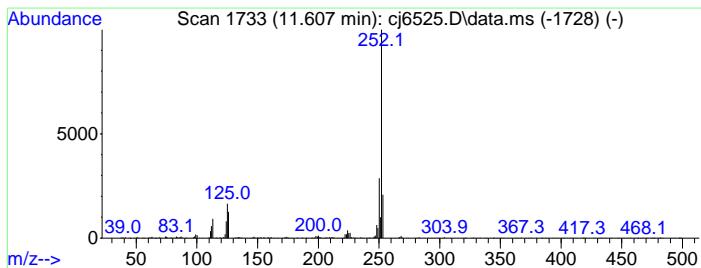
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 7 unknow PAH substances Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.607	11.83 ppm	981555	Perylene-d12	11.714

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Benzo[k]fluoranthene	252	C20H12	000207-08-9	98
2		Benzo[e]pyrene	252	C20H12	000192-97-2	97
3		Benz[e]acephenanthrylene	252	C20H12	000205-99-2	96
4		Benzo[a]pyrene	252	C20H12	000050-32-8	94
5		Benzo[k]fluoranthene	252	C20H12	000207-08-9	93



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6525.D  
Acq On : 09 May 2024 08:11 pm  
Operator : rocquans  
Sample : jd87833-3  
Misc : op54460,ecj297,30.9,,,1,2  
ALS Vial : 16 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

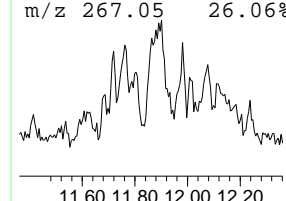
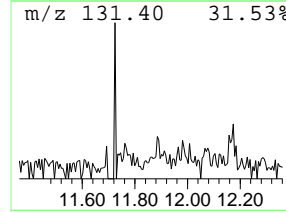
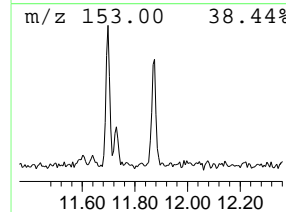
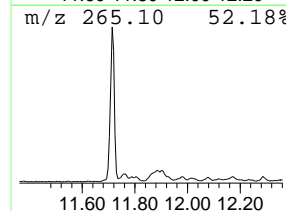
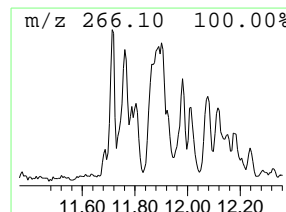
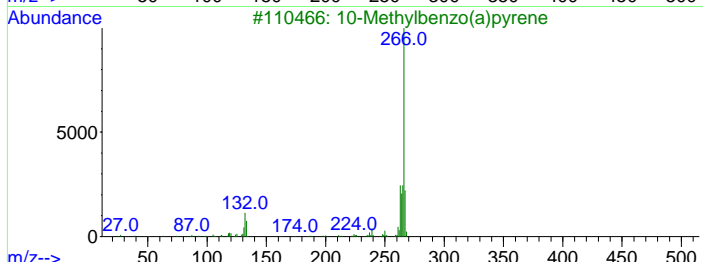
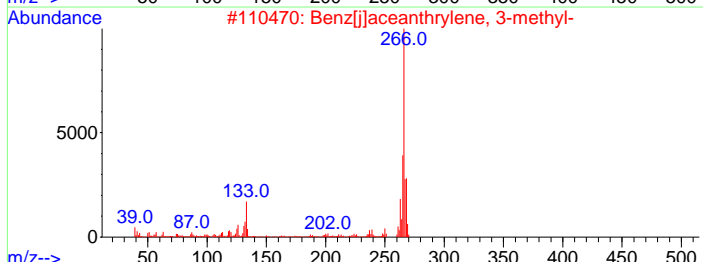
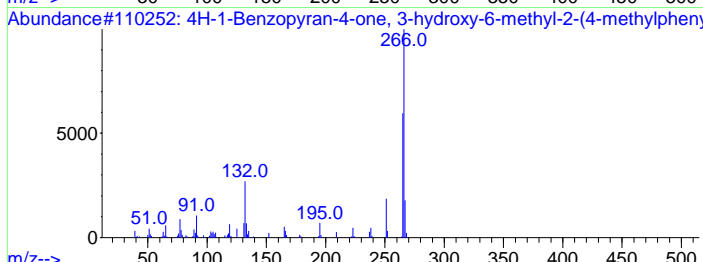
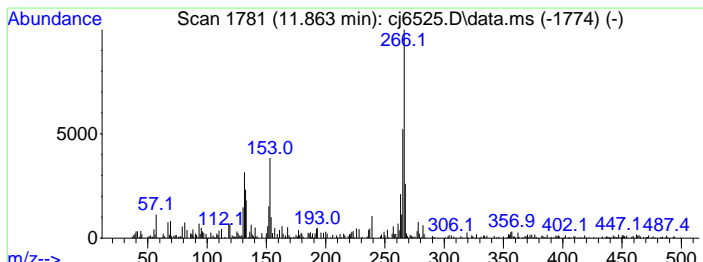
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 8 Unknown Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.863	4.80 ppm	398313	Perylene-d12	11.714

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	4H-1-Benzopyran-4-one, 3-hydroxy...	266	C17H14O3	078396-37-9	53
2		Benz[j]aceanthrylene, 3-methyl-	266	C21H14	003343-10-0	49
3		10-Methylbenzo(a)pyrene	266	C21H14	063104-32-5	49
4		Chlorothalonil	264	C8Cl4N2	001897-45-6	43
5		13H-Dibenzo[a,h]fluorene	266	C21H14	000239-85-0	43



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6525.D  
 Acq On : 09 May 2024 08:11 pm  
 Operator : rocquans  
 Sample : jd87833-3  
 Misc : op54460,ecj297,30.9,,,1,2  
 ALS Vial : 16 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

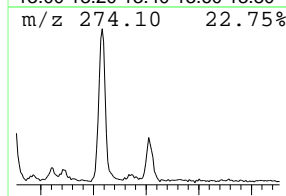
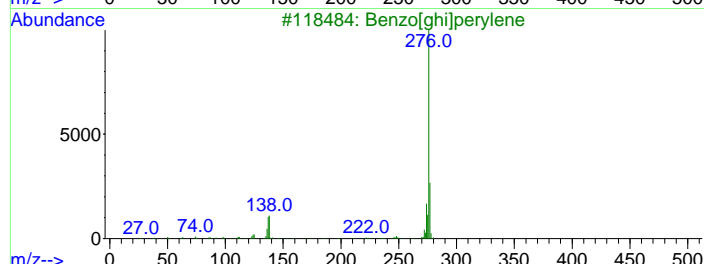
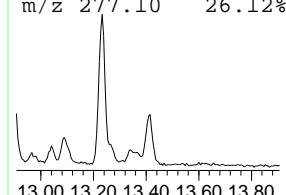
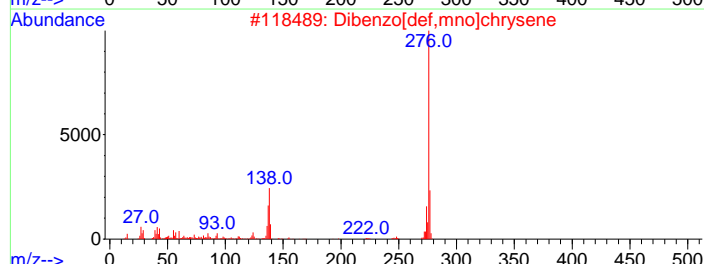
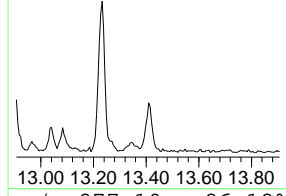
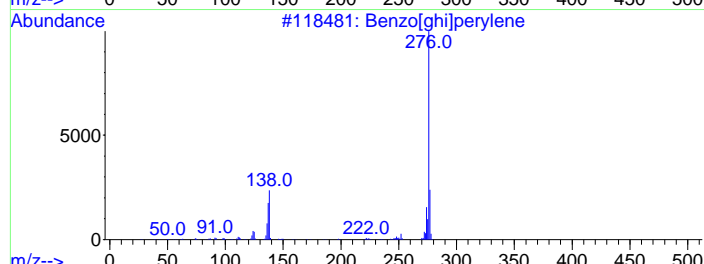
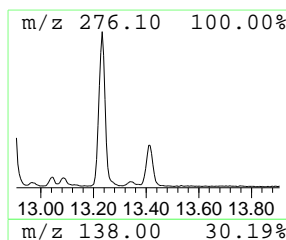
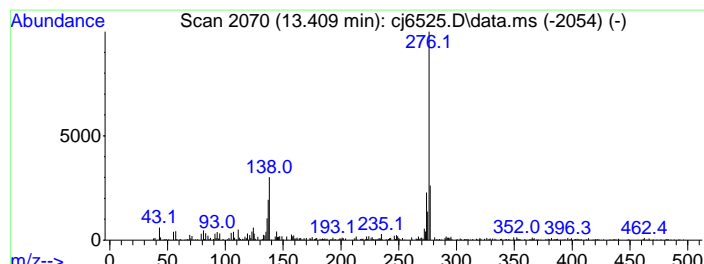
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 9 Unknown Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.409	6.19 ppm	513344	Perylene-d12	11.714

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Benzo[ghi]perylene	276	C22H12	000191-24-2	94
2			Dibenzo[def,mno]chrysene	276	C22H12	000191-26-4	93
3			Benzo[ghi]perylene	276	C22H12	000191-24-2	91
4			Indeno[1,2,3-cd]pyrene	276	C22H12	000193-39-5	91
5			Indeno[1,2,3-cd]pyrene	276	C22H12	000193-39-5	90



Tentatively Identified Compound (LSC) summary

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6525.D  
Acq On : 09 May 2024 08:11 pm  
Operator : rocquans  
Sample : jd87833-3  
Misc : op54460,ecj297,30.9,,,1,2  
ALS Vial : 16 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
Unknown	4.247	5.0	ppm	286489	2	4.664	2284830	40.0
4H-Cyclopenta[d...]	8.419	8.8	ppm	760443	8	7.868	3475700	40.0
Unknown	8.595	4.5	ppm	388752	8	7.868	3475700	40.0
11H-Benzo[b]flu...	9.515	4.7	ppm	615520	9	10.366	5191850	40.0
Unknown	10.462	4.1	ppm	533875	10	10.366	5191850	40.0
unknown PAH Sub...	11.441	6.8	ppm	567266	11	11.714	3319230	40.0
unknow PAH subs...	11.607	11.8	ppm	981555	11	11.714	3319230	40.0
Unknown	11.863	4.8	ppm	398313	11	11.714	3319230	40.0
Unknown	13.409	6.2	ppm	513344	11	11.714	3319230	40.0

7.1.6  
7



Quantitation Report (QT/LSC Reviewed)

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6530.D  
 Acq On : 09 May 2024 09:45 pm  
 Operator : rocquans  
 Sample : jd87833-4 Inst : GCMSJCJ  
 Misc : op54460,ecj297,30.2,,,1,1  
 ALS Vial : 21 Sample Multiplier: 1

Quant Time: May 10 19:04:17 2024  
 Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
 QLast Update : Thu May 09 12:05:48 2024  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.664	152	366062	40.00	ppm	0.00
24) Naphthalene-d8	5.466	136	1274378	40.00	ppm	0.00
46) Acenaphthene-d10	6.659	164	720354	40.00	ppm	0.00
69) Phenanthrene-d10	7.868	188	1262132	40.00	ppm	0.00
84) Chrysene-d12	10.366	240	880759	40.00	ppm	0.00
93) Perylene-d12	11.719	264	914016	40.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.664	152	366062	40.00	ppm	0.00
105) Phenanthrene-d10a	7.868	188	1262132	40.00	ppm	0.00
107) Naphthalene-d8a	5.466	136	1274378	40.00	ppm	0.00
109) Phenanthrene-d10b	7.868	188	1262132	40.00	ppm	0.00
112) Chrysene-d12a	10.366	240	880759	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.808	112	390625	37.12	ppm	0.01
Spiked Amount	50.000		Recovery	=	74.24%	
8) Phenol-d5	4.423	99	517989	38.17	ppm	0.00
Spiked Amount	50.000		Recovery	=	76.34%	
25) Nitrobenzene-d5	5.012	82	514721	39.45	ppm	0.00
Spiked Amount	50.000		Recovery	=	78.90%	
51) 2-Fluorobiphenyl	6.167	172	944532	41.67	ppm	0.00
Spiked Amount	50.000		Recovery	=	83.34%	
74) 2,4,6-Tribromophenol	7.274	330	131357	47.47	ppm	0.00
Spiked Amount	50.000		Recovery	=	94.94%	
87) Terphenyl-d14	9.355	244	945094	43.43	ppm	0.00
Spiked Amount	50.000		Recovery	=	86.86%	
110) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount	50.000		Recovery	=	0.00%	
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount	50.000		Recovery	=	0.00%	
Target Compounds						
						Qvalue
38) Naphthalene	5.482	128	19217	0.6295	ppm	99
44) 2-Methylnaphthalene	5.926	141	8673	0.4792	ppm	93
53) Biphenyl	6.237	154	5684	0.2297	ppm	100
56) Acenaphthylene	6.552	152	152755	5.4674	ppm	99
59) Acenaphthene	6.680	153	55756	2.8062	ppm	98
62) Dibenzofuran	6.809	168	37164	1.3479	ppm	95
66) Fluorene	7.082	166	94085	4.3195	ppm	98
78) Phenanthrene	7.889	178	1234005	40.4562	ppm	99
79) Anthracene	7.937	178	454814	14.8915	ppm	96
80) Carbazole	8.071	167	51935	1.8249	ppm	99
82) Fluoranthene	8.986	202	2812014	85.1556	ppm	99
86) Pyrene	9.200	202	2472396	82.5417	ppm	99
89) Benzo[a]anthracene	10.360	228	1164805	41.1321	ppm	98
91) Chrysene	10.393	228	995885	38.1164	ppm	98
95) Benzo[b]fluoranthene	11.355	252	1322696m	47.9043	ppm	
96) Benzo[k]fluoranthene	11.377	252	331615m	13.3471	ppm	
97) Benzo[a]pyrene	11.665	252	924977	40.4676	ppm	98
98) Indeno[1,2,3-cd]pyrene	12.901	276	581547	21.0459	ppm	99
100) Dibenz[a,h]anthracene	12.917	278	144207	6.5313	ppm	90
102) Benzo[g,h,i]perylene	13.249	276	534522	24.8922	ppm	99
-----						

(#) = qualifier out of range (m) = manual integration (+) = signals summed

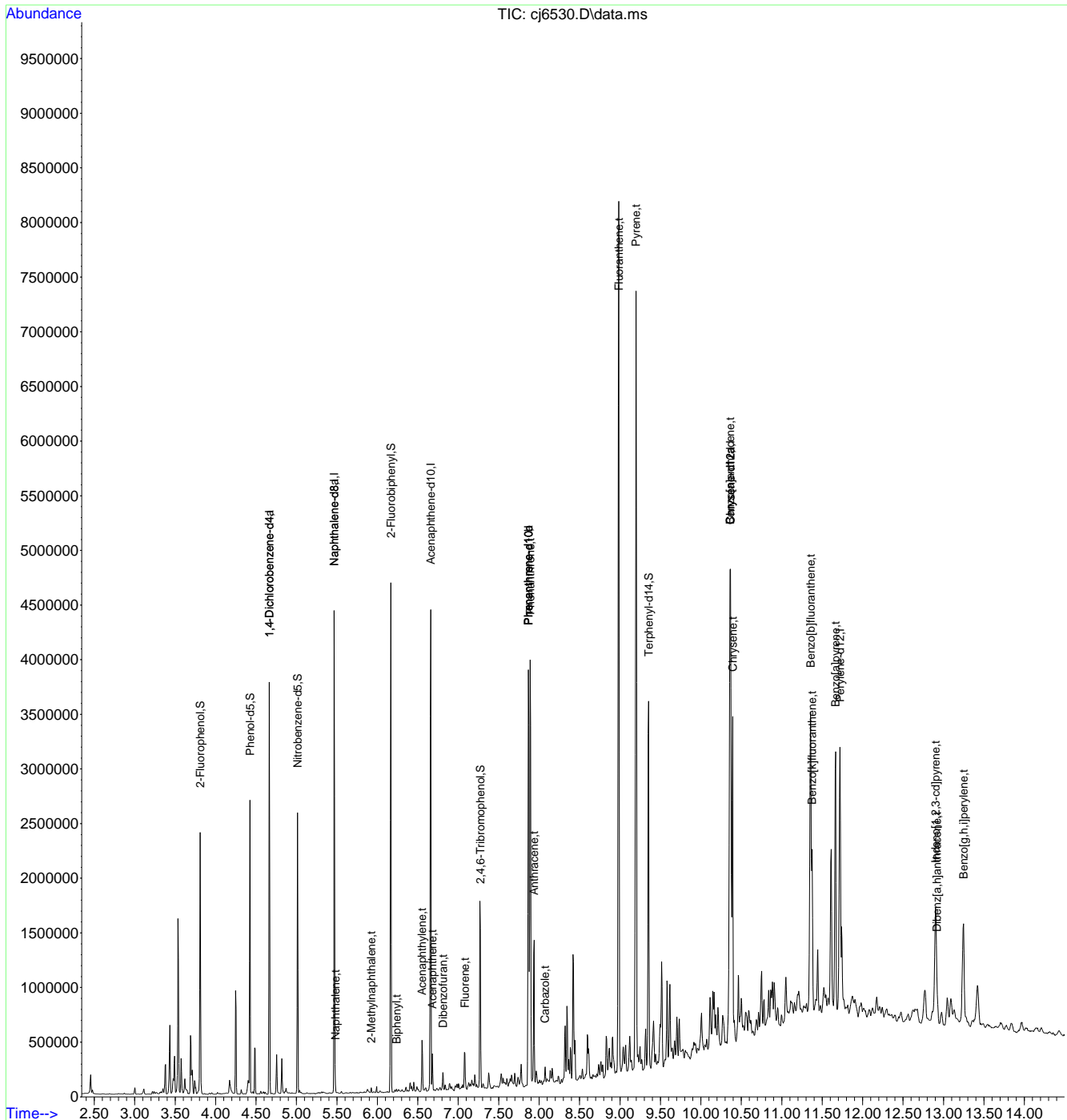
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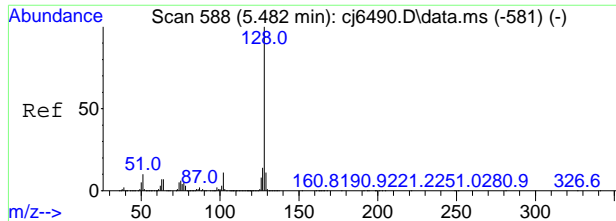
Quantitation Report (QT/LSC Reviewed)

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6530.D  
Acq On : 09 May 2024 09:45 pm  
Operator : rocquans  
Sample : jd87833-4 Inst : GCMS CJ  
Misc : op54460,ecj297,30.2,,,1,1  
ALS Vial : 21 Sample Multiplier: 1

Quant Time: May 10 19:04:17 2024  
Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
QLast Update : Thu May 09 12:05:48 2024  
Response via : Initial Calibration

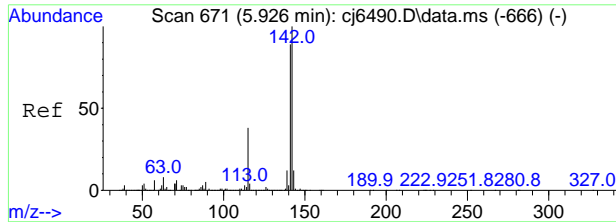
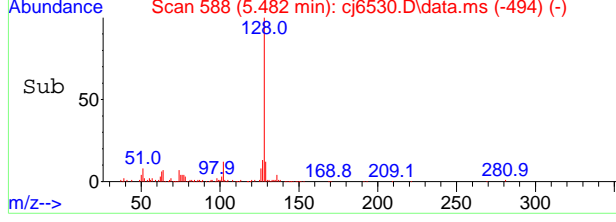
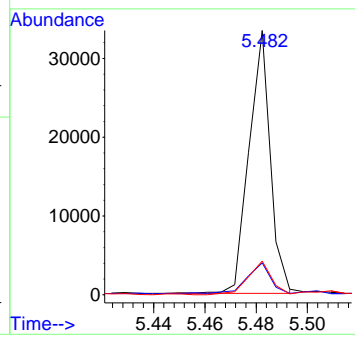
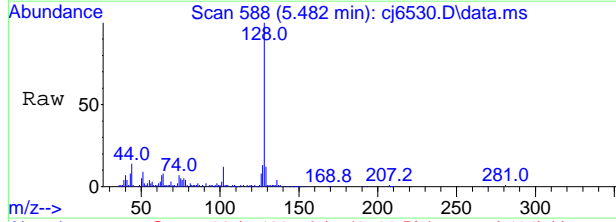


7.1.7  
7



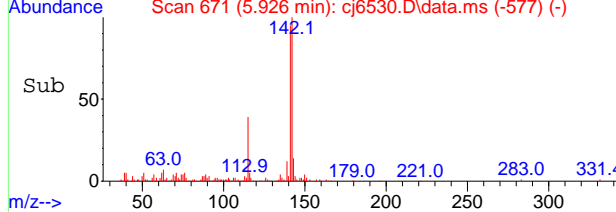
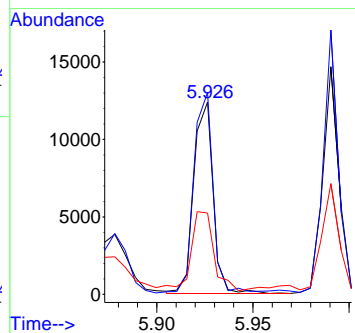
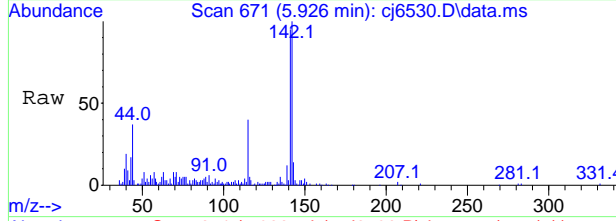
#38  
 Naphthalene  
 Concen: 0.6295 ppm  
 RT: 5.482 min Scan# 588  
 Delta R.T. 0.000 min  
 Lab File: cj6530.D  
 Acq: 09 May 2024 09:45 pm

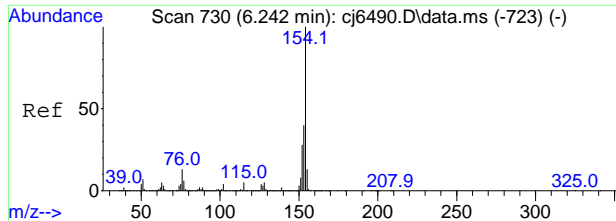
Tgt Ion	Ratio	Lower	Upper
128	100		
129	11.5	0.0	41.4
127	12.5	0.0	43.3



#44  
 2-Methylnaphthalene  
 Concen: 0.4792 ppm  
 RT: 5.926 min Scan# 671  
 Delta R.T. 0.000 min  
 Lab File: cj6530.D  
 Acq: 09 May 2024 09:45 pm

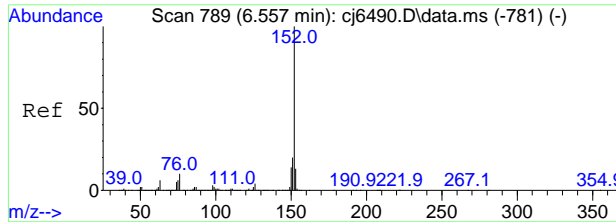
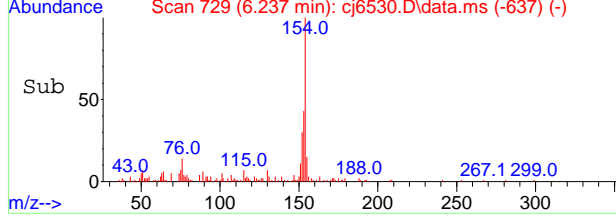
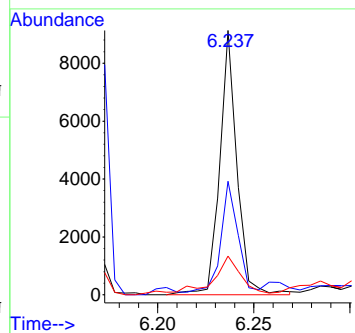
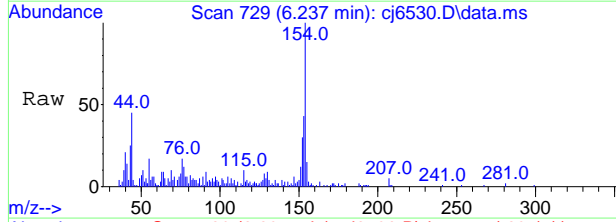
Tgt Ion	Ratio	Lower	Upper
141	100		
142	104.5	82.7	142.7
115	38.1	12.4	72.4





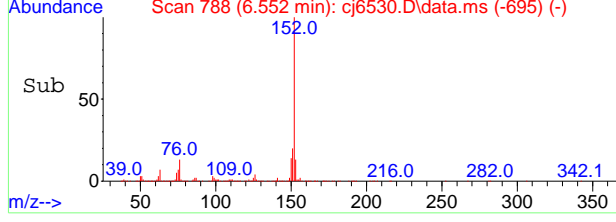
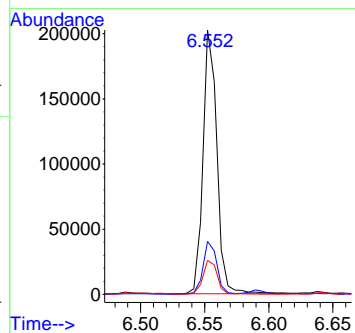
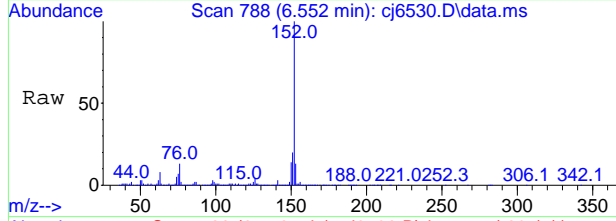
#53  
 Biphenyl  
 Concen: 0.2297 ppm  
 RT: 6.237 min Scan# 729  
 Delta R.T. -0.005 min  
 Lab File: cj6530.D  
 Acq: 09 May 2024 09:45 pm

Tgt Ion	Ratio	Lower	Upper
154	100		
153	40.5	10.5	70.5
155	12.8	0.0	42.8

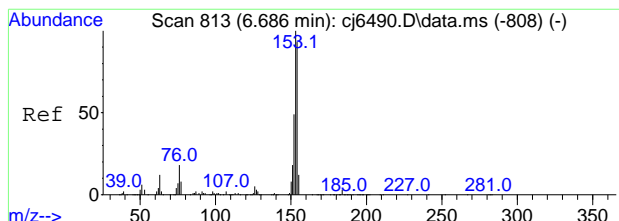


#56  
 Acenaphthylene  
 Concen: 5.4674 ppm  
 RT: 6.552 min Scan# 788  
 Delta R.T. -0.005 min  
 Lab File: cj6530.D  
 Acq: 09 May 2024 09:45 pm

Tgt Ion	Ratio	Lower	Upper
152	100		
151	19.9	0.0	50.3
153	12.7	0.0	43.4

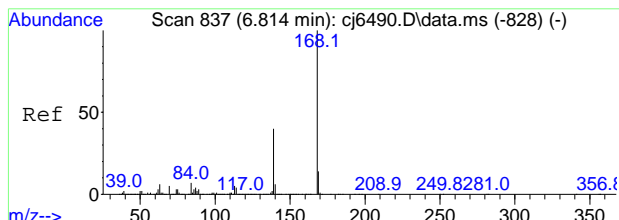
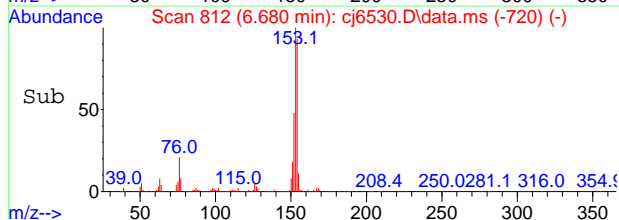
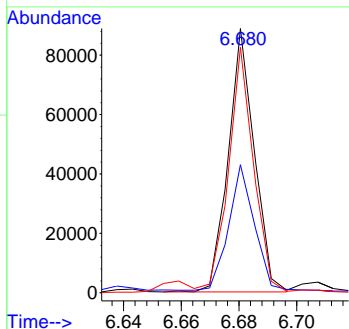
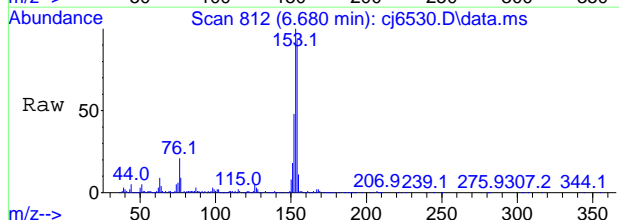


7.17  
7



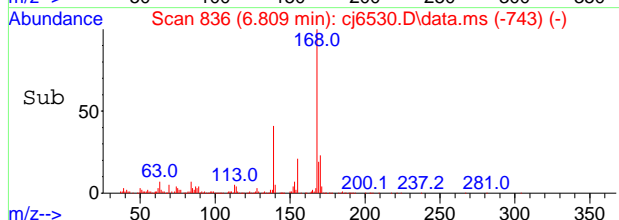
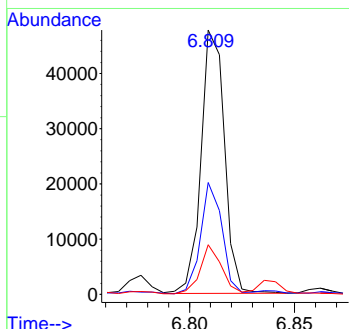
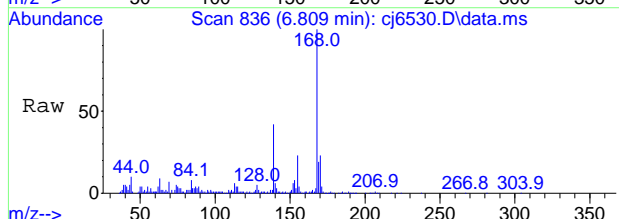
#59  
 Acenaphthene  
 Concen: 2.8062 ppm  
 RT: 6.680 min Scan# 812  
 Delta R.T. -0.006 min  
 Lab File: cj6530.D  
 Acq: 09 May 2024 09:45 pm

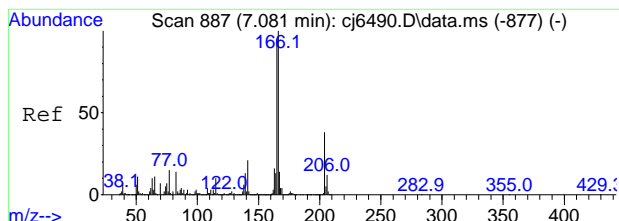
Tgt Ion	Resp	Lower	Upper
153	55756		
152	47.6	18.8	78.8
154	91.4	62.9	122.9



#62  
 Dibenzofuran  
 Concen: 1.3479 ppm  
 RT: 6.809 min Scan# 836  
 Delta R.T. -0.005 min  
 Lab File: cj6530.D  
 Acq: 09 May 2024 09:45 pm

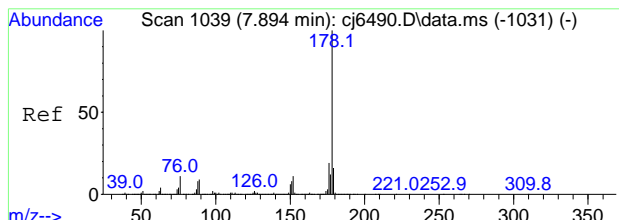
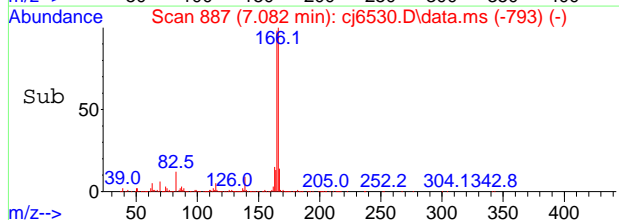
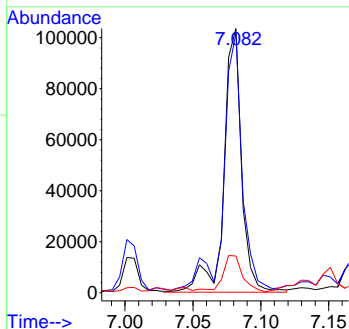
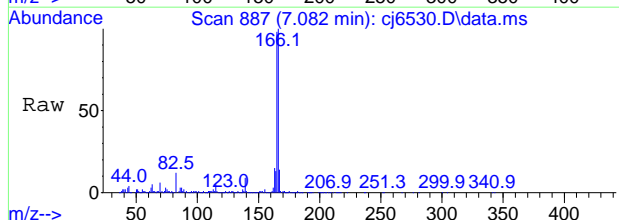
Tgt Ion	Resp	Lower	Upper
168	37164		
139	42.0	10.0	70.0
169	18.1	0.0	43.7





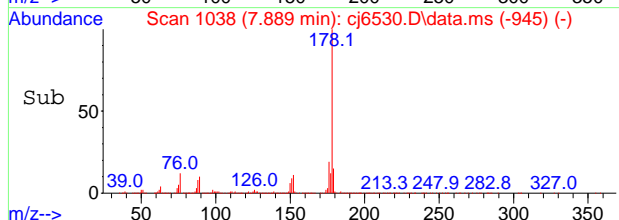
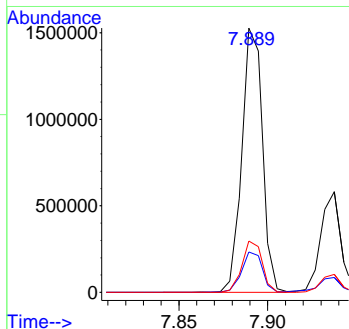
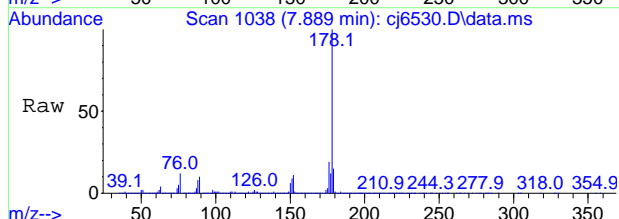
#66  
 Fluorene  
 Concen: 4.3195 ppm  
 RT: 7.082 min Scan# 887  
 Delta R.T. 0.001 min  
 Lab File: cj6530.D  
 Acq: 09 May 2024 09:45 pm

Tgt Ion	Ratio	Lower	Upper
166	100		
165	96.9	65.4	125.4
167	11.8	0.0	43.8

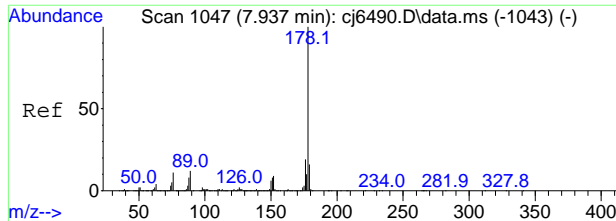


#78  
 Phenanthrene  
 Concen: 40.4562 ppm  
 RT: 7.889 min Scan# 1038  
 Delta R.T. -0.005 min  
 Lab File: cj6530.D  
 Acq: 09 May 2024 09:45 pm

Tgt Ion	Ratio	Lower	Upper
178	100		
179	15.2	0.0	45.5
176	19.4	0.0	49.2

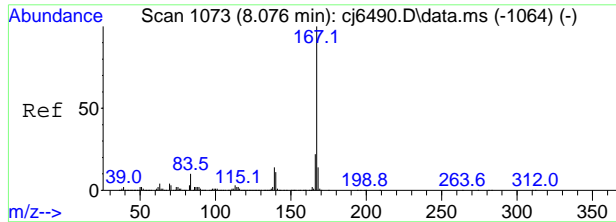
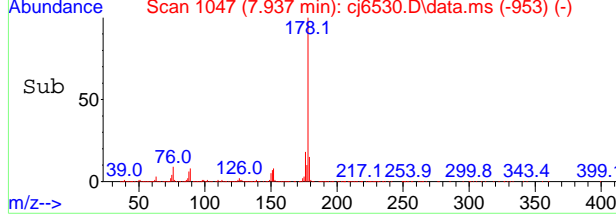
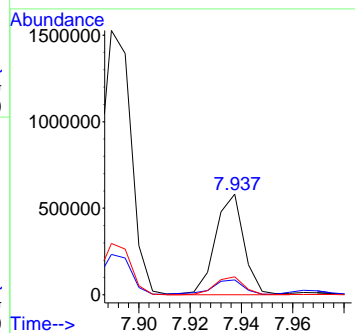
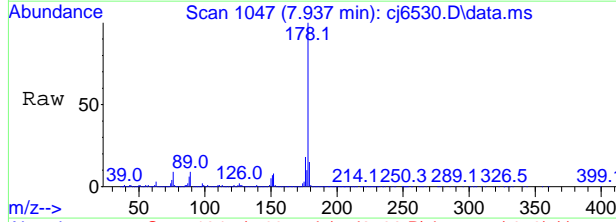


7.17



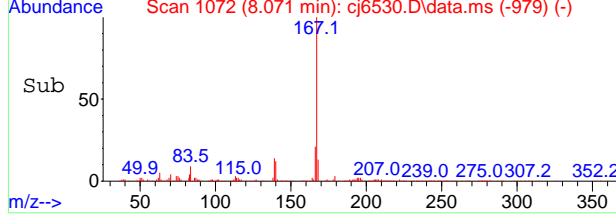
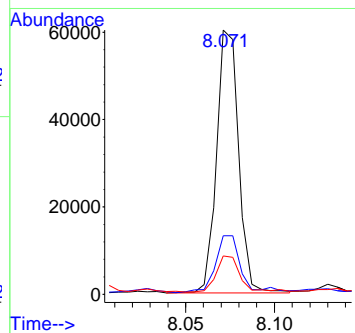
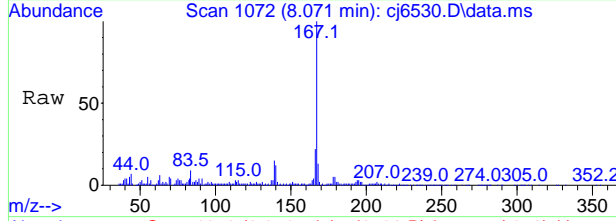
#79  
 Anthracene  
 Concen: 14.8915 ppm  
 RT: 7.937 min Scan# 1047  
 Delta R.T. 0.000 min  
 Lab File: cj6530.D  
 Acq: 09 May 2024 09:45 pm

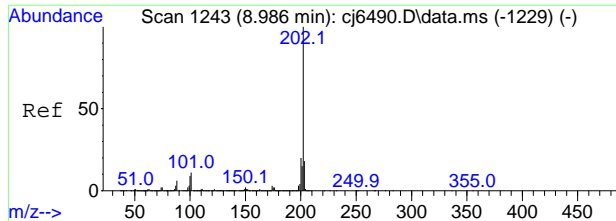
Tgt Ion	Ratio	Lower	Upper
178	100		
179	13.6	0.0	46.1
176	17.8	0.0	48.7



#80  
 Carbazole  
 Concen: 1.8249 ppm  
 RT: 8.071 min Scan# 1072  
 Delta R.T. -0.005 min  
 Lab File: cj6530.D  
 Acq: 09 May 2024 09:45 pm

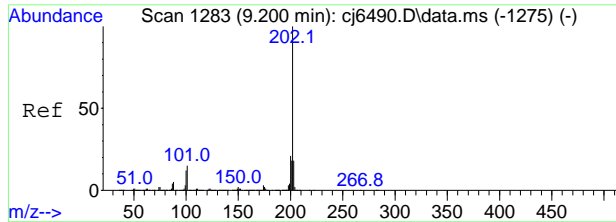
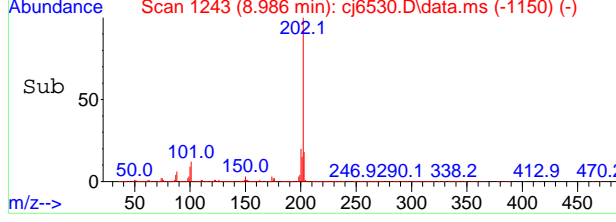
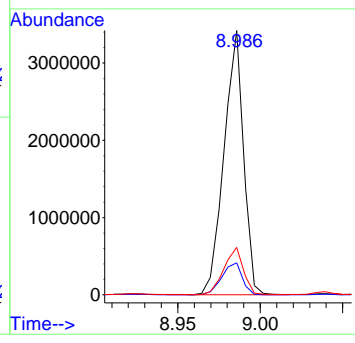
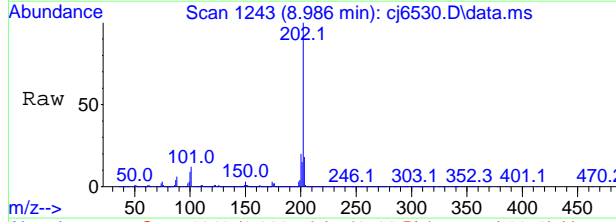
Tgt Ion	Ratio	Lower	Upper
167	100		
166	21.1	0.0	51.7
139	13.5	0.0	43.8





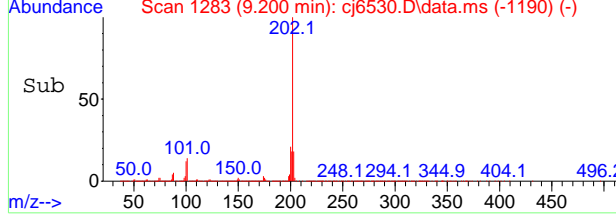
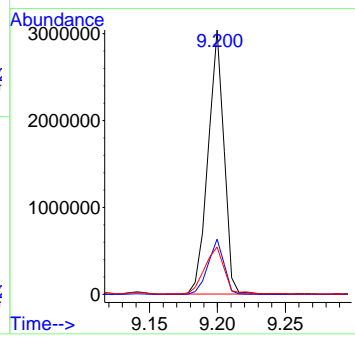
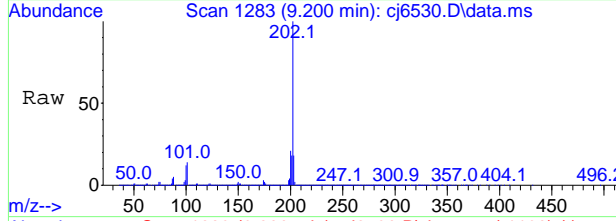
#82  
 Fluoranthene  
 Concen: 85.1556 ppm  
 RT: 8.986 min Scan# 1243  
 Delta R.T. -0.000 min  
 Lab File: cj6530.D  
 Acq: 09 May 2024 09:45 pm

Tgt Ion	Ratio	Lower	Upper
202	100		
101	12.1	0.0	41.4
203	17.8	0.0	47.6



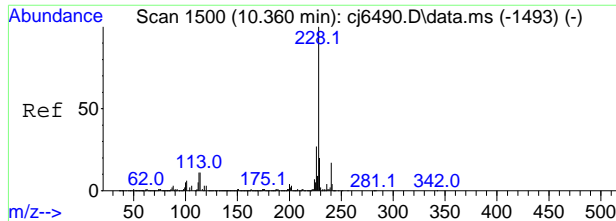
#86  
 Pyrene  
 Concen: 82.5417 ppm  
 RT: 9.200 min Scan# 1283  
 Delta R.T. -0.000 min  
 Lab File: cj6530.D  
 Acq: 09 May 2024 09:45 pm

Tgt Ion	Ratio	Lower	Upper
202	100		
200	20.9	0.0	51.4
203	17.8	0.0	47.8



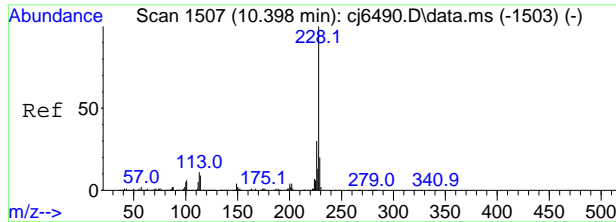
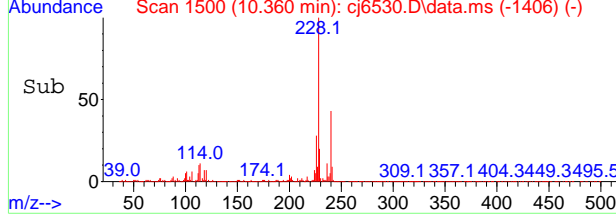
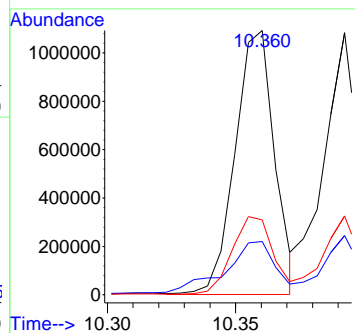
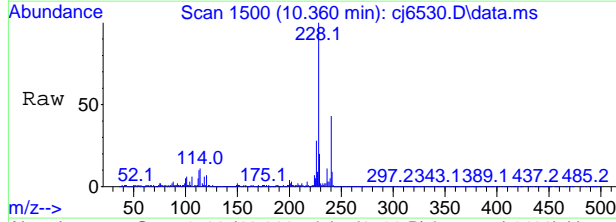
7.17  
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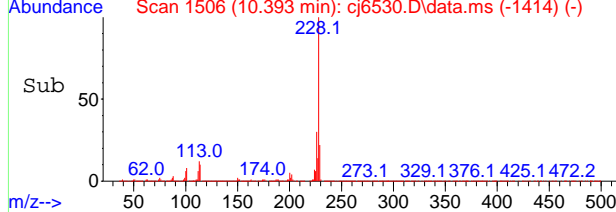
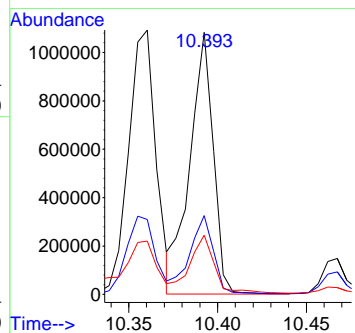
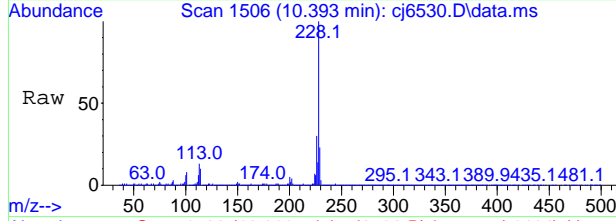
#89  
 Benzo[a]anthracene  
 Concen: 41.1321 ppm  
 RT: 10.360 min Scan# 1500  
 Delta R.T. 0.000 min  
 Lab File: cj6530.D  
 Acq: 09 May 2024 09:45 pm

Tgt Ion	Ratio	Lower	Upper
228	100		
229	19.2	0.0	49.8
226	28.0	0.0	57.1



#91  
 Chrysene  
 Concen: 38.1164 ppm  
 RT: 10.393 min Scan# 1506  
 Delta R.T. -0.005 min  
 Lab File: cj6530.D  
 Acq: 09 May 2024 09:45 pm

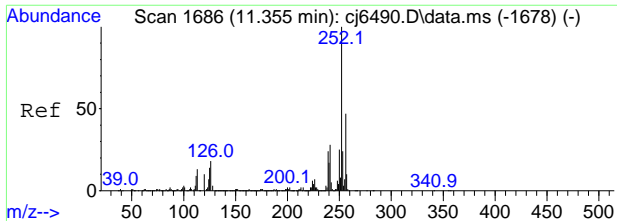
Tgt Ion	Ratio	Lower	Upper
228	100		
226	29.9	0.0	59.9
229	22.2	0.0	49.8



7.17  
7

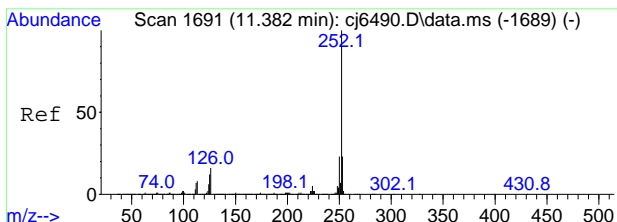
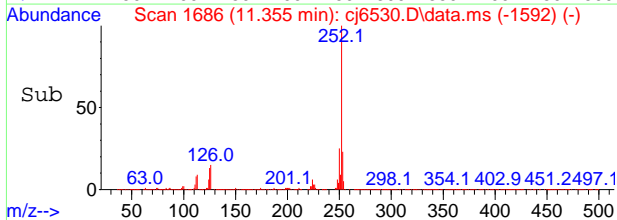
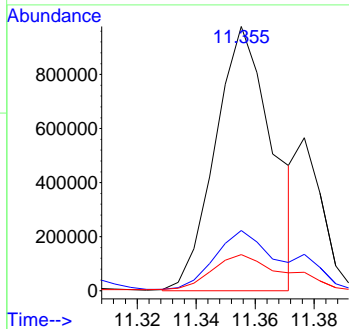
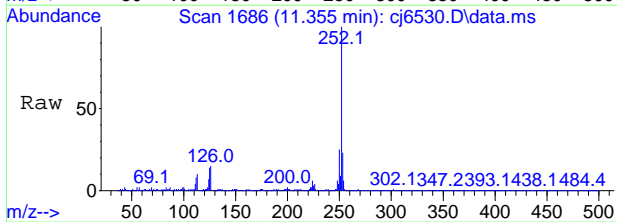






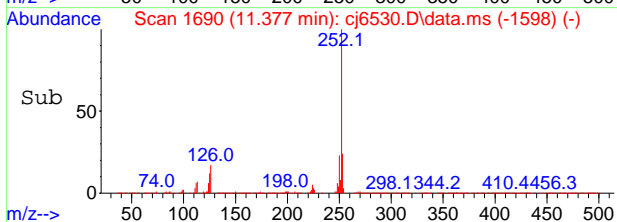
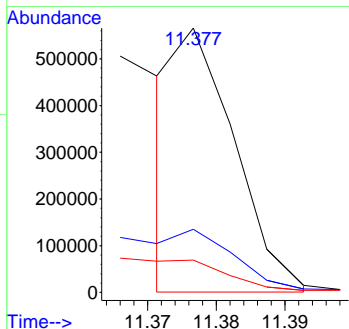
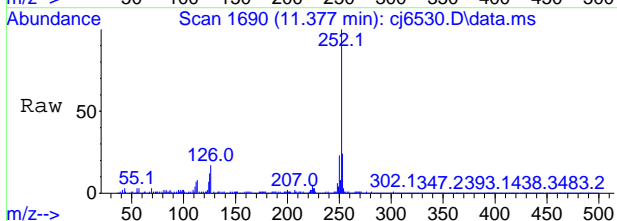
#95  
 Benzo[b]fluoranthene  
 Concen: 47.9043 ppm m  
 RT: 11.355 min Scan# 1686  
 Delta R.T. 0.000 min  
 Lab File: cj6530.D  
 Acq: 09 May 2024 09:45 pm

Tgt Ion	Ratio	Lower	Upper
252	100		
253	22.8	0.0	54.7
125	13.7	0.0	44.2

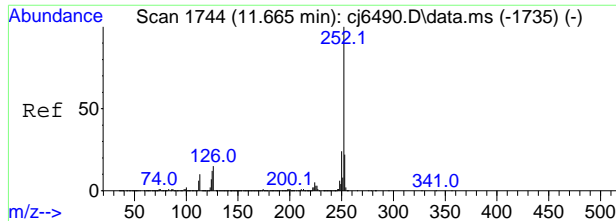


#96  
 Benzo[k]fluoranthene  
 Concen: 13.3471 ppm m  
 RT: 11.377 min Scan# 1690  
 Delta R.T. -0.005 min  
 Lab File: cj6530.D  
 Acq: 09 May 2024 09:45 pm

Tgt Ion	Ratio	Lower	Upper
252	100		
253	23.9	0.0	52.6
125	12.2	0.0	42.4



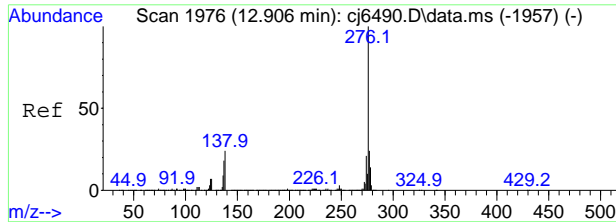
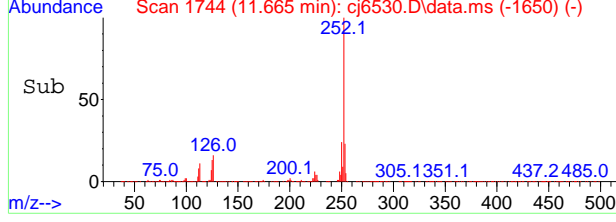
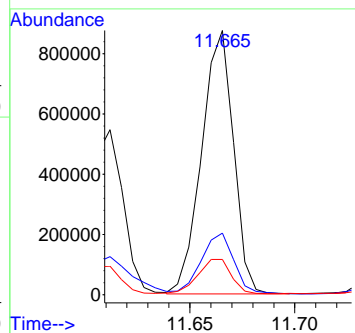
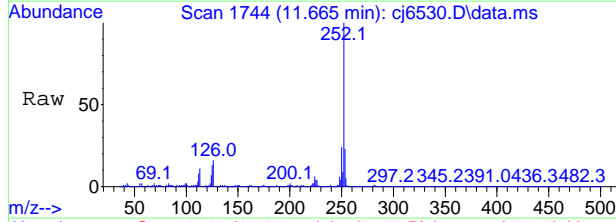
7.17  
7



#97  
 Benzo[a]pyrene  
 Concen: 40.4676 ppm  
 RT: 11.665 min Scan# 1744  
 Delta R.T. 0.000 min  
 Lab File: cj6530.D  
 Acq: 09 May 2024 09:45 pm

Tgt Ion:252 Resp: 924977

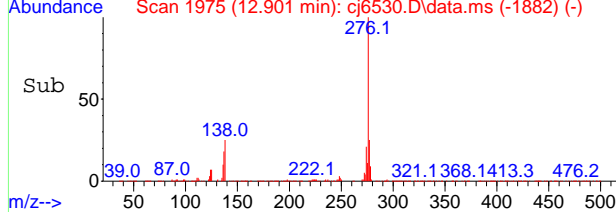
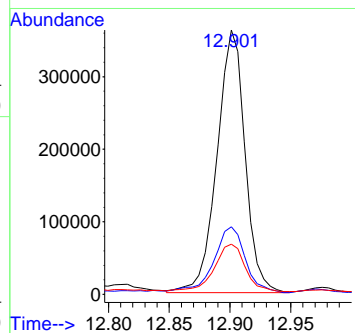
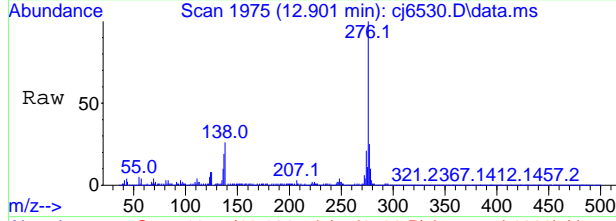
Ion	Ratio	Lower	Upper
252	100		
253	22.7	0.0	51.9
125	12.8	0.0	42.1



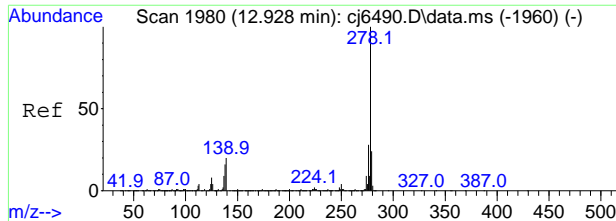
#98  
 Indeno[1,2,3-cd]pyrene  
 Concen: 21.0459 ppm  
 RT: 12.901 min Scan# 1975  
 Delta R.T. -0.005 min  
 Lab File: cj6530.D  
 Acq: 09 May 2024 09:45 pm

Tgt Ion:276 Resp: 581547

Ion	Ratio	Lower	Upper
276	100		
138	24.9	0.0	54.2
137	18.0	0.0	47.9

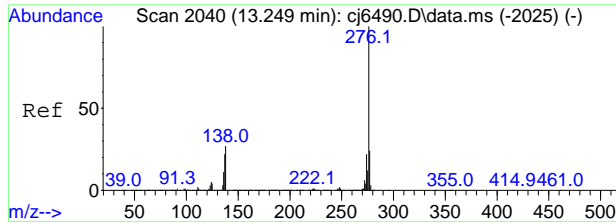
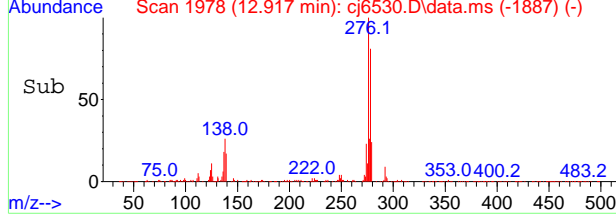
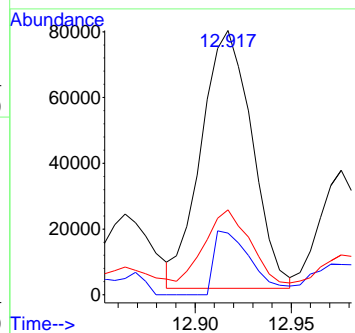
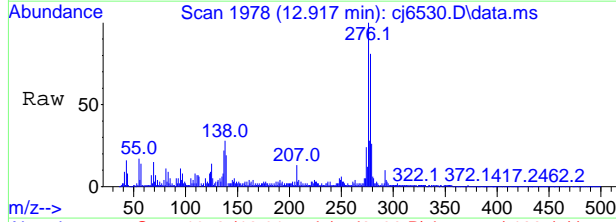


7.17  
7



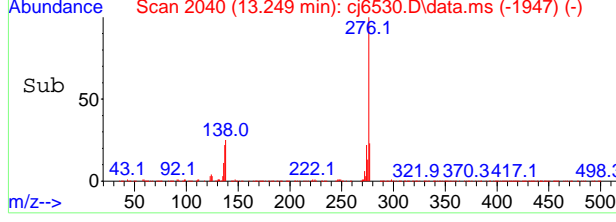
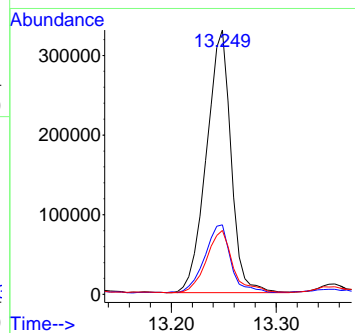
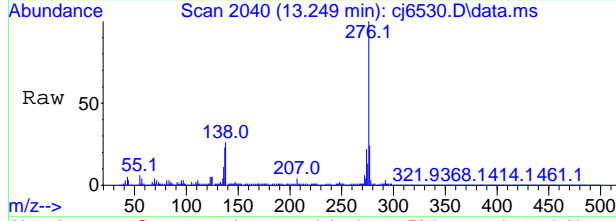
#100  
 Dibenz[a,h]anthracene  
 Concen: 6.5313 ppm  
 RT: 12.917 min Scan# 1978  
 Delta R.T. -0.011 min  
 Lab File: cj6530.D  
 Acq: 09 May 2024 09:45 pm

Tgt Ion	Ratio	Lower	Upper
278	100		
139	24.0	0.0	49.8
279	29.7	0.0	54.1



#102  
 Benzo[g,h,i]perylene  
 Concen: 24.8922 ppm  
 RT: 13.249 min Scan# 2040  
 Delta R.T. -0.000 min  
 Lab File: cj6530.D  
 Acq: 09 May 2024 09:45 pm

Tgt Ion	Ratio	Lower	Upper
276	100		
138	25.7	0.0	56.7
277	23.7	0.0	54.1



7.1.7

LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6530.D  
Acq On : 09 May 2024 09:45 pm  
Operator : rocquans  
Sample : jd87833-4  
Misc : op54460,ecj297,30.2,,,1,1  
ALS Vial : 21 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON  
Sampling : 1  
Start Thrs: 0.02  
Stop Thrs : 0  
Filtering: 5  
Min Area: 1000 Area counts  
Max Peaks: 100  
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS, zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

Signal : TIC: cj6530.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.172	332	343	353	rVV	127374	183379	2.69%	0.193%
2	4.247	353	357	366	rVB	948200	643523	9.45%	0.679%
3	4.423	380	390	395	rBV	2688223	1661532	24.40%	1.753%
4	4.482	399	401	408	rVB	422827	297554	4.37%	0.314%
5	4.664	431	435	439	rBV	3771537	2221534	32.63%	2.344%
6	4.755	445	452	460	rBV	361190	262702	3.86%	0.277%
7	4.819	460	464	469	rBV	320418	213529	3.14%	0.225%
8	5.012	495	500	504	rBV	2568927	1475415	21.67%	1.557%
9	5.466	577	585	591	rBV	4418303	2776639	40.78%	2.930%
10	6.167	710	716	723	rVB	4662108	2827375	41.53%	2.983%
11	6.552	783	788	793	rBV	471503	356042	5.23%	0.376%
12	6.659	800	808	811	rBV	4406252	3169659	46.55%	3.345%
13	6.680	811	812	819	rVB	340609	172306	2.53%	0.182%
14	6.809	832	836	839	rBV	162550	127951	1.88%	0.135%
15	7.076	875	886	892	rVB	339713	363260	5.34%	0.383%
16	7.269	917	922	927	rBV	1705815	1346695	19.78%	1.421%
17	7.376	938	942	949	rVB2	145599	148402	2.18%	0.157%
18	7.531	965	971	973	rBV3	126400	146020	2.14%	0.154%
19	7.777	1013	1017	1025	rVB	207359	220965	3.25%	0.233%
20	7.868	1025	1034	1036	rBV	3816561	3234668	47.51%	3.413%
21	7.889	1036	1038	1042	rVB	3855257	2965228	43.55%	3.129%
22	7.937	1042	1047	1050	rVB	1300244	1035024	15.20%	1.092%
23	8.077	1066	1073	1076	rBV2	165201	199920	2.94%	0.211%
24	8.323	1112	1119	1121	rBV	517988	490956	7.21%	0.518%
25	8.344	1121	1123	1126	rBV	598979	426785	6.27%	0.450%
26	8.387	1129	1131	1134	rVB	285600	229127	3.37%	0.242%
27	8.419	1134	1137	1147	rVB	1152276	1387926	20.39%	1.465%
28	8.595	1162	1170	1178	rBV2	406131	625350	9.18%	0.660%
29	8.734	1190	1196	1199	rBV2	119827	137875	2.03%	0.145%
30	8.831	1209	1214	1217	rBV	377104	401276	5.89%	0.423%
31	8.868	1217	1221	1225	rBV	201434	237760	3.49%	0.251%
32	8.911	1225	1229	1235	rVB	333045	405057	5.95%	0.427%
33	8.986	1235	1243	1248	rBV	7978186	6714636	98.62%	7.085%
34	9.039	1248	1253	1256	rBV4	225513	268211	3.94%	0.283%
35	9.071	1256	1259	1263	rVB	240073	214266	3.15%	0.226%
36	9.120	1263	1268	1275	rBV4	322892	438432	6.44%	0.463%
37	9.200	1275	1283	1289	rBV	7132157	6808528	100.00%	7.184%
38	9.317	1299	1305	1307	rBV	383015	336704	4.95%	0.355%
39	9.355	1307	1312	1317	rVB	3360450	3028748	44.48%	3.196%
40	9.414	1317	1323	1326	rBV2	434672	593897	8.72%	0.627%



7.18  
7

LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6530.D  
Acq On : 09 May 2024 09:45 pm  
Operator : rocquans  
Sample : jd87833-4  
Misc : op54460,ecj297,30.2,,,1,1  
ALS Vial : 21 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON  
Sampling : 1  
Start Thrs: 0.02  
Stop Thrs : 0  
Filtering: 5  
Min Area: 1000 Area counts  
Max Peaks: 100  
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS, zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

Table with 10 columns: Retention Time, Abundance, and various peak identifiers (rVB, rBV, rVB2, rVB3, rVV, rVV2, rVV3, rVV4, rVV7). Rows 41-85.



7.18  
7

LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6530.D  
Acq On : 09 May 2024 09:45 pm  
Operator : rocquans  
Sample : jd87833-4  
Misc : op54460,ecj297,30.2,,,1,1  
ALS Vial : 21 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON Filtering: 5  
Sampling : 1 Min Area: 1000 Area counts  
Start Thrs: 0.02 Max Peaks: 100  
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

86	12.174	1835	1839	1843	rVV3	174415	252065	3.70%	0.266%
87	12.297	1856	1862	1866	rBV4	76449	140734	2.07%	0.148%
88	12.473	1886	1895	1902	rVB10	89940	195026	2.86%	0.206%
89	12.623	1916	1923	1926	rBV3	93251	197431	2.90%	0.208%
90	12.767	1942	1950	1962	rBV4	303655	699742	10.28%	0.738%
91	12.901	1963	1975	1984	rVV2	1060093	2072517	30.44%	2.187%
92	12.976	1984	1989	1995	rVB2	118933	177132	2.60%	0.187%
93	13.045	1997	2002	2006	rBV	250379	394278	5.79%	0.416%
94	13.094	2006	2011	2015	rVV3	232249	426840	6.27%	0.450%
95	13.131	2015	2018	2030	rVV8	131474	322556	4.74%	0.340%
96	13.249	2032	2040	2056	rVB	941735	1726805	25.36%	1.822%
97	13.420	2063	2072	2079	rVB	360583	737874	10.84%	0.779%
98	13.703	2120	2125	2134	rVB9	65967	156280	2.30%	0.165%
99	13.837	2145	2150	2163	rVB4	88329	209700	3.08%	0.221%
100	13.971	2164	2175	2180	rBV4	93597	219986	3.23%	0.232%

Sum of corrected areas: 94771176



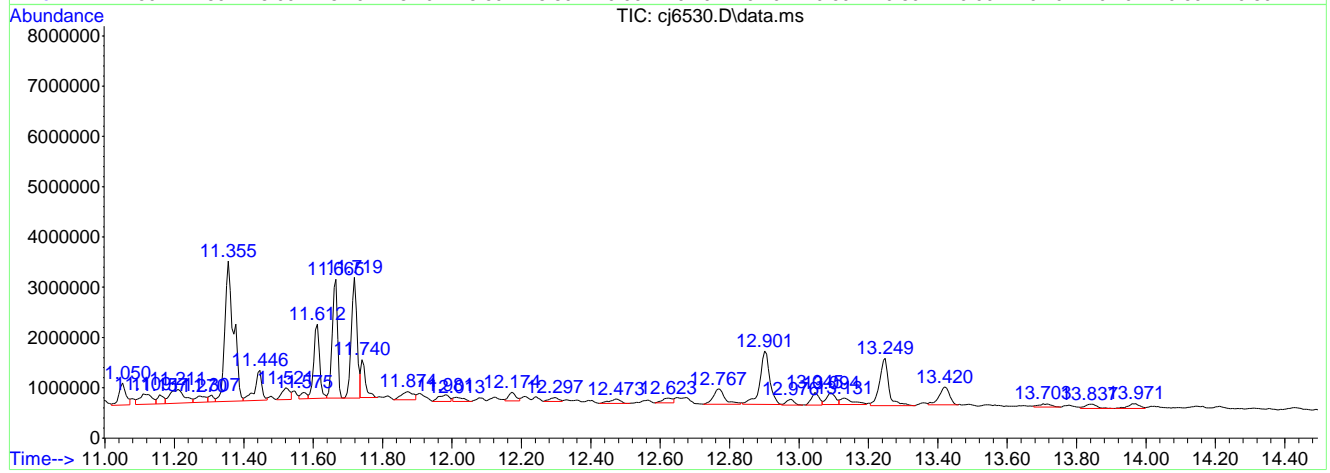
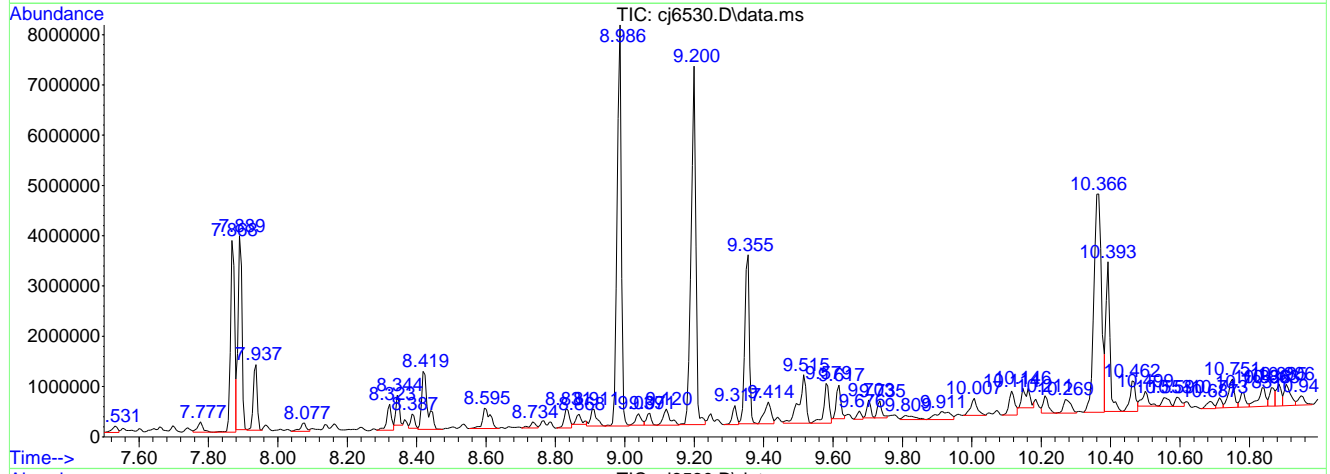
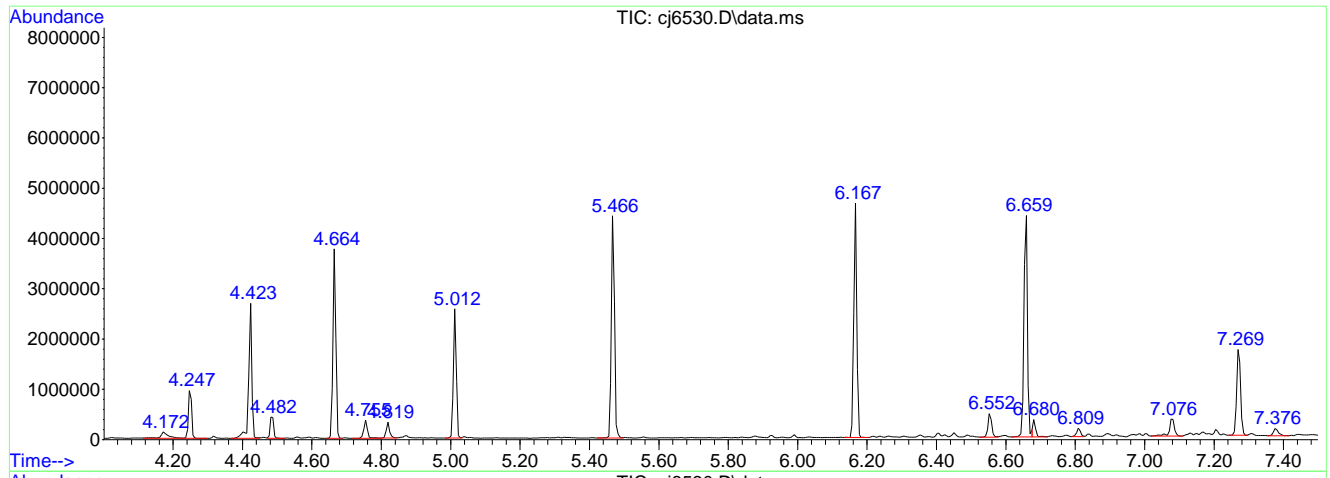
7.1.8  
7

LSC Report - Integrated Chromatogram

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6530.D  
Acq On : 09 May 2024 09:45 pm  
Operator : rocquans  
Sample : jd87833-4  
Misc : op54460,ecj297,30.2,,,1,1  
ALS Vial : 21 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p



7.1.8  
7



Library Search Compound Report

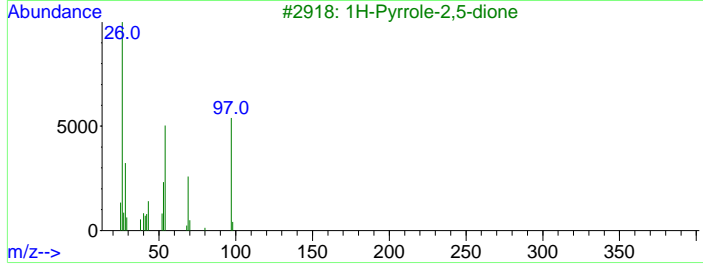
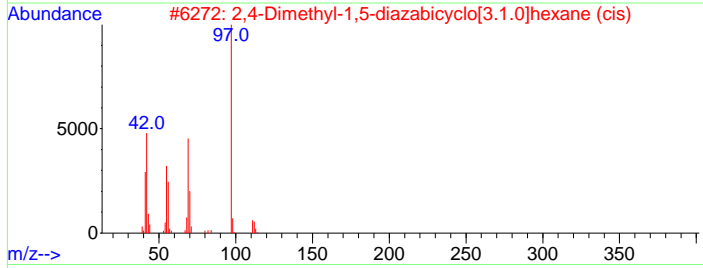
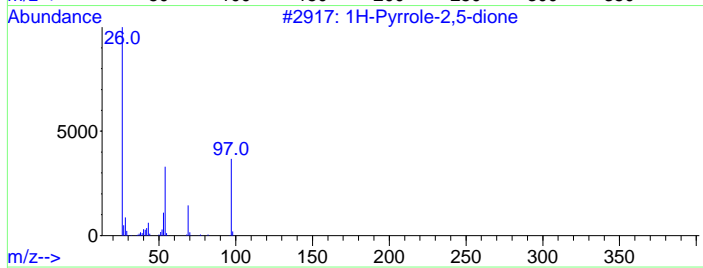
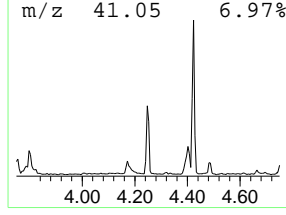
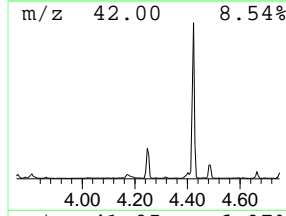
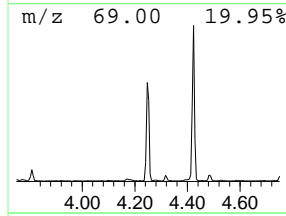
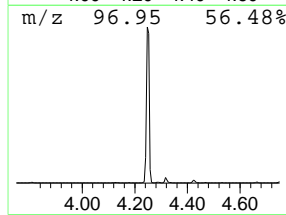
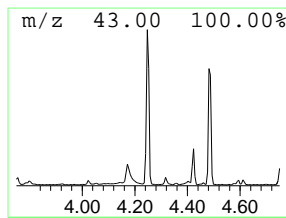
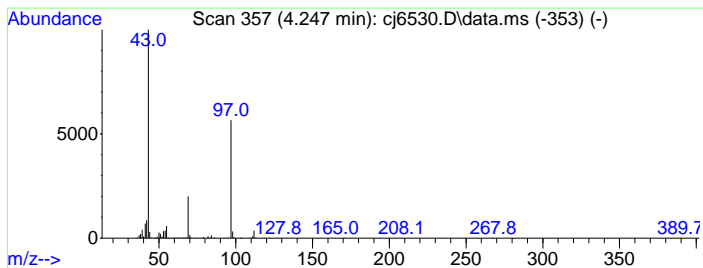
Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\
Data File : cj6530.D
Acq On : 09 May 2024 09:45 pm
Operator : rocquans
Sample : jd87833-4
Misc : op54460,ecj297,30.2,,1,1
ALS Vial : 21 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: lscint.p

\*\*\*\*\*
Peak Number 1 Unknown Concentration Rank 4

Table with 7 columns: R.T., EstConc, Area, Relative to ISTD, R.T., Hit# of, Tentative ID, MW, MolForm, CAS#, Qual. Row 1: 4.247, 11.59 ppm, 643523, 1,4-Dichlorobenzene-d4a, 4.664, 5, 1H-Pyrrole-2,5-dione, 97, C4H3NO2, 000541-59-3, 50.





Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6530.D  
Acq On : 09 May 2024 09:45 pm  
Operator : rocquans  
Sample : jd87833-4  
Misc : op54460,ecj297,30.2,,,1,1  
ALS Vial : 21 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

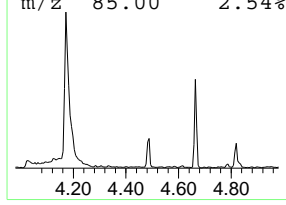
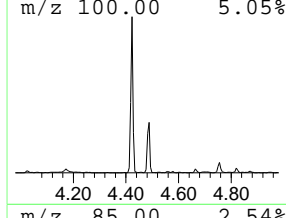
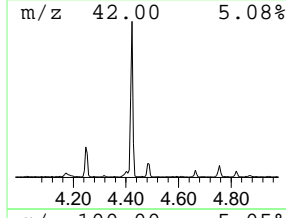
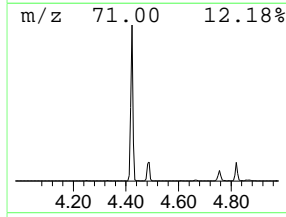
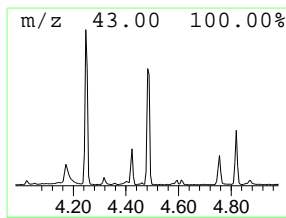
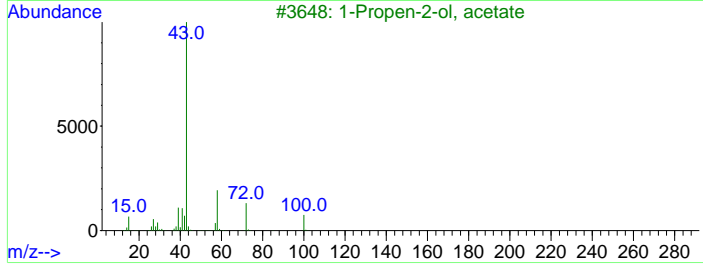
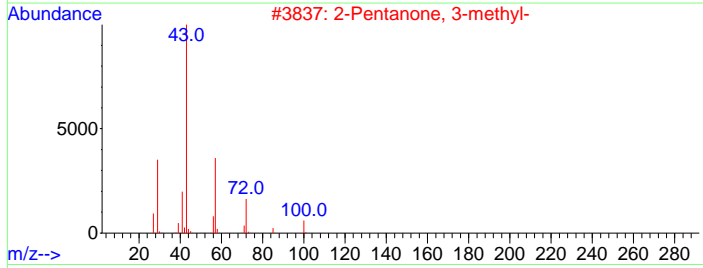
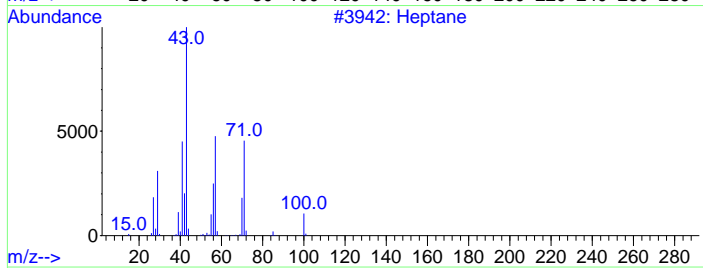
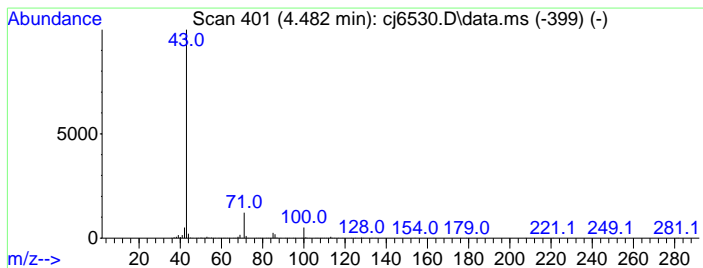
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 2 Unknown Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.482	5.36 ppm	297554	1,4-Dichlorobenzene-d4a	4.664

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Heptane	100	C7H16	000142-82-5	9
2		2-Pentanone, 3-methyl-	100	C6H12O	000565-61-7	9
3		1-Propen-2-ol, acetate	100	C5H8O2	000108-22-5	9
4		2-Pentanone, 3-methyl-	100	C6H12O	000565-61-7	9
5		3,6-Heptanedione	128	C7H12O2	001703-51-1	9



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6530.D  
Acq On : 09 May 2024 09:45 pm  
Operator : rocquans  
Sample : jd87833-4  
Misc : op54460,ecj297,30.2,,,1,1  
ALS Vial : 21 Sample Multiplier: 1

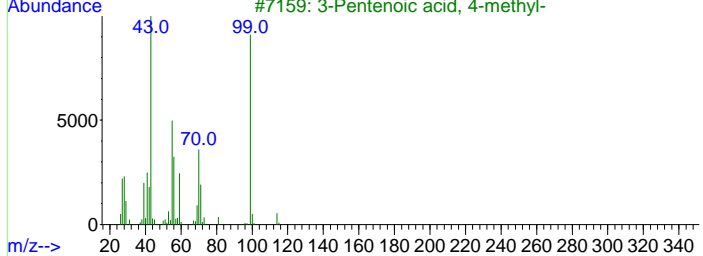
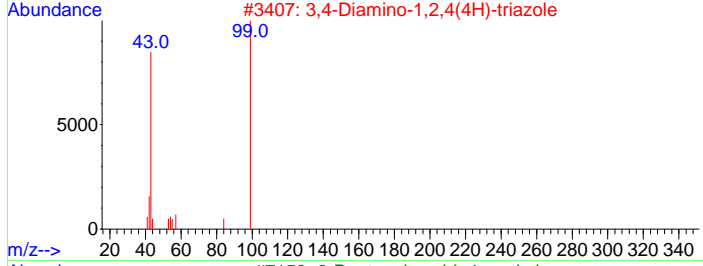
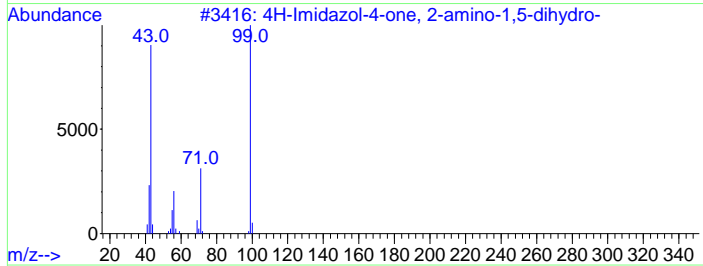
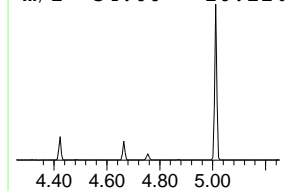
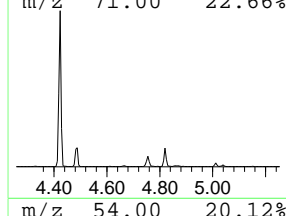
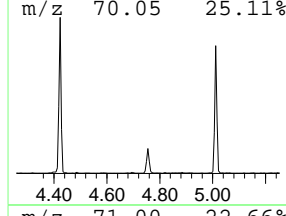
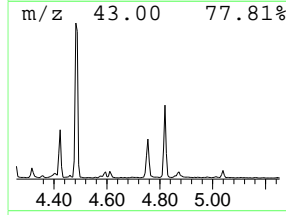
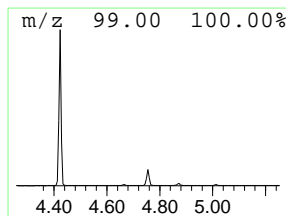
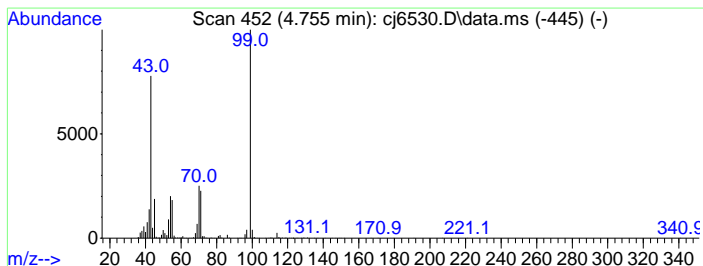
Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 3 Unknown Concentration Rank 22

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.755	4.73 ppm	262702	1,4-Dichlorobenzene-d4a	4.664

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	4H-Imidazol-4-one, 2-amino-1,5-d...	99	C3H5N3O	000503-86-6	53
2		3,4-Diamino-1,2,4(4H)-triazole	99	C2H5N5	038104-45-9	43
3		3-Pentenoic acid, 4-methyl-	114	C6H10O2	000504-85-8	42
4		2H-Pyran-2-one, 6-hexyltetrahydro-	184	C11H20O2	000710-04-3	40
5		.beta.-Acetylacrylic acid	114	C5H6O3	004743-82-2	38



7.1.8  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6530.D  
 Acq On : 09 May 2024 09:45 pm  
 Operator : rocquans  
 Sample : jd87833-4  
 Misc : op54460,ecj297,30.2,,,1,1  
 ALS Vial : 21 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

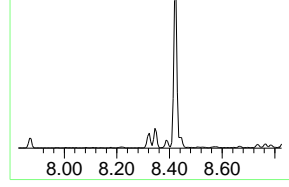
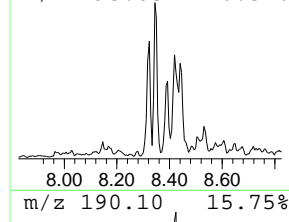
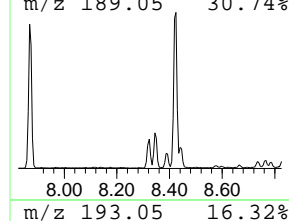
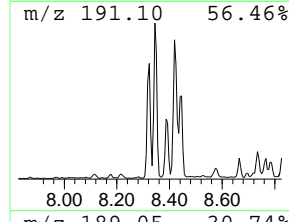
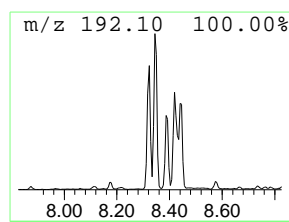
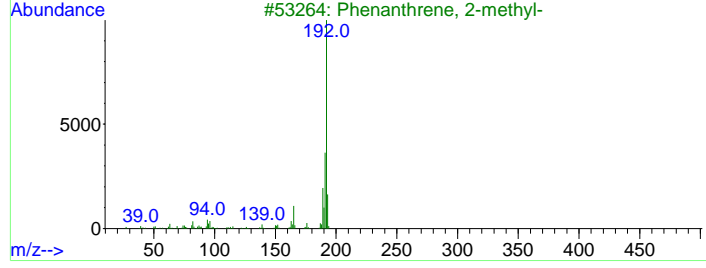
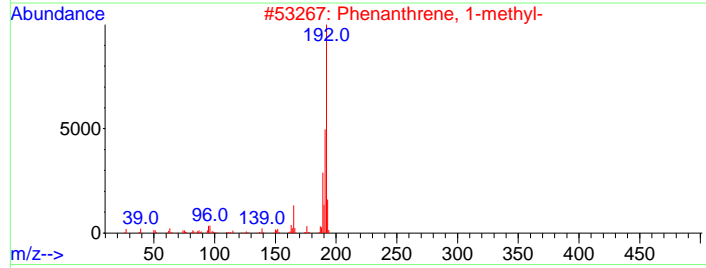
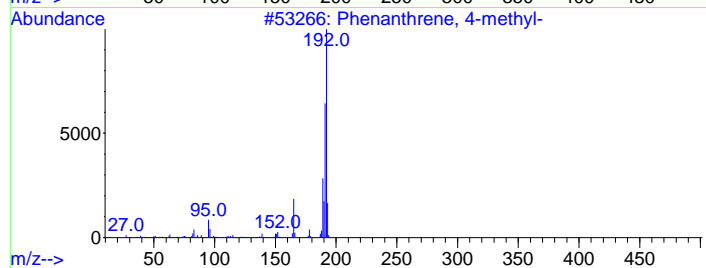
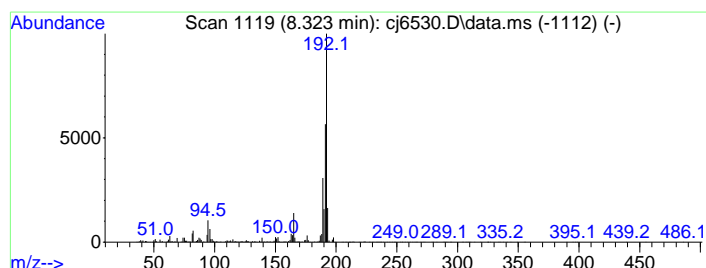
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 4 Phenanthrene, methyl Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.323	6.07 ppm	490956	Phenanthrene-d10b	7.868

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Phenanthrene, 4-methyl-	192	C15H12	000832-64-4	95
2		Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	93
3		Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	93
4		Anthracene, 2-methyl-	192	C15H12	000613-12-7	93
5		Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	92



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6530.D  
Acq On : 09 May 2024 09:45 pm  
Operator : rocquans  
Sample : jd87833-4  
Misc : op54460,ecj297,30.2,,,1,1  
ALS Vial : 21 Sample Multiplier: 1

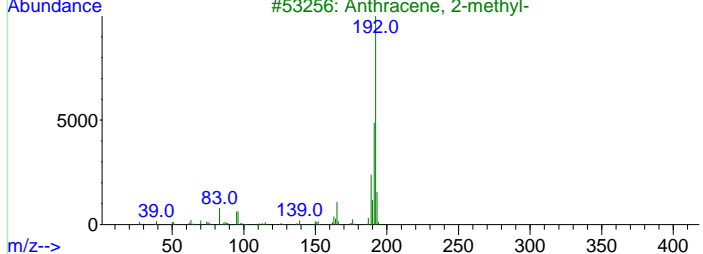
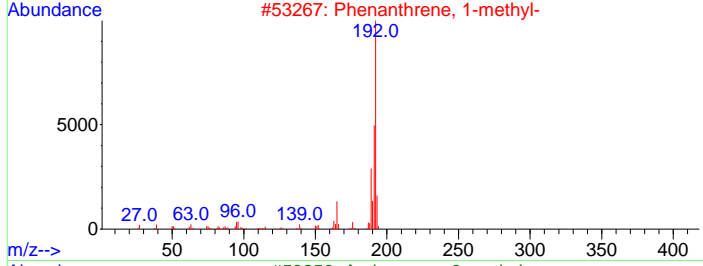
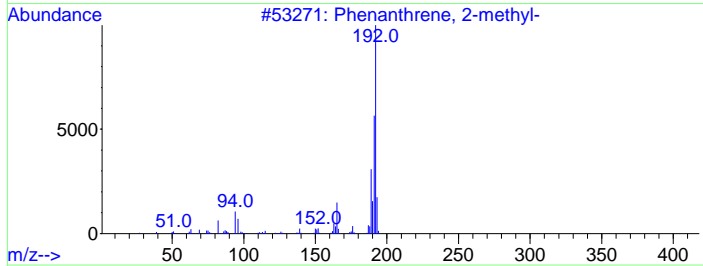
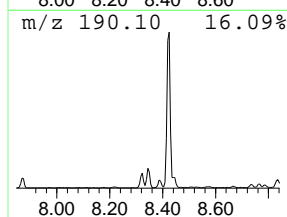
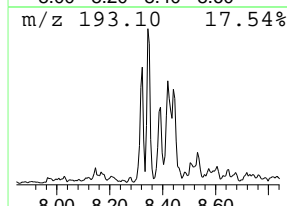
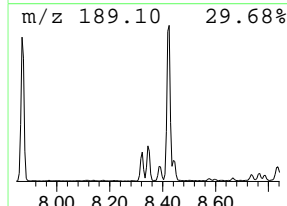
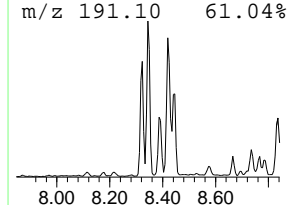
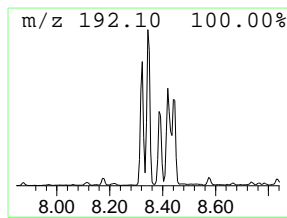
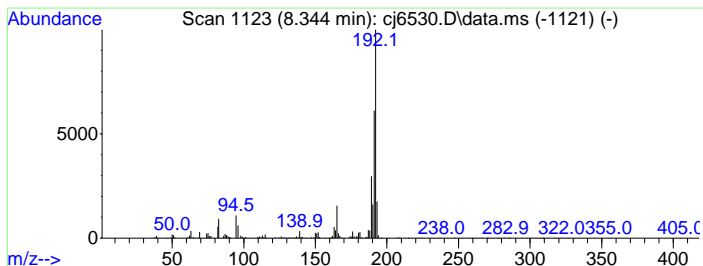
Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 5 Phenanthrene, methyl Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.344	5.28 ppm	426785	Phenanthrene-d10b	7.868

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	98
2		Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	97
3		Anthracene, 2-methyl-	192	C15H12	000613-12-7	96
4		Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	96
5		1H-Cyclopropa[1]phenanthrene,1a,...	192	C15H12	000949-41-7	96



7.1.8  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6530.D  
 Acq On : 09 May 2024 09:45 pm  
 Operator : rocquans  
 Sample : jd87833-4  
 Misc : op54460,ecj297,30.2,,,1,1  
 ALS Vial : 21 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

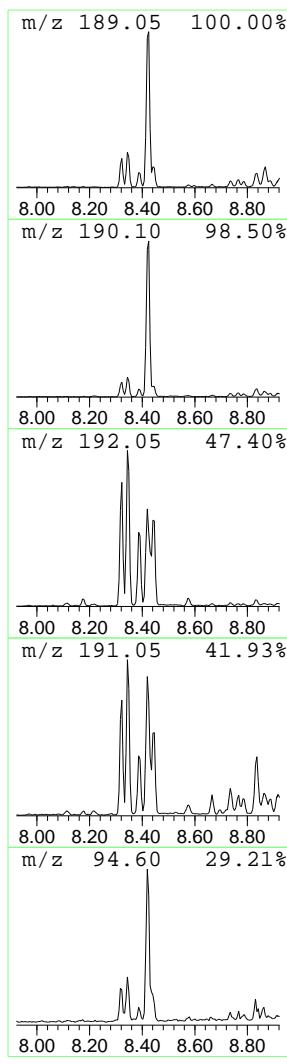
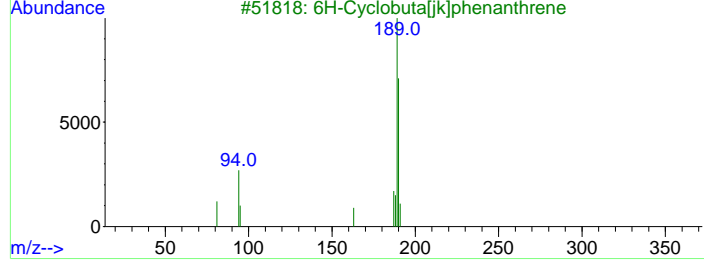
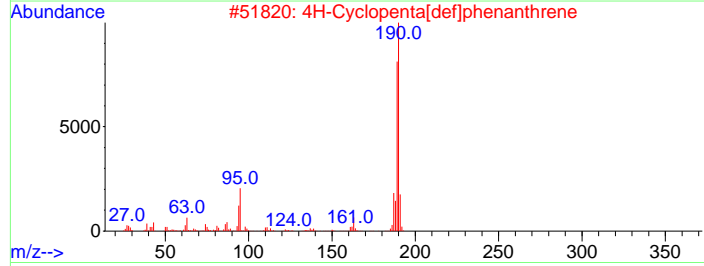
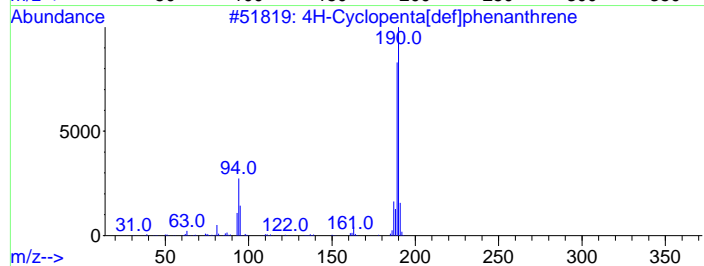
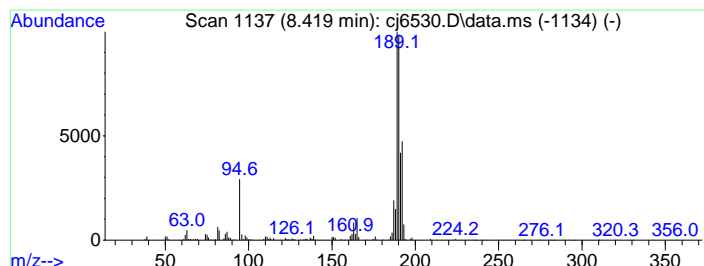
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 6 4H-Cyclopenta[def]phenanthrene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.419	17.16 ppm	1387930	Phenanthrene-d10b	7.868

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	4H-Cyclopenta[def]phenanthrene	190	C15H10	000203-64-5	70
2		4H-Cyclopenta[def]phenanthrene	190	C15H10	000203-64-5	64
3		6H-Cyclobuta[jk]phenanthrene	190	C15H10	083469-43-6	58
4		Carbonic acid, ethyl 2-formyl-4,...	262	C10H8Cl2O4	1000331-34-4	50
5		4H-Cyclopenta[def]phenanthrene	190	C15H10	000203-64-5	50



7.18  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6530.D  
Acq On : 09 May 2024 09:45 pm  
Operator : rocquans  
Sample : jd87833-4  
Misc : op54460,ecj297,30.2,,,1,1  
ALS Vial : 21 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

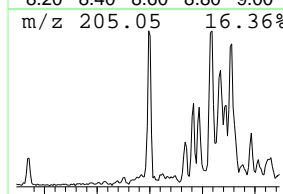
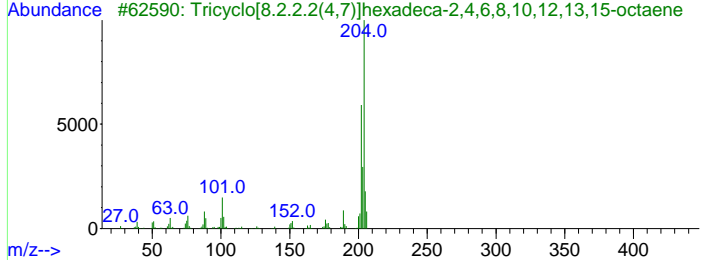
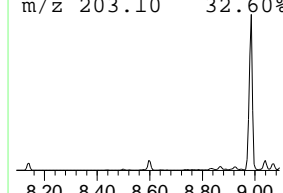
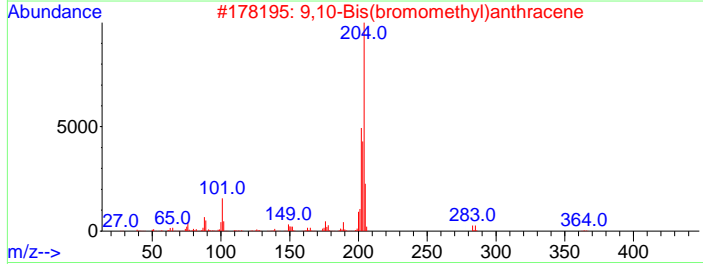
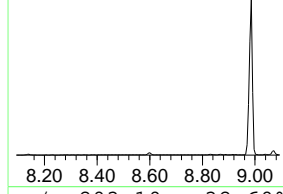
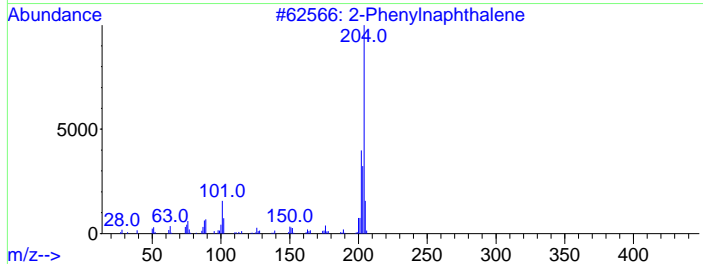
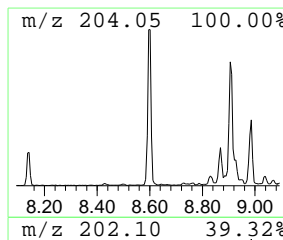
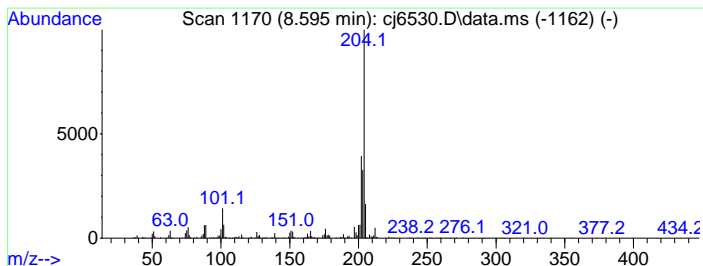
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 7 Unknown Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.595	7.73 ppm	625350	Phenanthrene-d10b	7.868

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2-Phenylnaphthalene	204	C16H12	035465-71-5	93
2		9,10-Bis(bromomethyl)anthracene	362	C16H12Br2	034373-96-1	86
3		Tricyclo[8.2.2.2(4,7)]hexadeca-2...	204	C16H12	006572-60-7	86
4		Naphthalene, 2-phenyl-	204	C16H12	000612-94-2	83
5		5,16[1',2'] : 8,13[1'',2'']-Dibenz...	408	C32H24	005672-97-9	78



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6530.D  
 Acq On : 09 May 2024 09:45 pm  
 Operator : rocquans  
 Sample : jd87833-4  
 Misc : op54460,ecj297,30.2,,1,1  
 ALS Vial : 21 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

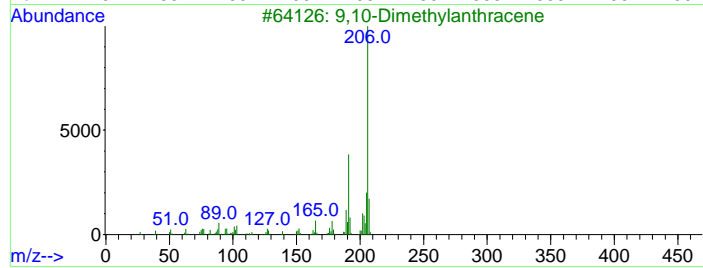
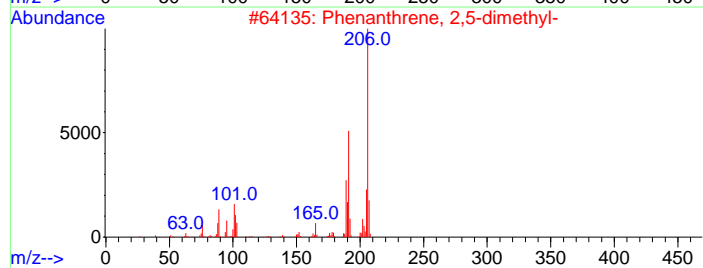
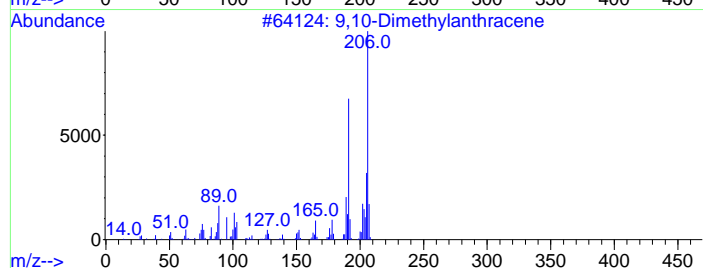
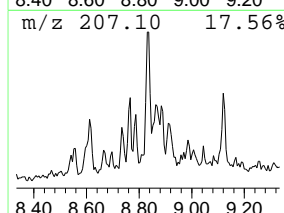
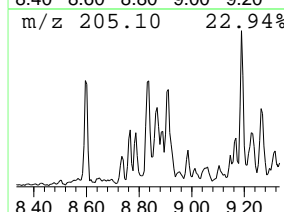
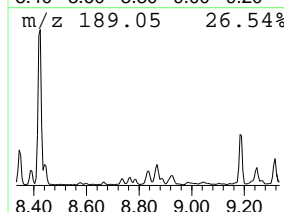
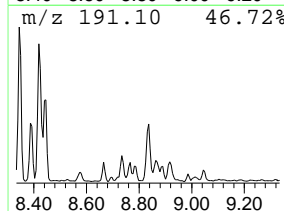
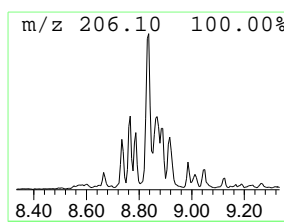
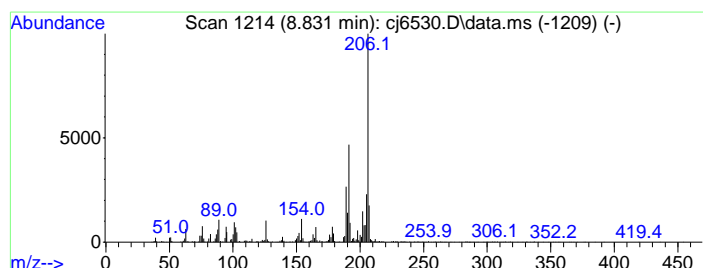
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 8 Anthracene, dimethyl Concentration Rank 21

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.831	4.96 ppm	401276	Phenanthrene-d10b	7.868

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	9,10-Dimethylantracene	206	C16H14	000781-43-1	97
2		Phenanthrene, 2,5-dimethyl-	206	C16H14	003674-66-6	96
3		9,10-Dimethylantracene	206	C16H14	000781-43-1	95
4		Anthracene, 1,4-dimethyl-	206	C16H14	000781-92-0	93
5		Phenanthrene, 2,3-dimethyl-	206	C16H14	003674-65-5	91



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6530.D  
 Acq On : 09 May 2024 09:45 pm  
 Operator : rocquans  
 Sample : jd87833-4  
 Misc : op54460,ecj297,30.2,,1,1  
 ALS Vial : 21 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

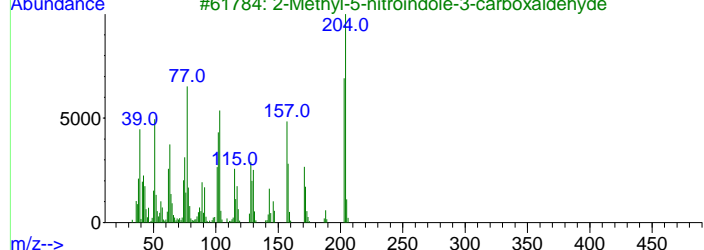
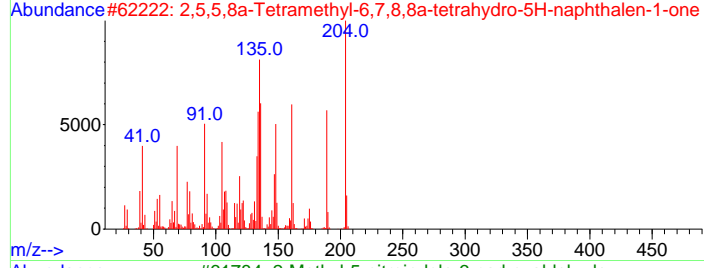
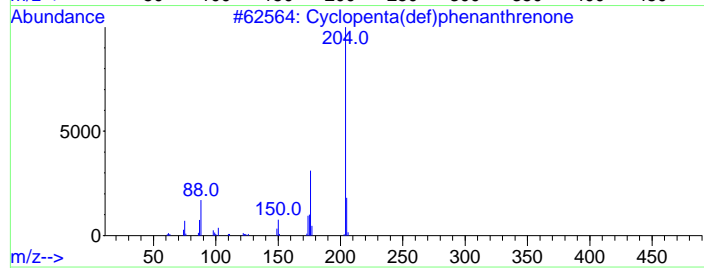
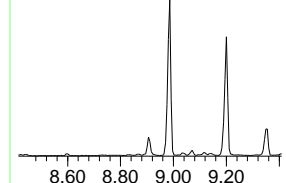
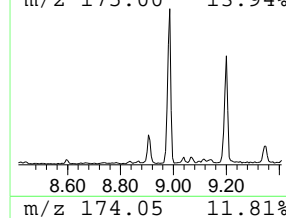
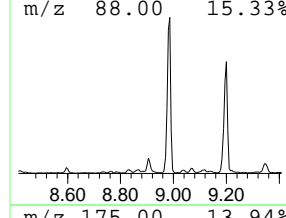
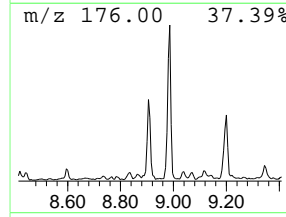
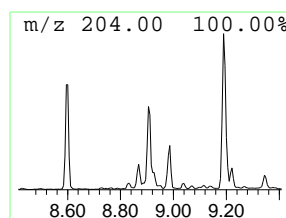
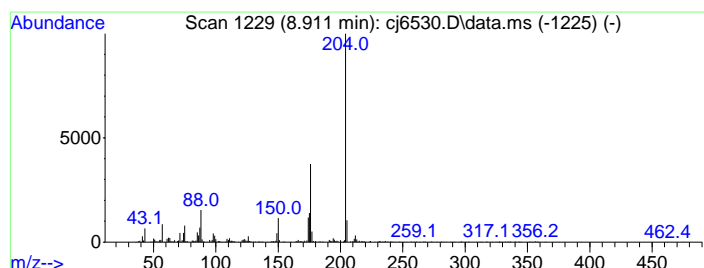
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 9 Unknown Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.911	5.01 ppm	405057	Phenanthrene-d10b	7.868

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Cyclopenta(def)phenanthrenone	204	C15H8O	005737-13-3	90
2		2,5,5,8a-Tetramethyl-6,7,8,8a-te...	204	C14H20O	124957-09-1	43
3		2-Methyl-5-nitroindole-3-carboxa...	204	C10H8N2O3	003558-17-6	38
4		[1,1'-Biphenyl-3-ol], 6-chloro-	204	C12H9ClO	021345-13-1	37
5		Quinoline, 8-methoxy-5-nitro-	204	C10H8N2O3	1000298-88-7	37



7.1.8  
7



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6530.D  
 Acq On : 09 May 2024 09:45 pm  
 Operator : rocquans  
 Sample : jd87833-4  
 Misc : op54460,ecj297,30.2,,1,1  
 ALS Vial : 21 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

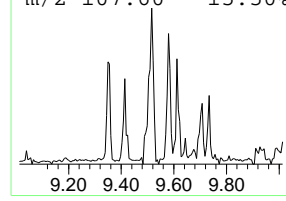
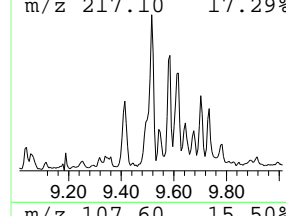
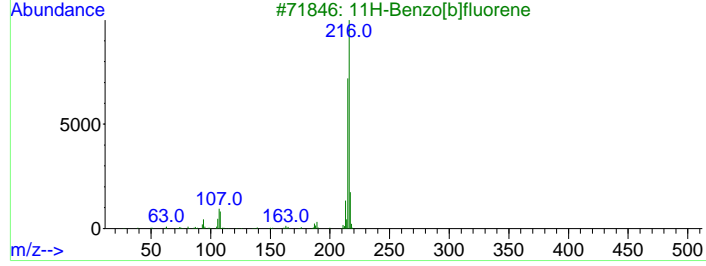
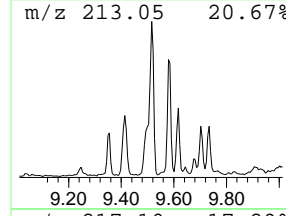
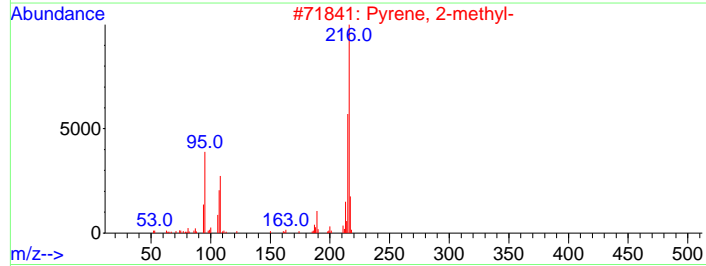
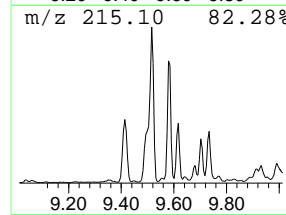
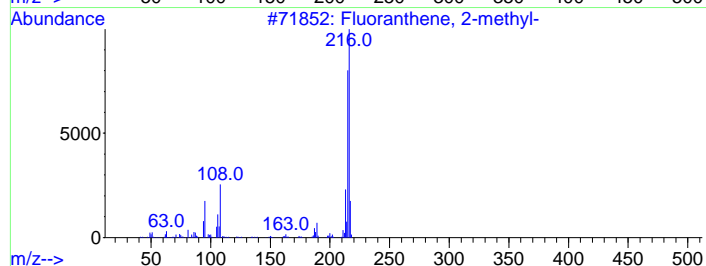
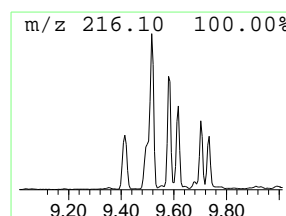
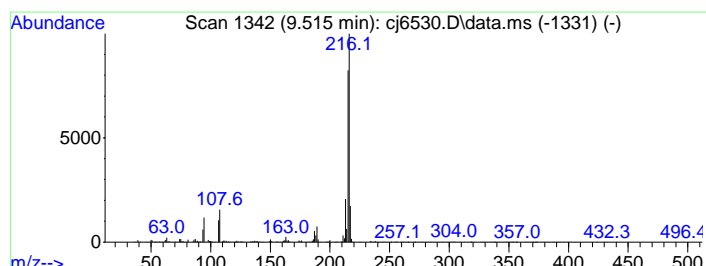
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 10 Fluoranthene, methyl Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.515	8.10 ppm	1359410	Chrysene-d12	10.366

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Fluoranthene, 2-methyl-	216	C17H12	033543-31-6	95
2	Pyrene, 2-methyl-	216	C17H12	003442-78-2	95
3	11H-Benzo[b]fluorene	216	C17H12	000243-17-4	94
4	11H-Benzo[a]fluorene	216	C17H12	000238-84-6	91
5	11H-Benzo[b]fluorene	216	C17H12	000243-17-4	90



7.18  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6530.D  
Acq On : 09 May 2024 09:45 pm  
Operator : rocquans  
Sample : jd87833-4  
Misc : op54460,ecj297,30.2,,,1,1  
ALS Vial : 21 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

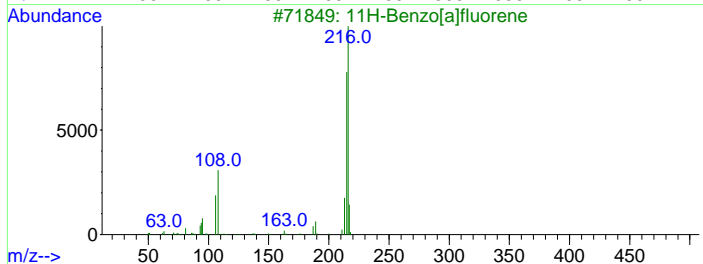
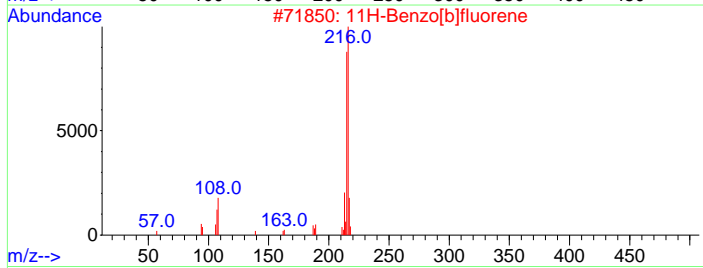
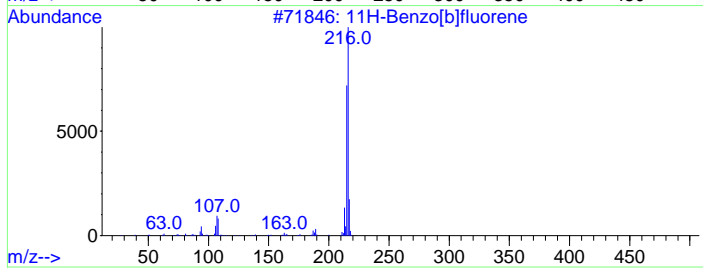
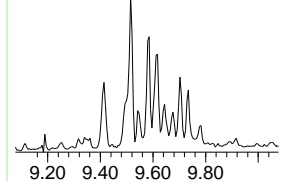
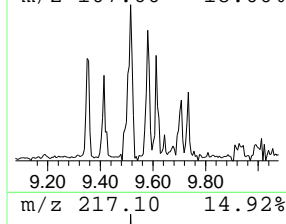
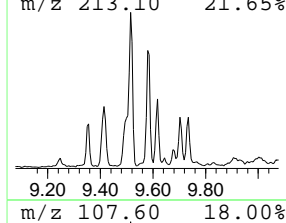
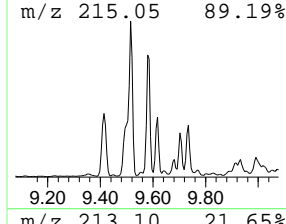
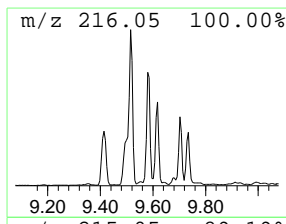
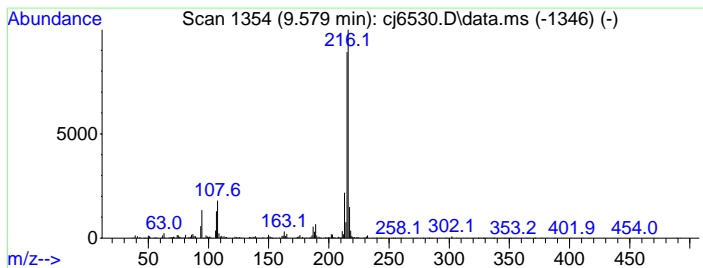
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 11 Unknown Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.579	5.01 ppm	840613	Chrysene-d12	10.366

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	11H-Benzo[b]fluorene	216	C17H12	000243-17-4	94
2		11H-Benzo[b]fluorene	216	C17H12	000243-17-4	90
3		11H-Benzo[a]fluorene	216	C17H12	000238-84-6	87
4		Pyrene, 1-methyl-	216	C17H12	002381-21-7	87
5		Fluoranthene, 2-methyl-	216	C17H12	033543-31-6	81



7.18  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6530.D  
 Acq On : 09 May 2024 09:45 pm  
 Operator : rocquans  
 Sample : jd87833-4  
 Misc : op54460,ecj297,30.2,,1,1  
 ALS Vial : 21 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

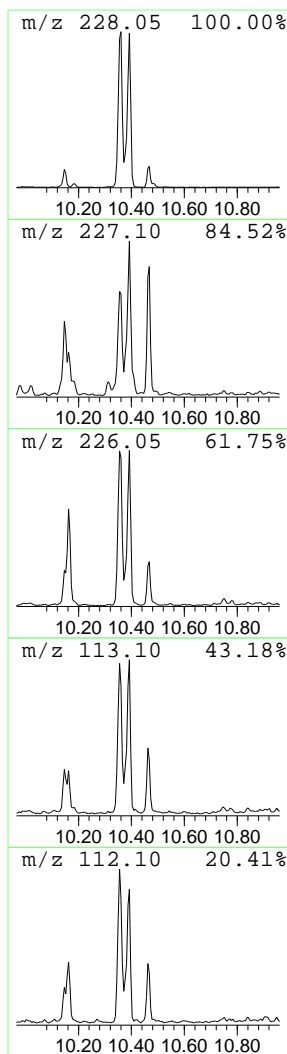
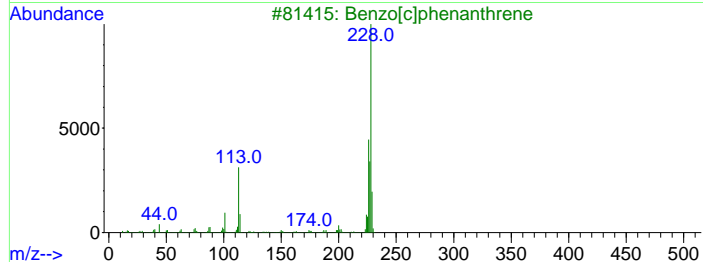
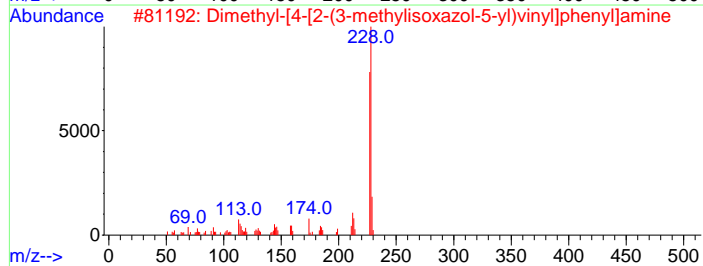
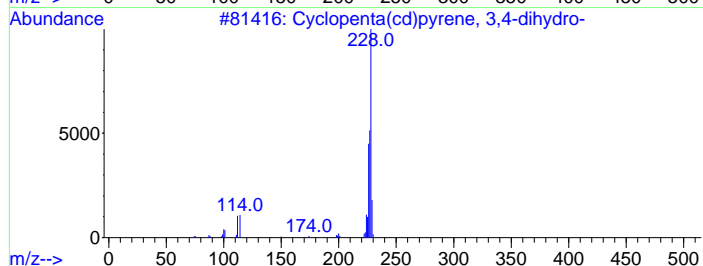
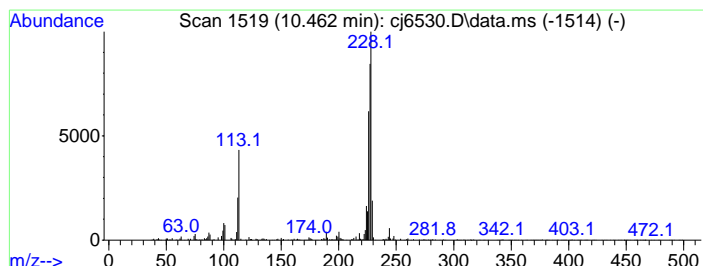
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 12 Unknown Concentration Rank 24

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.462	4.18 ppm	701122	Chrysene-d12a	10.366

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Cyclopenta(cd)pyrene, 3,4-dihydro-	228	C18H12	025732-74-5	50
2		Dimethyl-[4-[2-(3-methylisoxazol...	228	C14H16N2O	1000306-39-6	43
3		Benzo[c]phenanthrene	228	C18H12	000195-19-7	38
4		1,3,5-Triazine-2(1H)-thione, 4-(...	227	C9H17N5S	023613-02-7	38
5		Purine-6(1H)-thione, 3,7-dimethy...	228	C7H8N4Se	023663-58-3	32



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6530.D  
Acq On : 09 May 2024 09:45 pm  
Operator : rocquans  
Sample : jd87833-4  
Misc : op54460,ecj297,30.2,,,1,1  
ALS Vial : 21 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

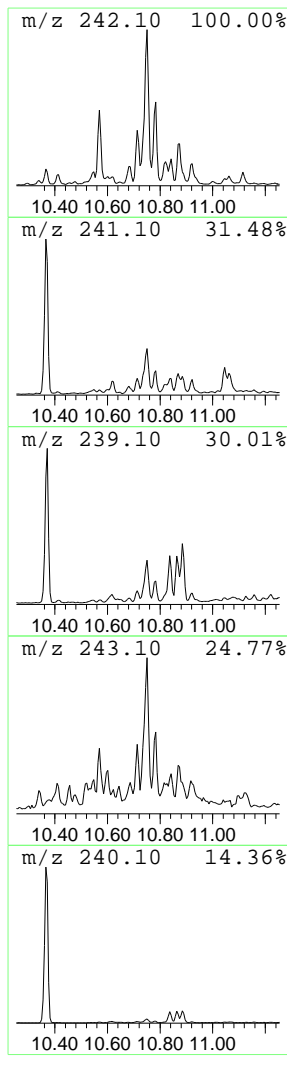
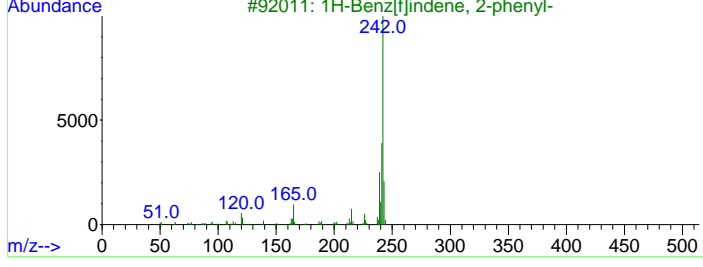
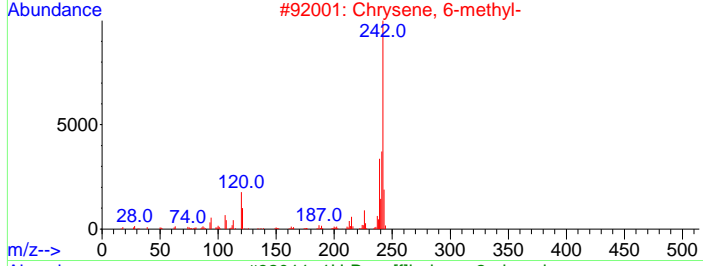
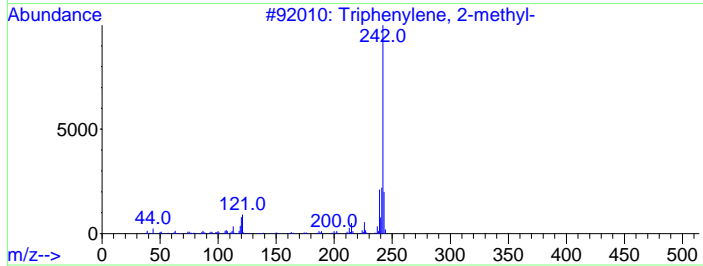
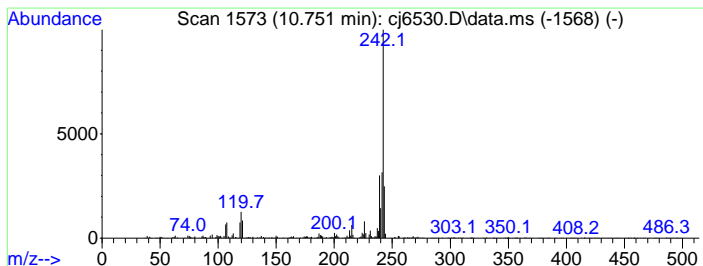
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 13 Unknown Concentration Rank 25

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.751	4.07 ppm	682791	Chrysene-d12a	10.366

Hit#	of 5	Tentative ID	MW	MolForm	CAS#	Qual
1		Triphenylene, 2-methyl-	242	C19H14	001705-84-6	96
2		Chrysene, 6-methyl-	242	C19H14	001705-85-7	96
3		1H-Benz[f]indene, 2-phenyl-	242	C19H14	1000305-22-4	95
4		Benz[a]anthracene, 7-methyl-	242	C19H14	002541-69-7	94
5		Chrysene, 2-methyl-	242	C19H14	003351-32-4	94



Library Search Compound Report

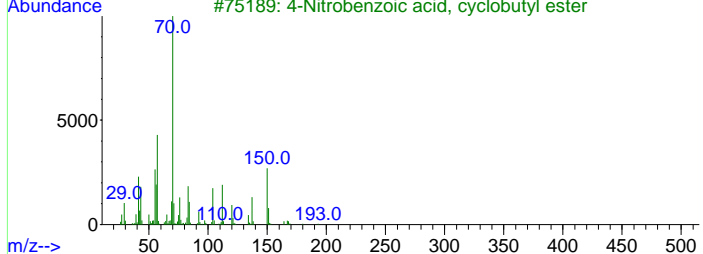
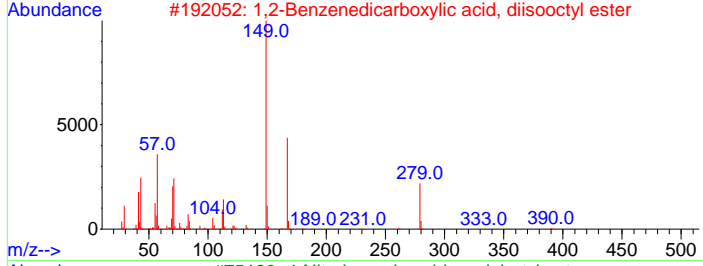
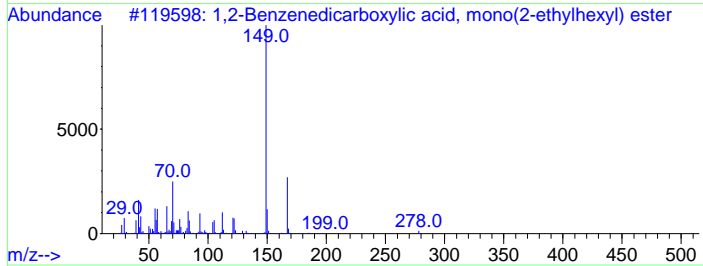
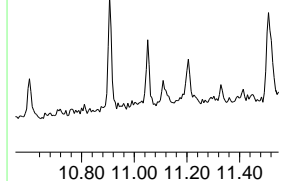
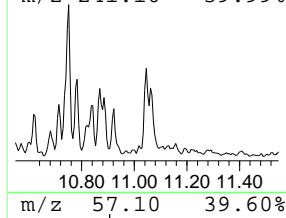
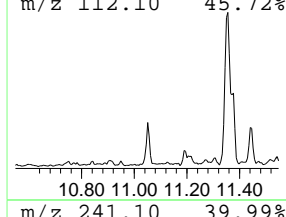
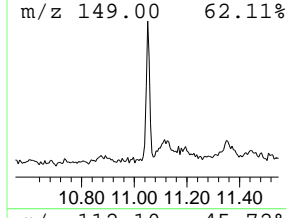
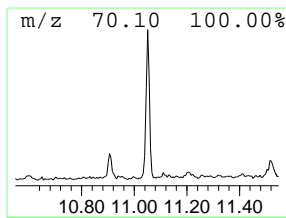
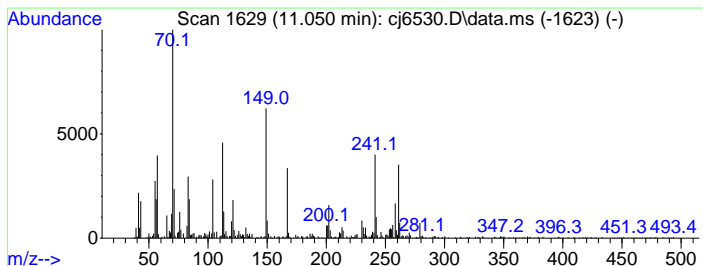
Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\
Data File : cj6530.D
Acq On : 09 May 2024 09:45 pm
Operator : rocquans
Sample : jd87833-4
Misc : op54460,ecj297,30.2,,1,1
ALS Vial : 21 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: lscint.p

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Peak Number 14 Unknown Concentration Rank 8

Table with 7 columns: R.T., EstConc, Area, Relative to ISTD, R.T., Hit# of 5, Tentative ID, MW, MolForm, CAS#, Qual. Row 1: 11.050, 8.69 ppm, 612214, Perylene-d12, 11.719.



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6530.D  
Acq On : 09 May 2024 09:45 pm  
Operator : rocquans  
Sample : jd87833-4  
Misc : op54460,ecj297,30.2,,1,1  
ALS Vial : 21 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

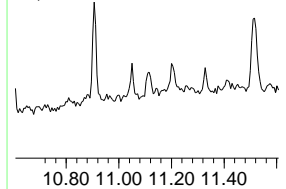
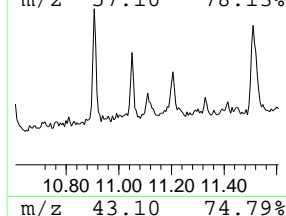
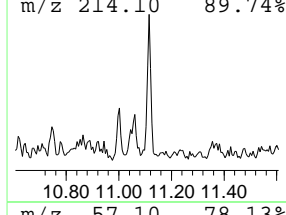
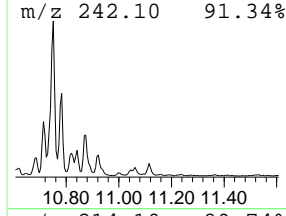
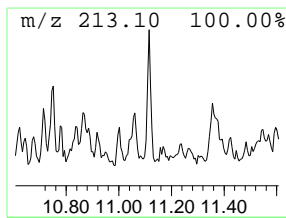
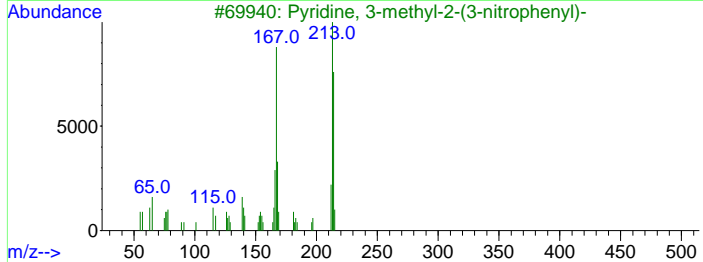
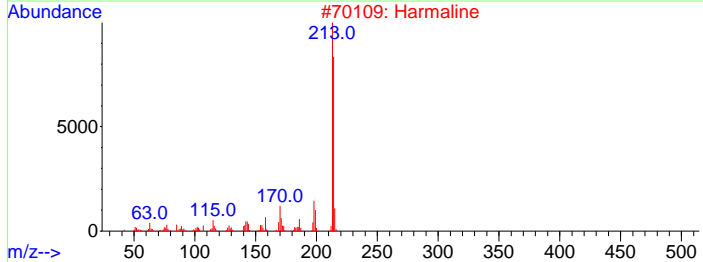
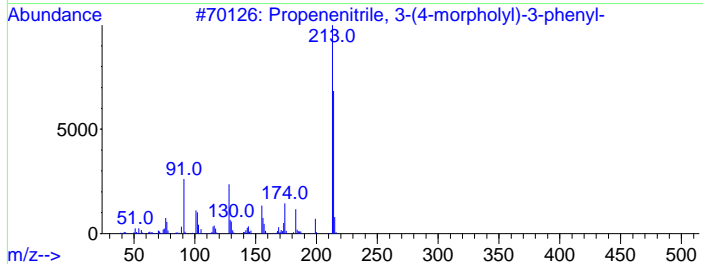
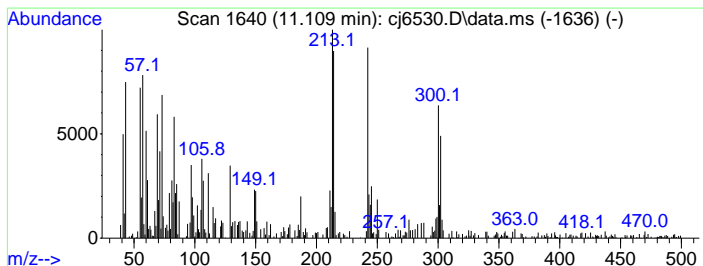
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 15 Unknown Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.109	7.37 ppm	519073	Perylene-d12	11.719

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Propenenitrile, 3-(4-morpholy)-...	214	C13H14N2O	020842-95-9	30
2		Harmaline	214	C13H14N2O	000304-21-2	27
3		Pyridine, 3-methyl-2-(3-nitrophe...	214	C12H10N2O2	113120-14-2	27
4		4'-Bromo-flavone	300	C15H9BrO2	020525-20-6	15
5		Thiazolo[4,5-d]pyrimidin-7(4H)-one	213	C7H7N3OS2	1000153-89-3	14



7.18  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6530.D  
Acq On : 09 May 2024 09:45 pm  
Operator : rocquans  
Sample : jd87833-4  
Misc : op54460,ecj297,30.2,,1,1  
ALS Vial : 21 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

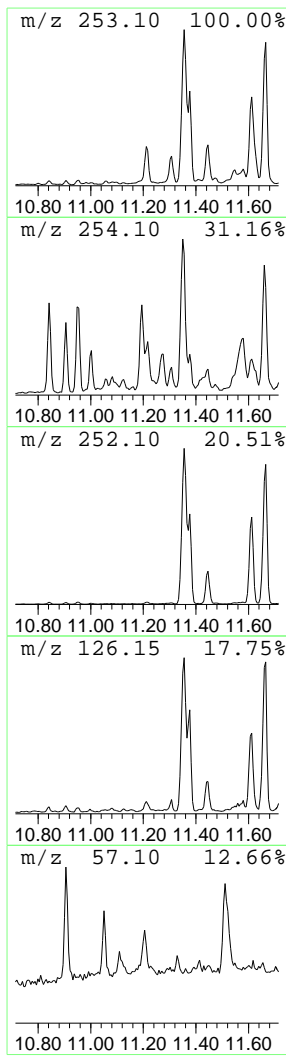
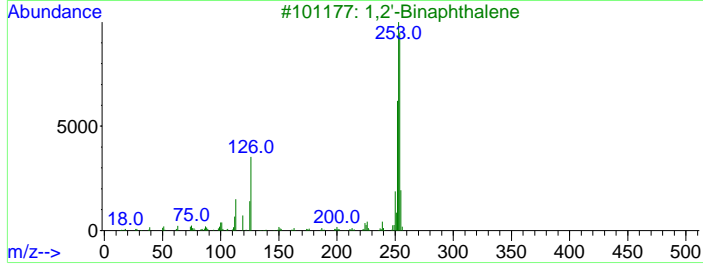
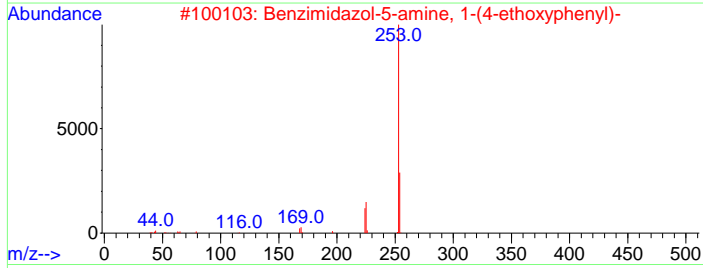
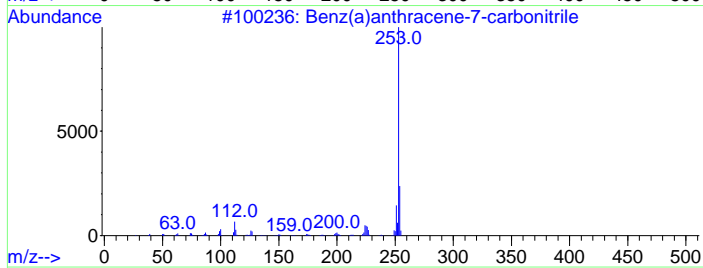
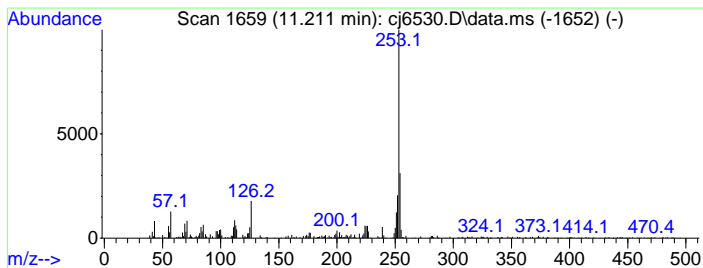
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 16 Unknown Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.211	11.36 ppm	800337	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Benz(a)anthracene-7-carbonitrile	253	C19H11N	007476-08-6	92
2			Benzimidazol-5-amine, 1-(4-ethox...	253	C15H15N3O	007104-62-3	50
3			1,2'-Binaphthalene	254	C20H14	004325-74-0	47
4			Imidazole, 2-iodo-5-methyl-4-nitro-	253	C4H4IN3O2	149510-86-1	38
5			4,6'-Biazulenyl	254	C20H14	094154-49-1	38



7.1.8  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6530.D  
Acq On : 09 May 2024 09:45 pm  
Operator : rocquans  
Sample : jd87833-4  
Misc : op54460,ecj297,30.2,,,1,1  
ALS Vial : 21 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

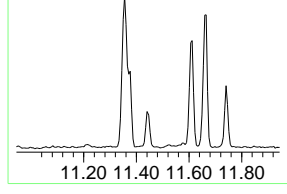
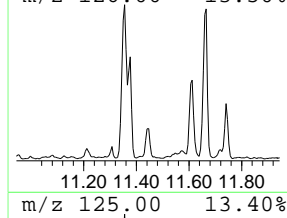
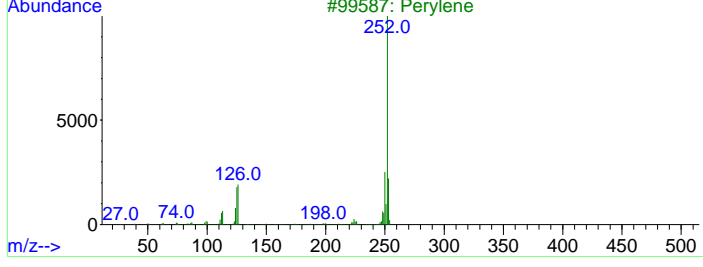
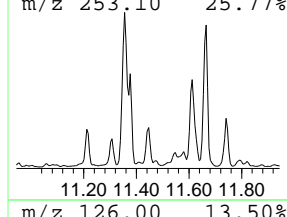
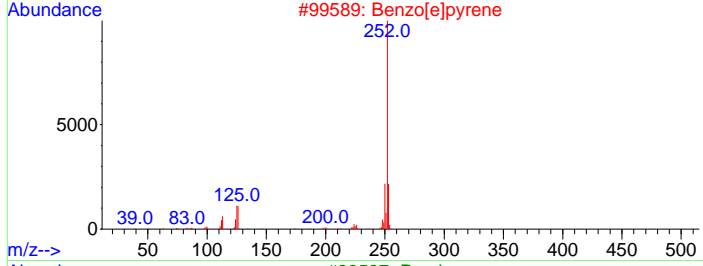
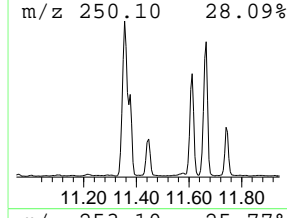
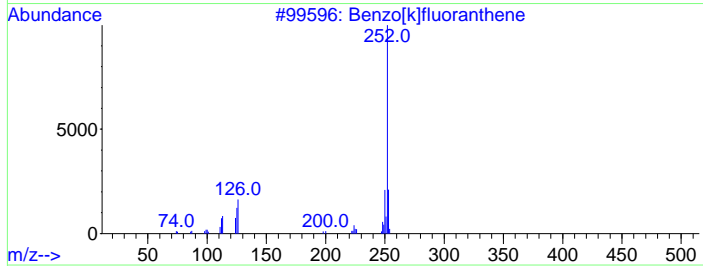
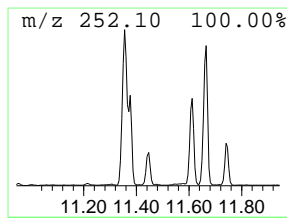
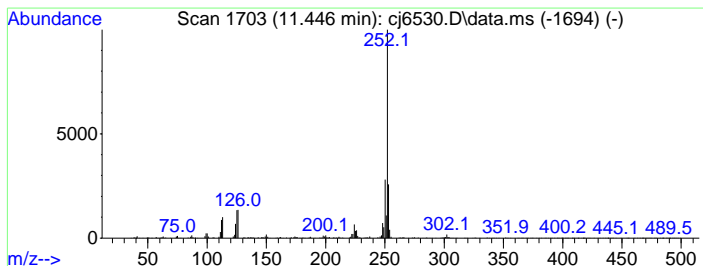
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 17 Unknown PHA Substance Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.446	12.11 ppm	852877	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Benzo[k]fluoranthene	252	C20H12	000207-08-9	98
2			Benzo[e]pyrene	252	C20H12	000192-97-2	98
3			Perylene	252	C20H12	000198-55-0	94
4			Benzo[a]pyrene	252	C20H12	000050-32-8	94
5			Benz[e]acephenanthrylene	252	C20H12	000205-99-2	94



7.1.8  
7



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6530.D  
Acq On : 09 May 2024 09:45 pm  
Operator : rocquans  
Sample : jd87833-4  
Misc : op54460,ecj297,30.2,,,1,1  
ALS Vial : 21 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

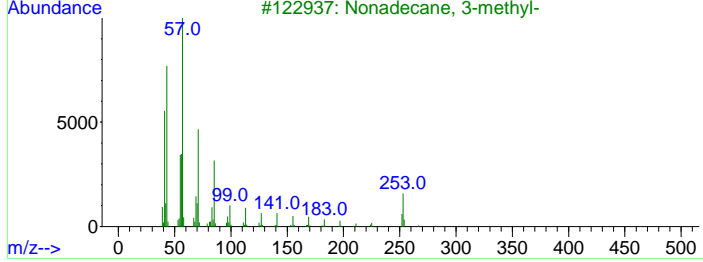
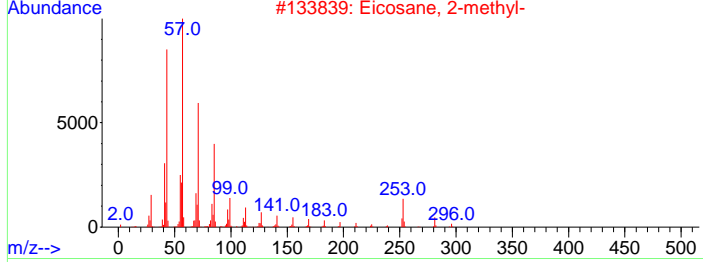
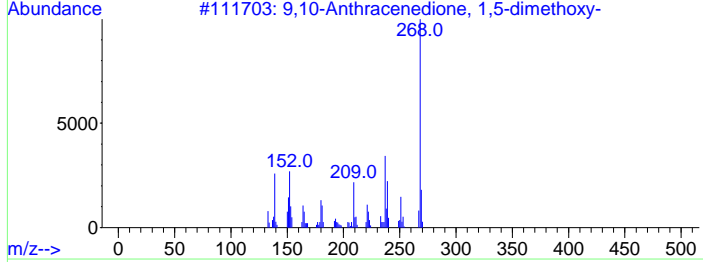
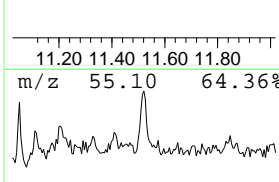
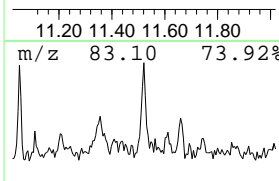
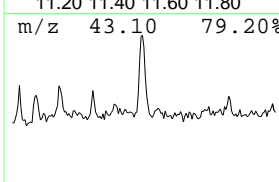
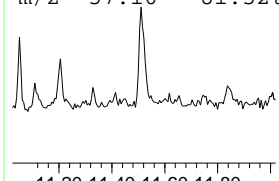
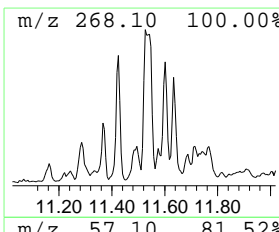
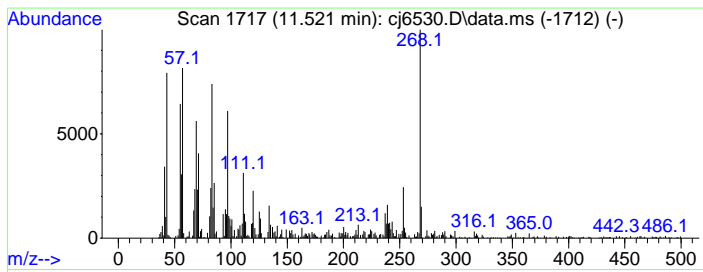
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 18 Unknown Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.521	5.52 ppm	389122	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			9,10-Anthracenedione, 1,5-dimeth...	268	C16H12O4	006448-90-4	64
2			Eicosane, 2-methyl-	296	C21H44	001560-84-5	25
3			Nonadecane, 3-methyl-	282	C20H42	006418-45-7	25
4			Dinaphtho[1,2-b:1',2'-d]furan	268	C20H12O	000207-93-2	25
5			3-Methylcholanthrene	268	C21H16	000056-49-5	18



7.18  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6530.D  
Acq On : 09 May 2024 09:45 pm  
Operator : rocquans  
Sample : jd87833-4  
Misc : op54460,ecj297,30.2,,,1,1  
ALS Vial : 21 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

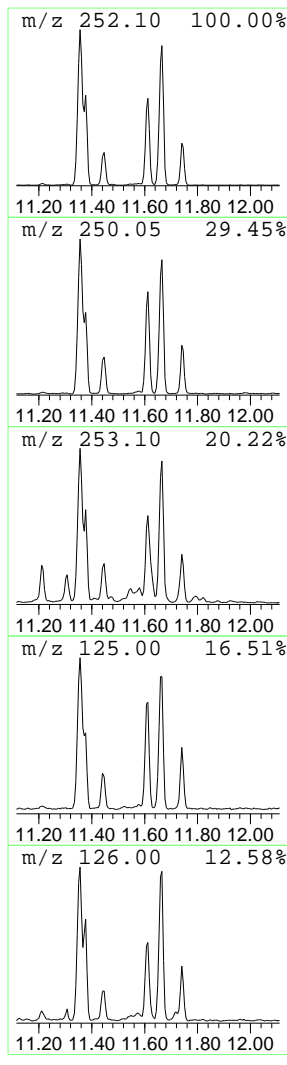
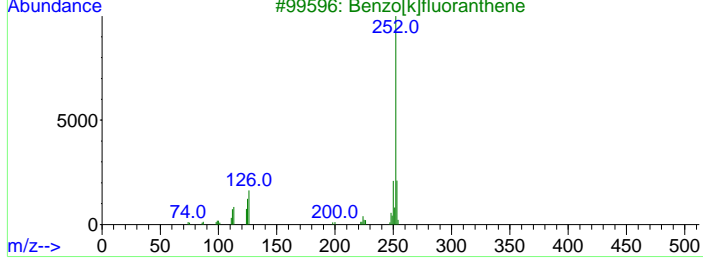
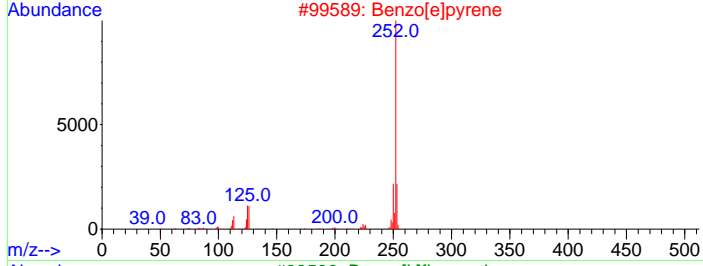
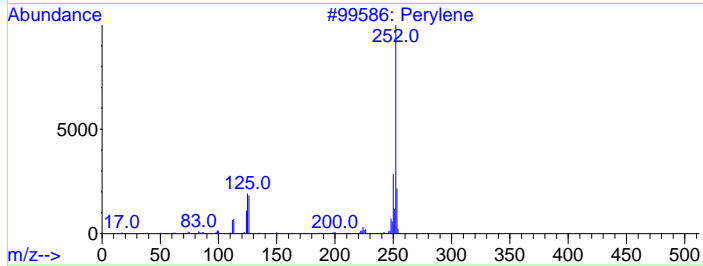
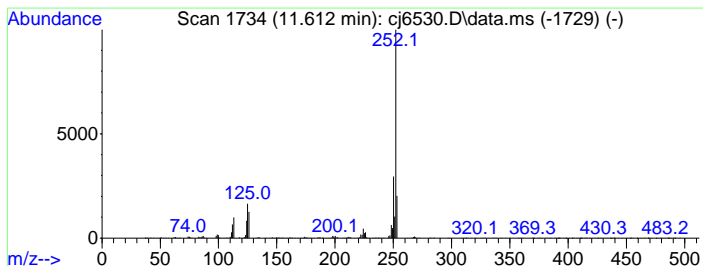
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 19 Unknown PHA Substance Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.612	24.26 ppm	1709060	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Perylene	252	C20H12	000198-55-0	98
2			Benzo[e]pyrene	252	C20H12	000192-97-2	98
3			Benzo[k]fluoranthene	252	C20H12	000207-08-9	98
4			Perylene	252	C20H12	000198-55-0	94
5			Benzo[k]fluoranthene	252	C20H12	000207-08-9	93



7.1.8  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6530.D  
Acq On : 09 May 2024 09:45 pm  
Operator : rocquans  
Sample : jd87833-4  
Misc : op54460,ecj297,30.2,,,1,1  
ALS Vial : 21 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

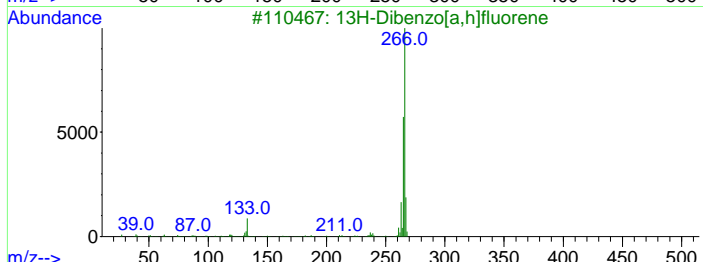
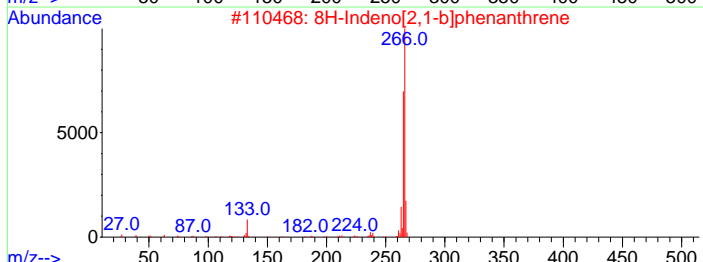
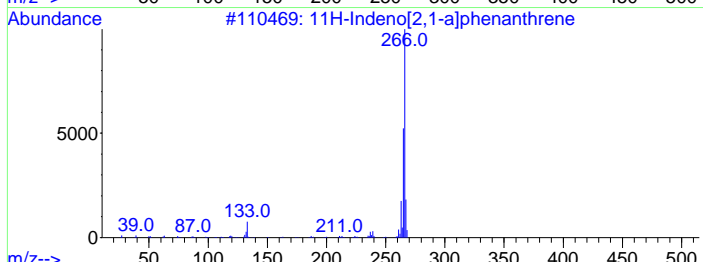
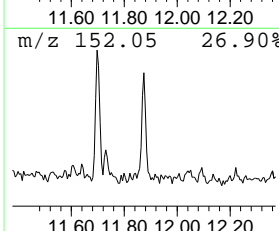
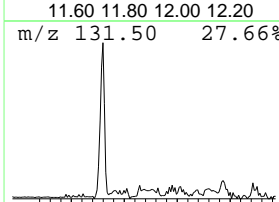
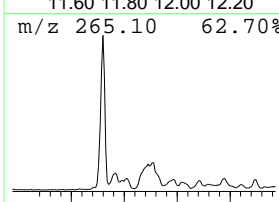
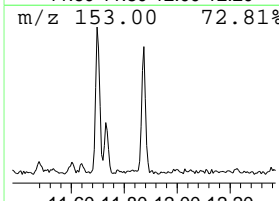
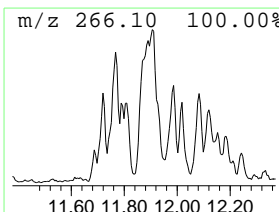
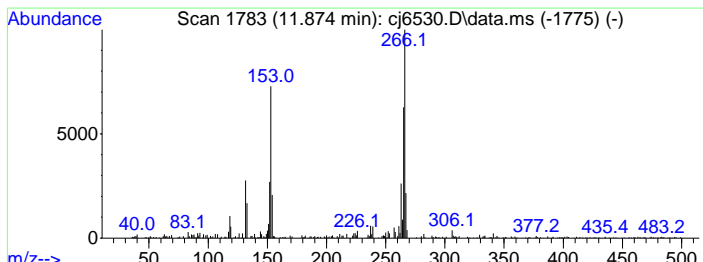
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 20 H-Indeno phenanthrene Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.874	5.63 ppm	396307	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			11H-Indeno[2,1-a]phenanthrene	266	C21H14	000220-97-3	89
2			8H-Indeno[2,1-b]phenanthrene	266	C21H14	000241-28-1	55
3			13H-Dibenzo[a,h]fluorene	266	C21H14	000239-85-0	50
4			Perylene, 3-methyl-	266	C21H14	024471-47-4	46
5			Thiazole, 4-phenyl-2-(4-tolylami...	266	C16H14N2S	016098-04-7	43



7.1.8  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6530.D  
Acq On : 09 May 2024 09:45 pm  
Operator : rocquans  
Sample : jd87833-4  
Misc : op54460,ecj297,30.2,,,1,1  
ALS Vial : 21 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

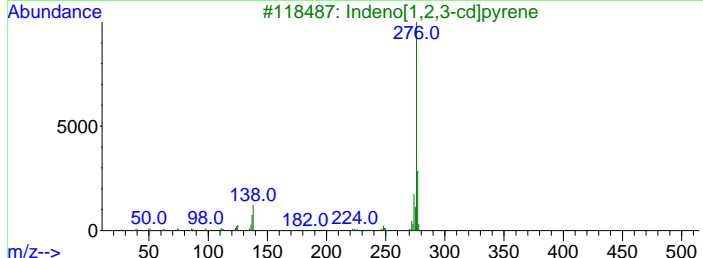
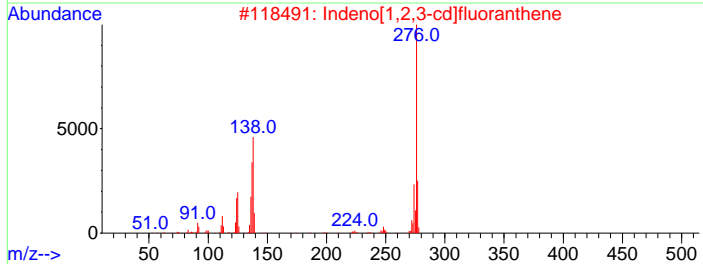
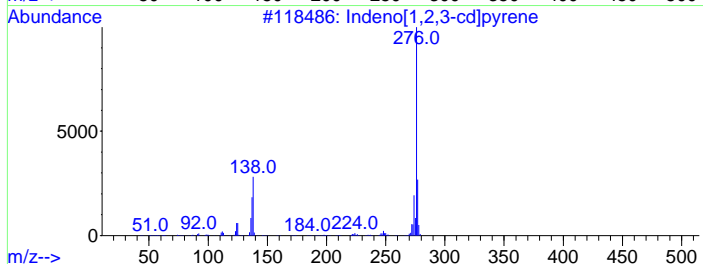
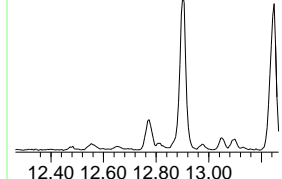
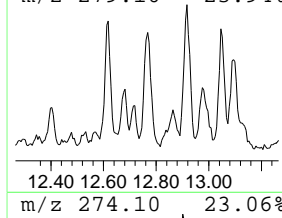
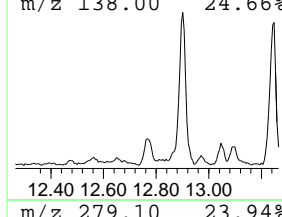
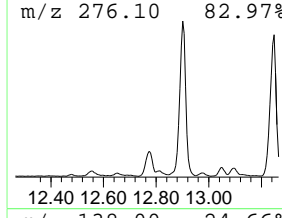
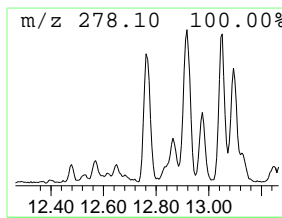
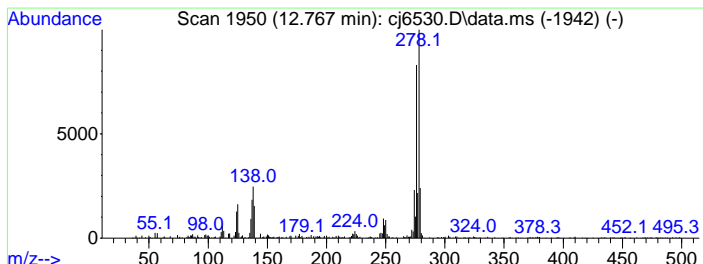
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 21 Unknown Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.767	9.93 ppm	699742	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Indeno[1,2,3-cd]pyrene	276	C22H12	000193-39-5	90
2			Indeno[1,2,3-cd]fluoranthene	276	C22H12	000193-43-1	90
3			Indeno[1,2,3-cd]pyrene	276	C22H12	000193-39-5	87
4			Dibenzo[def,mno]chrysene	276	C22H12	000191-26-4	86
5			Dibenzo[def,mno]chrysene	276	C22H12	000191-26-4	50



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6530.D  
Acq On : 09 May 2024 09:45 pm  
Operator : rocquans  
Sample : jd87833-4  
Misc : op54460,ecj297,30.2,,,1,1  
ALS Vial : 21 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

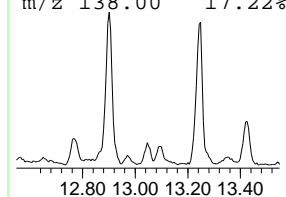
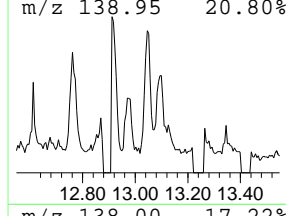
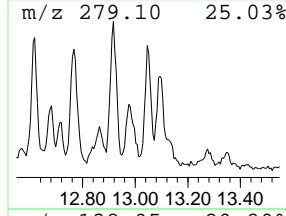
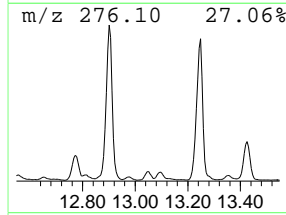
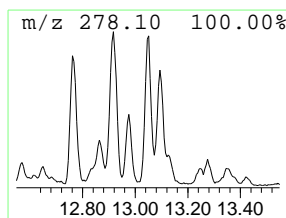
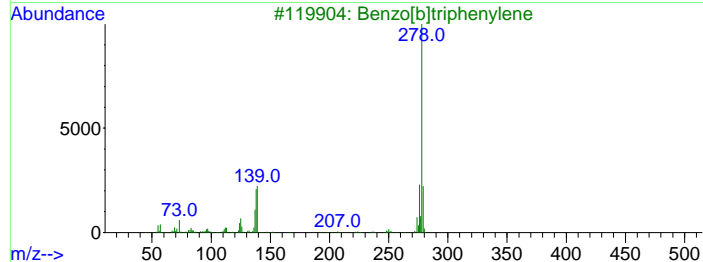
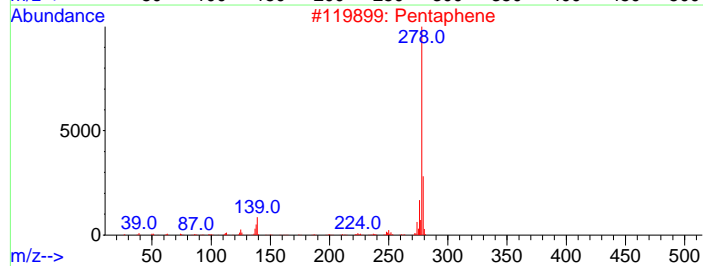
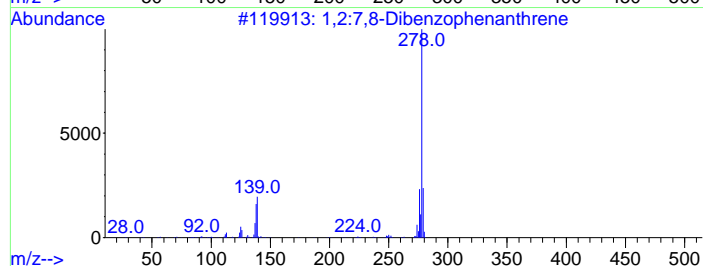
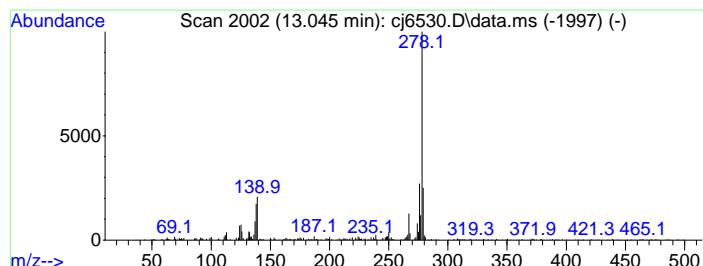
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 22 Unknown Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.046	5.60 ppm	394278	Perylene-d12	11.719

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	1,2:7,8-Dibenzophenanthrene	278	C22H14	000213-46-7	98
2		Pentaphene	278	C22H14	000222-93-5	97
3		Benzo[b]triphenylene	278	C22H14	000215-58-7	96
4		Benzo[b]triphenylene	278	C22H14	000215-58-7	96
5		Benzo[b]chrysene	278	C22H14	000214-17-5	96



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6530.D  
Acq On : 09 May 2024 09:45 pm  
Operator : rocquans  
Sample : jd87833-4  
Misc : op54460,ecj297,30.2,,,1,1  
ALS Vial : 21 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

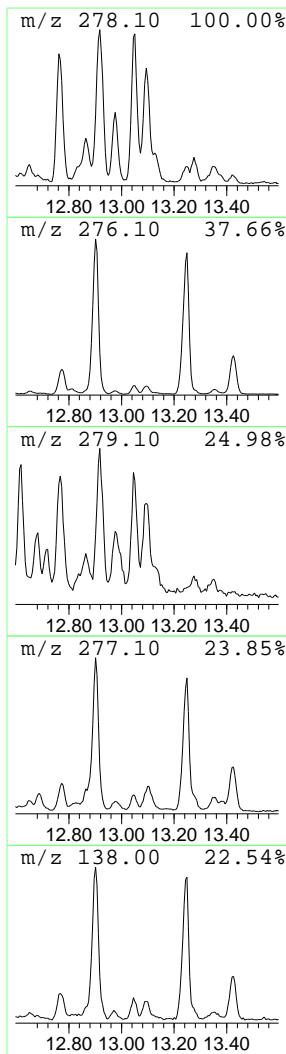
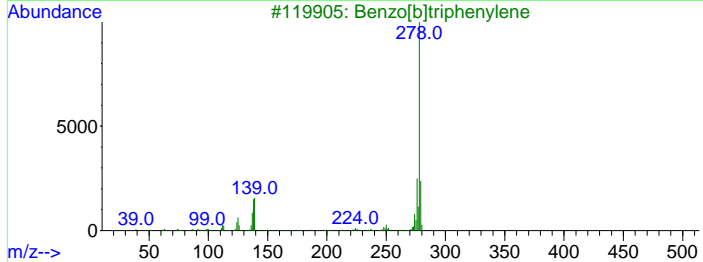
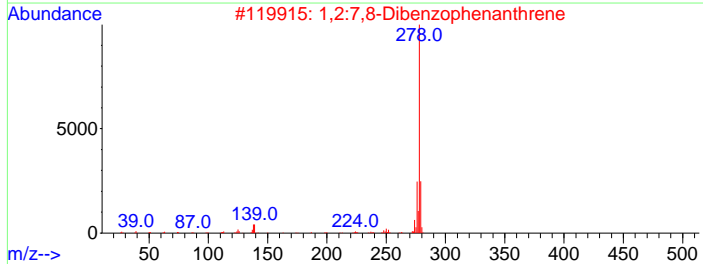
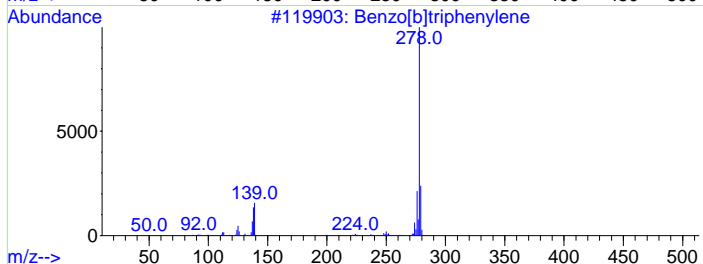
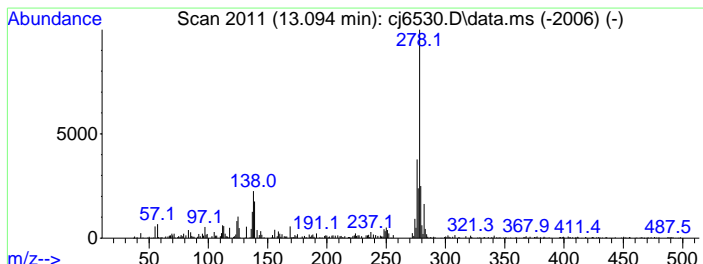
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 23 Unknown Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.094	6.06 ppm	426840	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Benzo[b]triphenylene	278	C22H14	000215-58-7	86
2			1,2:7,8-Dibenzophenanthrene	278	C22H14	000213-46-7	86
3			Benzo[b]triphenylene	278	C22H14	000215-58-7	83
4			Benzo[b]chrysene	278	C22H14	000214-17-5	83
5			1,2:7,8-Dibenzophenanthrene	278	C22H14	000213-46-7	70



Library Search Compound Report

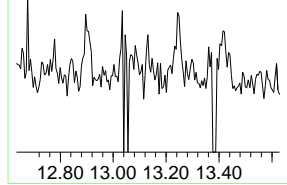
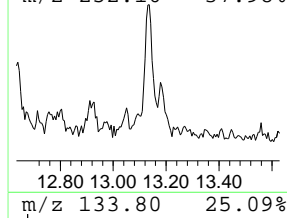
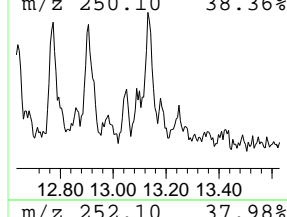
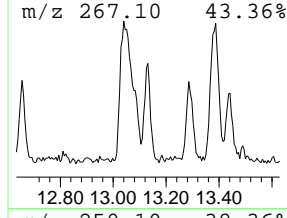
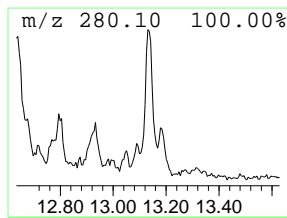
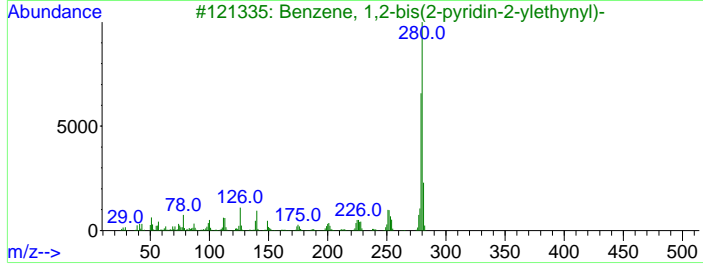
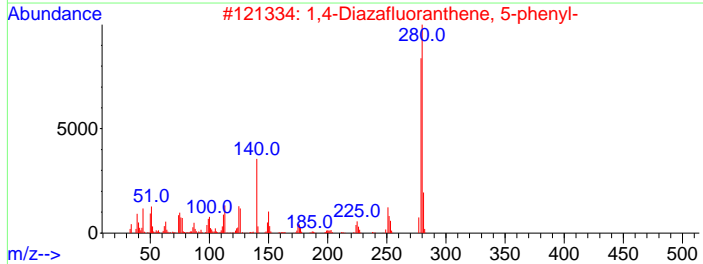
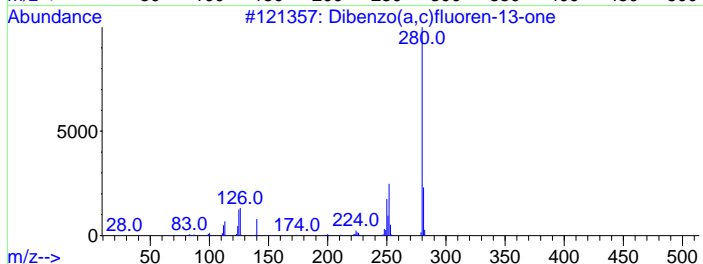
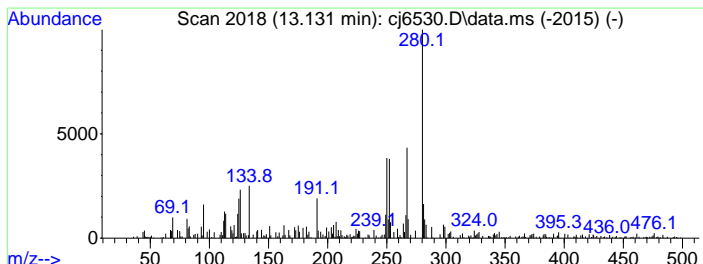
Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\
Data File : cj6530.D
Acq On : 09 May 2024 09:45 pm
Operator : rocquans
Sample : jd87833-4
Misc : op54460,ecj297,30.2,,1,1
ALS Vial : 21 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: lscint.p

\*\*\*\*\*
Peak Number 24 Unknown Concentration Rank 23

Table with 7 columns: R.T., EstConc, Area, Relative to ISTD, R.T., Hit# of 5, Tentative ID, MW, MolForm, CAS#, Qual. Row 1: 13.131, 4.58 ppm, 322556, Perylene-d12, 11.719.



7.18
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6530.D  
Acq On : 09 May 2024 09:45 pm  
Operator : rocquans  
Sample : jd87833-4  
Misc : op54460,ecj297,30.2,,,1,1  
ALS Vial : 21 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

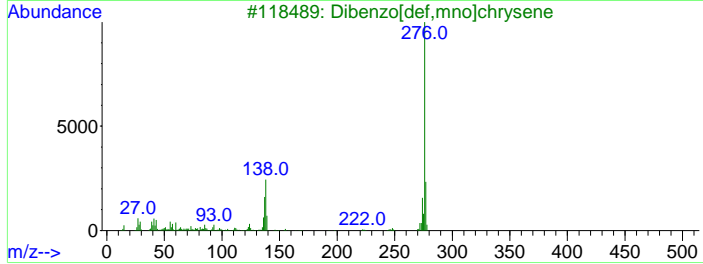
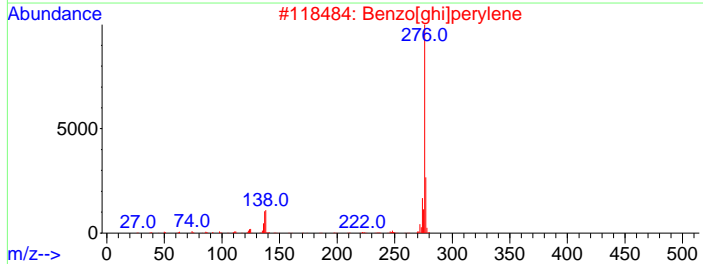
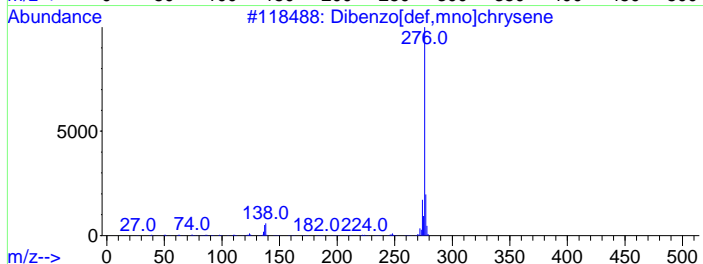
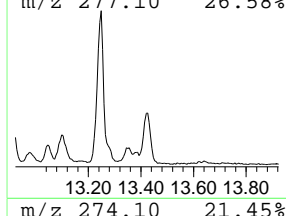
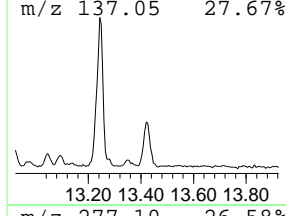
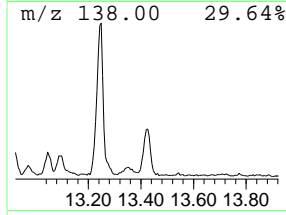
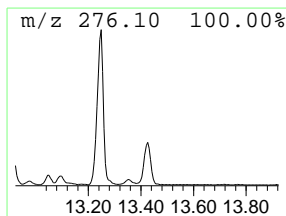
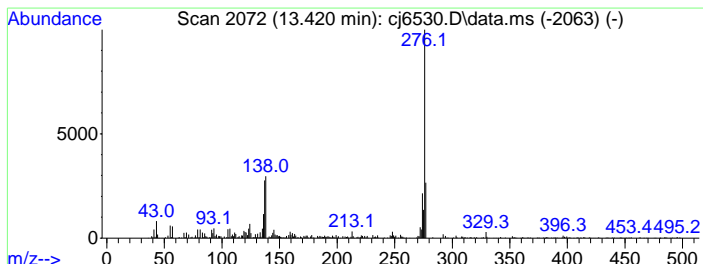
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 25 Unknown Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.420	10.47 ppm	737874	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Dibenzo[def,mno]chrysene	276	C22H12	000191-26-4	97
2			Benzo[ghi]perylene	276	C22H12	000191-24-2	93
3			Dibenzo[def,mno]chrysene	276	C22H12	000191-26-4	93
4			Benzo[ghi]perylene	276	C22H12	000191-24-2	93
5			Indeno[1,2,3-cd]pyrene	276	C22H12	000193-39-5	89





Tentatively Identified Compound (LSC) summary

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6530.D  
Acq On : 09 May 2024 09:45 pm  
Operator : rocquans  
Sample : jd87833-4  
Misc : op54460,ecj297,30.2,,,1,1  
ALS Vial : 21 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
Unknown	4.247	11.6	ppm	643523	2	4.664	2221530	40.0
Unknown	4.482	5.4	ppm	297554	2	4.664	2221530	40.0
Unknown	4.755	4.7	ppm	262702	2	4.664	2221530	40.0
Phenanthrene, m...	8.323	6.1	ppm	490956	8	7.868	3234670	40.0
Phenanthrene, m...	8.344	5.3	ppm	426785	8	7.868	3234670	40.0
4H-Cyclopenta[d...	8.419	17.2	ppm	1387930	8	7.868	3234670	40.0
Unknown	8.595	7.7	ppm	625350	8	7.868	3234670	40.0
Anthracene, dim...	8.831	5.0	ppm	401276	8	7.868	3234670	40.0
Unknown	8.911	5.0	ppm	405057	8	7.868	3234670	40.0
Fluoranthene, m...	9.515	8.1	ppm	1359410	9	10.366	6709830	40.0
Unknown	9.579	5.0	ppm	840613	9	10.366	6709830	40.0
Unknown	10.462	4.2	ppm	701122	10	10.366	6709830	40.0
Unknown	10.751	4.1	ppm	682791	10	10.366	6709830	40.0
Unknown	11.050	8.7	ppm	612214	11	11.719	2817730	40.0
Unknown	11.109	7.4	ppm	519073	11	11.719	2817730	40.0
Unknown	11.211	11.4	ppm	800337	11	11.719	2817730	40.0
Unknown PHA Sub...	11.446	12.1	ppm	852877	11	11.719	2817730	40.0
Unknown	11.521	5.5	ppm	389122	11	11.719	2817730	40.0
Unknown PHA Sub...	11.612	24.3	ppm	1709060	11	11.719	2817730	40.0
H-Indeno phenan...	11.874	5.6	ppm	396307	11	11.719	2817730	40.0
Unknown	12.767	9.9	ppm	699742	11	11.719	2817730	40.0
Unknown	13.046	5.6	ppm	394278	11	11.719	2817730	40.0
Unknown	13.094	6.1	ppm	426840	11	11.719	2817730	40.0
Unknown	13.131	4.6	ppm	322556	11	11.719	2817730	40.0
Unknown	13.420	10.5	ppm	737874	11	11.719	2817730	40.0

7.1.8  
7



## Quantitation Report (QT/LSC Reviewed)

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6531.D  
 Acq On : 09 May 2024 10:03 pm  
 Operator : rocquans  
 Sample : jd87833-5 Inst : GCMSMJ  
 Misc : op54460,ecj297,30.4,,,1,1  
 ALS Vial : 22 Sample Multiplier: 1

Quant Time: May 10 19:09:04 2024  
 Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
 QLast Update : Thu May 09 12:05:48 2024  
 Response via : Initial Calibration

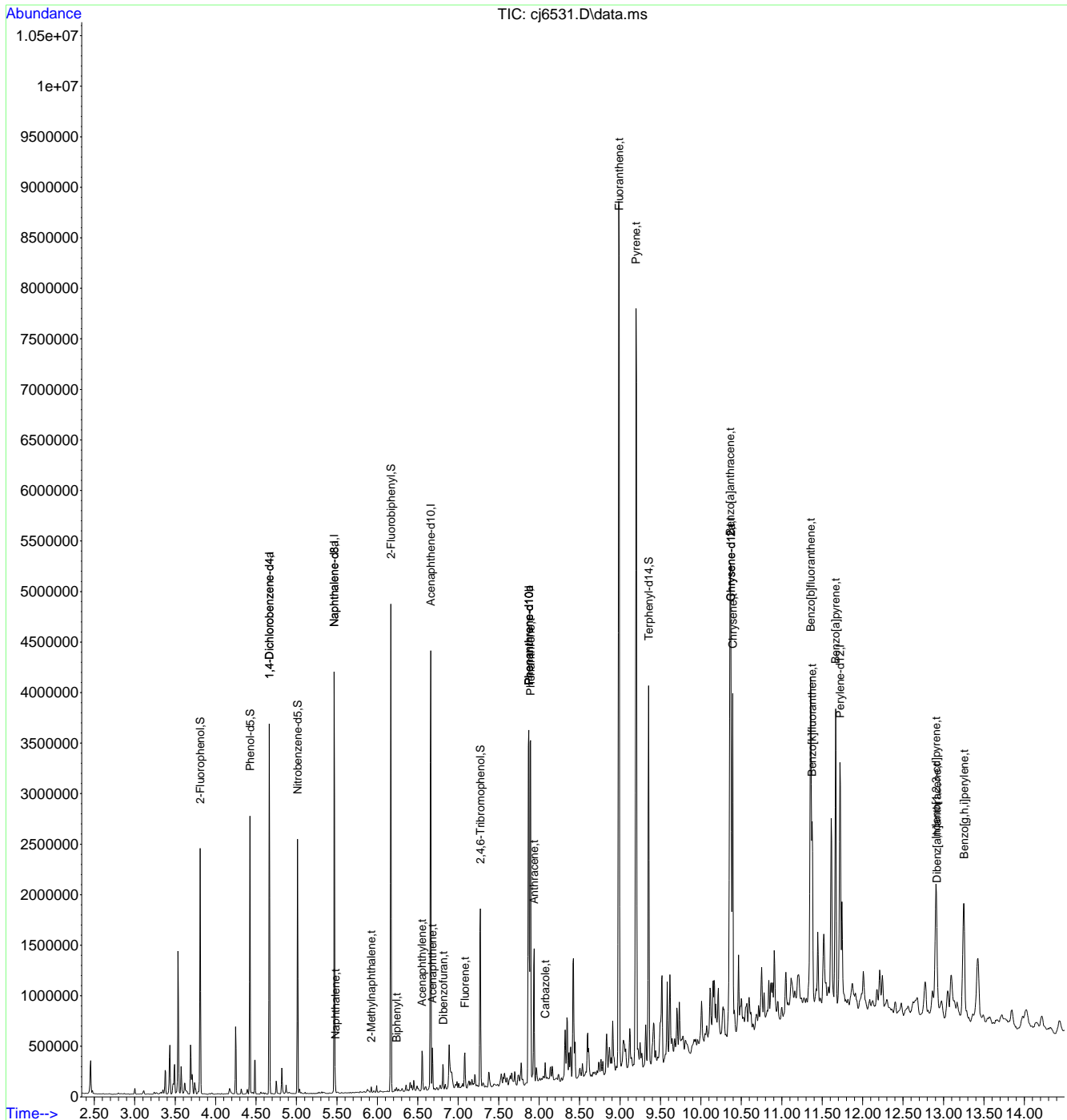
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.664	152	353722	40.00	ppm	0.00
24) Naphthalene-d8	5.466	136	1237394	40.00	ppm	0.00
46) Acenaphthene-d10	6.659	164	691359	40.00	ppm	0.00
69) Phenanthrene-d10	7.873	188	1218173	40.00	ppm	0.00
84) Chrysene-d12	10.371	240	857333	40.00	ppm	0.00
93) Perylene-d12	11.719	264	895253	40.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.664	152	353722	40.00	ppm	0.00
105) Phenanthrene-d10a	7.873	188	1218173	40.00	ppm	0.00
107) Naphthalene-d8a	5.466	136	1237394	40.00	ppm	0.00
109) Phenanthrene-d10b	7.873	188	1218173	40.00	ppm	0.00
112) Chrysene-d12a	10.371	240	857333	40.00	ppm	0.01
System Monitoring Compounds						
5) 2-Fluorophenol	3.808	112	383737	37.74	ppm	0.01
Spiked Amount 50.000			Recovery =	75.48%		
8) Phenol-d5	4.423	99	527551	40.23	ppm	0.00
Spiked Amount 50.000			Recovery =	80.46%		
25) Nitrobenzene-d5	5.011	82	502748	39.68	ppm	0.00
Spiked Amount 50.000			Recovery =	79.36%		
51) 2-Fluorobiphenyl	6.167	172	945762	43.47	ppm	0.00
Spiked Amount 50.000			Recovery =	86.94%		
74) 2,4,6-Tribromophenol	7.274	330	137316	51.41	ppm	0.00
Spiked Amount 50.000			Recovery =	102.82%		
87) Terphenyl-d14	9.355	244	977017	46.12	ppm	0.00
Spiked Amount 50.000			Recovery =	92.24%		
110) 1-chlorooctadecane	0.000	57	0	0.00	ppm	0.00
Spiked Amount 50.000			Recovery =	0.00%		
111) o-terphenyl	0.000	230	0	0.00	ppm	0.00
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						
						Qvalue
38) Naphthalene	5.482	128	23096	0.7792	ppm	98
44) 2-Methylnaphthalene	5.926	141	9562	0.5441	ppm	92
53) Biphenyl	6.236	154	8453	0.3559	ppm	95
56) Acenaphthylene	6.552	152	140155	5.2268	ppm	98
59) Acenaphthene	6.680	153	76576	4.0157	ppm	92
62) Dibenzofuran	6.814	168	67035	2.5332	ppm	93
66) Fluorene	7.081	166	94353	4.5135	ppm	99
78) Phenanthrene	7.894	178	1142769	38.8171	ppm	99
79) Anthracene	7.937	178	456273	15.4783	ppm	97
80) Carbazole	8.076	167	54148	1.9713	ppm	99
82) Fluoranthene	8.991	202	3263743	102.4018	ppm	99
86) Pyrene	9.200	202	2967693	101.7845	ppm	98
89) Benzo[a]anthracene	10.360	228	1389567	50.4098	ppm	98
91) Chrysene	10.392	228	1067306	41.9661	ppm	97
95) Benzo[b]fluoranthene	11.355	252	1502352m	55.5513	ppm	
96) Benzo[k]fluoranthene	11.376	252	483090m	19.8513	ppm	
97) Benzo[a]pyrene	11.665	252	1141348	50.9803	ppm	98
98) Indeno[1,2,3-cd]pyrene	12.906	276	719017	26.5662	ppm	98
100) Dibenz[a,h]anthracene	12.917	278	169208	7.8243	ppm	94
102) Benzo[g,h,i]perylene	13.254	276	688805	32.7494	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT/LSC Reviewed)

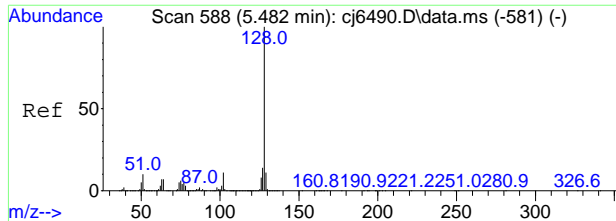
Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6531.D  
Acq On : 09 May 2024 10:03 pm  
Operator : rocquans  
Sample : jd87833-5 Inst : GCMS CJ  
Misc : op54460,ecj297,30.4,,,1,1  
ALS Vial : 22 Sample Multiplier: 1

Quant Time: May 10 19:09:04 2024  
Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
QLast Update : Thu May 09 12:05:48 2024  
Response via : Initial Calibration



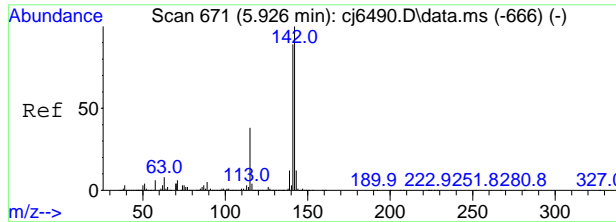
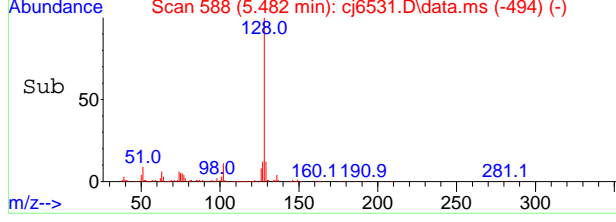
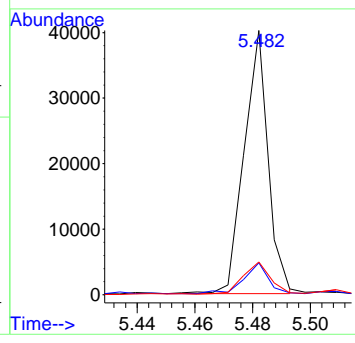
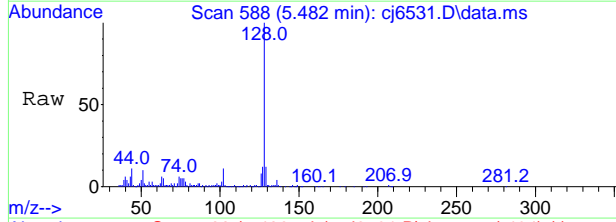
7.1.7





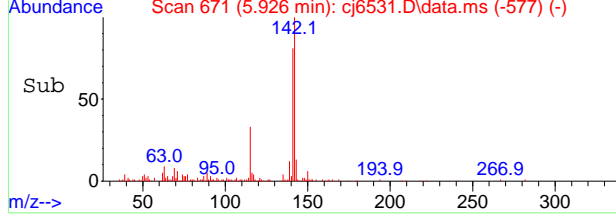
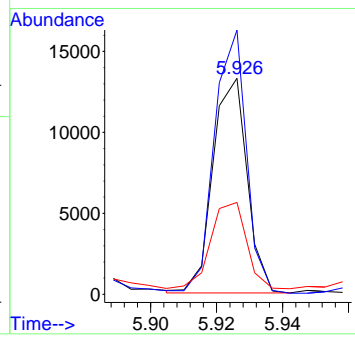
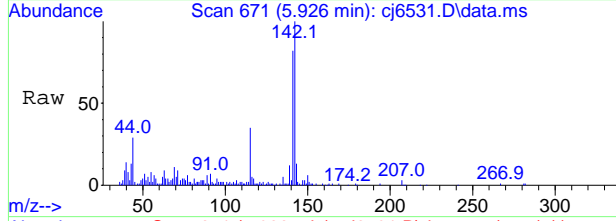
#38  
 Naphthalene  
 Concen: 0.7792 ppm  
 RT: 5.482 min Scan# 588  
 Delta R.T. 0.000 min  
 Lab File: cj6531.D  
 Acq: 09 May 2024 10:03 pm

Tgt Ion	Ratio	Lower	Upper
128	100		
129	11.3	0.0	41.4
127	12.1	0.0	43.3



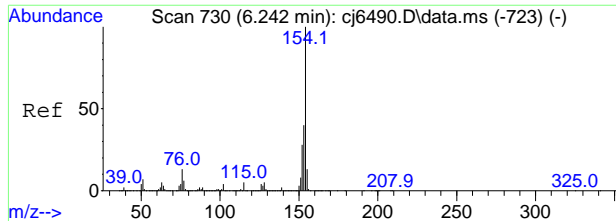
#44  
 2-Methylnaphthalene  
 Concen: 0.5441 ppm  
 RT: 5.926 min Scan# 671  
 Delta R.T. 0.000 min  
 Lab File: cj6531.D  
 Acq: 09 May 2024 10:03 pm

Tgt Ion	Ratio	Lower	Upper
141	100		
142	122.7	82.7	142.7
115	40.3	12.4	72.4



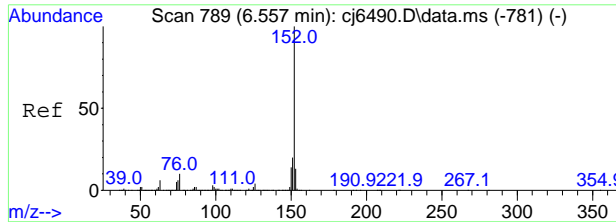
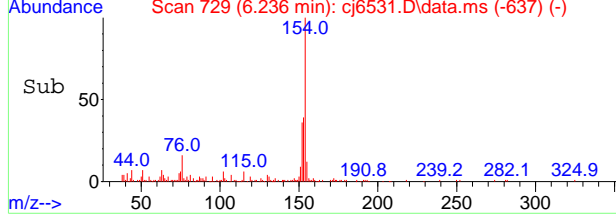
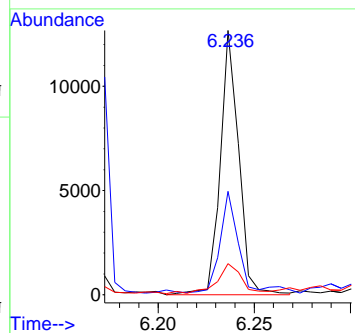
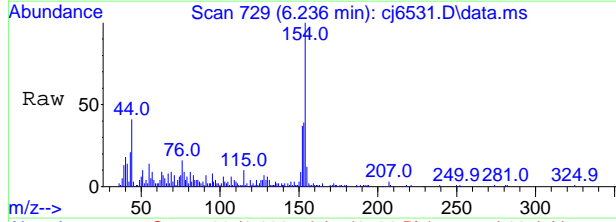
7.19





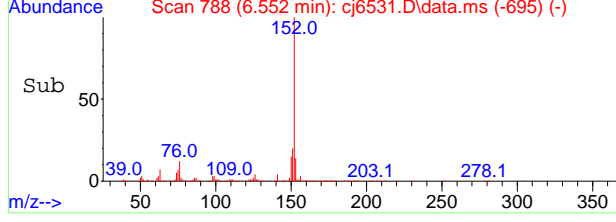
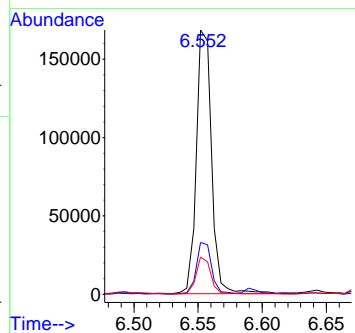
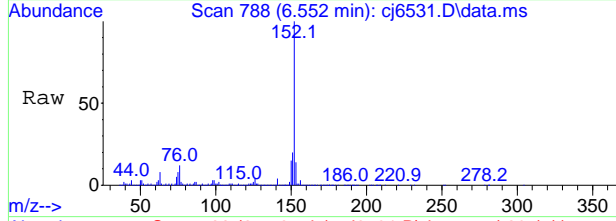
#53  
 Biphenyl  
 Concen: 0.3559 ppm  
 RT: 6.236 min Scan# 729  
 Delta R.T. -0.006 min  
 Lab File: cj6531.D  
 Acq: 09 May 2024 10:03 pm

Tgt Ion	Ratio	Lower	Upper
154	100		
153	37.3	10.5	70.5
155	10.2	0.0	42.8

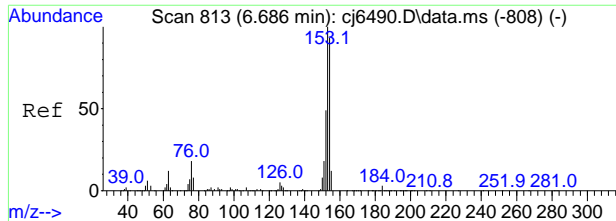


#56  
 Acenaphthylene  
 Concen: 5.2268 ppm  
 RT: 6.552 min Scan# 788  
 Delta R.T. -0.005 min  
 Lab File: cj6531.D  
 Acq: 09 May 2024 10:03 pm

Tgt Ion	Ratio	Lower	Upper
152	100		
151	19.5	0.0	50.3
153	14.0	0.0	43.4

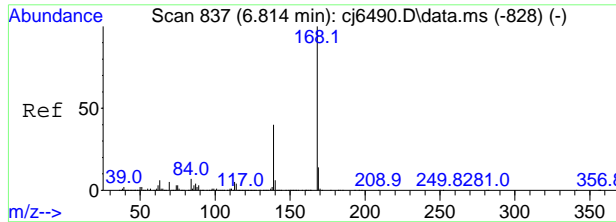
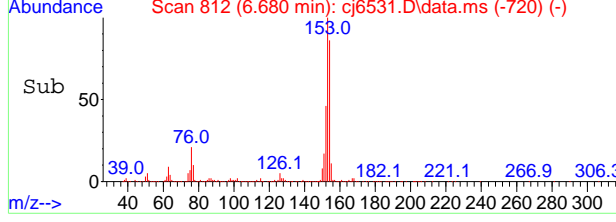
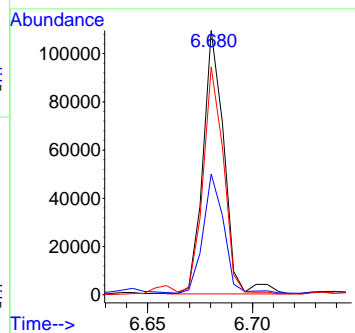
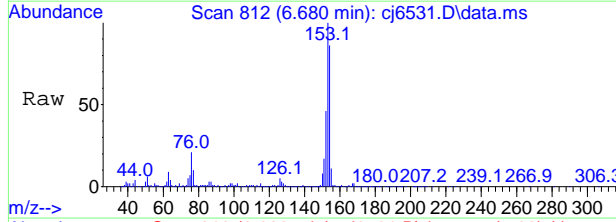


7.19  
7



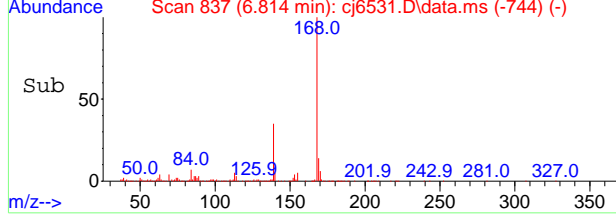
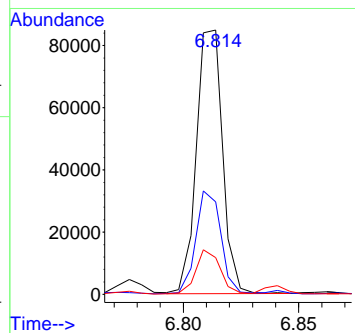
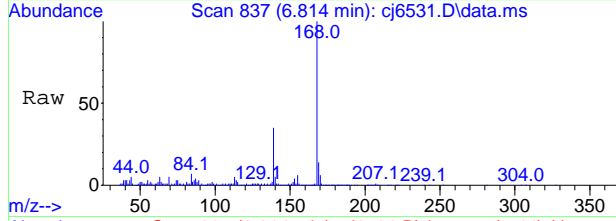
#59  
Acenaphthene  
Concen: 4.0157 ppm  
RT: 6.680 min Scan# 812  
Delta R.T. -0.006 min  
Lab File: cj6531.D  
Acq: 09 May 2024 10:03 pm

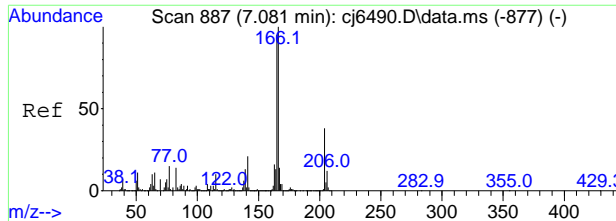
Tgt Ion	Resp	Lower	Upper
153	76576		
152	45.1	18.8	78.8
154	84.5	62.9	122.9



#62  
Dibenzofuran  
Concen: 2.5332 ppm  
RT: 6.814 min Scan# 837  
Delta R.T. 0.000 min  
Lab File: cj6531.D  
Acq: 09 May 2024 10:03 pm

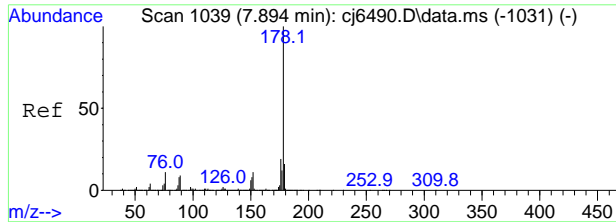
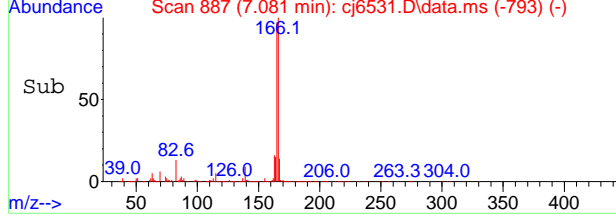
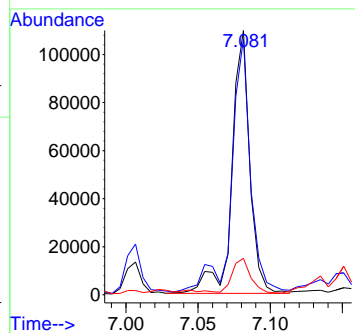
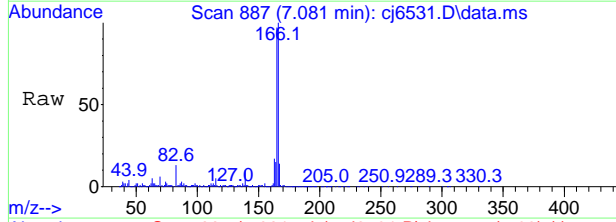
Tgt Ion	Resp	Lower	Upper
168	67035		
139	34.7	10.0	70.0
169	13.3	0.0	43.7





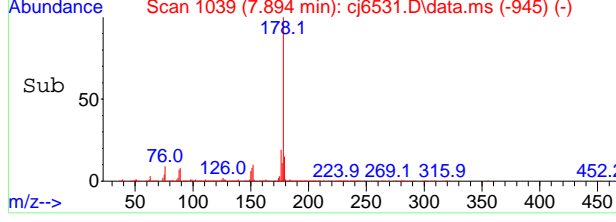
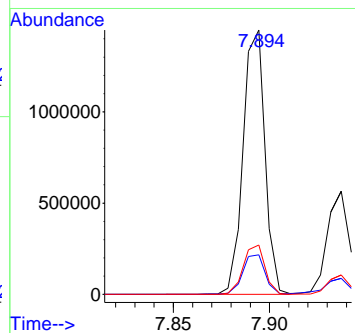
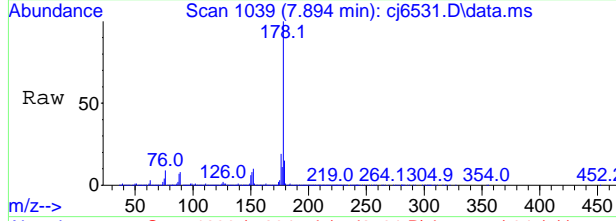
#66  
 Fluorene  
 Concen: 4.5135 ppm  
 RT: 7.081 min Scan# 887  
 Delta R.T. 0.000 min  
 Lab File: cj6531.D  
 Acq: 09 May 2024 10:03 pm

Tgt Ion	Ratio	Lower	Upper
166	100		
165	96.0	65.4	125.4
167	12.2	0.0	43.8



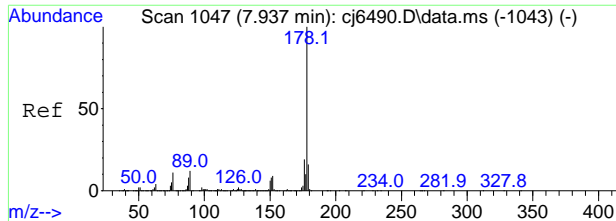
#78  
 Phenanthrene  
 Concen: 38.8171 ppm  
 RT: 7.894 min Scan# 1039  
 Delta R.T. 0.000 min  
 Lab File: cj6531.D  
 Acq: 09 May 2024 10:03 pm

Tgt Ion	Ratio	Lower	Upper
178	100		
179	14.8	0.0	45.5
176	18.7	0.0	49.2



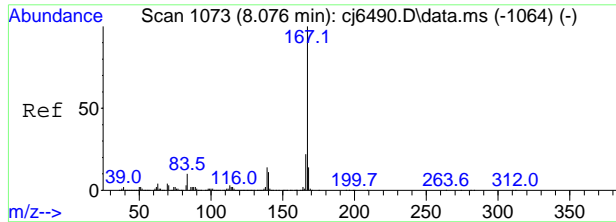
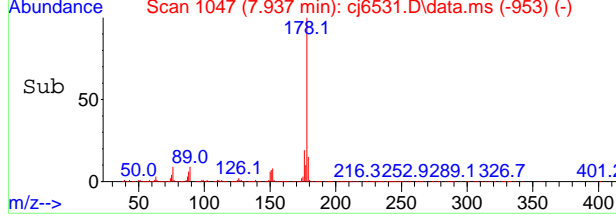
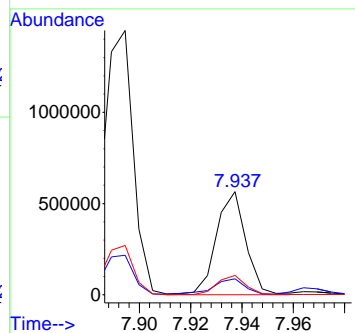
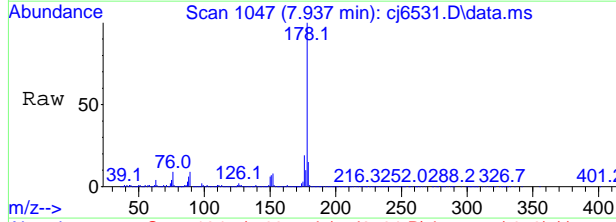
7.19  
7





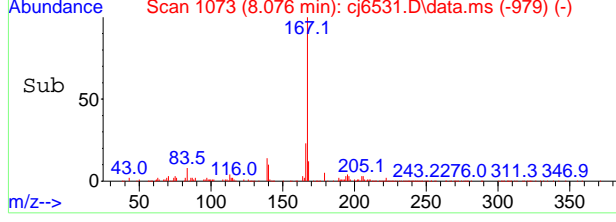
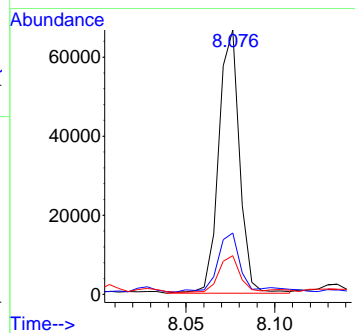
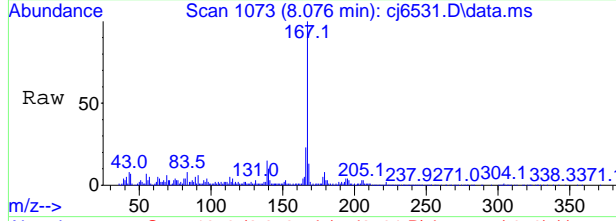
#79  
 Anthracene  
 Concen: 15.4783 ppm  
 RT: 7.937 min Scan# 1047  
 Delta R.T. 0.000 min  
 Lab File: cj6531.D  
 Acq: 09 May 2024 10:03 pm

Tgt Ion	Ratio	Lower	Upper
178	100		
179	13.8	0.0	46.1
176	18.7	0.0	48.7



#80  
 Carbazole  
 Concen: 1.9713 ppm  
 RT: 8.076 min Scan# 1073  
 Delta R.T. 0.000 min  
 Lab File: cj6531.D  
 Acq: 09 May 2024 10:03 pm

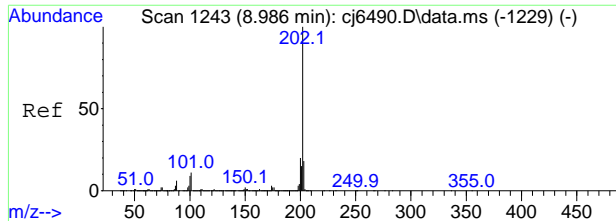
Tgt Ion	Ratio	Lower	Upper
167	100		
166	21.9	0.0	51.7
139	13.2	0.0	43.8



7.19  
7



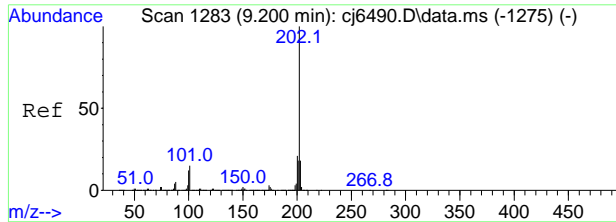
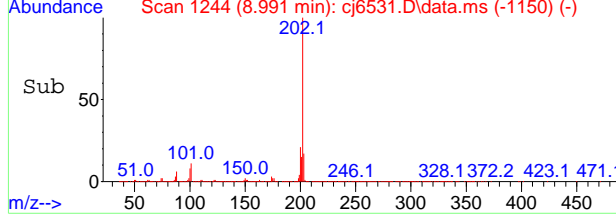
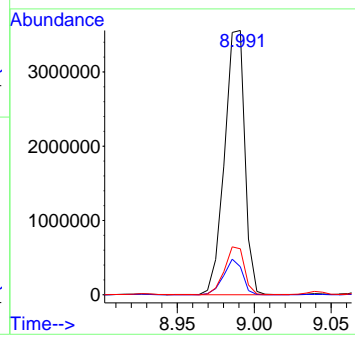
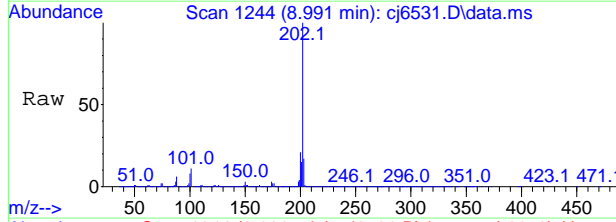




#82  
 Fluoranthene  
 Concen: 102.4018 ppm  
 RT: 8.991 min Scan# 1244  
 Delta R.T. 0.005 min  
 Lab File: cj6531.D  
 Acq: 09 May 2024 10:03 pm

Tgt Ion:202 Resp: 3263743

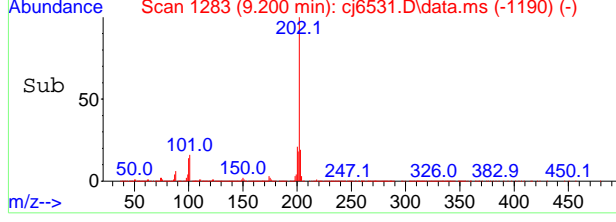
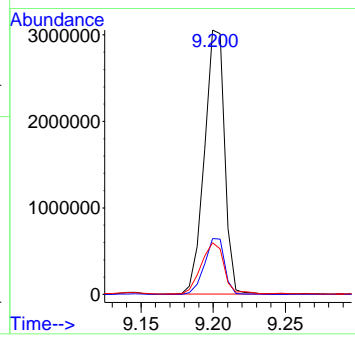
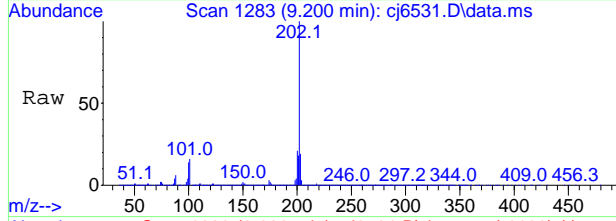
Ion	Ratio	Lower	Upper
202	100		
101	10.6	0.0	41.4
203	17.3	0.0	47.6



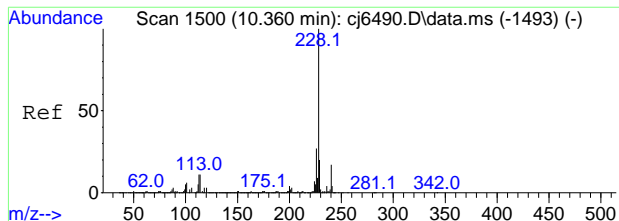
#86  
 Pyrene  
 Concen: 101.7845 ppm  
 RT: 9.200 min Scan# 1283  
 Delta R.T. -0.000 min  
 Lab File: cj6531.D  
 Acq: 09 May 2024 10:03 pm

Tgt Ion:202 Resp: 2967693

Ion	Ratio	Lower	Upper
202	100		
200	21.1	0.0	51.4
203	19.3	0.0	47.8

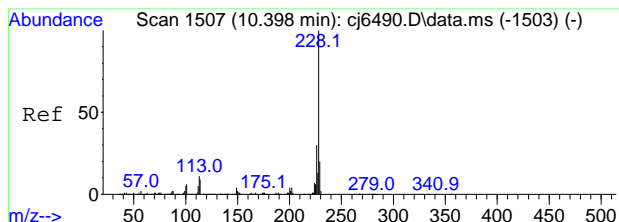
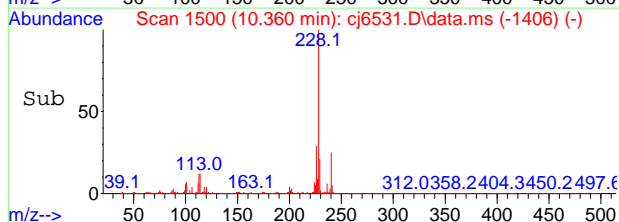
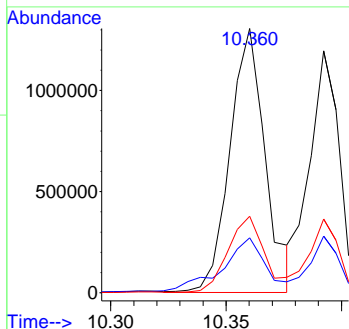
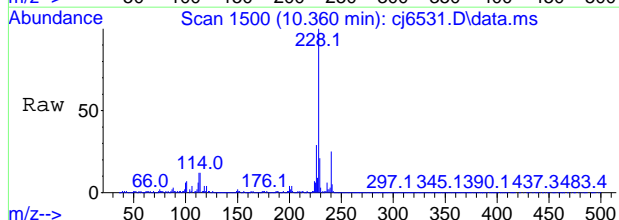


7.19  
7



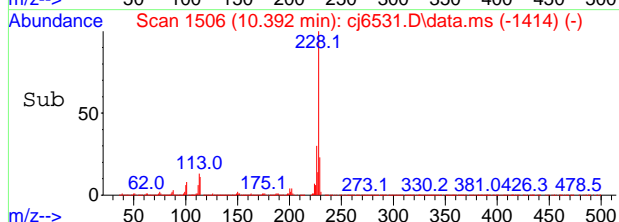
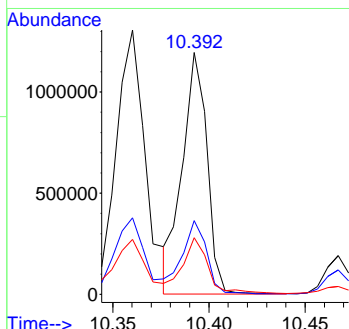
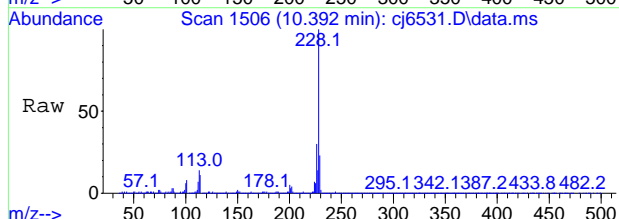
#89  
 Benzo[a]anthracene  
 Concen: 50.4098 ppm  
 RT: 10.360 min Scan# 1500  
 Delta R.T. 0.000 min  
 Lab File: cj6531.D  
 Acq: 09 May 2024 10:03 pm

Tgt Ion	Ratio	Lower	Upper
228	100		
229	20.2	0.0	49.8
226	28.5	0.0	57.1

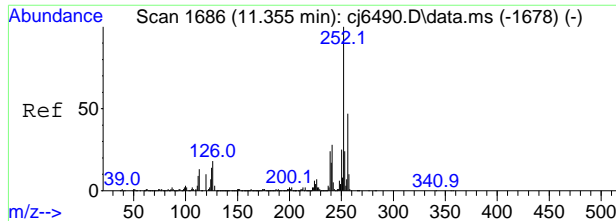


#91  
 Chrysene  
 Concen: 41.9661 ppm  
 RT: 10.392 min Scan# 1506  
 Delta R.T. -0.006 min  
 Lab File: cj6531.D  
 Acq: 09 May 2024 10:03 pm

Tgt Ion	Ratio	Lower	Upper
228	100		
226	30.1	0.0	59.9
229	23.2	0.0	49.8



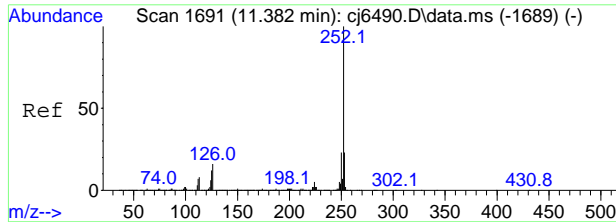
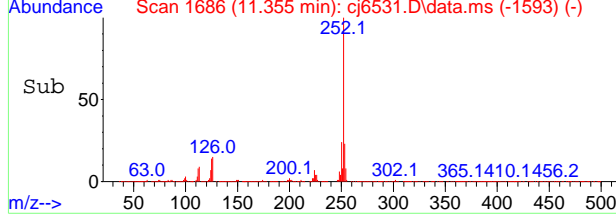
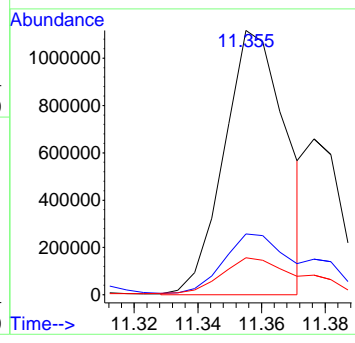
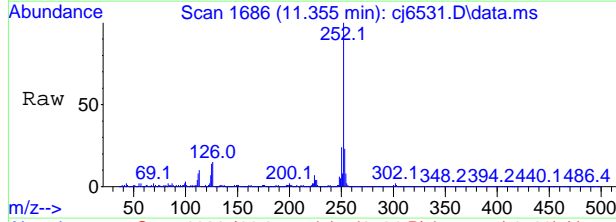
7.19  
7



#95  
 Benzo[b]fluoranthene  
 Concen: 55.5513 ppm m  
 RT: 11.355 min Scan# 1686  
 Delta R.T. 0.000 min  
 Lab File: cj6531.D  
 Acq: 09 May 2024 10:03 pm

Tgt Ion: 252 Resp: 1502352

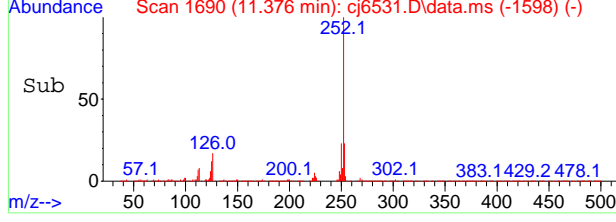
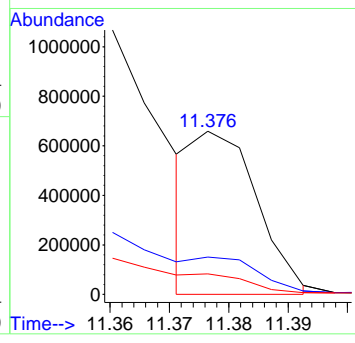
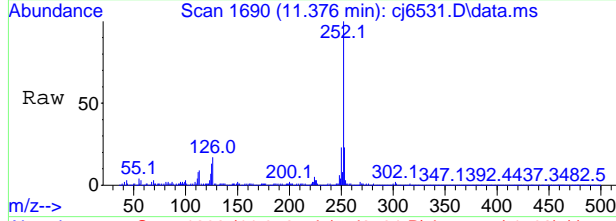
Ion	Ratio	Lower	Upper
252	100		
253	23.0	0.0	54.7
125	14.0	0.0	44.2



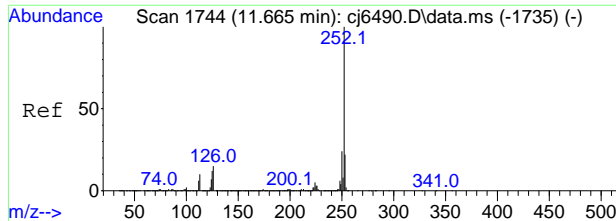
#96  
 Benzo[k]fluoranthene  
 Concen: 19.8513 ppm m  
 RT: 11.376 min Scan# 1690  
 Delta R.T. -0.006 min  
 Lab File: cj6531.D  
 Acq: 09 May 2024 10:03 pm

Tgt Ion: 252 Resp: 483090

Ion	Ratio	Lower	Upper
252	100		
253	22.9	0.0	52.6
125	12.6	0.0	42.4



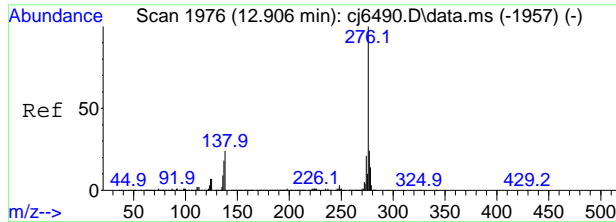
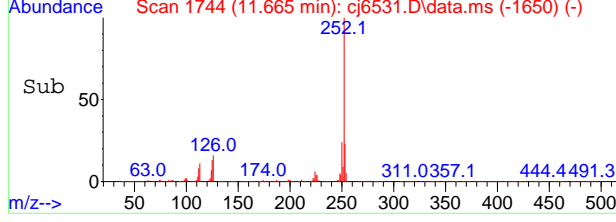
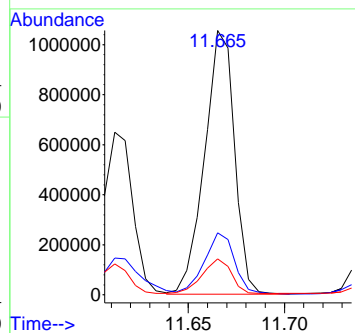
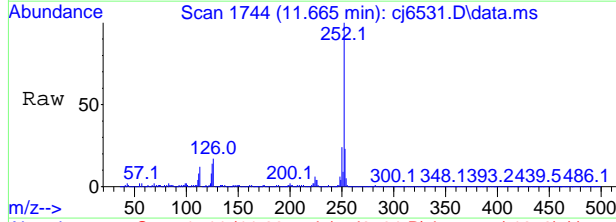
7.19  
7



#97  
 Benzo[a]pyrene  
 Concen: 50.9803 ppm  
 RT: 11.665 min Scan# 1744  
 Delta R.T. 0.000 min  
 Lab File: cj6531.D  
 Acq: 09 May 2024 10:03 pm

Tgt Ion:252 Resp: 1141348

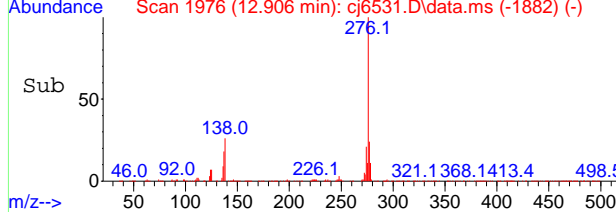
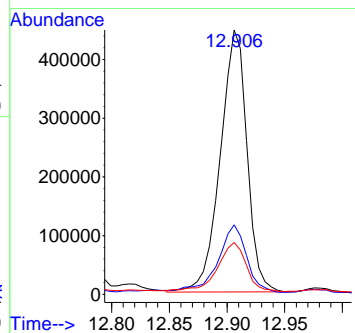
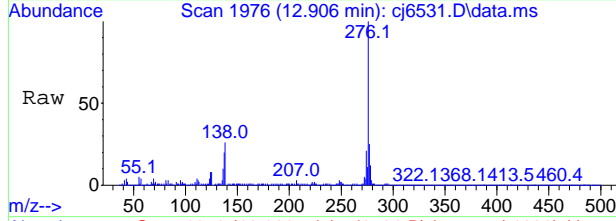
Ion	Ratio	Lower	Upper
252	100		
253	22.6	0.0	51.9
125	13.2	0.0	42.1



#98  
 Indeno[1,2,3-cd]pyrene  
 Concen: 26.5662 ppm  
 RT: 12.906 min Scan# 1976  
 Delta R.T. 0.000 min  
 Lab File: cj6531.D  
 Acq: 09 May 2024 10:03 pm

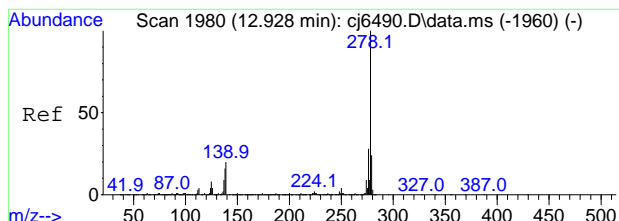
Tgt Ion:276 Resp: 719017

Ion	Ratio	Lower	Upper
276	100		
138	25.4	0.0	54.2
137	18.5	0.0	47.9



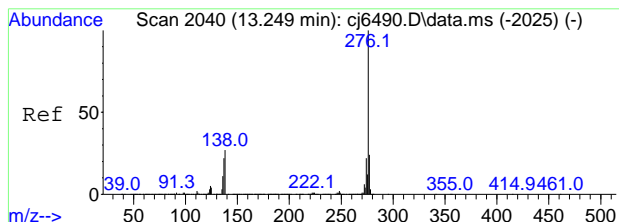
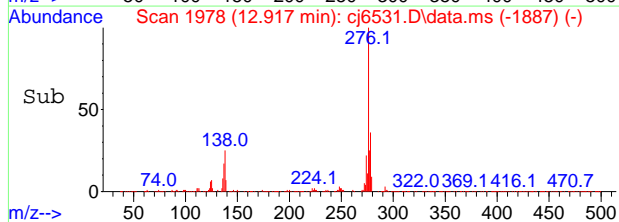
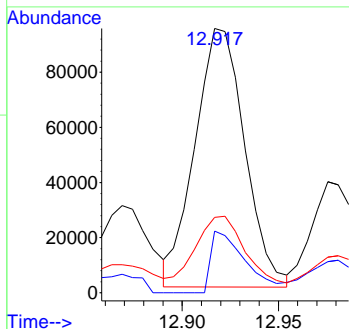
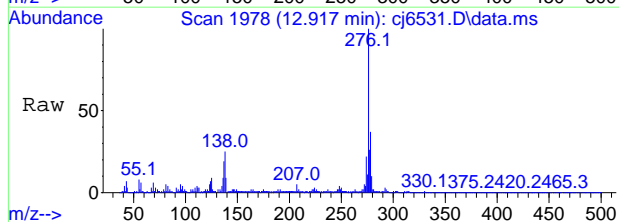
7.19  
7





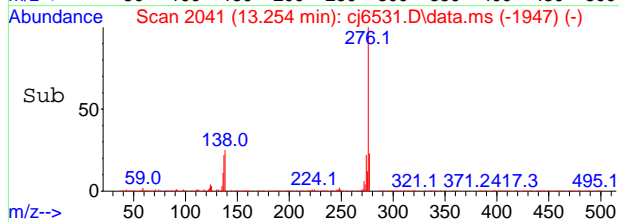
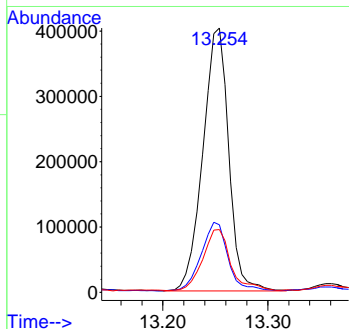
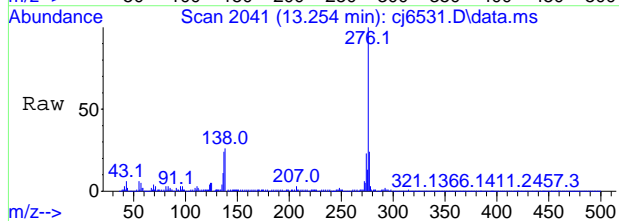
#100  
 Dibenz[a,h]anthracene  
 Concen: 7.8243 ppm  
 RT: 12.917 min Scan# 1978  
 Delta R.T. -0.011 min  
 Lab File: cj6531.D  
 Acq: 09 May 2024 10:03 pm

Tgt Ion	Resp	Lower	Upper
278	169208		
139	23.6	0.0	49.8
279	26.5	0.0	54.1



#102  
 Benzo[g,h,i]perylene  
 Concen: 32.7494 ppm  
 RT: 13.254 min Scan# 2041  
 Delta R.T. 0.005 min  
 Lab File: cj6531.D  
 Acq: 09 May 2024 10:03 pm

Tgt Ion	Resp	Lower	Upper
276	688805		
138	25.0	0.0	56.7
277	23.0	0.0	54.1



LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6531.D  
Acq On : 09 May 2024 10:03 pm  
Operator : rocquans  
Sample : jd87833-5  
Misc : op54460,ecj297,30.4,,,1,1  
ALS Vial : 22 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON  
Sampling : 1  
Start Thrs: 0.02  
Stop Thrs : 0  
Filtering: 5  
Min Area: 1000 Area counts  
Max Peaks: 100  
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

Signal : TIC: cj6531.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.247	354	357	364	rVB	669478	424814	5.27%	0.395%
2	4.423	387	390	395	rBV	2749343	1543256	19.16%	1.435%
3	4.482	399	401	406	rVB	333888	235183	2.92%	0.219%
4	4.664	431	435	439	rBV	3664843	2151803	26.71%	2.001%
5	4.819	460	464	470	rBV	258748	186581	2.32%	0.174%
6	5.011	495	500	503	rBV	2516707	1436091	17.83%	1.336%
7	5.466	577	585	590	rBV	4170491	2700597	33.53%	2.512%
8	6.167	712	716	720	rBV	4827574	2839278	35.25%	2.641%
9	6.552	784	788	793	rBV	397626	326623	4.05%	0.304%
10	6.659	800	808	811	rBV	4349266	3091762	38.38%	2.875%
11	6.680	811	812	819	rVB	414109	236364	2.93%	0.220%
12	6.809	832	836	839	rVB	244035	190654	2.37%	0.177%
13	6.889	845	851	862	rBV	438650	784612	9.74%	0.730%
14	7.081	877	887	892	rVB	351298	364259	4.52%	0.339%
15	7.274	918	923	927	rBV	1756582	1412627	17.54%	1.314%
16	7.777	1013	1017	1025	rVB2	220883	281793	3.50%	0.262%
17	7.873	1025	1035	1037	rBV	3513022	3473333	43.12%	3.230%
18	7.894	1037	1039	1042	rVB	3332550	2375283	29.49%	2.209%
19	7.937	1042	1047	1050	rVB	1309001	1084032	13.46%	1.008%
20	8.322	1112	1119	1121	rBV	498766	493374	6.13%	0.459%
21	8.344	1121	1123	1126	rVB	518967	405046	5.03%	0.377%
22	8.392	1129	1132	1134	rVB	292032	249549	3.10%	0.232%
23	8.424	1134	1138	1146	rVB	1188296	1439002	17.86%	1.338%
24	8.600	1162	1171	1178	rVB2	430977	665732	8.26%	0.619%
25	8.836	1209	1215	1218	rBV	405423	448702	5.57%	0.417%
26	8.868	1218	1221	1224	rBV	201490	206831	2.57%	0.192%
27	8.911	1224	1229	1235	rVB2	490837	558262	6.93%	0.519%
28	8.986	1235	1243	1248	rBV	8600962	7852563	97.49%	7.303%
29	9.039	1248	1253	1262	rVB4	272686	631476	7.84%	0.587%
30	9.119	1262	1268	1275	rBV3	389870	522348	6.48%	0.486%
31	9.200	1276	1283	1290	rBV	7486455	8055028	100.00%	7.491%
32	9.248	1290	1292	1299	rVB2	245594	332778	4.13%	0.309%
33	9.317	1299	1305	1308	rBV	421876	394461	4.90%	0.367%
34	9.355	1308	1312	1317	rVB	3744786	3114494	38.67%	2.897%
35	9.413	1317	1323	1327	rBV3	408735	637067	7.91%	0.592%
36	9.520	1331	1343	1346	rVB	861828	1380645	17.14%	1.284%
37	9.585	1346	1355	1358	rBV	800103	837039	10.39%	0.778%
38	9.617	1358	1361	1364	rBV	763503	684118	8.49%	0.636%
39	9.702	1374	1377	1380	rBV	385973	329400	4.09%	0.306%
40	9.734	1380	1383	1387	rBV	421366	347726	4.32%	0.323%



7.1.10  
7

LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6531.D  
Acq On : 09 May 2024 10:03 pm  
Operator : rocquans  
Sample : jd87833-5  
Misc : op54460,ecj297,30.4,,,1,1  
ALS Vial : 22 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON  
Sampling : 1  
Start Thrs: 0.02  
Stop Thrs : 0  
Filtering: 5  
Min Area: 1000 Area counts  
Max Peaks: 100  
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

Table with 10 columns: Retention Time, Abundance, and Percent. Rows 41-85 showing peak data for various compounds.



7.1.10  
7

LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6531.D  
Acq On : 09 May 2024 10:03 pm  
Operator : rocquans  
Sample : jd87833-5  
Misc : op54460,ecj297,30.4,,,1,1  
ALS Vial : 22 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON Filtering: 5  
Sampling : 1 Min Area: 1000 Area counts  
Start Thrs: 0.02 Max Peaks: 100  
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

86	12.772	1943	1951	1957	rVV4	342995	734420	9.12%	0.683%
87	12.863	1961	1968	1971	rVV4	261630	507245	6.30%	0.472%
88	12.906	1971	1976	1984	rVV2	1323488	2366084	29.37%	2.200%
89	12.976	1984	1989	1996	rVV	175806	371009	4.61%	0.345%
90	13.051	1996	2003	2007	rVV2	280437	530555	6.59%	0.493%
91	13.093	2007	2011	2022	rVV6	441798	1197042	14.86%	1.113%
92	13.168	2022	2025	2032	rVV6	179440	346272	4.30%	0.322%
93	13.249	2032	2040	2056	rVB	1168899	2291865	28.45%	2.131%
94	13.425	2064	2073	2082	rVV2	637218	1546593	19.20%	1.438%
95	13.564	2092	2099	2106	rVB10	69751	199988	2.48%	0.186%
96	13.848	2147	2152	2164	rVB5	188131	436599	5.42%	0.406%
97	13.981	2169	2177	2179	rBV8	116331	246706	3.06%	0.229%
98	14.024	2179	2185	2196	rVB8	167061	492127	6.11%	0.458%
99	14.217	2215	2221	2232	rVB5	133721	326442	4.05%	0.304%
100	14.431	2253	2261	2269	rBV9	130349	381555	4.74%	0.355%

Sum of corrected areas: 107524881

7.1.10  
7

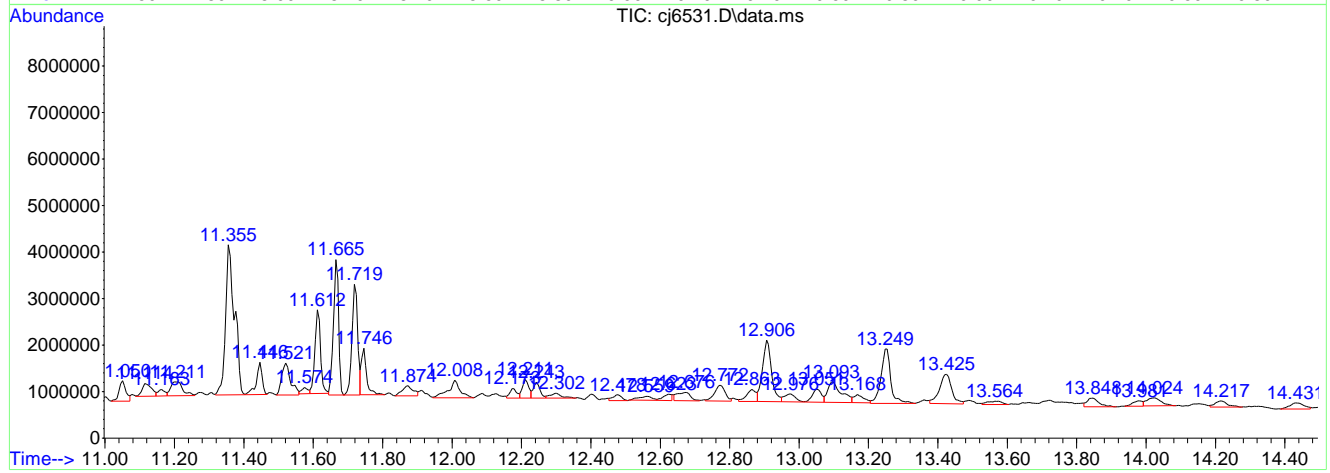
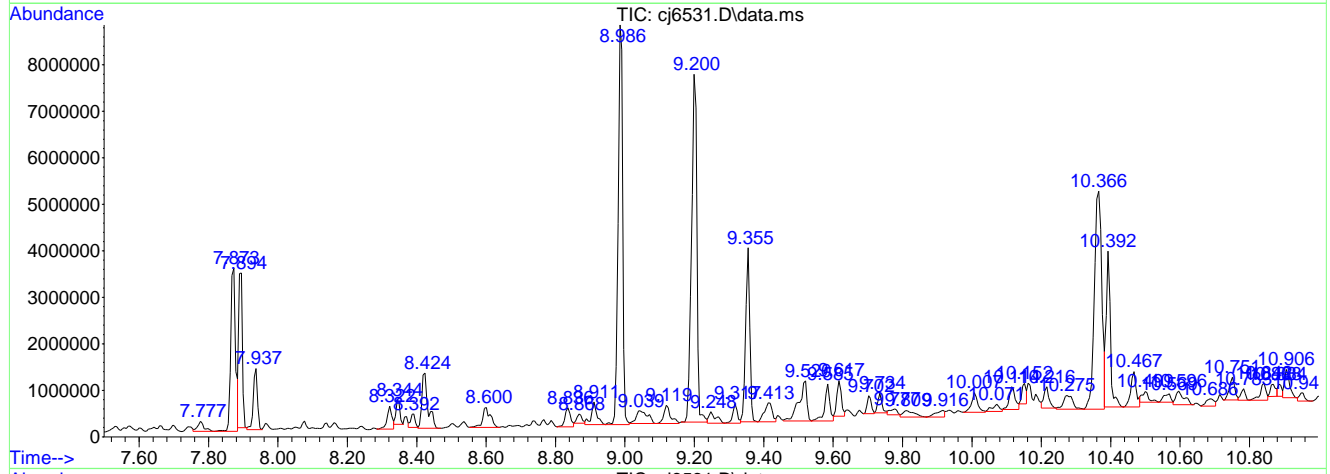
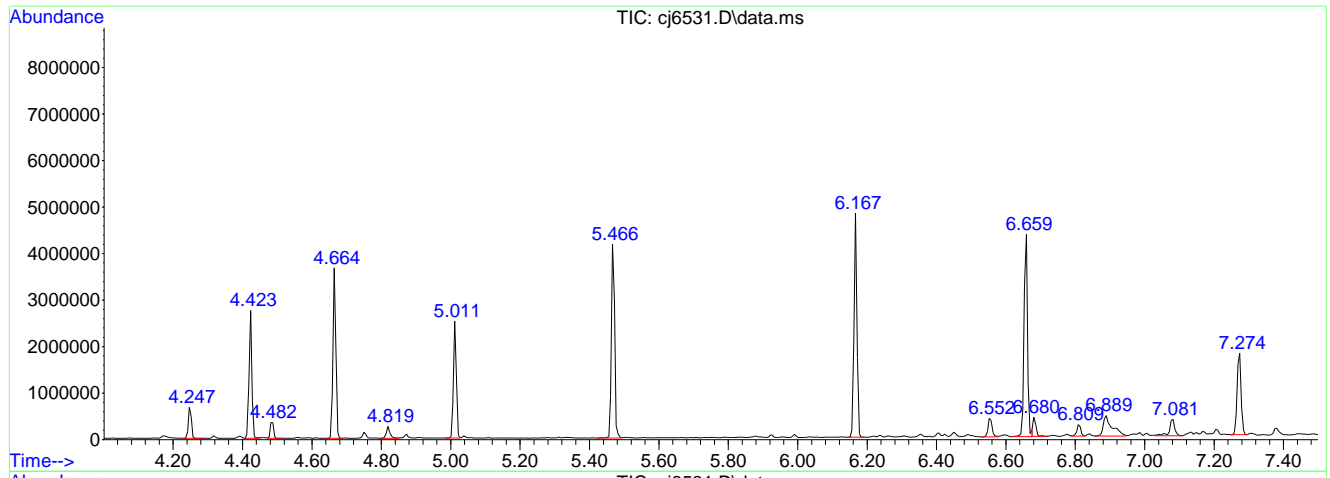


LSC Report - Integrated Chromatogram

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6531.D  
Acq On : 09 May 2024 10:03 pm  
Operator : rocquans  
Sample : jd87833-5  
Misc : op54460,ecj297,30.4,,,1,1  
ALS Vial : 22 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p



7.1.10  
7



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6531.D  
Acq On : 09 May 2024 10:03 pm  
Operator : rocquans  
Sample : jd87833-5  
Misc : op54460,ecj297,30.4,,,1,1  
ALS Vial : 22 Sample Multiplier: 1

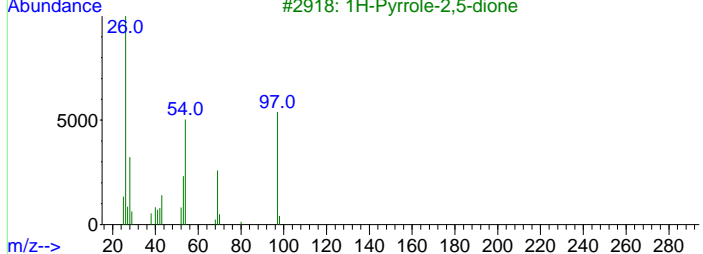
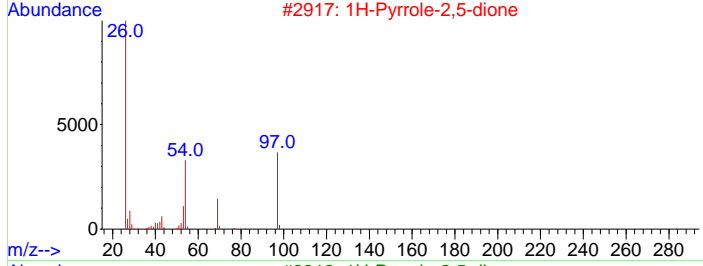
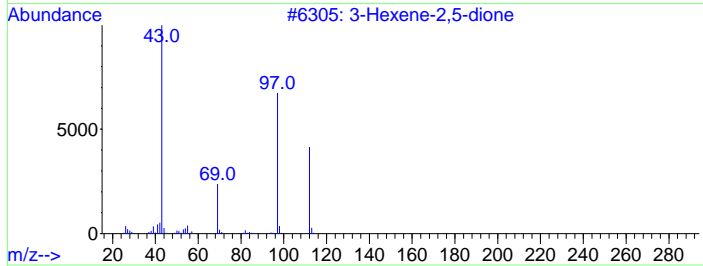
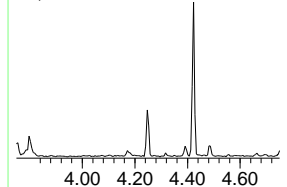
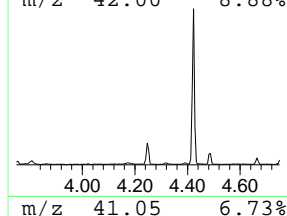
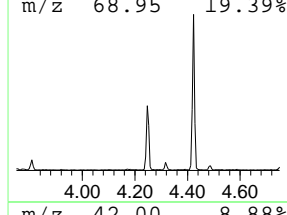
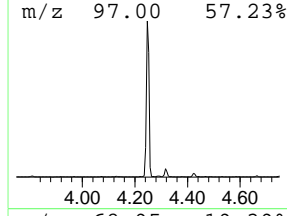
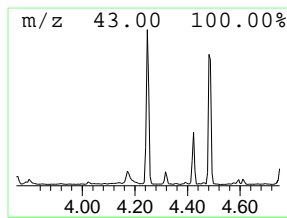
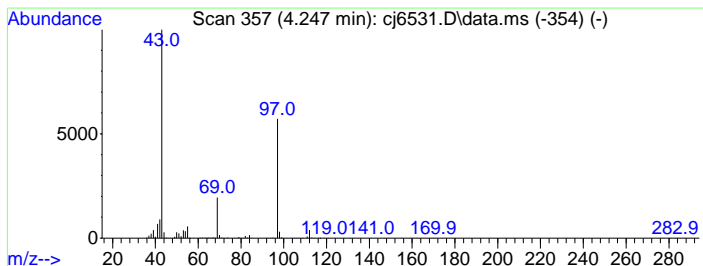
Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 1 Unknown Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.247	7.90 ppm	424814	1,4-Dichlorobenzene-d4a	4.664

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			3-Hexene-2,5-dione	112	C6H8O2	004436-75-3	64
2			1H-Pyrrole-2,5-dione	97	C4H3NO2	000541-59-3	50
3			1H-Pyrrole-2,5-dione	97	C4H3NO2	000541-59-3	25
4			1H-Pyrrole-2,5-dione	97	C4H3NO2	000541-59-3	25
5			2,4-Dimethyl-1,5-diazabicyclo[3....	112	C6H12N2	100463-01-2	25



7.1.10  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6531.D  
 Acq On : 09 May 2024 10:03 pm  
 Operator : rocquans  
 Sample : jd87833-5  
 Misc : op54460,ecj297,30.4,,,1,1  
 ALS Vial : 22 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

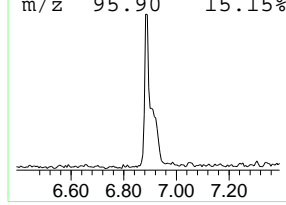
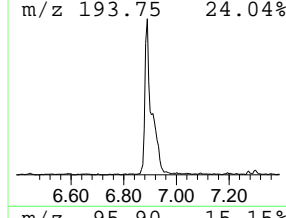
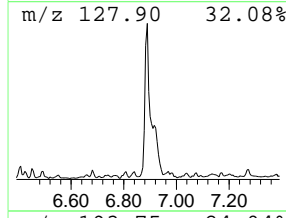
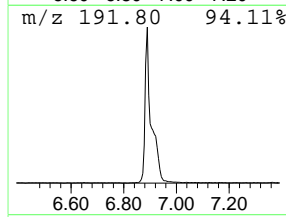
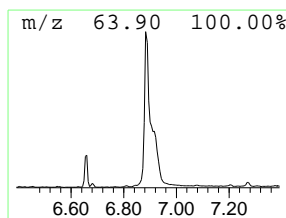
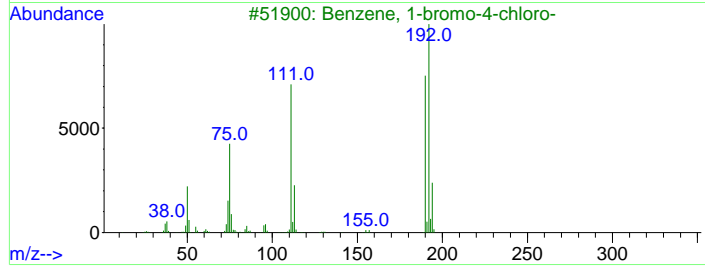
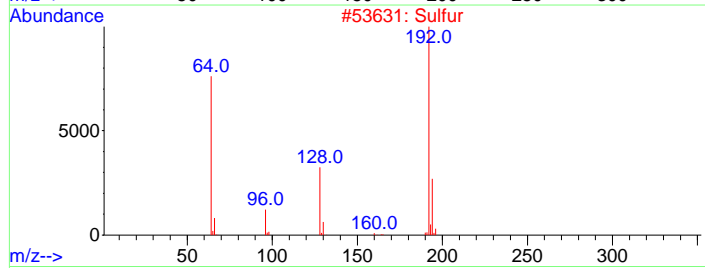
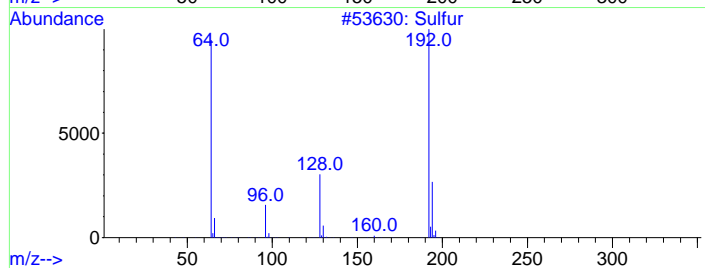
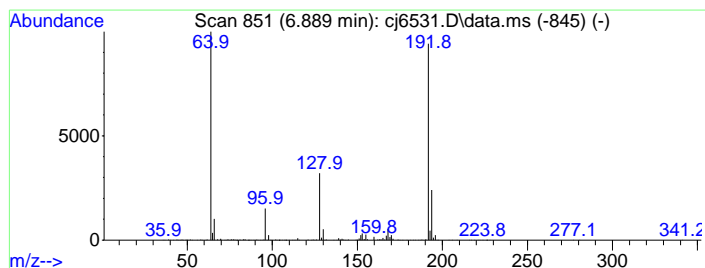
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 2 Sulfur Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.889	10.15 ppm	784612	Acenaphthene-d10	6.659

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Sulfur	192	S6	013798-23-7	94
2		Sulfur	192	S6	013798-23-7	94
3		Benzene, 1-bromo-4-chloro-	190	C6H4BrCl	000106-39-8	9
4		2,4-Diamino-6-methylpteridine-8-...	192	C7H8N6O	019994-63-9	9
5		1,2-Dimethyl-5-nitro-1H-imidazo[...	192	C8H8N4O2	1000296-10-0	9



7.1.10  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6531.D  
Acq On : 09 May 2024 10:03 pm  
Operator : rocquans  
Sample : jd87833-5  
Misc : op54460,ecj297,30.4,,,1,1  
ALS Vial : 22 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

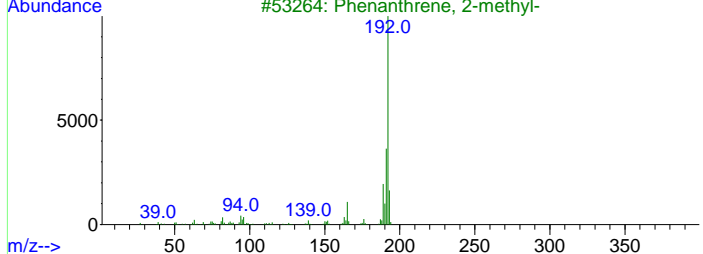
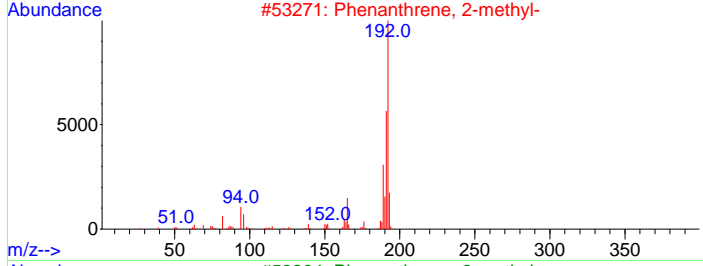
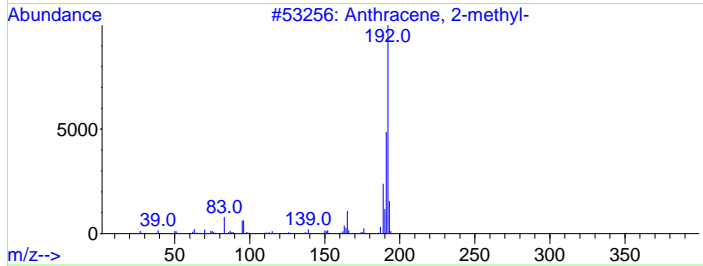
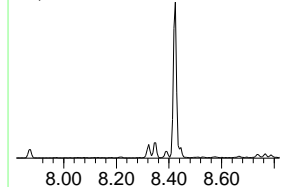
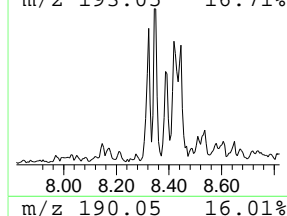
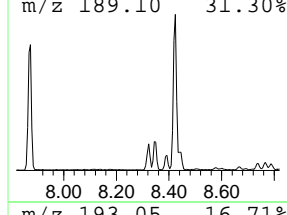
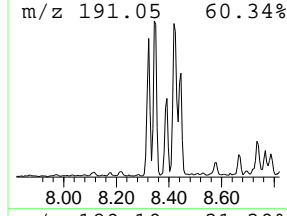
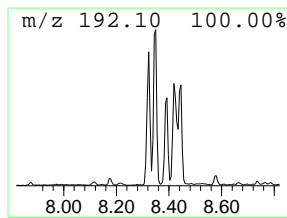
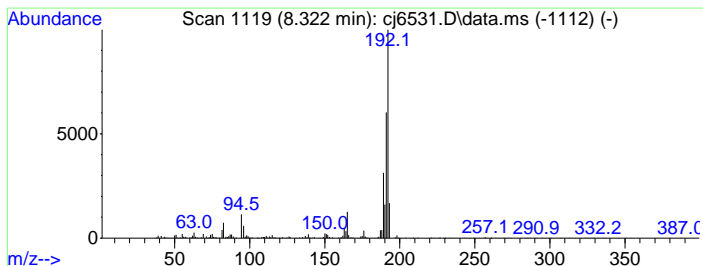
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 3 Anthracene, methyl Concentration Rank 25

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.322	5.68 ppm	493374	Phenanthrene-d10b	7.873

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Anthracene, 2-methyl-	192	C15H12	000613-12-7	96
2		Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	93
3		Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	93
4		Anthracene, 2-methyl-	192	C15H12	000613-12-7	93
5		Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	90



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6531.D  
 Acq On : 09 May 2024 10:03 pm  
 Operator : rocquans  
 Sample : jd87833-5  
 Misc : op54460,ecj297,30.4,,,1,1  
 ALS Vial : 22 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

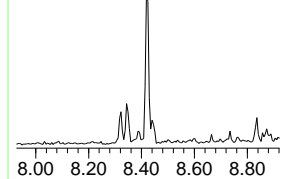
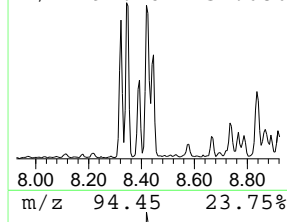
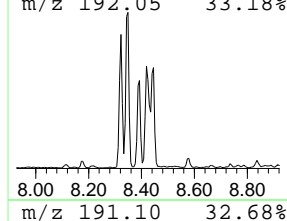
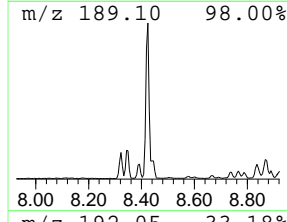
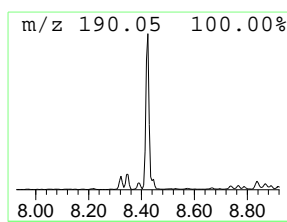
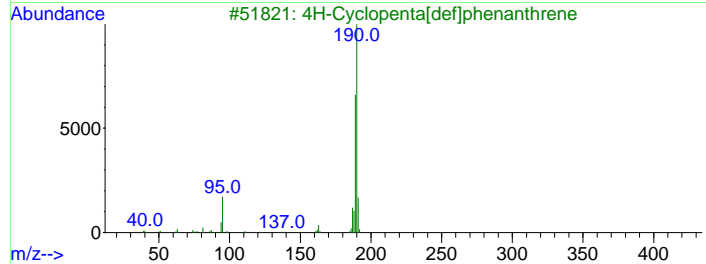
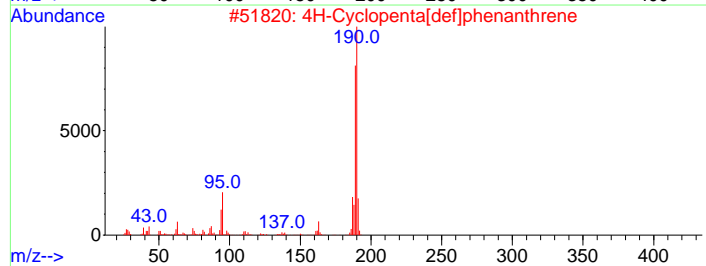
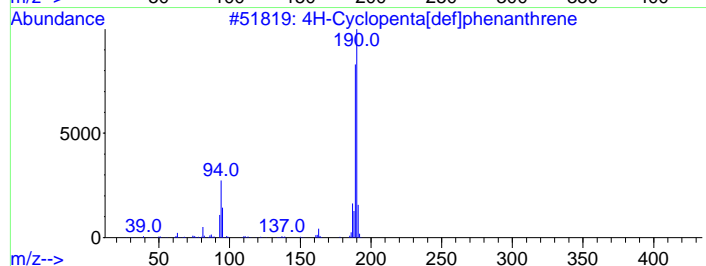
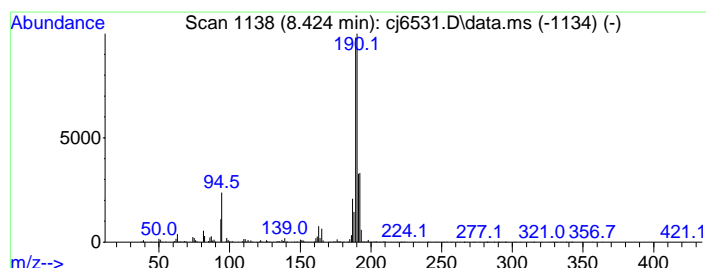
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 4 4H-Cyclopenta[def]phenanthrene Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.424	16.57 ppm	1439000	Phenanthrene-d10b	7.873

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	4H-Cyclopenta[def]phenanthrene	190	C15H10	000203-64-5	94
2		4H-Cyclopenta[def]phenanthrene	190	C15H10	000203-64-5	68
3		4H-Cyclopenta[def]phenanthrene	190	C15H10	000203-64-5	64
4		Thiophene-3-carboxaldehyde, 5-ch...	190	C5H4BClO3S	036155-87-0	52
5		2,3,5,6-Tetramethylterephthalald...	190	C12H14O2	007072-01-7	50



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6531.D  
 Acq On : 09 May 2024 10:03 pm  
 Operator : rocquans  
 Sample : jd87833-5  
 Misc : op54460,ecj297,30.4,,,1,1  
 ALS Vial : 22 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

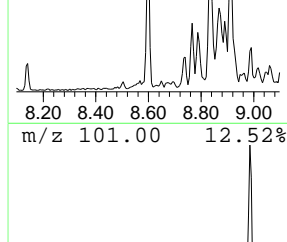
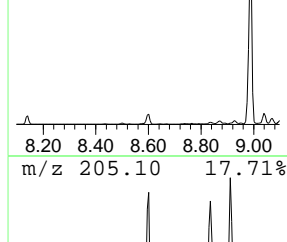
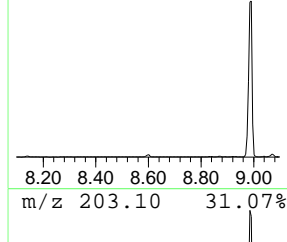
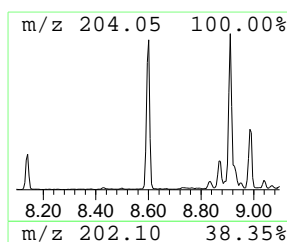
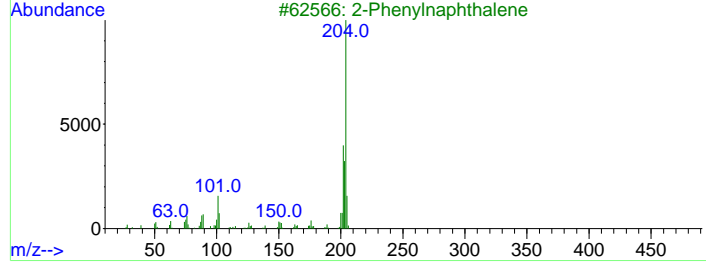
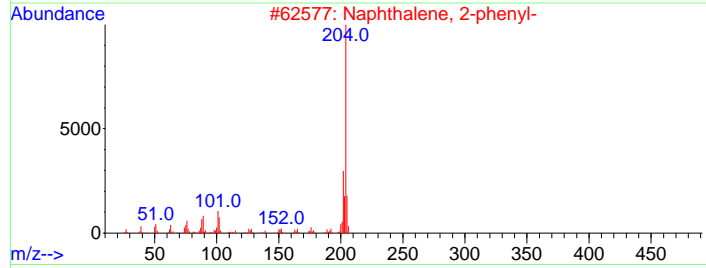
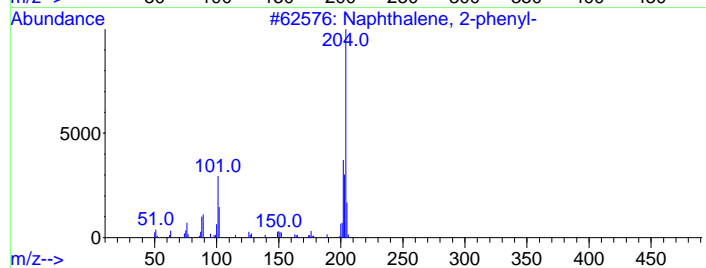
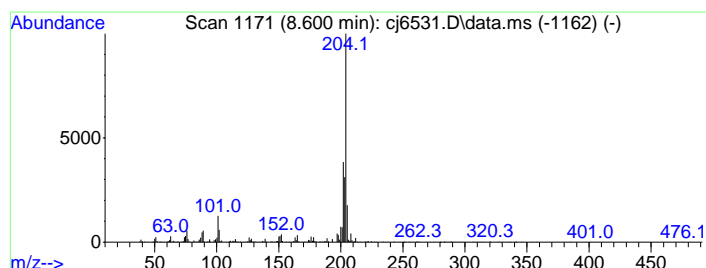
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 5 Naphthalene, phenyl Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.600	7.67 ppm	665732	Phenanthrene-d10b	7.873

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Naphthalene, 2-phenyl-	204	C16H12	000612-94-2	86
2		Naphthalene, 2-phenyl-	204	C16H12	000612-94-2	83
3		2-Phenylnaphthalene	204	C16H12	035465-71-5	70
4		Naphthalene, 2-phenyl-	204	C16H12	000612-94-2	70
5		Tricyclo[8.2.2.2(4,7)]hexadeca-2...	204	C16H12	006572-60-7	70



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6531.D  
Acq On : 09 May 2024 10:03 pm  
Operator : rocquans  
Sample : jd87833-5  
Misc : op54460,ecj297,30.4,,,1,1  
ALS Vial : 22 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

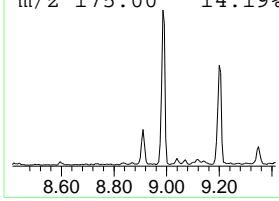
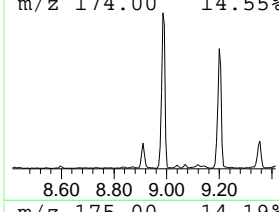
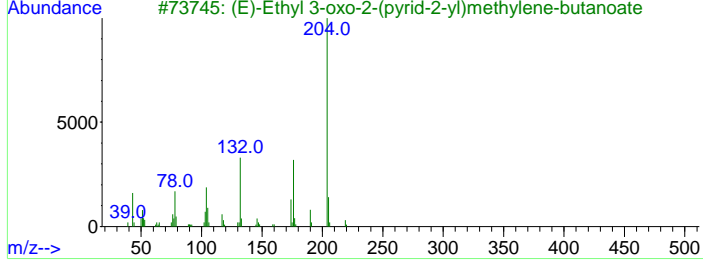
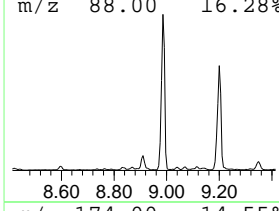
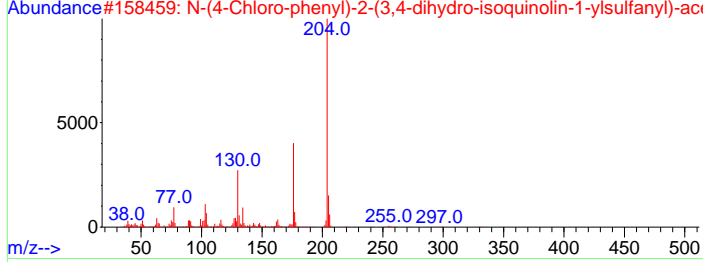
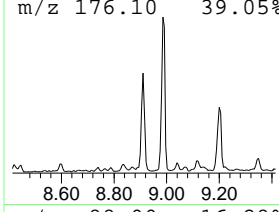
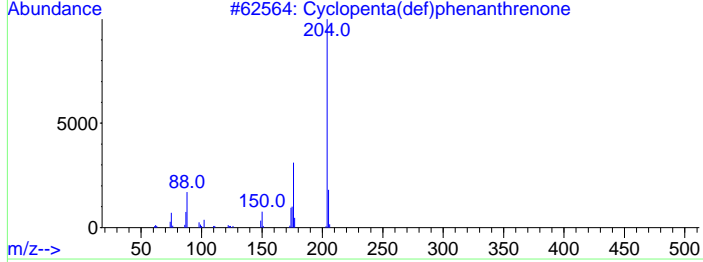
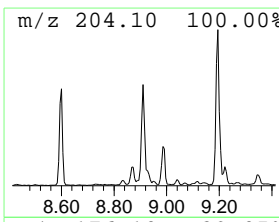
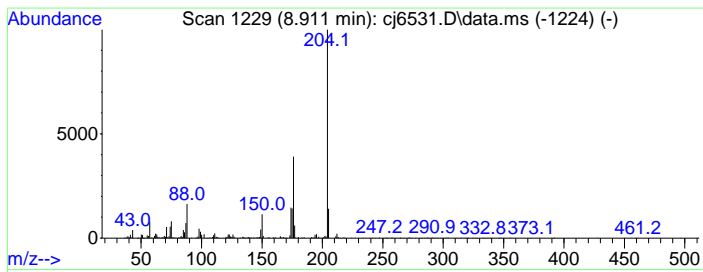
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 6 Unknown Concentration Rank 21

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.911	6.43 ppm	558262	Phenanthrene-d10b	7.873

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Cyclopenta(def)phenanthrenone	204	C15H8O	005737-13-3	94
2		N-(4-Chloro-phenyl)-2-(3,4-dihyd...	330	C17H15ClN2OS	1000296-34-3	59
3		(E)-Ethyl 3-oxo-2-(pyrid-2-yl)me...	219	C12H13NO3	1000147-59-7	50
4		3,4-Biphenyldicarbonitrile	204	C14H8N2	004128-63-6	42
5		[1,2,4]Triazololo[5,1-b]quinazolin...	204	C10H12N4O	1000337-56-5	38



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6531.D  
Acq On : 09 May 2024 10:03 pm  
Operator : rocquans  
Sample : jd87833-5  
Misc : op54460,ecj297,30.4,,1,1  
ALS Vial : 22 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

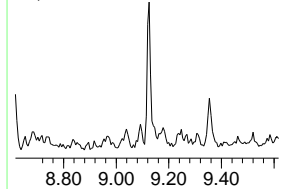
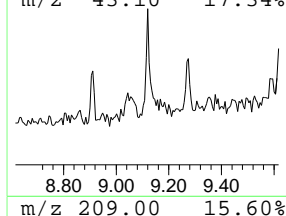
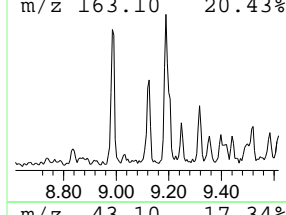
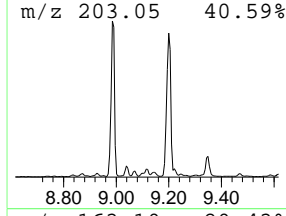
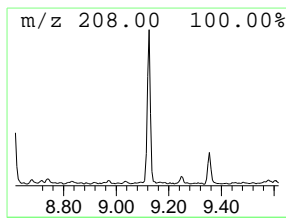
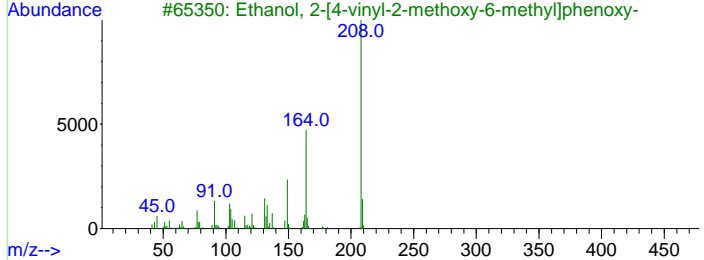
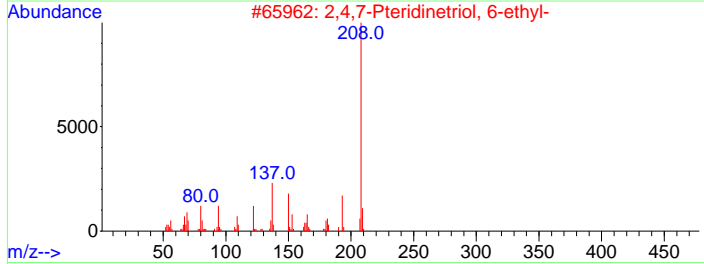
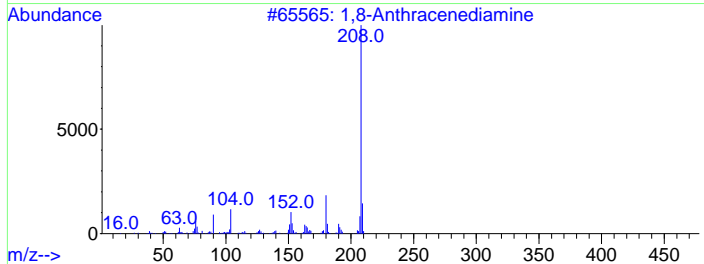
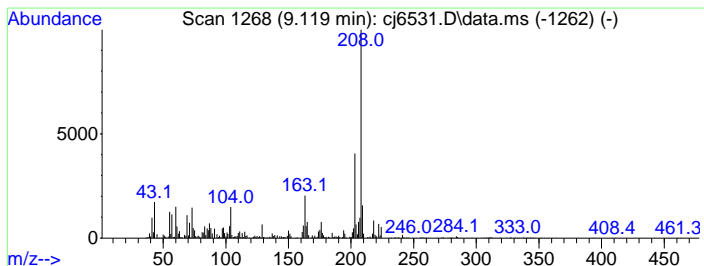
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 7 Unknown Concentration Rank 24

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.119	6.02 ppm	522348	Phenanthrene-d10b	7.873

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	1,8-Anthracenediamine	208	C14H12N2	139312-39-3	49
2		2,4,7-Pteridinetriol, 6-ethyl-	208	C8H8N4O3	031053-47-1	46
3		Ethanol, 2-[4-vinyl-2-methoxy-6-...]	208	C12H16O3	1000132-26-4	43
4		4,7-Dimethyl-1,10-phenanthroline	208	C14H12N2	003248-05-3	43
5		Indole, 6-methyl-2-(3-pyridyl)-	208	C14H12N2	293762-69-3	43



7.1.10  
7



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6531.D  
Acq On : 09 May 2024 10:03 pm  
Operator : rocquans  
Sample : jd87833-5  
Misc : op54460,ecj297,30.4,,,1,1  
ALS Vial : 22 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

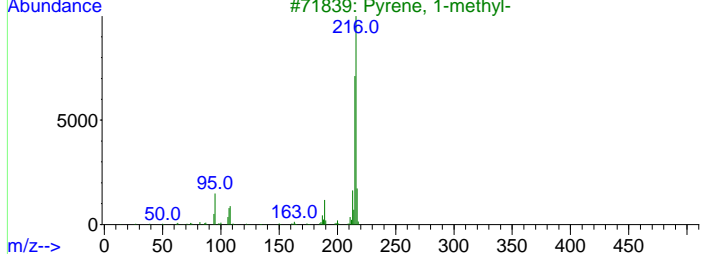
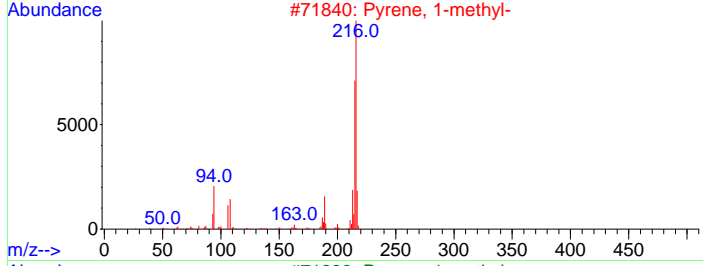
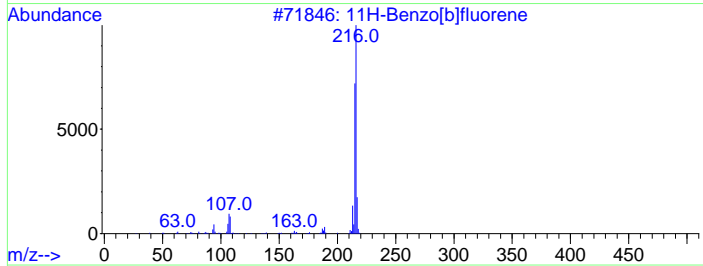
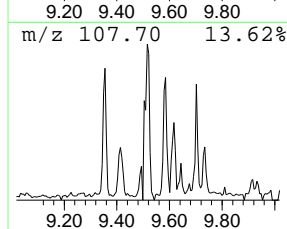
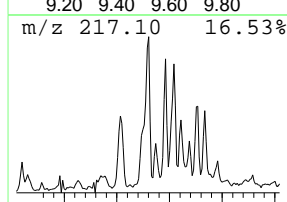
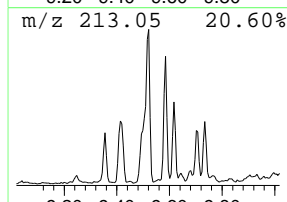
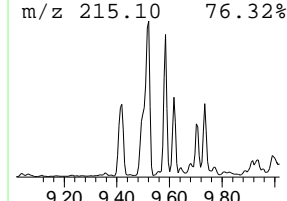
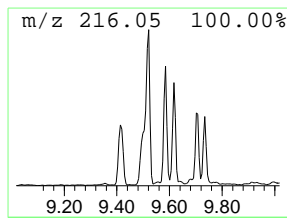
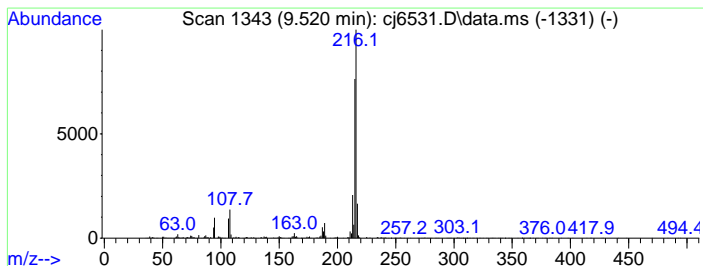
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TIC Integration Parameters: lscint.p

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Peak Number 8 Pyrene, methyl Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.520	7.82 ppm	1380650	Chrysene-d12	10.371

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	11H-Benzo[b]fluorene	216	C17H12	000243-17-4	95
2		Pyrene, 1-methyl-	216	C17H12	002381-21-7	93
3		Pyrene, 1-methyl-	216	C17H12	002381-21-7	93
4		Fluoranthene, 2-methyl-	216	C17H12	033543-31-6	91
5		11H-Benzo[b]fluorene	216	C17H12	000243-17-4	91



7.1.10  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6531.D  
Acq On : 09 May 2024 10:03 pm  
Operator : rocquans  
Sample : jd87833-5  
Misc : op54460,ecj297,30.4,,,1,1  
ALS Vial : 22 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

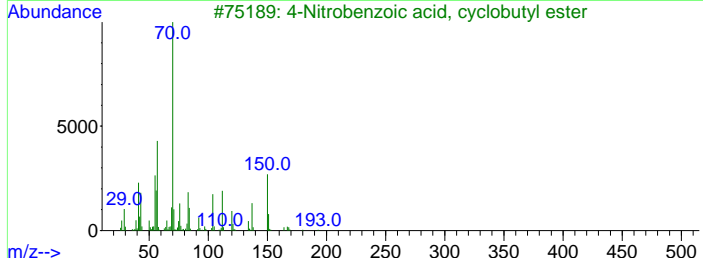
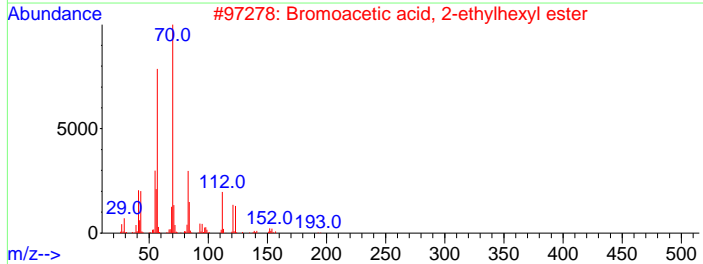
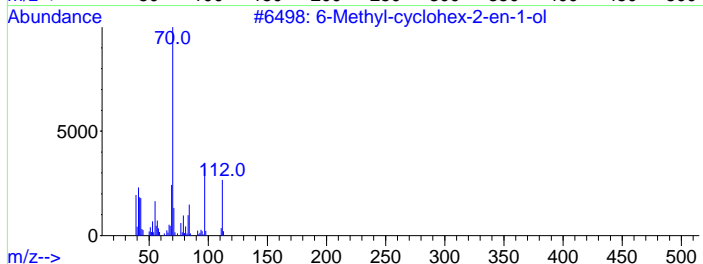
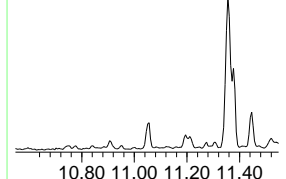
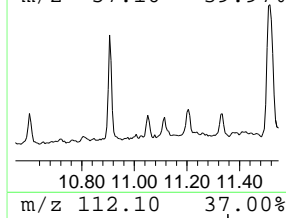
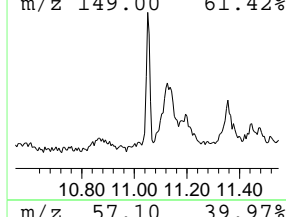
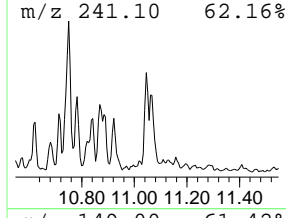
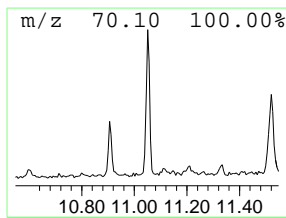
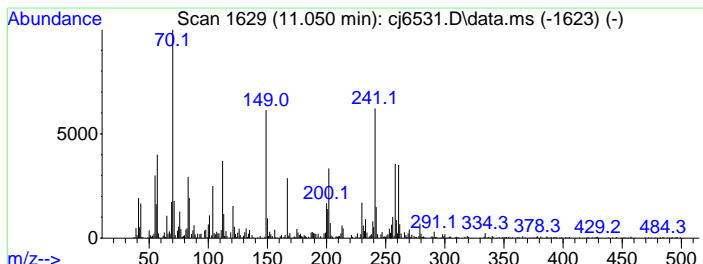
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 9 Unknown Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.050	8.75 ppm	608643	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			6-Methyl-cyclohex-2-en-1-ol	112	C7H12O	1000144-17-3	25
2			Bromoacetic acid, 2-ethylhexyl e...	250	C10H19BrO2	068144-73-0	22
3			4-Nitrobenzoic acid, cyclobutyl ...	221	C11H11NO4	070335-00-1	22
4			1,2,4-Benzothiadiazine, 7-chloro...	328	C13H17ClN4O2S	070443-35-5	22
5			1,2-Benzenedicarboxylic acid, di...	390	C24H38O4	027554-26-3	15



7.1.10  
7

Library Search Compound Report

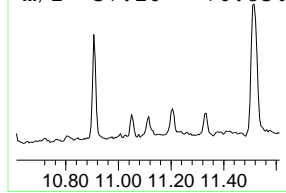
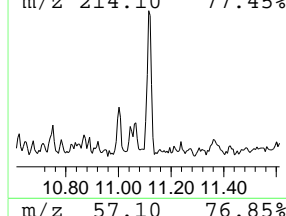
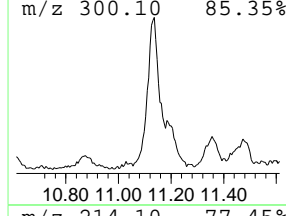
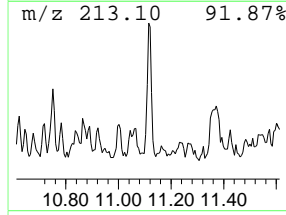
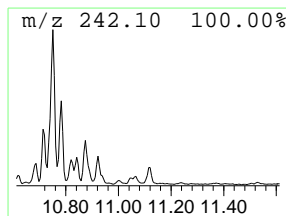
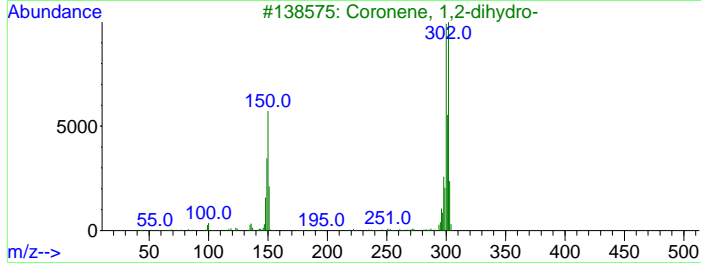
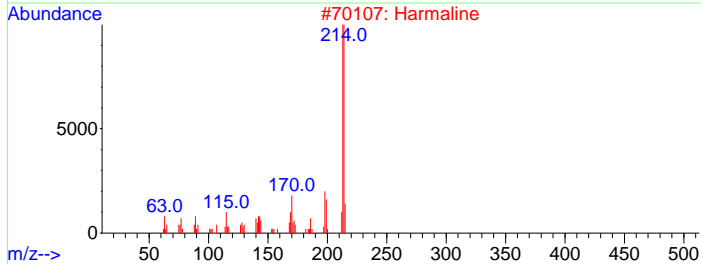
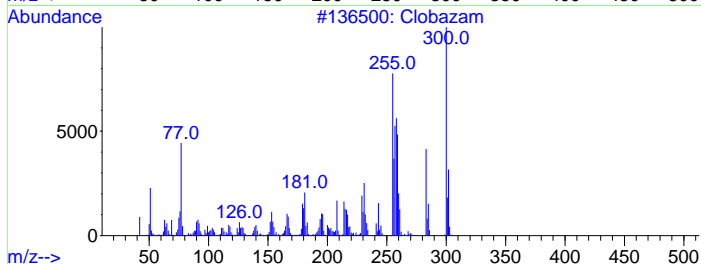
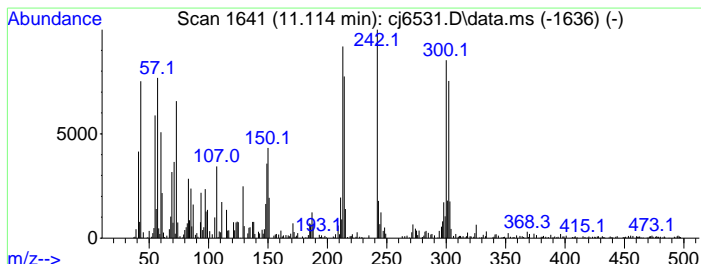
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Data File : cj6531.D  
Acq On : 09 May 2024 10:03 pm  
Operator : rocquans  
Sample : jd87833-5  
Misc : op54460,ecj297,30.4,,,1,1  
ALS Vial : 22 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 10 Unknown Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.	
11.114	7.69 ppm	534347	Perylene-d12	11.719	
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Clobazam	300	C16H13ClN2O2	022316-47-8	38
2	Harmaline	214	C13H14N2O	000304-21-2	25
3	Coronene, 1,2-dihydro-	302	C24H14	107716-56-3	25
4	Harmaline	214	C13H14N2O	000304-21-2	18
5	Harmaline	214	C13H14N2O	000304-21-2	18



7.1.10  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6531.D  
 Acq On : 09 May 2024 10:03 pm  
 Operator : rocquans  
 Sample : jd87833-5  
 Misc : op54460,ecj297,30.4,,,1,1  
 ALS Vial : 22 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

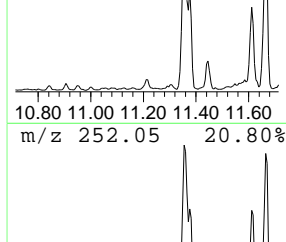
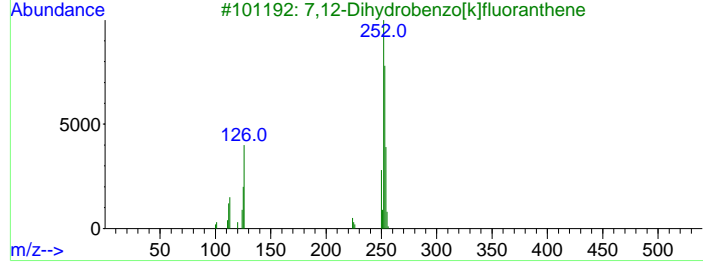
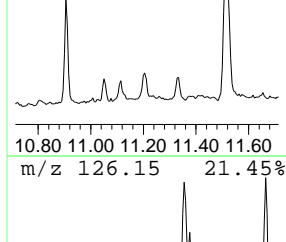
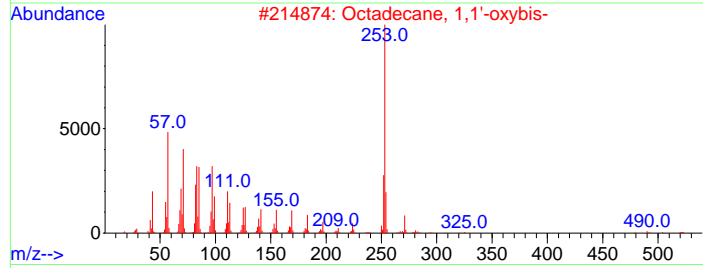
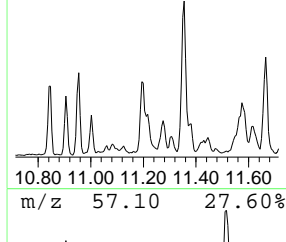
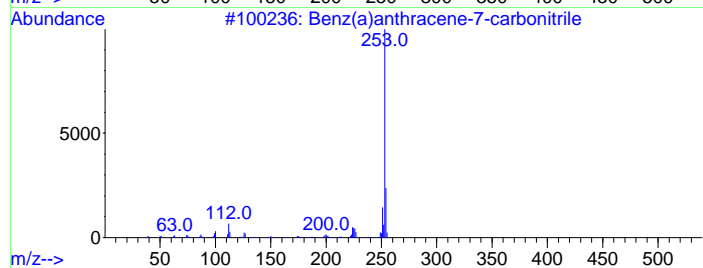
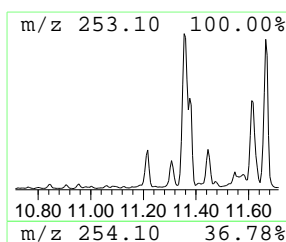
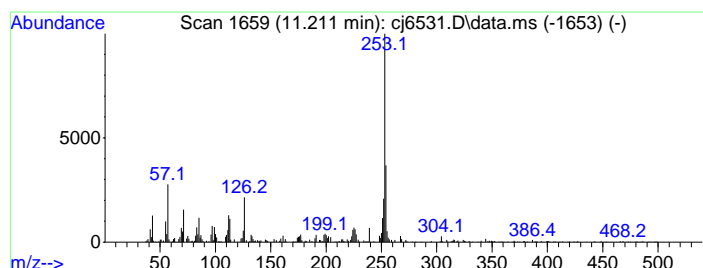
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 11 Unknown Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.211	10.38 ppm	721837	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Benz(a)anthracene-7-carbonitrile	253	C19H11N	007476-08-6	52
2			Octadecane, 1,1'-oxybis-	523	C36H74O	006297-03-6	50
3			7,12-Dihydrobenzo[k]fluoranthene	254	C20H14	1000080-17-7	45
4			Octadecanoic acid, 2-oxo-, methy...	312	C19H36O3	002380-18-9	38
5			Ethyl 4-(5-methyl-1,1-dioxido-4-...	373	C19H19NO5S	1000294-64-6	38



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6531.D  
Acq On : 09 May 2024 10:03 pm  
Operator : rocquans  
Sample : jd87833-5  
Misc : op54460,ecj297,30.4,,,1,1  
ALS Vial : 22 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

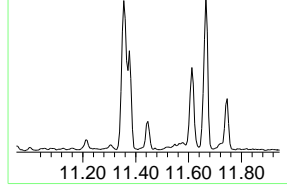
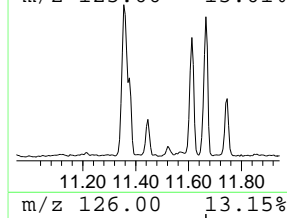
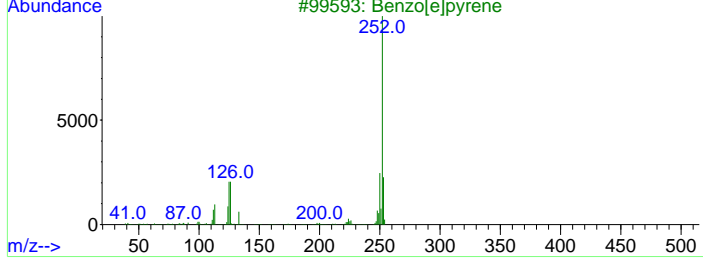
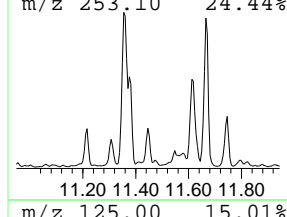
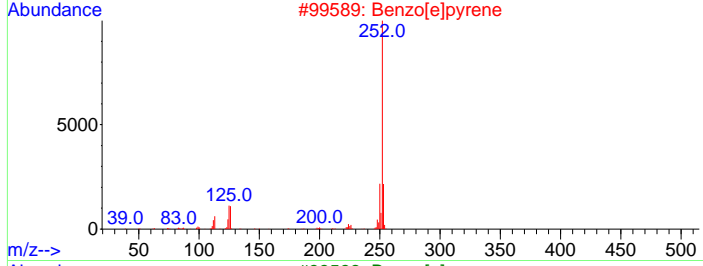
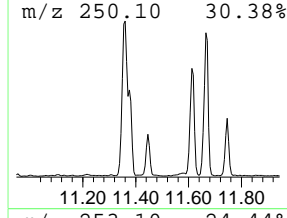
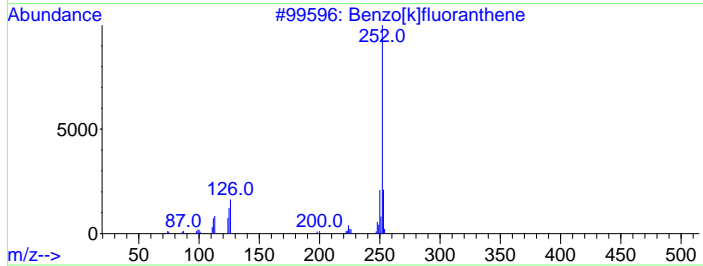
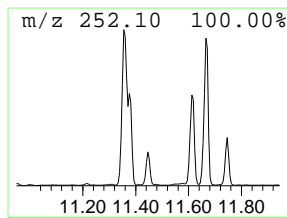
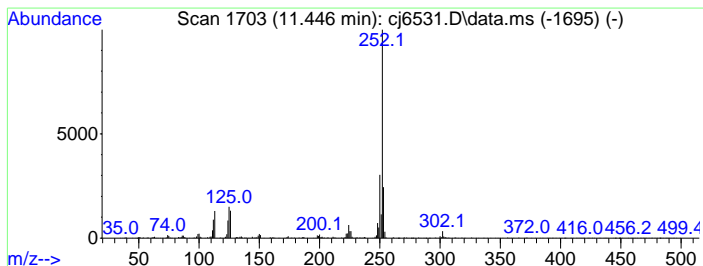
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 12 Unknown PHA Substance Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.446	11.44 ppm	795373	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Benzo[k]fluoranthene	252	C20H12	000207-08-9	97
2			Benzo[e]pyrene	252	C20H12	000192-97-2	97
3			Benzo[e]pyrene	252	C20H12	000192-97-2	94
4			Benz[e]acephenanthrylene	252	C20H12	000205-99-2	94
5			Benz[e]acephenanthrylene	252	C20H12	000205-99-2	93



7.1.10  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6531.D  
Acq On : 09 May 2024 10:03 pm  
Operator : rocquans  
Sample : jd87833-5  
Misc : op54460,ecj297,30.4,,,1,1  
ALS Vial : 22 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

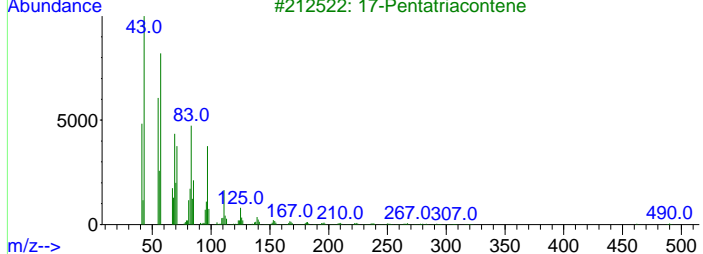
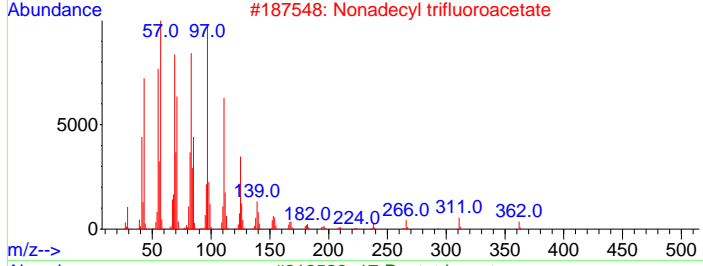
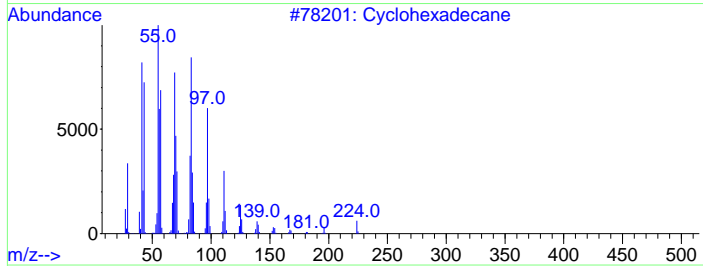
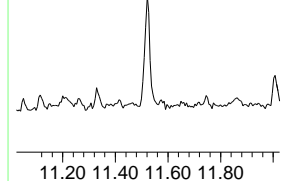
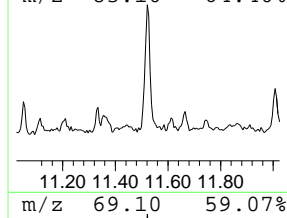
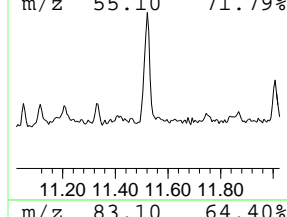
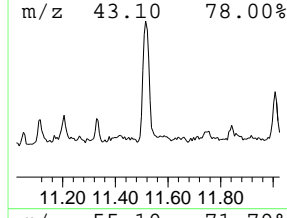
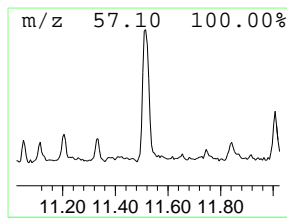
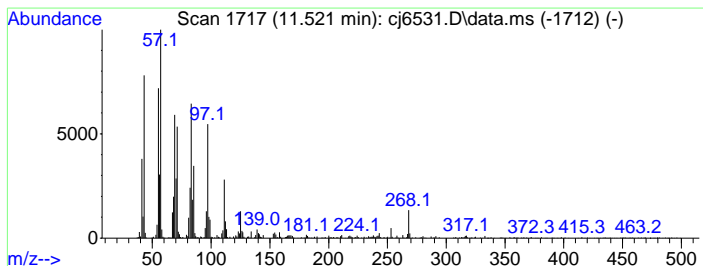
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 13 Unknown Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.521	17.68 ppm	1229110	Perylene-d12	11.719

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		Cyclohexadecane	224	C16H32	000295-65-8	92
2		Nonadecyl trifluoroacetate	380	C21H39F3O2	1000351-76-3	91
3		17-Pentatriacontene	491	C35H70	006971-40-0	91
4		Nonadecyl pentafluoropropionate	430	C22H39F5O2	1000351-88-8	91
5		Eicosyl pentafluoropropionate	444	C23H41F5O2	1000351-80-8	91



7.1.10  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6531.D  
Acq On : 09 May 2024 10:03 pm  
Operator : rocquans  
Sample : jd87833-5  
Misc : op54460,ecj297,30.4,,,1,1  
ALS Vial : 22 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

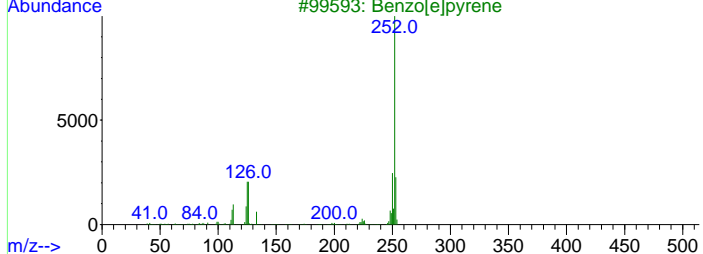
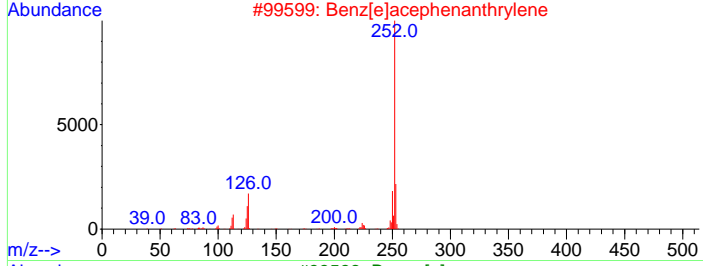
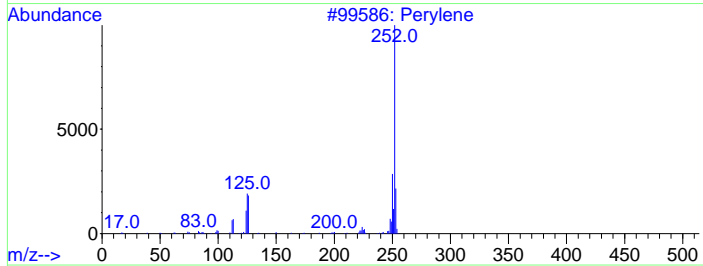
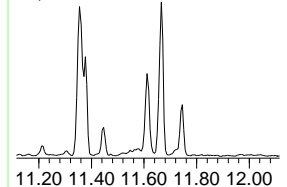
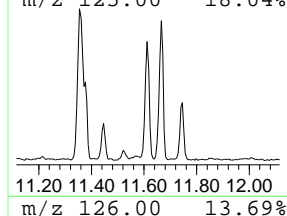
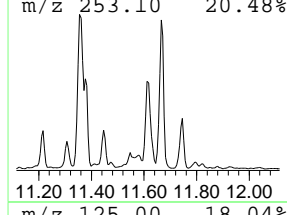
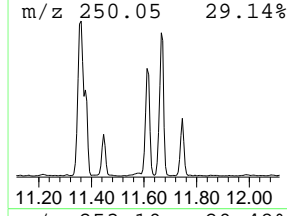
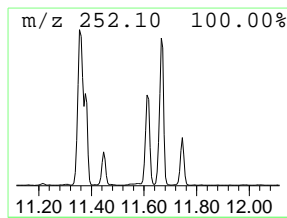
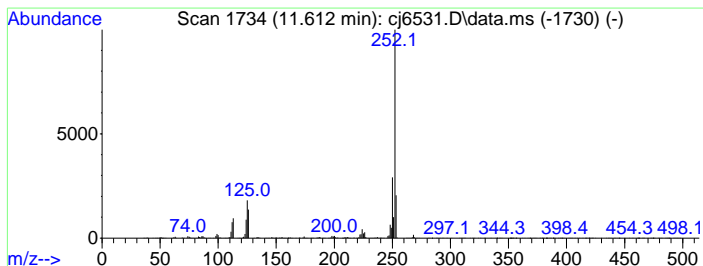
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 14 Unknown PHA Substance Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.612	28.86 ppm	2006190	Perylene-d12	11.719

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Perylene	252	C20H12	000198-55-0	94
2		Benz[e]acephenanthrylene	252	C20H12	000205-99-2	94
3		Benzo[e]pyrene	252	C20H12	000192-97-2	94
4		Benzo[k]fluoranthene	252	C20H12	000207-08-9	94
5		Benzo[e]pyrene	252	C20H12	000192-97-2	93



7.1.10  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6531.D  
 Acq On : 09 May 2024 10:03 pm  
 Operator : rocquans  
 Sample : jd87833-5  
 Misc : op54460,ecj297,30.4,,,1,1  
 ALS Vial : 22 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

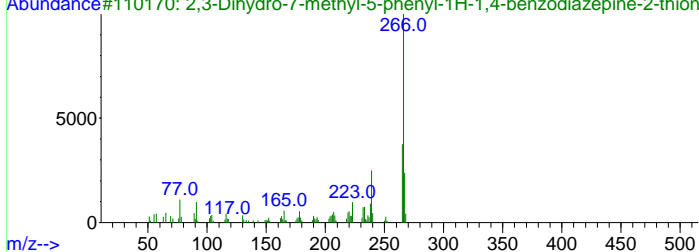
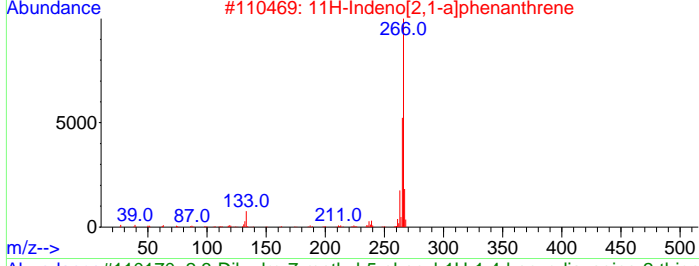
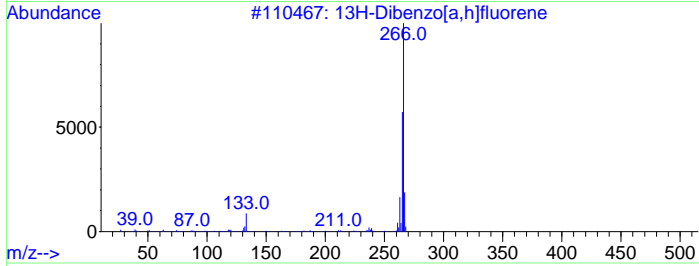
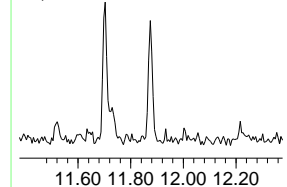
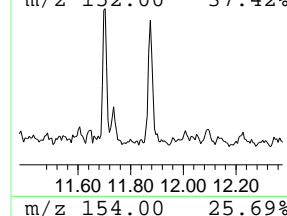
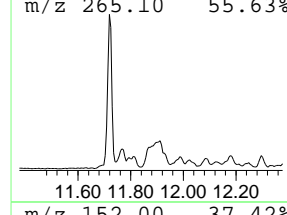
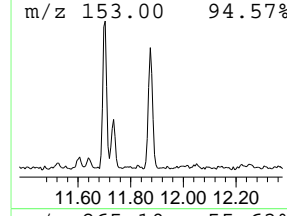
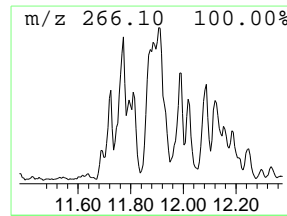
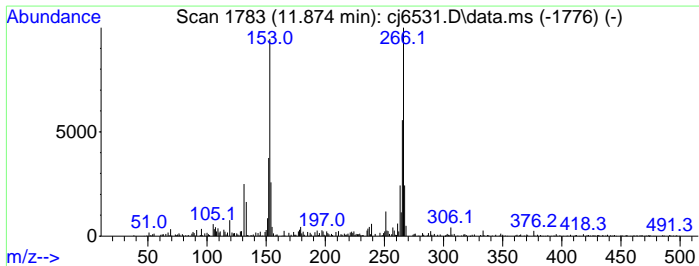
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 15 Unknown Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.874	6.87 ppm	477408	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			13H-Dibenzo[a,h]fluorene	266	C21H14	000239-85-0	46
2			11H-Indeno[2,1-a]phenanthrene	266	C21H14	000220-97-3	42
3			2,3-Dihydro-7-methyl-5-phenyl-1H...	266	C16H14N2S	002888-60-0	35
4			1-Phosphacyclopent-2-ene, 1,5-di...	266	C18H19P	1000162-78-2	35
5			1-Benzothieno[3,2-f]quinazoline-...	266	C14H10N4S	065642-92-4	27





Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6531.D  
Acq On : 09 May 2024 10:03 pm  
Operator : rocquans  
Sample : jd87833-5  
Misc : op54460,ecj297,30.4,,,1,1  
ALS Vial : 22 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

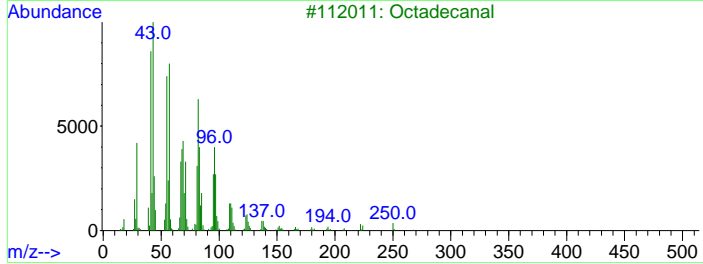
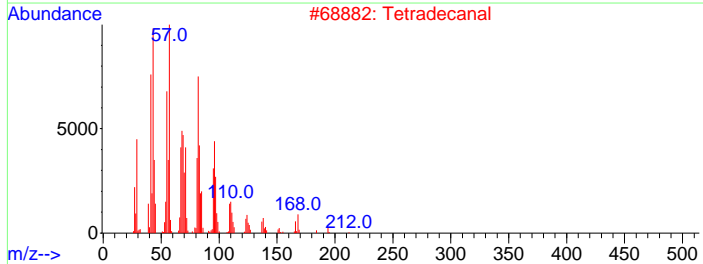
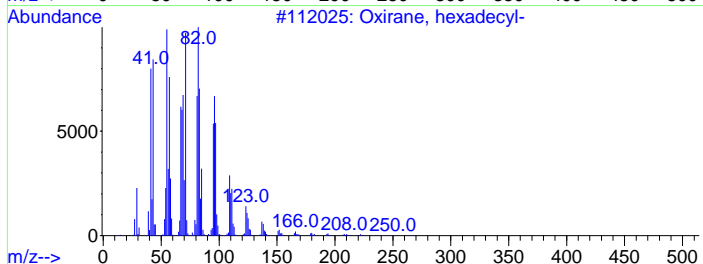
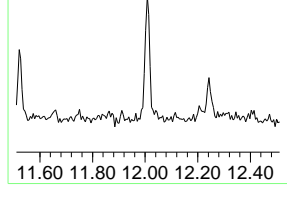
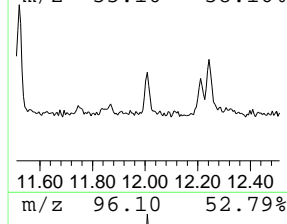
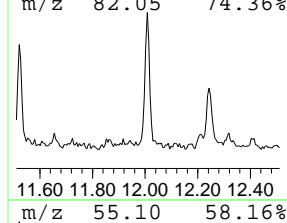
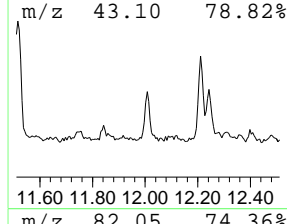
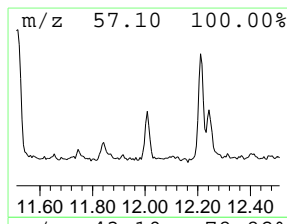
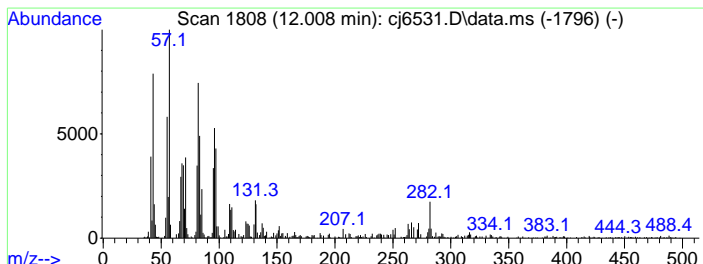
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 16 Unknown Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.008	12.46 ppm	866558	Perylene-d12	11.719

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Oxirane, hexadecyl-	268	C18H36O	007390-81-0	91
2		Tetradecanal	212	C14H28O	000124-25-4	91
3		Octadecanal	268	C18H36O	000638-66-4	87
4		1,19-Eicosadiene	278	C20H38	014811-95-1	76
5		Cyclohexane, (1-butylhexadecyl)-	364	C26H52	004443-59-8	70



7.1.10  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6531.D  
Acq On : 09 May 2024 10:03 pm  
Operator : rocquans  
Sample : jd87833-5  
Misc : op54460,ecj297,30.4,,,1,1  
ALS Vial : 22 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

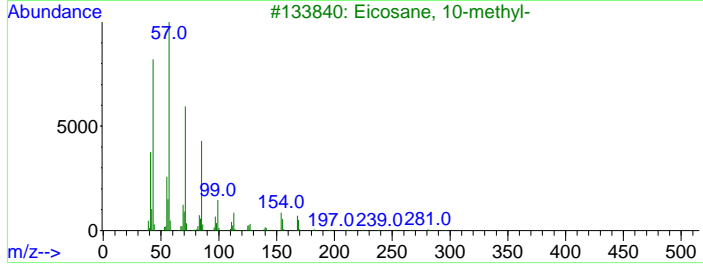
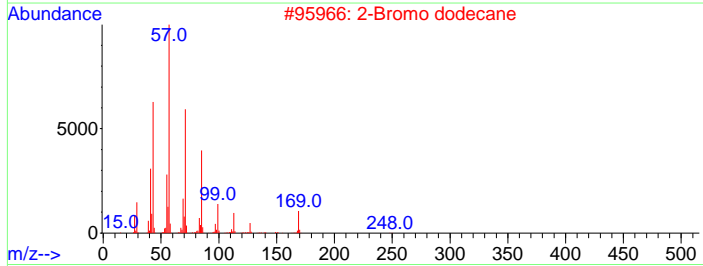
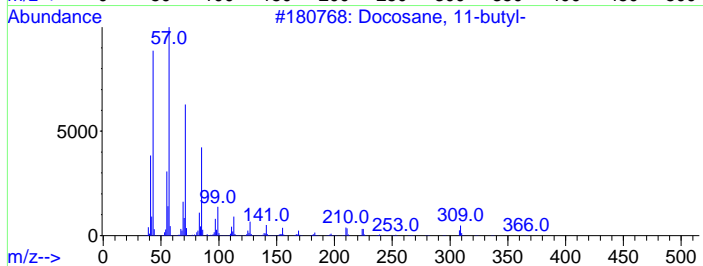
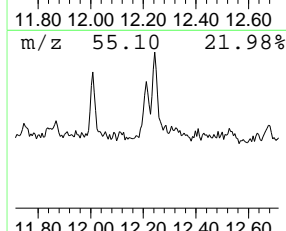
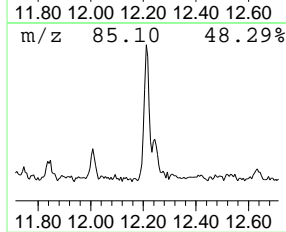
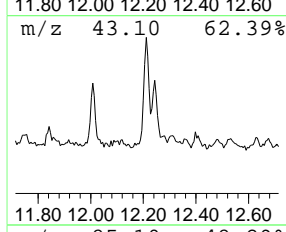
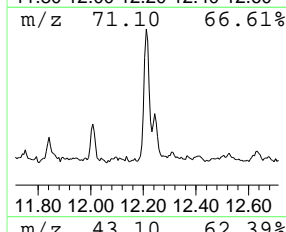
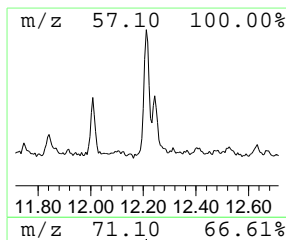
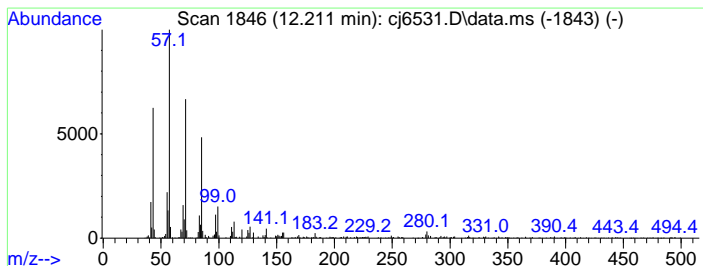
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 17 Alkane Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.211	7.18 ppm	499101	Perylene-d12	11.719

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		Docosane, 11-butyl-	366	C26H54	013475-76-8	93
2		2-Bromo dodecane	248	C12H25Br	013187-99-0	91
3		Eicosane, 10-methyl-	296	C21H44	054833-23-7	91
4		Heptadecane, 9-octyl-	352	C25H52	007225-64-1	87
5		Hexadecane, 6,11-dipentyl-	366	C26H54	015874-03-0	87



7.1.10  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6531.D  
Acq On : 09 May 2024 10:03 pm  
Operator : rocquans  
Sample : jd87833-5  
Misc : op54460,ecj297,30.4,,,1,1  
ALS Vial : 22 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

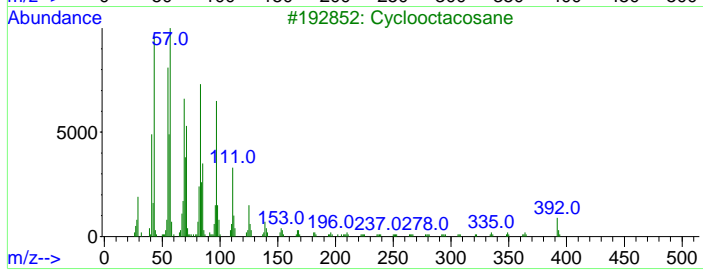
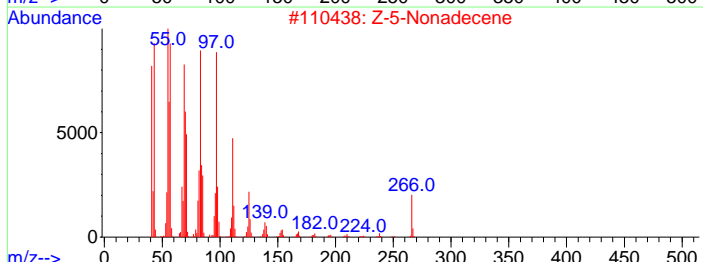
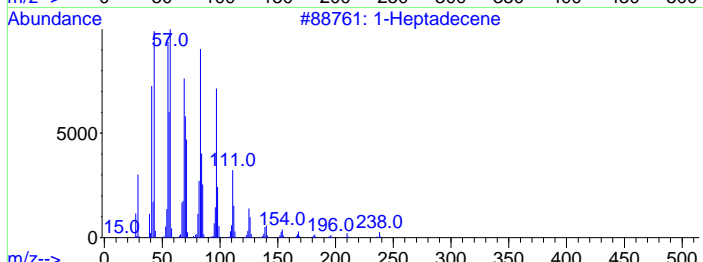
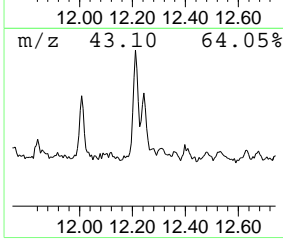
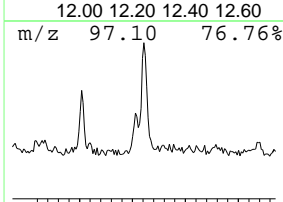
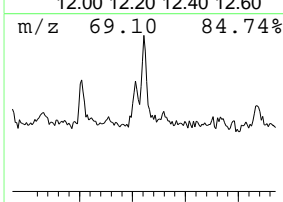
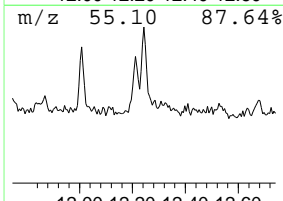
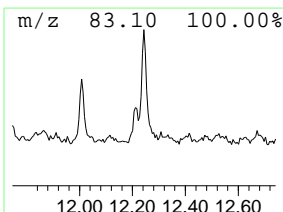
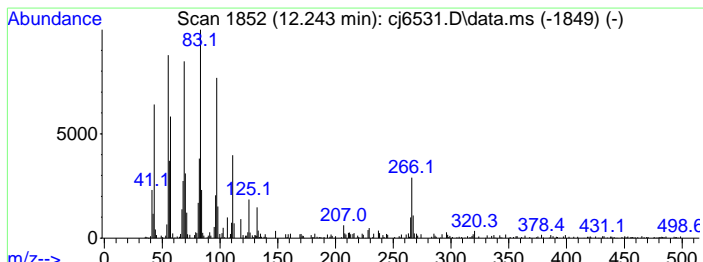
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 18 Unknown Concentration Rank 22

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.243	6.36 ppm	441978	Perylene-d12	11.719

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	1-Heptadecene	238	C17H34	006765-39-5	80
2		Z-5-Nonadecene	266	C19H38	1000131-11-8	47
3		Cyclooctacosane	392	C28H56	000297-24-5	46
4		13-Tetradecen-1-ol acetate	254	C16H30O2	056221-91-1	43
5		Cyclopentane, 1-ethyl-3-methyl-, ...	112	C8H16	002613-65-2	42



7.1.10  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6531.D  
 Acq On : 09 May 2024 10:03 pm  
 Operator : rocquans  
 Sample : jd87833-5  
 Misc : op54460,ecj297,30.4,,,1,1  
 ALS Vial : 22 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

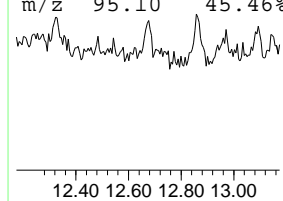
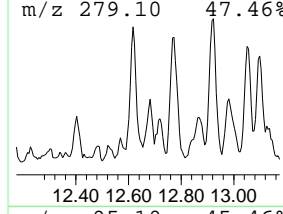
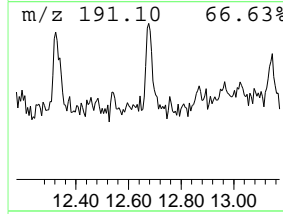
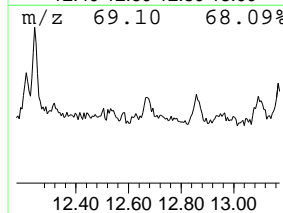
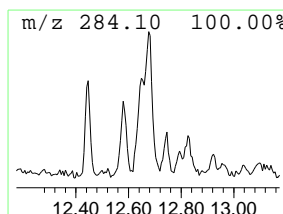
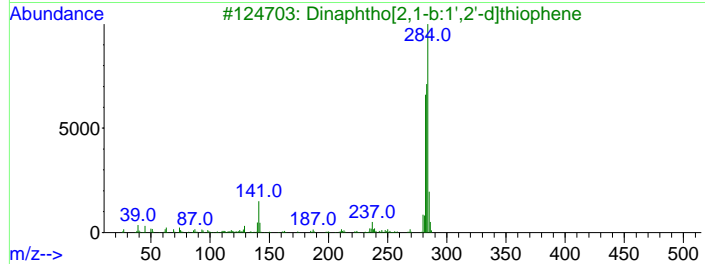
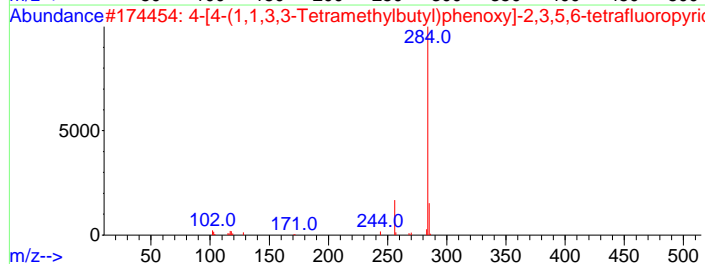
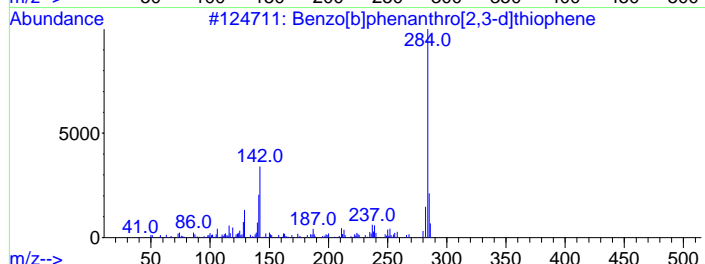
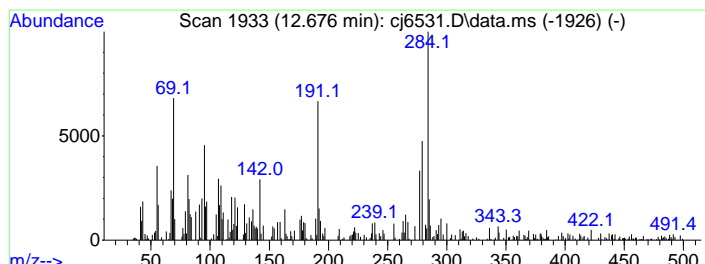
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 19 Unknown Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.676	6.84 ppm	475304	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Benzo[b]phenanthro[2,3-d]thiophene	284	C20H12S	000248-85-1	30
2			4-[4-(1,1,3,3-Tetramethylbutyl)p...	355	C19H21F4NO	1000314-30-9	27
3			Dinaphtho[2,1-b:1',2'-d]thiophene	284	C20H12S	000194-65-0	25
4			3-Hydroxy-2-(4-hydroxy-3-methoxy...	284	C16H12O5	159184-95-9	25
5			Dinaphtho[1,2-b:1',2'-d]thiophene	284	C20H12S	000207-94-3	25



7.1.10  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6531.D  
Acq On : 09 May 2024 10:03 pm  
Operator : rocquans  
Sample : jd87833-5  
Misc : op54460,ecj297,30.4,,,1,1  
ALS Vial : 22 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

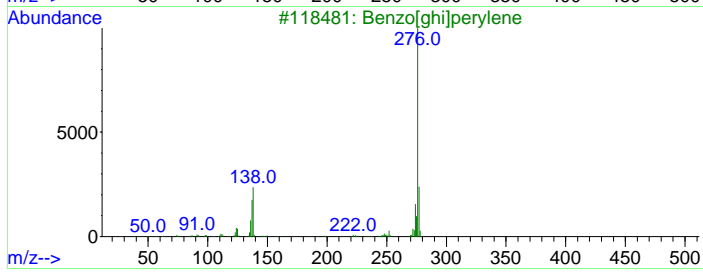
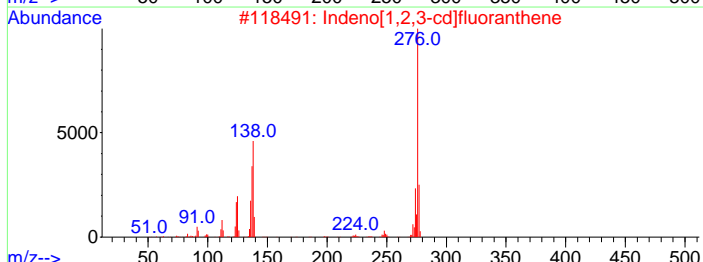
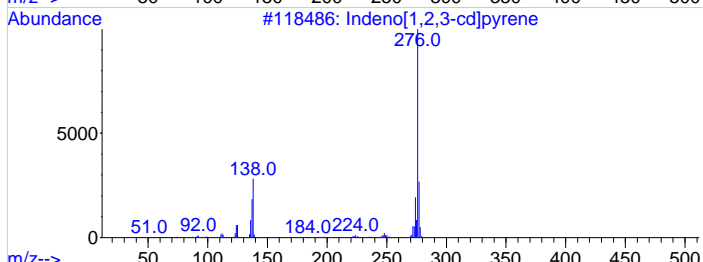
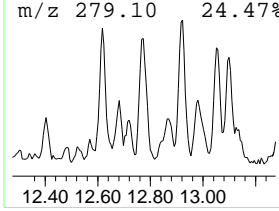
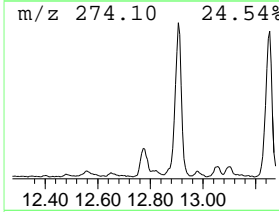
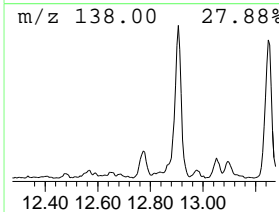
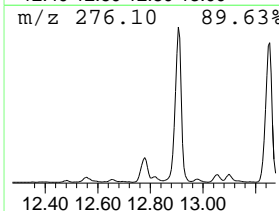
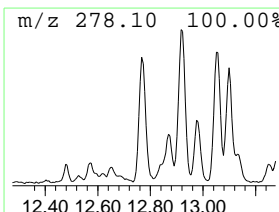
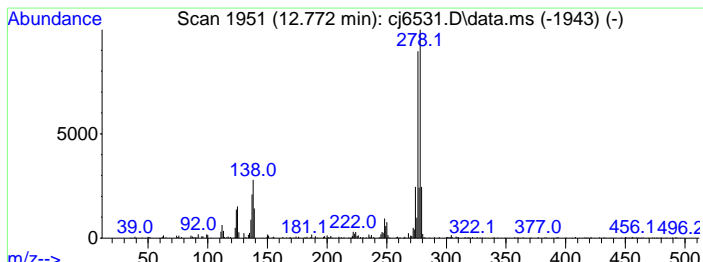
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 20 Unknown Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.773	10.56 ppm	734420	Perylene-d12	11.719

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Indeno[1,2,3-cd]pyrene	276	C22H12	000193-39-5	91
2		Indeno[1,2,3-cd]fluoranthene	276	C22H12	000193-43-1	90
3		Benzo[ghi]perylene	276	C22H12	000191-24-2	55
4		Dibenzo[def,mno]chrysene	276	C22H12	000191-26-4	55
5		Benzo[ghi]perylene	276	C22H12	000191-24-2	55



7.1.10  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6531.D  
 Acq On : 09 May 2024 10:03 pm  
 Operator : rocquans  
 Sample : jd87833-5  
 Misc : op54460,ecj297,30.4,,,1,1  
 ALS Vial : 22 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

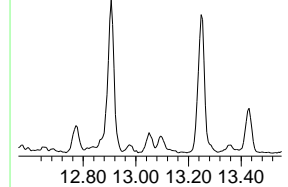
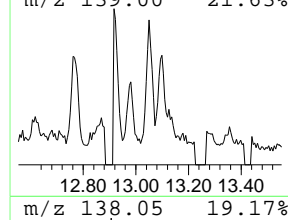
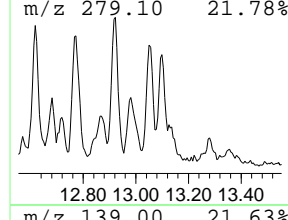
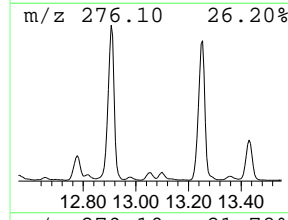
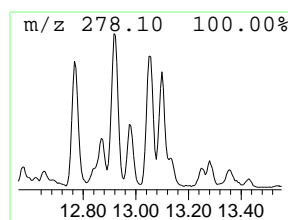
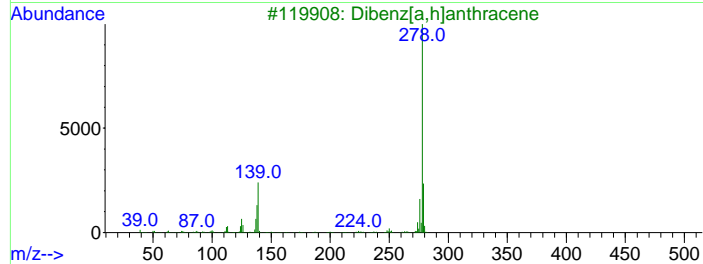
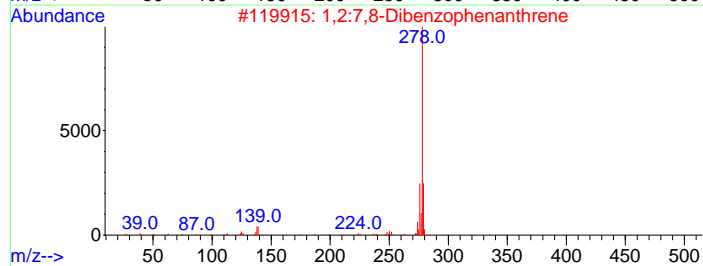
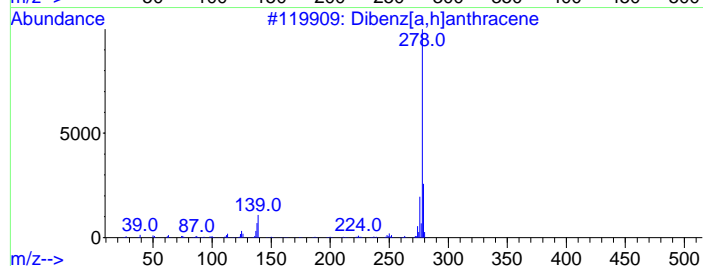
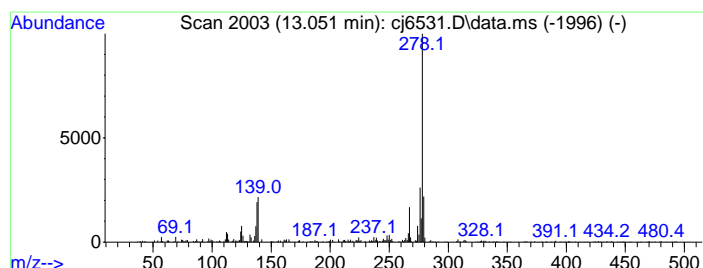
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 21 Unknown Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.051	7.63 ppm	530555	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Dibenz[a,h]anthracene	278	C22H14	000053-70-3	96
2			1,2:7,8-Dibenzophenanthrene	278	C22H14	000213-46-7	93
3			Dibenz[a,h]anthracene	278	C22H14	000053-70-3	92
4			Naphtho[1,2-a]anthracene	278	C22H14	000195-06-2	90
5			Benzo[b]triphenylene	278	C22H14	000215-58-7	90



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6531.D  
Acq On : 09 May 2024 10:03 pm  
Operator : rocquans  
Sample : jd87833-5  
Misc : op54460,ecj297,30.4,,,1,1  
ALS Vial : 22 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

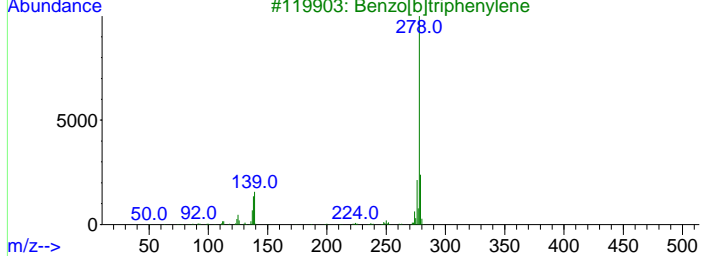
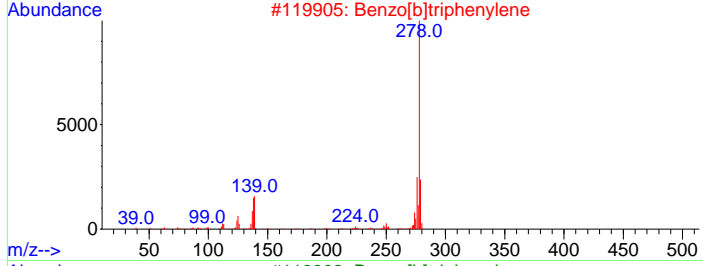
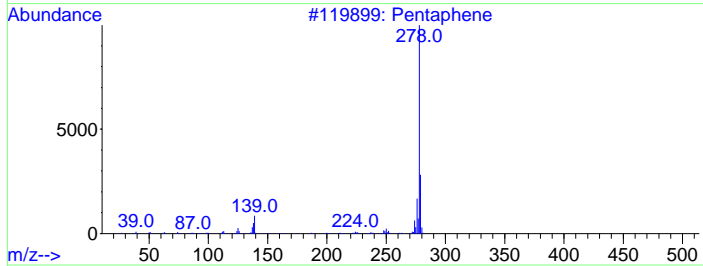
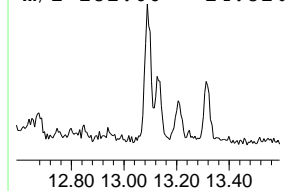
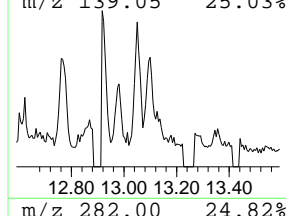
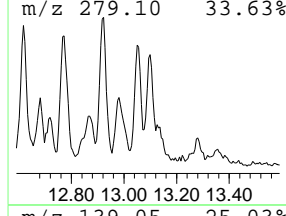
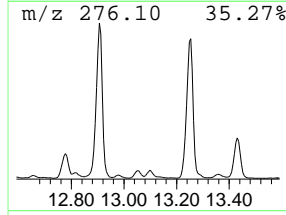
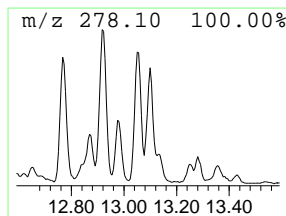
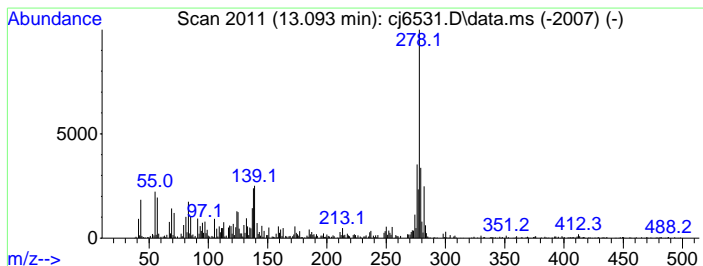
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 22 Unknown Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.093	17.22 ppm	1197040	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Pentaphene	278	C22H14	000222-93-5	90
2			Benzo[b]triphenylene	278	C22H14	000215-58-7	86
3			Benzo[b]triphenylene	278	C22H14	000215-58-7	83
4			1,2:7,8-Dibenzophenanthrene	278	C22H14	000213-46-7	70
5			1,2:7,8-Dibenzophenanthrene	278	C22H14	000213-46-7	70



7.1.10  
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Library Search Compound Report

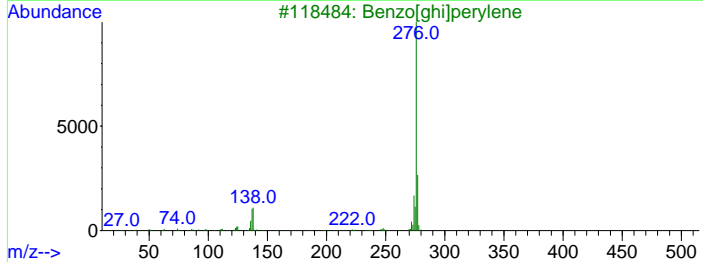
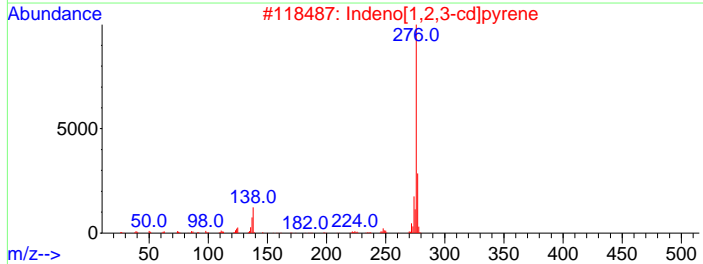
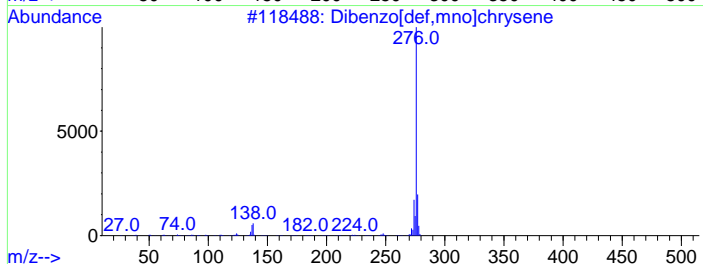
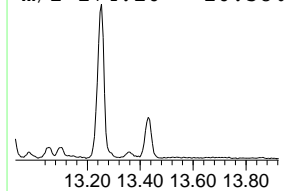
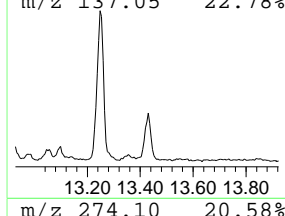
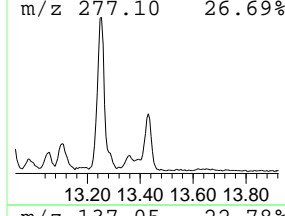
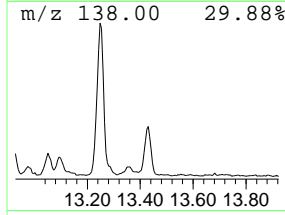
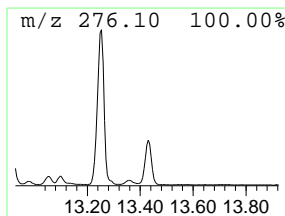
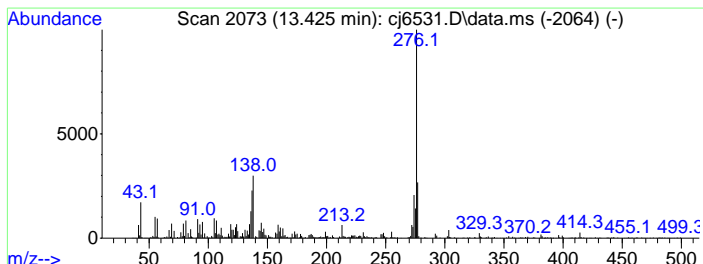
Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\
Data File : cj6531.D
Acq On : 09 May 2024 10:03 pm
Operator : rocquans
Sample : jd87833-5
Misc : op54460,ecj297,30.4,,,1,1
ALS Vial : 22 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: lscint.p

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Peak Number 23 Unknown Concentration Rank 2

Table with 7 columns: R.T., EstConc, Area, Relative to ISTD, R.T., Hit# of 5, Tentative ID, MW, MolForm, CAS#, Qual. Row 1: 13.425, 22.25 ppm, 1546590, Perylene-d12, 11.719.



7.1.10 7



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6531.D  
 Acq On : 09 May 2024 10:03 pm  
 Operator : rocquans  
 Sample : jd87833-5  
 Misc : op54460,ecj297,30.4,,,1,1  
 ALS Vial : 22 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

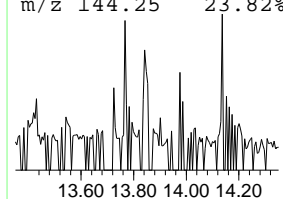
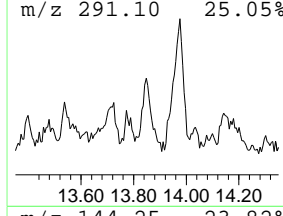
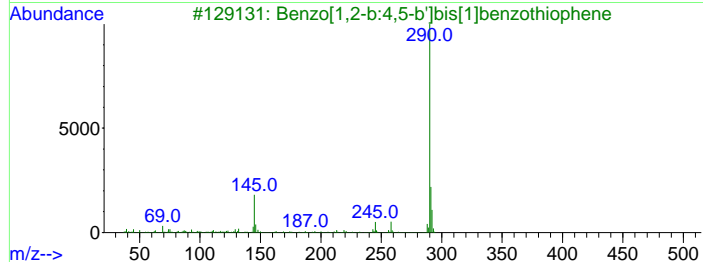
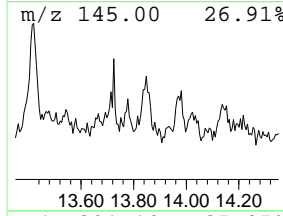
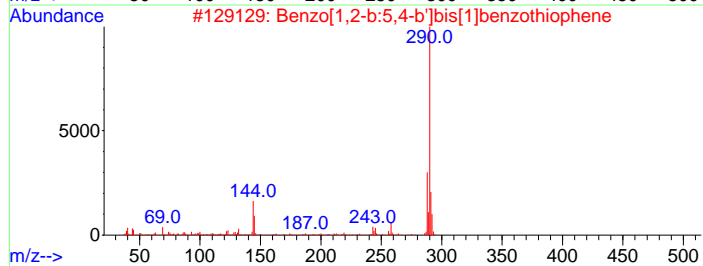
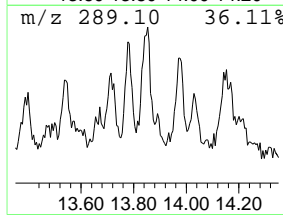
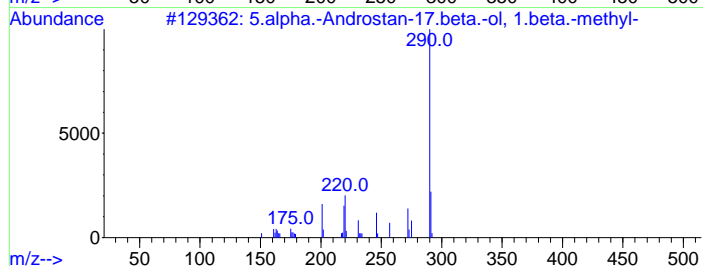
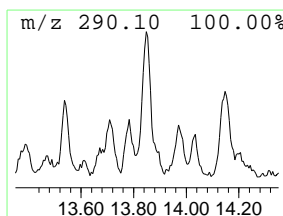
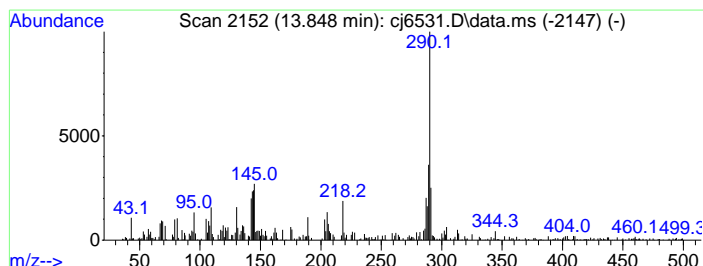
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 24 Unknown Concentration Rank 23

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.848	6.28 ppm	436599	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			5.alpha.-Androstan-17.beta.-ol, ...	290	C20H34O	005846-88-8	52
2			Benzo[1,2-b:5,4-b']bis[1]benzoth...	290	C18H10S2	000241-37-2	47
3			Benzo[1,2-b:4,5-b']bis[1]benzoth...	290	C18H10S2	000241-34-9	46
4			Benzo[ghi]perylene, 4-methyl-	290	C23H14	019224-38-5	46
5			Benzoxazole, 2,2'-(1,2-ethenediy...	290	C18H14N2O2	001041-00-5	38



7.1.10  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6531.D  
 Acq On : 09 May 2024 10:03 pm  
 Operator : rocquans  
 Sample : jd87833-5  
 Misc : op54460,ecj297,30.4,,,1,1  
 ALS Vial : 22 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

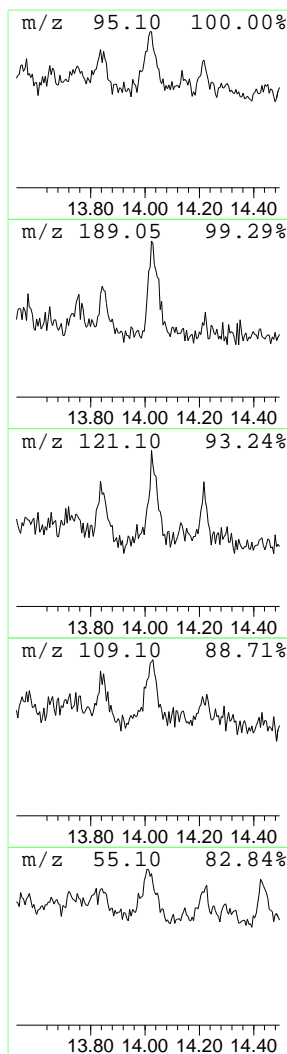
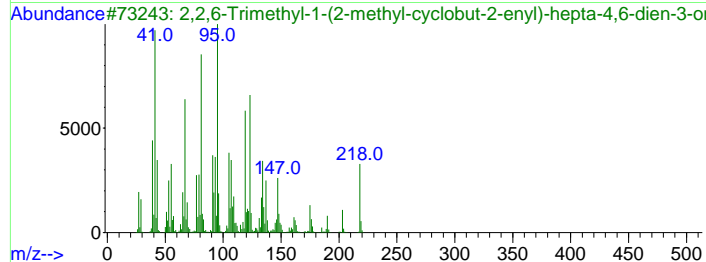
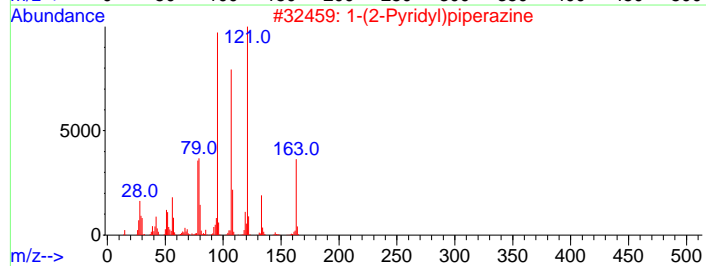
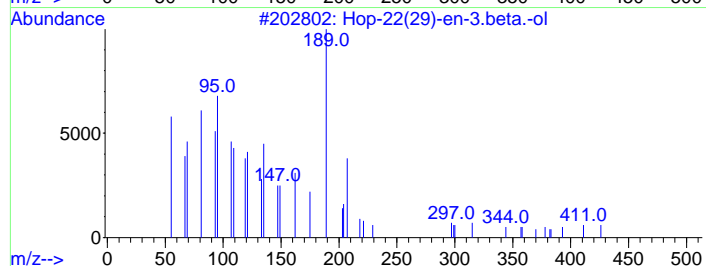
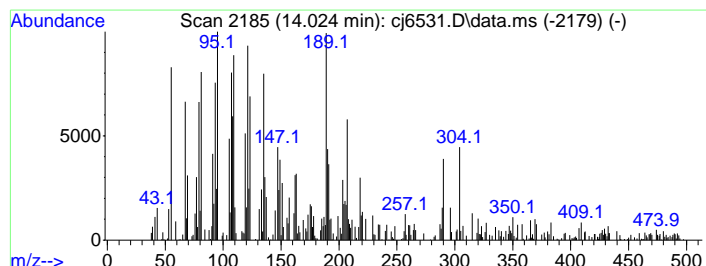
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 25 Unknown Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.024	7.08 ppm	492127	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Hop-22(29)-en-3.beta.-ol	426	C30H50O	058801-23-3	43
2			1-(2-Pyridyl)piperazine	163	C9H13N3	034803-66-2	30
3			2,2,6-Trimethyl-1-(2-methyl-cycl...	218	C15H22O	1000188-72-8	25
4			Lupan-3-ol, acetate	470	C32H54O2	003418-94-8	25
5			1,5-Cycloundecadiene, 9-(1-methy...	190	C14H22	062338-55-0	18



7.1.10  
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Tentatively Identified Compound (LSC) summary

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6531.D  
Acq On : 09 May 2024 10:03 pm  
Operator : rocquans  
Sample : jd87833-5  
Misc : op54460,ecj297,30.4,,,1,1  
ALS Vial : 22 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
Unknown	4.247	7.9	ppm	424814	2	4.664	2151800	40.0
Sulfur	6.889	10.2	ppm	784612	5	6.659	3091760	40.0
Anthracene, methyl	8.322	5.7	ppm	493374	8	7.873	3473330	40.0
4H-Cyclopenta[d...]	8.424	16.6	ppm	1439000	8	7.873	3473330	40.0
Naphthalene, ph...	8.600	7.7	ppm	665732	8	7.873	3473330	40.0
Unknown	8.911	6.4	ppm	558262	8	7.873	3473330	40.0
Unknown	9.119	6.0	ppm	522348	8	7.873	3473330	40.0
Pyrene, methyl	9.520	7.8	ppm	1380650	9	10.371	7064420	40.0
Unknown	11.050	8.8	ppm	608643	11	11.719	2780960	40.0
Unknown	11.114	7.7	ppm	534347	11	11.719	2780960	40.0
Unknown	11.211	10.4	ppm	721837	11	11.719	2780960	40.0
Unknown PHA Sub...	11.446	11.4	ppm	795373	11	11.719	2780960	40.0
Unknown	11.521	17.7	ppm	1229110	11	11.719	2780960	40.0
Unknown PHA Sub...	11.612	28.9	ppm	2006190	11	11.719	2780960	40.0
Unknown	11.874	6.9	ppm	477408	11	11.719	2780960	40.0
Unknown	12.008	12.5	ppm	866558	11	11.719	2780960	40.0
Alkane	12.211	7.2	ppm	499101	11	11.719	2780960	40.0
Unknown	12.243	6.4	ppm	441978	11	11.719	2780960	40.0
Unknown	12.676	6.8	ppm	475304	11	11.719	2780960	40.0
Unknown	12.773	10.6	ppm	734420	11	11.719	2780960	40.0
Unknown	13.051	7.6	ppm	530555	11	11.719	2780960	40.0
Unknown	13.093	17.2	ppm	1197040	11	11.719	2780960	40.0
Unknown	13.425	22.3	ppm	1546590	11	11.719	2780960	40.0
Unknown	13.848	6.3	ppm	436599	11	11.719	2780960	40.0
Unknown	14.024	7.1	ppm	492127	11	11.719	2780960	40.0

7.1.10  
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## Quantitation Report (QT Reviewed)

Data Path : X:\Dayton SVOA GCMS\nerirose\ecj302\  
 Data File : cj6680.D  
 Acq On : 13 May 2024 10:04 am  
 Operator : kaleigh  
 Sample : jd87833-5 Inst : GCMSMJ  
 Misc : op54460,ecj302,30.4,,,1,5  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 13 17:28:09 2024  
 Quant Method : X:\Dayton SVOA GCMS\nerirose\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
 QLast Update : Mon May 13 16:52:36 2024  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.601	152	253902	40.00	ppm	0.00
24) Naphthalene-d8	5.403	136	891714	40.00	ppm	0.00
46) Acenaphthene-d10	6.585	164	515076	40.00	ppm	0.00
69) Phenanthrene-d10	7.789	188	942003	40.00	ppm	0.00
84) Chrysene-d12	10.276	240	719748	40.00	ppm	0.00
93) Perylene-d12	11.613	264	698307	40.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.601	152	253902	40.00	ppm	0.00
105) Phenanthrene-d10a	7.789	188	942003	40.00	ppm	0.00
107) Naphthalene-d8a	5.403	136	891714	40.00	ppm	0.00
109) Phenanthrene-d10b	7.789	188	942003	40.00	ppm	0.00
112) Chrysene-d12a	10.276	240	719748	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.751	112	51978	7.12	ppm	0.00
Spiked Amount 50.000			Recovery =	14.24%		
8) Phenol-d5	4.371	99	69270	7.36	ppm	0.00
Spiked Amount 50.000			Recovery =	14.72%		
25) Nitrobenzene-d5	4.949	82	66956	7.33	ppm	0.00
Spiked Amount 50.000			Recovery =	14.66%		
51) 2-Fluorobiphenyl	6.099	172	132300	8.16	ppm	0.00
Spiked Amount 50.000			Recovery =	16.32%		
74) 2,4,6-Tribromophenol	7.201	330	19568	9.47	ppm	0.00
Spiked Amount 50.000			Recovery =	18.94%		
87) Terphenyl-d14	9.265	244	152170	8.56	ppm	0.00
Spiked Amount 50.000			Recovery =	17.12%		
110) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						
						Qvalue
38) Naphthalene	5.419	128	3514	0.1645	ppm	96
56) Acenaphthylene	6.484	152	15970	0.7994	ppm	97
59) Acenaphthene	6.607	153	10697	0.7529	ppm	98
62) Dibenzofuran	6.735	168	9179	0.4656	ppm	98
66) Fluorene	7.003	166	12175m	0.7817	ppm	
78) Phenanthrene	7.810	178	160439	7.0474	ppm	99
79) Anthracene	7.853	178	60127	2.6377	ppm	97
80) Carbazole	7.998	167	7987	0.3760	ppm	98
82) Fluoranthene	8.896	202	494976	20.0832	ppm	99
86) Pyrene	9.110	202	455112	18.5930	ppm	97
89) Benzo[a]anthracene	10.265	228	212223	9.1706	ppm	98
91) Chrysene	10.297	228	170721	7.9959	ppm	97
95) Benzo[b]fluoranthene	11.255	252	225536m	10.6915	ppm	
96) Benzo[k]fluoranthene	11.276	252	72713m	3.8307	ppm	
97) Benzo[a]pyrene	11.554	252	164032	9.3932	ppm	98
98) Indeno[1,2,3-cd]pyrene	12.753	276	104667	4.9579	ppm	97
100) Dibenz[a,h]anthracene	12.769	278	23931	1.4187	ppm	94
102) Benzo[g,h,i]perylene	13.084	276	98083	5.9786	ppm	99
-----						

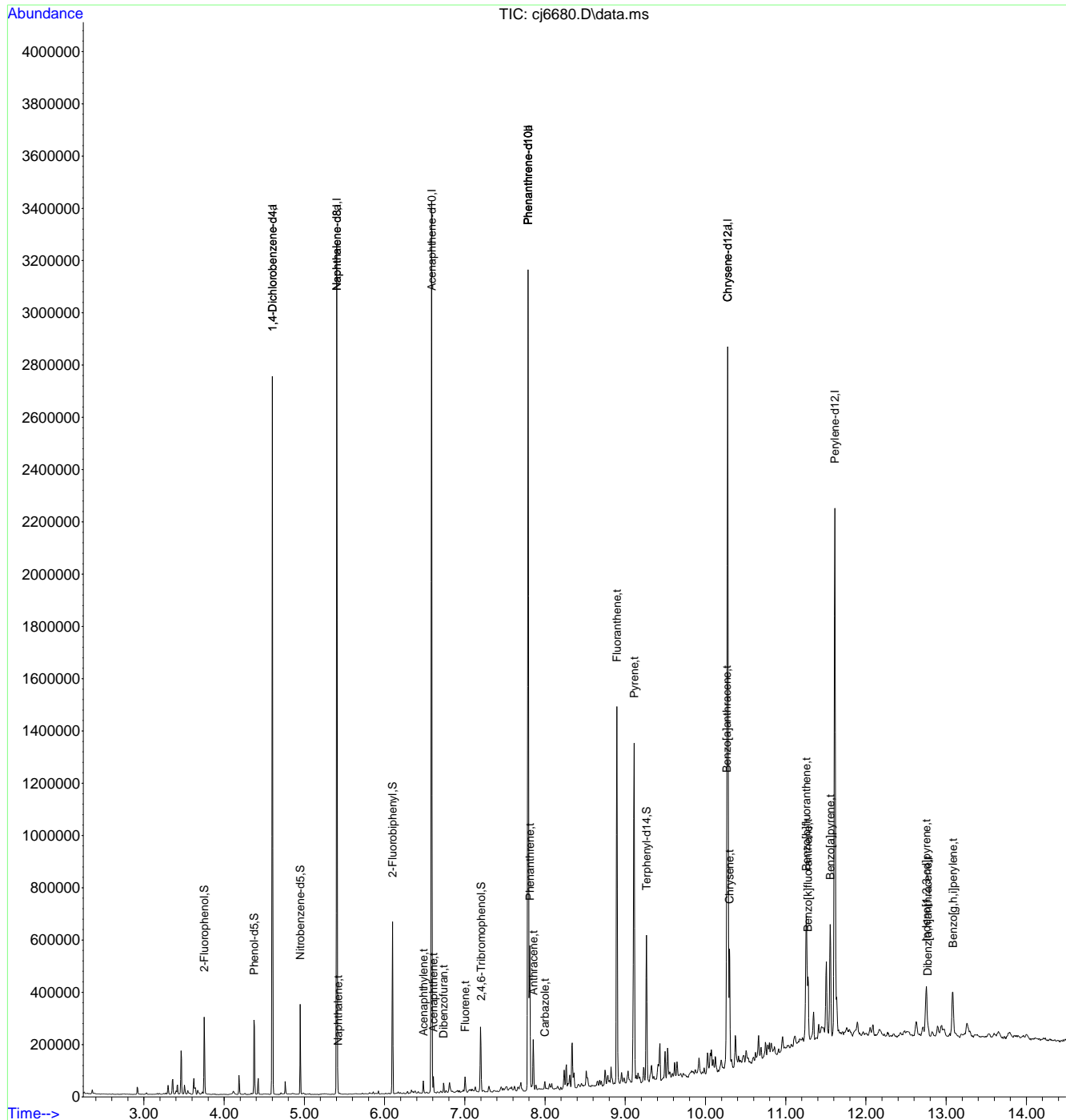
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

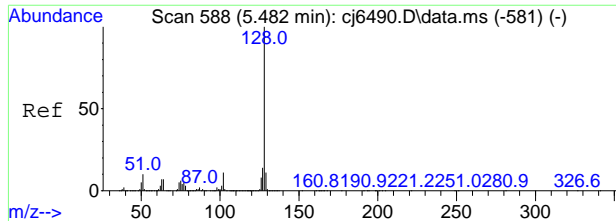
Data Path : X:\Dayton SVOA GCMS\nerirose\ecj302\  
 Data File : cj6680.D  
 Acq On : 13 May 2024 10:04 am  
 Operator : kaleigh  
 Sample : jd87833-5  
 Misc : op54460,ecj302,30.4,,,1,5  
 ALS Vial : 7 Sample Multiplier: 1

Inst : GCMS CJ

Quant Time: May 13 17:28:09 2024  
 Quant Method : X:\Dayton SVOA GCMS\nerirose\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
 QLast Update : Mon May 13 16:52:36 2024  
 Response via : Initial Calibration

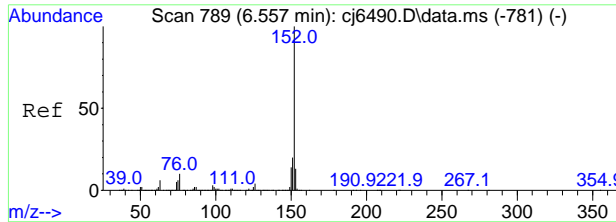
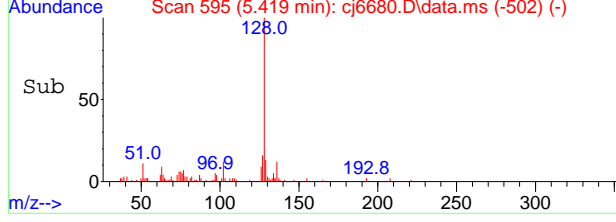
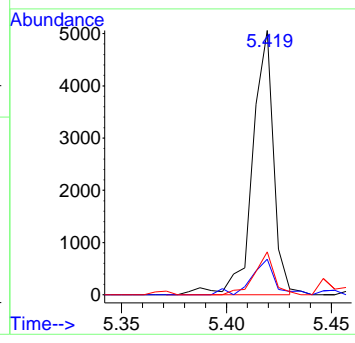
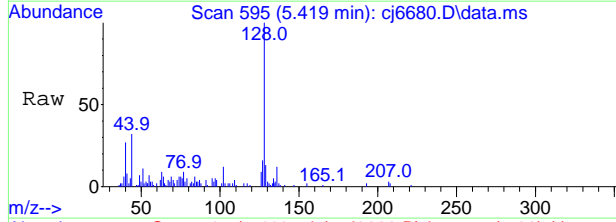


7.1.11  
7



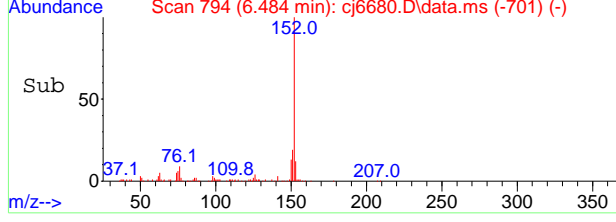
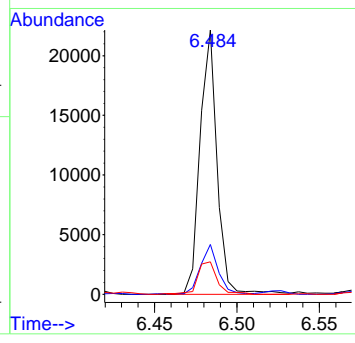
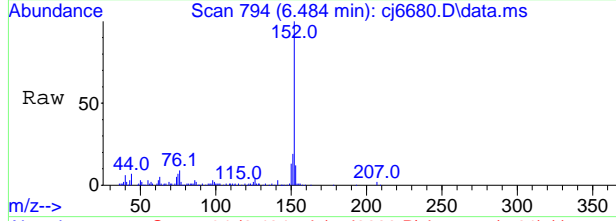
#38  
 Naphthalene  
 Concen: 0.1645 ppm  
 RT: 5.419 min Scan# 595  
 Delta R.T. -0.000 min  
 Lab File: cj6680.D  
 Acq: 13 May 2024 10:04 am

Tgt Ion	Ratio	Lower	Upper
128	100		
129	13.0	0.0	41.4
127	15.1	0.0	43.4

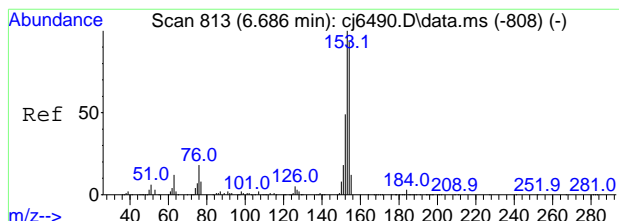


#56  
 Acenaphthylene  
 Concen: 0.7994 ppm  
 RT: 6.484 min Scan# 794  
 Delta R.T. -0.000 min  
 Lab File: cj6680.D  
 Acq: 13 May 2024 10:04 am

Tgt Ion	Ratio	Lower	Upper
152	100		
151	18.6	0.0	50.2
153	12.2	0.0	43.2

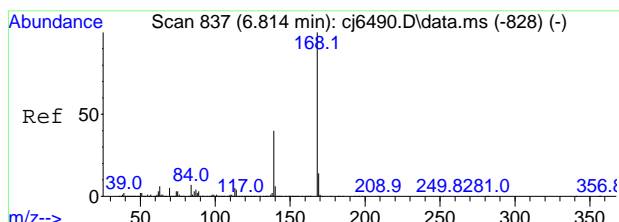
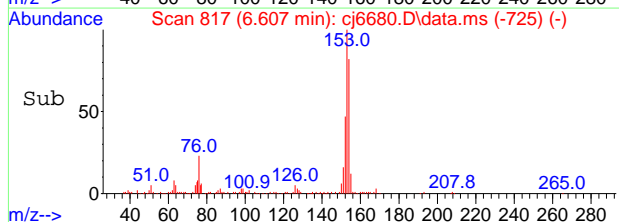
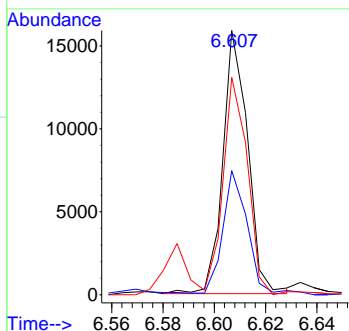
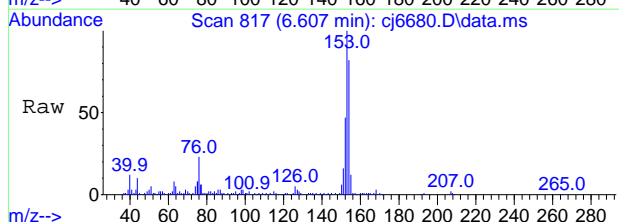


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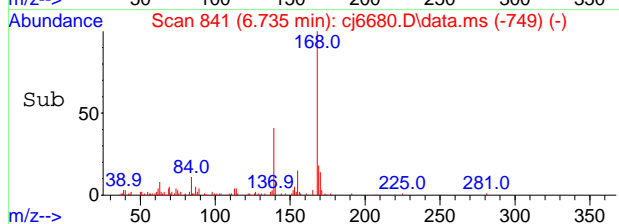
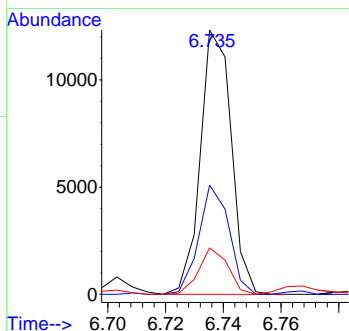
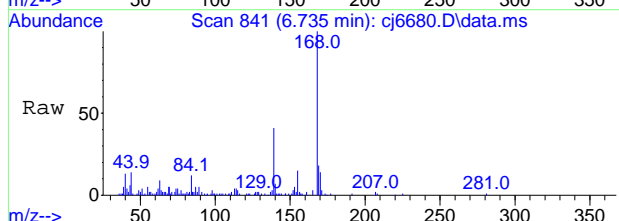
#59  
 Acenaphthene  
 Concen: 0.7529 ppm  
 RT: 6.607 min Scan# 817  
 Delta R.T. -0.006 min  
 Lab File: cj6680.D  
 Acq: 13 May 2024 10:04 am

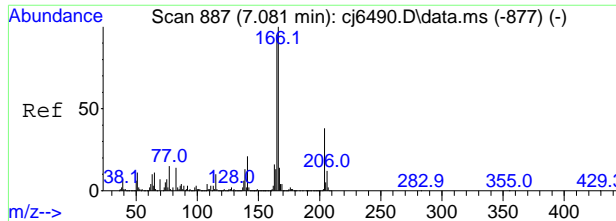
Tgt Ion	Resp	Lower	Upper
153	10697		
153	100		
152	46.4	16.8	76.8
154	78.3	50.5	110.5



#62  
 Dibenzofuran  
 Concen: 0.4656 ppm  
 RT: 6.735 min Scan# 841  
 Delta R.T. -0.006 min  
 Lab File: cj6680.D  
 Acq: 13 May 2024 10:04 am

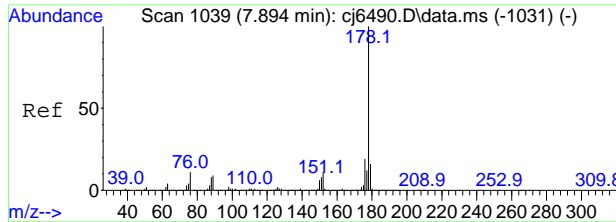
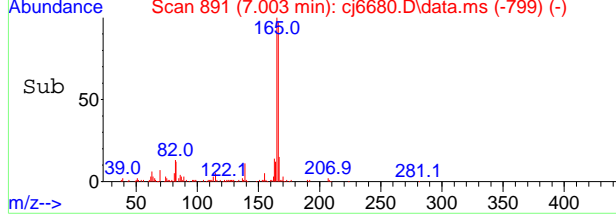
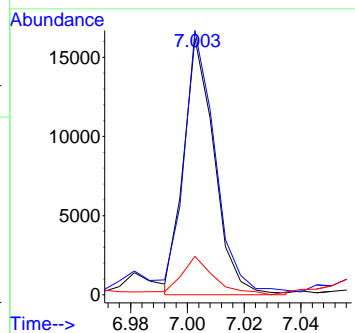
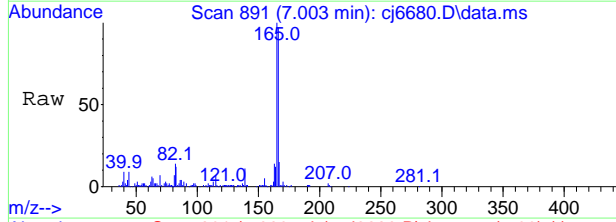
Tgt Ion	Resp	Lower	Upper
168	9179		
168	100		
139	41.0	10.6	70.6
169	16.1	0.0	43.4





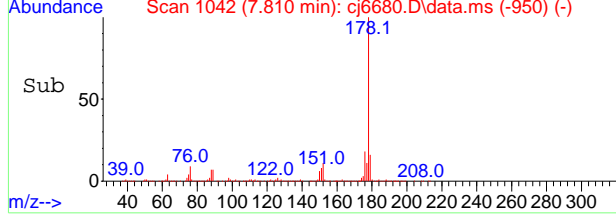
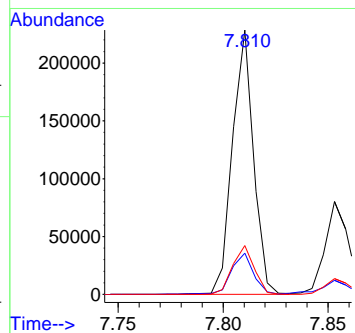
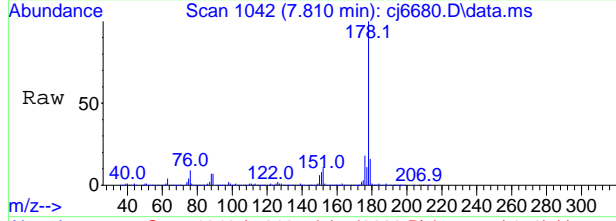
#66  
 Fluorene  
 Concen: 0.7817 ppm m  
 RT: 7.003 min Scan# 891  
 Delta R.T. -0.006 min  
 Lab File: cj6680.D  
 Acq: 13 May 2024 10:04 am

Tgt Ion	Resp	Lower	Upper
166	12175		
165	103.1	67.8	127.8
167	15.0	0.0	43.6



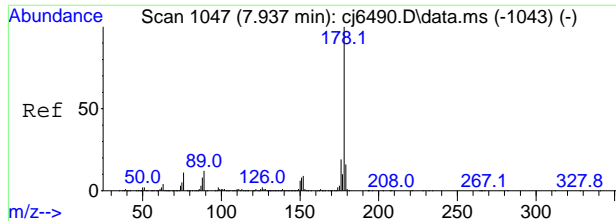
#78  
 Phenanthrene  
 Concen: 7.0474 ppm  
 RT: 7.810 min Scan# 1042  
 Delta R.T. -0.006 min  
 Lab File: cj6680.D  
 Acq: 13 May 2024 10:04 am

Tgt Ion	Resp	Lower	Upper
178	160439		
179	15.4	0.0	45.3
176	18.4	0.0	48.8



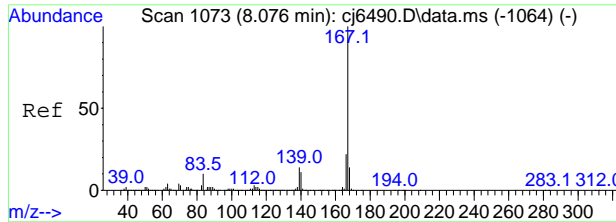
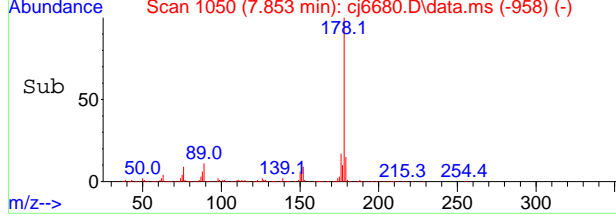
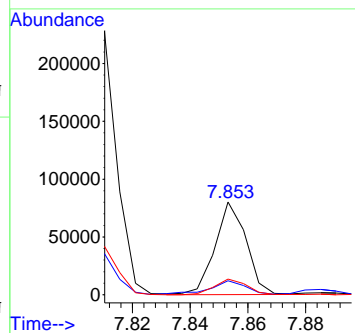
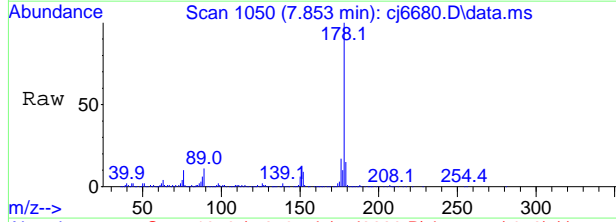
7.1.11  
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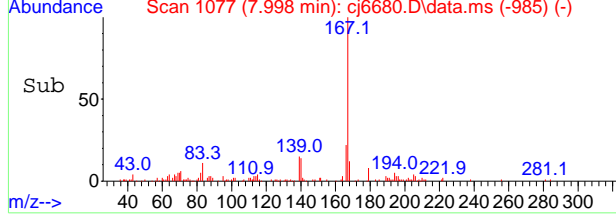
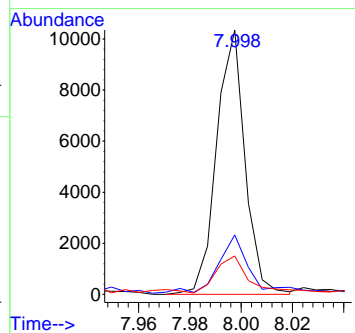
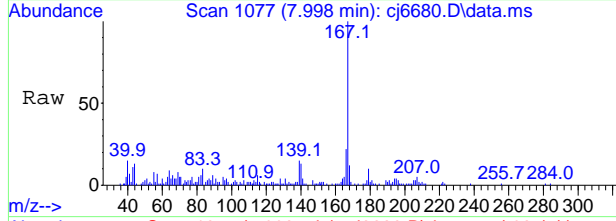
#79  
 Anthracene  
 Concen: 2.6377 ppm  
 RT: 7.853 min Scan# 1050  
 Delta R.T. -0.006 min  
 Lab File: cj6680.D  
 Acq: 13 May 2024 10:04 am

Tgt Ion	Ratio	Lower	Upper
178	100		
179	14.3	0.0	45.3
176	16.8	0.0	48.1

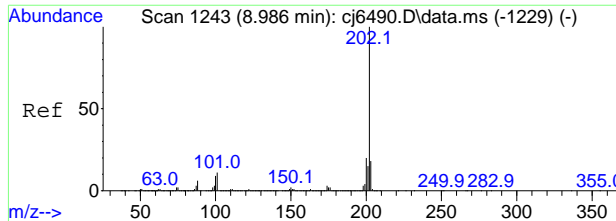


#80  
 Carbazole  
 Concen: 0.3760 ppm  
 RT: 7.998 min Scan# 1077  
 Delta R.T. -0.006 min  
 Lab File: cj6680.D  
 Acq: 13 May 2024 10:04 am

Tgt Ion	Ratio	Lower	Upper
167	100		
166	20.8	0.0	51.6
139	12.8	0.0	43.3

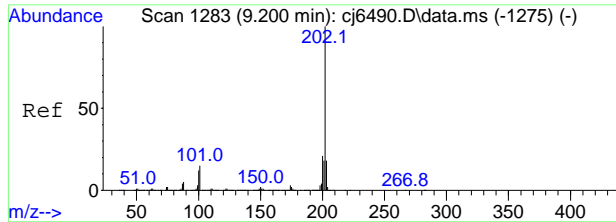
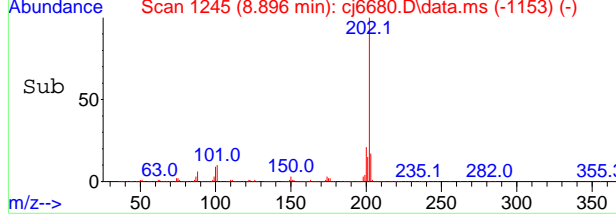
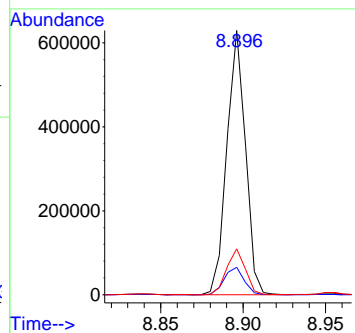
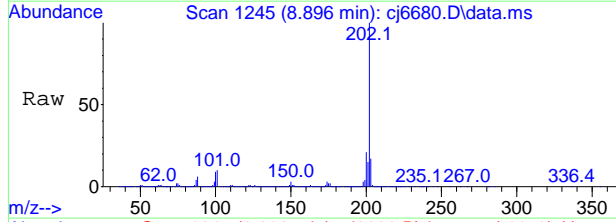


7.1.11  
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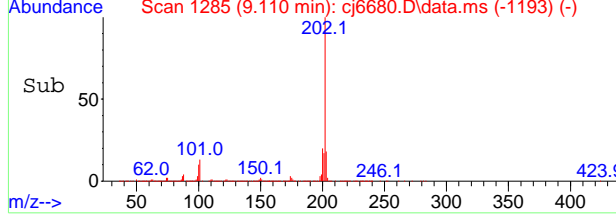
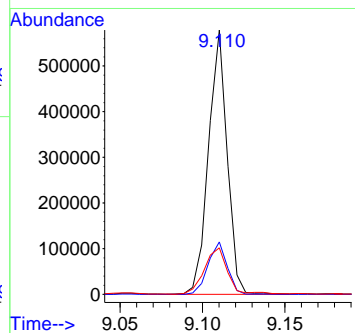
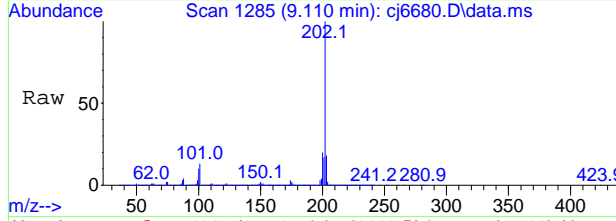
#82  
 Fluoranthene  
 Concen: 20.0832 ppm  
 RT: 8.896 min Scan# 1245  
 Delta R.T. -0.006 min  
 Lab File: cj6680.D  
 Acq: 13 May 2024 10:04 am

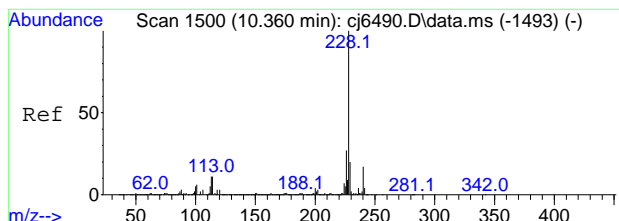
Tgt Ion	Ratio	Lower	Upper
202	100		
101	10.4	0.0	40.6
203	17.4	0.0	48.2



#86  
 Pyrene  
 Concen: 18.5930 ppm  
 RT: 9.110 min Scan# 1285  
 Delta R.T. -0.006 min  
 Lab File: cj6680.D  
 Acq: 13 May 2024 10:04 am

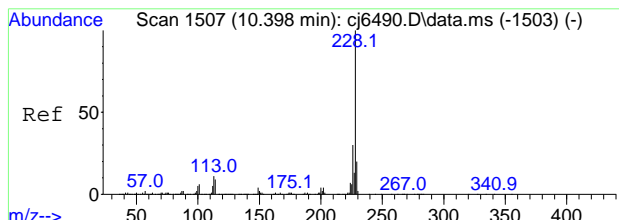
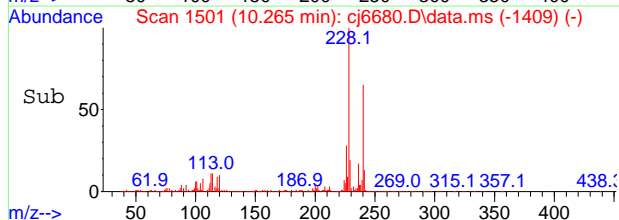
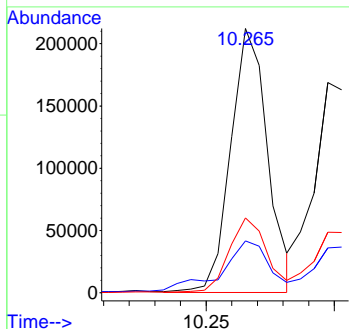
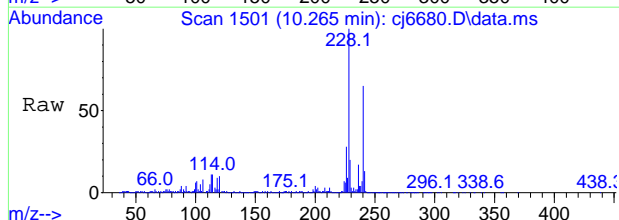
Tgt Ion	Ratio	Lower	Upper
202	100		
200	19.9	0.0	51.6
203	17.5	0.0	48.0





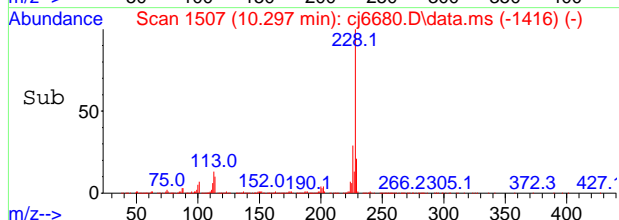
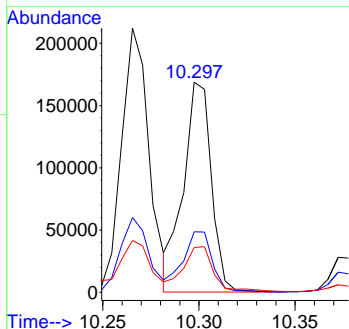
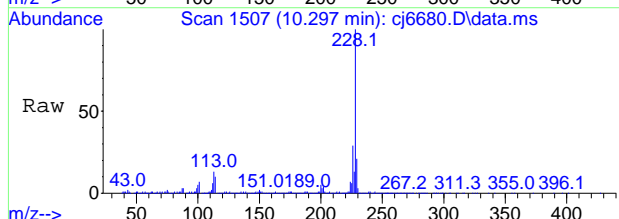
#89  
 Benzo[a]anthracene  
 Concen: 9.1706 ppm  
 RT: 10.265 min Scan# 1501  
 Delta R.T. -0.006 min  
 Lab File: cj6680.D  
 Acq: 13 May 2024 10:04 am

Tgt Ion	Ratio	Lower	Upper
228	100		
229	18.5	0.0	49.8
226	28.1	0.0	56.9

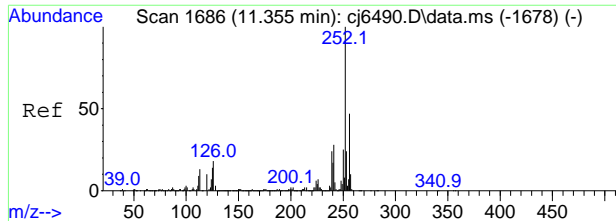


#91  
 Chrysene  
 Concen: 7.9959 ppm  
 RT: 10.297 min Scan# 1507  
 Delta R.T. -0.011 min  
 Lab File: cj6680.D  
 Acq: 13 May 2024 10:04 am

Tgt Ion	Ratio	Lower	Upper
228	100		
226	28.4	0.1	60.1
229	20.5	0.0	49.6

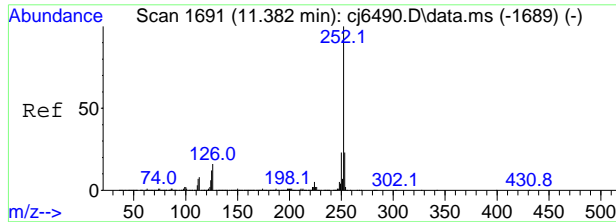
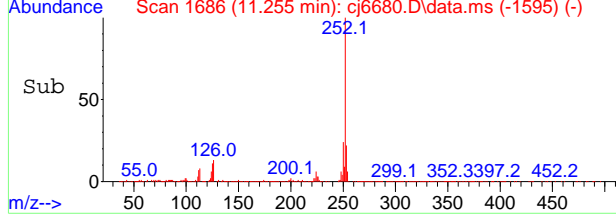
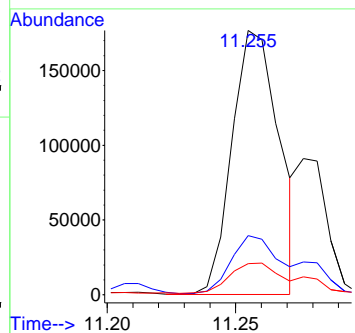
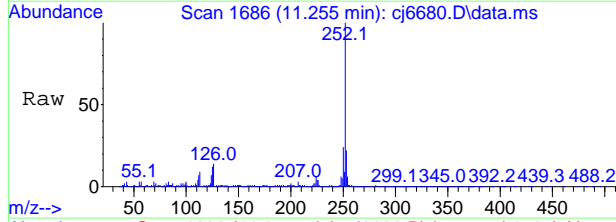


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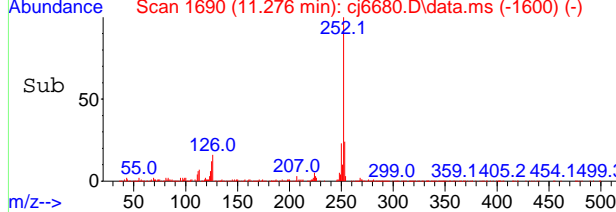
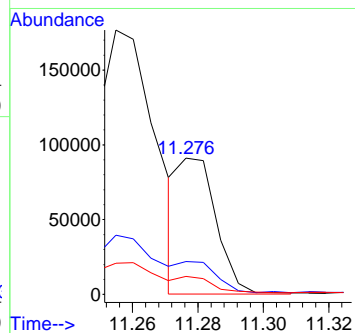
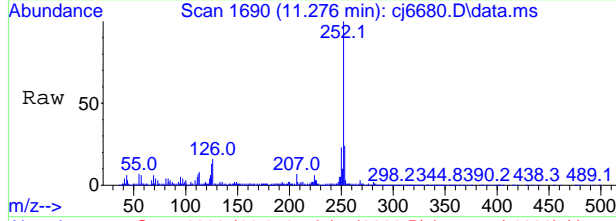
#95  
 Benzo[b]fluoranthene  
 Concen: 10.6915 ppm m  
 RT: 11.255 min Scan# 1686  
 Delta R.T. -0.011 min  
 Lab File: cj6680.D  
 Acq: 13 May 2024 10:04 am

Tgt Ion	Ratio	Lower	Upper
252	100		
253	22.4	0.0	52.9
125	11.8	0.0	39.9

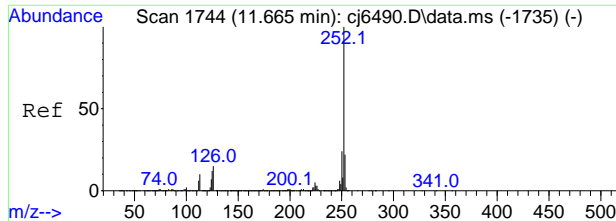


#96  
 Benzo[k]fluoranthene  
 Concen: 3.8307 ppm m  
 RT: 11.276 min Scan# 1690  
 Delta R.T. -0.016 min  
 Lab File: cj6680.D  
 Acq: 13 May 2024 10:04 am

Tgt Ion	Ratio	Lower	Upper
252	100		
253	24.1	0.0	52.1
125	13.2	0.0	39.2

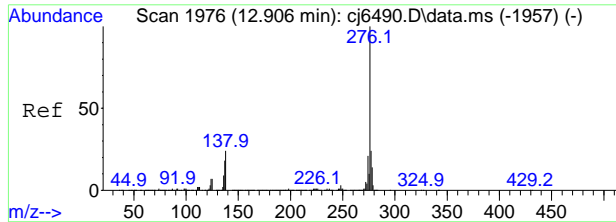
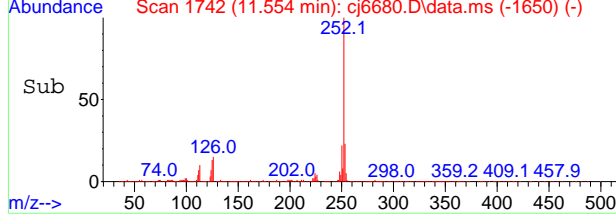
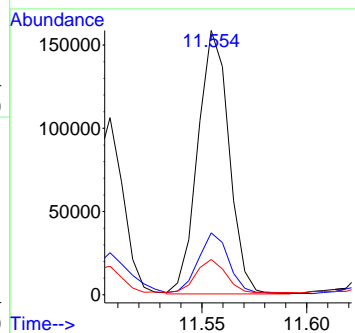
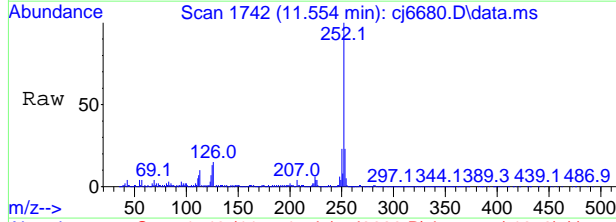


7.1.11  
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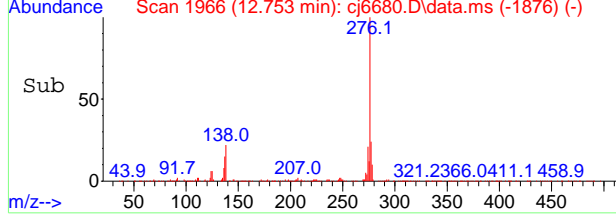
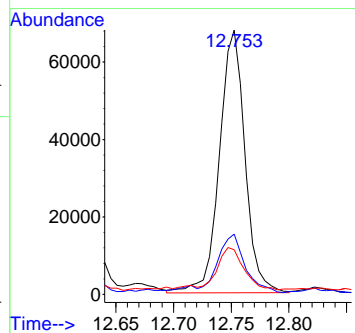
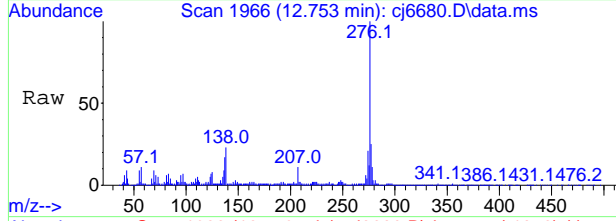
#97  
 Benzo[a]pyrene  
 Concen: 9.3932 ppm  
 RT: 11.554 min Scan# 1742  
 Delta R.T. -0.006 min  
 Lab File: cj6680.D  
 Acq: 13 May 2024 10:04 am

Tgt Ion	Ratio	Lower	Upper
252	100		
253	22.9	0.0	51.8
125	12.6	0.0	42.3

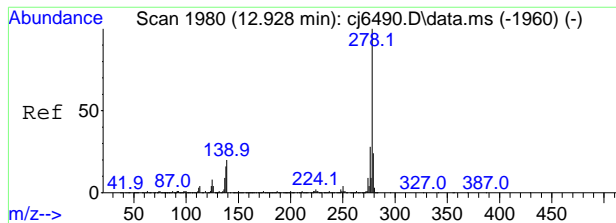


#98  
 Indeno[1,2,3-cd]pyrene  
 Concen: 4.9579 ppm  
 RT: 12.753 min Scan# 1966  
 Delta R.T. -0.016 min  
 Lab File: cj6680.D  
 Acq: 13 May 2024 10:04 am

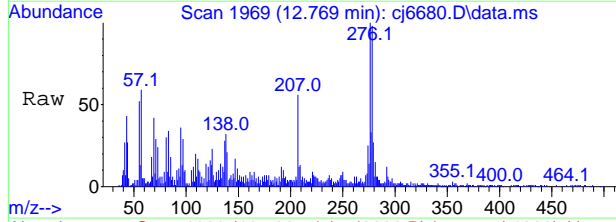
Tgt Ion	Ratio	Lower	Upper
276	100		
138	21.9	0.0	52.4
137	14.7	0.0	46.6



7.1.11  
7

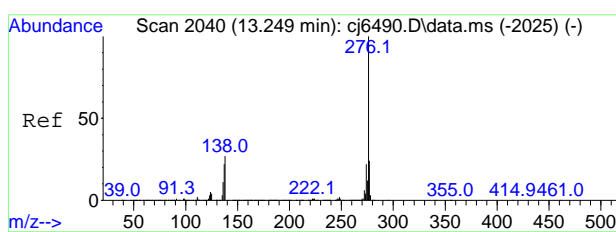
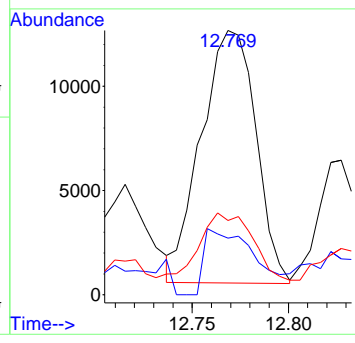
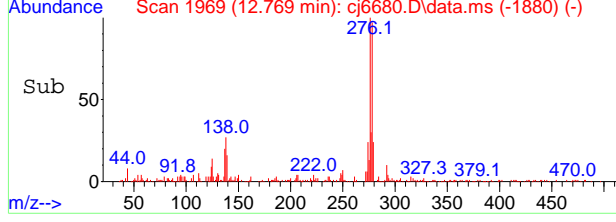


#100  
 Dibenz[a,h]anthracene  
 Concen: 1.4187 ppm  
 RT: 12.769 min Scan# 1969  
 Delta R.T. -0.022 min  
 Lab File: cj6680.D  
 Acq: 13 May 2024 10:04 am

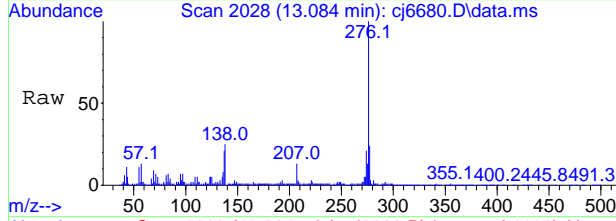


Tgt Ion: 278 Resp: 23931

Ion	Ratio	Lower	Upper
278	100		
139	11.9	0.0	47.4
279	23.8	0.0	53.2

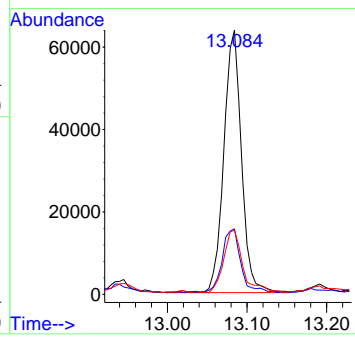
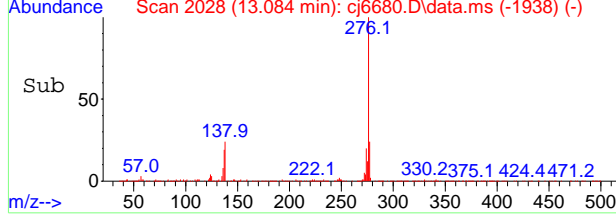


#102  
 Benzo[g,h,i]perylene  
 Concen: 5.9786 ppm  
 RT: 13.084 min Scan# 2028  
 Delta R.T. -0.016 min  
 Lab File: cj6680.D  
 Acq: 13 May 2024 10:04 am



Tgt Ion: 276 Resp: 98083

Ion	Ratio	Lower	Upper
276	100		
138	24.1	0.0	53.6
277	23.5	0.0	53.9



7.1.11  
7

Quantitation Report (QT/LSC Reviewed)

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6532.D  
Acq On : 09 May 2024 10:22 pm  
Operator : rocquans  
Sample : jd87833-6 Inst : GCMSCJ  
Misc : op54460,ecj297,30.9,,,1,1  
ALS Vial : 23 Sample Multiplier: 1

Quant Time: May 10 19:13:12 2024  
Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
QLast Update : Thu May 09 12:05:48 2024  
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.664	152	342593	40.00	ppm	0.00
24) Naphthalene-d8	5.466	136	1228725	40.00	ppm	0.00
46) Acenaphthene-d10	6.659	164	681462	40.00	ppm	0.00
69) Phenanthrene-d10	7.873	188	1201770	40.00	ppm	0.00
84) Chrysene-d12	10.371	240	855342	40.00	ppm	0.00
93) Perylene-d12	11.719	264	877926	40.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.664	152	342593	40.00	ppm	0.00
105) Phenanthrene-d10a	7.873	188	1201770	40.00	ppm	0.00
107) Naphthalene-d8a	5.466	136	1228725	40.00	ppm	0.00
109) Phenanthrene-d10b	7.873	188	1201770	40.00	ppm	0.00
112) Chrysene-d12a	10.371	240	855342	40.00	ppm	0.01
System Monitoring Compounds						
5) 2-Fluorophenol	3.808	112	352700	35.82	ppm	0.01
Spiked Amount 50.000			Recovery =	71.64%		
8) Phenol-d5	4.423	99	483618	38.08	ppm	0.00
Spiked Amount 50.000			Recovery =	76.16%		
25) Nitrobenzene-d5	5.011	82	458876	36.47	ppm	0.00
Spiked Amount 50.000			Recovery =	72.94%		
51) 2-Fluorobiphenyl	6.167	172	860341	40.12	ppm	0.00
Spiked Amount 50.000			Recovery =	80.24%		
74) 2,4,6-Tribromophenol	7.274	330	122302	46.42	ppm	0.00
Spiked Amount 50.000			Recovery =	92.84%		
87) Terphenyl-d14	9.354	244	885886	41.92	ppm	0.00
Spiked Amount 50.000			Recovery =	83.84%		
110) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						
						Qvalue
38) Naphthalene	5.482	128	32396	1.1007	ppm	98
44) 2-Methylnaphthalene	5.926	141	12012	0.6883	ppm	91
53) Biphenyl	6.236	154	10221	0.4365	ppm	99
56) Acenaphthylene	6.552	152	161794	6.1214	ppm	98
59) Acenaphthene	6.680	153	80898	4.3039	ppm	98
62) Dibenzofuran	6.814	168	67572	2.5906	ppm	99
66) Fluorene	7.081	166	111774	5.4245	ppm	99
78) Phenanthrene	7.894	178	1174901	40.4532	ppm	99
79) Anthracene	7.937	178	428469	14.7335	ppm	97
80) Carbazole	8.076	167	75950	2.8027	ppm	95
82) Fluoranthene	8.985	202	2630878	83.6719	ppm	99
86) Pyrene	9.199	202	2403062	82.6109	ppm	99
89) Benzo[a]anthracene	10.360	228	1192712	43.3691	ppm	97
91) Chrysene	10.392	228	909865	35.8589	ppm	97
95) Benzo[b]fluoranthene	11.355	252	1314206m	49.5535	ppm	
96) Benzo[k]fluoranthene	11.376	252	376082m	15.7591	ppm	
97) Benzo[a]pyrene	11.665	252	950113	43.2761	ppm	98
98) Indeno[1,2,3-cd]pyrene	12.906	276	601909	22.6782	ppm	99
100) Dibenz[a,h]anthracene	12.922	278	146194	6.8935	ppm	92
102) Benzo[g,h,i]perylene	13.248	276	562582	27.2760	ppm	99
-----						

(#) = qualifier out of range (m) = manual integration (+) = signals summed

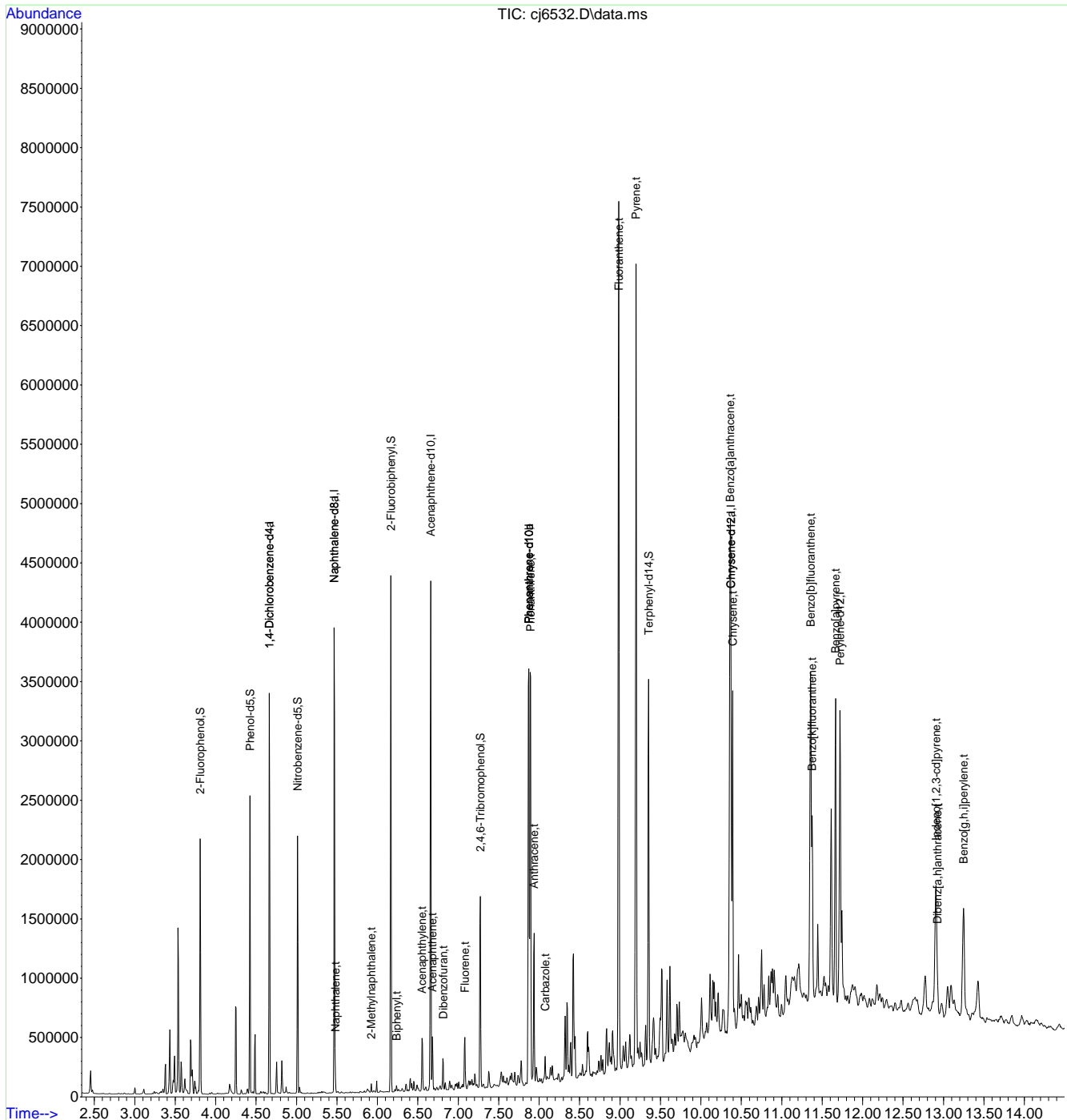


7.1.12  
7

Quantitation Report (QT/LSC Reviewed)

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6532.D  
Acq On : 09 May 2024 10:22 pm  
Operator : rocquans  
Sample : jd87833-6 Inst : GCMS CJ  
Misc : op54460,ecj297,30.9,,,1,1  
ALS Vial : 23 Sample Multiplier: 1

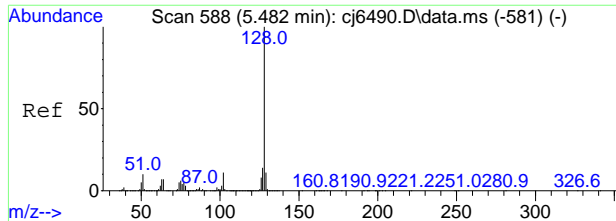
Quant Time: May 10 19:13:12 2024  
Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
QLast Update : Thu May 09 12:05:48 2024  
Response via : Initial Calibration



7.1.12  
7

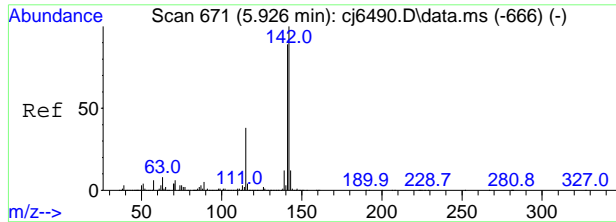
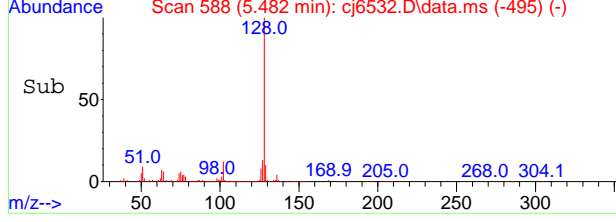
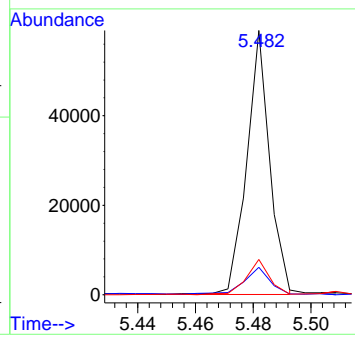
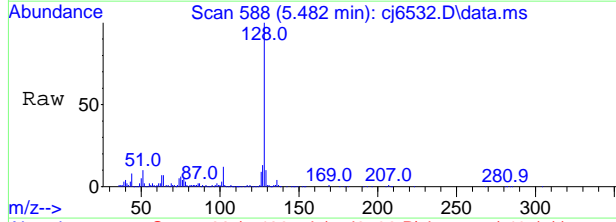






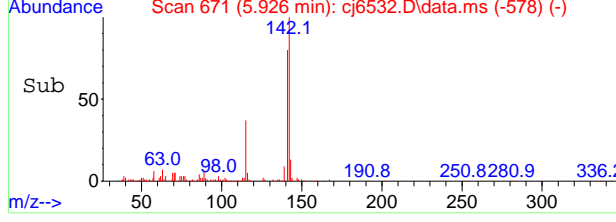
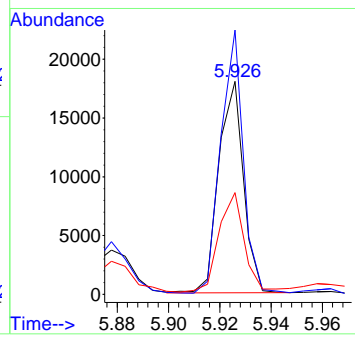
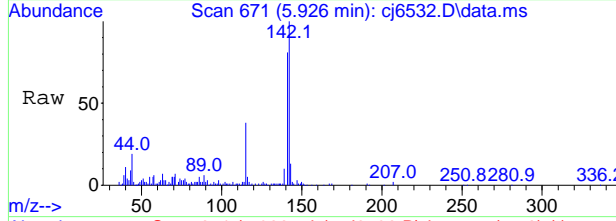
#38  
Naphthalene  
Concen: 1.1007 ppm  
RT: 5.482 min Scan# 588  
Delta R.T. -0.000 min  
Lab File: cj6532.D  
Acq: 09 May 2024 10:22 pm

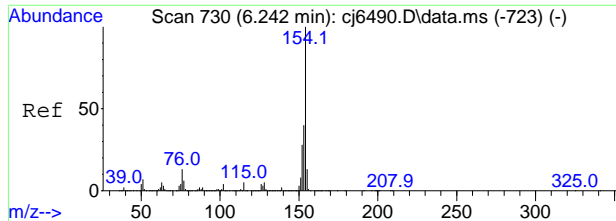
Tgt Ion	Ratio	Lower	Upper
128	100		
129	10.1	0.0	41.4
127	13.3	0.0	43.3



#44  
2-Methylnaphthalene  
Concen: 0.6883 ppm  
RT: 5.926 min Scan# 671  
Delta R.T. -0.000 min  
Lab File: cj6532.D  
Acq: 09 May 2024 10:22 pm

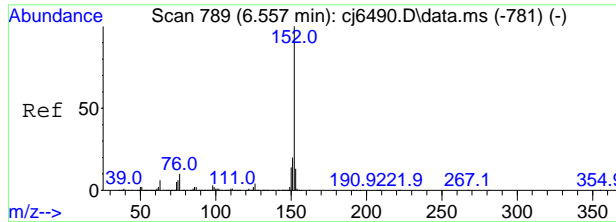
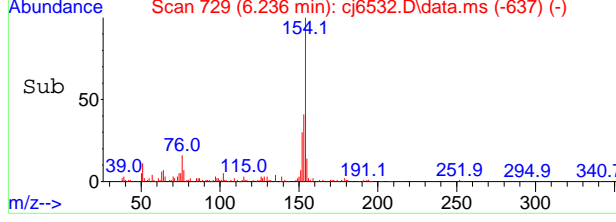
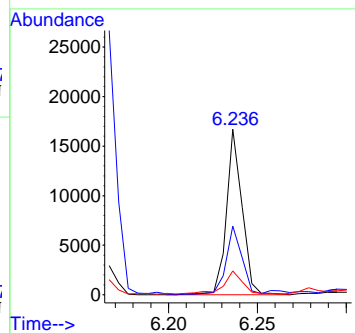
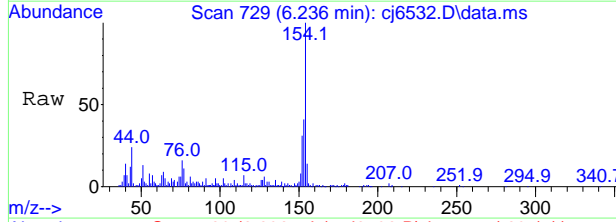
Tgt Ion	Ratio	Lower	Upper
141	100		
142	124.2	82.7	142.7
115	46.1	12.4	72.4





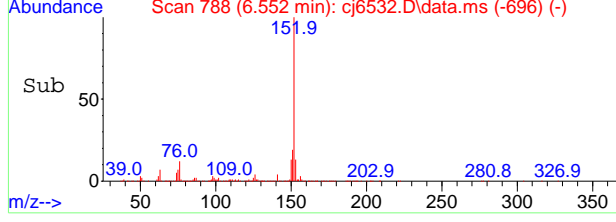
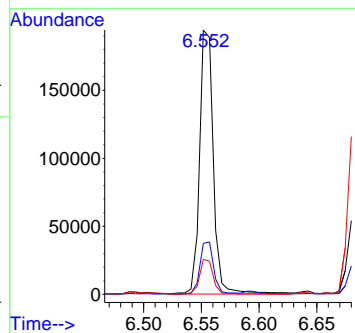
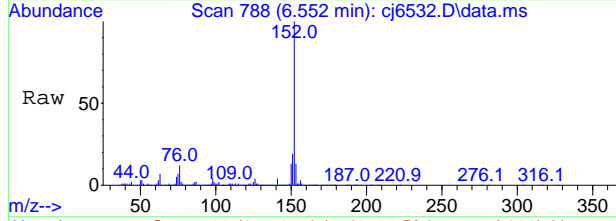
#53  
 Biphenyl  
 Concen: 0.4365 ppm  
 RT: 6.236 min Scan# 729  
 Delta R.T. -0.006 min  
 Lab File: cj6532.D  
 Acq: 09 May 2024 10:22 pm

Tgt Ion	Ratio	Lower	Upper
154	100		
153	40.5	10.5	70.5
155	13.6	0.0	42.8



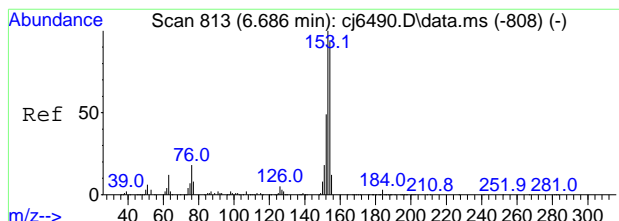
#56  
 Acenaphthylene  
 Concen: 6.1214 ppm  
 RT: 6.552 min Scan# 788  
 Delta R.T. -0.005 min  
 Lab File: cj6532.D  
 Acq: 09 May 2024 10:22 pm

Tgt Ion	Ratio	Lower	Upper
152	100		
151	19.2	0.0	50.3
153	13.1	0.0	43.4



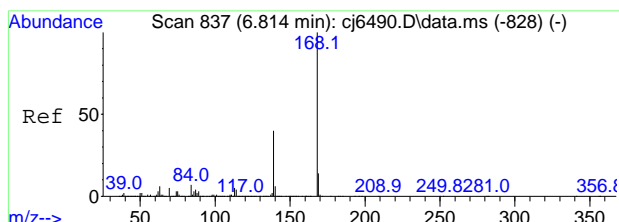
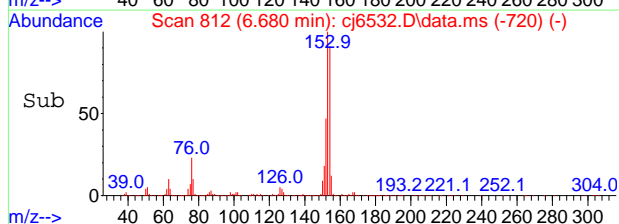
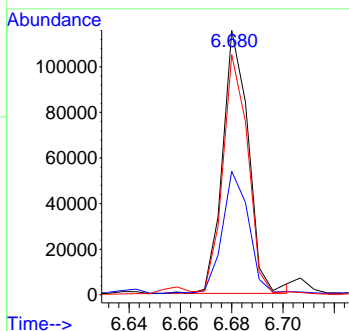
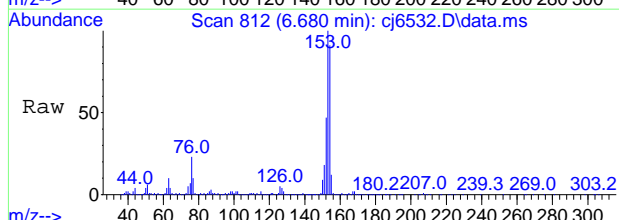
7.1.12  
7





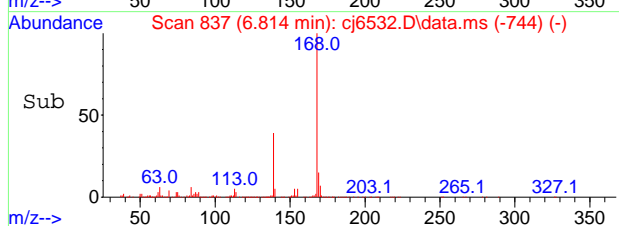
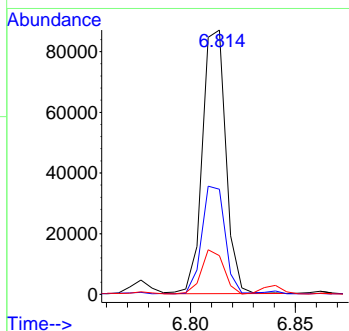
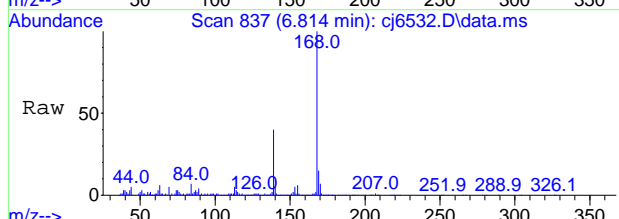
#59  
Acenaphthene  
Concen: 4.3039 ppm  
RT: 6.680 min Scan# 812  
Delta R.T. -0.006 min  
Lab File: cj6532.D  
Acq: 09 May 2024 10:22 pm

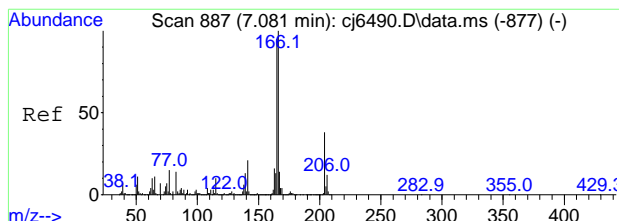
Tgt Ion	Resp	Lower	Upper
153	80898		
152	47.0	18.8	78.8
154	91.3	62.9	122.9



#62  
Dibenzofuran  
Concen: 2.5906 ppm  
RT: 6.814 min Scan# 837  
Delta R.T. -0.000 min  
Lab File: cj6532.D  
Acq: 09 May 2024 10:22 pm

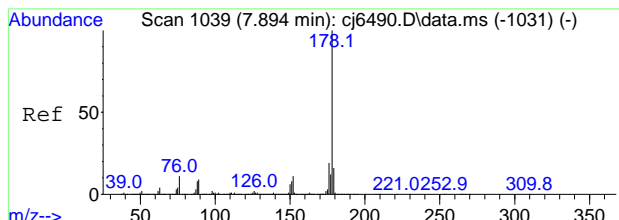
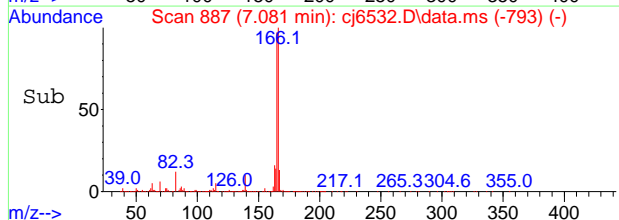
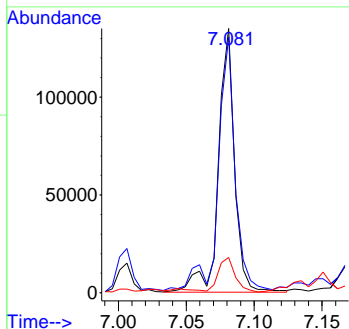
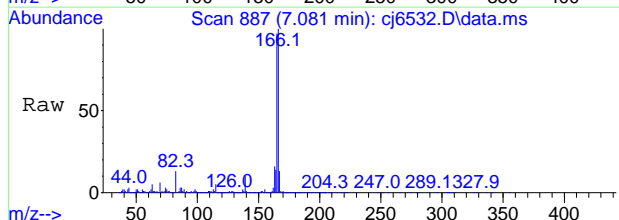
Tgt Ion	Resp	Lower	Upper
168	67572		
139	39.6	10.0	70.0
169	14.1	0.0	43.7





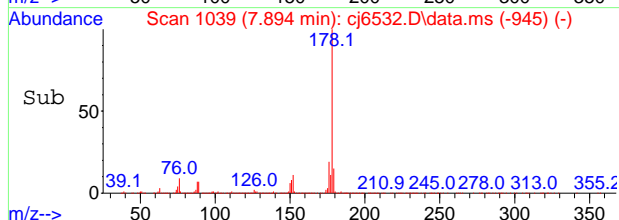
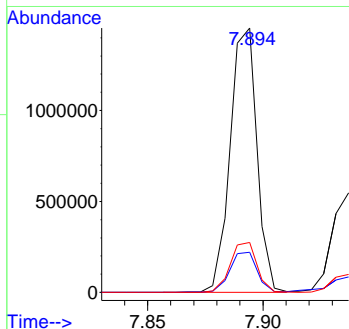
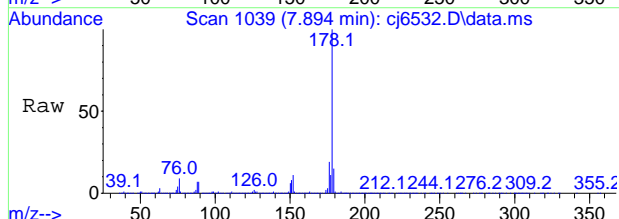
#66  
 Fluorene  
 Concen: 5.4245 ppm  
 RT: 7.081 min Scan# 887  
 Delta R.T. 0.000 min  
 Lab File: cj6532.D  
 Acq: 09 May 2024 10:22 pm

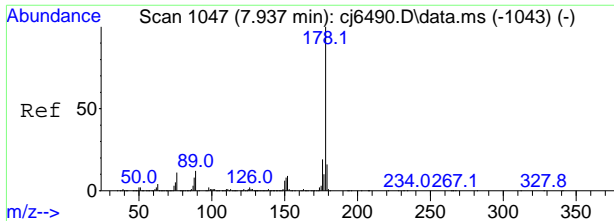
Tgt Ion	Ratio	Lower	Upper
166	100		
165	95.7	65.4	125.4
167	12.2	0.0	43.8



#78  
 Phenanthrene  
 Concen: 40.4532 ppm  
 RT: 7.894 min Scan# 1039  
 Delta R.T. 0.000 min  
 Lab File: cj6532.D  
 Acq: 09 May 2024 10:22 pm

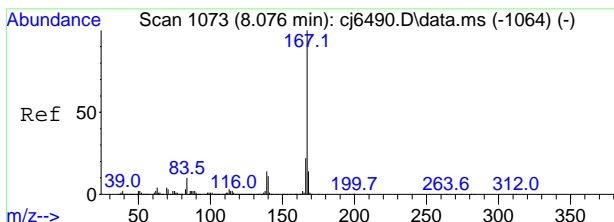
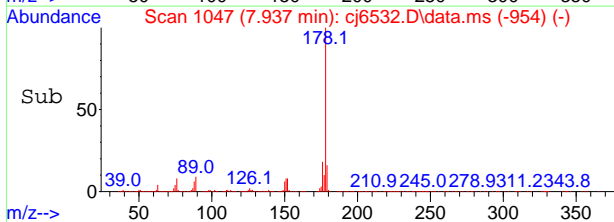
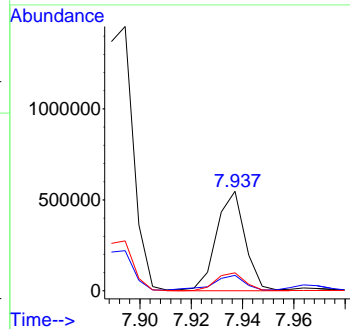
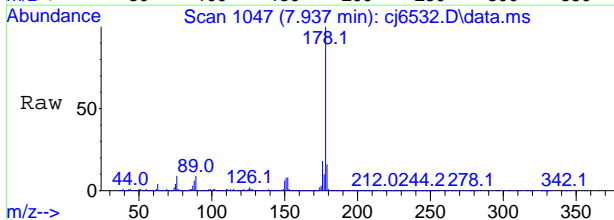
Tgt Ion	Ratio	Lower	Upper
178	100		
179	15.1	0.0	45.5
176	18.8	0.0	49.2





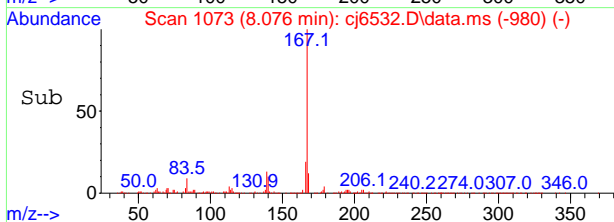
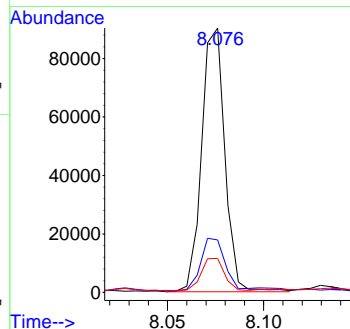
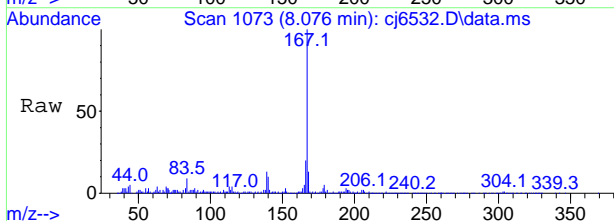
#79  
 Anthracene  
 Concen: 14.7335 ppm  
 RT: 7.937 min Scan# 1047  
 Delta R.T. 0.000 min  
 Lab File: cj6532.D  
 Acq: 09 May 2024 10:22 pm

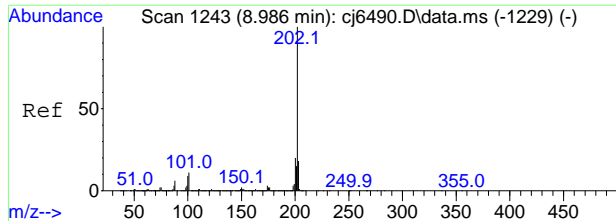
Tgt Ion:	178	Resp:	428469
Ion Ratio	100	Lower	Upper
178	100	0.0	46.1
179	13.9	0.0	48.7
176	18.0	0.0	



#80  
 Carbazole  
 Concen: 2.8027 ppm  
 RT: 8.076 min Scan# 1073  
 Delta R.T. 0.000 min  
 Lab File: cj6532.D  
 Acq: 09 May 2024 10:22 pm

Tgt Ion:	167	Resp:	75950
Ion Ratio	100	Lower	Upper
167	100	0.0	51.7
166	19.2	0.0	43.8
139	12.2	0.0	

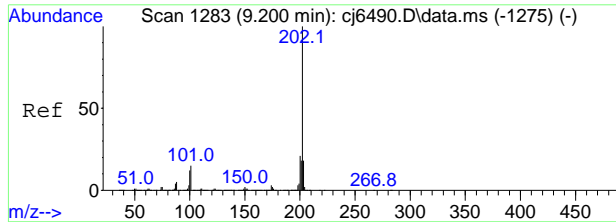
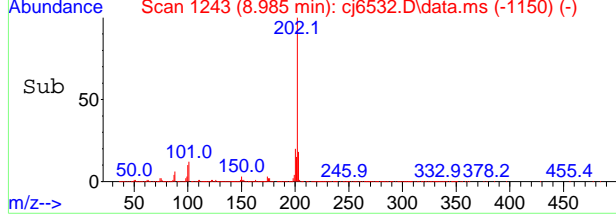
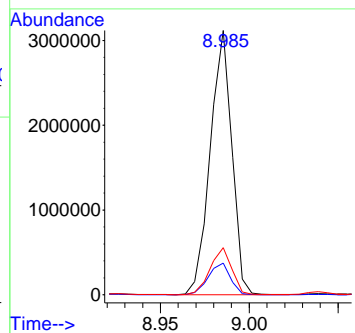
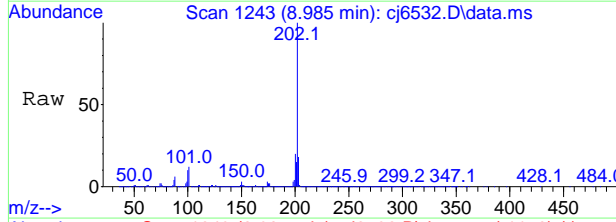




#82  
Fluoranthene  
Concen: 83.6719 ppm  
RT: 8.985 min Scan# 1243  
Delta R.T. -0.001 min  
Lab File: cj6532.D  
Acq: 09 May 2024 10:22 pm

Tgt Ion:202 Resp: 2630878

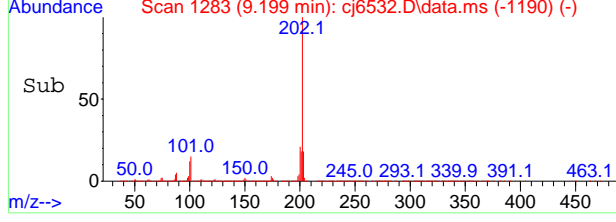
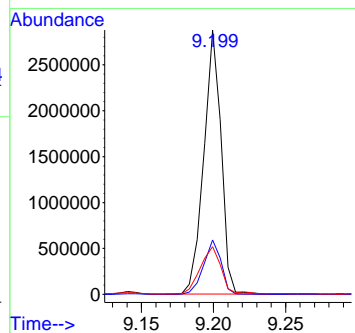
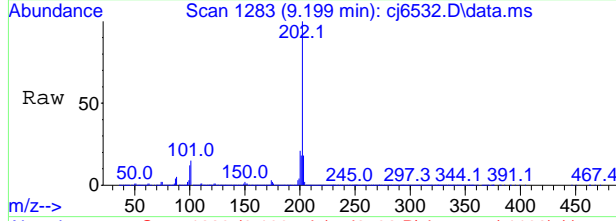
Ion	Ratio	Lower	Upper
202	100		
101	11.9	0.0	41.4
203	17.8	0.0	47.6

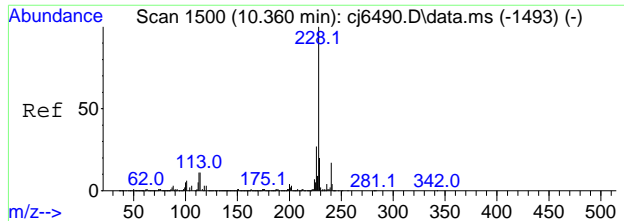


#86  
Pyrene  
Concen: 82.6109 ppm  
RT: 9.199 min Scan# 1283  
Delta R.T. -0.001 min  
Lab File: cj6532.D  
Acq: 09 May 2024 10:22 pm

Tgt Ion:202 Resp: 2403062

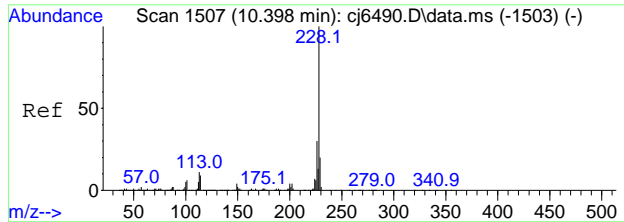
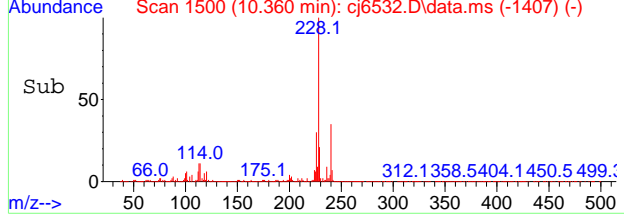
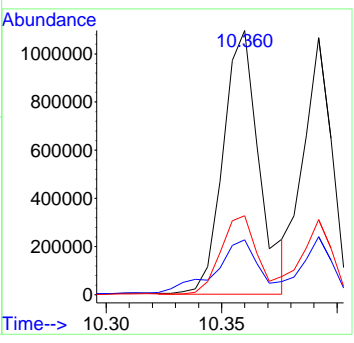
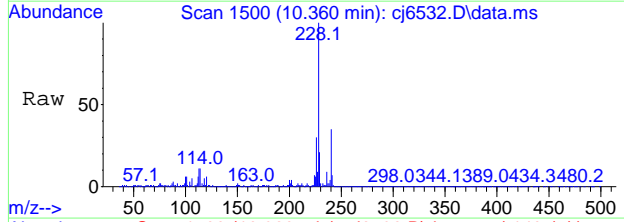
Ion	Ratio	Lower	Upper
202	100		
200	20.6	0.0	51.4
203	17.9	0.0	47.8





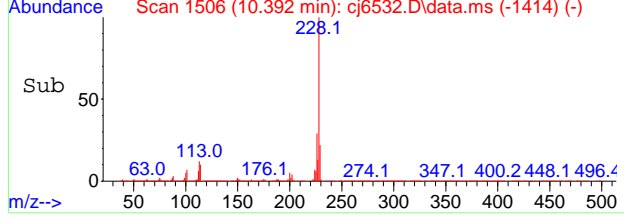
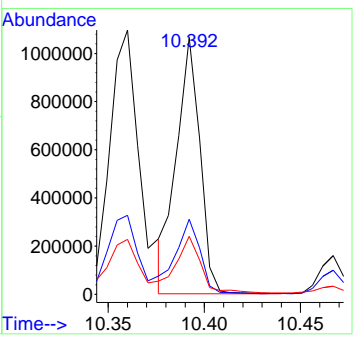
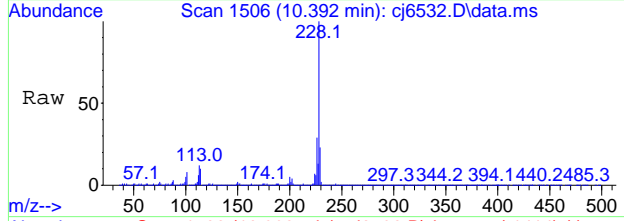
#89  
Benzo[a]anthracene  
Concen: 43.3691 ppm  
RT: 10.360 min Scan# 1500  
Delta R.T. -0.000 min  
Lab File: cj6532.D  
Acq: 09 May 2024 10:22 pm

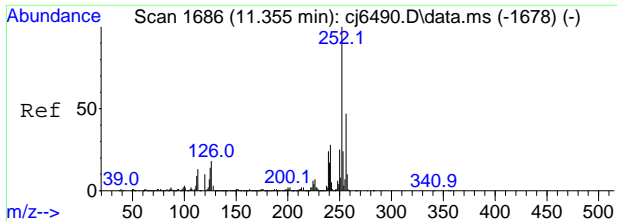
Tgt Ion	Ratio	Lower	Upper
228	100		
229	20.0	0.0	49.8
226	29.5	0.0	57.1



#91  
Chrysene  
Concen: 35.8589 ppm  
RT: 10.392 min Scan# 1506  
Delta R.T. -0.006 min  
Lab File: cj6532.D  
Acq: 09 May 2024 10:22 pm

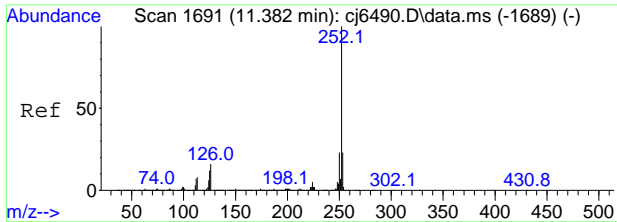
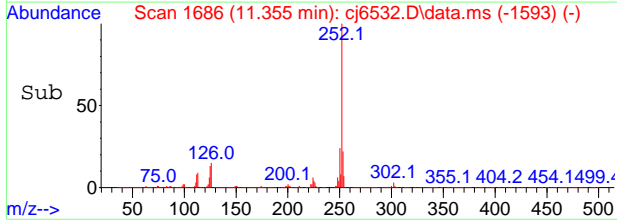
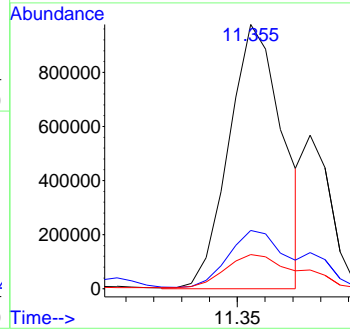
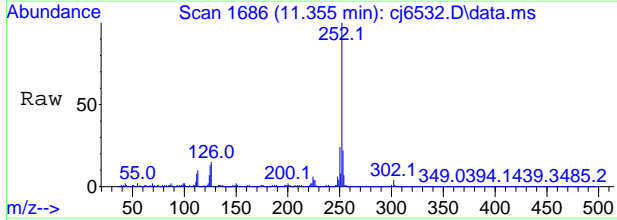
Tgt Ion	Ratio	Lower	Upper
228	100		
226	28.7	0.0	59.9
229	22.2	0.0	49.8





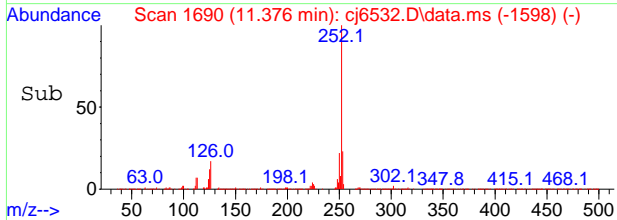
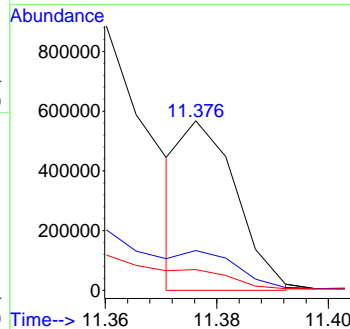
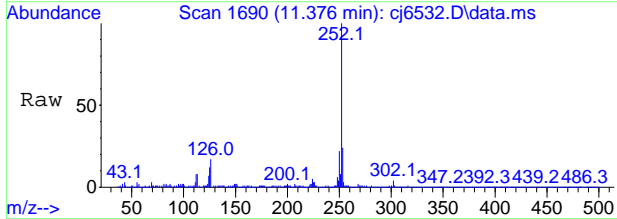
#95  
 Benzo[b]fluoranthene  
 Concen: 49.5535 ppm m  
 RT: 11.355 min Scan# 1686  
 Delta R.T. -0.000 min  
 Lab File: cj6532.D  
 Acq: 09 May 2024 10:22 pm

Tgt Ion	Ratio	Lower	Upper
252	100		
253	22.0	0.0	54.7
125	12.9	0.0	44.2



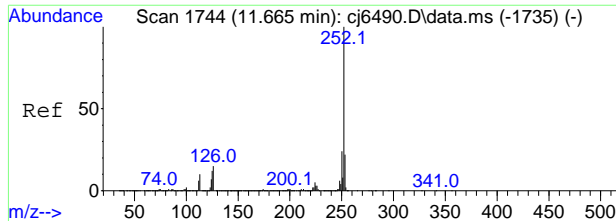
#96  
 Benzo[k]fluoranthene  
 Concen: 15.7591 ppm m  
 RT: 11.376 min Scan# 1690  
 Delta R.T. -0.006 min  
 Lab File: cj6532.D  
 Acq: 09 May 2024 10:22 pm

Tgt Ion	Ratio	Lower	Upper
252	100		
253	23.5	0.0	52.6
125	12.2	0.0	42.4



7.1.12  
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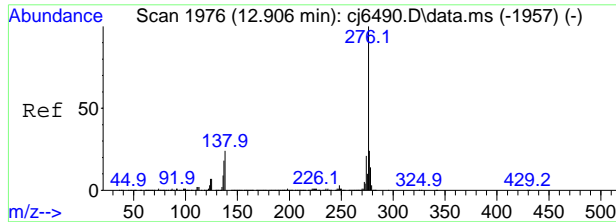
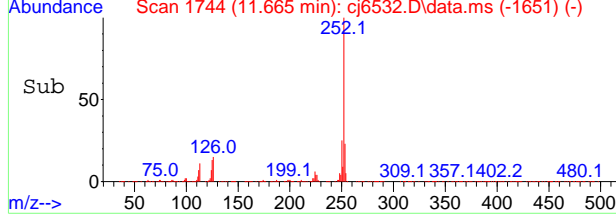
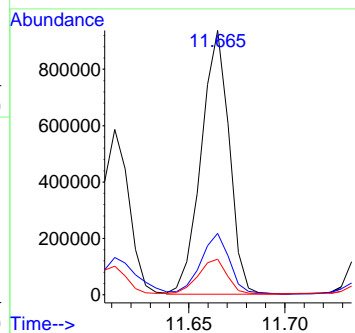
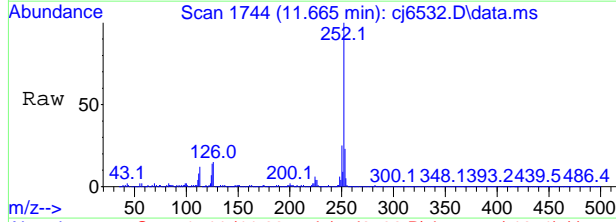




#97  
 Benzo[a]pyrene  
 Concen: 43.2761 ppm  
 RT: 11.665 min Scan# 1744  
 Delta R.T. 0.000 min  
 Lab File: cj6532.D  
 Acq: 09 May 2024 10:22 pm

Tgt Ion:252 Resp: 950113

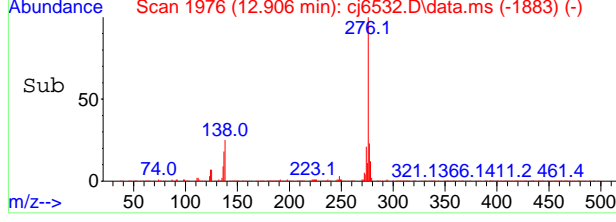
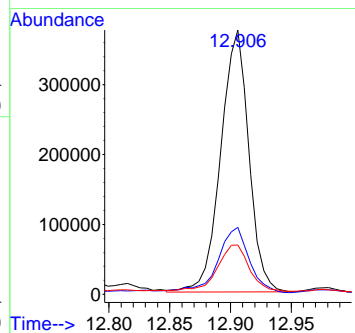
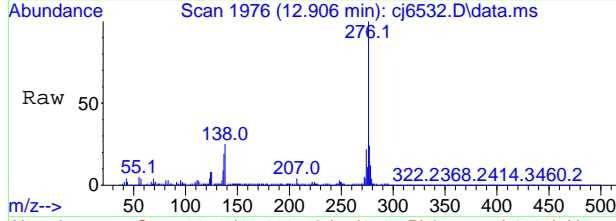
Ion	Ratio	Lower	Upper
252	100		
253	22.5	0.0	51.9
125	13.1	0.0	42.1



#98  
 Indeno[1,2,3-cd]pyrene  
 Concen: 22.6782 ppm  
 RT: 12.906 min Scan# 1976  
 Delta R.T. -0.000 min  
 Lab File: cj6532.D  
 Acq: 09 May 2024 10:22 pm

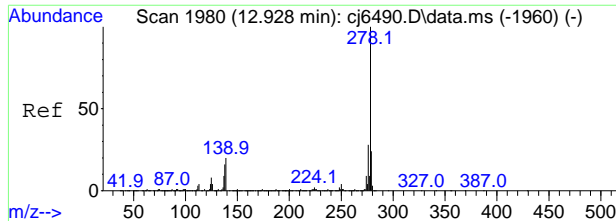
Tgt Ion:276 Resp: 601909

Ion	Ratio	Lower	Upper
276	100		
138	24.6	0.0	54.2
137	17.5	0.0	47.9



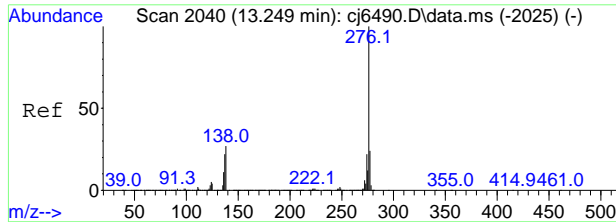
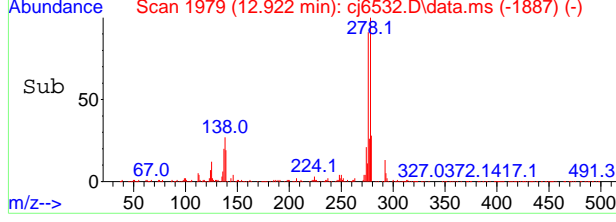
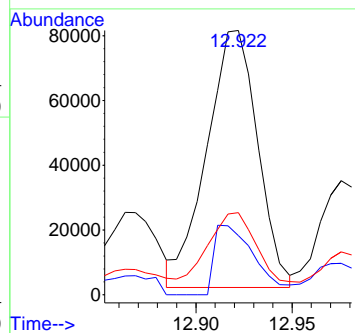
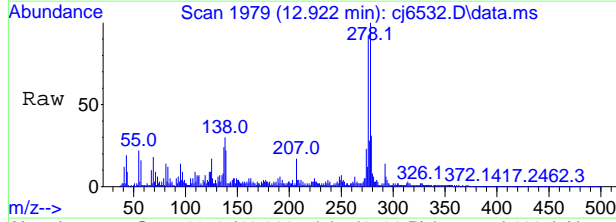
7.1.12  
7





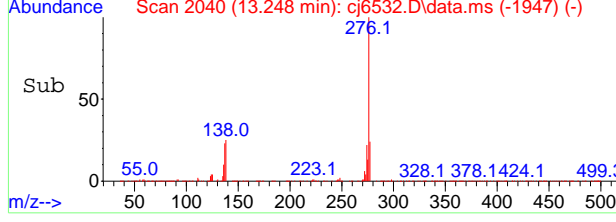
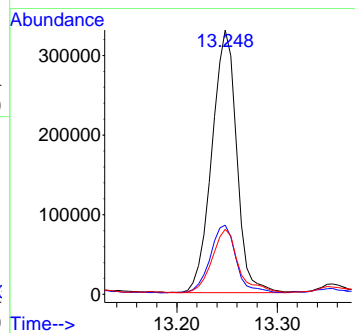
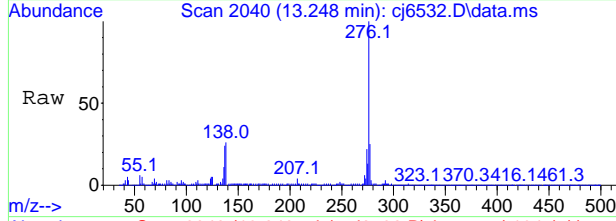
#100  
 Dibenz[a,h]anthracene  
 Concen: 6.8935 ppm  
 RT: 12.922 min Scan# 1979  
 Delta R.T. -0.006 min  
 Lab File: cj6532.D  
 Acq: 09 May 2024 10:22 pm

Tgt Ion	Ratio	Lower	Upper
278	100		
139	22.9	0.0	49.8
279	28.4	0.0	54.1



#102  
 Benzo[g,h,i]perylene  
 Concen: 27.2760 ppm  
 RT: 13.248 min Scan# 2040  
 Delta R.T. -0.001 min  
 Lab File: cj6532.D  
 Acq: 09 May 2024 10:22 pm

Tgt Ion	Ratio	Lower	Upper
276	100		
138	25.7	0.0	56.7
277	24.0	0.0	54.1



7.1.12  
7



LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6532.D  
Acq On : 09 May 2024 10:22 pm  
Operator : rocquans  
Sample : jd87833-6  
Misc : op54460,ecj297,30.9,,,1,1  
ALS Vial : 23 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON Filtering: 5  
Sampling : 1 Min Area: 1000 Area counts  
Start Thrs: 0.02 Max Peaks: 100  
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

Signal : TIC: cj6532.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.246	353	357	367	rVB	738204	545354	8.33%	0.597%
2	4.423	387	390	395	rBV	2510915	1417276	21.66%	1.552%
3	4.487	399	402	407	rVB	500402	316166	4.83%	0.346%
4	4.664	431	435	439	rBV	3380485	2117033	32.35%	2.319%
5	4.755	446	452	460	rBV	269349	191906	2.93%	0.210%
6	4.819	461	464	469	rBV	277486	193842	2.96%	0.212%
7	5.011	495	500	504	rBV	2170258	1320653	20.18%	1.447%
8	5.466	577	585	592	rBV	3923061	2692033	41.14%	2.949%
9	6.167	710	716	722	rVB	4353186	2583569	39.48%	2.830%
10	6.552	784	788	793	rBV	448665	366267	5.60%	0.401%
11	6.659	800	808	811	rBV	4294317	3021500	46.17%	3.310%
12	6.680	811	812	819	rVB	452101	270070	4.13%	0.296%
13	6.808	832	836	839	rBV	259205	199295	3.05%	0.218%
14	7.081	875	887	892	rVB	434272	409126	6.25%	0.448%
15	7.274	918	923	927	rBV	1613171	1277273	19.52%	1.399%
16	7.375	939	942	949	rVB3	141412	135097	2.06%	0.148%
17	7.531	965	971	974	rBV3	125306	168813	2.58%	0.185%
18	7.777	1013	1017	1024	rVB	210510	236041	3.61%	0.259%
19	7.873	1030	1035	1037	rBV	3500200	3390305	51.81%	3.713%
20	7.889	1037	1038	1042	rVB	3433220	2449115	37.42%	2.683%
21	7.937	1042	1047	1050	rVB	1246726	991699	15.15%	1.086%
22	8.076	1066	1073	1076	rBV	227951	249078	3.81%	0.273%
23	8.322	1112	1119	1121	rVB	539274	463845	7.09%	0.508%
24	8.344	1121	1123	1129	rVB	595571	511723	7.82%	0.561%
25	8.392	1129	1132	1134	rVB	286252	231980	3.54%	0.254%
26	8.424	1134	1138	1146	rVB	1050929	1295007	19.79%	1.418%
27	8.600	1162	1171	1178	rBV2	377248	591716	9.04%	0.648%
28	8.734	1190	1196	1199	rBV2	117144	138023	2.11%	0.151%
29	8.836	1209	1215	1218	rBV	385435	424902	6.49%	0.465%
30	8.868	1218	1221	1224	rBV	199070	200669	3.07%	0.220%
31	8.910	1224	1229	1235	rVB2	333940	442972	6.77%	0.485%
32	8.985	1235	1243	1249	rBV	7323394	6292163	96.15%	6.892%
33	9.039	1249	1253	1256	rBV3	194006	207484	3.17%	0.227%
34	9.071	1256	1259	1262	rVB	220593	190308	2.91%	0.208%
35	9.119	1262	1268	1275	rBV4	282658	422919	6.46%	0.463%
36	9.199	1275	1283	1290	rBV	6767293	6544308	100.00%	7.168%
37	9.247	1290	1292	1299	rVB2	207828	276795	4.23%	0.303%
38	9.317	1299	1305	1307	rBV	349612	310508	4.74%	0.340%
39	9.354	1307	1312	1317	rVB	3233006	2838349	43.37%	3.109%
40	9.413	1317	1323	1327	rBV2	380851	595824	9.10%	0.653%



7.1.13  
7

LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6532.D  
Acq On : 09 May 2024 10:22 pm  
Operator : rocquans  
Sample : jd87833-6  
Misc : op54460,ecj297,30.9,,,1,1  
ALS Vial : 23 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON  
Sampling : 1  
Start Thrs: 0.02  
Stop Thrs : 0  
Filtering: 5  
Min Area: 1000 Area counts  
Max Peaks: 100  
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

Table with 10 columns: Retention Time, Peak Number, and Percent Area. It lists 85 peaks with their respective retention times and area percentages.



7.1.13  
7

LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6532.D  
Acq On : 09 May 2024 10:22 pm  
Operator : rocquans  
Sample : jd87833-6  
Misc : op54460,ecj297,30.9,,,1,1  
ALS Vial : 23 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON Filtering: 5  
Sampling : 1 Min Area: 1000 Area counts  
Start Thrs: 0.02 Max Peaks: 100  
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

86	12.211	1843	1846	1850	rVV5	100645	151109	2.31%	0.166%
87	12.473	1887	1895	1901	rVB9	97074	198978	3.04%	0.218%
88	12.649	1916	1928	1931	rBV9	113829	361404	5.52%	0.396%
89	12.772	1942	1951	1962	rBV5	329304	759927	11.61%	0.832%
90	12.906	1963	1976	1984	rVV2	1097917	2210567	33.78%	2.421%
91	12.976	1984	1989	1995	rVB2	113558	198889	3.04%	0.218%
92	13.050	1995	2003	2007	rBV2	256754	454574	6.95%	0.498%
93	13.093	2007	2011	2016	rVV3	265696	522426	7.98%	0.572%
94	13.131	2016	2018	2031	rVV7	147502	326066	4.98%	0.357%
95	13.248	2032	2040	2055	rVB	942259	1829893	27.96%	2.004%
96	13.425	2063	2073	2083	rVB	319102	704259	10.76%	0.771%
97	13.714	2120	2127	2134	rVB10	63241	158843	2.43%	0.174%
98	13.847	2145	2152	2161	rVB4	88442	197654	3.02%	0.216%
99	13.965	2168	2174	2180	rBV10	79780	150254	2.30%	0.165%
100	14.147	2204	2208	2216	rVV9	56063	137169	2.10%	0.150%

Sum of corrected areas: 91296971



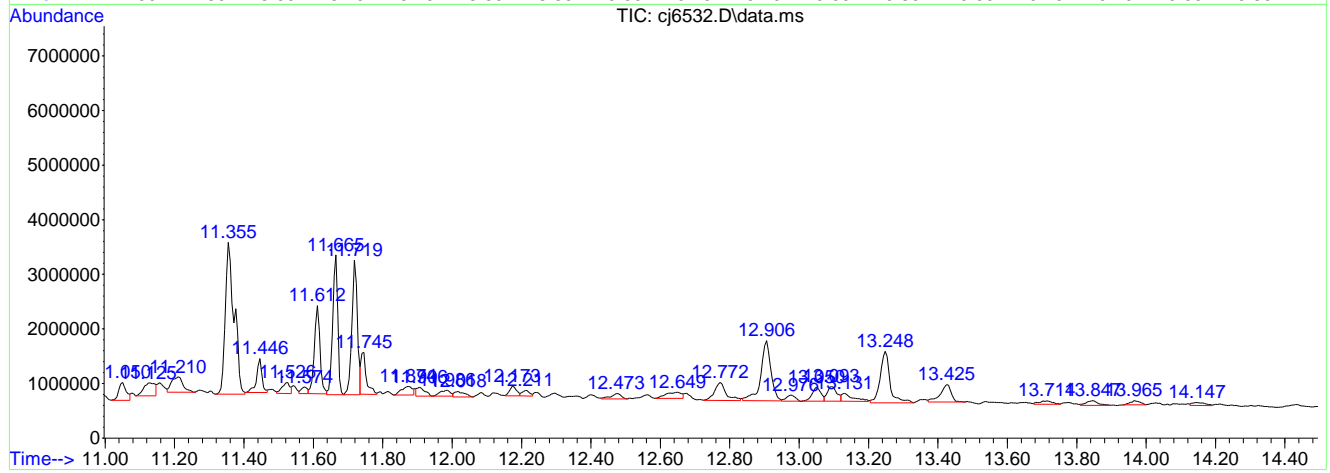
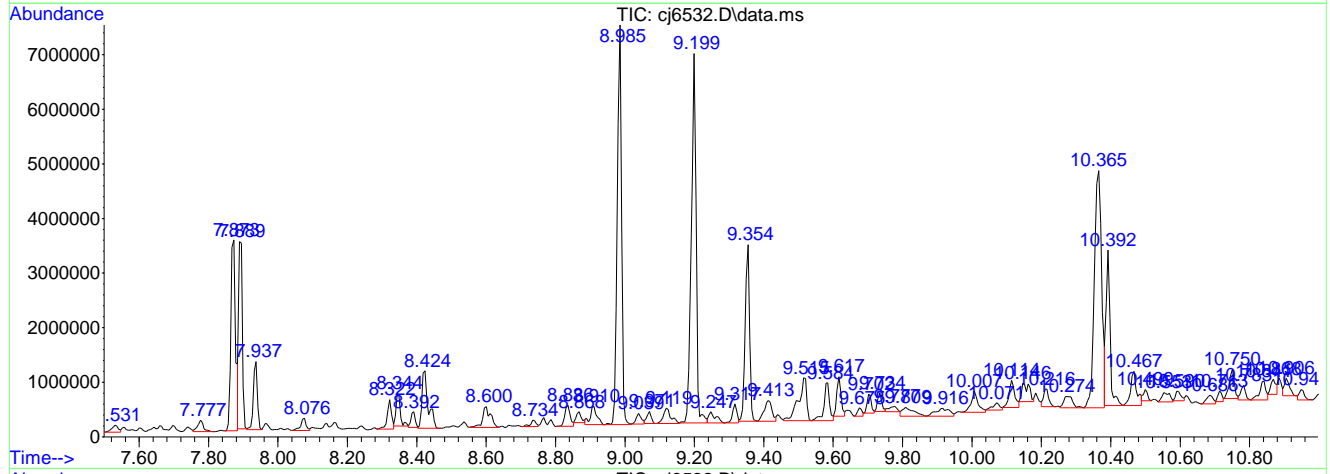
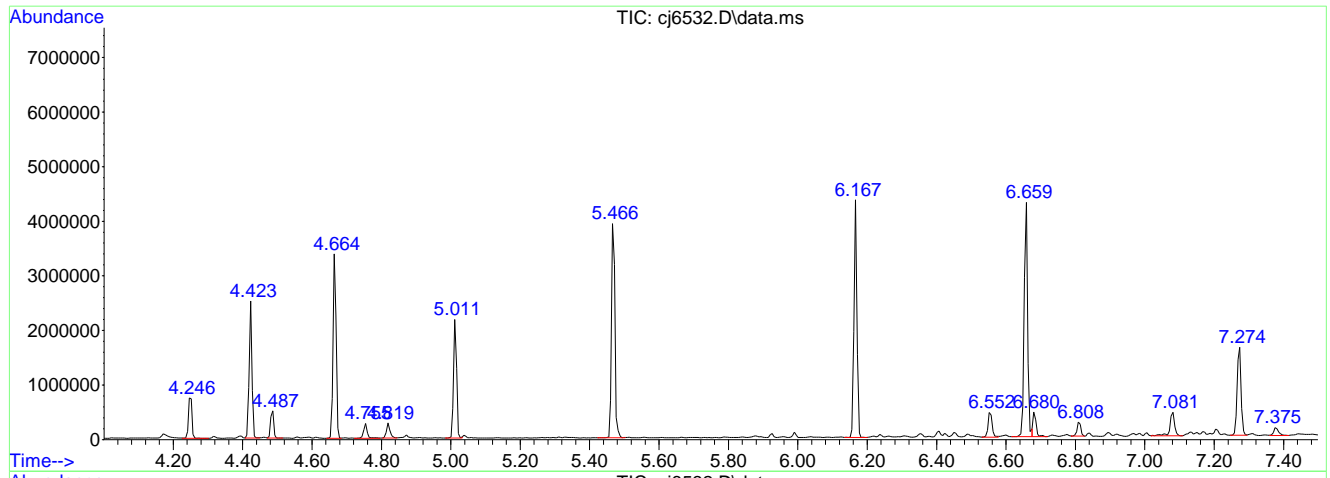
7.1.13  
7

LSC Report - Integrated Chromatogram

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6532.D  
Acq On : 09 May 2024 10:22 pm  
Operator : rocquans  
Sample : jd87833-6  
Misc : op54460,ecj297,30.9,,,1,1  
ALS Vial : 23 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p



7.1.13  
7



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6532.D  
Acq On : 09 May 2024 10:22 pm  
Operator : rocquans  
Sample : jd87833-6  
Misc : op54460,ecj297,30.9,,,1,1  
ALS Vial : 23 Sample Multiplier: 1

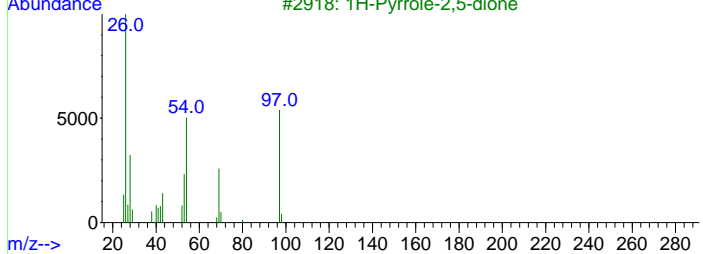
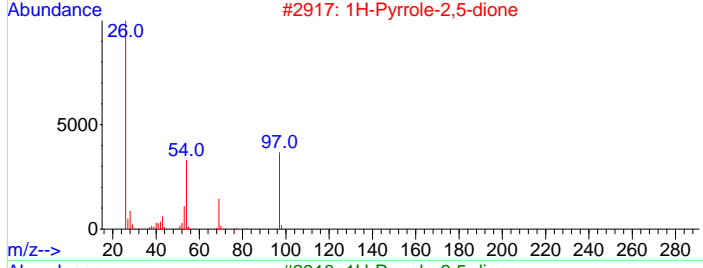
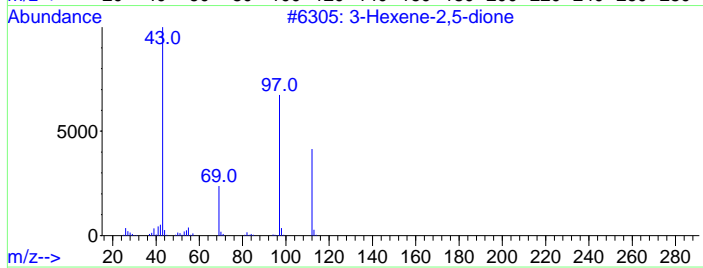
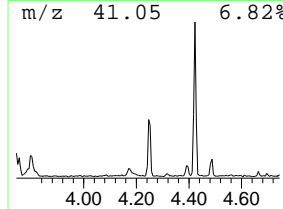
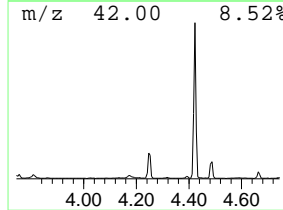
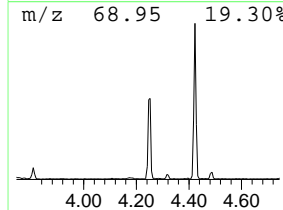
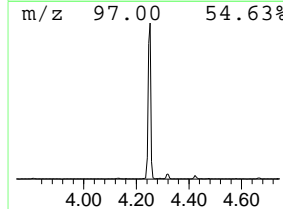
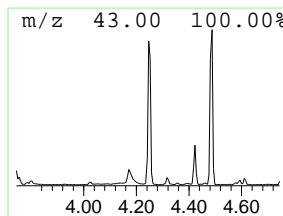
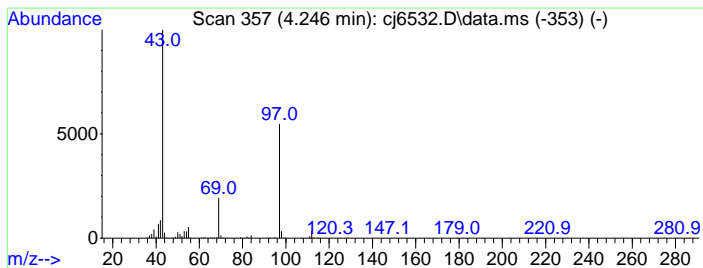
Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 1 Unknown ketone Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.246	10.30 ppm	545354	1,4-Dichlorobenzene-d4a	4.664

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	3-Hexene-2,5-dione	112	C6H8O2	004436-75-3	78
2		1H-Pyrrole-2,5-dione	97	C4H3NO2	000541-59-3	53
3		1H-Pyrrole-2,5-dione	97	C4H3NO2	000541-59-3	28
4		2,4-Dimethyl-1,5-diazabicyclo[3....	112	C6H12N2	100463-01-2	28
5		5-Hexen-2-one	98	C6H10O	000109-49-9	14



7.1.13  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6532.D  
Acq On : 09 May 2024 10:22 pm  
Operator : rocquans  
Sample : jd87833-6  
Misc : op54460,ecj297,30.9,,,1,1  
ALS Vial : 23 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

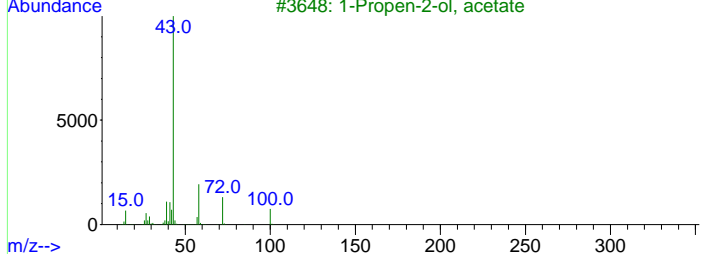
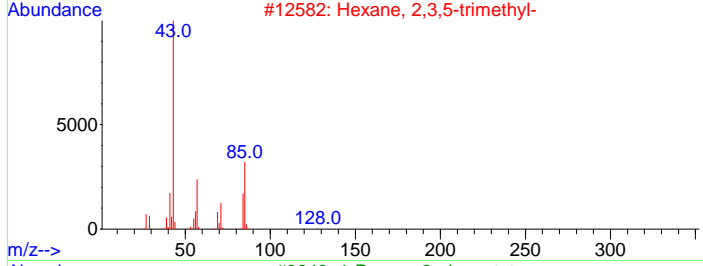
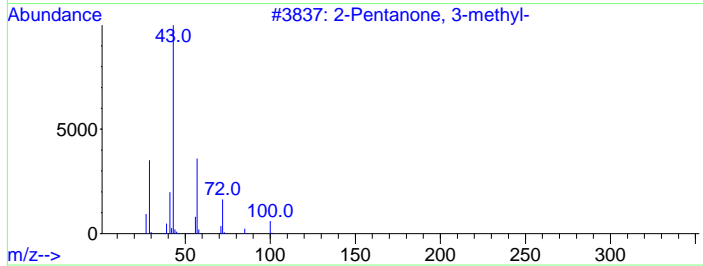
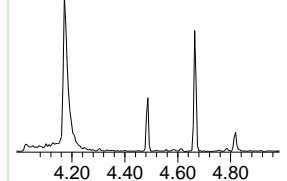
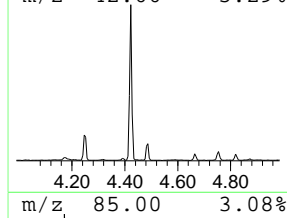
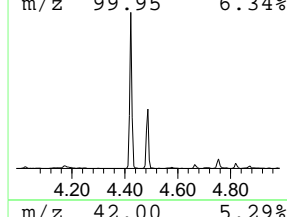
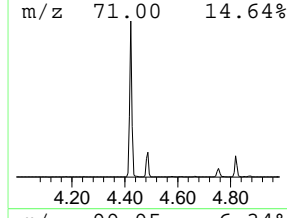
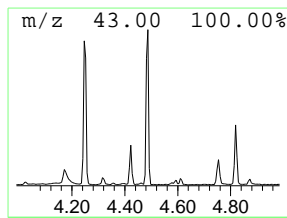
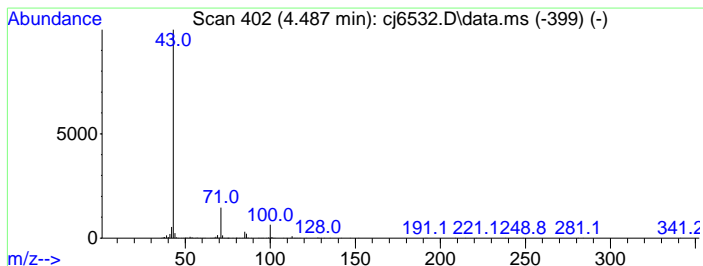
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 2 Unknown Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.487	5.97 ppm	316166	1,4-Dichlorobenzene-d4a	4.664

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2-Pentanone, 3-methyl-	100	C6H12O	000565-61-7	9
2		Hexane, 2,3,5-trimethyl-	128	C9H20	001069-53-0	9
3		1-Propen-2-ol, acetate	100	C5H8O2	000108-22-5	9
4		Pentane, 2-methyl-	86	C6H14	000107-83-5	9
5		2-Pentanone, 3-methyl-	100	C6H12O	000565-61-7	9



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6532.D  
Acq On : 09 May 2024 10:22 pm  
Operator : rocquans  
Sample : jd87833-6  
Misc : op54460,ecj297,30.9,,,1,1  
ALS Vial : 23 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

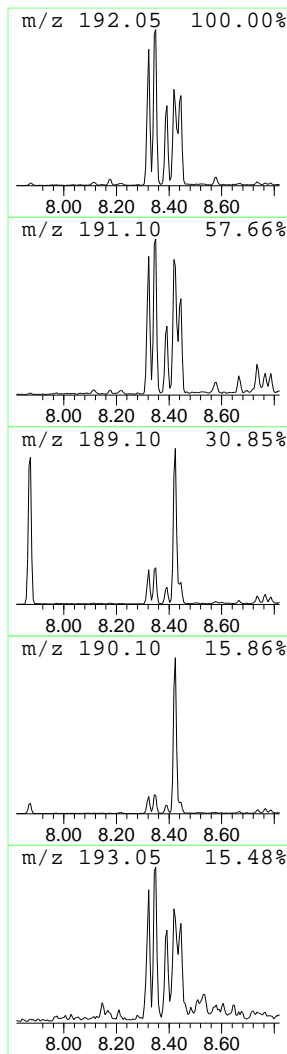
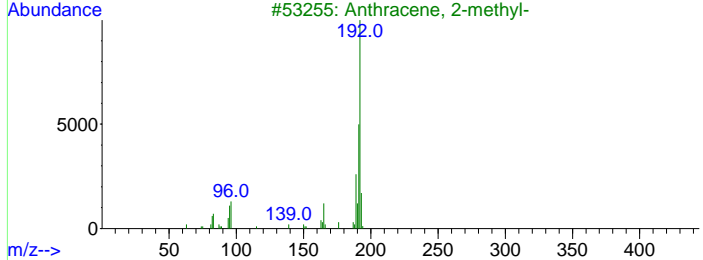
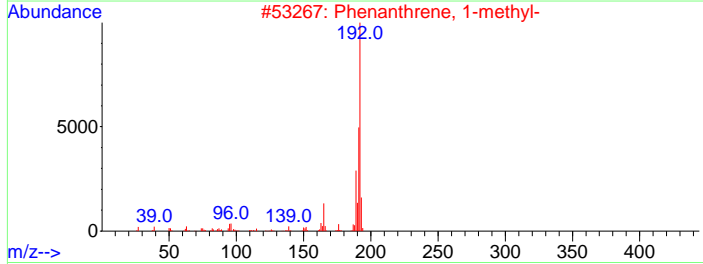
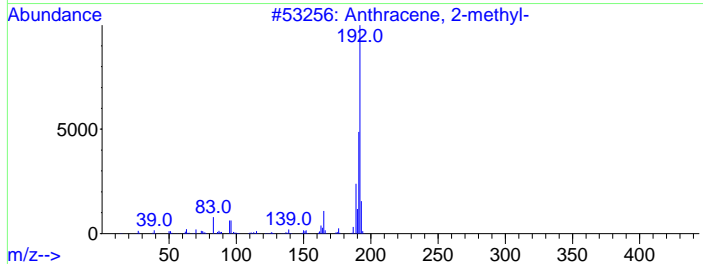
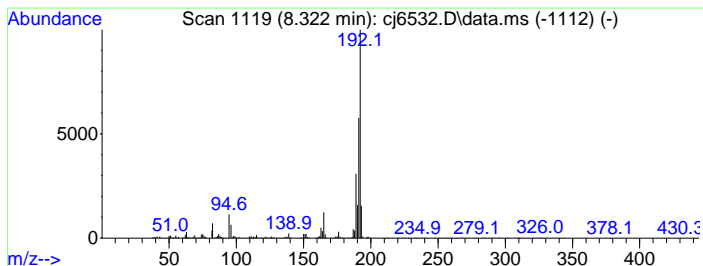
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 3 Anthracene, methyl Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.322	5.47 ppm	463845	Phenanthrene-d10b	7.873

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Anthracene, 2-methyl-	192	C15H12	000613-12-7	93
2		Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	93
3		Anthracene, 2-methyl-	192	C15H12	000613-12-7	91
4		Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	91
5		Anthracene, 1-methyl-	192	C15H12	000610-48-0	91



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6532.D  
Acq On : 09 May 2024 10:22 pm  
Operator : rocquans  
Sample : jd87833-6  
Misc : op54460,ecj297,30.9,,,1,1  
ALS Vial : 23 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

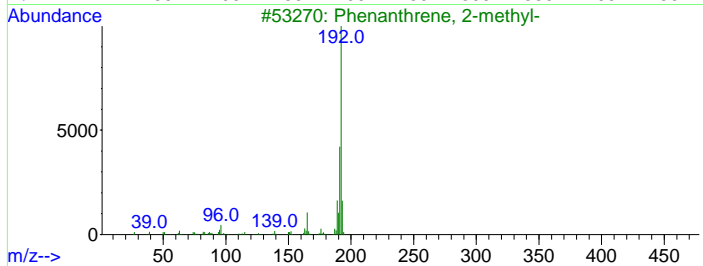
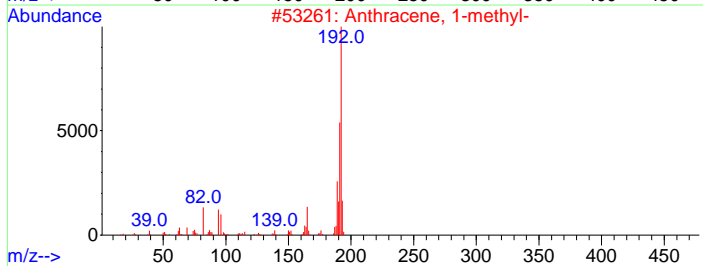
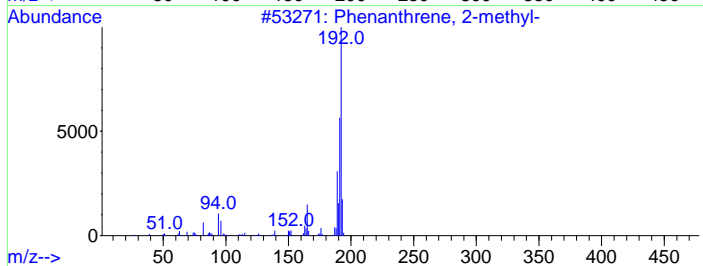
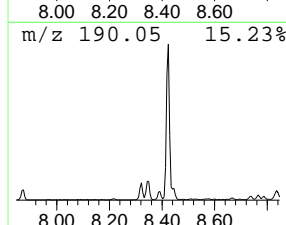
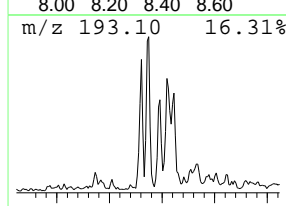
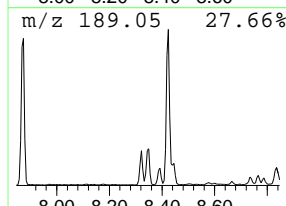
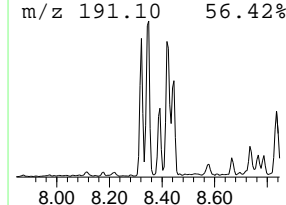
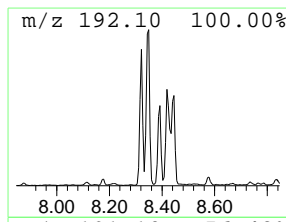
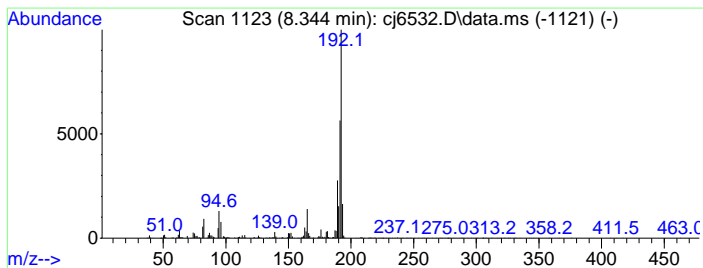
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 4 Anthracene, methyl Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.344	6.04 ppm	511723	Phenanthrene-d10b	7.873

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	97
2		Anthracene, 1-methyl-	192	C15H12	000610-48-0	97
3		Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	97
4		1H-Cyclopropa[1]phenanthrene,1a,...	192	C15H12	000949-41-7	96
5		Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	96



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Library Search Compound Report

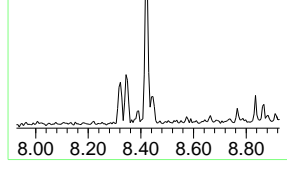
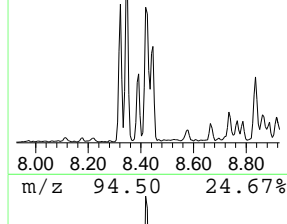
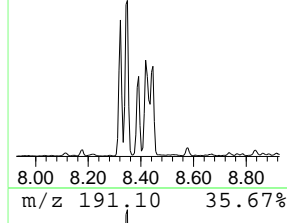
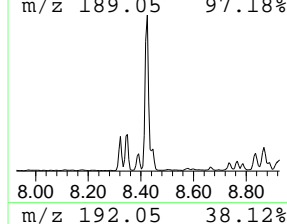
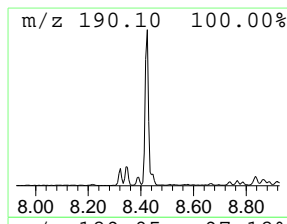
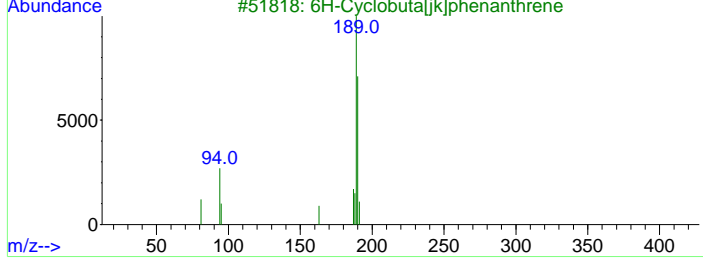
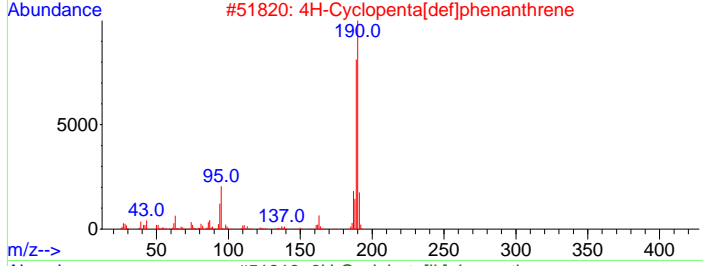
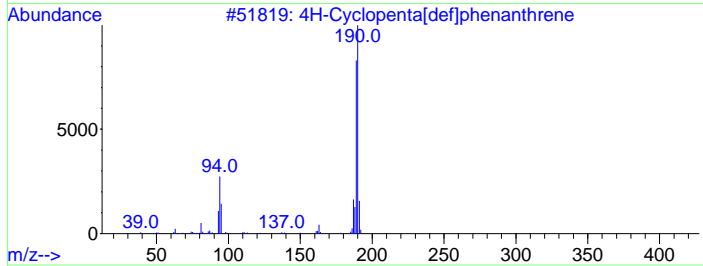
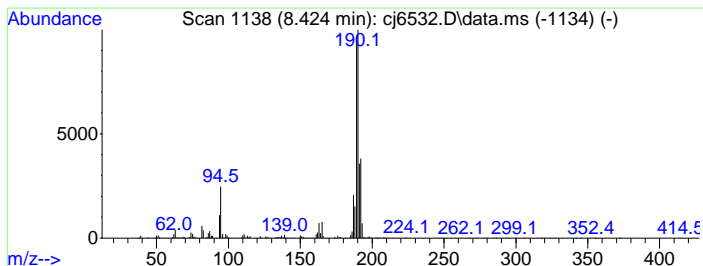
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Data File : cj6532.D
Acq On : 09 May 2024 10:22 pm
Operator : rocquans
Sample : jd87833-6
Misc : op54460,ecj297,30.9,,,1,1
ALS Vial : 23 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: lscint.p

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Peak Number 5 4H-Cyclopenta[def]phenanthrene Concentration Rank 2

Table with 7 columns: R.T., EstConc, Area, Relative to ISTD, R.T., Hit# of 5, Tentative ID, MW, MolForm, CAS#, Qual. It lists search results for peak 5, identifying it as Phenanthrene-d10b and listing several 4H-Cyclopenta[def]phenanthrene and 6H-Cyclobuta[jk]phenanthrene isomers.



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6532.D  
Acq On : 09 May 2024 10:22 pm  
Operator : rocquans  
Sample : jd87833-6  
Misc : op54460,ecj297,30.9,,,1,1  
ALS Vial : 23 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

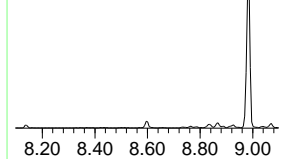
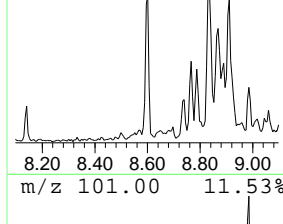
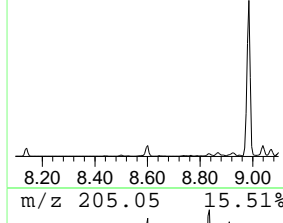
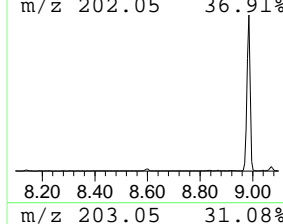
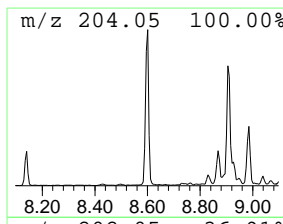
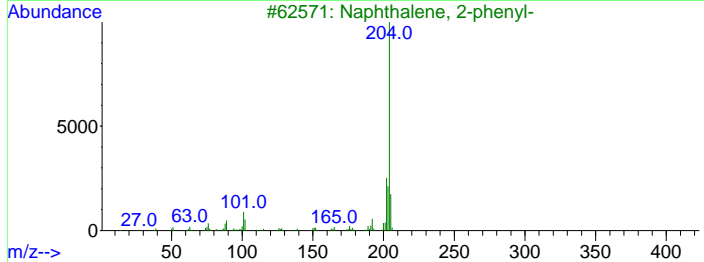
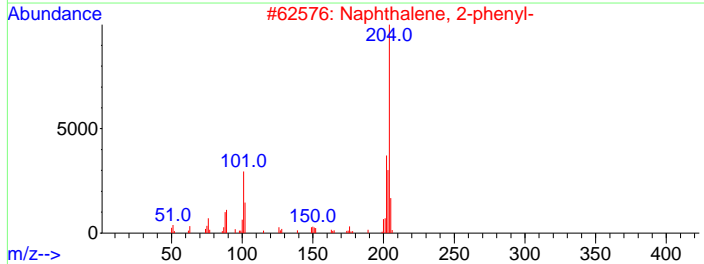
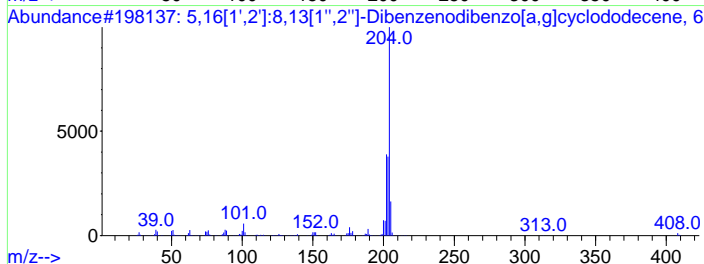
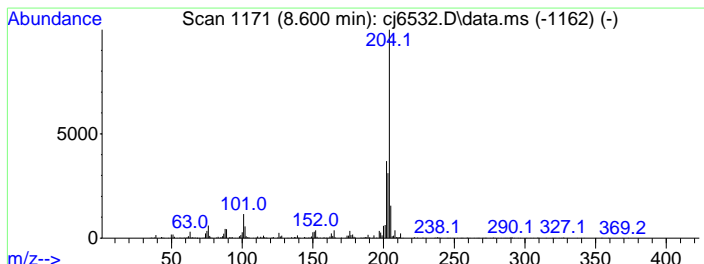
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 6 Naphthalene, phenyl Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.600	6.98 ppm	591716	Phenanthrene-d10b	7.873

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	5,16[1',2']:8,13[1'',2'']-Dibenz...	408	C32H24	005672-97-9	86
2		Naphthalene, 2-phenyl-	204	C16H12	000612-94-2	76
3		Naphthalene, 2-phenyl-	204	C16H12	000612-94-2	76
4		Naphthalene, 2-phenyl-	204	C16H12	000612-94-2	76
5		Naphthalene, 1-phenyl-	204	C16H12	000605-02-7	64



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6532.D  
Acq On : 09 May 2024 10:22 pm  
Operator : rocquans  
Sample : jd87833-6  
Misc : op54460,ecj297,30.9,,,1,1  
ALS Vial : 23 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

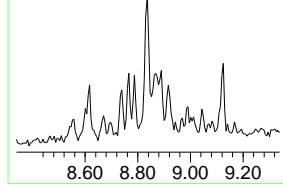
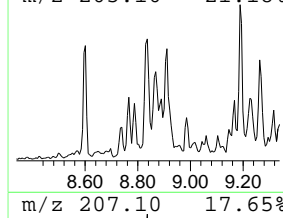
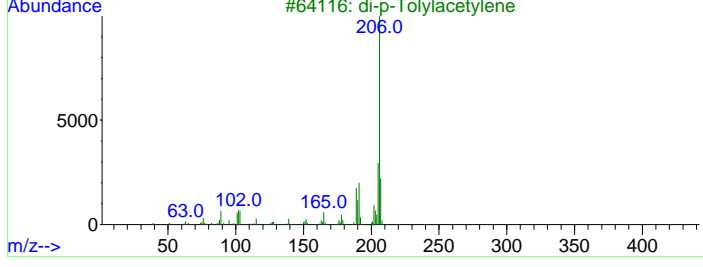
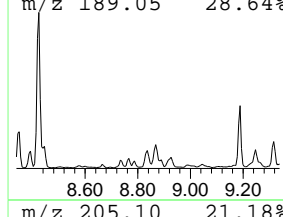
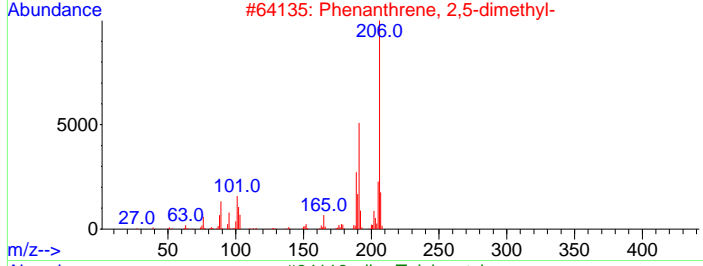
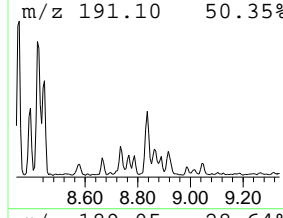
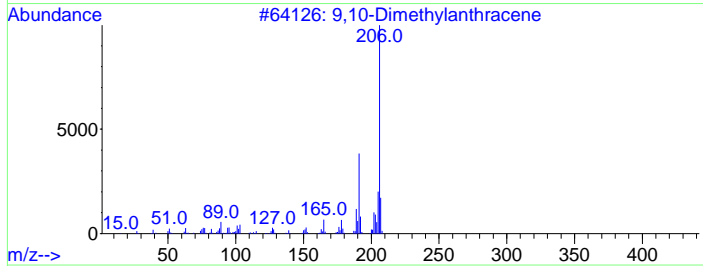
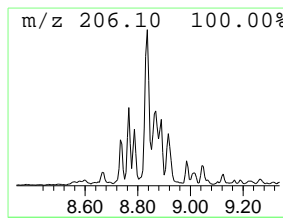
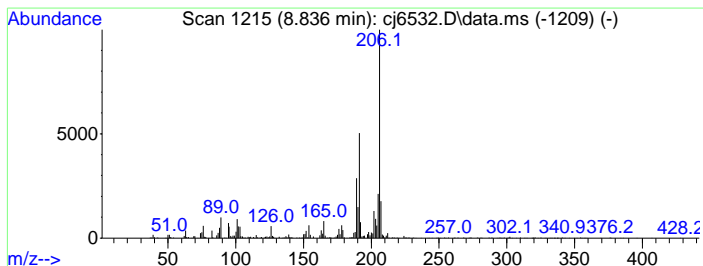
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 7 Phenanthrene, dimethyl Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.836	5.01 ppm	424902	Phenanthrene-d10b	7.873

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	9,10-Dimethylantracene	206	C16H14	000781-43-1	96
2	Phenanthrene, 2,5-dimethyl-	206	C16H14	003674-66-6	94
3	di-p-Tolylacetylene	206	C16H14	002789-88-0	93
4	Phenanthrene, 3,6-dimethyl-	206	C16H14	001576-67-6	93
5	Anthracene, 1,4-dimethyl-	206	C16H14	000781-92-0	93



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6532.D  
Acq On : 09 May 2024 10:22 pm  
Operator : rocquans  
Sample : jd87833-6  
Misc : op54460,ecj297,30.9,,,1,1  
ALS Vial : 23 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

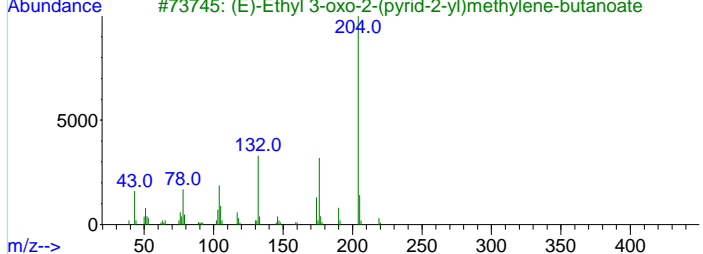
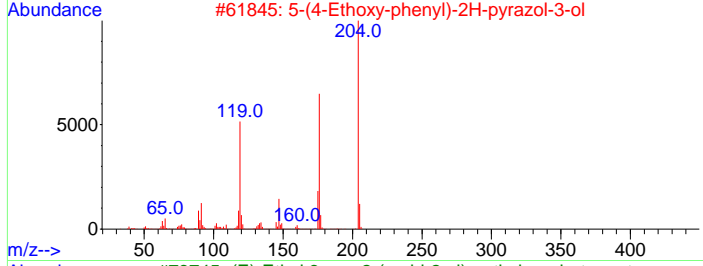
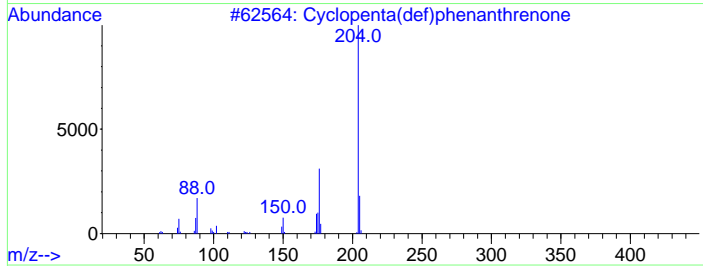
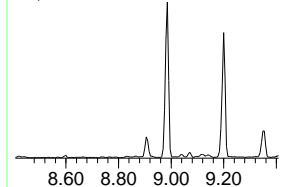
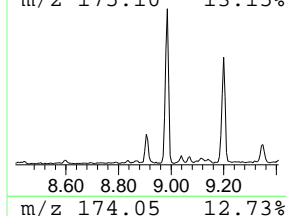
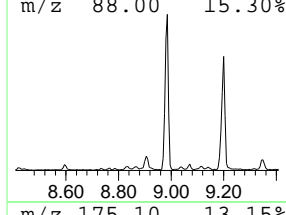
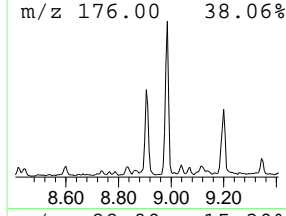
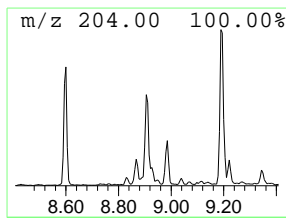
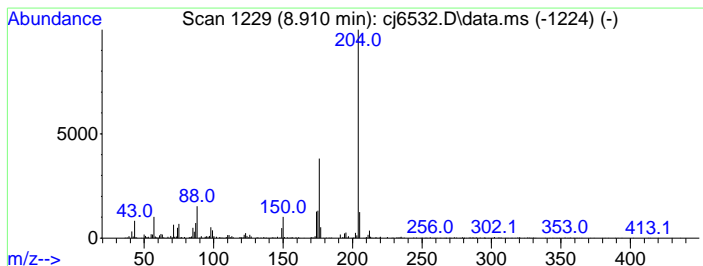
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 8 Unknown Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.910	5.23 ppm	442972	Phenanthrene-d10b	7.873

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Cyclopenta(def)phenanthrenone	204	C15H8O	005737-13-3	93
2		5-(4-Ethoxy-phenyl)-2H-pyrazol-3-ol	204	C11H12N2O2	1000278-26-8	64
3		(E)-Ethyl 3-oxo-2-(pyrid-2-yl)me...	219	C12H13NO3	1000147-59-7	50
4		Quinoline, 8-hydroxy-5-nitro-7-m...	289	C14H15N3O4	074440-53-2	43
5		1,2,4,8-Tetramethylbicyclo[6.3.0...	204	C15H24	137235-51-9	43



7.1.13  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6532.D  
Acq On : 09 May 2024 10:22 pm  
Operator : rocquans  
Sample : jd87833-6  
Misc : op54460,ecj297,30.9,,,1,1  
ALS Vial : 23 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

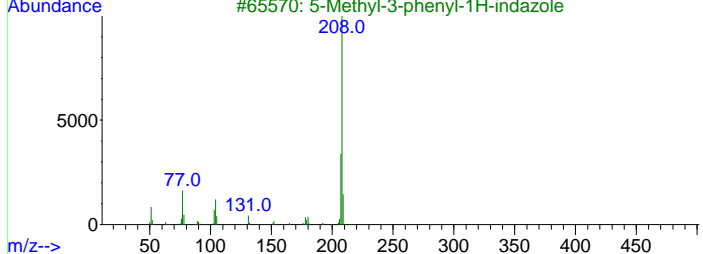
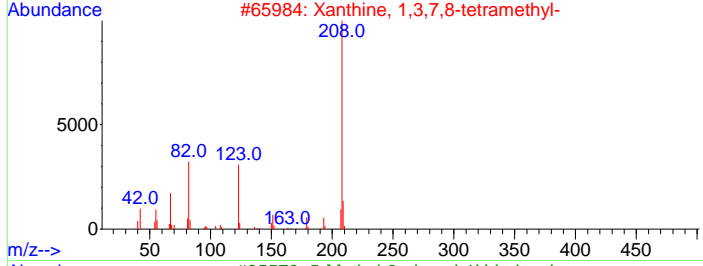
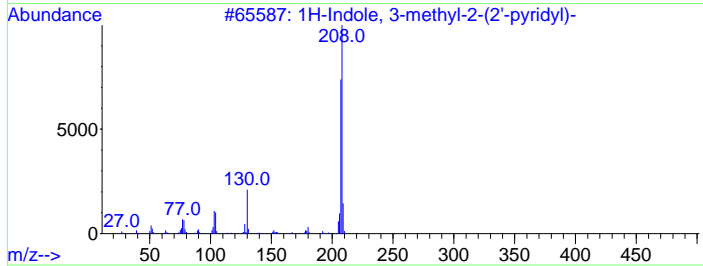
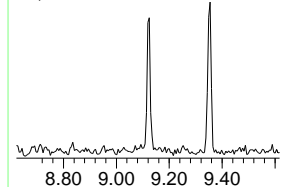
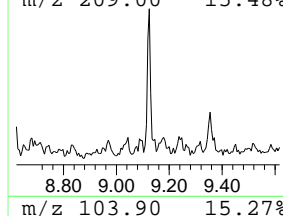
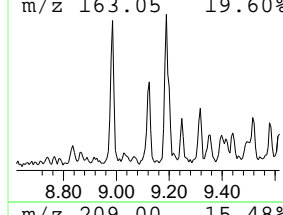
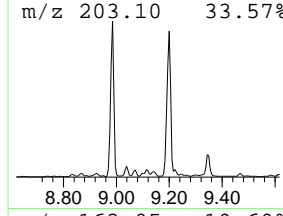
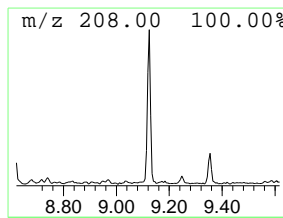
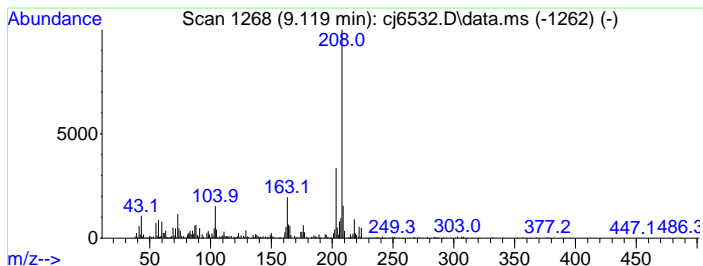
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 9 Unknown Concentration Rank 21

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.119	4.99 ppm	422919	Phenanthrene-d10b	7.873

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			1H-Indole, 3-methyl-2-(2'-pyridyl)-	208	C14H12N2	000951-25-7	47
2			Xanthine, 1,3,7,8-tetramethyl-	208	C9H12N4O2	000832-66-6	43
3			5-Methyl-3-phenyl-1H-indazole	208	C14H12N2	057614-16-1	43
4			1,8-dimethyl-3,6-diazahomoadaman...	208	C12H20N2O	160777-78-6	43
5			1,10-Phenanthroline, 2,9-dimethyl-	208	C14H12N2	000484-11-7	43



7.1.13  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6532.D  
Acq On : 09 May 2024 10:22 pm  
Operator : rocquans  
Sample : jd87833-6  
Misc : op54460,ecj297,30.9,,,1,1  
ALS Vial : 23 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

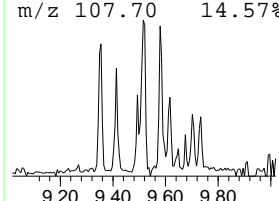
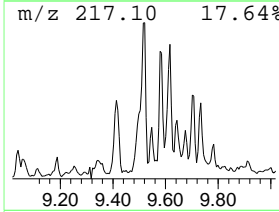
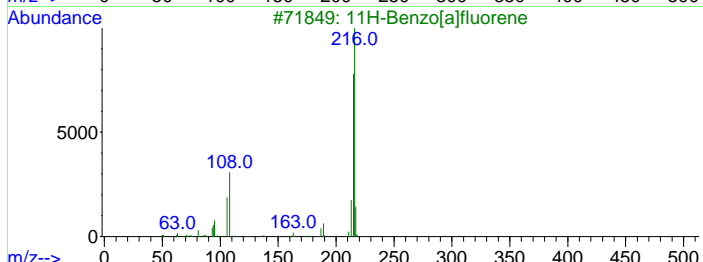
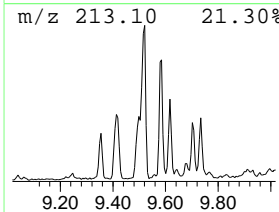
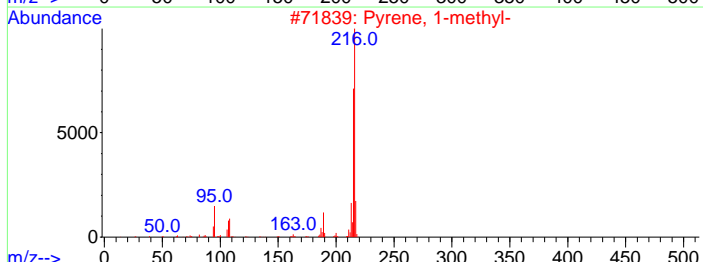
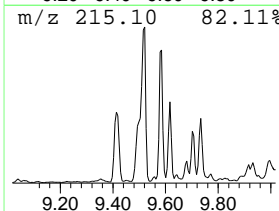
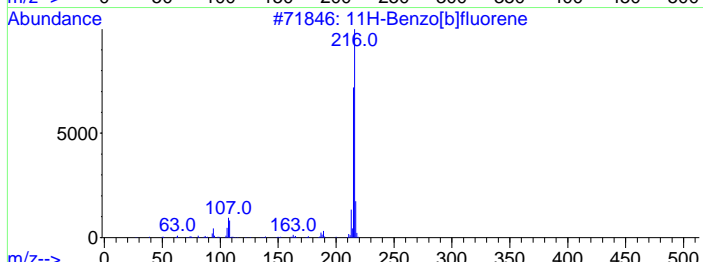
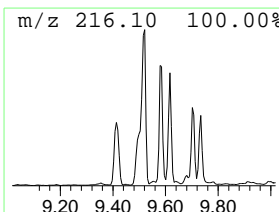
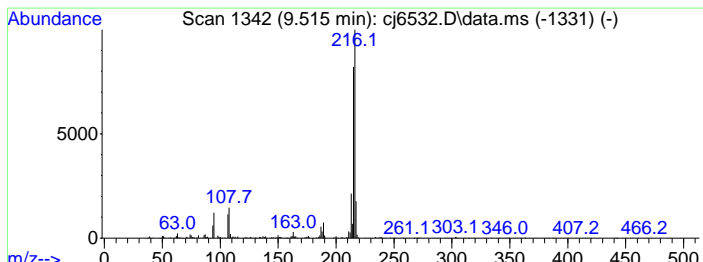
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 10 Pyrene, methyl Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.515	8.04 ppm	1291140	Chrysene-d12	10.371

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	11H-Benzo[b]fluorene	216	C17H12	000243-17-4	96
2		Pyrene, 1-methyl-	216	C17H12	002381-21-7	93
3		11H-Benzo[a]fluorene	216	C17H12	000238-84-6	91
4		Fluoranthene, 2-methyl-	216	C17H12	033543-31-6	91
5		11H-Benzo[b]fluorene	216	C17H12	000243-17-4	91



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6532.D  
Acq On : 09 May 2024 10:22 pm  
Operator : rocquans  
Sample : jd87833-6  
Misc : op54460,ecj297,30.9,,,1,1  
ALS Vial : 23 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

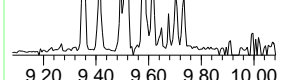
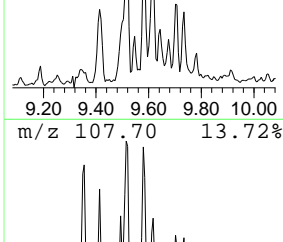
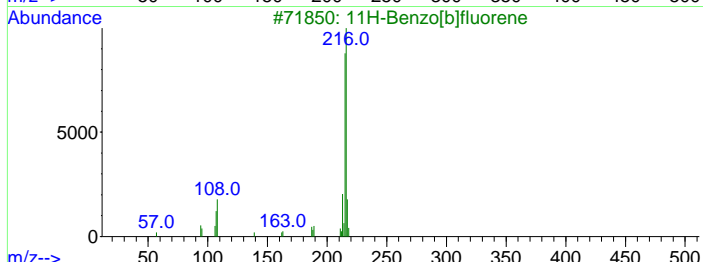
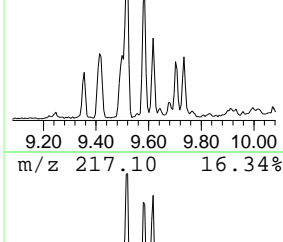
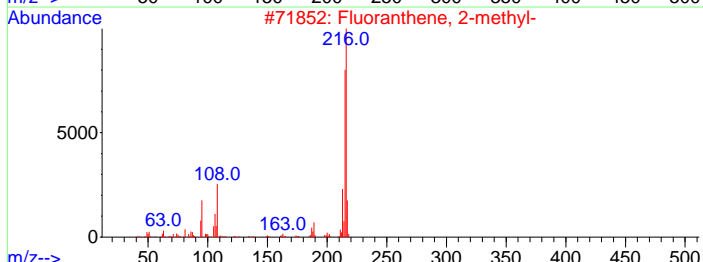
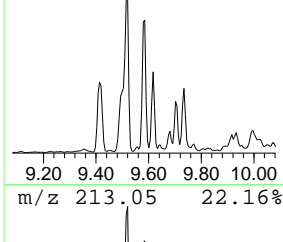
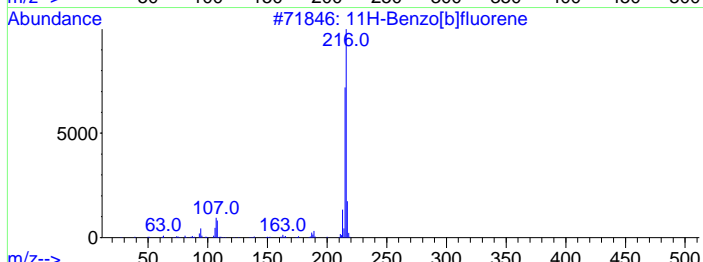
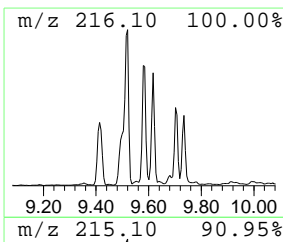
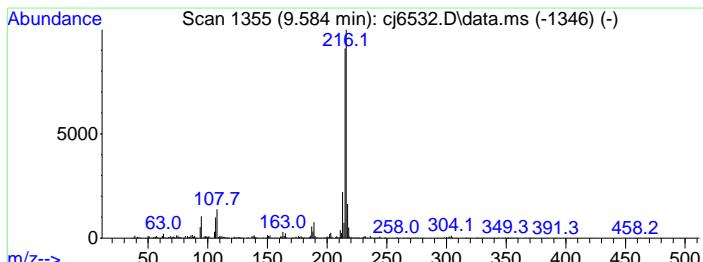
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 11 Fluoranthene, methyl Concentration Rank 23

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.584	4.87 ppm	781225	Chrysene-d12	10.371

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	11H-Benzo[b]fluorene	216	C17H12	000243-17-4	93
2		Fluoranthene, 2-methyl-	216	C17H12	033543-31-6	91
3		11H-Benzo[b]fluorene	216	C17H12	000243-17-4	90
4		Pyrene, 1-methyl-	216	C17H12	002381-21-7	90
5		11H-Benzo[a]fluorene	216	C17H12	000238-84-6	87



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6532.D  
Acq On : 09 May 2024 10:22 pm  
Operator : rocquans  
Sample : jd87833-6  
Misc : op54460,ecj297,30.9,,,1,1  
ALS Vial : 23 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

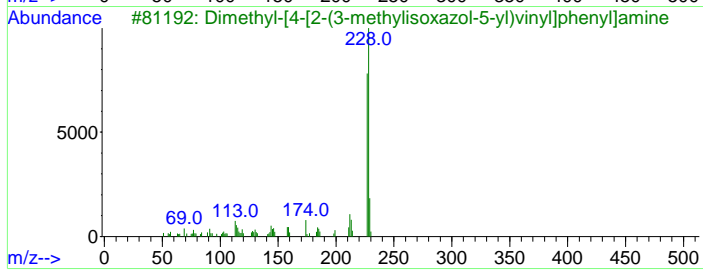
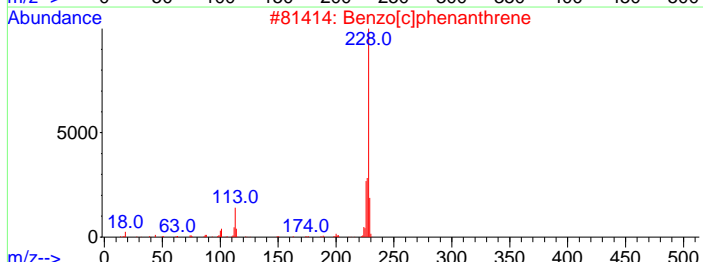
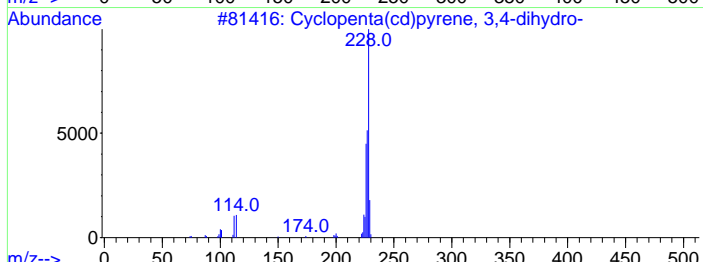
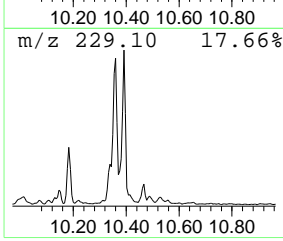
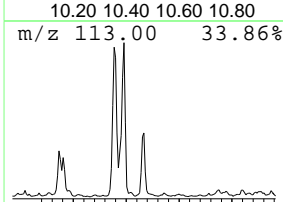
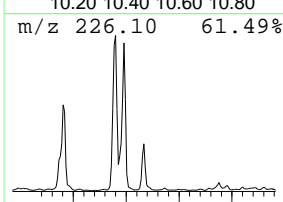
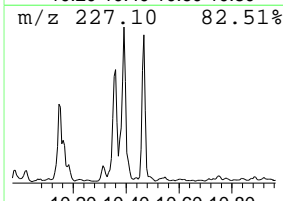
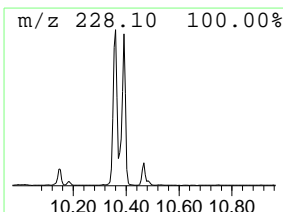
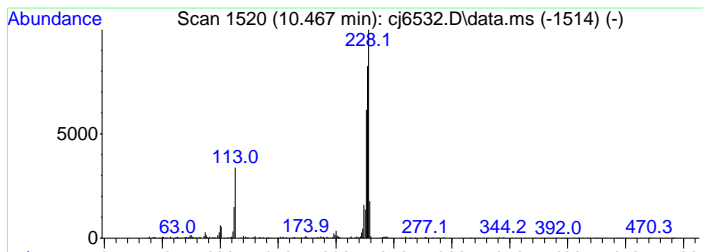
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 12 Unknown Concentration Rank 22

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.467	4.90 ppm	786315	Chrysene-d12a	10.371

Hit#	of 5	Tentative ID	MW	MolForm	CAS#	Qual
1		Cyclopenta(cd)pyrene, 3,4-dihydro-	228	C18H12	025732-74-5	70
2		Benzo[c]phenanthrene	228	C18H12	000195-19-7	49
3		Dimethyl-[4-[2-(3-methylisoxazol...	228	C14H16N2O	1000306-39-6	47
4		Isothiazol-5-amine, 4-bromo-3-ch...	226	C4H4BrClN2S	1000272-59-9	47
5		Benz[a]anthracene	228	C18H12	000056-55-3	38



7.1.13  
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Library Search Compound Report

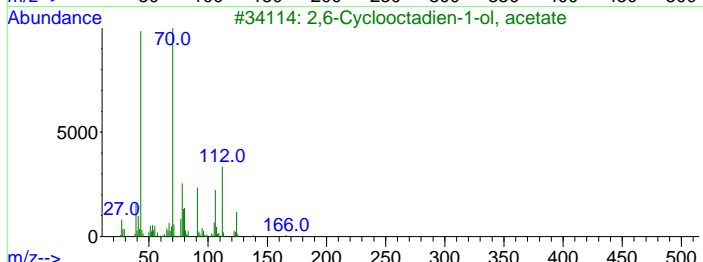
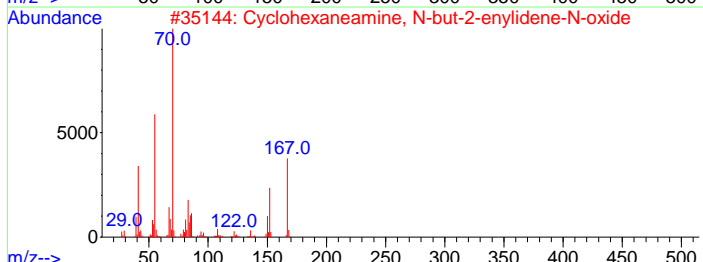
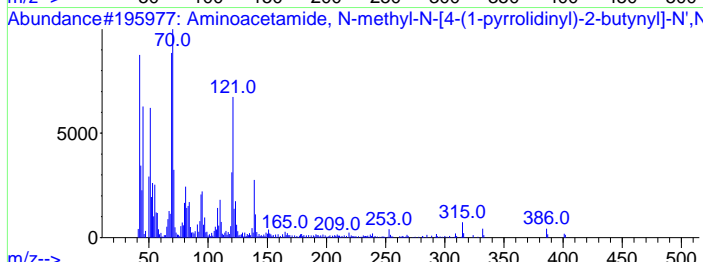
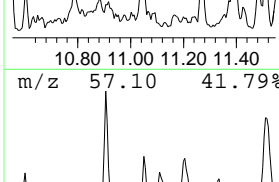
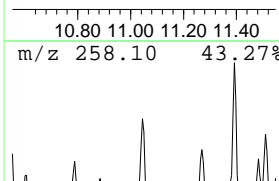
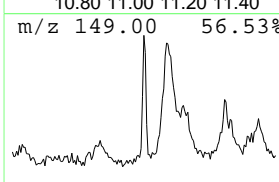
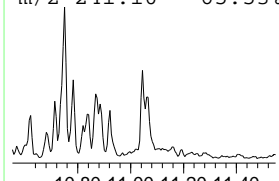
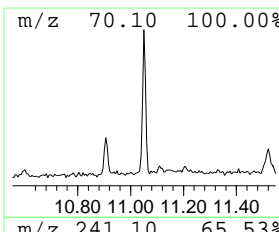
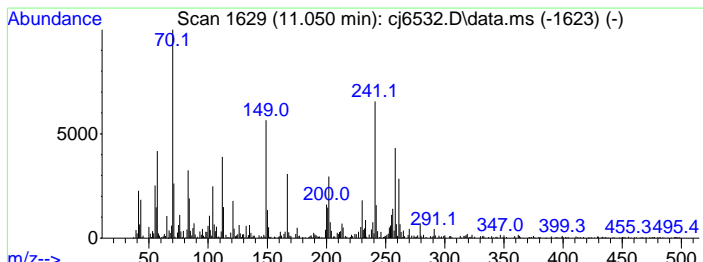
Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\
Data File : cj6532.D
Acq On : 09 May 2024 10:22 pm
Operator : rocquans
Sample : jd87833-6
Misc : op54460,ecj297,30.9,,,1,1
ALS Vial : 23 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: lscint.p

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Peak Number 13 Unknown Concentration Rank 11

Table with 7 columns: R.T., EstConc, Area, Relative to ISTD, R.T., Hit# of, and Tentative ID. It lists several chemical compounds like Aminoacetamide, Cyclohexaneamine, and Cyclooctadien-1-ol.



7.1.13
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6532.D  
 Acq On : 09 May 2024 10:22 pm  
 Operator : rocquans  
 Sample : jd87833-6  
 Misc : op54460,ecj297,30.9,,,1,1  
 ALS Vial : 23 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

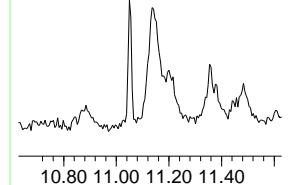
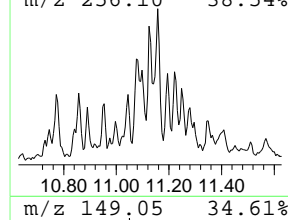
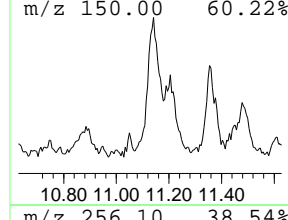
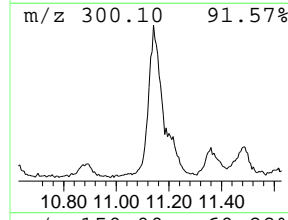
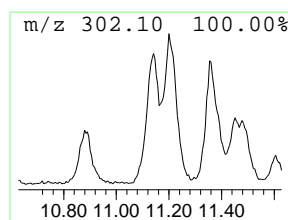
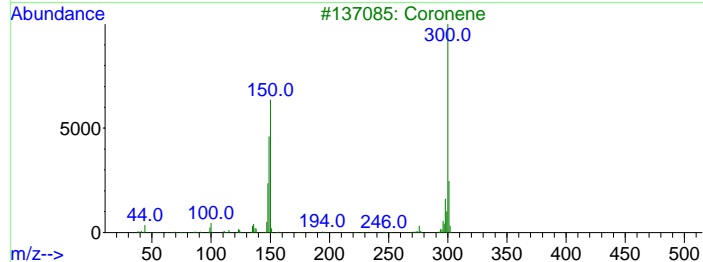
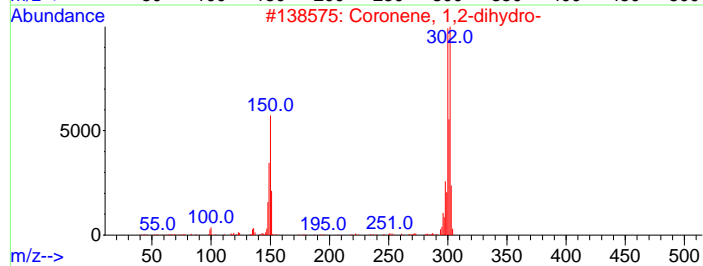
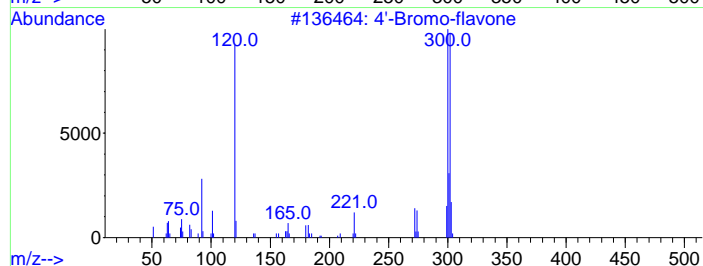
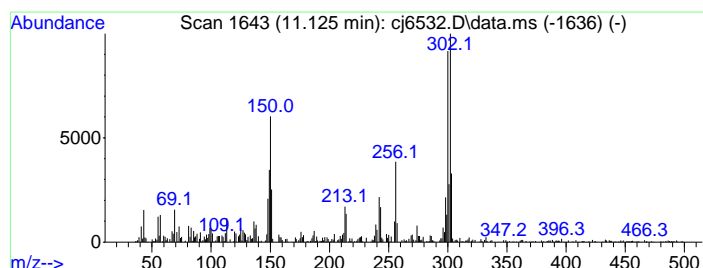
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 14 Unknown Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.125	8.06 ppm	558604	Perylene-d12	11.719

Hit#	of 5	Tentative ID	MW	MolForm	CAS#	Qual
1		4'-Bromo-flavone	300	C15H9BrO2	020525-20-6	46
2		Coronene, 1,2-dihydro-	302	C24H14	107716-56-3	46
3		Coronene	300	C24H12	000191-07-1	42
4		1,2:3,4-Dibenzopyrene	302	C24H14	000191-30-0	38
5		Coronene	300	C24H12	000191-07-1	38



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6532.D  
 Acq On : 09 May 2024 10:22 pm  
 Operator : rocquans  
 Sample : jd87833-6  
 Misc : op54460,ecj297,30.9,,,1,1  
 ALS Vial : 23 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

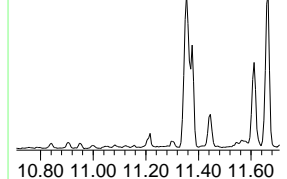
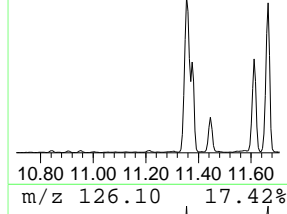
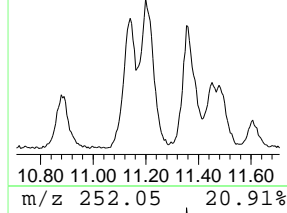
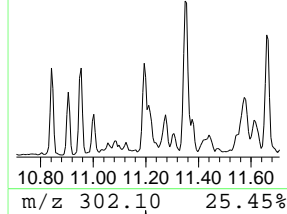
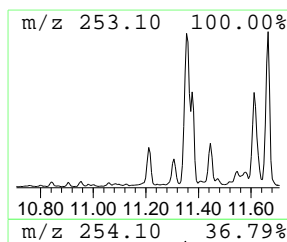
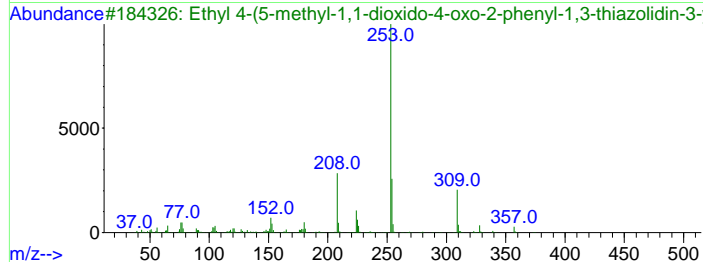
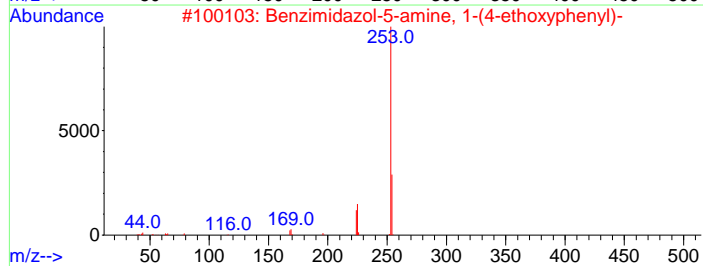
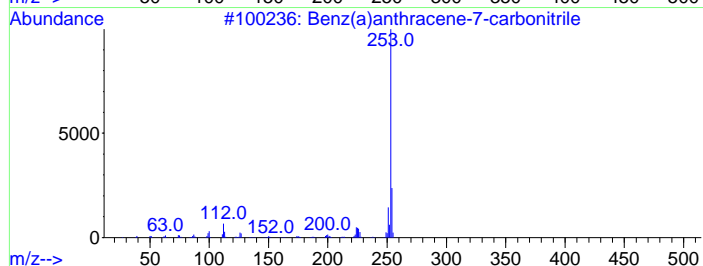
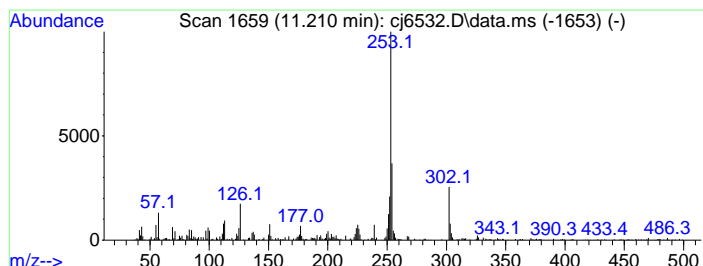
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 15 Unknown Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.210	9.25 ppm	640690	Perylene-d12	11.719

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Benz(a)anthracene-7-carbonitrile	253	C19H11N	007476-08-6	58
2		Benzimidazol-5-amine, 1-(4-ethox...	253	C15H15N3O	007104-62-3	47
3		Ethyl 4-(5-methyl-1,1-dioxido-4-...	373	C19H19NO5S	1000294-64-6	46
4		2-Propen-1-one, 3-(4-nitrophenyl...	253	C15H11NO3	001222-98-6	40
5		4,5-Dihydrobenzo[e]pyrene	254	C20H14	095676-42-9	37



7.1.13  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6532.D  
 Acq On : 09 May 2024 10:22 pm  
 Operator : rocquans  
 Sample : jd87833-6  
 Misc : op54460,ecj297,30.9,,,1,1  
 ALS Vial : 23 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

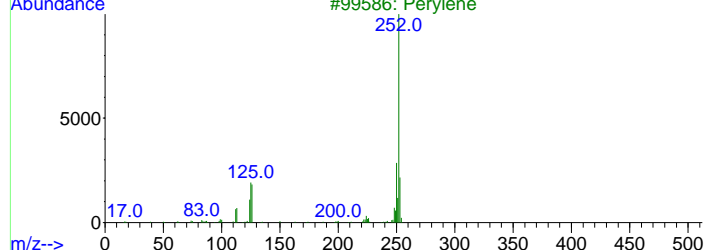
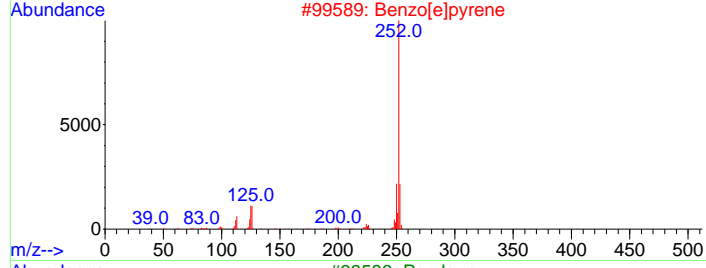
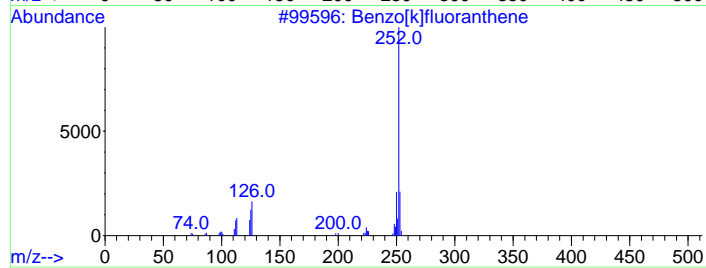
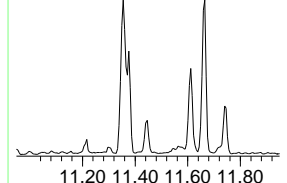
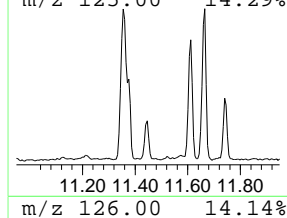
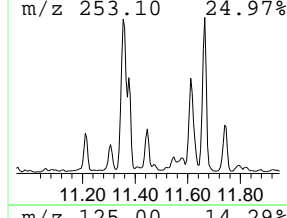
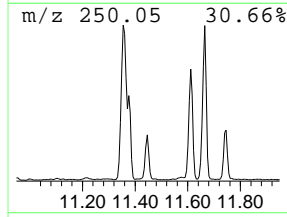
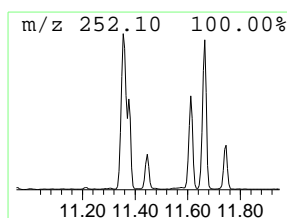
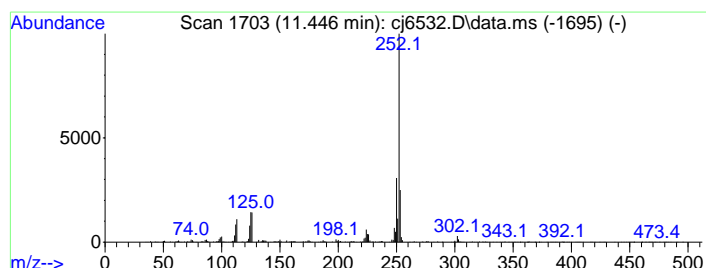
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 16 Unknown PHA substances Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.446	9.60 ppm	664997	Perylene-d12	11.719

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Benzo[k]fluoranthene	252	C20H12	000207-08-9	99
2		Benzo[e]pyrene	252	C20H12	000192-97-2	98
3		Perylene	252	C20H12	000198-55-0	95
4		Perylene	252	C20H12	000198-55-0	95
5		Benz[e]acephenanthrylene	252	C20H12	000205-99-2	93



7.1.13  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6532.D  
Acq On : 09 May 2024 10:22 pm  
Operator : rocquans  
Sample : jd87833-6  
Misc : op54460,ecj297,30.9,,,1,1  
ALS Vial : 23 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

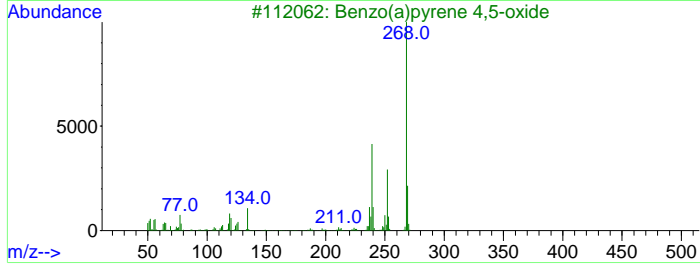
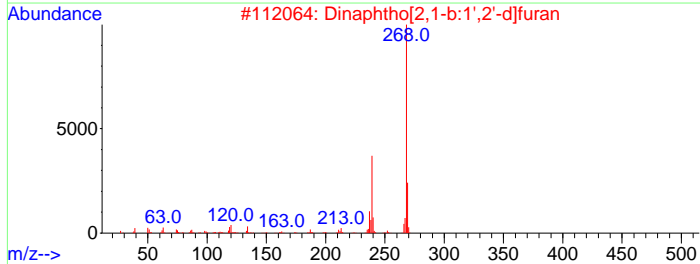
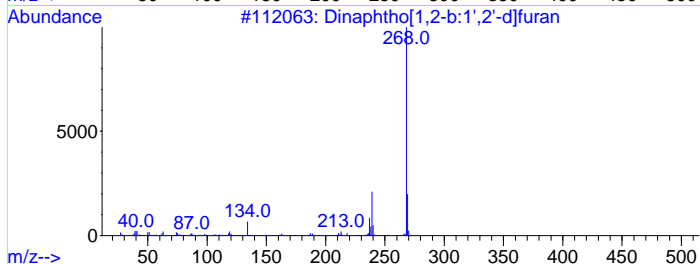
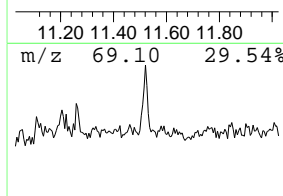
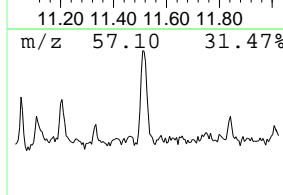
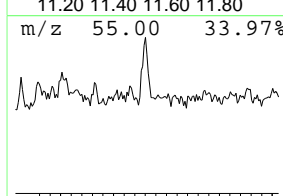
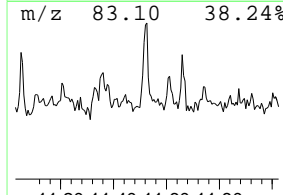
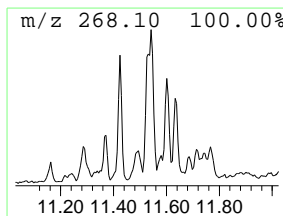
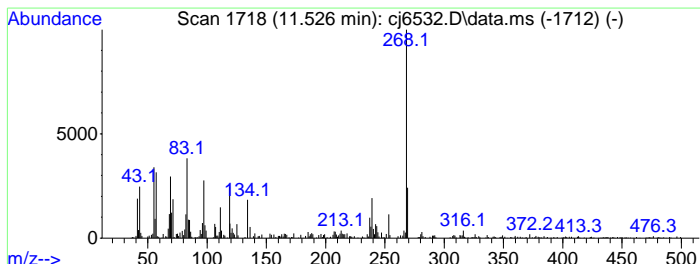
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 17 Unknown Concentration Rank 25

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.526	4.70 ppm	325824	Perylene-d12	11.719

Hit#	of 5	Tentative ID	MW	MolForm	CAS#	Qual
1		Dinaphtho[1,2-b:1',2'-d]furan	268	C20H12O	000207-93-2	60
2		Dinaphtho[2,1-b:1',2'-d]furan	268	C20H12O	000194-63-8	53
3		Benzo(a)pyrene 4,5-oxide	268	C20H12O	037574-47-3	49
4		Dinaphtho[1,2-b:1',2'-d]furan	268	C20H12O	000207-93-2	46
5		trans-4'-Methyl-4-(methylthio)ch...	268	C17H16OS	126443-27-4	43



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7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6532.D  
Acq On : 09 May 2024 10:22 pm  
Operator : rocquans  
Sample : jd87833-6  
Misc : op54460,ecj297,30.9,,,1,1  
ALS Vial : 23 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

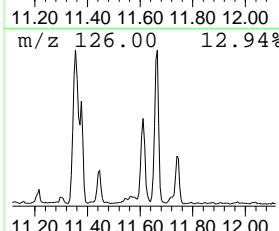
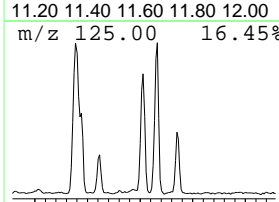
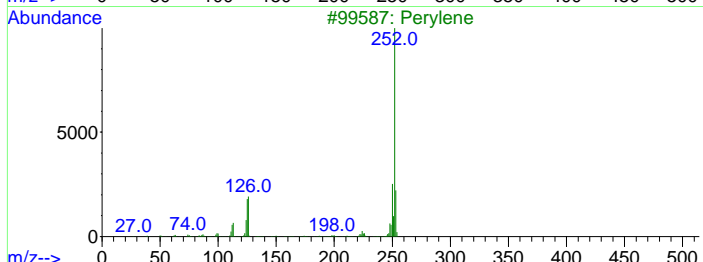
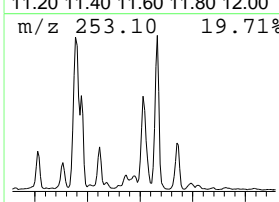
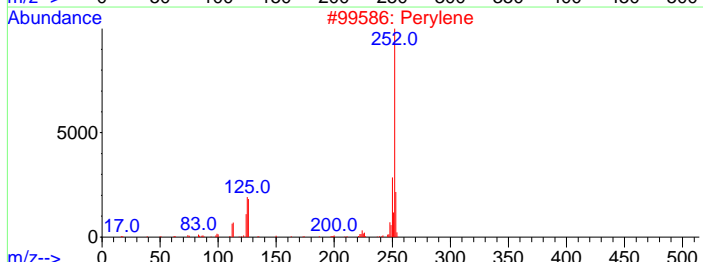
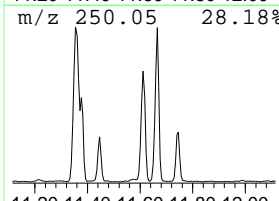
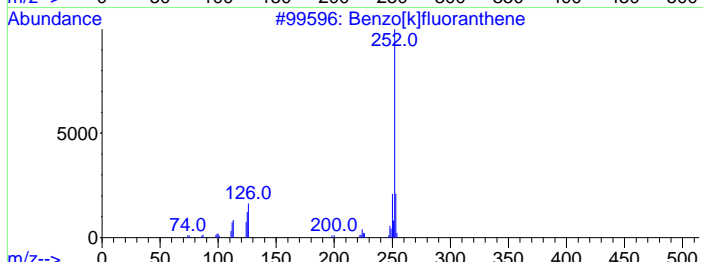
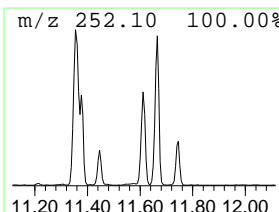
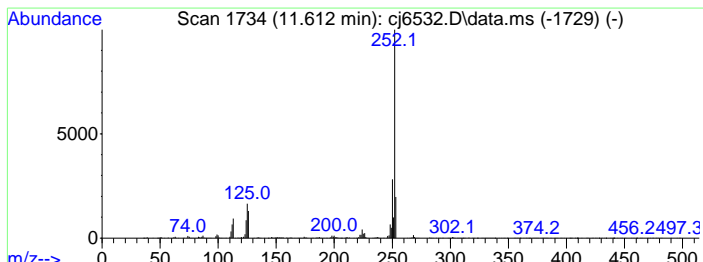
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 18 Unknown PHA Substance Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.612	26.25 ppm	1819140	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Benzo[k]fluoranthene	252	C20H12	000207-08-9	98
2			Perylene	252	C20H12	000198-55-0	98
3			Perylene	252	C20H12	000198-55-0	98
4			Benzo[e]pyrene	252	C20H12	000192-97-2	97
5			Benz[e]acephenanthrylene	252	C20H12	000205-99-2	95



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7



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6532.D  
Acq On : 09 May 2024 10:22 pm  
Operator : rocquans  
Sample : jd87833-6  
Misc : op54460,ecj297,30.9,,,1,1  
ALS Vial : 23 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

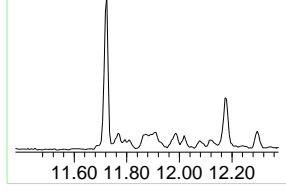
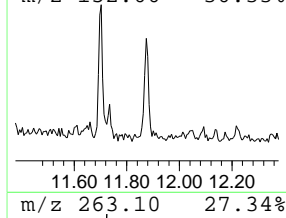
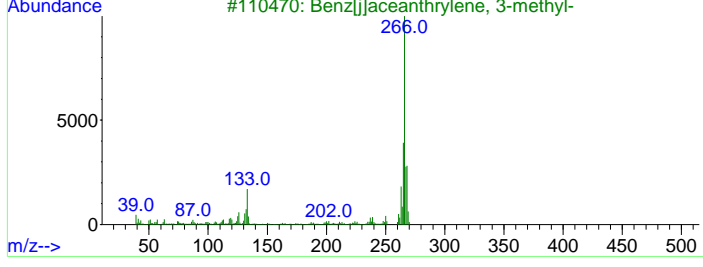
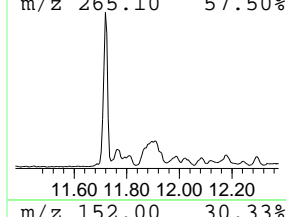
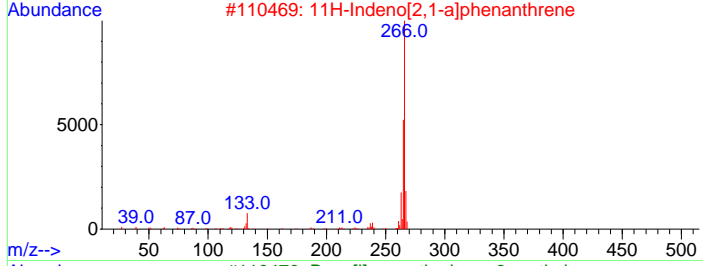
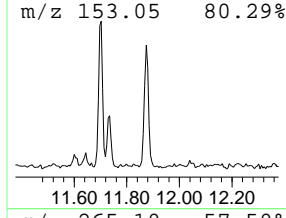
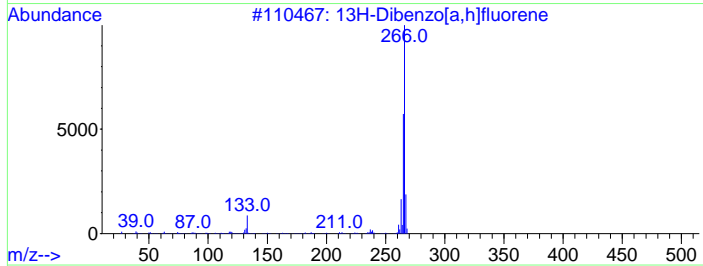
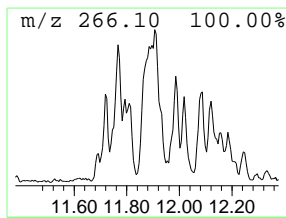
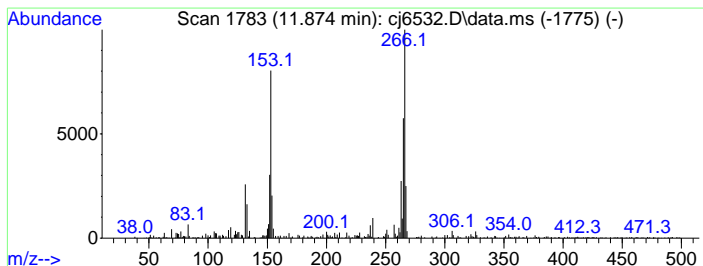
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 19 Unknown Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.874	5.23 ppm	362363	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			13H-Dibenzo[a,h]fluorene	266	C21H14	000239-85-0	42
2			11H-Indeno[2,1-a]phenanthrene	266	C21H14	000220-97-3	42
3			Benz[j]aceanthrylene, 3-methyl-	266	C21H14	003343-10-0	30
4			8H-Indeno[2,1-b]phenanthrene	266	C21H14	000241-28-1	30
5			4,5-Dihydro-3H-dinaphtho[2,1-c:1...	295	C22H17N	1000297-99-2	25



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7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6532.D  
Acq On : 09 May 2024 10:22 pm  
Operator : rocquans  
Sample : jd87833-6  
Misc : op54460,ecj297,30.9,,,1,1  
ALS Vial : 23 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

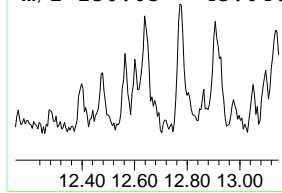
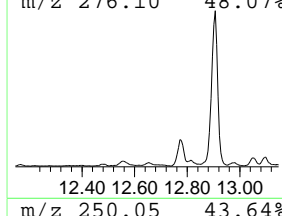
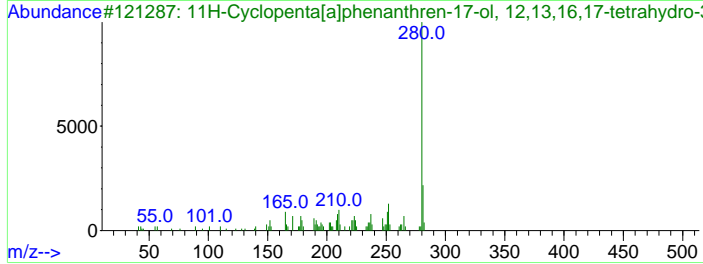
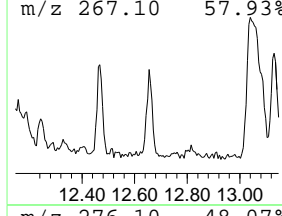
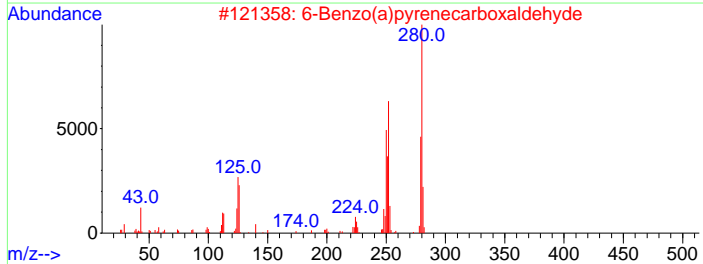
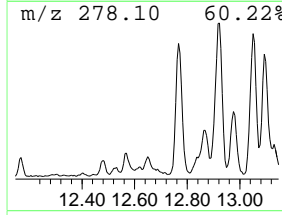
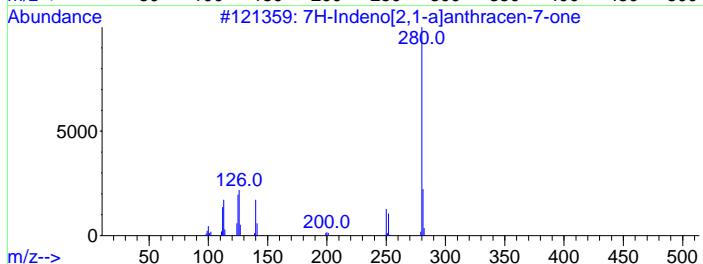
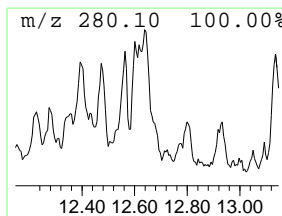
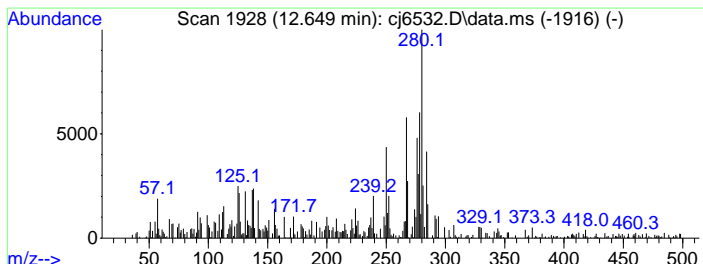
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 20 Unknown Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.649	5.22 ppm	361404	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			7H-Indeno[2,1-a]anthracen-7-one	280	C21H12O	027582-45-2	60
2			6-Benzo(a)pyrenecarboxaldehyde	280	C21H12O	013312-42-0	59
3			11H-Cyclopenta[a]phenanthren-17-...	280	C19H20O2	033760-56-4	35
4			3,5-Dibromosalicylaldehyde	278	C7H4Br2O2	000090-59-5	27
5			Estra-1,3,5,7,9-pentaen-17-one, ...	280	C19H20O2	003907-67-3	25



7.1.13  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6532.D  
 Acq On : 09 May 2024 10:22 pm  
 Operator : rocquans  
 Sample : jd87833-6  
 Misc : op54460,ecj297,30.9,,,1,1  
 ALS Vial : 23 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

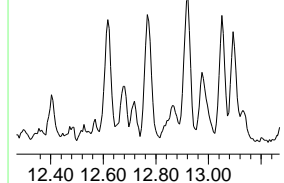
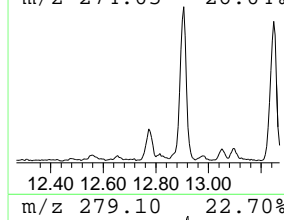
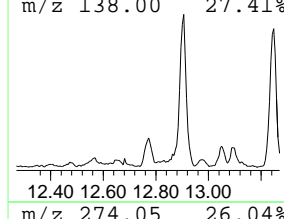
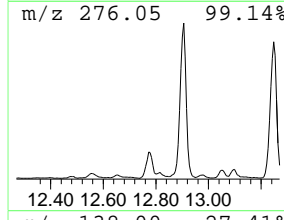
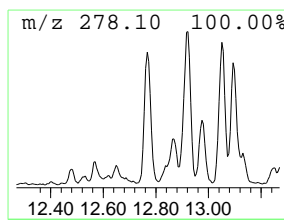
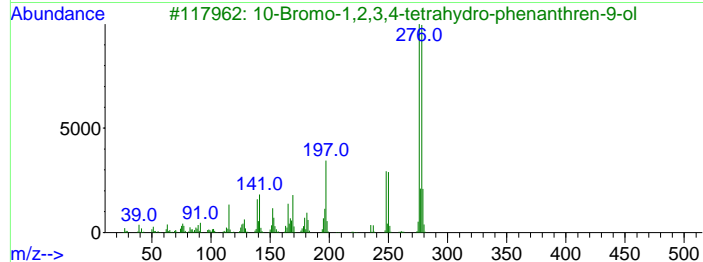
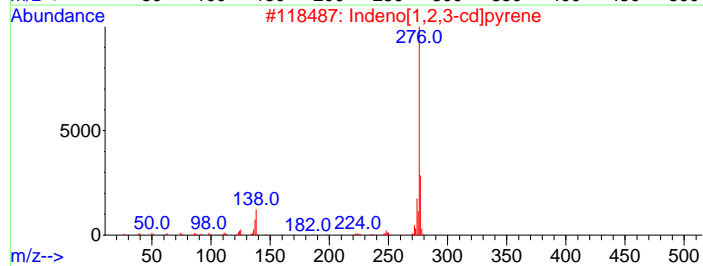
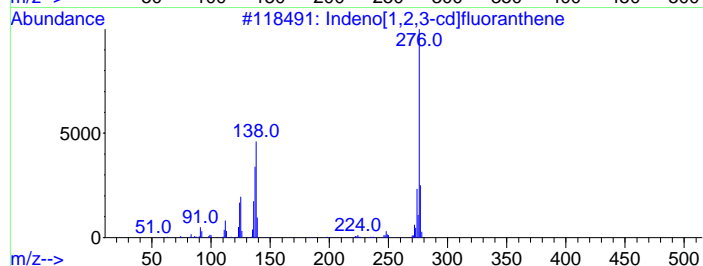
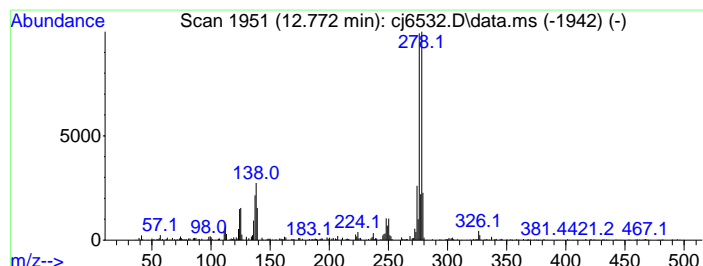
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 21 Unknown Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.772	10.97 ppm	759927	Perylene-d12	11.719

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Indeno[1,2,3-cd]fluoranthene	276	C22H12	000193-43-1	90
2		Indeno[1,2,3-cd]pyrene	276	C22H12	000193-39-5	70
3		10-Bromo-1,2,3,4-tetrahydro-phen...	276	C14H13BrO	1000190-54-9	68
4		Indeno[1,2,3-cd]pyrene	276	C22H12	000193-39-5	64
5		Dibenzo[def,mno]chrysene	276	C22H12	000191-26-4	50



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6532.D  
Acq On : 09 May 2024 10:22 pm  
Operator : rocquans  
Sample : jd87833-6  
Misc : op54460,ecj297,30.9,,,1,1  
ALS Vial : 23 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

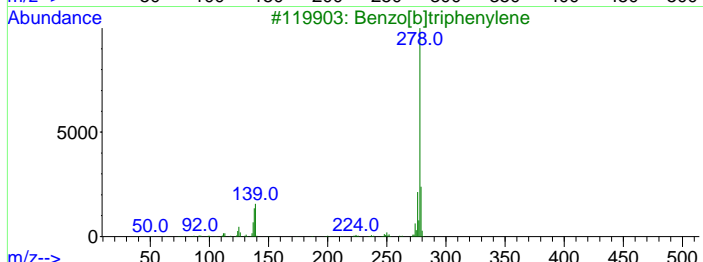
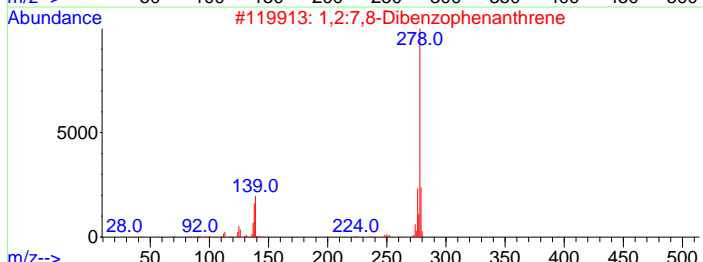
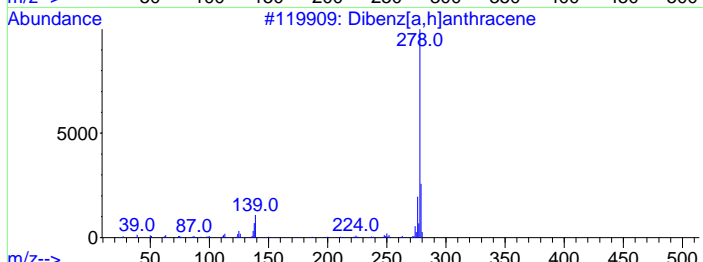
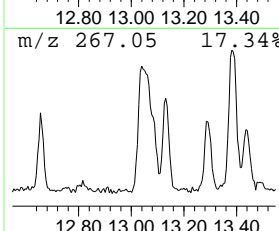
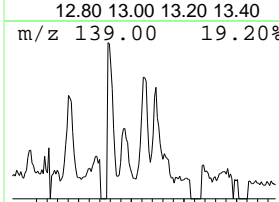
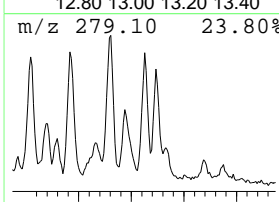
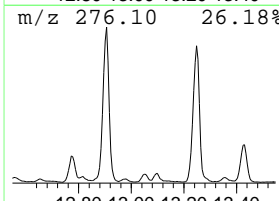
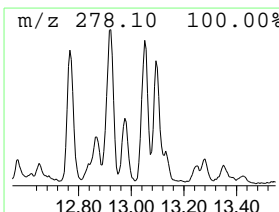
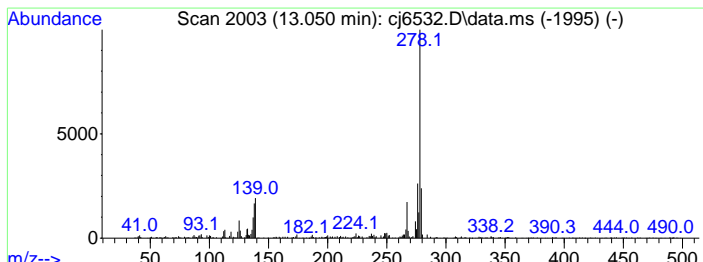
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 22 Unknown Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.050	6.56 ppm	454574	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Dibenz[a,h]anthracene	278	C22H14	000053-70-3	93
2			1,2:7,8-Dibenzophenanthrene	278	C22H14	000213-46-7	93
3			Benzo[b]triphenylene	278	C22H14	000215-58-7	93
4			Benzo[a]naphthacene	278	C22H14	000226-88-0	90
5			1,2:7,8-Dibenzophenanthrene	278	C22H14	000213-46-7	89



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6532.D  
 Acq On : 09 May 2024 10:22 pm  
 Operator : rocquans  
 Sample : jd87833-6  
 Misc : op54460,ecj297,30.9,,,1,1  
 ALS Vial : 23 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

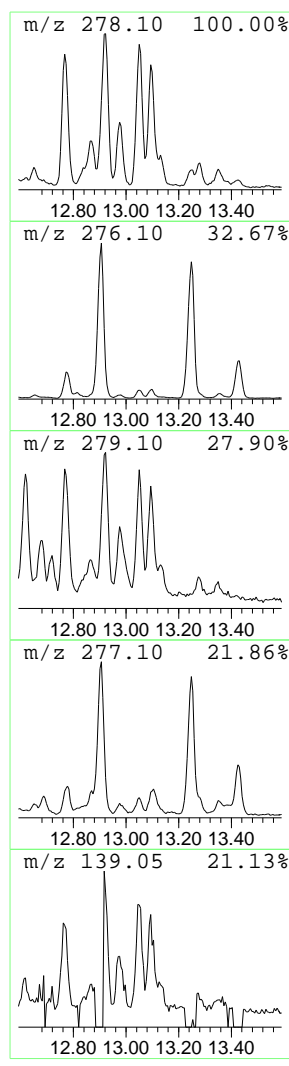
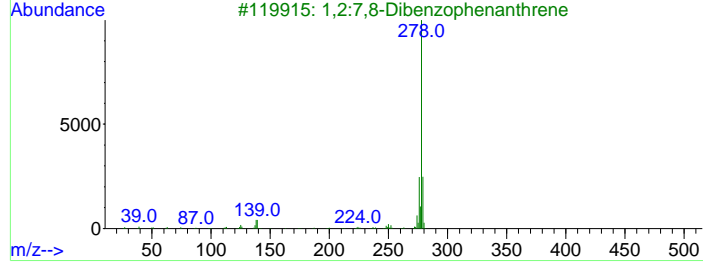
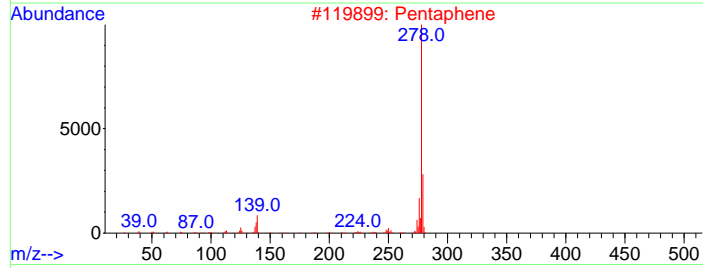
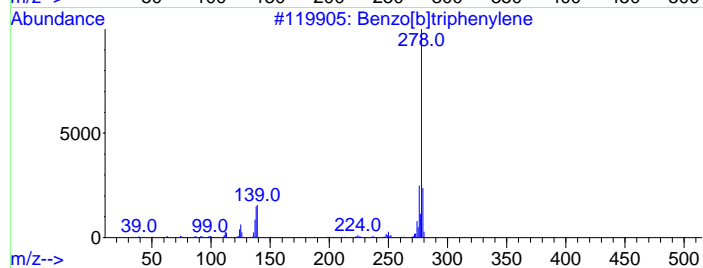
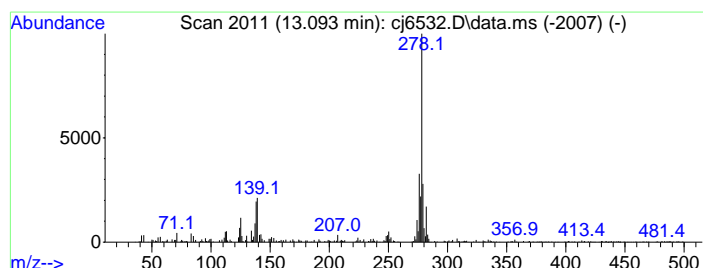
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 23 Unknown Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.093	7.54 ppm	522426	Perylene-d12	11.719

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Benzo[b]triphenylene	278	C22H14	000215-58-7	94
2		Pentaphene	278	C22H14	000222-93-5	91
3		1,2:7,8-Dibenzophenanthrene	278	C22H14	000213-46-7	89
4		Quinoxaline, 6-(3-nitrobenzylide...	278	C15H10N4O2	302800-55-1	86
5		Benzo[b]chrysene	278	C22H14	000214-17-5	86



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6532.D  
 Acq On : 09 May 2024 10:22 pm  
 Operator : rocquans  
 Sample : jd87833-6  
 Misc : op54460,ecj297,30.9,,,1,1  
 ALS Vial : 23 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

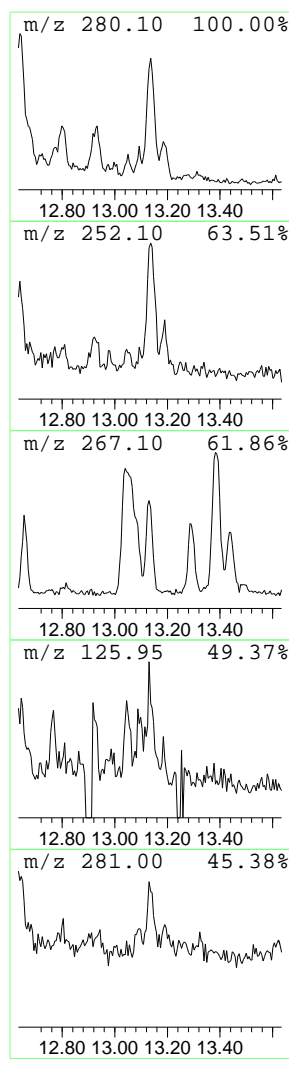
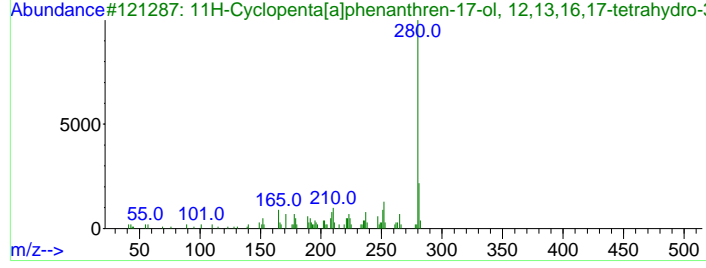
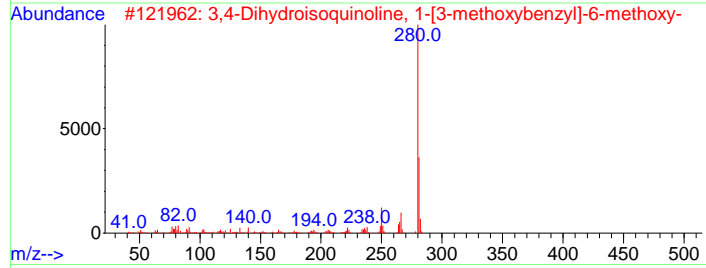
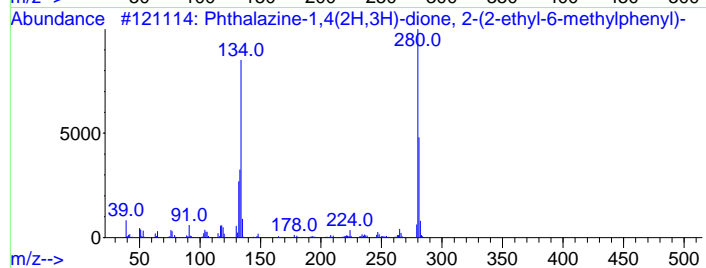
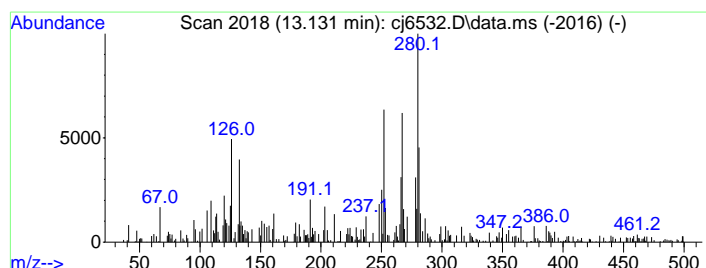
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 24 Unknown Concentration Rank 24

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.131	4.71 ppm	326066	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Phthalazine-1,4(2H,3H)-dione, 2-...	280	C17H16N2O2	298228-28-1	30
2			3,4-Dihydroisoquinoline, 1-[3-me...	281	C18H19NO2	1000126-16-1	27
3			11H-Cyclopenta[a]phenanthren-17-...	280	C19H20O2	033760-56-4	25
4			Pyrazolidinetrione, phenyl-, 4-(...	280	C15H12N4O2	021272-26-4	22
5			2,3-Dicyanodibenzo(f,h)quinoxaline	280	C18H8N4	055408-49-6	22



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6532.D  
Acq On : 09 May 2024 10:22 pm  
Operator : rocquans  
Sample : jd87833-6  
Misc : op54460,ecj297,30.9,,,1,1  
ALS Vial : 23 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

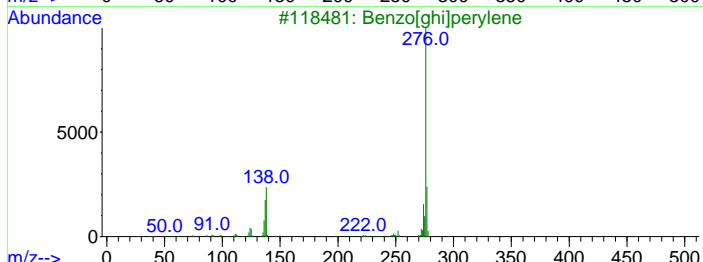
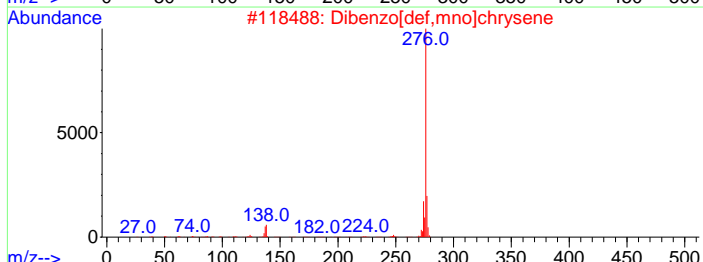
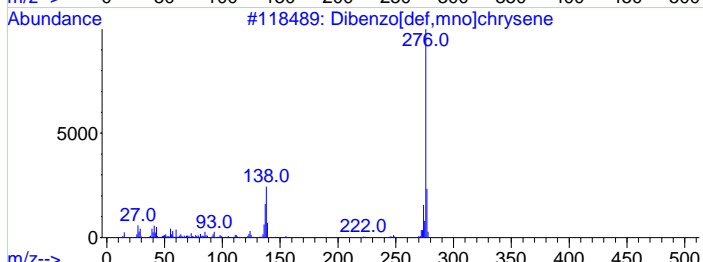
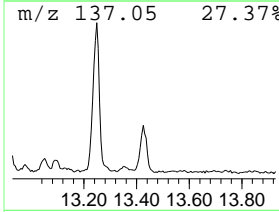
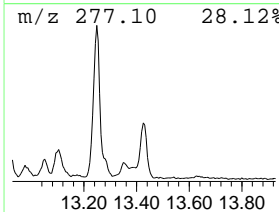
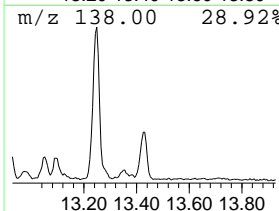
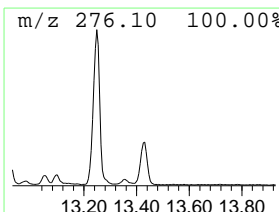
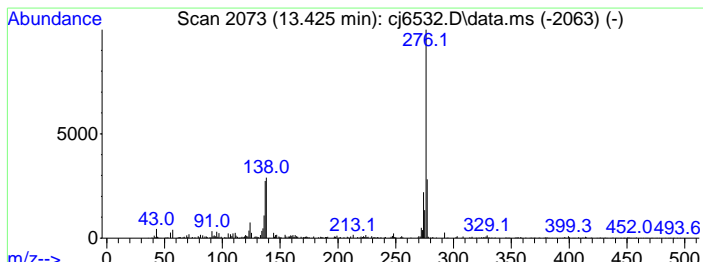
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 25 Unknown Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.425	10.16 ppm	704259	Perylene-d12	11.719

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Dibenzo[def,mno]chrysene	276	C22H12	000191-26-4	93
2		Dibenzo[def,mno]chrysene	276	C22H12	000191-26-4	91
3		Benzo[ghi]perylene	276	C22H12	000191-24-2	91
4		Benzo[ghi]perylene	276	C22H12	000191-24-2	91
5		Benzo[ghi]perylene	276	C22H12	000191-24-2	81



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Tentatively Identified Compound (LSC) summary

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6532.D  
 Acq On : 09 May 2024 10:22 pm  
 Operator : rocquans  
 Sample : jd87833-6  
 Misc : op54460,ecj297,30.9,,,1,1  
 ALS Vial : 23 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
Unknown ketone	4.246	10.3	ppm	545354	2	4.664	2117030	40.0
Unknown	4.487	6.0	ppm	316166	2	4.664	2117030	40.0
Anthracene, methyl	8.322	5.5	ppm	463845	8	7.873	3390310	40.0
Anthracene, methyl	8.344	6.0	ppm	511723	8	7.873	3390310	40.0
4H-Cyclopenta[d...]	8.424	15.3	ppm	1295010	8	7.873	3390310	40.0
Naphthalene, ph...	8.600	7.0	ppm	591716	8	7.873	3390310	40.0
Phenanthrene, d...	8.836	5.0	ppm	424902	8	7.873	3390310	40.0
Unknown	8.910	5.2	ppm	442972	8	7.873	3390310	40.0
Unknown	9.119	5.0	ppm	422919	8	7.873	3390310	40.0
Pyrene, methyl	9.515	8.0	ppm	1291140	9	10.371	6421960	40.0
Fluoranthene, m...	9.584	4.9	ppm	781225	9	10.371	6421960	40.0
Unknown	10.467	4.9	ppm	786315	10	10.371	6421960	40.0
Unknown	11.050	7.2	ppm	501058	11	11.719	2771570	40.0
Unknown	11.125	8.1	ppm	558604	11	11.719	2771570	40.0
Unknown	11.210	9.3	ppm	640690	11	11.719	2771570	40.0
Unknown PHA sub...	11.446	9.6	ppm	664997	11	11.719	2771570	40.0
Unknown	11.526	4.7	ppm	325824	11	11.719	2771570	40.0
Unknown PHA Sus...	11.612	26.3	ppm	1819140	11	11.719	2771570	40.0
Unknown	11.874	5.2	ppm	362363	11	11.719	2771570	40.0
Unknown	12.649	5.2	ppm	361404	11	11.719	2771570	40.0
Unknown	12.772	11.0	ppm	759927	11	11.719	2771570	40.0
Unknown	13.050	6.6	ppm	454574	11	11.719	2771570	40.0
Unknown	13.093	7.5	ppm	522426	11	11.719	2771570	40.0
Unknown	13.131	4.7	ppm	326066	11	11.719	2771570	40.0
Unknown	13.425	10.2	ppm	704259	11	11.719	2771570	40.0

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Quantitation Report (QT/LSC Reviewed)

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6539.D  
Acq On : 10 May 2024 12:35 am  
Operator : rocquans  
Sample : jd87833-7 Inst : GCMSCJ  
Misc : op54460,ecj297,30.7,,,1,1  
ALS Vial : 30 Sample Multiplier: 1

Quant Time: May 10 20:01:25 2024  
Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
QLast Update : Thu May 09 12:05:48 2024  
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.664	152	337378	40.00	ppm	0.00
24) Naphthalene-d8	5.472	136	1172941	40.00	ppm	0.00
46) Acenaphthene-d10	6.659	164	648873	40.00	ppm	0.00
69) Phenanthrene-d10	7.873	188	1146583	40.00	ppm	0.00
84) Chrysene-d12	10.371	240	810452	40.00	ppm	0.00
93) Perylene-d12	11.724	264	846065	40.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.664	152	337378	40.00	ppm	0.00
105) Phenanthrene-d10a	7.873	188	1146583	40.00	ppm	0.00
107) Naphthalene-d8a	5.472	136	1172941	40.00	ppm	0.00
109) Phenanthrene-d10b	7.873	188	1146583	40.00	ppm	0.00
112) Chrysene-d12a	10.371	240	810452	40.00	ppm	0.01
System Monitoring Compounds						
5) 2-Fluorophenol	3.813	112	317877	32.78	ppm	0.02
Spiked Amount 50.000			Recovery =	65.56%		
8) Phenol-d5	4.429	99	447808	35.80	ppm	0.01
Spiked Amount 50.000			Recovery =	71.60%		
25) Nitrobenzene-d5	5.012	82	431292	35.91	ppm	0.00
Spiked Amount 50.000			Recovery =	71.82%		
51) 2-Fluorobiphenyl	6.167	172	805482	39.45	ppm	0.00
Spiked Amount 50.000			Recovery =	78.90%		
74) 2,4,6-Tribromophenol	7.274	330	112010	44.56	ppm	0.00
Spiked Amount 50.000			Recovery =	89.12%		
87) Terphenyl-d14	9.355	244	794684	39.69	ppm	0.00
Spiked Amount 50.000			Recovery =	79.38%		
110) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						
						Qvalue
21) 3&4-Methylphenol	4.910	108	1426	0.1481	ppm	97
38) Naphthalene	5.482	128	30123	1.0721	ppm	99
44) 2-Methylnaphthalene	5.926	141	12361	0.7420	ppm	96
53) Biphenyl	6.236	154	7871	0.3530	ppm	98
56) Acenaphthylene	6.557	152	242867	9.6502	ppm	100
59) Acenaphthene	6.680	153	52121	2.9122	ppm	94
62) Dibenzofuran	6.814	168	46122	1.8570	ppm	92
66) Fluorene	7.082	166	91505	4.6638	ppm	97
78) Phenanthrene	7.895	178	814900	29.4085	ppm	99
79) Anthracene	7.937	178	384725	13.8661	ppm	96
80) Carbazole	8.076	167	52401	2.0268	ppm	98
82) Fluoranthene	8.986	202	2008227	66.9434	ppm	98
86) Pyrene	9.200	202	2038078	73.9445	ppm	99
89) Benzo[a]anthracene	10.360	228	1008398	38.6981	ppm	95
91) Chrysene	10.392	228	840136	34.9447	ppm	97
95) Benzo[b]fluoranthene	11.361	252	1170676m	45.8038	ppm	
96) Benzo[k]fluoranthene	11.377	252	388551m	16.8947	ppm	
97) Benzo[a]pyrene	11.671	252	925718	43.7528	ppm	100
98) Indeno[1,2,3-cd]pyrene	12.906	276	588878	23.0227	ppm	99
100) Dibenz[a,h]anthracene	12.922	278	149257	7.3030	ppm	91
102) Benzo[g,h,i]perylene	13.254	276	556595	28.0019	ppm	97
108) Caprolactam	5.728	55	1445	0.2900	ppm	81
-----						

(#) = qualifier out of range (m) = manual integration (+) = signals summed

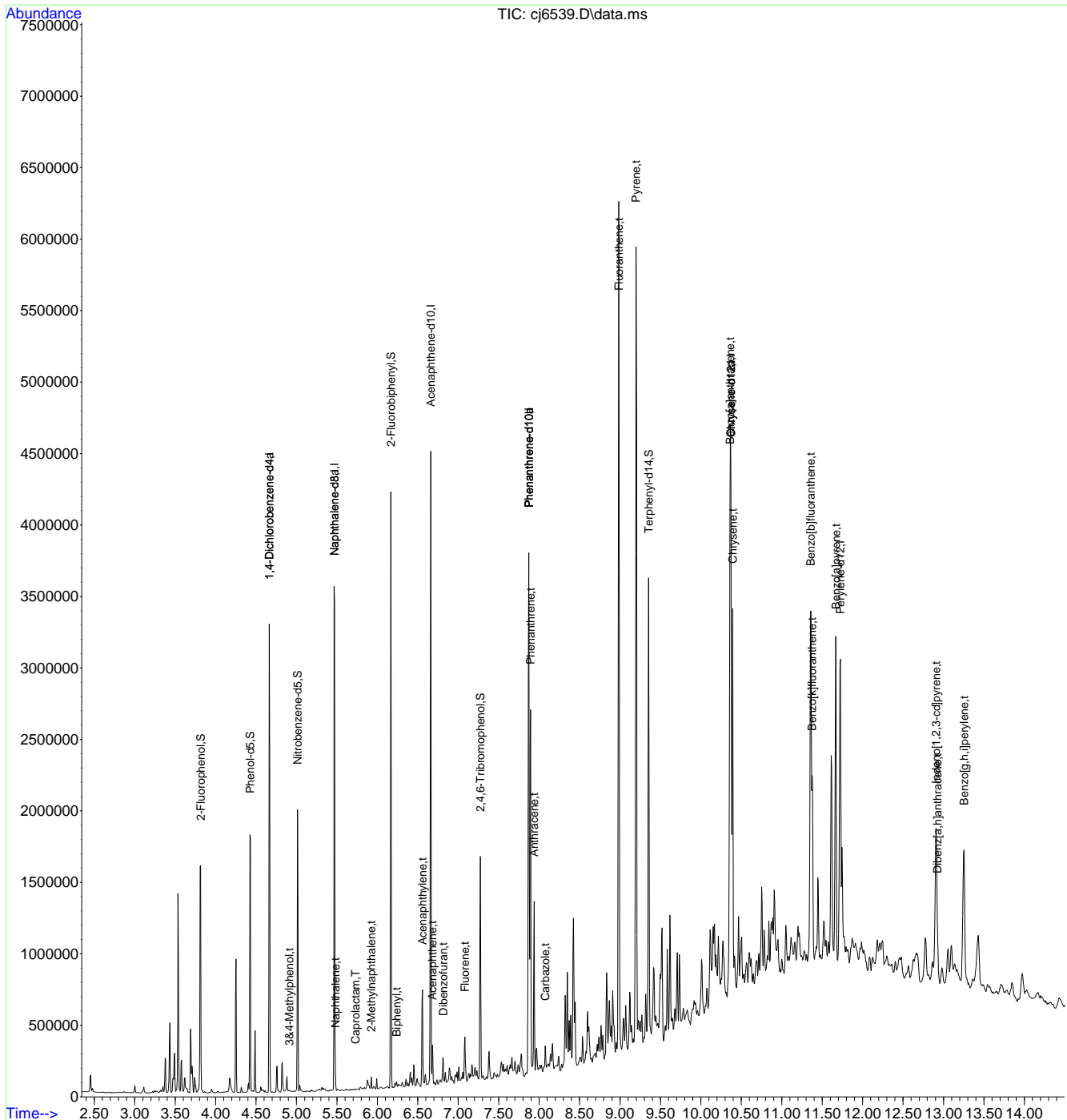


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Quantitation Report (QT/LSC Reviewed)

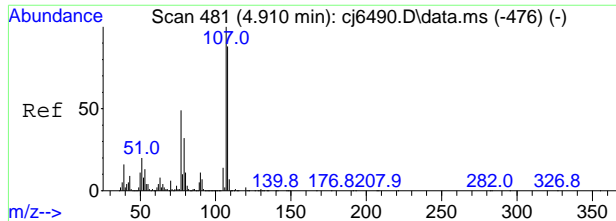
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Data File : cj6539.D  
Acq On : 10 May 2024 12:35 am  
Operator : rocquans  
Sample : jd87833-7 Inst : GCMS CJ  
Misc : op54460,ecj297,30.7,,,1,1  
ALS Vial : 30 Sample Multiplier: 1

Quant Time: May 10 20:01:25 2024  
Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
QLast Update : Thu May 09 12:05:48 2024  
Response via : Initial Calibration



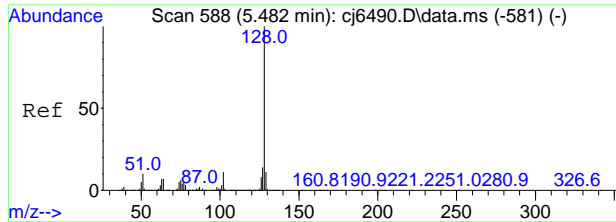
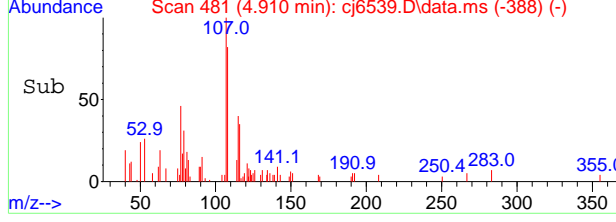
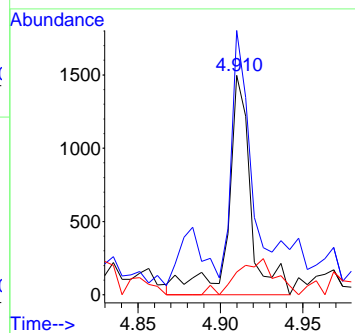
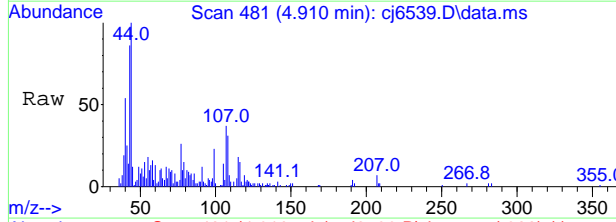
7.1.14  
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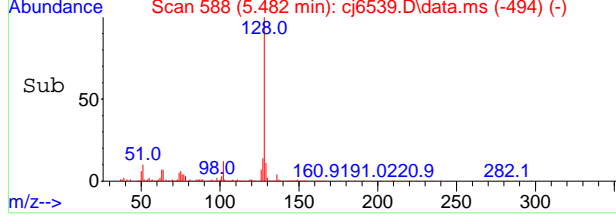
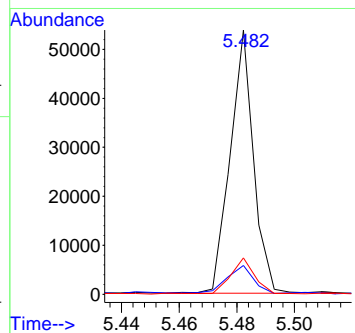
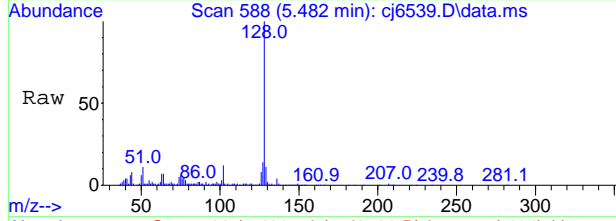
#21  
 3&4-Methylphenol  
 Concen: 0.1481 ppm  
 RT: 4.910 min Scan# 481  
 Delta R.T. -0.000 min  
 Lab File: cj6539.D  
 Acq: 10 May 2024 12:35 am

Tgt Ion	Ratio	Lower	Upper
108	100		
107	110.8	83.2	143.2
90	8.6	0.0	42.4

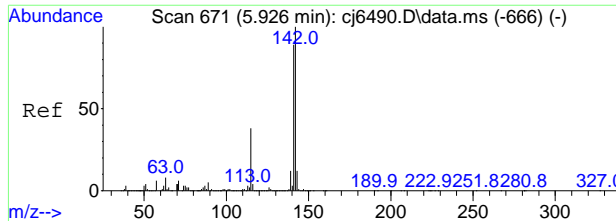


#38  
 Naphthalene  
 Concen: 1.0721 ppm  
 RT: 5.482 min Scan# 588  
 Delta R.T. 0.000 min  
 Lab File: cj6539.D  
 Acq: 10 May 2024 12:35 am

Tgt Ion	Ratio	Lower	Upper
128	100		
129	10.4	0.0	41.4
127	13.5	0.0	43.3

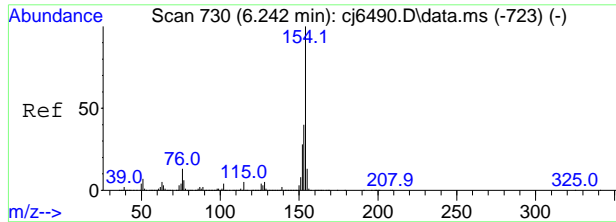
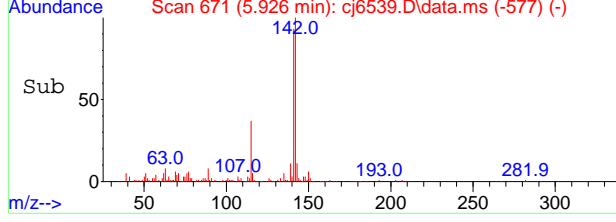
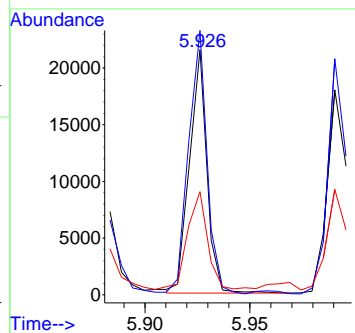
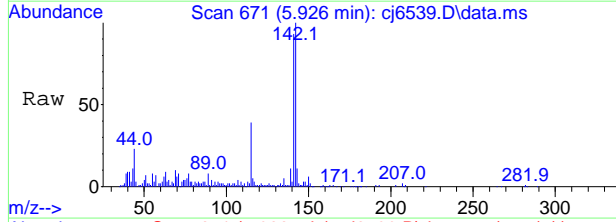


7.1.14  
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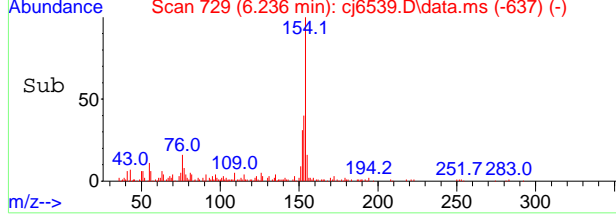
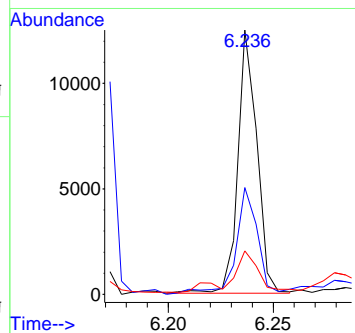
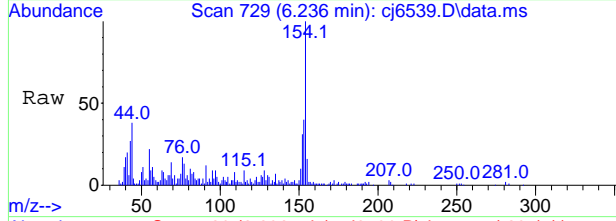
#44  
 2-Methylnaphthalene  
 Concen: 0.7420 ppm  
 RT: 5.926 min Scan# 671  
 Delta R.T. 0.000 min  
 Lab File: cj6539.D  
 Acq: 10 May 2024 12:35 am

Tgt Ion	Ratio	Lower	Upper
141	100		
142	109.0	82.7	142.7
115	38.5	12.4	72.4



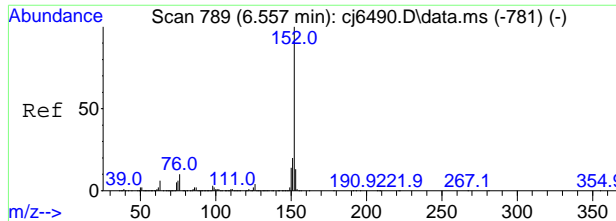
#53  
 Biphenyl  
 Concen: 0.3530 ppm  
 RT: 6.236 min Scan# 729  
 Delta R.T. -0.006 min  
 Lab File: cj6539.D  
 Acq: 10 May 2024 12:35 am

Tgt Ion	Ratio	Lower	Upper
154	100		
153	39.8	10.5	70.5
155	15.1	0.0	42.8



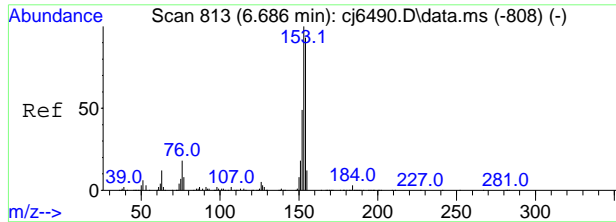
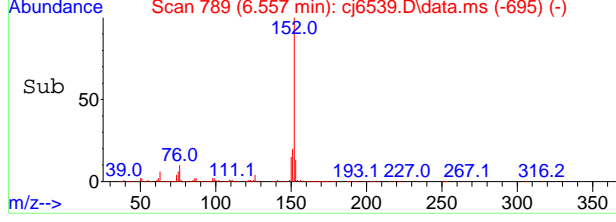
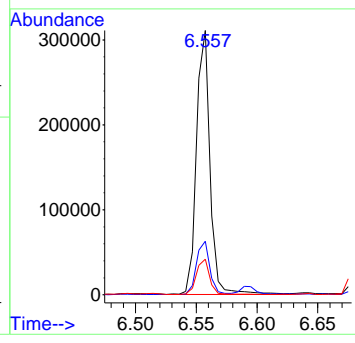
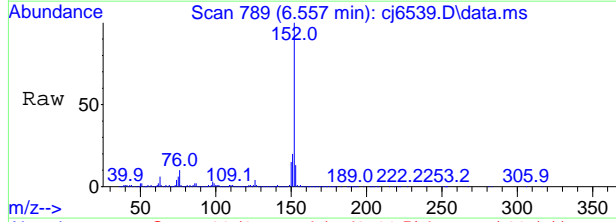
7.1.14  
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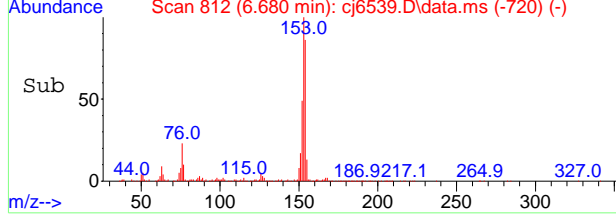
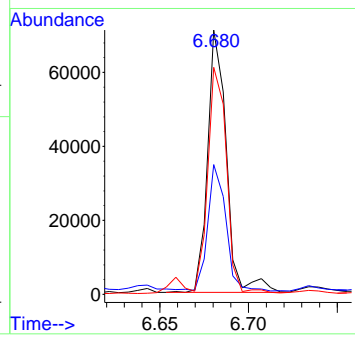
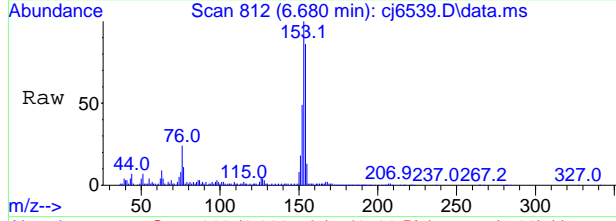
#56  
Acenaphthylene  
Concen: 9.6502 ppm  
RT: 6.557 min Scan# 789  
Delta R.T. 0.000 min  
Lab File: cj6539.D  
Acq: 10 May 2024 12:35 am

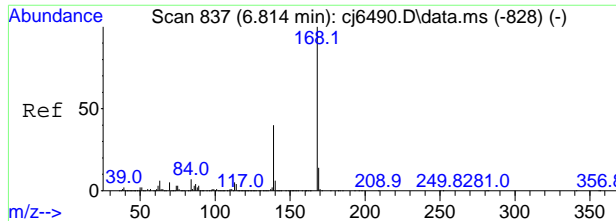
Tgt Ion	Ratio	Lower	Upper
152	100		
151	20.1	0.0	50.3
153	13.3	0.0	43.4



#59  
Acenaphthene  
Concen: 2.9122 ppm  
RT: 6.680 min Scan# 812  
Delta R.T. -0.006 min  
Lab File: cj6539.D  
Acq: 10 May 2024 12:35 am

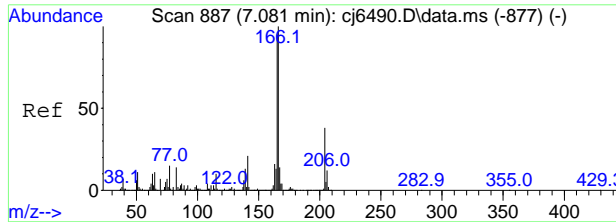
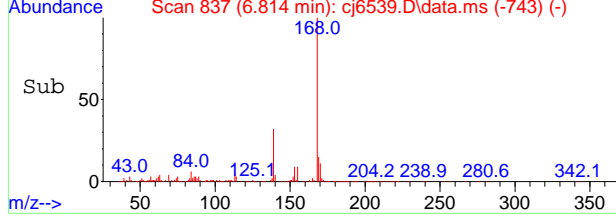
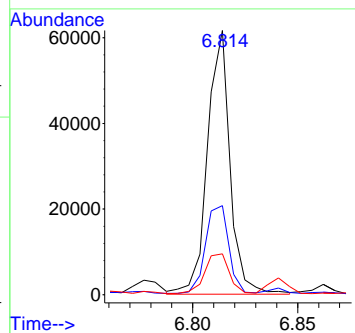
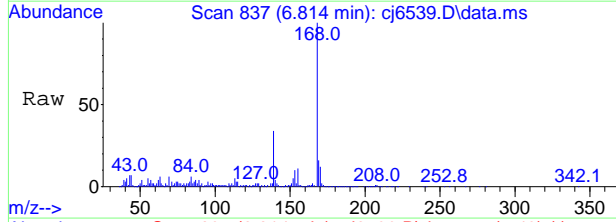
Tgt Ion	Ratio	Lower	Upper
153	100		
152	47.8	18.8	78.8
154	84.8	62.9	122.9





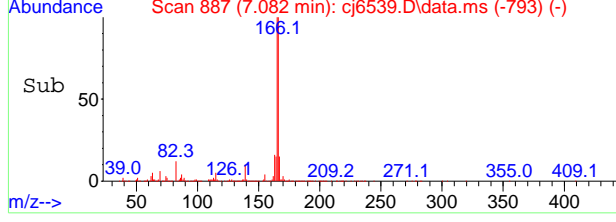
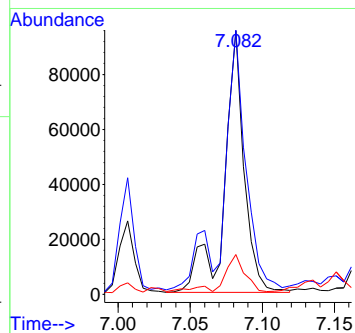
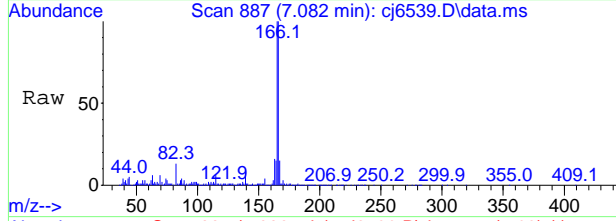
#62  
 Dibenzofuran  
 Concen: 1.8570 ppm  
 RT: 6.814 min Scan# 837  
 Delta R.T. 0.000 min  
 Lab File: cj6539.D  
 Acq: 10 May 2024 12:35 am

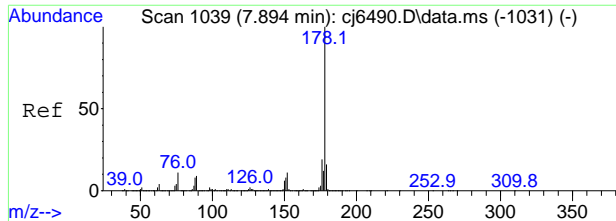
Tgt Ion	Ratio	Lower	Upper
168	100		
139	33.5	10.0	70.0
169	13.9	0.0	43.7



#66  
 Fluorene  
 Concen: 4.6638 ppm  
 RT: 7.082 min Scan# 887  
 Delta R.T. 0.001 min  
 Lab File: cj6539.D  
 Acq: 10 May 2024 12:35 am

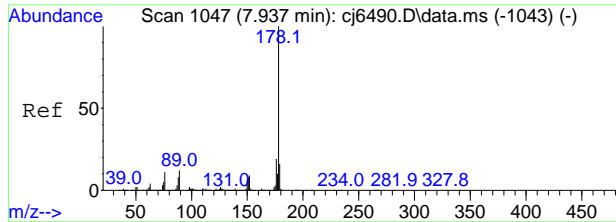
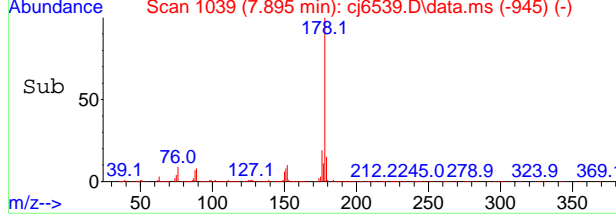
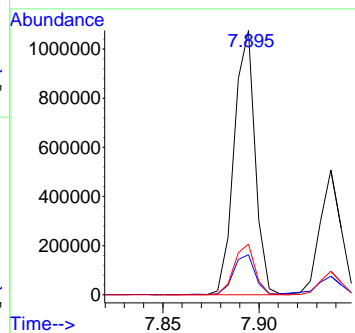
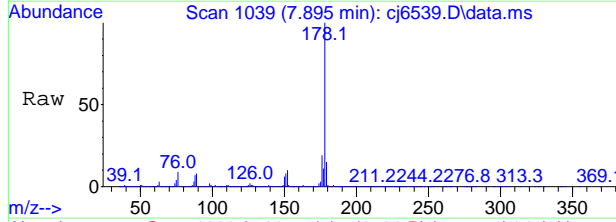
Tgt Ion	Ratio	Lower	Upper
166	100		
165	99.0	65.4	125.4
167	13.4	0.0	43.8





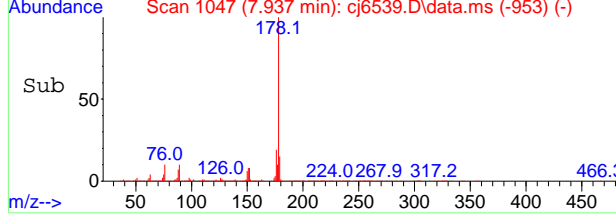
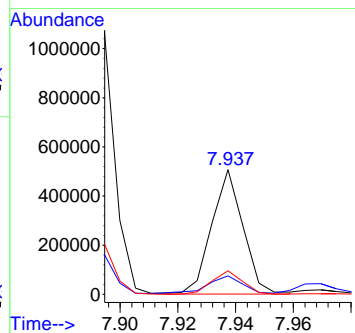
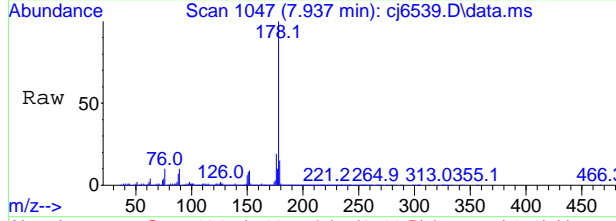
#78  
Phenanthrene  
Concen: 29.4085 ppm  
RT: 7.895 min Scan# 1039  
Delta R.T. 0.001 min  
Lab File: cj6539.D  
Acq: 10 May 2024 12:35 am

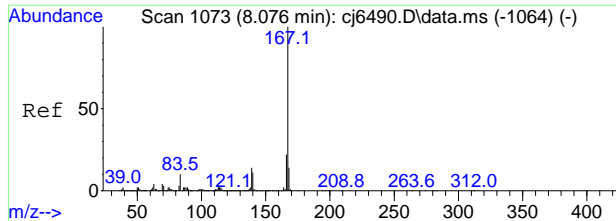
Tgt Ion	Ratio	Lower	Upper
178	100		
179	14.8	0.0	45.5
176	19.1	0.0	49.2



#79  
Anthracene  
Concen: 13.8661 ppm  
RT: 7.937 min Scan# 1047  
Delta R.T. 0.000 min  
Lab File: cj6539.D  
Acq: 10 May 2024 12:35 am

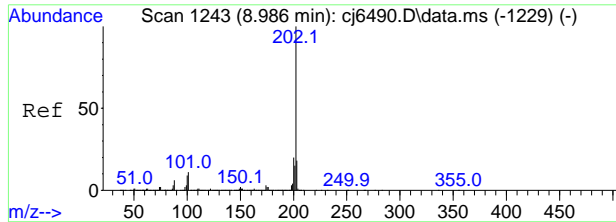
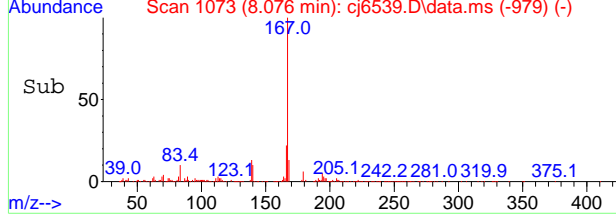
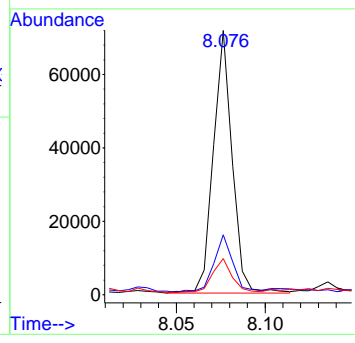
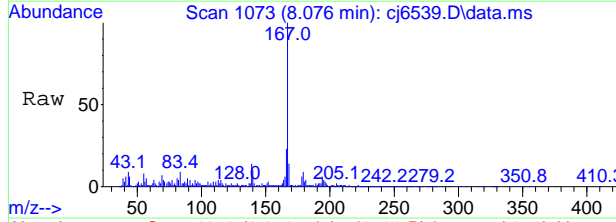
Tgt Ion	Ratio	Lower	Upper
178	100		
179	12.9	0.0	46.1
176	19.0	0.0	48.7





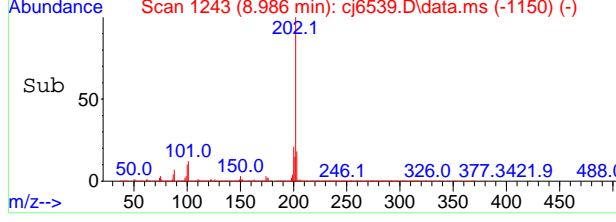
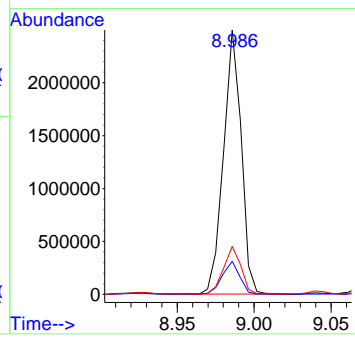
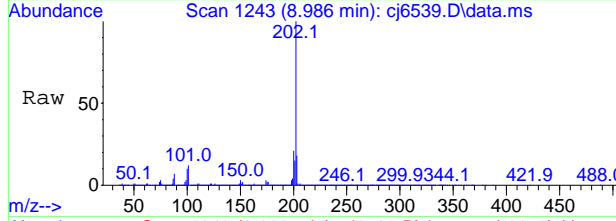
#80  
 Carbazole  
 Concen: 2.0268 ppm  
 RT: 8.076 min Scan# 1073  
 Delta R.T. 0.000 min  
 Lab File: cj6539.D  
 Acq: 10 May 2024 12:35 am

Tgt Ion	Ratio	Lower	Upper
167	100		
166	21.1	0.0	51.7
139	12.3	0.0	43.8

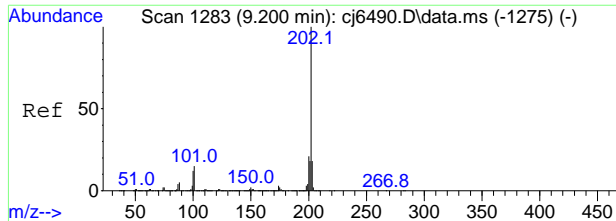


#82  
 Fluoranthene  
 Concen: 66.9434 ppm  
 RT: 8.986 min Scan# 1243  
 Delta R.T. -0.000 min  
 Lab File: cj6539.D  
 Acq: 10 May 2024 12:35 am

Tgt Ion	Ratio	Lower	Upper
202	100		
101	12.4	0.0	41.4
203	18.0	0.0	47.6



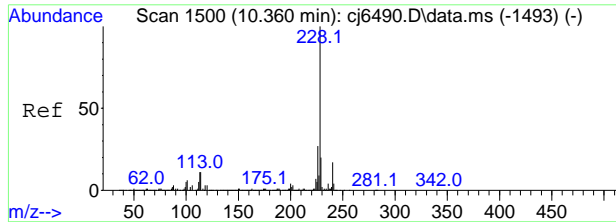
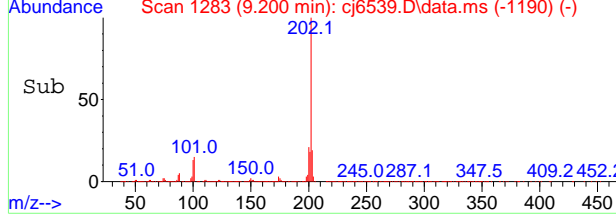
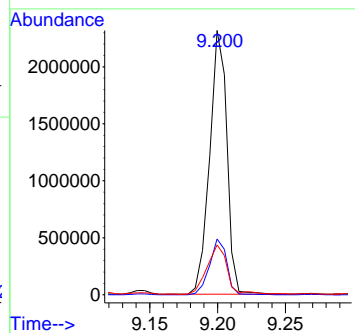
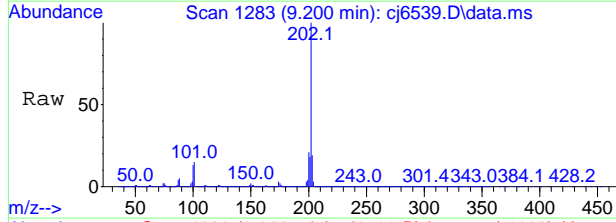




#86  
 Pyrene  
 Concen: 73.9445 ppm  
 RT: 9.200 min Scan# 1283  
 Delta R.T. -0.000 min  
 Lab File: cj6539.D  
 Acq: 10 May 2024 12:35 am

Tgt Ion: 202 Resp: 2038078

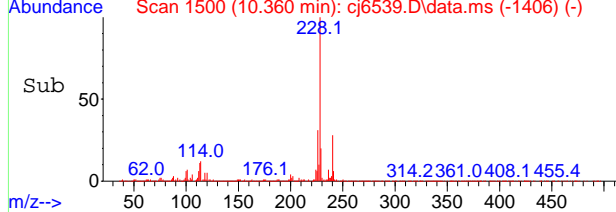
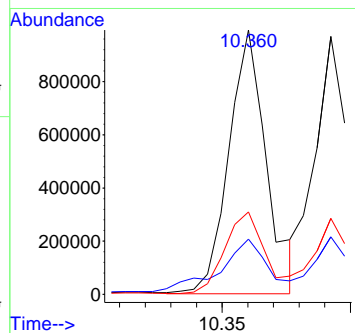
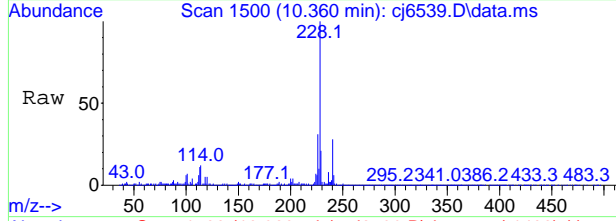
Ion	Ratio	Lower	Upper
202	100		
200	21.1	0.0	51.4
203	18.7	0.0	47.8

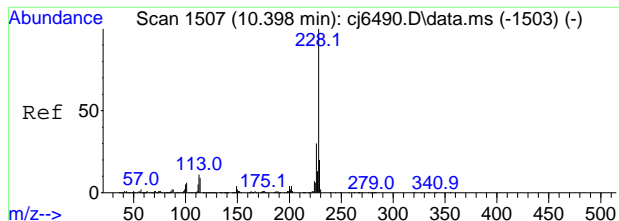


#89  
 Benzo[a]anthracene  
 Concen: 38.6981 ppm  
 RT: 10.360 min Scan# 1500  
 Delta R.T. 0.000 min  
 Lab File: cj6539.D  
 Acq: 10 May 2024 12:35 am

Tgt Ion: 228 Resp: 1008398

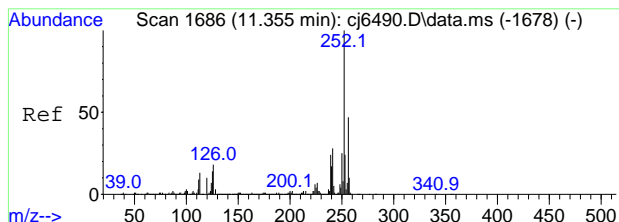
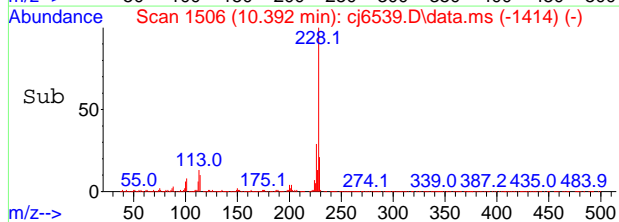
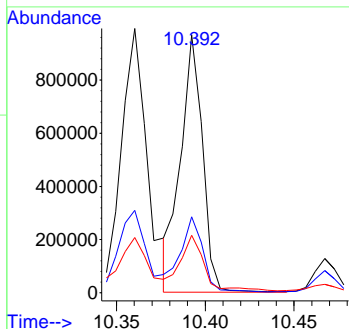
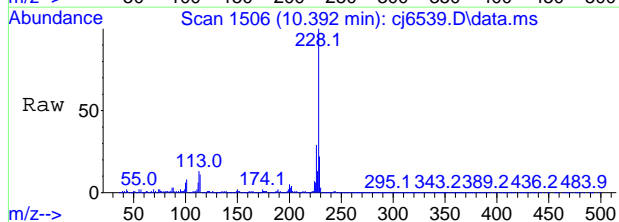
Ion	Ratio	Lower	Upper
228	100		
229	19.3	0.0	49.8
226	30.9	0.0	57.1





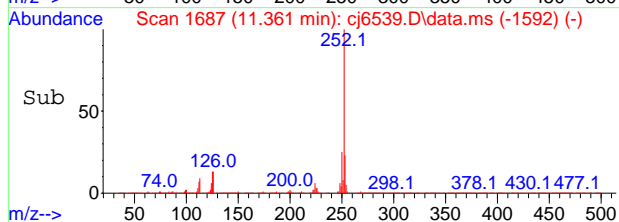
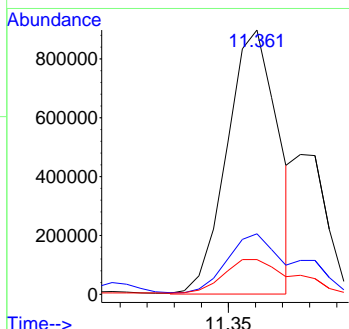
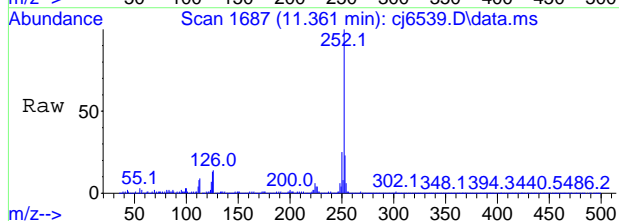
#91  
 Chrysene  
 Concen: 34.9447 ppm  
 RT: 10.392 min Scan# 1506  
 Delta R.T. -0.006 min  
 Lab File: cj6539.D  
 Acq: 10 May 2024 12:35 am

Tgt Ion:	228	Resp:	840136
Ion Ratio	100	Lower	Upper
226	28.8	0.0	59.9
229	21.6	0.0	49.8

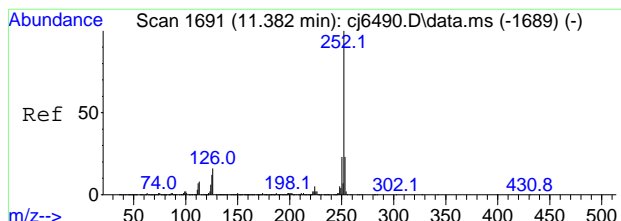


#95  
 Benzo[b]fluoranthene  
 Concen: 45.8038 ppm m  
 RT: 11.361 min Scan# 1687  
 Delta R.T. 0.006 min  
 Lab File: cj6539.D  
 Acq: 10 May 2024 12:35 am

Tgt Ion:	252	Resp:	1170676
Ion Ratio	100	Lower	Upper
253	22.9	0.0	54.7
125	13.2	0.0	44.2

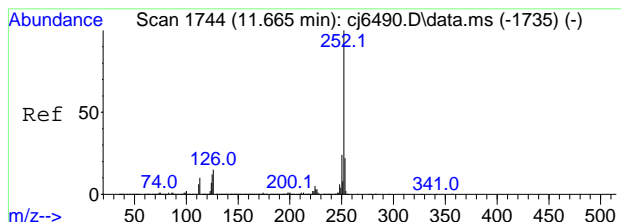
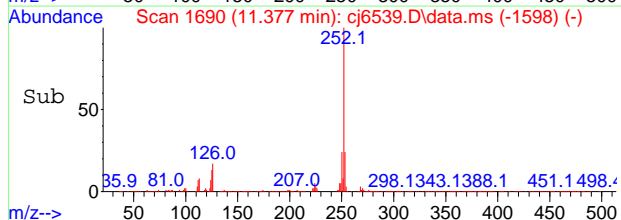
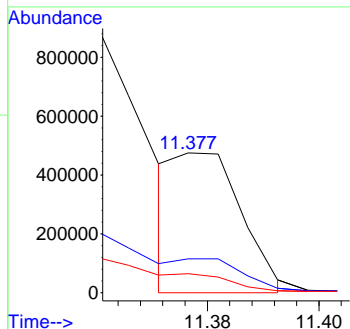
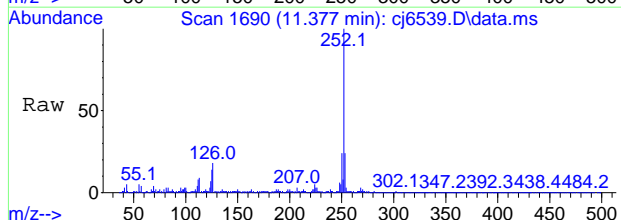


7.1.14  
7



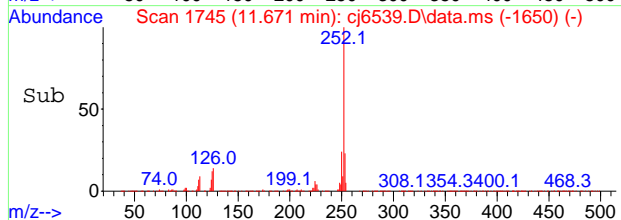
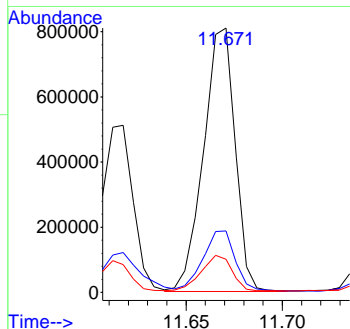
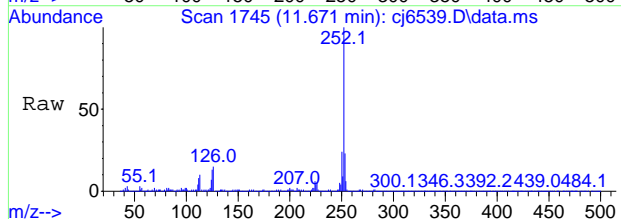
#96  
 Benzo[k]fluoranthene  
 Concen: 16.8947 ppm m  
 RT: 11.377 min Scan# 1690  
 Delta R.T. -0.005 min  
 Lab File: cj6539.D  
 Acq: 10 May 2024 12:35 am

Tgt Ion	Ratio	Lower	Upper
252	100		
253	24.2	0.0	52.6
125	13.7	0.0	42.4

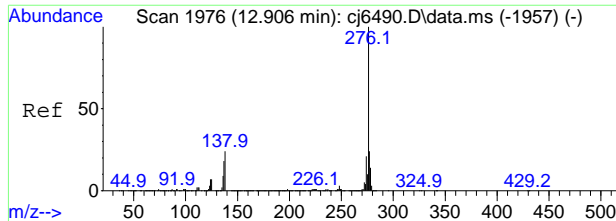


#97  
 Benzo[a]pyrene  
 Concen: 43.7528 ppm  
 RT: 11.671 min Scan# 1745  
 Delta R.T. 0.006 min  
 Lab File: cj6539.D  
 Acq: 10 May 2024 12:35 am

Tgt Ion	Ratio	Lower	Upper
252	100		
253	22.1	0.0	51.9
125	12.0	0.0	42.1

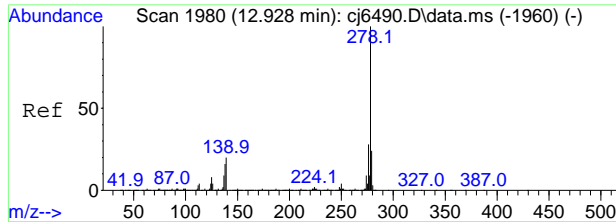
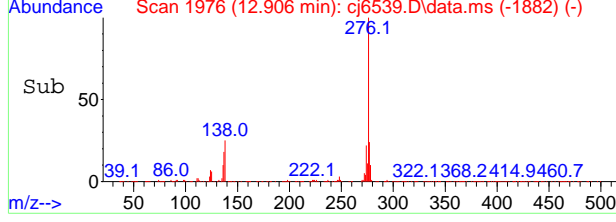
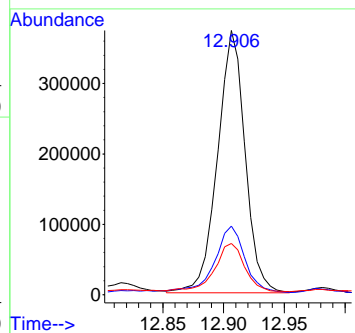
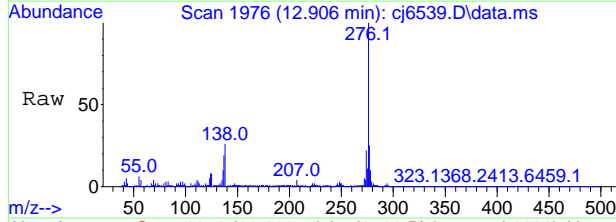


7.1.14  
7



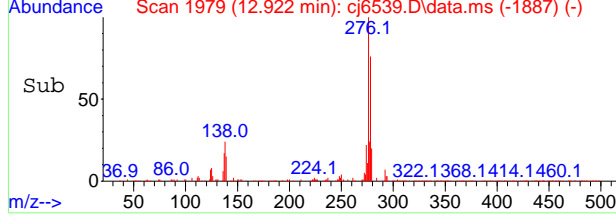
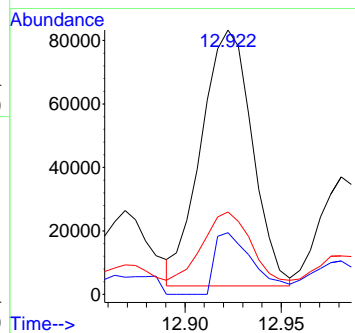
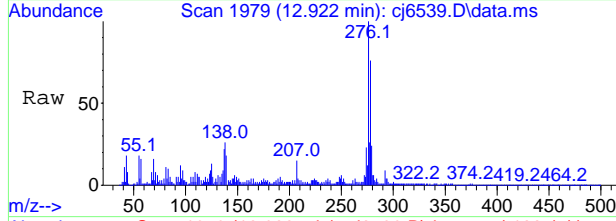
#98  
 Indeno[1,2,3-cd]pyrene  
 Concen: 23.0227 ppm  
 RT: 12.906 min Scan# 1976  
 Delta R.T. 0.000 min  
 Lab File: cj6539.D  
 Acq: 10 May 2024 12:35 am

Tgt Ion	Ratio	Lower	Upper
276	100		
138	25.2	0.0	54.2
137	18.2	0.0	47.9

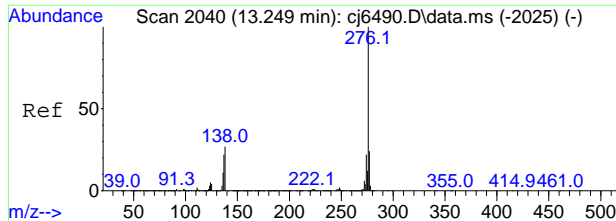


#100  
 Dibenz[a,h]anthracene  
 Concen: 7.3030 ppm  
 RT: 12.922 min Scan# 1979  
 Delta R.T. -0.006 min  
 Lab File: cj6539.D  
 Acq: 10 May 2024 12:35 am

Tgt Ion	Ratio	Lower	Upper
278	100		
139	23.7	0.0	49.8
279	28.6	0.0	54.1

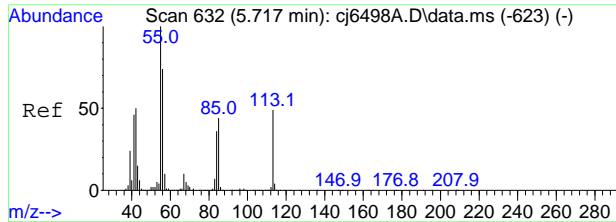
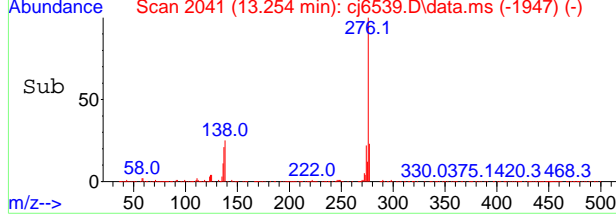
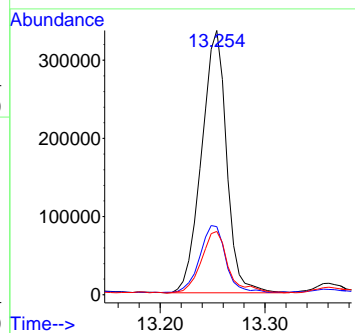
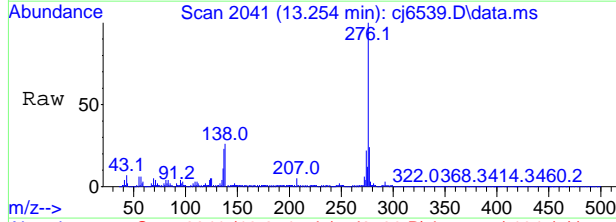


7.1.14  
7



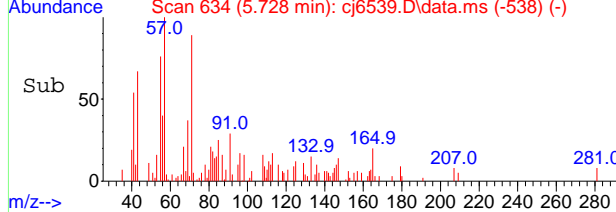
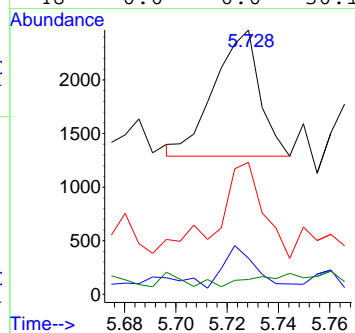
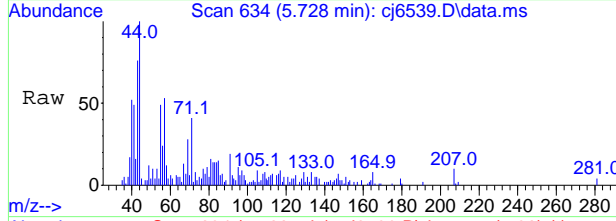
#102  
 Benzo[g,h,i]perylene  
 Concen: 28.0019 ppm  
 RT: 13.254 min Scan# 2041  
 Delta R.T. 0.005 min  
 Lab File: cj6539.D  
 Acq: 10 May 2024 12:35 am

Tgt Ion	Ratio	Lower	Upper
276	100		
138	25.0	0.0	56.7
277	23.3	0.0	54.1



#108  
 Caprolactam  
 Concen: 0.2900 ppm  
 RT: 5.728 min Scan# 634  
 Delta R.T. 0.011 min  
 Lab File: cj6539.D  
 Acq: 10 May 2024 12:35 am

Tgt Ion	Ratio	Lower	Upper
55	100		
113	18.8	18.8	78.8
56	72.2	43.8	103.8
48	0.0	0.0	30.1



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 7



LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6539.D  
Acq On : 10 May 2024 12:35 am  
Operator : rocquans  
Sample : jd87833-7  
Misc : op54460,ecj297,30.7,,,1,1  
ALS Vial : 30 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON Filtering: 5  
Sampling : 1 Min Area: 1000 Area counts  
Start Thrs: 0.02 Max Peaks: 100  
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS, zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

Signal : TIC: cj6539.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.172	332	343	353	rVB	102815	152040	2.61%	0.176%
2	4.252	353	358	363	rVB	936210	616271	10.58%	0.714%
3	4.423	381	390	396	rBV	1802412	1366378	23.46%	1.583%
4	4.487	399	402	408	rVB	432476	243391	4.18%	0.282%
5	4.664	430	435	440	rBV	3276984	2046716	35.15%	2.371%
6	4.760	446	453	460	rBV	184954	153062	2.63%	0.177%
7	4.824	460	465	470	rBV2	209177	180228	3.09%	0.209%
8	5.012	495	500	504	rBV	1972357	1222714	21.00%	1.416%
9	5.466	577	585	591	rBV	3528281	2586705	44.42%	2.996%
10	6.167	712	716	720	rBV	4173141	2413016	41.44%	2.795%
11	6.557	784	789	793	rBV	679006	556951	9.56%	0.645%
12	6.659	800	808	811	rBV	4430252	2881004	49.47%	3.337%
13	6.680	811	812	819	rVB	281189	188969	3.25%	0.219%
14	6.809	832	836	839	rBV	173757	150424	2.58%	0.174%
15	7.082	884	887	892	rVB	311592	279851	4.81%	0.324%
16	7.274	919	923	927	rBV	1558538	1156724	19.86%	1.340%
17	7.381	939	943	950	rVB3	195317	191890	3.30%	0.222%
18	7.777	1013	1017	1025	rVB2	158087	247037	4.24%	0.286%
19	7.873	1030	1035	1037	rBV	3644249	3070809	52.73%	3.557%
20	7.895	1037	1039	1042	rVB	2500354	1737707	29.84%	2.013%
21	7.937	1042	1047	1050	rVB	1182605	887436	15.24%	1.028%
22	7.969	1050	1053	1057	rBV3	155590	157325	2.70%	0.182%
23	8.076	1067	1073	1076	rBV2	182394	196832	3.38%	0.228%
24	8.167	1086	1090	1093	rVB3	177271	189306	3.25%	0.219%
25	8.322	1113	1119	1121	rBV	506395	454109	7.80%	0.526%
26	8.349	1121	1124	1126	rVB	558661	373401	6.41%	0.432%
27	8.392	1130	1132	1134	rVB	302347	199098	3.42%	0.231%
28	8.424	1134	1138	1146	rVB2	1031314	1322505	22.71%	1.532%
29	8.601	1163	1171	1182	rBV4	356569	677679	11.64%	0.785%
30	8.836	1209	1215	1218	rBV	607237	652129	11.20%	0.755%
31	8.868	1218	1221	1224	rBV	300478	278971	4.79%	0.323%
32	8.911	1227	1229	1235	rVB3	429485	488587	8.39%	0.566%
33	8.986	1235	1243	1249	rBV	5953583	4873639	83.69%	5.645%
34	9.039	1249	1253	1256	rBV3	218788	248275	4.26%	0.288%
35	9.071	1256	1259	1264	rVB	307879	271831	4.67%	0.315%
36	9.119	1264	1268	1275	rBV5	402262	594136	10.20%	0.688%
37	9.200	1275	1283	1287	rBV	5568491	5344056	91.77%	6.189%
38	9.269	1294	1296	1299	rVB2	196804	158503	2.72%	0.184%
39	9.317	1299	1305	1307	rBV	342574	316116	5.43%	0.366%
40	9.355	1307	1312	1318	rVB	3194504	2627383	45.12%	3.043%



7.1.15  
7

LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6539.D  
Acq On : 10 May 2024 12:35 am  
Operator : rocquans  
Sample : jd87833-7  
Misc : op54460,ecj297,30.7,,,1,1  
ALS Vial : 30 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON  
Sampling : 1  
Start Thrs: 0.02  
Stop Thrs : 0  
Filtering: 5  
Min Area: 1000 Area counts  
Max Peaks: 100  
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS, zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

Table with 10 columns: Retention Time, Peak Number, Area, Abundance, and Percent. Contains 85 rows of peak data.



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7

LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6539.D  
Acq On : 10 May 2024 12:35 am  
Operator : rocquans  
Sample : jd87833-7  
Misc : op54460,ecj297,30.7,,,1,1  
ALS Vial : 30 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON Filtering: 5  
Sampling : 1 Min Area: 1000 Area counts  
Start Thrs: 0.02 Max Peaks: 100  
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

86	12.297	1857	1862	1871	rVB5	74649	154116	2.65%	0.178%
87	12.628	1917	1924	1926	rVV4	121998	222828	3.83%	0.258%
88	12.666	1926	1931	1942	rVB9	206948	591054	10.15%	0.685%
89	12.773	1943	1951	1962	rBV3	303995	654321	11.24%	0.758%
90	12.864	1963	1968	1970	rBV4	122072	170846	2.93%	0.198%
91	12.906	1970	1976	1985	rVB2	1087761	1946828	33.43%	2.255%
92	12.981	1985	1990	1997	rBV	111743	173118	2.97%	0.201%
93	13.056	1997	2004	2007	rBV	243800	407537	7.00%	0.472%
94	13.099	2007	2012	2016	rVV3	186410	253249	4.35%	0.293%
95	13.254	2034	2041	2055	rVB	966395	1760675	30.23%	2.039%
96	13.430	2064	2074	2083	rVB	356819	864092	14.84%	1.001%
97	13.709	2120	2126	2136	rBV	70921	184703	3.17%	0.214%
98	13.848	2146	2152	2163	rVB4	132135	339731	5.83%	0.393%
99	13.976	2165	2176	2181	rBV5	196288	480828	8.26%	0.557%
100	14.425	2253	2260	2269	rBV5	71237	228073	3.92%	0.264%

Sum of corrected areas: 86340858

7.1.15  
7

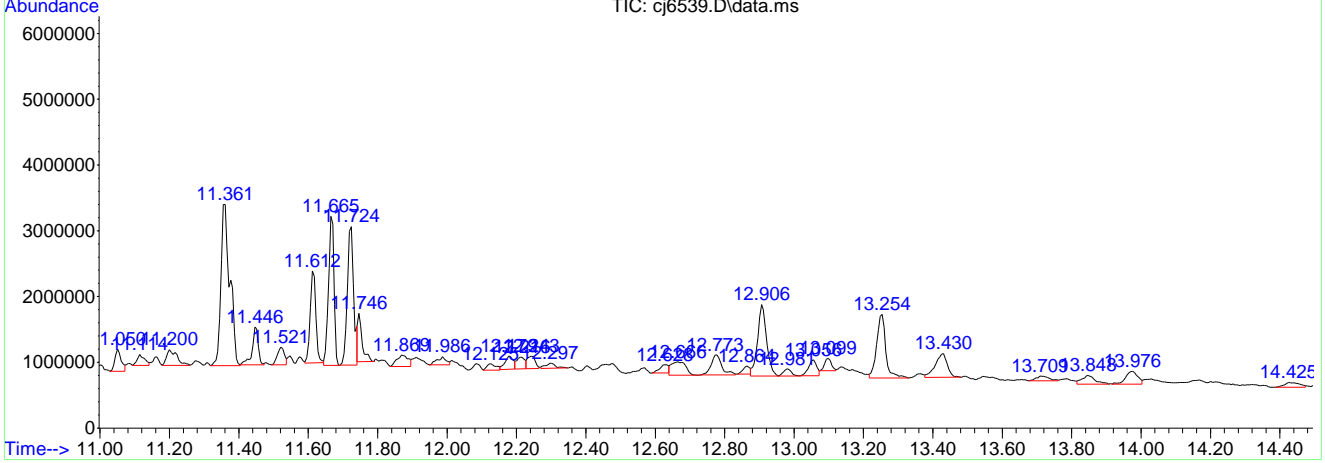
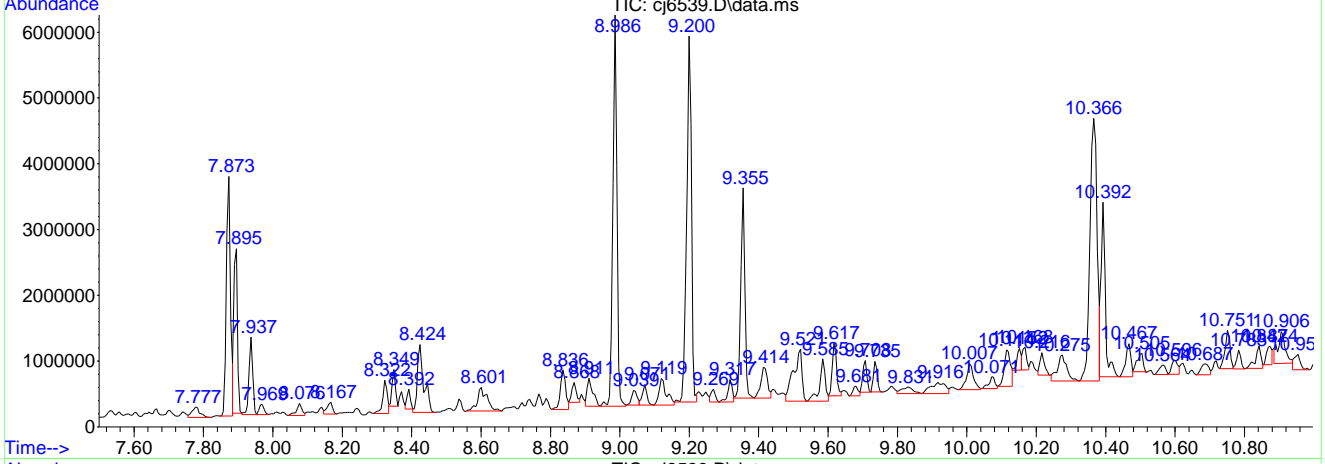
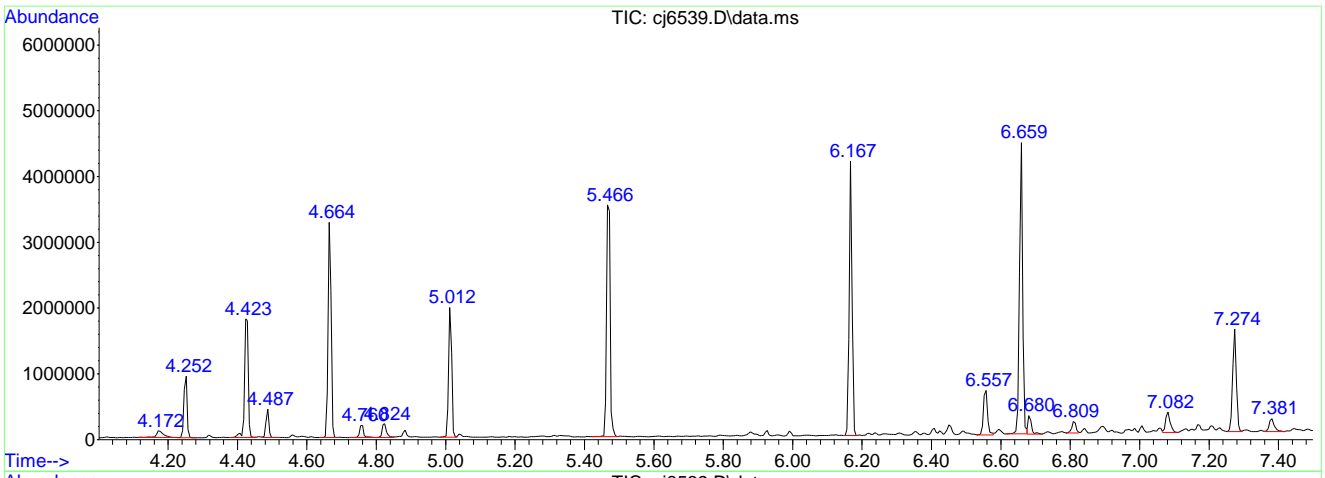


LSC Report - Integrated Chromatogram

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6539.D  
Acq On : 10 May 2024 12:35 am  
Operator : rocquans  
Sample : jd87833-7  
Misc : op54460,ecj297,30.7,,,1,1  
ALS Vial : 30 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p



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7



Library Search Compound Report

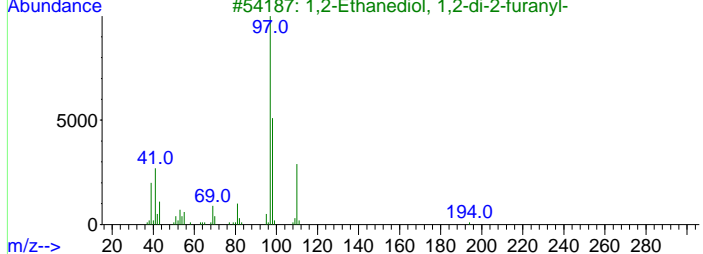
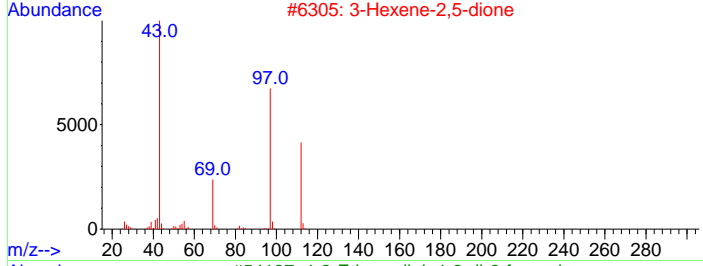
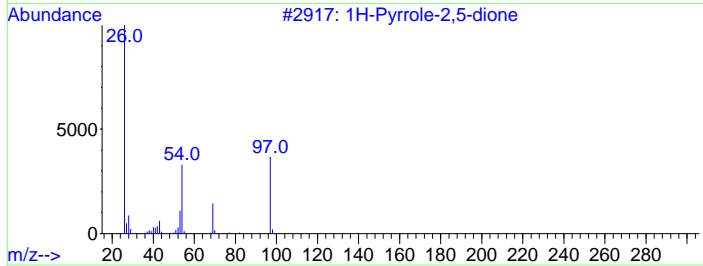
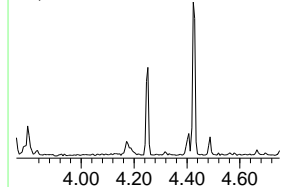
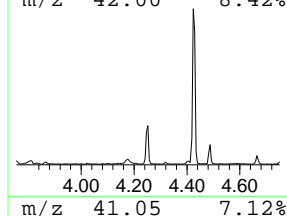
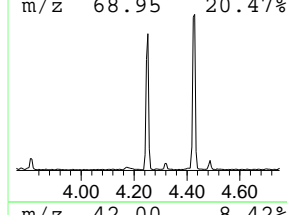
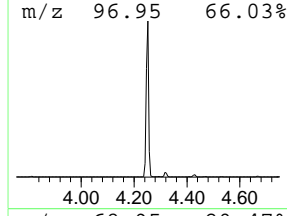
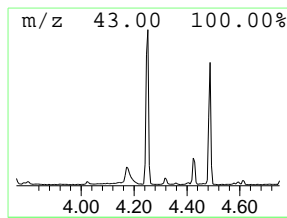
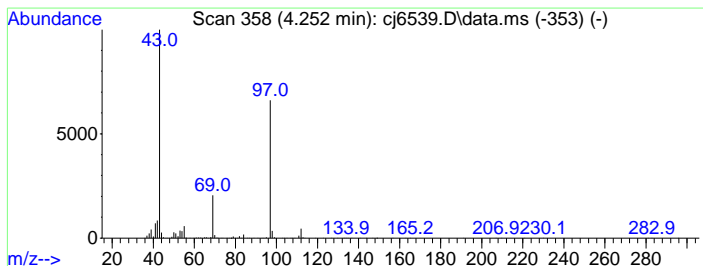
Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\
Data File : cj6539.D
Acq On : 10 May 2024 12:35 am
Operator : rocquans
Sample : jd87833-7
Misc : op54460,ecj297,30.7,,1,1
ALS Vial : 30 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: lscint.p

\*\*\*\*\*
Peak Number 1 Unknown Concentration Rank 4

Table with 5 columns: R.T., EstConc, Area, Relative to ISTD, R.T. and 7 columns: Hit# of, Tentative ID, MW, MolForm, CAS#, Qual. It lists several chemical compounds like 1H-Pyrrole-2,5-dione and 3-Hexene-2,5-dione.



7.1.15
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6539.D  
 Acq On : 10 May 2024 12:35 am  
 Operator : rocquans  
 Sample : jd87833-7  
 Misc : op54460,ecj297,30.7,,,1,1  
 ALS Vial : 30 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

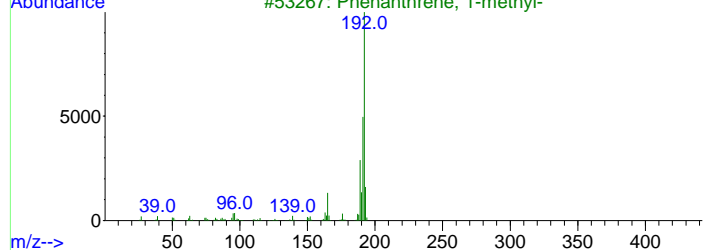
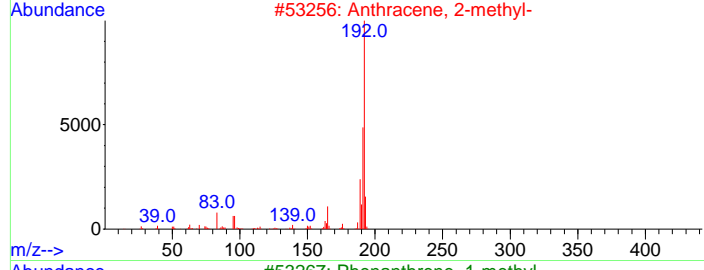
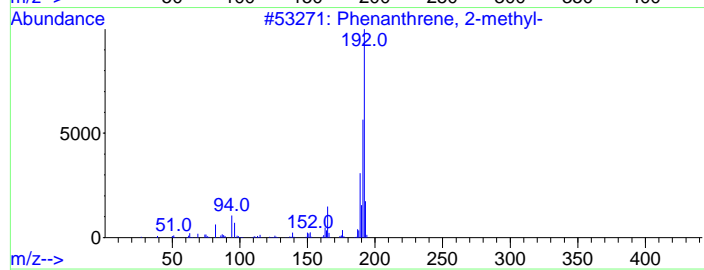
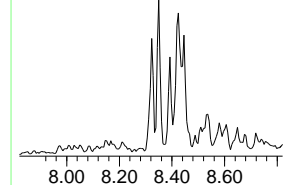
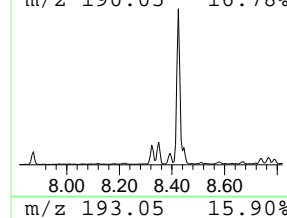
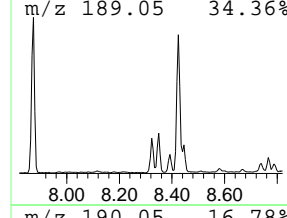
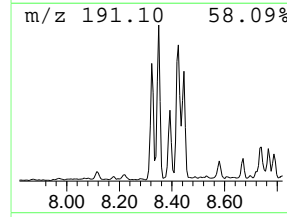
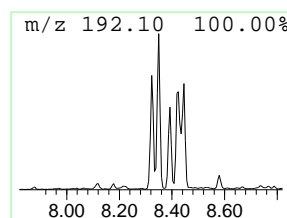
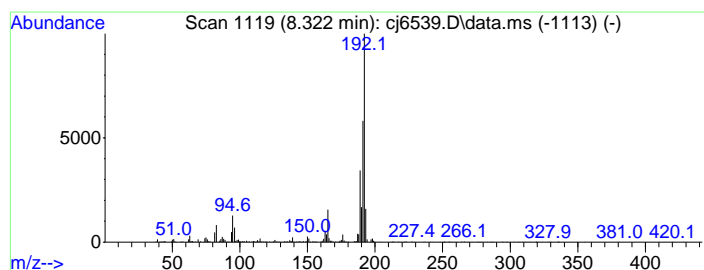
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 2 Phenanthrene, methyl Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.322	5.92 ppm	454109	Phenanthrene-d10b	7.873

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	96
2	Anthracene, 2-methyl-	192	C15H12	000613-12-7	96
3	Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	95
4	Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	95
5	Anthracene, 1-methyl-	192	C15H12	000610-48-0	95



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6539.D  
 Acq On : 10 May 2024 12:35 am  
 Operator : rocquans  
 Sample : jd87833-7  
 Misc : op54460,ecj297,30.7,,,1,1  
 ALS Vial : 30 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

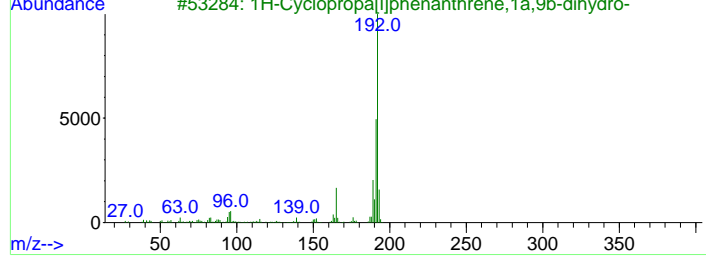
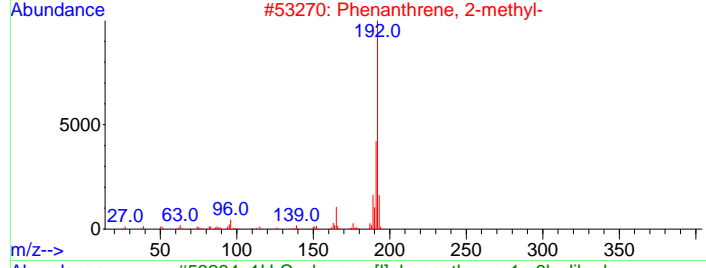
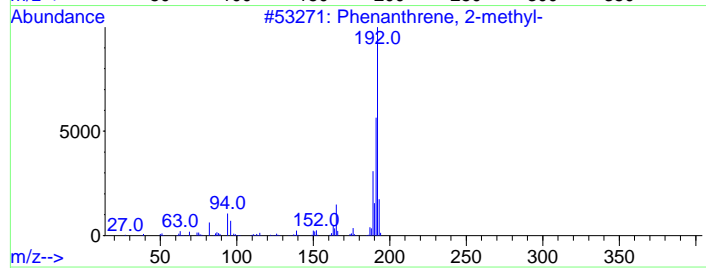
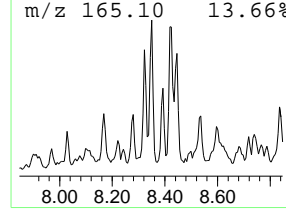
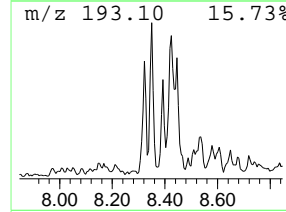
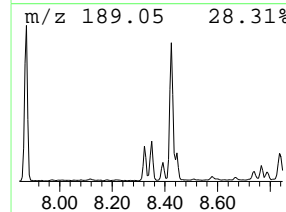
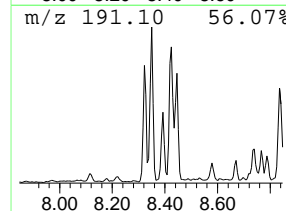
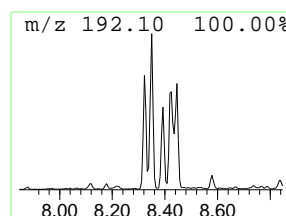
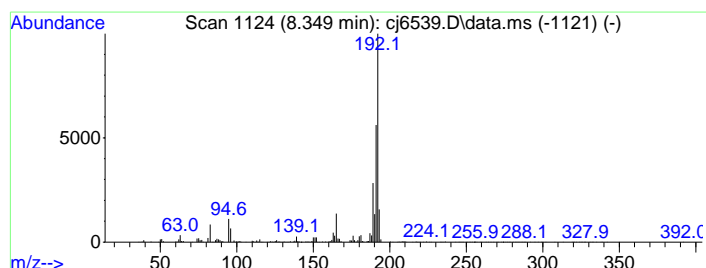
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 3 Phenanthrene, methyl Concentration Rank 25

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.349	4.86 ppm	373401	Phenanthrene-d10b	7.873

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	98
2		Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	97
3		1H-Cyclopropa[1]phenanthrene,1a,...	192	C15H12	000949-41-7	96
4		Anthracene, 2-methyl-	192	C15H12	000613-12-7	96
5		Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	96



7.1.15  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6539.D  
Acq On : 10 May 2024 12:35 am  
Operator : rocquans  
Sample : jd87833-7  
Misc : op54460,ecj297,30.7,,,1,1  
ALS Vial : 30 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

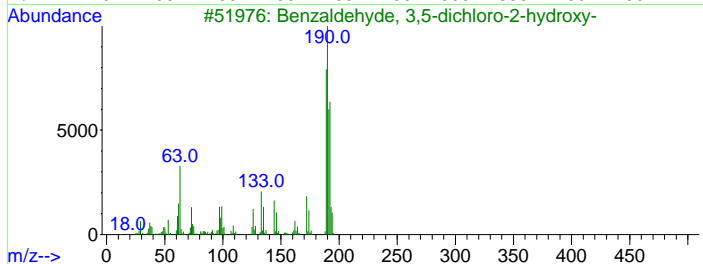
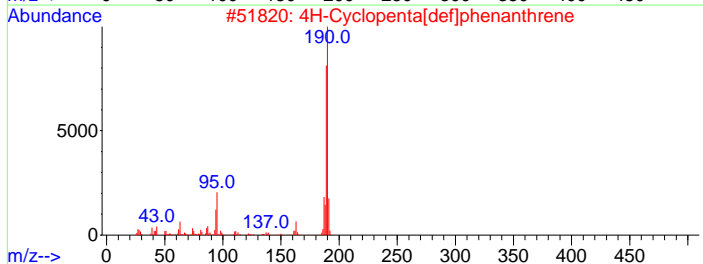
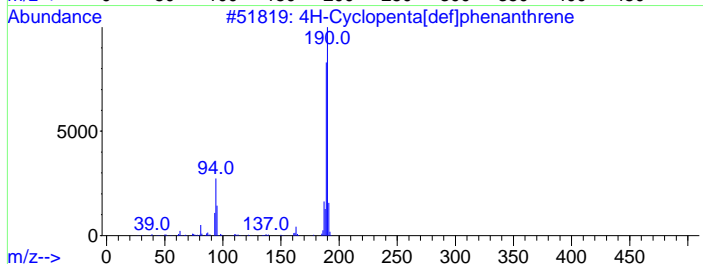
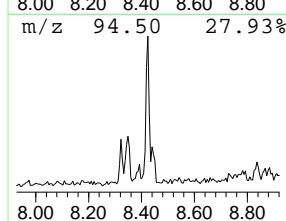
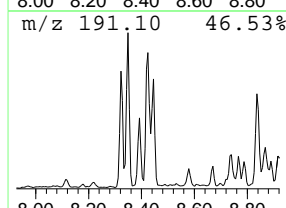
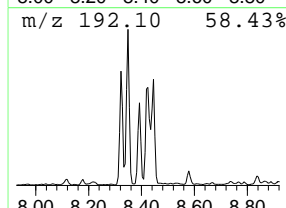
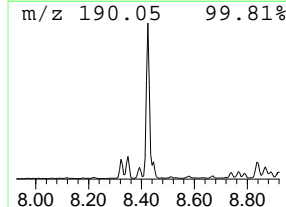
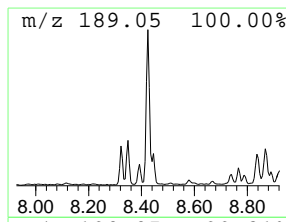
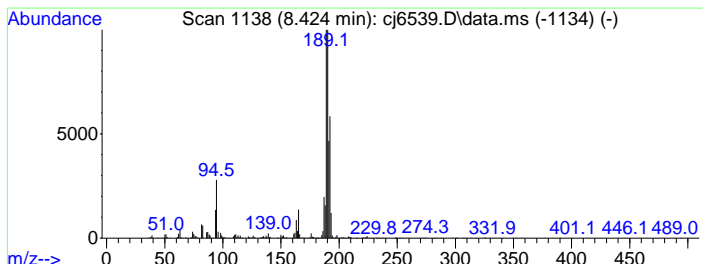
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 4 Unknown Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.424	17.23 ppm	1322510	Phenanthrene-d10b	7.873

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	4H-Cyclopenta[def]phenanthrene	190	C15H10	000203-64-5	64
2		4H-Cyclopenta[def]phenanthrene	190	C15H10	000203-64-5	55
3		Benzaldehyde, 3,5-dichloro-2-hyd...	190	C7H4Cl2O2	000090-60-8	47
4		4H-Cyclopenta[def]phenanthrene	190	C15H10	000203-64-5	43
5		Methyl diselenide	190	C2H6Se2	007101-31-7	38



7.1.15  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6539.D  
 Acq On : 10 May 2024 12:35 am  
 Operator : rocquans  
 Sample : jd87833-7  
 Misc : op54460,ecj297,30.7,,1,1  
 ALS Vial : 30 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

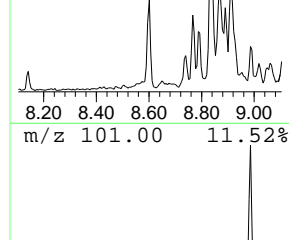
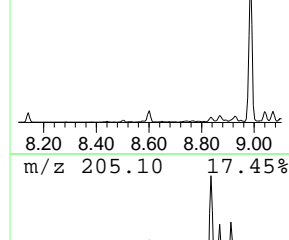
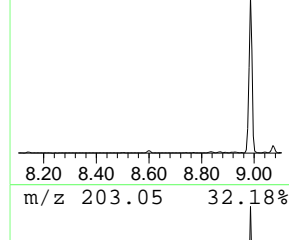
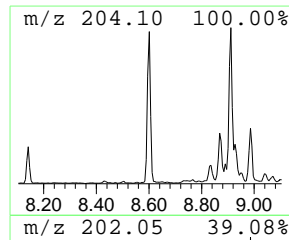
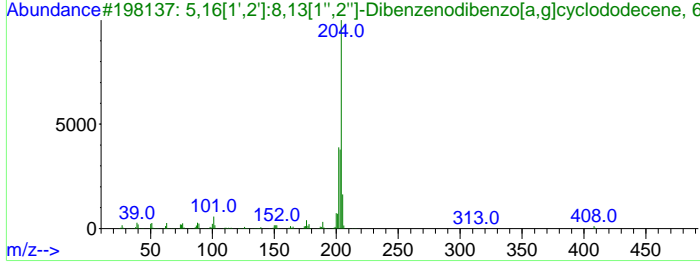
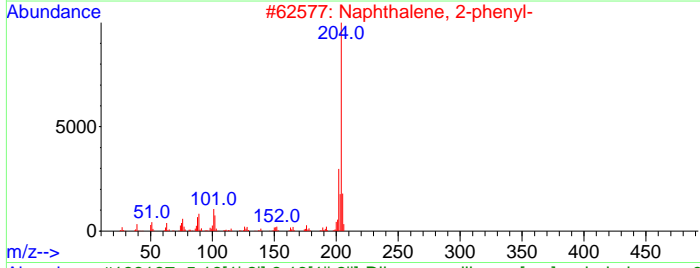
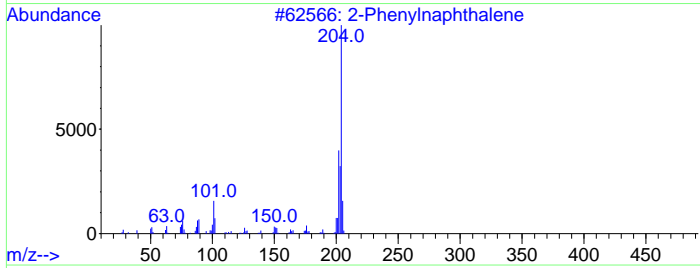
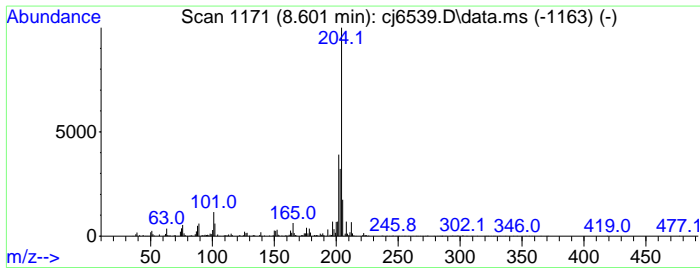
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 5 Unknown Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.601	8.83 ppm	677679	Phenanthrene-d10b	7.873

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2-Phenyl-naphthalene	204	C16H12	035465-71-5	92
2		Naphthalene, 2-phenyl-	204	C16H12	000612-94-2	91
3		5,16[1',2']:8,13[1'',2'']-Dibenz...	408	C32H24	005672-97-9	86
4		6-Phenylbenzocyclohepten-7-one	232	C17H12O	093327-56-1	78
5		9,10-Bis(bromomethyl)anthracene	362	C16H12Br2	034373-96-1	70



7.1.15  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6539.D  
 Acq On : 10 May 2024 12:35 am  
 Operator : rocquans  
 Sample : jd87833-7  
 Misc : op54460,ecj297,30.7,,,1,1  
 ALS Vial : 30 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

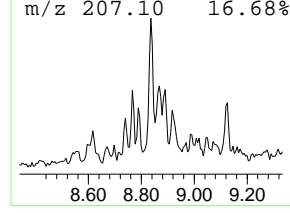
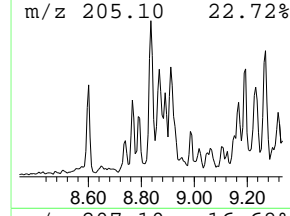
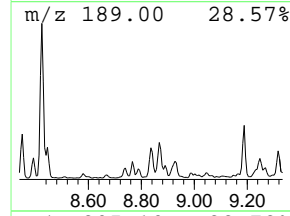
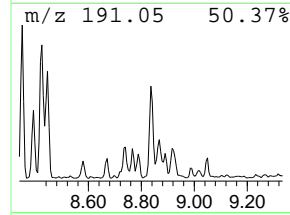
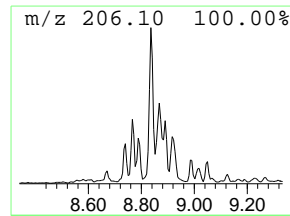
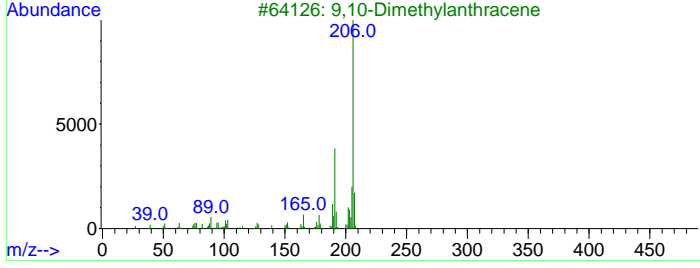
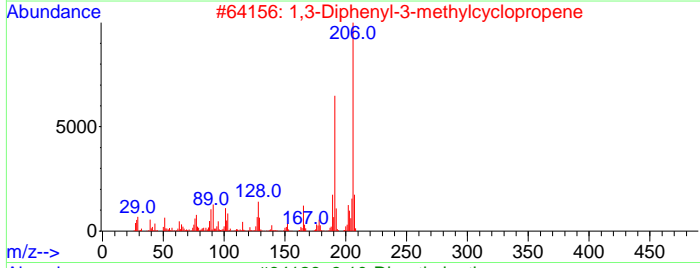
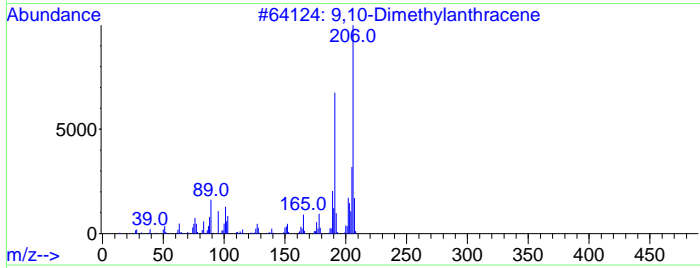
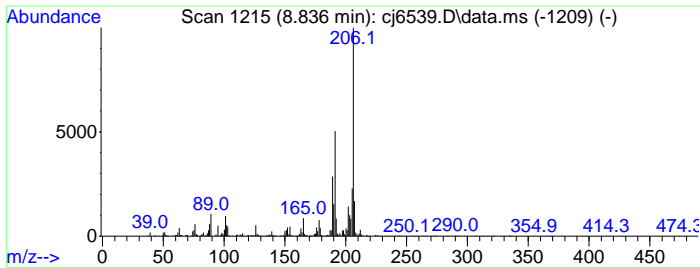
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 6 Alkene Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.836	8.49 ppm	652129	Phenanthrene-d10b	7.873

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	9,10-Dimethylanthracene	206	C16H14	000781-43-1	97
2		1,3-Diphenyl-3-methylcyclopropene	206	C16H14	086544-79-8	96
3		9,10-Dimethylanthracene	206	C16H14	000781-43-1	96
4		Phenanthrene, 2,5-dimethyl-	206	C16H14	003674-66-6	95
5		Phenanthrene, 2,3-dimethyl-	206	C16H14	003674-65-5	94



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6539.D  
 Acq On : 10 May 2024 12:35 am  
 Operator : rocquans  
 Sample : jd87833-7  
 Misc : op54460,ecj297,30.7,,,1,1  
 ALS Vial : 30 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

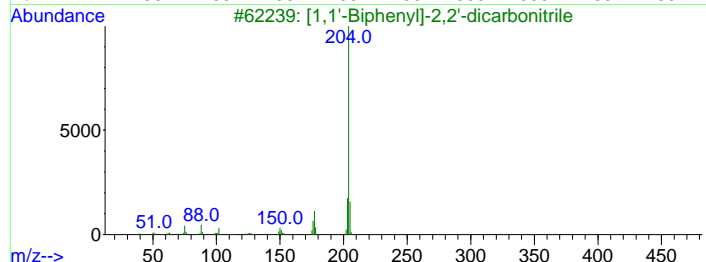
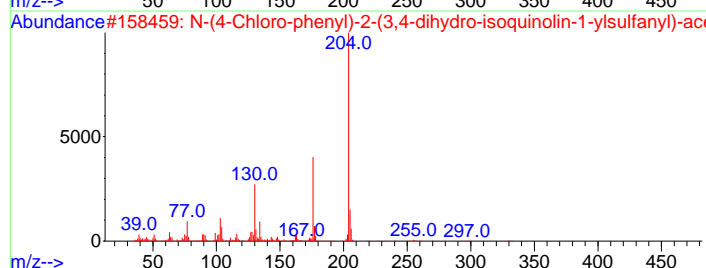
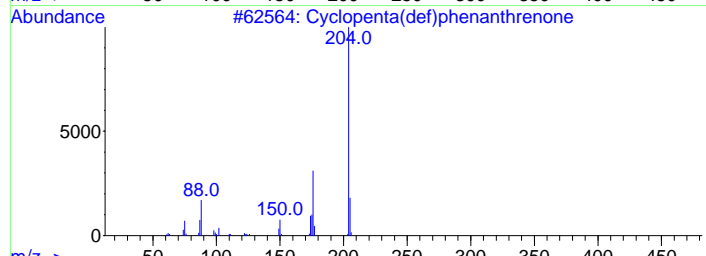
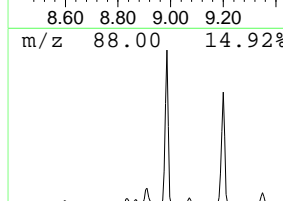
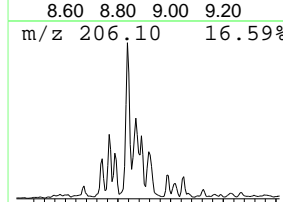
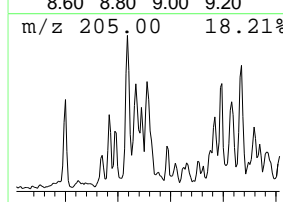
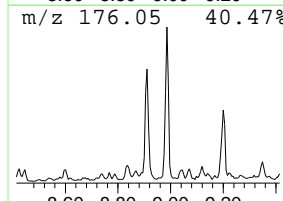
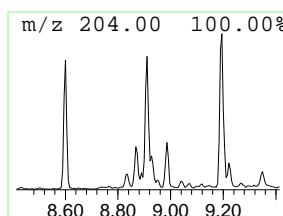
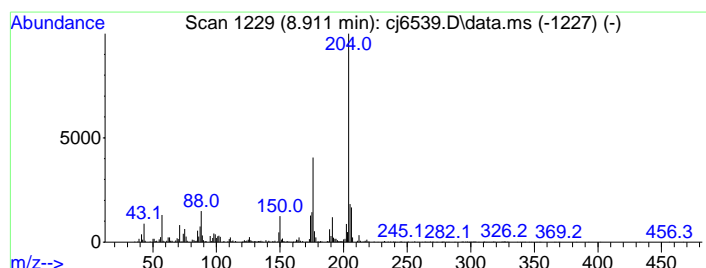
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 7 Unknown Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.911	6.36 ppm	488587	Phenanthrene-d10b	7.873

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Cyclopenta(def)phenanthrenone	204	C15H8O	005737-13-3	93
2		N-(4-Chloro-phenyl)-2-(3,4-dihyd...	330	C17H15ClN2OS	1000296-34-3	58
3		[1,1'-Biphenyl]-2,2'-dicarbonitrile	204	C14H8N2	004341-02-0	50
4		[1,1'-Biphenyl]-4,4'-dicarbonitrile	204	C14H8N2	001591-30-6	50
5		3,4-Biphenyldicarbonitrile	204	C14H8N2	004128-63-6	45



7.1.15  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6539.D  
Acq On : 10 May 2024 12:35 am  
Operator : rocquans  
Sample : jd87833-7  
Misc : op54460,ecj297,30.7,,1,1  
ALS Vial : 30 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

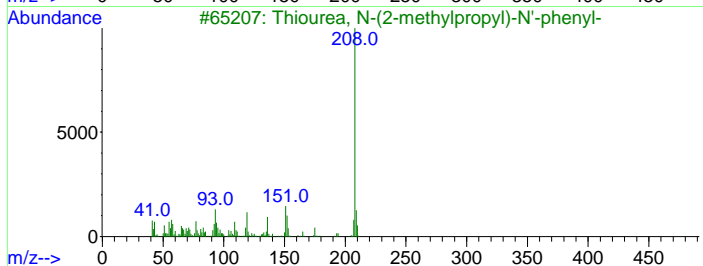
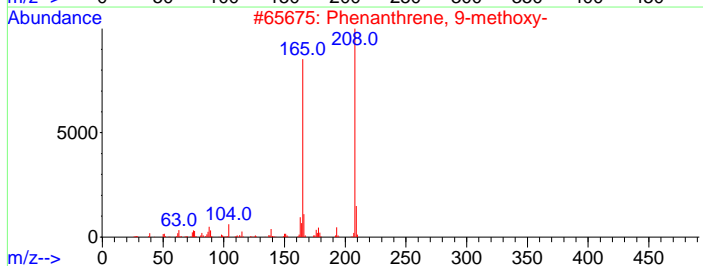
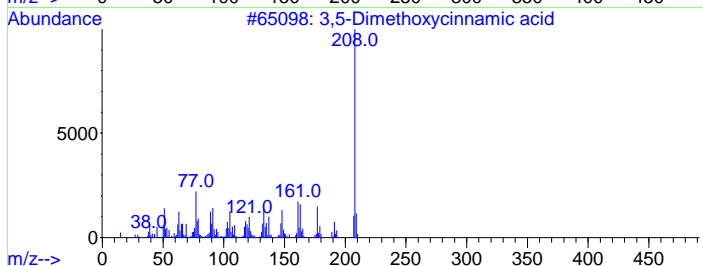
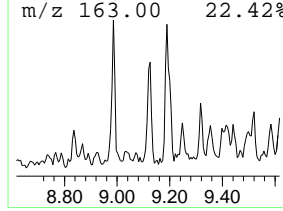
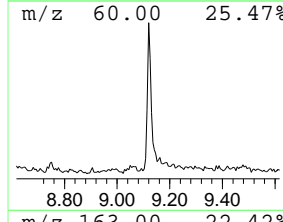
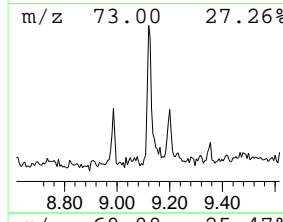
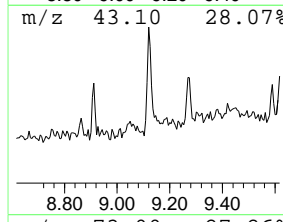
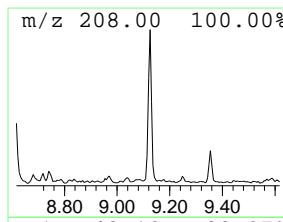
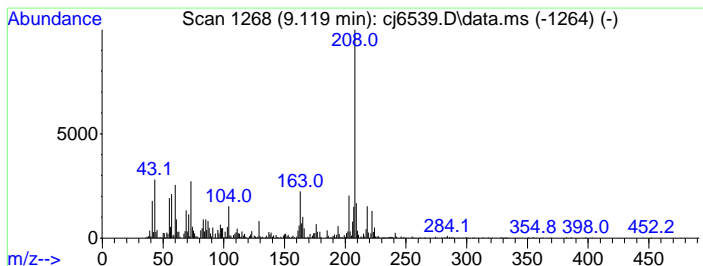
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 8 Unknown Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.119	7.74 ppm	594136	Phenanthrene-d10b	7.873

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	3,5-Dimethoxycinnamic acid	208	C11H12O4	016909-11-8	43
2		Phenanthrene, 9-methoxy-	208	C15H12O	005085-74-5	43
3		Thiourea, N-(2-methylpropyl)-N'-...	208	C11H16N2S	016275-53-9	38
4		Benzene, 1-methoxy-4-(phenylethy...	208	C15H12O	007380-78-1	38
5		Pyrimidine, 2-(2,4-difluoropheno...	208	C10H6F2N2O	1000260-37-2	38



7.1.15  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6539.D  
Acq On : 10 May 2024 12:35 am  
Operator : rocquans  
Sample : jd87833-7  
Misc : op54460,ecj297,30.7,,,1,1  
ALS Vial : 30 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

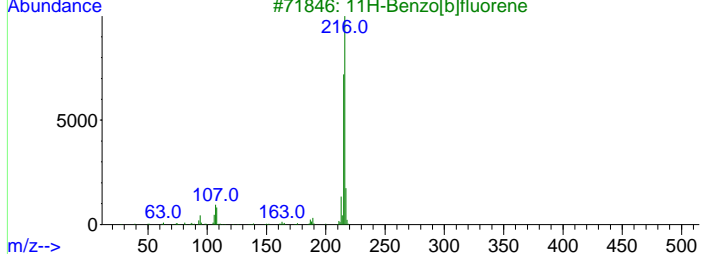
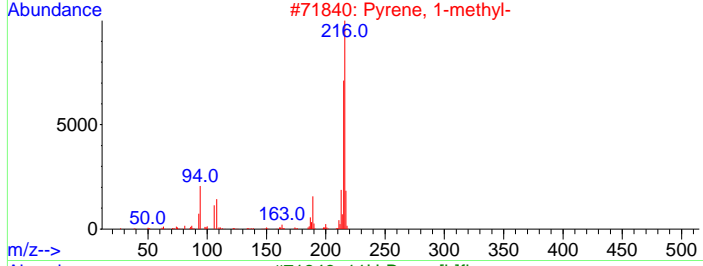
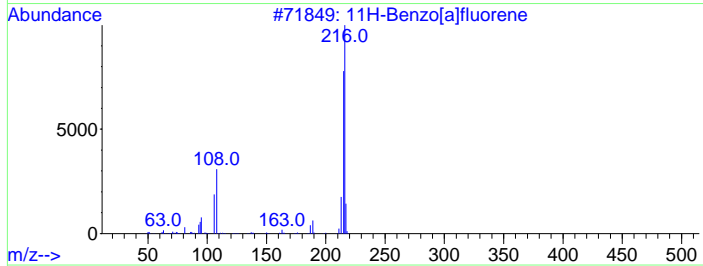
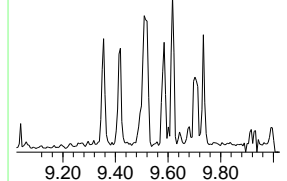
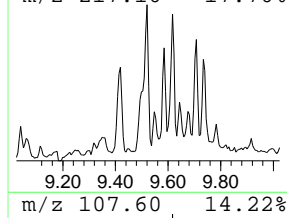
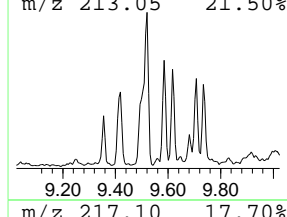
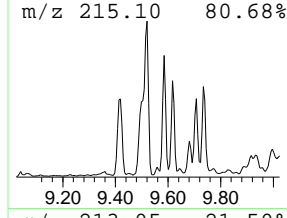
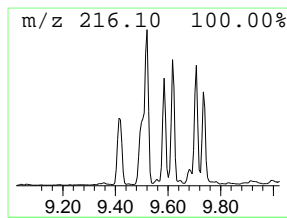
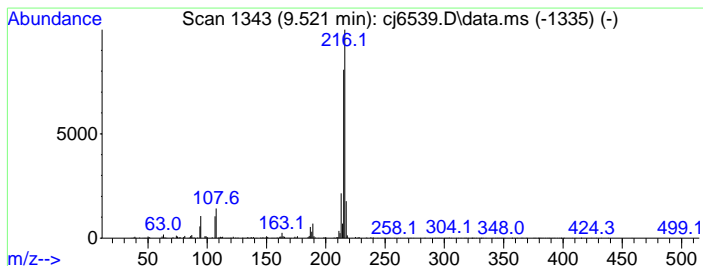
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 9 Pyrene, methyl Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.521	9.24 ppm	1345670	Chrysene-d12	10.371

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	11H-Benzo[a]fluorene	216	C17H12	000238-84-6	93
2		Pyrene, 1-methyl-	216	C17H12	002381-21-7	90
3		11H-Benzo[b]fluorene	216	C17H12	000243-17-4	90
4		Pyrene, 1-methyl-	216	C17H12	002381-21-7	90
5		11H-Benzo[b]fluorene	216	C17H12	000243-17-4	87



7.1.15  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6539.D  
Acq On : 10 May 2024 12:35 am  
Operator : rocquans  
Sample : jd87833-7  
Misc : op54460,ecj297,30.7,,,1,1  
ALS Vial : 30 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

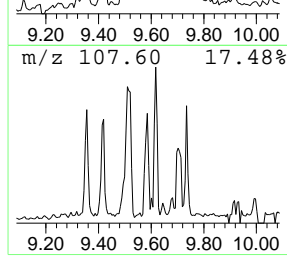
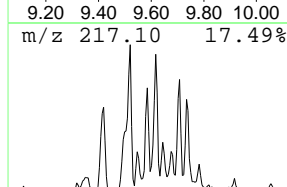
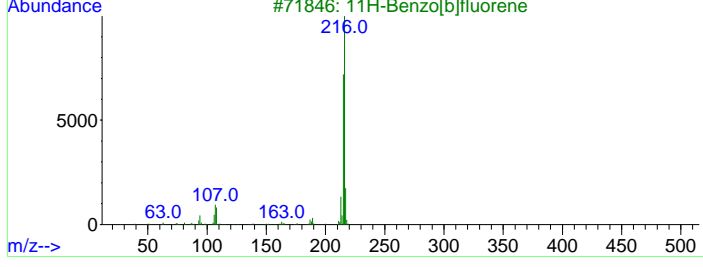
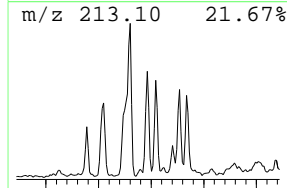
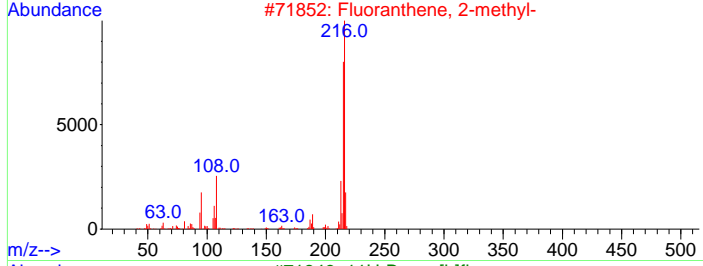
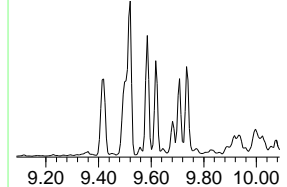
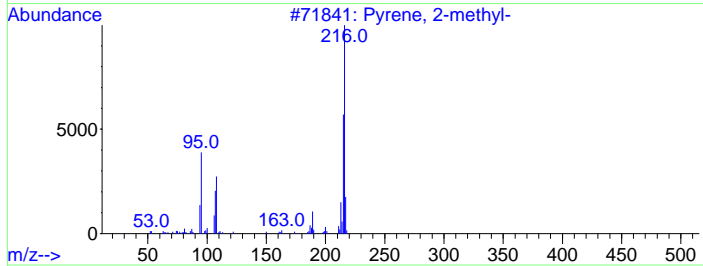
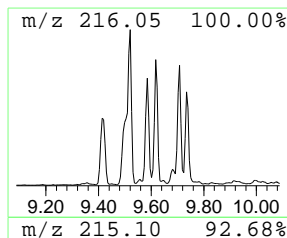
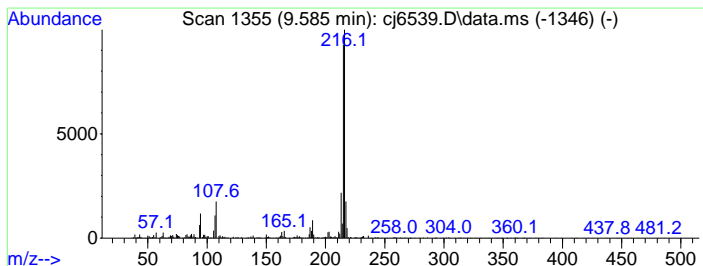
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 10 Pyrene, methyl Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.585	5.05 ppm	735277	Chrysene-d12	10.371

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Pyrene, 2-methyl-	216	C17H12	003442-78-2	94
2		Fluoranthene, 2-methyl-	216	C17H12	033543-31-6	93
3		11H-Benzo[b]fluorene	216	C17H12	000243-17-4	91
4		Fluoranthene, 2-methyl-	216	C17H12	033543-31-6	90
5		11H-Benzo[a]fluorene	216	C17H12	000238-84-6	87



7.1.15  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6539.D  
Acq On : 10 May 2024 12:35 am  
Operator : rocquans  
Sample : jd87833-7  
Misc : op54460,ecj297,30.7,,,1,1  
ALS Vial : 30 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

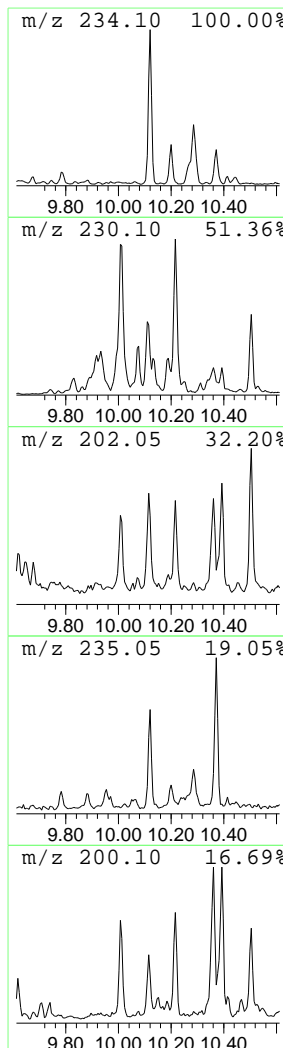
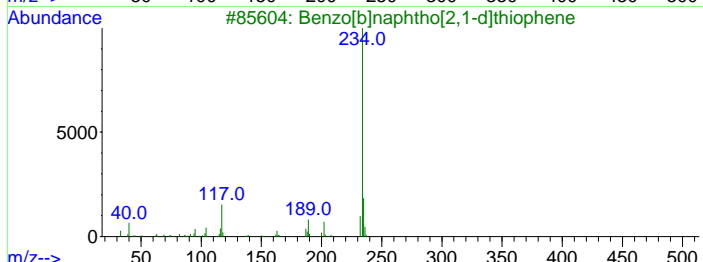
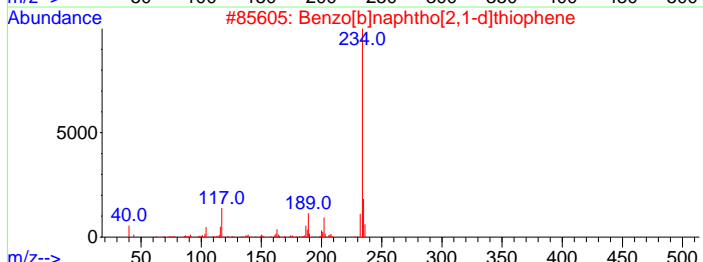
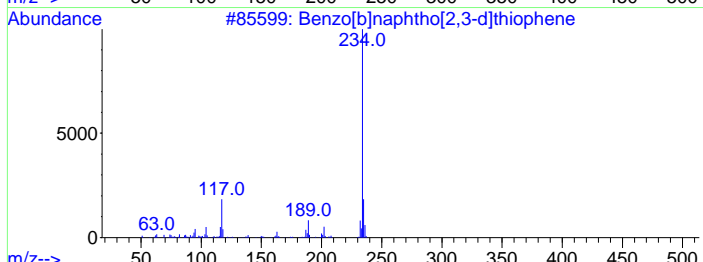
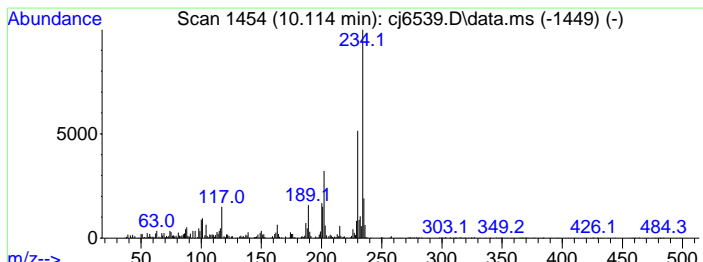
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TIC Integration Parameters: lscint.p

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Peak Number 11 Benzo[b]naphtho[2,3-d]thiop... Concentration Rank 24

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.114	4.92 ppm	716899	Chrysene-d12	10.371

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Benzo[b]naphtho[2,3-d]thiophene	234	C16H10S	000243-46-9	92
2			Benzo[b]naphtho[2,1-d]thiophene	234	C16H10S	000239-35-0	91
3			Benzo[b]naphtho[2,1-d]thiophene	234	C16H10S	000239-35-0	83
4			7H-Benz[de]anthracen-7-one	230	C17H10O	000082-05-3	78
5			Anthra(1,2-b)thiophene	234	C16H10S	000227-86-1	78



7.1.15  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6539.D  
 Acq On : 10 May 2024 12:35 am  
 Operator : rocquans  
 Sample : jd87833-7  
 Misc : op54460,ecj297,30.7,,,1,1  
 ALS Vial : 30 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

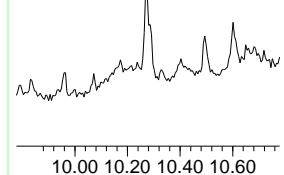
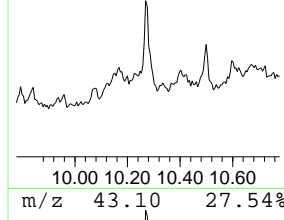
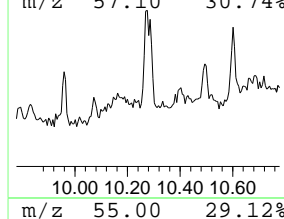
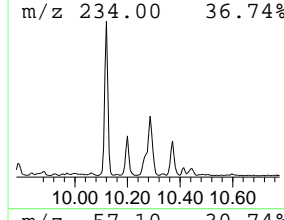
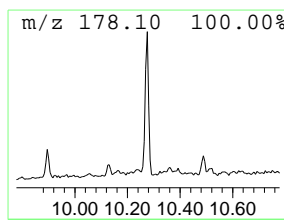
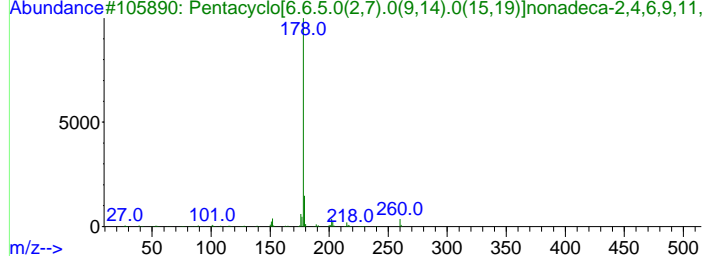
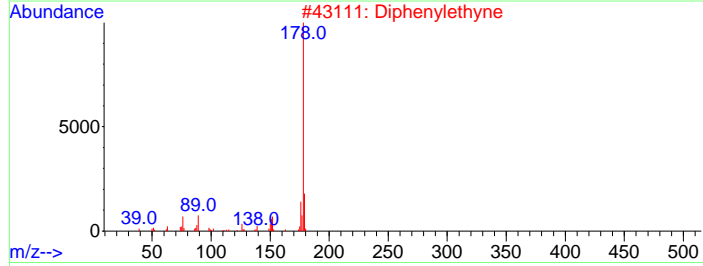
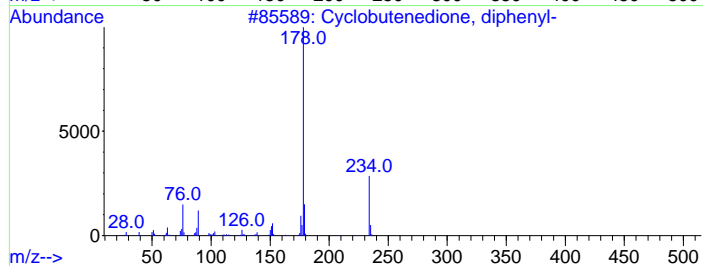
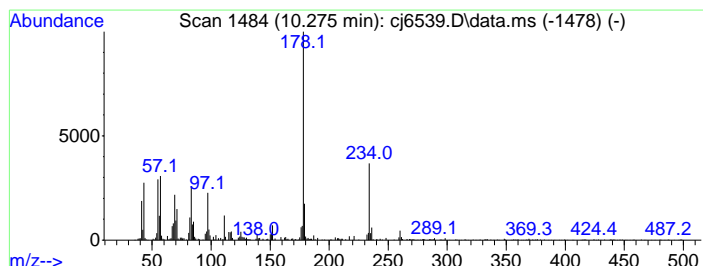
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 12 Unknown Concentration Rank 21

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.275	5.01 ppm	729251	Chrysene-d12	10.371

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Cyclobutenedione, diphenyl-	234	C16H10O2	024234-76-2	47
2			Diphenylethyne	178	C14H10	000501-65-5	43
3			Pentacyclo[6.6.5.0(2,7).0(9,14)...	260	C19H16O	111272-10-7	43
4			Diphenylethyne	178	C14H10	000501-65-5	43
5			1,2,4-Triazine, 5,6-diphenyl-3-(...)	386	C26H18N4	001058-71-5	38



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6539.D  
Acq On : 10 May 2024 12:35 am  
Operator : rocquans  
Sample : jd87833-7  
Misc : op54460,ecj297,30.7,,,1,1  
ALS Vial : 30 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

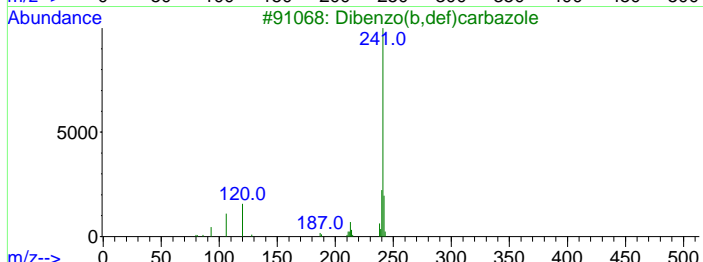
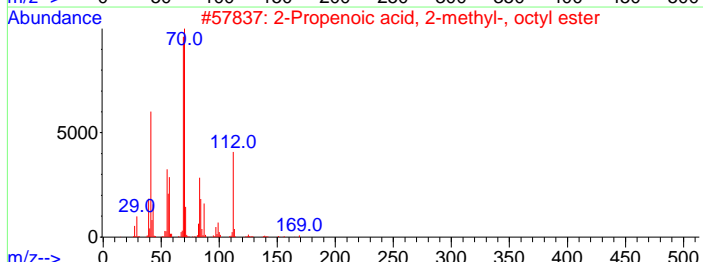
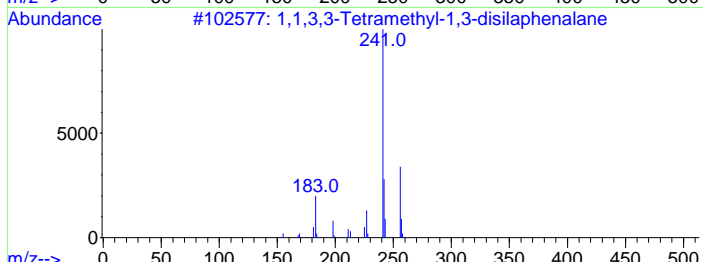
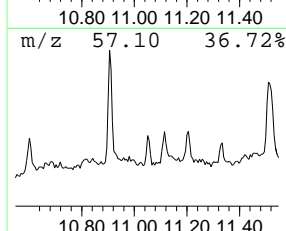
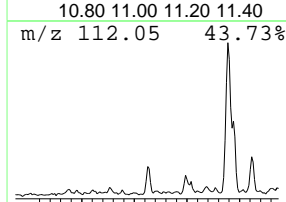
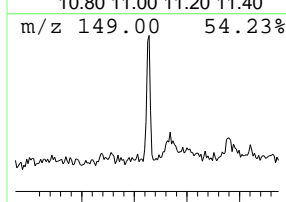
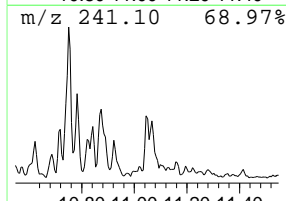
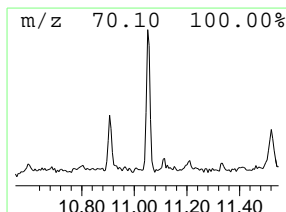
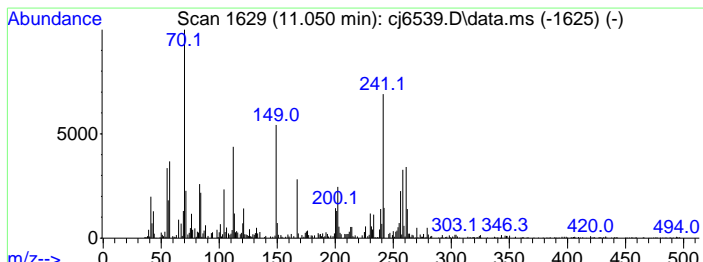
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 13 Unknown Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.050	6.27 ppm	428126	Perylene-d12	11.724

Hit#	of 5	Tentative ID	MW	MolForm	CAS#	Qual
1		1,1,3,3-Tetramethyl-1,3-disilaph...	256	C15H20Si2	032538-51-5	35
2		2-Propenoic acid, 2-methyl-, oct...	198	C12H22O2	002157-01-9	16
3		Dibenzo(b,def)carbazole	241	C18H11N	104313-09-9	15
4		Acetic acid, [4-(4-methyl-1-pipe...	262	C14H18N2O3	346699-90-9	14
5		4-Nitrobenzoic acid, cyclobutyl ...	221	C11H11NO4	070335-00-1	12



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6539.D  
Acq On : 10 May 2024 12:35 am  
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Sample : jd87833-7  
Misc : op54460,ecj297,30.7,,1,1  
ALS Vial : 30 Sample Multiplier: 1

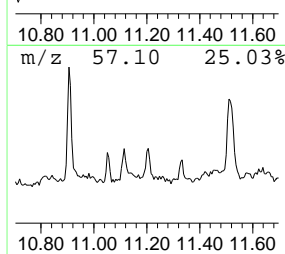
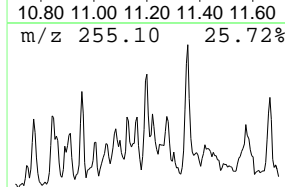
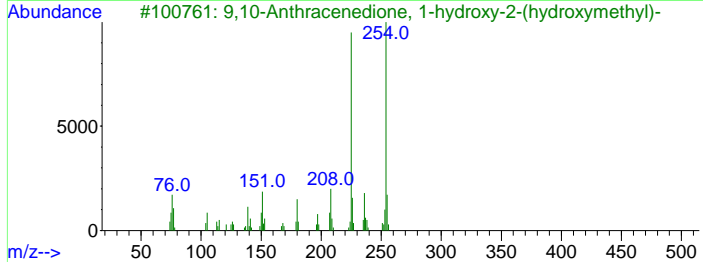
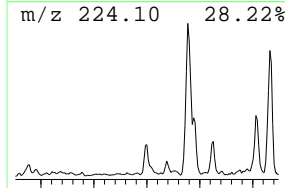
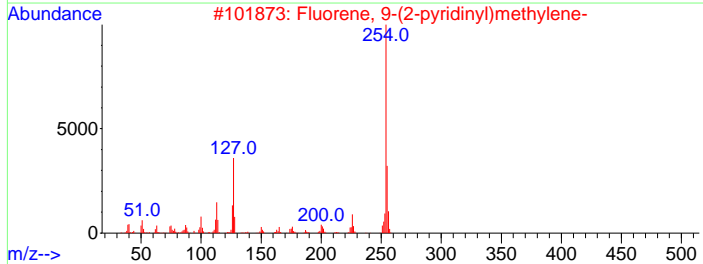
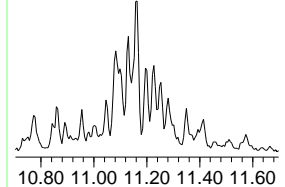
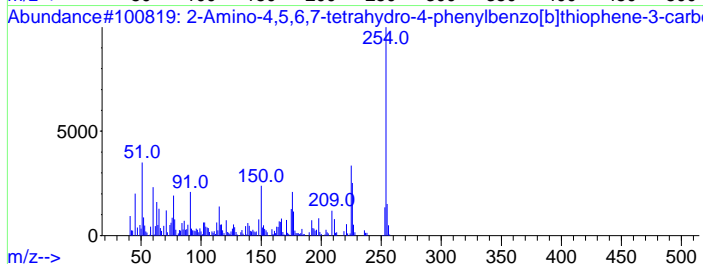
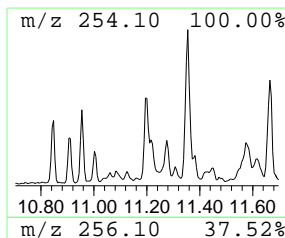
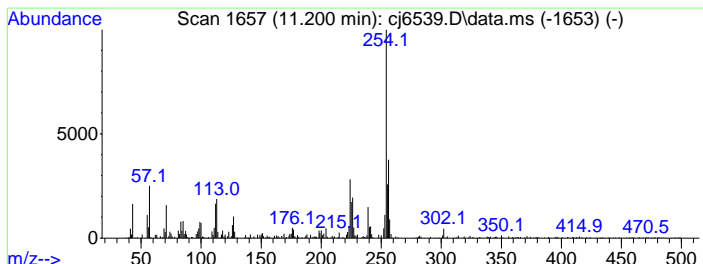
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Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 14 Unknown Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.200	7.09 ppm	484230	Perylene-d12	11.724

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2-Amino-4,5,6,7-tetrahydro-4-phe...	254	C15H14N2S	037071-22-0	52
2		Fluorene, 9-(2-pyridinyl)methylene-	255	C19H13N	002871-27-4	52
3		9,10-Anthracenedione, 1-hydroxy-...	254	C15H10O4	024094-45-9	50
4		1,1'-Binaphthalene	254	C20H14	000604-53-5	50
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7.1.15  
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Library Search Compound Report

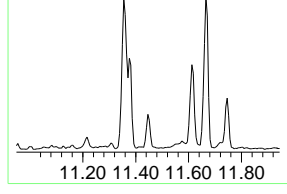
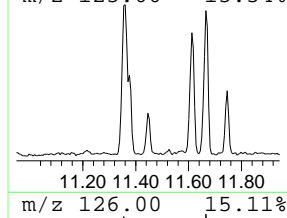
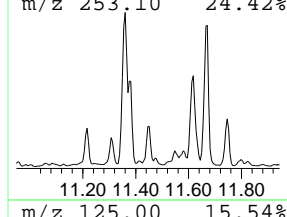
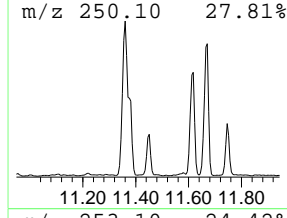
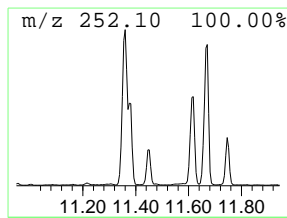
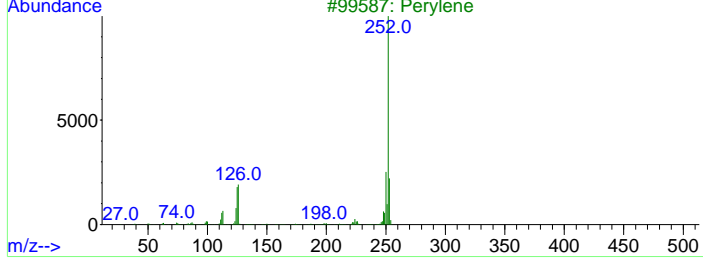
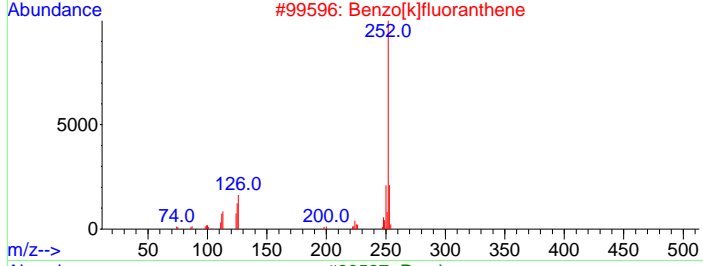
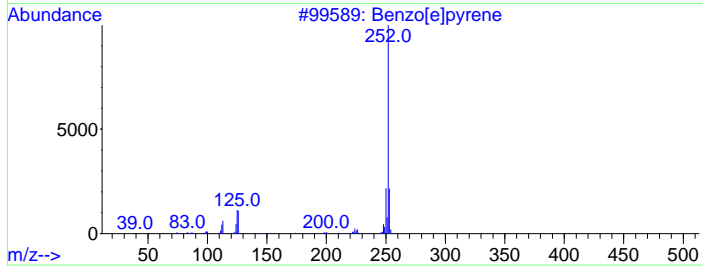
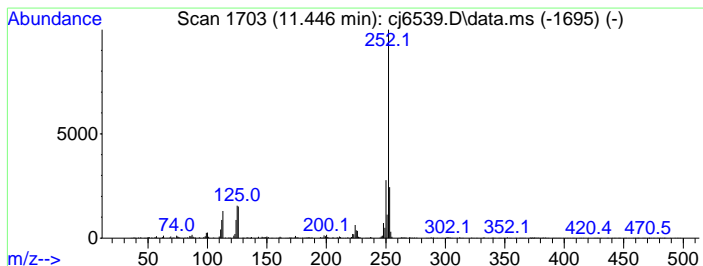
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Data File : cj6539.D
Acq On : 10 May 2024 12:35 am
Operator : rocquans
Sample : jd87833-7
Misc : op54460,ecj297,30.7,,,1,1
ALS Vial : 30 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: lscint.p

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Peak Number 15 Unknown PHA Substance Concentration Rank 5

Table with 7 columns: R.T., EstConc, Area, Relative to ISTD, R.T., Hit# of, Tentative ID, MW, MolForm, CAS#, Qual. Row 1: 11.446, 10.25 ppm, 699728, Perylene-d12, 11.724, 5, Benzo[e]pyrene, 252, C20H12, 000192-97-2, 98.



7.1.15
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6539.D  
Acq On : 10 May 2024 12:35 am  
Operator : rocquans  
Sample : jd87833-7  
Misc : op54460,ecj297,30.7,,,1,1  
ALS Vial : 30 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

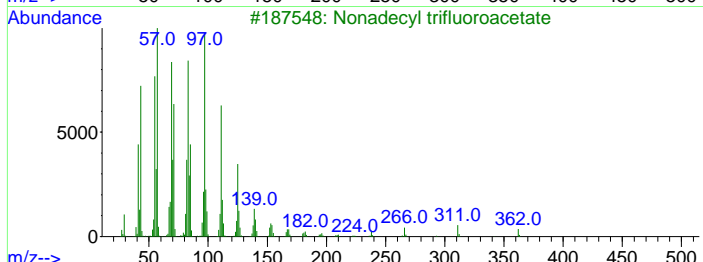
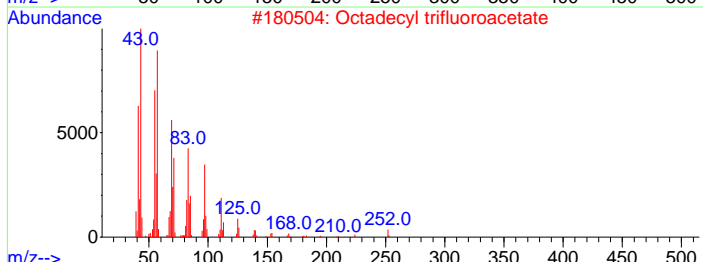
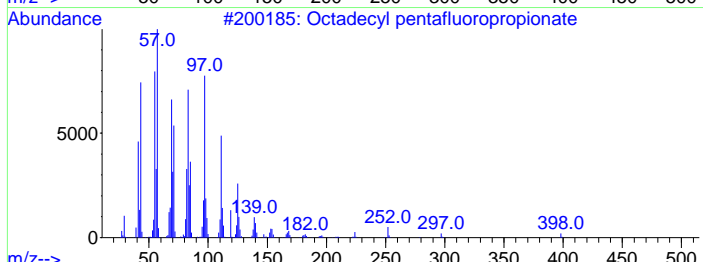
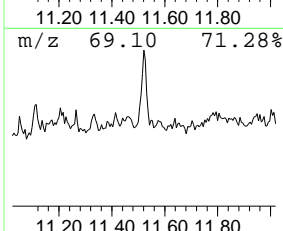
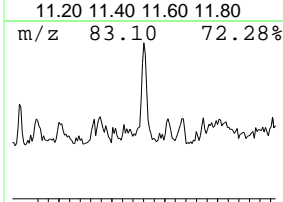
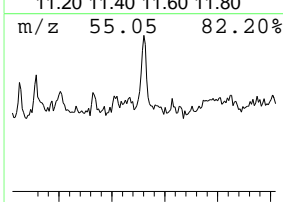
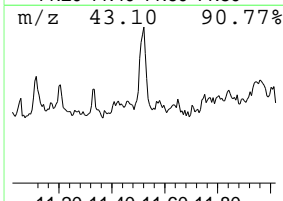
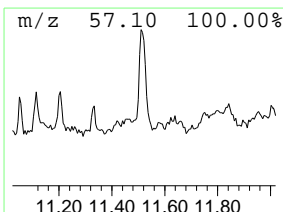
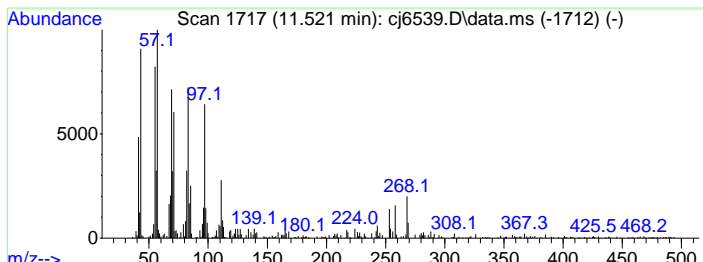
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 16 Unknown Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.521	5.62 ppm	383413	Perylene-d12	11.724

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		Octadecyl pentafluoropropionate	416	C21H37F5O2	1000351-80-7	74
2		Octadecyl trifluoroacetate	366	C20H37F3O2	079392-43-1	74
3		Nonadecyl trifluoroacetate	380	C21H39F3O2	1000351-76-3	74
4		1-Octacosanol	410	C28H58O	1000351-79-2	70
5		n-Tetracosanol-1	354	C24H50O	000506-51-4	70



7.1.15  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6539.D  
Acq On : 10 May 2024 12:35 am  
Operator : rocquans  
Sample : jd87833-7  
Misc : op54460,ecj297,30.7,,,1,1  
ALS Vial : 30 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

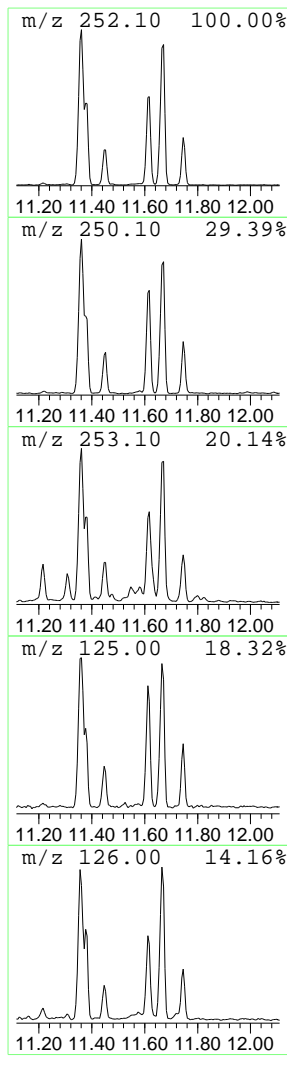
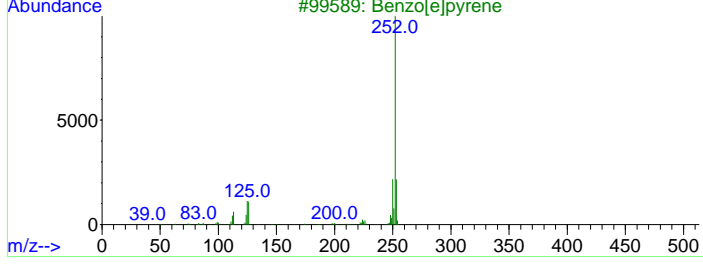
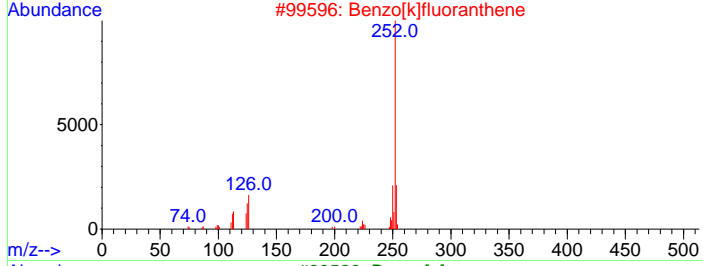
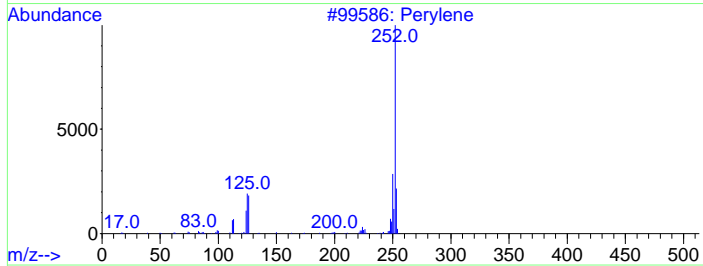
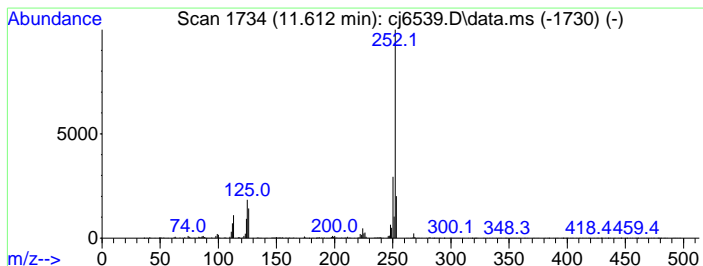
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 17 Unknown PHA substance Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.612	23.12 ppm	1578620	Perylene-d12	11.724

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Perylene	252	C20H12	000198-55-0	98
2		Benzo[k]fluoranthene	252	C20H12	000207-08-9	98
3		Benzo[e]pyrene	252	C20H12	000192-97-2	97
4		Perylene	252	C20H12	000198-55-0	96
5		Benzo[e]pyrene	252	C20H12	000192-97-2	96



7.1.15  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6539.D  
Acq On : 10 May 2024 12:35 am  
Operator : rocquans  
Sample : jd87833-7  
Misc : op54460,ecj297,30.7,,1,1  
ALS Vial : 30 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

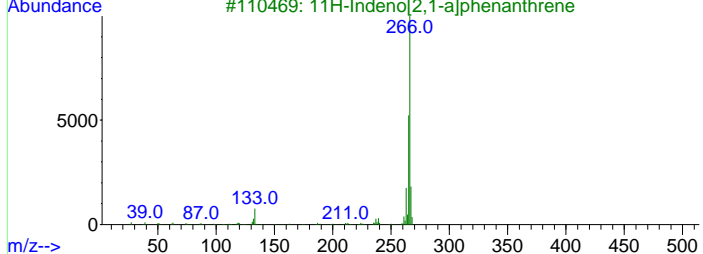
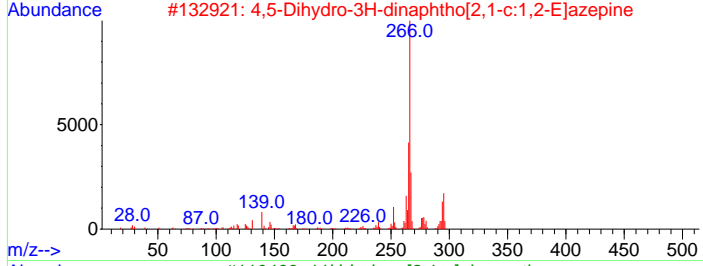
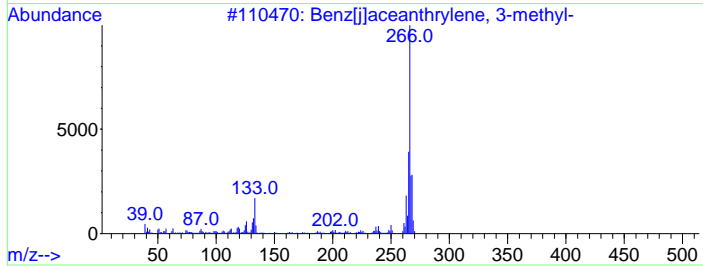
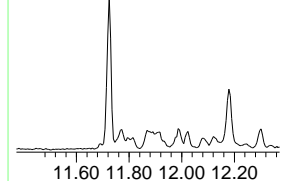
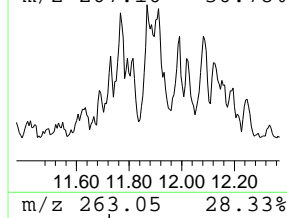
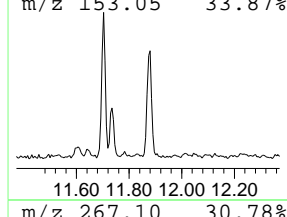
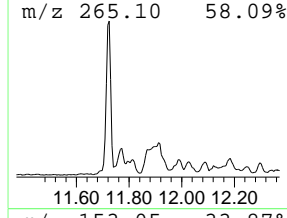
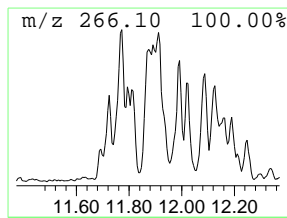
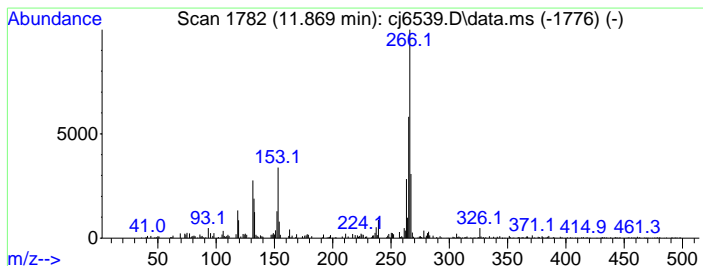
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 18 Unknown Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.869	6.05 ppm	413051	Perylene-d12	11.724

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Benz[j]aceanthrylene, 3-methyl-	266	C21H14	003343-10-0	64
2			4,5-Dihydro-3H-dinaphtho[2,1-c:1...	295	C22H17N	1000297-99-2	59
3			11H-Indeno[2,1-a]phenanthrene	266	C21H14	000220-97-3	58
4			8H-Indeno[2,1-b]phenanthrene	266	C21H14	000241-28-1	52
5			13H-Dibenzo[a,h]fluorene	266	C21H14	000239-85-0	49



7.1.15  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6539.D  
Acq On : 10 May 2024 12:35 am  
Operator : rocquans  
Sample : jd87833-7  
Misc : op54460,ecj297,30.7,,,1,1  
ALS Vial : 30 Sample Multiplier: 1

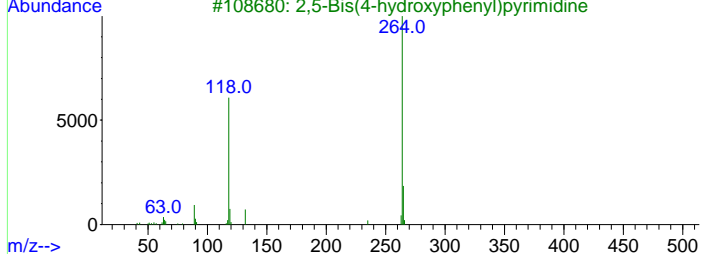
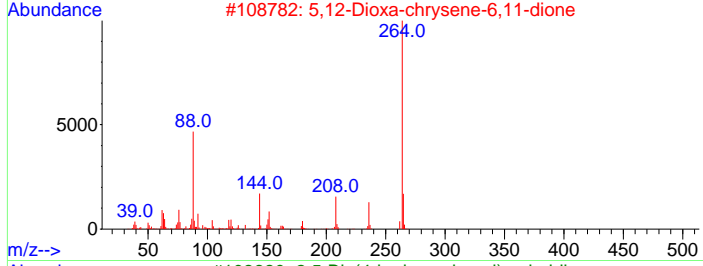
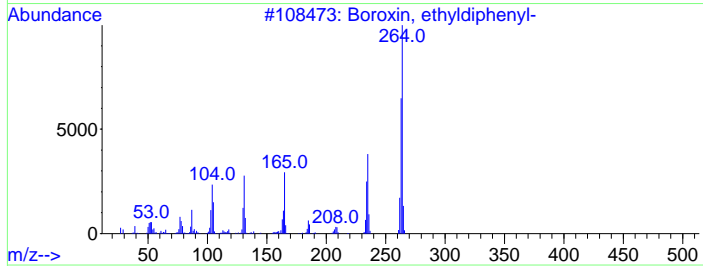
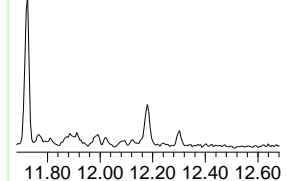
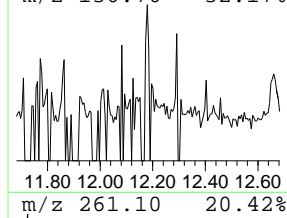
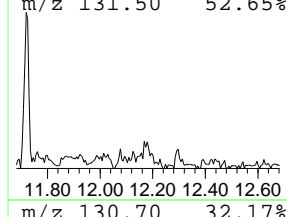
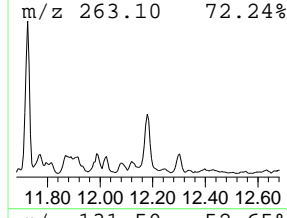
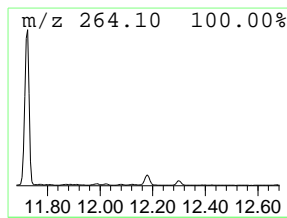
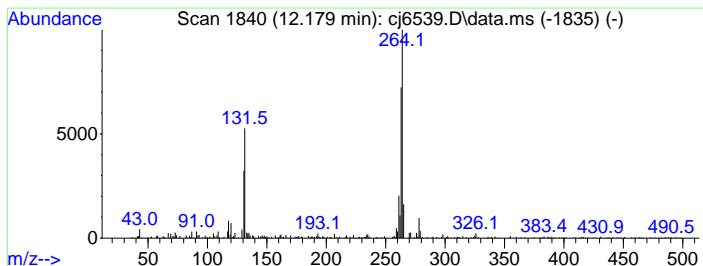
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Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 19 Unknown Concentration Rank 22

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.179	4.98 ppm	340082	Perylene-d12	11.724

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Boroxin, ethyldiphenyl-	264	C14H15B3O3	1000151-82-0	25
2		5,12-Dioxa-chrysene-6,11-dione	264	C16H8O4	002288-98-4	22
3		2,5-Bis(4-hydroxyphenyl)pyrimidine	264	C16H12N2O2	159488-83-2	22
4		3,3'-Dimethyl-4,4'-biphenylene d...	264	C16H12N2O2	000091-97-4	22
5		Iron, (.eta.-5-cyclopentadienyl)...	264	C16H16Fe	1000155-06-6	17



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7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6539.D  
Acq On : 10 May 2024 12:35 am  
Operator : rocquans  
Sample : jd87833-7  
Misc : op54460,ecj297,30.7,,1,1  
ALS Vial : 30 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

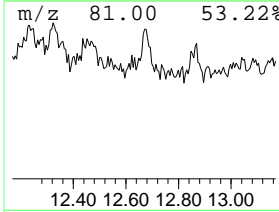
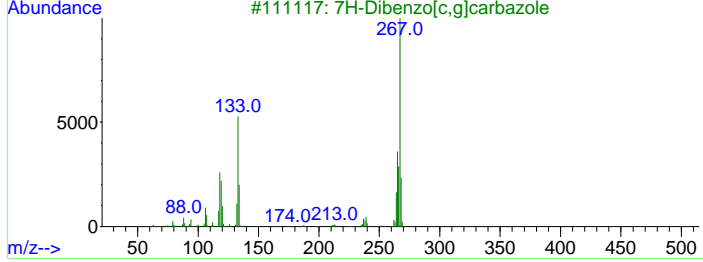
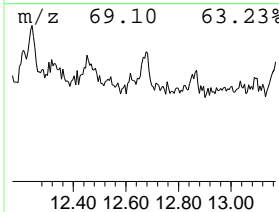
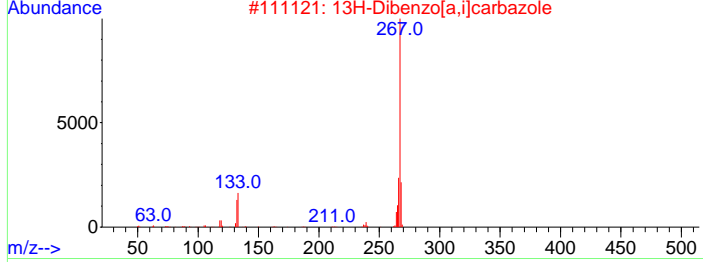
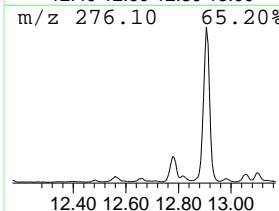
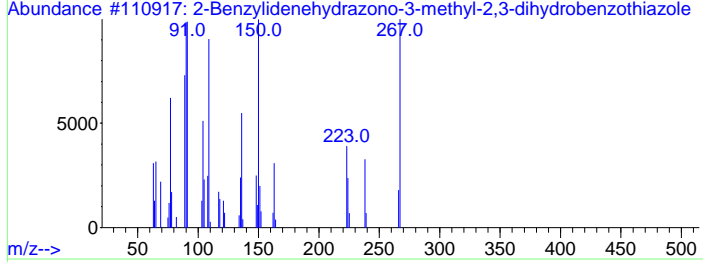
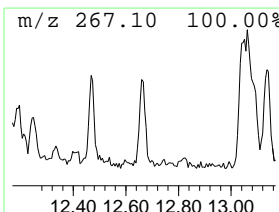
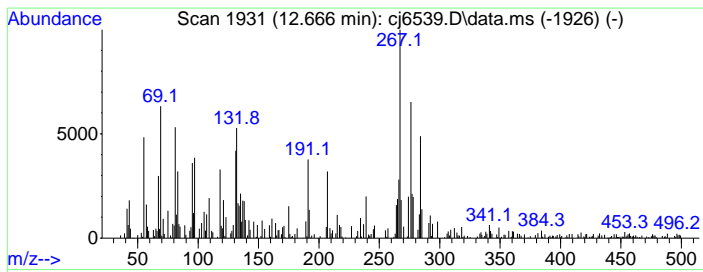
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 20 Unknown Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.666	8.66 ppm	591054	Perylene-d12	11.724

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			2-Benzylidenehydrazono-3-methyl-...	267	C15H13N3S	1000146-59-1	25
2			13H-Dibenzo[a,i]carbazole	267	C20H13N	000239-64-5	18
3			7H-Dibenzo[c,g]carbazole	267	C20H13N	000194-59-2	14
4			3-[4-Methoxyphenyl]-1,4-benzothi...	284	C15H12N2O2S	1000211-53-6	14
5			2-[2-(4-Methoxyphenyl)vinyl]-3,3...	277	C19H19NO	101913-13-7	11



7.1.15  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6539.D  
 Acq On : 10 May 2024 12:35 am  
 Operator : rocquans  
 Sample : jd87833-7  
 Misc : op54460,ecj297,30.7,,1,1  
 ALS Vial : 30 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

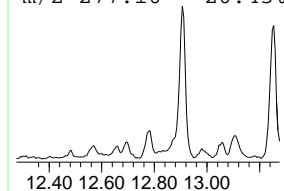
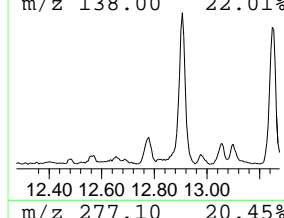
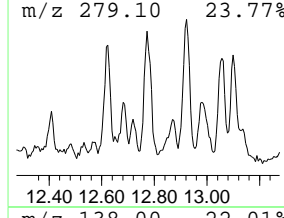
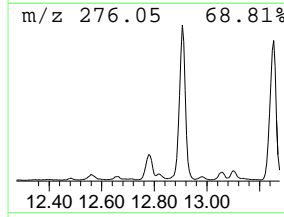
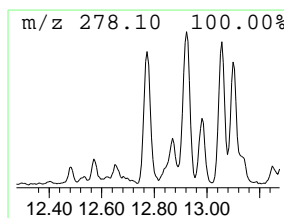
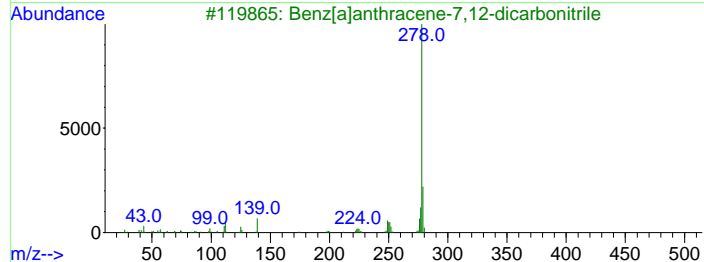
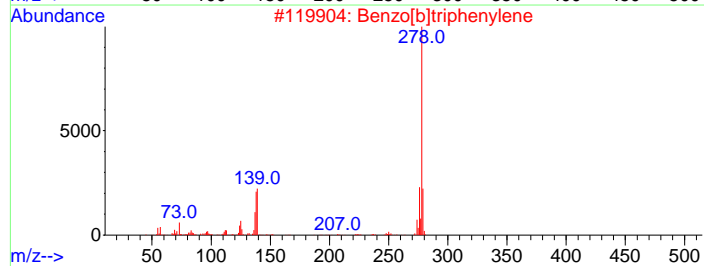
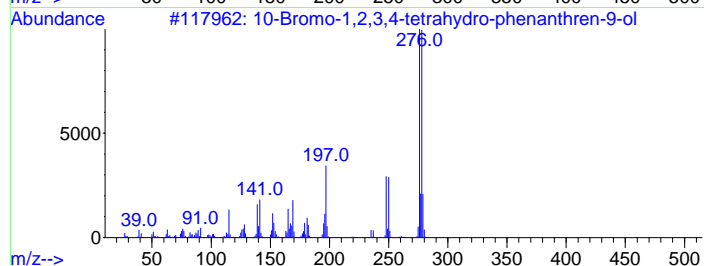
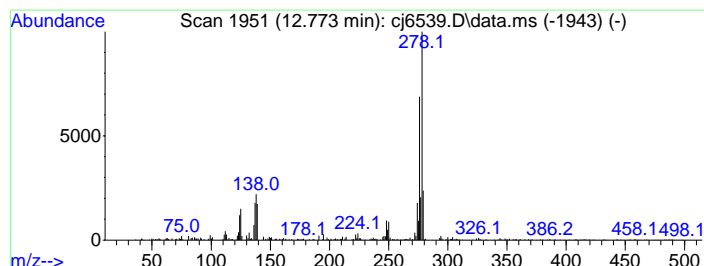
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 21 Unknown Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.773	9.58 ppm	654321	Perylene-d12	11.724

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	10-Bromo-1,2,3,4-tetrahydro-phen...	276	C14H13BrO	1000190-54-9	59
2		Benzo[b]triphenylene	278	C22H14	000215-58-7	49
3		Benz[a]anthracene-7,12-dicarboni...	278	C20H10N2	035215-32-8	49
4		Benzo[b]triphenylene	278	C22H14	000215-58-7	49
5		Indeno[1,2,3-cd]pyrene	276	C22H12	000193-39-5	46



7.1.15  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6539.D  
 Acq On : 10 May 2024 12:35 am  
 Operator : rocquans  
 Sample : jd87833-7  
 Misc : op54460,ecj297,30.7,,,1,1  
 ALS Vial : 30 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

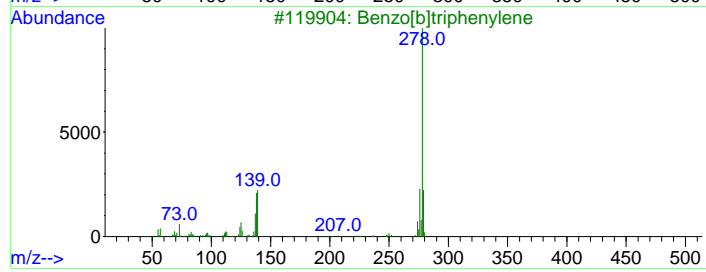
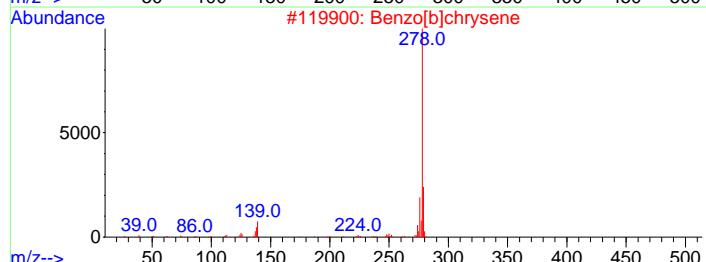
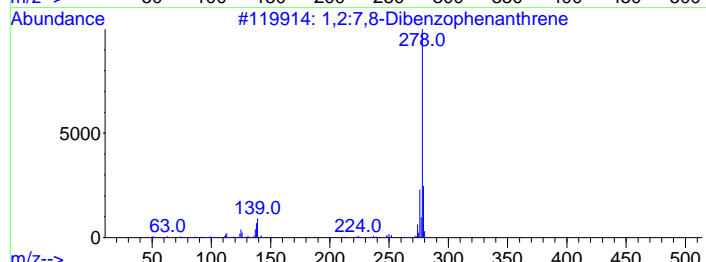
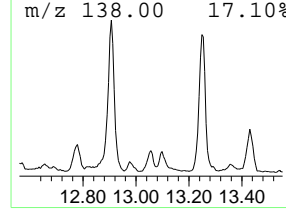
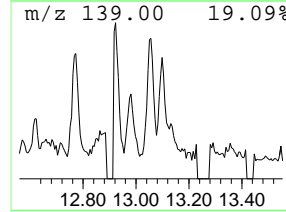
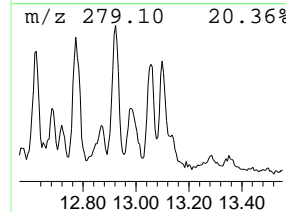
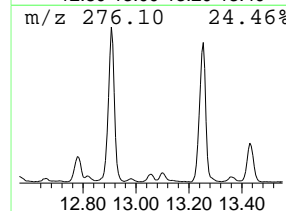
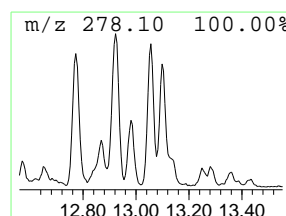
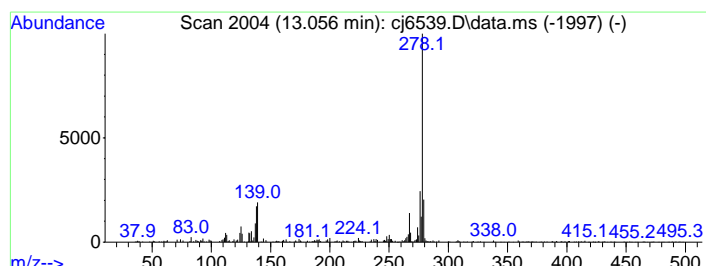
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 22 Unknown Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.056	5.97 ppm	407537	Perylene-d12	11.724

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			1,2:7,8-Dibenzophenanthrene	278	C22H14	000213-46-7	96
2			Benzo[b]chrysene	278	C22H14	000214-17-5	96
3			Benzo[b]triphenylene	278	C22H14	000215-58-7	96
4			1,2:7,8-Dibenzophenanthrene	278	C22H14	000213-46-7	94
5			Dibenz[a,h]anthracene	278	C22H14	000053-70-3	93



7.1.15  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6539.D  
 Acq On : 10 May 2024 12:35 am  
 Operator : rocquans  
 Sample : jd87833-7  
 Misc : op54460,ecj297,30.7,,,1,1  
 ALS Vial : 30 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

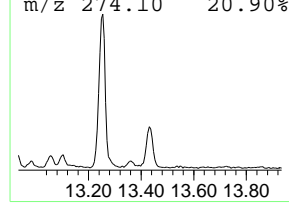
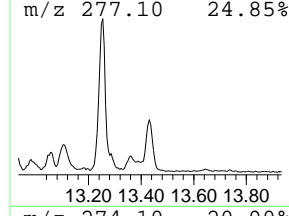
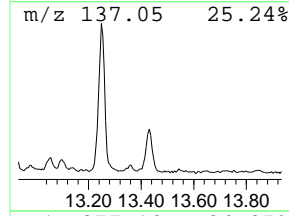
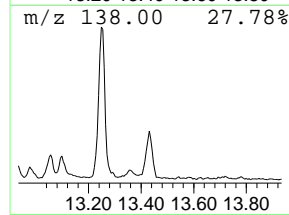
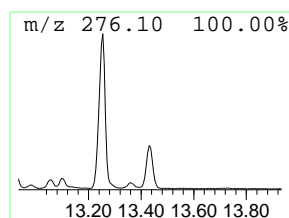
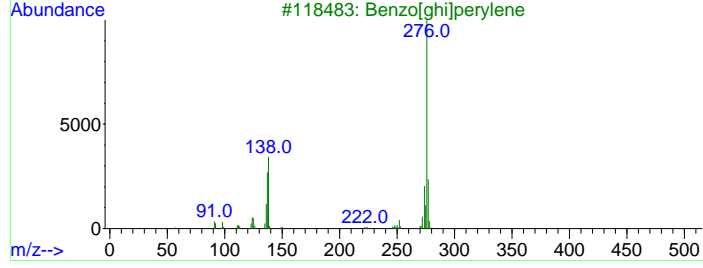
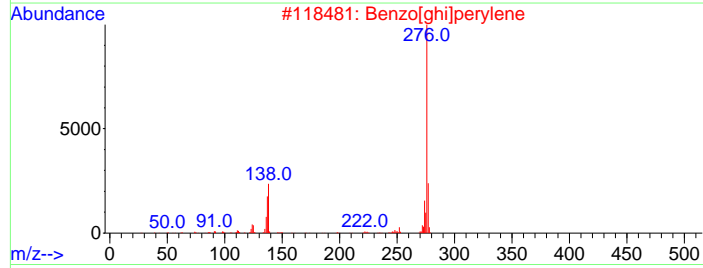
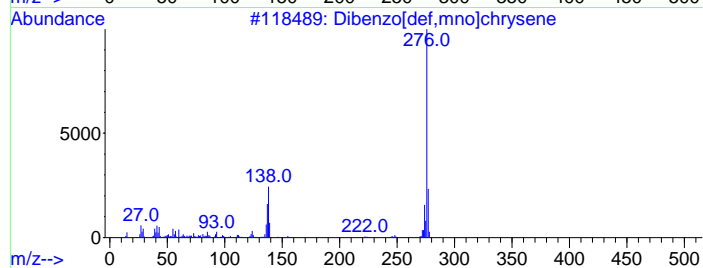
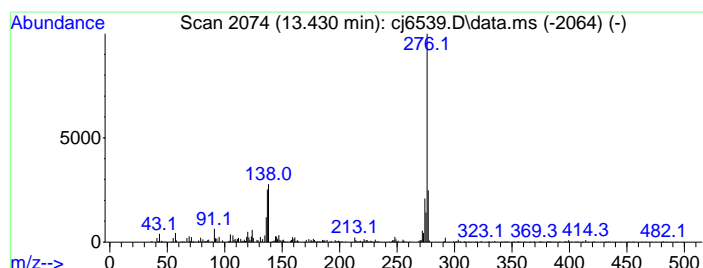
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 23 Unknown Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.431	12.66 ppm	864092	Perylene-d12	11.724

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Dibenzo[def,mno]chrysene	276	C22H12	000191-26-4	95
2		Benzo[ghi]perylene	276	C22H12	000191-24-2	94
3		Benzo[ghi]perylene	276	C22H12	000191-24-2	93
4		Dibenzo[def,mno]chrysene	276	C22H12	000191-26-4	93
5		Indeno[1,2,3-cd]pyrene	276	C22H12	000193-39-5	91





Library Search Compound Report

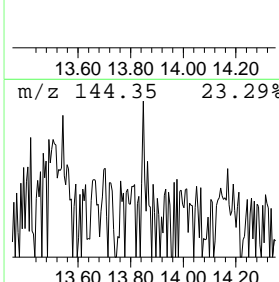
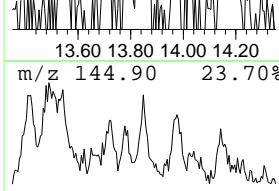
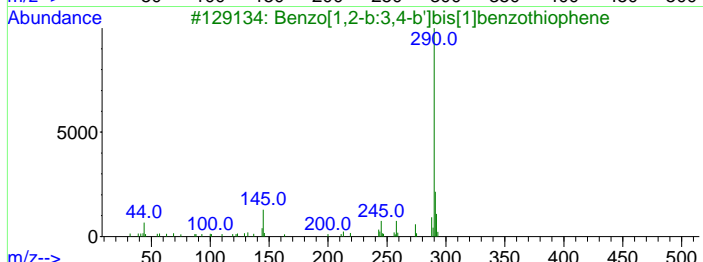
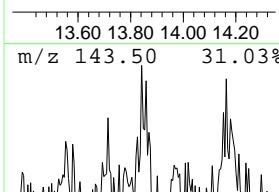
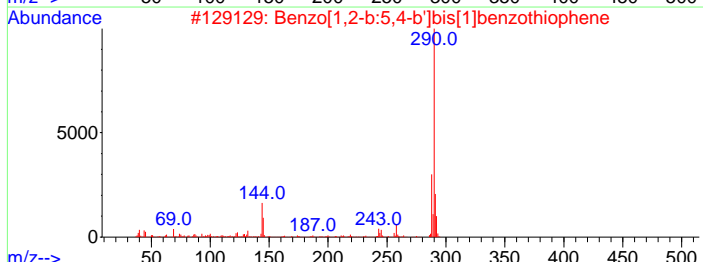
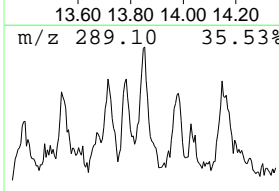
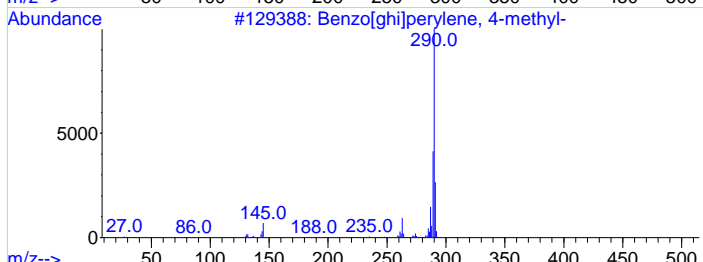
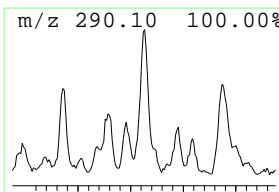
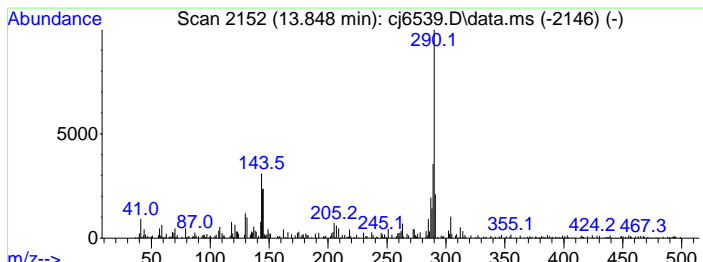
Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\
Data File : cj6539.D
Acq On : 10 May 2024 12:35 am
Operator : rocquans
Sample : jd87833-7
Misc : op54460,ecj297,30.7,,,1,1
ALS Vial : 30 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: lscint.p

\*\*\*\*\*
Peak Number 24 Unknown Concentration Rank 23

Table with 7 columns: R.T., EstConc, Area, Relative to ISTD, R.T., Hit# of, Tentative ID, MW, MolForm, CAS#, Qual. Row 1: 13.848, 4.98 ppm, 339731, Perylene-d12, 11.724, 5, Benzo[ghi]perylene, 4-methyl-, 290, C23H14, 019224-38-5, 55.



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6539.D  
 Acq On : 10 May 2024 12:35 am  
 Operator : rocquans  
 Sample : jd87833-7  
 Misc : op54460,ecj297,30.7,,1,1  
 ALS Vial : 30 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

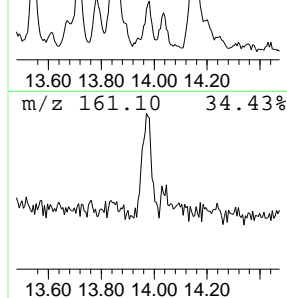
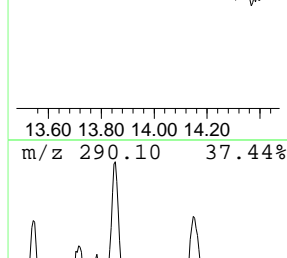
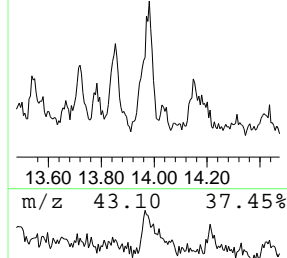
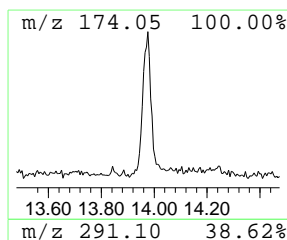
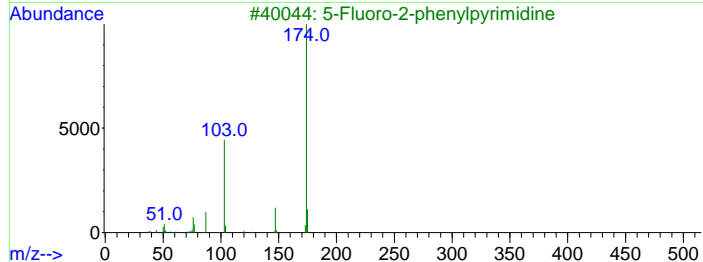
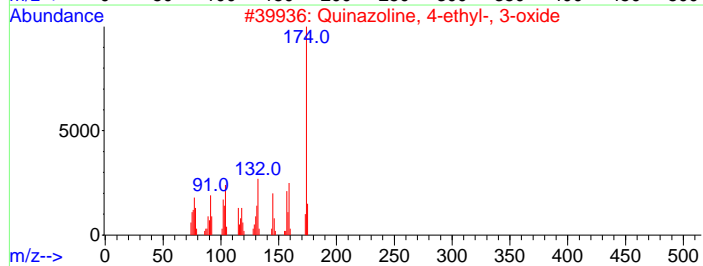
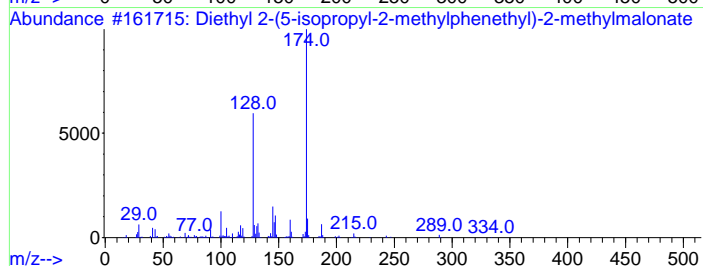
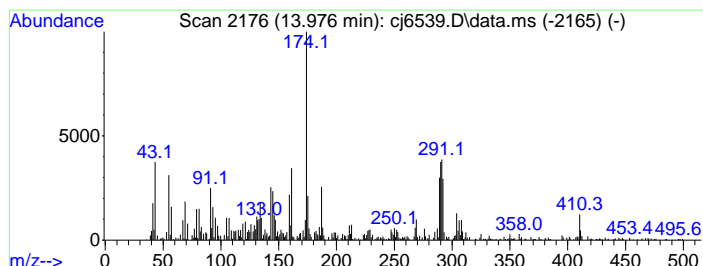
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 25 Unknown Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.976	7.04 ppm	480828	Perylene-d12	11.724

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Diethyl 2-(5-isopropyl-2-methylp...	334	C20H30O4	025391-07-5	25
2			Quinazoline, 4-ethyl-, 3-oxide	174	C10H10N2O	037920-74-4	25
3			5-Fluoro-2-phenylpyrimidine	174	C10H7FN2	054376-51-1	22
4			1H-Isoindole-1,3(2H)-dione, 2-[2...	309	C19H19NO3	1000350-33-0	22
5			Acetamide, 2,2,2-trifluoro-N-[2-...	300	C14H15F3N2O2	1000337-54-1	22



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Tentatively Identified Compound (LSC) summary

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6539.D  
 Acq On : 10 May 2024 12:35 am  
 Operator : rocquans  
 Sample : jd87833-7  
 Misc : op54460,ecj297,30.7,,,1,1  
 ALS Vial : 30 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
Unknown	4.252	12.0	ppm	616271	2	4.664	2046720	40.0
Phenanthrene, m...	8.322	5.9	ppm	454109	8	7.873	3070810	40.0
Phenanthrene, m...	8.349	4.9	ppm	373401	8	7.873	3070810	40.0
Unknown	8.424	17.2	ppm	1322510	8	7.873	3070810	40.0
Unknown	8.601	8.8	ppm	677679	8	7.873	3070810	40.0
Alkene	8.836	8.5	ppm	652129	8	7.873	3070810	40.0
Unknown	8.911	6.4	ppm	488587	8	7.873	3070810	40.0
Unknown	9.119	7.7	ppm	594136	8	7.873	3070810	40.0
Pyrene, methyl	9.521	9.2	ppm	1345670	9	10.371	5823310	40.0
Pyrene, methyl	9.585	5.0	ppm	735277	9	10.371	5823310	40.0
Benzo[b]naphtho...	10.114	4.9	ppm	716899	9	10.371	5823310	40.0
Unknown	10.275	5.0	ppm	729251	9	10.371	5823310	40.0
Unknown	11.050	6.3	ppm	428126	11	11.724	2731130	40.0
Unknown	11.200	7.1	ppm	484230	11	11.724	2731130	40.0
Unknown PHA Sub...	11.446	10.3	ppm	699728	11	11.724	2731130	40.0
Unknown	11.521	5.6	ppm	383413	11	11.724	2731130	40.0
Unknown PHA sus...	11.612	23.1	ppm	1578620	11	11.724	2731130	40.0
Unknown	11.869	6.0	ppm	413051	11	11.724	2731130	40.0
Unknown	12.179	5.0	ppm	340082	11	11.724	2731130	40.0
Unknown	12.666	8.7	ppm	591054	11	11.724	2731130	40.0
Unknown	12.773	9.6	ppm	654321	11	11.724	2731130	40.0
Unknown	13.056	6.0	ppm	407537	11	11.724	2731130	40.0
Unknown	13.431	12.7	ppm	864092	11	11.724	2731130	40.0
Unknown	13.848	5.0	ppm	339731	11	11.724	2731130	40.0
Unknown	13.976	7.0	ppm	480828	11	11.724	2731130	40.0

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Quantitation Report (LSC Reviewed)

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6533.D  
Acq On : 09 May 2024 10:41 pm  
Operator : rocquans  
Sample : jd87833-8 Inst : GCMSJC  
Misc : op54460,ecj297,30.4,,,1,1  
ALS Vial : 24 Sample Multiplier: 1

Quant Time: May 10 19:16:52 2024  
Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
QLast Update : Thu May 09 12:05:48 2024  
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.664	152	351776	40.00	ppm	0.00
24) Naphthalene-d8	5.466	136	1236733	40.00	ppm	0.00
46) Acenaphthene-d10	6.659	164	689793	40.00	ppm	0.00
69) Phenanthrene-d10	7.868	188	1237774	40.00	ppm	0.00
84) Chrysene-d12	10.366	240	873540	40.00	ppm	0.00
93) Perylene-d12	11.719	264	899719	40.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.664	152	351776	40.00	ppm	0.00
105) Phenanthrene-d10a	7.868	188	1237774	40.00	ppm	0.00
107) Naphthalene-d8a	5.466	136	1236733	40.00	ppm	0.00
109) Phenanthrene-d10b	7.868	188	1237774	40.00	ppm	# 0.00
112) Chrysene-d12a	10.366	240	873540	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.808	112	308872	30.55	ppm	0.01
Spiked Amount 50.000			Recovery =	61.10%		
8) Phenol-d5	4.423	99	422629	32.41	ppm	0.00
Spiked Amount 50.000			Recovery =	64.82%		
25) Nitrobenzene-d5	5.012	82	406557	32.11	ppm	0.00
Spiked Amount 50.000			Recovery =	64.22%		
51) 2-Fluorobiphenyl	6.167	172	749427	34.53	ppm	0.00
Spiked Amount 50.000			Recovery =	69.06%		
74) 2,4,6-Tribromophenol	7.274	330	107089	39.46	ppm	0.00
Spiked Amount 50.000			Recovery =	78.92%		
87) Terphenyl-d14	9.355	244	793544	36.77	ppm	0.00
Spiked Amount 50.000			Recovery =	73.54%		
110) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						
						Qvalue
38) Naphthalene	5.482	128	14034	0.4737	ppm	98
44) 2-Methylnaphthalene	5.926	141	5008	0.2851	ppm	92
53) Biphenyl	6.236	154	4078	0.1721	ppm	91
56) Acenaphthylene	6.552	152	98005	3.6632	ppm	100
59) Acenaphthene	6.680	153	26874	1.4125	ppm	96
62) Dibenzofuran	6.809	168	17630	0.6677	ppm	98
66) Fluorene	7.082	166	39207	1.8798	ppm	99
78) Phenanthrene	7.889	178	527531	17.6352	ppm	99
79) Anthracene	7.937	178	190818	6.3707	ppm	97
80) Carbazole	8.076	167	26436	0.9472	ppm	97
82) Fluoranthene	8.986	202	1586578	48.9915	ppm	100
86) Pyrene	9.200	202	1426229	48.0086	ppm	98
89) Benzo[a]anthracene	10.360	228	718393	25.5779	ppm	98
91) Chrysene	10.392	228	618944	23.8851	ppm	99
95) Benzo[b]fluoranthene	11.355	252	799054m	29.3994	ppm	
96) Benzo[k]fluoranthene	11.377	252	283263m	11.5822	ppm	
97) Benzo[a]pyrene	11.660	252	590528	26.2461	ppm	98
98) Indeno[1,2,3-cd]pyrene	12.896	276	384092	14.1210	ppm	96
100) Dibenz[a,h]anthracene	12.912	278	95604	4.3988	ppm	94
102) Benzo[g,h,i]perylene	13.243	276	355527	16.8197	ppm	97
-----						

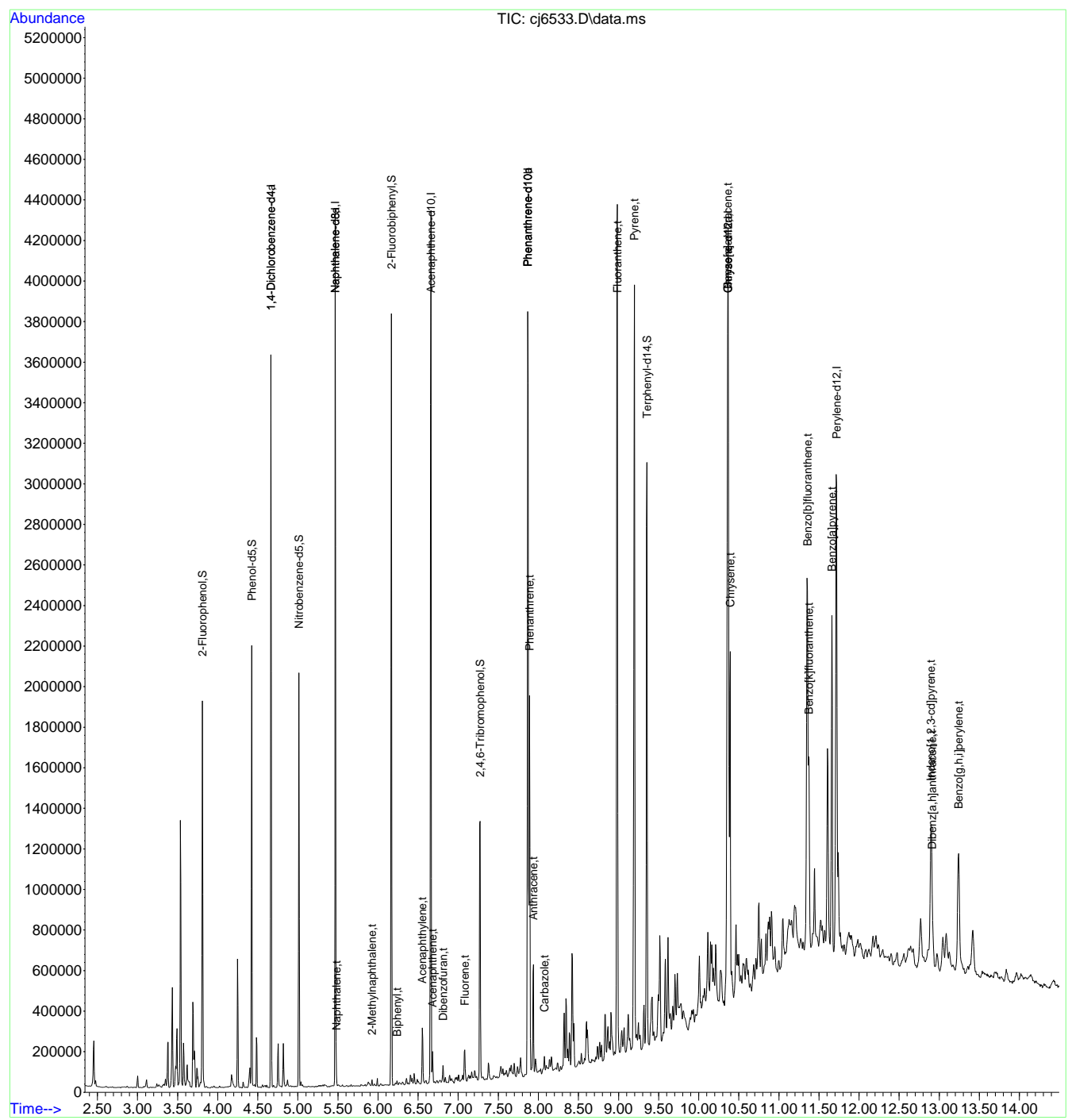
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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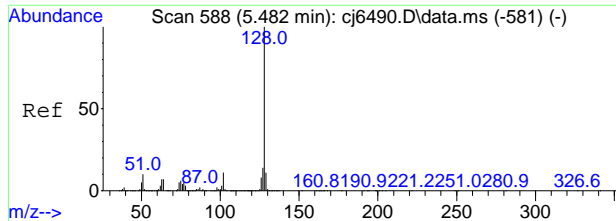
Quantitation Report (LSC Reviewed)

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6533.D  
Acq On : 09 May 2024 10:41 pm  
Operator : rocquans  
Sample : jd87833-8 Inst : GCMS CJ  
Misc : op54460,ecj297,30.4,,,1,1  
ALS Vial : 24 Sample Multiplier: 1

Quant Time: May 10 19:16:52 2024  
Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
QLast Update : Thu May 09 12:05:48 2024  
Response via : Initial Calibration

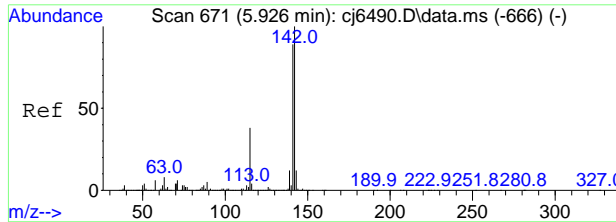
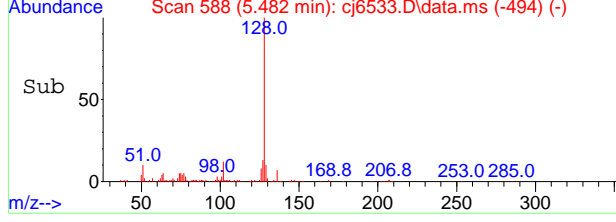
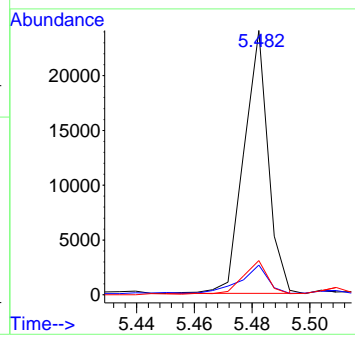
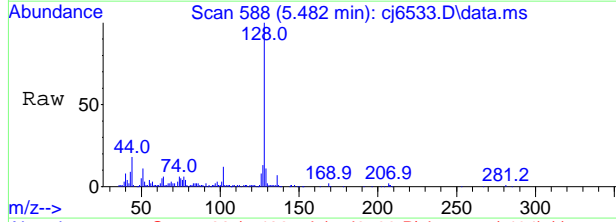


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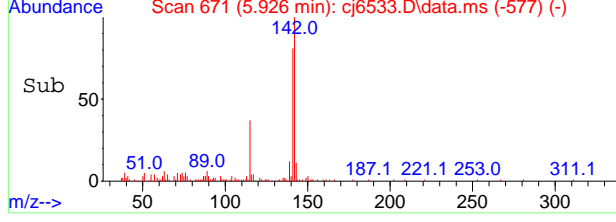
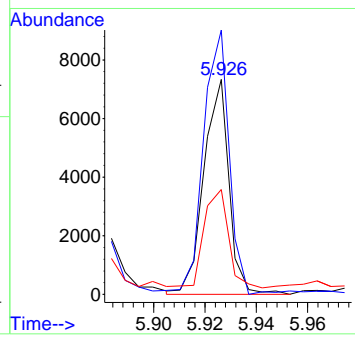
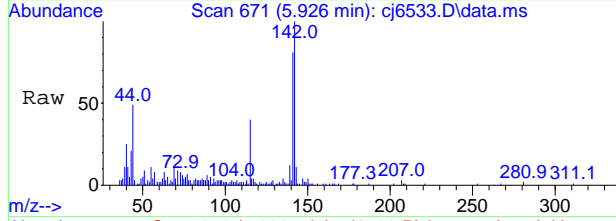
#38  
Naphthalene  
Concen: 0.4737 ppm  
RT: 5.482 min Scan# 588  
Delta R.T. 0.000 min  
Lab File: cj6533.D  
Acq: 09 May 2024 10:41 pm

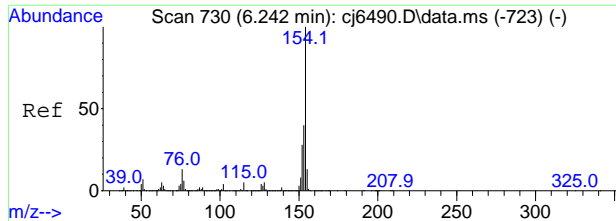
Tgt Ion	Ratio	Lower	Upper
128	100		
129	10.7	0.0	41.4
127	12.7	0.0	43.3



#44  
2-Methylnaphthalene  
Concen: 0.2851 ppm  
RT: 5.926 min Scan# 671  
Delta R.T. 0.000 min  
Lab File: cj6533.D  
Acq: 09 May 2024 10:41 pm

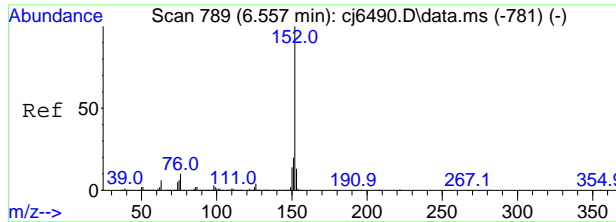
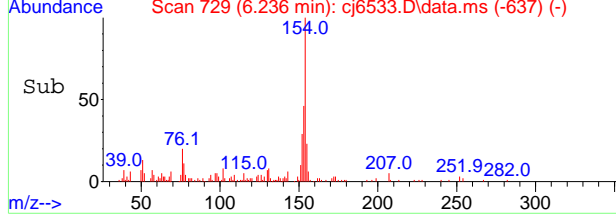
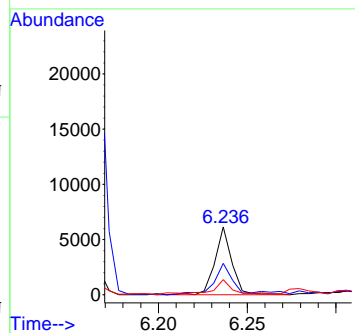
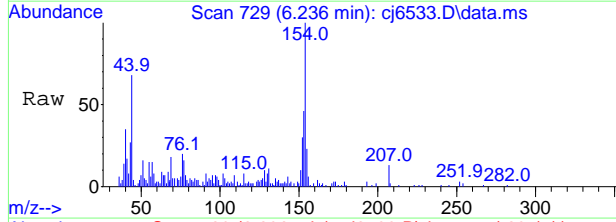
Tgt Ion	Ratio	Lower	Upper
141	100		
142	122.8	82.7	142.7
115	45.2	12.4	72.4





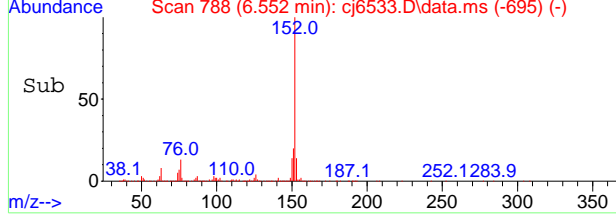
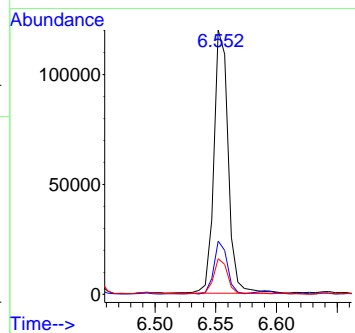
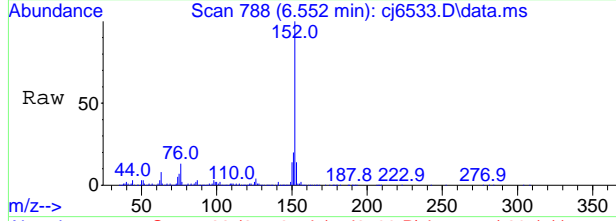
#53  
 Biphenyl  
 Concen: 0.1721 ppm  
 RT: 6.236 min Scan# 729  
 Delta R.T. -0.006 min  
 Lab File: cj6533.D  
 Acq: 09 May 2024 10:41 pm

Tgt Ion	Ratio	Lower	Upper
154	100		
153	45.6	10.5	70.5
155	16.9	0.0	42.8

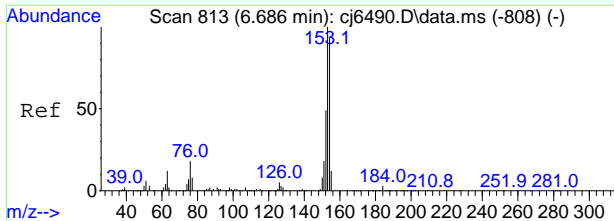


#56  
 Acenaphthylene  
 Concen: 3.6632 ppm  
 RT: 6.552 min Scan# 788  
 Delta R.T. -0.005 min  
 Lab File: cj6533.D  
 Acq: 09 May 2024 10:41 pm

Tgt Ion	Ratio	Lower	Upper
152	100		
151	20.0	0.0	50.3
153	13.3	0.0	43.4

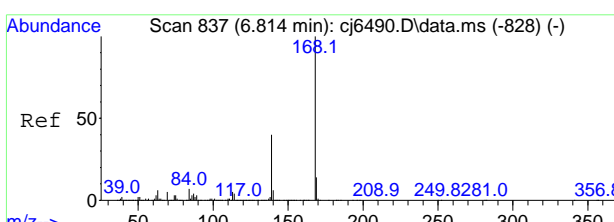
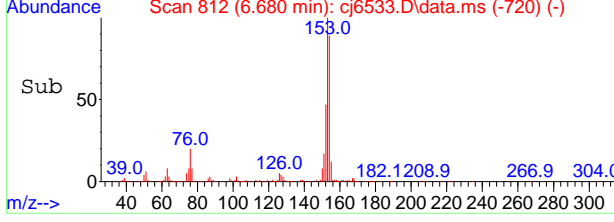
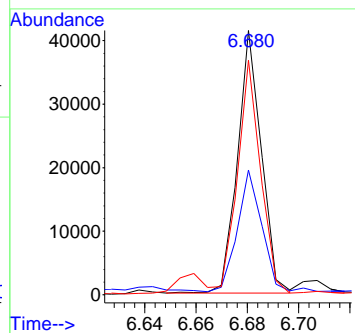
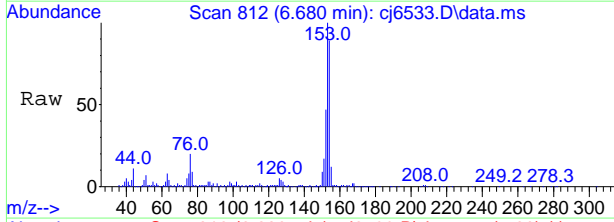


7.1.16  
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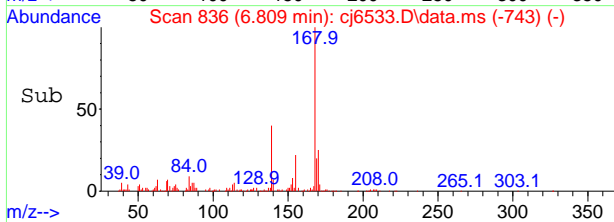
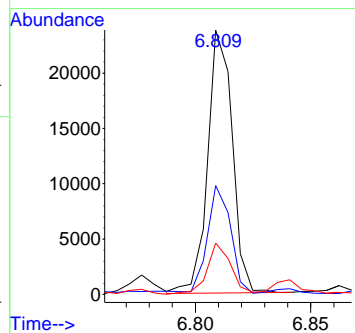
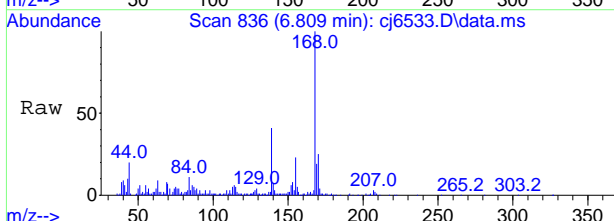
#59  
Acenaphthene  
Concen: 1.4125 ppm  
RT: 6.680 min Scan# 812  
Delta R.T. -0.006 min  
Lab File: cj6533.D  
Acq: 09 May 2024 10:41 pm

Tgt Ion	Ratio	Lower	Upper
153	100		
152	46.0	18.8	78.8
154	88.7	62.9	122.9

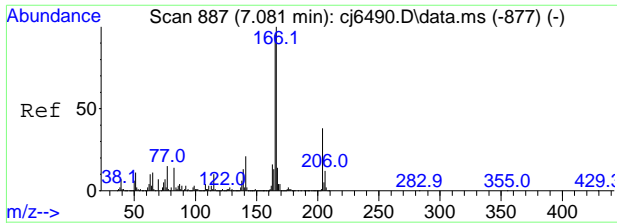


#62  
Dibenzofuran  
Concen: 0.6677 ppm  
RT: 6.809 min Scan# 836  
Delta R.T. -0.005 min  
Lab File: cj6533.D  
Acq: 09 May 2024 10:41 pm

Tgt Ion	Ratio	Lower	Upper
168	100		
139	39.8	10.0	70.0
169	16.8	0.0	43.7

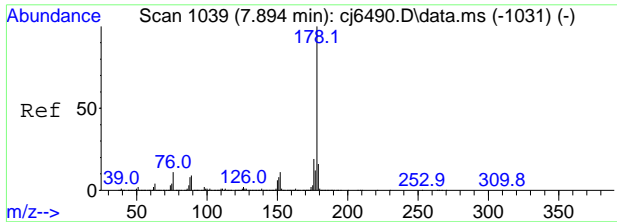
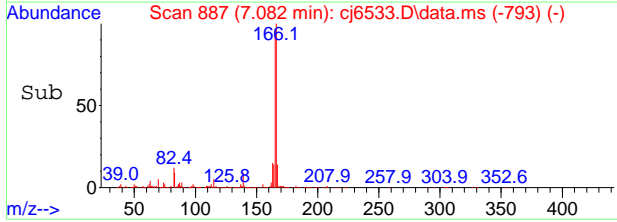
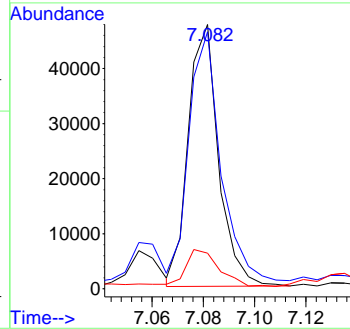
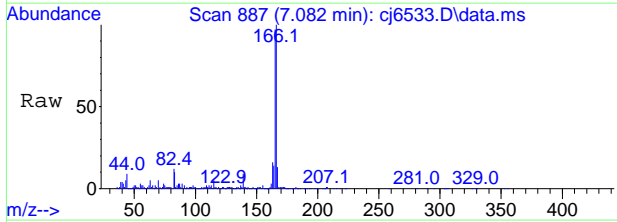






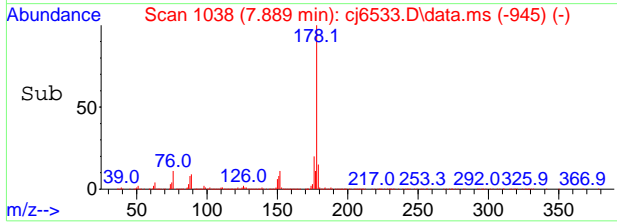
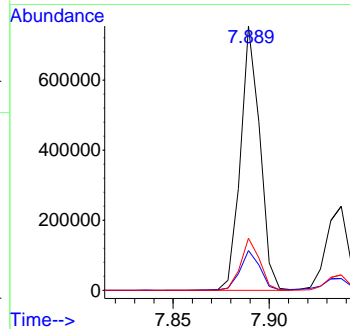
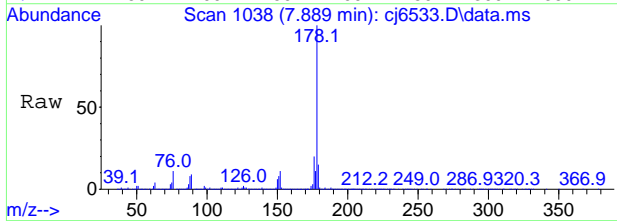
#66  
 Fluorene  
 Concen: 1.8798 ppm  
 RT: 7.082 min Scan# 887  
 Delta R.T. 0.001 min  
 Lab File: cj6533.D  
 Acq: 09 May 2024 10:41 pm

Tgt Ion	Ratio	Lower	Upper
166	100		
165	95.2	65.4	125.4
167	12.0	0.0	43.8

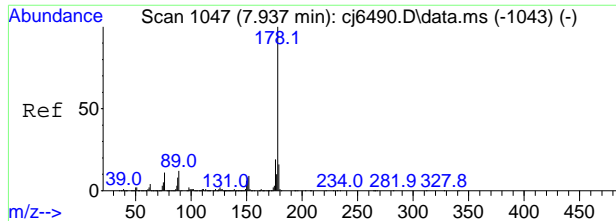


#78  
 Phenanthrene  
 Concen: 17.6352 ppm  
 RT: 7.889 min Scan# 1038  
 Delta R.T. -0.005 min  
 Lab File: cj6533.D  
 Acq: 09 May 2024 10:41 pm

Tgt Ion	Ratio	Lower	Upper
178	100		
179	15.0	0.0	45.5
176	19.8	0.0	49.2

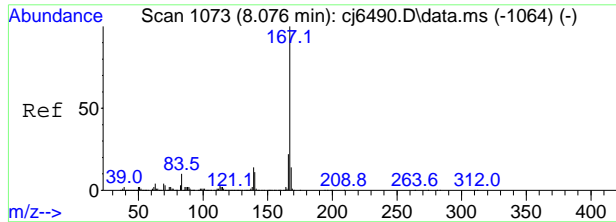
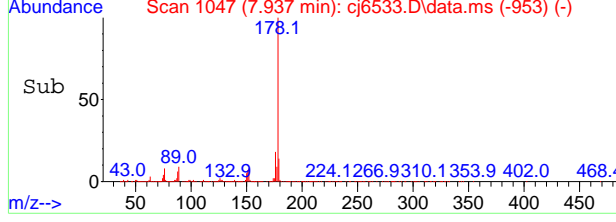
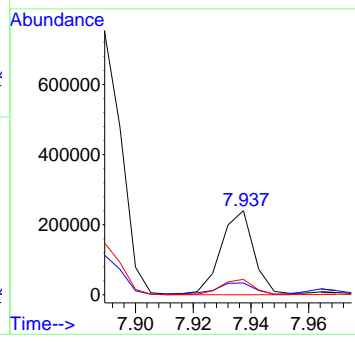
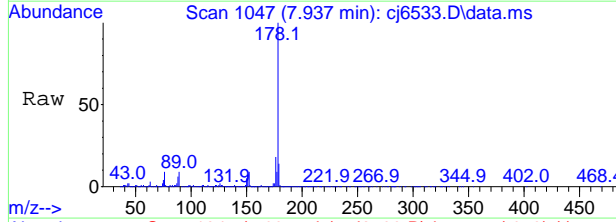


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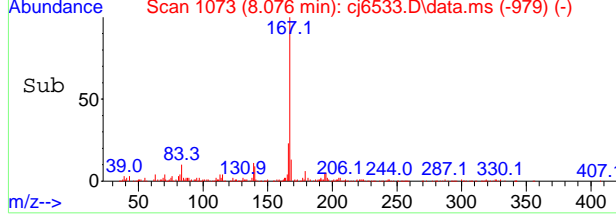
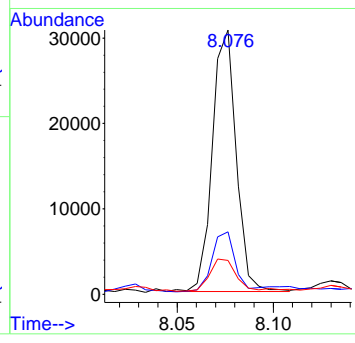
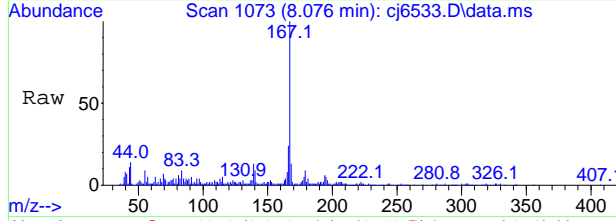
#79  
 Anthracene  
 Concen: 6.3707 ppm  
 RT: 7.937 min Scan# 1047  
 Delta R.T. 0.000 min  
 Lab File: cj6533.D  
 Acq: 09 May 2024 10:41 pm

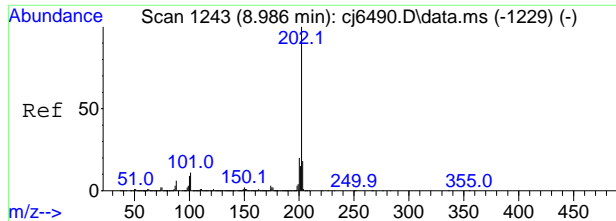
Tgt Ion	Resp	Lower	Upper
178	190818		
178	100		
179	13.6	0.0	46.1
176	18.3	0.0	48.7



#80  
 Carbazole  
 Concen: 0.9472 ppm  
 RT: 8.076 min Scan# 1073  
 Delta R.T. 0.000 min  
 Lab File: cj6533.D  
 Acq: 09 May 2024 10:41 pm

Tgt Ion	Resp	Lower	Upper
167	26436		
167	100		
166	21.6	0.0	51.7
139	11.2	0.0	43.8

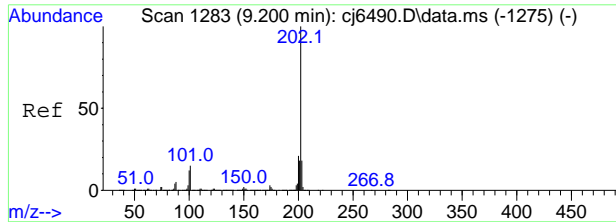
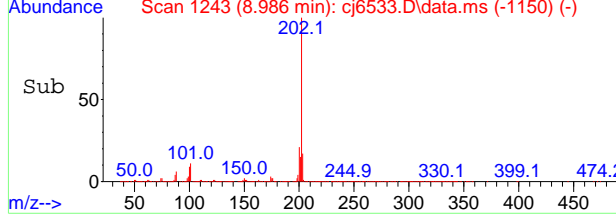
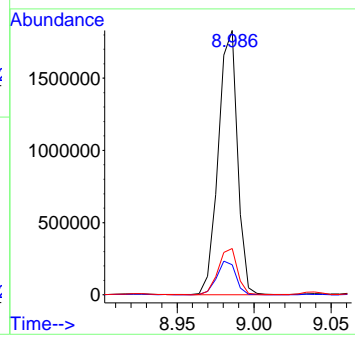
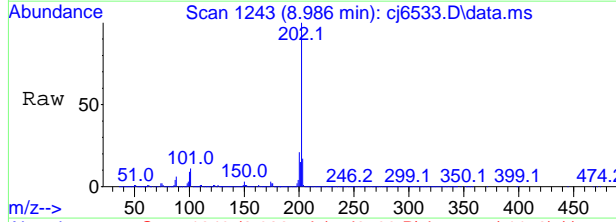




#82  
 Fluoranthene  
 Concen: 48.9915 ppm  
 RT: 8.986 min Scan# 1243  
 Delta R.T. -0.000 min  
 Lab File: cj6533.D  
 Acq: 09 May 2024 10:41 pm

Tgt Ion:202 Resp: 1586578

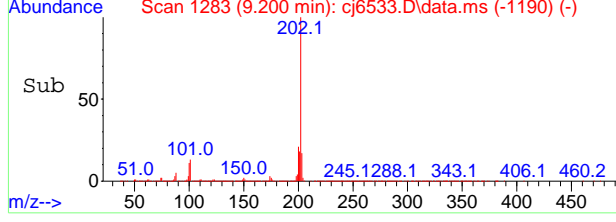
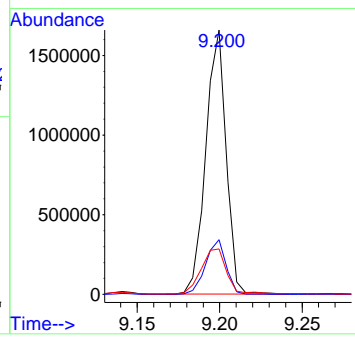
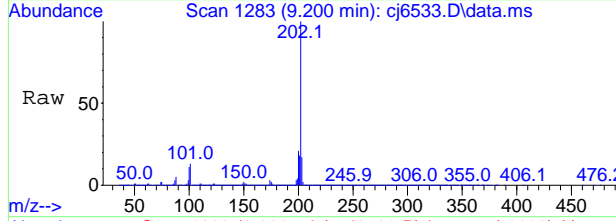
Ion	Ratio	Lower	Upper
202	100		
101	11.3	0.0	41.4
203	17.4	0.0	47.6

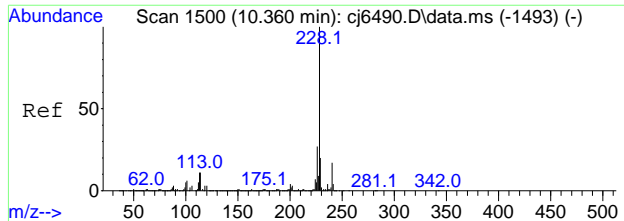


#86  
 Pyrene  
 Concen: 48.0086 ppm  
 RT: 9.200 min Scan# 1283  
 Delta R.T. -0.000 min  
 Lab File: cj6533.D  
 Acq: 09 May 2024 10:41 pm

Tgt Ion:202 Resp: 1426229

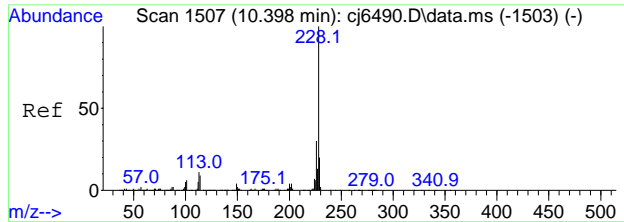
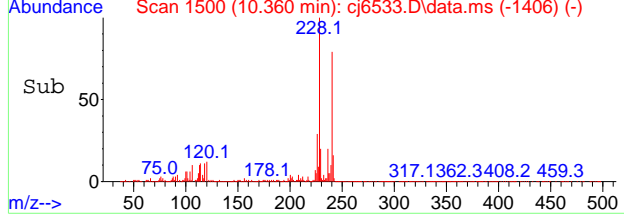
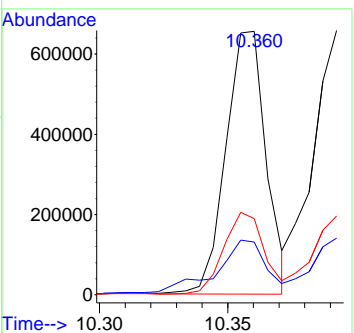
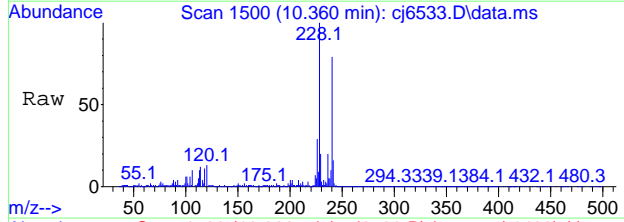
Ion	Ratio	Lower	Upper
202	100		
200	20.7	0.0	51.4
203	17.0	0.0	47.8





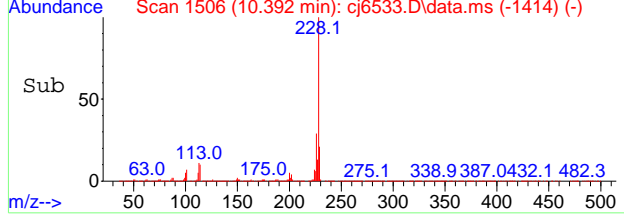
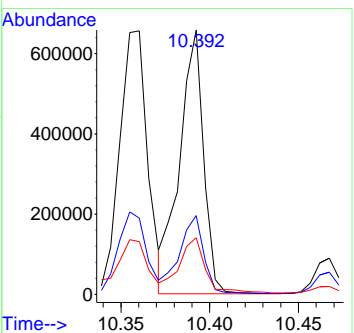
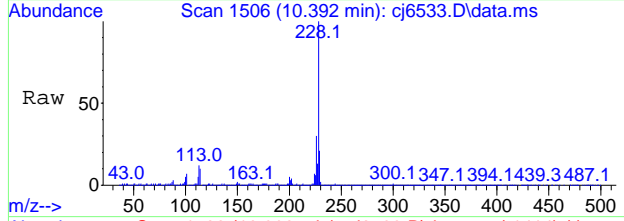
#89  
Benzo[a]anthracene  
Concen: 25.5779 ppm  
RT: 10.360 min Scan# 1500  
Delta R.T. 0.000 min  
Lab File: cj6533.D  
Acq: 09 May 2024 10:41 pm

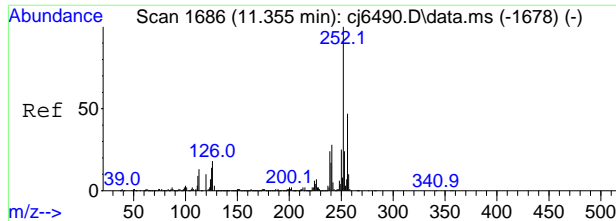
Tgt Ion	Ratio	Lower	Upper
228	100		
229	18.9	0.0	49.8
226	28.5	0.0	57.1



#91  
Chrysene  
Concen: 23.8851 ppm  
RT: 10.392 min Scan# 1506  
Delta R.T. -0.006 min  
Lab File: cj6533.D  
Acq: 09 May 2024 10:41 pm

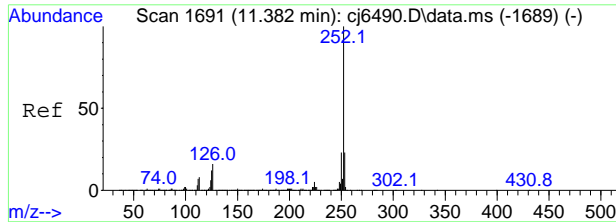
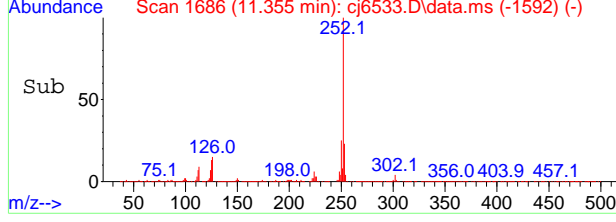
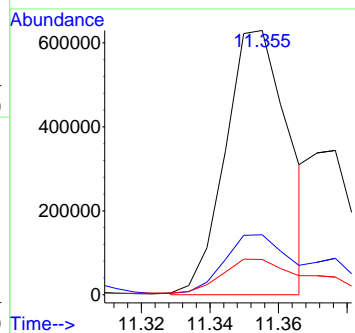
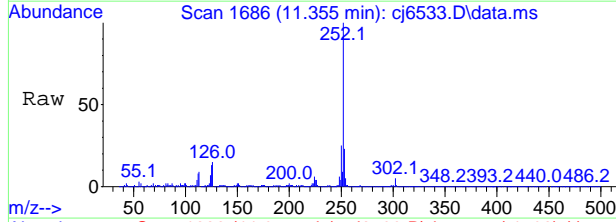
Tgt Ion	Ratio	Lower	Upper
228	100		
226	29.4	0.0	59.9
229	20.9	0.0	49.8





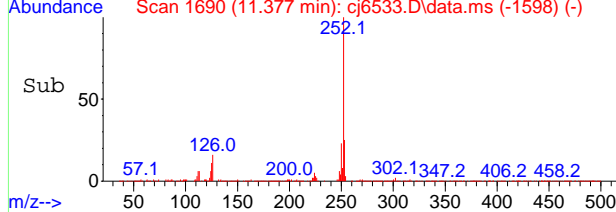
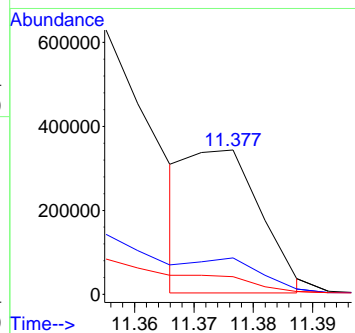
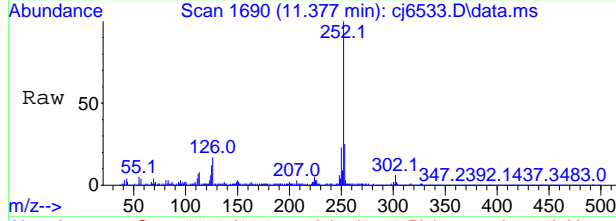
#95  
 Benzo[b]fluoranthene  
 Concen: 29.3994 ppm m  
 RT: 11.355 min Scan# 1686  
 Delta R.T. 0.000 min  
 Lab File: cj6533.D  
 Acq: 09 May 2024 10:41 pm

Tgt Ion	Ratio	Lower	Upper
252	100		
253	22.7	0.0	54.7
125	13.4	0.0	44.2

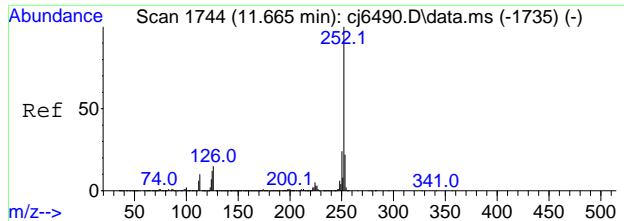


#96  
 Benzo[k]fluoranthene  
 Concen: 11.5822 ppm m  
 RT: 11.377 min Scan# 1690  
 Delta R.T. -0.005 min  
 Lab File: cj6533.D  
 Acq: 09 May 2024 10:41 pm

Tgt Ion	Ratio	Lower	Upper
252	100		
253	25.3	0.0	52.6
125	12.2	0.0	42.4

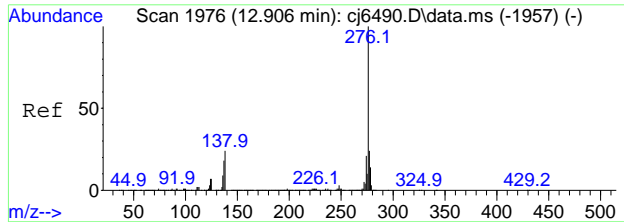
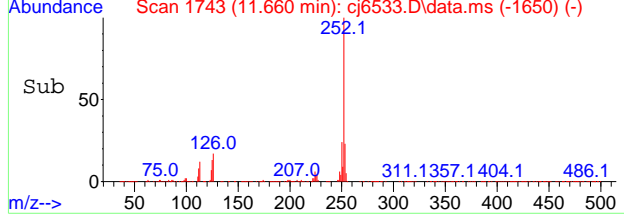
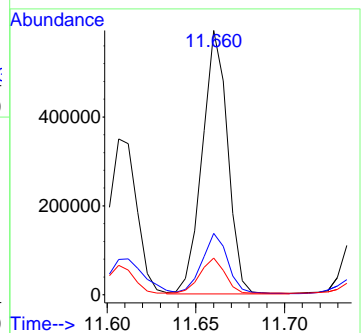
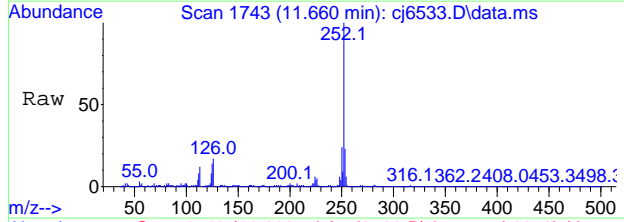


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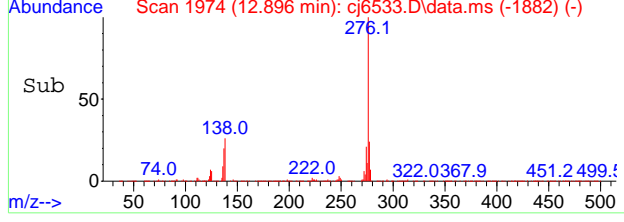
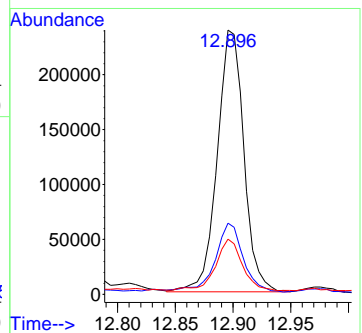
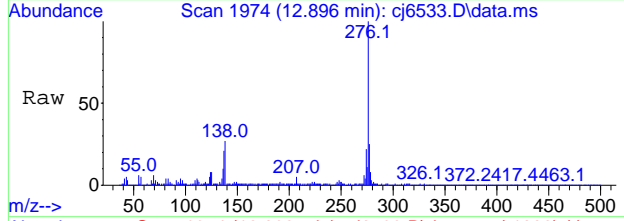
#97  
 Benzo[a]pyrene  
 Concen: 26.2461 ppm  
 RT: 11.660 min Scan# 1743  
 Delta R.T. -0.005 min  
 Lab File: cj6533.D  
 Acq: 09 May 2024 10:41 pm

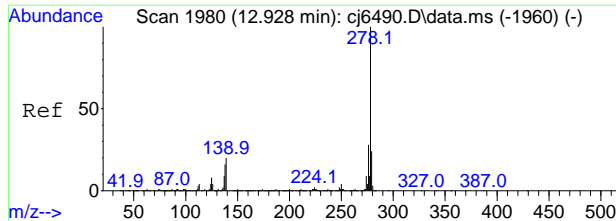
Tgt Ion	Ratio	Lower	Upper
252	100		
253	22.3	0.0	51.9
125	13.3	0.0	42.1



#98  
 Indeno[1,2,3-cd]pyrene  
 Concen: 14.1210 ppm  
 RT: 12.896 min Scan# 1974  
 Delta R.T. -0.010 min  
 Lab File: cj6533.D  
 Acq: 09 May 2024 10:41 pm

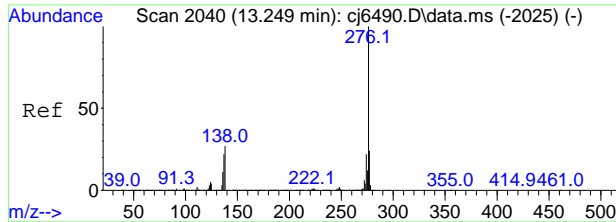
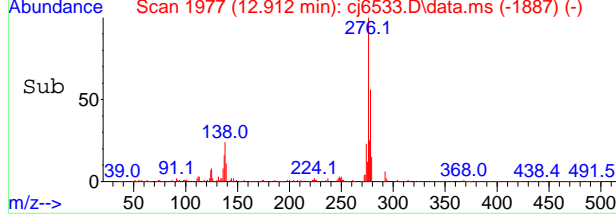
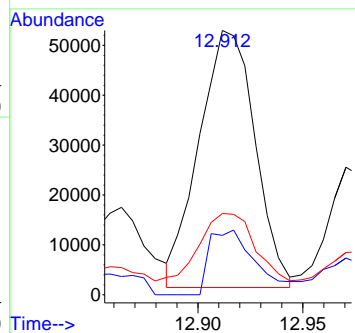
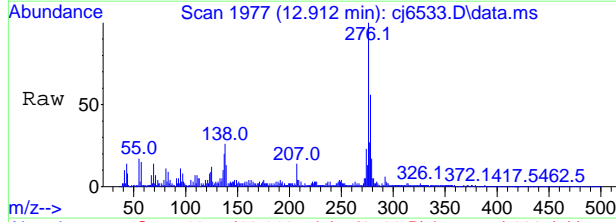
Tgt Ion	Ratio	Lower	Upper
276	100		
138	25.9	0.0	54.2
137	19.5	0.0	47.9





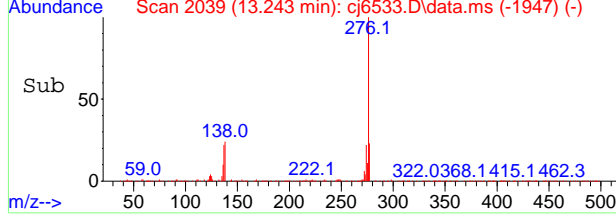
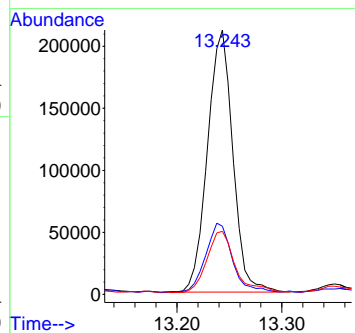
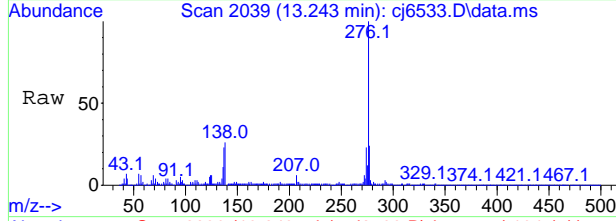
#100  
 Dibenz[a,h]anthracene  
 Concen: 4.3988 ppm  
 RT: 12.912 min Scan# 1977  
 Delta R.T. -0.016 min  
 Lab File: cj6533.D  
 Acq: 09 May 2024 10:41 pm

Tgt Ion	Ratio	Lower	Upper
278	100		
139	22.0	0.0	49.8
279	27.3	0.0	54.1



#102  
 Benzo[g,h,i]perylene  
 Concen: 16.8197 ppm  
 RT: 13.243 min Scan# 2039  
 Delta R.T. -0.006 min  
 Lab File: cj6533.D  
 Acq: 09 May 2024 10:41 pm

Tgt Ion	Ratio	Lower	Upper
276	100		
138	24.9	0.0	56.7
277	23.1	0.0	54.1



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LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\nerirose\ecj297\  
Data File : cj6533.D  
Acq On : 09 May 2024 10:41 pm  
Operator : rocquans  
Sample : jd87833-8  
Misc : op54460,ecj297,30.4,,,1,1  
ALS Vial : 24 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON Filtering: 5  
Sampling : 1 Min Area: 1000 Area counts  
Start Thrs: 0.02 Max Peaks: 100  
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

Signal : TIC: cj6533.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.172	336	343	352	rVB	63104	82396	1.58%	0.126%
2	4.247	352	357	363	rVB	634906	396750	7.63%	0.608%
3	4.402	379	386	387	rBV	98205	89265	1.72%	0.137%
4	4.423	387	390	395	rVV	2177909	1229657	23.65%	1.884%
5	4.482	399	401	407	rVB	246499	160660	3.09%	0.246%
6	4.664	431	435	439	rBV	3613618	2140471	41.17%	3.280%
7	4.755	445	452	460	rBV	216241	161013	3.10%	0.247%
8	4.819	460	464	469	rBV	215547	149377	2.87%	0.229%
9	5.012	495	500	504	rVV	2040911	1161667	22.34%	1.780%
10	5.466	580	585	590	rVV	4322699	2662144	51.20%	4.079%
11	6.167	709	716	721	rBV	3806269	2270698	43.67%	3.479%
12	6.552	784	788	793	rBV	277669	218639	4.20%	0.335%
13	6.659	800	808	811	rBV	4306755	3046713	58.59%	4.668%
14	6.680	811	812	815	rVB	154245	74900	1.44%	0.115%
15	7.082	884	887	892	rVB	154906	141716	2.73%	0.217%
16	7.274	917	923	927	rBV	1276091	1071316	20.60%	1.641%
17	7.376	939	942	949	rVB2	83971	82025	1.58%	0.126%
18	7.531	965	971	974	rBV3	56688	72194	1.39%	0.111%
19	7.777	1013	1017	1023	rVB	93793	112555	2.16%	0.172%
20	7.868	1029	1034	1037	rBV	3763224	3347488	64.38%	5.129%
21	7.889	1037	1038	1042	rVB	1845708	994384	19.12%	1.524%
22	7.937	1042	1047	1050	rVB	527893	433004	8.33%	0.663%
23	8.076	1066	1073	1075	rBV2	87040	104970	2.02%	0.161%
24	8.162	1086	1089	1093	rVB4	68741	73763	1.42%	0.113%
25	8.322	1112	1119	1121	rBV	280080	257818	4.96%	0.395%
26	8.344	1121	1123	1126	rVB	294201	215960	4.15%	0.331%
27	8.387	1129	1131	1134	rVB	160435	130888	2.52%	0.201%
28	8.419	1134	1137	1146	rVB	561343	710172	13.66%	1.088%
29	8.601	1162	1171	1178	rBV2	210050	353158	6.79%	0.541%
30	8.734	1190	1196	1199	rBV2	78568	97270	1.87%	0.149%
31	8.836	1209	1215	1218	rBV	229709	263810	5.07%	0.404%
32	8.868	1218	1221	1224	rBV	127264	129930	2.50%	0.199%
33	8.906	1224	1228	1234	rVB2	212377	273566	5.26%	0.419%
34	8.986	1235	1243	1248	rBV	4193648	3782352	72.74%	5.795%
35	9.039	1248	1253	1255	rBV3	108759	109565	2.11%	0.168%
36	9.071	1255	1259	1262	rVB2	122913	123639	2.38%	0.189%
37	9.119	1262	1268	1275	rBV4	189158	289482	5.57%	0.444%
38	9.200	1275	1283	1290	rBV	3772856	3875829	74.54%	5.938%
39	9.317	1299	1305	1307	rBV	222232	205816	3.96%	0.315%
40	9.355	1307	1312	1317	rVB	2872236	2462442	47.36%	3.773%



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7



LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\nerirose\ecj297\  
Data File : cj6533.D  
Acq On : 09 May 2024 10:41 pm  
Operator : rocquans  
Sample : jd87833-8  
Misc : op54460,ecj297,30.4,,,1,1  
ALS Vial : 24 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON  
Sampling : 1  
Start Thrs: 0.02  
Stop Thrs : 0  
Filtering: 5  
Min Area: 1000 Area counts  
Max Peaks: 100  
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS, zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

Table with 10 columns: Retention Time, Abundance, and Percent Area. Rows 41-85 list various peaks with their corresponding values.



7.1.17  
7

LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\nerirose\ecj297\  
Data File : cj6533.D  
Acq On : 09 May 2024 10:41 pm  
Operator : rocquans  
Sample : jd87833-8  
Misc : op54460,ecj297,30.4,,,1,1  
ALS Vial : 24 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON Filtering: 5  
Sampling : 1 Min Area: 1000 Area counts  
Start Thrs: 0.02 Max Peaks: 100  
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

86	12.398	1878	1881	1886	rVB6	56874	81584	1.57%	0.125%
87	12.473	1886	1895	1901	rVB6	68192	141677	2.72%	0.217%
88	12.559	1902	1911	1915	rBV10	63271	136633	2.63%	0.209%
89	12.623	1916	1923	1925	rBV4	59331	115067	2.21%	0.176%
90	12.767	1942	1950	1961	rBV3	240507	515852	9.92%	0.790%
91	12.896	1962	1974	1985	rVV2	697849	1417281	27.26%	2.171%
92	12.971	1985	1988	1995	rVB	87944	135918	2.61%	0.208%
93	13.045	1995	2002	2006	rBV	169871	300616	5.78%	0.461%
94	13.088	2006	2010	2015	rVV4	165498	296830	5.71%	0.455%
95	13.126	2015	2017	2023	rVB6	74627	91547	1.76%	0.140%
96	13.243	2031	2039	2054	rVB	593538	1167916	22.46%	1.789%
97	13.420	2062	2072	2081	rVB2	219528	487437	9.37%	0.747%
98	13.837	2145	2150	2161	rVB5	63734	110615	2.13%	0.169%
99	13.965	2168	2174	2180	rBV5	45141	92180	1.77%	0.141%
100	14.425	2252	2260	2266	rBV5	40779	115423	2.22%	0.177%

Sum of corrected areas: 65267498

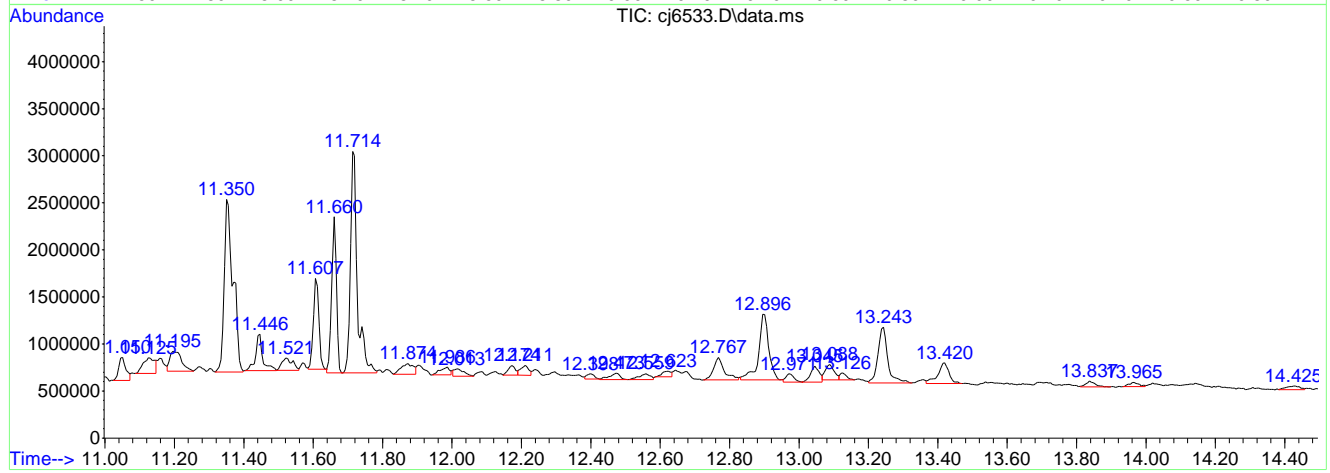
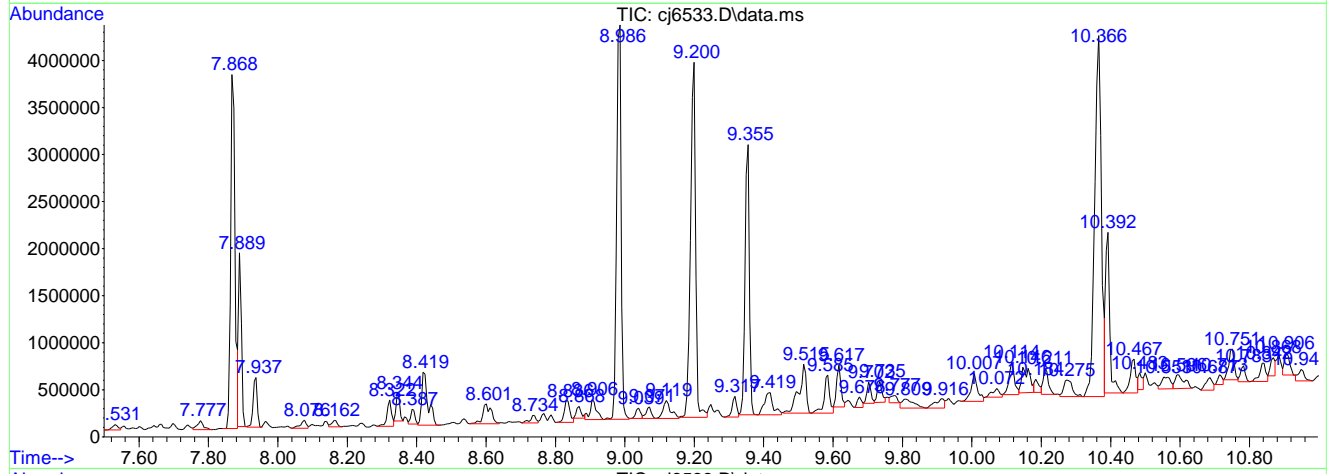
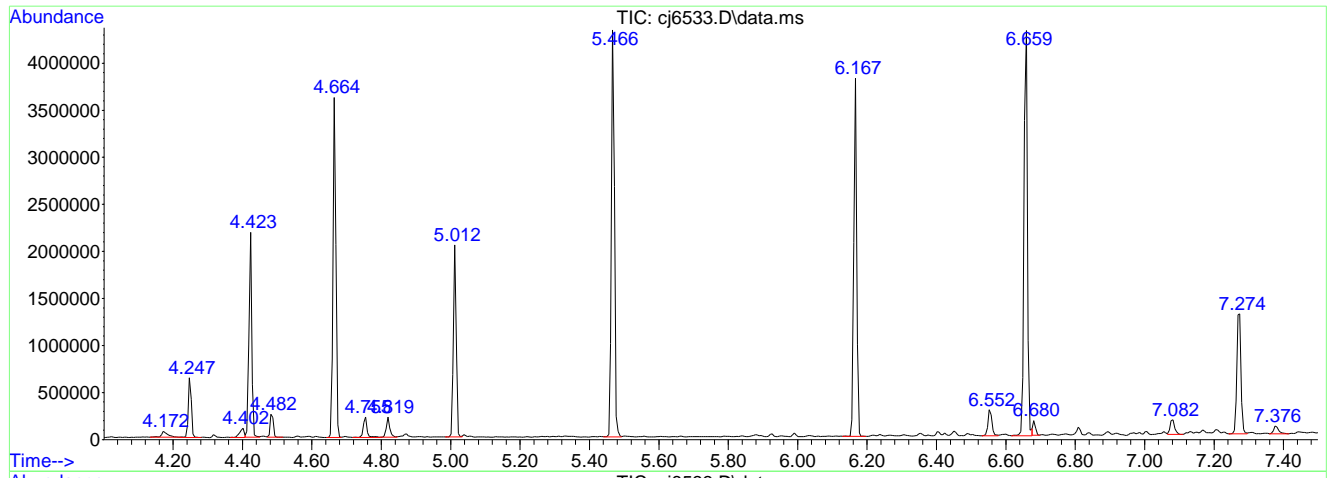
7.1.17  
7

LSC Report - Integrated Chromatogram

Data Path : X:\Dayton SVOA GCMS\nerirose\ecj297\  
Data File : cj6533.D  
Acq On : 09 May 2024 10:41 pm  
Operator : rocquans  
Sample : jd87833-8  
Misc : op54460,ecj297,30.4,,,1,1  
ALS Vial : 24 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p



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7



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\nerirose\ecj297\  
Data File : cj6533.D  
Acq On : 09 May 2024 10:41 pm  
Operator : rocquans  
Sample : jd87833-8  
Misc : op54460,ecj297,30.4,,,1,1  
ALS Vial : 24 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

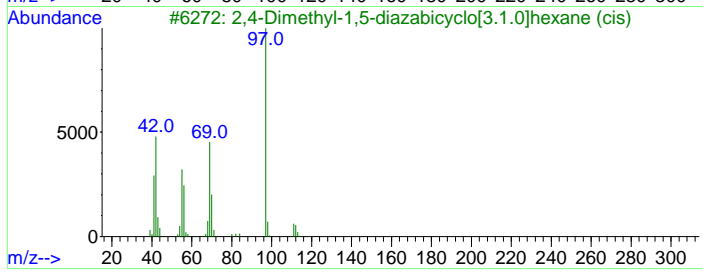
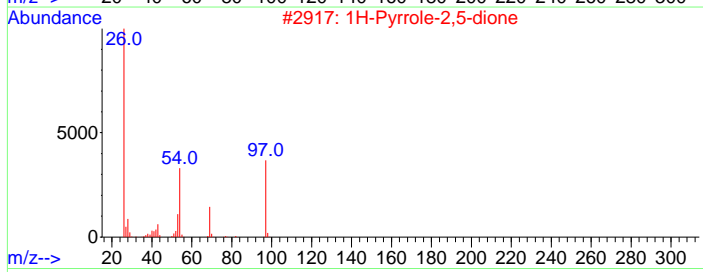
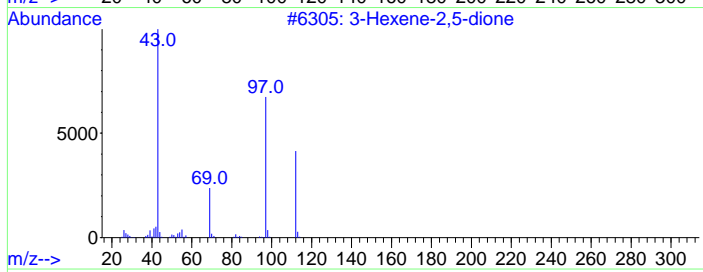
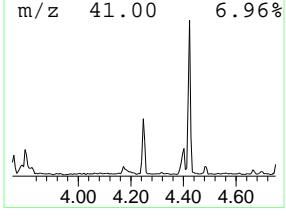
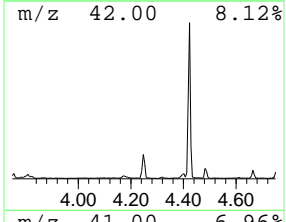
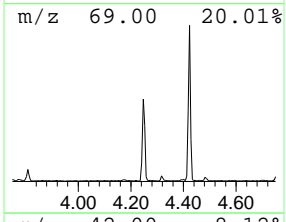
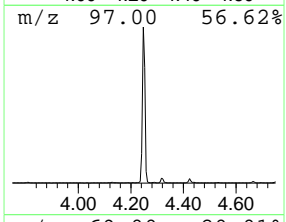
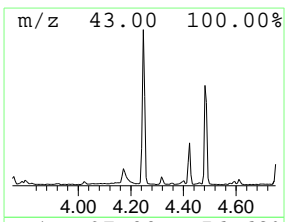
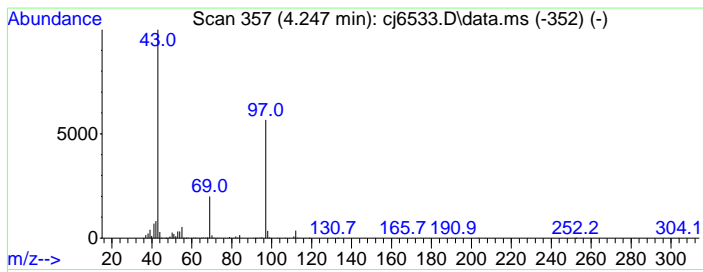
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 1 Unknown Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.247	7.41 ppm	396750	1,4-Dichlorobenzene-d4a	4.664

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	3-Hexene-2,5-dione	112	C6H8O2	004436-75-3	78
2		1H-Pyrrole-2,5-dione	97	C4H3NO2	000541-59-3	53
3		2,4-Dimethyl-1,5-diazabicyclo[3.1.0]hexane (cis)	112	C6H12N2	100463-01-2	28
4		5-Hexen-2-one	98	C6H10O	000109-49-9	14
5		1H-Pyrrole-2,5-dione	97	C4H3NO2	000541-59-3	9



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7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\nerirose\ecj297\  
Data File : cj6533.D  
Acq On : 09 May 2024 10:41 pm  
Operator : rocquans  
Sample : jd87833-8  
Misc : op54460,ecj297,30.4,,,1,1  
ALS Vial : 24 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

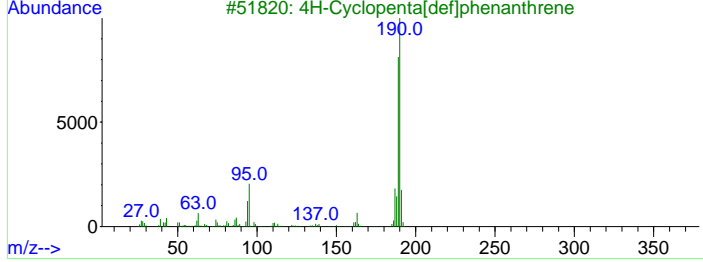
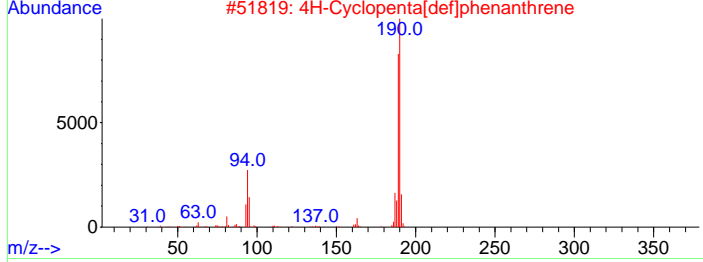
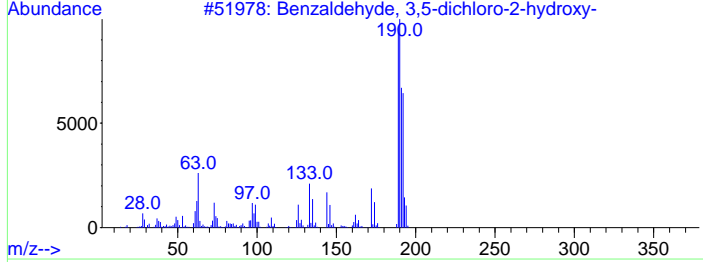
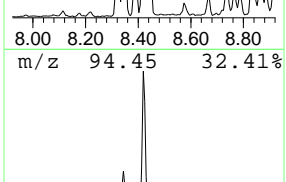
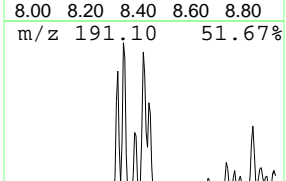
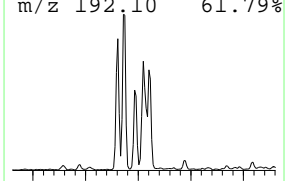
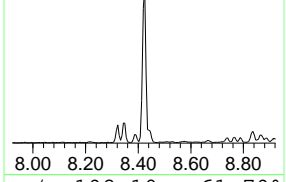
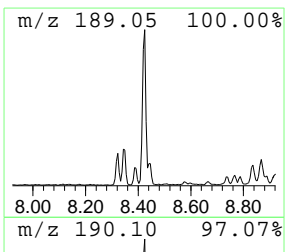
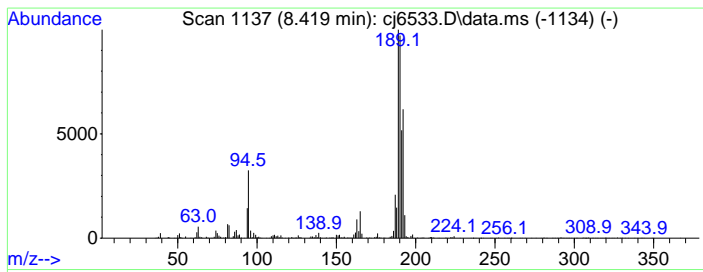
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 2 4H-Cyclopenta[def]phenanthrene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.419	8.49 ppm	710172	Phenanthrene-d10b	7.868

Hit#	of 5	Tentative ID	MW	MolForm	CAS#	Qual
1		Benzaldehyde, 3,5-dichloro-2-hyd...	190	C7H4Cl2O2	000090-60-8	64
2		4H-Cyclopenta[def]phenanthrene	190	C15H10	000203-64-5	58
3		4H-Cyclopenta[def]phenanthrene	190	C15H10	000203-64-5	49
4		Phenanthrene, 4-methyl-	192	C15H12	000832-64-4	35
5		5H-Dibenzo[a,d]cycloheptene	192	C15H12	000256-81-5	35



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\nerirose\ecj297\  
 Data File : cj6533.D  
 Acq On : 09 May 2024 10:41 pm  
 Operator : rocquans  
 Sample : jd87833-8  
 Misc : op54460,ecj297,30.4,,,1,1  
 ALS Vial : 24 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

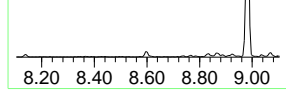
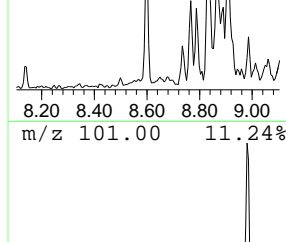
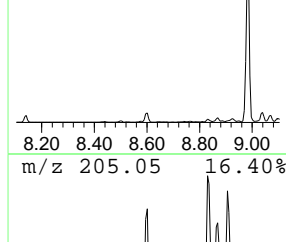
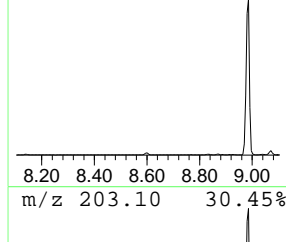
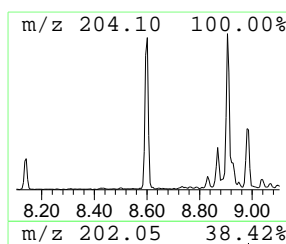
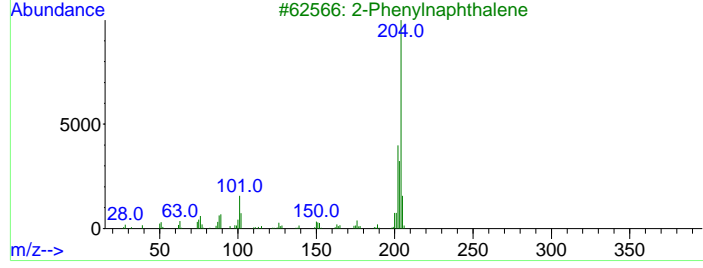
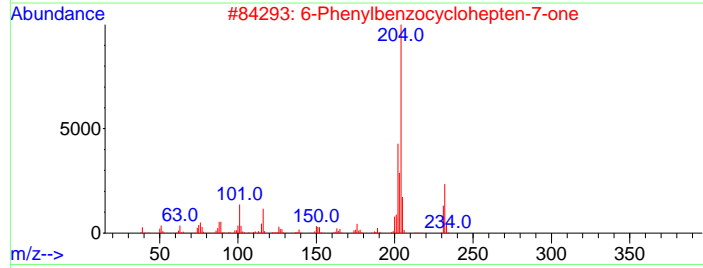
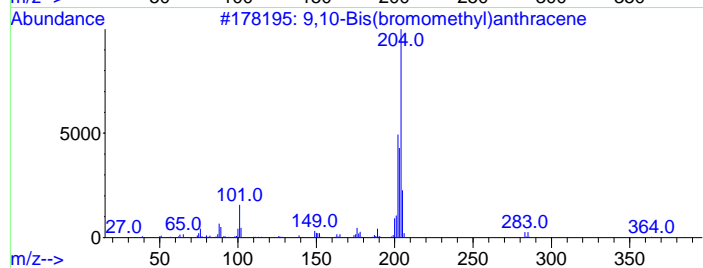
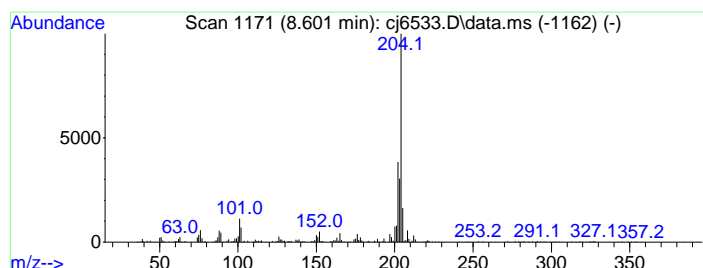
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 3 Unknown Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.601	4.22 ppm	353158	Phenanthrene-d10b	7.868

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	9,10-Bis(bromomethyl)anthracene	362	C16H12Br2	034373-96-1	90
2		6-Phenylbenzocyclohepten-7-one	232	C17H12O	093327-56-1	90
3		2-Phenylnaphthalene	204	C16H12	035465-71-5	86
4		1,2,4,8-Tetramethylbicyclo[6.3.0...]	204	C15H24	137235-51-9	83
5		5,16[1',2'] : 8,13[1'',2'']-Dibenz...	408	C32H24	005672-97-9	72



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7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\nerirose\ecj297\  
Data File : cj6533.D  
Acq On : 09 May 2024 10:41 pm  
Operator : rocquans  
Sample : jd87833-8  
Misc : op54460,ecj297,30.4,,,1,1  
ALS Vial : 24 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

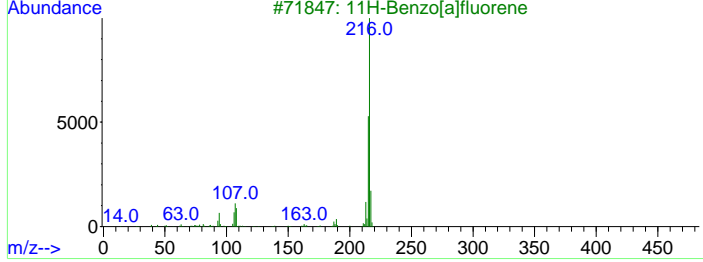
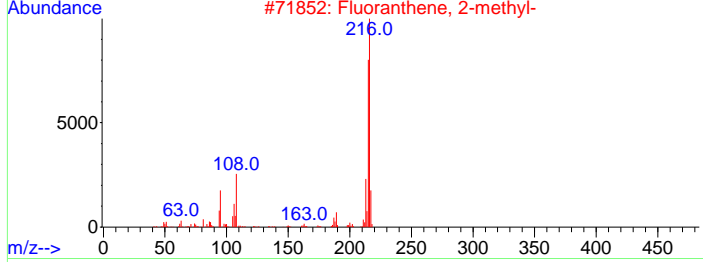
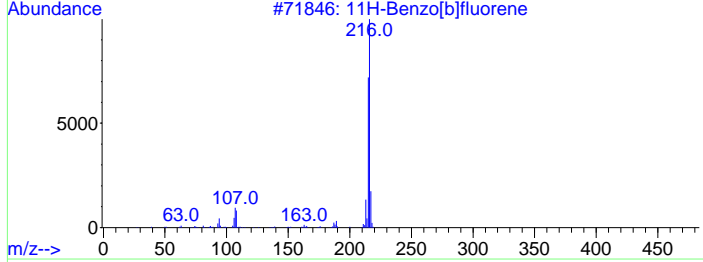
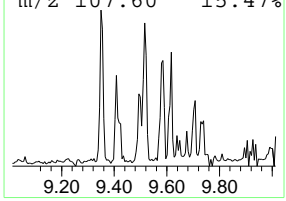
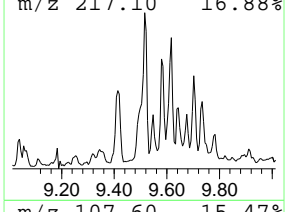
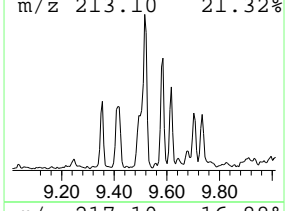
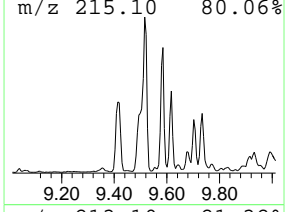
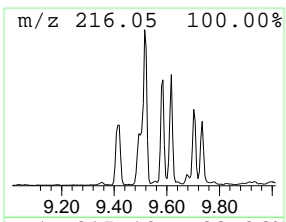
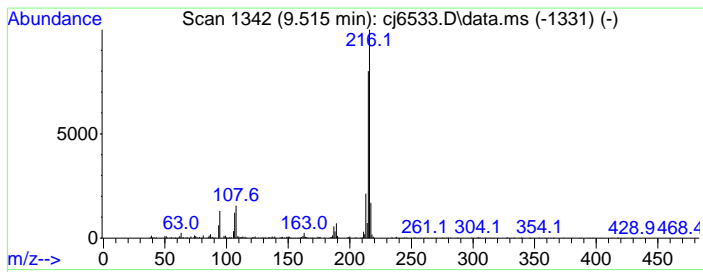
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 4 Pyrene methyl Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.515	5.85 ppm	760616	Chrysene-d12	10.366

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	11H-Benzo[b]fluorene	216	C17H12	000243-17-4	95
2		Fluoranthene, 2-methyl-	216	C17H12	033543-31-6	95
3		11H-Benzo[a]fluorene	216	C17H12	000238-84-6	90
4		11H-Benzo[a]fluorene	216	C17H12	000238-84-6	87
5		Pyrene, 1-methyl-	216	C17H12	002381-21-7	87



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\nerirose\ecj297\  
Data File : cj6533.D  
Acq On : 09 May 2024 10:41 pm  
Operator : rocquans  
Sample : jd87833-8  
Misc : op54460,ecj297,30.4,,,1,1  
ALS Vial : 24 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

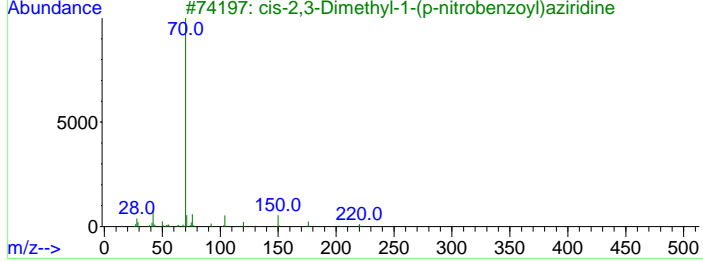
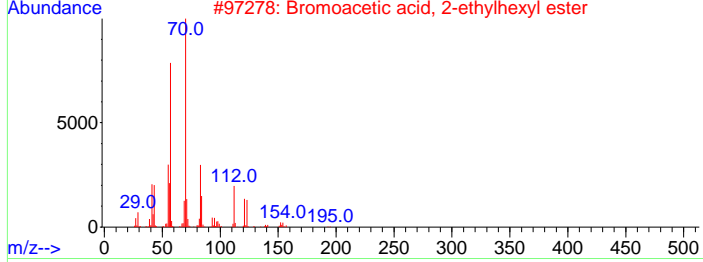
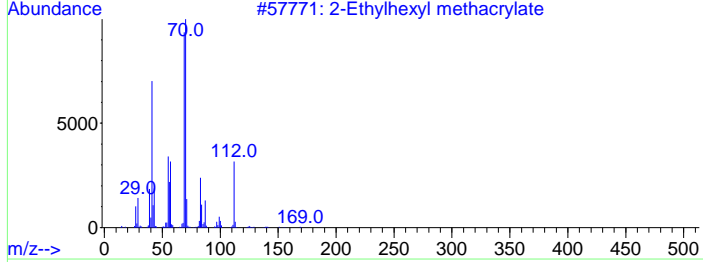
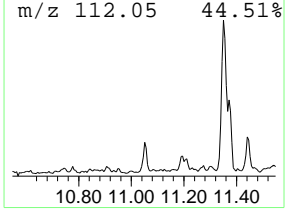
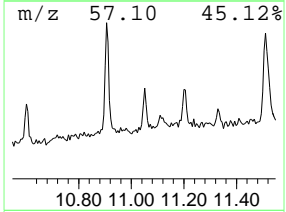
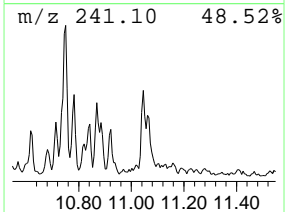
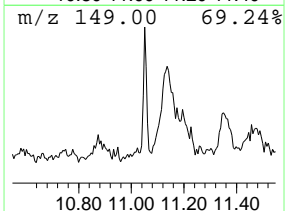
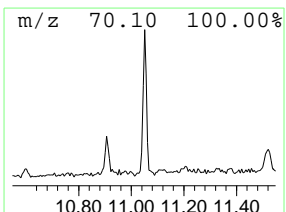
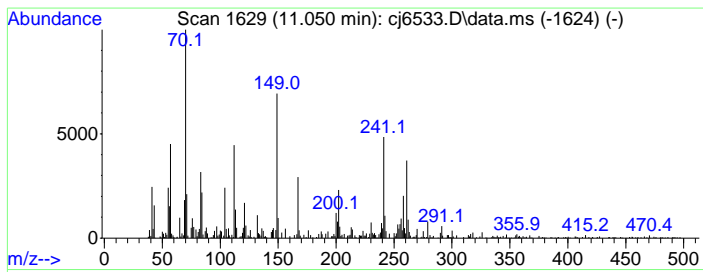
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 5 Unknown Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.050	4.35 ppm	353143	Perylene-d12	11.719

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Ethylhexyl methacrylate	198	C12H22O2	000688-84-6	16
2	Bromoacetic acid, 2-ethylhexyl e...	250	C10H19BrO2	068144-73-0	12
3	cis-2,3-Dimethyl-1-(p-nitrobenzo...	220	C11H12N2O3	021383-77-7	10
4	1,2-Benzenedicarboxylic acid, di...	330	C20H26O4	000084-61-7	10
5	Phthalic acid, decyl 2-ethylhexy...	418	C26H42O4	1000309-00-0	10



7.1.17  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\nerirose\ecj297\  
 Data File : cj6533.D  
 Acq On : 09 May 2024 10:41 pm  
 Operator : rocquans  
 Sample : jd87833-8  
 Misc : op54460,ecj297,30.4,,,1,1  
 ALS Vial : 24 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

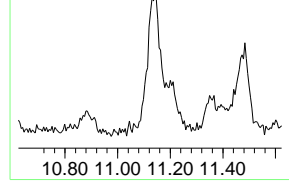
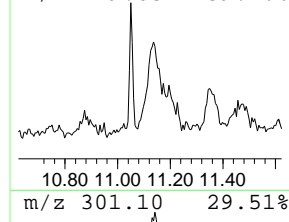
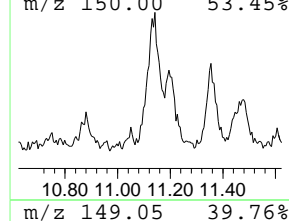
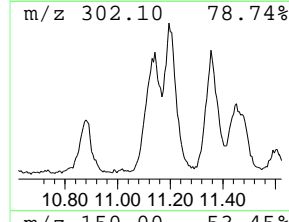
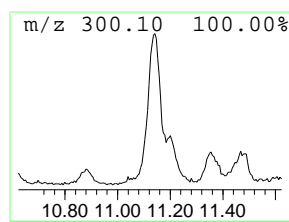
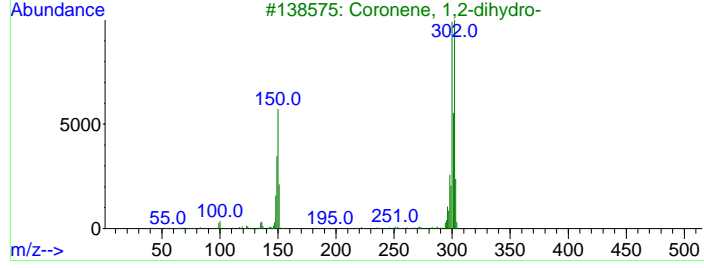
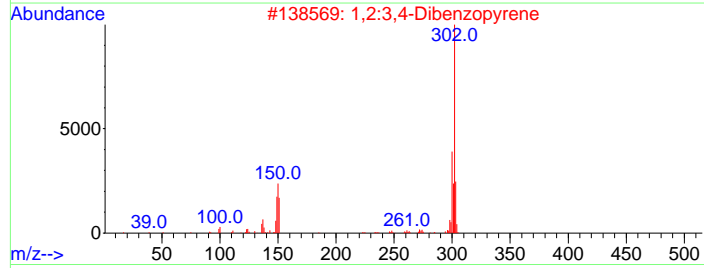
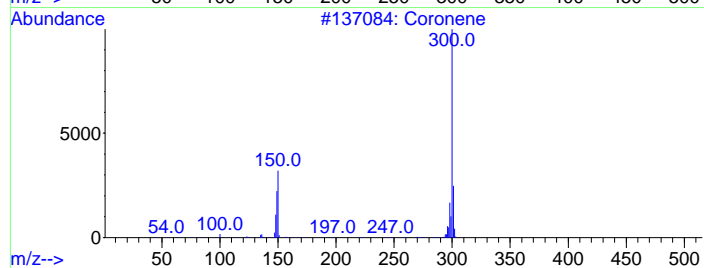
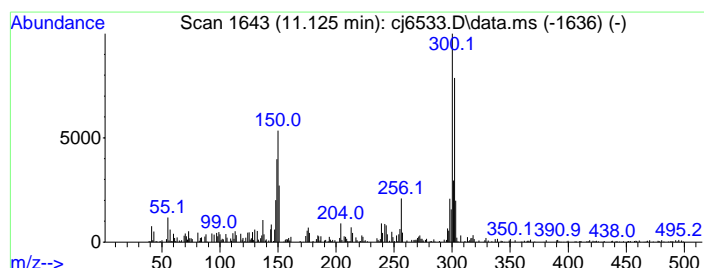
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 6 Unknown Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.125	4.91 ppm	398938	Perylene-d12	11.719

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Coronene	300	C24H12	000191-07-1	55
2		1,2:3,4-Dibenzopyrene	302	C24H14	000191-30-0	49
3		Coronene, 1,2-dihydro-	302	C24H14	107716-56-3	47
4		Coronene	300	C24H12	000191-07-1	43
5		1,2:4,5-Dibenzopyrene	302	C24H14	000192-65-4	38



7.1.17  
 7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\nerirose\ecj297\  
Data File : cj6533.D  
Acq On : 09 May 2024 10:41 pm  
Operator : rocquans  
Sample : jd87833-8  
Misc : op54460,ecj297,30.4,,,1,1  
ALS Vial : 24 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

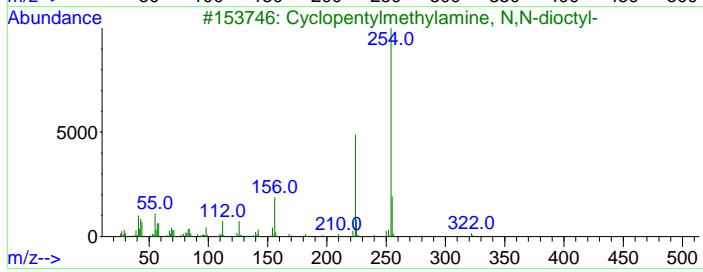
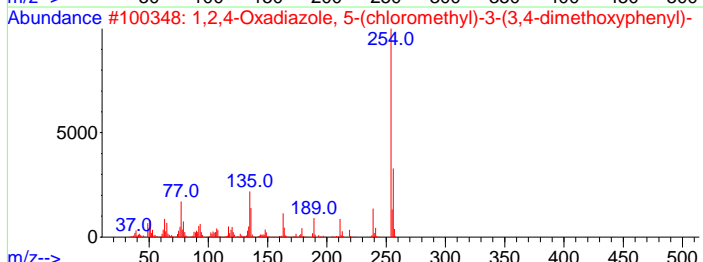
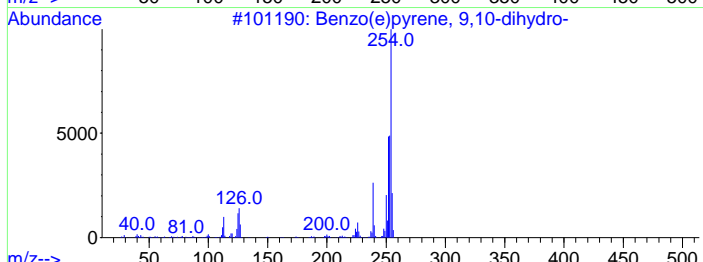
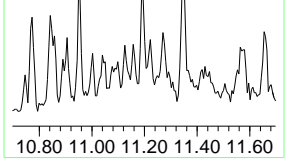
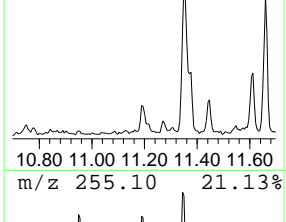
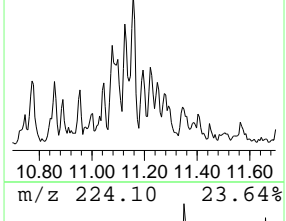
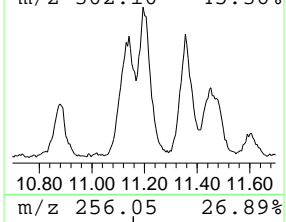
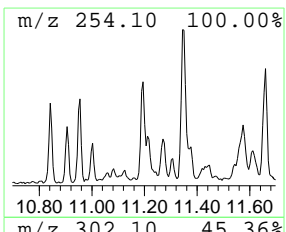
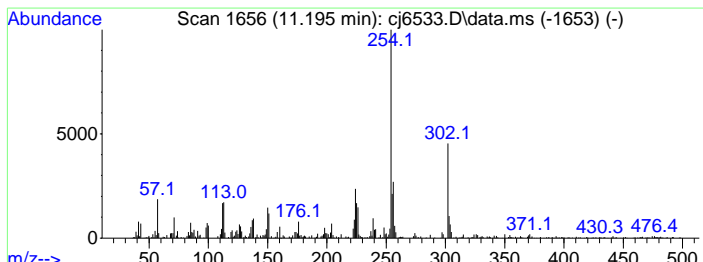
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 7 Unknown Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.195	6.02 ppm	488942	Perylene-d12	11.719

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Benzo(e)pyrene, 9,10-dihydro-	254	C20H14	066788-01-0	49
2		1,2,4-Oxadiazole, 5-(chloromethy...	254	C11H11ClN2O3	1000338-17-0	43
3		Cyclopentylmethylamine, N,N-dioc...	323	C22H45N	1000310-50-1	43
4		Pyrazole, 4-chloro-3,5-diphenyl-	254	C15H11ClN2	071549-28-5	43
5		1H-Pyrazole, 3-(4-chlorophenyl)-...	254	C15H11ClN2	033064-19-6	43



7.1.17  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\nerirose\ecj297\  
Data File : cj6533.D  
Acq On : 09 May 2024 10:41 pm  
Operator : rocquans  
Sample : jd87833-8  
Misc : op54460,ecj297,30.4,,,1,1  
ALS Vial : 24 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

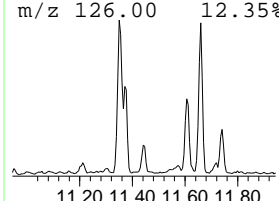
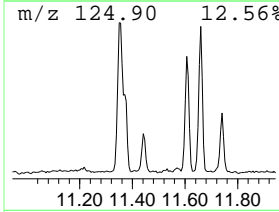
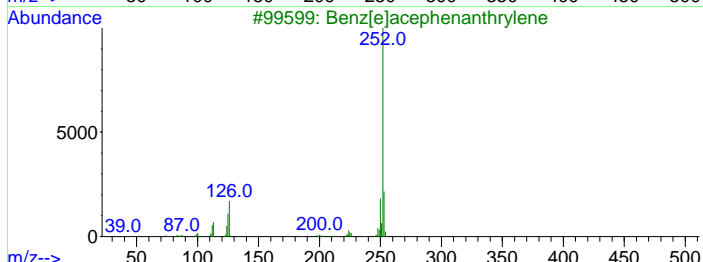
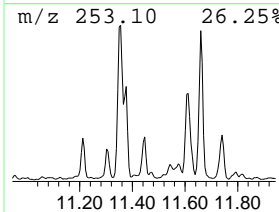
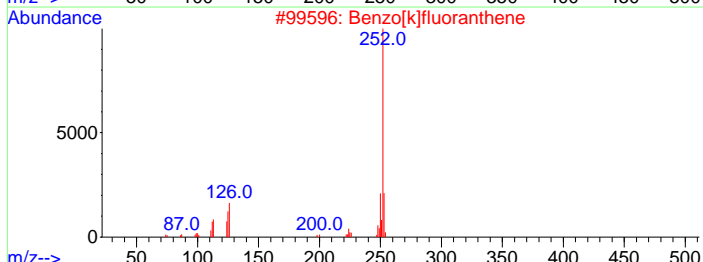
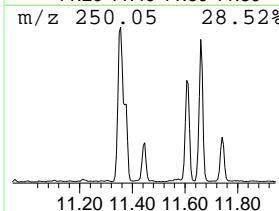
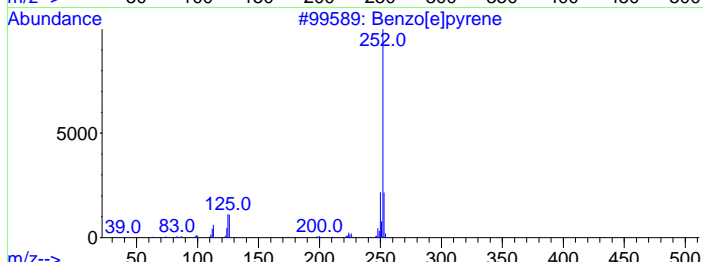
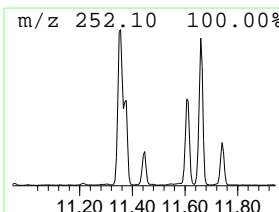
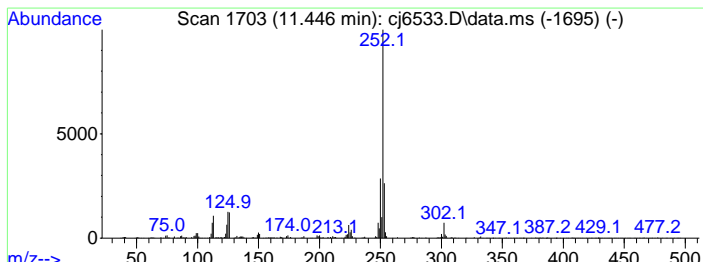
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 8 Unknown PAH substance Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.446	6.65 ppm	540117	Perylene-d12	11.719

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Benzo[e]pyrene	252	C20H12	000192-97-2	98
2		Benzo[k]fluoranthene	252	C20H12	000207-08-9	96
3		Benz[e]acephenanthrylene	252	C20H12	000205-99-2	93
4		Perylene	252	C20H12	000198-55-0	93
5		Benzo[a]pyrene	252	C20H12	000050-32-8	93



7.1.17  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\nerirose\ecj297\  
Data File : cj6533.D  
Acq On : 09 May 2024 10:41 pm  
Operator : rocquans  
Sample : jd87833-8  
Misc : op54460,ecj297,30.4,,,1,1  
ALS Vial : 24 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

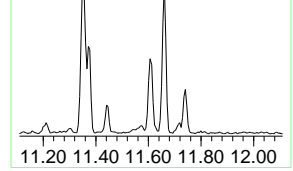
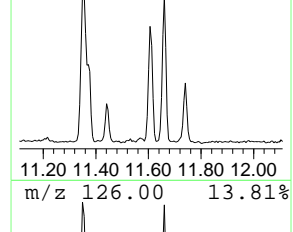
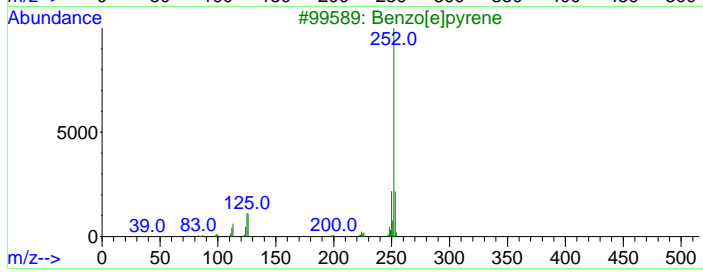
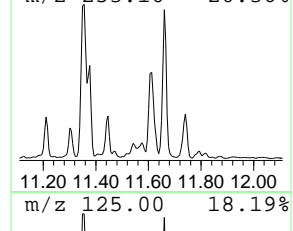
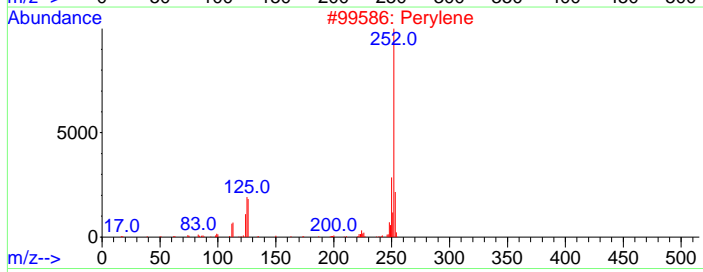
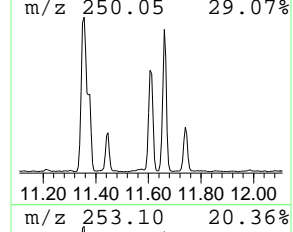
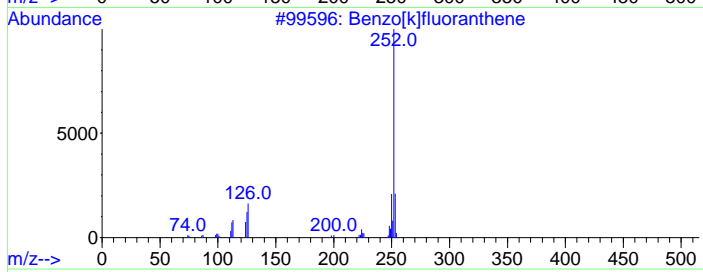
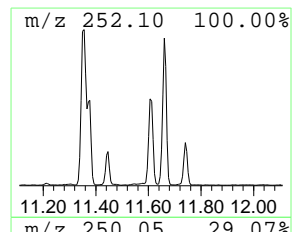
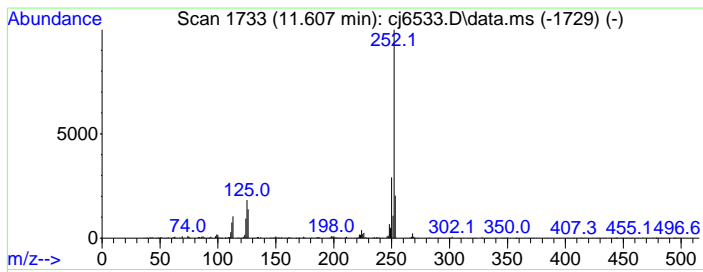
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 9 Unknown PAH substance Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.607	13.11 ppm	1065010	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Benzo[k]fluoranthene	252	C20H12	000207-08-9	98
2			Perylene	252	C20H12	000198-55-0	98
3			Benzo[e]pyrene	252	C20H12	000192-97-2	98
4			Benzo[e]pyrene	252	C20H12	000192-97-2	98
5			Benz[e]acephenanthrylene	252	C20H12	000205-99-2	96



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\nerirose\ecj297\  
Data File : cj6533.D  
Acq On : 09 May 2024 10:41 pm  
Operator : rocquans  
Sample : jd87833-8  
Misc : op54460,ecj297,30.4,,,1,1  
ALS Vial : 24 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

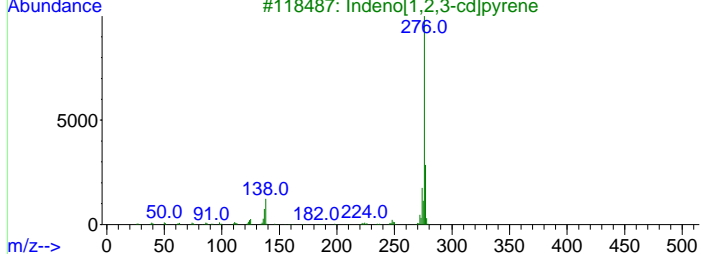
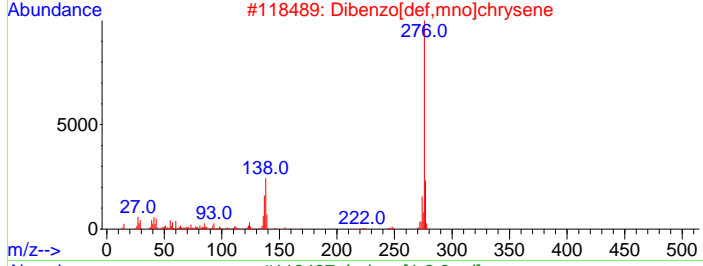
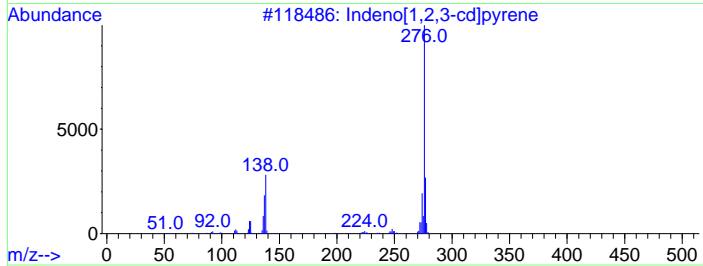
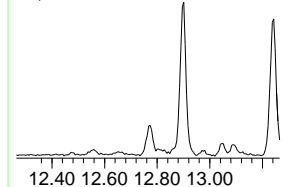
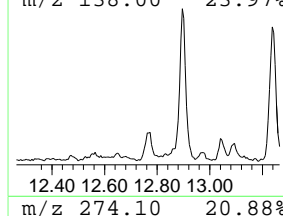
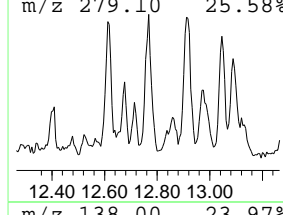
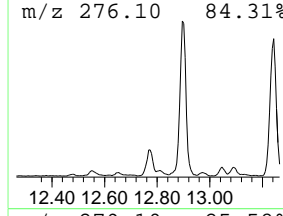
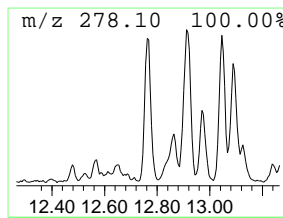
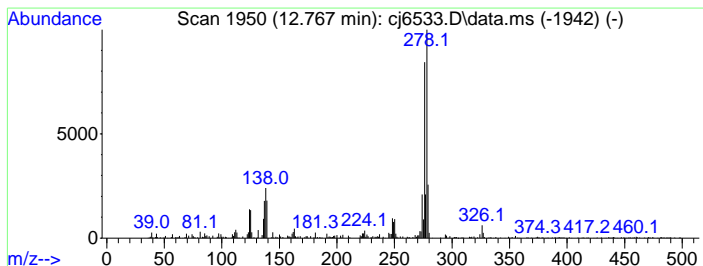
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 10 Unknown PAH substance Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.767	6.35 ppm	515852	Perylene-d12	11.719

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Indeno[1,2,3-cd]pyrene	276	C22H12	000193-39-5	89
2		Dibenzo[def,mno]chrysene	276	C22H12	000191-26-4	60
3		Indeno[1,2,3-cd]pyrene	276	C22H12	000193-39-5	50
4		Benzo[ghi]perylene	276	C22H12	000191-24-2	46
5		Dibenzo[def,mno]chrysene	276	C22H12	000191-26-4	46



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\nerirose\ecj297\  
Data File : cj6533.D  
Acq On : 09 May 2024 10:41 pm  
Operator : rocquans  
Sample : jd87833-8  
Misc : op54460,ecj297,30.4,,,1,1  
ALS Vial : 24 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

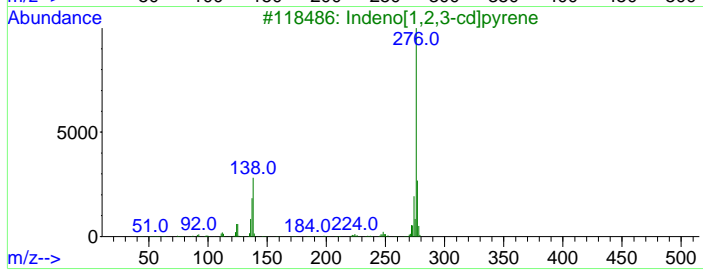
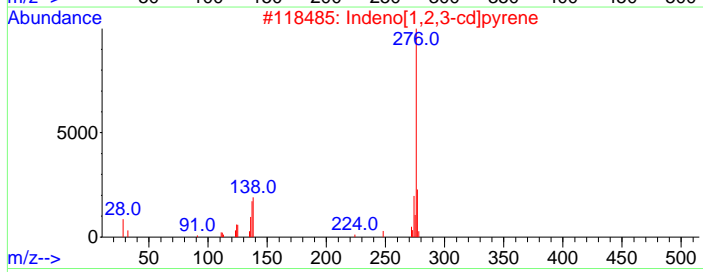
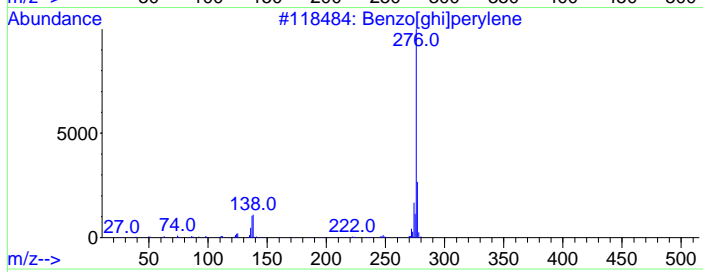
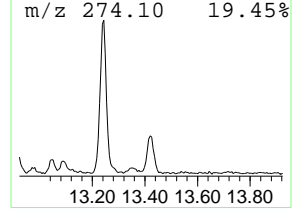
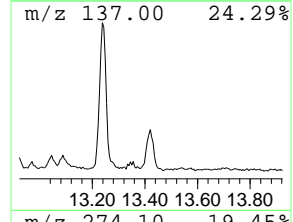
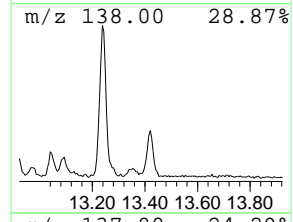
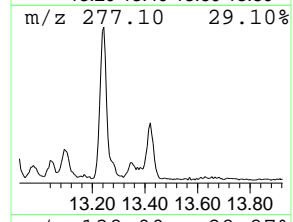
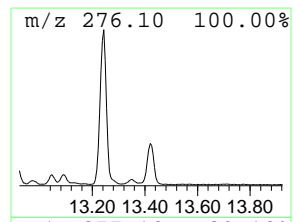
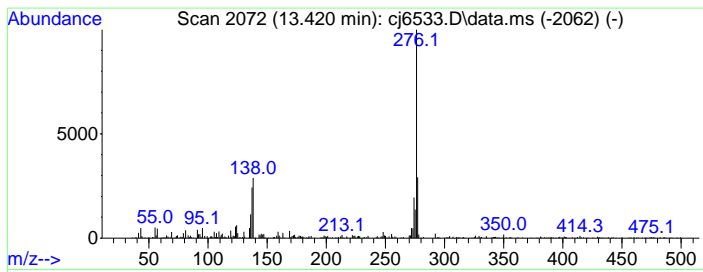
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 11 Unknown PAH substance Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.420	6.00 ppm	487437	Perylene-d12	11.719

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Benzo[ghi]perylene	276	C22H12	000191-24-2	93
2		Indeno[1,2,3-cd]pyrene	276	C22H12	000193-39-5	93
3		Indeno[1,2,3-cd]pyrene	276	C22H12	000193-39-5	93
4		Dibenzo[def,mno]chrysene	276	C22H12	000191-26-4	91
5		Benzo[ghi]perylene	276	C22H12	000191-24-2	91



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Tentatively Identified Compound (LSC) summary

Data Path : X:\Dayton SVOA GCMS\nerirose\ecj297\  
Data File : cj6533.D  
Acq On : 09 May 2024 10:41 pm  
Operator : rocquans  
Sample : jd87833-8  
Misc : op54460,ecj297,30.4,,,1,1  
ALS Vial : 24 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
Unknown	4.247	7.4	ppm	396750	2	4.664	2140470	40.0
4H-Cyclopenta[d...]	8.419	8.5	ppm	710172	8	7.868	3347490	40.0
Unknown	8.601	4.2	ppm	353158	8	7.868	3347490	40.0
Pyrene methyl	9.515	5.8	ppm	760616	9	10.366	5199660	40.0
Unknown	11.050	4.3	ppm	353143	11	11.719	3249660	40.0
Unknown	11.125	4.9	ppm	398938	11	11.719	3249660	40.0
Unknown	11.195	6.0	ppm	488942	11	11.719	3249660	40.0
Unknown PAH sub...	11.446	6.7	ppm	540117	11	11.719	3249660	40.0
Unknown PAH sub...	11.607	13.1	ppm	1065010	11	11.719	3249660	40.0
Unknown PAH sub...	12.767	6.3	ppm	515852	11	11.719	3249660	40.0
Unknown PAH sub...	13.420	6.0	ppm	487437	11	11.719	3249660	40.0

7.1.17  
7



Quantitation Report (QT/LSC Reviewed)

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6540.D  
Acq On : 10 May 2024 12:54 am  
Operator : rocquans  
Sample : jd87833-9 Inst : GCMSCJ  
Misc : op54460,ecj297,30.7,,,1,1  
ALS Vial : 31 Sample Multiplier: 1

Quant Time: May 10 20:09:28 2024  
Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
QLast Update : Thu May 09 12:05:48 2024  
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.664	152	330644	40.00	ppm	0.00
24) Naphthalene-d8	5.471	136	1153413	40.00	ppm	0.00
46) Acenaphthene-d10	6.659	164	653496	40.00	ppm	0.00
69) Phenanthrene-d10	7.873	188	1145424	40.00	ppm	0.00
84) Chrysene-d12	10.365	240	810050	40.00	ppm	0.00
93) Perylene-d12	11.719	264	823369	40.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.664	152	330644	40.00	ppm	0.00
105) Phenanthrene-d10a	7.873	188	1145424	40.00	ppm	0.00
107) Naphthalene-d8a	5.471	136	1153413	40.00	ppm	0.00
109) Phenanthrene-d10b	7.873	188	1145424	40.00	ppm	0.00
112) Chrysene-d12a	10.365	240	810050	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.813	112	334169	35.16	ppm	0.02
Spiked Amount 50.000			Recovery =	70.32%		
8) Phenol-d5	4.428	99	460243	37.55	ppm	0.01
Spiked Amount 50.000			Recovery =	75.10%		
25) Nitrobenzene-d5	5.011	82	445712	37.74	ppm	0.00
Spiked Amount 50.000			Recovery =	75.48%		
51) 2-Fluorobiphenyl	6.167	172	817877	39.77	ppm	0.00
Spiked Amount 50.000			Recovery =	79.54%		
74) 2,4,6-Tribromophenol	7.274	330	118048	47.01	ppm	0.00
Spiked Amount 50.000			Recovery =	94.02%		
87) Terphenyl-d14	9.354	244	832881	41.61	ppm	0.00
Spiked Amount 50.000			Recovery =	83.22%		
110) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						
					Qvalue	
18) Acetophenone	4.915	105	8733	0.5746	ppm #	63
21) 3&4-Methylphenol	4.910	108	46147	4.8913	ppm	93
38) Naphthalene	5.482	128	16556	0.5992	ppm	98
44) 2-Methylnaphthalene	5.926	141	6219	0.3796	ppm	98
45) 1-Methylnaphthalene	5.990	141	5794	0.3699	ppm	93
53) Biphenyl	6.236	154	5523	0.2460	ppm	96
56) Acenaphthylene	6.557	152	64079	2.5281	ppm	97
59) Acenaphthene	6.680	153	19634	1.0893	ppm	94
62) Dibenzofuran	6.814	168	15072	0.6026	ppm	98
66) Fluorene	7.081	166	26970m	1.3649	ppm	
78) Phenanthrene	7.894	178	318218	11.4956	ppm	98
79) Anthracene	7.937	178	110386	3.9825	ppm	97
80) Carbazole	8.076	167	25843	1.0006	ppm	97
81) Di-n-butylphthalate	8.397	149	8602	0.2696	ppm	94
82) Fluoranthene	8.985	202	665490	22.2063	ppm	99
86) Pyrene	9.199	202	617666	22.4210	ppm	99
89) Benzo[a]anthracene	10.360	228	270559	10.3881	ppm	96
91) Chrysene	10.392	228	272227	11.3287	ppm	97
92) bis(2-Ethylhexyl)phtha...	10.408	149	20006	1.0989	ppm	94
95) Benzo[b]fluoranthene	11.355	252	365416m	14.6914	ppm	
96) Benzo[k]fluoranthene	11.376	252	85960m	3.8407	ppm	
97) Benzo[a]pyrene	11.665	252	247115	12.0015	ppm	99
98) Indeno[1,2,3-cd]pyrene	12.906	276	163719	6.5772	ppm	99
100) Dibenz[a,h]anthracene	12.922	278	39744	1.9982	ppm	93
102) Benzo[g,h,i]perylene	13.248	276	150113	7.7603	ppm	99
104) Benzaldehyde	4.385	105	5498	0.5809	ppm	96

7.1.18  
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Quantitation Report (QT/LSC Reviewed)

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6540.D  
Acq On : 10 May 2024 12:54 am  
Operator : rocquans  
Sample : jd87833-9 Inst : GCMS CJ  
Misc : op54460,ecj297,30.7,,,1,1  
ALS Vial : 31 Sample Multiplier: 1

Quant Time: May 10 20:09:28 2024  
Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
QLast Update : Thu May 09 12:05:48 2024  
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
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(#) = qualifier out of range (m) = manual integration (+) = signals summed

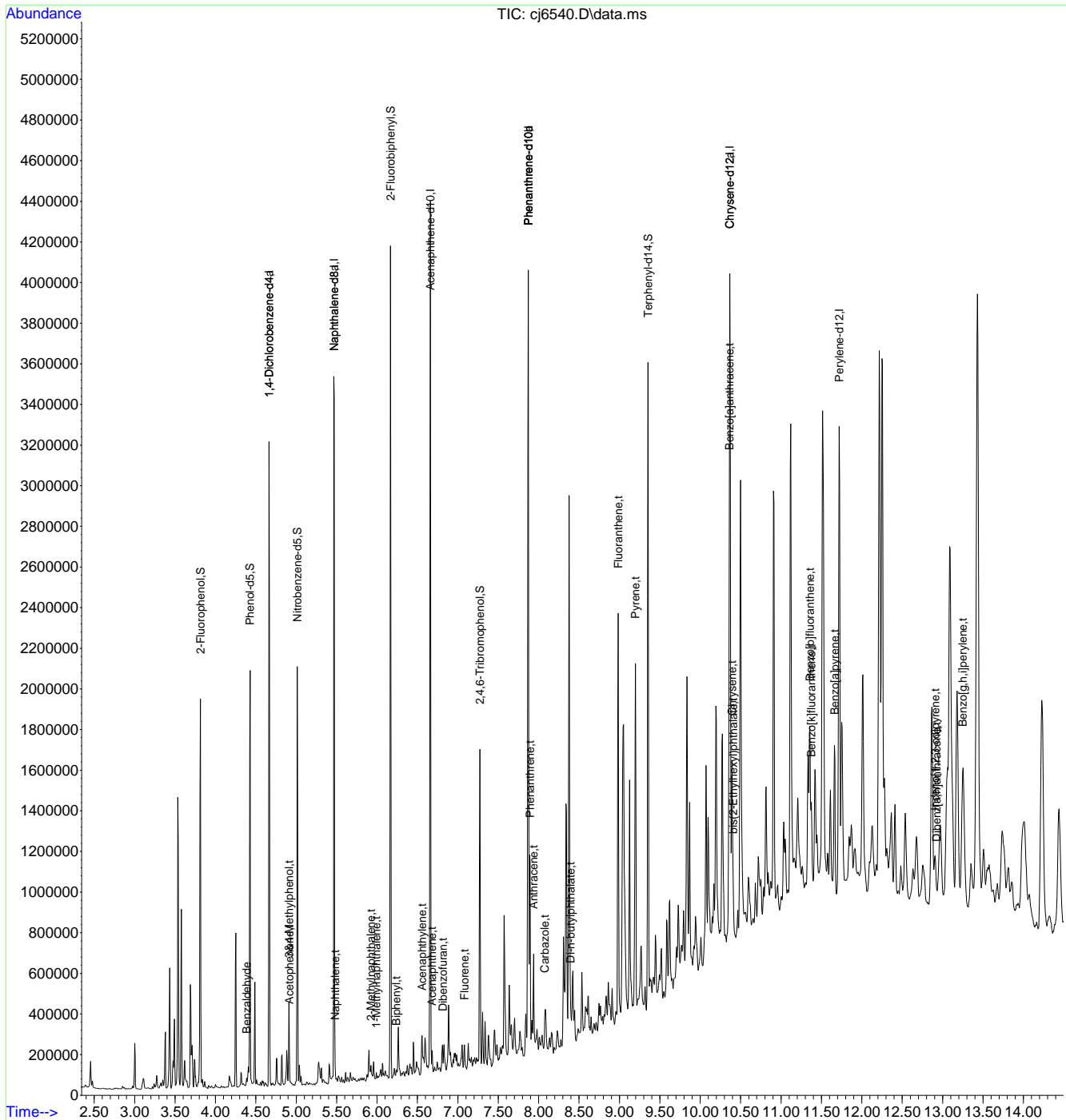
7.1.18  
7



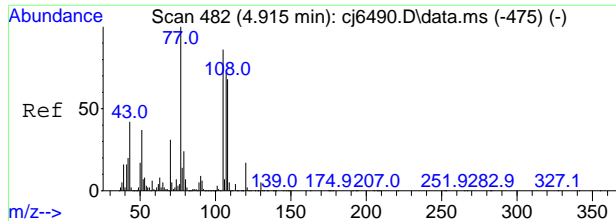
Quantitation Report (QT/LSC Reviewed)

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6540.D  
Acq On : 10 May 2024 12:54 am  
Operator : rocquans  
Sample : jd87833-9 Inst : GCMSCJ  
Misc : op54460,ecj297,30.7,,,1,1  
ALS Vial : 31 Sample Multiplier: 1

Quant Time: May 10 20:09:28 2024  
Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
QLast Update : Thu May 09 12:05:48 2024  
Response via : Initial Calibration

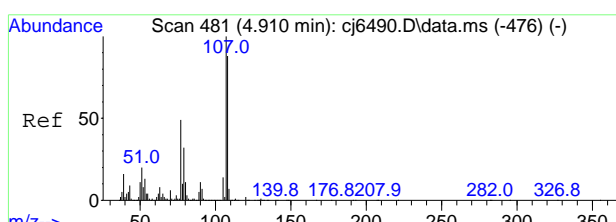
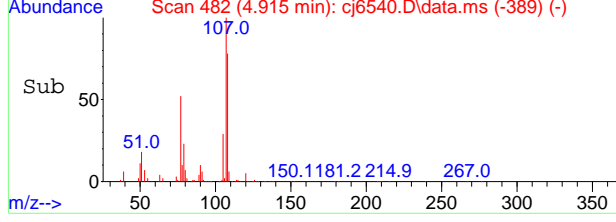
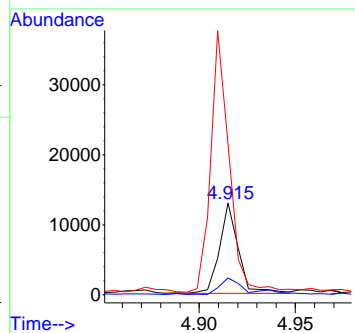
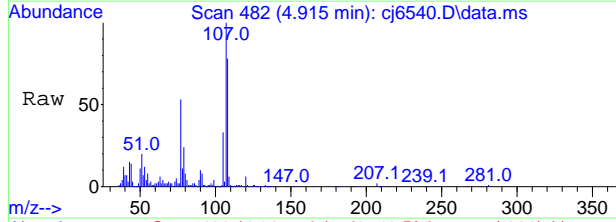


7.1.18  
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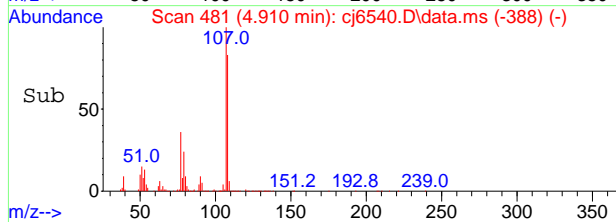
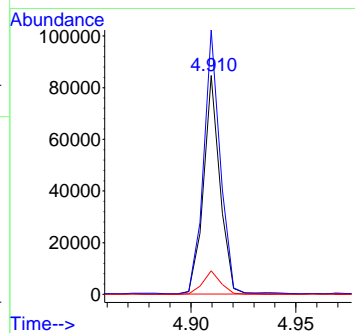
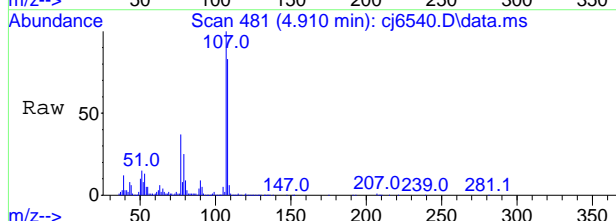
#18  
 Acetophenone  
 Concen: 0.5746 ppm  
 RT: 4.915 min Scan# 482  
 Delta R.T. -0.000 min  
 Lab File: cj6540.D  
 Acq: 10 May 2024 12:54 am

Tgt Ion	Ratio	Lower	Upper
105	100		
120	17.5	0.0	49.8
77	161.9	86.0	146.0#



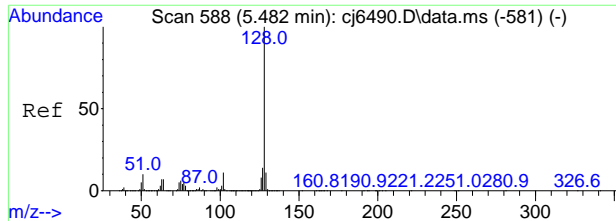
#21  
 3&4-Methylphenol  
 Concen: 4.8913 ppm  
 RT: 4.910 min Scan# 481  
 Delta R.T. -0.000 min  
 Lab File: cj6540.D  
 Acq: 10 May 2024 12:54 am

Tgt Ion	Ratio	Lower	Upper
108	100		
107	120.6	83.2	143.2
90	10.7	0.0	42.4



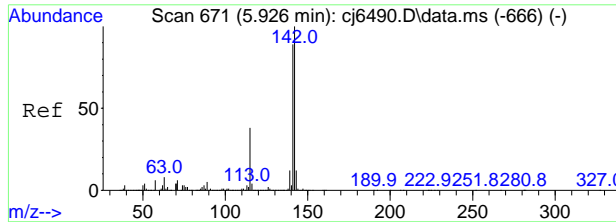
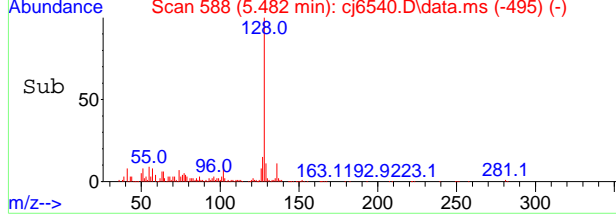
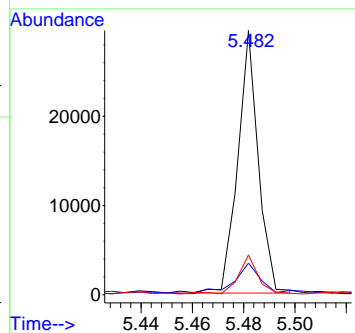
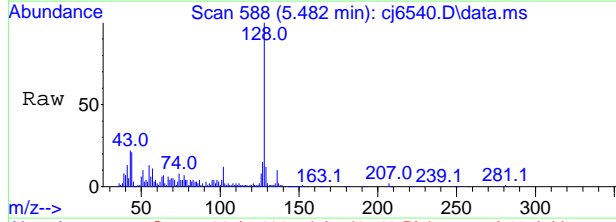
7.1.18  
7





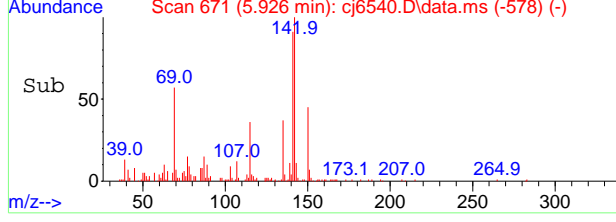
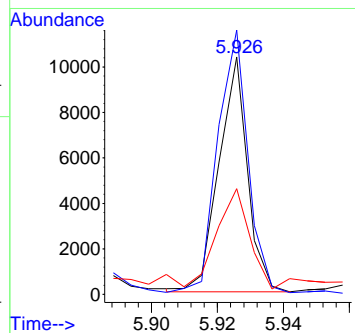
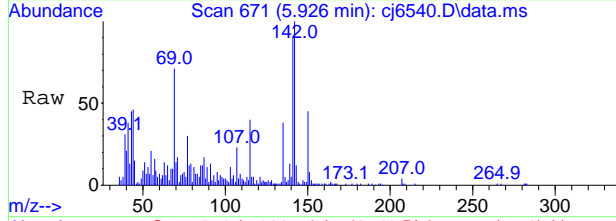
#38  
 Naphthalene  
 Concen: 0.5992 ppm  
 RT: 5.482 min Scan# 588  
 Delta R.T. -0.000 min  
 Lab File: cj6540.D  
 Acq: 10 May 2024 12:54 am

Tgt Ion	Ratio	Lower	Upper
128	100		
129	10.9	0.0	41.4
127	14.6	0.0	43.3



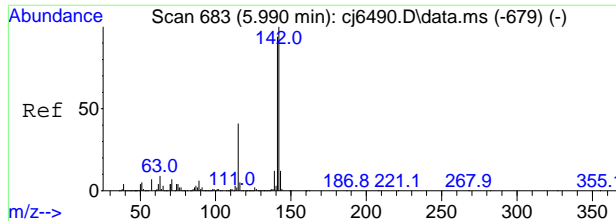
#44  
 2-Methylnaphthalene  
 Concen: 0.3796 ppm  
 RT: 5.926 min Scan# 671  
 Delta R.T. -0.000 min  
 Lab File: cj6540.D  
 Acq: 10 May 2024 12:54 am

Tgt Ion	Ratio	Lower	Upper
141	100		
142	113.1	82.7	142.7
115	37.8	12.4	72.4



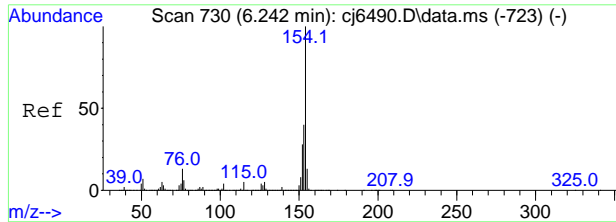
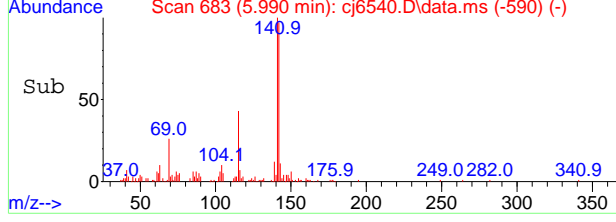
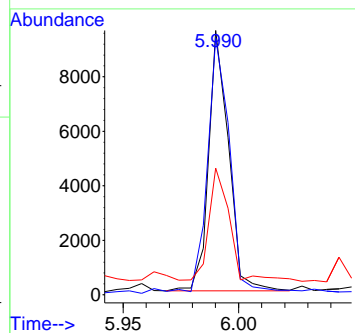
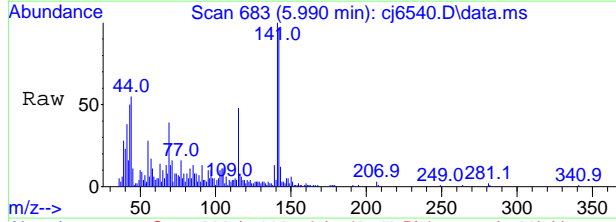
7.1.18  
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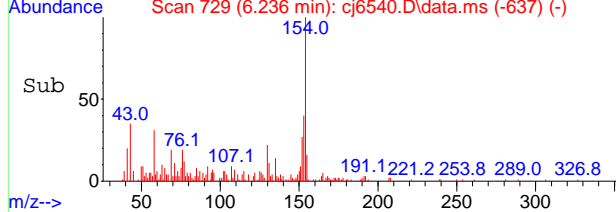
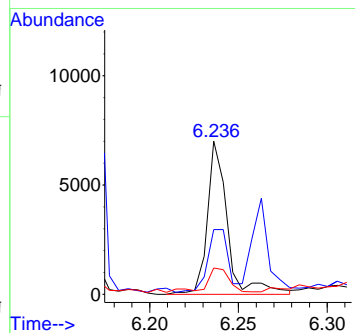
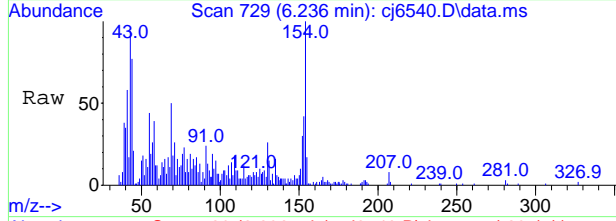
#45  
 1-Methylnaphthalene  
 Concen: 0.3699 ppm  
 RT: 5.990 min Scan# 683  
 Delta R.T. 0.000 min  
 Lab File: cj6540.D  
 Acq: 10 May 2024 12:54 am

Tgt Ion	Ratio	Lower	Upper
141	100		
142	98.1	77.0	137.0
115	42.2	14.2	74.2



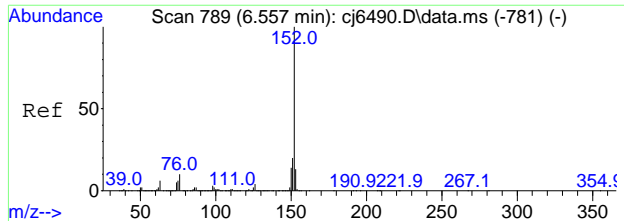
#53  
 Biphenyl  
 Concen: 0.2460 ppm  
 RT: 6.236 min Scan# 729  
 Delta R.T. -0.006 min  
 Lab File: cj6540.D  
 Acq: 10 May 2024 12:54 am

Tgt Ion	Ratio	Lower	Upper
154	100		
153	39.2	10.5	70.5
155	16.7	0.0	42.8



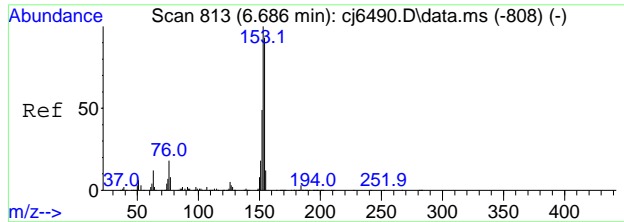
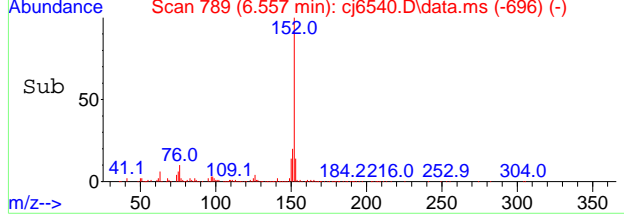
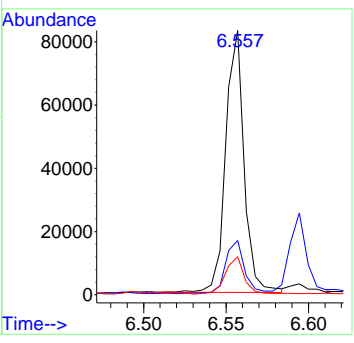
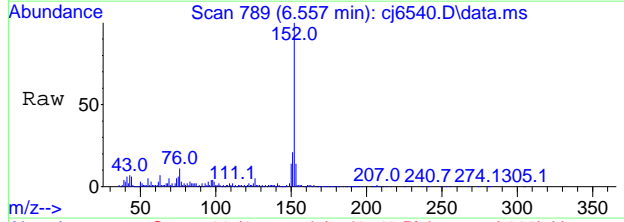
7.1.18  
7





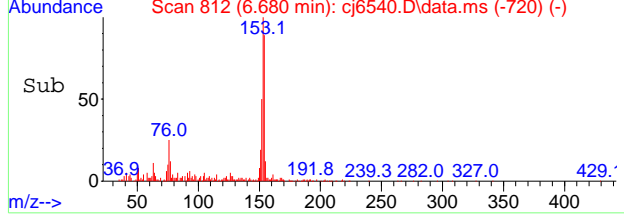
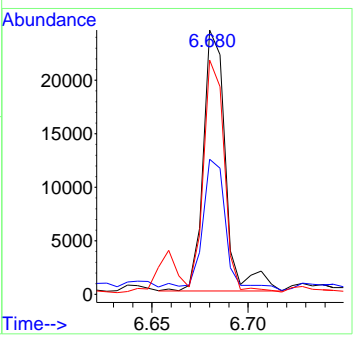
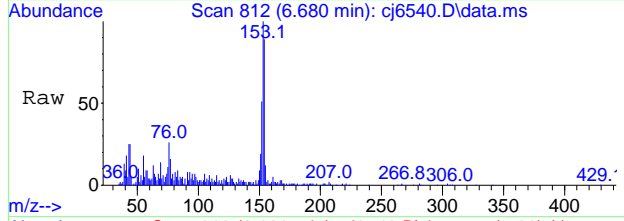
#56  
Acenaphthylene  
Concen: 2.5281 ppm  
RT: 6.557 min Scan# 789  
Delta R.T. 0.000 min  
Lab File: cj6540.D  
Acq: 10 May 2024 12:54 am

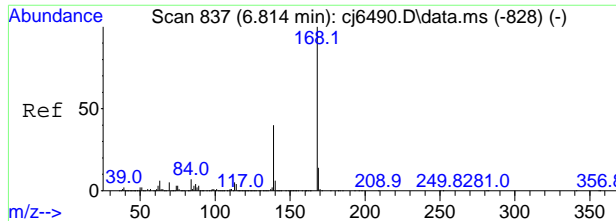
Tgt Ion	Resp	Lower	Upper
152	64079		
151	18.7	0.0	50.3
153	14.0	0.0	43.4



#59  
Acenaphthene  
Concen: 1.0893 ppm  
RT: 6.680 min Scan# 812  
Delta R.T. -0.006 min  
Lab File: cj6540.D  
Acq: 10 May 2024 12:54 am

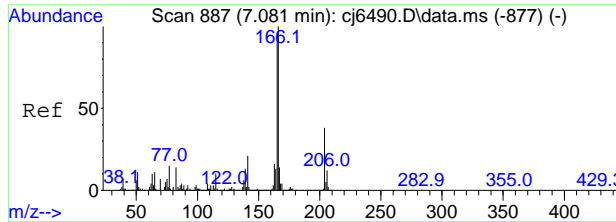
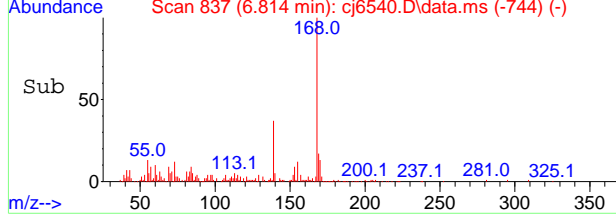
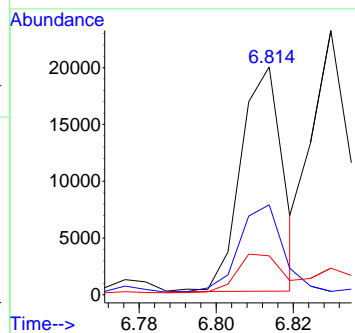
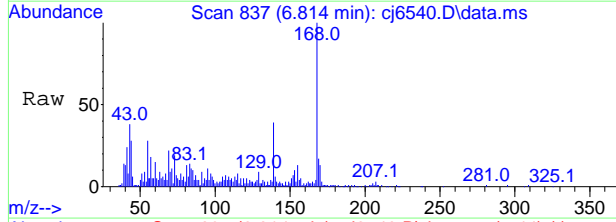
Tgt Ion	Resp	Lower	Upper
153	19634		
152	49.8	18.8	78.8
154	84.6	62.9	122.9





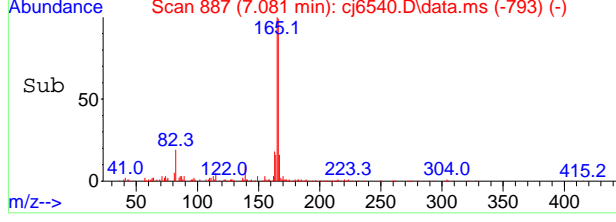
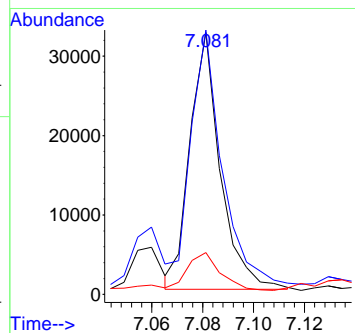
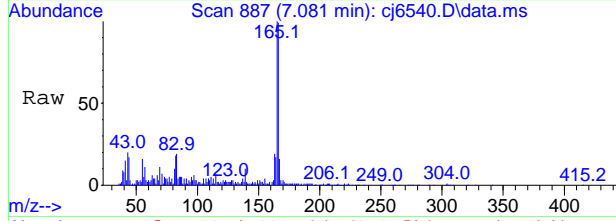
#62  
 Dibenzofuran  
 Concen: 0.6026 ppm  
 RT: 6.814 min Scan# 837  
 Delta R.T. -0.000 min  
 Lab File: cj6540.D  
 Acq: 10 May 2024 12:54 am

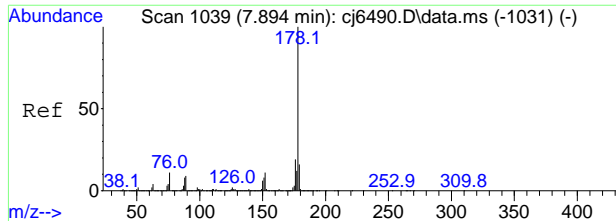
Tgt Ion	Ratio	Lower	Upper
168	100		
139	40.4	10.0	70.0
169	16.4	0.0	43.7



#66  
 Fluorene  
 Concen: 1.3649 ppm m  
 RT: 7.081 min Scan# 887  
 Delta R.T. 0.000 min  
 Lab File: cj6540.D  
 Acq: 10 May 2024 12:54 am

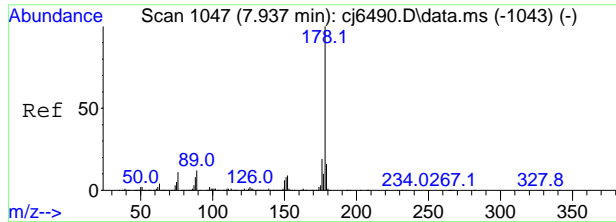
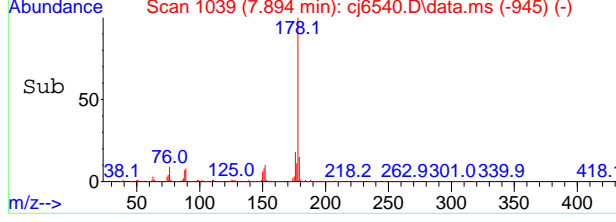
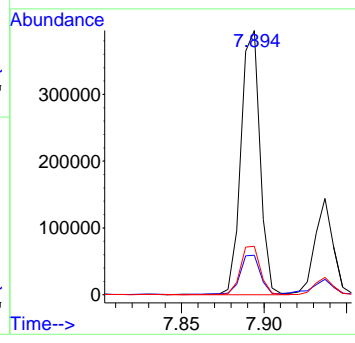
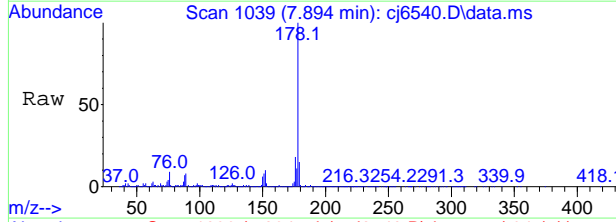
Tgt Ion	Ratio	Lower	Upper
166	100		
165	101.0	65.4	125.4
167	16.0	0.0	43.8





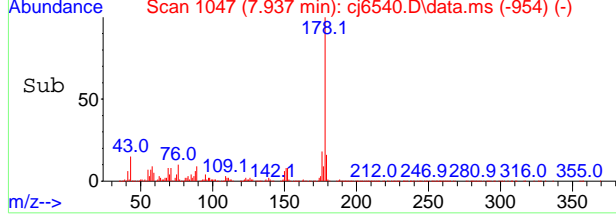
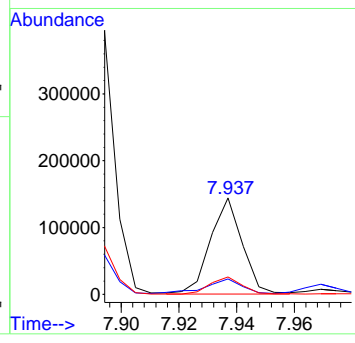
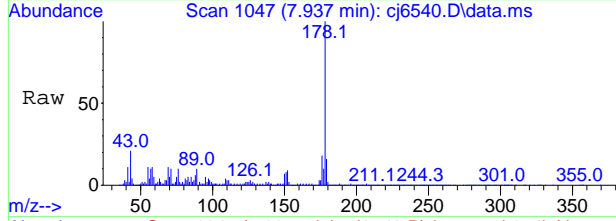
#78  
 Phenanthrene  
 Concen: 11.4956 ppm  
 RT: 7.894 min Scan# 1039  
 Delta R.T. 0.000 min  
 Lab File: cj6540.D  
 Acq: 10 May 2024 12:54 am

Tgt Ion	Ratio	Lower	Upper
178	100		
179	14.6	0.0	45.5
176	18.3	0.0	49.2

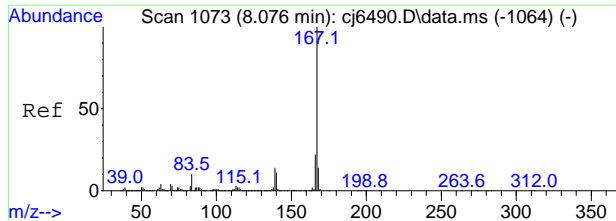


#79  
 Anthracene  
 Concen: 3.9825 ppm  
 RT: 7.937 min Scan# 1047  
 Delta R.T. -0.000 min  
 Lab File: cj6540.D  
 Acq: 10 May 2024 12:54 am

Tgt Ion	Ratio	Lower	Upper
178	100		
179	14.1	0.0	46.1
176	18.0	0.0	48.7

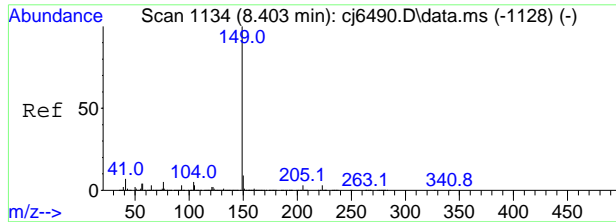
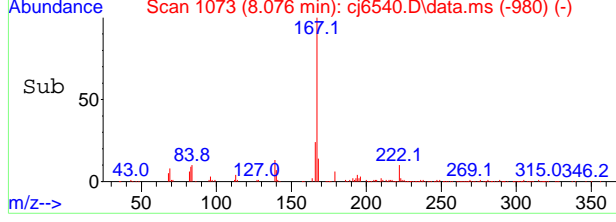
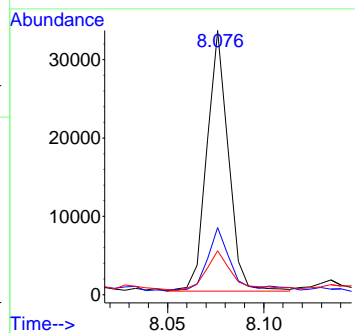
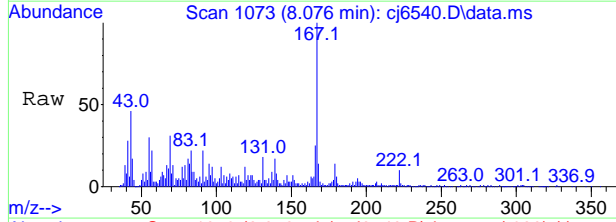






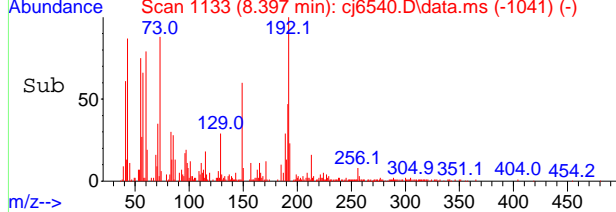
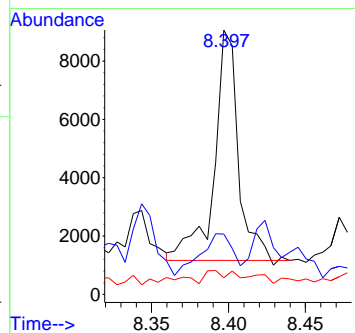
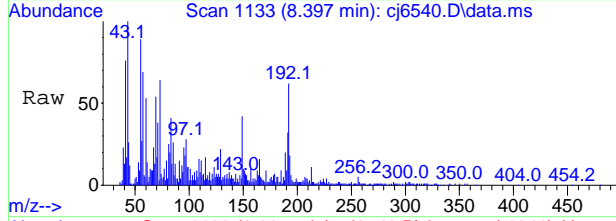
#80  
 Carbazole  
 Concen: 1.0006 ppm  
 RT: 8.076 min Scan# 1073  
 Delta R.T. 0.000 min  
 Lab File: cj6540.D  
 Acq: 10 May 2024 12:54 am

Tgt Ion	Ratio	Lower	Upper
167	100		
166	23.6	0.0	51.7
139	14.4	0.0	43.8

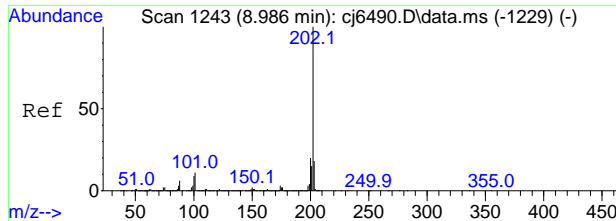


#81  
 Di-n-butylphthalate  
 Concen: 0.2696 ppm  
 RT: 8.397 min Scan# 1133  
 Delta R.T. -0.006 min  
 Lab File: cj6540.D  
 Acq: 10 May 2024 12:54 am

Tgt Ion	Ratio	Lower	Upper
149	100		
150	9.9	0.0	39.3
104	0.2	0.0	35.2

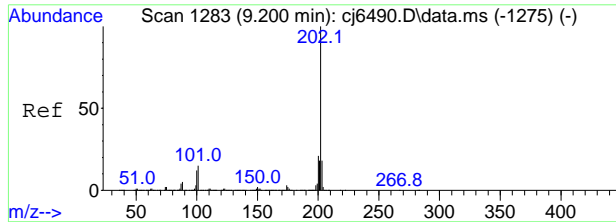
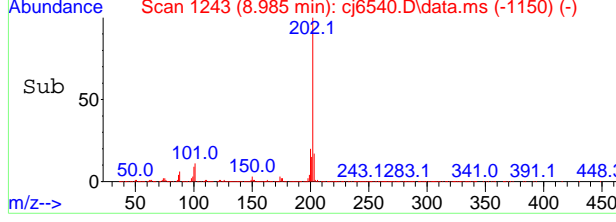
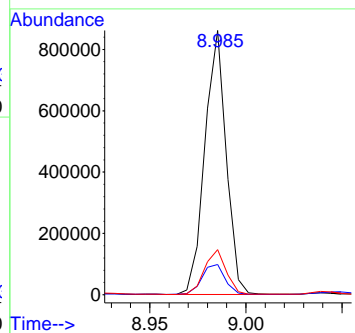
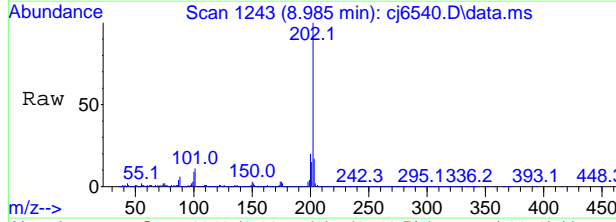


7.1.18  
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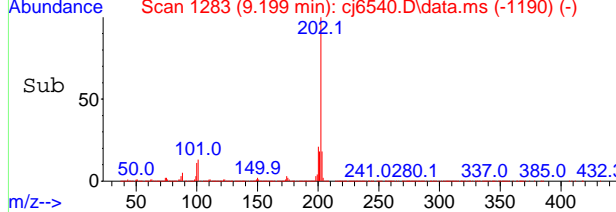
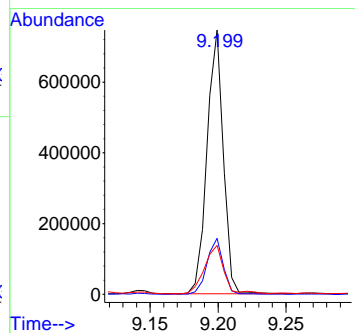
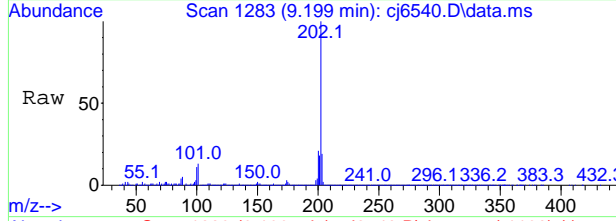
#82  
 Fluoranthene  
 Concen: 22.2063 ppm  
 RT: 8.985 min Scan# 1243  
 Delta R.T. -0.001 min  
 Lab File: cj6540.D  
 Acq: 10 May 2024 12:54 am

Tgt Ion	Ratio	Lower	Upper
202	100		
101	11.3	0.0	41.4
203	16.9	0.0	47.6



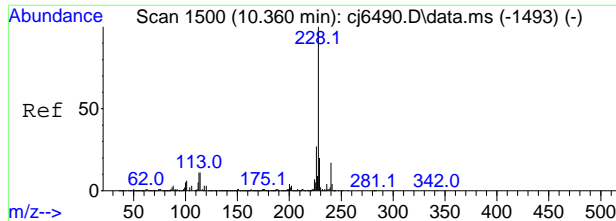
#86  
 Pyrene  
 Concen: 22.4210 ppm  
 RT: 9.199 min Scan# 1283  
 Delta R.T. -0.001 min  
 Lab File: cj6540.D  
 Acq: 10 May 2024 12:54 am

Tgt Ion	Ratio	Lower	Upper
202	100		
200	21.2	0.0	51.4
203	18.2	0.0	47.8



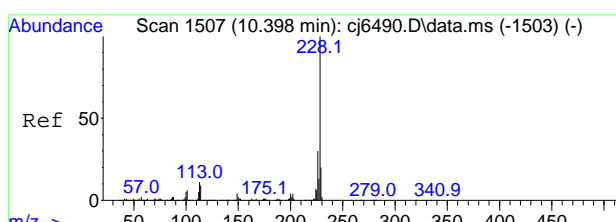
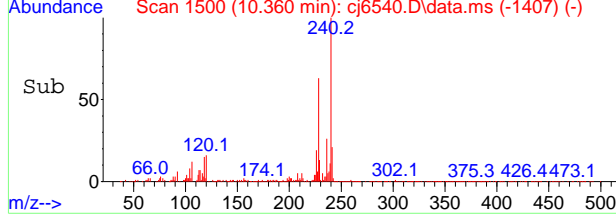
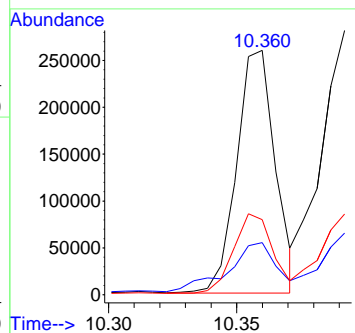
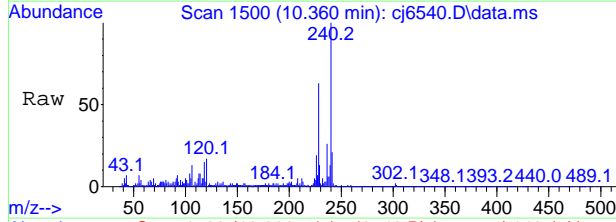
7.1.18  
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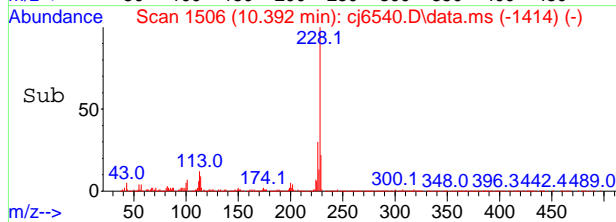
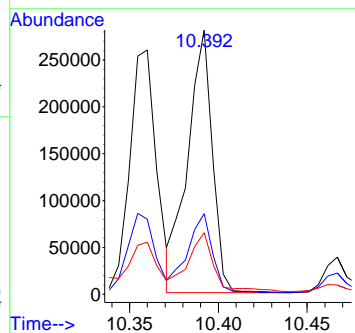
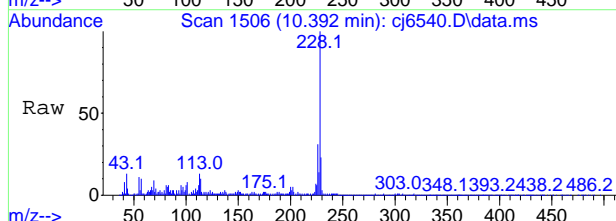
#89  
 Benzo[a]anthracene  
 Concen: 10.3881 ppm  
 RT: 10.360 min Scan# 1500  
 Delta R.T. -0.000 min  
 Lab File: cj6540.D  
 Acq: 10 May 2024 12:54 am

Tgt Ion	Ratio	Lower	Upper
228	100		
229	19.8	0.0	49.8
226	30.7	0.0	57.1

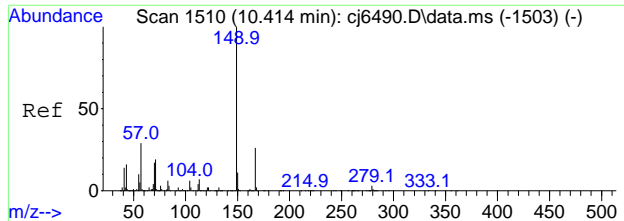


#91  
 Chrysene  
 Concen: 11.3287 ppm  
 RT: 10.392 min Scan# 1506  
 Delta R.T. -0.006 min  
 Lab File: cj6540.D  
 Acq: 10 May 2024 12:54 am

Tgt Ion	Ratio	Lower	Upper
228	100		
226	30.3	0.0	59.9
229	22.2	0.0	49.8

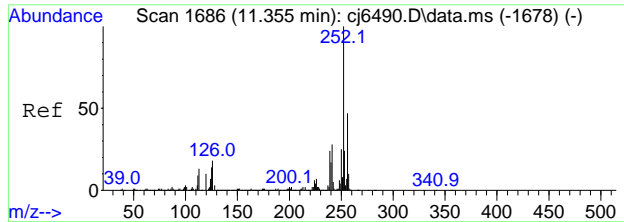
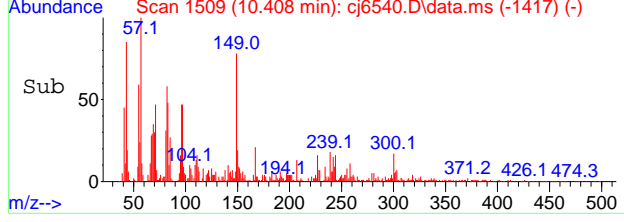
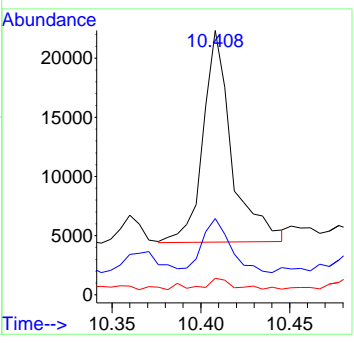
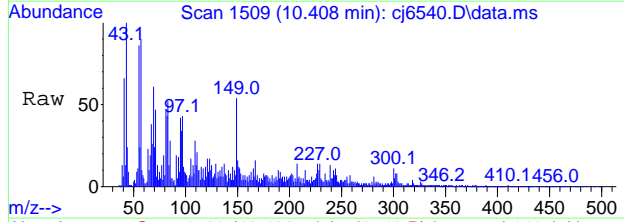


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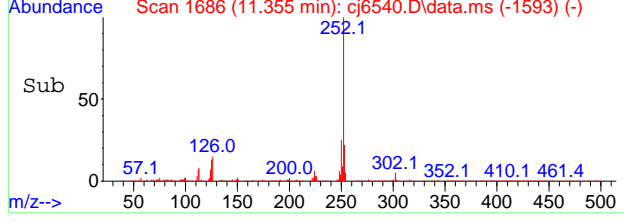
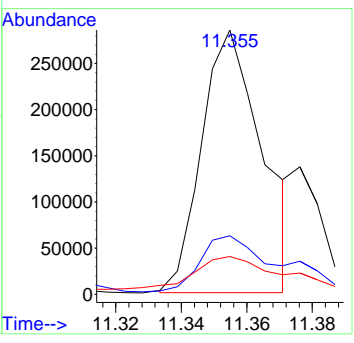
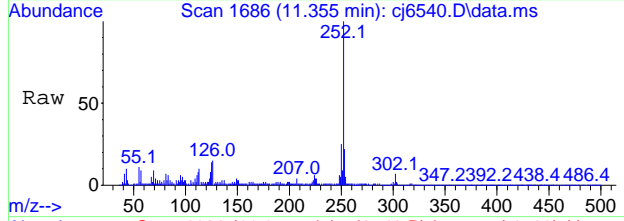
#92  
 bis(2-Ethylhexyl)phthalate  
 Concen: 1.0989 ppm  
 RT: 10.408 min Scan# 1509  
 Delta R.T. -0.006 min  
 Lab File: cj6540.D  
 Acq: 10 May 2024 12:54 am

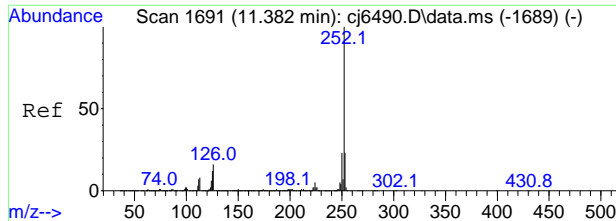
Tgt Ion	Ratio	Lower	Upper
149	100		
167	23.2	0.0	56.1
279	4.8	0.0	33.2



#95  
 Benzo[b]fluoranthene  
 Concen: 14.6914 ppm m  
 RT: 11.355 min Scan# 1686  
 Delta R.T. -0.000 min  
 Lab File: cj6540.D  
 Acq: 10 May 2024 12:54 am

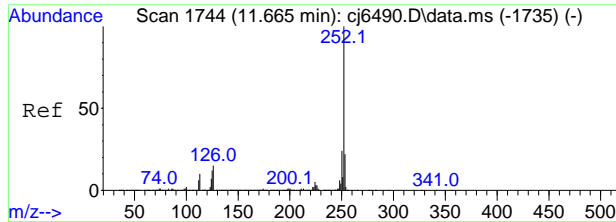
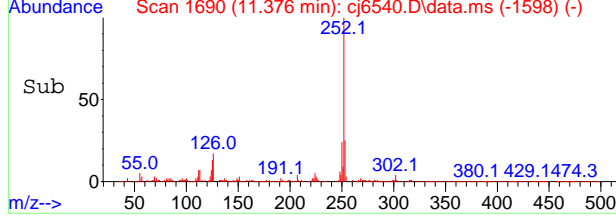
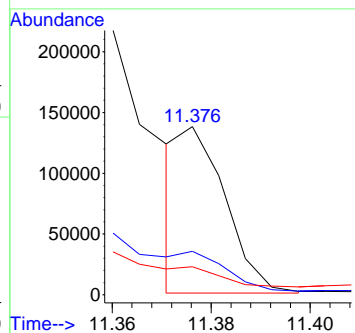
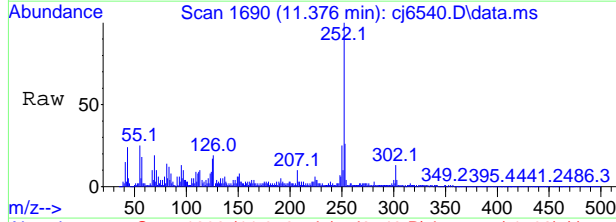
Tgt Ion	Ratio	Lower	Upper
252	100		
253	22.2	0.0	54.7
125	14.3	0.0	44.2





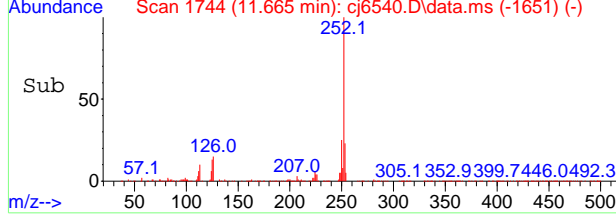
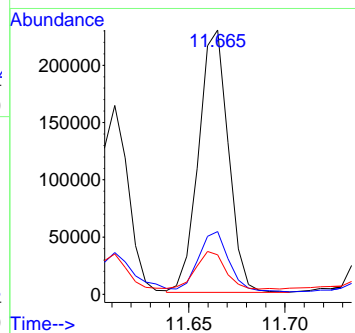
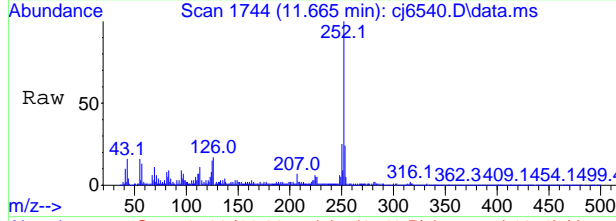
#96  
 Benzo[k]fluoranthene  
 Concen: 3.8407 ppm m  
 RT: 11.376 min Scan# 1690  
 Delta R.T. -0.006 min  
 Lab File: cj6540.D  
 Acq: 10 May 2024 12:54 am

Tgt Ion	Resp	Lower	Upper
252	85960		
253	25.9	0.0	52.6
125	16.8	0.0	42.4

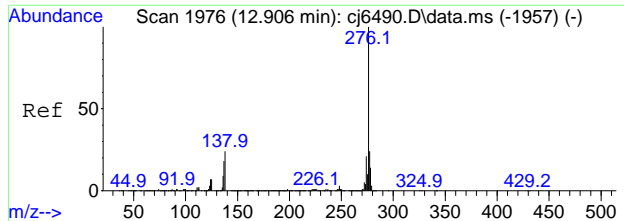


#97  
 Benzo[a]pyrene  
 Concen: 12.0015 ppm  
 RT: 11.665 min Scan# 1744  
 Delta R.T. 0.000 min  
 Lab File: cj6540.D  
 Acq: 10 May 2024 12:54 am

Tgt Ion	Resp	Lower	Upper
252	247115		
253	22.4	0.0	51.9
125	12.8	0.0	42.1

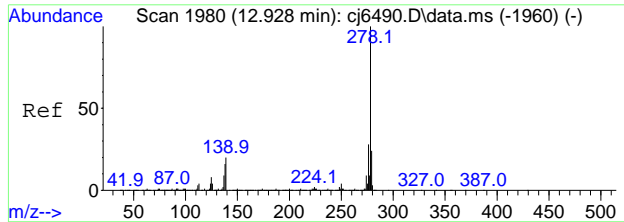
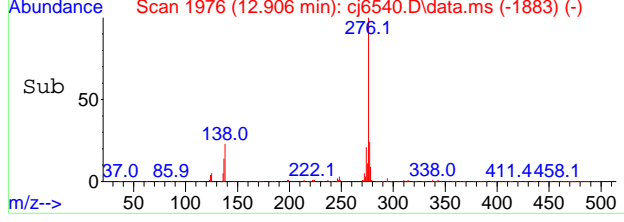
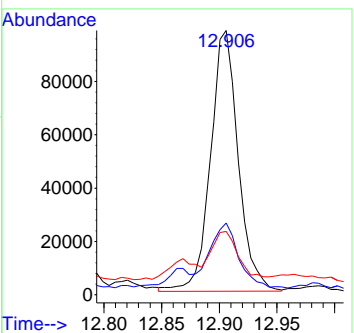
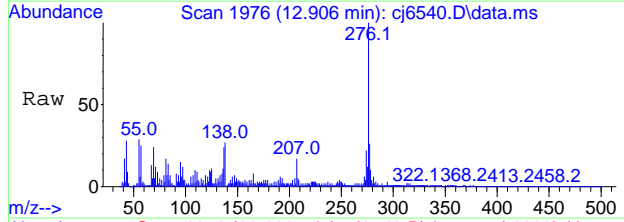


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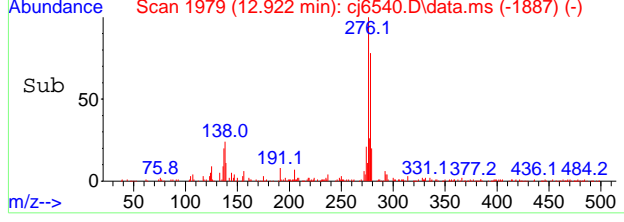
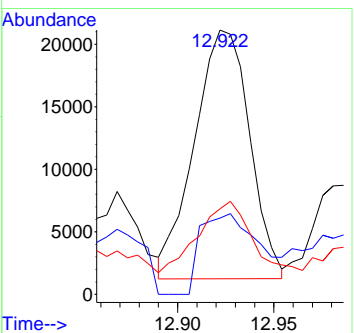
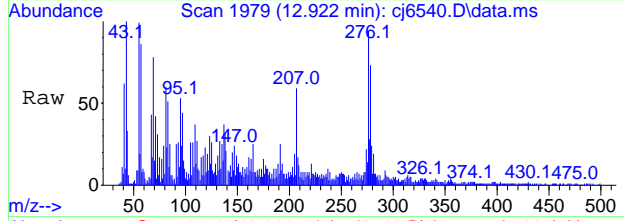
#98  
 Indeno[1,2,3-cd]pyrene  
 Concen: 6.5772 ppm  
 RT: 12.906 min Scan# 1976  
 Delta R.T. -0.000 min  
 Lab File: cj6540.D  
 Acq: 10 May 2024 12:54 am

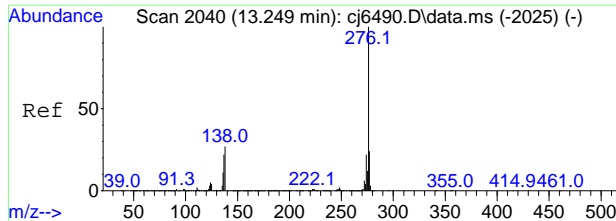
Tgt Ion	Resp	Lower	Upper
276	163719		
138	24.3	0.0	54.2
137	17.1	0.0	47.9



#100  
 Dibenz[a,h]anthracene  
 Concen: 1.9982 ppm  
 RT: 12.922 min Scan# 1979  
 Delta R.T. -0.006 min  
 Lab File: cj6540.D  
 Acq: 10 May 2024 12:54 am

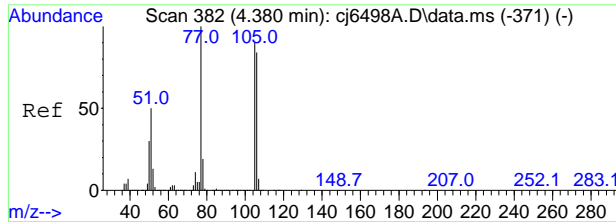
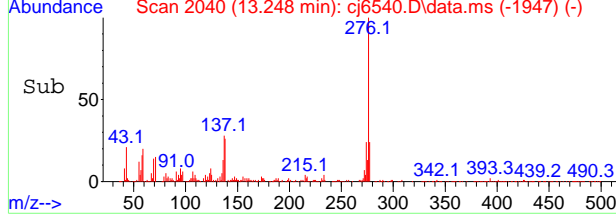
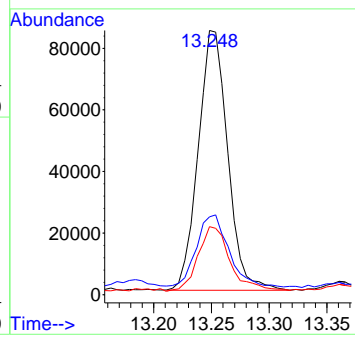
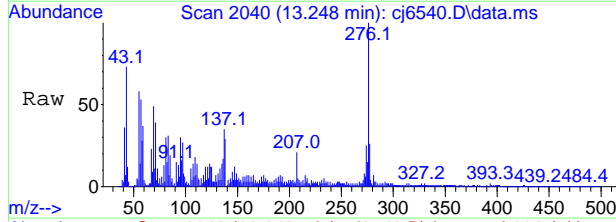
Tgt Ion	Resp	Lower	Upper
278	39744		
139	24.7	0.0	49.8
279	25.7	0.0	54.1





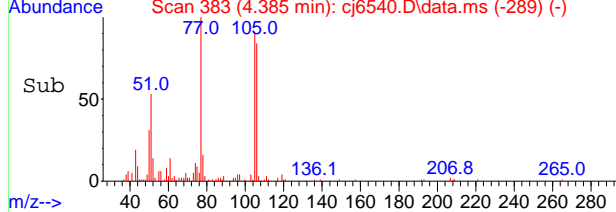
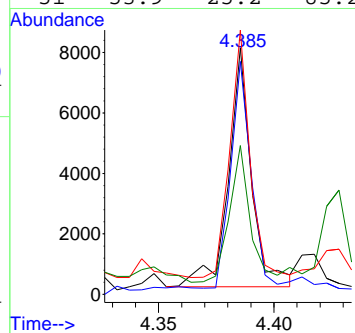
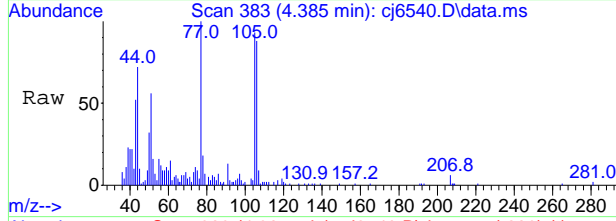
#102  
 Benzo[g,h,i]perylene  
 Concen: 7.7603 ppm  
 RT: 13.248 min Scan# 2040  
 Delta R.T. -0.001 min  
 Lab File: cj6540.D  
 Acq: 10 May 2024 12:54 am

Tgt Ion	Ratio	Lower	Upper
276	100		
138	26.7	0.0	56.7
277	24.8	0.0	54.1



#104  
 Benzaldehyde  
 Concen: 0.5809 ppm  
 RT: 4.385 min Scan# 383  
 Delta R.T. 0.005 min  
 Lab File: cj6540.D  
 Acq: 10 May 2024 12:54 am

Tgt Ion	Ratio	Lower	Upper
105	100		
106	95.4	62.5	122.5
77	104.7	80.6	140.6
51	53.9	25.2	85.2



7.1.18  
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LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6540.D  
Acq On : 10 May 2024 12:54 am  
Operator : rocquans  
Sample : jd87833-9  
Misc : op54460,ecj297,30.7,,,1,1  
ALS Vial : 31 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON  
Sampling : 1  
Start Thrs: 0.02  
Stop Thrs : 0  
Filtering: 5  
Min Area: 1000 Area counts  
Max Peaks: 100  
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS, zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

Signal : TIC: cj6540.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.252	354	358	361	rVB	759246	491119	8.63%	0.428%
2	4.428	379	391	396	rVV	2049169	1495541	26.29%	1.304%
3	4.487	396	402	405	rVV	513351	315131	5.54%	0.275%
4	4.664	431	435	440	rBV	3174585	2028522	35.66%	1.769%
5	4.910	479	481	494	rVB2	410578	266196	4.68%	0.232%
6	5.011	494	500	503	rBV	2061662	1291785	22.71%	1.126%
7	5.466	579	585	593	rVV	3479347	2566621	45.12%	2.238%
8	6.167	711	716	720	rBV	4097579	2462144	43.28%	2.147%
9	6.263	727	734	740	rVB3	241728	228922	4.02%	0.200%
10	6.557	784	789	794	rBV2	195643	271094	4.77%	0.236%
11	6.659	803	808	815	rVB	4287593	2947752	51.82%	2.570%
12	6.883	845	850	858	rBV	322860	427256	7.51%	0.373%
13	7.274	917	923	926	rVB	1548010	1132532	19.91%	0.988%
14	7.381	940	943	950	rVB2	154784	205682	3.62%	0.179%
15	7.456	950	957	960	rBV5	181234	255568	4.49%	0.223%
16	7.573	972	979	986	rVB2	690076	714997	12.57%	0.623%
17	7.637	986	991	994	rBV	346015	383661	6.74%	0.335%
18	7.702	999	1003	1008	rVB2	175884	211261	3.71%	0.184%
19	7.766	1008	1015	1024	rVB3	122705	233156	4.10%	0.203%
20	7.841	1024	1029	1031	rBV2	208160	213392	3.75%	0.186%
21	7.873	1031	1035	1042	rBV2	3779504	3592666	63.16%	3.133%
22	7.937	1042	1047	1051	rVB	437521	377233	6.63%	0.329%
23	8.081	1070	1074	1081	rVB3	195744	268560	4.72%	0.234%
24	8.306	1112	1116	1119	rBV	540783	606218	10.66%	0.529%
25	8.338	1119	1122	1126	rVV2	1083213	1072882	18.86%	0.936%
26	8.376	1126	1129	1135	rVV	2595345	2327265	40.91%	2.029%
27	8.424	1135	1138	1146	rVB2	345771	467072	8.21%	0.407%
28	8.536	1153	1159	1163	rBV2	299072	292528	5.14%	0.255%
29	8.836	1208	1215	1218	rBV4	140446	217182	3.82%	0.189%
30	8.862	1218	1220	1226	rVB3	188020	225194	3.96%	0.196%
31	8.985	1234	1243	1249	rBV	2024045	1790075	31.47%	1.561%
32	9.050	1249	1255	1265	rBV4	1417535	2723049	47.87%	2.375%
33	9.124	1265	1269	1276	rBV	1127508	1069083	18.79%	0.932%
34	9.199	1276	1283	1287	rBV	1688291	1607672	28.26%	1.402%
35	9.269	1287	1296	1302	rVB4	290820	434693	7.64%	0.379%
36	9.354	1308	1312	1317	rBV	3190740	2705849	47.57%	2.360%
37	9.445	1327	1329	1333	rVB	284173	245107	4.31%	0.214%
38	9.520	1333	1343	1346	rVB	245446	412777	7.26%	0.360%
39	9.584	1351	1355	1358	rBV3	381257	435013	7.65%	0.379%
40	9.622	1358	1362	1370	rVB3	436898	538792	9.47%	0.470%



7.1.19  
7



LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6540.D  
Acq On : 10 May 2024 12:54 am  
Operator : rocquans  
Sample : jd87833-9  
Misc : op54460,ecj297,30.7,,,1,1  
ALS Vial : 31 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON  
Sampling : 1  
Start Thrs: 0.02  
Stop Thrs : 0  
Filtering: 5  
Min Area: 1000 Area counts  
Max Peaks: 100  
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS, zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

Table with 10 columns: Retention Time, Abundance, and Percent Area. Rows 41-85 showing peak data for various compounds.

7.1.19  
7

LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6540.D  
Acq On : 10 May 2024 12:54 am  
Operator : rocquans  
Sample : jd87833-9  
Misc : op54460,ecj297,30.7,,,1,1  
ALS Vial : 31 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON Filtering: 5  
Sampling : 1 Min Area: 1000 Area counts  
Start Thrs: 0.02 Max Peaks: 100  
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

86	12.970	1981	1988	1996	rVB5	346848	723057	12.71%	0.631%
87	13.088	1996	2010	2021	rBV6	1716404	5012009	88.11%	4.371%
88	13.179	2021	2027	2034	rVV	989877	1767857	31.08%	1.542%
89	13.254	2034	2041	2053	rVB2	687150	1634590	28.74%	1.425%
90	13.350	2053	2059	2065	rBV9	216111	457971	8.05%	0.399%
91	13.430	2065	2074	2083	rVV2	2942277	5688235	100.00%	4.960%
92	13.505	2083	2088	2093	rVV5	210959	352154	6.19%	0.307%
93	13.575	2093	2101	2108	rVB10	134421	382871	6.73%	0.334%
94	13.735	2124	2131	2140	rVV8	347773	1060770	18.65%	0.925%
95	13.815	2141	2146	2151	rVV8	165532	347071	6.10%	0.303%
96	13.853	2151	2153	2161	rVB7	142233	228058	4.01%	0.199%
97	14.008	2171	2182	2191	rBV5	426182	1563012	27.48%	1.363%
98	14.227	2214	2223	2235	rBV3	1125903	2675473	47.04%	2.333%
99	14.323	2235	2241	2248	rVB3	85761	230096	4.05%	0.201%
100	14.441	2250	2263	2269	rBV2	604606	1578430	27.75%	1.376%

Sum of corrected areas: 114677010

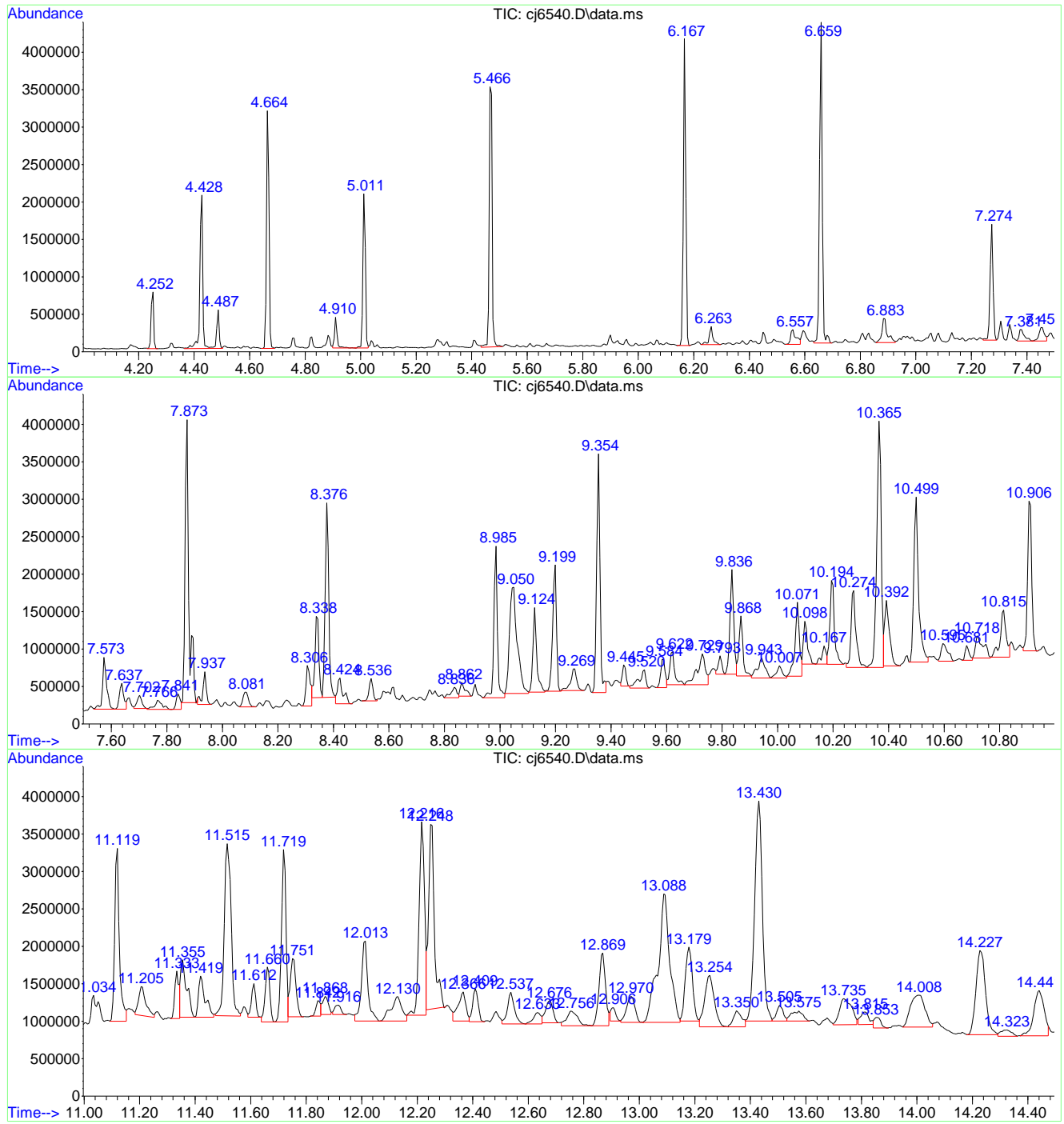
7.1.19  
7

LSC Report - Integrated Chromatogram

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6540.D  
Acq On : 10 May 2024 12:54 am  
Operator : rocquans  
Sample : jd87833-9  
Misc : op54460,ecj297,30.7,,,1,1  
ALS Vial : 31 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p



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7



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6540.D  
Acq On : 10 May 2024 12:54 am  
Operator : rocquans  
Sample : jd87833-9  
Misc : op54460,ecj297,30.7,,,1,1  
ALS Vial : 31 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

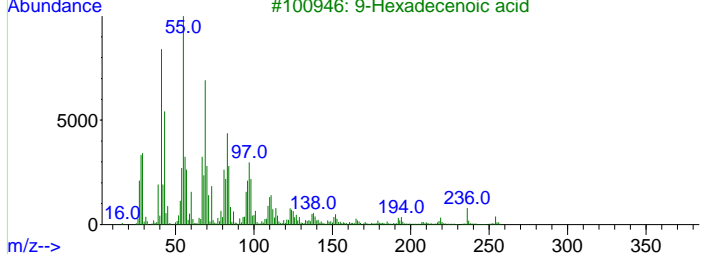
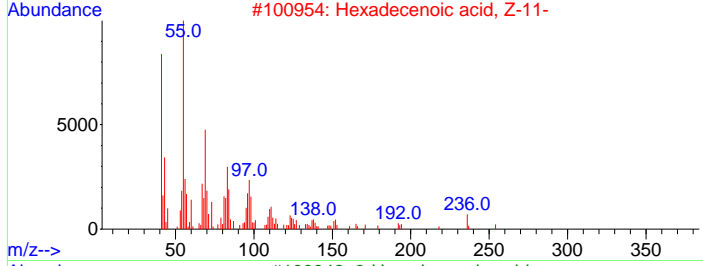
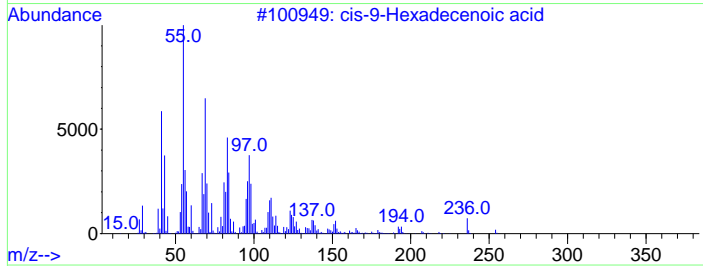
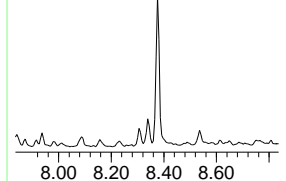
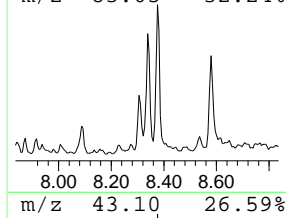
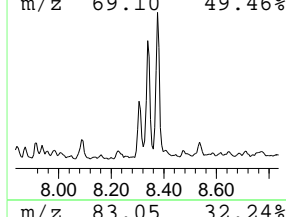
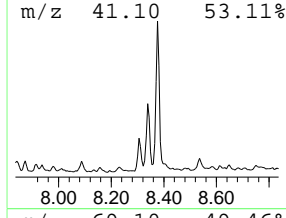
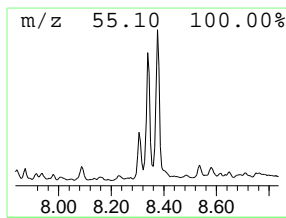
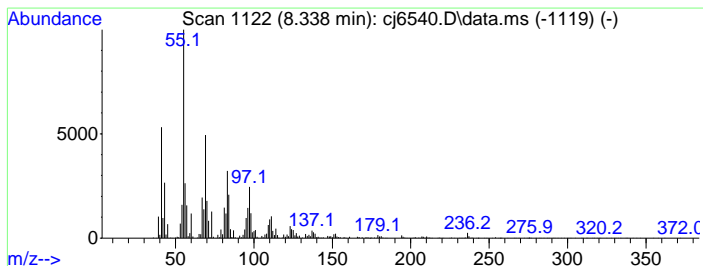
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 1 Unknown acid Concentration Rank 21

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.338	11.95 ppm	1072880	Phenanthrene-d10b	7.873

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	cis-9-Hexadecenoic acid	254	C16H30O2	1000333-19-5	93
2		Hexadecenoic acid, Z-11-	254	C16H30O2	002416-20-8	87
3		9-Hexadecenoic acid	254	C16H30O2	002091-29-4	87
4		Myristoleic acid	226	C14H26O2	000544-64-9	80
5		E-9-Tetradecenoic acid	226	C14H26O2	1000131-35-8	80



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7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6540.D  
Acq On : 10 May 2024 12:54 am  
Operator : rocquans  
Sample : jd87833-9  
Misc : op54460,ecj297,30.7,,,1,1  
ALS Vial : 31 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

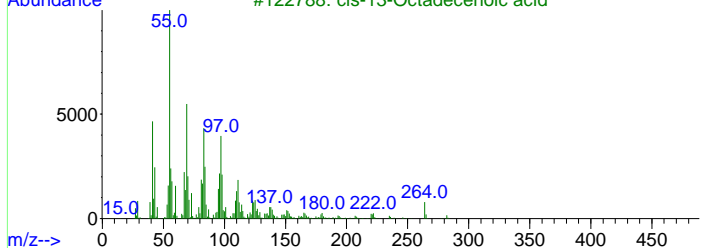
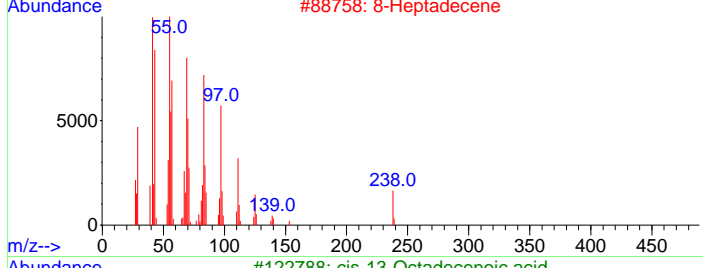
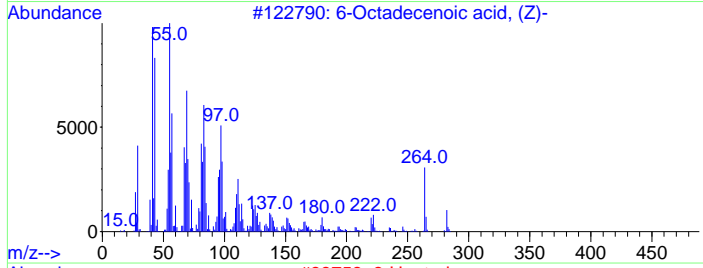
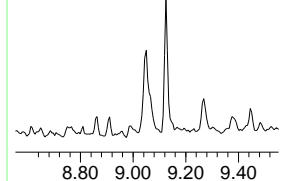
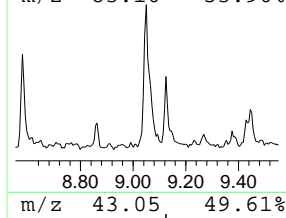
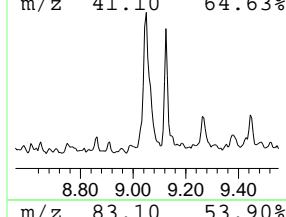
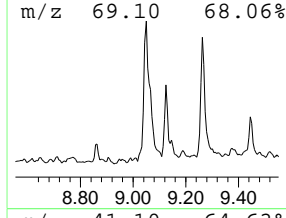
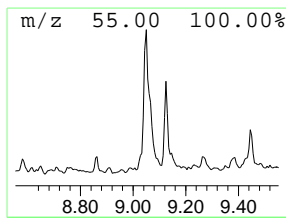
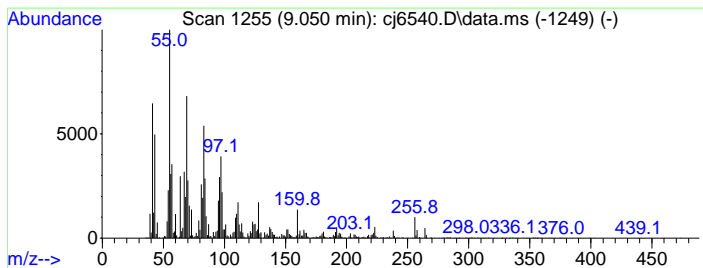
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 2 Unknown alcohol Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.050	30.32 ppm	2723050	Phenanthrene-d10b	7.873

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	6-Octadecenoic acid, (Z)-	282	C18H34O2	000593-39-5	96
2	8-Heptadecene	238	C17H34	002579-04-6	90
3	cis-13-Octadecenoic acid	282	C18H34O2	013126-39-1	90
4	Octadec-9-enoic acid	282	C18H34O2	1000190-13-7	70
5	9-Octadecenoic acid, (E)-	282	C18H34O2	000112-79-8	70



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Library Search Compound Report

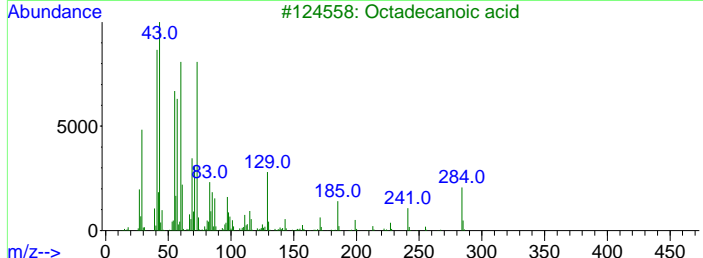
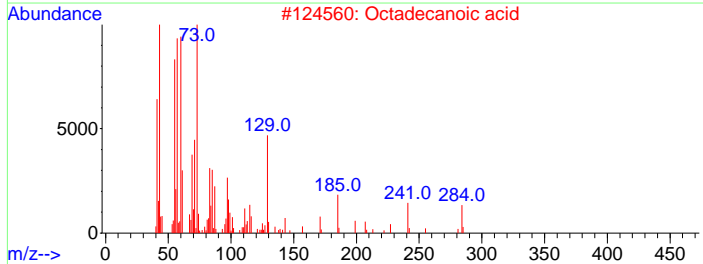
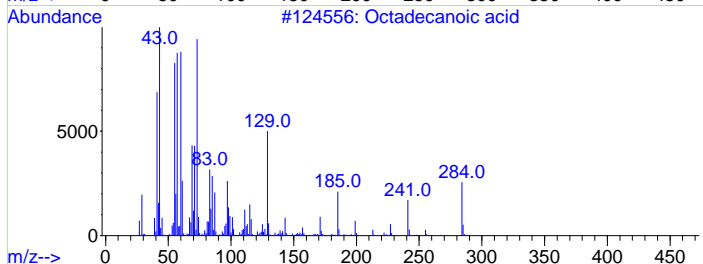
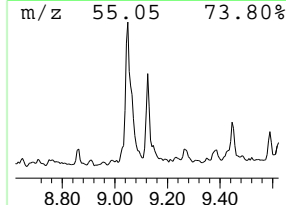
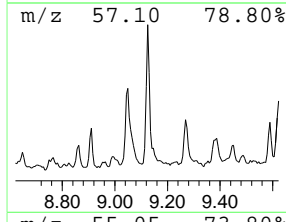
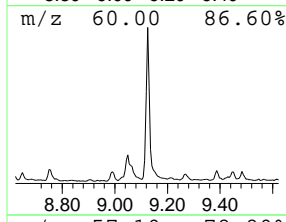
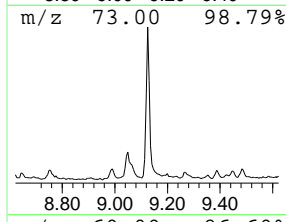
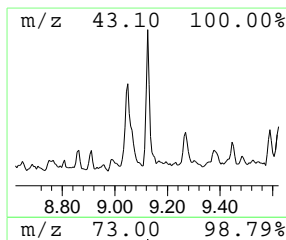
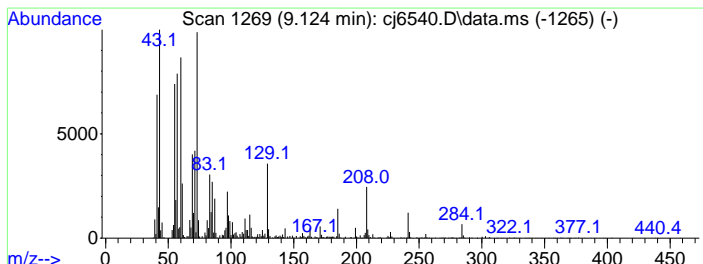
Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6540.D  
Acq On : 10 May 2024 12:54 am  
Operator : rocquans  
Sample : jd87833-9  
Misc : op54460,ecj297,30.7,,1,1  
ALS Vial : 31 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 3 Octadecanoic acid Concentration Rank 22

R.T.	EstConc	Area	Relative to ISTD	R.T.	
9.124	11.63 ppm	1069080	Chrysene-d12	10.365	
Hit# of	5	Tentative ID	MW MolForm	CAS#	Qual
1		Octadecanoic acid	284 C18H36O2	000057-11-4	99
2		Octadecanoic acid	284 C18H36O2	000057-11-4	99
3		Octadecanoic acid	284 C18H36O2	000057-11-4	95
4		Pentadecanoic acid	242 C15H30O2	001002-84-2	91
5		Octadecanoic acid	284 C18H36O2	000057-11-4	91



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6540.D  
Acq On : 10 May 2024 12:54 am  
Operator : rocquans  
Sample : jd87833-9  
Misc : op54460,ecj297,30.7,,1,1  
ALS Vial : 31 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

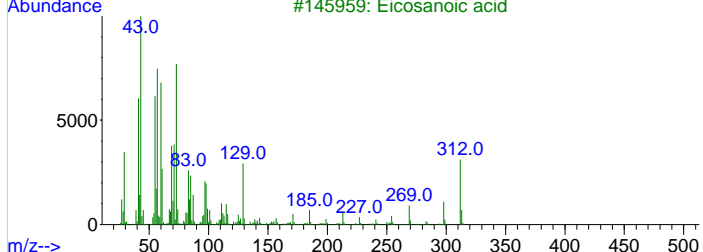
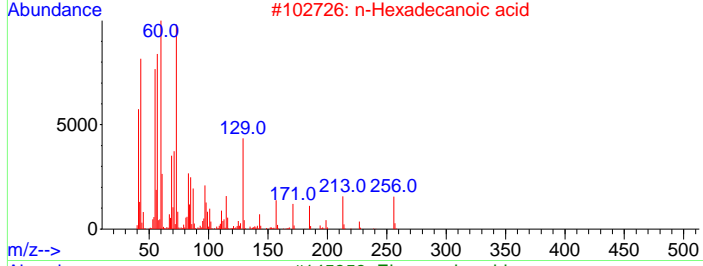
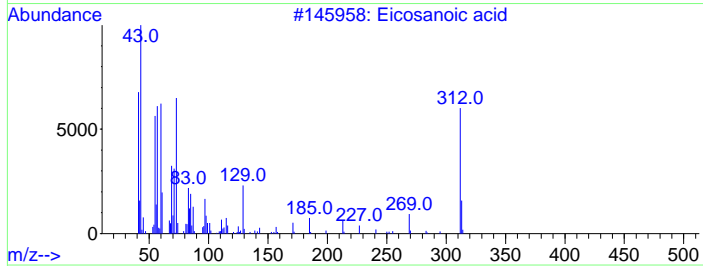
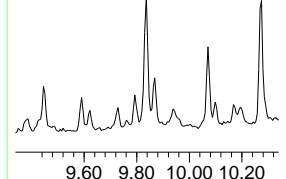
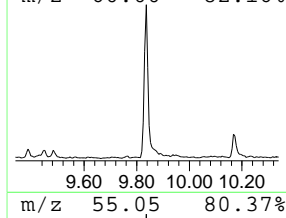
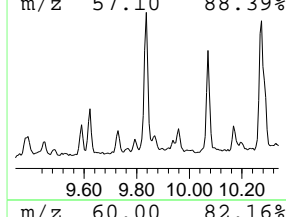
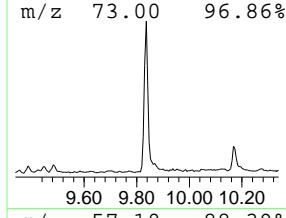
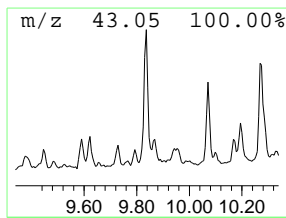
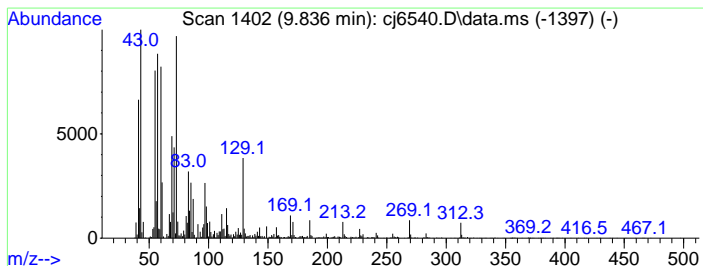
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 4 Unknown acid Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.836	14.65 ppm	1346840	Chrysene-d12	10.365

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Eicosanoic acid	312	C20H40O2	000506-30-9	97
2		n-Hexadecanoic acid	256	C16H32O2	000057-10-3	94
3		Eicosanoic acid	312	C20H40O2	000506-30-9	91
4		Octadecanoic acid	284	C18H36O2	000057-11-4	91
5		Pentadecanoic acid	242	C15H30O2	001002-84-2	91



7.1.19  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6540.D  
Acq On : 10 May 2024 12:54 am  
Operator : rocquans  
Sample : jd87833-9  
Misc : op54460,ecj297,30.7,,1,1  
ALS Vial : 31 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

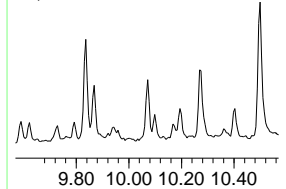
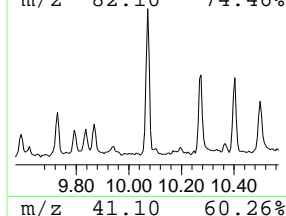
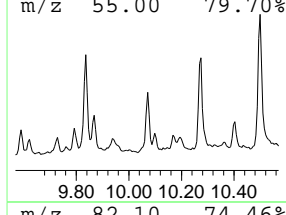
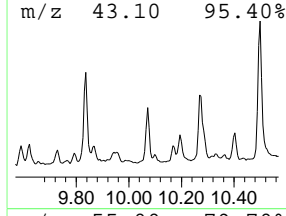
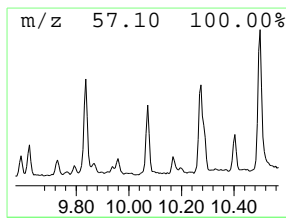
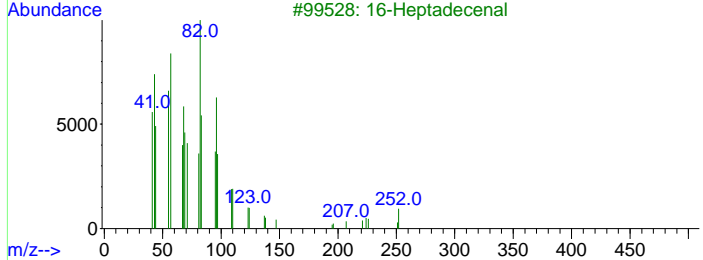
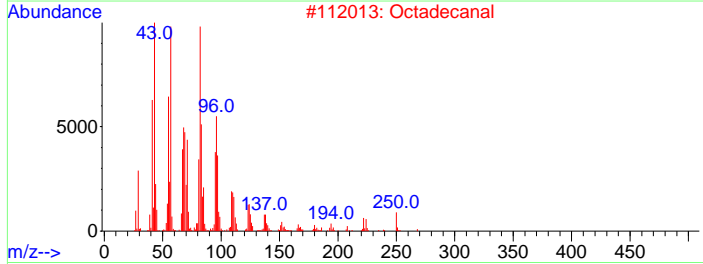
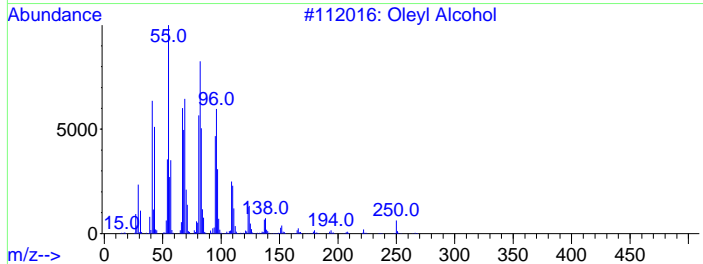
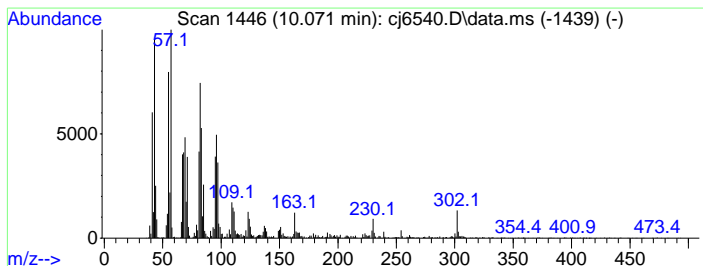
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 5 Unknown Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.071	12.05 ppm	1107920	Chrysene-d12	10.365

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Oleyl Alcohol	268	C18H36O	000143-28-2	93
2	Octadecanal	268	C18H36O	000638-66-4	90
3	16-Heptadecenal	252	C17H32O	1000144-57-9	89
4	1,19-Eicosadiene	278	C20H38	014811-95-1	89
5	Pentadecanal-	226	C15H30O	002765-11-9	87



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6540.D  
 Acq On : 10 May 2024 12:54 am  
 Operator : rocquans  
 Sample : jd87833-9  
 Misc : op54460,ecj297,30.7,,1,1  
 ALS Vial : 31 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

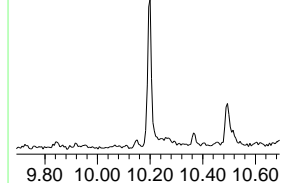
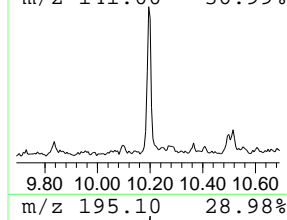
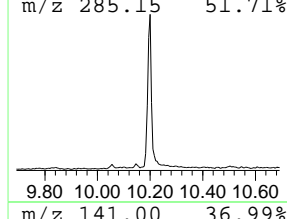
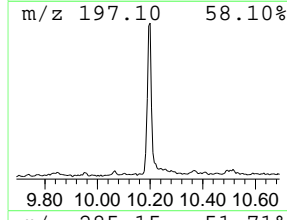
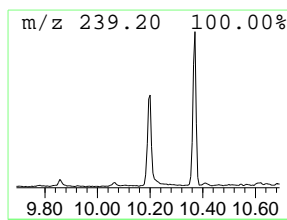
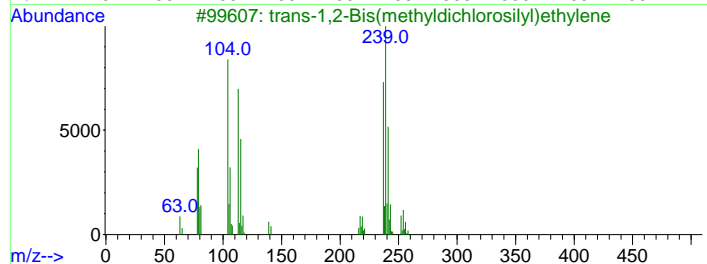
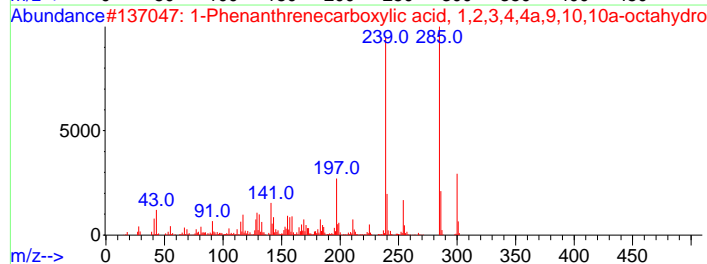
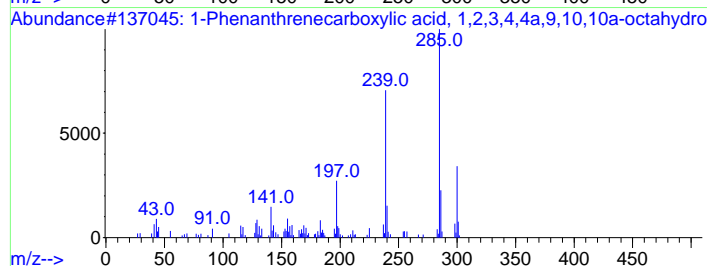
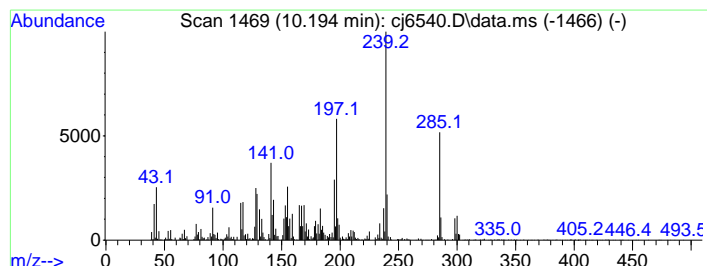
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 6 Butanoic acid, 2-(cyano)(2,... Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.194	13.76 ppm	1265290	Chrysene-d12	10.365

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			1-Phenanthrenecarboxylic acid, 1...	300	C20H28O2	005155-70-4	93
2			1-Phenanthrenecarboxylic acid, 1...	300	C20H28O2	001740-19-8	87
3			trans-1,2-Bis(methyldichlorosilyl...)	252	C4H8Cl4Si2	065899-10-7	83
4			1-Phenanthrenecarboxylic acid, 1...	300	C20H28O2	001740-19-8	74
5			Butanoic acid, 2-(cyano)(2,4,6-t...	300	C17H20N2O3	1000267-71-7	64



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6540.D  
Acq On : 10 May 2024 12:54 am  
Operator : rocquans  
Sample : jd87833-9  
Misc : op54460,ecj297,30.7,,,1,1  
ALS Vial : 31 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

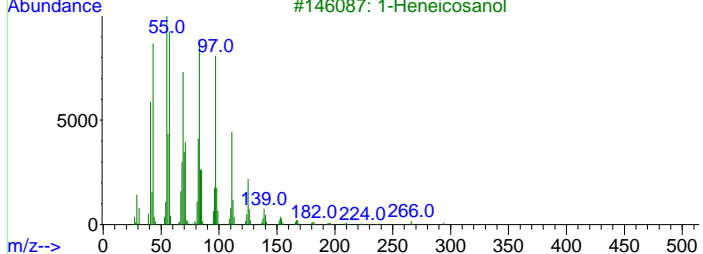
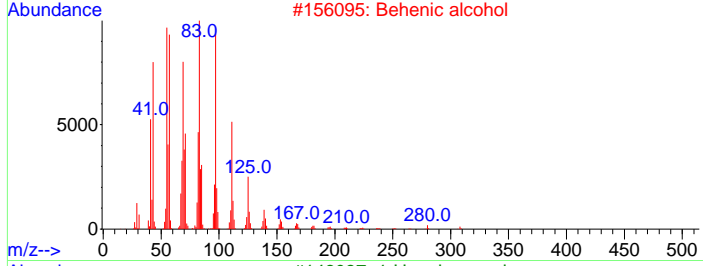
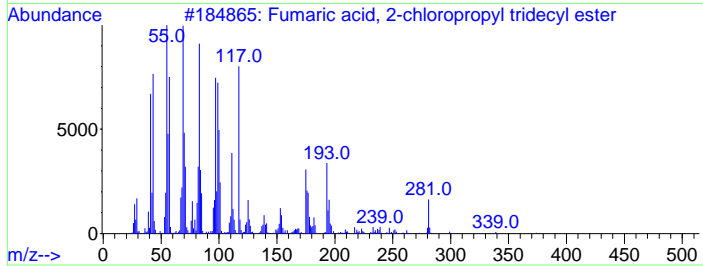
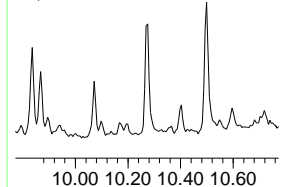
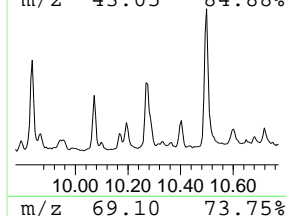
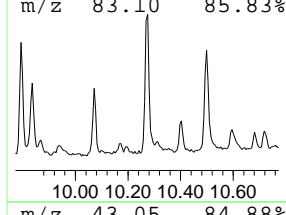
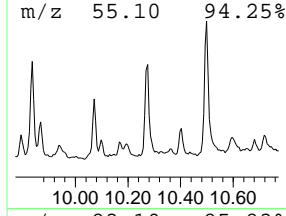
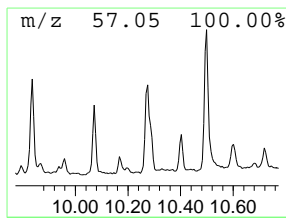
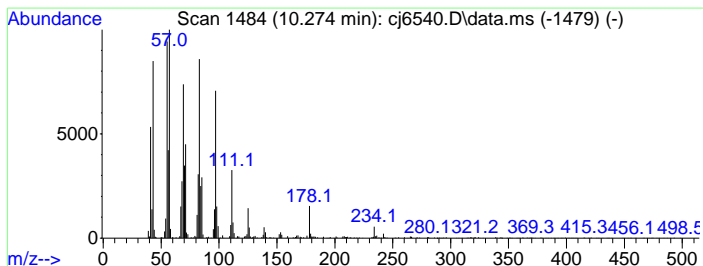
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 7 Unknown alcohol Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.274	13.73 ppm	1262580	Chrysene-d12	10.365

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Fumaric acid, 2-chloropropyl tri...	374	C20H35ClO4	1000348-57-1	98
2		Behenic alcohol	326	C22H46O	000661-19-8	94
3		1-Heneicosanol	312	C21H44O	015594-90-8	94
4		n-Tetracosanol-1	354	C24H50O	000506-51-4	94
5		Trifluoroacetoxy hexadecane	338	C18H33F3O2	006222-03-3	91



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Library Search Compound Report

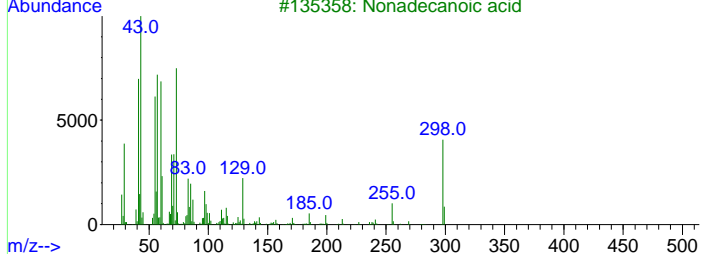
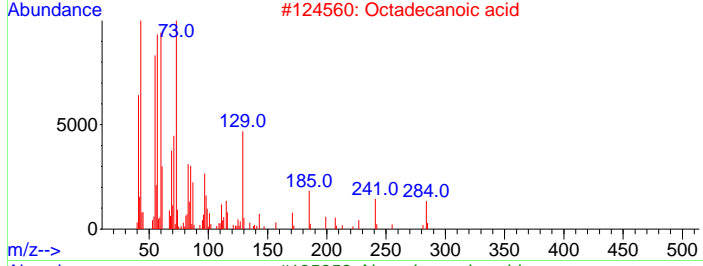
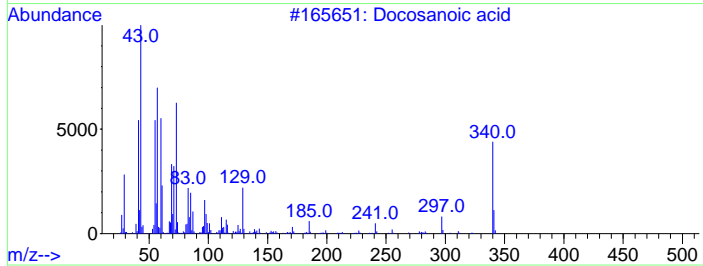
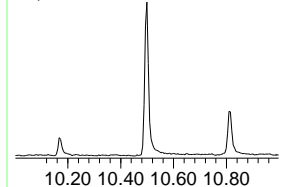
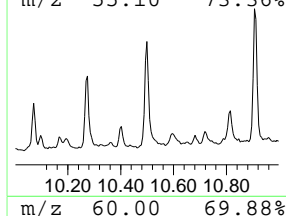
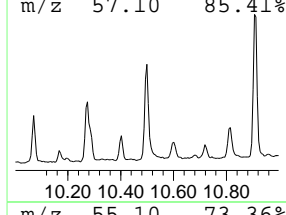
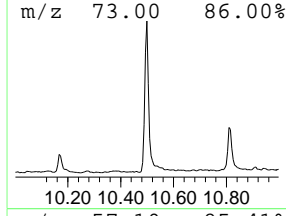
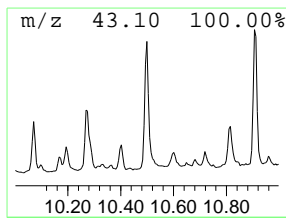
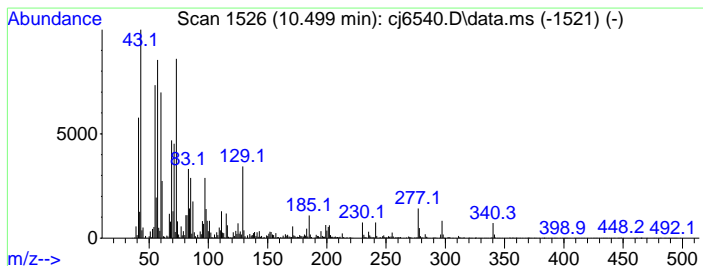
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Data File : cj6540.D  
Acq On : 10 May 2024 12:54 am  
Operator : rocquans  
Sample : jd87833-9  
Misc : op54460,ecj297,30.7,,,1,1  
ALS Vial : 31 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 8 Docosanoic acid Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.	
10.499	28.45 ppm	2616030	Chrysene-d12a	10.365	
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Docosanoic acid	340	C22H44O2	000112-85-6	99
2	Octadecanoic acid	284	C18H36O2	000057-11-4	97
3	Nonadecanoic acid	298	C19H38O2	000646-30-0	94
4	Docosanoic acid	340	C22H44O2	000112-85-6	74
5	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	58



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Library Search Compound Report

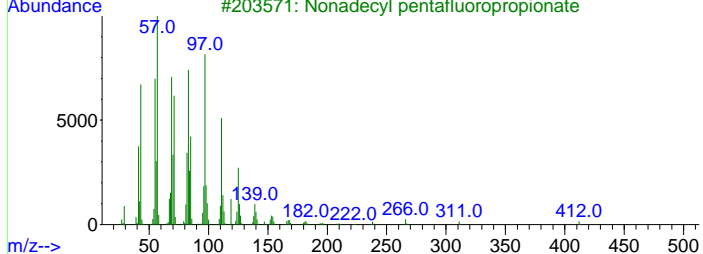
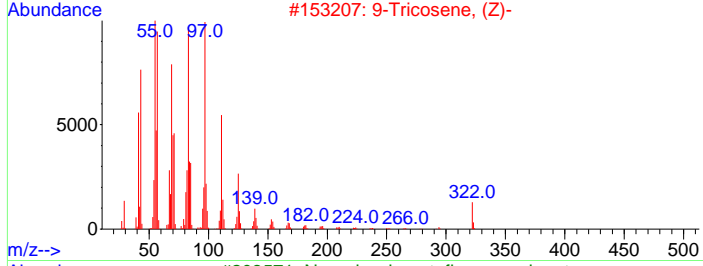
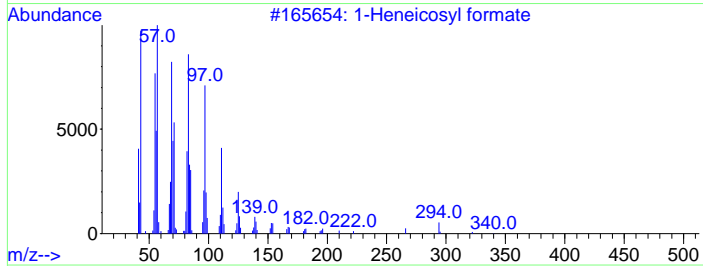
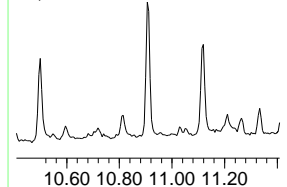
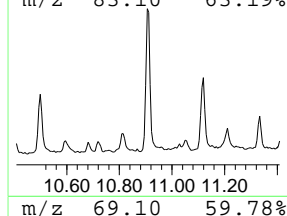
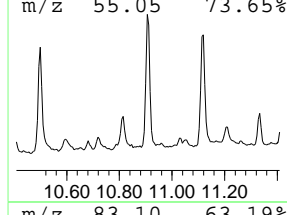
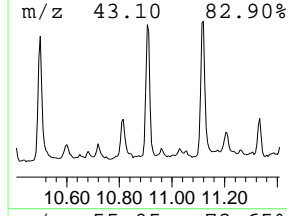
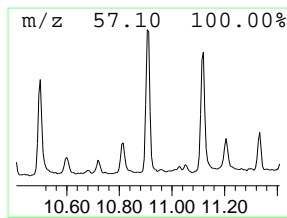
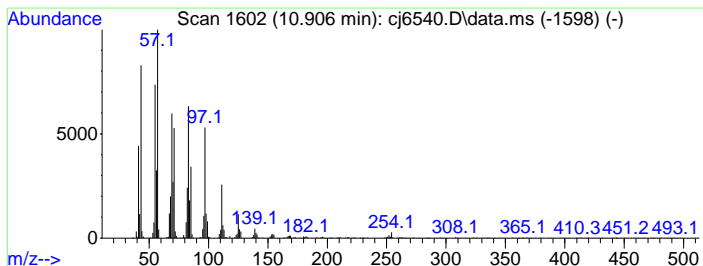
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Data File : cj6540.D  
Acq On : 10 May 2024 12:54 am  
Operator : rocquans  
Sample : jd87833-9  
Misc : op54460,ecj297,30.7,,,1,1  
ALS Vial : 31 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 9 Unknown Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.	
10.906	22.01 ppm	2023570	Chrysene-d12a	10.365	
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Heneicosyl formate	340	C22H44O2	077899-03-7	97
2	9-Tricosene, (Z)-	322	C23H46	027519-02-4	93
3	Nonadecyl pentafluoropropionate	430	C22H39F5O2	1000351-88-8	91
4	Tricosyl pentafluoropropionate	486	C26H47F5O2	1000351-81-0	91
5	Eicosyl pentafluoropropionate	444	C23H41F5O2	1000351-80-8	91



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6540.D  
Acq On : 10 May 2024 12:54 am  
Operator : rocquans  
Sample : jd87833-9  
Misc : op54460,ecj297,30.7,,,1,1  
ALS Vial : 31 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

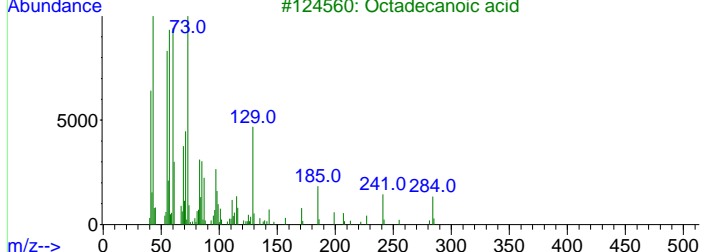
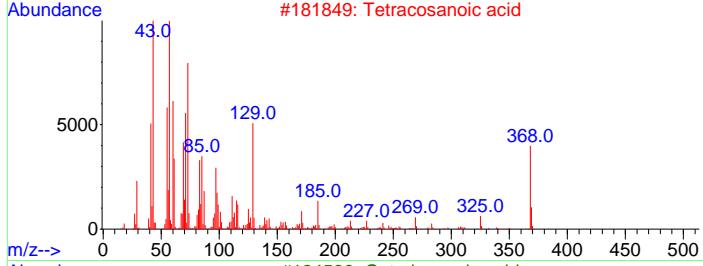
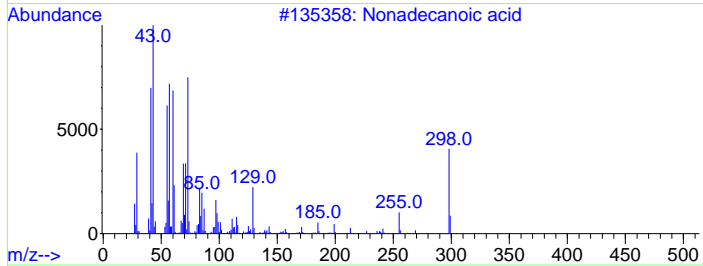
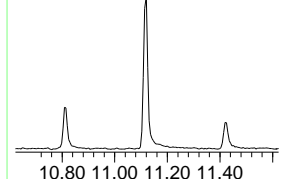
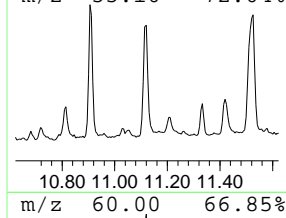
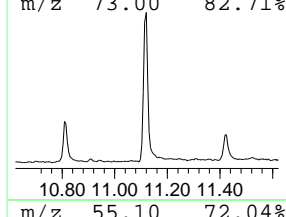
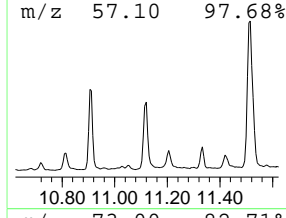
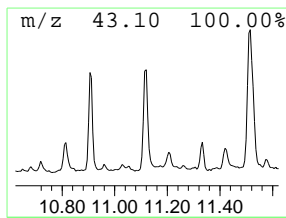
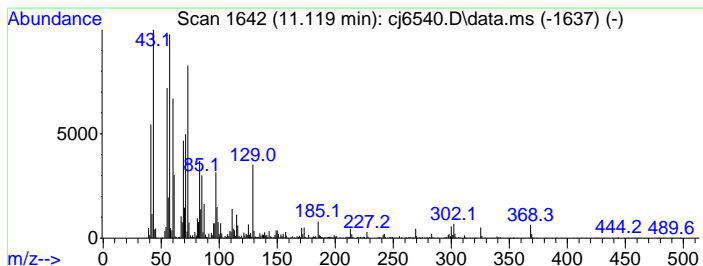
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TIC Integration Parameters: lscint.p

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Peak Number 10 Unknown acid Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.120	41.40 ppm	2734460	Perylene-d12	11.719

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		Nonadecanoic acid	298	C19H38O2	000646-30-0	91
2		Tetracosanoic acid	368	C24H48O2	000557-59-5	83
3		Octadecanoic acid	284	C18H36O2	000057-11-4	76
4		n-Decanoic acid	172	C10H20O2	000334-48-5	62
5		Oxalic acid, allyl hexadecyl ester	354	C21H38O4	1000309-24-4	38



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6540.D  
Acq On : 10 May 2024 12:54 am  
Operator : rocquans  
Sample : jd87833-9  
Misc : op54460,ecj297,30.7,,,1,1  
ALS Vial : 31 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

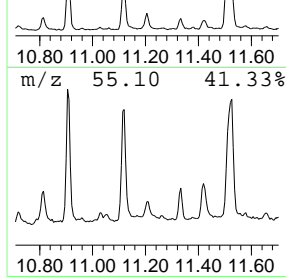
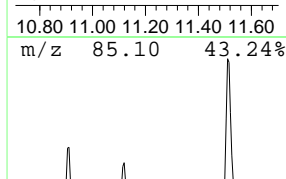
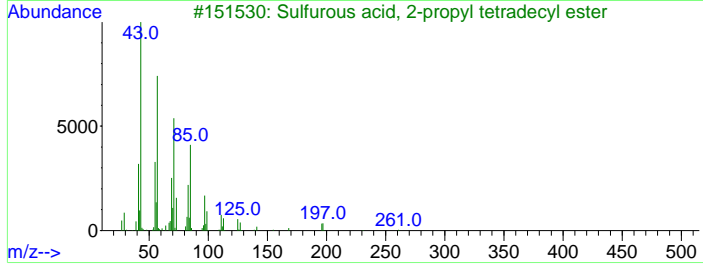
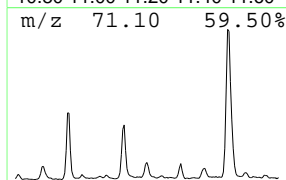
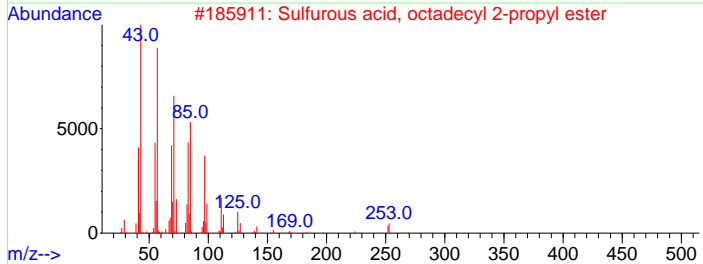
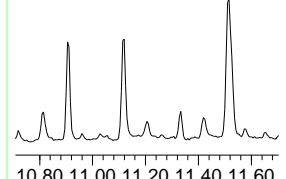
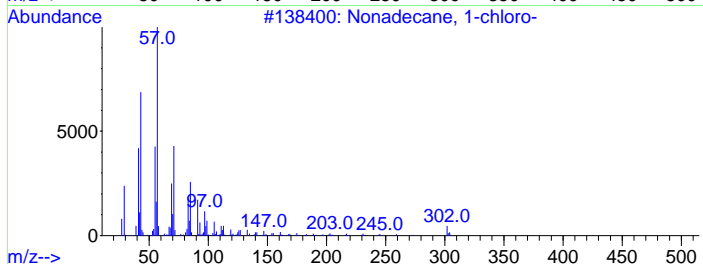
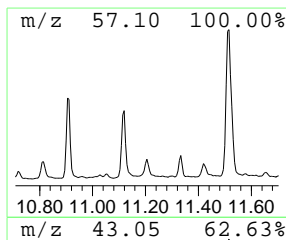
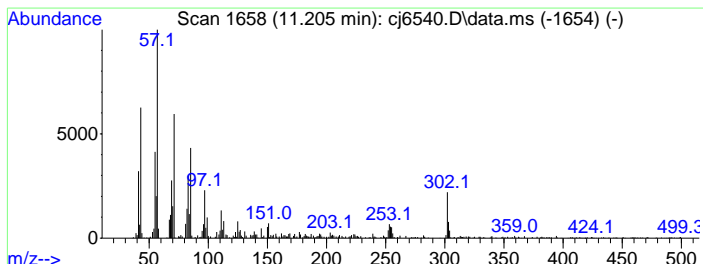
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 11 Unknown Concentration Rank 25

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.205	10.70 ppm	706589	Perylene-d12	11.719

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		Nonadecane, 1-chloro-	302	C19H39Cl	062016-76-6	93
2		Sulfurous acid, octadecyl 2-prop...	376	C21H44O3S	1000309-12-7	76
3		Sulfurous acid, 2-propyl tetradec...	320	C17H36O3S	1000309-12-5	68
4		Heptacosane, 1-chloro-	414	C27H55Cl	062016-79-9	64
5		Sulfurous acid, pentadecyl 2-pro...	334	C18H38O3S	1000309-12-6	64



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6540.D  
Acq On : 10 May 2024 12:54 am  
Operator : rocquans  
Sample : jd87833-9  
Misc : op54460,ecj297,30.7,,,1,1  
ALS Vial : 31 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

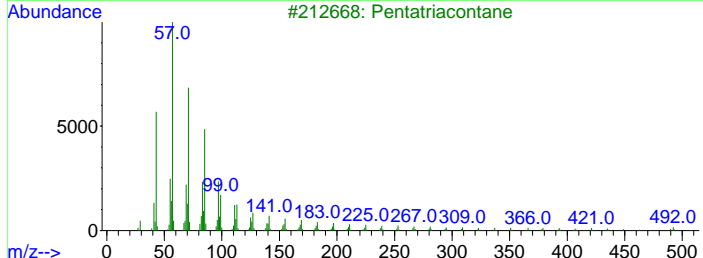
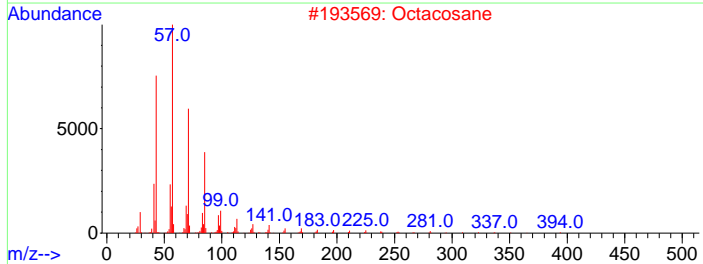
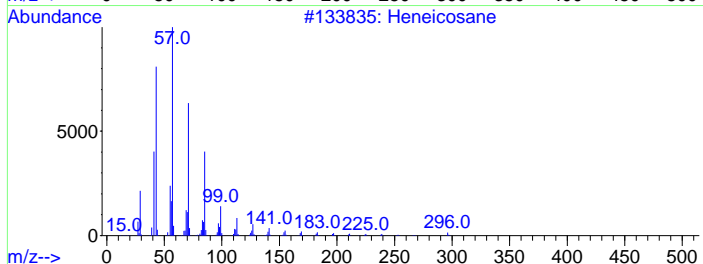
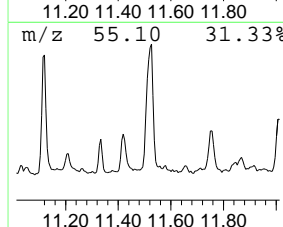
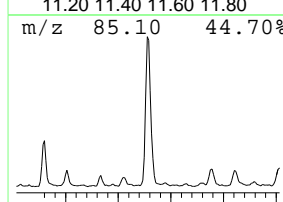
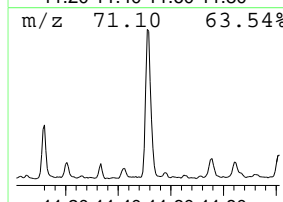
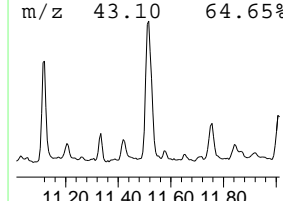
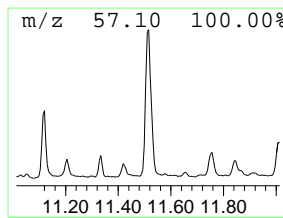
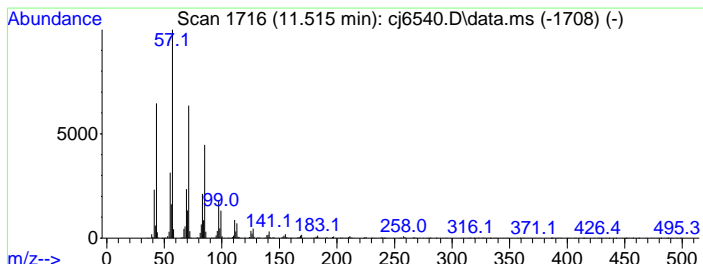
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 12 Alkane Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.515	59.53 ppm	3932250	Perylene-d12	11.719

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Heneicosane	296	C21H44	000629-94-7	95
2		Octacosane	394	C28H58	000630-02-4	93
3		Pentatriacontane	493	C35H72	000630-07-9	93
4		Dotriacontane	451	C32H66	000544-85-4	91
5		Tritetracontane	605	C43H88	007098-21-7	91



7.1.19  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6540.D  
Acq On : 10 May 2024 12:54 am  
Operator : rocquans  
Sample : jd87833-9  
Misc : op54460,ecj297,30.7,,,1,1  
ALS Vial : 31 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

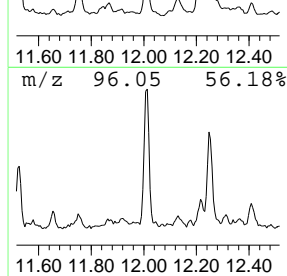
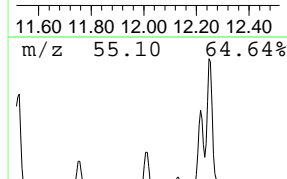
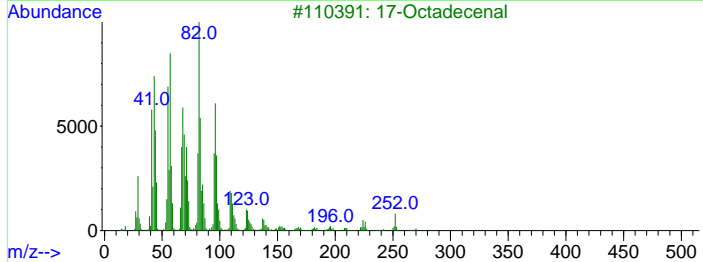
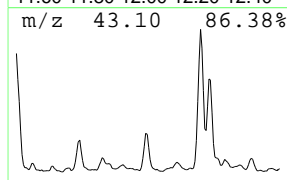
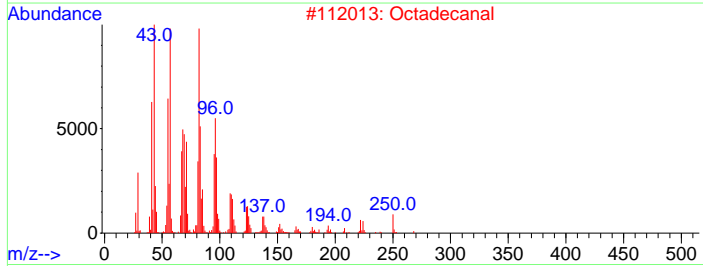
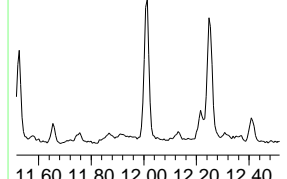
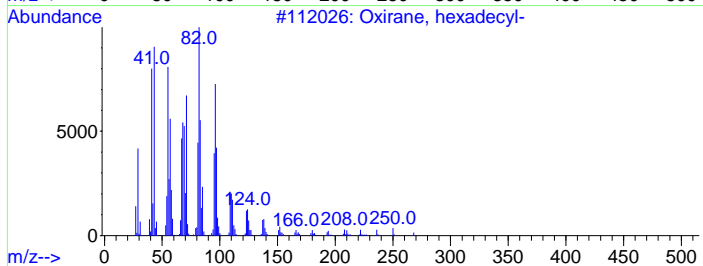
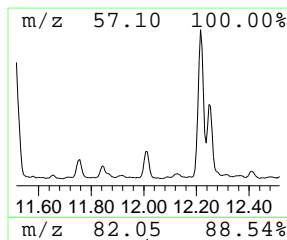
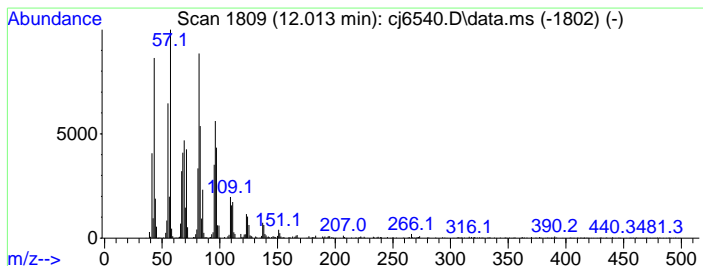
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 13 Unknown Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.013	25.79 ppm	1703740	Perylene-d12	11.719

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Oxirane, hexadecyl-	268	C18H36O	007390-81-0	91
2	Octadecanal	268	C18H36O	000638-66-4	91
3	17-Octadecenal	266	C18H34O	056554-86-0	90
4	(Z)-14-Tricosenyl formate	366	C24H46O2	077899-10-6	86
5	Tetradecanal	212	C14H28O	000124-25-4	80



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6540.D  
 Acq On : 10 May 2024 12:54 am  
 Operator : rocquans  
 Sample : jd87833-9  
 Misc : op54460,ecj297,30.7,,,1,1  
 ALS Vial : 31 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

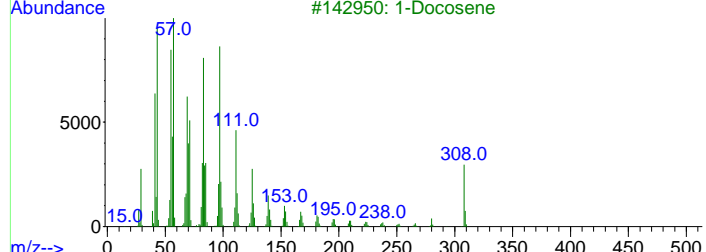
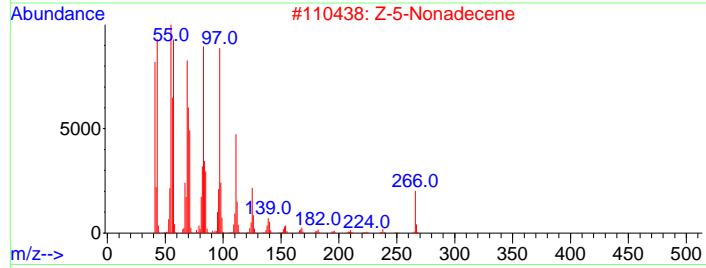
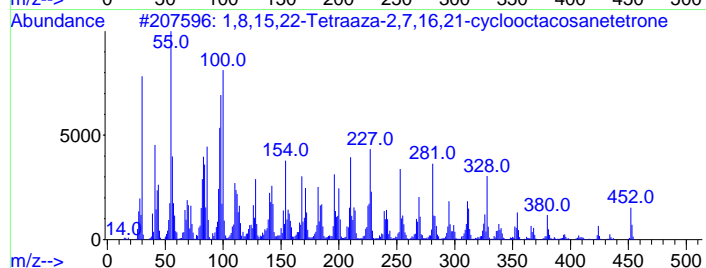
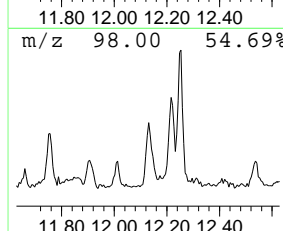
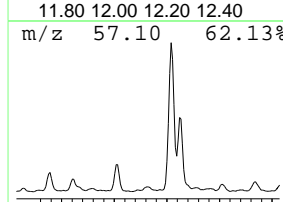
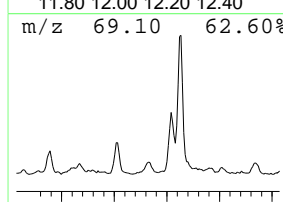
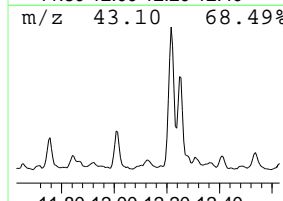
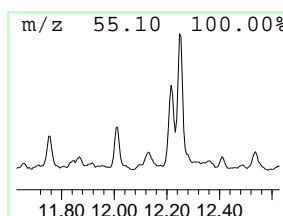
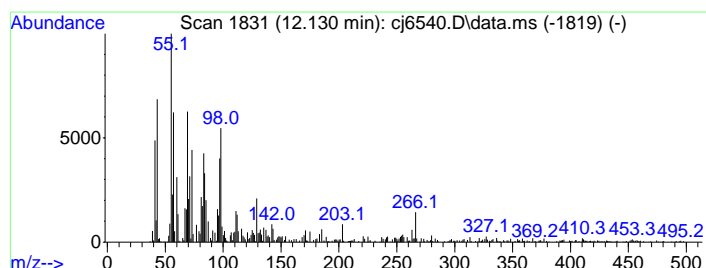
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 14 Unknown Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.130	13.56 ppm	895664	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,8,15,22-Tetraaza-2,7,16,21-cyc...	452	C24H44N4O4	004238-35-1	93		
2	Z-5-Nonadecene	266	C19H38	1000131-11-8	78		
3	1-Docosene	308	C22H44	001599-67-3	55		
4	Octadecane, 1-(ethenylloxy)-	296	C20H40O	000930-02-9	50		
5	Hexadecenoic acid, Z-11-	254	C16H30O2	002416-20-8	49		



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6540.D  
Acq On : 10 May 2024 12:54 am  
Operator : rocquans  
Sample : jd87833-9  
Misc : op54460,ecj297,30.7,,,1,1  
ALS Vial : 31 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

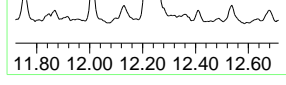
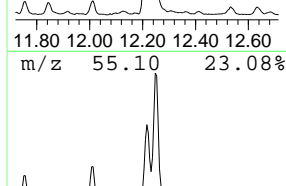
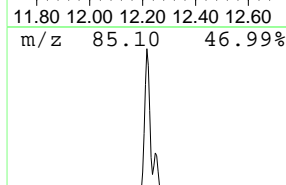
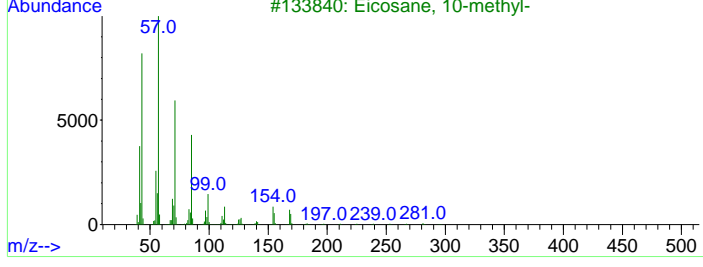
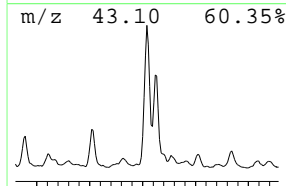
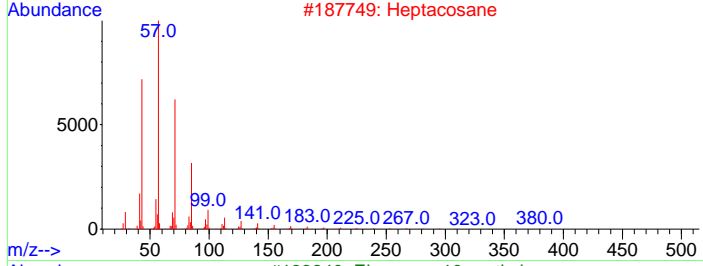
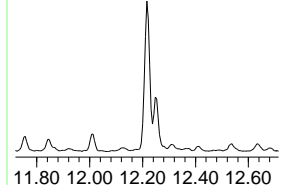
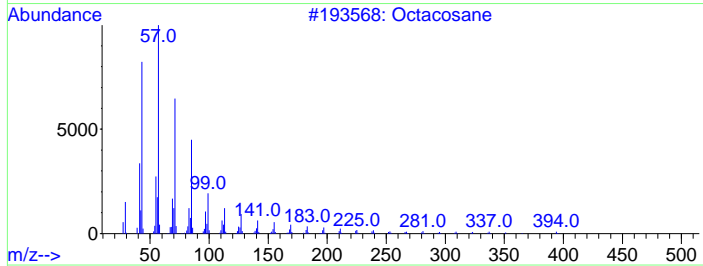
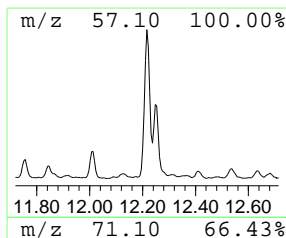
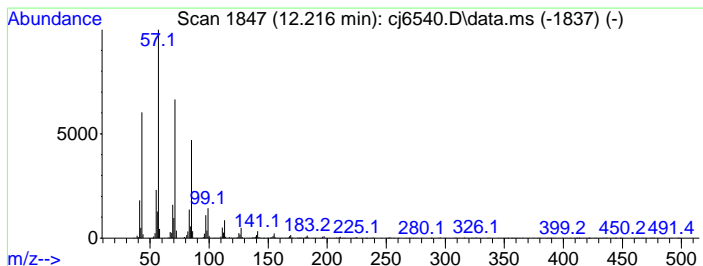
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 15 Alkane Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.216	54.33 ppm	3588810	Perylene-d12	11.719

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		Octacosane	394	C28H58	000630-02-4	91
2		Heptacosane	380	C27H56	000593-49-7	91
3		Eicosane, 10-methyl-	296	C21H44	054833-23-7	90
4		Tetratetracontane	619	C44H90	007098-22-8	90
5		Tetracosane	338	C24H50	000646-31-1	90



7.1.19  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6540.D  
Acq On : 10 May 2024 12:54 am  
Operator : rocquans  
Sample : jd87833-9  
Misc : op54460,ecj297,30.7,,,1,1  
ALS Vial : 31 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

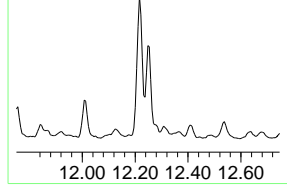
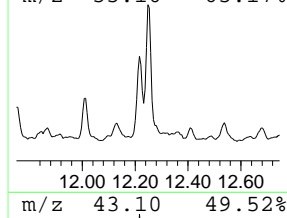
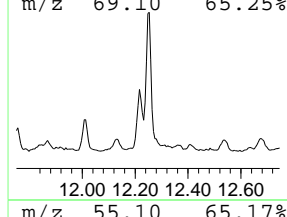
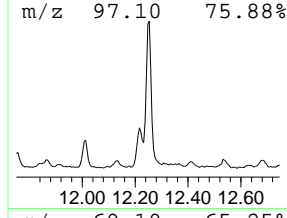
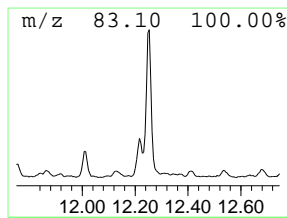
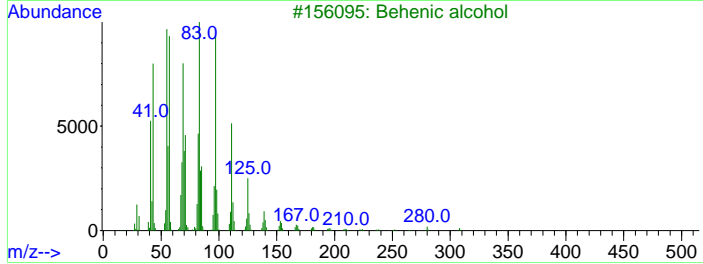
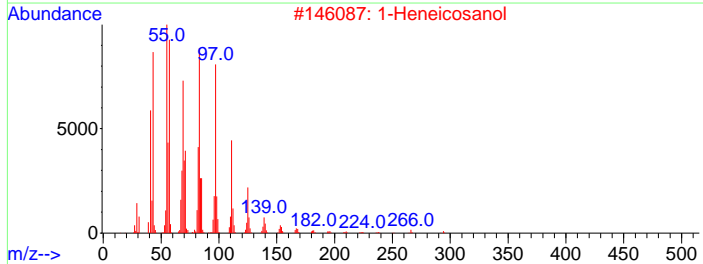
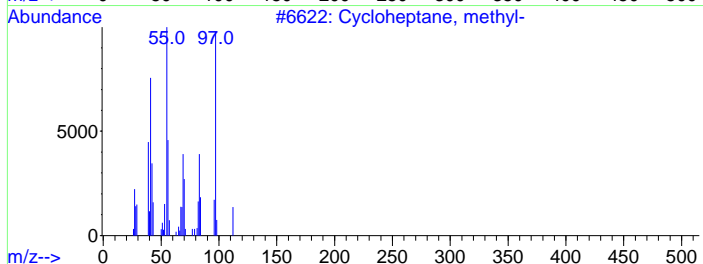
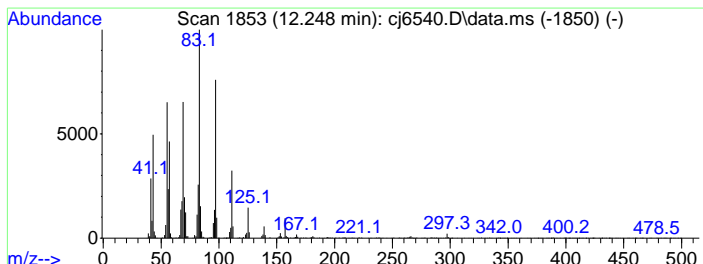
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 16 Unknown Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.248	53.91 ppm	3560940	Perylene-d12	11.719

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Cycloheptane, methyl-	112	C8H16	004126-78-7	60
2		1-Heneicosanol	312	C21H44O	015594-90-8	52
3		Behenic alcohol	326	C22H46O	000661-19-8	50
4		Cyclohexanone, 3-ethyl-	126	C8H14O	022461-89-8	47
5		1-Nonadecene	266	C19H38	018435-45-5	43



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6540.D  
 Acq On : 10 May 2024 12:54 am  
 Operator : rocquans  
 Sample : jd87833-9  
 Misc : op54460,ecj297,30.7,,,1,1  
 ALS Vial : 31 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

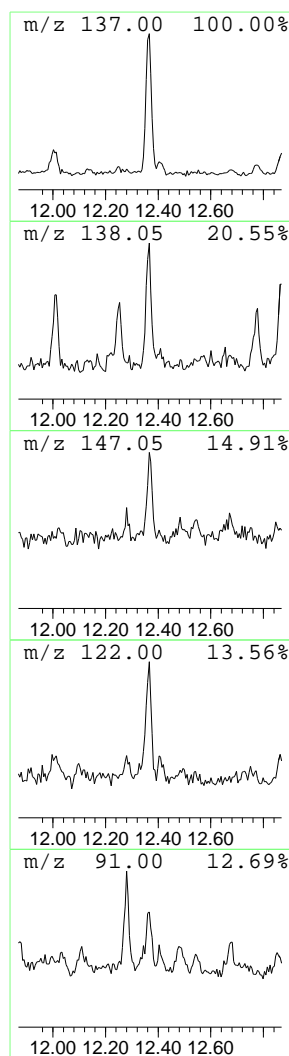
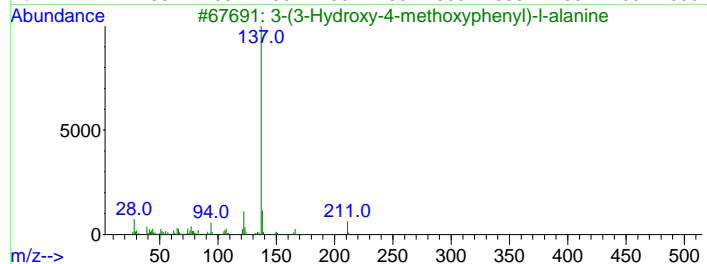
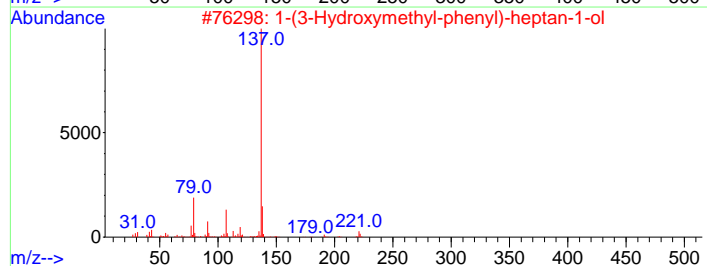
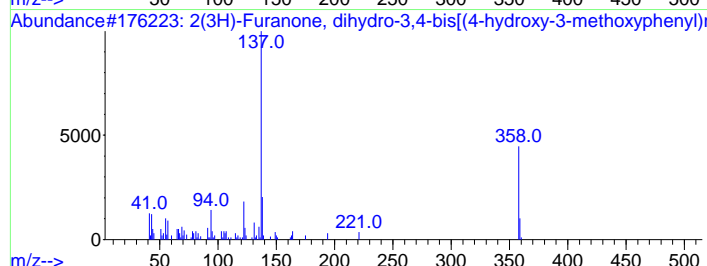
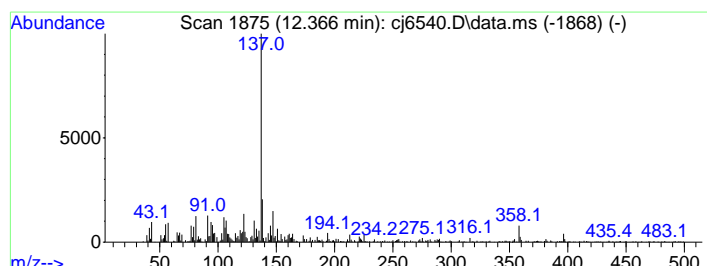
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 17 Unknown Concentration Rank 23

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.366	11.33 ppm	748302	Perylene-d12	11.719

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2(3H)-Furanone, dihydro-3,4-bis[...]	358	C20H22O6	000580-72-3	96
2		1-(3-Hydroxymethyl-phenyl)-hepta...	222	C14H22O2	1000186-47-5	53
3		3-(3-Hydroxy-4-methoxyphenyl)-1-...	211	C10H13NO4	1000103-80-4	53
4		Phenylacetylformic acid, 4-hydro...	210	C10H10O5	001081-71-6	50
5		Dihydrocapsaicin	307	C18H29NO3	019408-84-5	50



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6540.D  
Acq On : 10 May 2024 12:54 am  
Operator : rocquans  
Sample : jd87833-9  
Misc : op54460,ecj297,30.7,,,1,1  
ALS Vial : 31 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

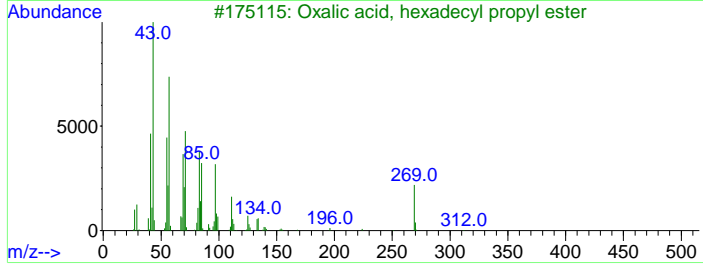
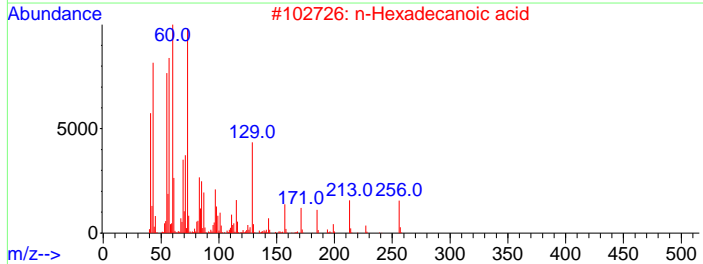
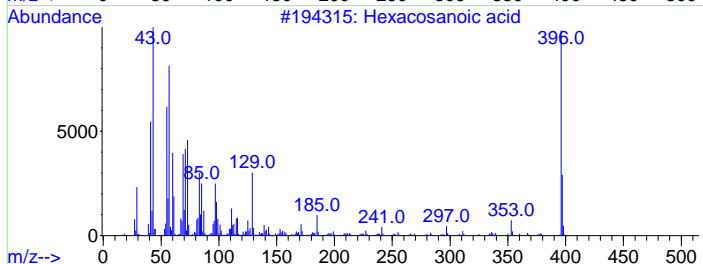
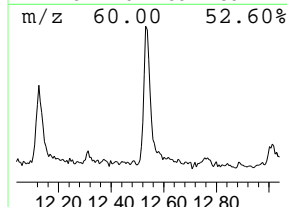
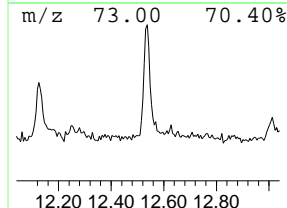
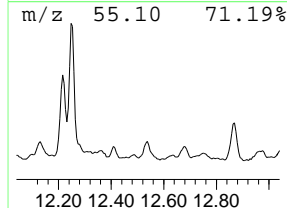
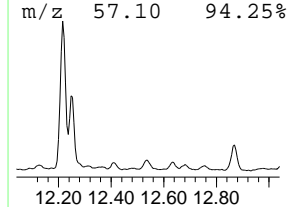
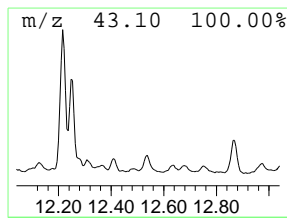
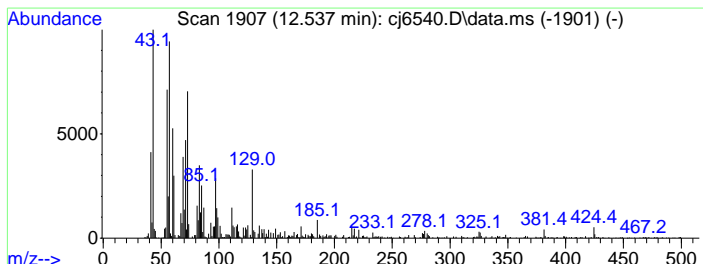
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 18 Unknown acid Concentration Rank 24

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.537	10.98 ppm	725317	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Hexacosanoic acid	396	C26H52O2	000506-46-7	64
2			n-Hexadecanoic acid	256	C16H32O2	000057-10-3	49
3			Oxalic acid, hexadecyl propyl ester	356	C21H40O4	1000309-26-9	45
4			5-Eicosene, (E)-	280	C20H40	074685-30-6	44
5			Silane, trichlorooctadecyl-	386	C18H37Cl3Si	000112-04-9	38



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6540.D  
 Acq On : 10 May 2024 12:54 am  
 Operator : rocquans  
 Sample : jd87833-9  
 Misc : op54460,ecj297,30.7,,,1,1  
 ALS Vial : 31 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

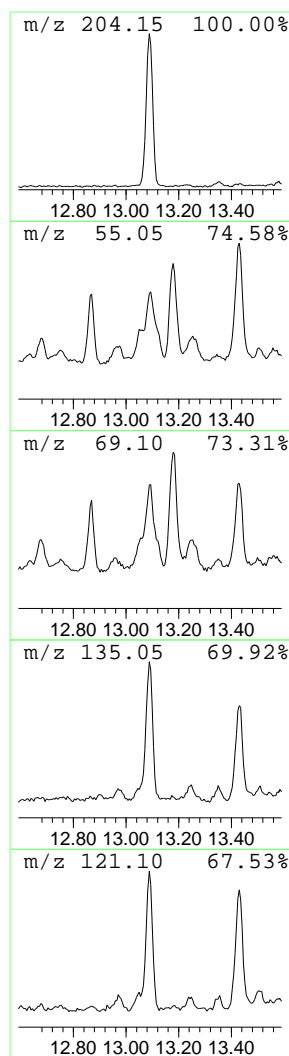
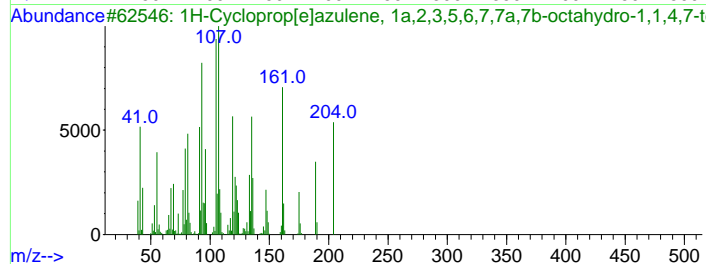
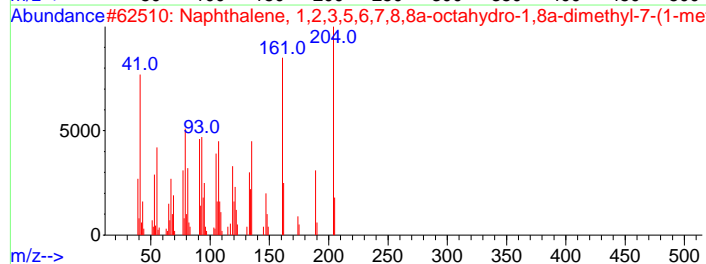
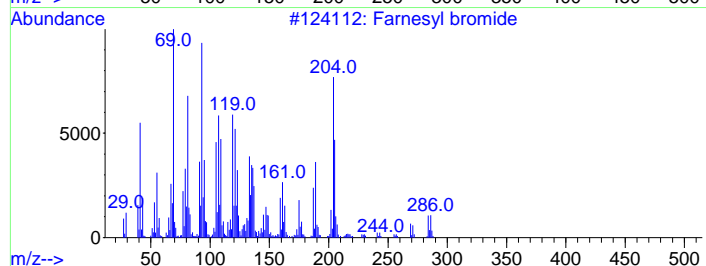
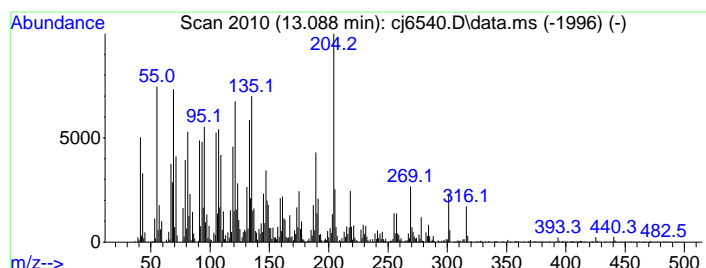
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 19 Unknown Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.088	75.88 ppm	5012010	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Farnesyl bromide	284	C15H25Br	006874-67-5	62
2			Naphthalene, 1,2,3,5,6,7,8,8a-oc...	204	C15H24	004630-07-3	60
3			1H-Cycloprop[e]azulene, 1a,2,3,5...	204	C15H24	021747-46-6	55
4			1,4-Dimethyl-8-isopropylidenetri...	204	C15H24	1000140-07-7	50
5			1H-3a,7-Methanoazulene, octahydr...	204	C15H24	000508-55-4	46



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6540.D  
Acq On : 10 May 2024 12:54 am  
Operator : rocquans  
Sample : jd87833-9  
Misc : op54460,ecj297,30.7,,,1,1  
ALS Vial : 31 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

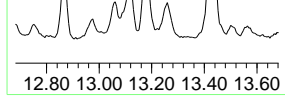
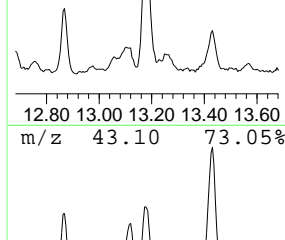
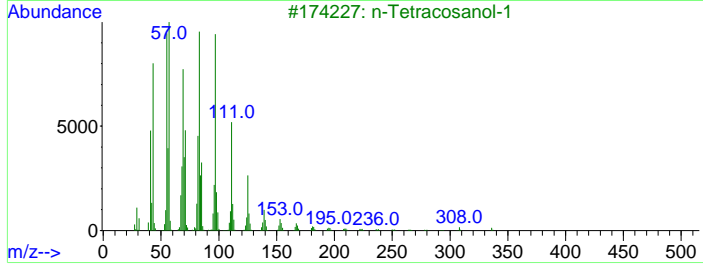
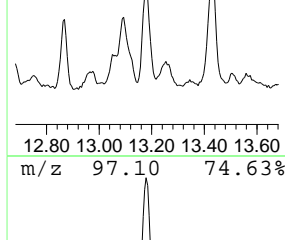
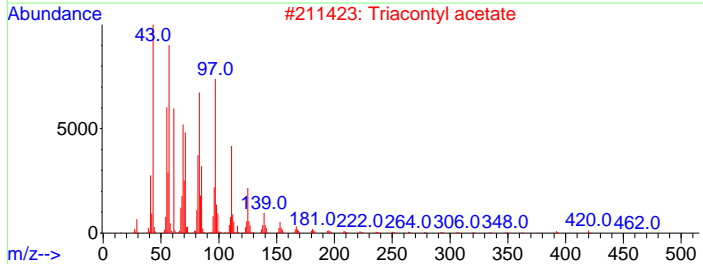
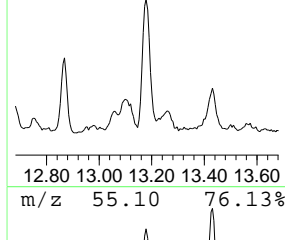
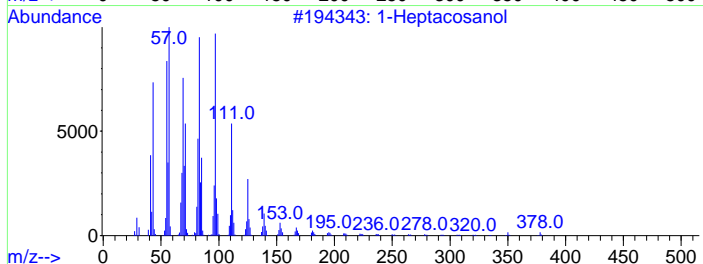
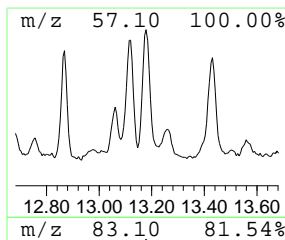
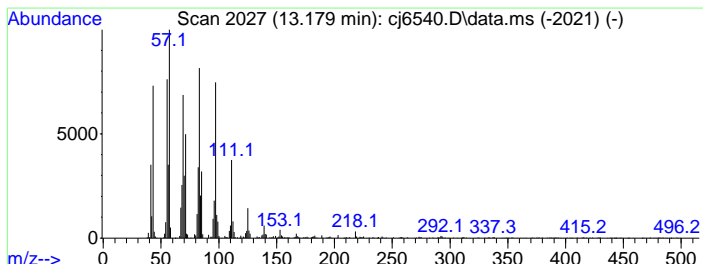
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 20 Unknown Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.179	26.76 ppm	1767860	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			1-Heptacosanol	396	C27H56O	002004-39-9	94
2			Triacetyl acetate	480	C32H64O2	041755-58-2	93
3			n-Tetracosanol-1	354	C24H50O	000506-51-4	90
4			1-Triacontanol	438	C30H62O	000593-50-0	90
5			Octadecane, 1-(ethenylloxy)-	296	C20H40O	000930-02-9	87



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6540.D  
 Acq On : 10 May 2024 12:54 am  
 Operator : rocquans  
 Sample : jd87833-9  
 Misc : op54460,ecj297,30.7,,1,1  
 ALS Vial : 31 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

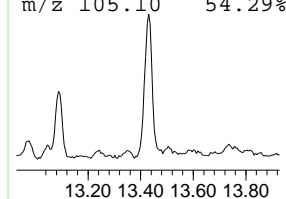
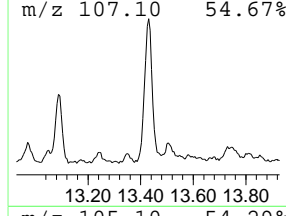
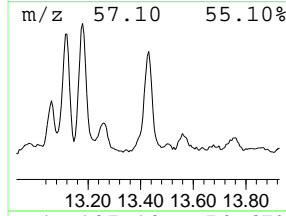
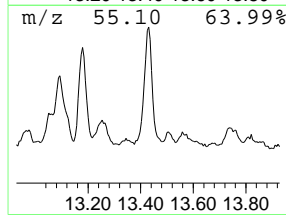
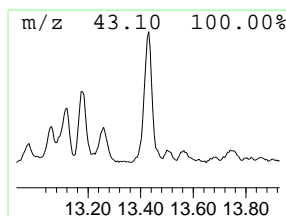
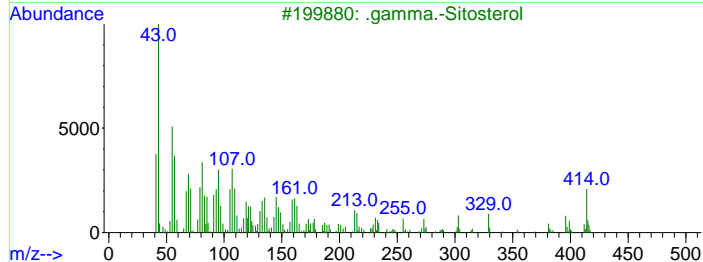
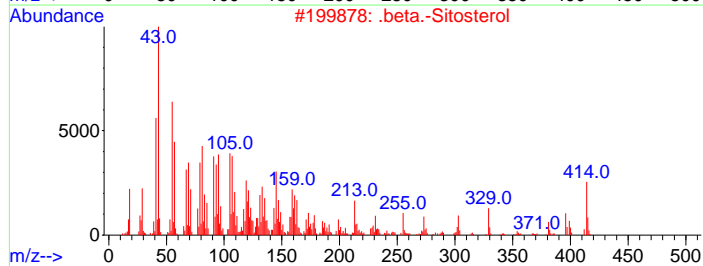
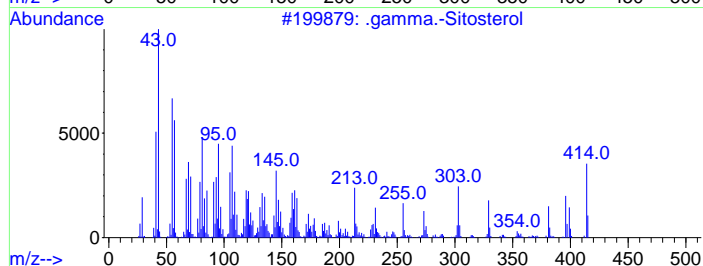
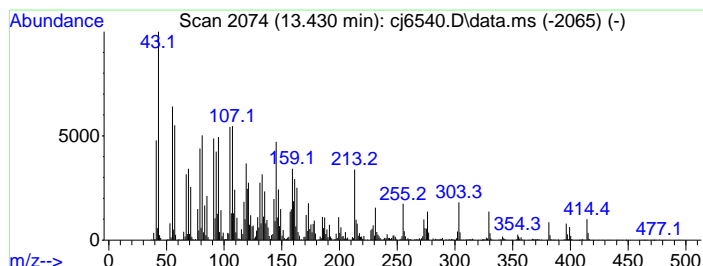
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 21 Unknown Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.430	86.11 ppm	5688240	Perylene-d12	11.719

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	.gamma.-Sitosterol	414	C29H50O	000083-47-6	99
2		.beta.-Sitosterol	414	C29H50O	000083-46-5	95
3		.gamma.-Sitosterol	414	C29H50O	000083-47-6	60
4		.beta.-Sitosterol	414	C29H50O	000083-46-5	55
5		Campesterol	400	C28H48O	000474-62-4	53





Library Search Compound Report

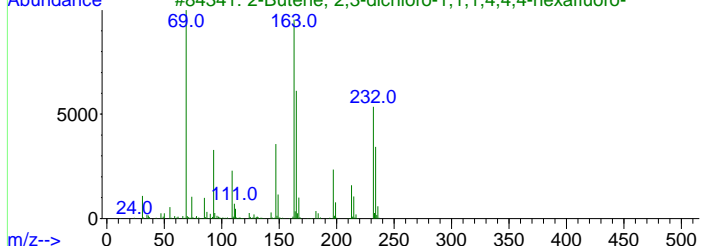
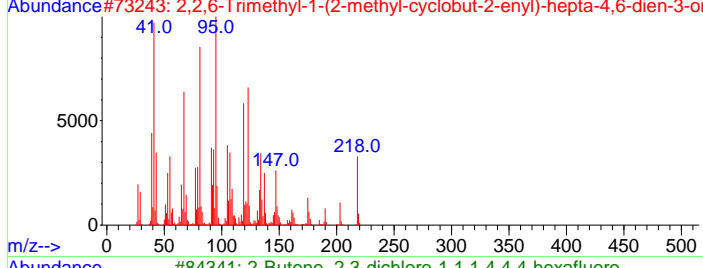
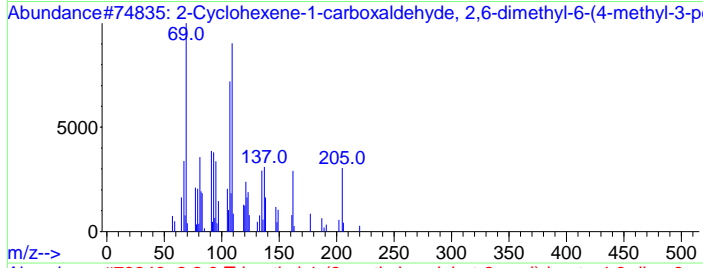
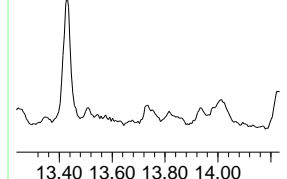
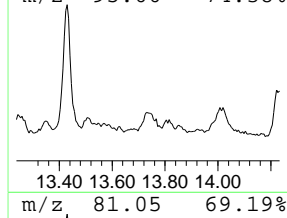
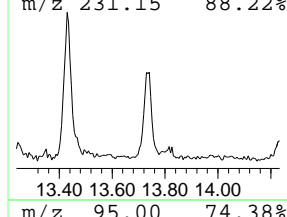
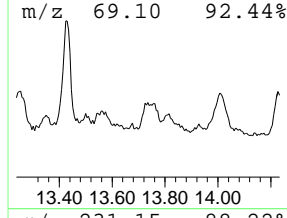
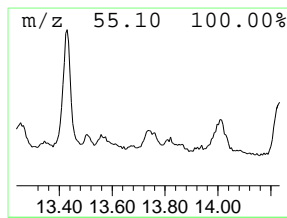
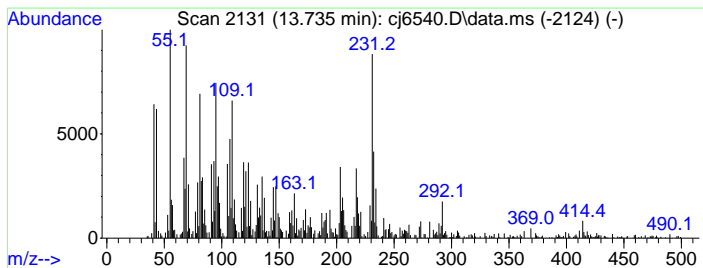
Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\
Data File : cj6540.D
Acq On : 10 May 2024 12:54 am
Operator : rocquans
Sample : jd87833-9
Misc : op54460,ecj297,30.7,,1,1
ALS Vial : 31 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: lscint.p

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Peak Number 22 Unknown Concentration Rank 15

Table with 7 columns: R.T., EstConc, Area, Relative to ISTD, R.T., Hit# of, 5, Tentative ID, MW, MolForm, CAS#, Qual. Row 1: 13.735, 16.06 ppm, 1060770, Perylene-d12, 11.719.



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6540.D  
Acq On : 10 May 2024 12:54 am  
Operator : rocquans  
Sample : jd87833-9  
Misc : op54460,ecj297,30.7,,,1,1  
ALS Vial : 31 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

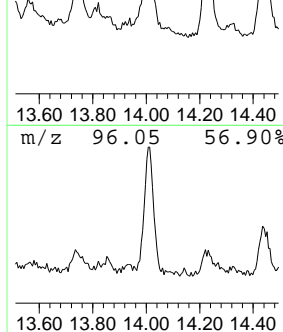
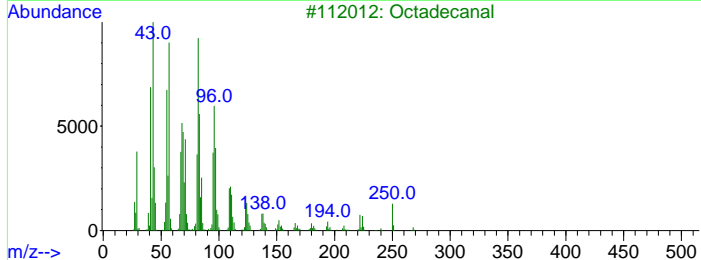
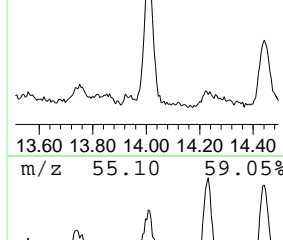
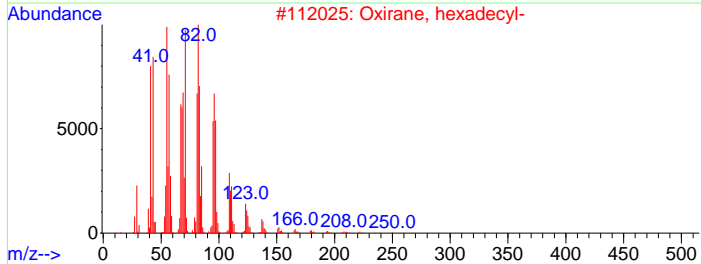
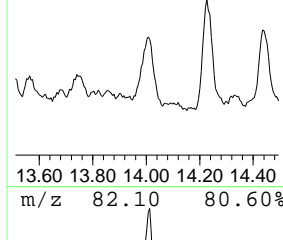
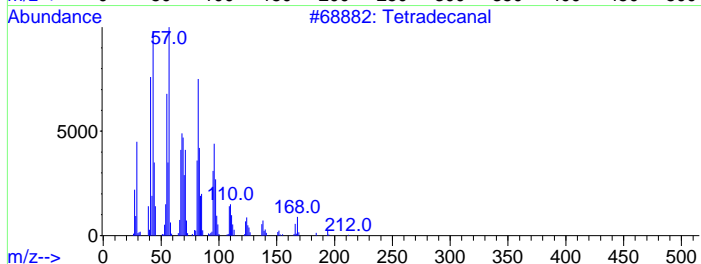
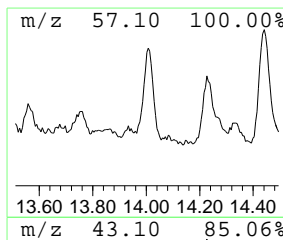
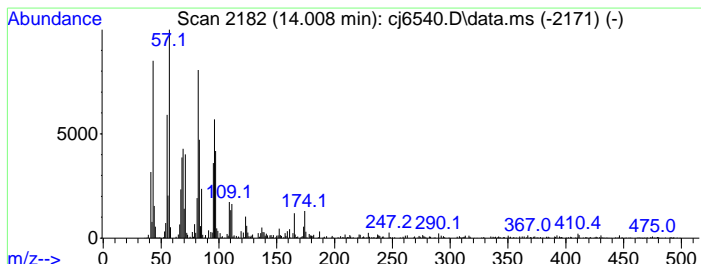
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 23 Unknown Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.008	23.66 ppm	1563010	Perylene-d12	11.719

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Tetradecanal	212	C14H28O	000124-25-4	87
2		Oxirane, hexadecyl-	268	C18H36O	007390-81-0	87
3		Octadecanal	268	C18H36O	000638-66-4	83
4		Hexadecanal	240	C16H32O	000629-80-1	72
5		1,19-Eicosadiene	278	C20H38	014811-95-1	50



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6540.D  
Acq On : 10 May 2024 12:54 am  
Operator : rocquans  
Sample : jd87833-9  
Misc : op54460,ecj297,30.7,,1,1  
ALS Vial : 31 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

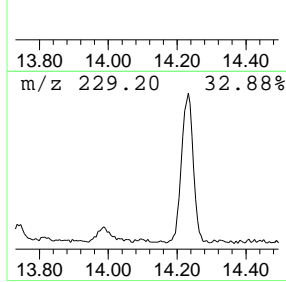
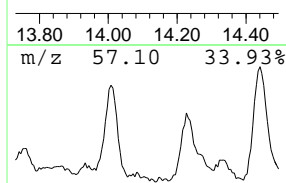
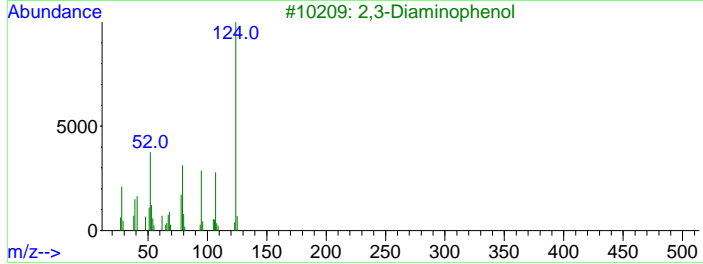
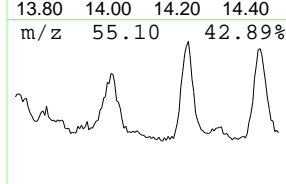
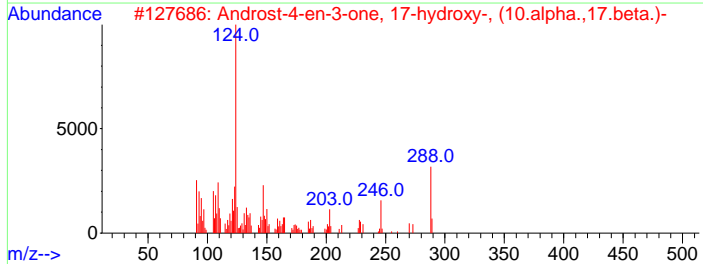
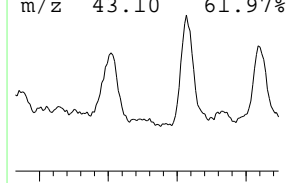
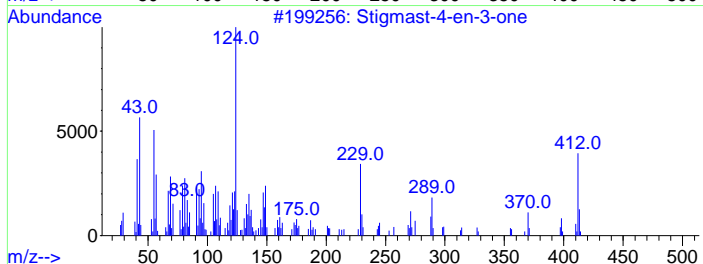
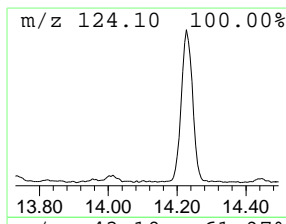
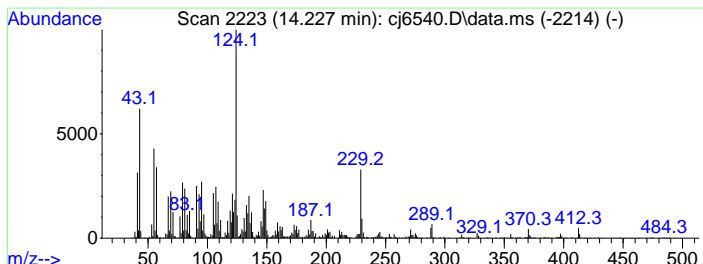
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 24 Unknown Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.227	40.50 ppm	2675470	Perylene-d12	11.719

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Stigmast-4-en-3-one	412	C29H48O	001058-61-3	90
2		Androst-4-en-3-one, 17-hydroxy-, ...	288	C19H28O2	000604-39-7	64
3		2,3-Diaminophenol	124	C6H8N2O	059649-56-8	47
4		1,4-Benzenediol, 2-methyl-	124	C7H8O2	000095-71-6	46
5		Testosterone	288	C19H28O2	000058-22-0	42



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6540.D  
Acq On : 10 May 2024 12:54 am  
Operator : rocquans  
Sample : jd87833-9  
Misc : op54460,ecj297,30.7,,,1,1  
ALS Vial : 31 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

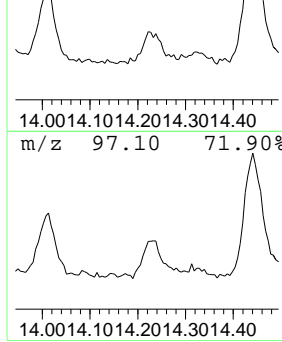
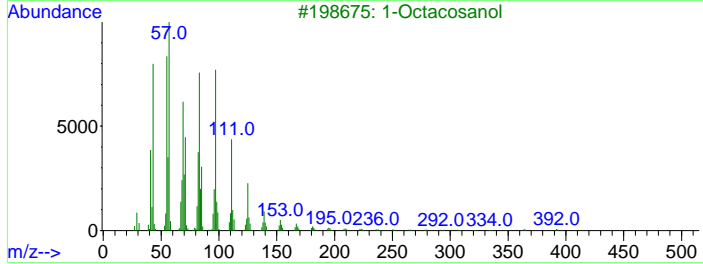
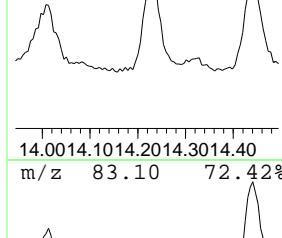
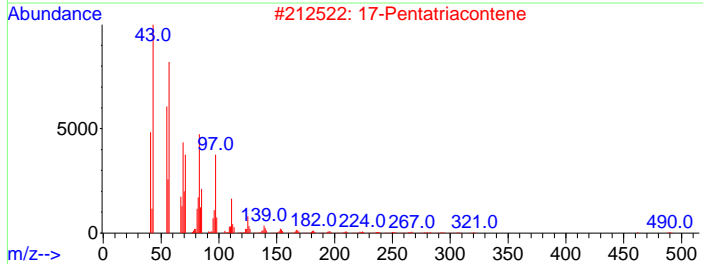
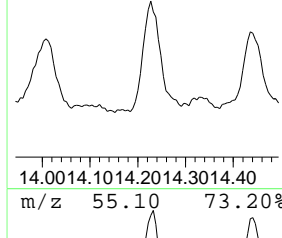
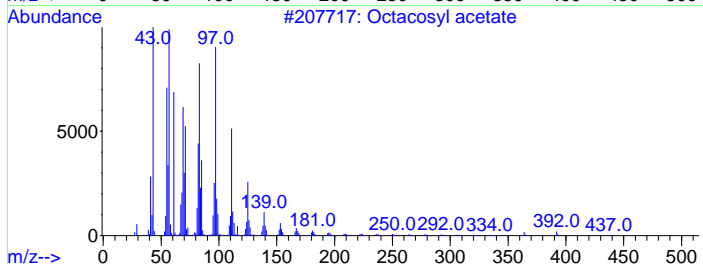
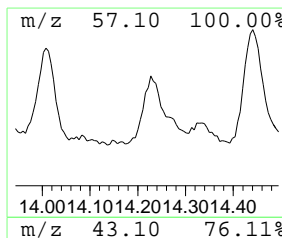
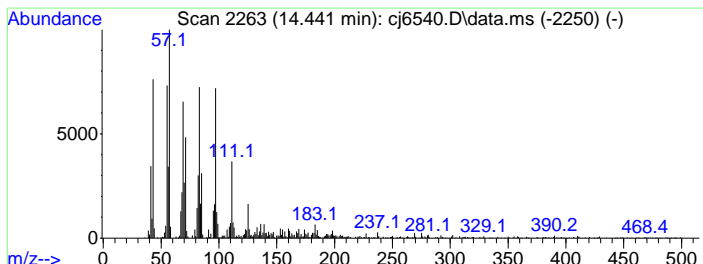
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 25 Octacosyl acetate Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.441	23.90 ppm	1578430	Perylene-d12	11.719

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Octacosyl acetate	452	C30H60O2	018206-97-8	99
2		17-Pentatriacontene	491	C35H70	006971-40-0	91
3		1-Octacosanol	410	C28H58O	1000351-79-2	90
4		Cyclotetracosane	336	C24H48	000297-03-0	87
5		1-Docosene	308	C22H44	001599-67-3	81



7.1.19  
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Tentatively Identified Compound (LSC) summary

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6540.D  
Acq On : 10 May 2024 12:54 am  
Operator : rocquans  
Sample : jd87833-9  
Misc : op54460,ecj297,30.7,,,1,1  
ALS Vial : 31 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
Unknown acid	8.338	11.9	ppm	1072880	8	7.873	3592670	40.0
Unknown alcohol	9.050	30.3	ppm	2723050	8	7.873	3592670	40.0
Octadecanoic acid	9.124	11.6	ppm	1069080	9	10.365	3678290	40.0
Unknown acid	9.836	14.7	ppm	1346840	9	10.365	3678290	40.0
Unknown	10.071	12.1	ppm	1107920	9	10.365	3678290	40.0
Butanoic acid, ...	10.194	13.8	ppm	1265290	9	10.365	3678290	40.0
Unknown alcohol	10.274	13.7	ppm	1262580	9	10.365	3678290	40.0
Docosanoic acid	10.499	28.4	ppm	2616030	10	10.365	3678290	40.0
Unknown	10.906	22.0	ppm	2023570	10	10.365	3678290	40.0
Unknown acid	11.120	41.4	ppm	2734460	11	11.719	2642210	40.0
Unknown	11.205	10.7	ppm	706589	11	11.719	2642210	40.0
Alkane	11.515	59.5	ppm	3932250	11	11.719	2642210	40.0
Unknown	12.013	25.8	ppm	1703740	11	11.719	2642210	40.0
Unknown	12.130	13.6	ppm	895664	11	11.719	2642210	40.0
Alkane	12.216	54.3	ppm	3588810	11	11.719	2642210	40.0
Unknown	12.248	53.9	ppm	3560940	11	11.719	2642210	40.0
Unknown	12.366	11.3	ppm	748302	11	11.719	2642210	40.0
Unknown acid	12.537	11.0	ppm	725317	11	11.719	2642210	40.0
Unknown	13.088	75.9	ppm	5012010	11	11.719	2642210	40.0
Unknown	13.179	26.8	ppm	1767860	11	11.719	2642210	40.0
Unknown	13.430	86.1	ppm	5688240	11	11.719	2642210	40.0
Unknown	13.735	16.1	ppm	1060770	11	11.719	2642210	40.0
Unknown	14.008	23.7	ppm	1563010	11	11.719	2642210	40.0
Unknown	14.227	40.5	ppm	2675470	11	11.719	2642210	40.0
Octacosyl acetate	14.441	23.9	ppm	1578430	11	11.719	2642210	40.0

7.1.19  
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Quantitation Report (QT/LSC Reviewed)

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6534.D  
 Acq On : 09 May 2024 11:00 pm  
 Operator : rocquans  
 Sample : jd87833-10 Inst : GCMSMJ  
 Misc : op54460,ecj297,30.6,,,1,1  
 ALS Vial : 25 Sample Multiplier: 1

Quant Time: May 10 19:26:00 2024  
 Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
 QLast Update : Thu May 09 12:05:48 2024  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.664	152	338801	40.00	ppm	0.00
24) Naphthalene-d8	5.466	136	1197453	40.00	ppm	0.00
46) Acenaphthene-d10	6.659	164	671880	40.00	ppm	0.00
69) Phenanthrene-d10	7.868	188	1193602	40.00	ppm	0.00
84) Chrysene-d12	10.366	240	852283	40.00	ppm	0.00
93) Perylene-d12	11.714	264	867275	40.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.664	152	338801	40.00	ppm	0.00
105) Phenanthrene-d10a	7.868	188	1193602	40.00	ppm	0.00
107) Naphthalene-d8a	5.466	136	1197453	40.00	ppm	0.00
109) Phenanthrene-d10b	7.868	188	1193602	40.00	ppm	0.00
112) Chrysene-d12a	10.366	240	852283	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.808	112	361784	37.15	ppm	0.01
Spiked Amount 50.000			Recovery =	74.30%		
8) Phenol-d5	4.423	99	495661	39.46	ppm	0.00
Spiked Amount 50.000			Recovery =	78.92%		
25) Nitrobenzene-d5	5.012	82	468916	38.24	ppm	0.00
Spiked Amount 50.000			Recovery =	76.48%		
51) 2-Fluorobiphenyl	6.167	172	866780	41.00	ppm	0.00
Spiked Amount 50.000			Recovery =	82.00%		
74) 2,4,6-Tribromophenol	7.274	330	127865	48.86	ppm	0.00
Spiked Amount 50.000			Recovery =	97.72%		
87) Terphenyl-d14	9.355	244	932555	44.29	ppm	0.00
Spiked Amount 50.000			Recovery =	88.58%		
110) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						
					Qvalue	
21) 3&4-Methylphenol	4.910	108	11863	1.2271	ppm	94
56) Acenaphthylene	6.557	152	20423	0.7837	ppm	93
78) Phenanthrene	7.889	178	38965	1.3508	ppm	98
79) Anthracene	7.932	178	17738	0.6141	ppm	95
80) Carbazole	8.076	167	4961	0.1843	ppm	91
82) Fluoranthene	8.980	202	115079	3.6850	ppm	100
86) Pyrene	9.194	202	105909	3.6539	ppm	99
89) Benzo[a]anthracene	10.355	228	58026	2.1175	ppm	90
91) Chrysene	10.387	228	43240	1.7103	ppm	99
95) Benzo[b]fluoranthene	11.350	252	63666m	2.4301	ppm	
96) Benzo[k]fluoranthene	11.371	252	23513m	0.9974	ppm	
97) Benzo[a]pyrene	11.655	252	48134	2.2193	ppm	95
98) Indeno[1,2,3-cd]pyrene	12.890	276	34262	1.3067	ppm	95
100) Dibenz[a,h]anthracene	12.906	278	8449	0.4033	ppm	88
102) Benzo[g,h,i]perylene	13.227	276	32871	1.6133	ppm	97
-----						

(#) = qualifier out of range (m) = manual integration (+) = signals summed

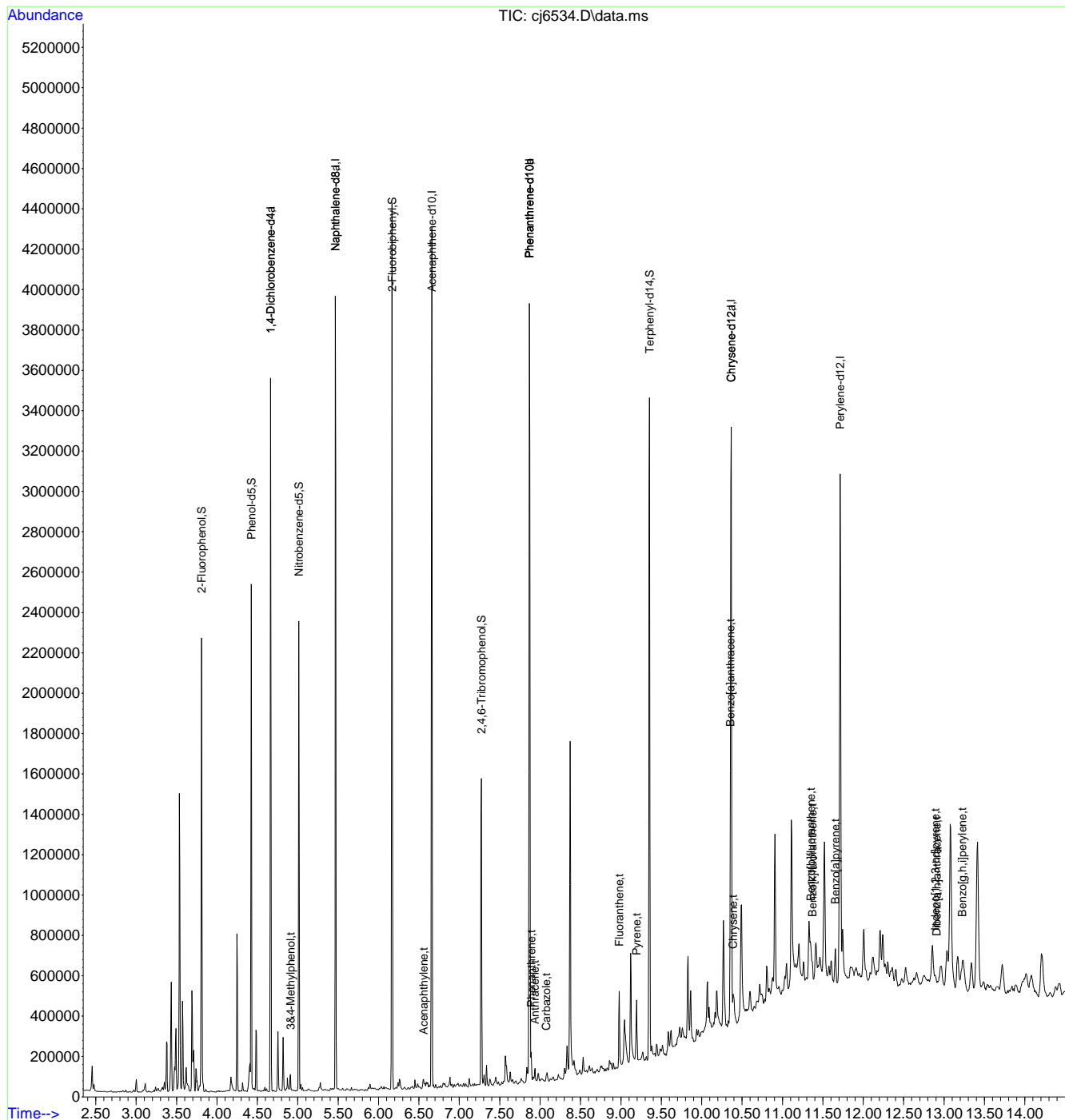
7.1.20  
7



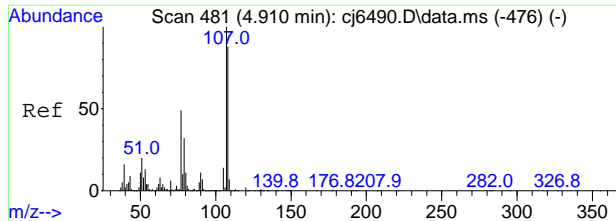
Quantitation Report (QT/LSC Reviewed)

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6534.D  
Acq On : 09 May 2024 11:00 pm  
Operator : rocquans  
Sample : jd87833-10 Inst : GCMS CJ  
Misc : op54460,ecj297,30.6,,,1,1  
ALS Vial : 25 Sample Multiplier: 1

Quant Time: May 10 19:26:00 2024  
Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
QLast Update : Thu May 09 12:05:48 2024  
Response via : Initial Calibration

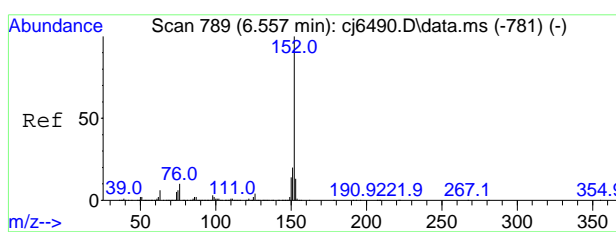
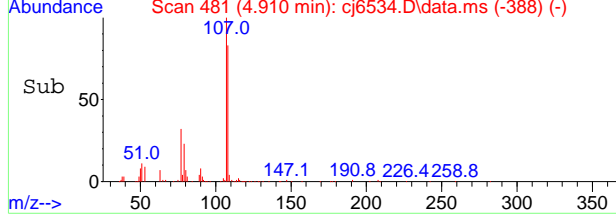
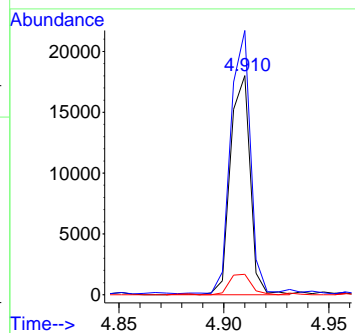
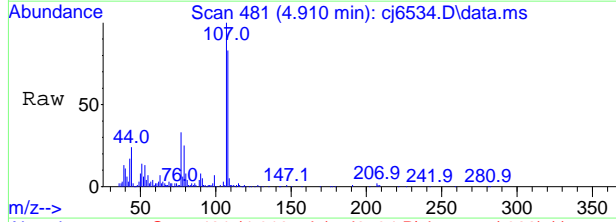


7.1.20  
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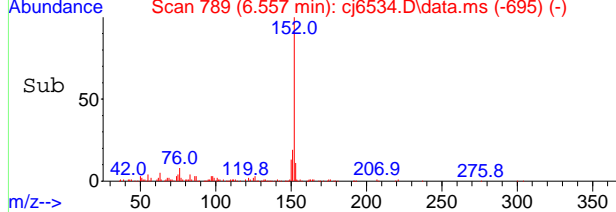
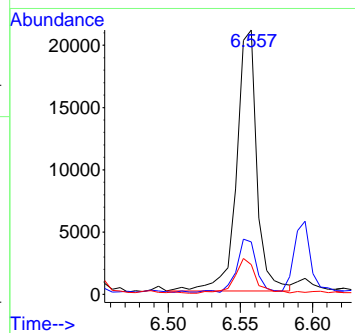
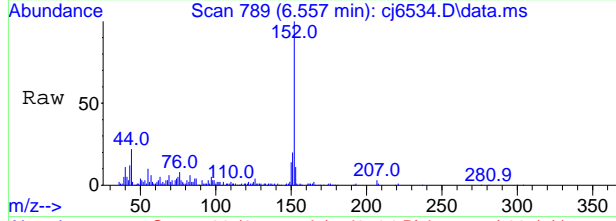
#21  
 3&4-Methylphenol  
 Concen: 1.2271 ppm  
 RT: 4.910 min Scan# 481  
 Delta R.T. 0.000 min  
 Lab File: cj6534.D  
 Acq: 09 May 2024 11:00 pm

Tgt Ion	Ratio	Lower	Upper
108	100		
107	119.2	83.2	143.2
90	9.1	0.0	42.4



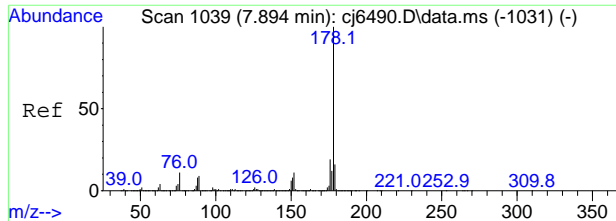
#56  
 Acenaphthylene  
 Concen: 0.7837 ppm  
 RT: 6.557 min Scan# 789  
 Delta R.T. 0.000 min  
 Lab File: cj6534.D  
 Acq: 09 May 2024 11:00 pm

Tgt Ion	Ratio	Lower	Upper
152	100		
151	16.4	0.0	50.3
153	11.7	0.0	43.4



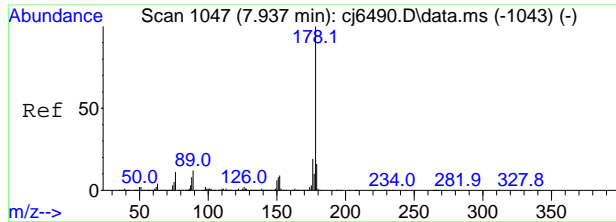
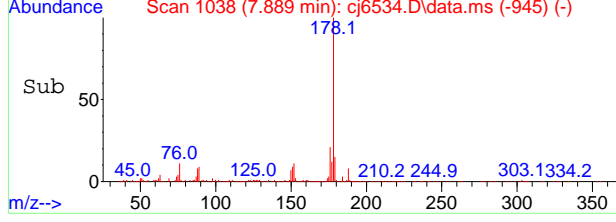
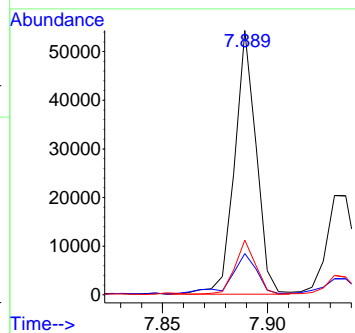
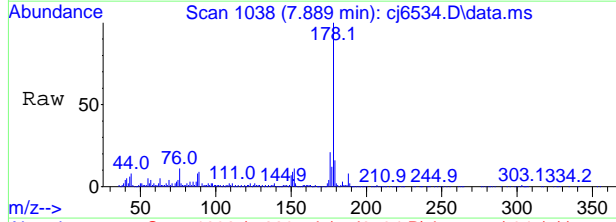
7.1.20  
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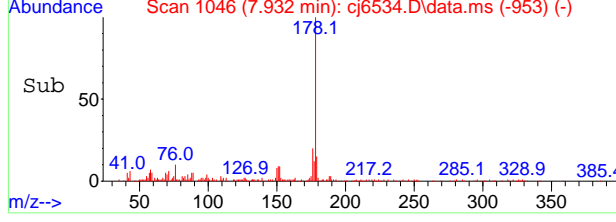
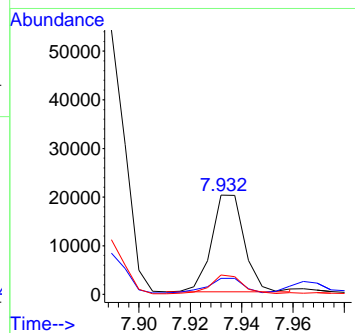
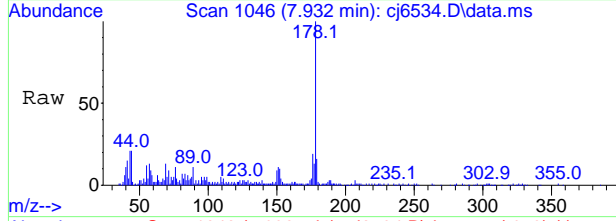
#78  
 Phenanthrene  
 Concen: 1.3508 ppm  
 RT: 7.889 min Scan# 1038  
 Delta R.T. -0.005 min  
 Lab File: cj6534.D  
 Acq: 09 May 2024 11:00 pm

Tgt Ion	Ratio	Lower	Upper
178	100		
179	15.3	0.0	45.5
176	20.3	0.0	49.2



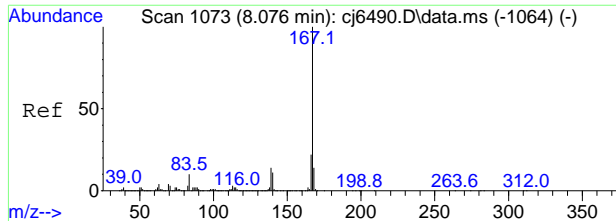
#79  
 Anthracene  
 Concen: 0.6141 ppm  
 RT: 7.932 min Scan# 1046  
 Delta R.T. -0.005 min  
 Lab File: cj6534.D  
 Acq: 09 May 2024 11:00 pm

Tgt Ion	Ratio	Lower	Upper
178	100		
179	11.7	0.0	46.1
176	18.5	0.0	48.7



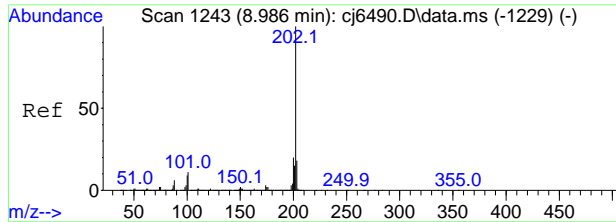
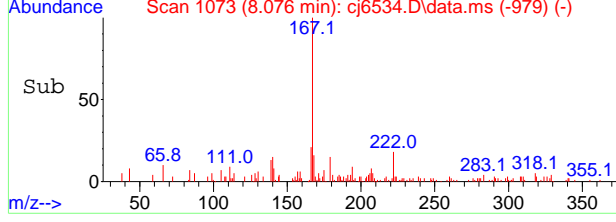
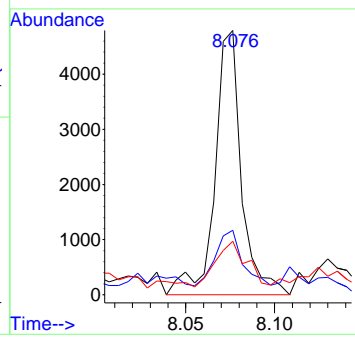
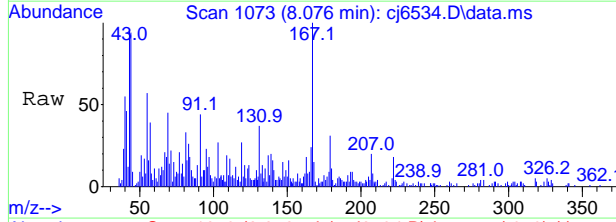
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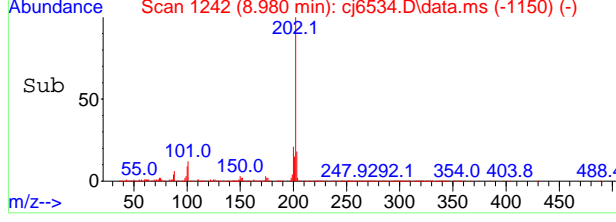
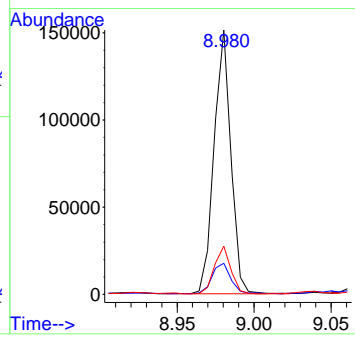
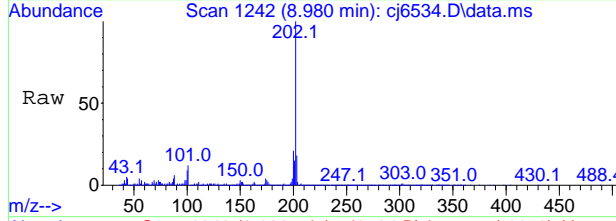
#80  
 Carbazole  
 Concen: 0.1843 ppm  
 RT: 8.076 min Scan# 1073  
 Delta R.T. 0.000 min  
 Lab File: cj6534.D  
 Acq: 09 May 2024 11:00 pm

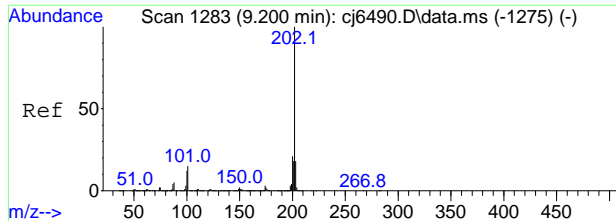
Tgt Ion	Resp	Lower	Upper
167	4961	100	
166	16.0	0.0	51.7
139	15.4	0.0	43.8



#82  
 Fluoranthene  
 Concen: 3.6850 ppm  
 RT: 8.980 min Scan# 1242  
 Delta R.T. -0.006 min  
 Lab File: cj6534.D  
 Acq: 09 May 2024 11:00 pm

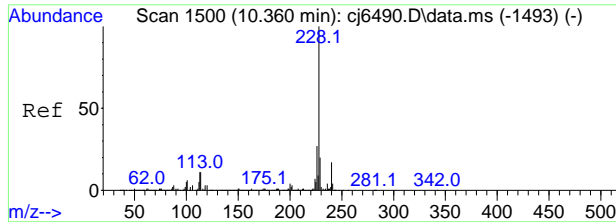
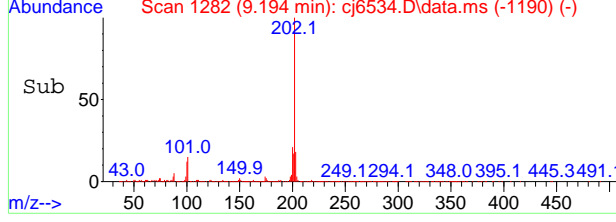
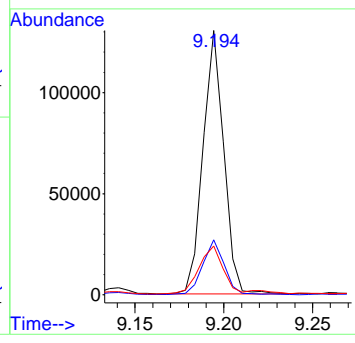
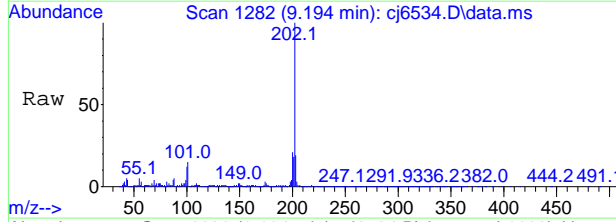
Tgt Ion	Resp	Lower	Upper
202	115079	100	
101	11.5	0.0	41.4
203	17.8	0.0	47.6





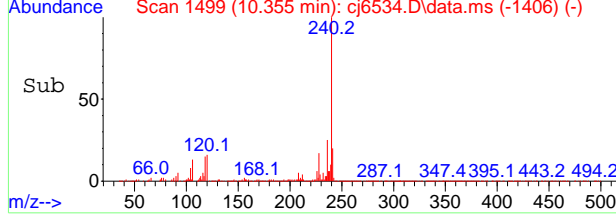
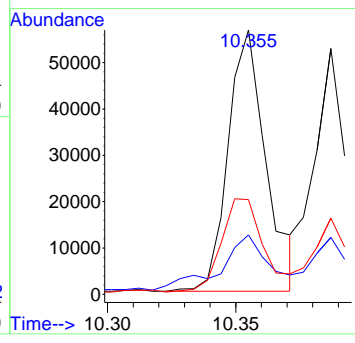
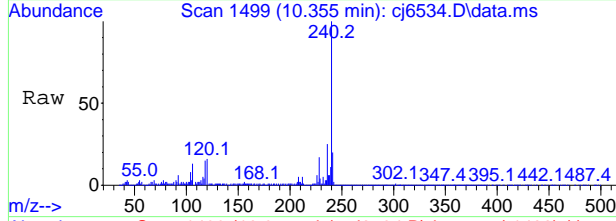
#86  
 Pyrene  
 Concen: 3.6539 ppm  
 RT: 9.194 min Scan# 1282  
 Delta R.T. -0.006 min  
 Lab File: cj6534.D  
 Acq: 09 May 2024 11:00 pm

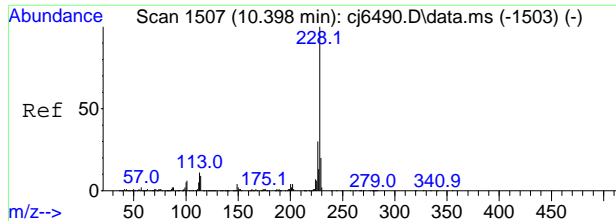
Tgt Ion	Ratio	Lower	Upper
202	100		
200	20.7	0.0	51.4
203	18.1	0.0	47.8



#89  
 Benzo[a]anthracene  
 Concen: 2.1175 ppm  
 RT: 10.355 min Scan# 1499  
 Delta R.T. -0.005 min  
 Lab File: cj6534.D  
 Acq: 09 May 2024 11:00 pm

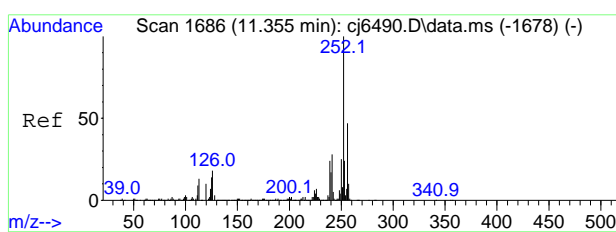
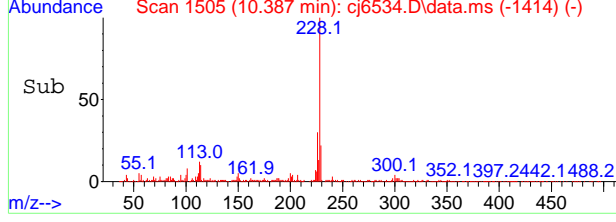
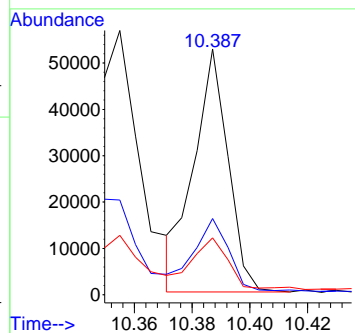
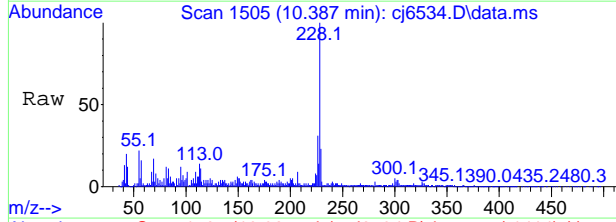
Tgt Ion	Ratio	Lower	Upper
228	100		
229	19.4	0.0	49.8
226	35.7	0.0	57.1





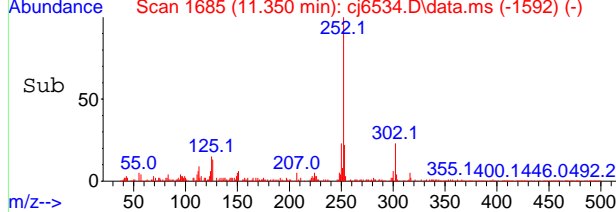
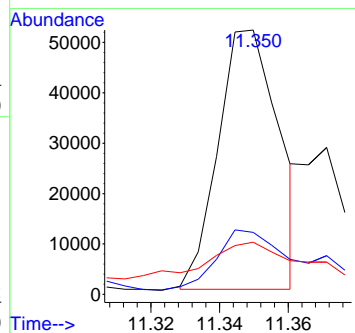
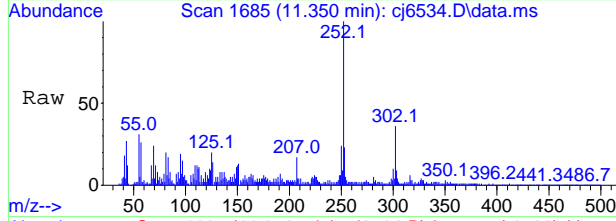
#91  
 Chrysene  
 Concen: 1.7103 ppm  
 RT: 10.387 min Scan# 1505  
 Delta R.T. -0.011 min  
 Lab File: cj6534.D  
 Acq: 09 May 2024 11:00 pm

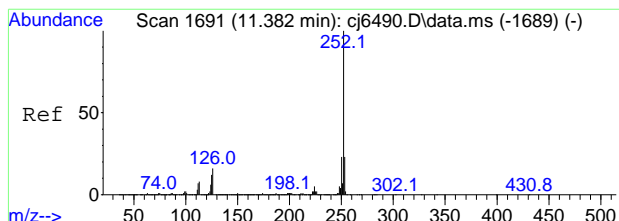
Tgt Ion	Ratio	Lower	Upper
228	100		
226	29.6	0.0	59.9
229	20.3	0.0	49.8



#95  
 Benzo[b]fluoranthene  
 Concen: 2.4301 ppm m  
 RT: 11.350 min Scan# 1685  
 Delta R.T. -0.005 min  
 Lab File: cj6534.D  
 Acq: 09 May 2024 11:00 pm

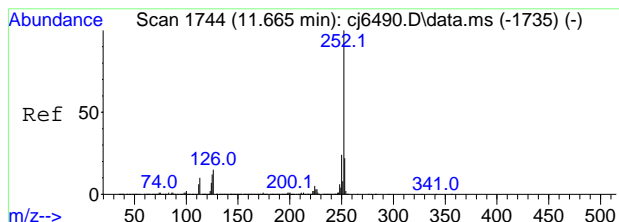
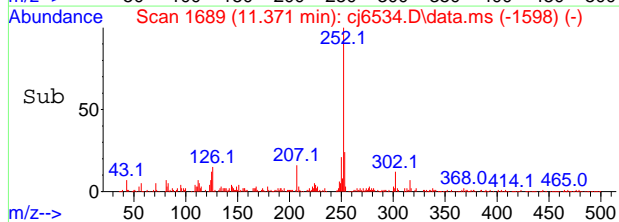
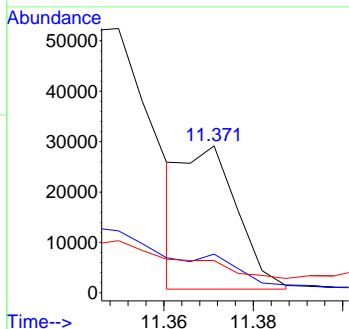
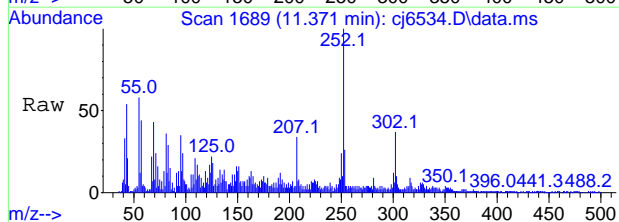
Tgt Ion	Ratio	Lower	Upper
252	100		
253	23.4	0.0	54.7
125	19.7	0.0	44.2





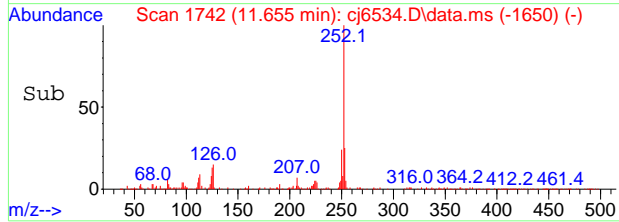
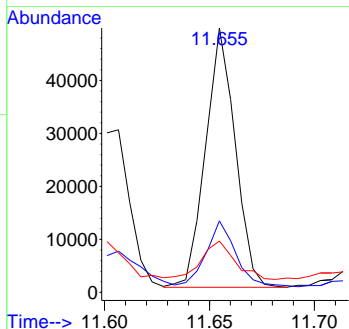
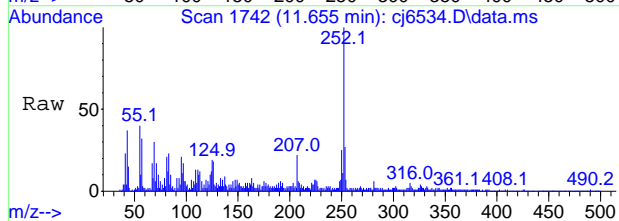
#96  
 Benzo[k]fluoranthene  
 Concen: 0.9974 ppm m  
 RT: 11.371 min Scan# 1689  
 Delta R.T. -0.011 min  
 Lab File: cj6534.D  
 Acq: 09 May 2024 11:00 pm

Tgt Ion	Ratio	Lower	Upper
252	100		
253	26.3	0.0	52.6
125	22.0	0.0	42.4

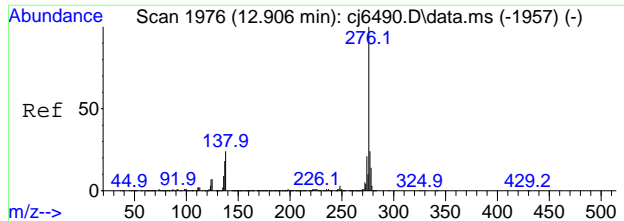


#97  
 Benzo[a]pyrene  
 Concen: 2.2193 ppm  
 RT: 11.655 min Scan# 1742  
 Delta R.T. -0.010 min  
 Lab File: cj6534.D  
 Acq: 09 May 2024 11:00 pm

Tgt Ion	Ratio	Lower	Upper
252	100		
253	24.2	0.0	51.9
125	14.2	0.0	42.1

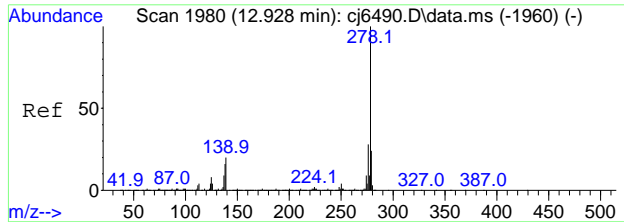
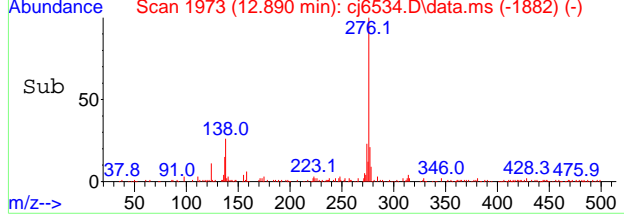
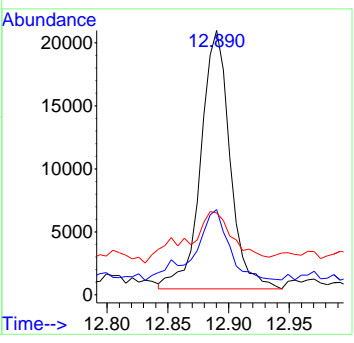
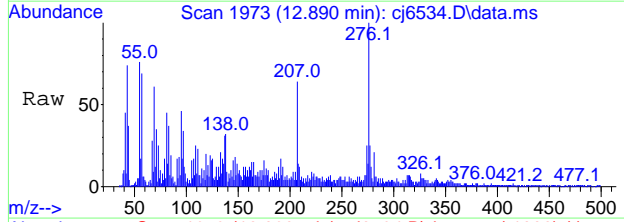


7.1.20  
7



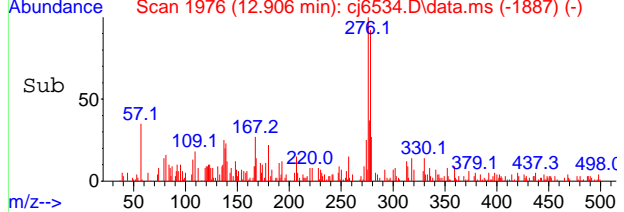
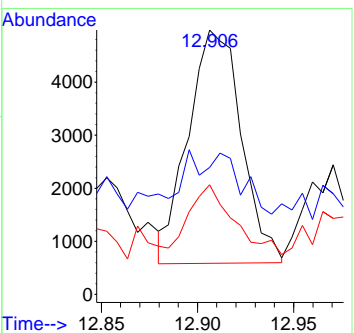
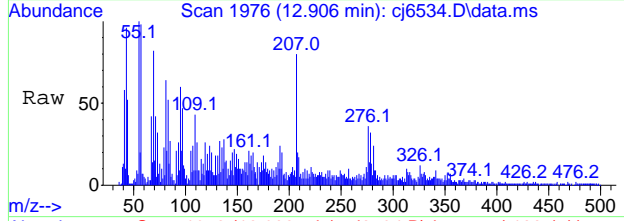
#98  
 Indeno[1,2,3-cd]pyrene  
 Concen: 1.3067 ppm  
 RT: 12.890 min Scan# 1973  
 Delta R.T. -0.016 min  
 Lab File: cj6534.D  
 Acq: 09 May 2024 11:00 pm

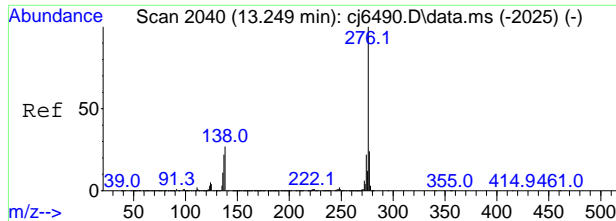
Tgt Ion	Ratio	Lower	Upper
276	100		
138	26.0	0.0	54.2
137	15.0	0.0	47.9



#100  
 Dibenz[a,h]anthracene  
 Concen: 0.4033 ppm  
 RT: 12.906 min Scan# 1976  
 Delta R.T. -0.022 min  
 Lab File: cj6534.D  
 Acq: 09 May 2024 11:00 pm

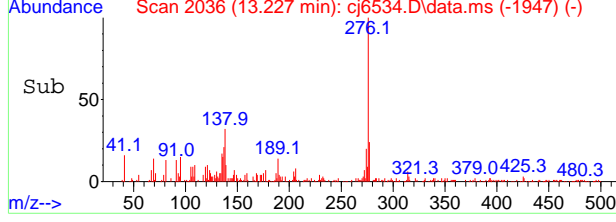
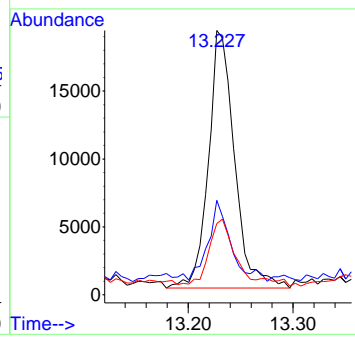
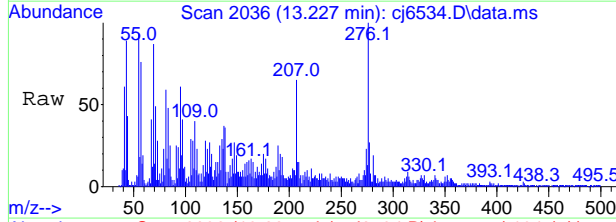
Tgt Ion	Ratio	Lower	Upper
278	100		
139	14.6	0.0	49.8
279	30.5	0.0	54.1





#102  
 Benzo[g,h,i]perylene  
 Concen: 1.6133 ppm  
 RT: 13.227 min Scan# 2036  
 Delta R.T. -0.022 min  
 Lab File: cj6534.D  
 Acq: 09 May 2024 11:00 pm

Tgt Ion	Ratio	Lower	Upper
276	100		
138	29.2	0.0	56.7
277	23.4	0.0	54.1



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LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6534.D  
Acq On : 09 May 2024 11:00 pm  
Operator : rocquans  
Sample : jd87833-10  
Misc : op54460,ecj297,30.6,,,1,1  
ALS Vial : 25 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON Filtering: 5  
Sampling : 1 Min Area: 1000 Area counts  
Start Thrs: 0.02 Max Peaks: 100  
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS, zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

Signal : TIC: cj6534.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.172	339	343	354	rVB	71556	88569	2.83%	0.174%
2	4.247	354	357	361	rVB	782218	504180	16.12%	0.989%
3	4.423	381	390	396	rBV	2514111	1601157	51.18%	3.142%
4	4.482	396	401	407	rVB	303302	220364	7.04%	0.432%
5	4.664	431	435	440	rBV	3536208	2080239	66.50%	4.082%
6	4.755	447	452	461	rBV	297840	216464	6.92%	0.425%
7	4.819	461	464	469	rBV	265538	168639	5.39%	0.331%
8	4.873	469	474	478	rBV2	63661	52427	1.68%	0.103%
9	4.910	478	481	488	rVB	81095	61754	1.97%	0.121%
10	5.012	493	500	504	rBV	2329725	1359479	43.46%	2.667%
11	5.279	540	550	557	rBV6	43272	60703	1.94%	0.119%
12	5.466	580	585	590	rBV	3931562	2560914	81.87%	5.025%
13	6.167	710	716	720	rBV	4393666	2616115	83.63%	5.133%
14	6.258	731	733	740	rVB2	51889	56216	1.80%	0.110%
15	6.557	784	789	793	rBV3	48076	71132	2.27%	0.140%
16	6.659	801	808	815	rVB	4263888	2936178	93.86%	5.761%
17	7.274	917	923	926	rBV	1517432	1192342	38.12%	2.340%
18	7.338	932	935	940	rVB	102950	75529	2.41%	0.148%
19	7.451	950	956	960	rBV6	42724	59784	1.91%	0.117%
20	7.574	972	979	986	rBV2	139072	215335	6.88%	0.423%
21	7.766	1007	1015	1022	rBV9	28821	63008	2.01%	0.124%
22	7.836	1022	1028	1030	rBV	79799	80707	2.58%	0.158%
23	7.868	1030	1034	1041	rVV	3849034	3128199	100.00%	6.138%
24	7.937	1041	1047	1050	rVB	61848	68301	2.18%	0.134%
25	8.087	1069	1075	1079	rBV5	43594	57325	1.83%	0.112%
26	8.301	1111	1115	1117	rBV2	57476	60913	1.95%	0.120%
27	8.333	1117	1121	1124	rBV2	137831	129200	4.13%	0.254%
28	8.371	1124	1128	1135	rVV	1627852	1359483	43.46%	2.667%
29	8.419	1135	1137	1145	rVB	70283	93366	2.98%	0.183%
30	8.531	1155	1158	1162	rBV2	85553	92246	2.95%	0.181%
31	8.857	1217	1219	1226	rBV3	49020	78336	2.50%	0.154%
32	8.980	1238	1242	1248	rBV	382669	330742	10.57%	0.649%
33	9.045	1248	1254	1264	rVV3	224906	408407	13.06%	0.801%
34	9.119	1264	1268	1277	rVV	543820	584638	18.69%	1.147%
35	9.194	1277	1282	1287	rVB	298721	271667	8.68%	0.533%
36	9.269	1291	1296	1301	rVB6	42951	57877	1.85%	0.114%
37	9.355	1307	1312	1316	rBV	3283223	2804468	89.65%	5.503%
38	9.446	1326	1329	1332	rBV	59975	60728	1.94%	0.119%
39	9.515	1339	1342	1350	rVB2	52267	62962	2.01%	0.124%
40	9.585	1350	1355	1358	rBV3	118397	153825	4.92%	0.302%



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7



LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\
Data File : cj6534.D
Acq On : 09 May 2024 11:00 pm
Operator : rocquans
Sample : jd87833-10
Misc : op54460,ecj297,30.6,,,1,1
ALS Vial : 25 Sample Multiplier: 1

Integration Parameters: lscint.p
Integrator: RTE
Smoothing : ON
Sampling : 1
Start Thrs: 0.02
Stop Thrs : 0
Filtering: 5
Min Area: 1000 Area counts
Max Peaks: 100
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

Table with 10 columns: Retention Time, Abundance, and various peak identifiers (e.g., rVB3, rBV7, rVB4, rBV, rVB6, rBV, rVB5, rBV7, rVB, rBV, rVB3, rBV5, rVB3, rBV2, rVV4, rVV, rVV3, rVV4, rVV5, rVV2, rVV3, rVB, rVB, rVV5, rVV4, rVV8, rVB8, rVB, rVV10, rVB4, rVB6, rVB5, rBV5, rVV4).

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7



LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6534.D  
Acq On : 09 May 2024 11:00 pm  
Operator : rocquans  
Sample : jd87833-10  
Misc : op54460,ecj297,30.6,,,1,1  
ALS Vial : 25 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON Filtering: 5  
Sampling : 1 Min Area: 1000 Area counts  
Start Thrs: 0.02 Max Peaks: 100  
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

86	12.965	1980	1987	1994	rVB4	96492	214319	6.85%	0.421%
87	13.035	1994	2000	2003	rBV7	172825	296568	9.48%	0.582%
88	13.077	2003	2008	2019	rVB4	813008	1527809	48.84%	2.998%
89	13.168	2019	2025	2030	rBV5	156182	298834	9.55%	0.586%
90	13.238	2030	2038	2048	rVB6	156689	470431	15.04%	0.923%
91	13.340	2049	2057	2062	rBV10	140769	254411	8.13%	0.499%
92	13.414	2062	2071	2080	rBV2	725907	1319814	42.19%	2.590%
93	13.489	2082	2085	2090	rVB7	42757	62705	2.00%	0.123%
94	13.719	2122	2128	2138	rVB7	144975	316518	10.12%	0.621%
95	13.885	2156	2159	2167	rVB10	38159	77561	2.48%	0.152%
96	14.014	2169	2183	2190	rBV10	94952	368614	11.78%	0.723%
97	14.083	2190	2196	2212	rVB10	108832	350895	11.22%	0.688%
98	14.206	2212	2219	2232	rBV5	215146	536530	17.15%	1.053%
99	14.383	2245	2252	2255	rBV9	49728	94988	3.04%	0.186%
100	14.420	2255	2259	2266	rVB8	56885	133874	4.28%	0.263%

Sum of corrected areas: 50965262

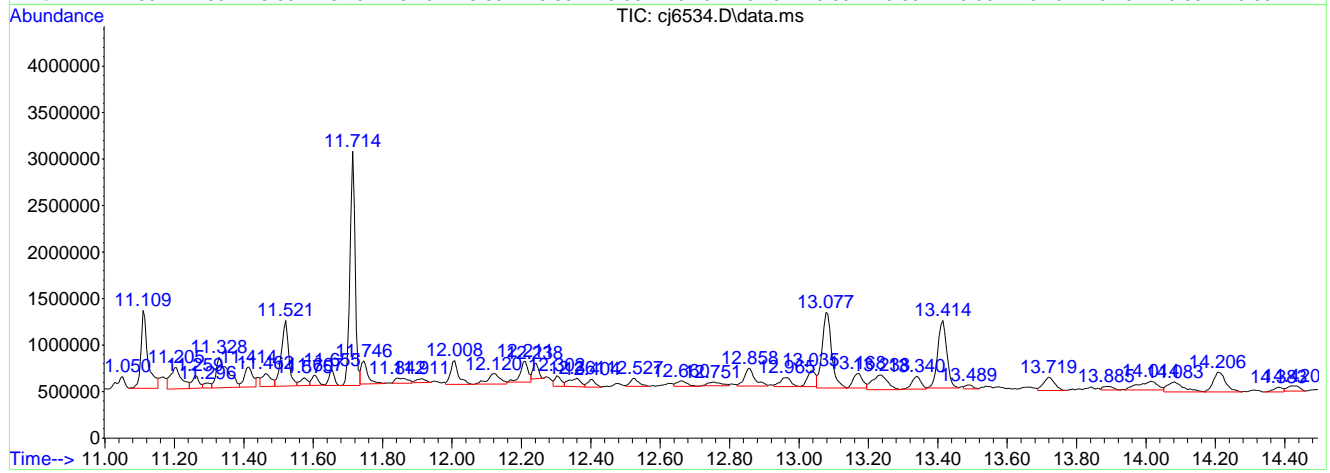
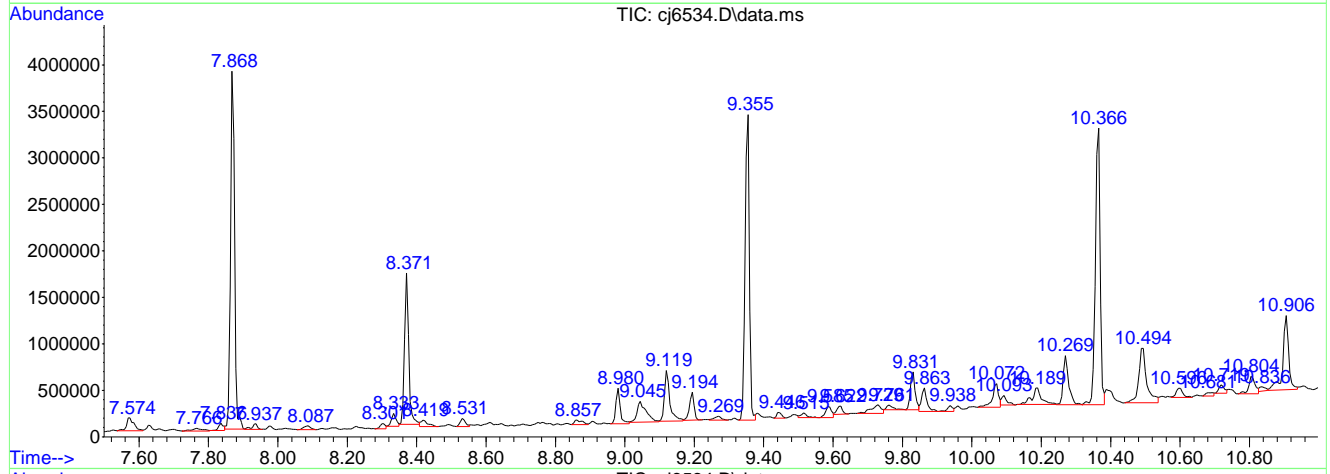
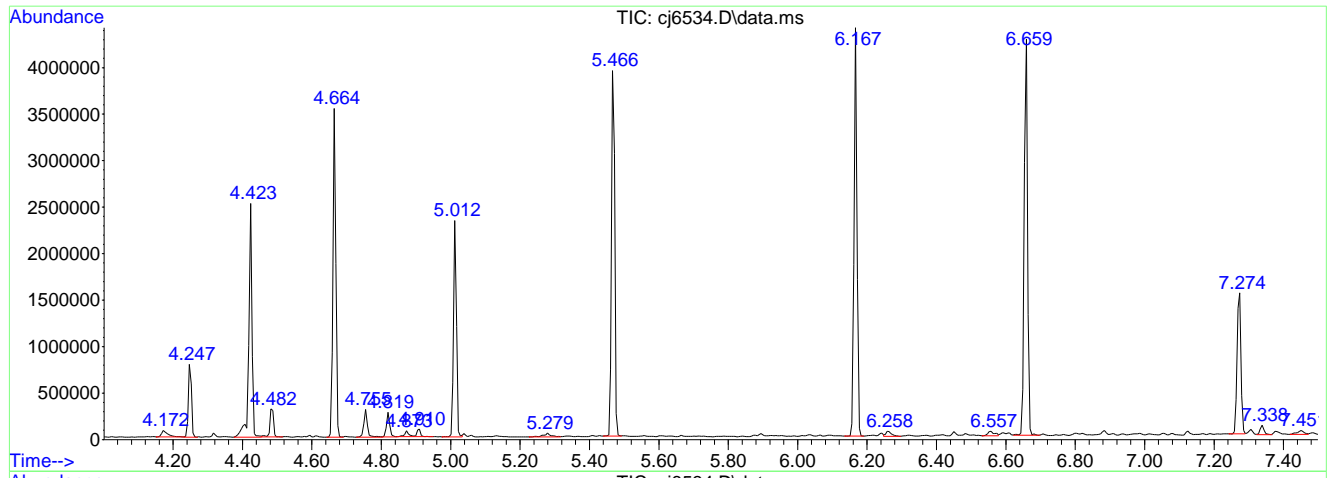
7.1.21  
7

LSC Report - Integrated Chromatogram

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6534.D  
Acq On : 09 May 2024 11:00 pm  
Operator : rocquans  
Sample : jd87833-10  
Misc : op54460,ecj297,30.6,,,1,1  
ALS Vial : 25 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p



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7



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6534.D  
Acq On : 09 May 2024 11:00 pm  
Operator : rocquans  
Sample : jd87833-10  
Misc : op54460,ecj297,30.6,,,1,1  
ALS Vial : 25 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

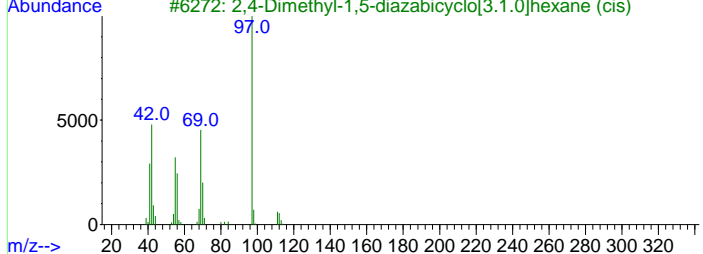
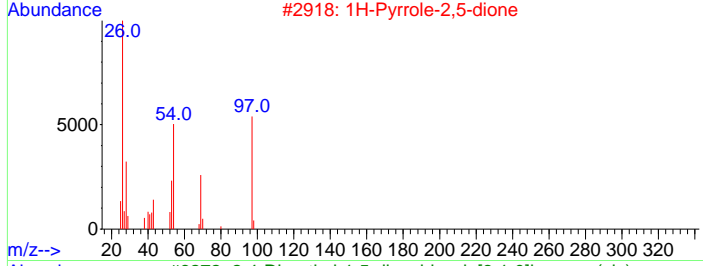
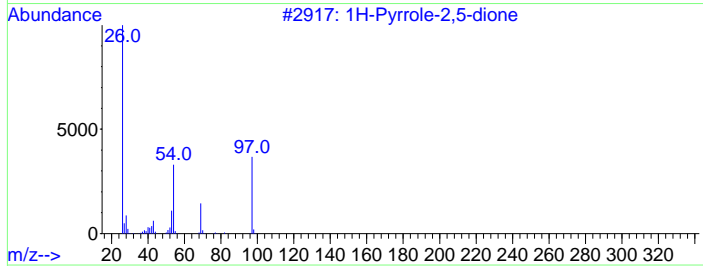
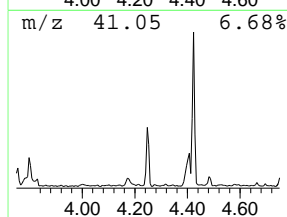
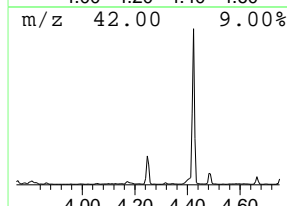
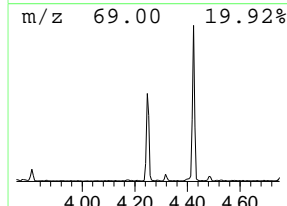
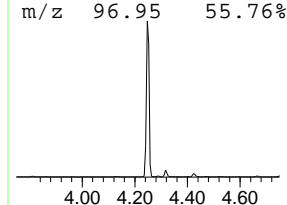
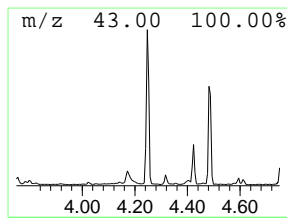
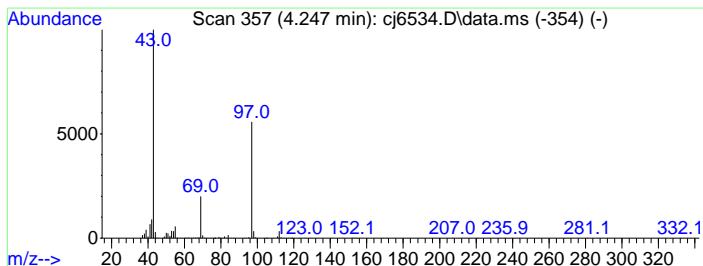
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 1 Unknown Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.247	9.69 ppm	504180	1,4-Dichlorobenzene-d4a	4.664

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	1H-Pyrrole-2,5-dione	97	C4H3NO2	000541-59-3	53
2		1H-Pyrrole-2,5-dione	97	C4H3NO2	000541-59-3	28
3		2,4-Dimethyl-1,5-diazabicyclo[3....	112	C6H12N2	100463-01-2	25
4		5-Hexen-2-one	98	C6H10O	000109-49-9	10
5		2,4-Dimethyl-1,5-diazabicyclo[3....	112	C6H12N2	1000283-20-9	9



7.1.21  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6534.D  
Acq On : 09 May 2024 11:00 pm  
Operator : rocquans  
Sample : jd87833-10  
Misc : op54460,ecj297,30.6,,,1,1  
ALS Vial : 25 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

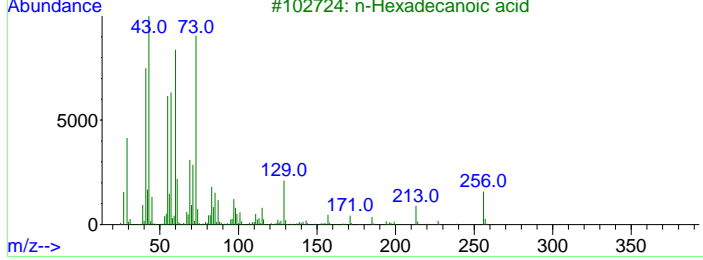
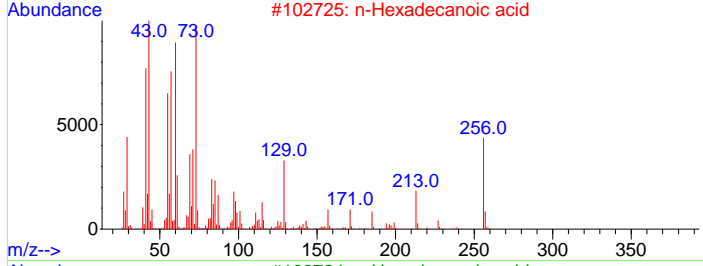
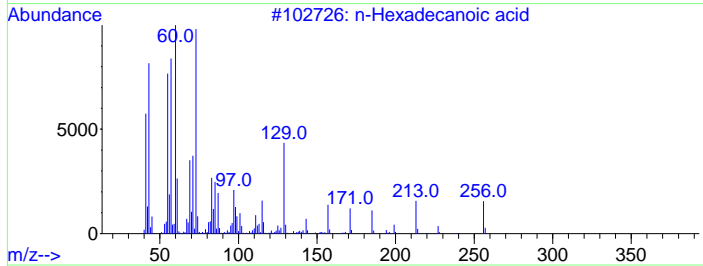
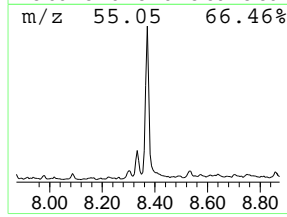
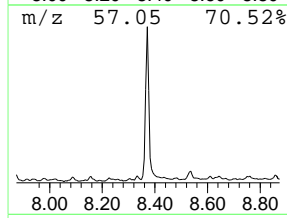
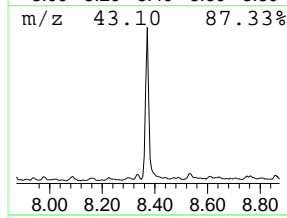
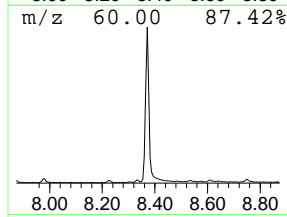
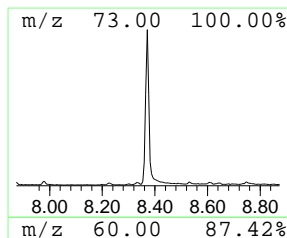
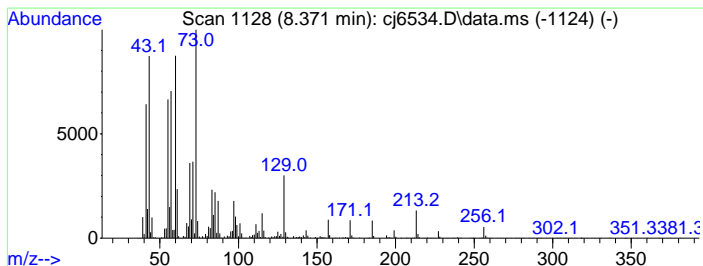
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 2 n-Hexadecanoic acid Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.371	17.38 ppm	1359480	Phenanthrene-d10b	7.868

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	99
2		n-Hexadecanoic acid	256	C16H32O2	000057-10-3	98
3		n-Hexadecanoic acid	256	C16H32O2	000057-10-3	95
4		Tetradecanoic acid	228	C14H28O2	000544-63-8	93
5		Tridecanoic acid	214	C13H26O2	000638-53-9	91



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6534.D  
Acq On : 09 May 2024 11:00 pm  
Operator : rocquans  
Sample : jd87833-10  
Misc : op54460,ecj297,30.6,,,1,1  
ALS Vial : 25 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

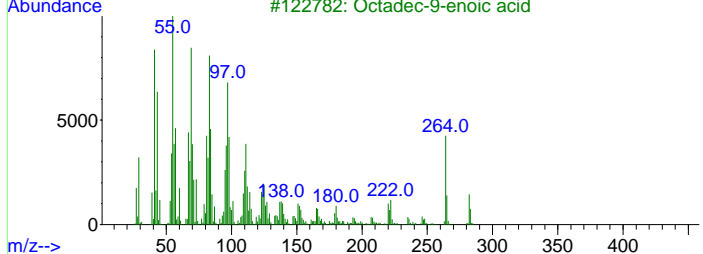
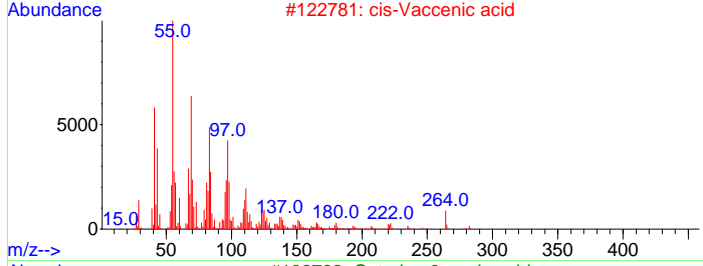
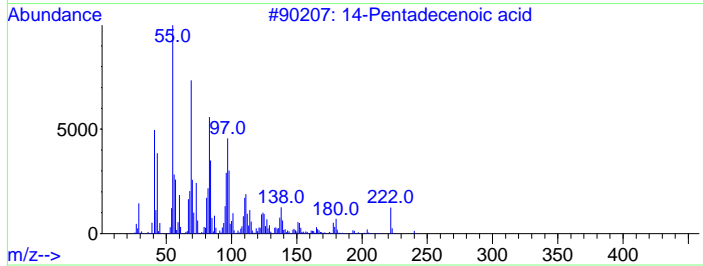
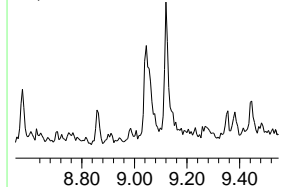
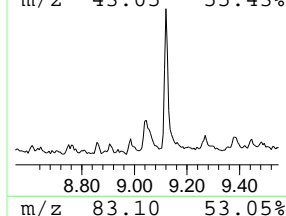
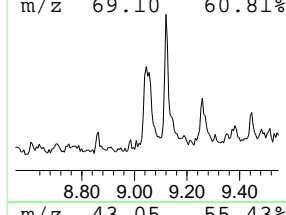
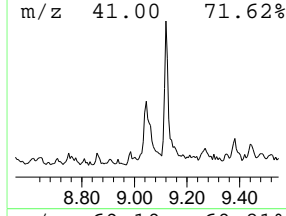
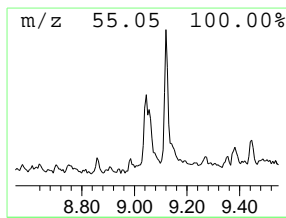
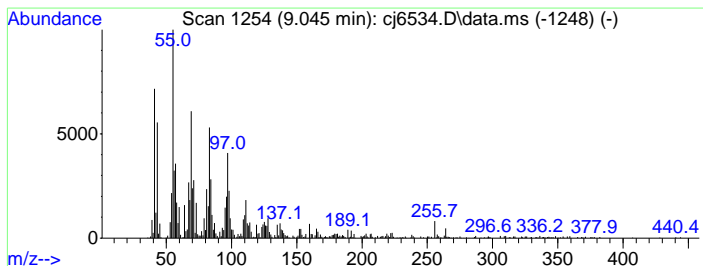
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TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 3 Unknown acid Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.045	5.22 ppm	408407	Phenanthrene-d10b	7.868

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	14-Pentadecenoic acid	240	C15H28O2	017351-34-7	91
2	cis-Vaccenic acid	282	C18H34O2	000506-17-2	87
3	Octadec-9-enoic acid	282	C18H34O2	1000190-13-7	87
4	trans-13-Octadecenoic acid	282	C18H34O2	000693-71-0	83
5	Oleic Acid	282	C18H34O2	000112-80-1	83



7.1.21  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6534.D  
Acq On : 09 May 2024 11:00 pm  
Operator : rocquans  
Sample : jd87833-10  
Misc : op54460,ecj297,30.6,,,1,1  
ALS Vial : 25 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

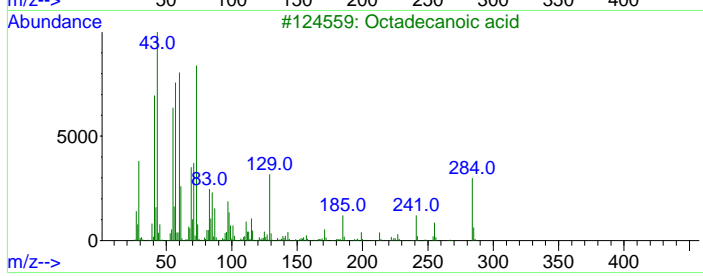
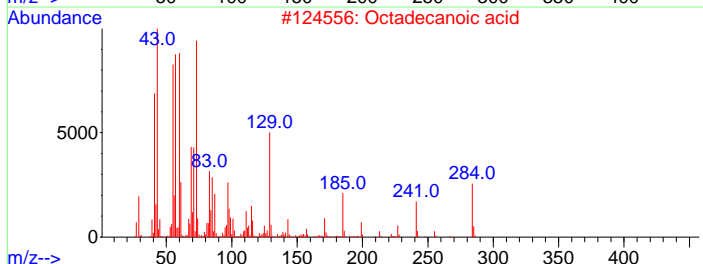
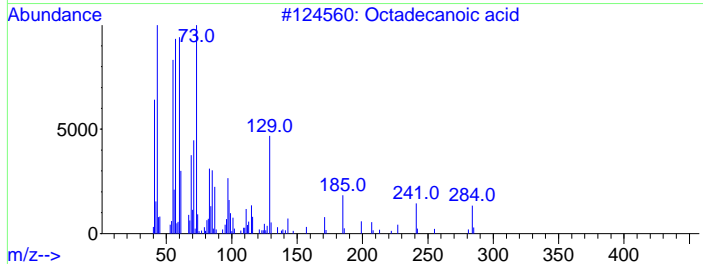
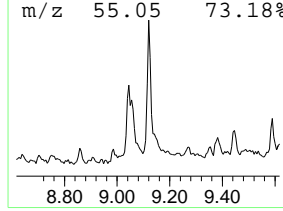
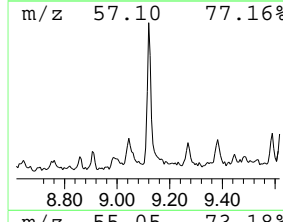
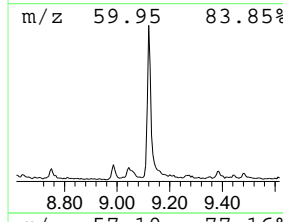
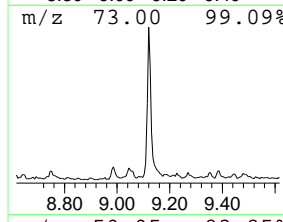
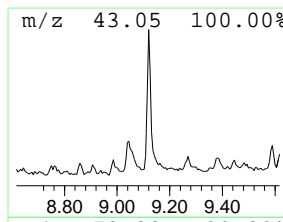
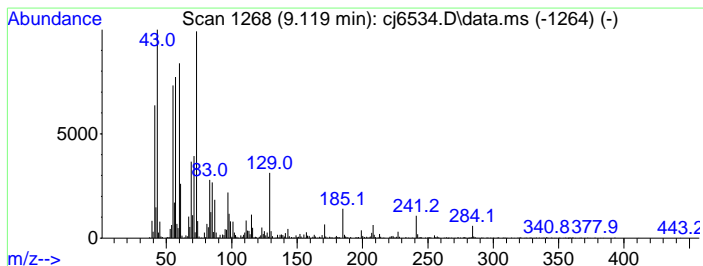
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 4 Octadecanoic acid Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.119	8.22 ppm	584638	Chrysene-d12	10.366

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Octadecanoic acid	284	C18H36O2	000057-11-4	99
2			Octadecanoic acid	284	C18H36O2	000057-11-4	99
3			Octadecanoic acid	284	C18H36O2	000057-11-4	93
4			Pentadecanoic acid	242	C15H30O2	001002-84-2	93
5			Pentadecanoic acid	242	C15H30O2	001002-84-2	91



7.1.21  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6534.D  
Acq On : 09 May 2024 11:00 pm  
Operator : rocquans  
Sample : jd87833-10  
Misc : op54460,ecj297,30.6,,,1,1  
ALS Vial : 25 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

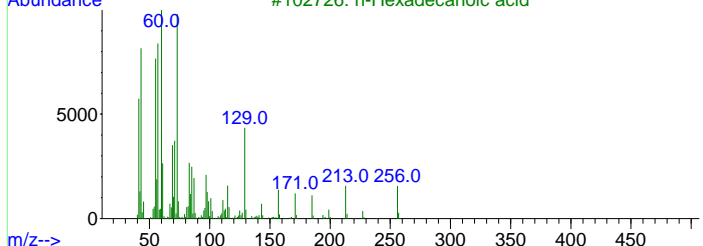
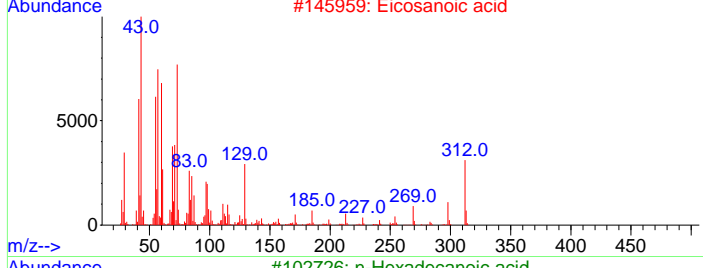
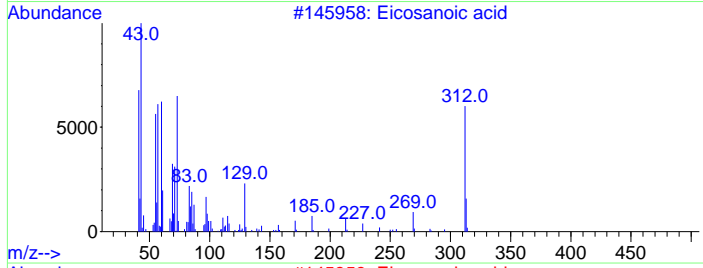
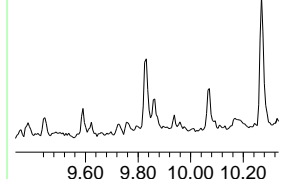
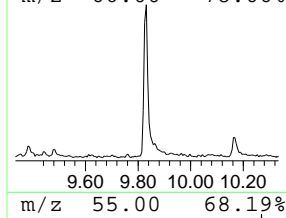
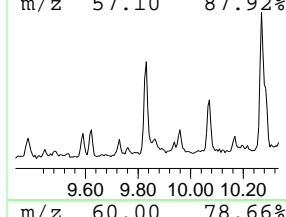
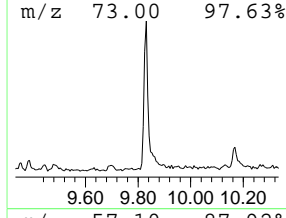
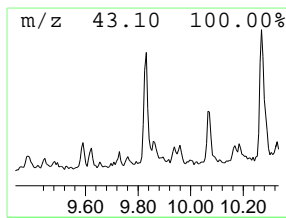
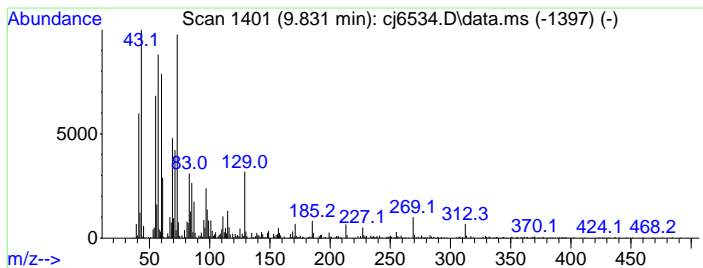
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 5 Eicosanoic acid Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.831	5.56 ppm	395712	Chrysene-d12	10.366

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1	Eicosanoic acid		312	C20H40O2	000506-30-9	98
2	Eicosanoic acid		312	C20H40O2	000506-30-9	94
3	n-Hexadecanoic acid		256	C16H32O2	000057-10-3	90
4	Octadecanoic acid		284	C18H36O2	000057-11-4	90
5	Pentadecanoic acid		242	C15H30O2	001002-84-2	72



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6534.D  
Acq On : 09 May 2024 11:00 pm  
Operator : rocquans  
Sample : jd87833-10  
Misc : op54460,ecj297,30.6,,,1,1  
ALS Vial : 25 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

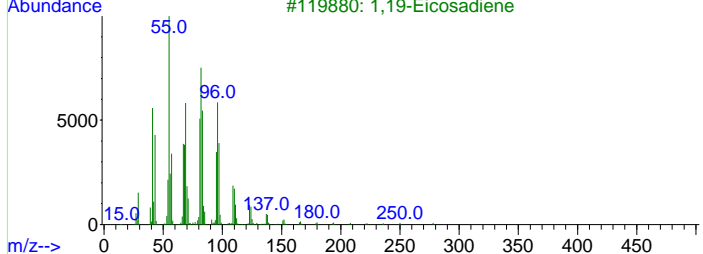
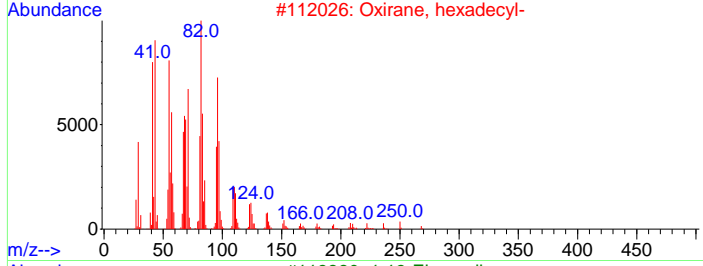
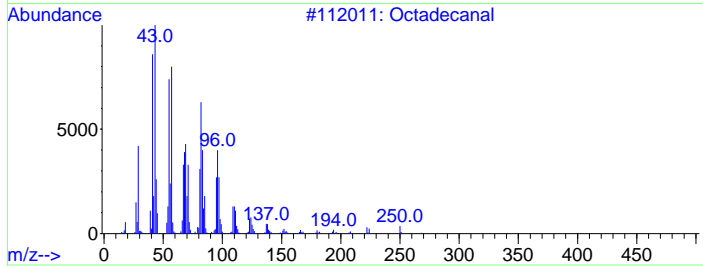
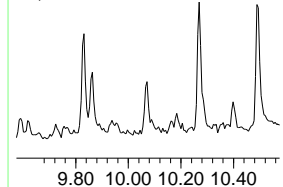
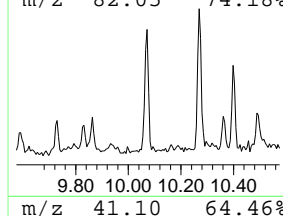
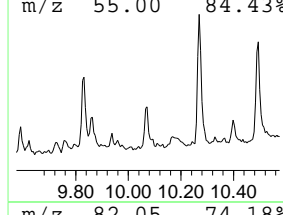
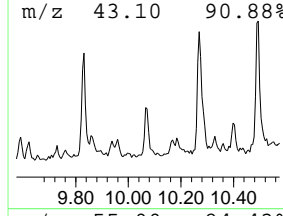
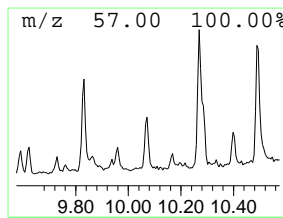
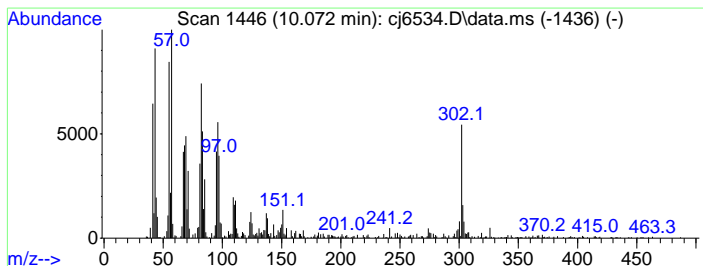
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 6 Unknown Concentration Rank 24

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.072	4.42 ppm	314607	Chrysene-d12	10.366

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Octadecanal	268	C18H36O	000638-66-4	91
2		Oxirane, hexadecyl-	268	C18H36O	007390-81-0	90
3		1,19-Eicosadiene	278	C20H38	014811-95-1	90
4		1,19-Eicosadiene	278	C20H38	014811-95-1	89
5		Z-2-Octadecen-1-ol	268	C18H36O	1000131-11-0	83



7.1.21  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6534.D  
 Acq On : 09 May 2024 11:00 pm  
 Operator : rocquans  
 Sample : jd87833-10  
 Misc : op54460,ecj297,30.6,,,1,1  
 ALS Vial : 25 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

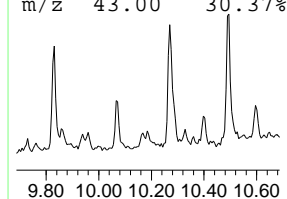
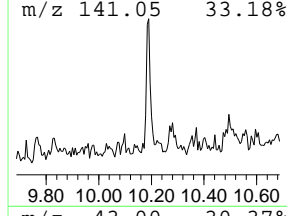
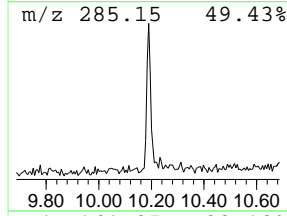
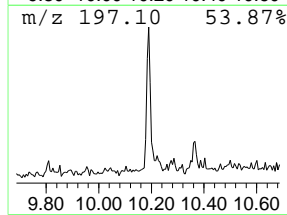
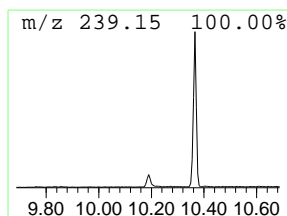
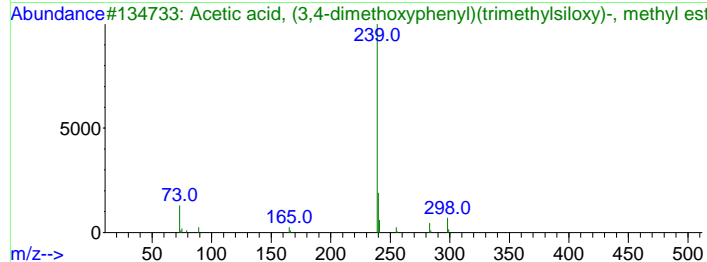
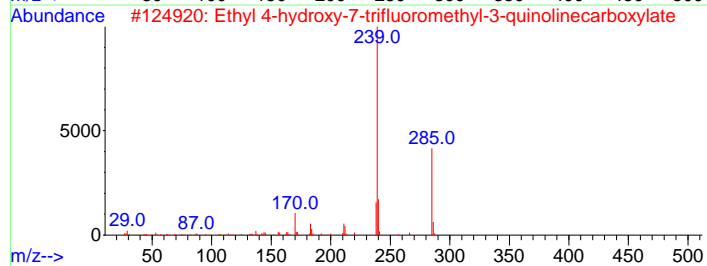
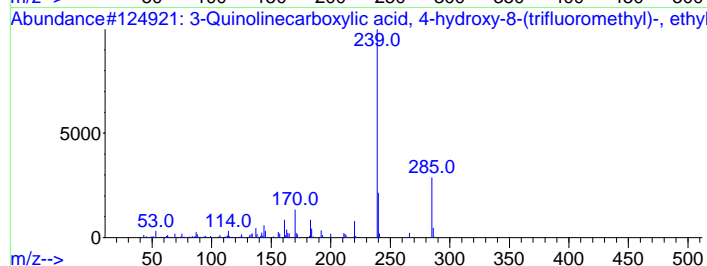
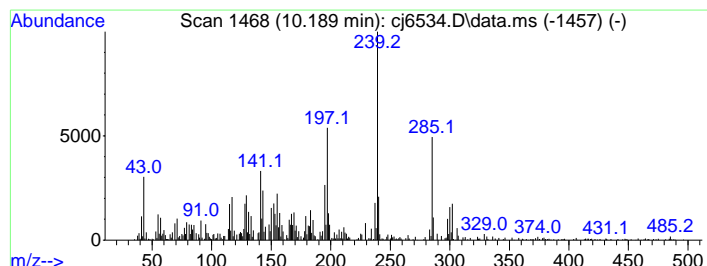
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 7 Unknown Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.189	4.73 ppm	336597	Chrysene-d12	10.366

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			3-Quinolinecarboxylic acid, 4-hy...	285	C13H10F3NO3	023851-84-5	53
2			Ethyl 4-hydroxy-7-trifluoromethy...	285	C13H10F3NO3	000391-02-6	49
3			Acetic acid, (3,4-dimethoxypheny...	298	C14H22O5Si	002911-70-8	38
4			Indole, 3-imidazolo[2,1-b]thiazo...	239	C13H9N3S	292855-05-1	38
5			2-Ethylidene-hydrazone-3-methyl-...	239	C10H10ClN3S	1000148-08-4	35



7.1.21  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6534.D  
Acq On : 09 May 2024 11:00 pm  
Operator : rocquans  
Sample : jd87833-10  
Misc : op54460,ecj297,30.6,,,1,1  
ALS Vial : 25 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

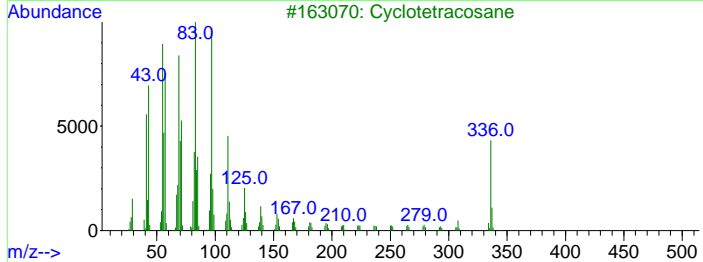
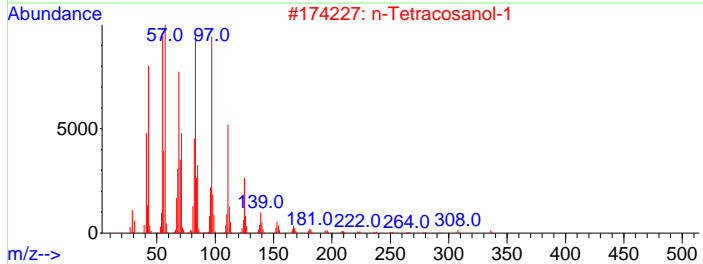
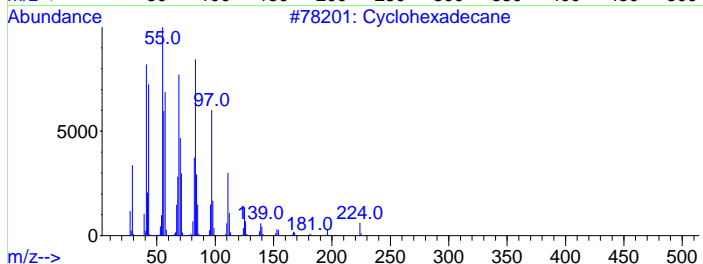
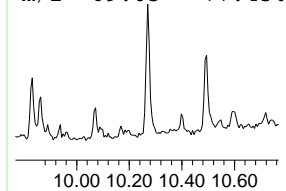
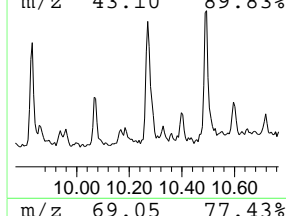
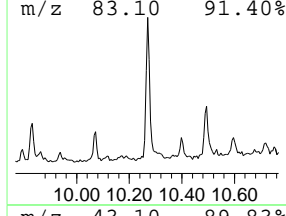
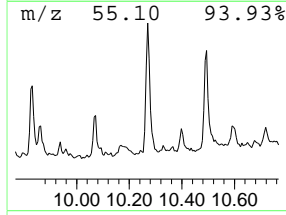
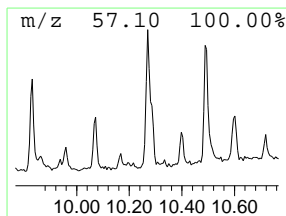
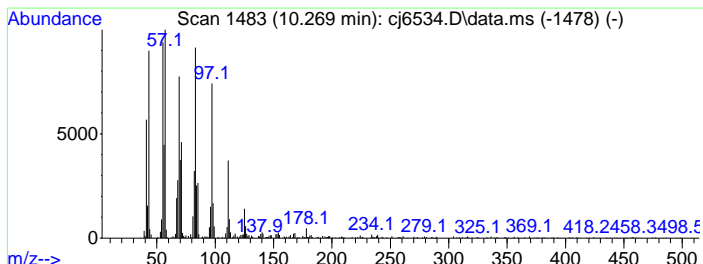
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 8 Cyclohexane alkyl Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.269	8.16 ppm	580189	Chrysene-d12	10.366

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		Cyclohexadecane	224	C16H32	000295-65-8	94
2		n-Tetracosanol-1	354	C24H50O	000506-51-4	94
3		Cyclotetracosane	336	C24H48	000297-03-0	93
4		1-Heneicosanol	312	C21H44O	015594-90-8	91
5		Bromoacetic acid, hexadecyl ester	362	C18H35BrO2	005454-48-8	91



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6534.D  
 Acq On : 09 May 2024 11:00 pm  
 Operator : rocquans  
 Sample : jd87833-10  
 Misc : op54460,ecj297,30.6,,,1,1  
 ALS Vial : 25 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

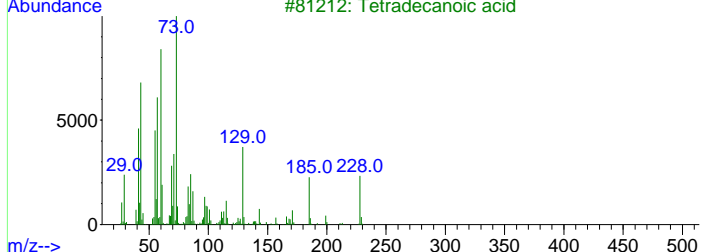
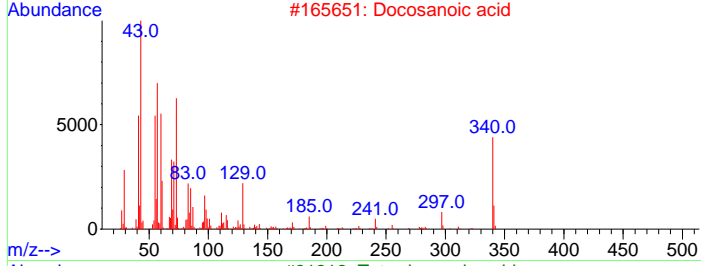
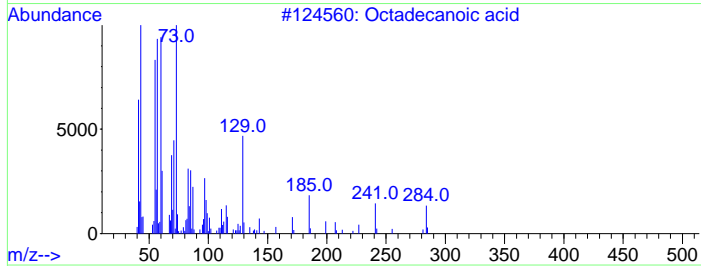
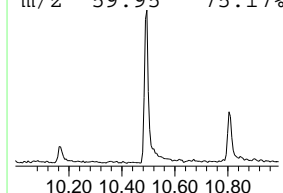
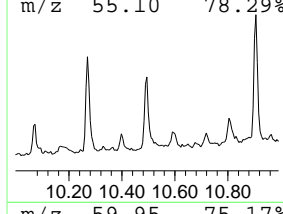
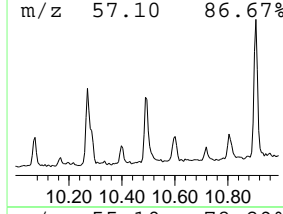
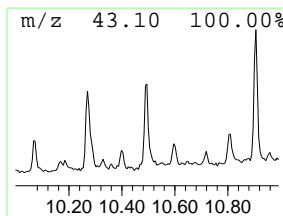
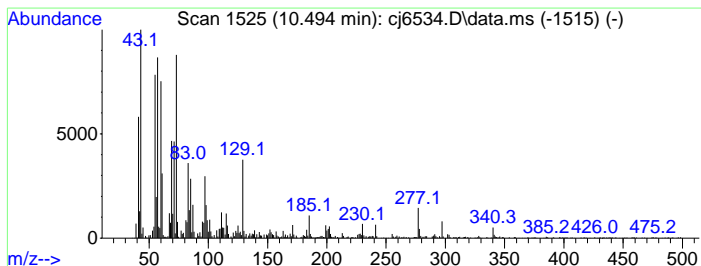
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 9 Octadecanoic acid Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.494	13.15 ppm	935639	Chrysene-d12a	10.366

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Octadecanoic acid	284	C18H36O2	000057-11-4	98
2		Docosanoic acid	340	C22H44O2	000112-85-6	96
3		Tetradecanoic acid	228	C14H28O2	000544-63-8	76
4		Pentadecanoic acid	242	C15H30O2	001002-84-2	64
5		n-Decanoic acid	172	C10H20O2	000334-48-5	62



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6534.D  
Acq On : 09 May 2024 11:00 pm  
Operator : rocquans  
Sample : jd87833-10  
Misc : op54460,ecj297,30.6,,,1,1  
ALS Vial : 25 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

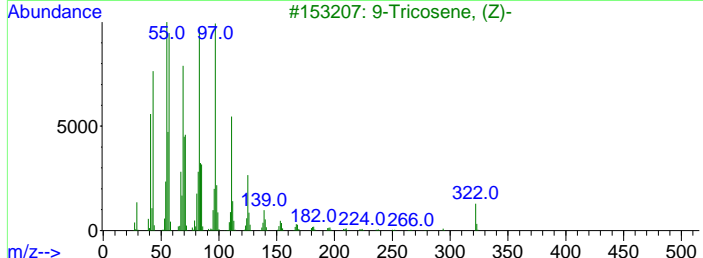
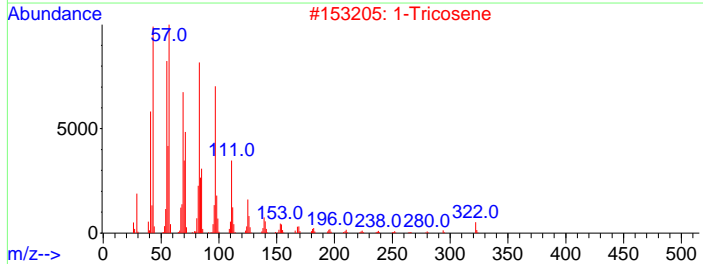
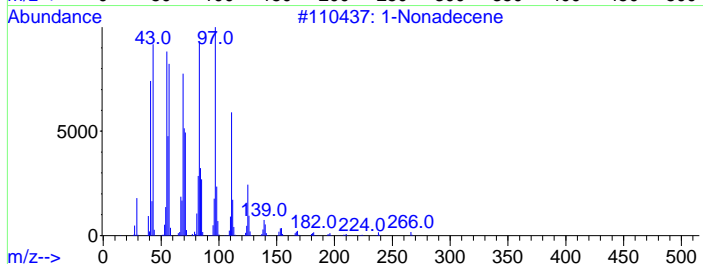
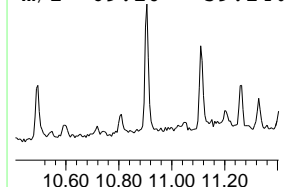
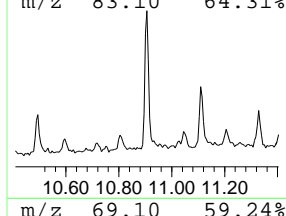
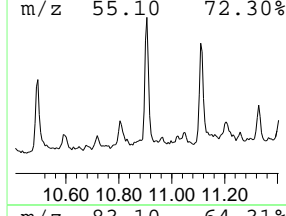
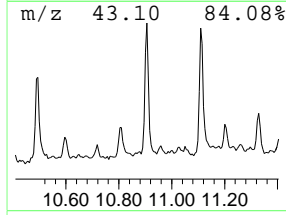
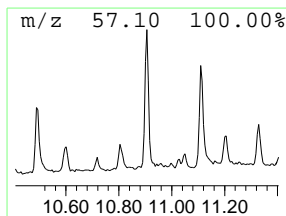
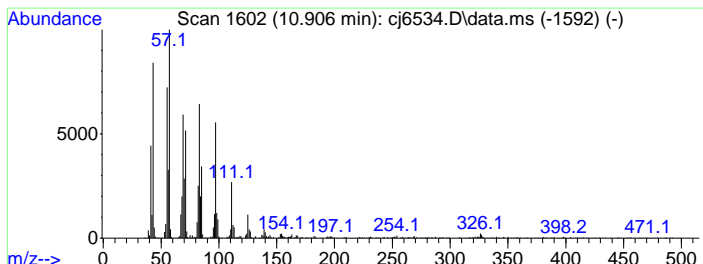
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 10 Alkene Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.906	13.13 ppm	934192	Chrysene-d12a	10.366

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	1-Nonadecene	266	C19H38	018435-45-5	96
2		1-Tricosene	322	C23H46	018835-32-0	95
3		9-Tricosene, (Z)-	322	C23H46	027519-02-4	93
4		1-Hexacosene	364	C26H52	018835-33-1	93
5		Eicosyl pentafluoropropionate	444	C23H41F5O2	1000351-80-8	91



7.1.21  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6534.D  
 Acq On : 09 May 2024 11:00 pm  
 Operator : rocquans  
 Sample : jd87833-10  
 Misc : op54460,ecj297,30.6,,,1,1  
 ALS Vial : 25 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

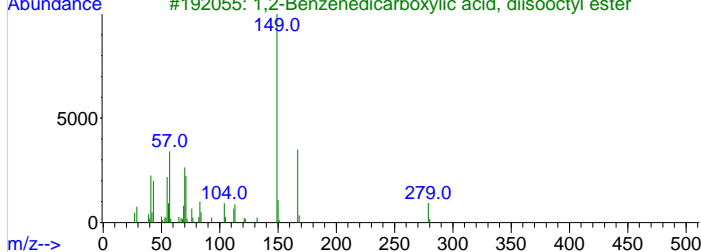
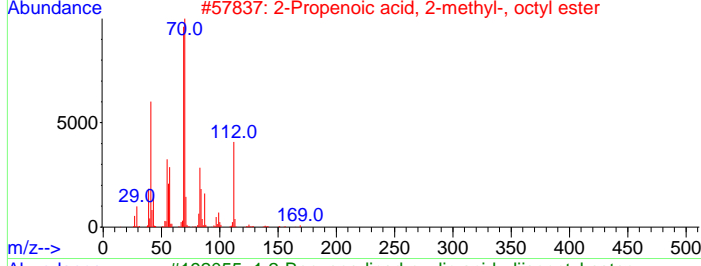
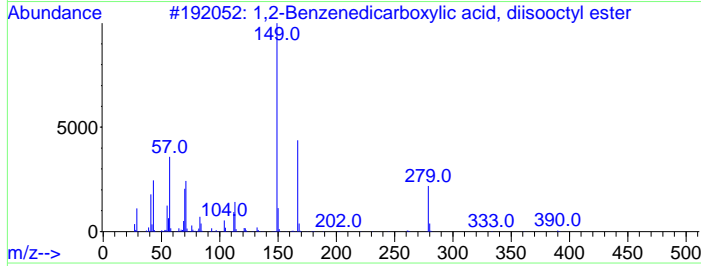
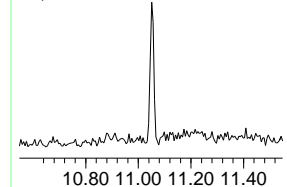
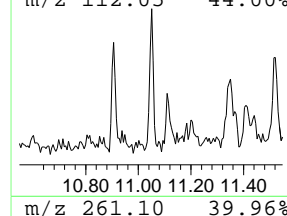
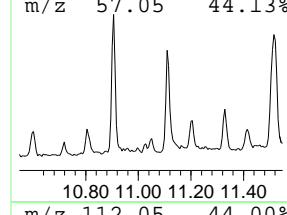
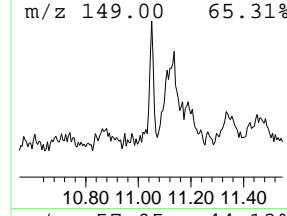
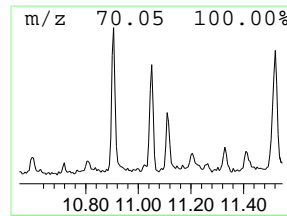
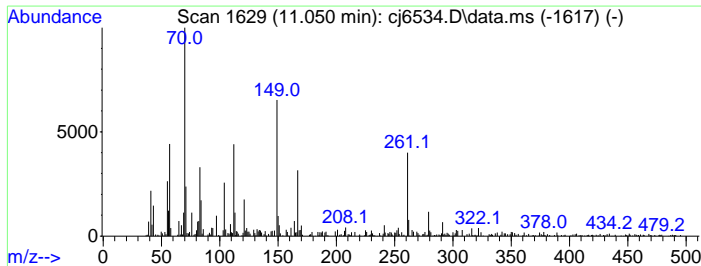
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 11 Unknown Concentration Rank 21

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.050	4.60 ppm	303858	Perylene-d12	11.714

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	1,2-Benzenedicarboxylic acid, di...	390	C24H38O4	027554-26-3	35
2		2-Propenoic acid, 2-methyl-, oct...	198	C12H22O2	002157-01-9	25
3		1,2-Benzenedicarboxylic acid, di...	390	C24H38O4	027554-26-3	22
4		Cyclohexaneamine, N-but-2-enylid...	167	C10H17NO	068048-01-1	16
5		9-(2',2'-Dimethylpropanoilhydraz...	576	C30H42Cl2N4O3	1000111-04-6	14



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6534.D  
Acq On : 09 May 2024 11:00 pm  
Operator : rocquans  
Sample : jd87833-10  
Misc : op54460,ecj297,30.6,,,1,1  
ALS Vial : 25 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

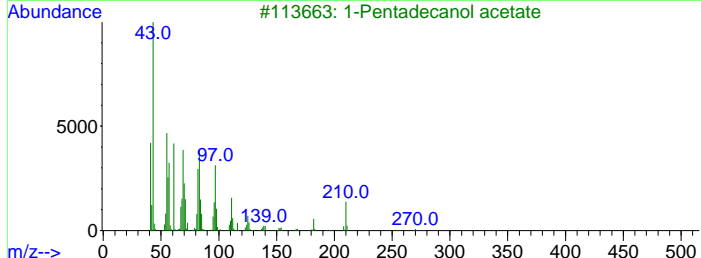
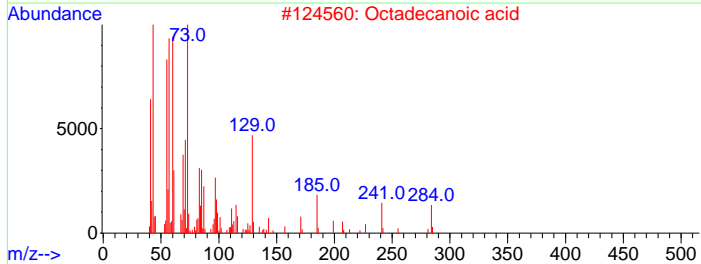
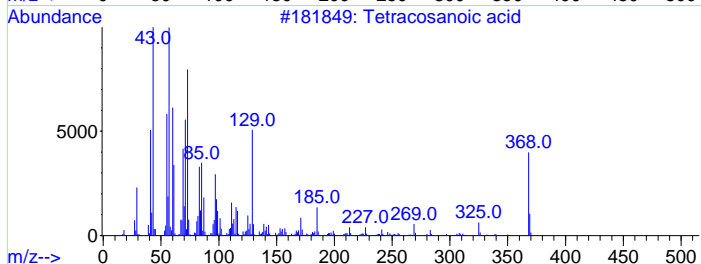
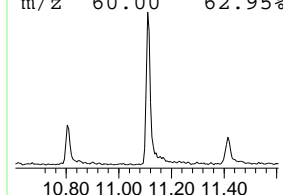
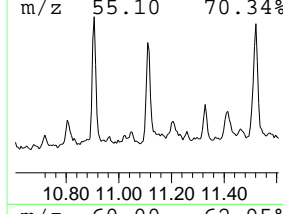
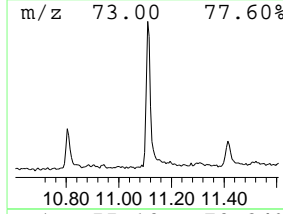
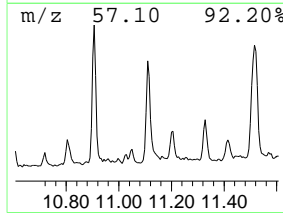
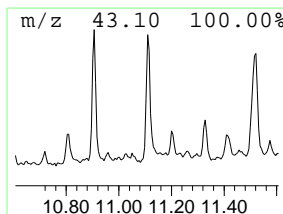
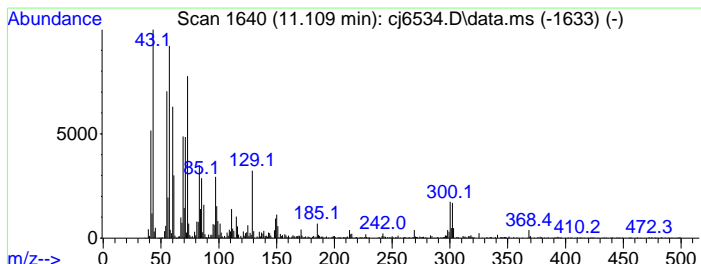
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 12 Unknown acid Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.109	17.45 ppm	1152930	Perylene-d12	11.714

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Tetracosanoic acid	368	C24H48O2	000557-59-5	81
2		Octadecanoic acid	284	C18H36O2	000057-11-4	70
3		1-Pentadecanol acetate	270	C17H34O2	000629-58-3	41
4		Oxalic acid, allyl hexadecyl ester	354	C21H38O4	1000309-24-4	38
5		Oxalic acid, pentadecyl propyl e...	342	C20H38O4	1000309-26-8	38



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6534.D  
Acq On : 09 May 2024 11:00 pm  
Operator : rocquans  
Sample : jd87833-10  
Misc : op54460,ecj297,30.6,,,1,1  
ALS Vial : 25 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

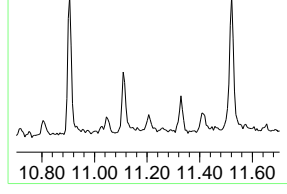
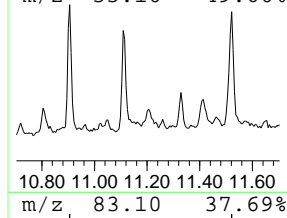
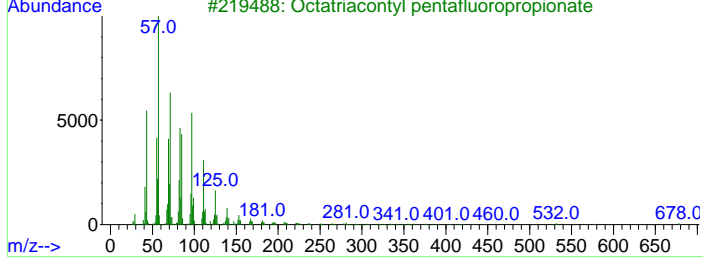
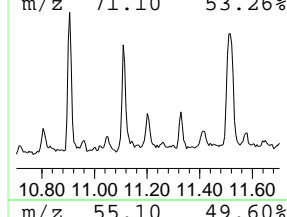
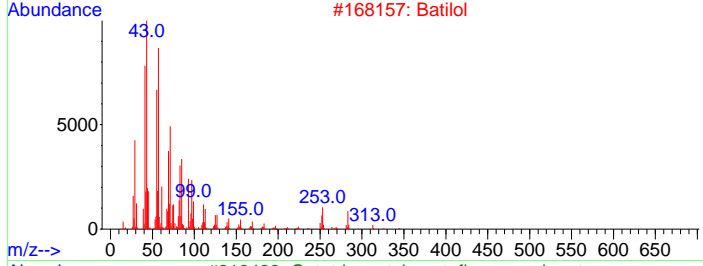
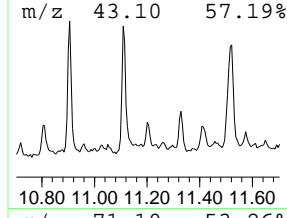
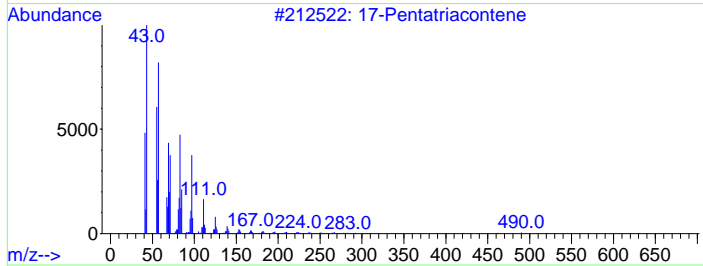
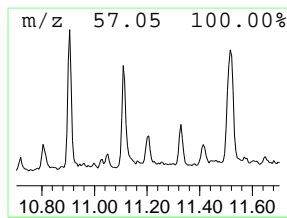
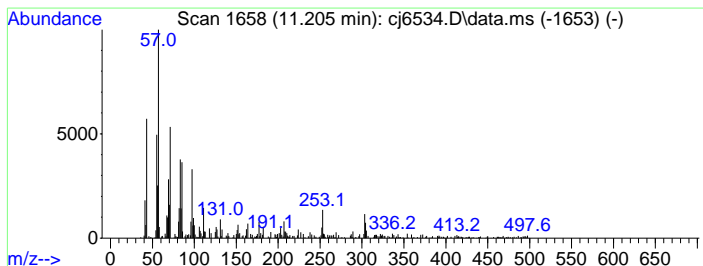
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 13 Unknown Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.205	7.80 ppm	515177	Perylene-d12	11.714

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	17-Pentatriacontene	491	C35H70	006971-40-0	83
2		Batilol	344	C21H44O3	000544-62-7	64
3		Octatriacontyl pentafluoropropio...	697	C41H77F5O2	1000351-89-1	64
4		Octadecane	254	C18H38	000593-45-3	60
5		Tetracosane	338	C24H50	000646-31-1	60



7.1.21  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6534.D  
Acq On : 09 May 2024 11:00 pm  
Operator : rocquans  
Sample : jd87833-10  
Misc : op54460,ecj297,30.6,,,1,1  
ALS Vial : 25 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

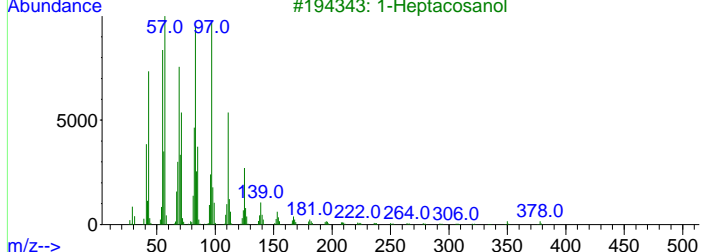
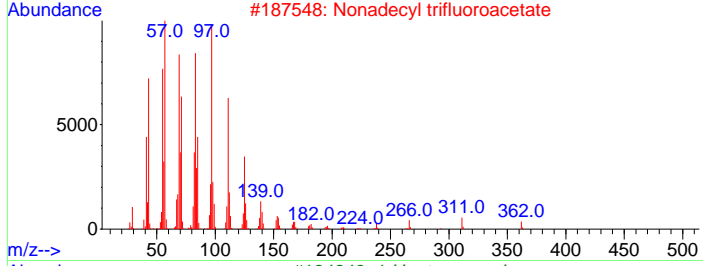
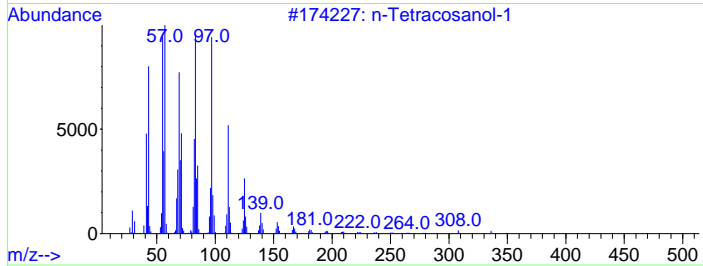
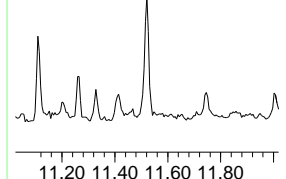
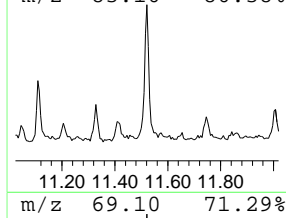
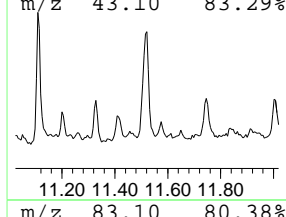
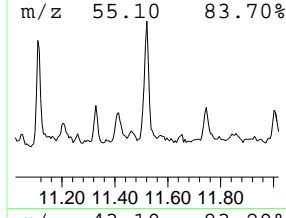
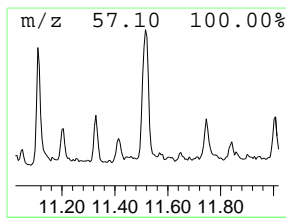
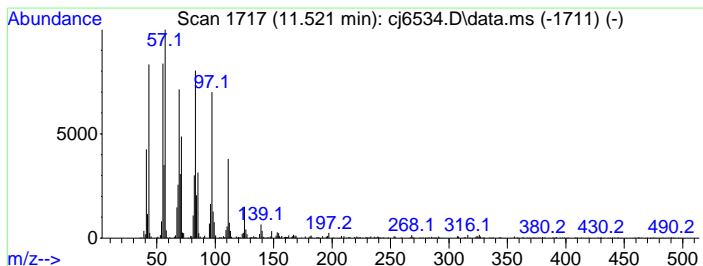
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 14 Unknown Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.521	15.66 ppm	1034910	Perylene-d12	11.714

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Tetracosanol-1	354	C24H50O	000506-51-4	94
2	Nonadecyl trifluoroacetate	380	C21H39F3O2	1000351-76-3	91
3	1-Heptacosanol	396	C27H56O	002004-39-9	91
4	Cyclopentadecane	210	C15H30	000295-48-7	90
5	Behenic alcohol	326	C22H46O	000661-19-8	90



7.1.21  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6534.D  
 Acq On : 09 May 2024 11:00 pm  
 Operator : rocquans  
 Sample : jd87833-10  
 Misc : op54460,ecj297,30.6,,,1,1  
 ALS Vial : 25 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

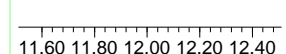
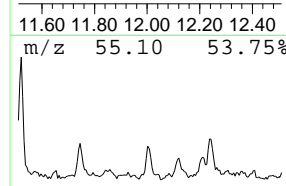
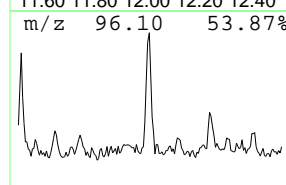
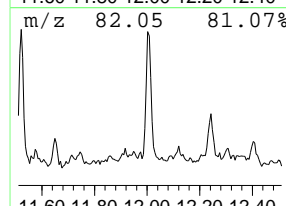
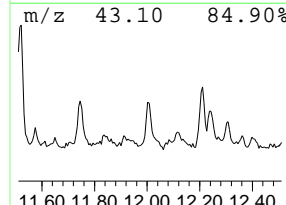
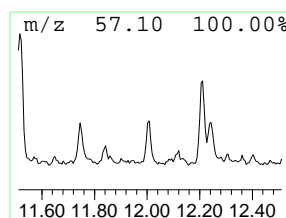
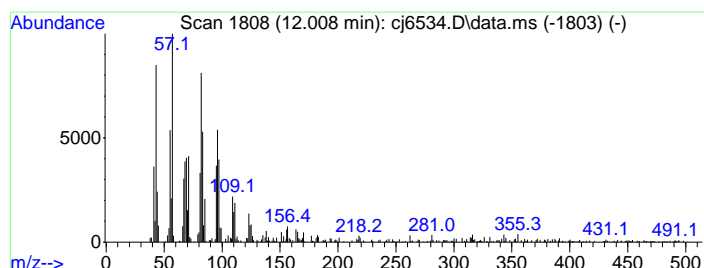
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 15 Unknown Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.008	6.04 ppm	399370	Perylene-d12	11.714

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Oxirane, heptadecyl-	282	C19H38O	067860-04-2	93
2		Tetradecanal	212	C14H28O	000124-25-4	91
3		Octadecanal	268	C18H36O	000638-66-4	91
4		Oxirane, hexadecyl-	268	C18H36O	007390-81-0	87
5		Oxirane, hexadecyl-	268	C18H36O	007390-81-0	83



7.1.21  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6534.D  
Acq On : 09 May 2024 11:00 pm  
Operator : rocquans  
Sample : jd87833-10  
Misc : op54460,ecj297,30.6,,,1,1  
ALS Vial : 25 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

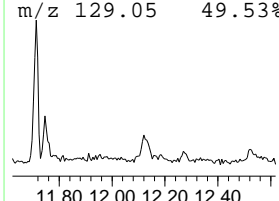
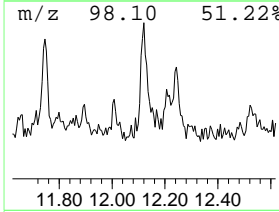
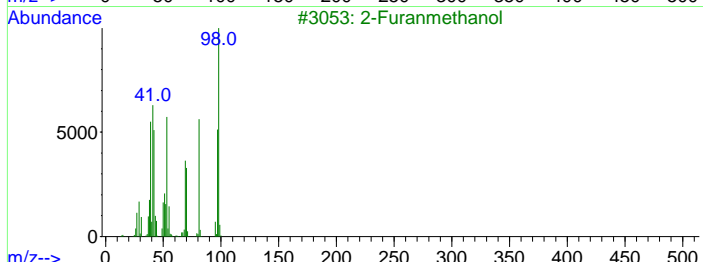
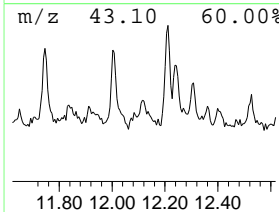
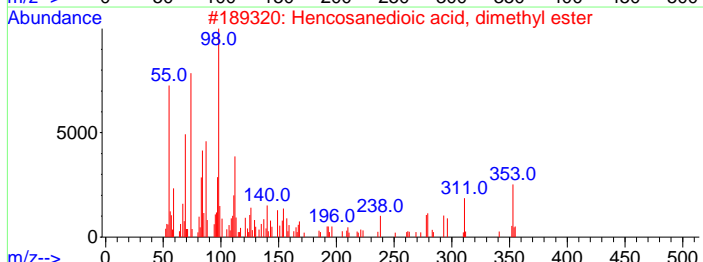
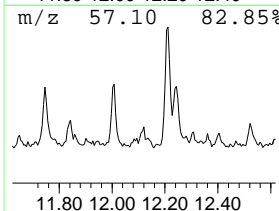
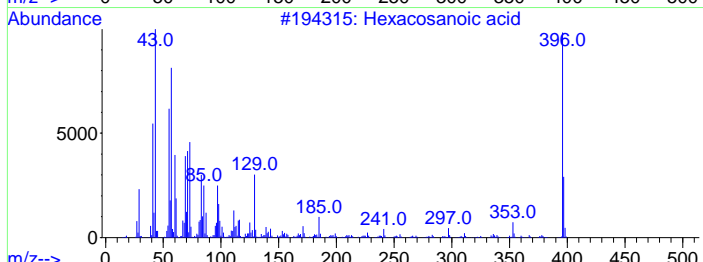
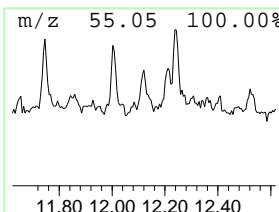
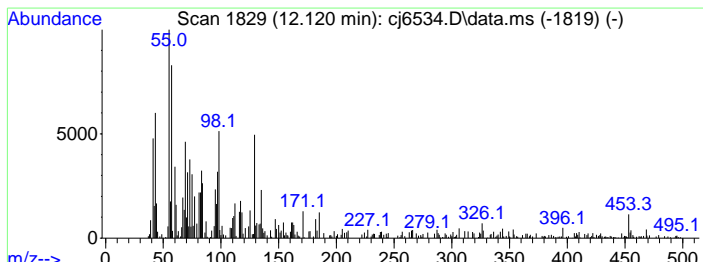
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 16 Unknown acid Concentration Rank 25

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.120	4.35 ppm	287436	Perylene-d12	11.714

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Hexacosanoic acid	396	C26H52O2	000506-46-7	27
2		Hencosanedioic acid, dimethyl ester	384	C23H44O4	042235-57-4	12
3		2-Furanmethanol	98	C5H6O2	000098-00-0	9
4		Octadecanoic acid, propyl ester	326	C21H42O2	003634-92-2	9
5		9-Octadecene, 1,1-dimethoxy-, (Z)-	312	C20H40O2	015677-71-1	9



7.1.21  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6534.D  
Acq On : 09 May 2024 11:00 pm  
Operator : rocquans  
Sample : jd87833-10  
Misc : op54460,ecj297,30.6,,,1,1  
ALS Vial : 25 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

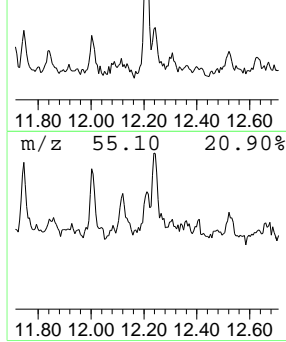
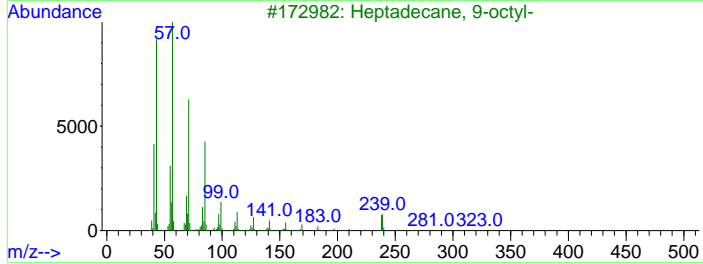
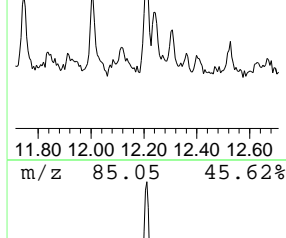
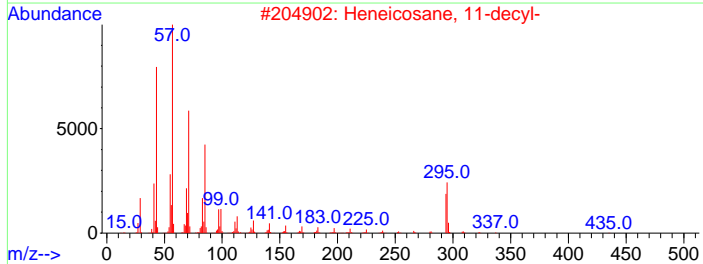
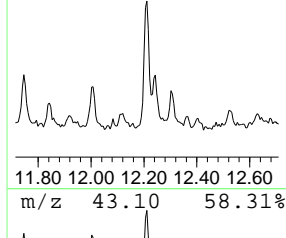
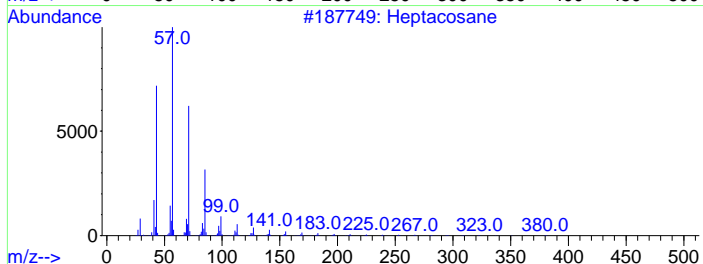
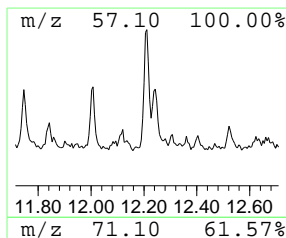
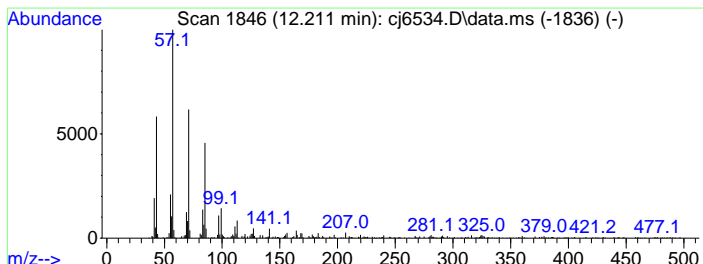
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 17 Alkane Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.211	5.39 ppm	356391	Perylene-d12	11.714

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Heptacosane	380	C27H56	000593-49-7	91
2			Heneicosane, 11-decyl-	437	C31H64	055320-06-4	89
3			Heptadecane, 9-octyl-	352	C25H52	007225-64-1	87
4			Tetratetracontane	619	C44H90	007098-22-8	86
5			Octadecane	254	C18H38	000593-45-3	83



7.1.21  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6534.D  
Acq On : 09 May 2024 11:00 pm  
Operator : rocquans  
Sample : jd87833-10  
Misc : op54460,ecj297,30.6,,,1,1  
ALS Vial : 25 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

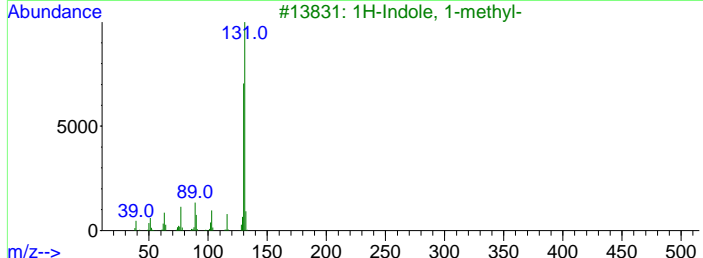
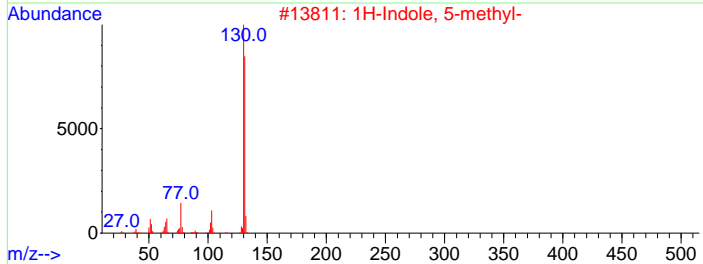
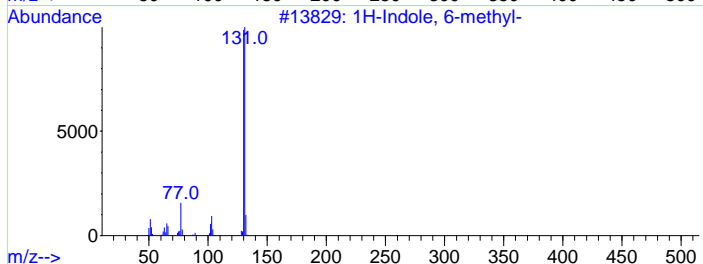
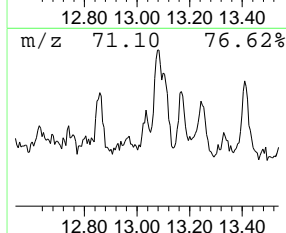
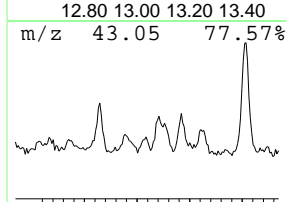
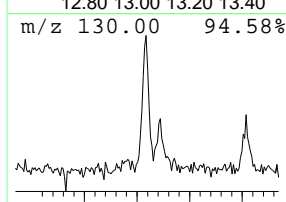
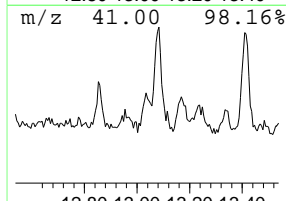
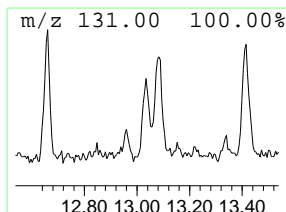
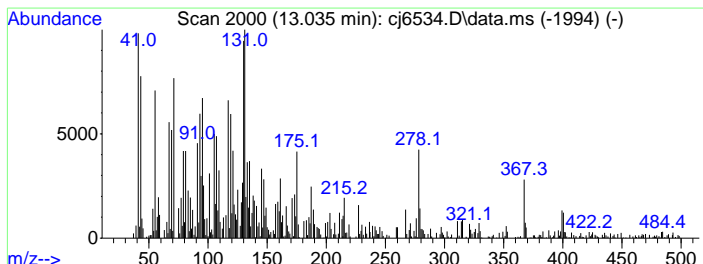
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 18 Unknown Concentration Rank 23

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.035	4.49 ppm	296568	Perylene-d12	11.714

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			1H-Indole, 6-methyl-	131	C9H9N	003420-02-8	18
2			1H-Indole, 5-methyl-	131	C9H9N	000614-96-0	14
3			1H-Indole, 1-methyl-	131	C9H9N	000603-76-9	14
4			.beta.-Benzal-n-butyramide	175	C11H13NO	007236-47-7	14
5			1H-Indole-3-ethanamine, N-methyl-	174	C11H14N2	000061-49-4	14



7.1.21  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6534.D  
 Acq On : 09 May 2024 11:00 pm  
 Operator : rocquans  
 Sample : jd87833-10  
 Misc : op54460,ecj297,30.6,,,1,1  
 ALS Vial : 25 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

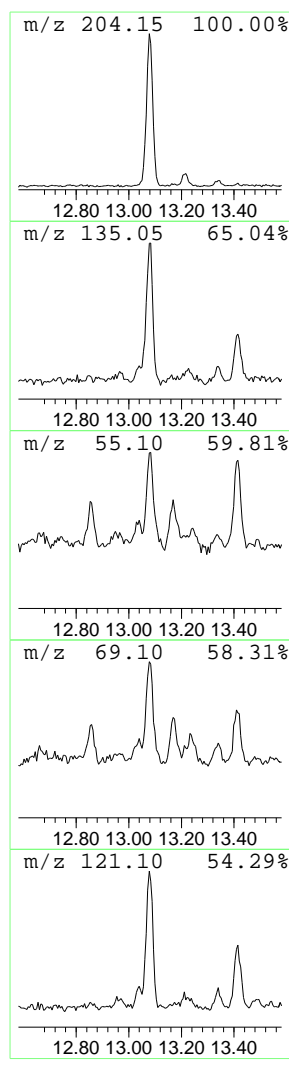
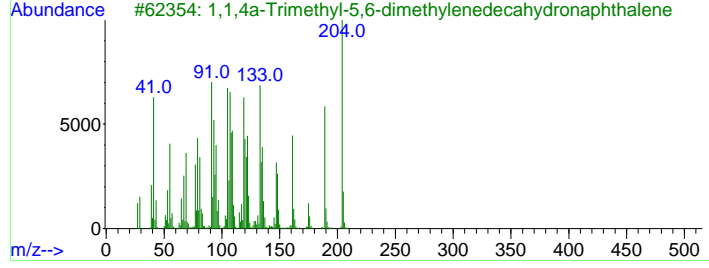
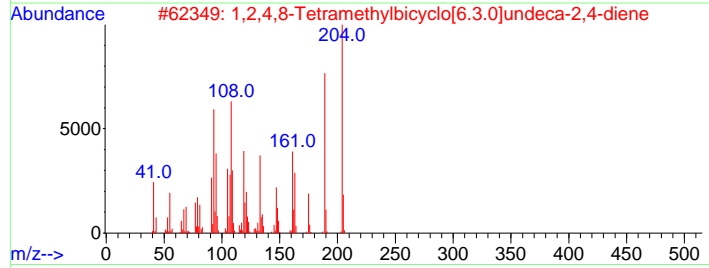
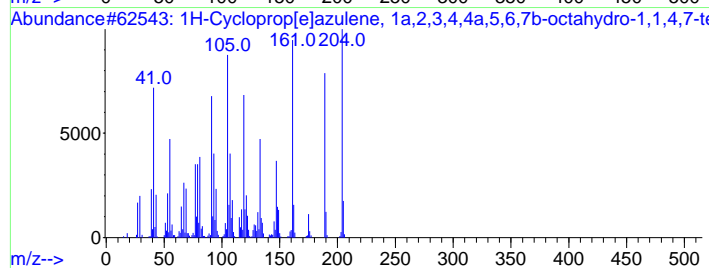
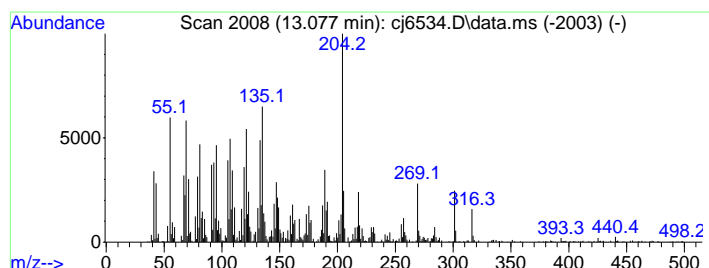
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 19 Unknown Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.078	23.12 ppm	1527810	Perylene-d12	11.714

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	1H-Cycloprop[e]azulene, 1a,2,3,4...	204	C15H24	000489-40-7	78
2		1,2,4,8-Tetramethylbicyclo[6.3.0]...	204	C15H24	137235-51-9	78
3		1,1,4a-Trimethyl-5,6-dimethylene...	204	C15H24	1000193-60-8	53
4		Naphthalene, 1,2,3,5,6,7,8,8a-oc...	204	C15H24	004630-07-3	52
5		1,4-Dimethyl-8-isopropylidenetri...	204	C15H24	1000140-07-7	46



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6534.D  
 Acq On : 09 May 2024 11:00 pm  
 Operator : rocquans  
 Sample : jd87833-10  
 Misc : op54460,ecj297,30.6,,,1,1  
 ALS Vial : 25 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

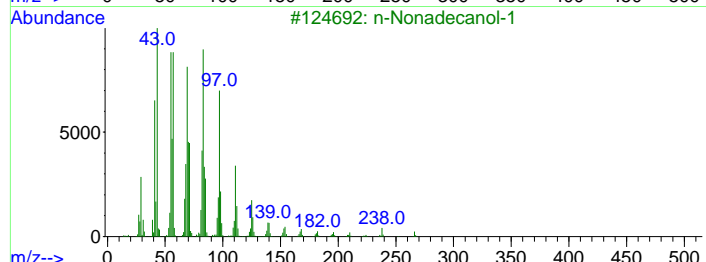
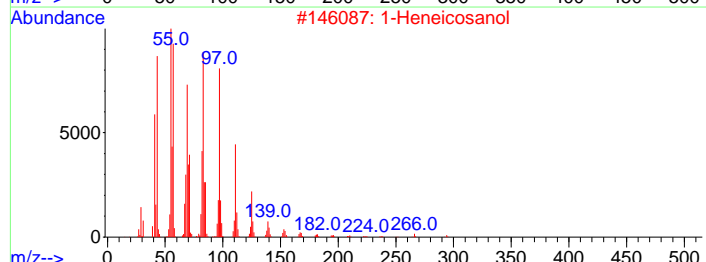
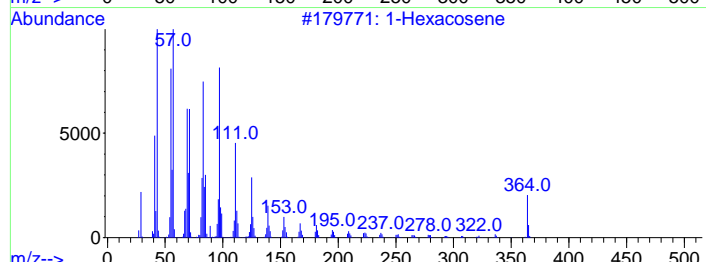
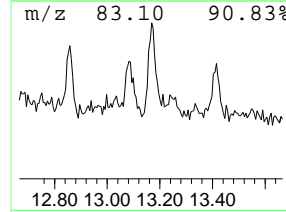
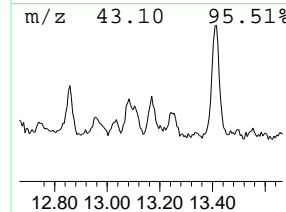
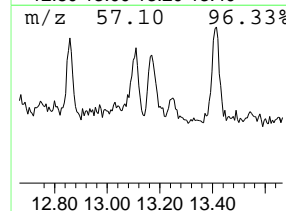
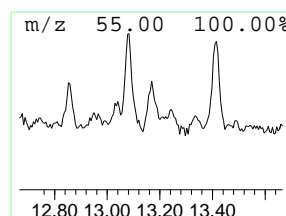
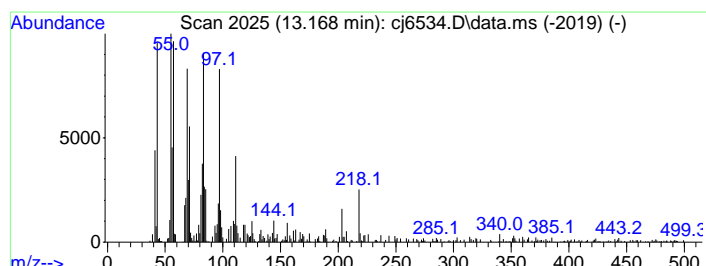
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 20 Unknown Concentration Rank 22

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.168	4.52 ppm	298834	Perylene-d12	11.714

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			1-Hexacosene	364	C26H52	018835-33-1	89
2			1-Heneicosanol	312	C21H44O	015594-90-8	83
3			n-Nonadecanol-1	284	C19H40O	001454-84-8	80
4			1-Docosene	308	C22H44	001599-67-3	68
5			17-Pentatriacontene	491	C35H70	006971-40-0	64



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6534.D  
Acq On : 09 May 2024 11:00 pm  
Operator : rocquans  
Sample : jd87833-10  
Misc : op54460,ecj297,30.6,,,1,1  
ALS Vial : 25 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

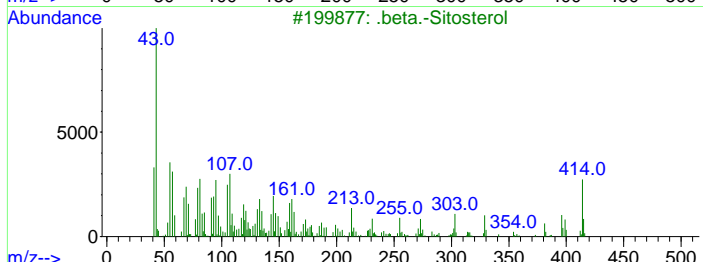
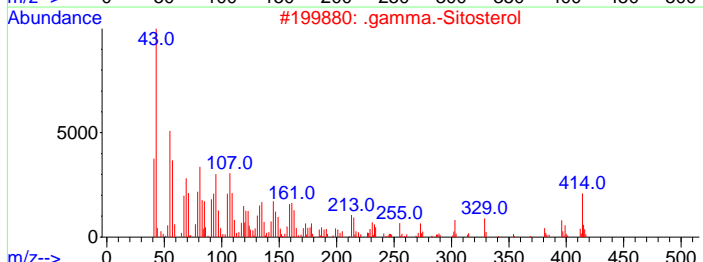
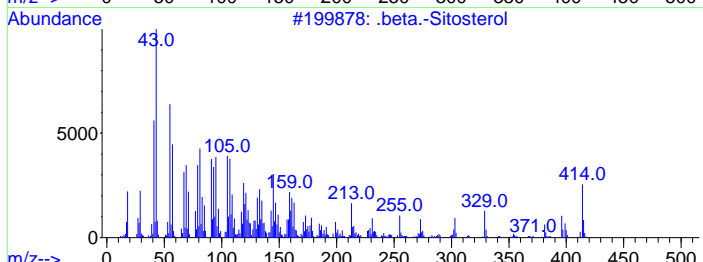
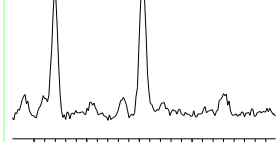
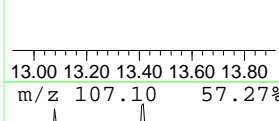
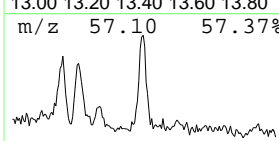
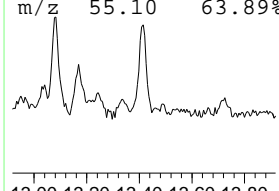
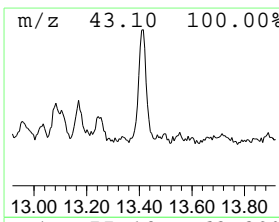
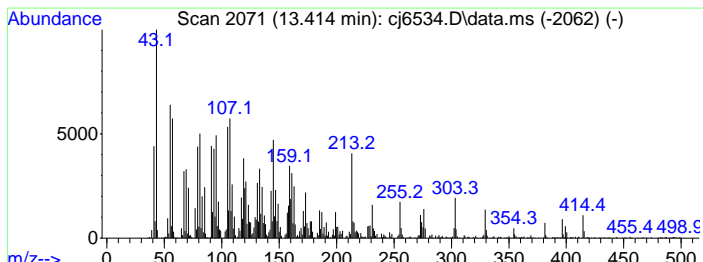
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 21 Unknown Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.415	19.97 ppm	1319810	Perylene-d12	11.714

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	.beta.-Sitosterol	414	C29H50O	000083-46-5	99
2		.gamma.-Sitosterol	414	C29H50O	000083-47-6	86
3		.beta.-Sitosterol	414	C29H50O	000083-46-5	86
4		.gamma.-Sitosterol	414	C29H50O	000083-47-6	70
5		Ergost-5-en-3-ol, (3.beta.)-	400	C28H48O	004651-51-8	62



7.1.21  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6534.D  
Acq On : 09 May 2024 11:00 pm  
Operator : rocquans  
Sample : jd87833-10  
Misc : op54460,ecj297,30.6,,,1,1  
ALS Vial : 25 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

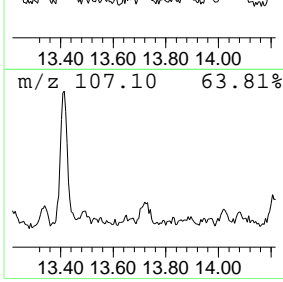
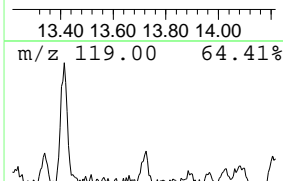
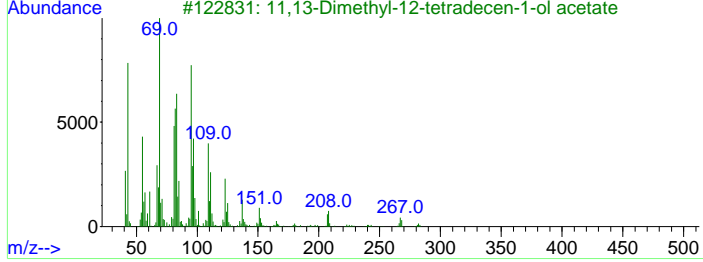
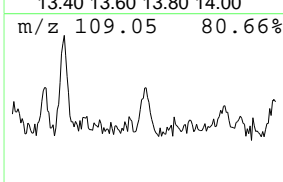
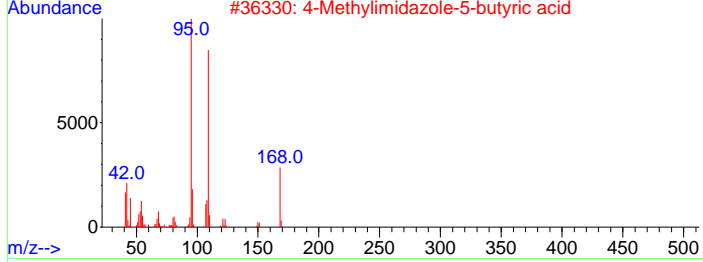
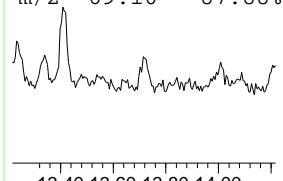
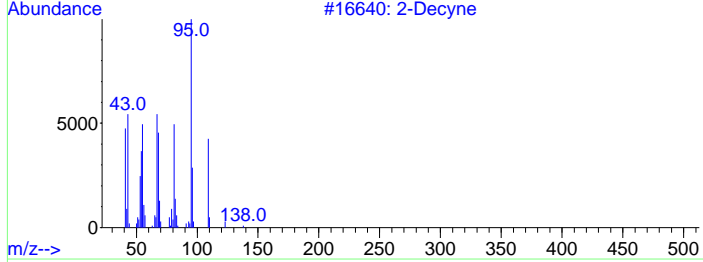
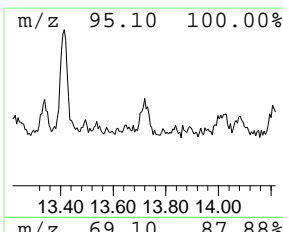
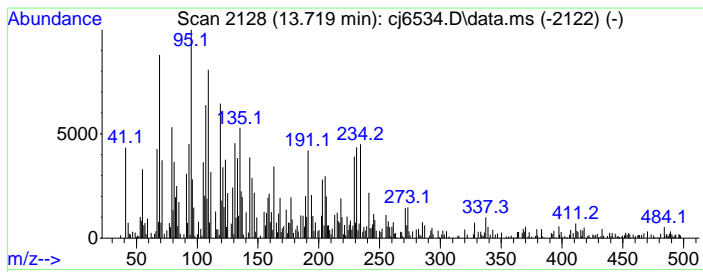
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 22 Unknown Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.719	4.79 ppm	316518	Perylene-d12	11.714

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2-Decyne	138	C10H18	002384-70-5	22
2		4-Methylimidazole-5-butyric acid	168	C8H12N2O2	1000129-14-7	22
3		11,13-Dimethyl-12-tetradecen-1-o...	282	C18H34O2	1000130-81-0	15
4		Sesquirosefuran	218	C15H22O	039007-93-7	15
5		Fenretinide	391	C26H33NO2	065646-68-6	14



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6534.D  
Acq On : 09 May 2024 11:00 pm  
Operator : rocquans  
Sample : jd87833-10  
Misc : op54460,ecj297,30.6,,,1,1  
ALS Vial : 25 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

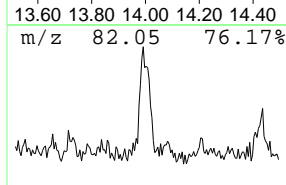
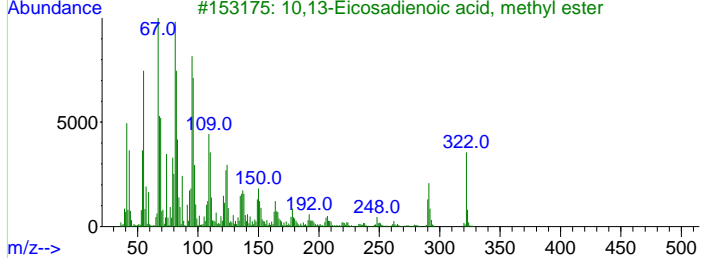
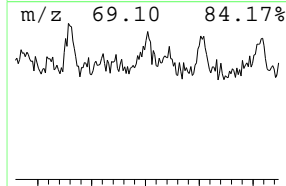
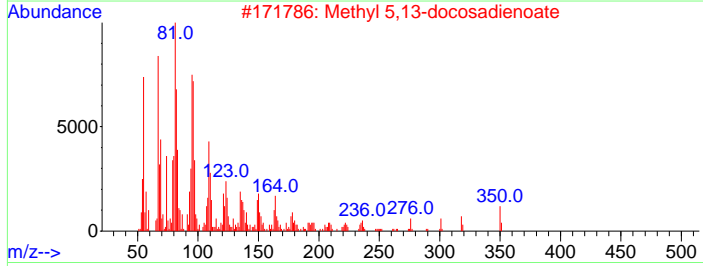
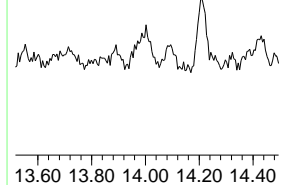
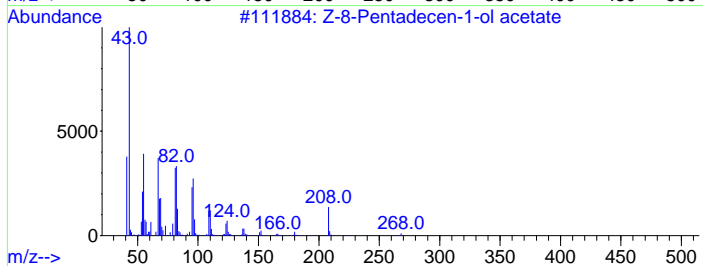
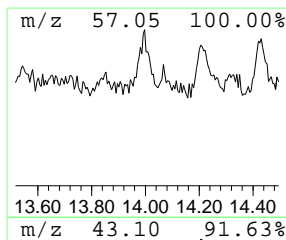
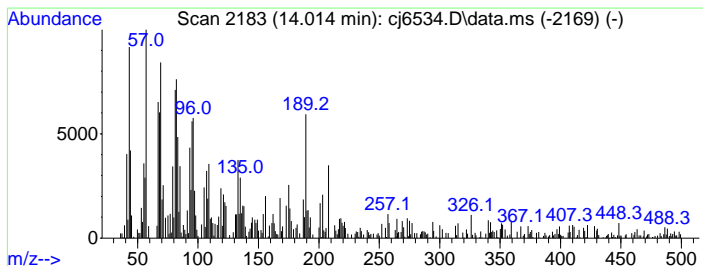
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 23 Unknown Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.014	5.58 ppm	368614	Perylene-d12	11.714

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Z-8-Pentadecen-1-ol acetate	268	C17H32O2	1000130-85-1	55
2		Methyl 5,13-docosadienoate	350	C23H42O2	1000336-51-0	52
3		10,13-Eicosadienoic acid, methyl...	322	C21H38O2	030223-50-8	47
4		6-Octen-1-ol, 3,7-dimethyl-	156	C10H20O	000106-22-9	46
5		Z-11(13-Methyl)tetradecen-1-ol a...	268	C17H32O2	1000131-33-3	45



7.1.21  
7

Library Search Compound Report

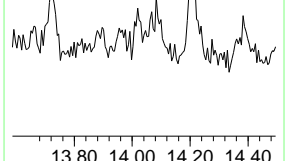
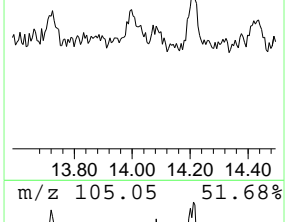
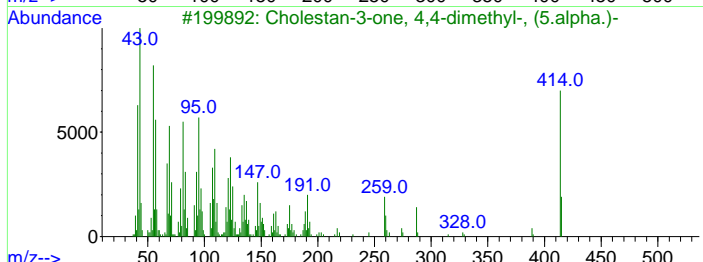
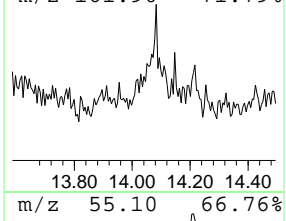
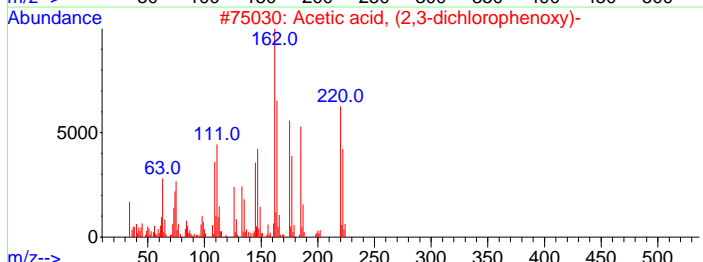
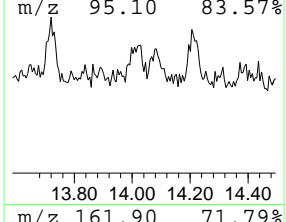
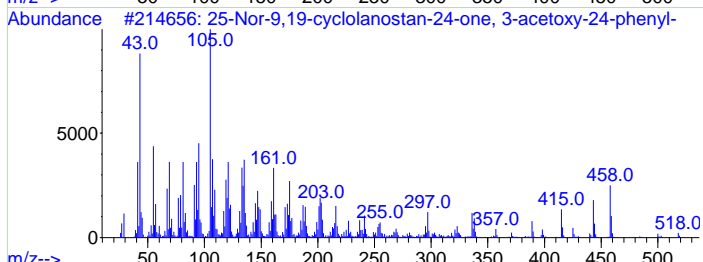
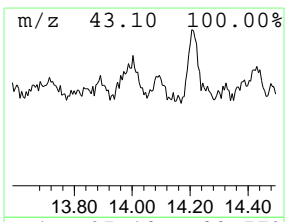
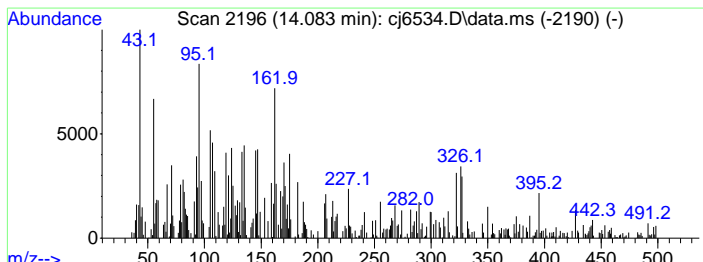
Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\
Data File : cj6534.D
Acq On : 09 May 2024 11:00 pm
Operator : rocquans
Sample : jd87833-10
Misc : op54460,ecj297,30.6,,,1,1
ALS Vial : 25 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: lscint.p

\*\*\*\*\*
Peak Number 24 Unknown Concentration Rank 17

Table with 7 columns: R.T., EstConc, Area, Relative to ISTD, R.T., Hit# of, and Tentative ID. It lists several chemical compounds like Perylene-d12, 25-Nor-9,19-cyclolanostan-24-one, Acetic acid, Cholestan-3-one, and Oxamide.



7.1.21
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6534.D  
 Acq On : 09 May 2024 11:00 pm  
 Operator : rocquans  
 Sample : jd87833-10  
 Misc : op54460,ecj297,30.6,,,1,1  
 ALS Vial : 25 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

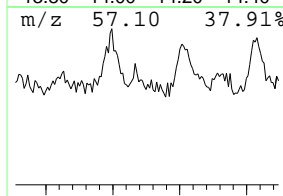
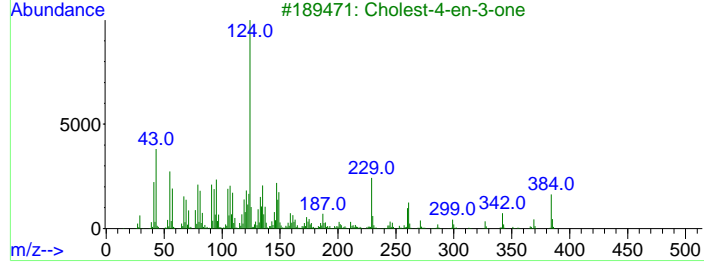
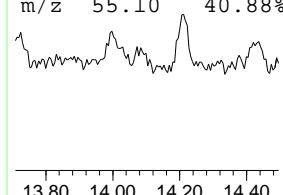
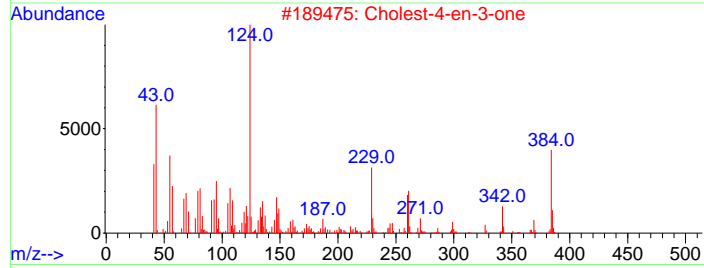
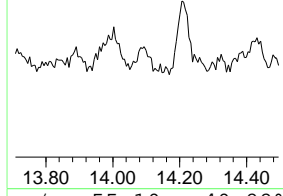
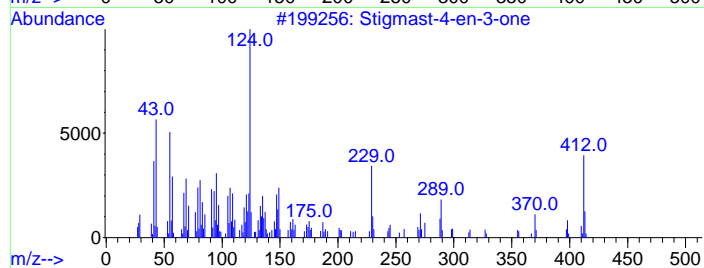
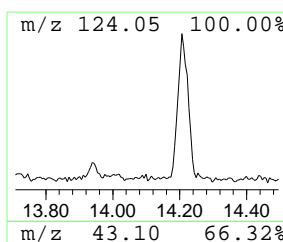
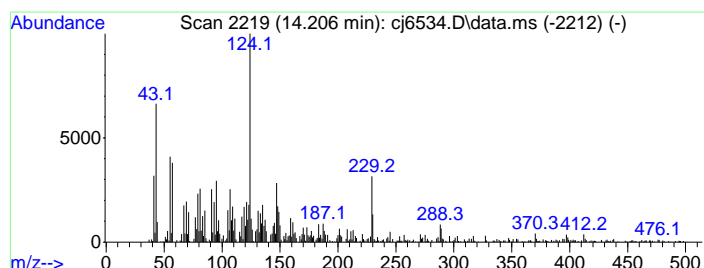
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 25 Unknown Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.206	8.12 ppm	536530	Perylene-d12	11.714

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Stigmast-4-en-3-one	412	C29H48O	001058-61-3	93
2			Cholest-4-en-3-one	384	C27H44O	000601-57-0	83
3			Cholest-4-en-3-one	384	C27H44O	000601-57-0	83
4			Cholest-4-en-3-one	384	C27H44O	000601-57-0	80
5			Androst-4-en-3-one, 17-hydroxy-, ...	288	C19H28O2	000604-39-7	70



7.1.21  
7

Tentatively Identified Compound (LSC) summary

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6534.D  
Acq On : 09 May 2024 11:00 pm  
Operator : rocquans  
Sample : jd87833-10  
Misc : op54460,ecj297,30.6,,,1,1  
ALS Vial : 25 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
Unknown	4.247	9.7	ppm	504180	2	4.664	2080240	40.0
n-Hexadecanoic ...	8.371	17.4	ppm	1359480	8	7.868	3128200	40.0
Unknown acid	9.045	5.2	ppm	408407	8	7.868	3128200	40.0
Octadecanoic acid	9.119	8.2	ppm	584638	9	10.366	2845040	40.0
Eicosanoic acid	9.831	5.6	ppm	395712	9	10.366	2845040	40.0
Unknown	10.072	4.4	ppm	314607	9	10.366	2845040	40.0
Unknown	10.189	4.7	ppm	336597	9	10.366	2845040	40.0
Cyclohexane alkyl	10.269	8.2	ppm	580189	9	10.366	2845040	40.0
Octadecanoic acid	10.494	13.2	ppm	935639	10	10.366	2845040	40.0
Alkene	10.906	13.1	ppm	934192	10	10.366	2845040	40.0
Unknown	11.050	4.6	ppm	303858	11	11.714	2643240	40.0
Unknown acid	11.109	17.4	ppm	1152930	11	11.714	2643240	40.0
Unknown	11.205	7.8	ppm	515177	11	11.714	2643240	40.0
Unknown	11.521	15.7	ppm	1034910	11	11.714	2643240	40.0
Unknown	12.008	6.0	ppm	399370	11	11.714	2643240	40.0
Unknown acid	12.120	4.3	ppm	287436	11	11.714	2643240	40.0
Alkane	12.211	5.4	ppm	356391	11	11.714	2643240	40.0
Unknown	13.035	4.5	ppm	296568	11	11.714	2643240	40.0
Unknown	13.078	23.1	ppm	1527810	11	11.714	2643240	40.0
Unknown	13.168	4.5	ppm	298834	11	11.714	2643240	40.0
Unknown	13.415	20.0	ppm	1319810	11	11.714	2643240	40.0
Unknown	13.719	4.8	ppm	316518	11	11.714	2643240	40.0
Unknown	14.014	5.6	ppm	368614	11	11.714	2643240	40.0
Unknown	14.083	5.3	ppm	350895	11	11.714	2643240	40.0
Unknown	14.206	8.1	ppm	536530	11	11.714	2643240	40.0

7.1.21  
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Quantitation Report (QT/LSC Reviewed)

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6526.D  
 Acq On : 09 May 2024 08:30 pm  
 Operator : rocquans  
 Sample : jd87833-11 Inst : GCMSCJ  
 Misc : op54460,ecj297,30.3,,,1,2  
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: May 10 18:47:52 2024  
 Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
 QLast Update : Thu May 09 12:05:48 2024  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	4.664	152	383650	40.00	ppm	0.00
24) Naphthalene-d8	5.466	136	1365898	40.00	ppm	0.00
46) Acenaphthene-d10	6.659	164	775833	40.00	ppm	0.00
69) Phenanthrene-d10	7.868	188	1398054	40.00	ppm	0.00
84) Chrysene-d12	10.360	240	982335	40.00	ppm	-0.01
93) Perylene-d12	11.714	264	979342	40.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.664	152	383650	40.00	ppm	0.00
105) Phenanthrene-d10a	7.868	188	1398054	40.00	ppm	0.00
107) Naphthalene-d8a	5.466	136	1365898	40.00	ppm	0.00
109) Phenanthrene-d10b	7.868	188	1398054	40.00	ppm	0.00
112) Chrysene-d12a	10.360	240	982335	40.00	ppm	0.00
<b>System Monitoring Compounds</b>						
5) 2-Fluorophenol	3.803	112	189170	17.15	ppm	0.00
Spiked Amount 50.000			Recovery =	34.30%		
8) Phenol-d5	4.418	99	253227	17.80	ppm	0.00
Spiked Amount 50.000			Recovery =	35.60%		
25) Nitrobenzene-d5	5.012	82	242608	17.35	ppm	0.00
Spiked Amount 50.000			Recovery =	34.70%		
51) 2-Fluorobiphenyl	6.167	172	463113	18.97	ppm	0.00
Spiked Amount 50.000			Recovery =	37.94%		
74) 2,4,6-Tribromophenol	7.269	330	63406	20.69	ppm	0.00
Spiked Amount 50.000			Recovery =	41.38%		
87) Terphenyl-d14	9.349	244	487046	20.07	ppm	0.00
Spiked Amount 50.000			Recovery =	40.14%		
110) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
<b>Target Compounds</b>						
						Qvalue
78) Phenanthrene	7.889	178	40341	1.1940	ppm	99
79) Anthracene	7.932	178	12094	0.3575	ppm	96
80) Carbazole	8.071	167	5131	0.1628	ppm	96
82) Fluoranthene	8.975	202	81109	2.2174	ppm	99
86) Pyrene	9.189	202	77978	2.3341	ppm	98
88) Butylbenzylphthalate	9.836	149	7224	0.4847	ppm	93
89) Benzo[a]anthracene	10.350	228	38345	1.2140	ppm	87
91) Chrysene	10.387	228	39244	1.3467	ppm	99
92) bis(2-Ethylhexyl)phtha...	10.403	149	8252m	0.3738	ppm	
95) Benzo[b]fluoranthene	11.344	252	45745m	1.5462	ppm	
96) Benzo[k]fluoranthene	11.366	252	14571m	0.5473	ppm	
97) Benzo[a]pyrene	11.655	252	32042	1.3083	ppm	91
98) Indeno[1,2,3-cd]pyrene	12.885	276	22883	0.7729	ppm	89
102) Benzo[g,h,i]perylene	13.227	276	25753	1.1193	ppm	98

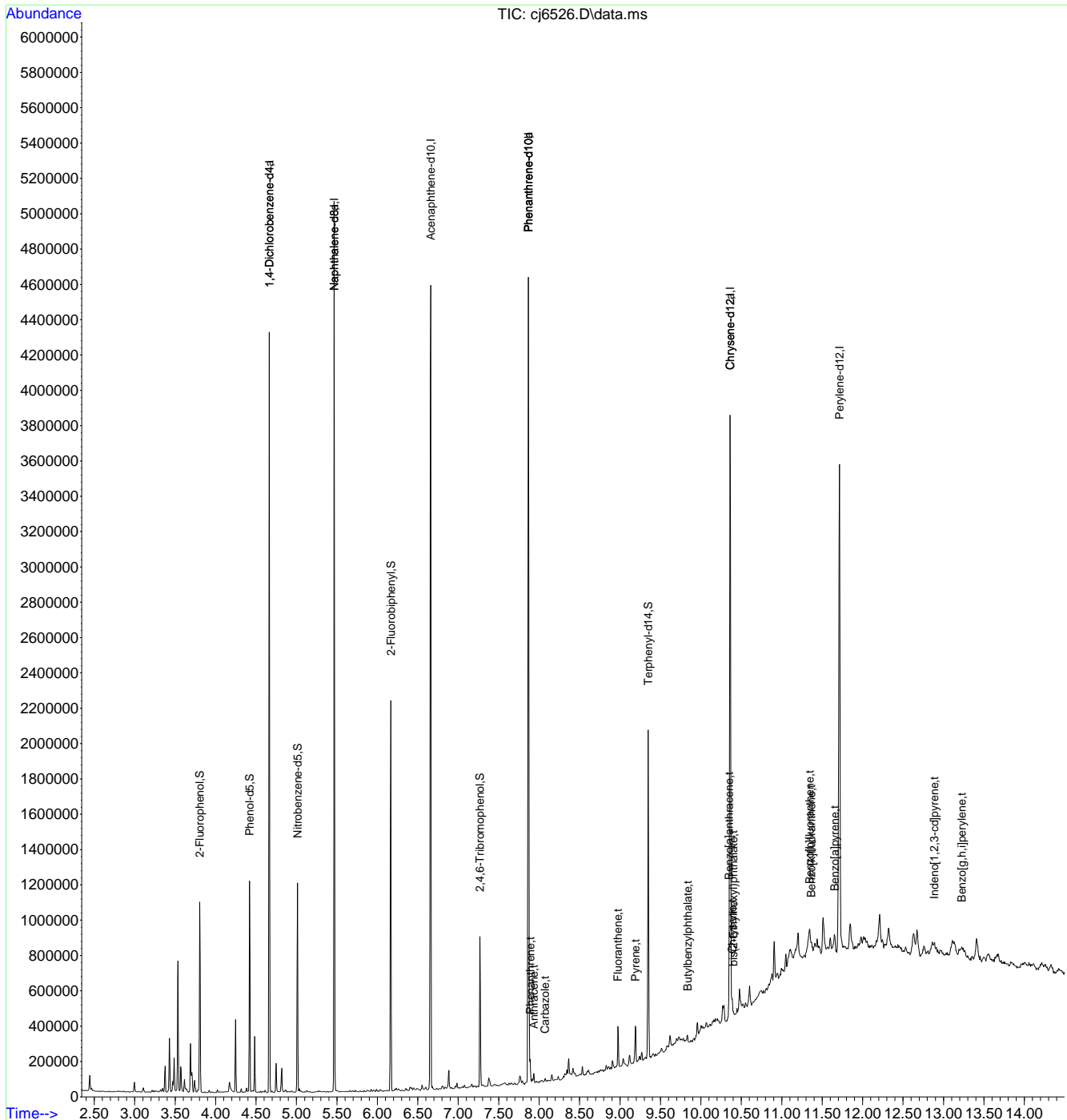
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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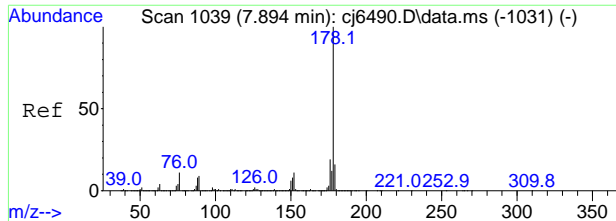
Quantitation Report (QT/LSC Reviewed)

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6526.D  
Acq On : 09 May 2024 08:30 pm  
Operator : rocquans  
Sample : jd87833-11 Inst : GCMS CJ  
Misc : op54460,ecj297,30.3,,,1,2  
ALS Vial : 17 Sample Multiplier: 1

Quant Time: May 10 18:47:52 2024  
Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
QLast Update : Thu May 09 12:05:48 2024  
Response via : Initial Calibration

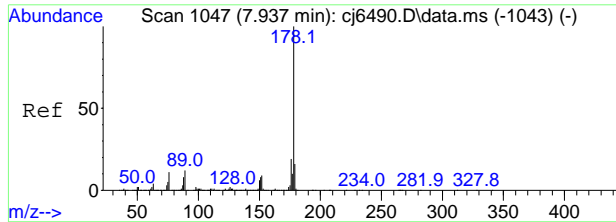
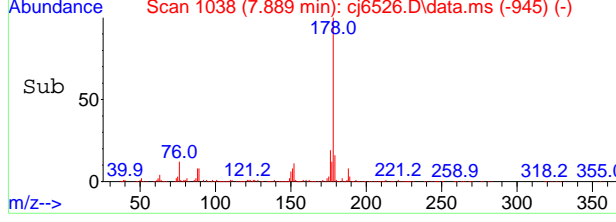
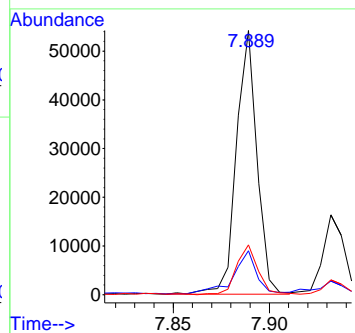
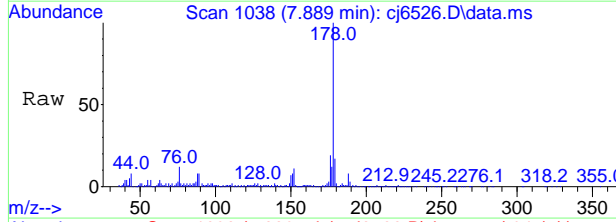


7.1.22  
7



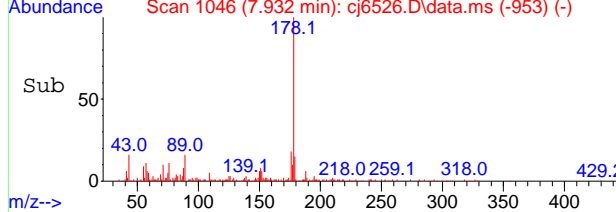
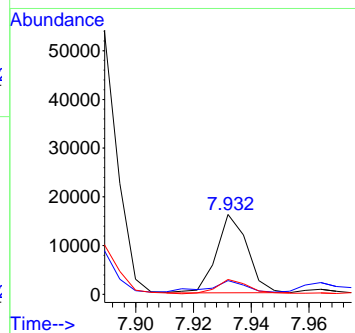
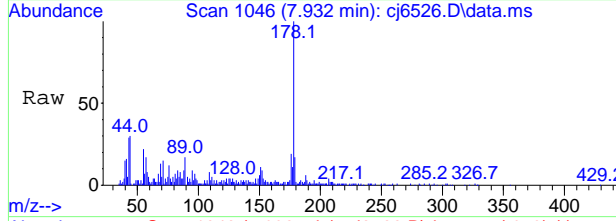
#78  
 Phenanthrene  
 Concen: 1.1940 ppm  
 RT: 7.889 min Scan# 1038  
 Delta R.T. -0.005 min  
 Lab File: cj6526.D  
 Acq: 09 May 2024 08:30 pm

Tgt Ion	Ratio	Lower	Upper
178	100		
179	16.0	0.0	45.5
176	18.6	0.0	49.2



#79  
 Anthracene  
 Concen: 0.3575 ppm  
 RT: 7.932 min Scan# 1046  
 Delta R.T. -0.005 min  
 Lab File: cj6526.D  
 Acq: 09 May 2024 08:30 pm

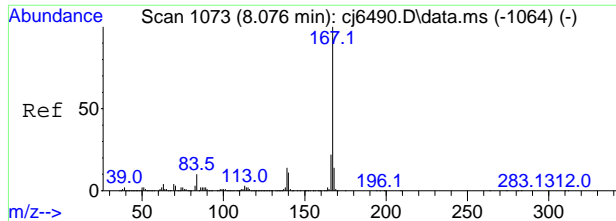
Tgt Ion	Ratio	Lower	Upper
178	100		
179	13.8	0.0	46.1
176	17.3	0.0	48.7



7.1.22  
7

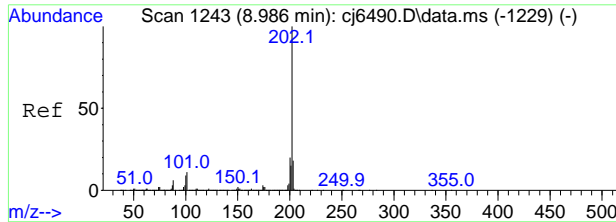
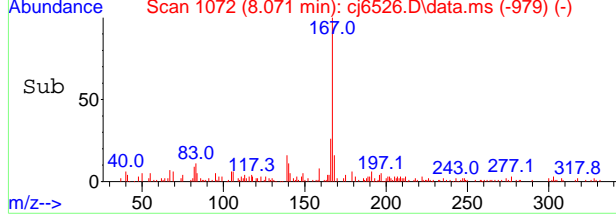
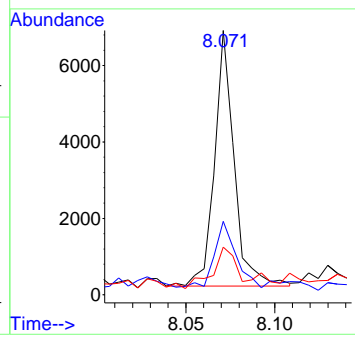
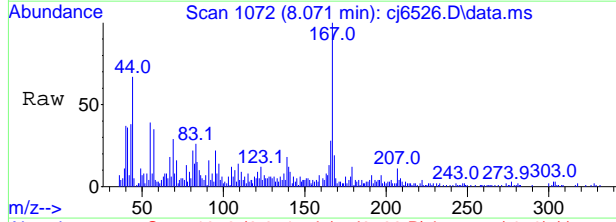






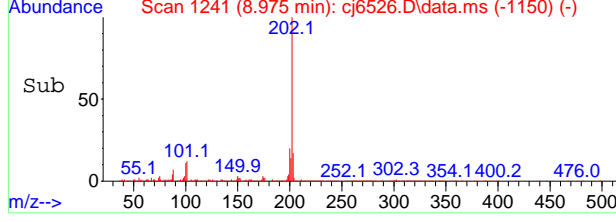
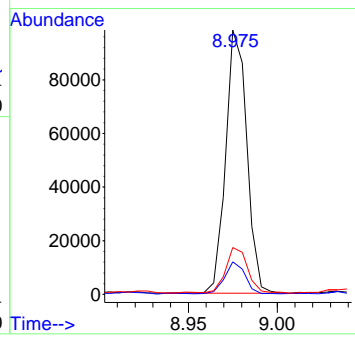
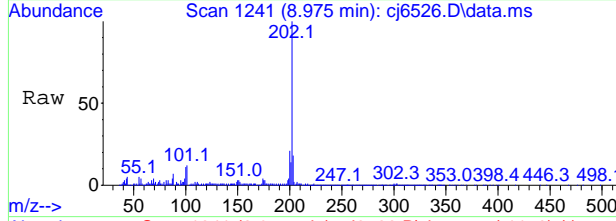
#80  
 Carbazole  
 Concen: 0.1628 ppm  
 RT: 8.071 min Scan# 1072  
 Delta R.T. -0.005 min  
 Lab File: cj6526.D  
 Acq: 09 May 2024 08:30 pm

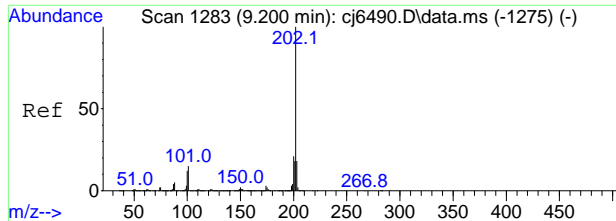
Tgt Ion	Resp	Lower	Upper
167	5131		
166	24.2	0.0	51.7
139	13.0	0.0	43.8



#82  
 Fluoranthene  
 Concen: 2.2174 ppm  
 RT: 8.975 min Scan# 1241  
 Delta R.T. -0.011 min  
 Lab File: cj6526.D  
 Acq: 09 May 2024 08:30 pm

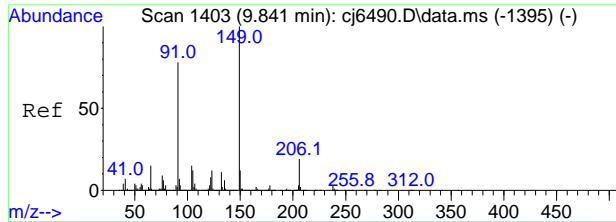
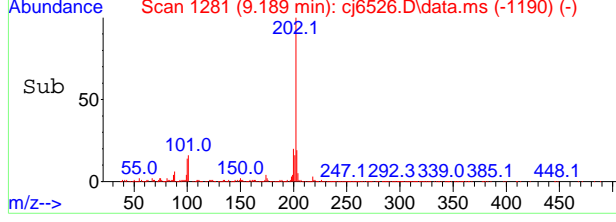
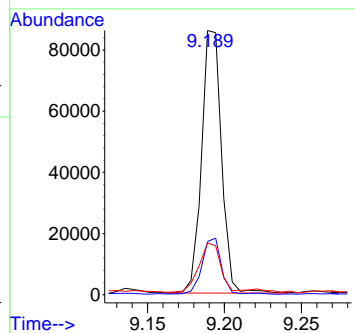
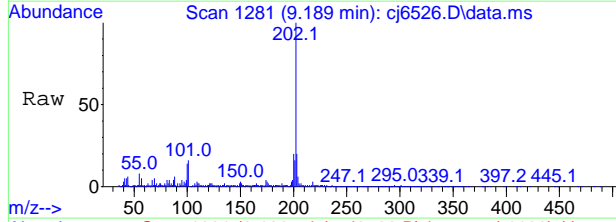
Tgt Ion	Resp	Lower	Upper
202	81109		
101	12.0	0.0	41.4
203	17.2	0.0	47.6





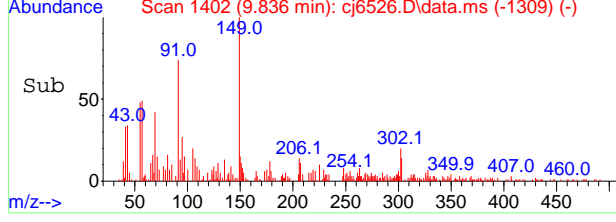
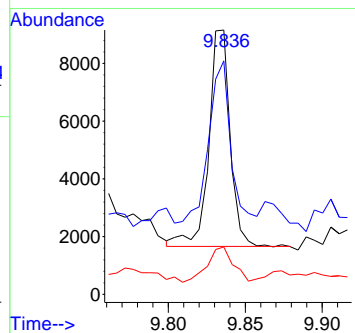
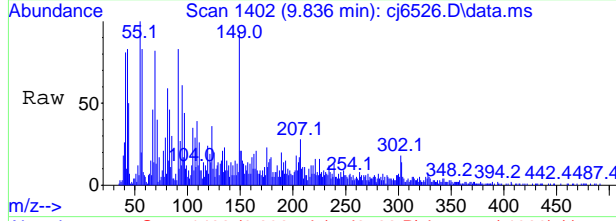
#86  
 Pyrene  
 Concen: 2.3341 ppm  
 RT: 9.189 min Scan# 1281  
 Delta R.T. -0.011 min  
 Lab File: cj6526.D  
 Acq: 09 May 2024 08:30 pm

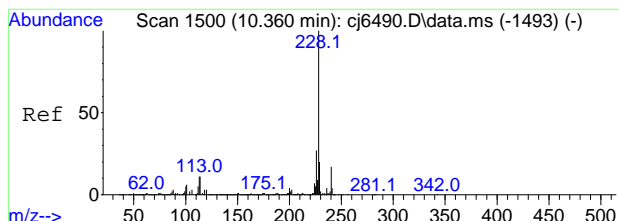
Tgt Ion	Resp	Lower	Upper
202	77978		
200	20.0	0.0	51.4
203	18.6	0.0	47.8



#88  
 Butylbenzylphthalate  
 Concen: 0.4847 ppm  
 RT: 9.836 min Scan# 1402  
 Delta R.T. -0.005 min  
 Lab File: cj6526.D  
 Acq: 09 May 2024 08:30 pm

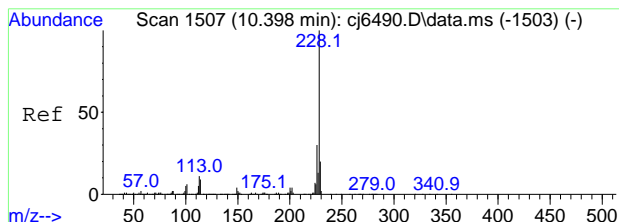
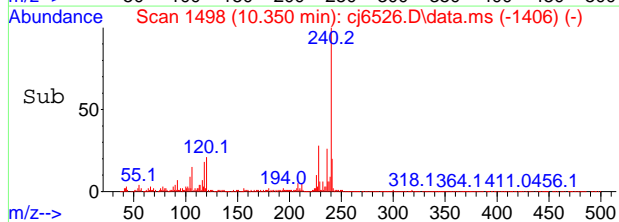
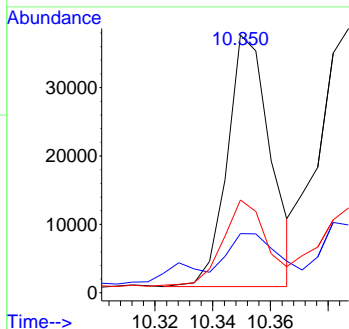
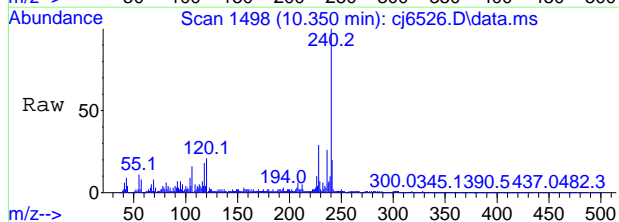
Tgt Ion	Resp	Lower	Upper
149	7224		
149	100		
91	72.4	47.9	107.9
206	14.1	0.0	48.6





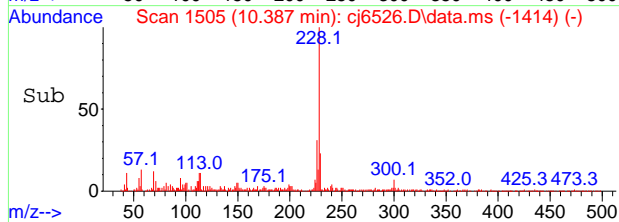
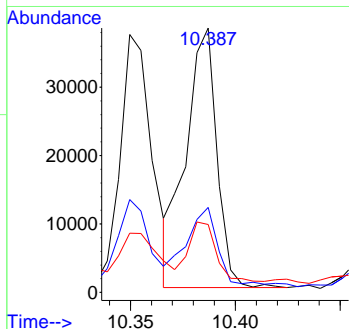
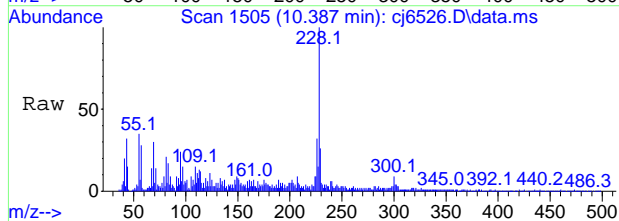
#89  
 Benzo[a]anthracene  
 Concen: 1.2140 ppm  
 RT: 10.350 min Scan# 1498  
 Delta R.T. -0.010 min  
 Lab File: cj6526.D  
 Acq: 09 May 2024 08:30 pm

Tgt Ion	Ratio	Lower	Upper
228	100		
229	15.5	0.0	49.8
226	34.9	0.0	57.1

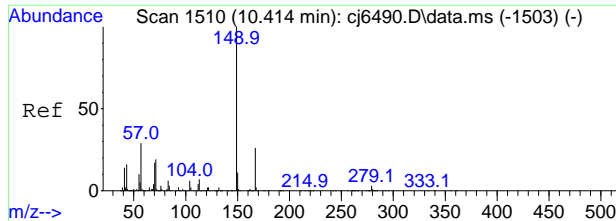


#91  
 Chrysene  
 Concen: 1.3467 ppm  
 RT: 10.387 min Scan# 1505  
 Delta R.T. -0.011 min  
 Lab File: cj6526.D  
 Acq: 09 May 2024 08:30 pm

Tgt Ion	Ratio	Lower	Upper
228	100		
226	30.1	0.0	59.9
229	20.3	0.0	49.8

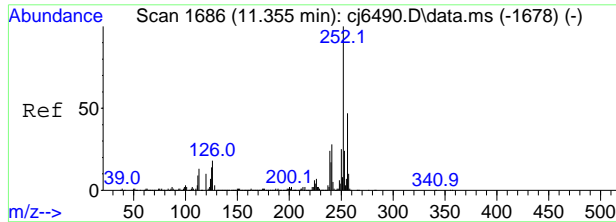
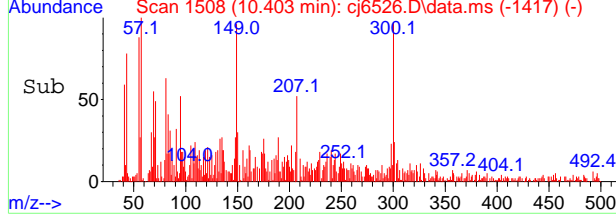
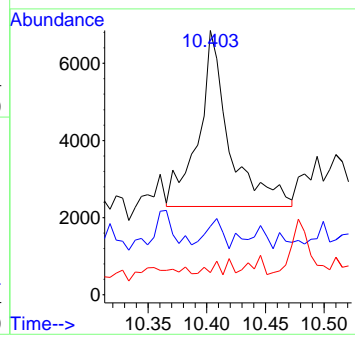
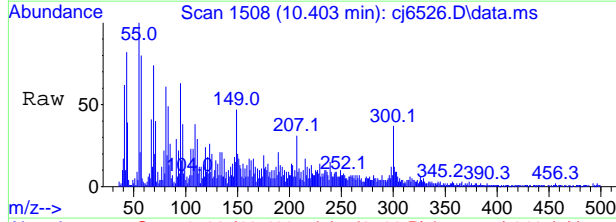


7.1.22  
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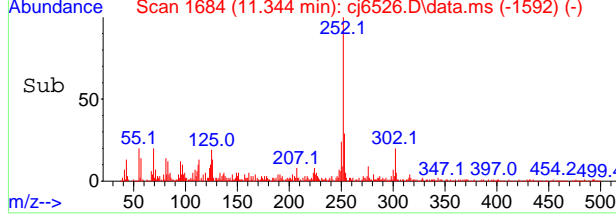
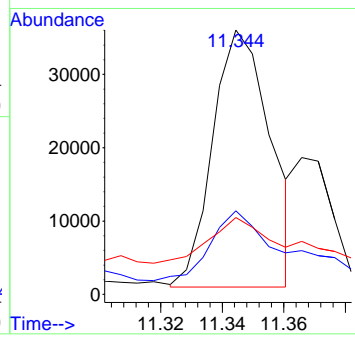
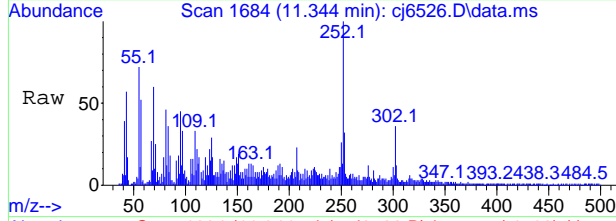
#92  
 bis(2-Ethylhexyl)phthalate  
 Concen: 0.3738 ppm m  
 RT: 10.403 min Scan# 1508  
 Delta R.T. -0.011 min  
 Lab File: cj6526.D  
 Acq: 09 May 2024 08:30 pm

Tgt Ion	Ratio	Lower	Upper
149	100		
167	25.9	0.0	56.1
279	8.4	0.0	33.2



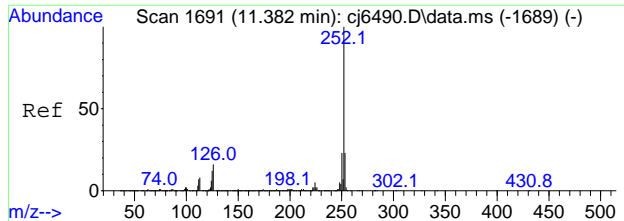
#95  
 Benzo[b]fluoranthene  
 Concen: 1.5462 ppm m  
 RT: 11.344 min Scan# 1684  
 Delta R.T. -0.011 min  
 Lab File: cj6526.D  
 Acq: 09 May 2024 08:30 pm

Tgt Ion	Ratio	Lower	Upper
252	100		
253	31.6	0.0	54.7
125	29.1	0.0	44.2



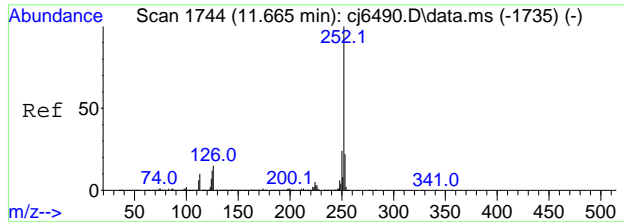
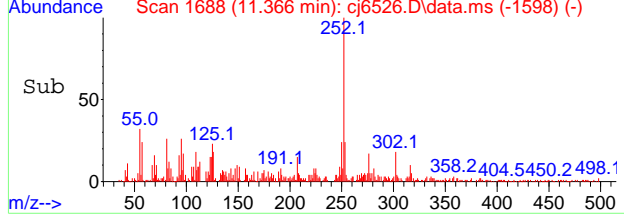
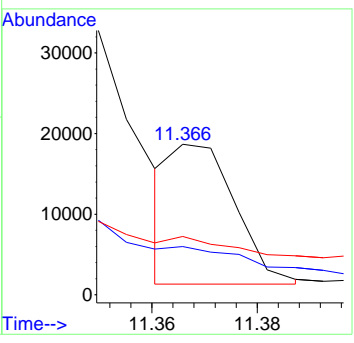
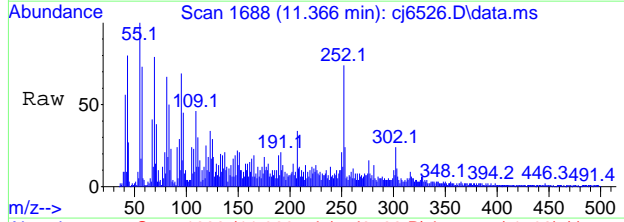
7.1.22  
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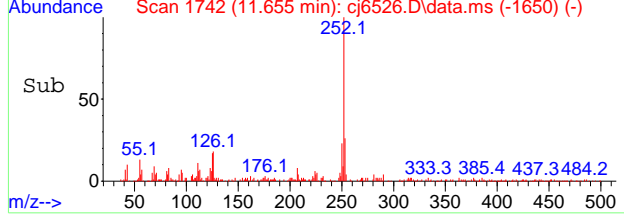
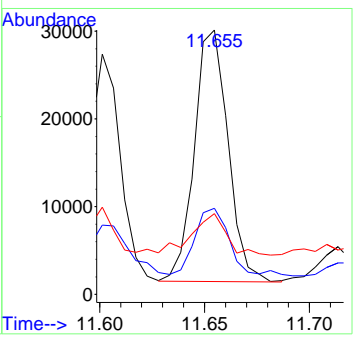
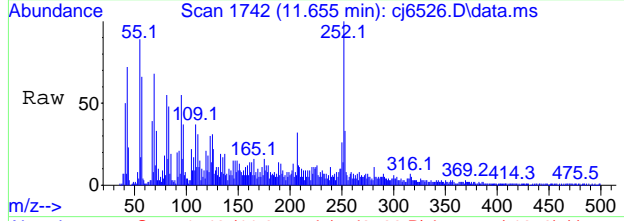
#96  
 Benzo[k]fluoranthene  
 Concen: 0.5473 ppm m  
 RT: 11.366 min Scan# 1688  
 Delta R.T. -0.016 min  
 Lab File: cj6526.D  
 Acq: 09 May 2024 08:30 pm

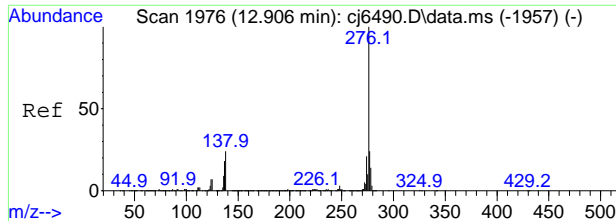
Tgt Ion	Ratio	Lower	Upper
252	100		
253	32.1	0.0	52.6
125	38.8	0.0	42.4



#97  
 Benzo[a]pyrene  
 Concen: 1.3083 ppm  
 RT: 11.655 min Scan# 1742  
 Delta R.T. -0.010 min  
 Lab File: cj6526.D  
 Acq: 09 May 2024 08:30 pm

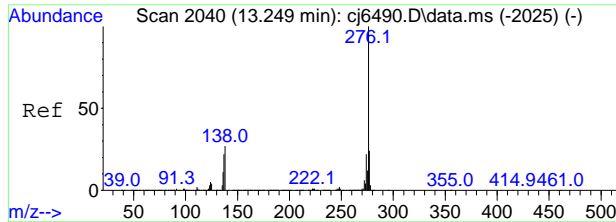
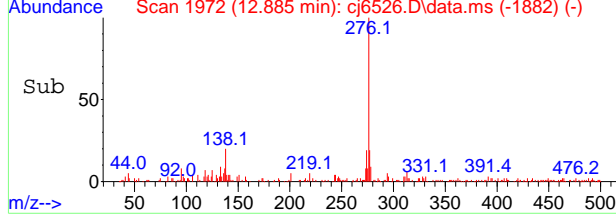
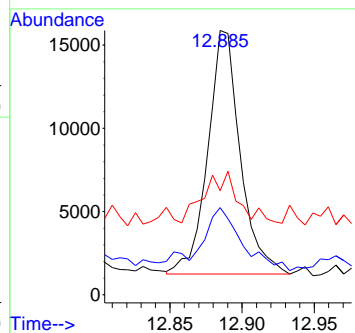
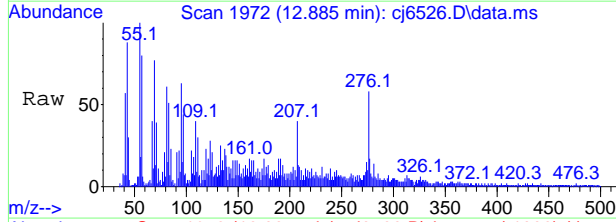
Tgt Ion	Ratio	Lower	Upper
252	100		
253	25.9	0.0	51.9
125	16.0	0.0	42.1





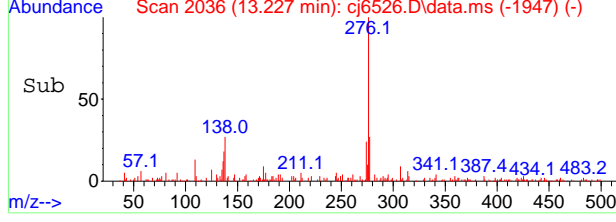
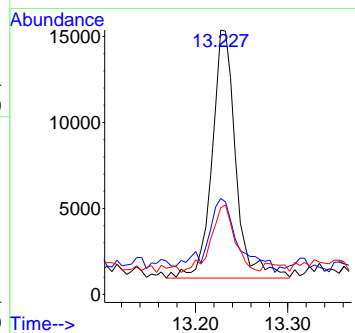
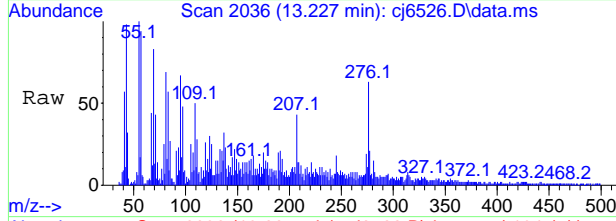
#98  
 Indeno[1,2,3-cd]pyrene  
 Concen: 0.7729 ppm  
 RT: 12.885 min Scan# 1972  
 Delta R.T. -0.021 min  
 Lab File: cj6526.D  
 Acq: 09 May 2024 08:30 pm

Tgt Ion	Ratio	Lower	Upper
276	100		
138	24.2	0.0	54.2
137	6.3	0.0	47.9



#102  
 Benzo[g,h,i]perylene  
 Concen: 1.1193 ppm  
 RT: 13.227 min Scan# 2036  
 Delta R.T. -0.022 min  
 Lab File: cj6526.D  
 Acq: 09 May 2024 08:30 pm

Tgt Ion	Ratio	Lower	Upper
276	100		
138	26.1	0.0	56.7
277	25.1	0.0	54.1



LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6526.D  
Acq On : 09 May 2024 08:30 pm  
Operator : rocquans  
Sample : jd87833-11  
Misc : op54460,ecj297,30.3,,,1,2  
ALS Vial : 17 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON  
Sampling : 1  
Start Thrs: 0.02  
Stop Thrs : 0  
Filtering: 5  
Min Area: 1000 Area counts  
Max Peaks: 100  
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS, zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

Signal : TIC: cj6526.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.172	339	343	353	rVV	57670	76025	2.08%	0.230%
2	4.247	353	357	363	rVB	412717	243261	6.67%	0.736%
3	4.418	385	389	393	rVB	1194160	741377	20.32%	2.243%
4	4.482	393	401	406	rVB	316860	182146	4.99%	0.551%
5	4.664	430	435	439	rBV	4306518	2353331	64.51%	7.120%
6	4.750	446	451	455	rBV	164643	118063	3.24%	0.357%
7	4.819	458	464	469	rVB	135042	106579	2.92%	0.322%
8	5.012	494	500	503	rBV	1186228	699633	19.18%	2.117%
9	5.466	575	585	590	rBV	5042447	2934376	80.43%	8.878%
10	6.167	712	716	722	rBV	2212044	1398089	38.32%	4.230%
11	6.402	757	760	766	rBV6	19084	31681	0.87%	0.096%
12	6.488	774	776	784	rVB8	12722	20936	0.57%	0.063%
13	6.552	784	788	792	rBV	31481	33384	0.92%	0.101%
14	6.659	802	808	818	rBV	4555619	3412832	93.55%	10.326%
15	6.803	832	835	839	rBV4	19070	23093	0.63%	0.070%
16	6.884	844	850	854	rBV	103121	92470	2.53%	0.280%
17	6.985	862	869	872	rBV2	31258	35312	0.97%	0.107%
18	7.167	892	903	905	rBV3	23877	40709	1.12%	0.123%
19	7.269	918	922	927	rBV	852443	616428	16.90%	1.865%
20	7.376	935	942	950	rBV2	48446	64012	1.75%	0.194%
21	7.574	965	979	987	rBV2	18431	66898	1.83%	0.202%
22	7.761	1008	1014	1018	rBV5	50124	70682	1.94%	0.214%
23	7.793	1018	1020	1025	rVB3	23487	26671	0.73%	0.081%
24	7.868	1025	1034	1041	rBV	4572880	3648176	100.00%	11.038%
25	7.932	1041	1046	1049	rVB2	52820	56856	1.56%	0.172%
26	8.039	1058	1066	1068	rBV8	14439	31304	0.86%	0.095%
27	8.076	1068	1073	1076	rBV3	21387	22707	0.62%	0.069%
28	8.157	1085	1088	1092	rBV2	35880	38376	1.05%	0.116%
29	8.317	1108	1118	1121	rBV5	36341	75930	2.08%	0.230%
30	8.365	1125	1127	1134	rVB3	92140	75473	2.07%	0.228%
31	8.419	1134	1137	1145	rVB2	45939	64440	1.77%	0.195%
32	8.536	1155	1159	1162	rVB	49495	45033	1.23%	0.136%
33	8.611	1164	1173	1178	rBV7	29590	61871	1.70%	0.187%
34	8.713	1181	1192	1194	rBV7	15425	38984	1.07%	0.118%
35	8.831	1208	1214	1216	rBV2	35894	42993	1.18%	0.130%
36	8.905	1226	1228	1233	rBV3	48209	55324	1.52%	0.167%
37	8.975	1233	1241	1246	rBV	236381	211898	5.81%	0.641%
38	9.039	1247	1253	1263	rBV	45697	73094	2.00%	0.221%
39	9.119	1263	1268	1273	rBV7	63479	92263	2.53%	0.279%
40	9.189	1274	1281	1285	rBV	213758	219967	6.03%	0.666%



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LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6526.D  
Acq On : 09 May 2024 08:30 pm  
Operator : rocquans  
Sample : jd87833-11  
Misc : op54460,ecj297,30.3,,,1,2  
ALS Vial : 17 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON  
Sampling : 1  
Start Thrs: 0.02  
Stop Thrs : 0  
Filtering: 5  
Min Area: 1000 Area counts  
Max Peaks: 100  
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS, zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

Table with 10 columns: Retention Time, Abundance, and various peak parameters. Rows 41-85 list individual peaks with their respective data.

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LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6526.D  
Acq On : 09 May 2024 08:30 pm  
Operator : rocquans  
Sample : jd87833-11  
Misc : op54460,ecj297,30.3,,,1,2  
ALS Vial : 17 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON Filtering: 5  
Sampling : 1 Min Area: 1000 Area counts  
Start Thrs: 0.02 Max Peaks: 100  
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

86	12.628	1917	1924	1929	rBV2	117265	265303	7.27%	0.803%
87	12.671	1929	1932	1941	rVB4	150658	241757	6.63%	0.731%
88	12.757	1945	1948	1953	rVB7	44616	61419	1.68%	0.186%
89	12.863	1961	1968	1970	rBV8	65619	117101	3.21%	0.354%
90	12.960	1984	1986	1996	rVB8	29666	57690	1.58%	0.175%
91	13.110	2007	2014	2017	rBV4	81096	159861	4.38%	0.484%
92	13.227	2027	2036	2041	rBV5	41036	118817	3.26%	0.360%
93	13.409	2063	2070	2077	rVB5	120157	224301	6.15%	0.679%
94	13.495	2082	2086	2091	rBV8	28063	56009	1.54%	0.169%
95	13.559	2092	2098	2108	rVB8	43853	115761	3.17%	0.350%
96	13.639	2111	2113	2114	rBV2	27710	22702	0.62%	0.069%
97	13.832	2147	2149	2163	rVB2	37972	107598	2.95%	0.326%
98	13.960	2171	2173	2176	rBV4	21140	29741	0.82%	0.090%
99	14.217	2213	2221	2225	rBV4	43308	98230	2.69%	0.297%
100	14.329	2237	2242	2251	rVB10	51337	115743	3.17%	0.350%

Sum of corrected areas: 33050435

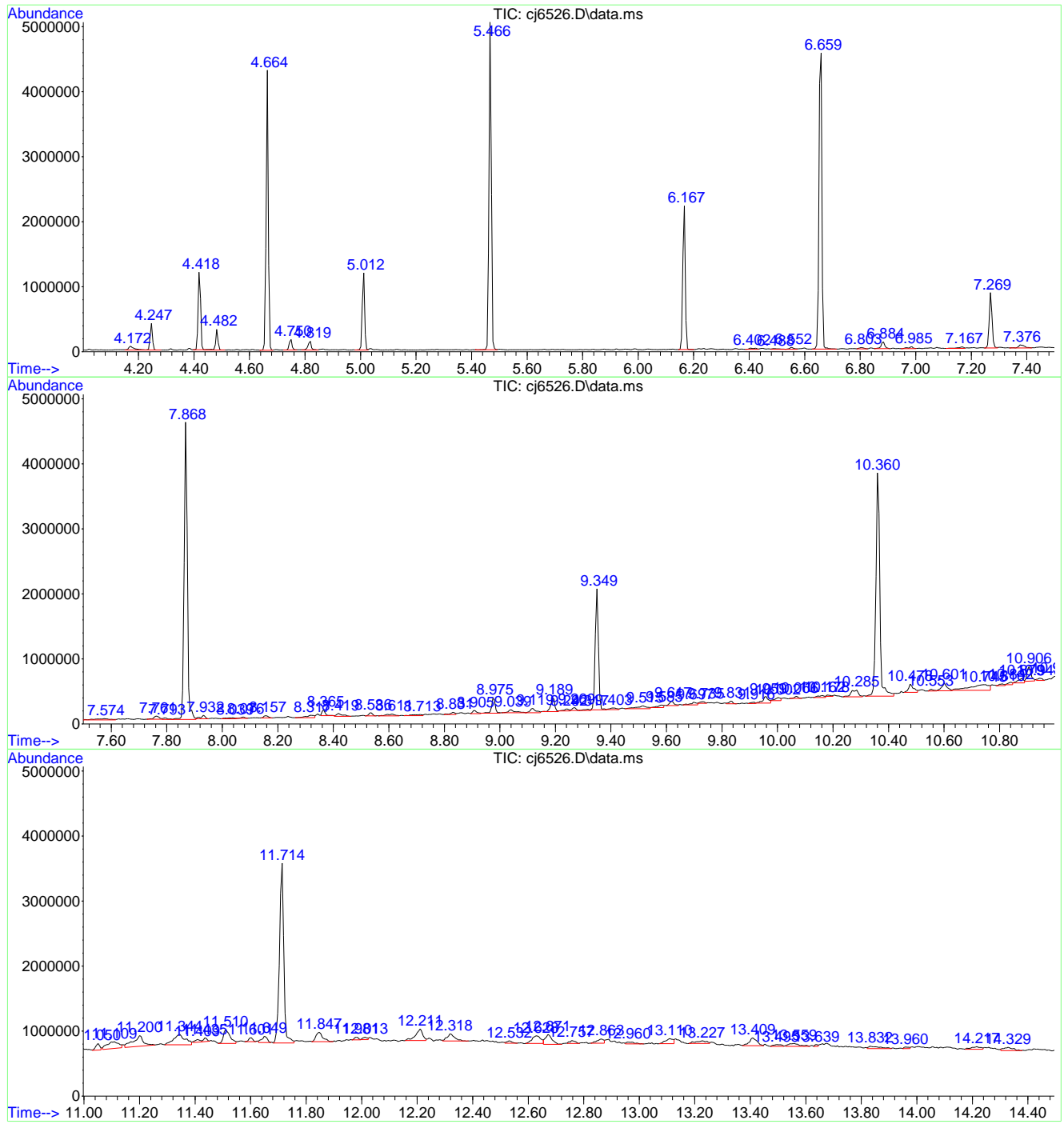
7.1.23  
7

LSC Report - Integrated Chromatogram

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6526.D  
Acq On : 09 May 2024 08:30 pm  
Operator : rocquans  
Sample : jd87833-11  
Misc : op54460,ecj297,30.3,,,1,2  
ALS Vial : 17 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p



7.1.23  
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Library Search Compound Report

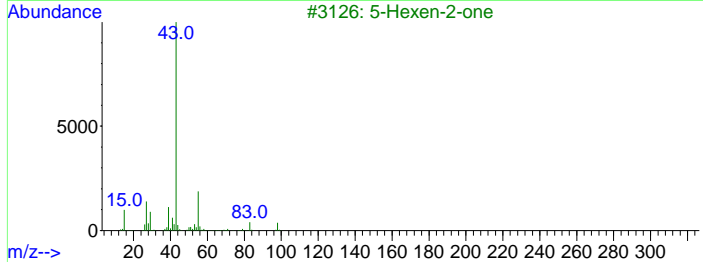
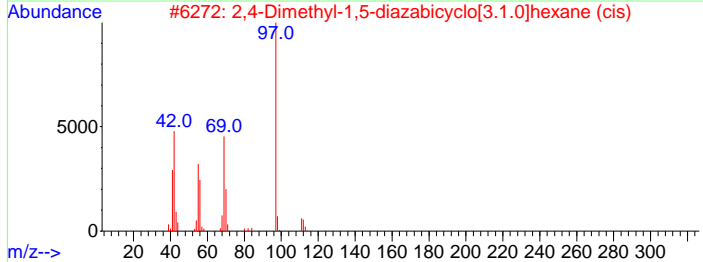
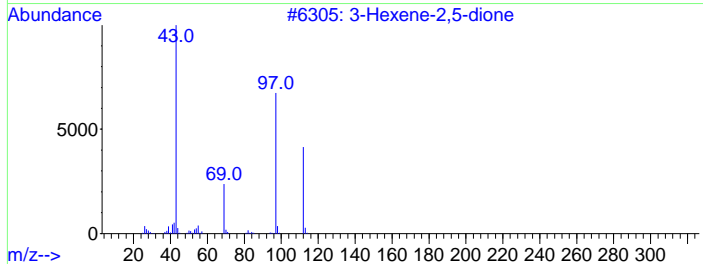
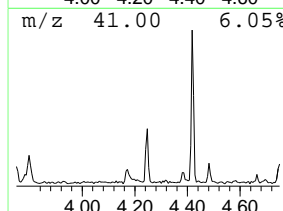
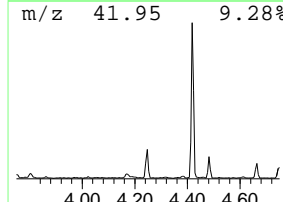
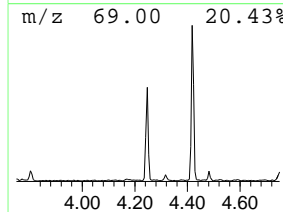
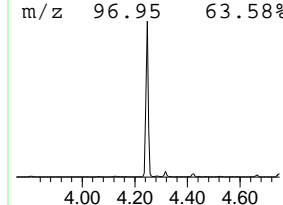
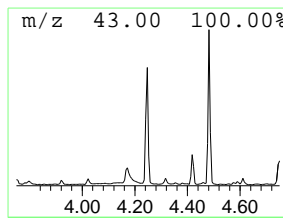
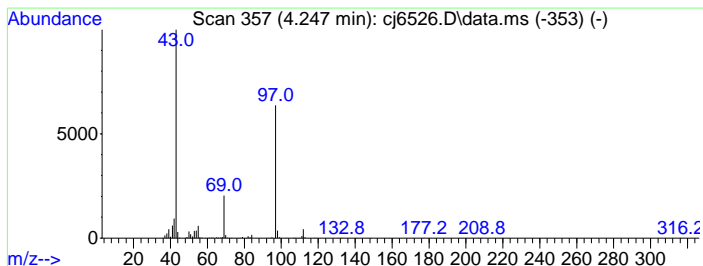
Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\
Data File : cj6526.D
Acq On : 09 May 2024 08:30 pm
Operator : rocquans
Sample : jd87833-11
Misc : op54460,ecj297,30.3,,,1,2
ALS Vial : 17 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: lscint.p

\*\*\*\*\*
Peak Number 1 Unknown Concentration Rank 6

Table with 7 columns: R.T., EstConc, Area, Relative to ISTD, R.T., Hit# of, Tentative ID, MW, MolForm, CAS#, Qual. Row 1: 4.247, 4.13 ppm, 243261, 1,4-Dichlorobenzene-d4a, 4.664, 5, 3-Hexene-2,5-dione, 112, C6H8O2, 004436-75-3, 40.



7.1.23
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6526.D  
Acq On : 09 May 2024 08:30 pm  
Operator : rocquans  
Sample : jd87833-11  
Misc : op54460,ecj297,30.3,,1,2  
ALS Vial : 17 Sample Multiplier: 1

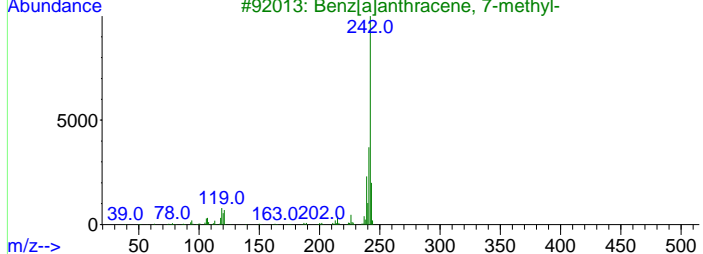
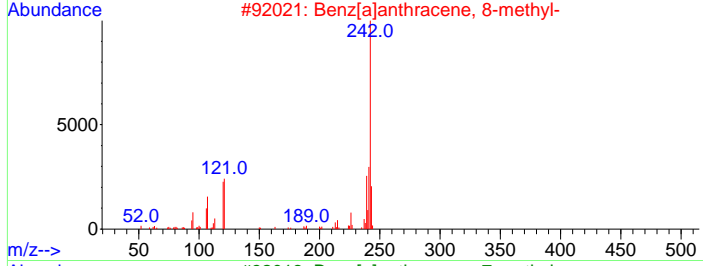
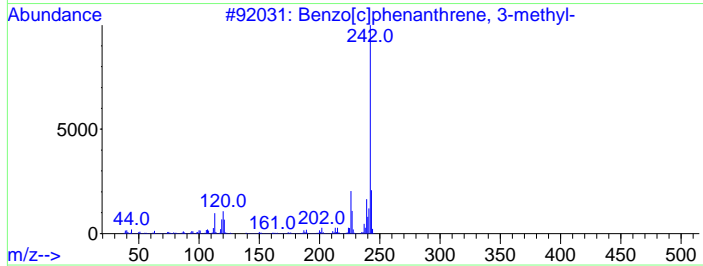
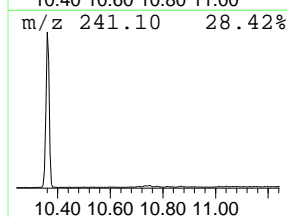
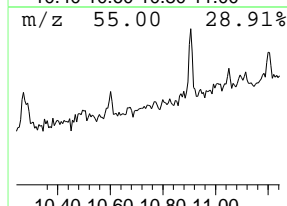
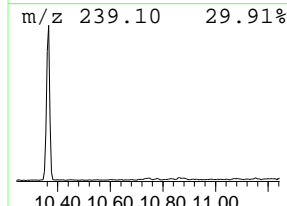
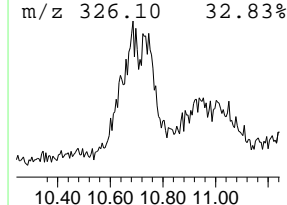
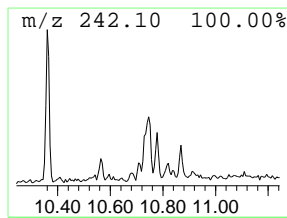
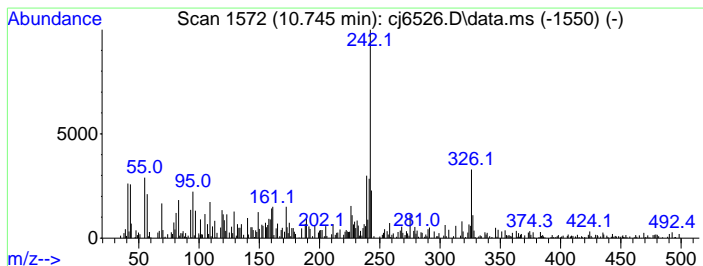
Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 2 Unknown Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.745	4.99 ppm	414541	Chrysene-d12a	10.360

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Benzo[c]phenanthrene, 3-methyl-	242	C19H14	002381-19-3	64
2		Benz[a]anthracene, 8-methyl-	242	C19H14	002381-31-9	60
3		Benz[a]anthracene, 7-methyl-	242	C19H14	002541-69-7	55
4		Benz[a]anthracene, 11-methyl-	242	C19H14	006111-78-0	55
5		Benzo[c]phenanthrene, 6-methyl-	242	C19H14	002381-34-2	50



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6526.D  
Acq On : 09 May 2024 08:30 pm  
Operator : rocquans  
Sample : jd87833-11  
Misc : op54460,ecj297,30.3,,1,2  
ALS Vial : 17 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

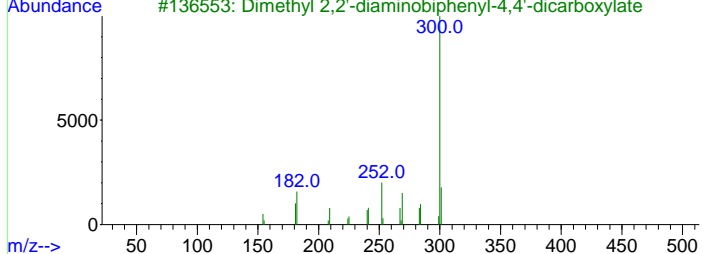
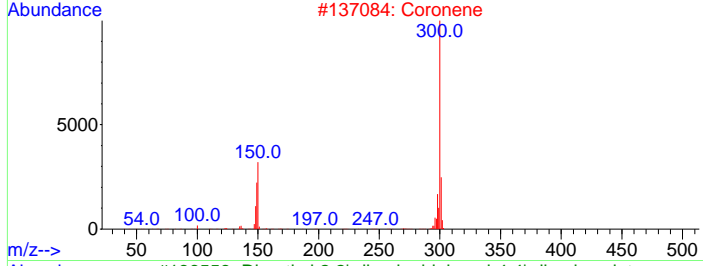
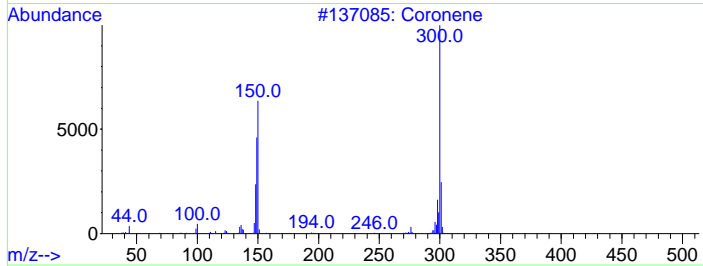
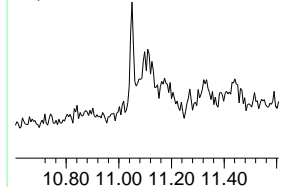
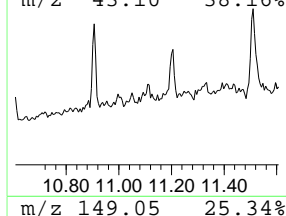
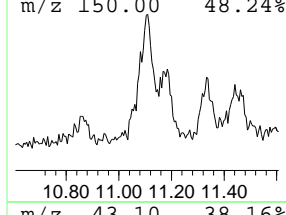
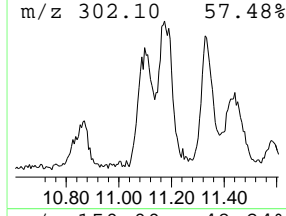
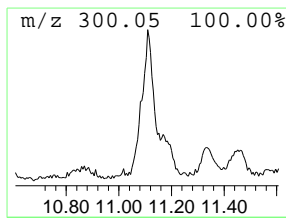
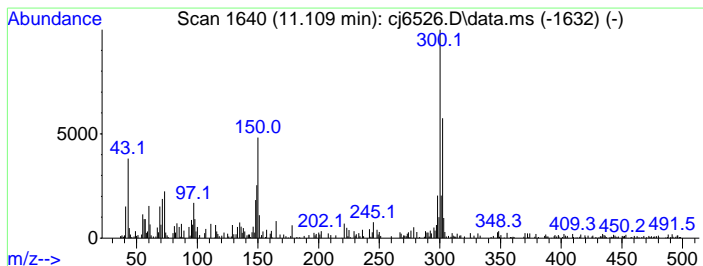
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 3 Unknown Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.109	4.17 ppm	313721	Perylene-d12	11.714

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Coronene	300	C24H12	000191-07-1	60
2	Coronene	300	C24H12	000191-07-1	47
3	Dimethyl 2,2'-diaminobiphenyl-4,...	300	C16H16N2O4	023933-57-5	43
4	4-Formyl-2-methoxyphenyl 5-formy...	300	C16H12O6	1000242-81-0	38
5	Acridin-9-yl-(4-methoxy-phenyl)-...	300	C20H16N2O	1000317-35-5	35



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7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6526.D  
Acq On : 09 May 2024 08:30 pm  
Operator : rocquans  
Sample : jd87833-11  
Misc : op54460,ecj297,30.3,,,1,2  
ALS Vial : 17 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

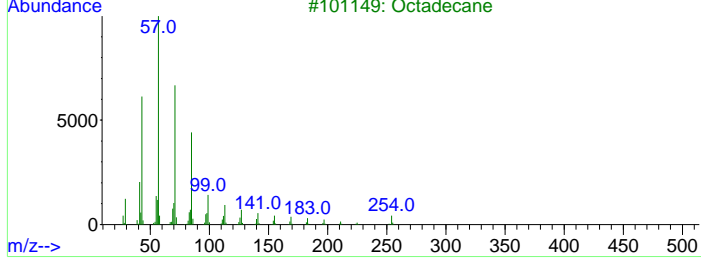
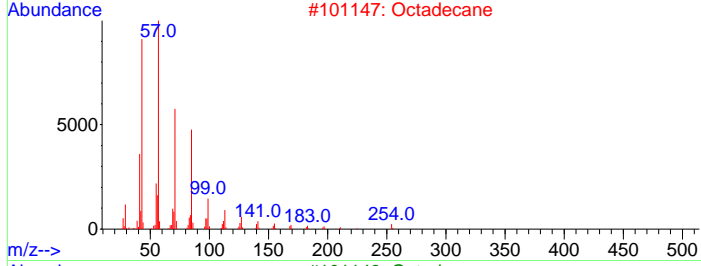
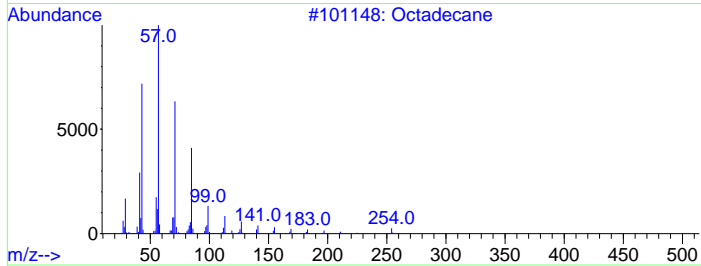
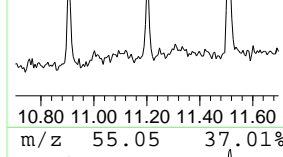
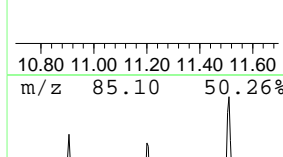
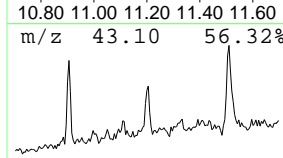
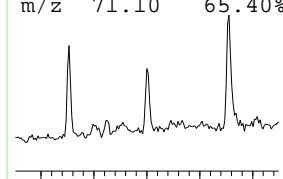
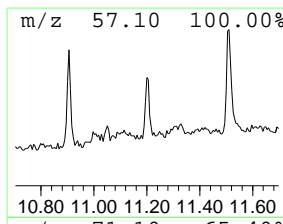
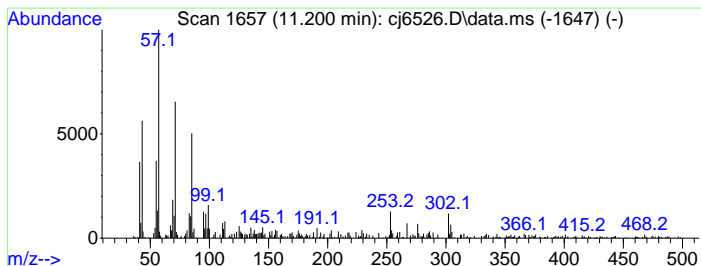
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 4 Octadecane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.200	5.58 ppm	420135	Perylene-d12	11.714

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecane	254	C18H38	000593-45-3	86
2	Octadecane	254	C18H38	000593-45-3	86
3	Octadecane	254	C18H38	000593-45-3	86
4	Eicosane	282	C20H42	000112-95-8	70
5	Hexadecane	226	C16H34	000544-76-3	70



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6526.D  
Acq On : 09 May 2024 08:30 pm  
Operator : rocquans  
Sample : jd87833-11  
Misc : op54460,ecj297,30.3,,,1,2  
ALS Vial : 17 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

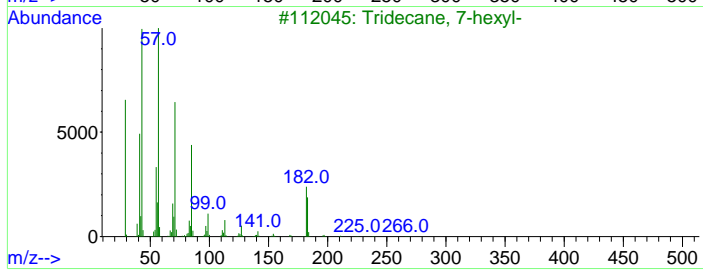
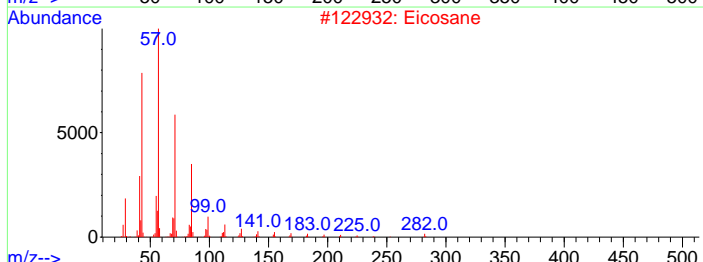
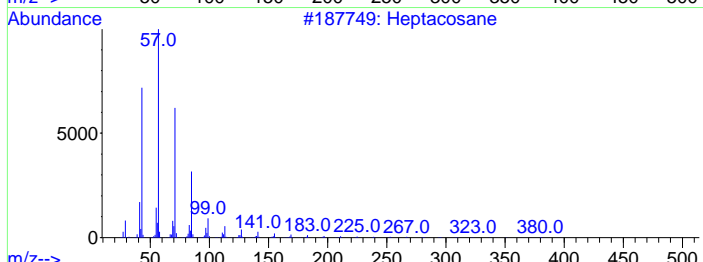
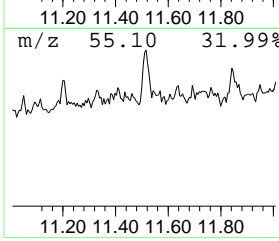
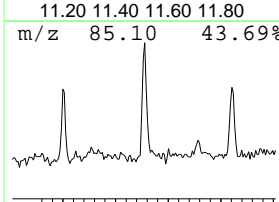
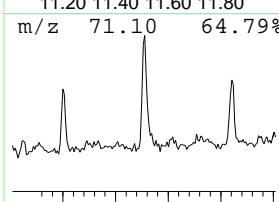
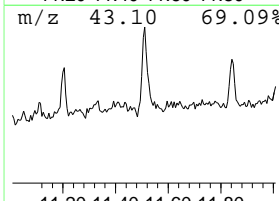
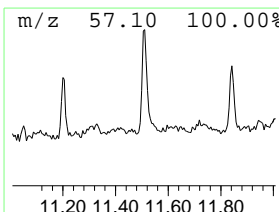
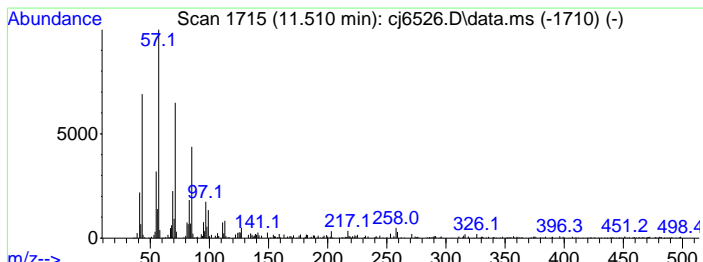
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 5 Alkane Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.510	4.72 ppm	355283	Perylene-d12	11.714

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptacosane		380	C27H56	000593-49-7	93
2	Eicosane		282	C20H42	000112-95-8	80
3	Tridecane, 7-hexyl-		268	C19H40	007225-66-3	80
4	Tetratriacontane, 17-hexadecyl-		703	C50H102	055256-07-0	80
5	Sulfurous acid, 2-propyl tridecy...		306	C16H34O3S	1000309-12-4	80



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6526.D  
Acq On : 09 May 2024 08:30 pm  
Operator : rocquans  
Sample : jd87833-11  
Misc : op54460,ecj297,30.3,,,1,2  
ALS Vial : 17 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

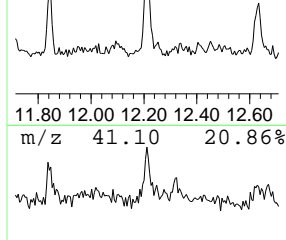
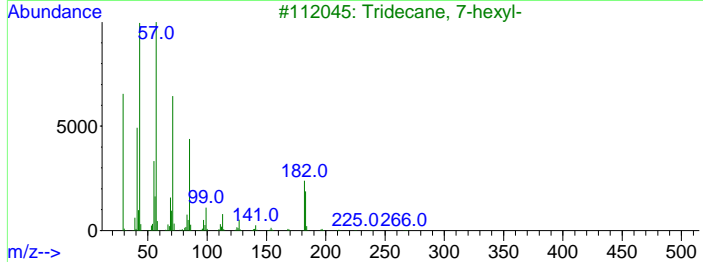
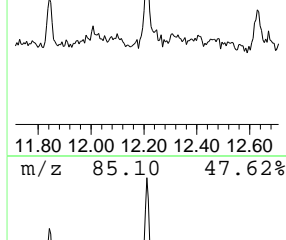
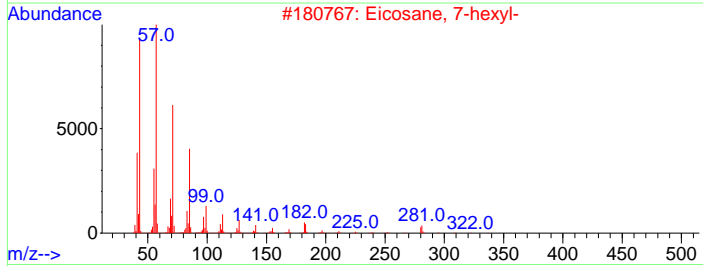
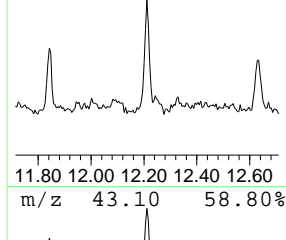
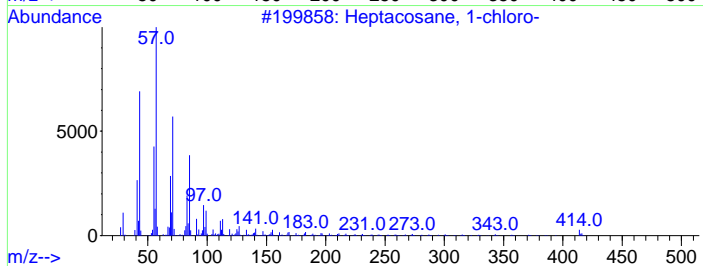
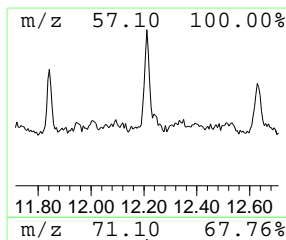
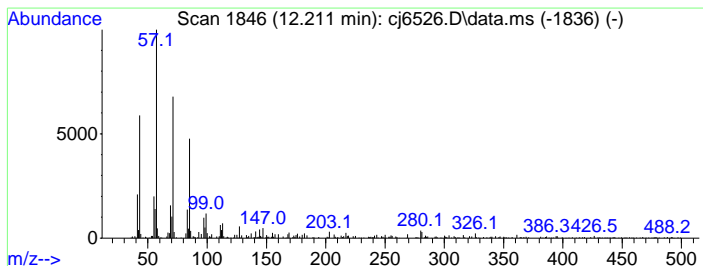
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 6 Alkane Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.211	4.23 ppm	318244	Perylene-d12	11.714

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Heptacosane, 1-chloro-	414	C27H55Cl	062016-79-9	90
2		Eicosane, 7-hexyl-	366	C26H54	055333-99-8	86
3		Tridecane, 7-hexyl-	268	C19H40	007225-66-3	83
4		Tetracosane	338	C24H50	000646-31-1	83
5		Heneicosane	296	C21H44	000629-94-7	80



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Tentatively Identified Compound (LSC) summary

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6526.D  
Acq On : 09 May 2024 08:30 pm  
Operator : rocquans  
Sample : jd87833-11  
Misc : op54460,ecj297,30.3,,,1,2  
ALS Vial : 17 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
Unknown	4.247	4.1	ppm	243261	2	4.664	2353330	40.0
Unknown	10.745	5.0	ppm	414541	10	10.360	3326070	40.0
Unknown	11.109	4.2	ppm	313721	11	11.714	3009890	40.0
Octadecane	11.200	5.6	ppm	420135	11	11.714	3009890	40.0
Alkane	11.510	4.7	ppm	355283	11	11.714	3009890	40.0
Alkane	12.211	4.2	ppm	318244	11	11.714	3009890	40.0

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Quantitation Report (QT/LSC Reviewed)

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6535.D  
 Acq On : 09 May 2024 11:19 pm  
 Operator : rocquans  
 Sample : jd87833-12 Inst : GCMSJC  
 Misc : op54460,ecj297,30.0,,,1,1  
 ALS Vial : 26 Sample Multiplier: 1

Quant Time: May 10 19:34:53 2024  
 Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
 QLast Update : Thu May 09 12:05:48 2024  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.664	152	345198	40.00	ppm	0.00
24) Naphthalene-d8	5.471	136	1198124	40.00	ppm	0.00
46) Acenaphthene-d10	6.659	164	666886	40.00	ppm	0.00
69) Phenanthrene-d10	7.873	188	1177594	40.00	ppm	0.00
84) Chrysene-d12	10.366	240	836561	40.00	ppm	0.00
93) Perylene-d12	11.713	264	874160	40.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.664	152	345198	40.00	ppm	0.00
105) Phenanthrene-d10a	7.873	188	1177594	40.00	ppm	0.00
107) Naphthalene-d8a	5.471	136	1198124	40.00	ppm	0.00
109) Phenanthrene-d10b	7.873	188	1177594	40.00	ppm	0.00
112) Chrysene-d12a	10.366	240	836561	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.808	112	361259	36.41	ppm	0.01
Spiked Amount 50.000			Recovery =	72.82%		
8) Phenol-d5	4.423	99	476850	37.26	ppm	0.00
Spiked Amount 50.000			Recovery =	74.52%		
25) Nitrobenzene-d5	5.011	82	466049	37.99	ppm	0.00
Spiked Amount 50.000			Recovery =	75.98%		
51) 2-Fluorobiphenyl	6.167	172	827516	39.43	ppm	0.00
Spiked Amount 50.000			Recovery =	78.86%		
74) 2,4,6-Tribromophenol	7.274	330	122958	47.62	ppm	0.00
Spiked Amount 50.000			Recovery =	95.24%		
87) Terphenyl-d14	9.355	244	892575	43.18	ppm	0.00
Spiked Amount 50.000			Recovery =	86.36%		
110) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						
					Qvalue	
21) 3&4-Methylphenol	4.910	108	22693	2.3039	ppm	96
56) Acenaphthylene	6.557	152	9920	0.3835	ppm	88
78) Phenanthrene	7.889	178	11946	0.4198	ppm	97
79) Anthracene	7.937	178	4022	0.1411	ppm	96
82) Fluoranthene	8.980	202	22632	0.7346	ppm	93
86) Pyrene	9.194	202	20796	0.7310	ppm	94
89) Benzo[a]anthracene	10.387	228	11464	0.4262	ppm	94
91) Chrysene	10.387	228	11464	0.4620	ppm	97
95) Benzo[b]fluoranthene	11.350	252	15545m	0.5887	ppm	
96) Benzo[k]fluoranthene	11.371	252	3276m	0.1379	ppm	
104) Benzaldehyde	4.386	105	2617	0.2648	ppm	89
-----						

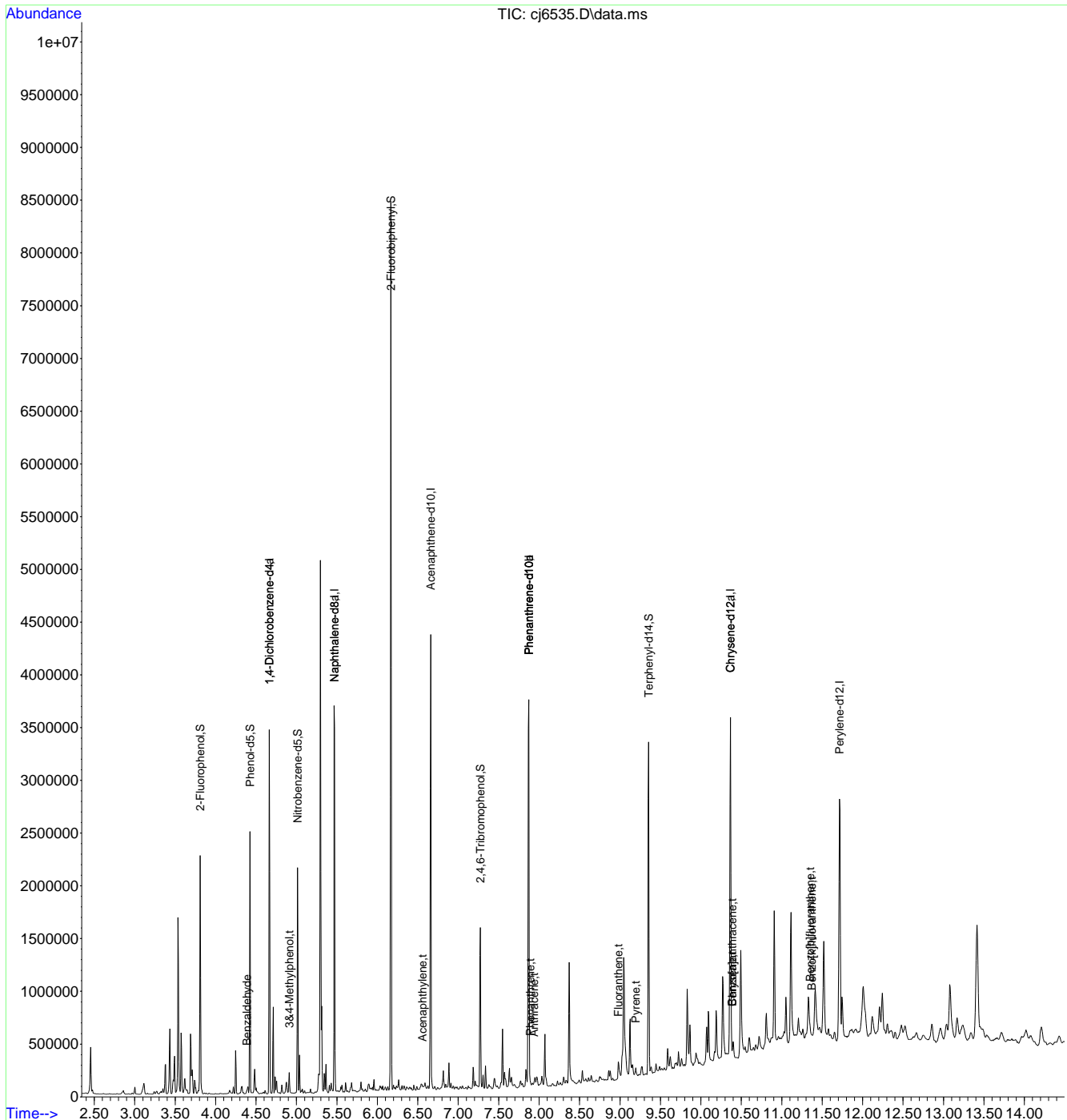
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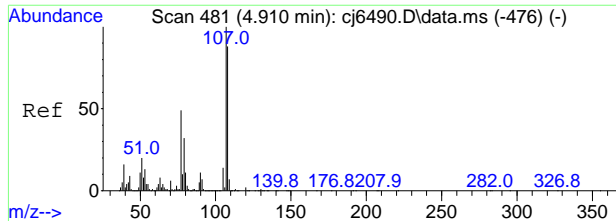
Quantitation Report (QT/LSC Reviewed)

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6535.D  
Acq On : 09 May 2024 11:19 pm  
Operator : rocquans  
Sample : jd87833-12 Inst : GCMS CJ  
Misc : op54460,ecj297,30.0,,,1,1  
ALS Vial : 26 Sample Multiplier: 1

Quant Time: May 10 19:34:53 2024  
Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
QLast Update : Thu May 09 12:05:48 2024  
Response via : Initial Calibration

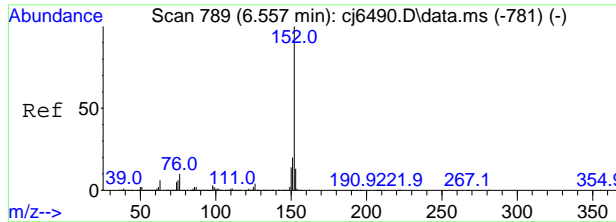
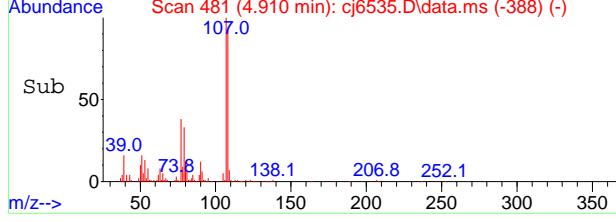
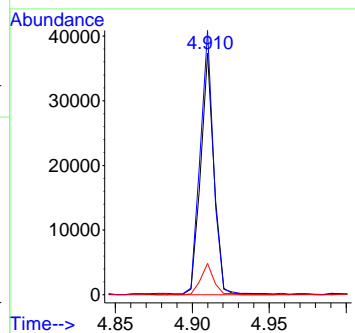
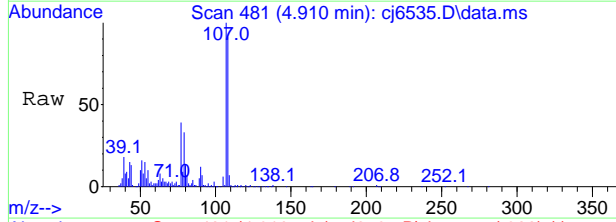


7.1.24  
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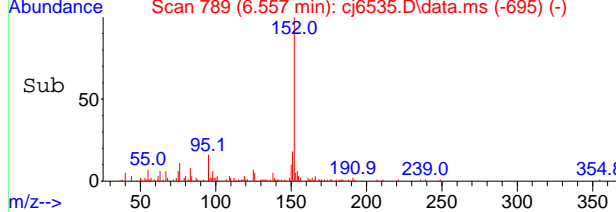
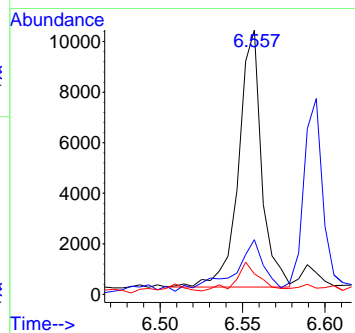
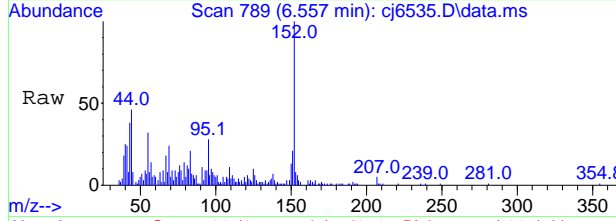
#21  
 3&4-Methylphenol  
 Concen: 2.3039 ppm  
 RT: 4.910 min Scan# 481  
 Delta R.T. -0.000 min  
 Lab File: cj6535.D  
 Acq: 09 May 2024 11:19 pm

Tgt Ion	Ratio	Lower	Upper
108	100		
107	109.1	83.2	143.2
90	12.9	0.0	42.4



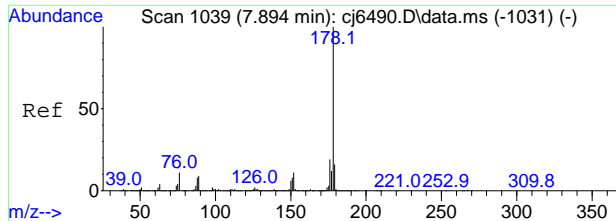
#56  
 Acenaphthylene  
 Concen: 0.3835 ppm  
 RT: 6.557 min Scan# 789  
 Delta R.T. 0.000 min  
 Lab File: cj6535.D  
 Acq: 09 May 2024 11:19 pm

Tgt Ion	Ratio	Lower	Upper
152	100		
151	17.5	0.0	50.3
153	5.4	0.0	43.4



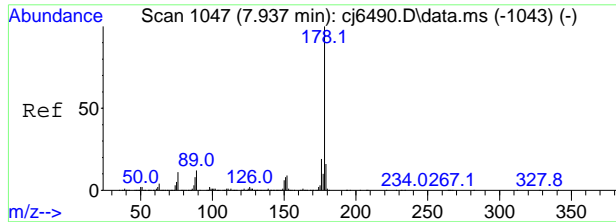
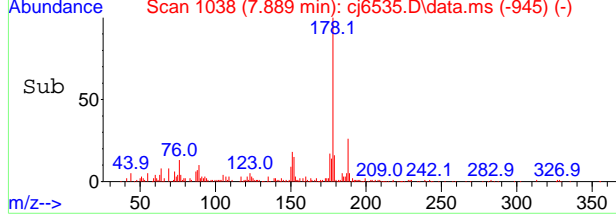
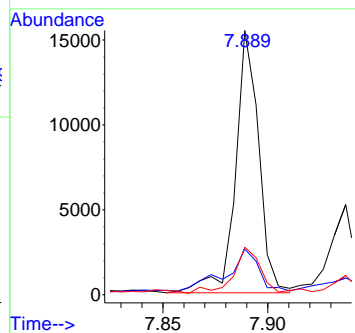
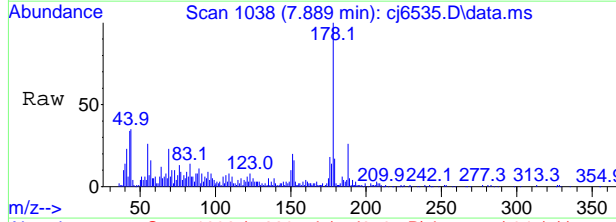
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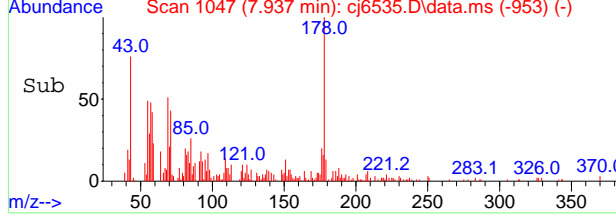
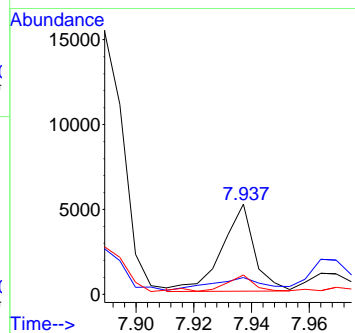
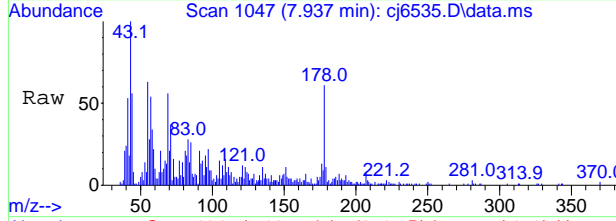
#78  
 Phenanthrene  
 Concen: 0.4198 ppm  
 RT: 7.889 min Scan# 1038  
 Delta R.T. -0.005 min  
 Lab File: cj6535.D  
 Acq: 09 May 2024 11:19 pm

Tgt Ion	Ratio	Lower	Upper
178	100		
179	15.3	0.0	45.5
176	16.7	0.0	49.2



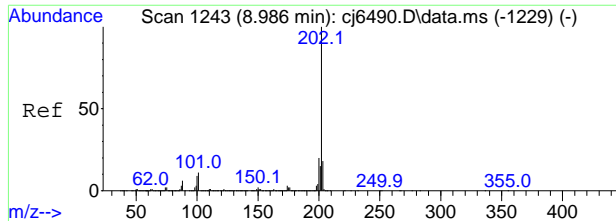
#79  
 Anthracene  
 Concen: 0.1411 ppm  
 RT: 7.937 min Scan# 1047  
 Delta R.T. 0.000 min  
 Lab File: cj6535.D  
 Acq: 09 May 2024 11:19 pm

Tgt Ion	Ratio	Lower	Upper
178	100		
179	13.0	0.0	46.1
176	18.2	0.0	48.7



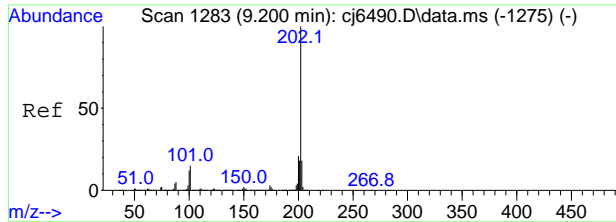
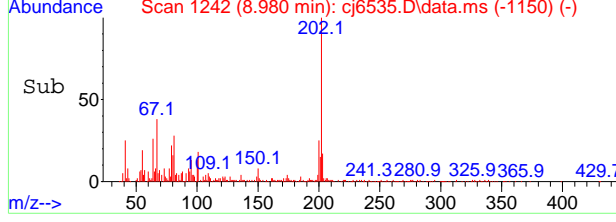
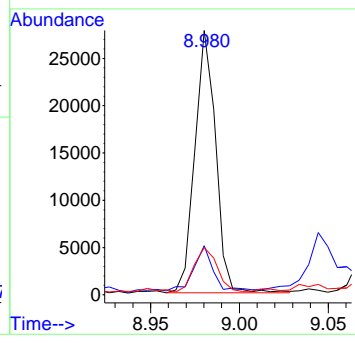
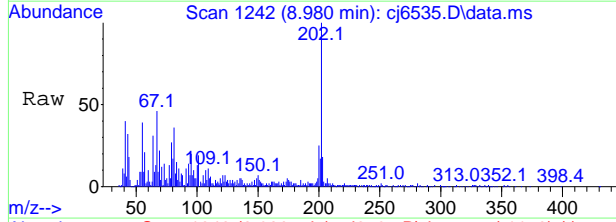
7.1.24  
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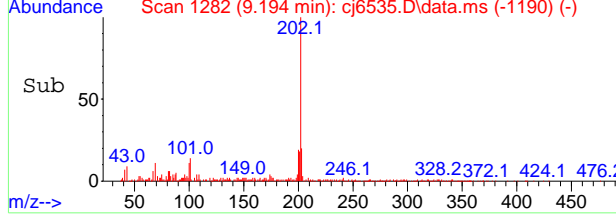
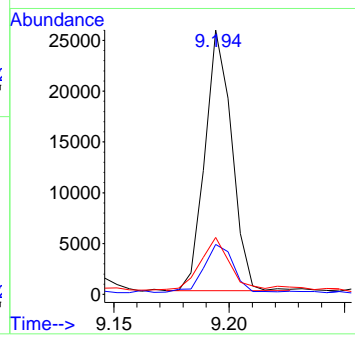
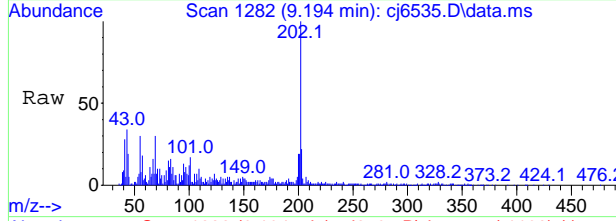
#82  
 Fluoranthene  
 Concen: 0.7346 ppm  
 RT: 8.980 min Scan# 1242  
 Delta R.T. -0.006 min  
 Lab File: cj6535.D  
 Acq: 09 May 2024 11:19 pm

Tgt Ion	Ratio	Lower	Upper
202	100		
101	16.3	0.0	41.4
203	16.1	0.0	47.6



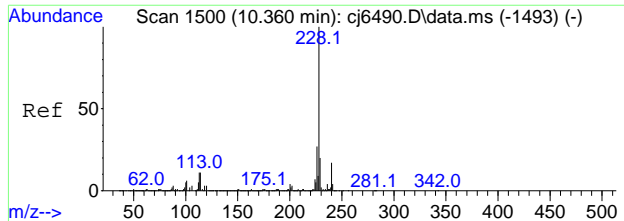
#86  
 Pyrene  
 Concen: 0.7310 ppm  
 RT: 9.194 min Scan# 1282  
 Delta R.T. -0.006 min  
 Lab File: cj6535.D  
 Acq: 09 May 2024 11:19 pm

Tgt Ion	Ratio	Lower	Upper
202	100		
200	18.1	0.0	51.4
203	19.5	0.0	47.8



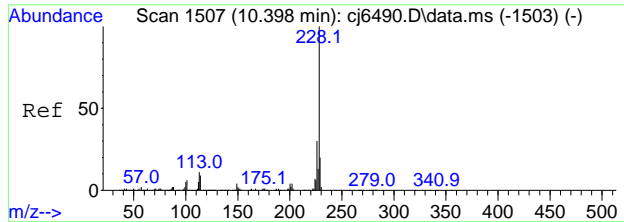
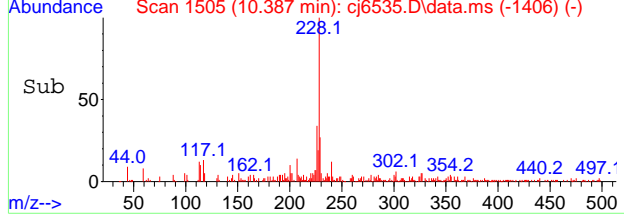
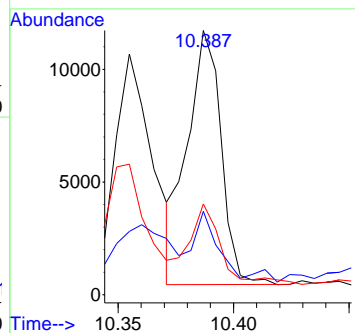
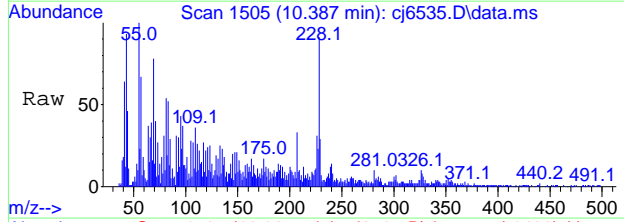
7.1.24  
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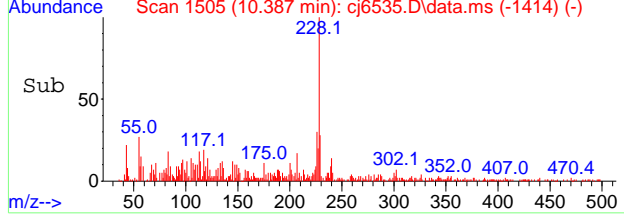
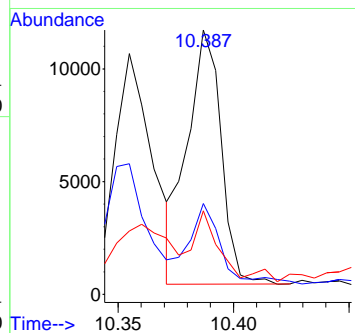
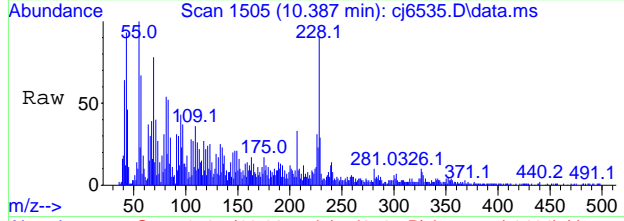
#89  
Benzo[a]anthracene  
Concen: 0.4262 ppm  
RT: 10.387 min Scan# 1505  
Delta R.T. 0.027 min  
Lab File: cj6535.D  
Acq: 09 May 2024 11:19 pm

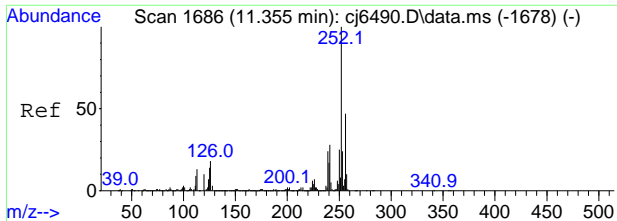
Tgt Ion	Ratio	Lower	Upper
228	100		
229	21.3	0.0	49.8
226	31.4	0.0	57.1



#91  
Chrysene  
Concen: 0.4620 ppm  
RT: 10.387 min Scan# 1505  
Delta R.T. -0.011 min  
Lab File: cj6535.D  
Acq: 09 May 2024 11:19 pm

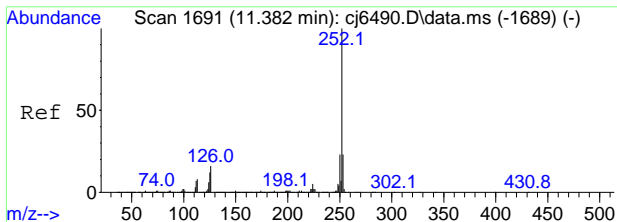
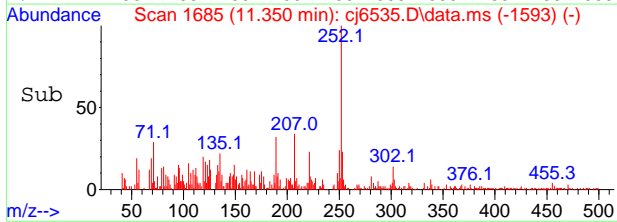
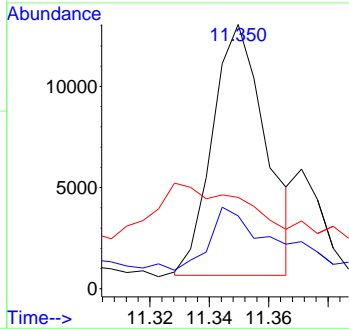
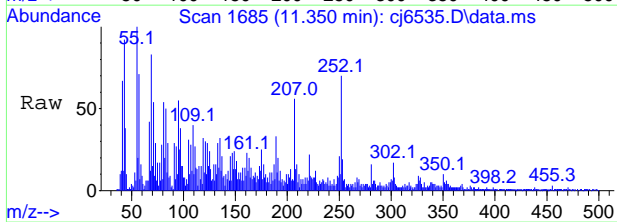
Tgt Ion	Ratio	Lower	Upper
228	100		
226	31.4	0.0	59.9
229	21.3	0.0	49.8





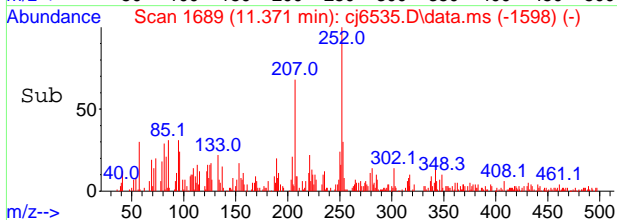
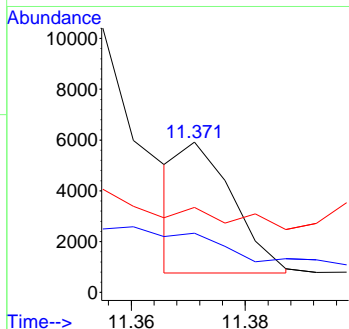
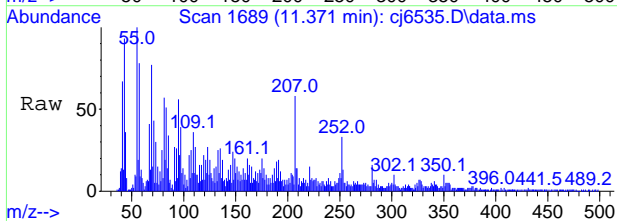
#95  
 Benzo[b]fluoranthene  
 Concen: 0.5887 ppm m  
 RT: 11.350 min Scan# 1685  
 Delta R.T. -0.005 min  
 Lab File: cj6535.D  
 Acq: 09 May 2024 11:19 pm

Tgt Ion	Ratio	Lower	Upper
252	100		
253	27.6	0.0	54.7
125	34.6	0.0	44.2

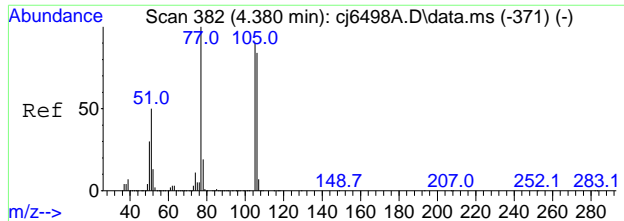


#96  
 Benzo[k]fluoranthene  
 Concen: 0.1379 ppm m  
 RT: 11.371 min Scan# 1689  
 Delta R.T. -0.011 min  
 Lab File: cj6535.D  
 Acq: 09 May 2024 11:19 pm

Tgt Ion	Ratio	Lower	Upper
252	100		
253	39.5	0.0	52.6
125	56.6	0.0	42.4#

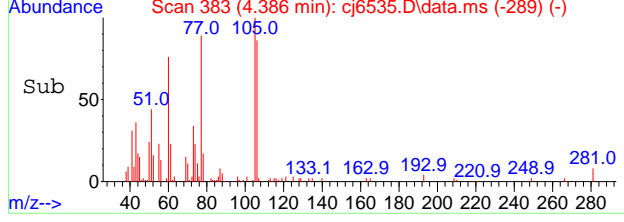
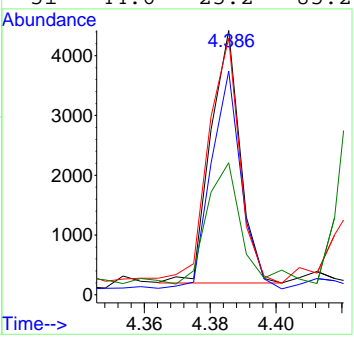
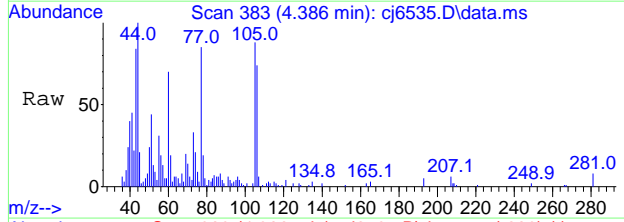






#104  
 Benzaldehyde  
 Concen: 0.2648 ppm  
 RT: 4.386 min Scan# 383  
 Delta R.T. 0.005 min  
 Lab File: cj6535.D  
 Acq: 09 May 2024 11:19 pm

Tgt Ion	Ratio	Lower	Upper
105	100		
106	86.2	62.5	122.5
77	96.1	80.6	140.6
51	44.6	25.2	85.2



7.1.24  
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LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6535.D  
Acq On : 09 May 2024 11:19 pm  
Operator : rocquans  
Sample : jd87833-12  
Misc : op54460,ecj297,30.0,,,1,1  
ALS Vial : 26 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON  
Sampling : 1  
Start Thrs: 0.02  
Stop Thrs : 0  
Filtering: 5  
Min Area: 1000 Area counts  
Max Peaks: 100  
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

Signal : TIC: cj6535.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.247	355	357	361	rVB	410909	249749	4.96%	0.367%
2	4.321	361	371	378	rBV4	72433	100563	2.00%	0.148%
3	4.423	387	390	397	rVB	2478873	1393528	27.69%	2.049%
4	4.482	397	401	412	rVB2	234599	251697	5.00%	0.370%
5	4.664	430	435	440	rBV	3453465	2105214	41.83%	3.095%
6	4.712	440	444	446	rBV	821860	486789	9.67%	0.716%
7	4.733	446	448	450	rBV	155349	113145	2.25%	0.166%
8	4.878	469	475	478	rBV3	108312	127221	2.53%	0.187%
9	4.910	478	481	487	rVB	195426	129684	2.58%	0.191%
10	5.011	494	500	503	rBV	2140167	1349045	26.81%	1.983%
11	5.038	503	505	508	rVB	350831	201237	4.00%	0.296%
12	5.295	543	553	560	rBV	5045557	3597296	71.48%	5.289%
13	5.343	560	562	564	rBV	170760	113934	2.26%	0.168%
14	5.364	564	566	571	rVB	271001	167561	3.33%	0.246%
15	5.466	582	585	591	rVB	3656983	2614693	51.96%	3.844%
16	5.680	620	625	628	rBV2	90231	96025	1.91%	0.141%
17	5.798	637	647	652	rBV3	95100	98110	1.95%	0.144%
18	5.894	660	665	668	rBV3	74309	107990	2.15%	0.159%
19	6.167	711	716	720	rBV	8428000	5032374	100.00%	7.399%
20	6.659	804	808	814	rVB	4307473	2973985	59.10%	4.373%
21	6.814	829	837	841	rBV3	173162	194415	3.86%	0.286%
22	6.884	845	850	853	rVB	234981	176811	3.51%	0.260%
23	7.183	901	906	909	rBV	206183	169444	3.37%	0.249%
24	7.274	918	923	926	rVB	1513198	1165499	23.16%	1.714%
25	7.306	926	929	932	rVB	128731	90065	1.79%	0.132%
26	7.338	932	935	939	rBV	215109	149693	2.97%	0.220%
27	7.445	951	955	961	rBV4	100815	143679	2.86%	0.211%
28	7.547	966	974	977	rBV	565310	470126	9.34%	0.691%
29	7.573	977	979	985	rVB2	138653	150248	2.99%	0.221%
30	7.632	985	990	992	rBV	174822	156638	3.11%	0.230%
31	7.836	1023	1028	1031	rBV	168371	163263	3.24%	0.240%
32	7.873	1031	1035	1041	rVB	3652507	3064335	60.89%	4.505%
33	8.033	1058	1065	1068	rBV5	88687	96850	1.92%	0.142%
34	8.071	1068	1072	1081	rVB	494532	447643	8.90%	0.658%
35	8.370	1124	1128	1145	rVB	1153229	1049048	20.85%	1.542%
36	8.536	1155	1159	1162	rBV	121099	127861	2.54%	0.188%
37	8.980	1232	1242	1247	rBV3	178506	248650	4.94%	0.366%
38	9.044	1247	1254	1265	rBV2	1122199	1650533	32.80%	2.427%
39	9.125	1265	1269	1273	rBV	524201	531693	10.57%	0.782%
40	9.269	1292	1296	1300	rVB2	84321	114124	2.27%	0.168%



7.1.25  
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LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6535.D  
Acq On : 09 May 2024 11:19 pm  
Operator : rocquans  
Sample : jd87833-12  
Misc : op54460,ecj297,30.0,,,1,1  
ALS Vial : 26 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON  
Sampling : 1  
Start Thrs: 0.02  
Stop Thrs : 0  
Filtering: 5  
Min Area: 1000 Area counts  
Max Peaks: 100  
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS, zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

Table with 10 columns: Retention Time, Abundance, and various peak identifiers (rBV, rVB, rVV, rV). Rows 41-85.

7.1.25  
7

LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6535.D  
Acq On : 09 May 2024 11:19 pm  
Operator : rocquans  
Sample : jd87833-12  
Misc : op54460,ecj297,30.0,,,1,1  
ALS Vial : 26 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON Filtering: 5  
Sampling : 1 Min Area: 1000 Area counts  
Start Thrs: 0.02 Max Peaks: 100  
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

86	12.858	1959	1967	1976	rVB5	176069	387074	7.69%	0.569%
87	12.960	1978	1986	1994	rBV5	127139	318049	6.32%	0.468%
88	13.040	1994	2001	2003	rVV7	160133	292125	5.80%	0.430%
89	13.077	2003	2008	2019	rVV7	532379	1151291	22.88%	1.693%
90	13.168	2019	2025	2031	rVV2	217640	456608	9.07%	0.671%
91	13.238	2031	2038	2049	rVV8	148863	480760	9.55%	0.707%
92	13.339	2049	2057	2062	rVV8	76836	167295	3.32%	0.246%
93	13.414	2062	2071	2091	rVV2	1095576	2522890	50.13%	3.709%
94	13.537	2091	2094	2103	rVB2	53611	116334	2.31%	0.171%
95	13.714	2121	2127	2138	rVB2	88210	218964	4.35%	0.322%
96	13.965	2168	2174	2177	rBV8	65705	131172	2.61%	0.193%
97	14.019	2178	2184	2190	rVV8	126575	330008	6.56%	0.485%
98	14.072	2192	2194	2211	rVB8	97135	293871	5.84%	0.432%
99	14.211	2211	2220	2233	rBV7	178837	480817	9.55%	0.707%
100	14.431	2255	2261	2267	rVB6	66265	138851	2.76%	0.204%

Sum of corrected areas: 68013816

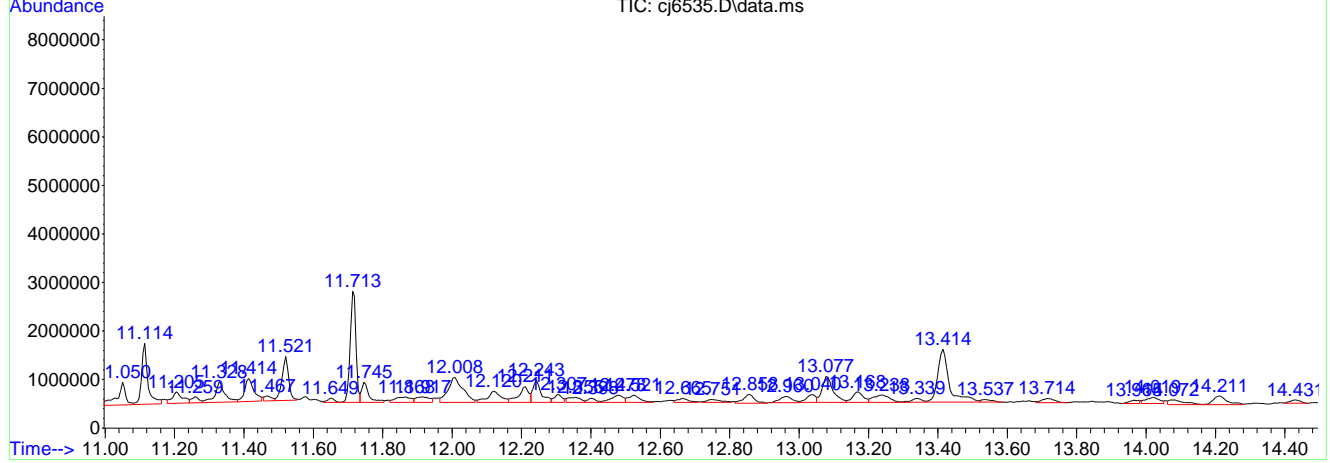
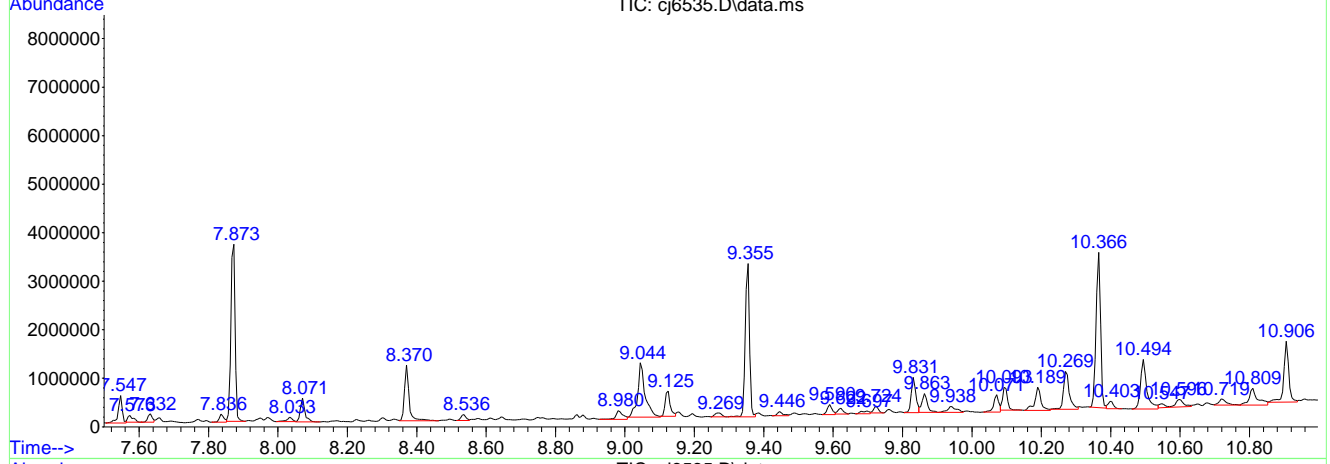
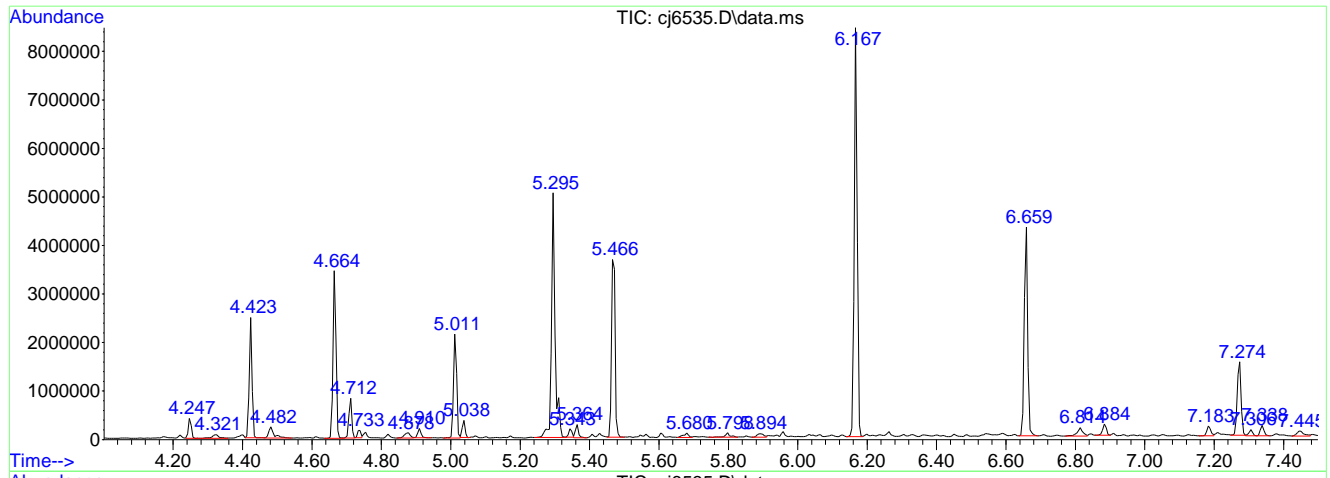
7.1.25  
7

LSC Report - Integrated Chromatogram

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6535.D  
Acq On : 09 May 2024 11:19 pm  
Operator : rocquans  
Sample : jd87833-12  
Misc : op54460,ecj297,30.0,,,1,1  
ALS Vial : 26 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p



7.1.25  
7



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6535.D  
Acq On : 09 May 2024 11:19 pm  
Operator : rocquans  
Sample : jd87833-12  
Misc : op54460,ecj297,30.0,,,1,1  
ALS Vial : 26 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

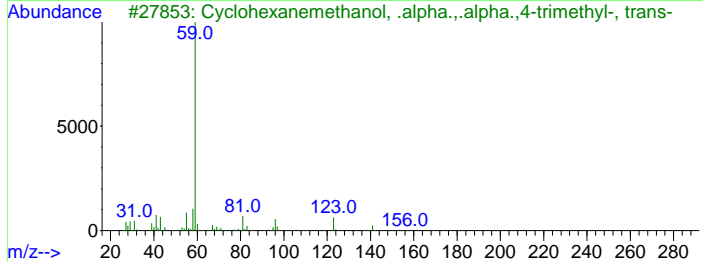
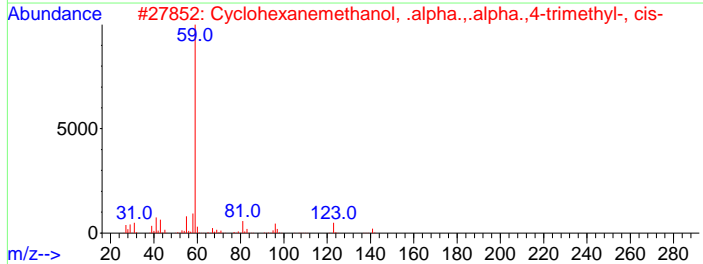
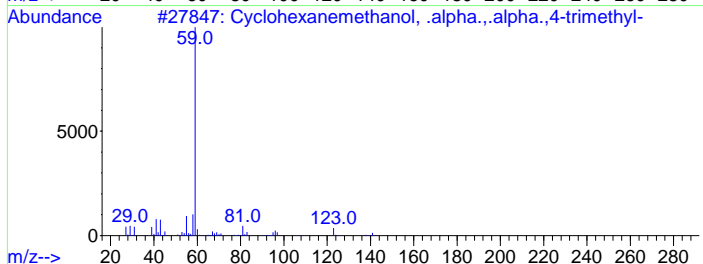
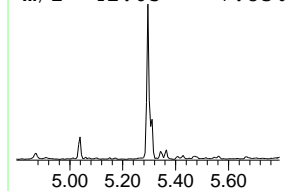
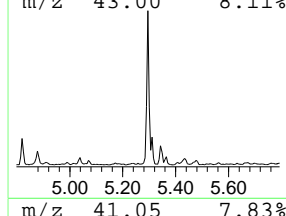
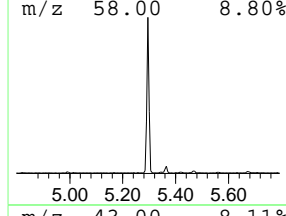
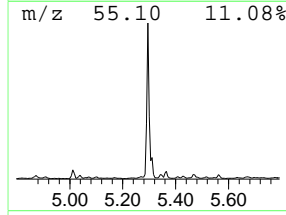
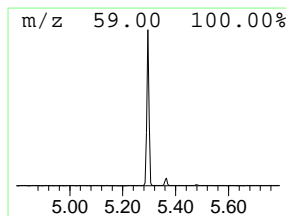
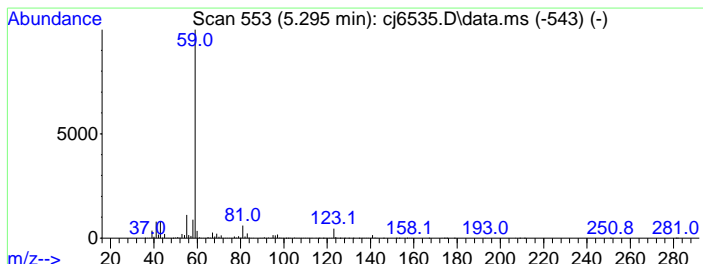
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 1 Unknown alcohol Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.295	55.03 ppm	3597300	Naphthalene-d8	5.471

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Cyclohexanemethanol, .alpha.,.al...	156	C10H20O	000498-81-7	83
2		Cyclohexanemethanol, .alpha.,.al...	156	C10H20O	007322-63-6	78
3		Cyclohexanemethanol, .alpha.,.al...	156	C10H20O	005114-00-1	74
4		Cyclohexanemethanol, .alpha.,.al...	156	C10H20O	000498-81-7	47
5		2-Hydroxy-2,5-dimethyl-hept-6-en...	156	C9H16O2	1000192-55-8	45



7.1.25  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6535.D  
 Acq On : 09 May 2024 11:19 pm  
 Operator : rocquans  
 Sample : jd87833-12  
 Misc : op54460,ecj297,30.0,,,1,1  
 ALS Vial : 26 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

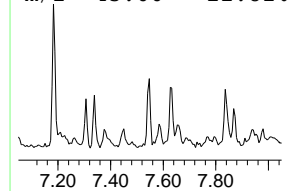
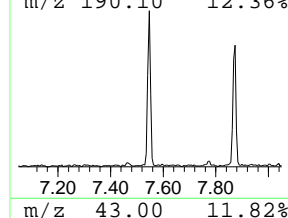
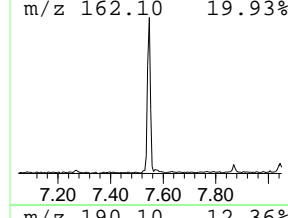
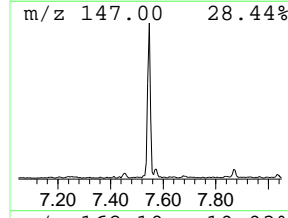
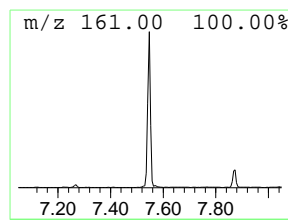
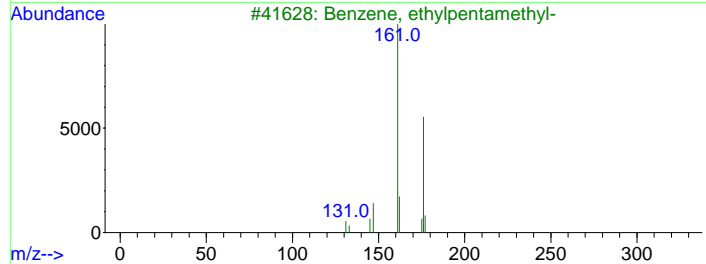
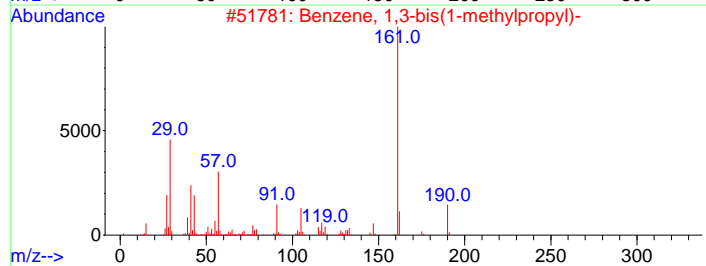
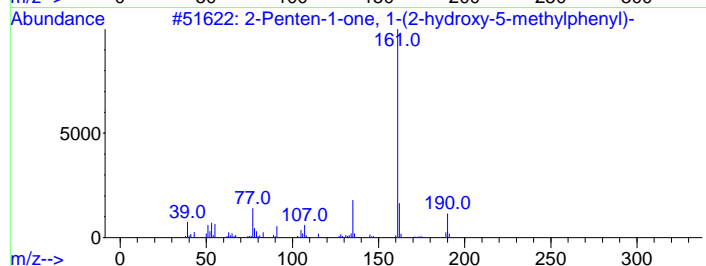
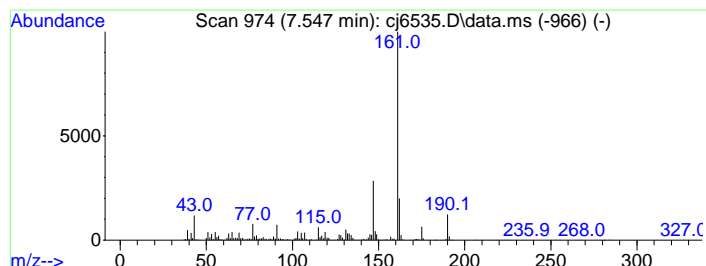
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 2 Unknown Concentration Rank 25

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.547	6.14 ppm	470126	Phenanthrene-d10	7.873

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2-Penten-1-one, 1-(2-hydroxy-5-m...	190	C12H14O2	051956-78-6	58
2		Benzene, 1,3-bis(1-methylpropyl)-	190	C14H22	001079-96-5	42
3		Benzene, ethylpentamethyl-	176	C13H20	002388-04-7	42
4		1-Propanone, 1-[4-(1,1-dimethyle...	190	C13H18O	071209-71-7	40
5		Benzoic acid, 4-butyl-, 4-cyanop...	279	C18H17NO2	038690-77-6	38



7.1.25  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6535.D  
Acq On : 09 May 2024 11:19 pm  
Operator : rocquans  
Sample : jd87833-12  
Misc : op54460,ecj297,30.0,,,1,1  
ALS Vial : 26 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

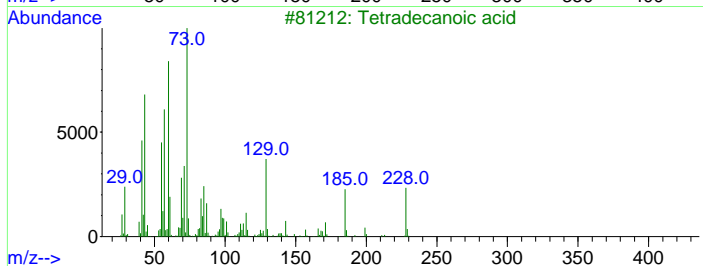
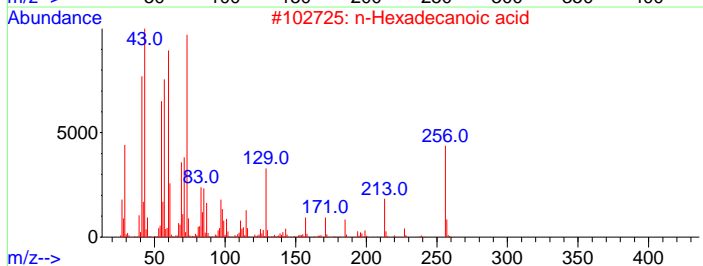
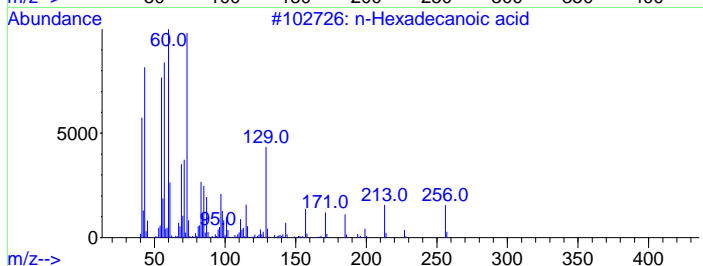
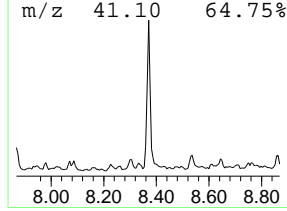
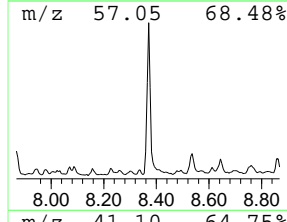
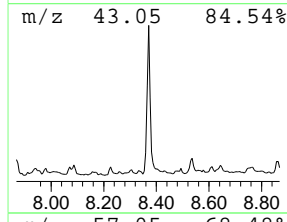
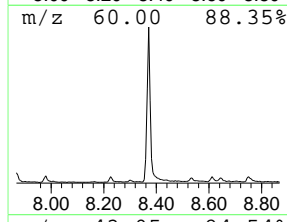
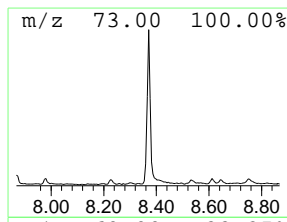
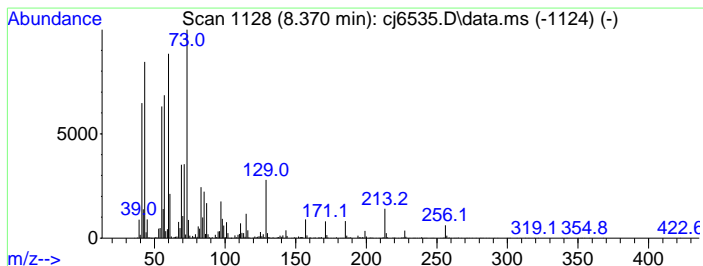
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 3 n-Hexadecanoic acid Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.370	13.69 ppm	1049050	Phenanthrene-d10b	7.873

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	99	
2	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	95	
3	Tetradecanoic acid	228	C14H28O2	000544-63-8	95	
4	Tridecanoic acid	214	C13H26O2	000638-53-9	91	
5	Tridecanoic acid	214	C13H26O2	000638-53-9	91	



7.1.25  
7



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6535.D  
Acq On : 09 May 2024 11:19 pm  
Operator : rocquans  
Sample : jd87833-12  
Misc : op54460,ecj297,30.0,,,1,1  
ALS Vial : 26 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

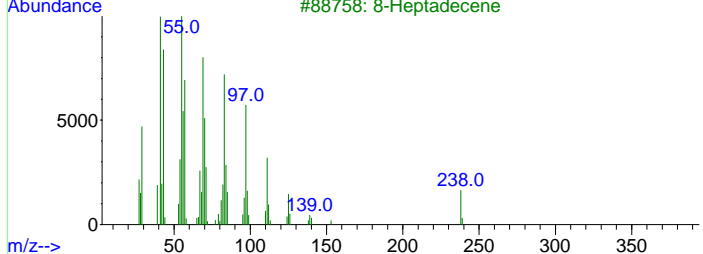
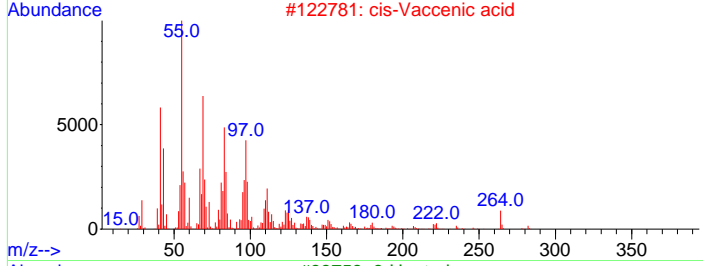
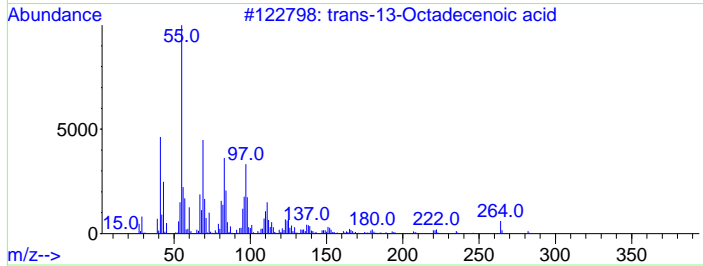
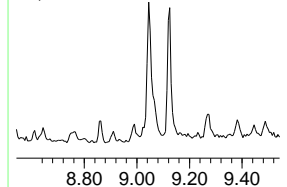
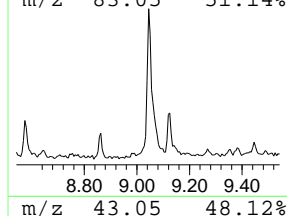
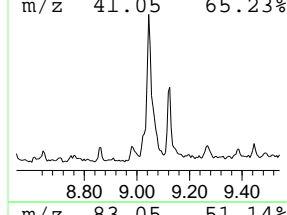
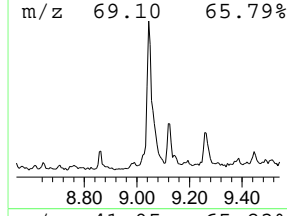
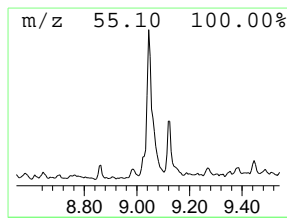
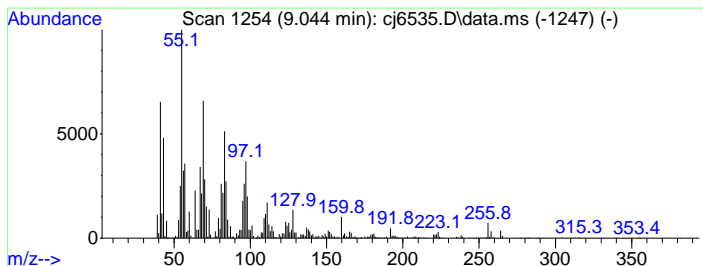
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 4 Unknown acid Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.044	21.55 ppm	1650530	Phenanthrene-d10b	7.873

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	trans-13-Octadecenoic acid	282	C18H34O2	000693-71-0	89
2	cis-Vaccenic acid	282	C18H34O2	000506-17-2	86
3	8-Heptadecene	238	C17H34	002579-04-6	84
4	Octadec-9-enoic acid	282	C18H34O2	1000190-13-7	70
5	Cyclotetradecane	196	C14H28	000295-17-0	64



7.1.25  
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Library Search Compound Report

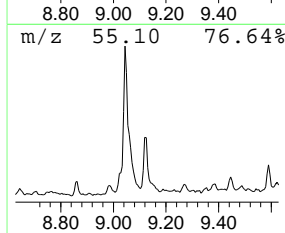
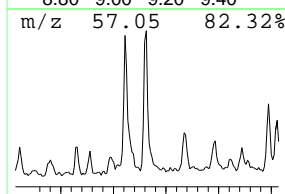
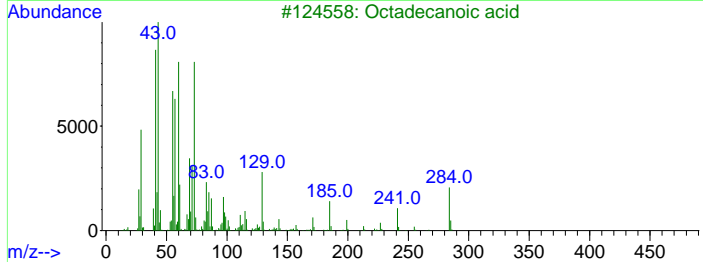
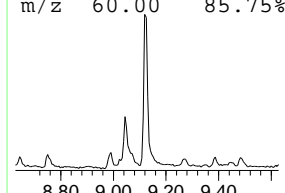
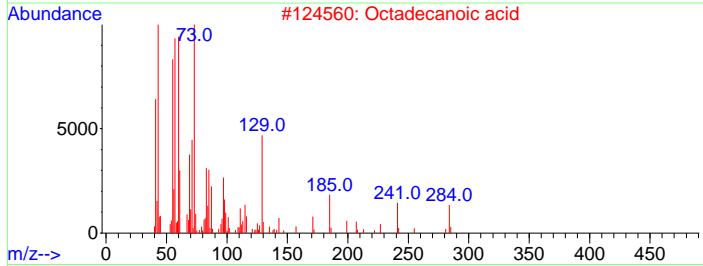
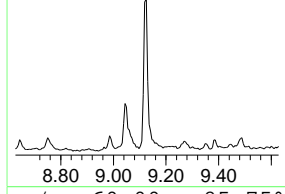
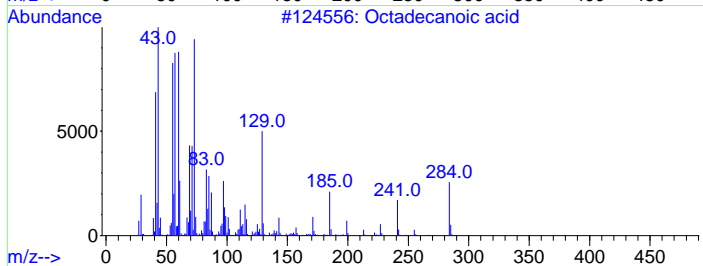
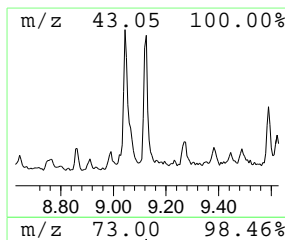
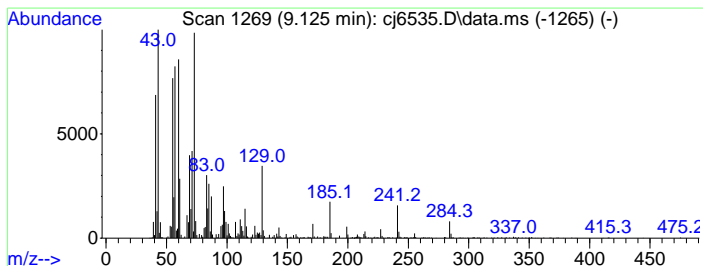
Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6535.D  
Acq On : 09 May 2024 11:19 pm  
Operator : rocquans  
Sample : jd87833-12  
Misc : op54460,ecj297,30.0,,,1,1  
ALS Vial : 26 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 5 Octadecanoic acid Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.	
9.125	7.45 ppm	531693	Chrysene-d12	10.366	
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octadecanoic acid	284	C18H36O2	000057-11-4	99
2	Octadecanoic acid	284	C18H36O2	000057-11-4	96
3	Octadecanoic acid	284	C18H36O2	000057-11-4	96
4	Octadecanoic acid	284	C18H36O2	000057-11-4	94
5	Pentadecanoic acid	242	C15H30O2	001002-84-2	93



7.1.25  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6535.D  
Acq On : 09 May 2024 11:19 pm  
Operator : rocquans  
Sample : jd87833-12  
Misc : op54460,ecj297,30.0,,,1,1  
ALS Vial : 26 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

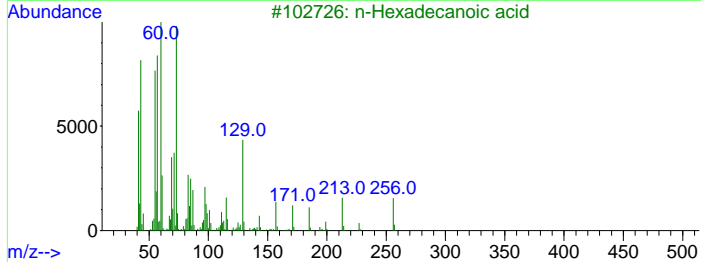
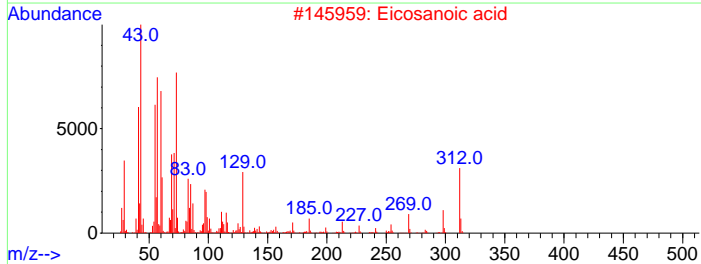
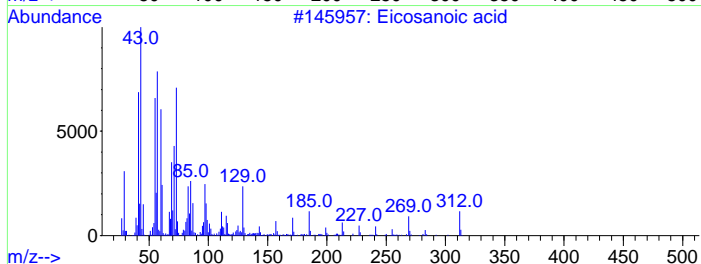
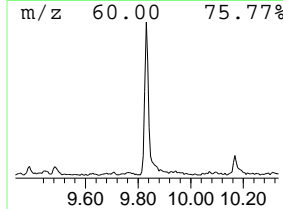
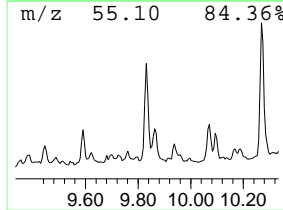
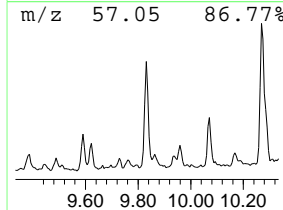
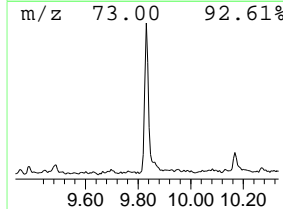
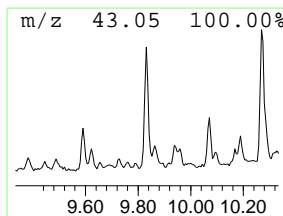
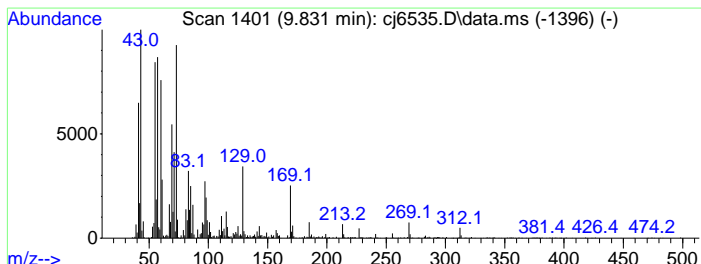
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 6 Eicosanoic acid Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.831	9.52 ppm	679778	Chrysene-d12	10.366

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1	Eicosanoic acid	312	C20H40O2	000506-30-9	92	
2	Eicosanoic acid	312	C20H40O2	000506-30-9	91	
3	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	90	
4	Eicosanoic acid	312	C20H40O2	000506-30-9	87	
5	Octadecanoic acid	284	C18H36O2	000057-11-4	87	



7.1.25  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6535.D  
Acq On : 09 May 2024 11:19 pm  
Operator : rocquans  
Sample : jd87833-12  
Misc : op54460,ecj297,30.0,,,1,1  
ALS Vial : 26 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

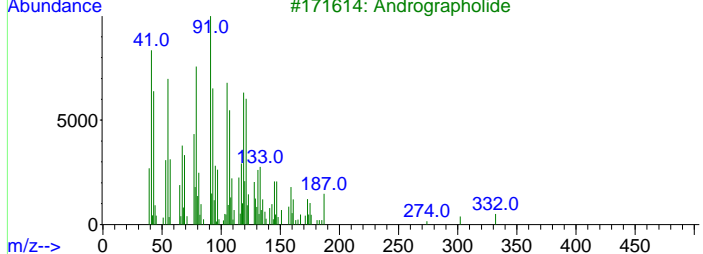
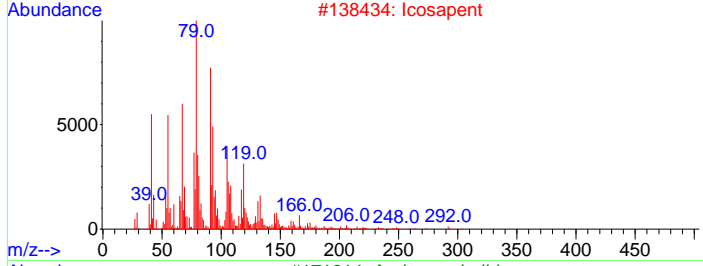
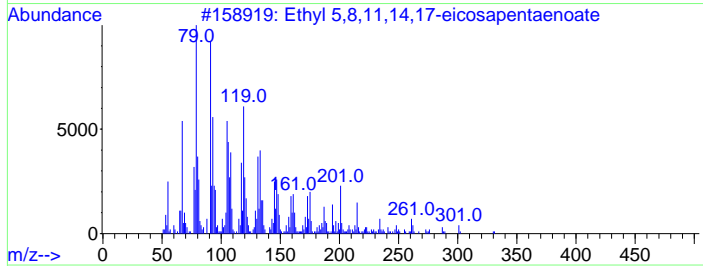
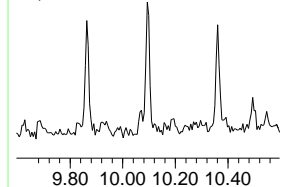
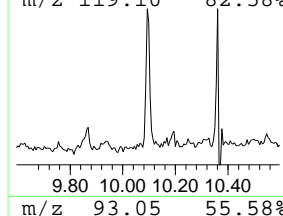
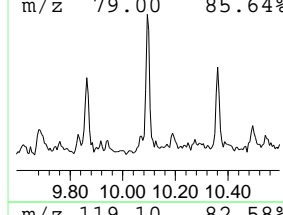
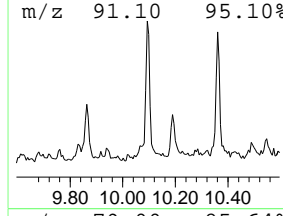
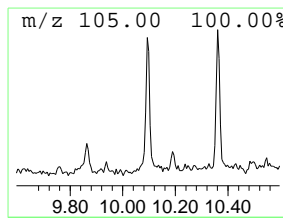
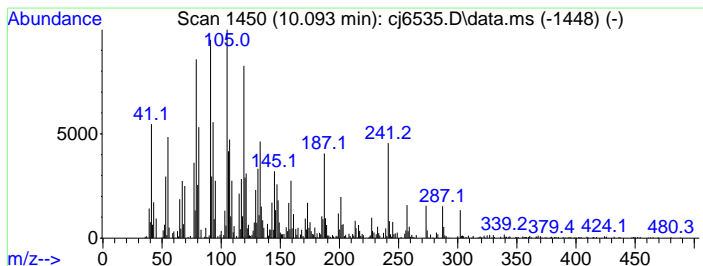
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 7 Unknown Concentration Rank 24

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.093	6.28 ppm	448254	Chrysene-d12	10.366

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Ethyl 5,8,11,14,17-eicosapentaen...	330	C22H34O2	1000336-70-3	70
2		Icosapent	302	C20H30O2	010417-94-4	50
3		Andrographolide	350	C20H30O5	005508-58-7	38
4		10,12-Tricosadiynoic acid, methy...	360	C24H40O2	1000333-59-4	35
5		1,8-Nonadiene, 2-methyl-5,7-dime...	162	C12H18	1000152-68-8	27



7.1.25  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\
Data File : cj6535.D
Acq On : 09 May 2024 11:19 pm
Operator : rocquans
Sample : jd87833-12
Misc : op54460,ecj297,30.0,,,1,1
ALS Vial : 26 Sample Multiplier: 1

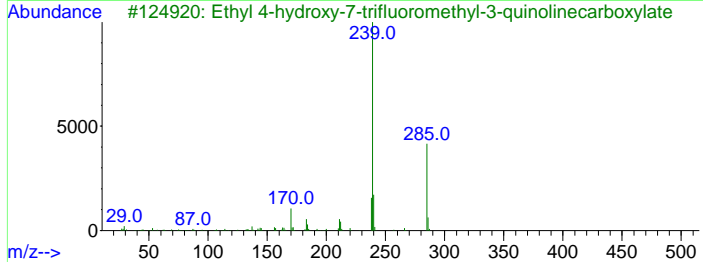
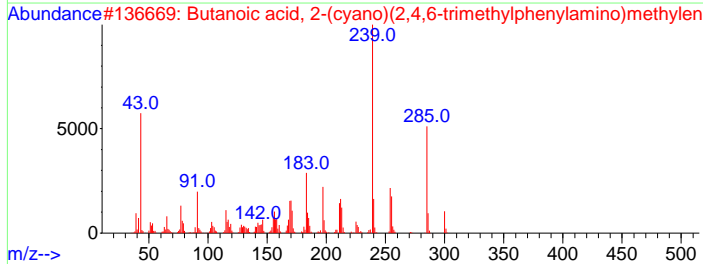
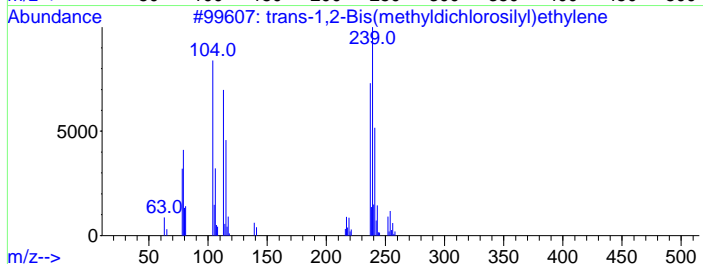
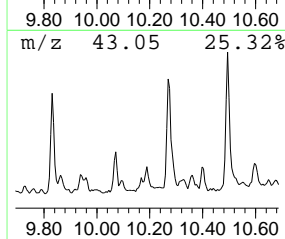
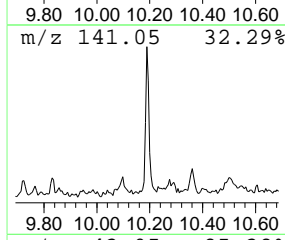
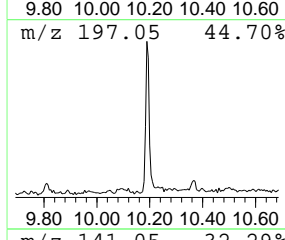
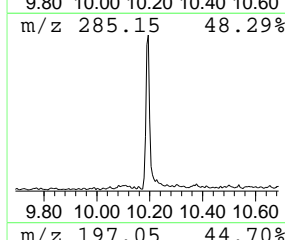
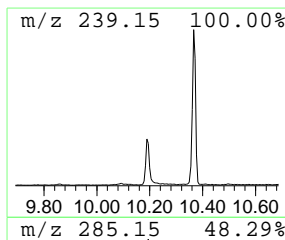
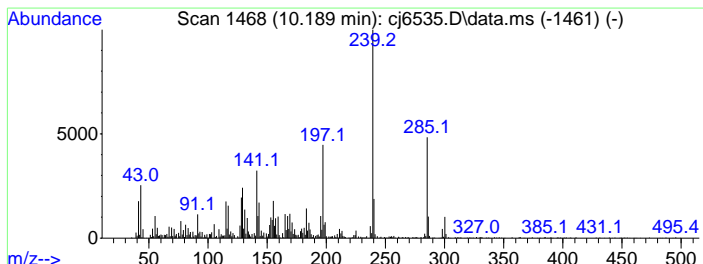
Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: lscint.p

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Peak Number 8 Unknown Concentration Rank 17

Table with 5 columns: R.T., EstConc, Area, Relative to ISTD, R.T.
Row 1: 10.189, 8.21 ppm, 585985, Chrysene-d12, 10.366

Table with 7 columns: Hit# of, Tentative ID, MW, MolForm, CAS#, Qual
Row 1: 1 trans-1,2-Bis(methylchlorosilyl)ethylene 252 C4H8Cl4Si2 065899-10-7 70



7.1.25
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6535.D  
Acq On : 09 May 2024 11:19 pm  
Operator : rocquans  
Sample : jd87833-12  
Misc : op54460,ecj297,30.0,,,1,1  
ALS Vial : 26 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

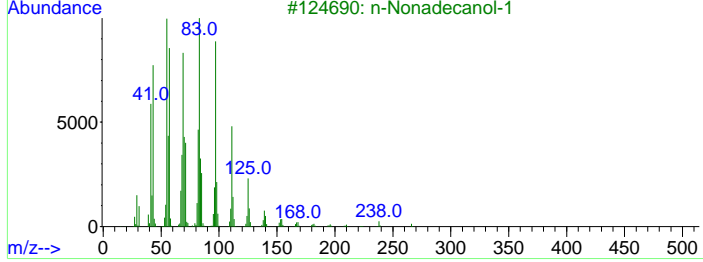
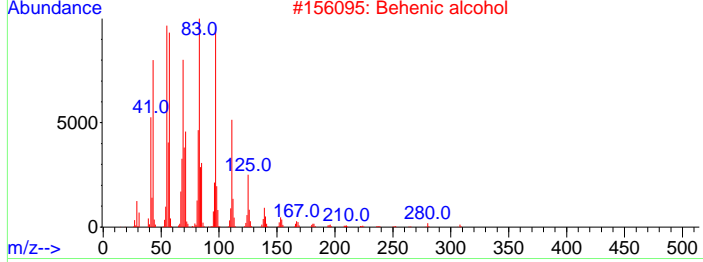
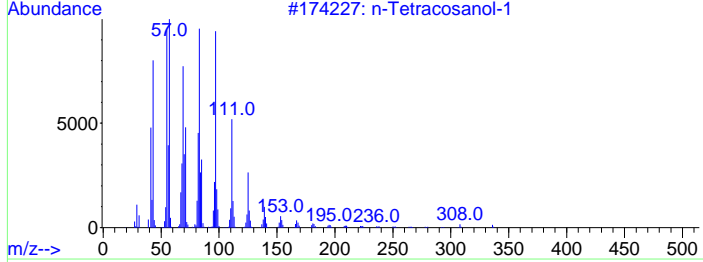
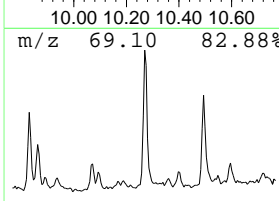
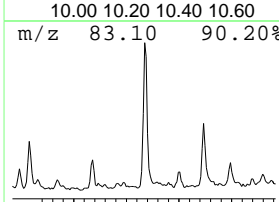
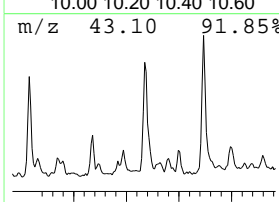
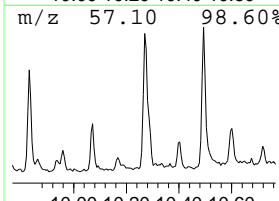
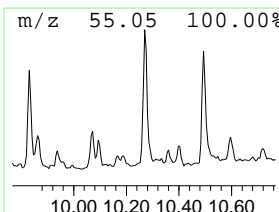
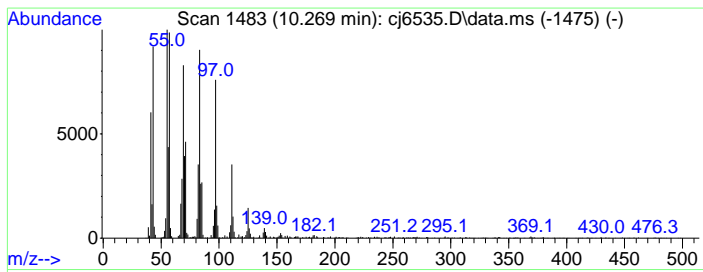
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 9 Unknown alcohol Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.269	12.79 ppm	913742	Chrysene-d12	10.366

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	n-Tetracosanol-1	354	C24H50O	000506-51-4	94
2		Behenic alcohol	326	C22H46O	000661-19-8	94
3		n-Nonadecanol-1	284	C19H40O	001454-84-8	94
4		9-Eicosene, (E)-	280	C20H40	074685-29-3	91
5		1-Nonadecene	266	C19H38	018435-45-5	91



7.1.25  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6535.D  
 Acq On : 09 May 2024 11:19 pm  
 Operator : rocquans  
 Sample : jd87833-12  
 Misc : op54460,ecj297,30.0,,,1,1  
 ALS Vial : 26 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

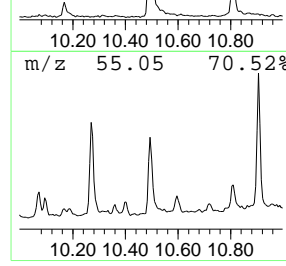
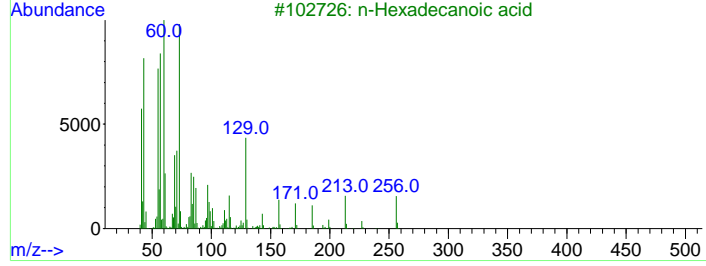
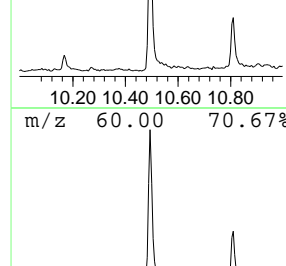
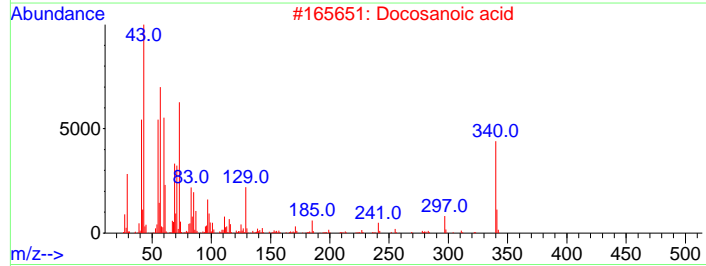
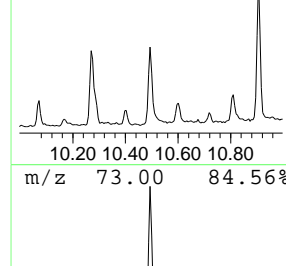
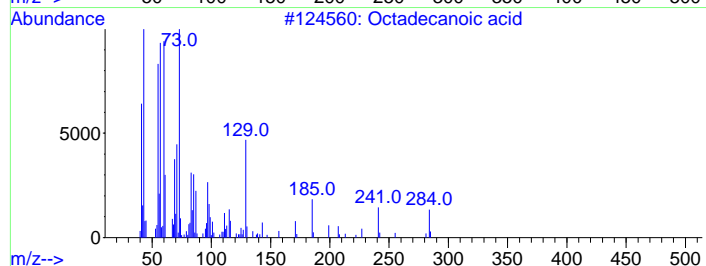
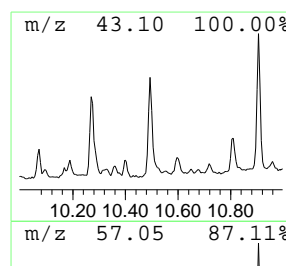
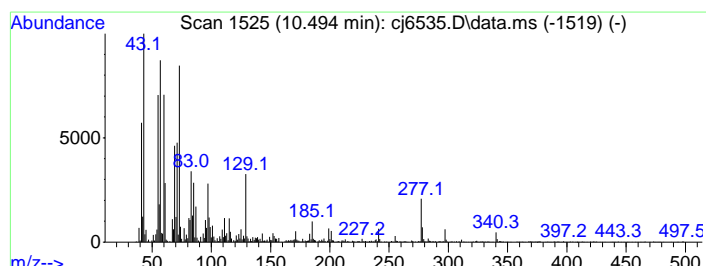
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 10 Octadecanoic acid Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.494	17.85 ppm	1274560	Chrysene-d12a	10.366

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		Octadecanoic acid	284	C18H36O2	000057-11-4	99
2		Docosanoic acid	340	C22H44O2	000112-85-6	95
3		n-Hexadecanoic acid	256	C16H32O2	000057-10-3	49
4		Pentadecanoic acid	242	C15H30O2	001002-84-2	49
5		Tridecanoic acid	214	C13H26O2	000638-53-9	47



7.1.25  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6535.D  
Acq On : 09 May 2024 11:19 pm  
Operator : rocquans  
Sample : jd87833-12  
Misc : op54460,ecj297,30.0,,,1,1  
ALS Vial : 26 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

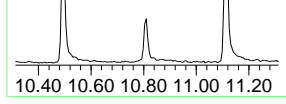
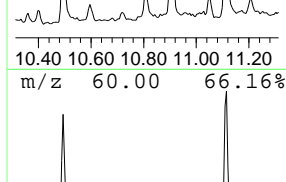
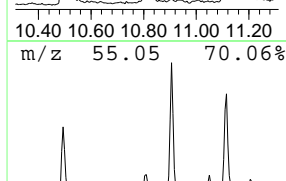
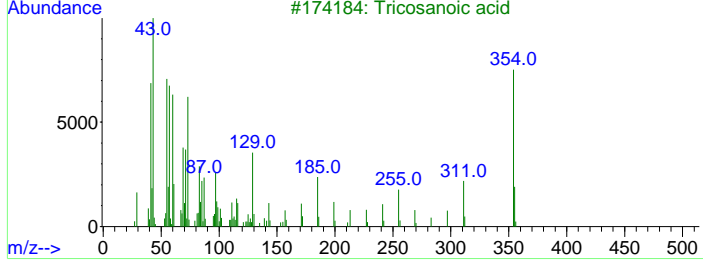
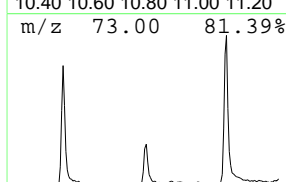
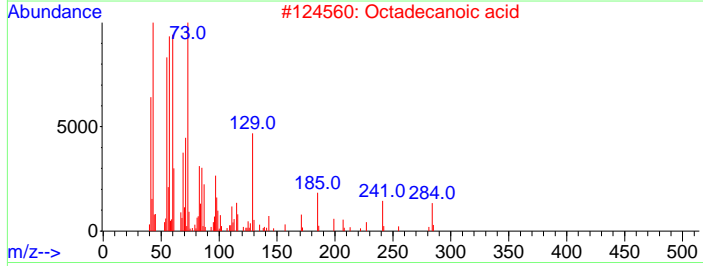
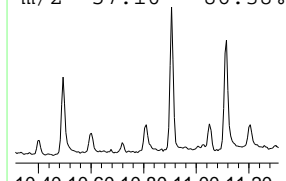
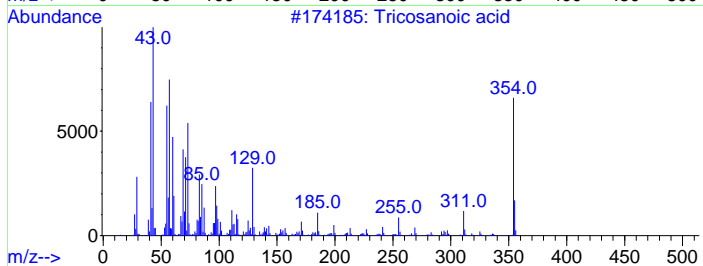
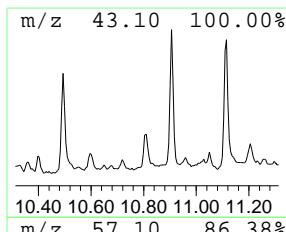
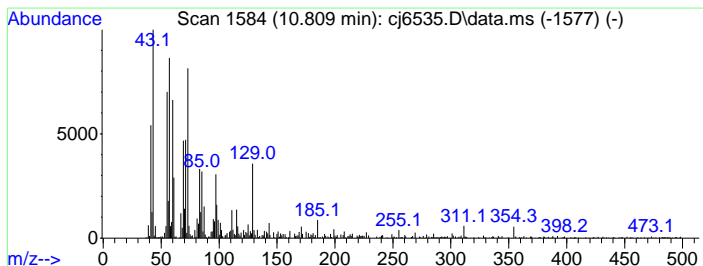
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 11 Unknown acid Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.810	8.18 ppm	584308	Chrysene-d12a	10.366

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Tricosanoic acid	354	C23H46O2	002433-96-7	94
2		Octadecanoic acid	284	C18H36O2	000057-11-4	74
3		Tricosanoic acid	354	C23H46O2	002433-96-7	70
4		Hexacosanoic acid	396	C26H52O2	000506-46-7	64
5		Oxalic acid, pentadecyl propyl e...	342	C20H38O4	1000309-26-8	41



7.1.25  
7



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6535.D  
Acq On : 09 May 2024 11:19 pm  
Operator : rocquans  
Sample : jd87833-12  
Misc : op54460,ecj297,30.0,,,1,1  
ALS Vial : 26 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

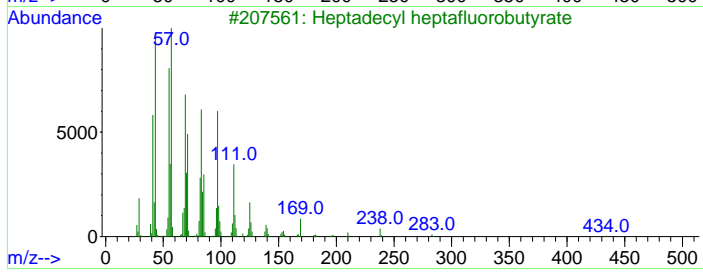
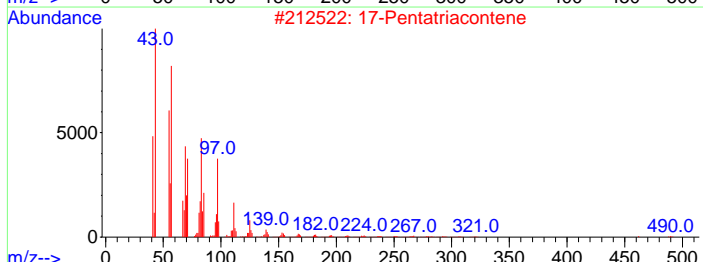
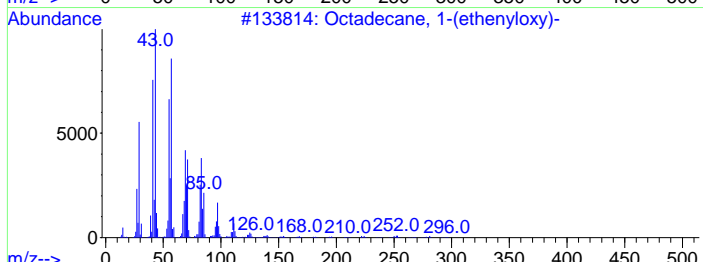
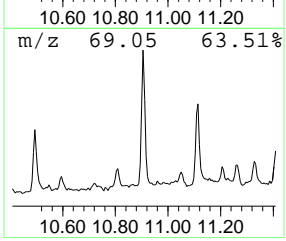
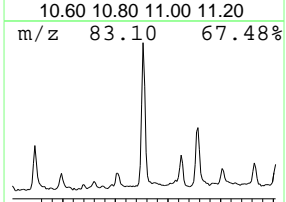
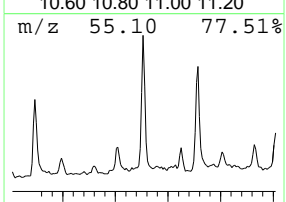
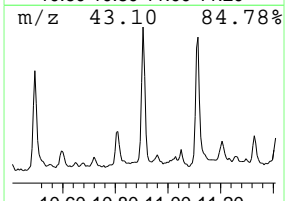
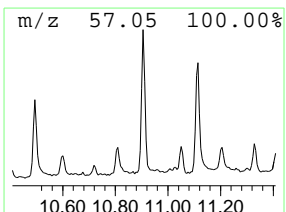
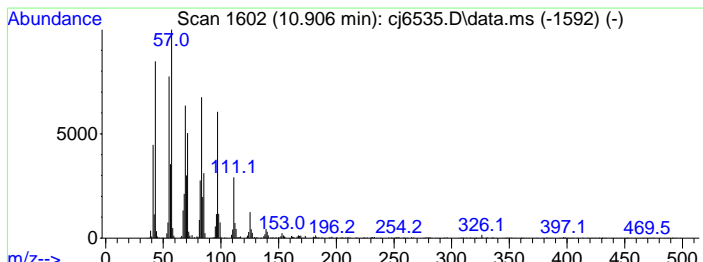
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 12 Unknown Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.906	17.11 ppm	1221870	Chrysene-d12a	10.366

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		Octadecane, 1-(ethenyloxy)-	296	C20H40O	000930-02-9	93
2		17-Pentatriacontene	491	C35H70	006971-40-0	91
3		Heptadecyl heptafluorobutyrate	452	C21H35F7O2	1000351-82-9	91
4		Eicosyl trifluoroacetate	394	C22H41F3O2	1000351-75-2	91
5		Nonadecyl pentafluoropropionate	430	C22H39F5O2	1000351-88-8	91



7.1.25  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6535.D  
 Acq On : 09 May 2024 11:19 pm  
 Operator : rocquans  
 Sample : jd87833-12  
 Misc : op54460,ecj297,30.0,,,1,1  
 ALS Vial : 26 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

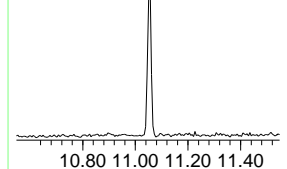
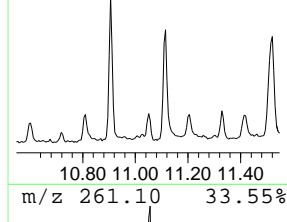
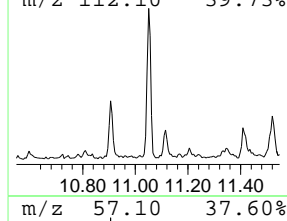
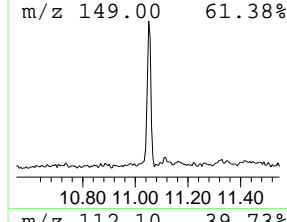
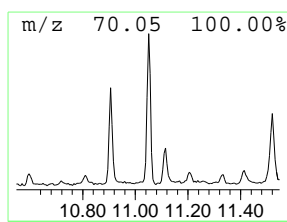
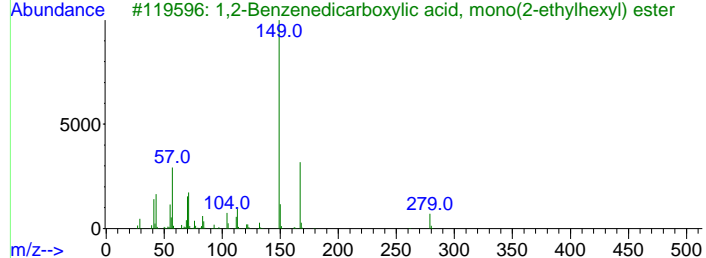
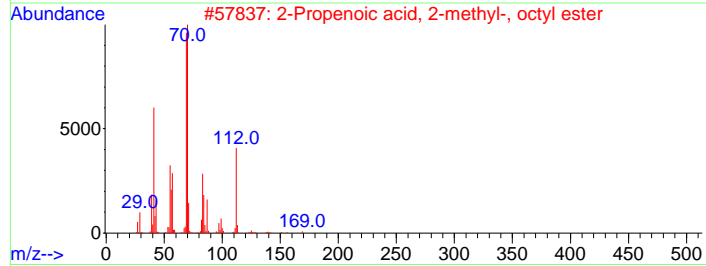
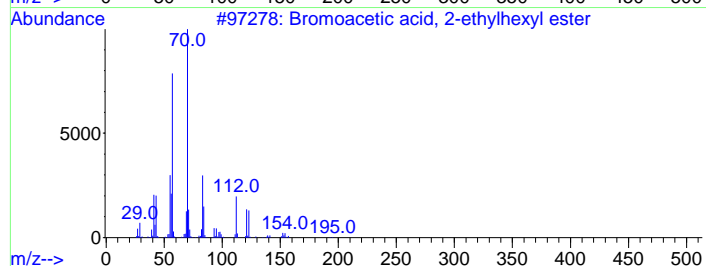
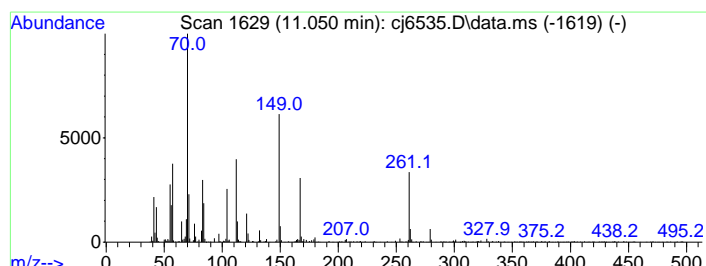
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 13 Unknown Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.050	11.29 ppm	754959	Perylene-d12	11.713

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Bromoacetic acid, 2-ethylhexyl e...	250	C10H19BrO2	068144-73-0	35
2			2-Propenoic acid, 2-methyl-, oct...	198	C12H22O2	002157-01-9	25
3			1,2-Benzenedicarboxylic acid, mo...	278	C16H22O4	004376-20-9	22
4			1,2-Benzenedicarboxylic acid, di...	390	C24H38O4	027554-26-3	22
5			Cyclohexaneamine, N-but-2-enylid...	167	C10H17NO	068048-01-1	16



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6535.D  
 Acq On : 09 May 2024 11:19 pm  
 Operator : rocquans  
 Sample : jd87833-12  
 Misc : op54460,ecj297,30.0,,,1,1  
 ALS Vial : 26 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

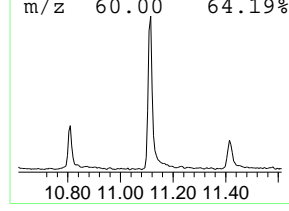
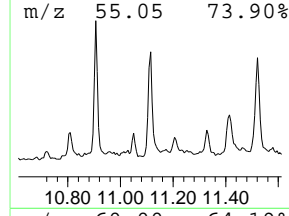
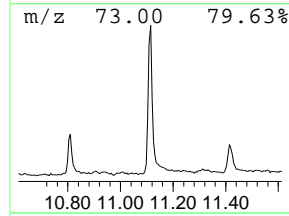
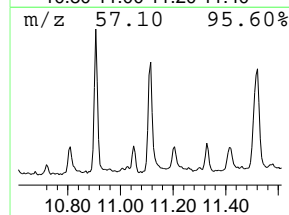
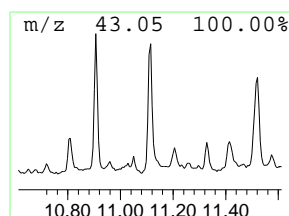
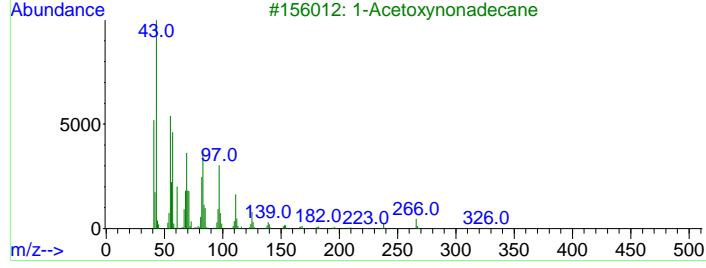
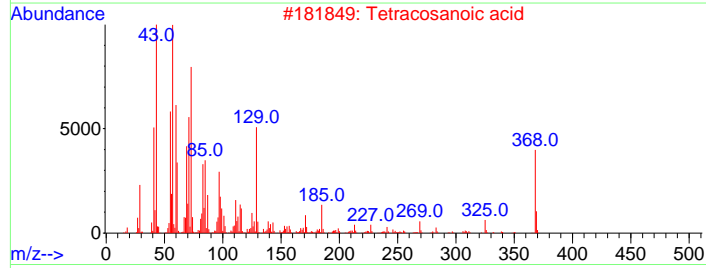
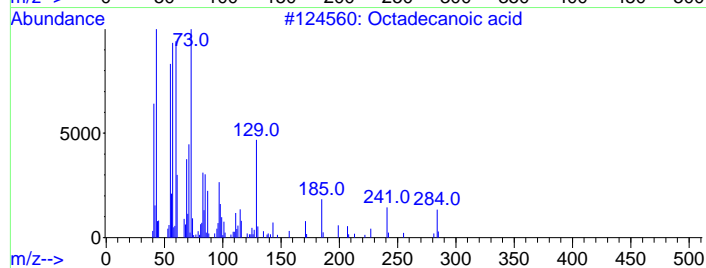
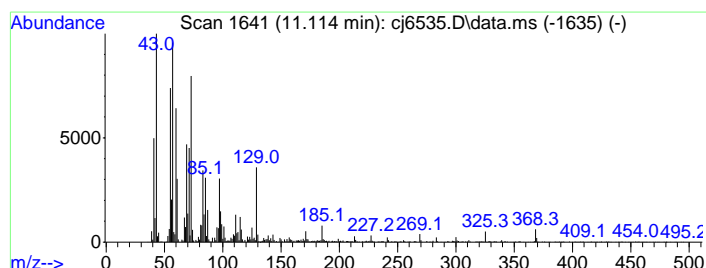
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 14 Unknown acid Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.114	23.54 ppm	1573360	Perylene-d12	11.713

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		Octadecanoic acid	284	C18H36O2	000057-11-4	87
2		Tetracosanoic acid	368	C24H48O2	000557-59-5	76
3		1-Acetoxynonadecane	326	C21H42O2	001577-43-1	41
4		Oxalic acid, isobutyl hexadecyl ...	370	C22H42O4	1000309-38-1	38
5		Oxalic acid, cyclobutyl hexadecyl ...	368	C22H40O4	1000309-70-6	38



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6535.D  
Acq On : 09 May 2024 11:19 pm  
Operator : rocquans  
Sample : jd87833-12  
Misc : op54460,ecj297,30.0,,,1,1  
ALS Vial : 26 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

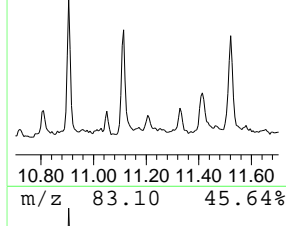
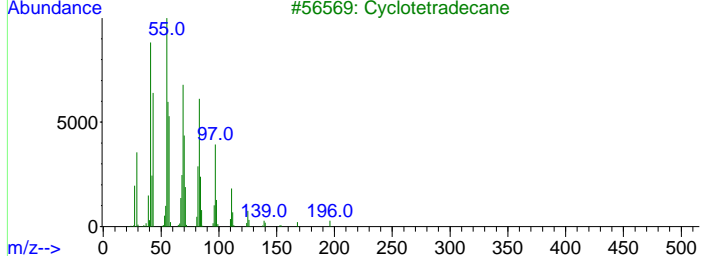
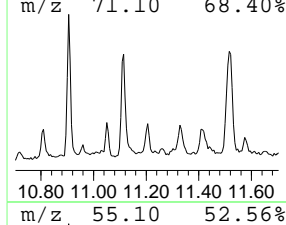
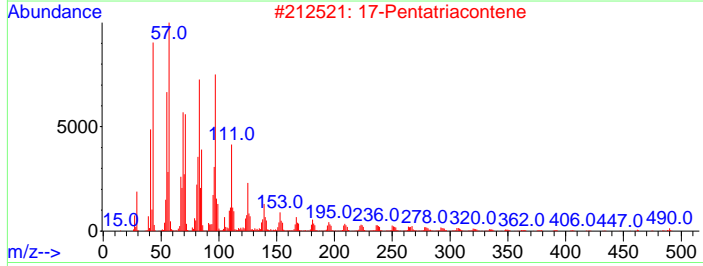
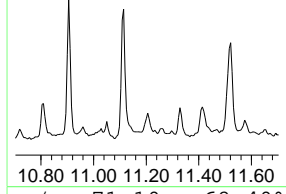
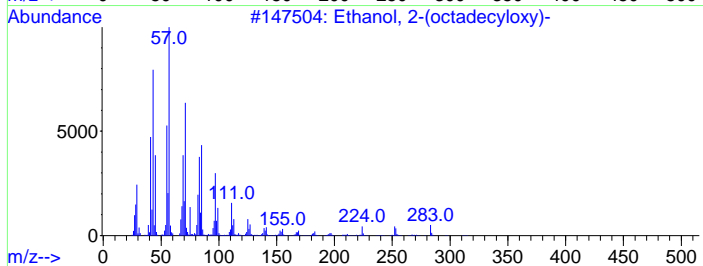
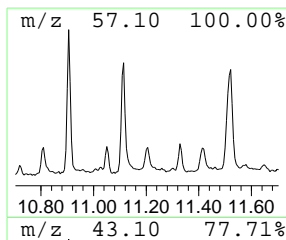
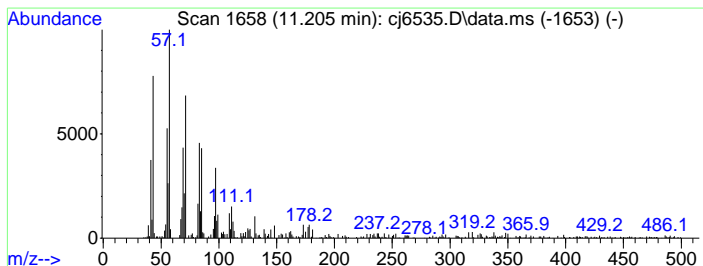
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 15 Unknown Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.205	7.44 ppm	497343	Perylene-d12	11.713

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Ethanol, 2-(octadecyloxy)-	314	C20H42O2	002136-72-3	93
2			17-Pentatriacontene	491	C35H70	006971-40-0	89
3			Cyclotetradecane	196	C14H28	000295-17-0	86
4			Oxalic acid, isobutyl pentadecyl...	356	C21H40O4	1000309-38-0	83
5			1-Docosene	308	C22H44	001599-67-3	70



7.1.25  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6535.D  
 Acq On : 09 May 2024 11:19 pm  
 Operator : rocquans  
 Sample : jd87833-12  
 Misc : op54460,ecj297,30.0,,,1,1  
 ALS Vial : 26 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

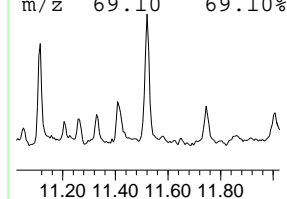
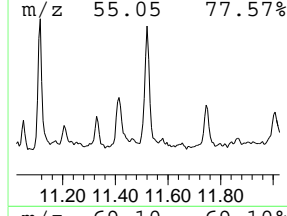
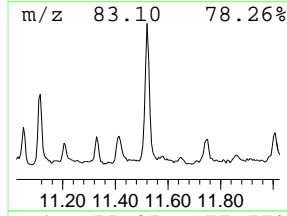
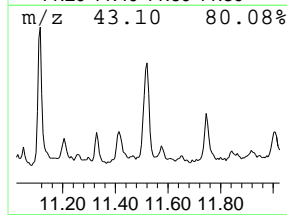
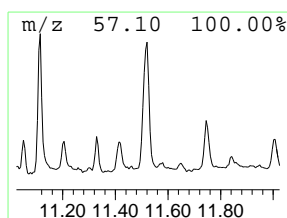
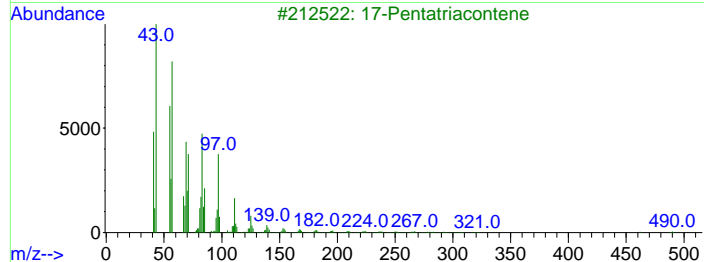
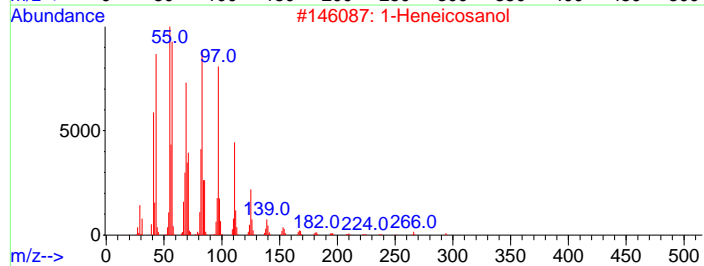
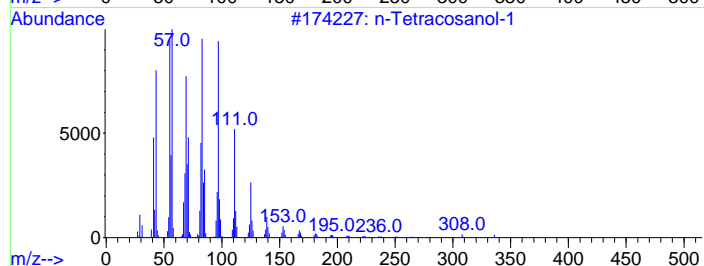
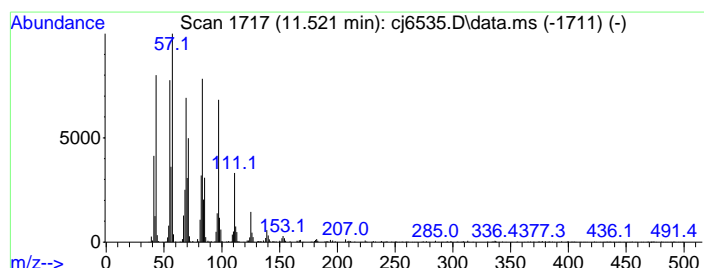
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 16 Unknown Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.521	17.83 ppm	1191820	Perylene-d12	11.713

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	n-Tetracosanol-1	354	C24H50O	000506-51-4	94
2		1-Heneicosanol	312	C21H44O	015594-90-8	93
3		17-Pentatriacontene	491	C35H70	006971-40-0	91
4		Cyclooctacosane	392	C28H56	000297-24-5	91
5		Heptafluorobutanoic acid, heptad...	452	C21H35F7O2	1000282-97-3	91



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6535.D  
Acq On : 09 May 2024 11:19 pm  
Operator : rocquans  
Sample : jd87833-12  
Misc : op54460,ecj297,30.0,,,1,1  
ALS Vial : 26 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

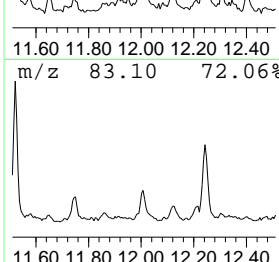
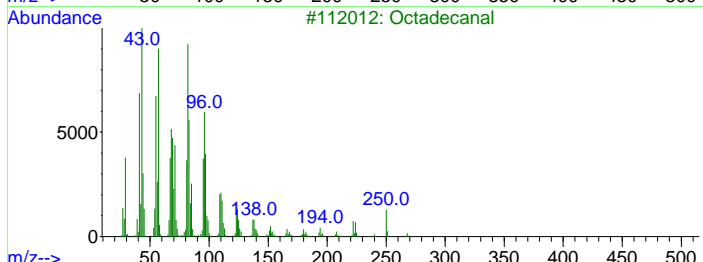
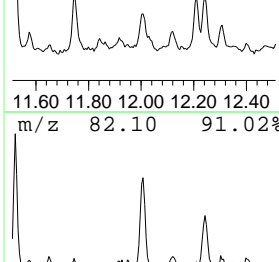
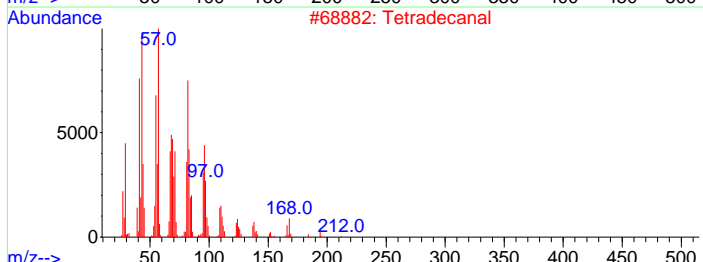
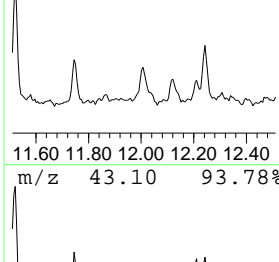
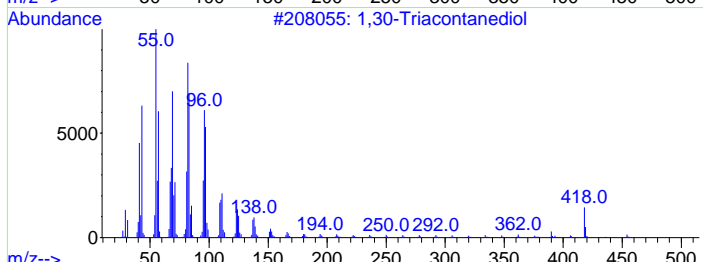
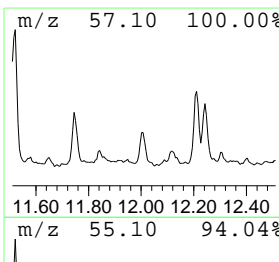
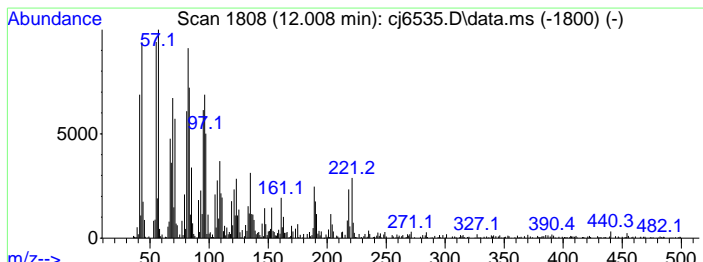
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 17 Unknown Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.008	22.64 ppm	1513320	Perylene-d12	11.713

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,30-Triacontanediol			454	C30H62O2	036645-68-8	78
2	Tetradecanal			212	C14H28O	000124-25-4	78
3	Octadecanal			268	C18H36O	000638-66-4	78
4	Oxirane, hexadecyl-			268	C18H36O	007390-81-0	60
5	(Z)-14-Tricosenyl formate			366	C24H46O2	077899-10-6	60



7.1.25  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6535.D  
Acq On : 09 May 2024 11:19 pm  
Operator : rocquans  
Sample : jd87833-12  
Misc : op54460,ecj297,30.0,,,1,1  
ALS Vial : 26 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

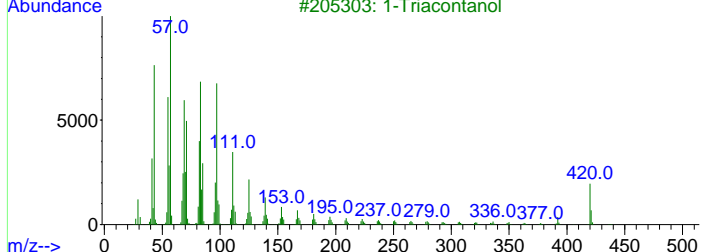
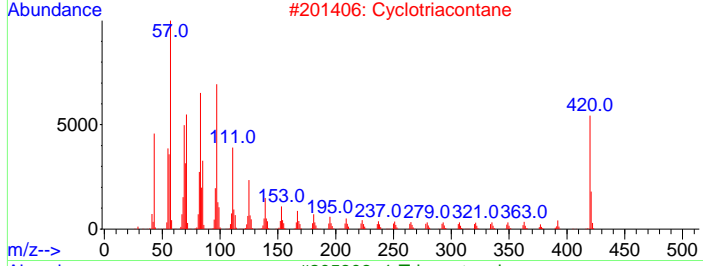
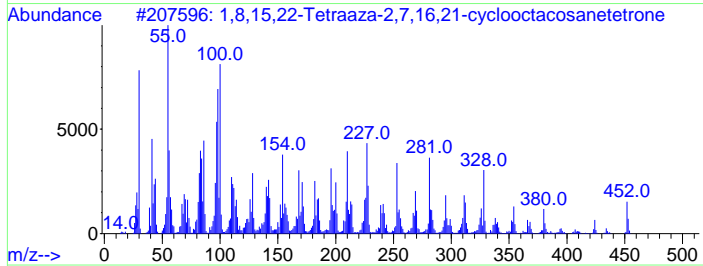
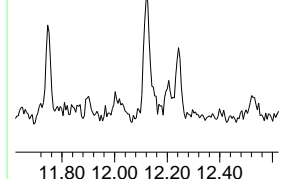
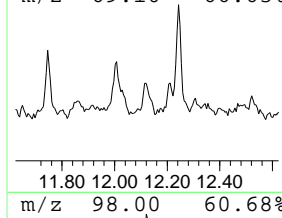
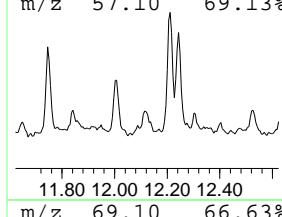
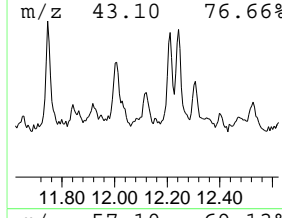
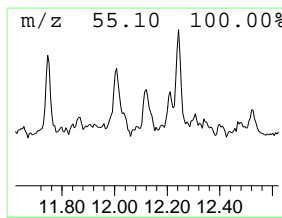
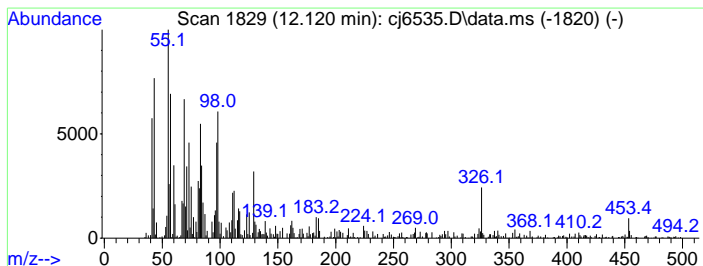
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 18 Unknown Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.120	9.36 ppm	625406	Perylene-d12	11.713

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,8,15,22-Tetraaza-2,7,16,21-cyc...	452	C24H44N4O4	004238-35-1	92		
2	Cyclotriacontane	420	C30H60	000297-35-8	52		
3	1-Triacontanol	438	C30H62O	000593-50-0	46		
4	Hexadecanoic acid, 2-hydroxy-, m...	286	C17H34O3	016742-51-1	30		
5	Tetratriacontane, 17-hexadecyl-	703	C50H102	055256-07-0	25		



7.1.25  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6535.D  
Acq On : 09 May 2024 11:19 pm  
Operator : rocquans  
Sample : jd87833-12  
Misc : op54460,ecj297,30.0,,,1,1  
ALS Vial : 26 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

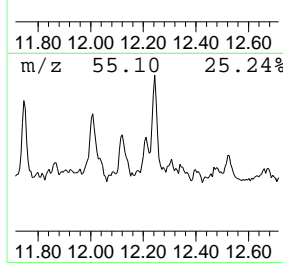
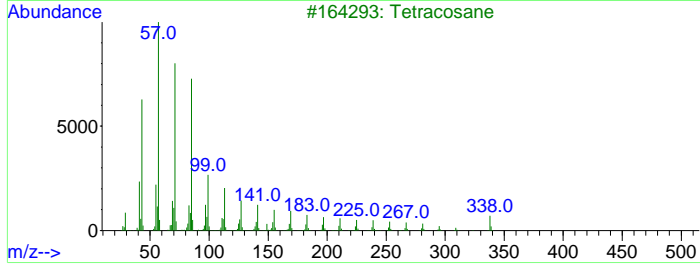
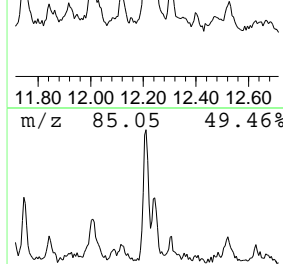
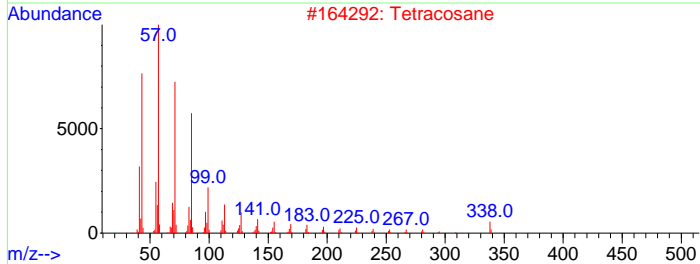
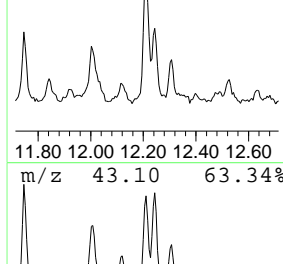
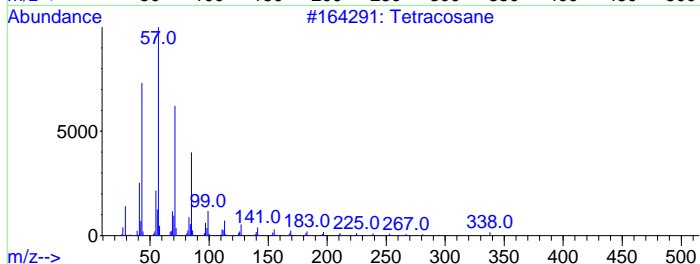
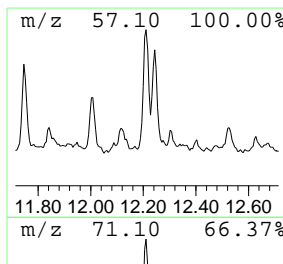
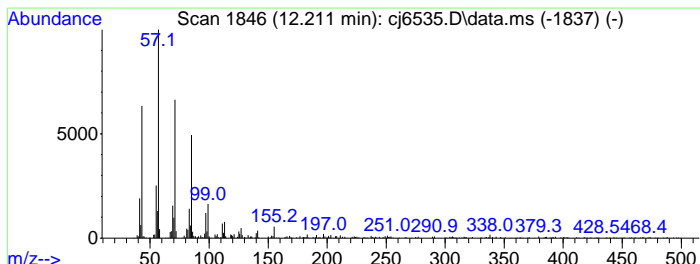
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 19 Tetracosane Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.211	9.99 ppm	667639	Perylene-d12	11.713

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Tetracosane	338	C24H50	000646-31-1	96
2			Tetracosane	338	C24H50	000646-31-1	93
3			Tetracosane	338	C24H50	000646-31-1	87
4			Tetracosane	338	C24H50	000646-31-1	87
5			Docosane	310	C22H46	000629-97-0	87



7.1.25  
7



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6535.D  
 Acq On : 09 May 2024 11:19 pm  
 Operator : rocquans  
 Sample : jd87833-12  
 Misc : op54460,ecj297,30.0,,,1,1  
 ALS Vial : 26 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

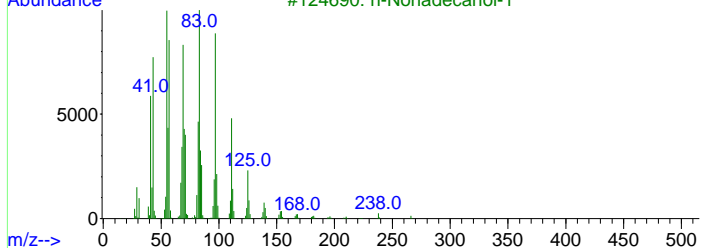
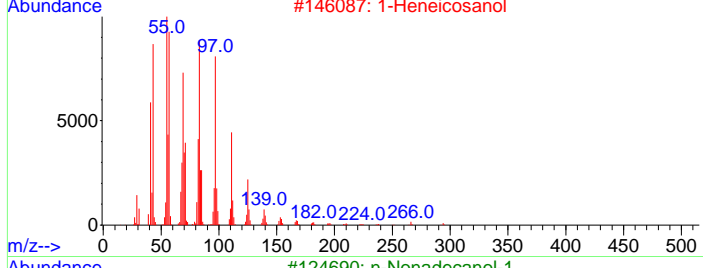
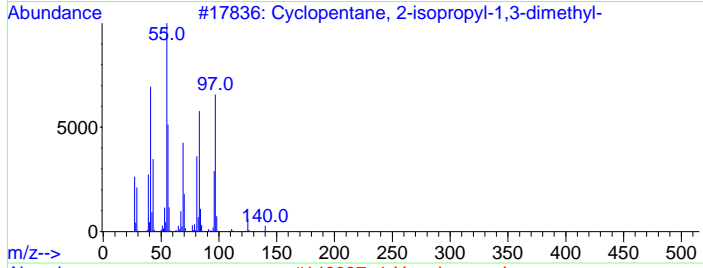
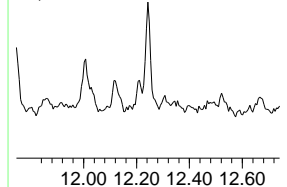
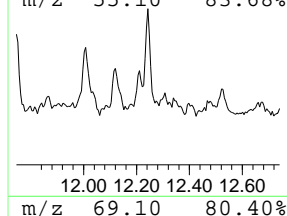
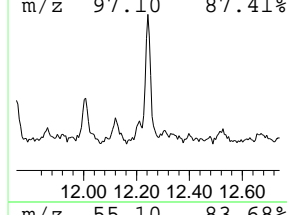
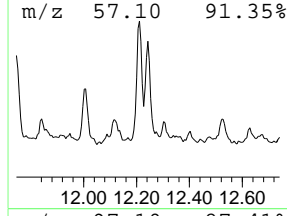
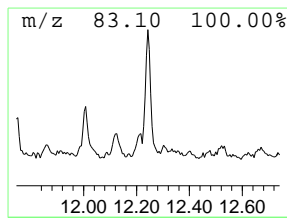
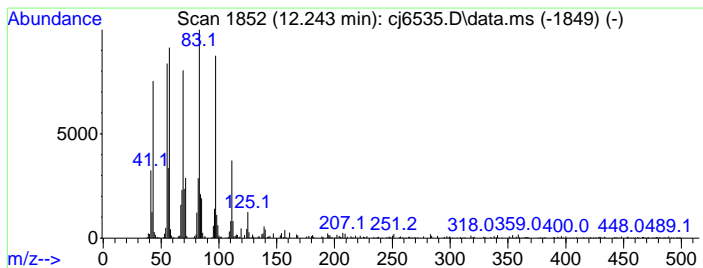
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 20 Unknown Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.243	11.07 ppm	740271	Perylene-d12	11.713

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Cyclopentane, 2-isopropyl-1,3-di...	140	C10H20	032281-85-9	81
2			1-Heneicosanol	312	C21H44O	015594-90-8	55
3			n-Nonadecanol-1	284	C19H40O	001454-84-8	55
4			Octacosyl acetate	452	C30H60O2	018206-97-8	50
5			Behenic alcohol	326	C22H46O	000661-19-8	49



7.1.25  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6535.D  
 Acq On : 09 May 2024 11:19 pm  
 Operator : rocquans  
 Sample : jd87833-12  
 Misc : op54460,ecj297,30.0,,,1,1  
 ALS Vial : 26 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

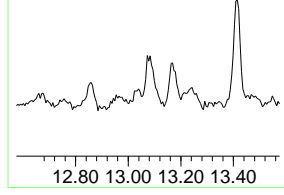
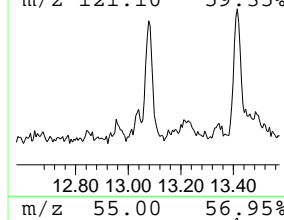
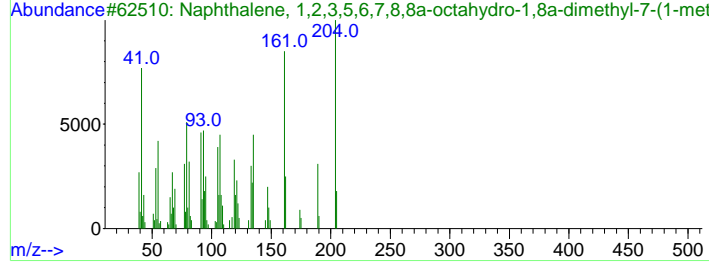
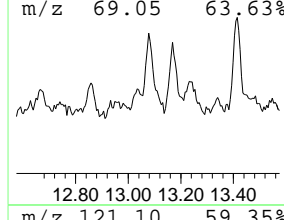
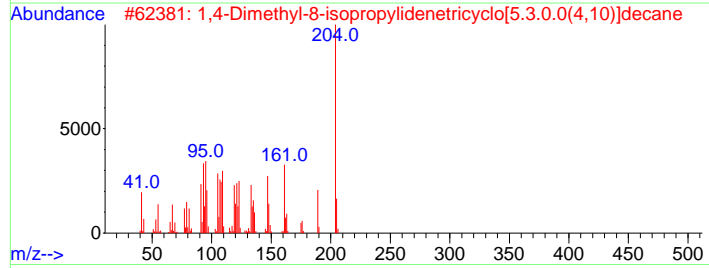
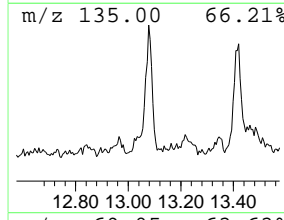
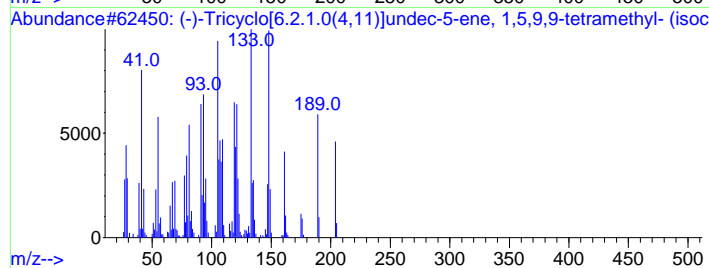
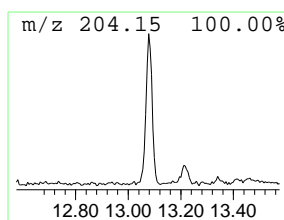
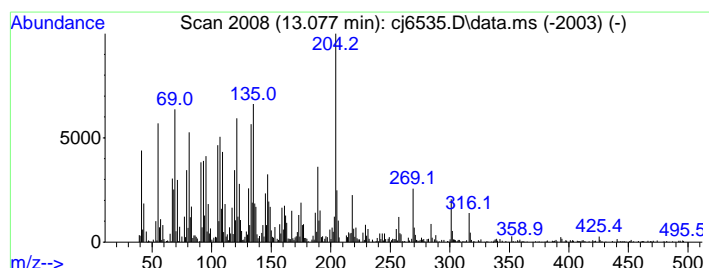
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 21 Unknown Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.077	17.22 ppm	1151290	Perylene-d12	11.713

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			(-)-Tricyclo[6.2.1.0(4,11)]undec...	204	C15H24	1000154-06-7	58
2			1,4-Dimethyl-8-isopropylidenetri...	204	C15H24	1000140-07-7	53
3			Naphthalene, 1,2,3,5,6,7,8,8a-oc...	204	C15H24	004630-07-3	49
4			1-Naphthalenecarboxylic acid, de...	316	C21H32O2	001235-39-8	44
5			2H-Cyclopentacyclooctene, 4,5,6,...	204	C15H24	1000221-85-8	43



7.1.25  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6535.D  
Acq On : 09 May 2024 11:19 pm  
Operator : rocquans  
Sample : jd87833-12  
Misc : op54460,ecj297,30.0,,,1,1  
ALS Vial : 26 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

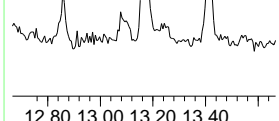
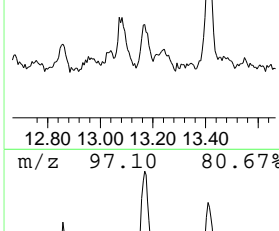
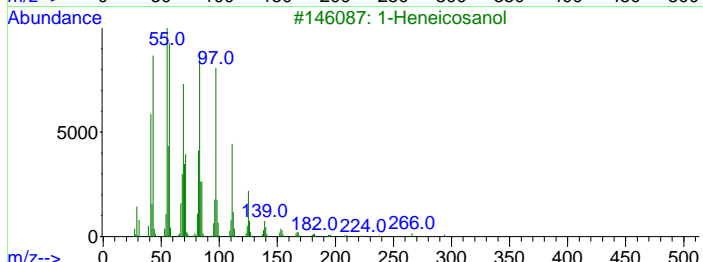
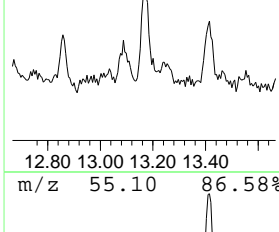
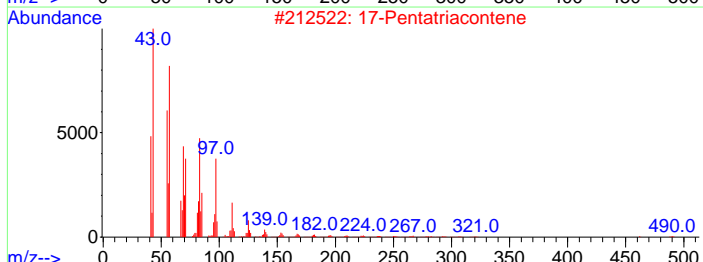
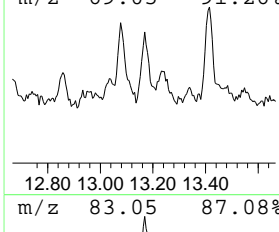
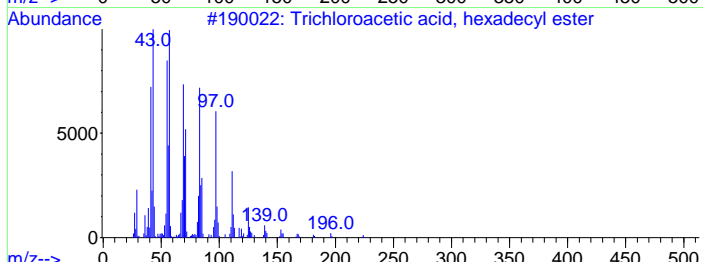
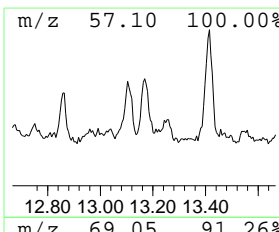
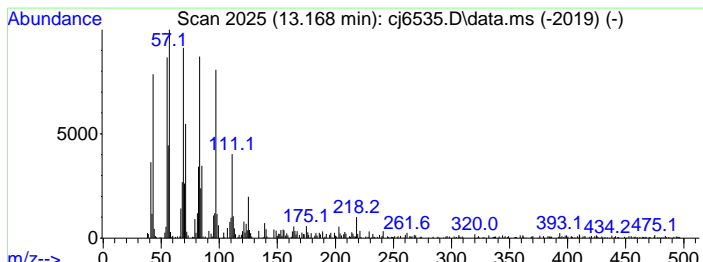
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 22 Unknown Concentration Rank 23

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.168	6.83 ppm	456608	Perylene-d12	11.713

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Trichloroacetic acid, hexadecyl ...	386	C18H33Cl3O2	074339-54-1	91
2			17-Pentatriacontene	491	C35H70	006971-40-0	72
3			1-Heneicosanol	312	C21H44O	015594-90-8	68
4			2-Methyl-2-docosene	322	C23H46	1000131-16-9	64
5			Heptadecyl trifluoroacetate	352	C19H35F3O2	1000351-87-0	62



7.1.25  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6535.D  
Acq On : 09 May 2024 11:19 pm  
Operator : rocquans  
Sample : jd87833-12  
Misc : op54460,ecj297,30.0,,,1,1  
ALS Vial : 26 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

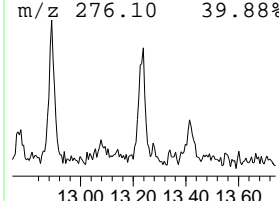
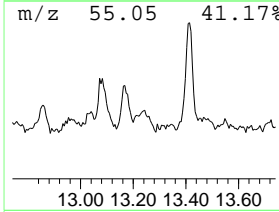
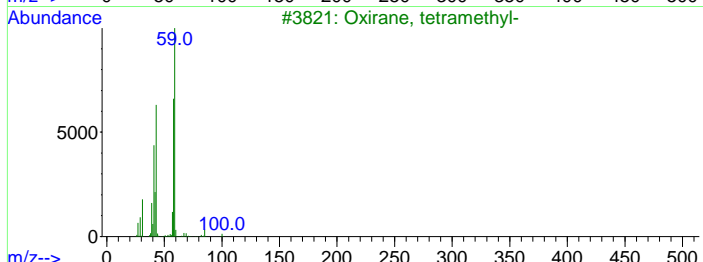
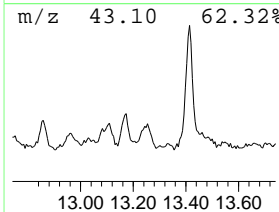
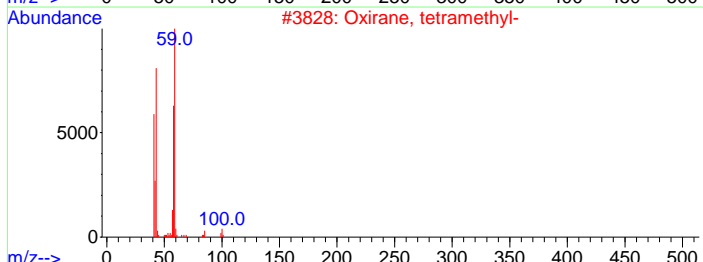
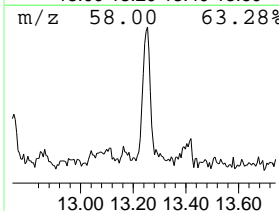
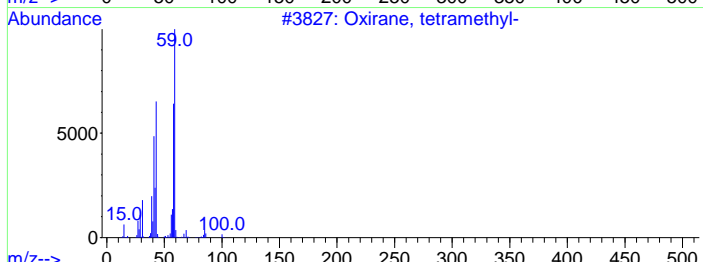
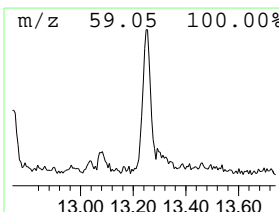
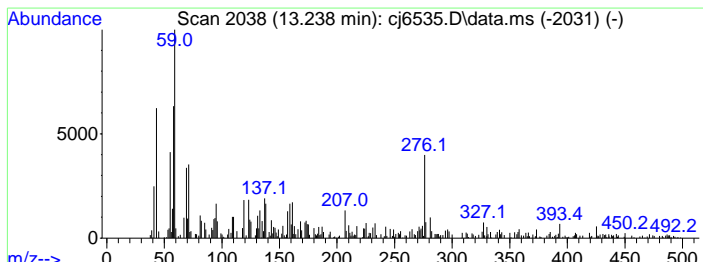
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 23 Oxirane, tetramethyl- Concentration Rank 22

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.238	7.19 ppm	480760	Perylene-d12	11.713

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Oxirane, tetramethyl-	100	C6H12O	005076-20-0	46
2		Oxirane, tetramethyl-	100	C6H12O	005076-20-0	43
3		Oxirane, tetramethyl-	100	C6H12O	005076-20-0	43
4		Succinic acid, di(2-methoxyethyl...)	234	C10H18O6	1000325-81-8	43
5		Succinic acid, isohexyl 2-methox...	260	C13H24O5	1000325-80-6	37



7.1.25  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6535.D  
Acq On : 09 May 2024 11:19 pm  
Operator : rocquans  
Sample : jd87833-12  
Misc : op54460,ecj297,30.0,,,1,1  
ALS Vial : 26 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

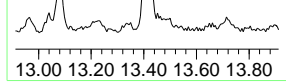
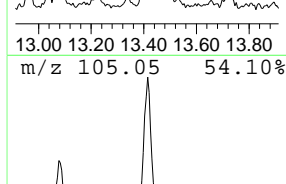
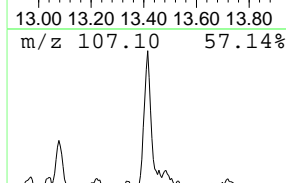
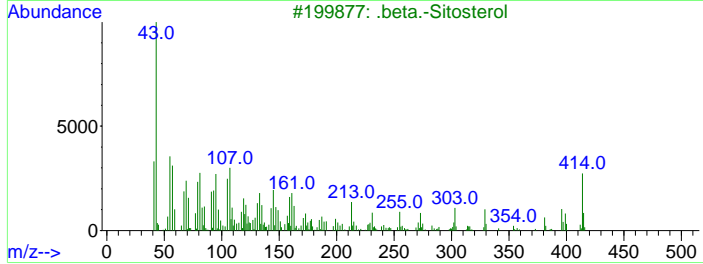
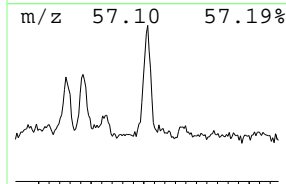
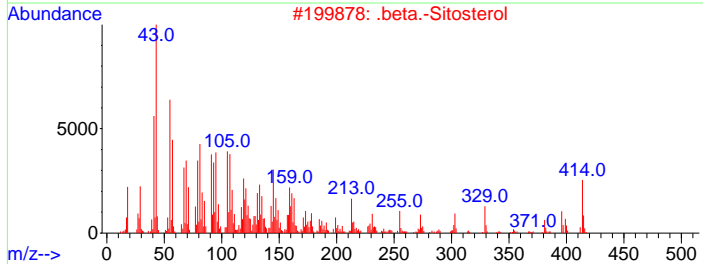
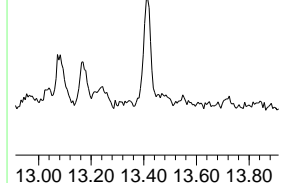
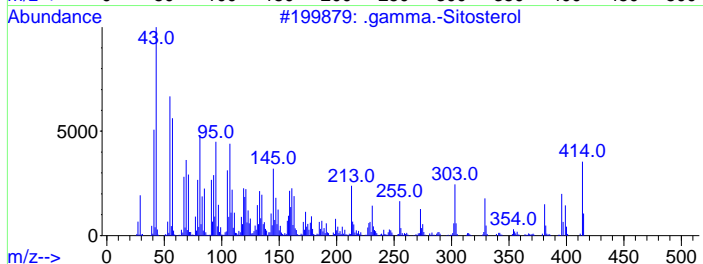
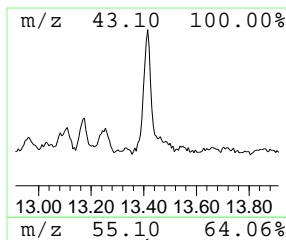
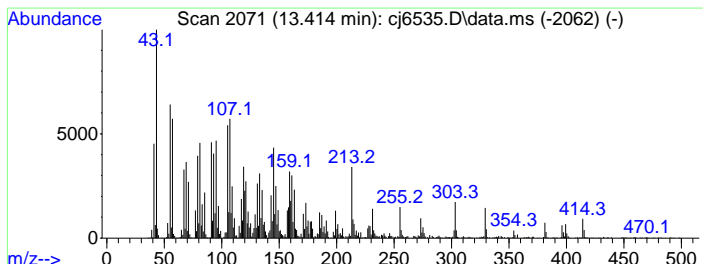
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 24 Unknown Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.414	37.74 ppm	2522890	Perylene-d12	11.713

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	.gamma.-Sitosterol	414	C29H50O	000083-47-6	95
2		.beta.-Sitosterol	414	C29H50O	000083-46-5	95
3		.beta.-Sitosterol	414	C29H50O	000083-46-5	91
4		.gamma.-Sitosterol	414	C29H50O	000083-47-6	83
5		Isocholesteryl methyl ether	400	C28H48O	029944-53-4	60



7.1.25  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6535.D  
 Acq On : 09 May 2024 11:19 pm  
 Operator : rocquans  
 Sample : jd87833-12  
 Misc : op54460,ecj297,30.0,,,1,1  
 ALS Vial : 26 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

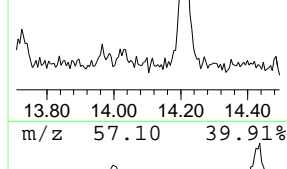
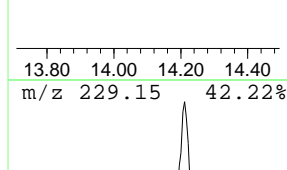
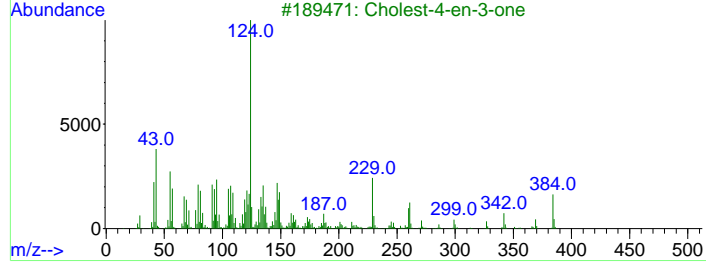
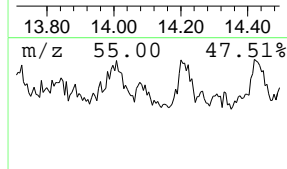
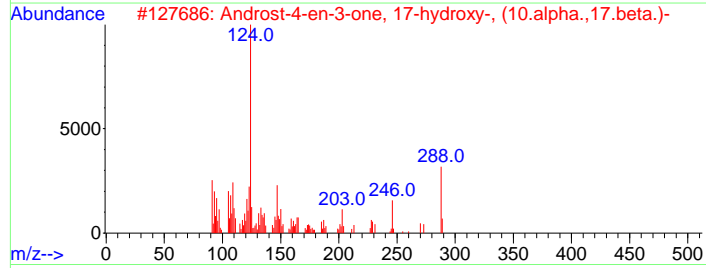
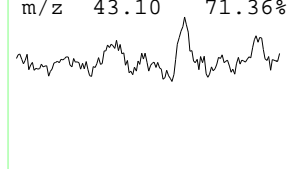
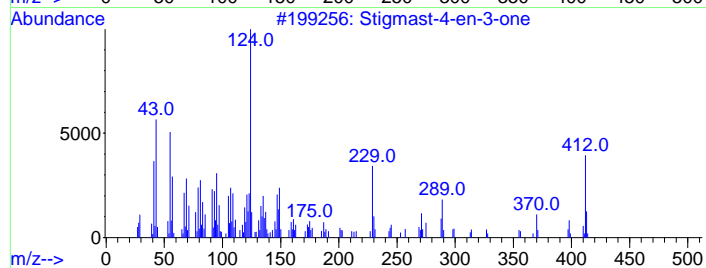
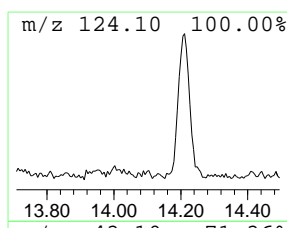
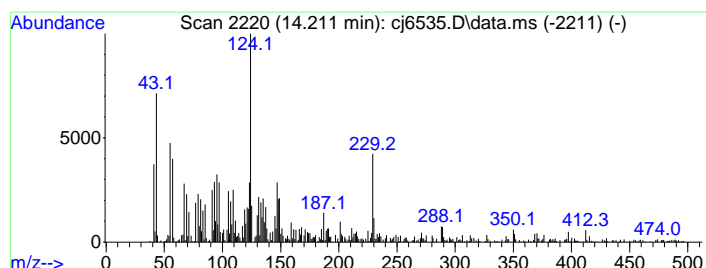
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 25 Unknown Concentration Rank 21

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.211	7.19 ppm	480817	Perylene-d12	11.713

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Stigmast-4-en-3-one	412	C29H48O	001058-61-3	76
2		Androst-4-en-3-one, 17-hydroxy-, ...	288	C19H28O2	000604-39-7	64
3		Cholest-4-en-3-one	384	C27H44O	000601-57-0	59
4		Testosterone	288	C19H28O2	000058-22-0	38
5		1'-[3-[Trichloromethyl]-1,2,4-th...	368	C13H19Cl3N4S	050350-57-7	35



7.1.25  
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Tentatively Identified Compound (LSC) summary

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6535.D  
 Acq On : 09 May 2024 11:19 pm  
 Operator : rocquans  
 Sample : jd87833-12  
 Misc : op54460,ecj297,30.0,,,1,1  
 ALS Vial : 26 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
Unknown alcohol	5.295	55.0	ppm	3597300	3	5.471	2614690	40.0
Unknown	7.547	6.1	ppm	470126	6	7.873	3064340	40.0
n-Hexadecanoic ...	8.370	13.7	ppm	1049050	8	7.873	3064340	40.0
Unknown acid	9.044	21.6	ppm	1650530	8	7.873	3064340	40.0
Octadecanoic acid	9.125	7.5	ppm	531693	9	10.366	2856630	40.0
Eicosanoic acid	9.831	9.5	ppm	679778	9	10.366	2856630	40.0
Unknown	10.093	6.3	ppm	448254	9	10.366	2856630	40.0
Unknown	10.189	8.2	ppm	585985	9	10.366	2856630	40.0
Unknown alcohol	10.269	12.8	ppm	913742	9	10.366	2856630	40.0
Octadecanoic acid	10.494	17.9	ppm	1274560	10	10.366	2856630	40.0
Unknown acid	10.810	8.2	ppm	584308	10	10.366	2856630	40.0
Unknown	10.906	17.1	ppm	1221870	10	10.366	2856630	40.0
Unknown	11.050	11.3	ppm	754959	11	11.713	2674010	40.0
Unknown acid	11.114	23.5	ppm	1573360	11	11.713	2674010	40.0
Unknown	11.205	7.4	ppm	497343	11	11.713	2674010	40.0
Unknown	11.521	17.8	ppm	1191820	11	11.713	2674010	40.0
Unknown	12.008	22.6	ppm	1513320	11	11.713	2674010	40.0
Unknown	12.120	9.4	ppm	625406	11	11.713	2674010	40.0
Tetracosane	12.211	10.0	ppm	667639	11	11.713	2674010	40.0
Unknown	12.243	11.1	ppm	740271	11	11.713	2674010	40.0
Unknown	13.077	17.2	ppm	1151290	11	11.713	2674010	40.0
Unknown	13.168	6.8	ppm	456608	11	11.713	2674010	40.0
Oxirane, tetram...	13.238	7.2	ppm	480760	11	11.713	2674010	40.0
Unknown	13.414	37.7	ppm	2522890	11	11.713	2674010	40.0
Unknown	14.211	7.2	ppm	480817	11	11.713	2674010	40.0

7.1.25  
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Quantitation Report (QT/LSC Reviewed)

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6536.D  
 Acq On : 09 May 2024 11:38 pm  
 Operator : rocquans  
 Sample : jd87833-13 Inst : GCMSCJ  
 Misc : op54460,ecj297,30.0,,,1,1  
 ALS Vial : 27 Sample Multiplier: 1

Quant Time: May 10 19:41:36 2024  
 Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
 QLast Update : Thu May 09 12:05:48 2024  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
1) 1,4-Dichlorobenzene-d4	4.664	152	353006	40.00	ppm	0.00	
24) Naphthalene-d8	5.466	136	1238601	40.00	ppm	0.00	
46) Acenaphthene-d10	6.659	164	688785	40.00	ppm	0.00	
69) Phenanthrene-d10	7.868	188	1211117	40.00	ppm	0.00	
84) Chrysene-d12	10.366	240	877322	40.00	ppm	0.00	
93) Perylene-d12	11.713	264	876016	40.00	ppm	0.00	
103) 1,4-Dichlorobenzene-d4a	4.664	152	353006	40.00	ppm	0.00	
105) Phenanthrene-d10a	7.868	188	1211117	40.00	ppm	0.00	
107) Naphthalene-d8a	5.466	136	1238601	40.00	ppm	0.00	
109) Phenanthrene-d10b	7.868	188	1211117	40.00	ppm	0.00	
112) Chrysene-d12a	10.366	240	877322	40.00	ppm	0.00	
System Monitoring Compounds							
5) 2-Fluorophenol	3.808	112	373516	36.81	ppm	0.01	
Spiked Amount 50.000			Recovery =	73.62%			
8) Phenol-d5	4.423	99	498950	38.13	ppm	0.00	
Spiked Amount 50.000			Recovery =	76.26%			
25) Nitrobenzene-d5	5.012	82	485811	38.31	ppm	0.00	
Spiked Amount 50.000			Recovery =	76.62%			
51) 2-Fluorobiphenyl	6.167	172	888320	40.99	ppm	0.00	
Spiked Amount 50.000			Recovery =	81.98%			
74) 2,4,6-Tribromophenol	7.274	330	128943	48.56	ppm	0.00	
Spiked Amount 50.000			Recovery =	97.12%			
87) Terphenyl-d14	9.355	244	952393	43.94	ppm	0.00	
Spiked Amount 50.000			Recovery =	87.88%			
110) 1-chlorooctadecane	0.000	57	0d	0.00	ppm		
Spiked Amount 50.000			Recovery =	0.00%			
111) o-terphenyl	0.000	230	0	0.00	ppm		
Spiked Amount 50.000			Recovery =	0.00%			
Target Compounds							
							Qvalue
78) Phenanthrene	7.889	178	31001	1.0592	ppm		97
79) Anthracene	7.937	178	7301	0.2491	ppm		87
80) Carbazole	8.076	167	4588	0.1680	ppm		92
82) Fluoranthene	8.980	202	64308	2.0295	ppm		98
86) Pyrene	9.194	202	58198	1.9506	ppm		98
89) Benzo[a]anthracene	10.355	228	26835	0.9513	ppm		84
91) Chrysene	10.387	228	26387	1.0139	ppm		96
92) bis(2-Ethylhexyl)phtha...	10.403	149	5424	0.2751	ppm		96
95) Benzo[b]fluoranthene	11.344	252	33486m	1.2654	ppm		
96) Benzo[k]fluoranthene	11.371	252	11229m	0.4716	ppm		
97) Benzo[a]pyrene	11.655	252	22763	1.0391	ppm		91
98) Indeno[1,2,3-cd]pyrene	12.890	276	18494	0.6983	ppm		88
102) Benzo[g,h,i]perylene	13.233	276	17417	0.8463	ppm		94
-----							

(#) = qualifier out of range (m) = manual integration (+) = signals summed

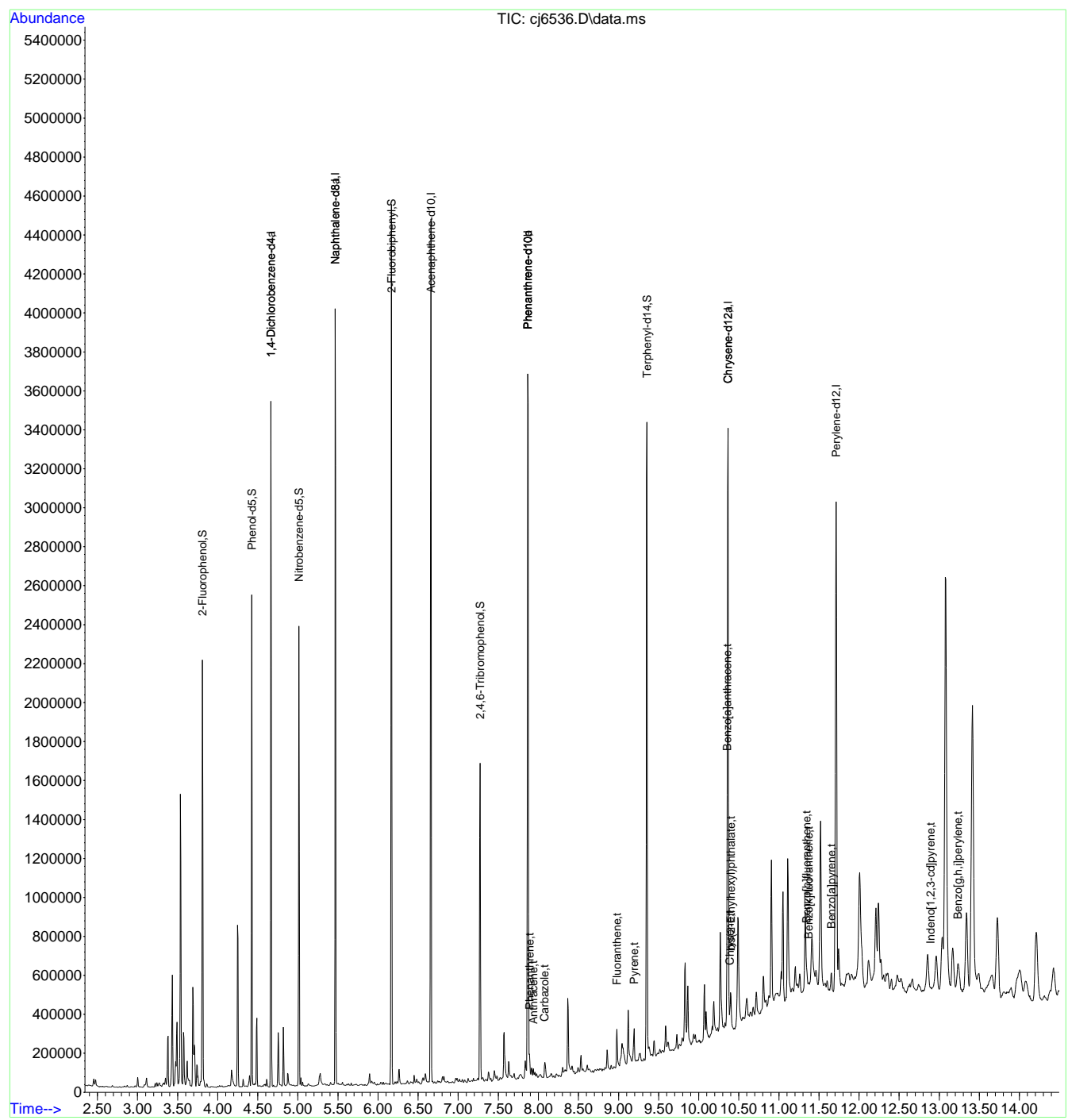
7.1.26  
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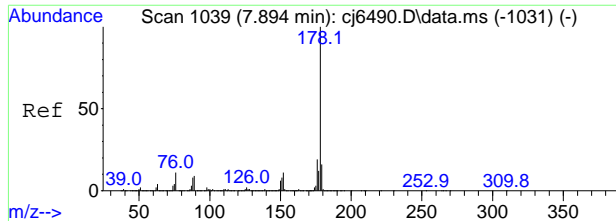
Quantitation Report (QT/LSC Reviewed)

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6536.D  
Acq On : 09 May 2024 11:38 pm  
Operator : rocquans  
Sample : jd87833-13 Inst : GCMSCJ  
Misc : op54460,ecj297,30.0,,,1,1  
ALS Vial : 27 Sample Multiplier: 1

Quant Time: May 10 19:41:36 2024  
Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
QLast Update : Thu May 09 12:05:48 2024  
Response via : Initial Calibration

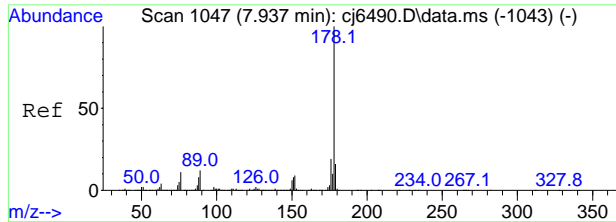
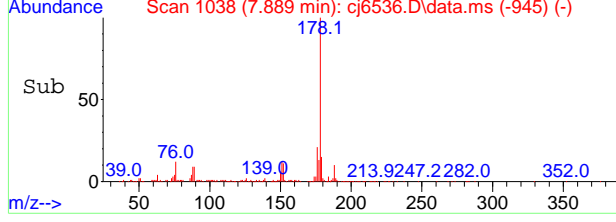
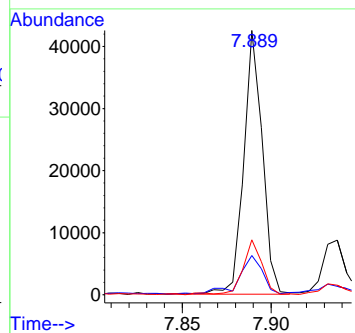
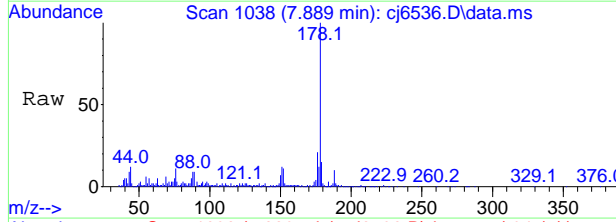


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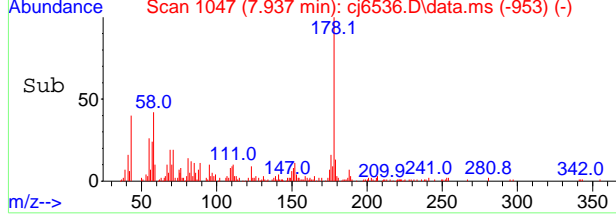
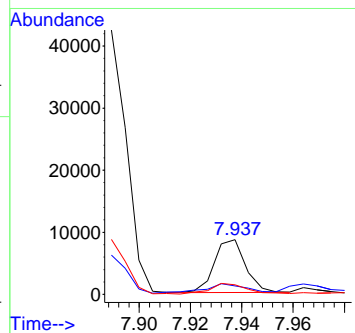
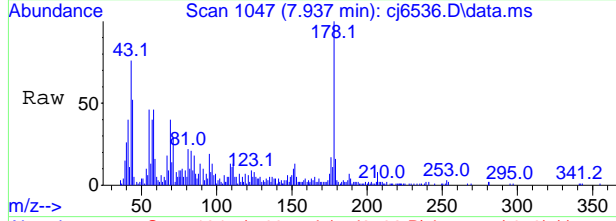
#78  
 Phenanthrene  
 Concen: 1.0592 ppm  
 RT: 7.889 min Scan# 1038  
 Delta R.T. -0.005 min  
 Lab File: cj6536.D  
 Acq: 09 May 2024 11:38 pm

Tgt Ion	Ratio	Lower	Upper
178	100		
179	14.3	0.0	45.5
176	20.5	0.0	49.2



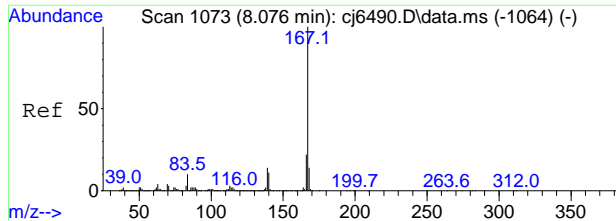
#79  
 Anthracene  
 Concen: 0.2491 ppm  
 RT: 7.937 min Scan# 1047  
 Delta R.T. 0.000 min  
 Lab File: cj6536.D  
 Acq: 09 May 2024 11:38 pm

Tgt Ion	Ratio	Lower	Upper
178	100		
179	6.5	0.0	46.1
176	16.3	0.0	48.7



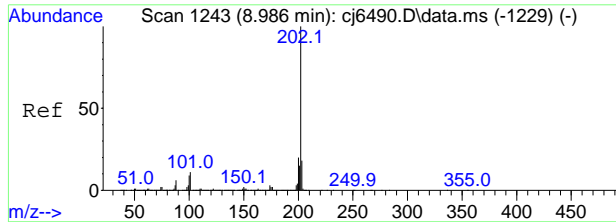
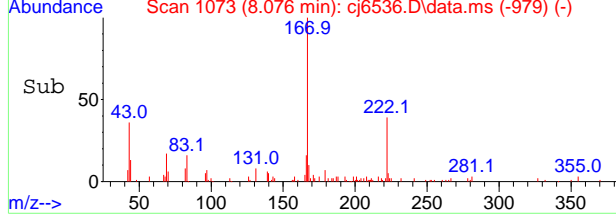
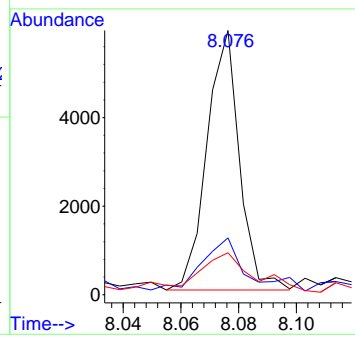
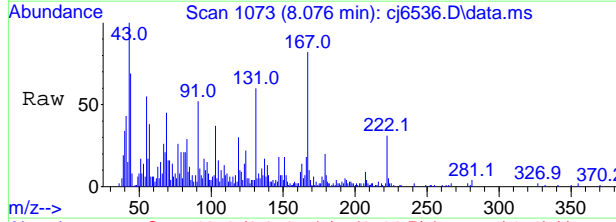
7.1.26  
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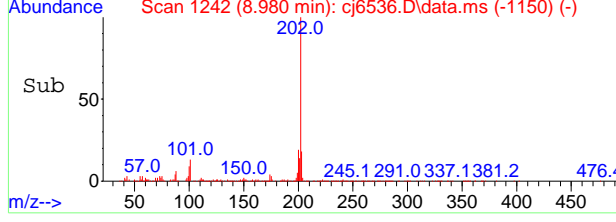
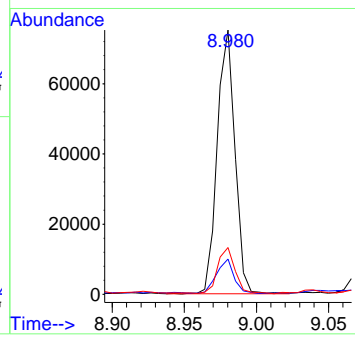
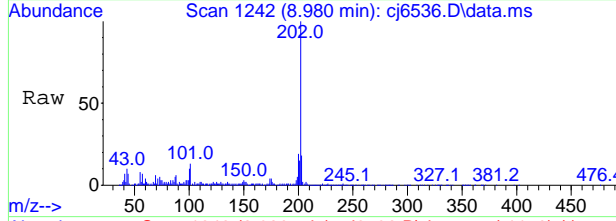
#80  
 Carbazole  
 Concen: 0.1680 ppm  
 RT: 8.076 min Scan# 1073  
 Delta R.T. 0.000 min  
 Lab File: cj6536.D  
 Acq: 09 May 2024 11:38 pm

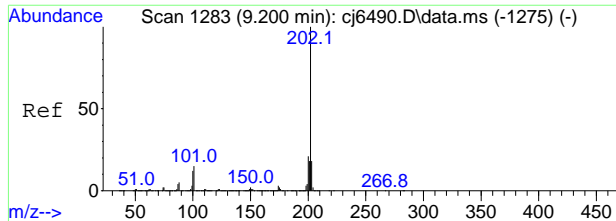
Tgt Ion:167	Resp:	4588
Ion Ratio	Lower	Upper
167	100	
166	16.7	0.0 51.7
139	12.4	0.0 43.8



#82  
 Fluoranthene  
 Concen: 2.0295 ppm  
 RT: 8.980 min Scan# 1242  
 Delta R.T. -0.006 min  
 Lab File: cj6536.D  
 Acq: 09 May 2024 11:38 pm

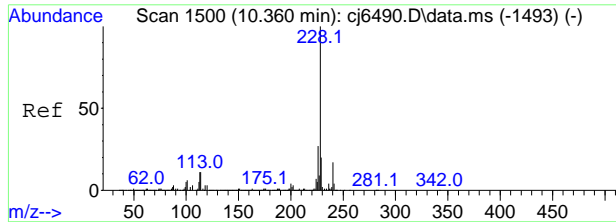
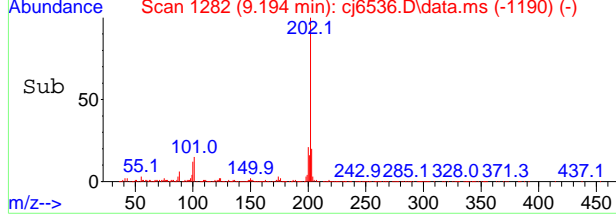
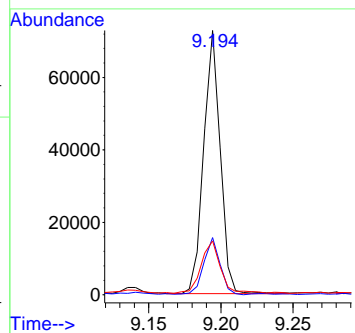
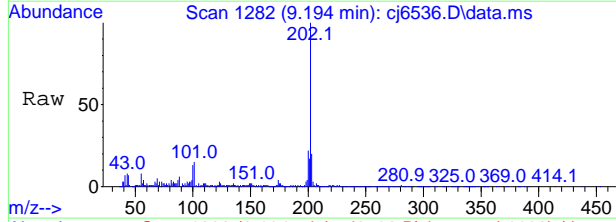
Tgt Ion:202	Resp:	64308
Ion Ratio	Lower	Upper
202	100	
101	13.0	0.0 41.4
203	17.1	0.0 47.6





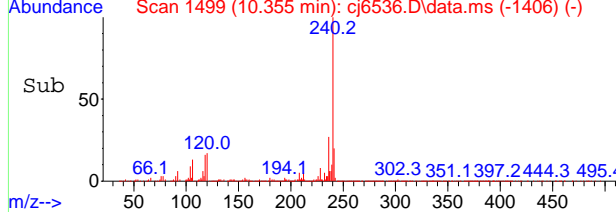
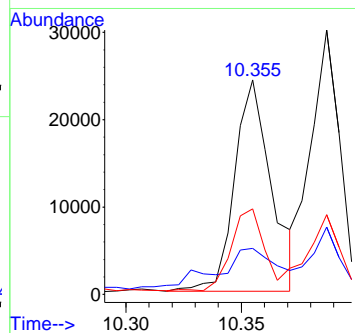
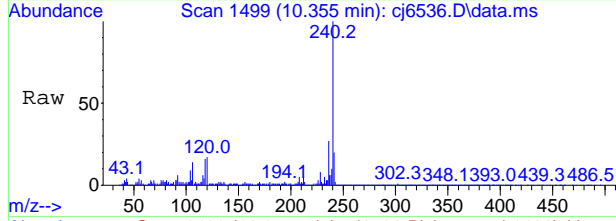
#86  
 Pyrene  
 Concen: 1.9506 ppm  
 RT: 9.194 min Scan# 1282  
 Delta R.T. -0.006 min  
 Lab File: cj6536.D  
 Acq: 09 May 2024 11:38 pm

Tgt Ion	Resp	Lower	Upper
202	58198	0.0	51.4
200	21.4	0.0	47.8
203	19.8	0.0	47.8

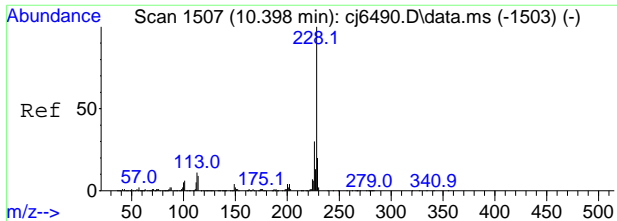


#89  
 Benzo[a]anthracene  
 Concen: 0.9513 ppm  
 RT: 10.355 min Scan# 1499  
 Delta R.T. -0.005 min  
 Lab File: cj6536.D  
 Acq: 09 May 2024 11:38 pm

Tgt Ion	Resp	Lower	Upper
228	26835	0.0	49.8
229	16.4	0.0	57.1
226	39.1	0.0	57.1

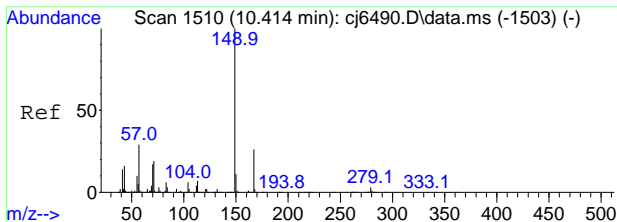
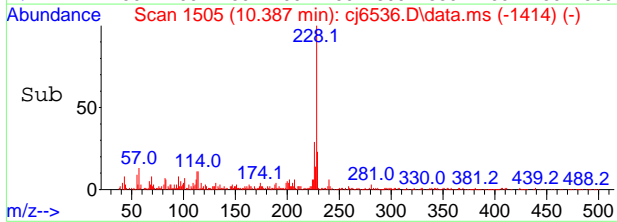
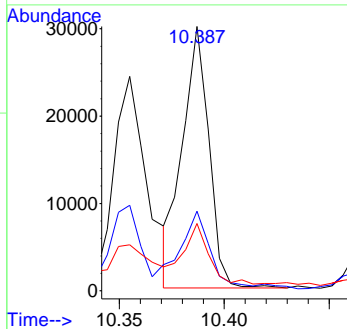
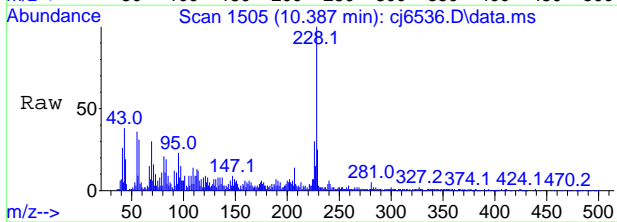


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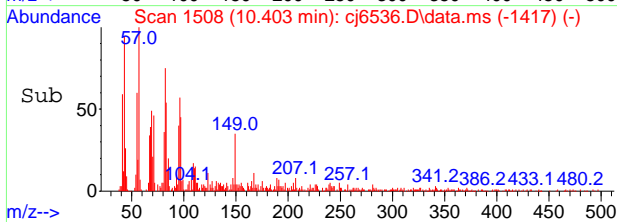
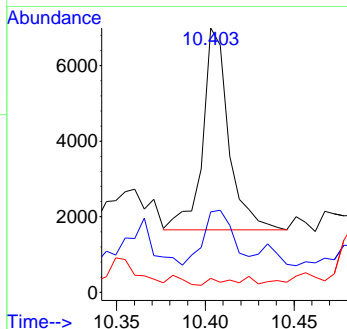
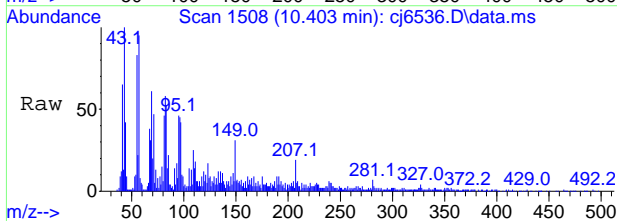
#91  
 Chrysene  
 Concen: 1.0139 ppm  
 RT: 10.387 min Scan# 1505  
 Delta R.T. -0.011 min  
 Lab File: cj6536.D  
 Acq: 09 May 2024 11:38 pm

Tgt Ion	Ratio	Lower	Upper
228	100		
226	27.8	0.0	59.9
229	22.2	0.0	49.8

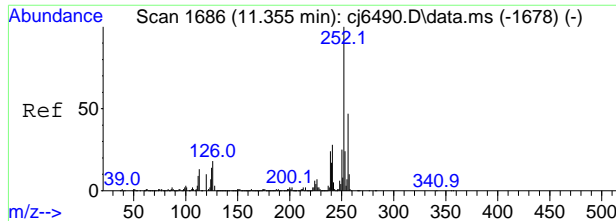


#92  
 bis(2-Ethylhexyl)phthalate  
 Concen: 0.2751 ppm  
 RT: 10.403 min Scan# 1508  
 Delta R.T. -0.011 min  
 Lab File: cj6536.D  
 Acq: 09 May 2024 11:38 pm

Tgt Ion	Ratio	Lower	Upper
149	100		
167	24.2	0.0	56.1
279	2.0	0.0	33.2

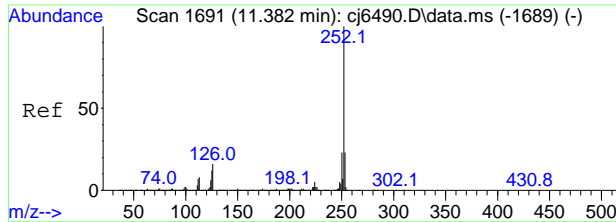
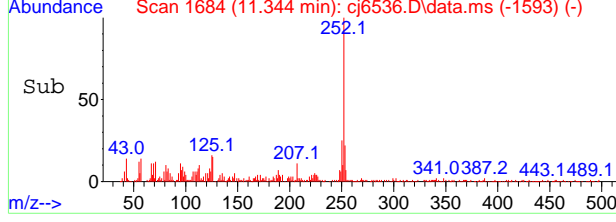
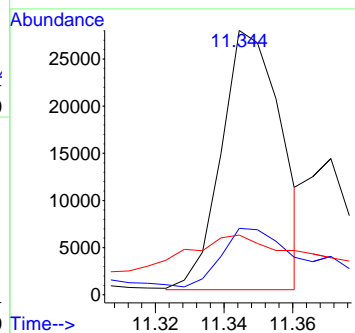
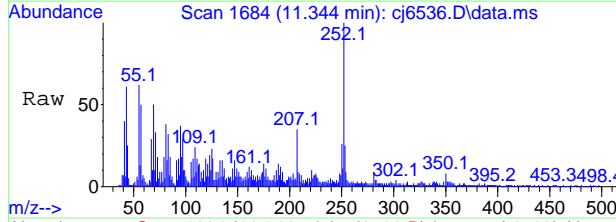


7.1.26  
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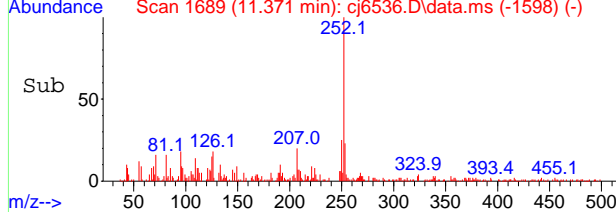
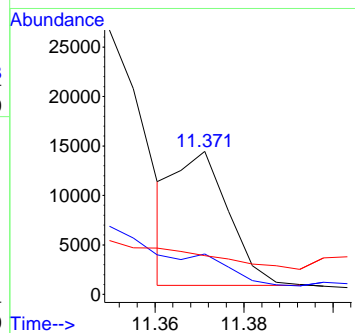
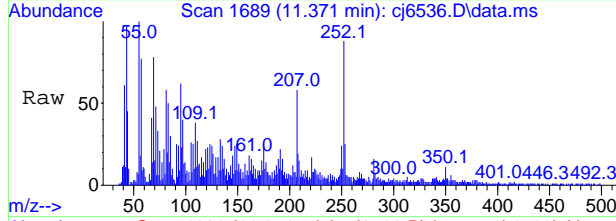
#95  
 Benzo[b]fluoranthene  
 Concen: 1.2654 ppm m  
 RT: 11.344 min Scan# 1684  
 Delta R.T. -0.011 min  
 Lab File: cj6536.D  
 Acq: 09 May 2024 11:38 pm

Tgt Ion	Resp	Lower	Upper
252	33486		
253	25.1	0.0	54.7
125	22.6	0.0	44.2

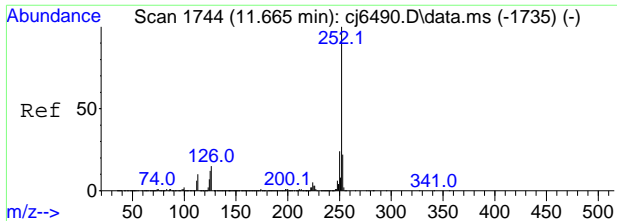


#96  
 Benzo[k]fluoranthene  
 Concen: 0.4716 ppm m  
 RT: 11.371 min Scan# 1689  
 Delta R.T. -0.011 min  
 Lab File: cj6536.D  
 Acq: 09 May 2024 11:38 pm

Tgt Ion	Resp	Lower	Upper
252	11229		
253	28.2	0.0	52.6
125	27.1	0.0	42.4

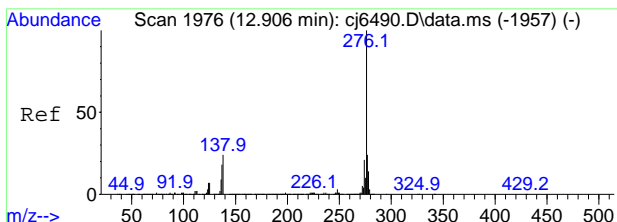
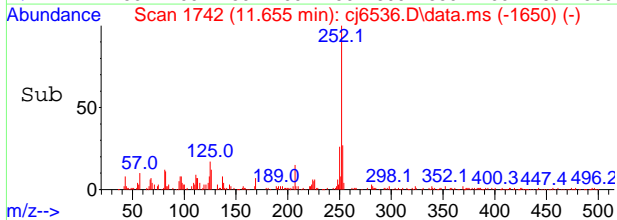
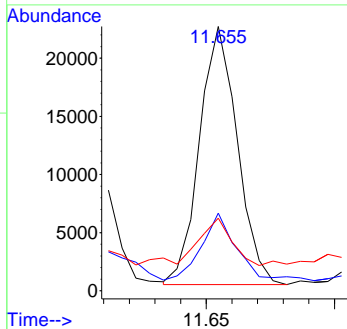
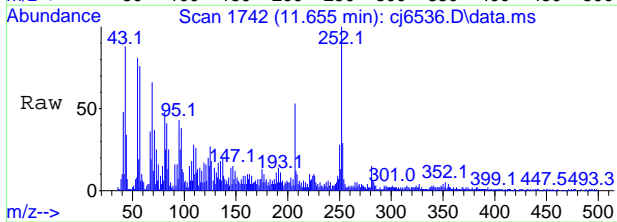


7.1.26  
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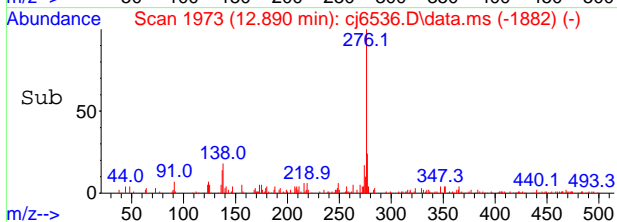
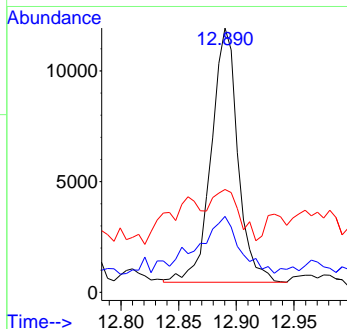
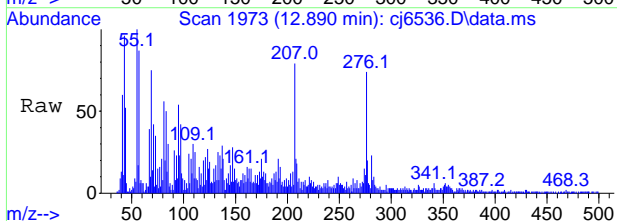
#97  
 Benzo[a]pyrene  
 Concen: 1.0391 ppm  
 RT: 11.655 min Scan# 1742  
 Delta R.T. -0.010 min  
 Lab File: cj6536.D  
 Acq: 09 May 2024 11:38 pm

Tgt Ion	Ratio	Lower	Upper
252	100		
253	25.4	0.0	51.9
125	16.7	0.0	42.1

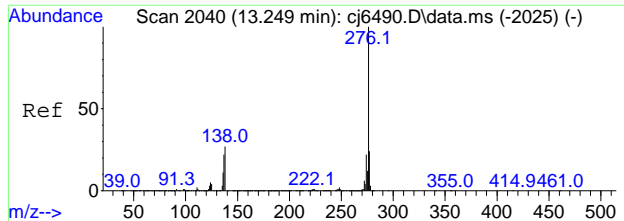


#98  
 Indeno[1,2,3-cd]pyrene  
 Concen: 0.6983 ppm  
 RT: 12.890 min Scan# 1973  
 Delta R.T. -0.016 min  
 Lab File: cj6536.D  
 Acq: 09 May 2024 11:38 pm

Tgt Ion	Ratio	Lower	Upper
276	100		
138	19.3	0.0	54.2
137	11.7	0.0	47.9

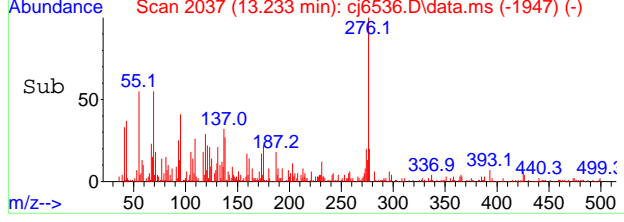
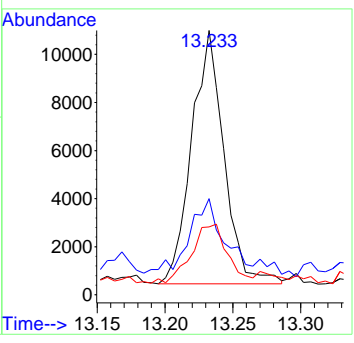
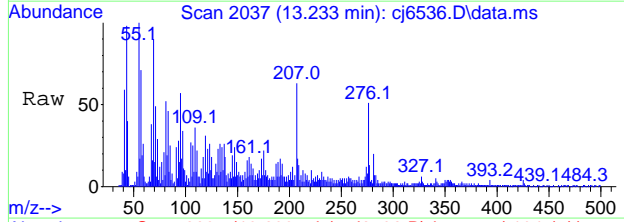


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#102  
 Benzo[g,h,i]perylene  
 Concen: 0.8463 ppm  
 RT: 13.233 min Scan# 2037  
 Delta R.T. -0.017 min  
 Lab File: cj6536.D  
 Acq: 09 May 2024 11:38 pm

Tgt Ion	Ratio	Lower	Upper
276	100		
138	29.1	0.0	56.7
277	20.3	0.0	54.1



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LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6536.D  
Acq On : 09 May 2024 11:38 pm  
Operator : rocquans  
Sample : jd87833-13  
Misc : op54460,ecj297,30.0,,,1,1  
ALS Vial : 27 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON  
Sampling : 1  
Start Thrs: 0.02  
Stop Thrs : 0  
Filtering: 5  
Min Area: 1000 Area counts  
Max Peaks: 100  
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS, zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

Signal : TIC: cj6536.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.172	340	343	353	rVB	83534	97988	2.58%	0.169%
2	4.247	353	357	363	rVB	830789	588184	15.50%	1.017%
3	4.396	380	385	387	rBV2	57701	48005	1.26%	0.083%
4	4.423	387	390	396	rBV	2520920	1457531	38.41%	2.521%
5	4.487	396	402	405	rVB	349470	236620	6.24%	0.409%
6	4.664	430	435	439	rBV	3519581	2155134	56.79%	3.728%
7	4.755	447	452	460	rBV	277317	220110	5.80%	0.381%
8	4.819	460	464	469	rBV	302532	182121	4.80%	0.315%
9	4.872	469	474	480	rBV2	64853	67941	1.79%	0.118%
10	5.012	491	500	504	rBV	2361400	1404646	37.01%	2.430%
11	5.279	535	550	557	rBV3	65667	119990	3.16%	0.208%
12	5.466	580	585	590	rBV	3983604	2639552	69.56%	4.566%
13	5.894	658	665	668	rBV	60960	64365	1.70%	0.111%
14	6.167	712	716	720	rBV	4519684	2671752	70.40%	4.621%
15	6.263	731	734	740	rVB	77467	71408	1.88%	0.124%
16	6.589	791	795	801	rVB4	43144	50818	1.34%	0.088%
17	6.659	801	808	814	rVB	4435585	3019369	79.56%	5.223%
18	7.274	913	923	927	rBV	1629948	1250555	32.95%	2.163%
19	7.376	939	942	946	rBV4	46561	47670	1.26%	0.082%
20	7.451	950	956	960	rBV6	55817	70934	1.87%	0.123%
21	7.574	972	979	987	rBV3	240587	293994	7.75%	0.509%
22	7.627	987	989	997	rVB	83334	88194	2.32%	0.153%
23	7.777	1008	1017	1024	rBV5	25482	66281	1.75%	0.115%
24	7.836	1024	1028	1030	rBV	92057	84272	2.22%	0.146%
25	7.868	1030	1034	1041	rVB	3596326	3119599	82.21%	5.396%
26	8.082	1070	1074	1079	rVB3	79395	94864	2.50%	0.164%
27	8.301	1111	1115	1118	rBV2	48350	59264	1.56%	0.103%
28	8.365	1124	1127	1135	rBV	374185	347926	9.17%	0.602%
29	8.419	1135	1137	1145	rVB2	41799	54008	1.42%	0.093%
30	8.531	1154	1158	1168	rBV4	85020	95279	2.51%	0.165%
31	8.857	1216	1219	1226	rVB2	100835	87325	2.30%	0.151%
32	8.980	1238	1242	1248	rBV	199970	197706	5.21%	0.342%
33	9.044	1248	1254	1264	rBV6	116562	281867	7.43%	0.488%
34	9.119	1264	1268	1277	rBV	277530	315656	8.32%	0.546%
35	9.194	1277	1282	1287	rBV2	169142	165595	4.36%	0.286%
36	9.269	1287	1296	1300	rBV3	40721	68949	1.82%	0.119%
37	9.355	1307	1312	1321	rBV	3277116	2933000	77.29%	5.073%
38	9.446	1326	1329	1333	rBV2	79900	78153	2.06%	0.135%
39	9.590	1351	1356	1359	rBV3	136433	155413	4.10%	0.269%
40	9.729	1374	1382	1385	rBV3	85077	101191	2.67%	0.175%



7.1.27  
7

LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6536.D  
Acq On : 09 May 2024 11:38 pm  
Operator : rocquans  
Sample : jd87833-13  
Misc : op54460,ecj297,30.0,,,1,1  
ALS Vial : 27 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON  
Sampling : 1  
Start Thrs: 0.02  
Stop Thrs : 0  
Filtering: 5  
Min Area: 1000 Area counts  
Max Peaks: 100  
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS, zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

Table with 10 columns: Retention Time, Abundance, and Percentages for peaks 41 through 85.



7.1.27  
7

LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6536.D  
Acq On : 09 May 2024 11:38 pm  
Operator : rocquans  
Sample : jd87833-13  
Misc : op54460,ecj297,30.0,,,1,1  
ALS Vial : 27 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON Filtering: 5  
Sampling : 1 Min Area: 1000 Area counts  
Start Thrs: 0.02 Max Peaks: 100  
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

86	13.040	1994	2001	2003	rVV4	270842	465059	12.25%	0.804%
87	13.077	2003	2008	2020	rVV3	2117225	3794897	100.00%	6.564%
88	13.168	2020	2025	2031	rVV3	214125	395764	10.43%	0.685%
89	13.238	2032	2038	2048	rVB6	146620	338760	8.93%	0.586%
90	13.339	2048	2057	2063	rBV3	407880	756544	19.94%	1.309%
91	13.414	2063	2071	2081	rVV2	1455160	2821460	74.35%	4.880%
92	13.495	2081	2086	2092	rVB10	78184	150561	3.97%	0.260%
93	13.660	2099	2117	2122	rBV10	89389	349100	9.20%	0.604%
94	13.725	2122	2129	2138	rVB4	410455	863308	22.75%	1.493%
95	13.805	2138	2144	2148	rBV9	28500	67879	1.79%	0.117%
96	13.896	2156	2161	2168	rVB9	55598	116214	3.06%	0.201%
97	14.003	2168	2181	2189	rBV7	145068	601109	15.84%	1.040%
98	14.083	2190	2196	2210	rVB7	101378	315752	8.32%	0.546%
99	14.211	2212	2220	2233	rBV4	352500	852244	22.46%	1.474%
100	14.425	2246	2260	2269	rBV6	168269	552136	14.55%	0.955%

Sum of corrected areas: 57811950



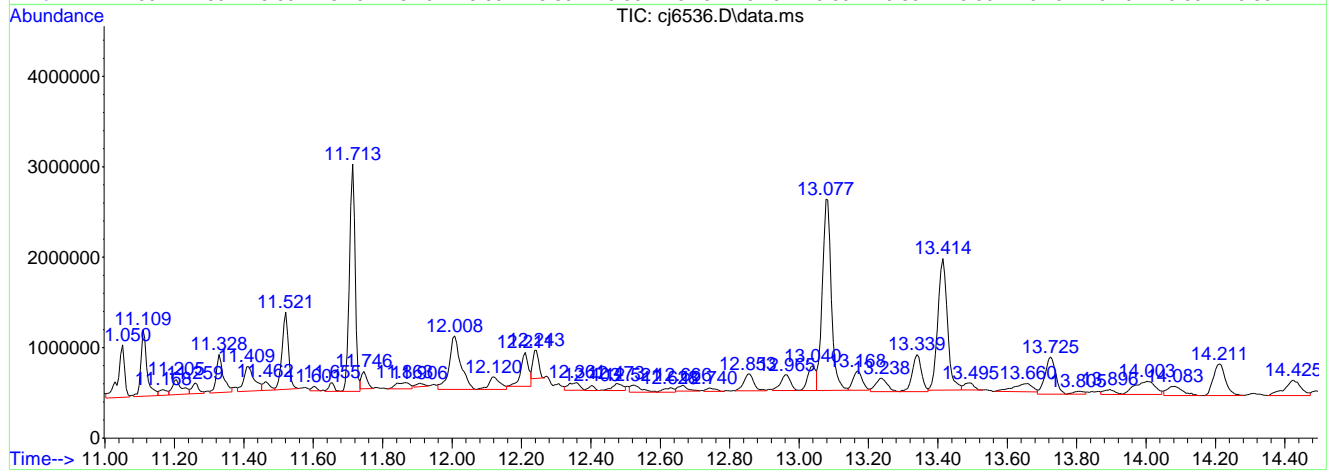
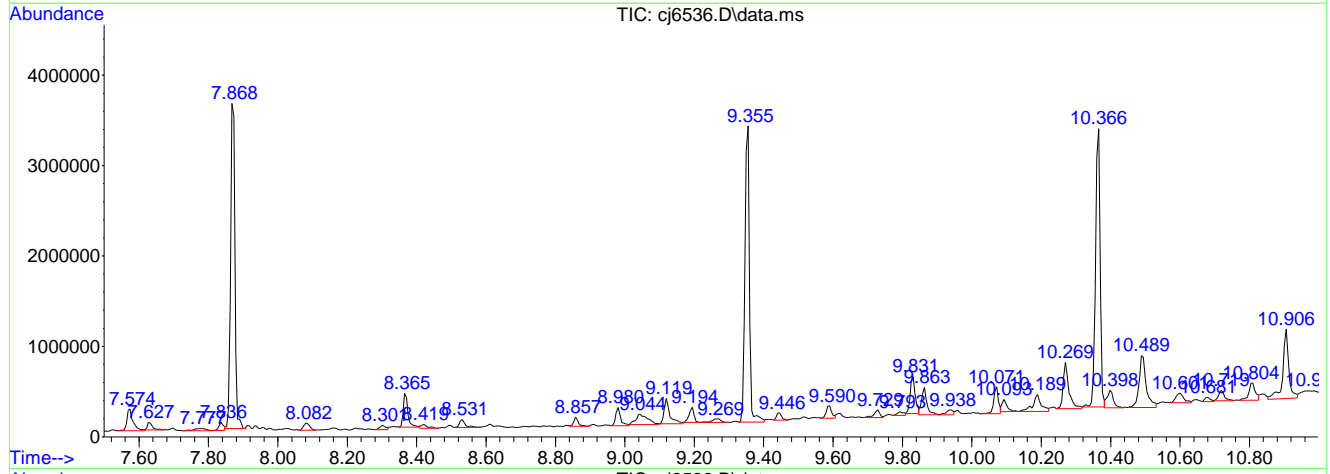
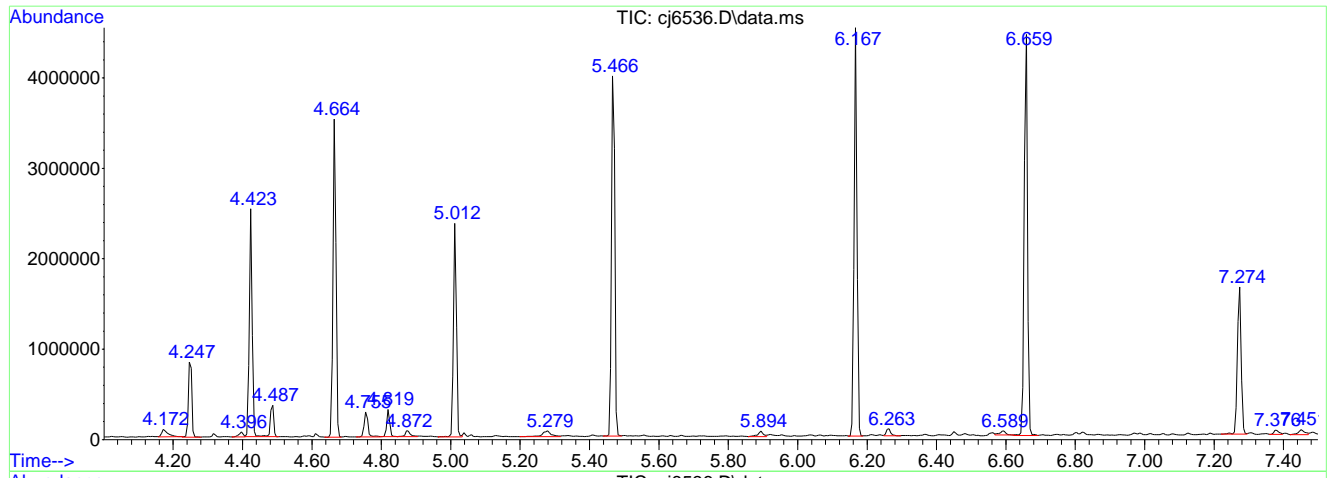
7.1.27  
7

LSC Report - Integrated Chromatogram

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6536.D  
Acq On : 09 May 2024 11:38 pm  
Operator : rocquans  
Sample : jd87833-13  
Misc : op54460,ecj297,30.0,,,1,1  
ALS Vial : 27 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6536.D  
Acq On : 09 May 2024 11:38 pm  
Operator : rocquans  
Sample : jd87833-13  
Misc : op54460,ecj297,30.0,,,1,1  
ALS Vial : 27 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

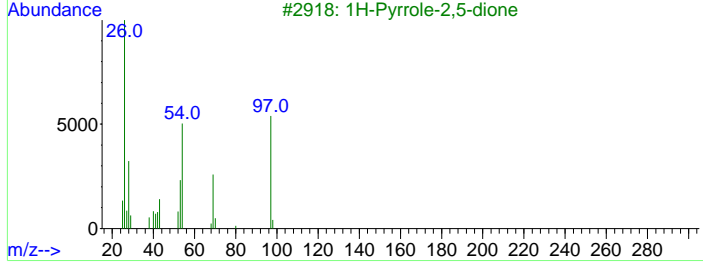
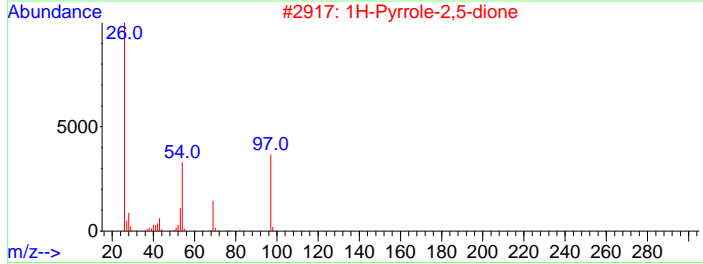
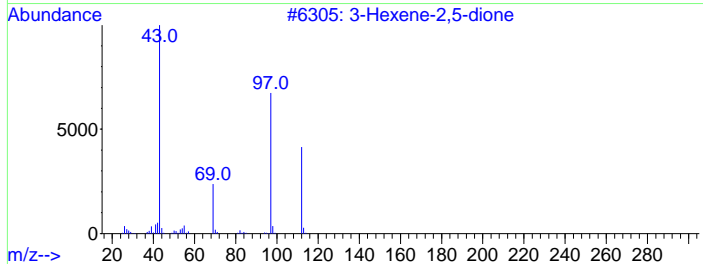
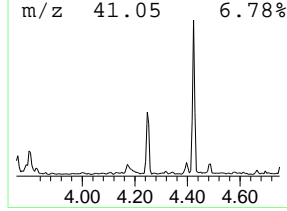
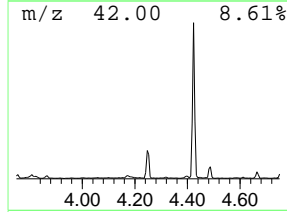
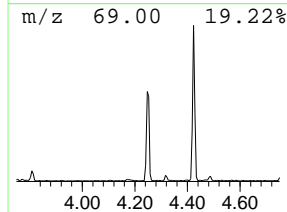
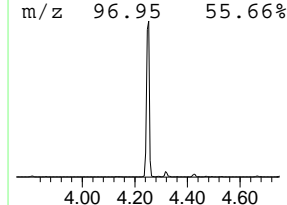
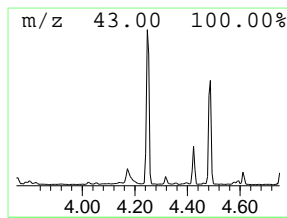
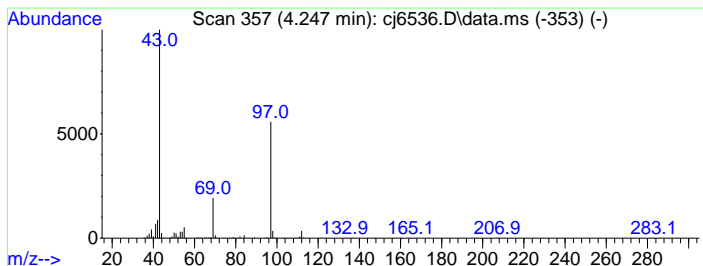
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 1 Unknown Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.247	10.92 ppm	588184	1,4-Dichlorobenzene-d4a	4.664

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	3-Hexene-2,5-dione	112	C6H8O2	004436-75-3	56
2		1H-Pyrrole-2,5-dione	97	C4H3NO2	000541-59-3	53
3		1H-Pyrrole-2,5-dione	97	C4H3NO2	000541-59-3	28
4		2,4-Dimethyl-1,5-diazabicyclo[3....	112	C6H12N2	100463-01-2	28
5		5-Hexen-2-one	98	C6H10O	000109-49-9	14



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6536.D  
Acq On : 09 May 2024 11:38 pm  
Operator : rocquans  
Sample : jd87833-13  
Misc : op54460,ecj297,30.0,,,1,1  
ALS Vial : 27 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

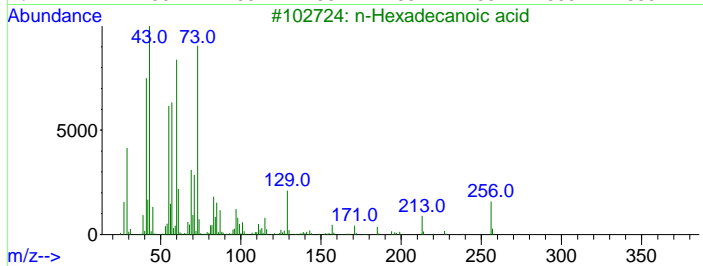
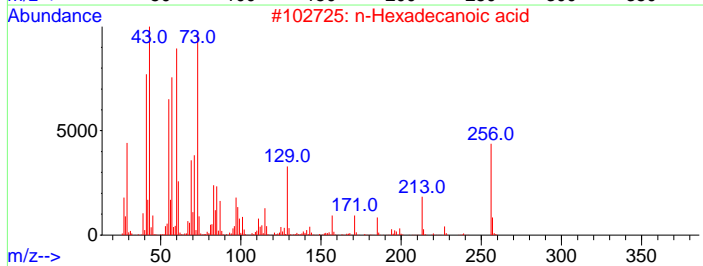
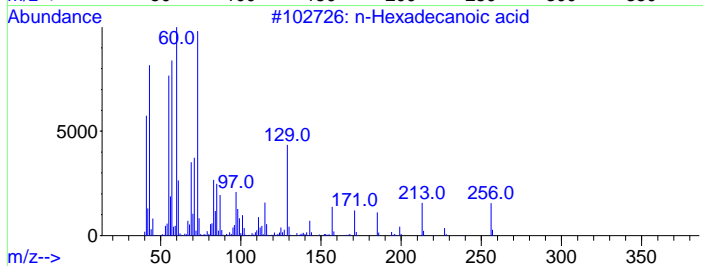
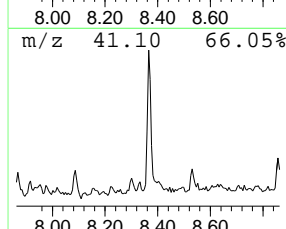
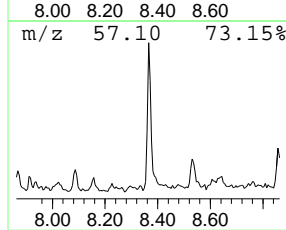
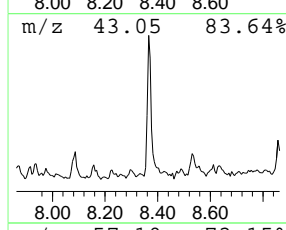
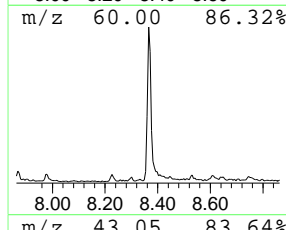
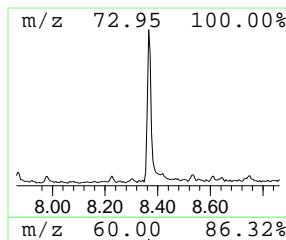
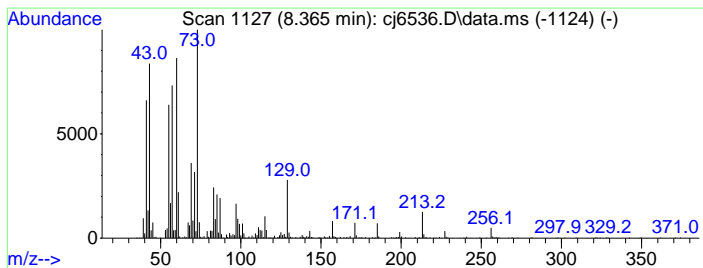
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 2 n-Hexadecanoic acid Concentration Rank 23

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.365	4.46 ppm	347926	Phenanthrene-d10b	7.868

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	99
2	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	96
3	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	93
4	Tetradecanoic acid	228	C14H28O2	000544-63-8	90
5	Octadecanoic acid	284	C18H36O2	000057-11-4	87



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6536.D  
Acq On : 09 May 2024 11:38 pm  
Operator : rocquans  
Sample : jd87833-13  
Misc : op54460,ecj297,30.0,,,1,1  
ALS Vial : 27 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

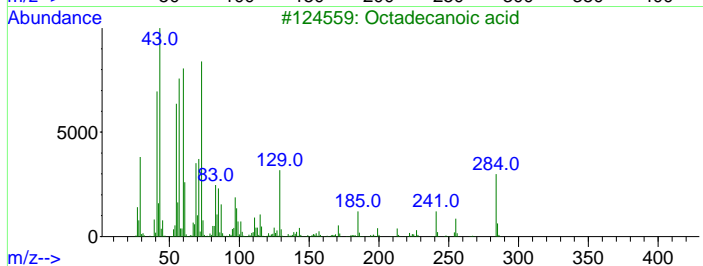
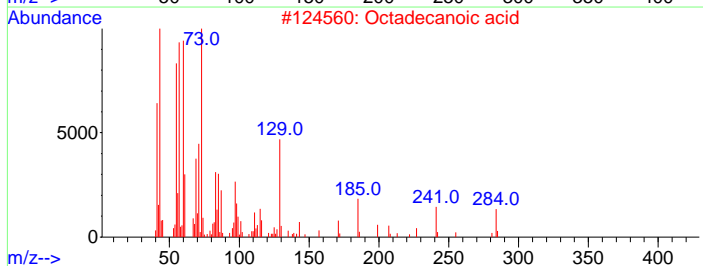
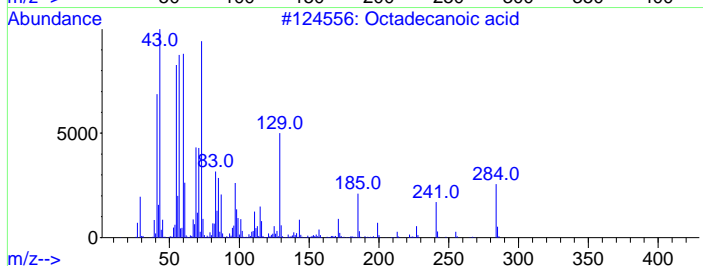
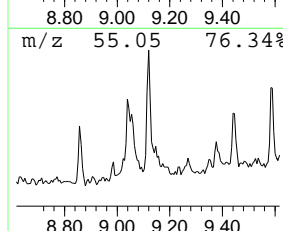
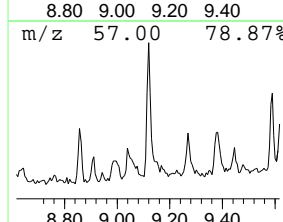
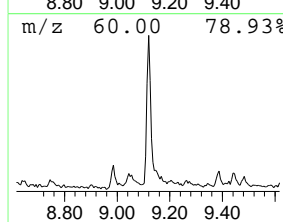
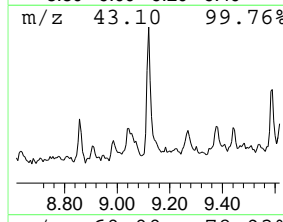
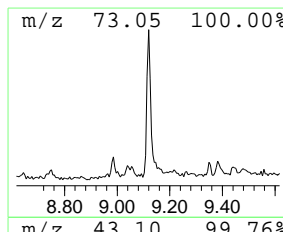
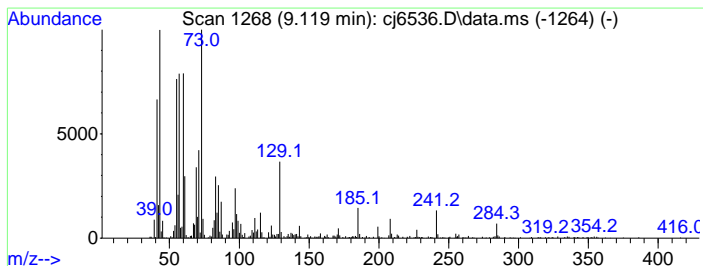
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 3 Octadecanoic acid Concentration Rank 24

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.119	4.45 ppm	315656	Chrysene-d12	10.366

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		Octadecanoic acid	284	C18H36O2	000057-11-4	99
2		Octadecanoic acid	284	C18H36O2	000057-11-4	99
3		Octadecanoic acid	284	C18H36O2	000057-11-4	95
4		Octadecanoic acid	284	C18H36O2	000057-11-4	94
5		Tetradecanoic acid	228	C14H28O2	000544-63-8	86



7.1.27  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6536.D  
 Acq On : 09 May 2024 11:38 pm  
 Operator : rocquans  
 Sample : jd87833-13  
 Misc : op54460,ecj297,30.0,,,1,1  
 ALS Vial : 27 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

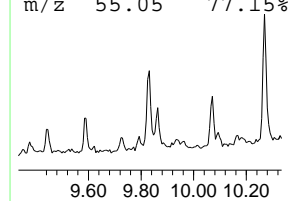
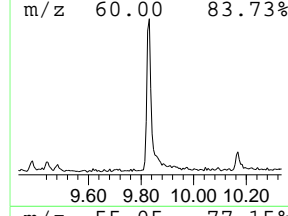
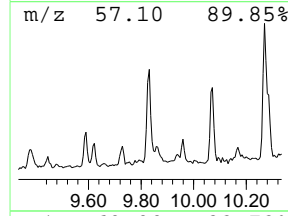
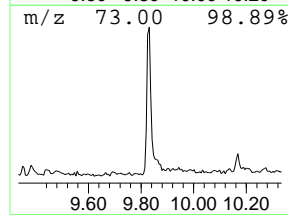
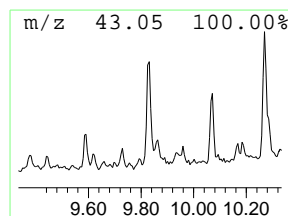
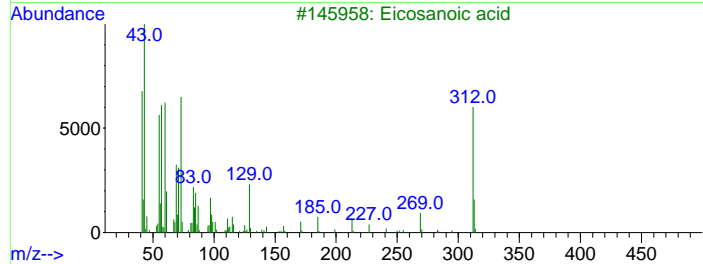
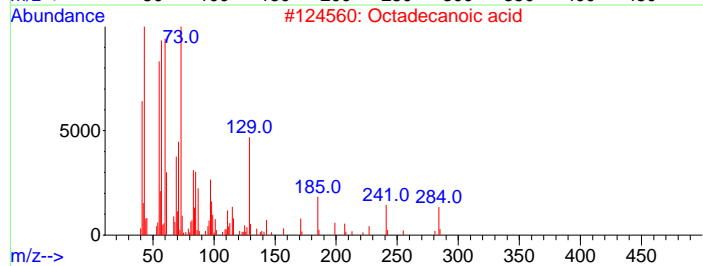
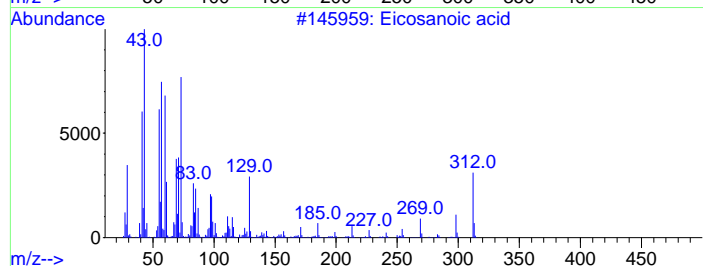
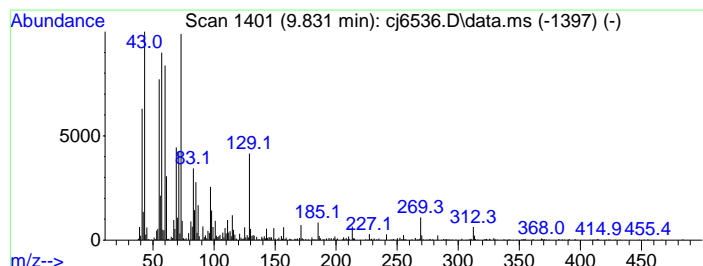
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 4 Unknown acid Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.831	5.86 ppm	415594	Chrysene-d12	10.366

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1	Eicosanoic acid		312	C20H40O2	000506-30-9	94
2	Octadecanoic acid		284	C18H36O2	000057-11-4	91
3	Eicosanoic acid		312	C20H40O2	000506-30-9	91
4	Pentadecanoic acid		242	C15H30O2	001002-84-2	78
5	n-Hexadecanoic acid		256	C16H32O2	000057-10-3	72





Library Search Compound Report

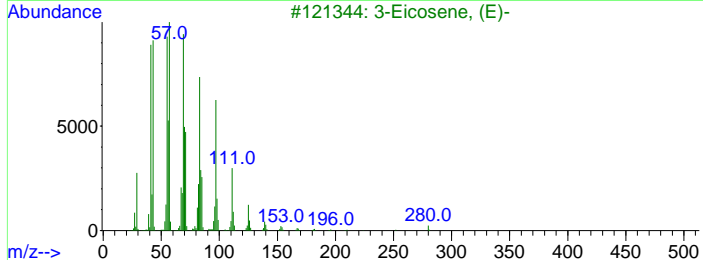
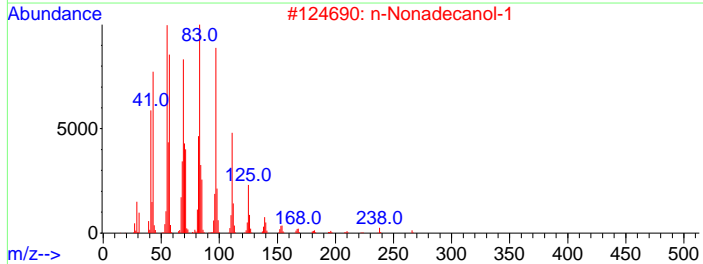
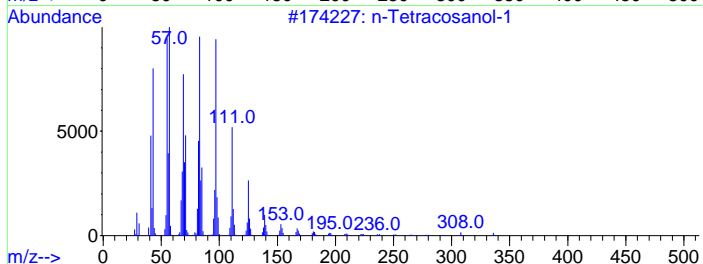
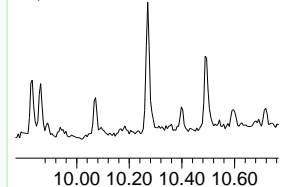
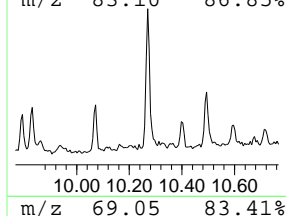
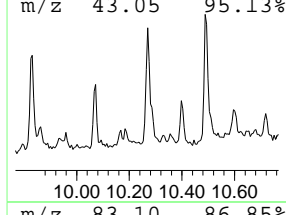
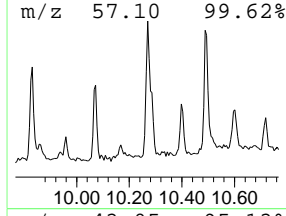
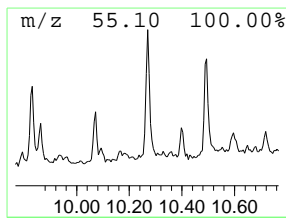
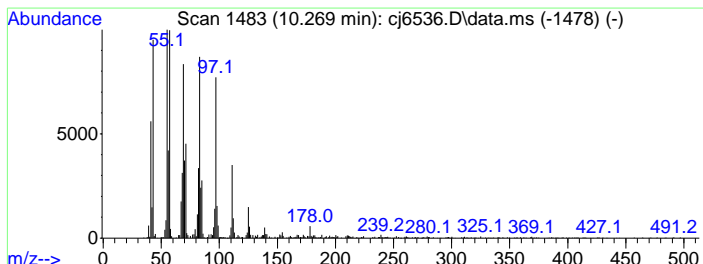
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Data File : cj6536.D  
Acq On : 09 May 2024 11:38 pm  
Operator : rocquans  
Sample : jd87833-13  
Misc : op54460,ecj297,30.0,,,1,1  
ALS Vial : 27 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 5 Unknown Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.	
10.269	8.18 ppm	579950	Chrysene-d12	10.366	
Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	n-Tetracosanol-1	354	C24H50O	000506-51-4	94
2	n-Nonadecanol-1	284	C19H40O	001454-84-8	91
3	3-Eicosene, (E)-	280	C20H40	074685-33-9	91
4	Behenic alcohol	326	C22H46O	000661-19-8	91
5	1-Heneicosanol	312	C21H44O	015594-90-8	91



7.1.27  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6536.D  
Acq On : 09 May 2024 11:38 pm  
Operator : rocquans  
Sample : jd87833-13  
Misc : op54460,ecj297,30.0,,,1,1  
ALS Vial : 27 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

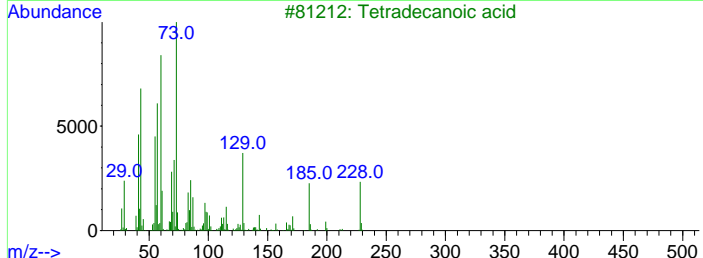
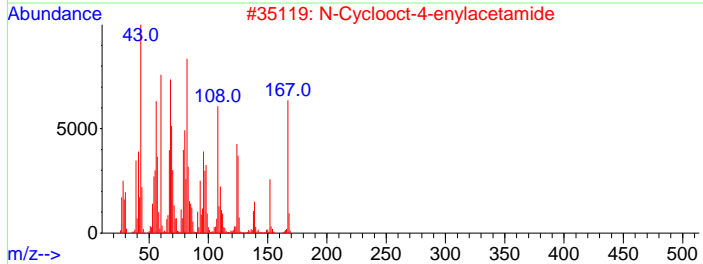
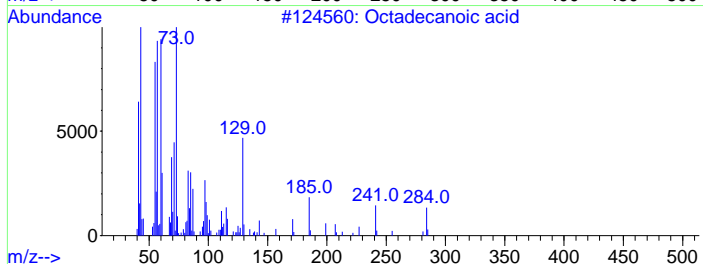
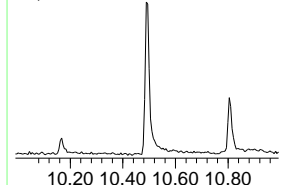
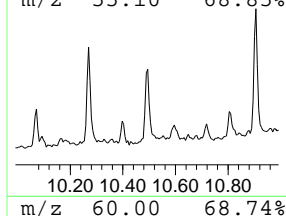
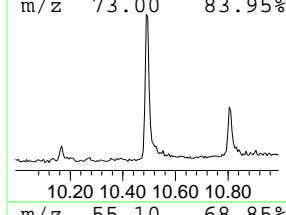
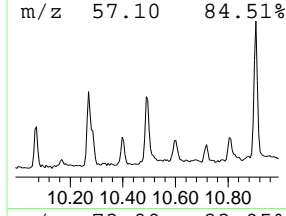
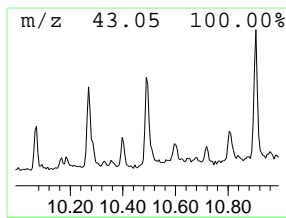
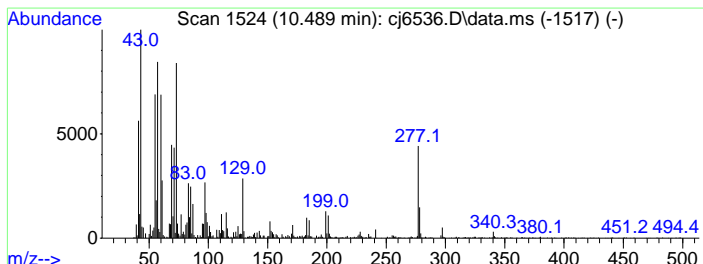
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 6 Unknown acid Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.489	11.73 ppm	832130	Chrysene-d12a	10.366

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		Octadecanoic acid	284	C18H36O2	000057-11-4	76
2		N-Cyclooct-4-enylacetamide	167	C10H17NO	170952-69-9	53
3		Tetradecanoic acid	228	C14H28O2	000544-63-8	49
4		Tridecanoic acid	214	C13H26O2	000638-53-9	43
5		Pentadecanoic acid	242	C15H30O2	001002-84-2	43



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6536.D  
Acq On : 09 May 2024 11:38 pm  
Operator : rocquans  
Sample : jd87833-13  
Misc : op54460,ecj297,30.0,,,1,1  
ALS Vial : 27 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

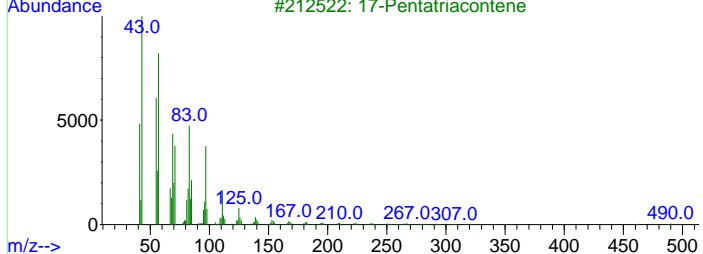
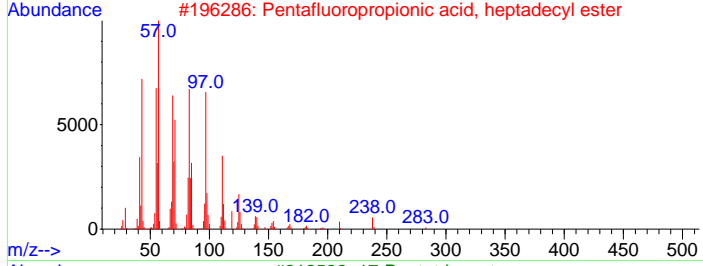
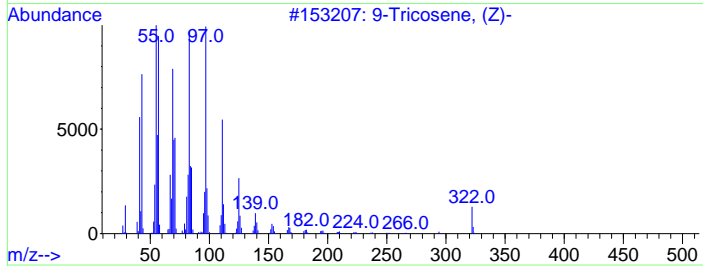
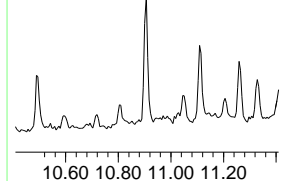
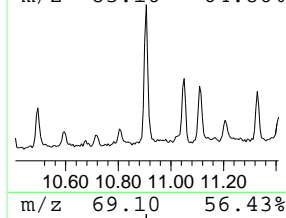
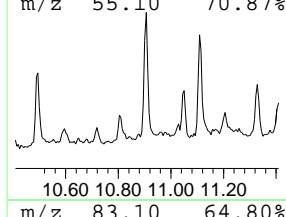
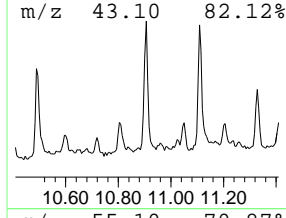
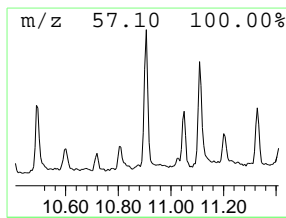
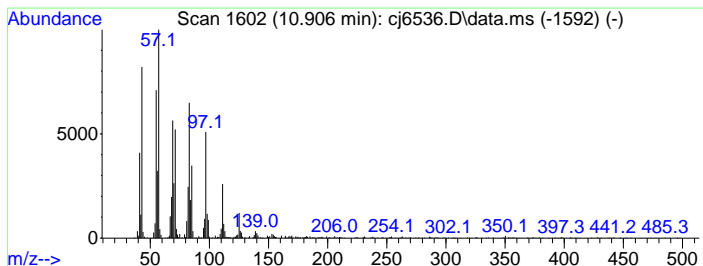
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 7 Unknown Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.906	12.86 ppm	911957	Chrysene-d12a	10.366

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		9-Tricosene, (Z)-	322	C23H46	027519-02-4	93
2		Pentafluoropropionic acid, hepta...	402	C20H35F5O2	1000283-04-2	91
3		17-Pentatriacontene	491	C35H70	006971-40-0	91
4		Nonadecyl trifluoroacetate	380	C21H39F3O2	1000351-76-3	91
5		Nonadecyl pentafluoropropionate	430	C22H39F5O2	1000351-88-8	91



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6536.D  
 Acq On : 09 May 2024 11:38 pm  
 Operator : rocquans  
 Sample : jd87833-13  
 Misc : op54460,ecj297,30.0,,,1,1  
 ALS Vial : 27 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

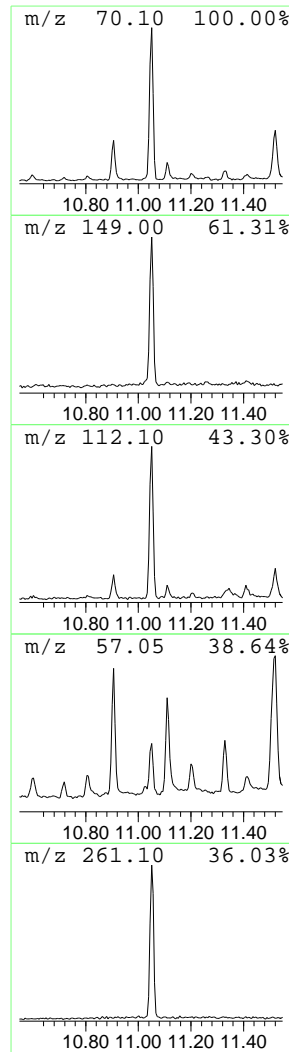
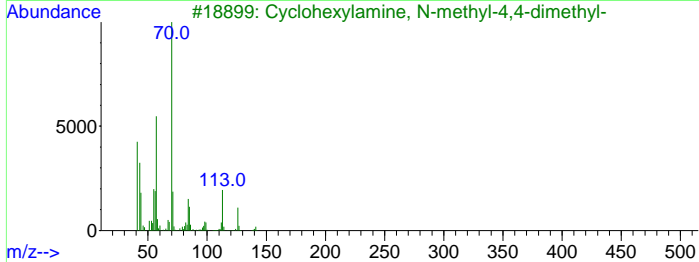
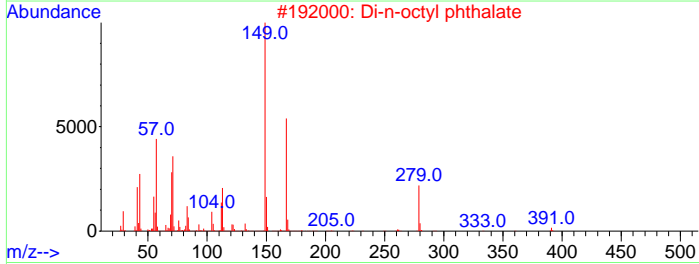
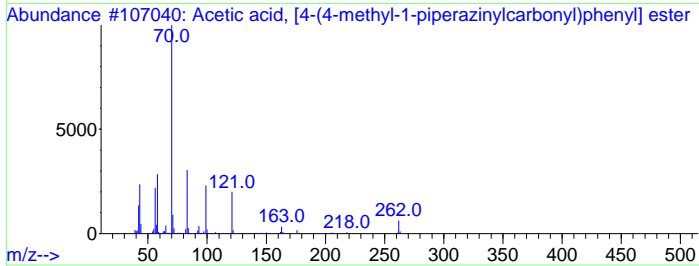
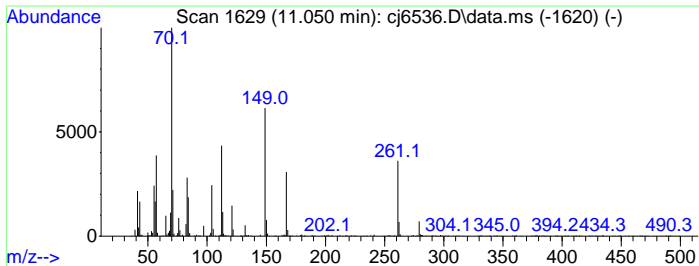
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 8 Unknown Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.050	10.57 ppm	768480	Perylene-d12	11.714

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Acetic acid, [4-(4-methyl-1-pipe...	262	C14H18N2O3	346699-90-9	22
2			Di-n-octyl phthalate	390	C24H38O4	000117-84-0	22
3			Cyclohexylamine, N-methyl-4,4-di...	141	C9H19N	045815-91-6	22
4			1,2-Benzenedicarboxylic acid, di...	390	C24H38O4	027554-26-3	22
5			Cyclohexaneamine, N-but-2-enylid...	167	C10H17NO	068048-01-1	16



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6536.D  
 Acq On : 09 May 2024 11:38 pm  
 Operator : rocquans  
 Sample : jd87833-13  
 Misc : op54460,ecj297,30.0,,,1,1  
 ALS Vial : 27 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
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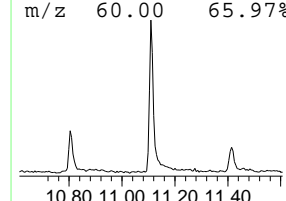
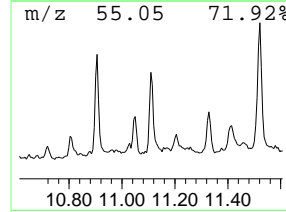
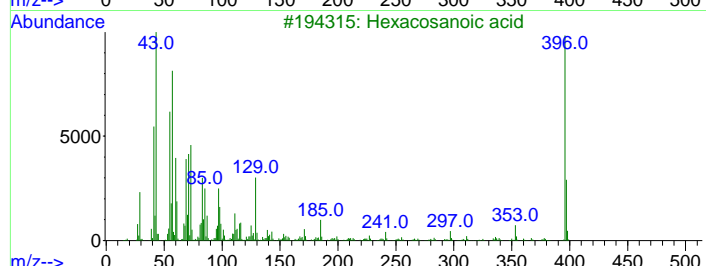
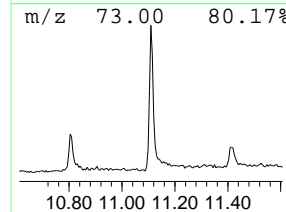
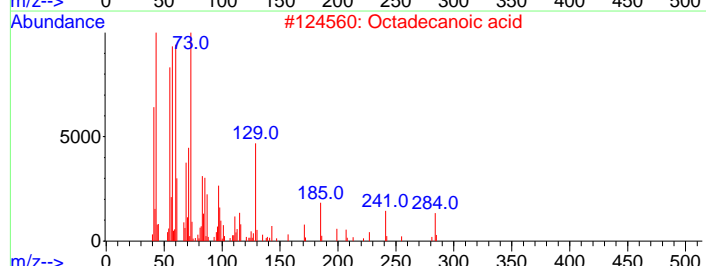
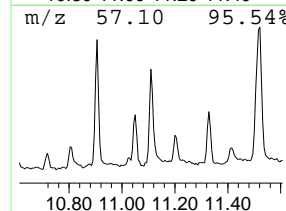
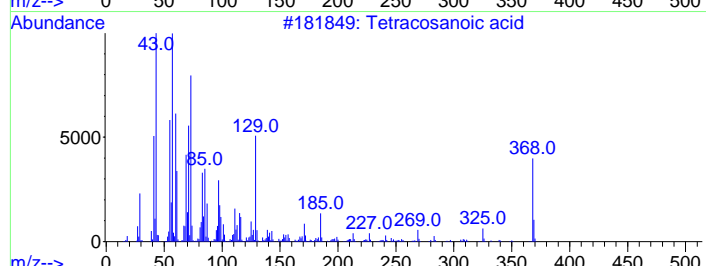
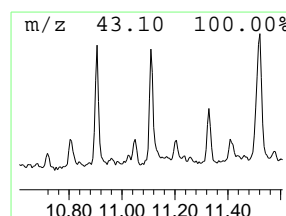
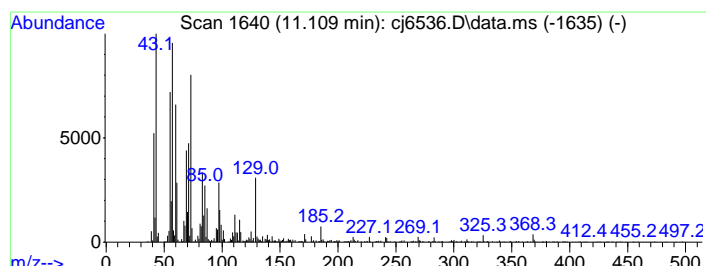
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 9 Unknown acid Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.109	12.29 ppm	894117	Perylene-d12	11.714

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		Tetracosanoic acid	368	C24H48O2	000557-59-5	96
2		Octadecanoic acid	284	C18H36O2	000057-11-4	74
3		Hexacosanoic acid	396	C26H52O2	000506-46-7	64
4		1-Acetoxynonadecane	326	C21H42O2	001577-43-1	47
5		Oxalic acid, allyl octadecyl ester	382	C23H42O4	1000309-24-5	41



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6536.D  
Acq On : 09 May 2024 11:38 pm  
Operator : rocquans  
Sample : jd87833-13  
Misc : op54460,ecj297,30.0,,,1,1  
ALS Vial : 27 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

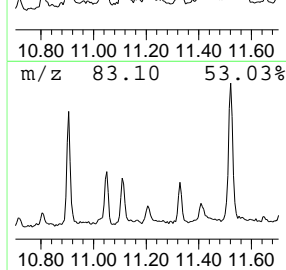
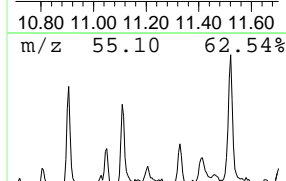
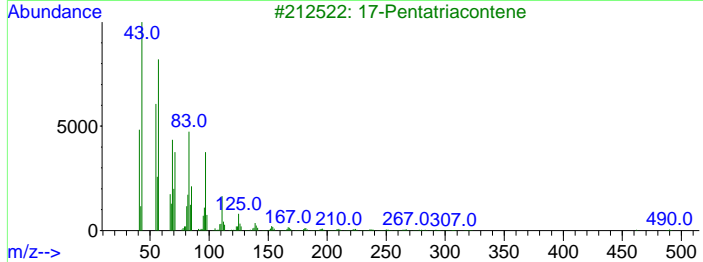
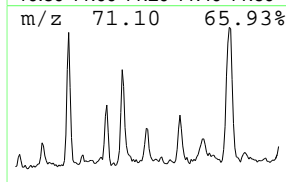
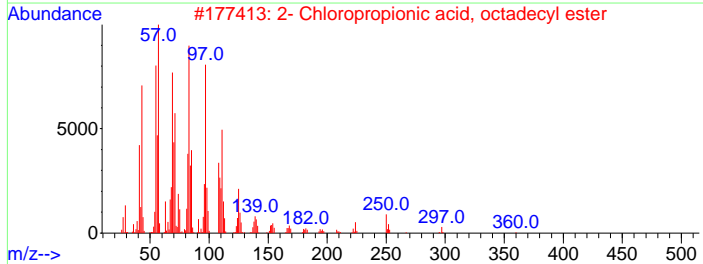
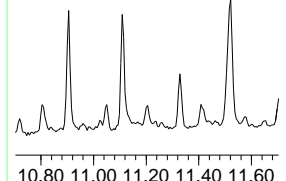
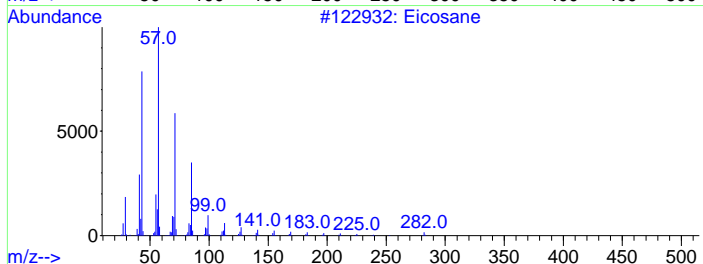
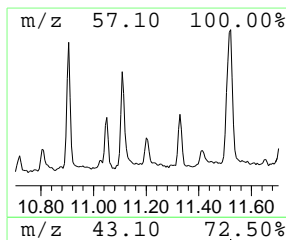
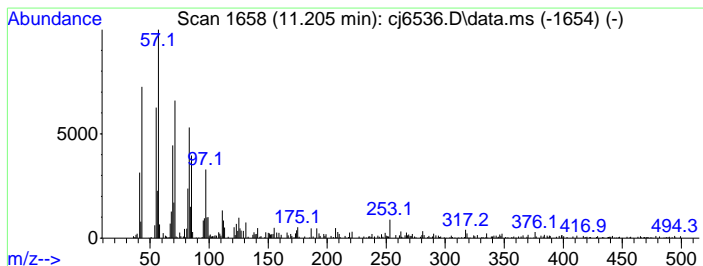
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 10 Unknown Concentration Rank 25

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.205	4.41 ppm	320661	Perylene-d12	11.714

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Eicosane	282	C20H42	000112-95-8	86
2			2- Chloropropionic acid, octadec...	360	C21H41ClO2	088104-31-8	78
3			17-Pentatriacontene	491	C35H70	006971-40-0	59
4			Octadecane, 1-(ethenylxy)-	296	C20H40O	000930-02-9	53
5			9-Eicosene, (E)-	280	C20H40	074685-29-3	53



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6536.D  
 Acq On : 09 May 2024 11:38 pm  
 Operator : rocquans  
 Sample : jd87833-13  
 Misc : op54460,ecj297,30.0,,,1,1  
 ALS Vial : 27 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

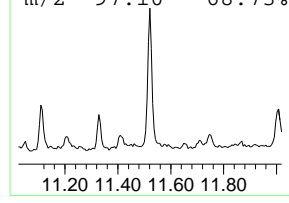
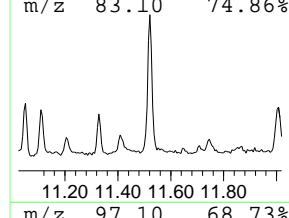
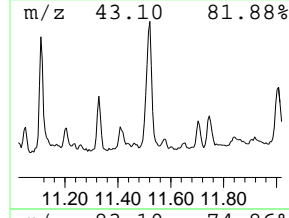
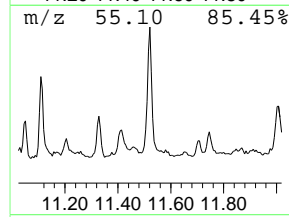
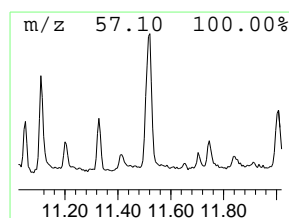
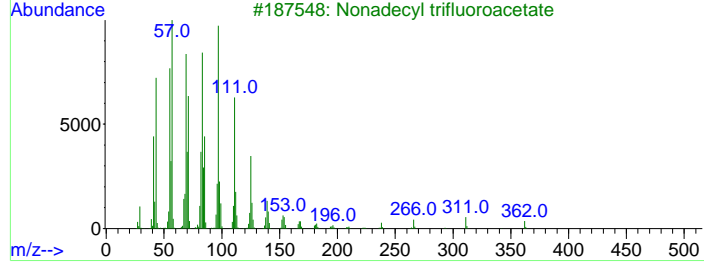
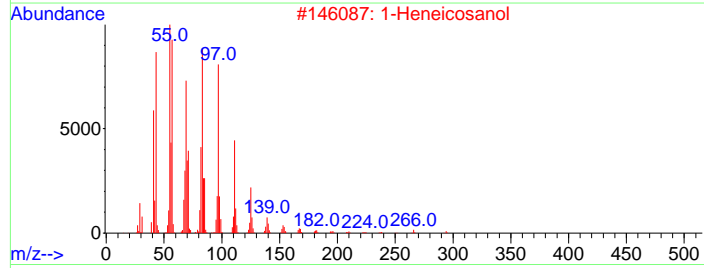
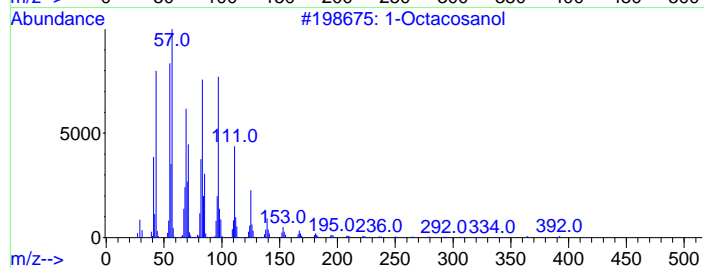
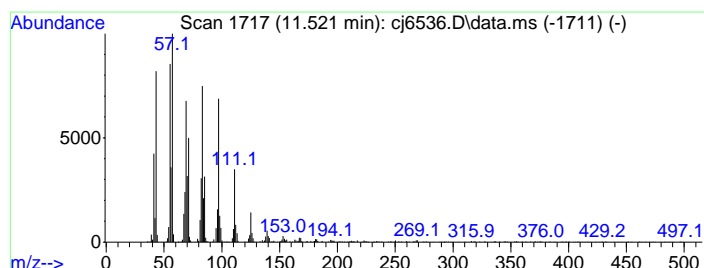
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 11 Unknown Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.521	15.08 ppm	1096870	Perylene-d12	11.714

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		1-Octacosanol	410	C28H58O	1000351-79-2	94
2		1-Heneicosanol	312	C21H44O	015594-90-8	91
3		Nonadecyl trifluoroacetate	380	C21H39F3O2	1000351-76-3	91
4		Heptafluorobutanoic acid, heptad...	452	C21H35F7O2	1000282-97-3	91
5		1-Docosene	308	C22H44	001599-67-3	91



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6536.D  
Acq On : 09 May 2024 11:38 pm  
Operator : rocquans  
Sample : jd87833-13  
Misc : op54460,ecj297,30.0,,,1,1  
ALS Vial : 27 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

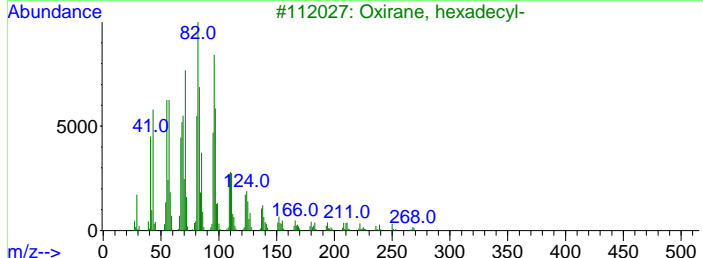
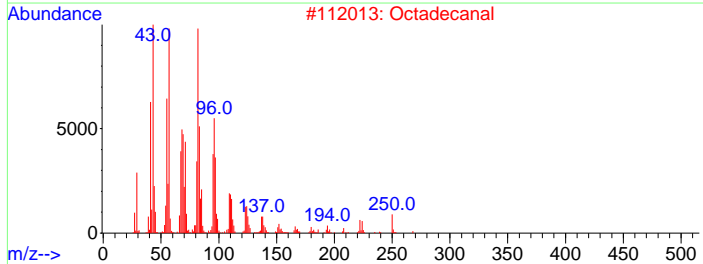
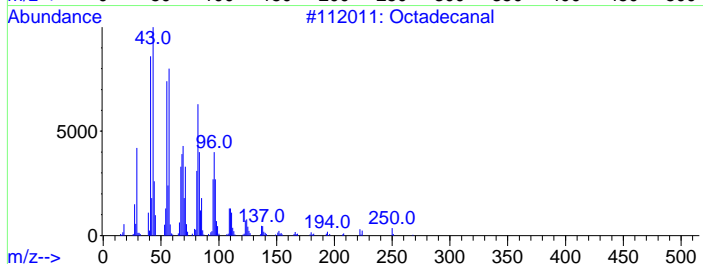
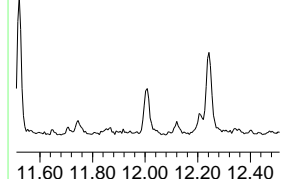
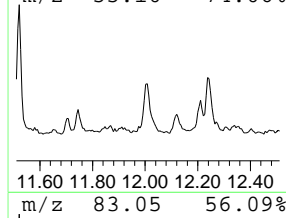
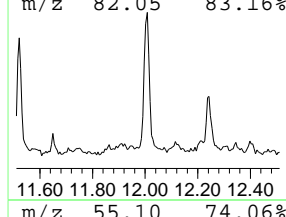
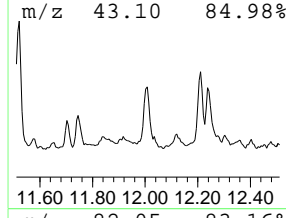
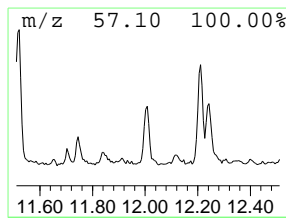
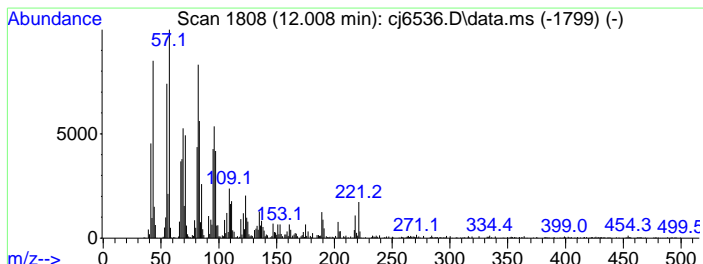
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 12 Octadecanal Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.008	18.82 ppm	1368530	Perylene-d12	11.714

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Octadecanal	268	C18H36O	000638-66-4	93
2		Octadecanal	268	C18H36O	000638-66-4	90
3		Oxirane, hexadecyl-	268	C18H36O	007390-81-0	83
4		Tetradecanal	212	C14H28O	000124-25-4	80
5		1,19-Eicosadiene	278	C20H38	014811-95-1	62



7.1.27  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6536.D  
Acq On : 09 May 2024 11:38 pm  
Operator : rocquans  
Sample : jd87833-13  
Misc : op54460,ecj297,30.0,,,1,1  
ALS Vial : 27 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

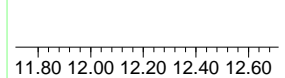
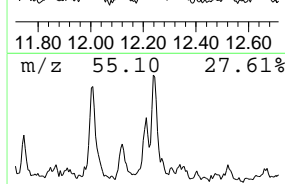
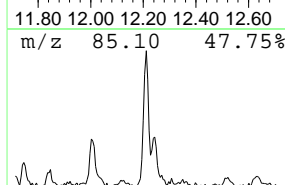
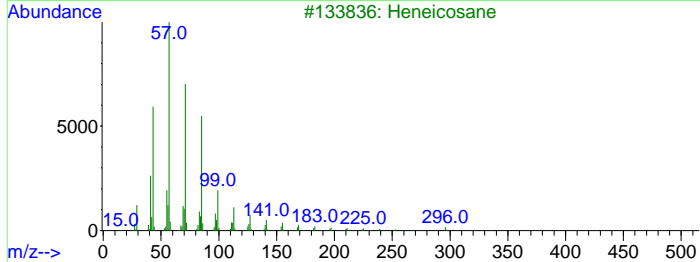
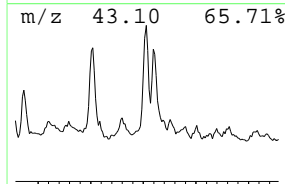
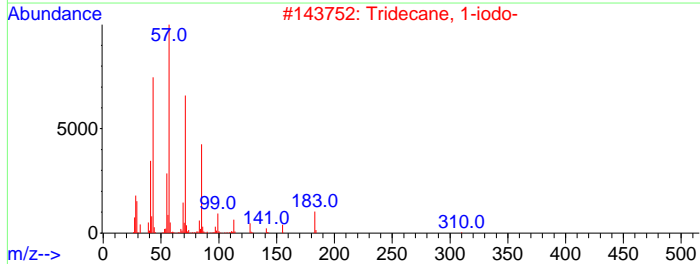
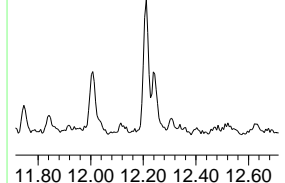
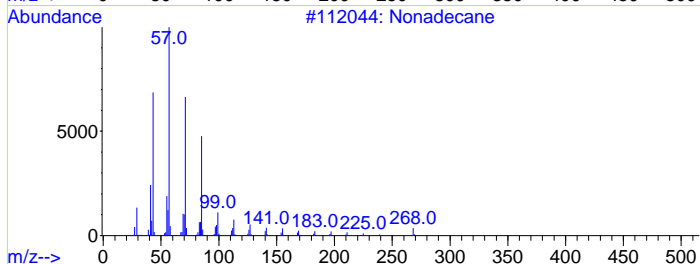
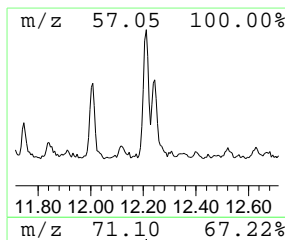
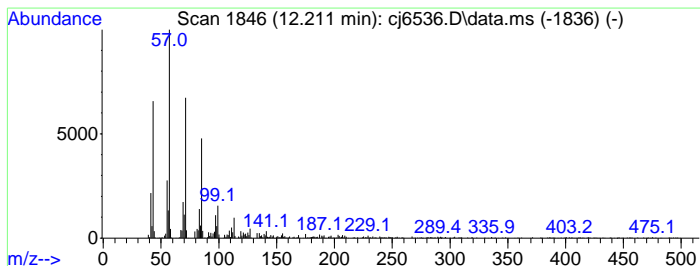
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 13 Alkane Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.211	8.09 ppm	588214	Perylene-d12	11.714

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Nonadecane	268	C19H40	000629-92-5	93
2			Tridecane, 1-iodo-	310	C13H27I	035599-77-0	91
3			Heneicosane	296	C21H44	000629-94-7	87
4			Dotriacontane	451	C32H66	000544-85-4	87
5			Pentadecane	212	C15H32	000629-62-9	83



7.1.27  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6536.D  
 Acq On : 09 May 2024 11:38 pm  
 Operator : rocquans  
 Sample : jd87833-13  
 Misc : op54460,ecj297,30.0,,,1,1  
 ALS Vial : 27 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

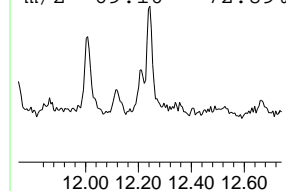
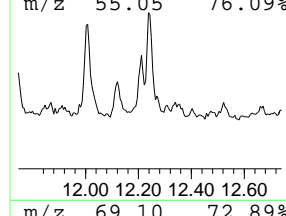
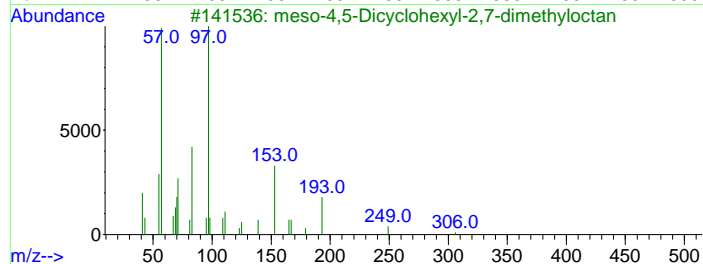
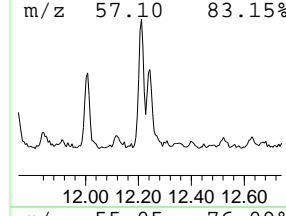
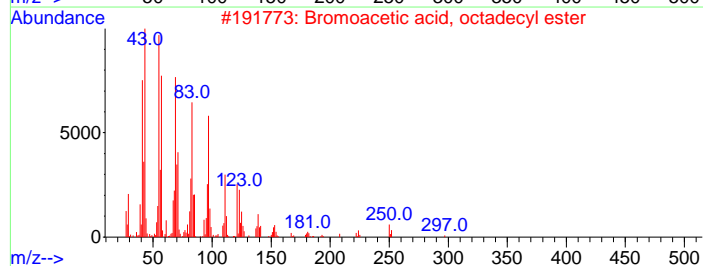
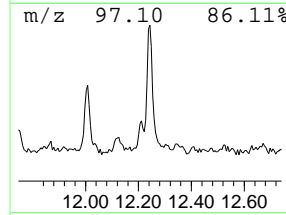
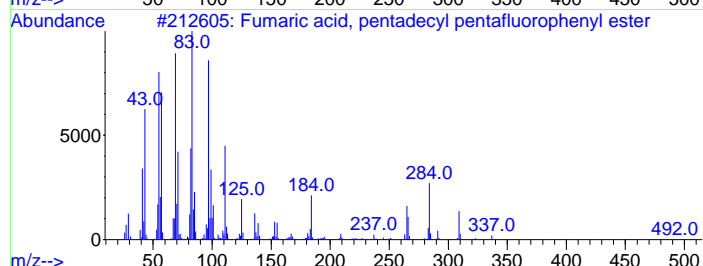
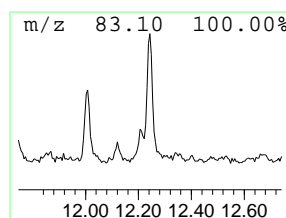
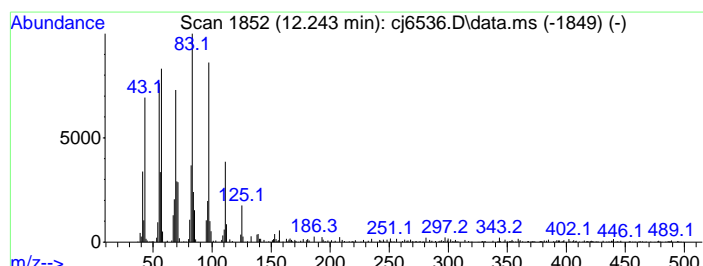
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 14 Unknown Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.243	4.93 ppm	358676	Perylene-d12	11.714

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Fumaric acid, pentadecyl pentafluorophenyl ester	492	C25H33F5O4	1000348-10-7	55
2		Bromoacetic acid, octadecyl ester	390	C20H39BrO2	018992-03-5	46
3		meso-4,5-Dicyclohexyl-2,7-dimethyloctan	306	C22H42	065149-86-2	43
4		E-2-Octenyl tiglate	210	C13H22O2	084271-97-6	38
5		n-Heptadecanol-1	256	C17H36O	001454-85-9	38



7.1.27  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6536.D  
 Acq On : 09 May 2024 11:38 pm  
 Operator : rocquans  
 Sample : jd87833-13  
 Misc : op54460,ecj297,30.0,,,1,1  
 ALS Vial : 27 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

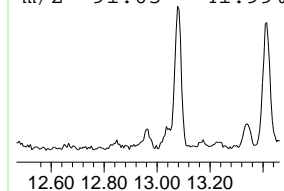
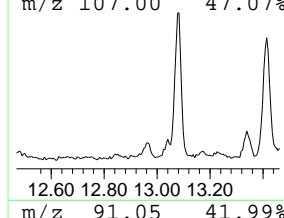
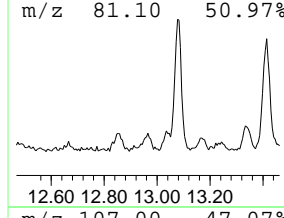
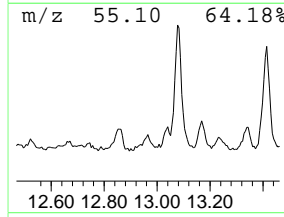
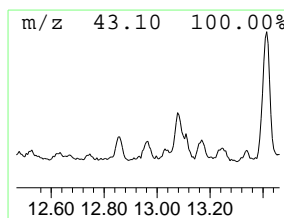
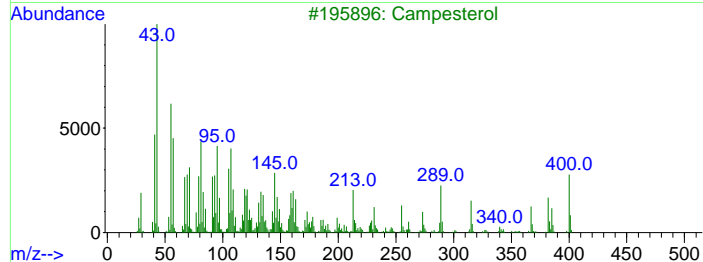
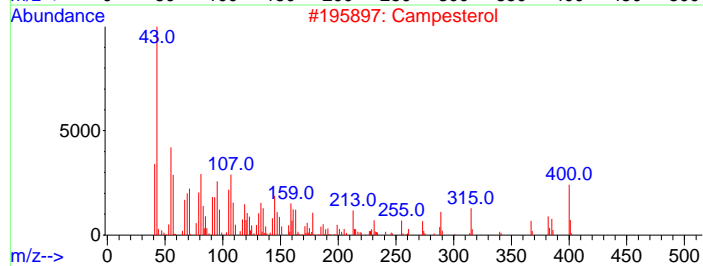
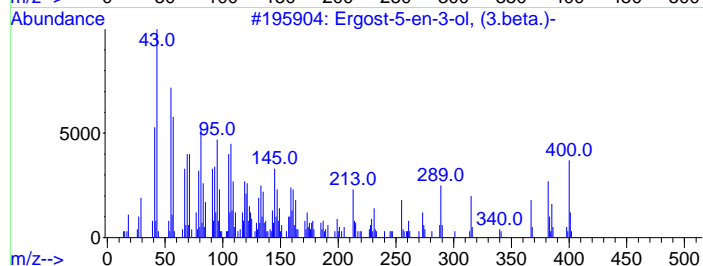
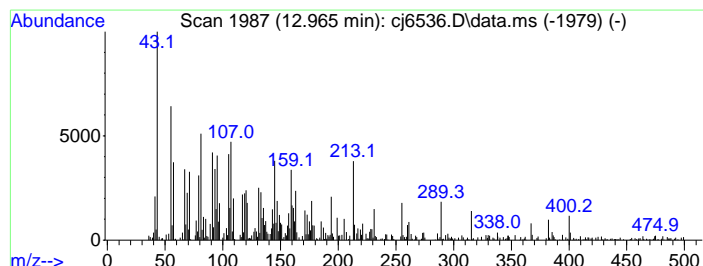
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 15 Unknown Concentration Rank 22

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.965	4.72 ppm	342977	Perylene-d12	11.714

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1	Ergost-5-en-3-ol, (3.beta.)-	400	C28H48O	004651-51-8	93		
2	Campesterol	400	C28H48O	000474-62-4	83		
3	Campesterol	400	C28H48O	000474-62-4	78		
4	5-Cholestene-3-ol, 24-methyl-	400	C28H48O	1000214-17-4	70		
5	Pregnan-20-one, 3-(acetyloxy)-5,...	404	C24H36O5	002857-83-2	64		



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6536.D  
Acq On : 09 May 2024 11:38 pm  
Operator : rocquans  
Sample : jd87833-13  
Misc : op54460,ecj297,30.0,,,1,1  
ALS Vial : 27 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

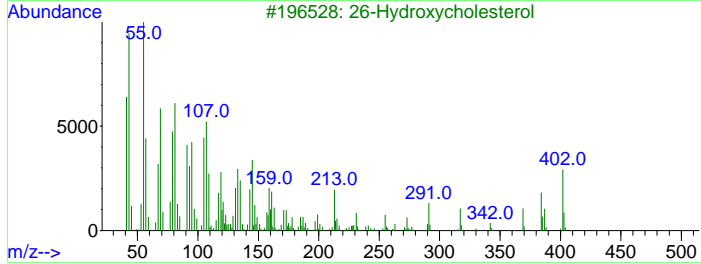
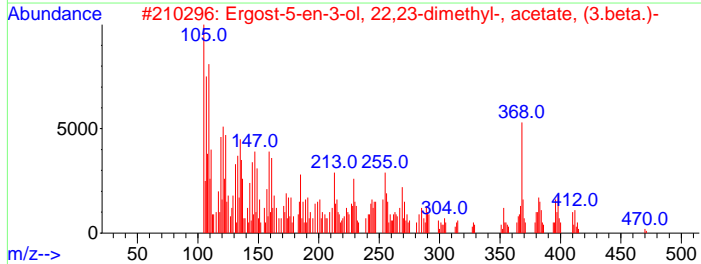
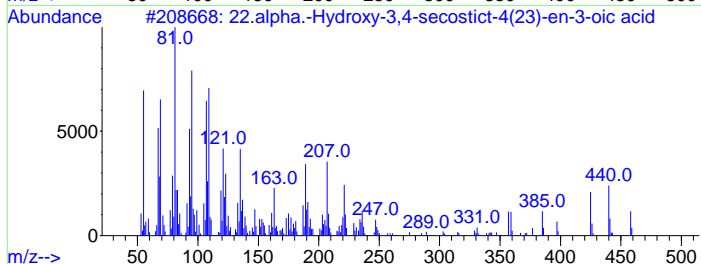
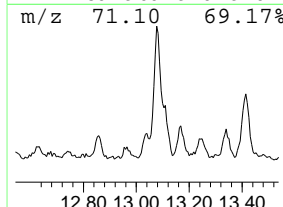
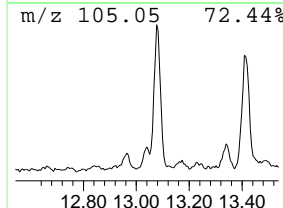
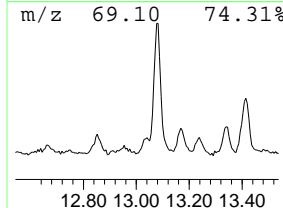
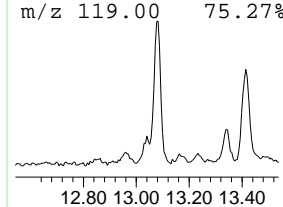
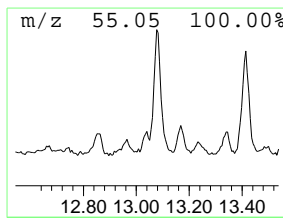
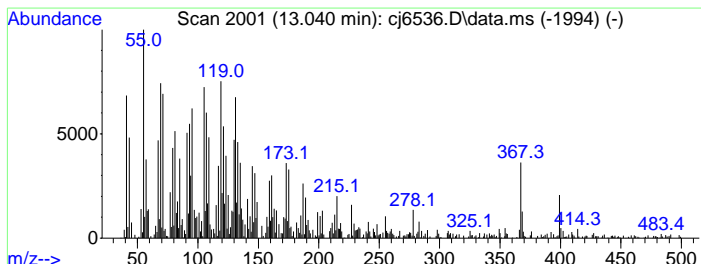
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 16 Unknown Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.040	6.39 ppm	465059	Perylene-d12	11.714

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			22.alpha.-Hydroxy-3,4-secostict-...	458	C30H50O3	069773-95-1	12
2			Ergost-5-en-3-ol, 22,23-dimethyl...	470	C32H54O2	055724-21-5	12
3			26-Hydroxycholesterol	402	C27H46O2	013095-61-9	10
4			Ergost-22-en-3-ol, (3.beta.,5.a.l...	400	C28H48O	036422-25-0	10
5			Ergost-25-ene-3,5,6-triol, (3.be...	432	C28H48O3	056143-28-3	9



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6536.D  
Acq On : 09 May 2024 11:38 pm  
Operator : rocquans  
Sample : jd87833-13  
Misc : op54460,ecj297,30.0,,,1,1  
ALS Vial : 27 Sample Multiplier: 1

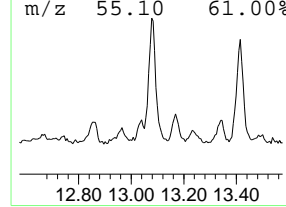
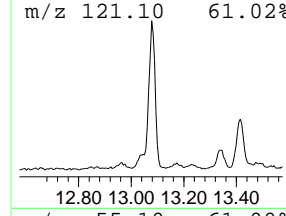
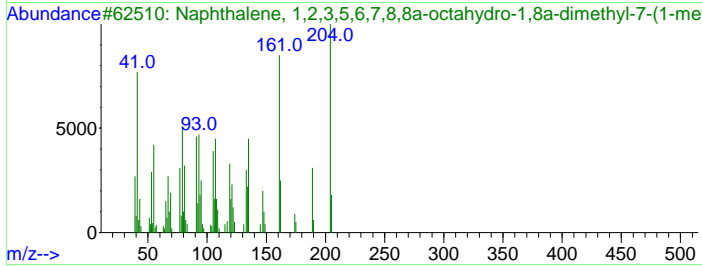
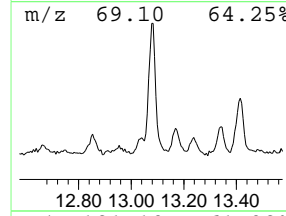
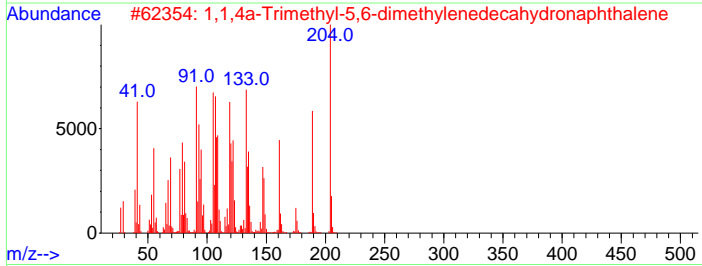
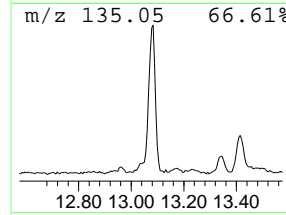
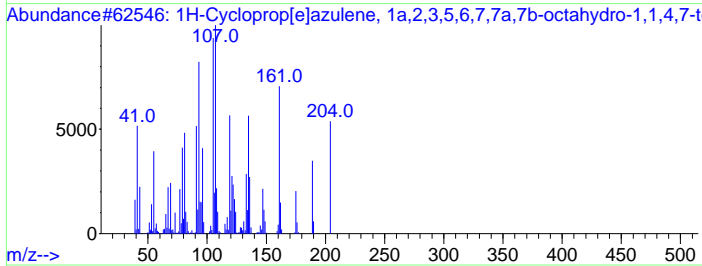
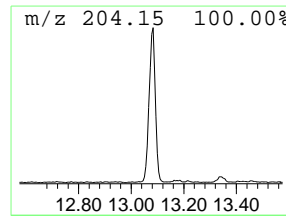
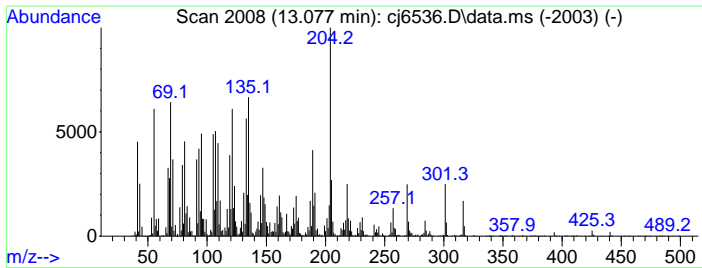
Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 17 Unknown Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.077	52.18 ppm	3794900	Perylene-d12	11.714

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		1H-Cycloprop[e]azulene, 1a,2,3,5...	204	C15H24	021747-46-6	70
2		1,1,4a-Trimethyl-5,6-dimethylene...	204	C15H24	1000193-60-8	53
3		Naphthalene, 1,2,3,5,6,7,8,8a-oc...	204	C15H24	004630-07-3	49
4		1,4-Dimethyl-8-isopropylidenetri...	204	C15H24	1000140-07-7	46
5		2H-Cyclopentacyclooctene, 4,5,6,...	204	C15H24	1000221-85-8	43



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6536.D  
 Acq On : 09 May 2024 11:38 pm  
 Operator : rocquans  
 Sample : jd87833-13  
 Misc : op54460,ecj297,30.0,,,1,1  
 ALS Vial : 27 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

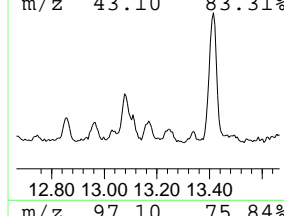
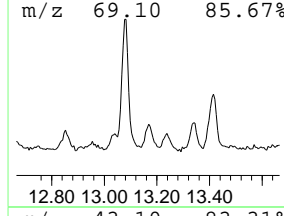
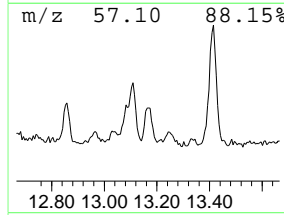
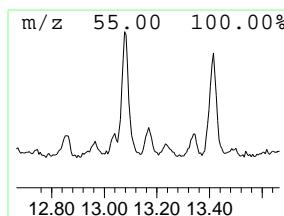
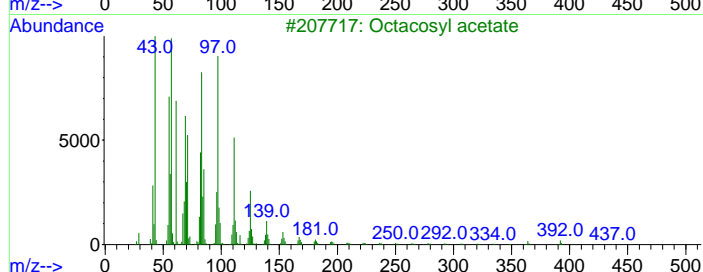
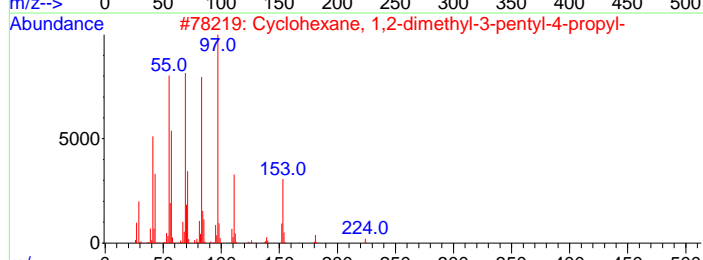
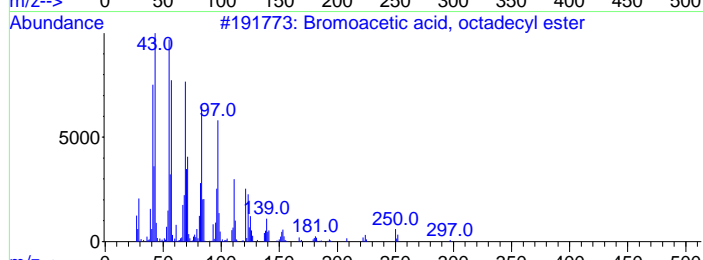
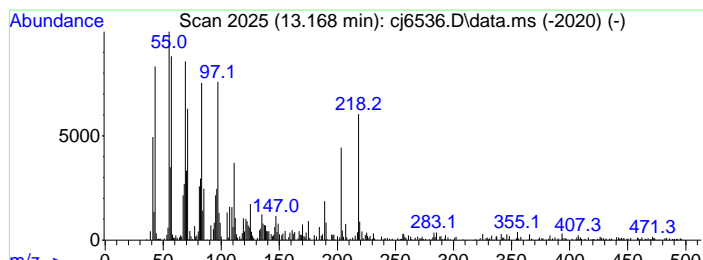
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 18 Unknown Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.168	5.44 ppm	395764	Perylene-d12	11.714

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Bromoacetic acid, octadecyl ester	390	C20H39BrO2	018992-03-5	76
2			Cyclohexane, 1,2-dimethyl-3-pent...	224	C16H32	062376-17-4	58
3			Octacosyl acetate	452	C30H60O2	018206-97-8	50
4			1,7-Dimethyl-4-(1-methylethyl)cy...	210	C15H30	000645-10-3	49
5			Cyclopentane, 1,1,3-trimethyl-	112	C8H16	004516-69-2	49



7.1.27  
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Library Search Compound Report

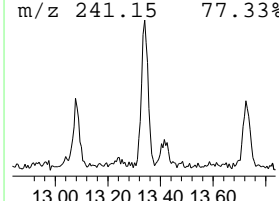
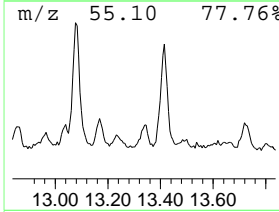
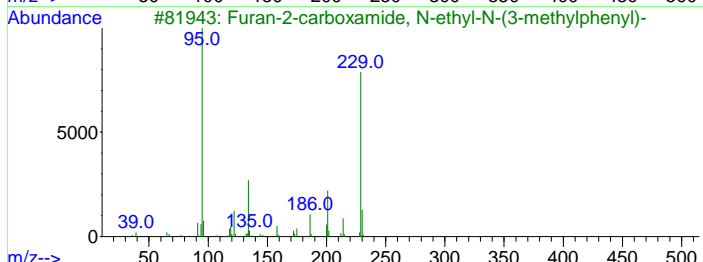
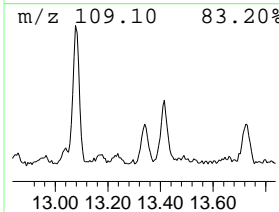
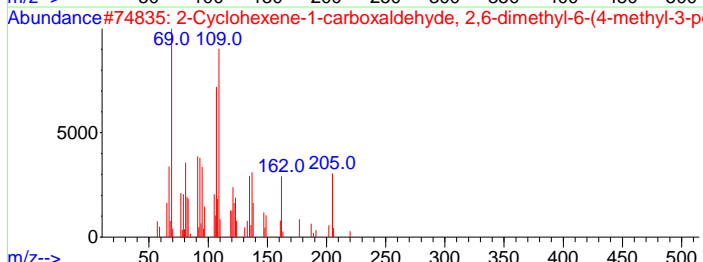
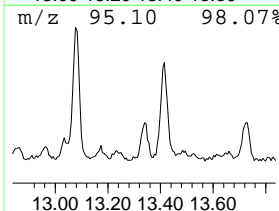
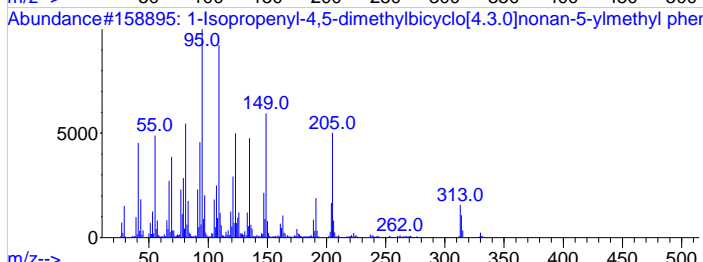
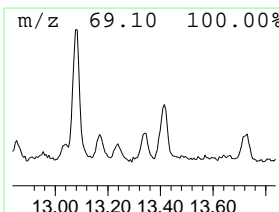
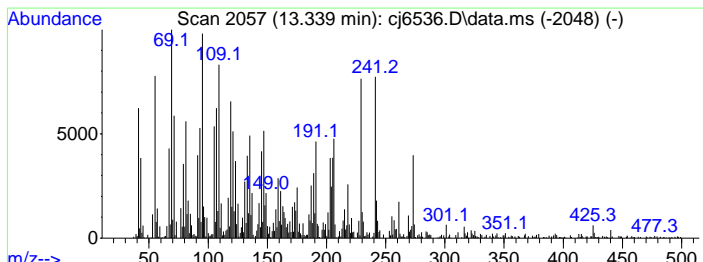
Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\
Data File : cj6536.D
Acq On : 09 May 2024 11:38 pm
Operator : rocquans
Sample : jd87833-13
Misc : op54460,ecj297,30.0,,,1,1
ALS Vial : 27 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: lscint.p

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Peak Number 19 Unknown Concentration Rank 12

Table with 7 columns: R.T., EstConc, Area, Relative to ISTD, R.T., Hit# of, and Tentative ID. It lists several chemical compounds like Perylene-d12 and various bicyclic and spiro compounds.



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6536.D  
Acq On : 09 May 2024 11:38 pm  
Operator : rocquans  
Sample : jd87833-13  
Misc : op54460,ecj297,30.0,,,1,1  
ALS Vial : 27 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

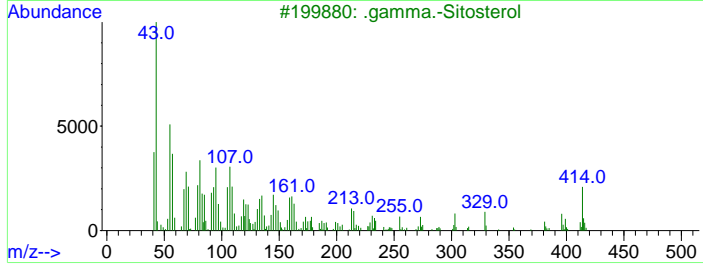
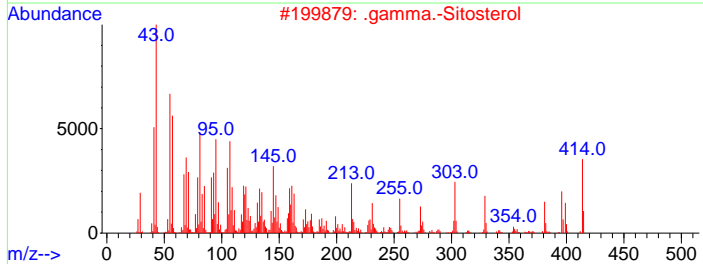
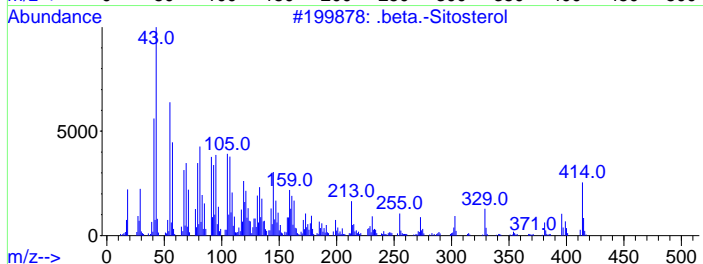
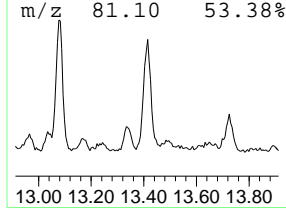
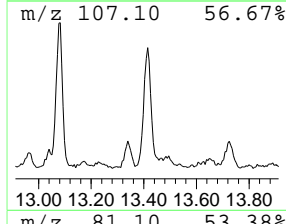
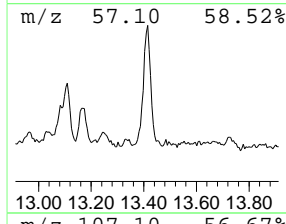
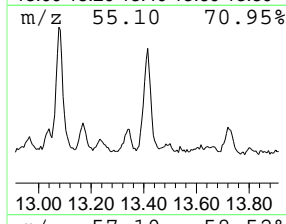
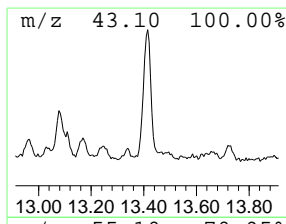
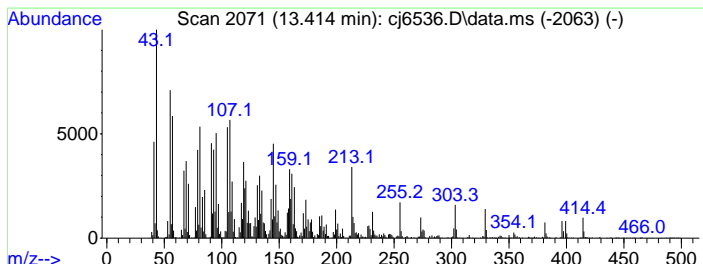
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 20 Unknown Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.414	38.79 ppm	2821460	Perylene-d12	11.714

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	.beta.-Sitosterol	414	C29H50O	000083-46-5	95
2		.gamma.-Sitosterol	414	C29H50O	000083-47-6	92
3		.gamma.-Sitosterol	414	C29H50O	000083-47-6	78
4		.beta.-Sitosterol	414	C29H50O	000083-46-5	70
5		Ergost-5-en-3-ol, (3.beta.)-	400	C28H48O	004651-51-8	58



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7



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6536.D  
Acq On : 09 May 2024 11:38 pm  
Operator : rocquans  
Sample : jd87833-13  
Misc : op54460,ecj297,30.0,,,1,1  
ALS Vial : 27 Sample Multiplier: 1

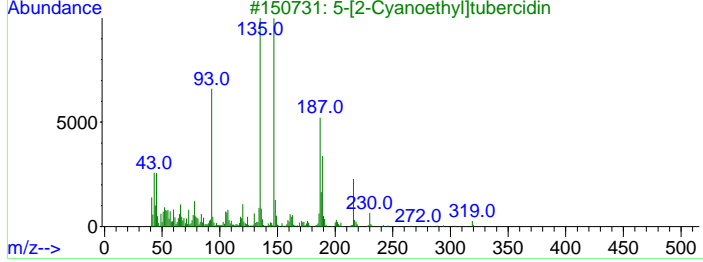
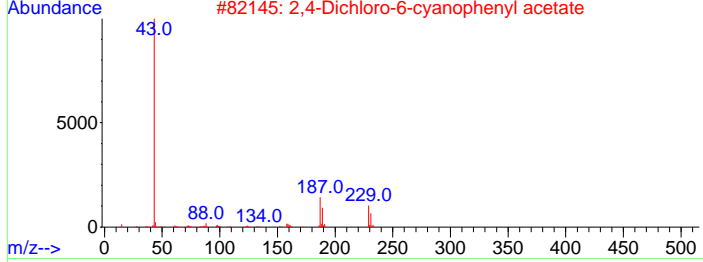
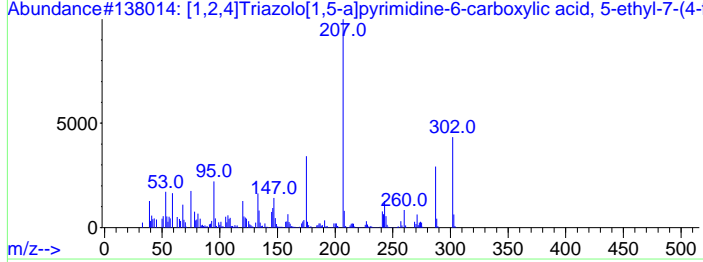
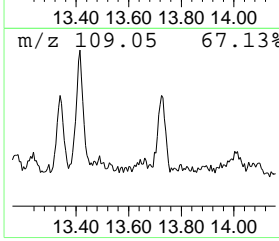
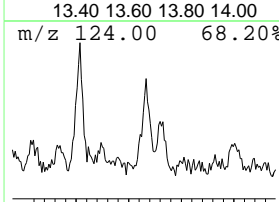
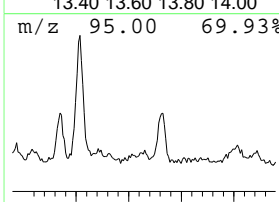
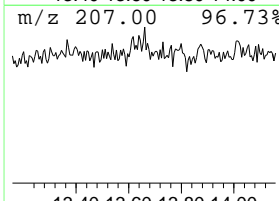
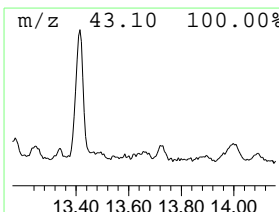
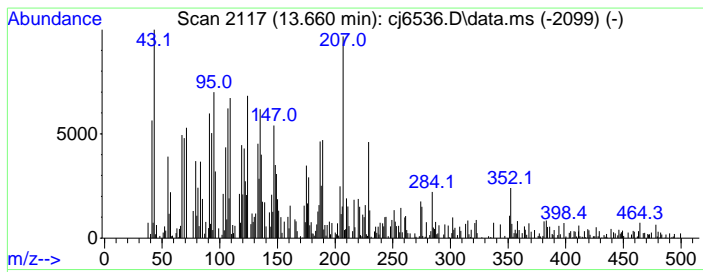
Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 21 Unknown Concentration Rank 21

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.660	4.80 ppm	349100	Perylene-d12	11.714

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			[1,2,4]Triazolo[1,5-a]pyrimidine...	302	C15H15FN4O2	1000317-15-2	15
2			2,4-Dichloro-6-cyanophenyl acetate	229	C9H5Cl2NO2	1000239-88-7	14
3			5-[2-Cyanoethyl]tubercidin	319	C14H17N5O4	076319-86-3	14
4			Isophthalic acid, allyl undecyl ...	360	C22H32O4	1000345-65-2	12
5			2-Methyl-7-phenylindole	207	C15H13N	001140-08-5	11



7.1.27  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6536.D  
 Acq On : 09 May 2024 11:38 pm  
 Operator : rocquans  
 Sample : jd87833-13  
 Misc : op54460,ecj297,30.0,,,1,1  
 ALS Vial : 27 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

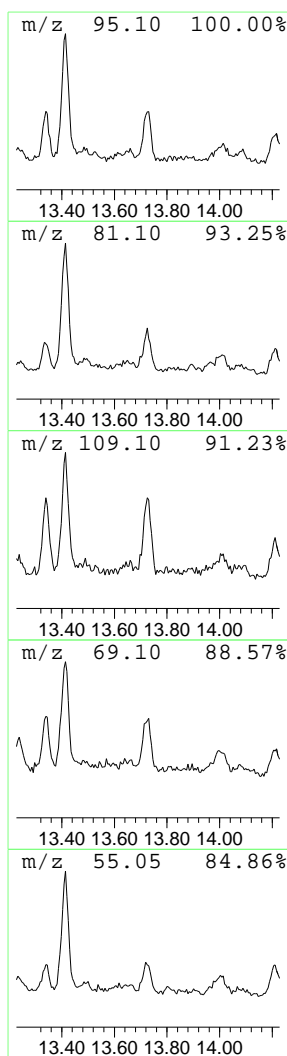
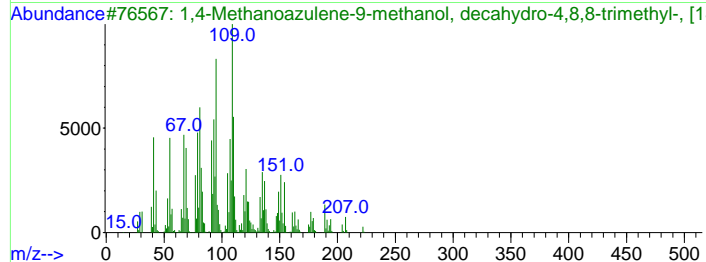
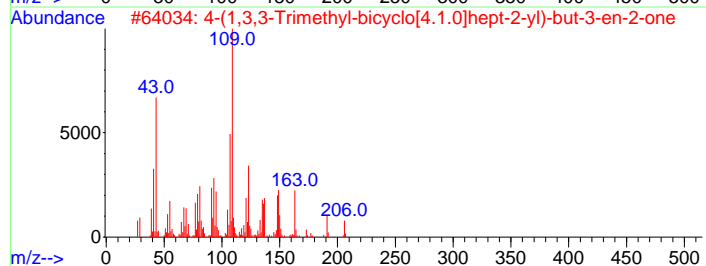
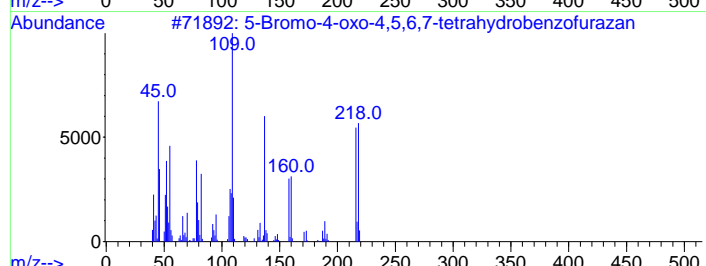
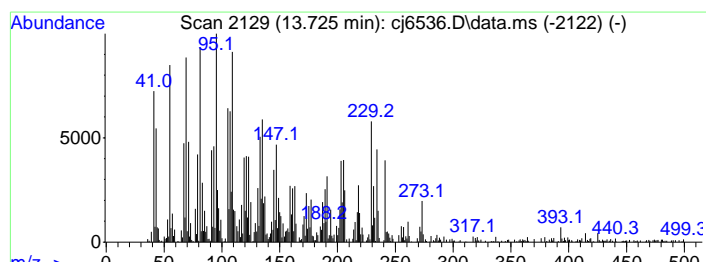
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 22 Unknown Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.725	11.87 ppm	863308	Perylene-d12	11.714

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			5-Bromo-4-oxo-4,5,6,7-tetrahydro...	216	C6H5BrN2O2	300574-36-1	90
2			4-(1,3,3-Trimethyl-bicyclo[4.1.0]...	206	C14H22O	077143-31-8	53
3			1,4-Methanoazulene-9-methanol, d...	222	C15H26O	001139-17-9	51
4			Alloaromadendrene oxide-(1)	220	C15H24O	1000156-12-8	49
5			Imidazole, 4-methyl-5-[3,3,3-tri...	234	C10H13F3N2O	1000129-15-8	46



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6536.D  
 Acq On : 09 May 2024 11:38 pm  
 Operator : rocquans  
 Sample : jd87833-13  
 Misc : op54460,ecj297,30.0,,,1,1  
 ALS Vial : 27 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

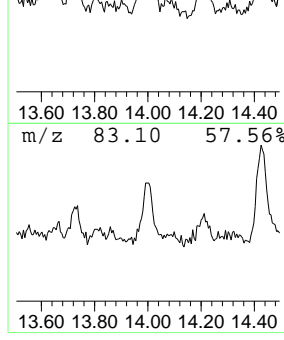
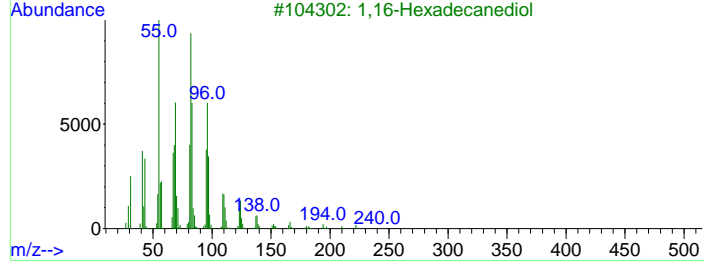
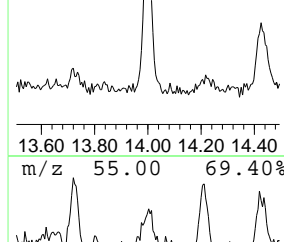
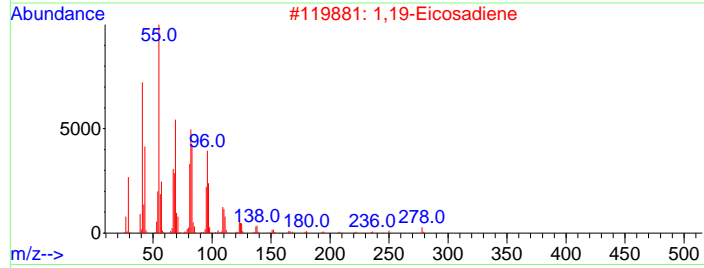
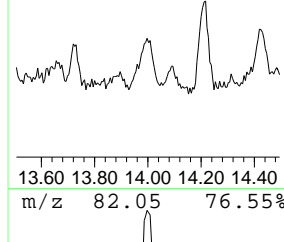
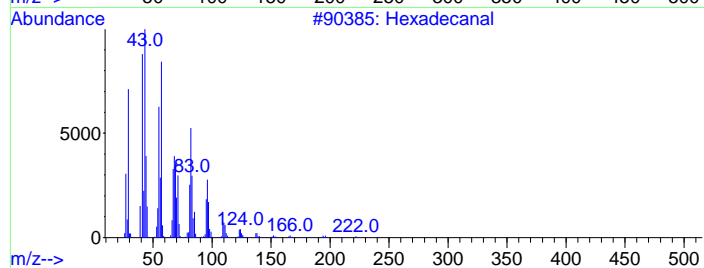
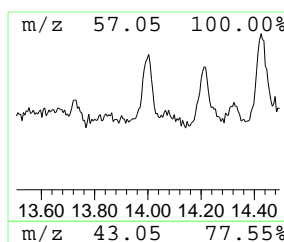
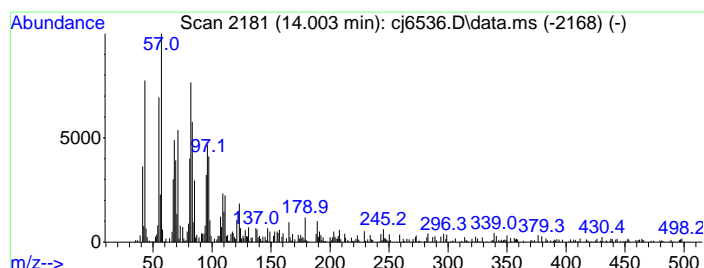
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 23 Unknown Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.003	8.27 ppm	601109	Perylene-d12	11.714

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Hexadecanal	240	C16H32O	000629-80-1	74
2			1,19-Eicosadiene	278	C20H38	014811-95-1	64
3			1,16-Hexadecanediol	258	C16H34O2	007735-42-4	52
4			1,13-Tetradecadiene	194	C14H26	021964-49-8	49
5			Oxirane, heptadecyl-	282	C19H38O	067860-04-2	49



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6536.D  
Acq On : 09 May 2024 11:38 pm  
Operator : rocquans  
Sample : jd87833-13  
Misc : op54460,ecj297,30.0,,,1,1  
ALS Vial : 27 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

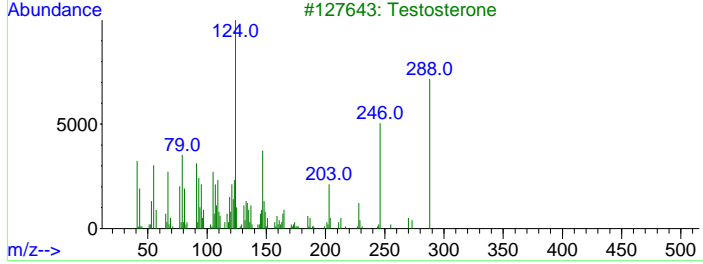
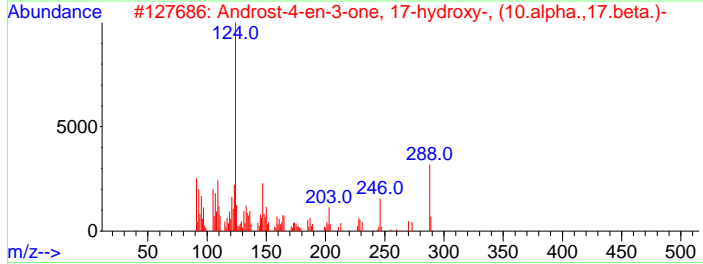
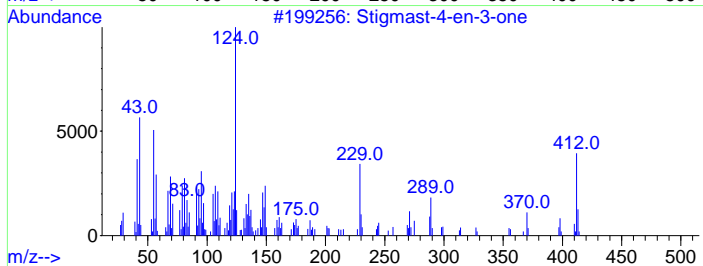
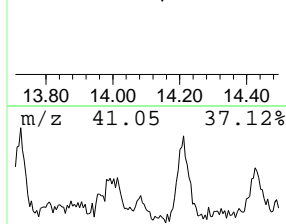
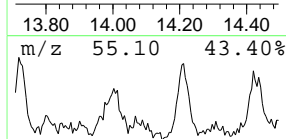
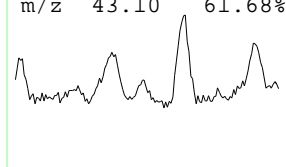
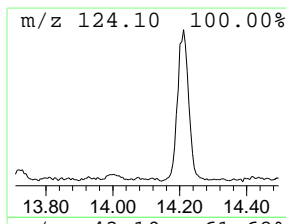
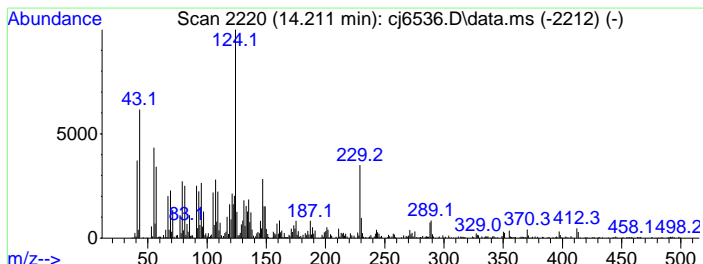
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 24 Unknown Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.211	11.72 ppm	852244	Perylene-d12	11.714

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Stigmast-4-en-3-one	412	C29H48O	001058-61-3	94
2		Androst-4-en-3-one, 17-hydroxy-, ...	288	C19H28O2	000604-39-7	64
3		Testosterone	288	C19H28O2	000058-22-0	58
4		2,3-Diaminophenol	124	C6H8N2O	059649-56-8	46
5		3-Cyclohexene-1-carboxaldehyde, ...	124	C8H12O	007560-64-7	46



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6536.D  
Acq On : 09 May 2024 11:38 pm  
Operator : rocquans  
Sample : jd87833-13  
Misc : op54460,ecj297,30.0,,,1,1  
ALS Vial : 27 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

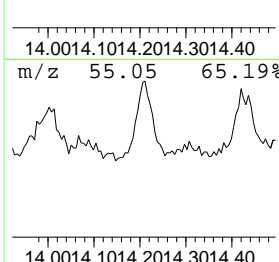
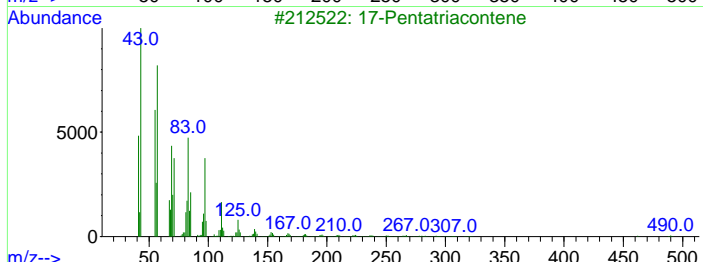
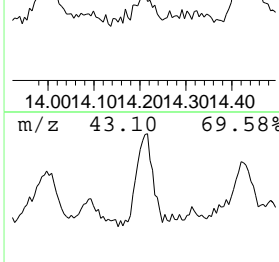
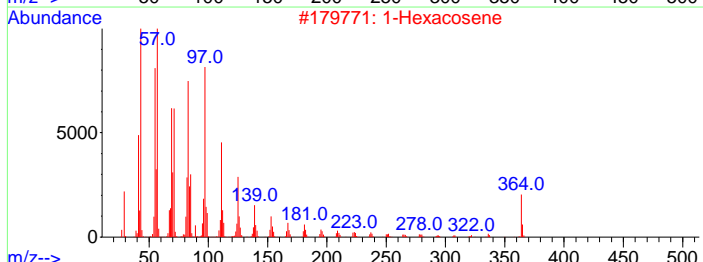
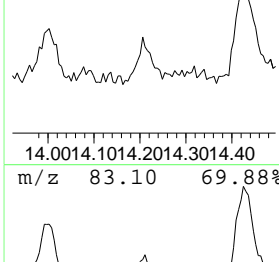
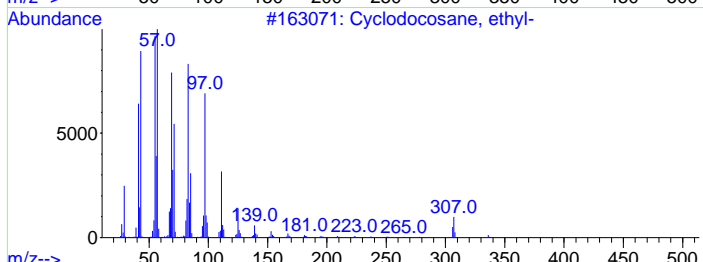
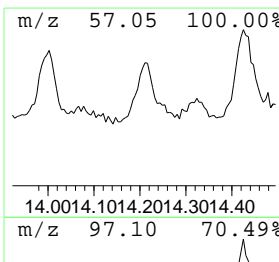
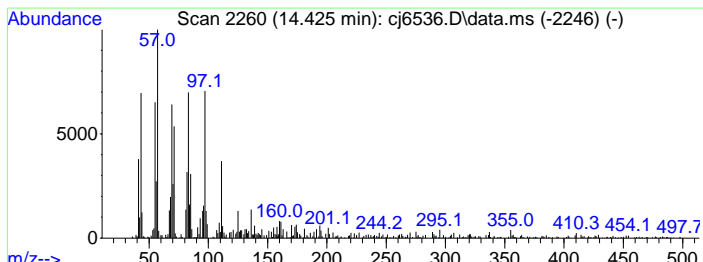
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 25 Unknown Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.425	7.59 ppm	552136	Perylene-d12	11.714

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		Cyclodocosane, ethyl-	336	C24H48	1000151-22-6	94
2		1-Hexacosene	364	C26H52	018835-33-1	93
3		17-Pentatriacontene	491	C35H70	006971-40-0	87
4		Nonadecyl heptafluorobutyrate	480	C23H39F7O2	1000351-83-9	87
5		1-Heptacosanol	396	C27H56O	002004-39-9	81



7.1.27  
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Tentatively Identified Compound (LSC) summary

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6536.D  
Acq On : 09 May 2024 11:38 pm  
Operator : rocquans  
Sample : jd87833-13  
Misc : op54460,ecj297,30.0,,,1,1  
ALS Vial : 27 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
Unknown	4.247	10.9	ppm	588184	2	4.664	2155130	40.0
n-Hexadecanoic ...	8.365	4.5	ppm	347926	8	7.868	3119600	40.0
Octadecanoic acid	9.119	4.5	ppm	315656	9	10.366	2837610	40.0
Unknown acid	9.831	5.9	ppm	415594	9	10.366	2837610	40.0
Unknown	10.269	8.2	ppm	579950	9	10.366	2837610	40.0
Unknown acid	10.489	11.7	ppm	832130	10	10.366	2837610	40.0
Unknown	10.906	12.9	ppm	911957	10	10.366	2837610	40.0
Unknown	11.050	10.6	ppm	768480	11	11.714	2909140	40.0
Unknown acid	11.109	12.3	ppm	894117	11	11.714	2909140	40.0
Unknown	11.205	4.4	ppm	320661	11	11.714	2909140	40.0
Unknown	11.521	15.1	ppm	1096870	11	11.714	2909140	40.0
Octadecanal	12.008	18.8	ppm	1368530	11	11.714	2909140	40.0
Alkane	12.211	8.1	ppm	588214	11	11.714	2909140	40.0
Unknown	12.243	4.9	ppm	358676	11	11.714	2909140	40.0
Unknown	12.965	4.7	ppm	342977	11	11.714	2909140	40.0
Unknown	13.040	6.4	ppm	465059	11	11.714	2909140	40.0
Unknown	13.077	52.2	ppm	3794900	11	11.714	2909140	40.0
Unknown	13.168	5.4	ppm	395764	11	11.714	2909140	40.0
Unknown	13.339	10.4	ppm	756544	11	11.714	2909140	40.0
Unknown	13.414	38.8	ppm	2821460	11	11.714	2909140	40.0
Unknown	13.660	4.8	ppm	349100	11	11.714	2909140	40.0
Unknown	13.725	11.9	ppm	863308	11	11.714	2909140	40.0
Unknown	14.003	8.3	ppm	601109	11	11.714	2909140	40.0
Unknown	14.211	11.7	ppm	852244	11	11.714	2909140	40.0
Unknown	14.425	7.6	ppm	552136	11	11.714	2909140	40.0

7.1.27  
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Quantitation Report (QT/LSC Reviewed)

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6541.D  
Acq On : 10 May 2024 01:13 am  
Operator : rocquans  
Sample : jd87833-14 Inst : GCMSCJ  
Misc : op54460,ecj297,30.2,,,1,1  
ALS Vial : 32 Sample Multiplier: 1

Quant Time: May 10 20:13:49 2024  
Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
QLast Update : Thu May 09 12:05:48 2024  
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.669	152	321346	40.00	ppm	0.00
24) Naphthalene-d8	5.471	136	1128839	40.00	ppm	0.00
46) Acenaphthene-d10	6.659	164	623856	40.00	ppm	0.00
69) Phenanthrene-d10	7.873	188	1083567	40.00	ppm	0.00
84) Chrysene-d12	10.366	240	777218	40.00	ppm	0.00
93) Perylene-d12	11.719	264	804995	40.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.669	152	321346	40.00	ppm	0.00
105) Phenanthrene-d10a	7.873	188	1083567	40.00	ppm	0.00
107) Naphthalene-d8a	5.471	136	1128839	40.00	ppm	0.00
109) Phenanthrene-d10b	7.873	188	1083567	40.00	ppm	0.00
112) Chrysene-d12a	10.366	240	777218	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.813	112	326911	35.39	ppm	0.02
Spiked Amount 50.000			Recovery =	70.78%		
8) Phenol-d5	4.429	99	440333	36.96	ppm	0.01
Spiked Amount 50.000			Recovery =	73.92%		
25) Nitrobenzene-d5	5.012	82	411936	35.64	ppm	0.00
Spiked Amount 50.000			Recovery =	71.28%		
51) 2-Fluorobiphenyl	6.167	172	766381	39.04	ppm	0.00
Spiked Amount 50.000			Recovery =	78.08%		
74) 2,4,6-Tribromophenol	7.274	330	107602	45.29	ppm	0.00
Spiked Amount 50.000			Recovery =	90.58%		
87) Terphenyl-d14	9.355	244	763388	39.75	ppm	0.00
Spiked Amount 50.000			Recovery =	79.50%		
110) 1-chlorooctadecane	0.000	57	0	0.00	ppm	0.00
Spiked Amount 50.000			Recovery =	0.00%		
111) o-terphenyl	0.000	230	0	0.00	ppm	0.00
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						
						Qvalue
38) Naphthalene	5.482	128	8039	0.2973	ppm	93
44) 2-Methylnaphthalene	5.926	141	3644	0.2273	ppm	80
45) 1-Methylnaphthalene	5.990	141	3819	0.2491	ppm	88
53) Biphenyl	6.236	154	3899	0.1819	ppm	92
56) Acenaphthylene	6.557	152	57563	2.3790	ppm	98
59) Acenaphthene	6.680	153	19796	1.1504	ppm	89
62) Dibenzofuran	6.814	168	11272	0.4720	ppm	98
66) Fluorene	7.081	166	23336	1.2371	ppm	93
78) Phenanthrene	7.894	178	352884	13.4756	ppm	99
79) Anthracene	7.937	178	107408	4.0963	ppm	97
80) Carbazole	8.076	167	31153	1.2750	ppm	96
82) Fluoranthene	8.986	202	755421	26.6461	ppm	98
86) Pyrene	9.200	202	704906	26.6686	ppm	99
89) Benzo[a]anthracene	10.355	228	340118	13.6104	ppm	95
91) Chrysene	10.392	228	303826	13.1778	ppm	98
92) bis(2-Ethylhexyl)phtha...	10.408	149	7280	0.4168	ppm	89
95) Dibenzo[b]fluoranthene	11.355	252	373001m	15.3386	ppm	
96) Benzo[k]fluoranthene	11.376	252	136086m	6.2191	ppm	
97) Benzo[a]pyrene	11.665	252	286699	14.2418	ppm	100
98) Indeno[1,2,3-cd]pyrene	12.901	276	192865	7.9249	ppm	98
100) Dibenzo[a,h]anthracene	12.922	278	47506	2.4430	ppm	97
102) Benzo[g,h,i]perylene	13.243	276	183672	9.7119	ppm	98
-----						

(#) = qualifier out of range (m) = manual integration (+) = signals summed

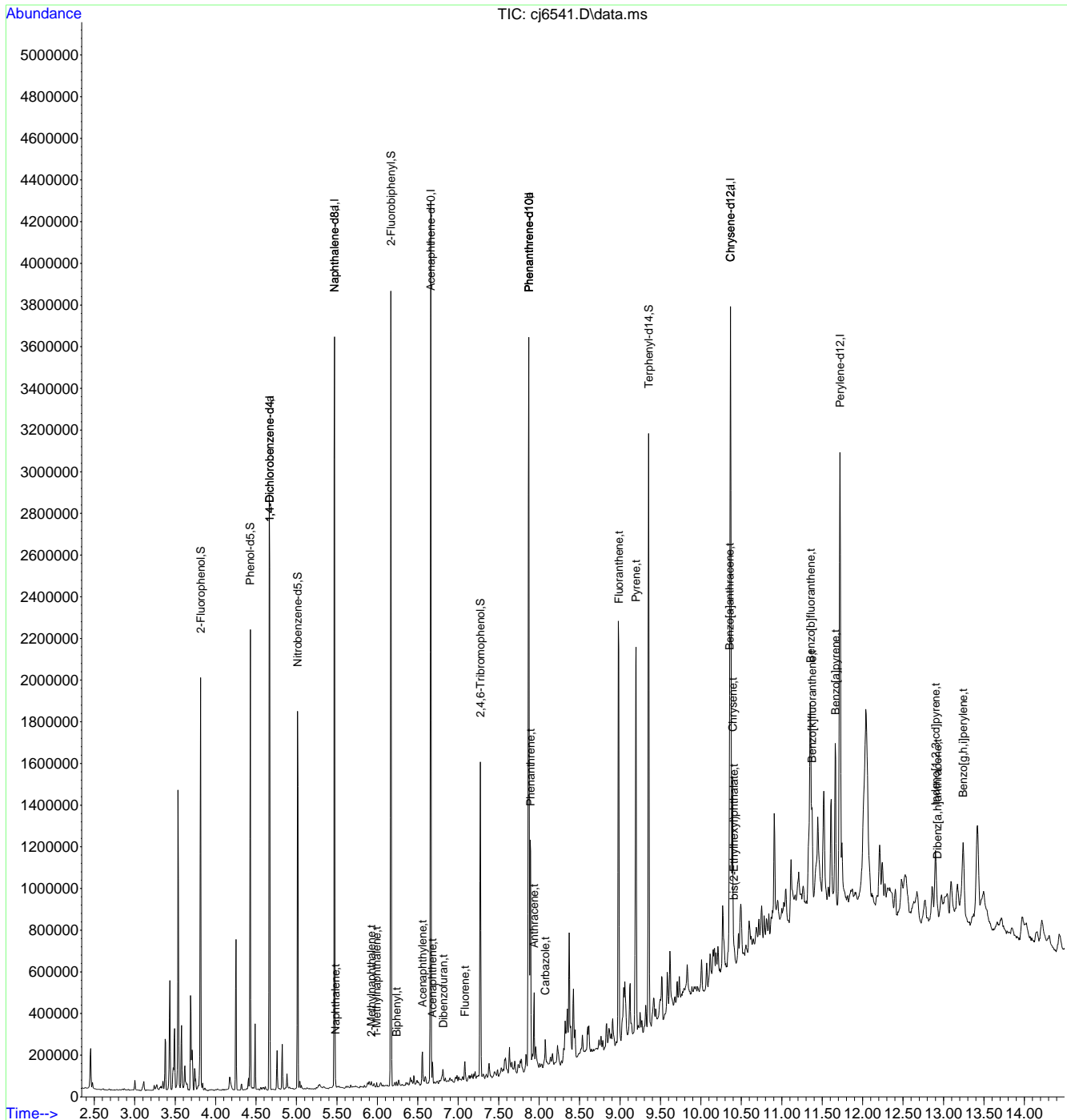


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Quantitation Report (QT/LSC Reviewed)

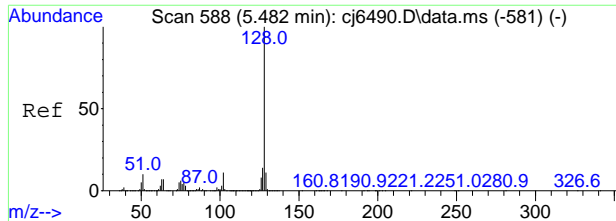
Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6541.D  
Acq On : 10 May 2024 01:13 am  
Operator : rocquans  
Sample : jd87833-14 Inst : GCMSCJ  
Misc : op54460,ecj297,30.2,,,1,1  
ALS Vial : 32 Sample Multiplier: 1

Quant Time: May 10 20:13:49 2024  
Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
QLast Update : Thu May 09 12:05:48 2024  
Response via : Initial Calibration



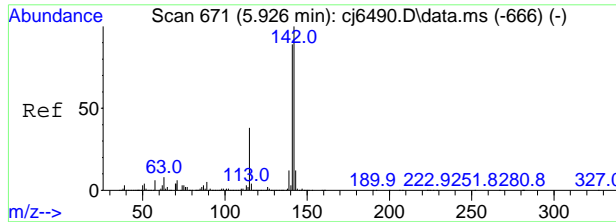
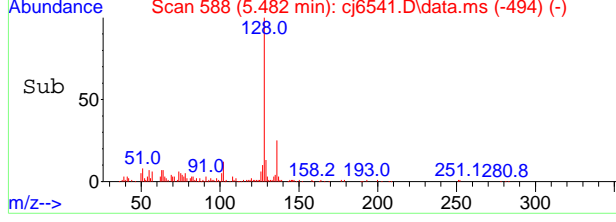
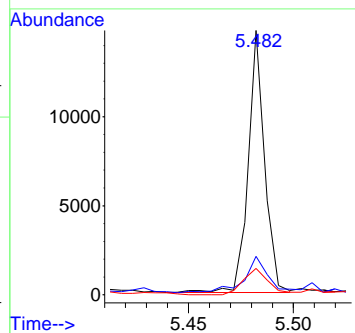
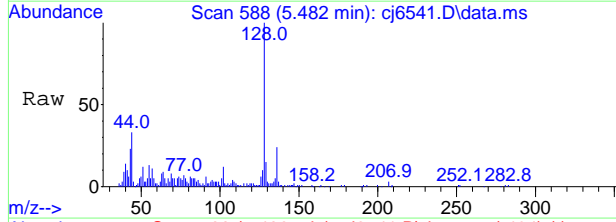
7.1.28  
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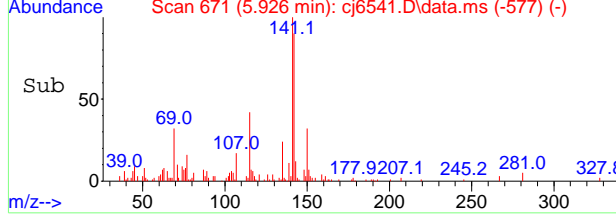
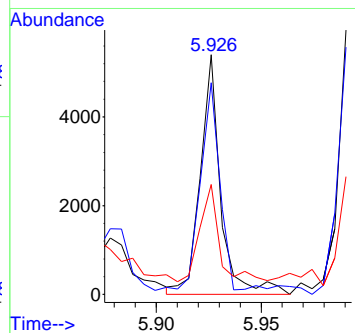
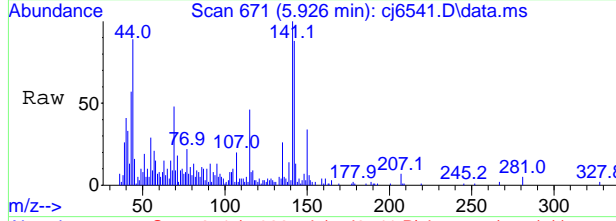
#38  
 Naphthalene  
 Concen: 0.2973 ppm  
 RT: 5.482 min Scan# 588  
 Delta R.T. 0.000 min  
 Lab File: cj6541.D  
 Acq: 10 May 2024 01:13 am

Tgt Ion	Ratio	Lower	Upper
128	100		
129	13.1	0.0	41.4
127	9.3	0.0	43.3

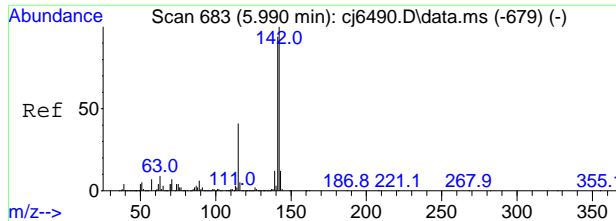


#44  
 2-Methylnaphthalene  
 Concen: 0.2273 ppm  
 RT: 5.926 min Scan# 671  
 Delta R.T. 0.000 min  
 Lab File: cj6541.D  
 Acq: 10 May 2024 01:13 am

Tgt Ion	Ratio	Lower	Upper
141	100		
142	86.1	82.7	142.7
115	37.9	12.4	72.4

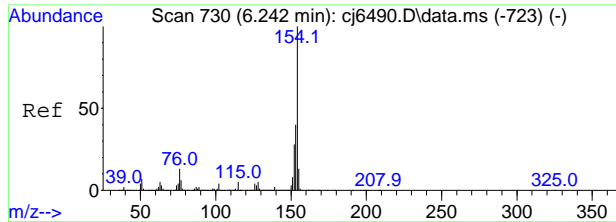
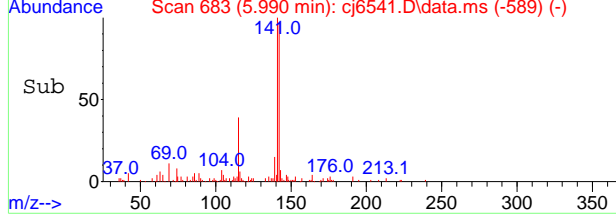
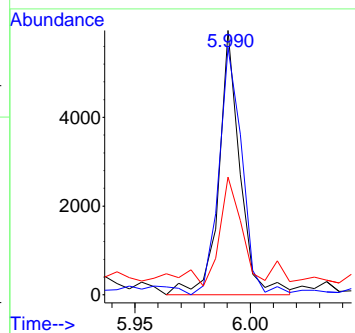
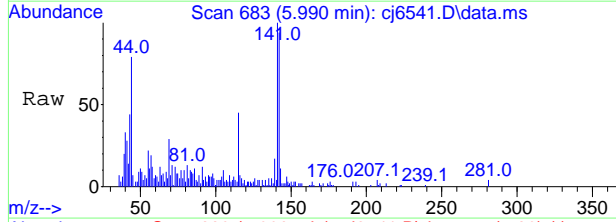


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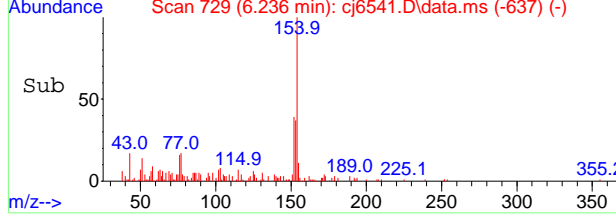
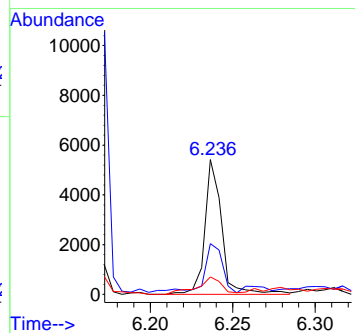
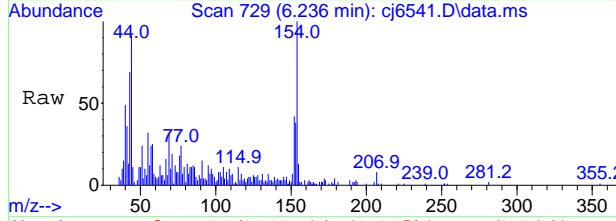
#45  
1-Methylnaphthalene  
Concen: 0.2491 ppm  
RT: 5.990 min Scan# 683  
Delta R.T. 0.000 min  
Lab File: cj6541.D  
Acq: 10 May 2024 01:13 am

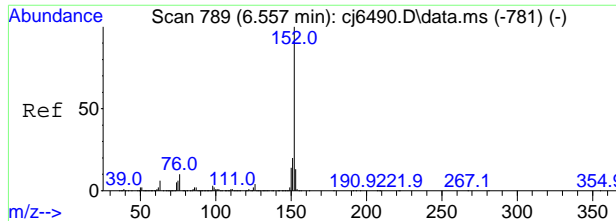
Tgt Ion	Ratio	Lower	Upper
141	100		
142	92.5	77.0	137.0
115	38.5	14.2	74.2



#53  
Biphenyl  
Concen: 0.1819 ppm  
RT: 6.236 min Scan# 729  
Delta R.T. -0.006 min  
Lab File: cj6541.D  
Acq: 10 May 2024 01:13 am

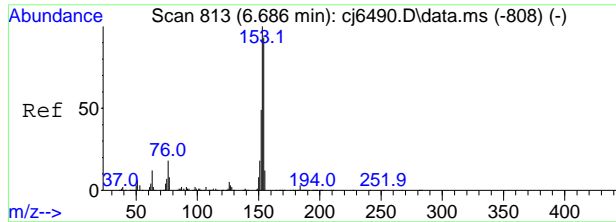
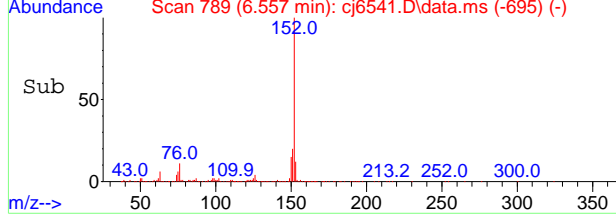
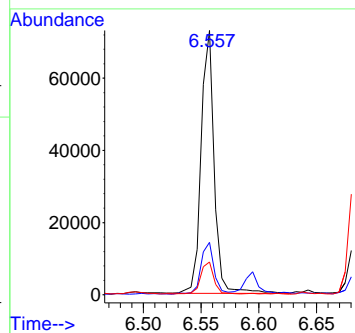
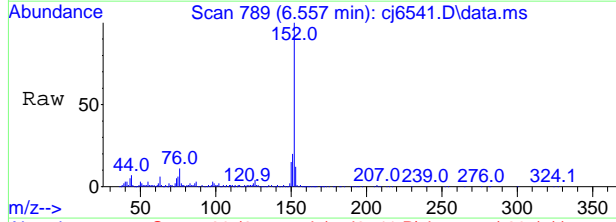
Tgt Ion	Ratio	Lower	Upper
154	100		
153	34.2	10.5	70.5
155	13.0	0.0	42.8





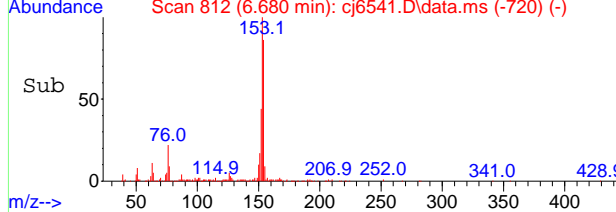
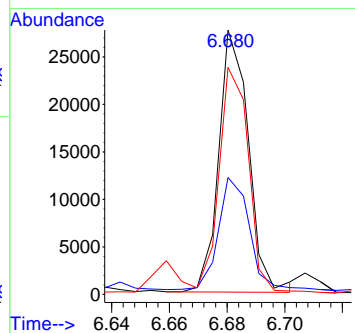
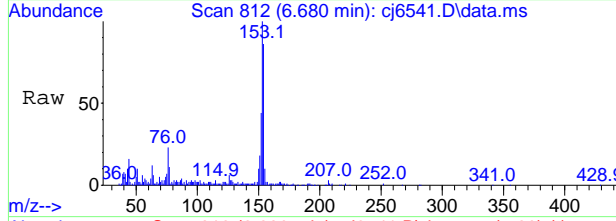
#56  
 Acenaphthylene  
 Concen: 2.3790 ppm  
 RT: 6.557 min Scan# 789  
 Delta R.T. 0.000 min  
 Lab File: cj6541.D  
 Acq: 10 May 2024 01:13 am

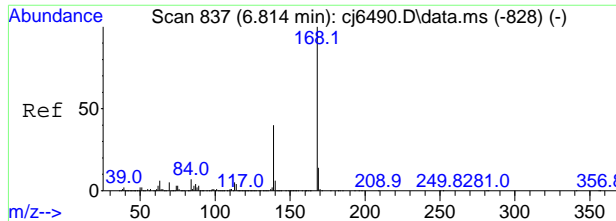
Tgt Ion	Resp	Lower	Upper
152	57563		
151	19.4	0.0	50.3
153	12.2	0.0	43.4



#59  
 Acenaphthene  
 Concen: 1.1504 ppm  
 RT: 6.680 min Scan# 812  
 Delta R.T. -0.006 min  
 Lab File: cj6541.D  
 Acq: 10 May 2024 01:13 am

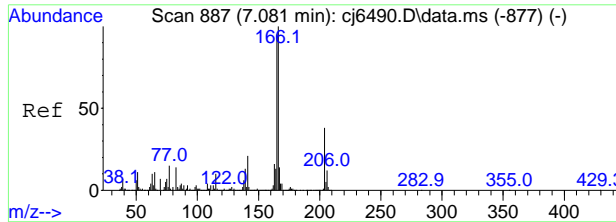
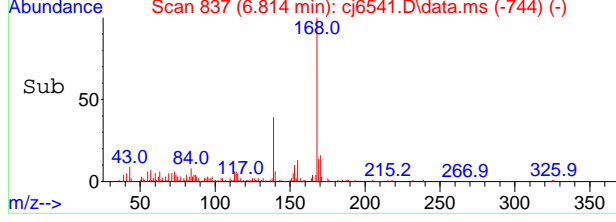
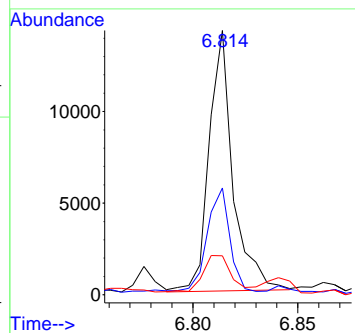
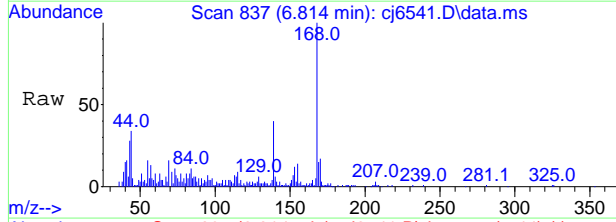
Tgt Ion	Resp	Lower	Upper
153	19796		
152	43.2	18.8	78.8
154	81.2	62.9	122.9





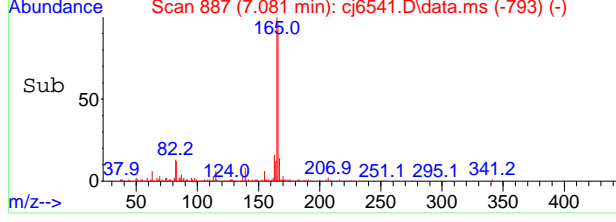
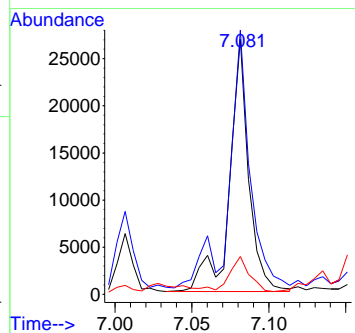
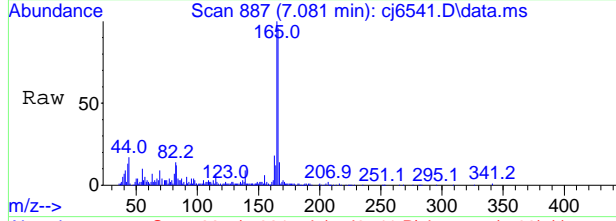
#62  
 Dibenzofuran  
 Concen: 0.4720 ppm  
 RT: 6.814 min Scan# 837  
 Delta R.T. 0.000 min  
 Lab File: cj6541.D  
 Acq: 10 May 2024 01:13 am

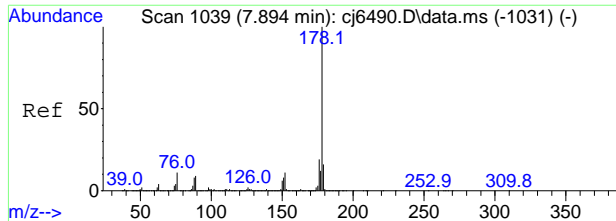
Tgt Ion	Ratio	Lower	Upper
168	100		
139	39.4	10.0	70.0
169	11.8	0.0	43.7



#66  
 Fluorene  
 Concen: 1.2371 ppm  
 RT: 7.081 min Scan# 887  
 Delta R.T. 0.000 min  
 Lab File: cj6541.D  
 Acq: 10 May 2024 01:13 am

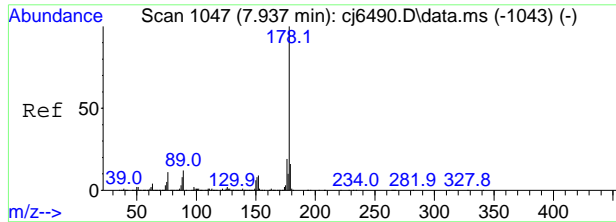
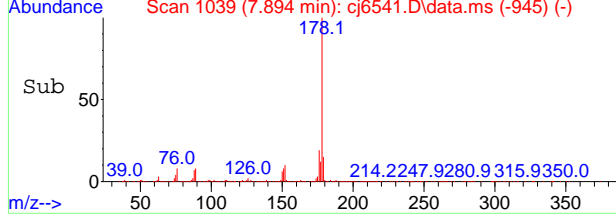
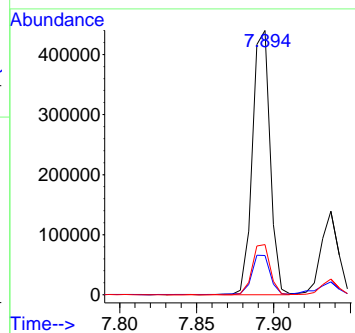
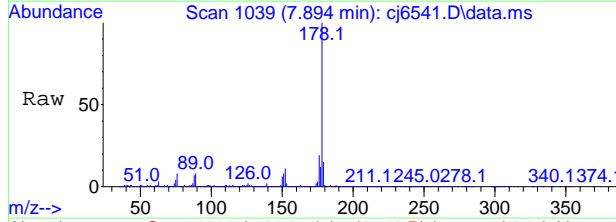
Tgt Ion	Ratio	Lower	Upper
166	100		
165	102.3	65.4	125.4
167	12.6	0.0	43.8





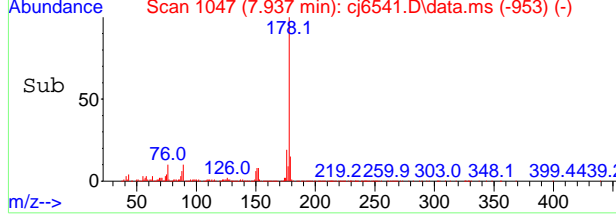
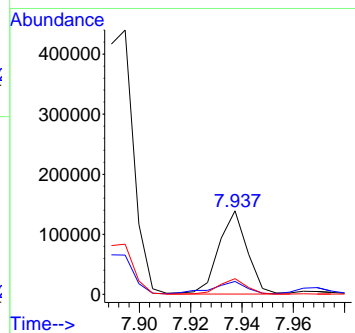
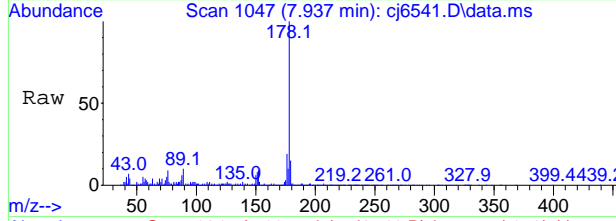
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 Phenanthrene  
 Concen: 13.4756 ppm  
 RT: 7.894 min Scan# 1039  
 Delta R.T. 0.000 min  
 Lab File: cj6541.D  
 Acq: 10 May 2024 01:13 am

Tgt Ion	Ratio	Lower	Upper
178	100		
179	14.7	0.0	45.5
176	18.9	0.0	49.2

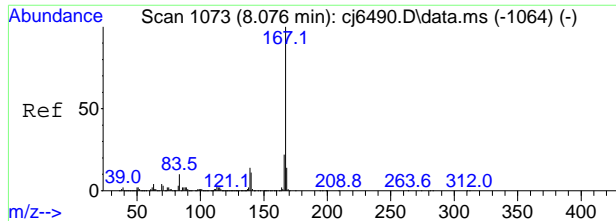


#79  
 Anthracene  
 Concen: 4.0963 ppm  
 RT: 7.937 min Scan# 1047  
 Delta R.T. 0.000 min  
 Lab File: cj6541.D  
 Acq: 10 May 2024 01:13 am

Tgt Ion	Ratio	Lower	Upper
178	100		
179	13.8	0.0	46.1
176	18.7	0.0	48.7

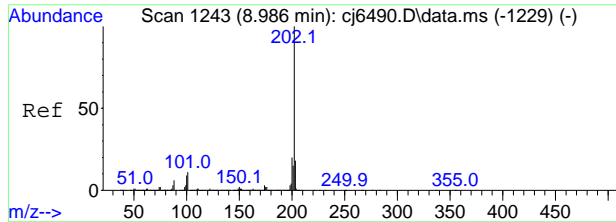
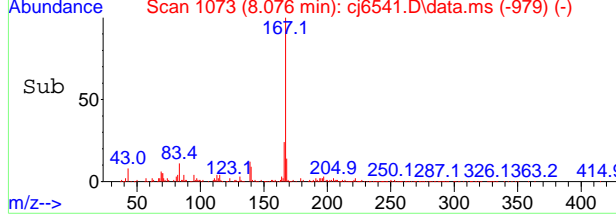
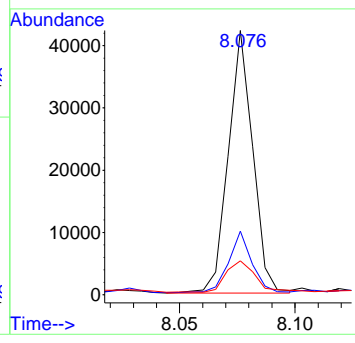
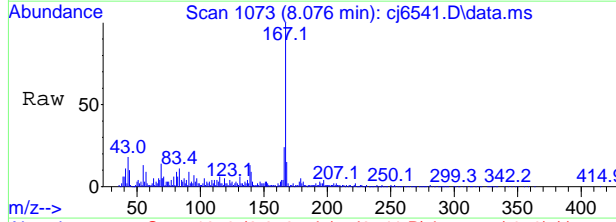


7.1.28  
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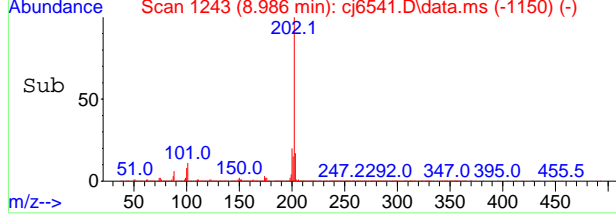
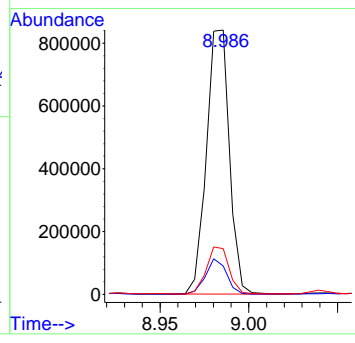
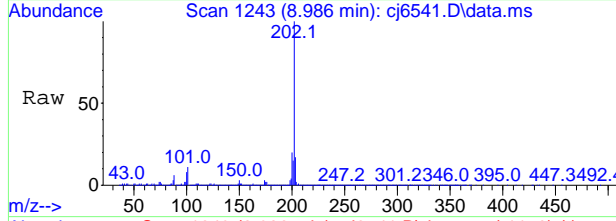
#80  
 Carbazole  
 Concen: 1.2750 ppm  
 RT: 8.076 min Scan# 1073  
 Delta R.T. 0.000 min  
 Lab File: cj6541.D  
 Acq: 10 May 2024 01:13 am

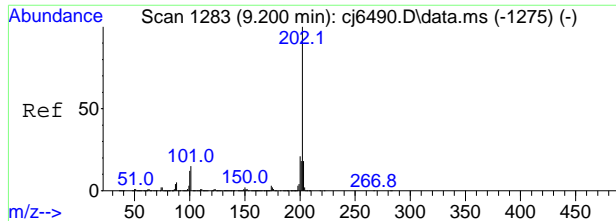
Tgt Ion	Resp	Lower	Upper
167	31153		
166	23.5	0.0	51.7
139	11.7	0.0	43.8



#82  
 Fluoranthene  
 Concen: 26.6461 ppm  
 RT: 8.986 min Scan# 1243  
 Delta R.T. -0.000 min  
 Lab File: cj6541.D  
 Acq: 10 May 2024 01:13 am

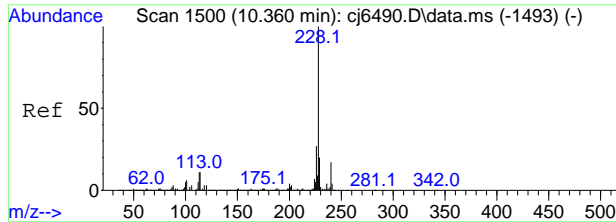
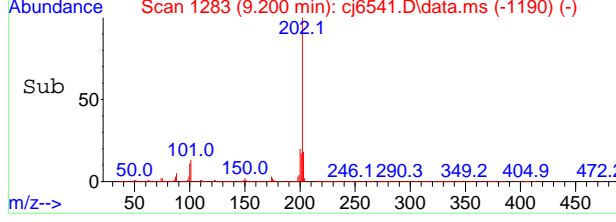
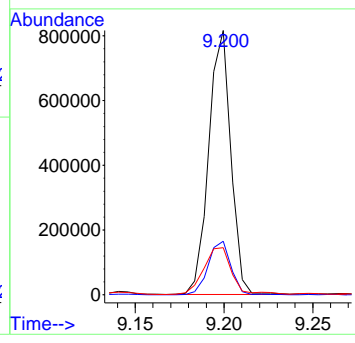
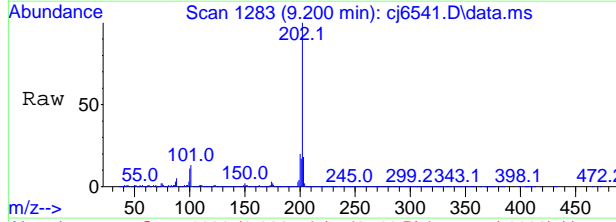
Tgt Ion	Resp	Lower	Upper
202	755421		
201	10.6	0.0	41.4
203	17.1	0.0	47.6





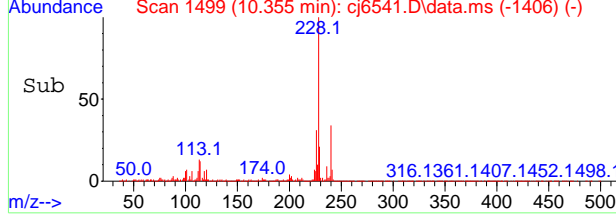
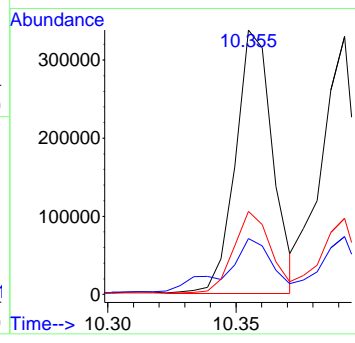
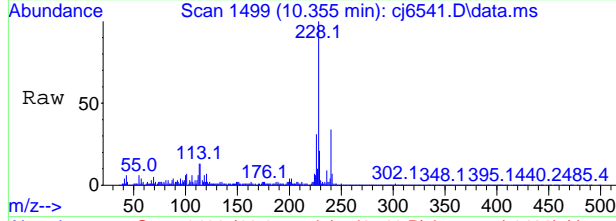
#86  
 Pyrene  
 Concen: 26.6686 ppm  
 RT: 9.200 min Scan# 1283  
 Delta R.T. -0.000 min  
 Lab File: cj6541.D  
 Acq: 10 May 2024 01:13 am

Tgt Ion	Ratio	Lower	Upper
202	100		
200	20.3	0.0	51.4
203	17.7	0.0	47.8

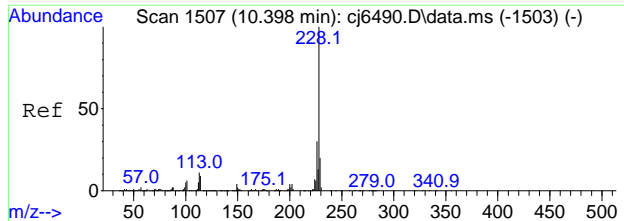


#89  
 Benzo[a]anthracene  
 Concen: 13.6104 ppm  
 RT: 10.355 min Scan# 1499  
 Delta R.T. -0.005 min  
 Lab File: cj6541.D  
 Acq: 10 May 2024 01:13 am

Tgt Ion	Ratio	Lower	Upper
228	100		
229	20.0	0.0	49.8
226	31.3	0.0	57.1

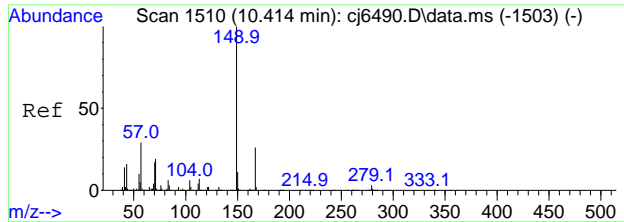
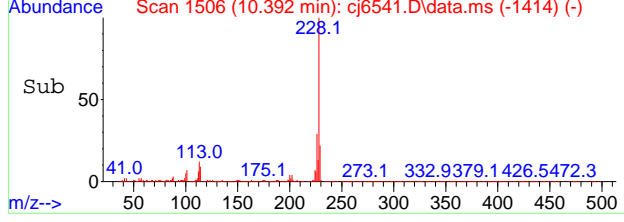
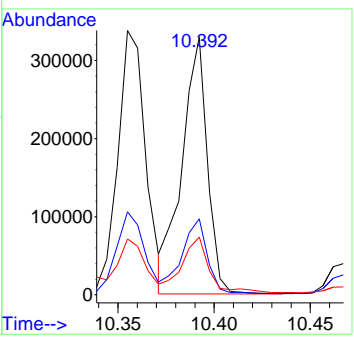
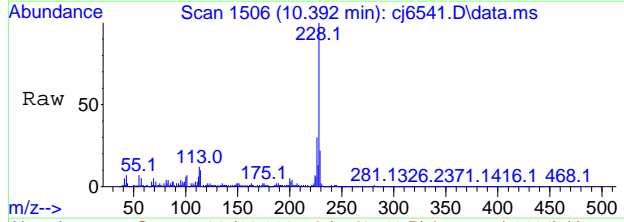


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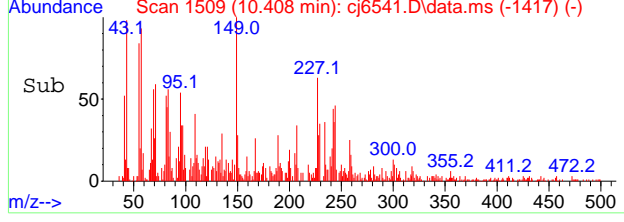
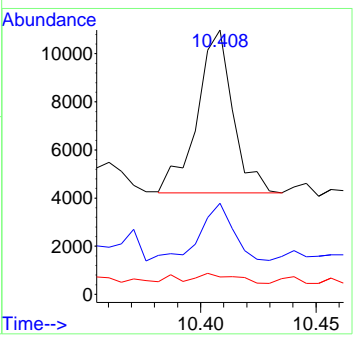
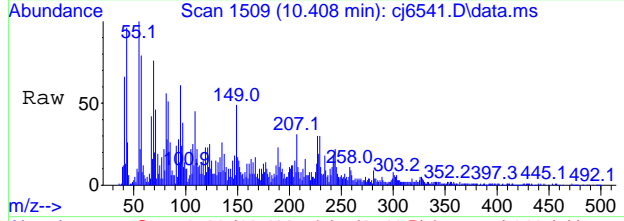
#91  
Chrysene  
Concen: 13.1778 ppm  
RT: 10.392 min Scan# 1506  
Delta R.T. -0.006 min  
Lab File: cj6541.D  
Acq: 10 May 2024 01:13 am

Tgt Ion:	228	Resp:	303826
Ion Ratio	100	Lower	Upper
226	29.2	0.0	59.9
229	21.6	0.0	49.8

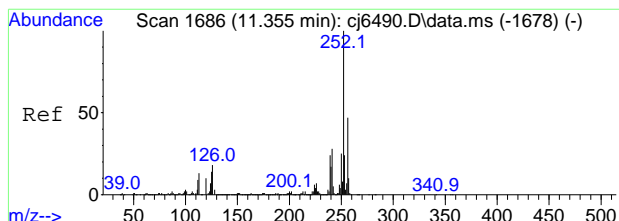


#92  
bis(2-Ethylhexyl)phthalate  
Concen: 0.4168 ppm  
RT: 10.408 min Scan# 1509  
Delta R.T. -0.006 min  
Lab File: cj6541.D  
Acq: 10 May 2024 01:13 am

Tgt Ion:	149	Resp:	7280
Ion Ratio	100	Lower	Upper
167	32.4	0.0	56.1
279	1.9	0.0	33.2

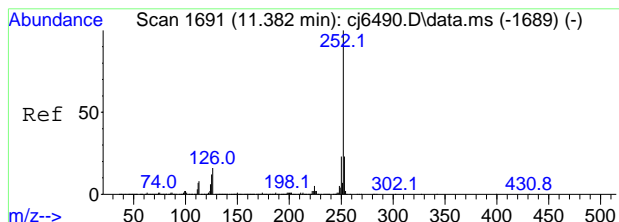
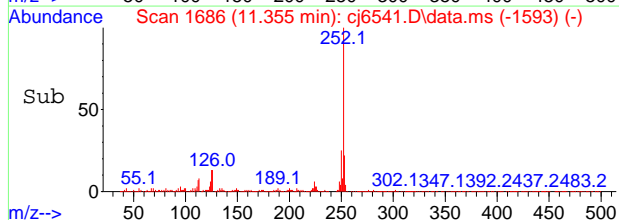
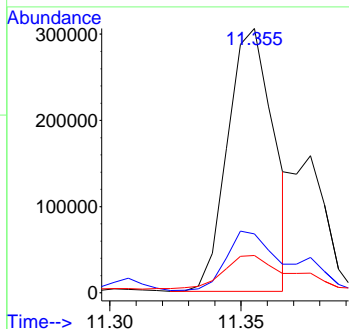
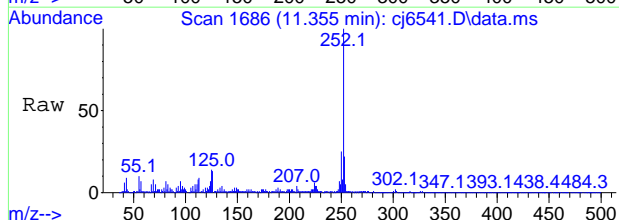






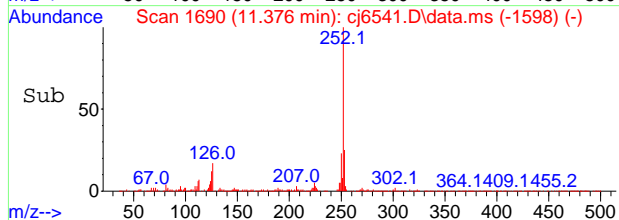
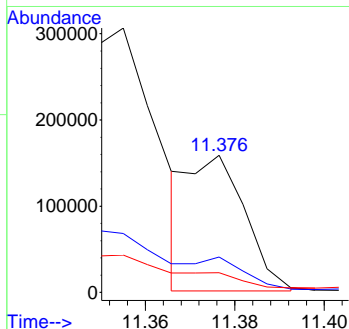
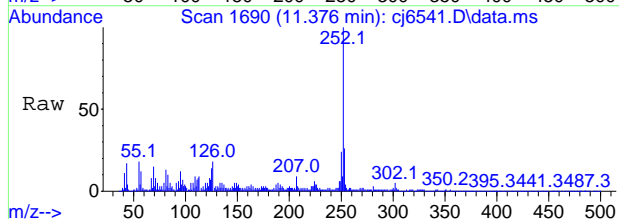
#95  
 Benzo[b]fluoranthene  
 Concen: 15.3386 ppm m  
 RT: 11.355 min Scan# 1686  
 Delta R.T. 0.000 min  
 Lab File: cj6541.D  
 Acq: 10 May 2024 01:13 am

Tgt Ion	Ratio	Lower	Upper
252	100		
253	22.2	0.0	54.7
125	14.1	0.0	44.2

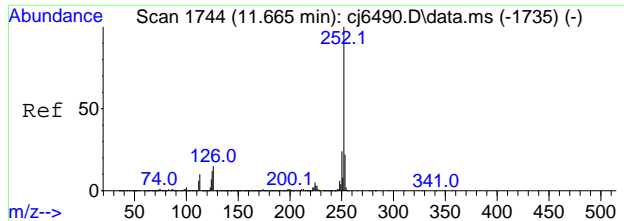


#96  
 Benzo[k]fluoranthene  
 Concen: 6.2191 ppm m  
 RT: 11.376 min Scan# 1690  
 Delta R.T. -0.006 min  
 Lab File: cj6541.D  
 Acq: 10 May 2024 01:13 am

Tgt Ion	Ratio	Lower	Upper
252	100		
253	25.8	0.0	52.6
125	14.3	0.0	42.4

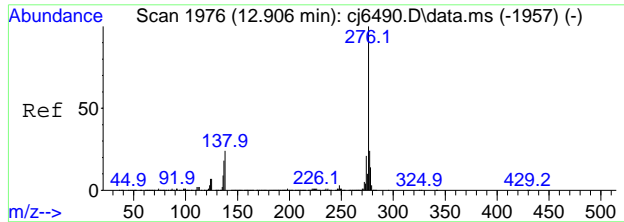
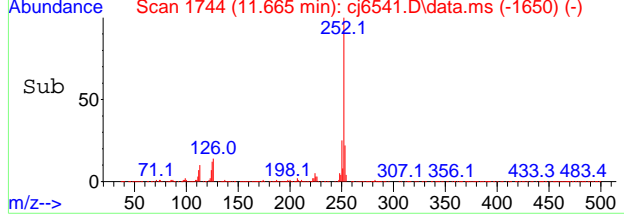
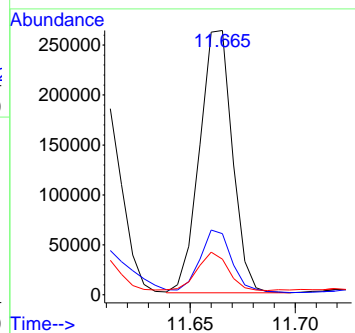
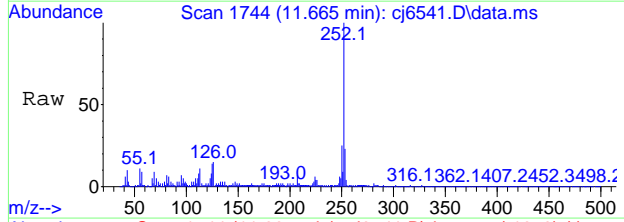


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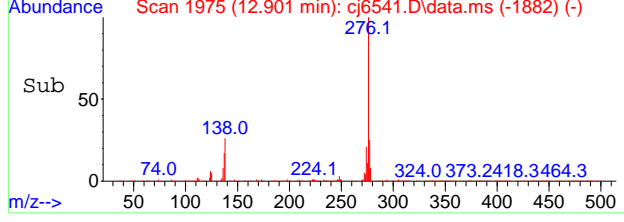
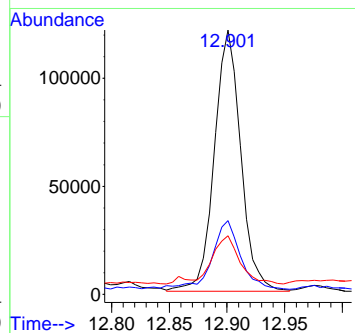
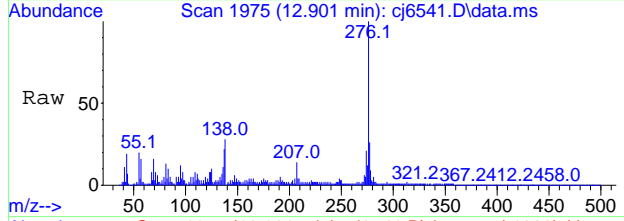
#97  
 Benzo[a]pyrene  
 Concen: 14.2418 ppm  
 RT: 11.665 min Scan# 1744  
 Delta R.T. 0.000 min  
 Lab File: cj6541.D  
 Acq: 10 May 2024 01:13 am

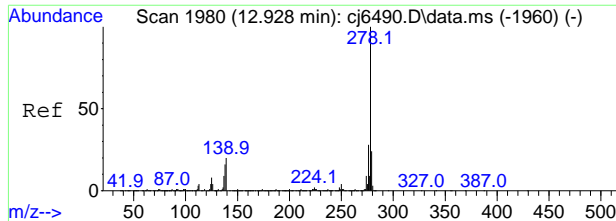
Tgt Ion	Resp	Lower	Upper
252	286699		
253	21.8	0.0	51.9
125	11.7	0.0	42.1



#98  
 Indeno[1,2,3-cd]pyrene  
 Concen: 7.9249 ppm  
 RT: 12.901 min Scan# 1975  
 Delta R.T. -0.005 min  
 Lab File: cj6541.D  
 Acq: 10 May 2024 01:13 am

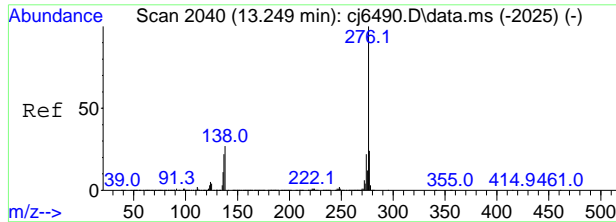
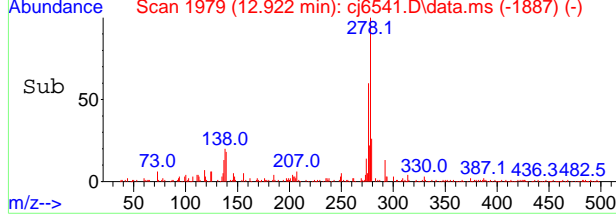
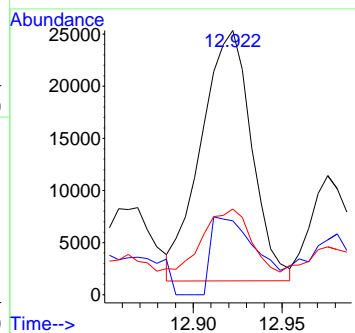
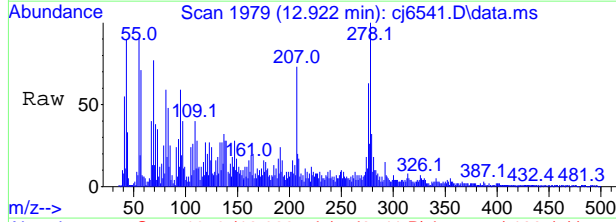
Tgt Ion	Resp	Lower	Upper
276	192865		
276	100		
138	25.7	0.0	54.2
137	18.2	0.0	47.9





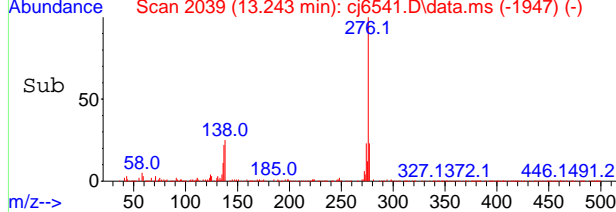
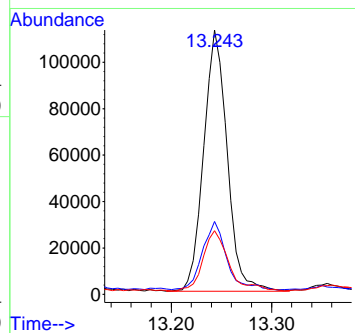
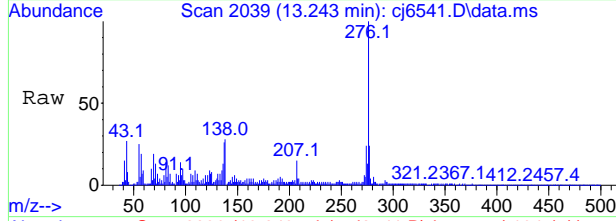
#100  
 Dibenz[a,h]anthracene  
 Concen: 2.4430 ppm  
 RT: 12.922 min Scan# 1979  
 Delta R.T. -0.006 min  
 Lab File: cj6541.D  
 Acq: 10 May 2024 01:13 am

Tgt Ion	Resp	Lower	Upper
278	47506		
139	18.2	0.0	49.8
279	25.1	0.0	54.1



#102  
 Benzo[g,h,i]perylene  
 Concen: 9.7119 ppm  
 RT: 13.243 min Scan# 2039  
 Delta R.T. -0.006 min  
 Lab File: cj6541.D  
 Acq: 10 May 2024 01:13 am

Tgt Ion	Resp	Lower	Upper
276	183672		
138	25.9	0.0	56.7
277	23.0	0.0	54.1



7.1.28  
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LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6541.D  
Acq On : 10 May 2024 01:13 am  
Operator : rocquans  
Sample : jd87833-14  
Misc : op54460,ecj297,30.2,,,1,1  
ALS Vial : 32 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON Filtering: 5  
Sampling : 1 Min Area: 1000 Area counts  
Start Thrs: 0.02 Max Peaks: 100  
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS, zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

Signal : TIC: cj6541.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.172	334	343	354	rVB	61903	88241	2.46%	0.145%
2	4.252	354	358	366	rVB	723607	446281	12.44%	0.734%
3	4.429	379	391	396	rBV	2207855	1328048	37.02%	2.184%
4	4.487	399	402	407	rVB	315498	169285	4.72%	0.278%
5	4.664	431	435	440	rBV	2859236	1958687	54.60%	3.221%
6	4.760	449	453	460	rBV	189924	133408	3.72%	0.219%
7	4.824	460	465	469	rBV	216796	141066	3.93%	0.232%
8	5.012	493	500	504	rBV	1813771	1198423	33.41%	1.971%
9	5.472	578	586	591	rBV	3604595	2417340	67.39%	3.975%
10	6.167	712	716	720	rBV	3816843	2290711	63.86%	3.767%
11	6.557	784	789	793	rBV	161700	151203	4.21%	0.249%
12	6.659	800	808	811	rBV	4233329	2725652	75.98%	4.482%
13	6.809	826	836	840	rBV3	69272	120555	3.36%	0.198%
14	7.081	884	887	892	rVB	95326	82842	2.31%	0.136%
15	7.274	913	923	927	rBV	1519050	1153604	32.16%	1.897%
16	7.584	974	981	987	rVB4	74247	131071	3.65%	0.216%
17	7.632	987	990	994	rBV2	124540	129958	3.62%	0.214%
18	7.777	1013	1017	1023	rVB3	63290	106072	2.96%	0.174%
19	7.836	1023	1028	1031	rBV2	85737	96011	2.68%	0.158%
20	7.873	1031	1035	1037	rBV	3497635	2823673	78.71%	4.643%
21	7.889	1037	1038	1042	rVB	1045562	716154	19.96%	1.178%
22	7.937	1042	1047	1049	rVB	318447	228119	6.36%	0.375%
23	7.959	1050	1051	1058	rVB4	99636	91904	2.56%	0.151%
24	8.076	1067	1073	1080	rBV2	136815	187145	5.22%	0.308%
25	8.226	1096	1101	1108	rVB4	96079	146329	4.08%	0.241%
26	8.322	1108	1119	1121	rBV	213030	328204	9.15%	0.540%
27	8.370	1125	1128	1135	rVB2	560280	550516	15.35%	0.905%
28	8.424	1135	1138	1147	rVB2	327181	401186	11.18%	0.660%
29	8.536	1147	1159	1165	rBV6	105301	206785	5.76%	0.340%
30	8.601	1165	1171	1172	rBV2	120827	114475	3.19%	0.188%
31	8.617	1172	1174	1178	rVB2	125103	102463	2.86%	0.168%
32	8.836	1209	1215	1217	rBV2	122274	134001	3.74%	0.220%
33	8.863	1217	1220	1224	rBV4	69365	81344	2.27%	0.134%
34	8.911	1224	1229	1234	rVB3	129985	176775	4.93%	0.291%
35	8.980	1235	1242	1248	rBV	2034349	1834907	51.15%	3.017%
36	9.060	1248	1257	1263	rBV5	283885	684111	19.07%	1.125%
37	9.125	1263	1269	1275	rBV4	247970	308683	8.60%	0.508%
38	9.200	1276	1283	1288	rBV	1853938	1899407	52.95%	3.124%
39	9.317	1299	1305	1308	rBV	131704	149463	4.17%	0.246%
40	9.355	1308	1312	1318	rBV	2848521	2339017	65.20%	3.846%



7.1.29  
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LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6541.D  
Acq On : 10 May 2024 01:13 am  
Operator : rocquans  
Sample : jd87833-14  
Misc : op54460,ecj297,30.2,,,1,1  
ALS Vial : 32 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON  
Sampling : 1  
Start Thrs: 0.02  
Stop Thrs : 0  
Filtering: 5  
Min Area: 1000 Area counts  
Max Peaks: 100  
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS, zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

Table with 10 columns: Retention Time, Abundance, and Percent. Rows 41-85 showing peak data for various compounds.



7.1.29  
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LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6541.D  
Acq On : 10 May 2024 01:13 am  
Operator : rocquans  
Sample : jd87833-14  
Misc : op54460,ecj297,30.2,,,1,1  
ALS Vial : 32 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON Filtering: 5  
Sampling : 1 Min Area: 1000 Area counts  
Start Thrs: 0.02 Max Peaks: 100  
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

86	12.858	1962	1967	1971	rVV3	166843	292223	8.15%	0.481%
87	12.901	1971	1975	1983	rVV2	343426	580540	16.18%	0.955%
88	12.976	1983	1989	1992	rVV6	133556	271316	7.56%	0.446%
89	13.045	1994	2002	2007	rVV2	144100	464480	12.95%	0.764%
90	13.093	2007	2011	2019	rVV6	206805	468783	13.07%	0.771%
91	13.174	2020	2026	2031	rVV3	197293	462428	12.89%	0.760%
92	13.243	2031	2039	2055	rVV	403345	1007076	28.07%	1.656%
93	13.420	2056	2072	2078	rVV5	493400	1272624	35.48%	2.093%
94	13.495	2079	2086	2106	rVB5	187125	821888	22.91%	1.352%
95	13.714	2123	2127	2139	rVB5	75950	203871	5.68%	0.335%
96	13.848	2149	2152	2162	rVB5	50419	109750	3.06%	0.180%
97	13.971	2170	2175	2181	rBV5	111511	283327	7.90%	0.466%
98	14.158	2204	2210	2214	rBV9	50058	101244	2.82%	0.166%
99	14.217	2216	2221	2232	rVB10	100609	232168	6.47%	0.382%
100	14.431	2254	2261	2269	rBV10	85835	223282	6.22%	0.367%

Sum of corrected areas: 60809702



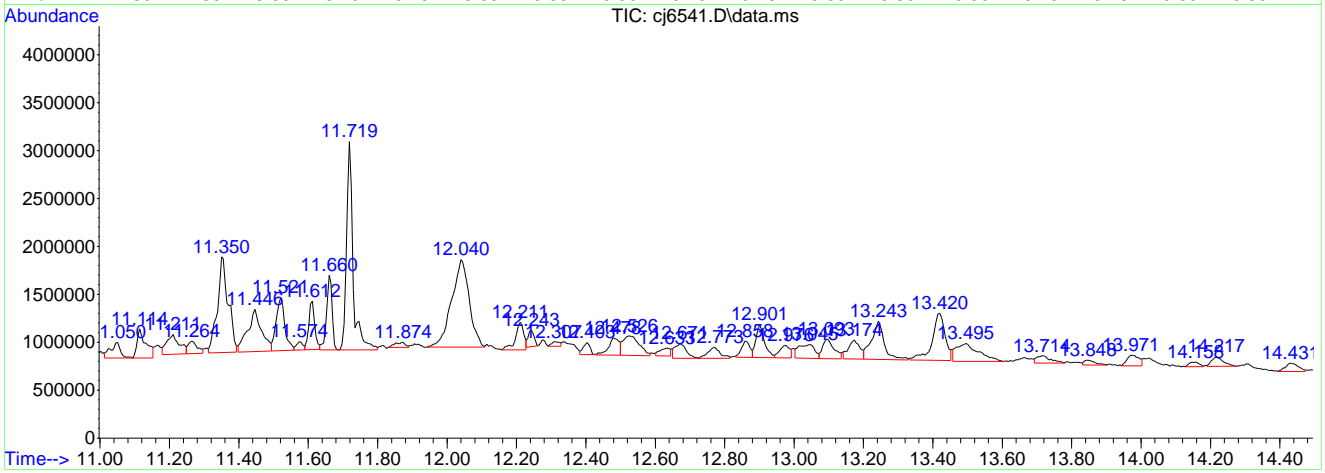
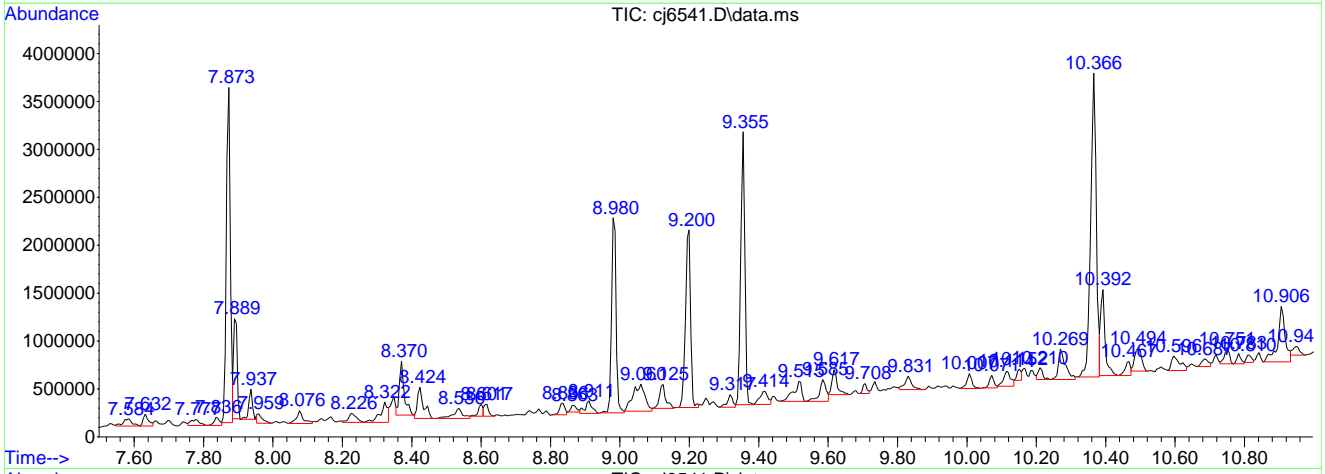
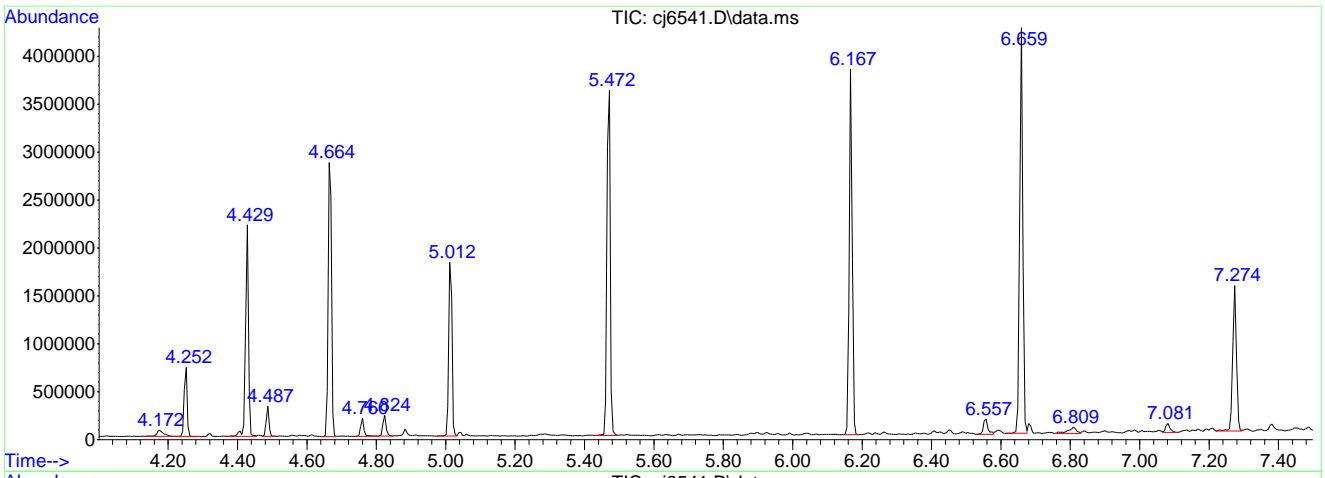
7.1.29  
7

LSC Report - Integrated Chromatogram

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6541.D  
Acq On : 10 May 2024 01:13 am  
Operator : rocquans  
Sample : jd87833-14  
Misc : op54460,ecj297,30.2,,1,1  
ALS Vial : 32 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p



7.1.29  
7



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6541.D  
Acq On : 10 May 2024 01:13 am  
Operator : rocquans  
Sample : jd87833-14  
Misc : op54460,ecj297,30.2,,,1,1  
ALS Vial : 32 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

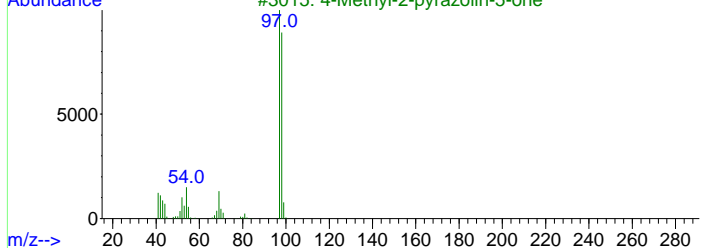
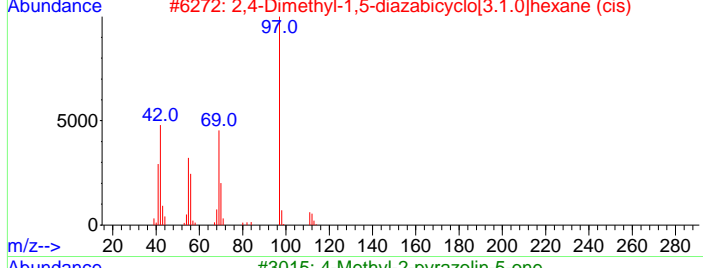
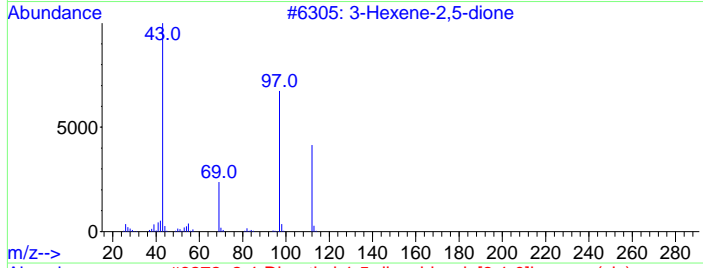
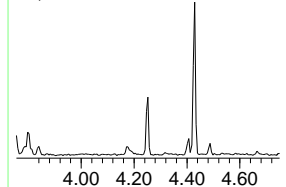
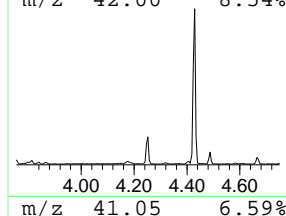
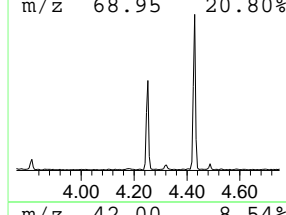
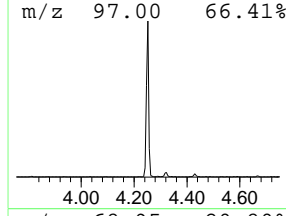
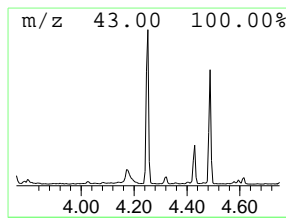
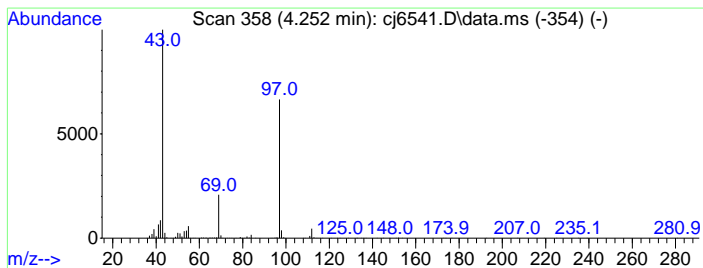
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 1 Unknown Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.252	9.11 ppm	446281	1,4-Dichlorobenzene-d4a	4.669

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	3-Hexene-2,5-dione	112	C6H8O2	004436-75-3	78
2		2,4-Dimethyl-1,5-diazabicyclo[3.0.0]hexane (cis)	112	C6H12N2	100463-01-2	28
3		4-Methyl-2-pyrazolin-5-one	98	C4H6N2O	013315-23-6	28
4		5-Hexen-2-one	98	C6H10O	000109-49-9	22
5		5-Hexen-2-one	98	C6H10O	000109-49-9	14



7.1.29  
7



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6541.D  
 Acq On : 10 May 2024 01:13 am  
 Operator : rocquans  
 Sample : jd87833-14  
 Misc : op54460,ecj297,30.2,,1,1  
 ALS Vial : 32 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

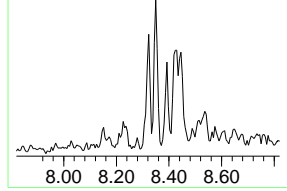
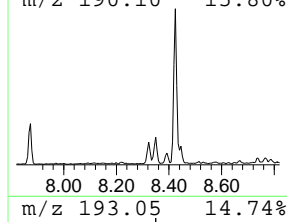
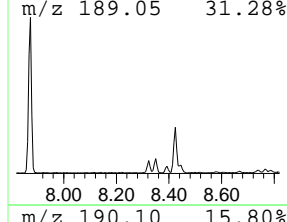
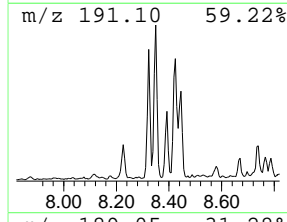
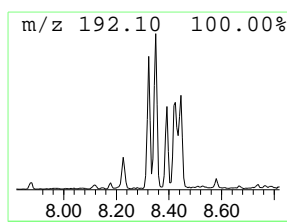
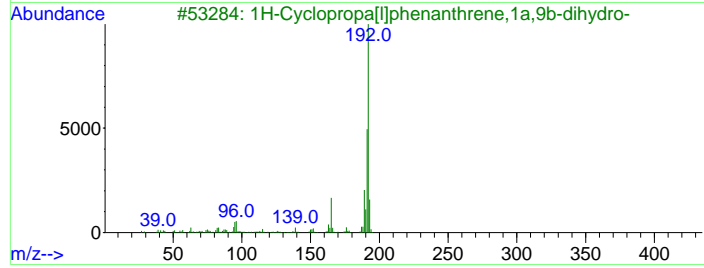
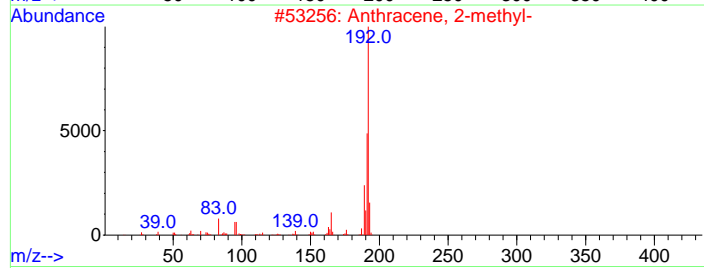
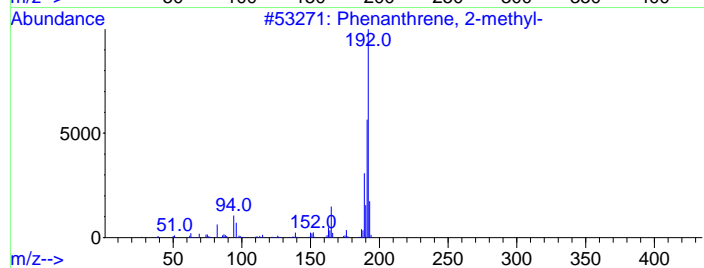
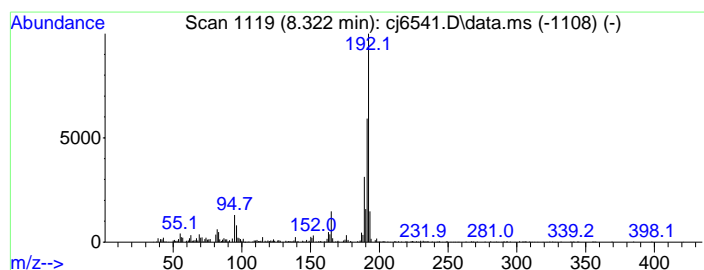
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 2 Phenanthrene, methyl Concentration Rank 22

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.322	4.65 ppm	328204	Phenanthrene-d10b	7.873

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	97
2	Anthracene, 2-methyl-	192	C15H12	000613-12-7	96
3	1H-Cyclopropa[1]phenanthrene,1a,...	192	C15H12	000949-41-7	95
4	Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	95
5	Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	95



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6541.D  
Acq On : 10 May 2024 01:13 am  
Operator : rocquans  
Sample : jd87833-14  
Misc : op54460,ecj297,30.2,,1,1  
ALS Vial : 32 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

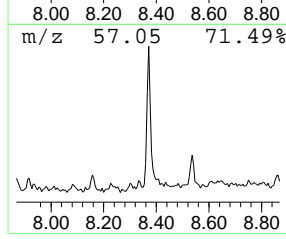
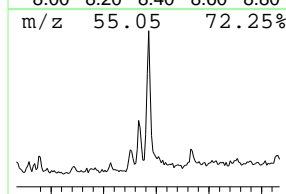
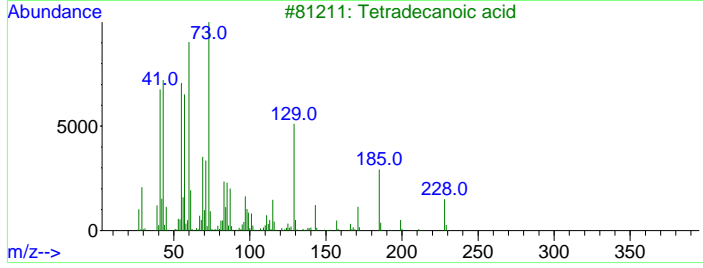
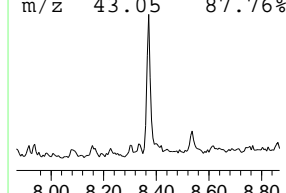
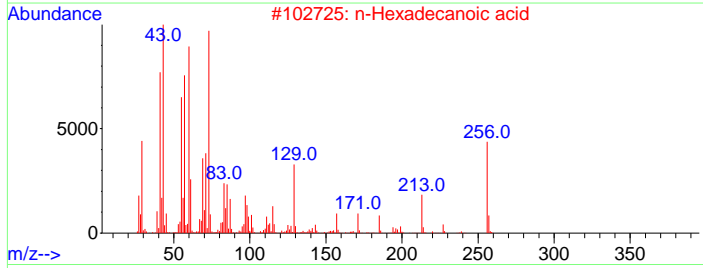
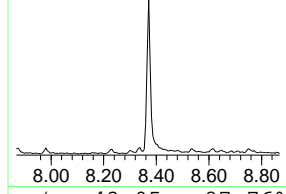
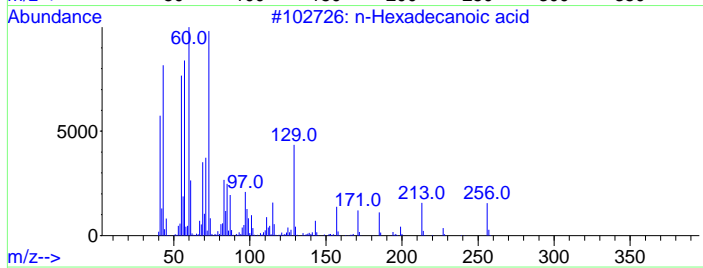
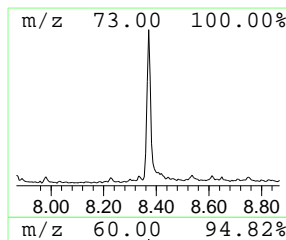
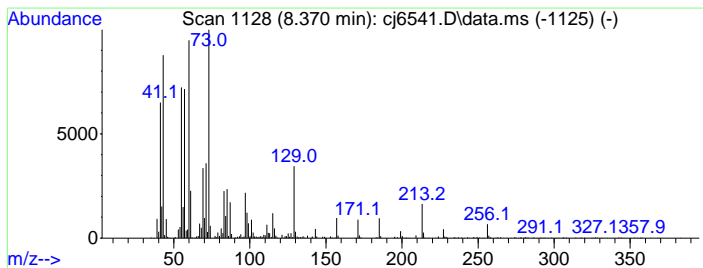
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 3 n-Hexadecanoic acid Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.370	7.80 ppm	550516	Phenanthrene-d10b	7.873

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		n-Hexadecanoic acid	256	C16H32O2	000057-10-3	99
2		n-Hexadecanoic acid	256	C16H32O2	000057-10-3	98
3		Tetradecanoic acid	228	C14H28O2	000544-63-8	93
4		Pentadecanoic acid	242	C15H30O2	001002-84-2	91
5		n-Hexadecanoic acid	256	C16H32O2	000057-10-3	91



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6541.D  
 Acq On : 10 May 2024 01:13 am  
 Operator : rocquans  
 Sample : jd87833-14  
 Misc : op54460,ecj297,30.2,,,1,1  
 ALS Vial : 32 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

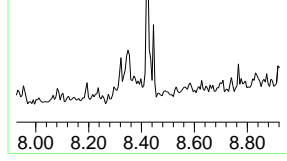
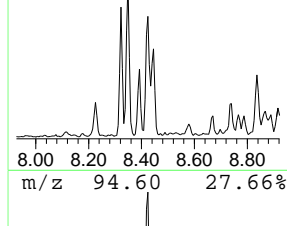
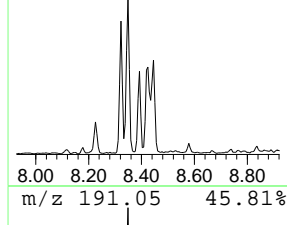
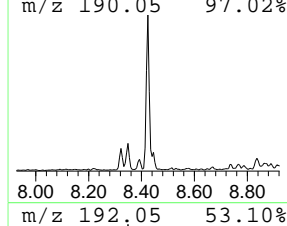
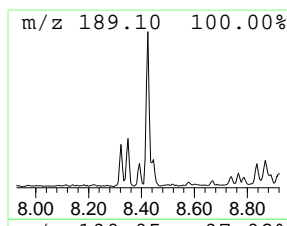
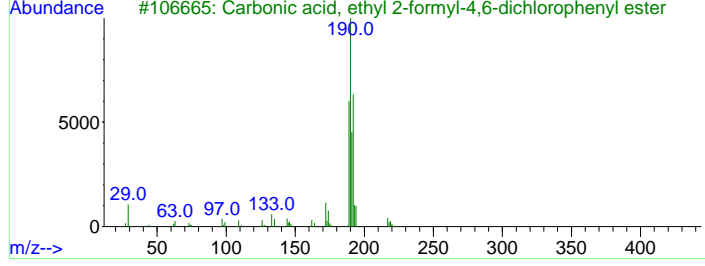
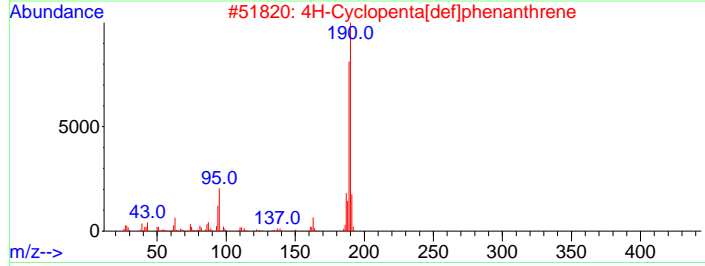
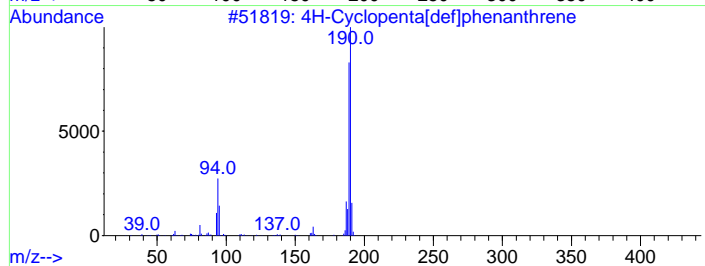
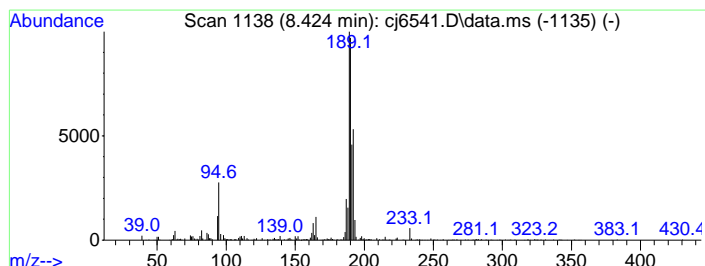
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 4 4H-Cyclopenta[def]phenanthrene Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.424	5.68 ppm	401186	Phenanthrene-d10b	7.873

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	4H-Cyclopenta[def]phenanthrene	190	C15H10	000203-64-5	76
2		4H-Cyclopenta[def]phenanthrene	190	C15H10	000203-64-5	60
3		Carbonic acid, ethyl 2-formyl-4,...	262	C10H8Cl2O4	1000331-34-4	47
4		4H-Cyclopenta[def]phenanthrene	190	C15H10	000203-64-5	47
5		Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	25



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6541.D  
 Acq On : 10 May 2024 01:13 am  
 Operator : rocquans  
 Sample : jd87833-14  
 Misc : op54460,ecj297,30.2,,1,1  
 ALS Vial : 32 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

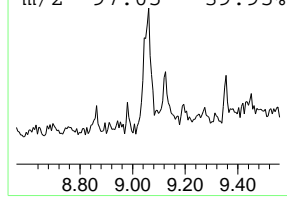
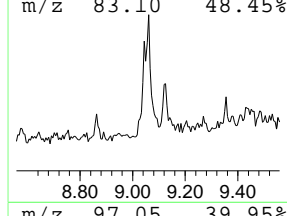
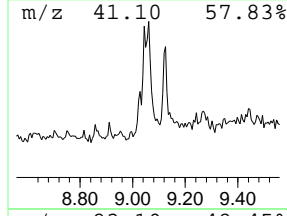
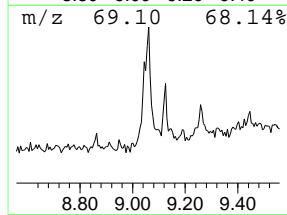
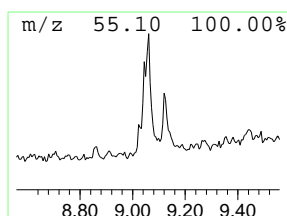
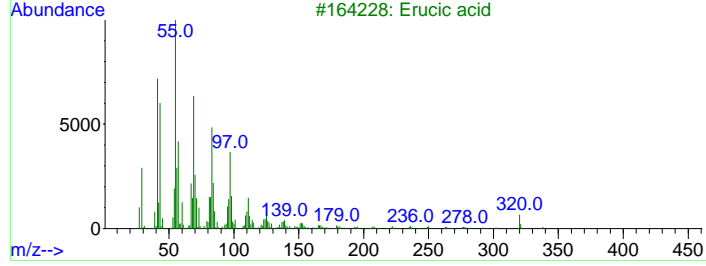
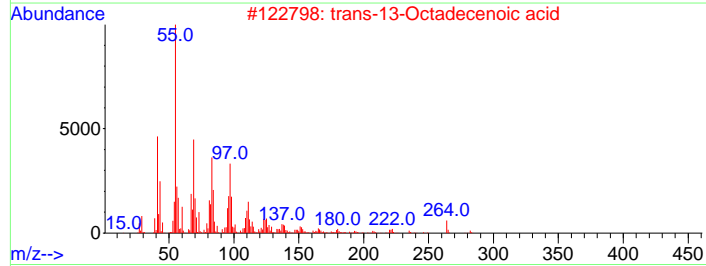
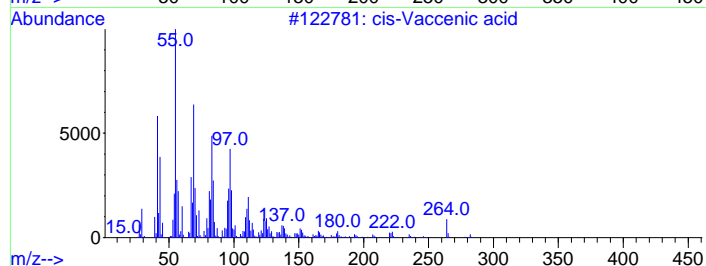
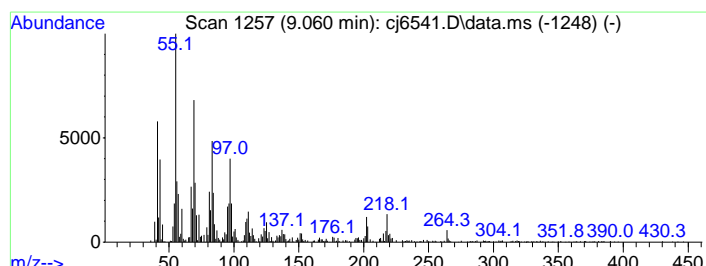
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 5 Unknown acid Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.060	9.69 ppm	684111	Phenanthrene-d10b	7.873

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	cis-Vaccenic acid	282	C18H34O2	000506-17-2	81
2	trans-13-Octadecenoic acid	282	C18H34O2	000693-71-0	81
3	Erucic acid	338	C22H42O2	000112-86-7	81
4	cis-11-Eicosenoic acid	310	C20H38O2	005561-99-9	81
5	Octadec-9-enoic acid	282	C18H34O2	1000190-13-7	76



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6541.D  
 Acq On : 10 May 2024 01:13 am  
 Operator : rocquans  
 Sample : jd87833-14  
 Misc : op54460,ecj297,30.2,,1,1  
 ALS Vial : 32 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

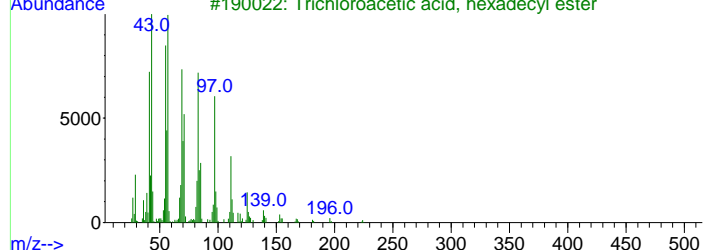
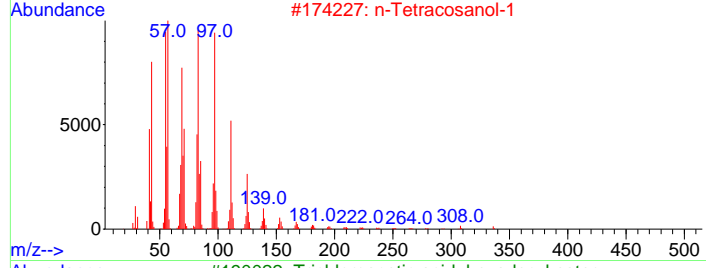
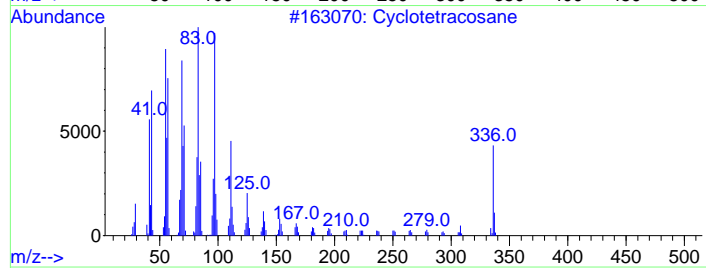
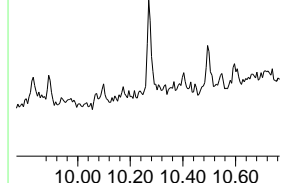
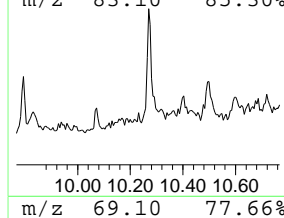
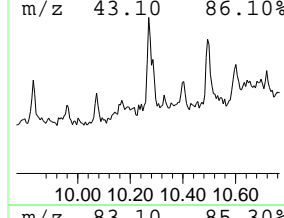
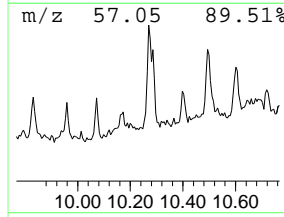
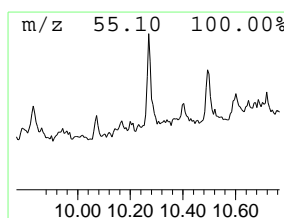
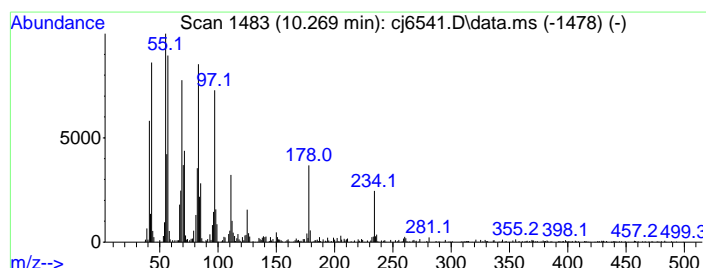
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 6 Unknown Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.269	4.99 ppm	447320	Chrysene-d12	10.366

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Cyclotetracosane	336	C24H48	000297-03-0	94
2		n-Tetracosanol-1	354	C24H50O	000506-51-4	93
3		Trichloroacetic acid, hexadecyl ...	386	C18H33Cl3O2	074339-54-1	93
4		Bromoacetic acid, hexadecyl ester	362	C18H35BrO2	005454-48-8	91
5		1-Heptacosanol	396	C27H56O	002004-39-9	90



7.1.29  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6541.D  
 Acq On : 10 May 2024 01:13 am  
 Operator : rocquans  
 Sample : jd87833-14  
 Misc : op54460,ecj297,30.2,,1,1  
 ALS Vial : 32 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

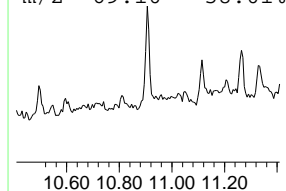
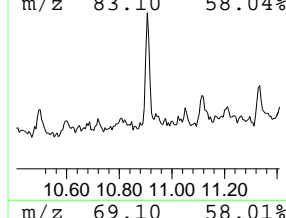
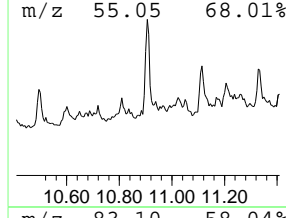
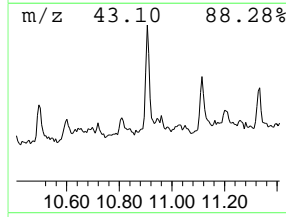
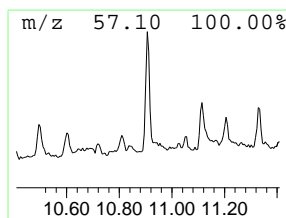
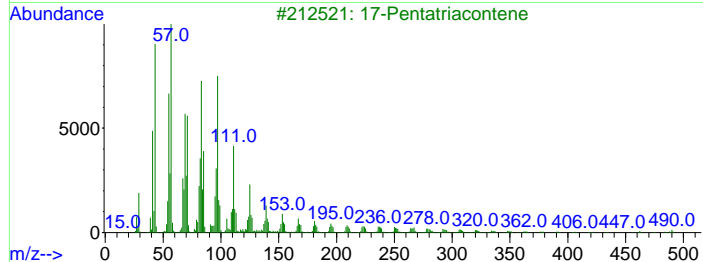
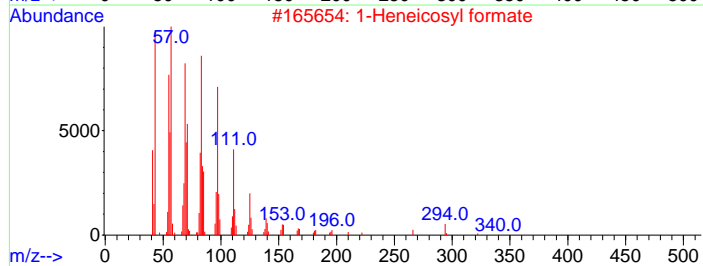
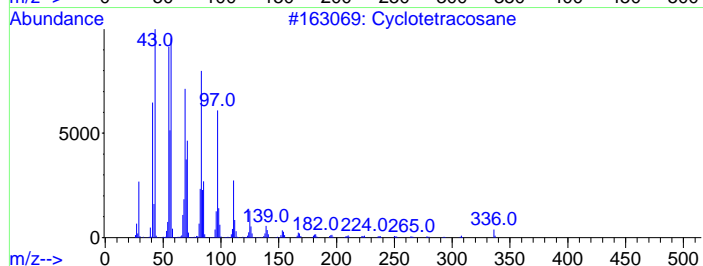
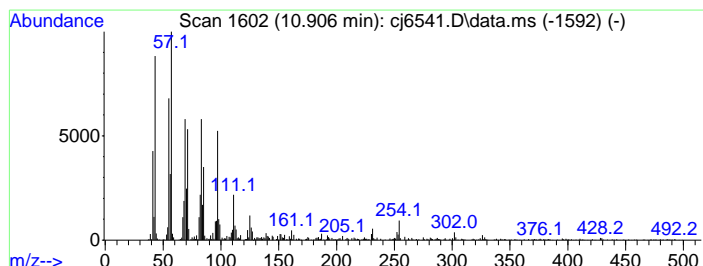
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 7 Unknown Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.906	9.62 ppm	863050	Chrysene-d12a	10.366

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Cyclotetracosane	336	C24H48	000297-03-0	98
2		1-Heneicosyl formate	340	C22H44O2	077899-03-7	95
3		17-Pentatriacontene	491	C35H70	006971-40-0	91
4		1-Docosene	308	C22H44	001599-67-3	90
5		2-Octadecyl-propane-1,3-diol	328	C21H44O2	005337-61-1	90



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6541.D  
 Acq On : 10 May 2024 01:13 am  
 Operator : rocquans  
 Sample : jd87833-14  
 Misc : op54460,ecj297,30.2,,1,1  
 ALS Vial : 32 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

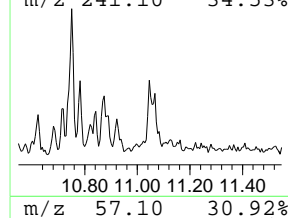
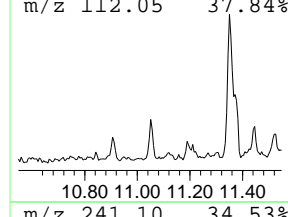
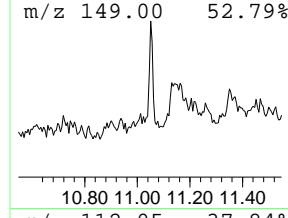
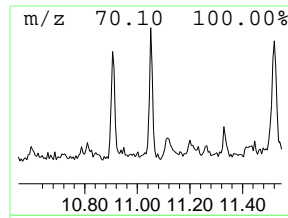
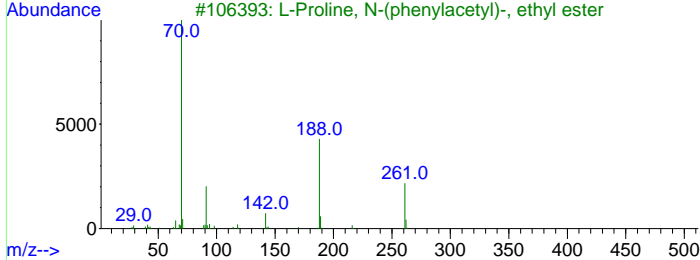
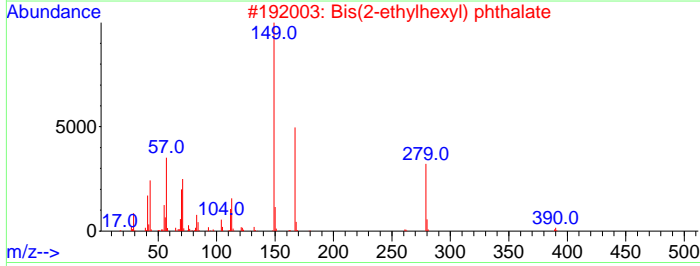
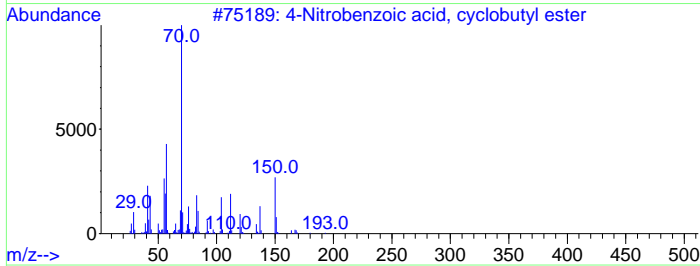
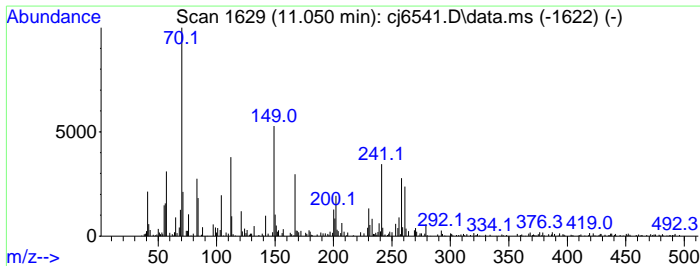
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 8 Unknown Concentration Rank 23

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.050	4.37 ppm	311045	Perylene-d12	11.719

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	4-Nitrobenzoic acid, cyclobutyl ...	221	C11H11NO4	070335-00-1	27
2		Bis(2-ethylhexyl) phthalate	390	C24H38O4	000117-81-7	25
3		L-Proline, N-(phenylacetyl)-, et...	261	C15H19NO3	1000346-18-9	22
4		Cyclohexaneamine, N-but-2-enylid...	167	C10H17NO	068048-01-1	22
5		2-Undecene, 3-methyl-, (Z)-	168	C12H24	057024-90-5	14



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6541.D  
Acq On : 10 May 2024 01:13 am  
Operator : rocquans  
Sample : jd87833-14  
Misc : op54460,ecj297,30.2,,1,1  
ALS Vial : 32 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

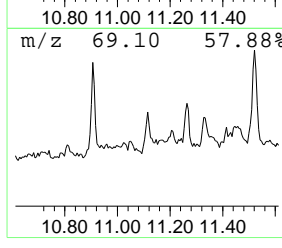
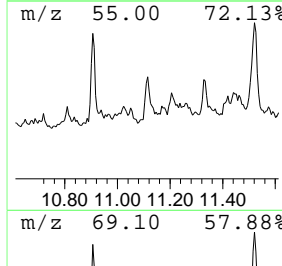
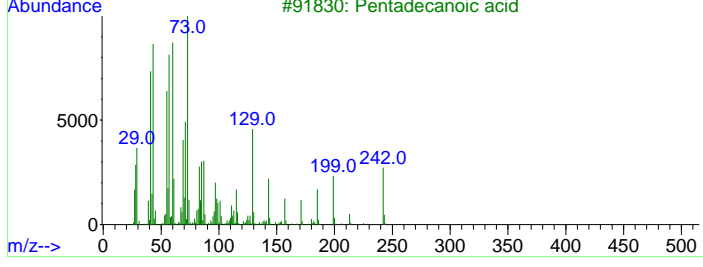
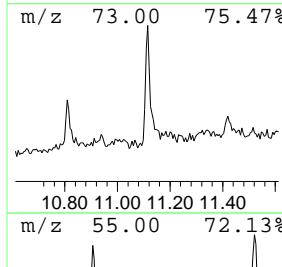
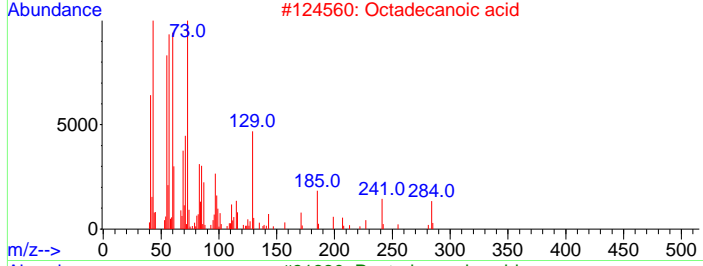
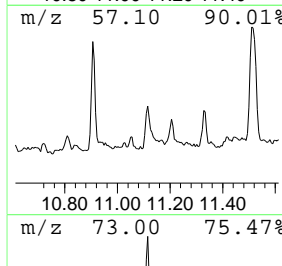
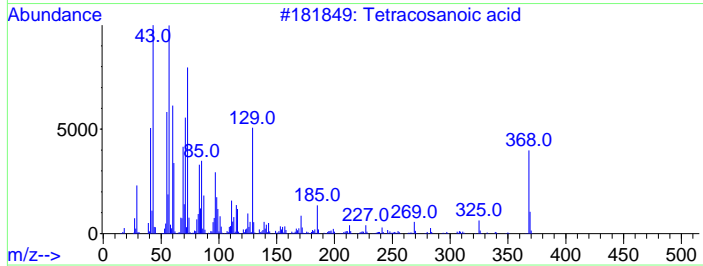
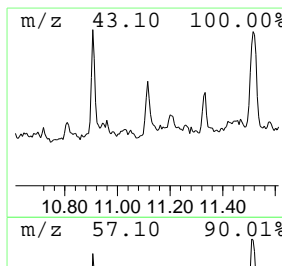
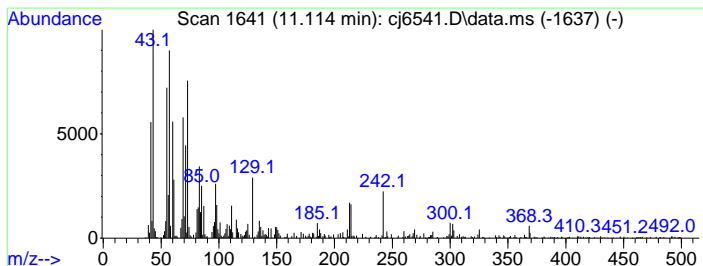
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 9 Unknown acid Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.114	7.70 ppm	547890	Perylene-d12	11.719

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Tetracosanoic acid	368	C24H48O2	000557-59-5	94
2		Octadecanoic acid	284	C18H36O2	000057-11-4	83
3		Pentadecanoic acid	242	C15H30O2	001002-84-2	72
4		Octadecanoic acid	284	C18H36O2	000057-11-4	70
5		Hexacosanoic acid	396	C26H52O2	000506-46-7	68



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6541.D  
 Acq On : 10 May 2024 01:13 am  
 Operator : rocquans  
 Sample : jd87833-14  
 Misc : op54460,ecj297,30.2,,,1,1  
 ALS Vial : 32 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

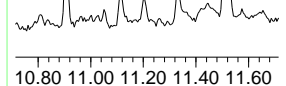
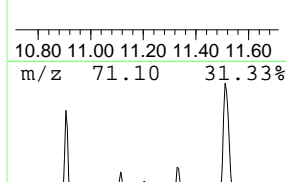
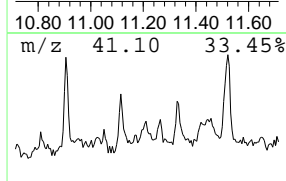
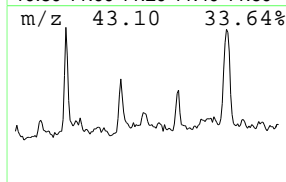
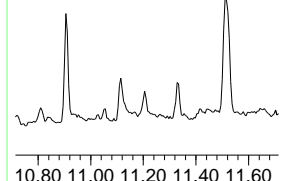
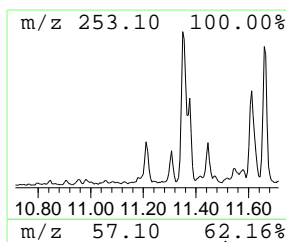
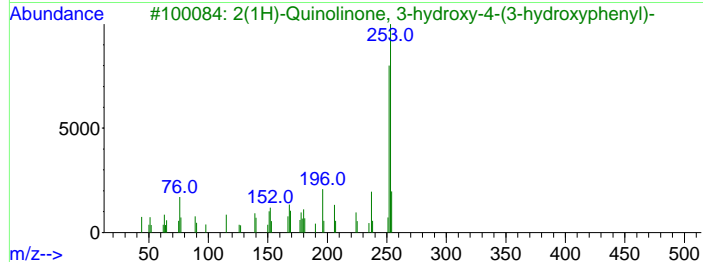
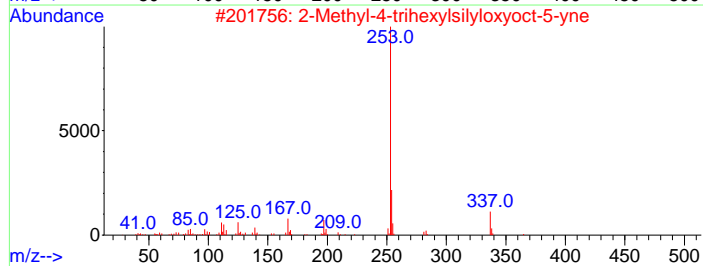
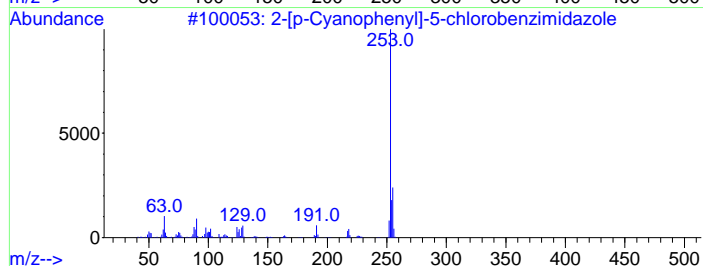
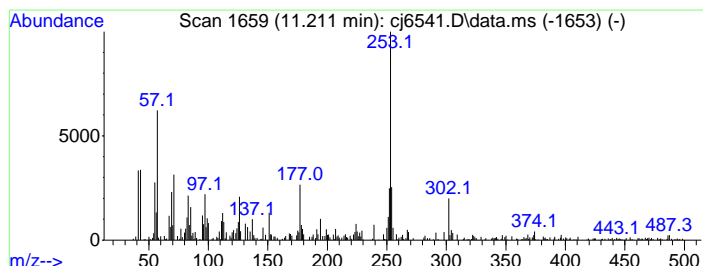
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 10 Unknown Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.211	7.32 ppm	520975	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			2-[p-Cyanophenyl]-5-chlorobenzim...	253	C14H8ClN3	146132-86-7	38
2			2-Methyl-4-trihexylsilyloxyoct-5...	422	C27H54OSi	1000299-52-5	38
3			2(1H)-Quinolinone, 3-hydroxy-4-(...	253	C15H11NO3	014484-44-7	38
4			Fumaric acid, 4-octyl undecyl ester	382	C23H42O4	1000339-22-2	37
5			Triamterene	253	C12H11N7	000396-01-0	35



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6541.D  
Acq On : 10 May 2024 01:13 am  
Operator : rocquans  
Sample : jd87833-14  
Misc : op54460,ecj297,30.2,,,1,1  
ALS Vial : 32 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

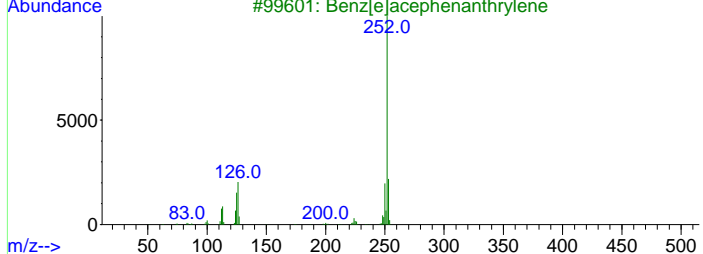
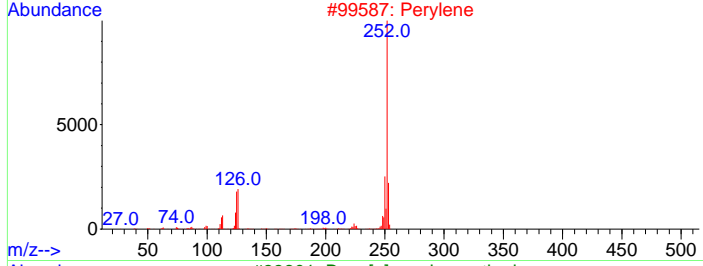
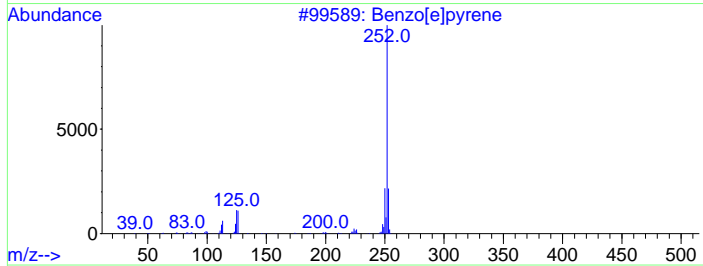
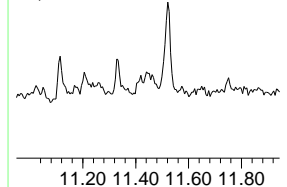
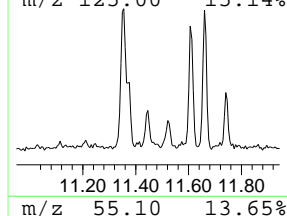
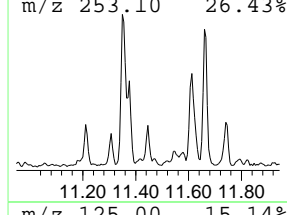
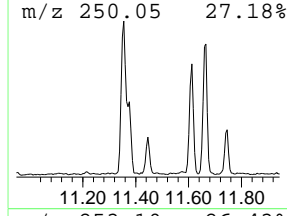
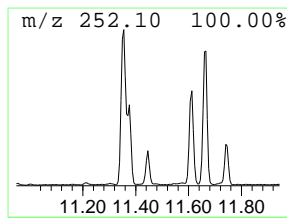
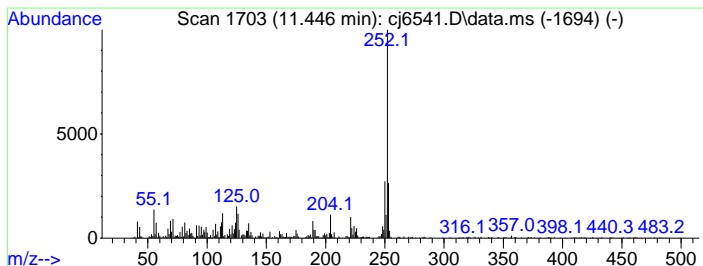
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 11 Unknown PHA Substance Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.446	17.14 ppm	1219540	Perylene-d12	11.719

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Benzo[e]pyrene	252	C20H12	000192-97-2	95
2		Perylene	252	C20H12	000198-55-0	93
3		Benz[e]acephenanthrylene	252	C20H12	000205-99-2	93
4		Benz[e]acephenanthrylene	252	C20H12	000205-99-2	93
5		Benzo[k]fluoranthene	252	C20H12	000207-08-9	92



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6541.D  
 Acq On : 10 May 2024 01:13 am  
 Operator : rocquans  
 Sample : jd87833-14  
 Misc : op54460,ecj297,30.2,,,1,1  
 ALS Vial : 32 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

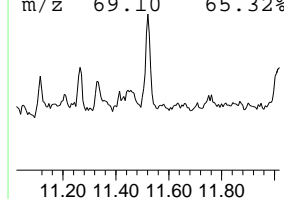
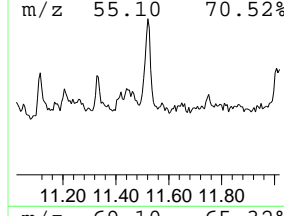
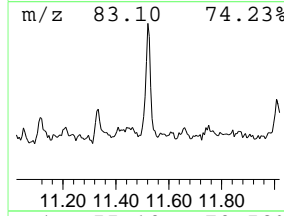
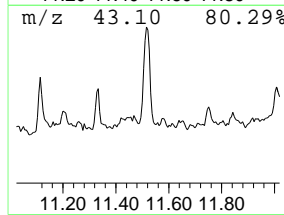
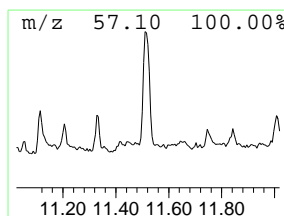
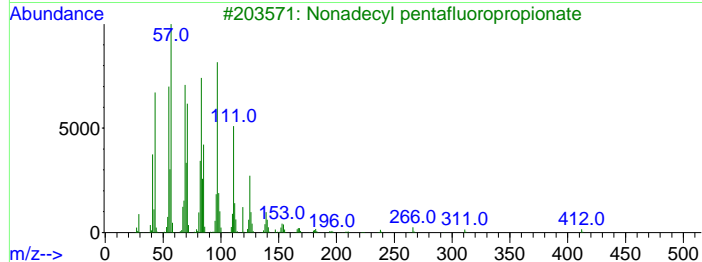
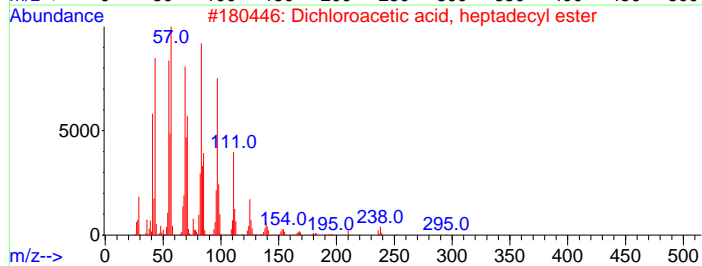
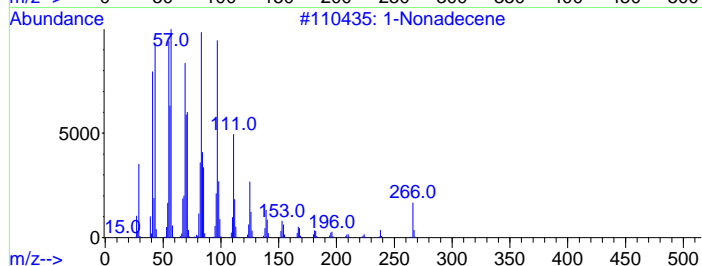
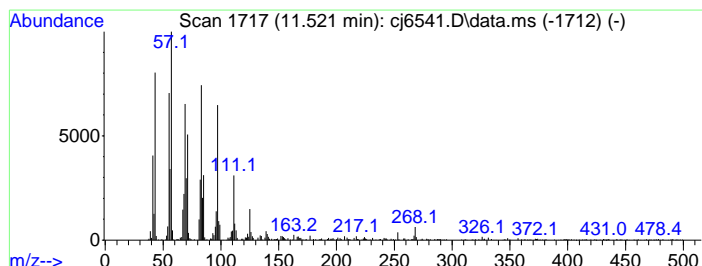
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 12 Unknown Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.521	13.45 ppm	957014	Perylene-d12	11.719

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		1-Nonadecene	266	C19H38	018435-45-5	91
2		Dichloroacetic acid, heptadecyl ...	366	C19H36Cl2O2	1000282-98-2	91
3		Nonadecyl pentafluoropropionate	430	C22H39F5O2	1000351-88-8	91
4		1-Tricosene	322	C23H46	018835-32-0	91
5		Heptafluorobutanoic acid, heptad...	452	C21H35F7O2	1000282-97-3	91



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6541.D  
Acq On : 10 May 2024 01:13 am  
Operator : rocquans  
Sample : jd87833-14  
Misc : op54460,ecj297,30.2,,,1,1  
ALS Vial : 32 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

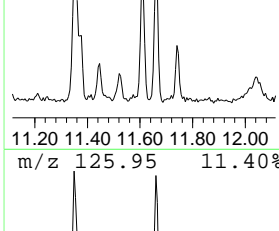
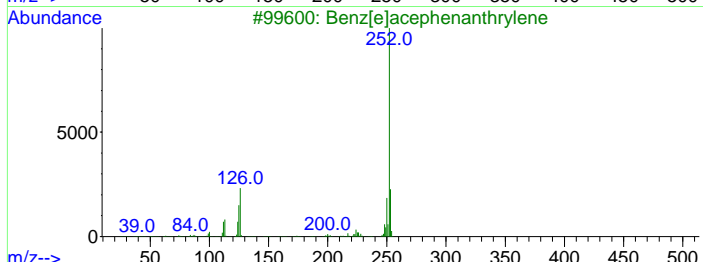
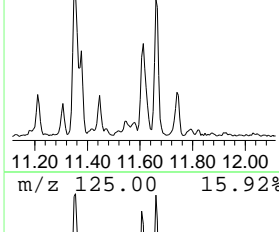
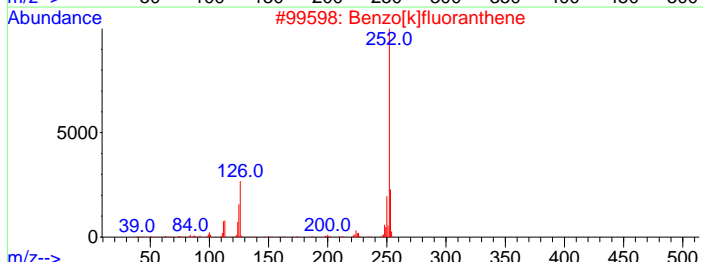
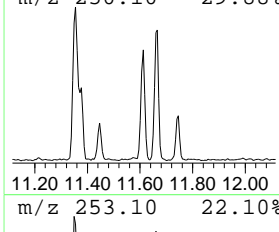
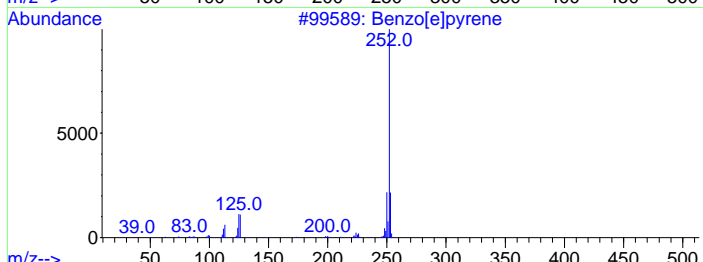
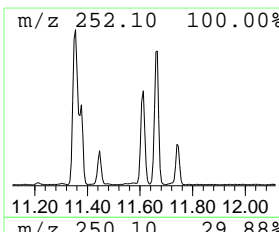
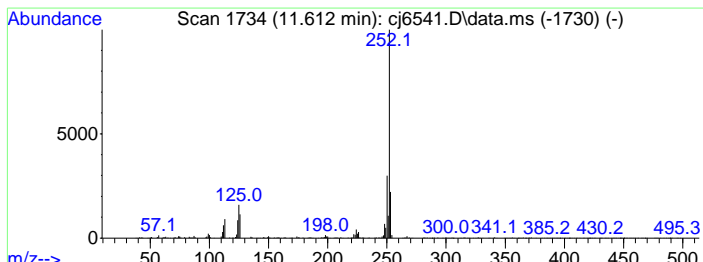
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 13 Unknown PHA Substance Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.612	8.43 ppm	600020	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Benzo[e]pyrene	252	C20H12	000192-97-2	94
2			Benzo[k]fluoranthene	252	C20H12	000207-08-9	93
3			Benz[e]acephenanthrylene	252	C20H12	000205-99-2	90
4			Benzo[j]fluoranthene	252	C20H12	000205-82-3	90
5			Benz[e]acephenanthrylene	252	C20H12	000205-99-2	90



7.1.29  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6541.D  
 Acq On : 10 May 2024 01:13 am  
 Operator : rocquans  
 Sample : jd87833-14  
 Misc : op54460,ecj297,30.2,,1,1  
 ALS Vial : 32 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

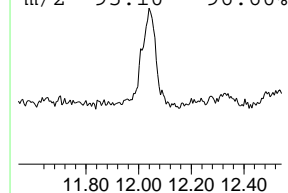
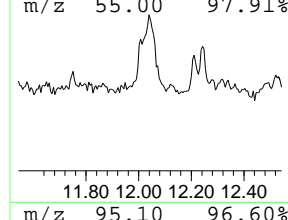
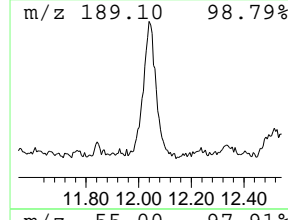
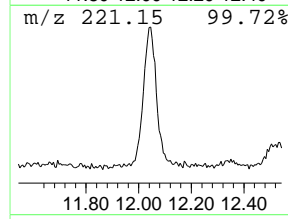
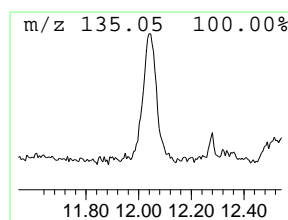
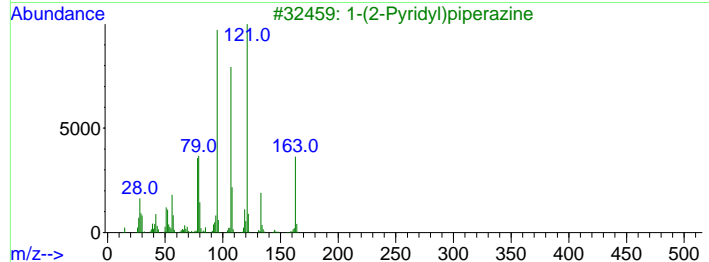
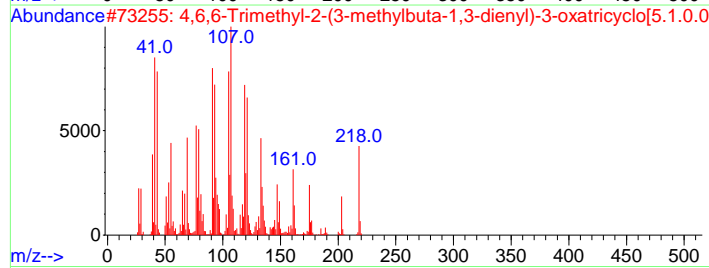
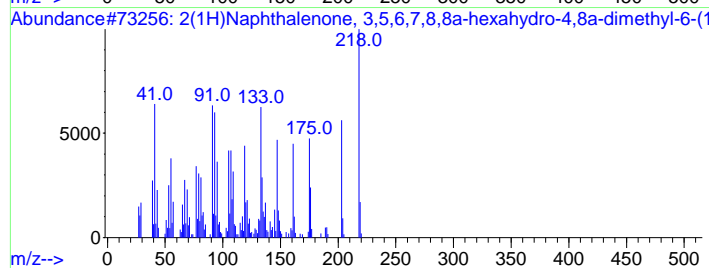
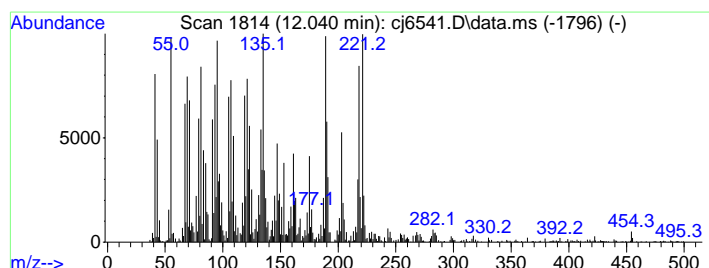
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 14 Unknown Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.040	45.03 ppm	3204470	Perylene-d12	11.719

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2(1H)Naphthalenone, 3,5,6,7,8,8a...	218	C15H22O	1000188-66-5	46
2		4,6,6-Trimethyl-2-(3-methylbuta-...	218	C15H22O	1000190-22-2	35
3		1-(2-Pyridyl)piperazine	163	C9H13N3	034803-66-2	22
4		2H-Cyclopropa[g]benzofuran, 4,5,...	218	C15H22O	102681-49-2	20
5		3,4-Bis-(methylthio)-quinoline	221	C11H11NS2	074579-34-3	15



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6541.D  
 Acq On : 10 May 2024 01:13 am  
 Operator : rocquans  
 Sample : jd87833-14  
 Misc : op54460,ecj297,30.2,,,1,1  
 ALS Vial : 32 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

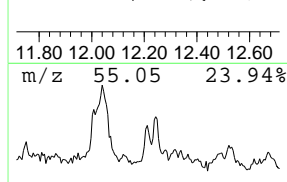
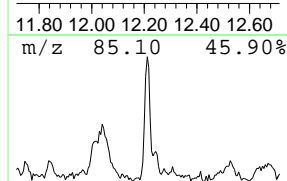
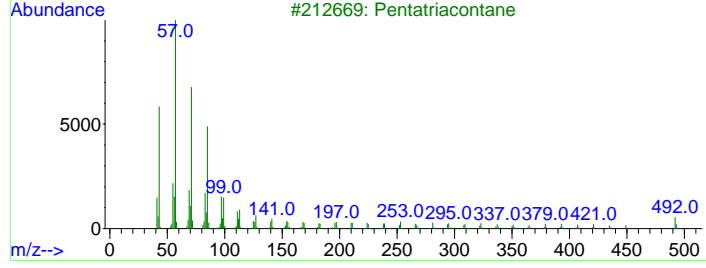
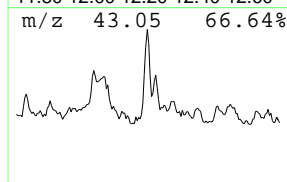
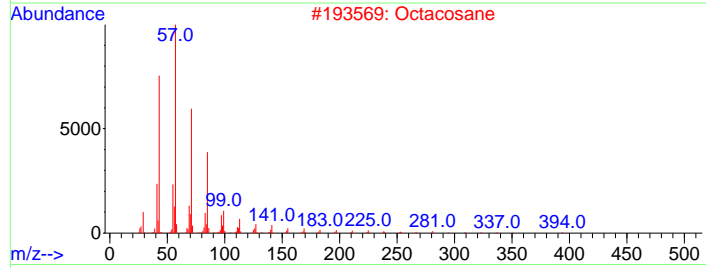
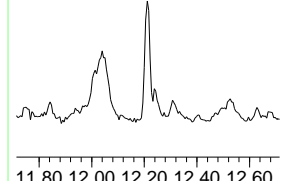
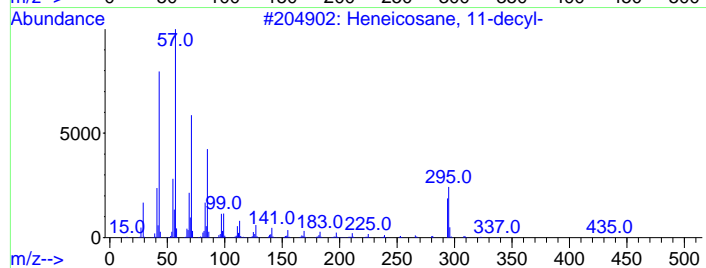
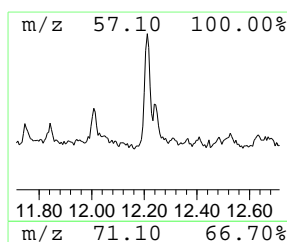
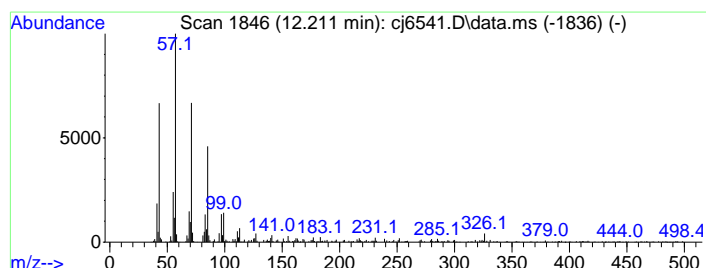
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 15 Alkane Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.211	6.90 ppm	490989	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Heneicosane, 11-decyl-	437	C31H64	055320-06-4	93
2			Octacosane	394	C28H58	000630-02-4	87
3			Pentatriacontane	493	C35H72	000630-07-9	86
4			Tetratetracontane	619	C44H90	007098-22-8	83
5			Heptacosane	380	C27H56	000593-49-7	83



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6541.D  
 Acq On : 10 May 2024 01:13 am  
 Operator : rocquans  
 Sample : jd87833-14  
 Misc : op54460,ecj297,30.2,,1,1  
 ALS Vial : 32 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

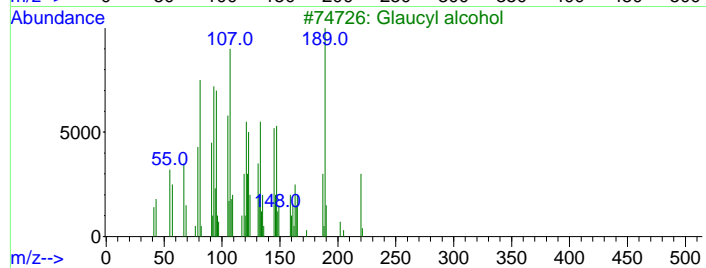
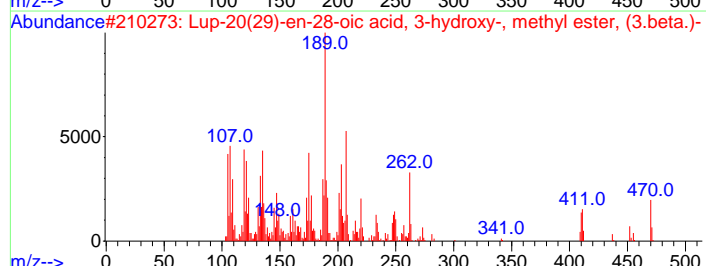
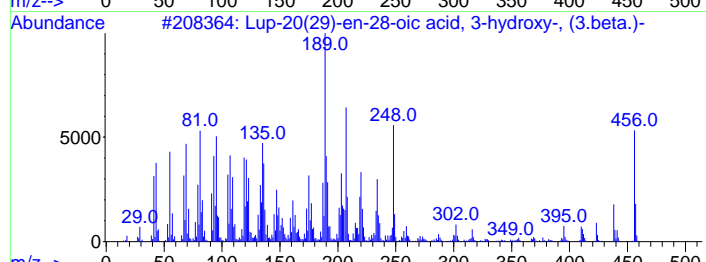
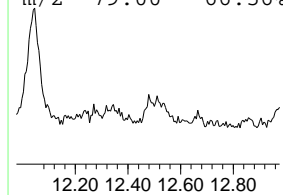
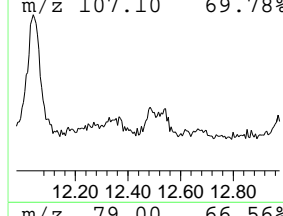
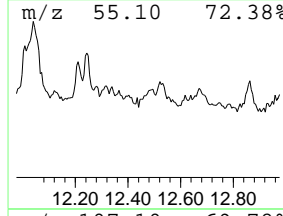
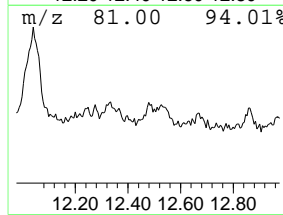
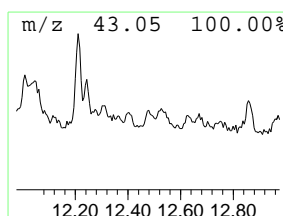
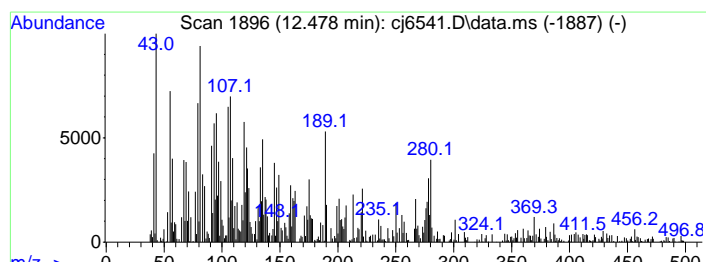
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 16 Unknown Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.478	5.58 ppm	397295	Perylene-d12	11.719

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Lup-20(29)-en-28-oic acid, 3-hyd...	456	C30H48O3	000472-15-1	49
2		Lup-20(29)-en-28-oic acid, 3-hyd...	470	C31H50O3	002259-06-5	37
3		Glaucyl alcohol	220	C15H24O	087745-32-2	35
4		Cholestane, 4,5-epoxy-, (4.alpha...	386	C27H46O	006079-19-2	35
5		Cholest-4-en-3-ol	386	C27H46O	014597-42-3	22



7.1.29  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6541.D  
 Acq On : 10 May 2024 01:13 am  
 Operator : rocquans  
 Sample : jd87833-14  
 Misc : op54460,ecj297,30.2,,1,1  
 ALS Vial : 32 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

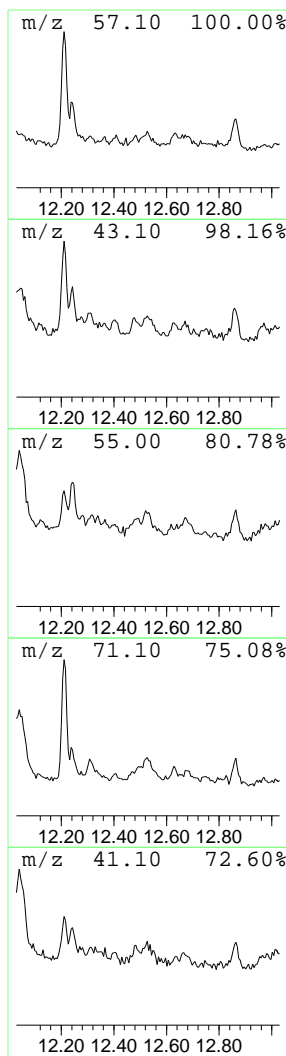
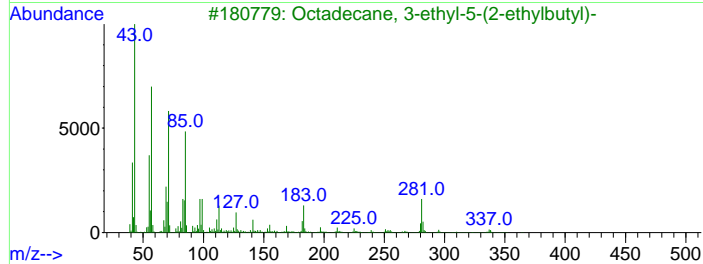
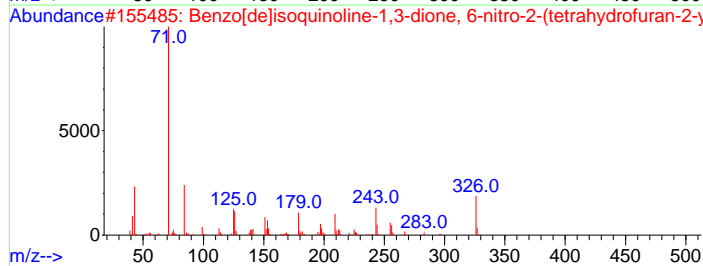
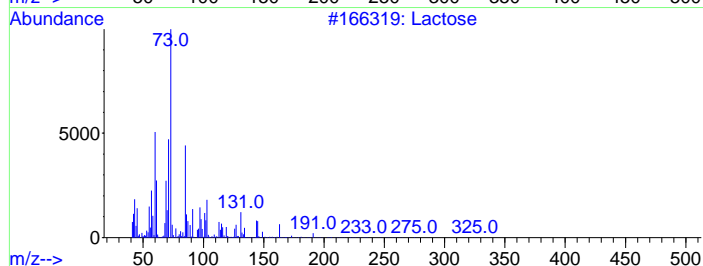
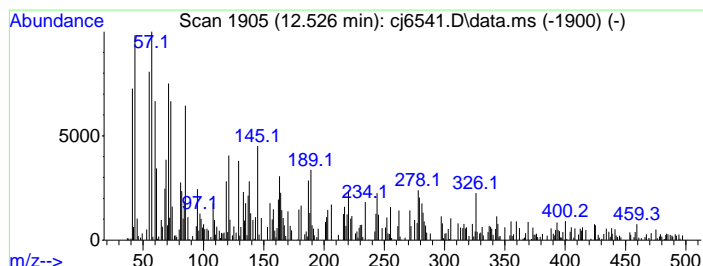
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 17 Unknown Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.527	9.20 ppm	655043	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Lactose	342	C12H22O11	000063-42-3	37
2			Benzo[de]isoquinoline-1,3-dione, ...	326	C17H14N2O5	1000304-25-5	25
3			Octadecane, 3-ethyl-5-(2-ethylbu...	366	C26H54	055282-12-7	16
4			Oxalic acid, 2-ethylhexyl octade...	454	C28H54O4	1000309-39-9	14
5			Cholest-5-ene, 3-methoxy-, (3.be...	400	C28H48O	001174-92-1	14



7.1.29  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6541.D  
Acq On : 10 May 2024 01:13 am  
Operator : rocquans  
Sample : jd87833-14  
Misc : op54460,ecj297,30.2,,1,1  
ALS Vial : 32 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

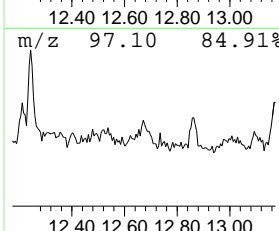
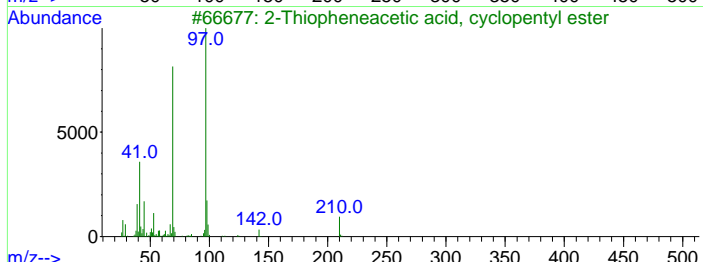
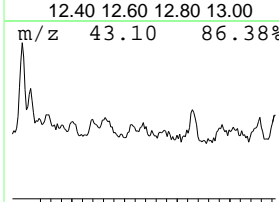
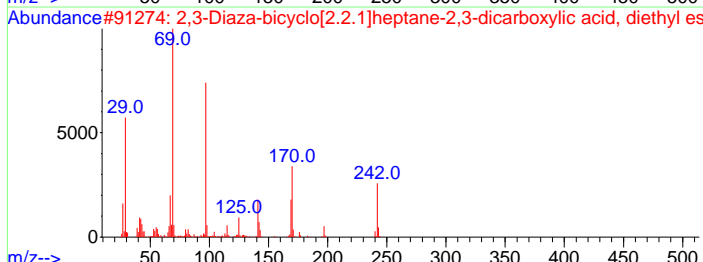
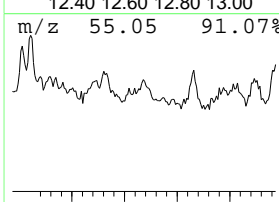
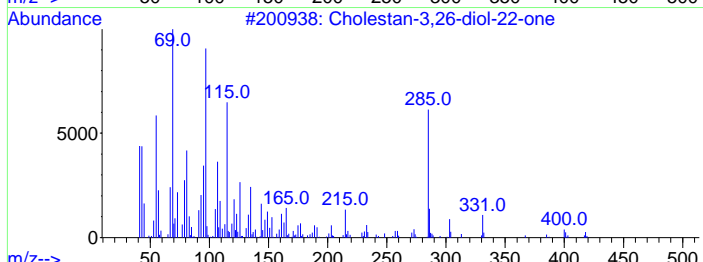
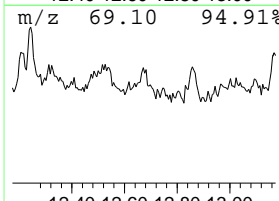
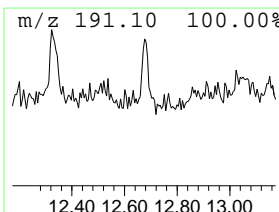
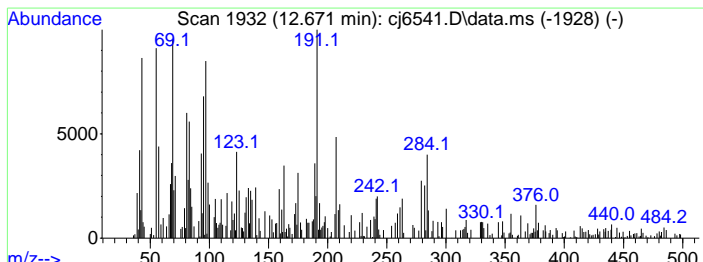
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 18 Unknown Concentration Rank 21

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.671	4.73 ppm	336568	Perylene-d12	11.719

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Cholestan-3,26-diol-22-one	418	C27H46O3	1000252-39-3	42
2		2,3-Diaza-bicyclo[2.2.1]heptane-...	242	C11H18N2O4	018860-71-4	25
3		2-Thiopheneacetic acid, cyclopen...	210	C11H14O2S	1000278-95-8	22
4		Isoquinoline, 1,2,3,4-tetrahydro...	283	C18H21NO2	036646-87-4	18
5		2-Thiopheneacetic acid, 2-methyl...	198	C10H14O2S	1000278-95-4	10



7.1.29  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6541.D  
 Acq On : 10 May 2024 01:13 am  
 Operator : rocquans  
 Sample : jd87833-14  
 Misc : op54460,ecj297,30.2,,1,1  
 ALS Vial : 32 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

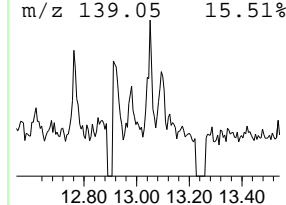
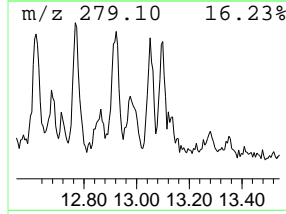
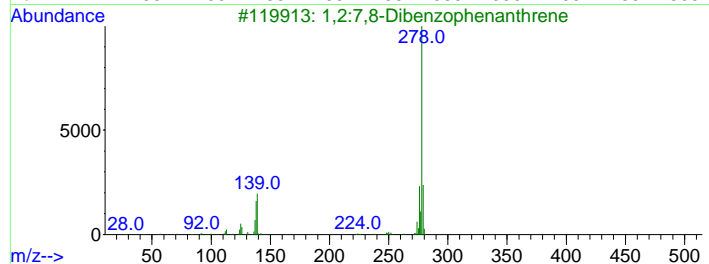
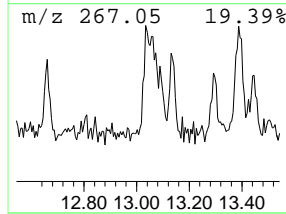
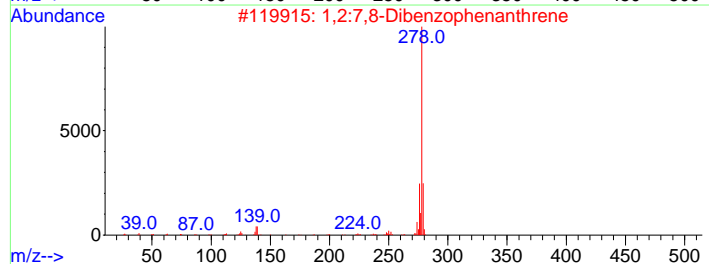
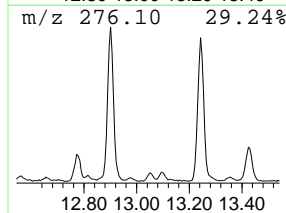
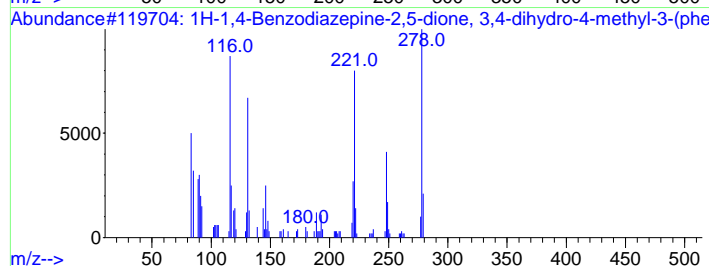
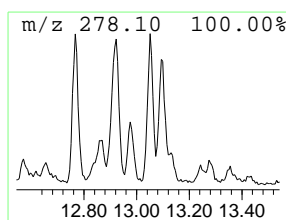
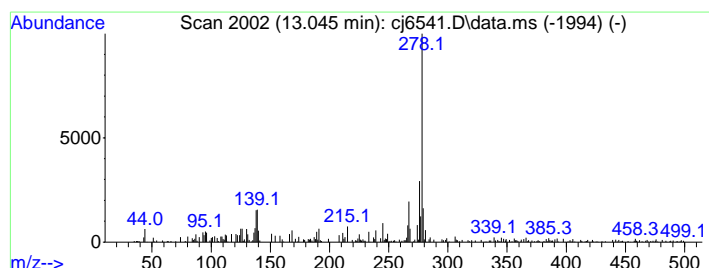
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 19 Unknown Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.045	6.53 ppm	464480	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			1H-1,4-Benzodiazepine-2,5-dione, ...	278	C17H14N2O2	031965-37-4	60
2			1,2:7,8-Dibenzophenanthrene	278	C22H14	000213-46-7	60
3			1,2:7,8-Dibenzophenanthrene	278	C22H14	000213-46-7	55
4			Benzo[b]triphenylene	278	C22H14	000215-58-7	55
5			Benzo[b]triphenylene	278	C22H14	000215-58-7	49



7.1.29  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6541.D  
 Acq On : 10 May 2024 01:13 am  
 Operator : rocquans  
 Sample : jd87833-14  
 Misc : op54460,ecj297,30.2,,,1,1  
 ALS Vial : 32 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

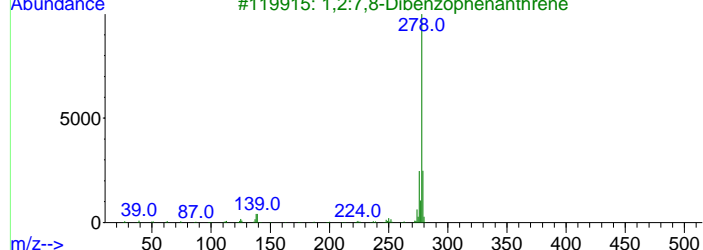
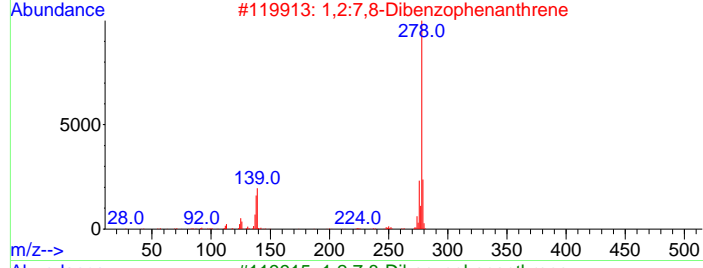
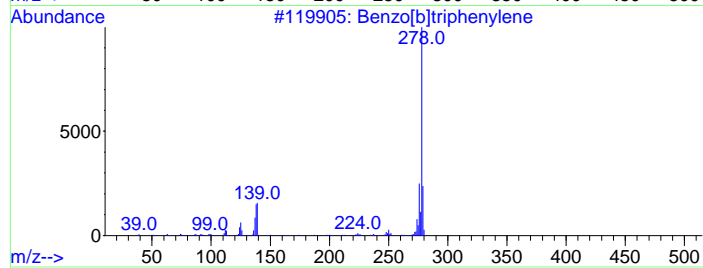
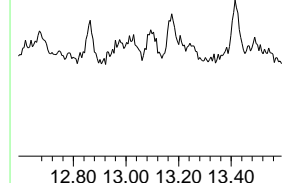
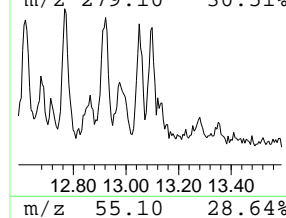
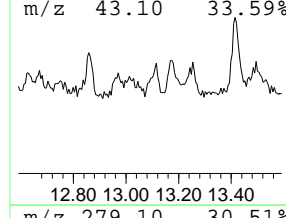
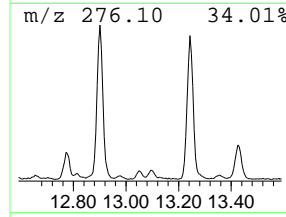
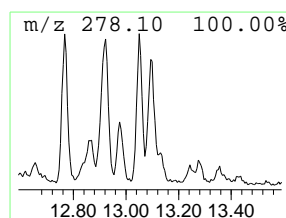
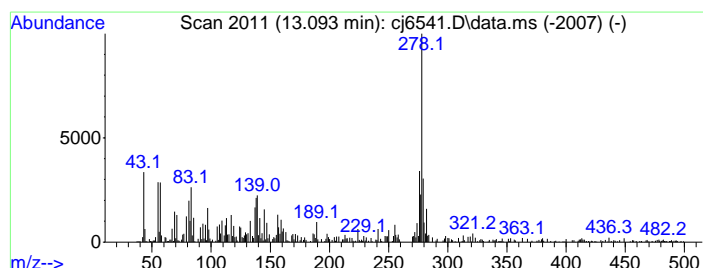
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 20 Unknown Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.093	6.59 ppm	468783	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Benzo[b]triphenylene	278	C22H14	000215-58-7	70
2			1,2:7,8-Dibenzophenanthrene	278	C22H14	000213-46-7	70
3			1,2:7,8-Dibenzophenanthrene	278	C22H14	000213-46-7	62
4			Benzo[b]triphenylene	278	C22H14	000215-58-7	60
5			Pentacene	278	C22H14	000135-48-8	58



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6541.D  
Acq On : 10 May 2024 01:13 am  
Operator : rocquans  
Sample : jd87833-14  
Misc : op54460,ecj297,30.2,,1,1  
ALS Vial : 32 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

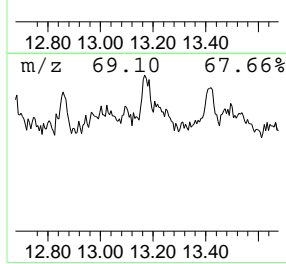
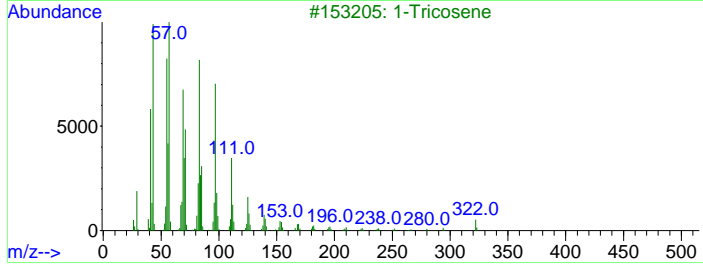
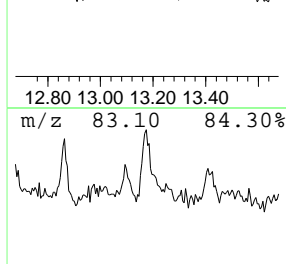
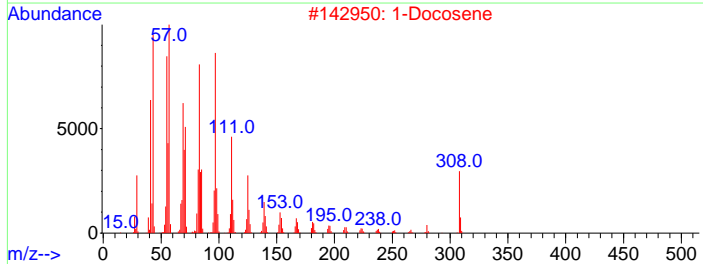
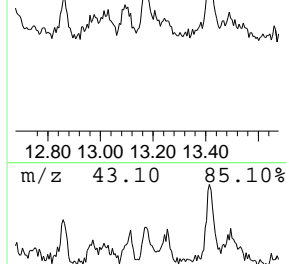
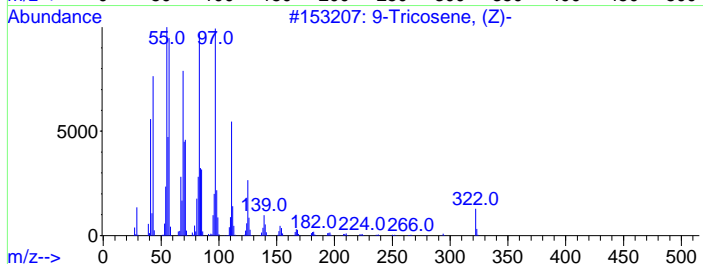
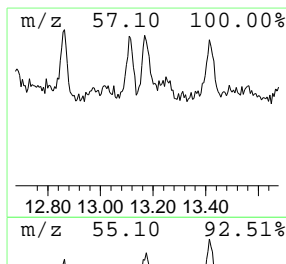
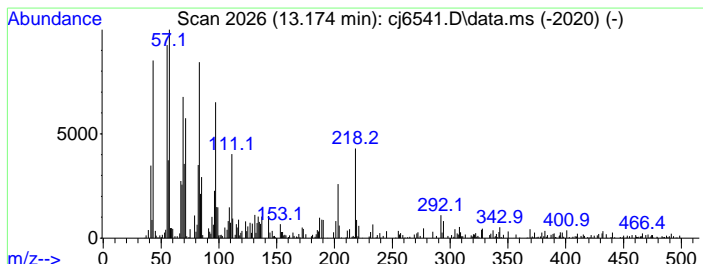
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 21 Alkene Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.174	6.50 ppm	462428	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			9-Tricosene, (Z)-	322	C23H46	027519-02-4	93
2			1-Docosene	308	C22H44	001599-67-3	92
3			1-Tricosene	322	C23H46	018835-32-0	91
4			n-Tetracosanol-1	354	C24H50O	000506-51-4	89
5			10-Heneicosene (c,t)	294	C21H42	095008-11-0	83



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6541.D  
Acq On : 10 May 2024 01:13 am  
Operator : rocquans  
Sample : jd87833-14  
Misc : op54460,ecj297,30.2,,1,1  
ALS Vial : 32 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

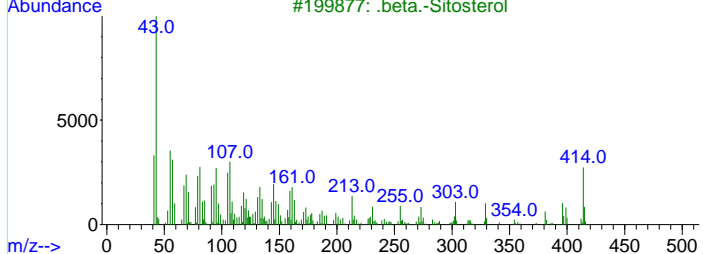
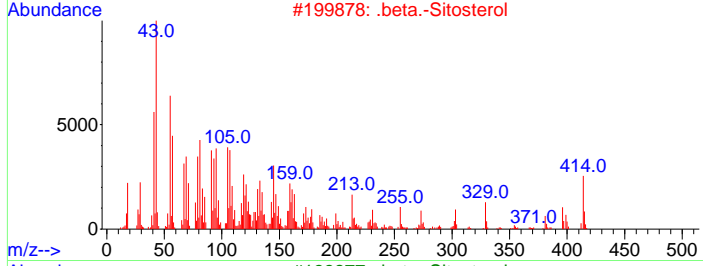
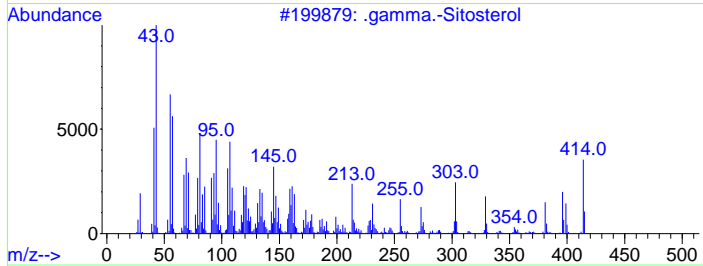
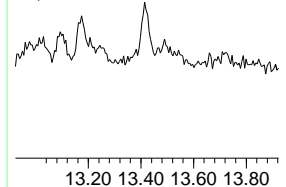
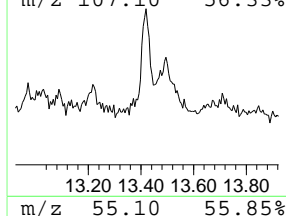
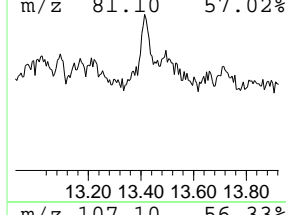
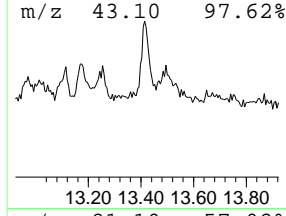
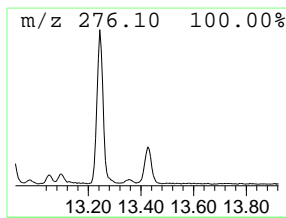
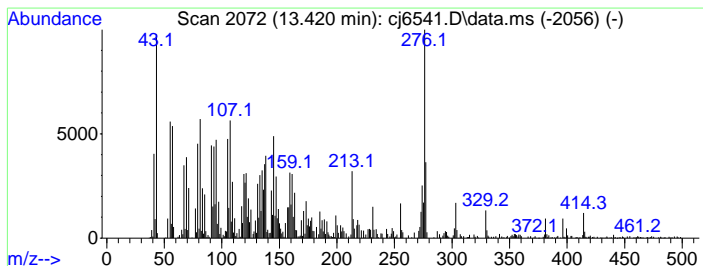
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 22 Unknown Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.420	17.88 ppm	1272620	Perylene-d12	11.719

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	.gamma.-Sitosterol	414	C29H50O	000083-47-6	70
2		.beta.-Sitosterol	414	C29H50O	000083-46-5	64
3		.beta.-Sitosterol	414	C29H50O	000083-46-5	53
4		Indeno[1,2,3-cd]pyrene	276	C22H12	000193-39-5	41
5		Indeno[1,2,3-cd]pyrene	276	C22H12	000193-39-5	41



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6541.D  
Acq On : 10 May 2024 01:13 am  
Operator : rocquans  
Sample : jd87833-14  
Misc : op54460,ecj297,30.2,,1,1  
ALS Vial : 32 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

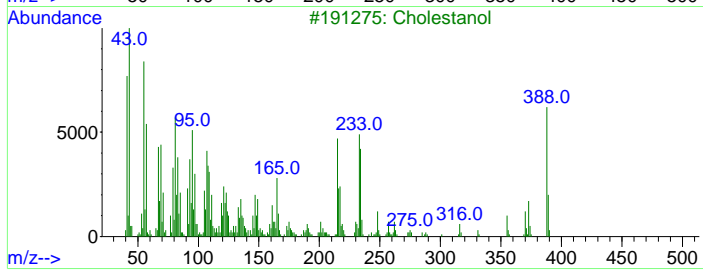
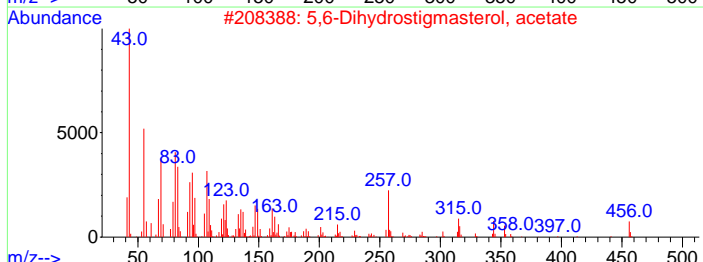
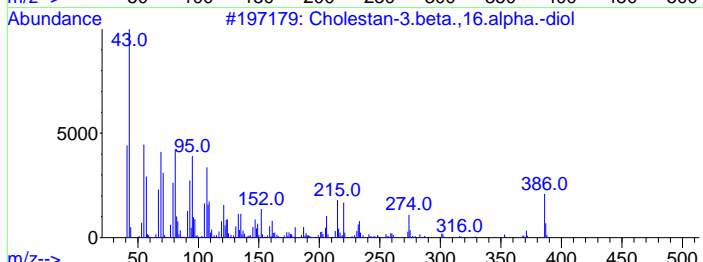
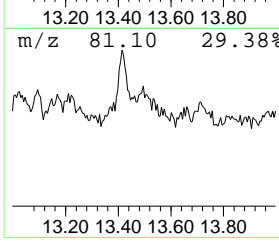
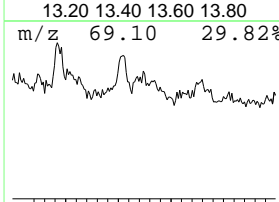
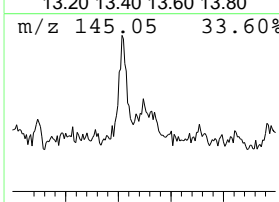
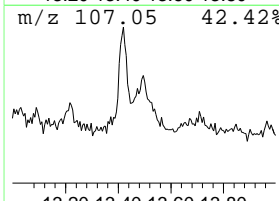
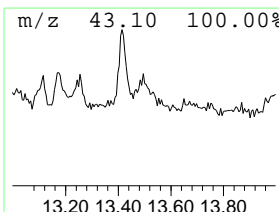
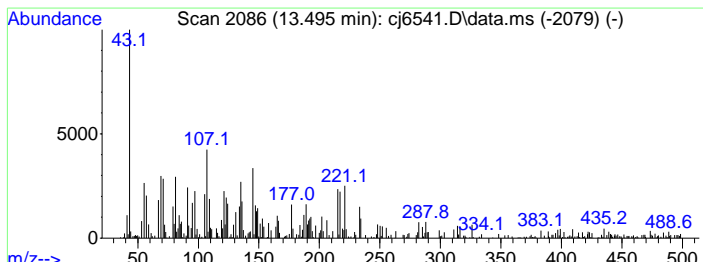
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 23 Unknown Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.495	11.55 ppm	821888	Perylene-d12	11.719

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Cholestan-3.beta.,16.alpha.-diol	404	C27H48O2	1000252-39-7	25
2		5,6-Dihydrostigmasterol, acetate	456	C31H52O2	005405-37-8	10
3		Cholestanol	388	C27H48O	000080-97-7	10
4		Bronopol	199	C3H6BrNO4	000052-51-7	10
5		Benzal diacetate	208	C11H12O4	000581-55-5	10



7.1.29  
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Tentatively Identified Compound (LSC) summary

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6541.D  
Acq On : 10 May 2024 01:13 am  
Operator : rocquans  
Sample : jd87833-14  
Misc : op54460,ecj297,30.2,,,1,1  
ALS Vial : 32 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
Unknown	4.252	9.1	ppm	446281	2	4.669	1958690	40.0
Phenanthrene, m...	8.322	4.7	ppm	328204	8	7.873	2823670	40.0
n-Hexadecanoic ...	8.370	7.8	ppm	550516	8	7.873	2823670	40.0
4H-Cyclopenta[d...	8.424	5.7	ppm	401186	8	7.873	2823670	40.0
Unknown acid	9.060	9.7	ppm	684111	8	7.873	2823670	40.0
Unknown	10.269	5.0	ppm	447320	9	10.366	3587360	40.0
Unknown	10.906	9.6	ppm	863050	10	10.366	3587360	40.0
Unknown	11.050	4.4	ppm	311045	11	11.719	2846740	40.0
Unknown acid	11.114	7.7	ppm	547890	11	11.719	2846740	40.0
Unknown	11.211	7.3	ppm	520975	11	11.719	2846740	40.0
Unknown PHA Sub...	11.446	17.1	ppm	1219540	11	11.719	2846740	40.0
Unknown	11.521	13.4	ppm	957014	11	11.719	2846740	40.0
Unknown PHA Sub...	11.612	8.4	ppm	600020	11	11.719	2846740	40.0
Unknown	12.040	45.0	ppm	3204470	11	11.719	2846740	40.0
Alkane	12.211	6.9	ppm	490989	11	11.719	2846740	40.0
Unknown	12.478	5.6	ppm	397295	11	11.719	2846740	40.0
Unknown	12.527	9.2	ppm	655043	11	11.719	2846740	40.0
Unknown	12.671	4.7	ppm	336568	11	11.719	2846740	40.0
Unknown	13.045	6.5	ppm	464480	11	11.719	2846740	40.0
Unknown	13.093	6.6	ppm	468783	11	11.719	2846740	40.0
Alkene	13.174	6.5	ppm	462428	11	11.719	2846740	40.0
Unknown	13.420	17.9	ppm	1272620	11	11.719	2846740	40.0
Unknown	13.495	11.6	ppm	821888	11	11.719	2846740	40.0

7.1.29  
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## Quantitation Report (QT/LSC Reviewed)

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6542.D  
 Acq On : 10 May 2024 01:32 am  
 Operator : rocquans  
 Sample : jd87833-15 Inst : GCMSJCJ  
 Misc : op54460,ecj297,31.7,,,1,1  
 ALS Vial : 33 Sample Multiplier: 1

Quant Time: May 10 20:17:37 2024  
 Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
 QLast Update : Thu May 09 12:05:48 2024  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
-----							
Internal Standards							
1) 1,4-Dichlorobenzene-d4	4.669	152	327409	40.00	ppm	0.00	
24) Naphthalene-d8	5.472	136	1164205	40.00	ppm	0.00	
46) Acenaphthene-d10	6.659	164	641642	40.00	ppm	0.00	
69) Phenanthrene-d10	7.873	188	1128523	40.00	ppm	0.00	
84) Chrysene-d12	10.371	240	807431	40.00	ppm	0.00	
93) Perylene-d12	11.724	264	826260	40.00	ppm	0.00	
103) 1,4-Dichlorobenzene-d4a	4.669	152	327409	40.00	ppm	0.00	
105) Phenanthrene-d10a	7.873	188	1128523	40.00	ppm	0.00	
107) Naphthalene-d8a	5.472	136	1164205	40.00	ppm	0.00	
109) Phenanthrene-d10b	7.873	188	1128523	40.00	ppm	0.00	
112) Chrysene-d12a	10.371	240	807431	40.00	ppm	0.01	
System Monitoring Compounds							
5) 2-Fluorophenol	3.813	112	347241	36.90	ppm	0.02	
Spiked Amount	50.000		Recovery	=	73.80%		
8) Phenol-d5	4.429	99	469581	38.69	ppm	0.01	
Spiked Amount	50.000		Recovery	=	77.38%		
25) Nitrobenzene-d5	5.012	82	448775	37.65	ppm	0.00	
Spiked Amount	50.000		Recovery	=	75.30%		
51) 2-Fluorobiphenyl	6.167	172	831975	41.21	ppm	0.00	
Spiked Amount	50.000		Recovery	=	82.42%		
74) 2,4,6-Tribromophenol	7.274	330	114642	46.33	ppm	0.00	
Spiked Amount	50.000		Recovery	=	92.66%		
87) Terphenyl-d14	9.355	244	815448	40.88	ppm	0.00	
Spiked Amount	50.000		Recovery	=	81.76%		
110) 1-chlorooctadecane	0.000	57	0d	0.00	ppm		
Spiked Amount	50.000		Recovery	=	0.00%		
111) o-terphenyl	0.000	230	0	0.00	ppm		
Spiked Amount	50.000		Recovery	=	0.00%		
Target Compounds							
						Qvalue	
38) Naphthalene	5.482	128	25852	0.9270	ppm	98	
44) 2-Methylnaphthalene	5.926	141	8986	0.5434	ppm	87	
45) 1-Methylnaphthalene	5.990	141	9865	0.6240	ppm	98	
53) Biphenyl	6.236	154	6087	0.2761	ppm	95	
56) Acenaphthylene	6.557	152	204328	8.2104	ppm	99	
59) Acenaphthene	6.680	153	58411	3.3004	ppm	96	
62) Dibenzofuran	6.814	168	43917	1.7882	ppm	96	
66) Fluorene	7.082	166	86737m	4.4707	ppm		
78) Phenanthrene	7.895	178	1212904	44.4723	ppm	99	
79) Anthracene	7.937	178	445107	16.2991	ppm	98	
80) Carbazole	8.076	167	59773	2.3489	ppm	99	
82) Fluoranthene	8.991	202	3033141	102.7265	ppm	99	
86) Pyrene	9.205	202	2650487	96.5234	ppm	99	
89) Benzo[a]anthracene	10.360	228	1364196	52.5480	ppm	96	
91) Chrysene	10.398	228	1158041	48.3479	ppm	98	
95) Benzo[b]fluoranthene	11.360	252	1637238m	65.5939	ppm		
96) Benzo[k]fluoranthene	11.382	252	459431m	20.4555	ppm		
97) Benzo[a]pyrene	11.671	252	1165454	56.4039	ppm	98	
98) Indeno[1,2,3-cd]pyrene	12.917	276	751360	30.0792	ppm	100	
100) Dibenz[a,h]anthracene	12.928	278	187933	9.4157	ppm	94	
102) Benzo[g,h,i]perylene	13.259	276	687385	35.4108	ppm	98	
-----							

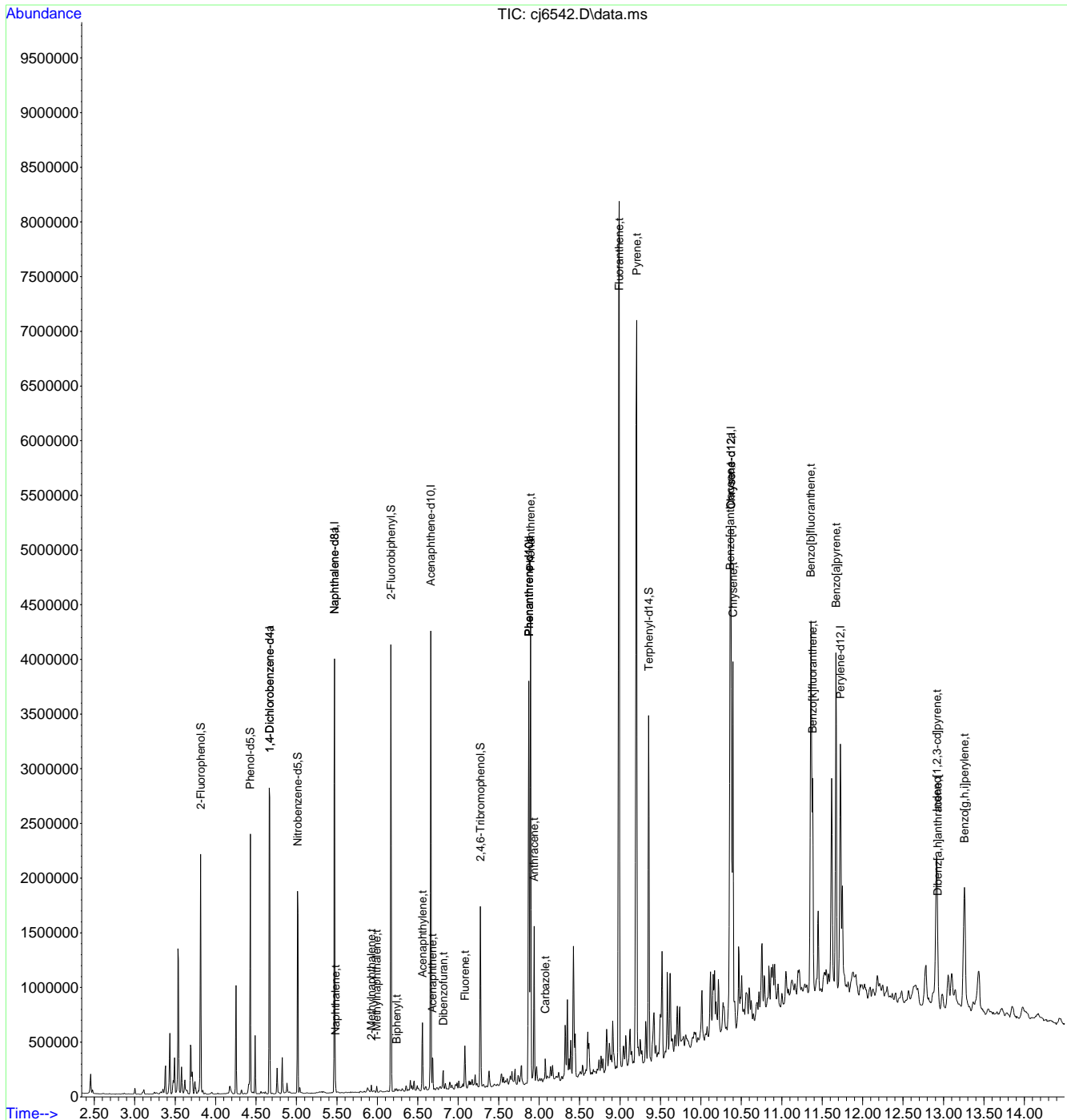
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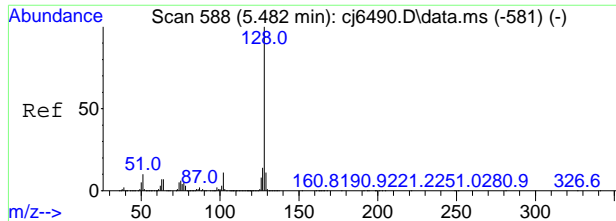
Quantitation Report (QT/LSC Reviewed)

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6542.D  
Acq On : 10 May 2024 01:32 am  
Operator : rocquans  
Sample : jd87833-15 Inst : GCMS CJ  
Misc : op54460,ecj297,31.7,,,1,1  
ALS Vial : 33 Sample Multiplier: 1

Quant Time: May 10 20:17:37 2024  
Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
QLast Update : Thu May 09 12:05:48 2024  
Response via : Initial Calibration

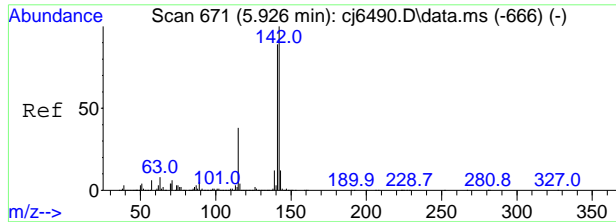
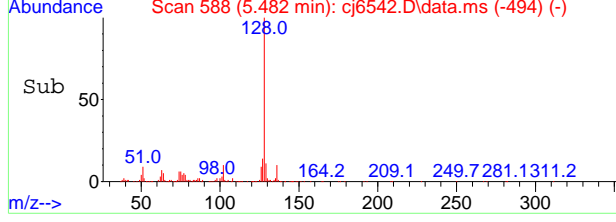
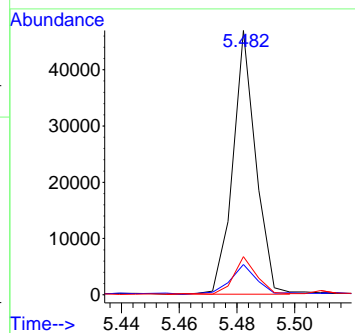
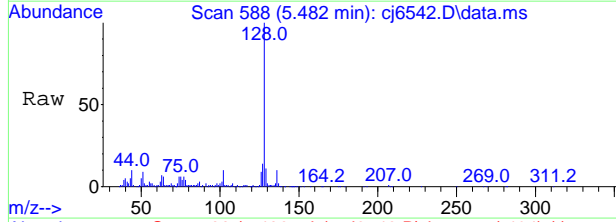


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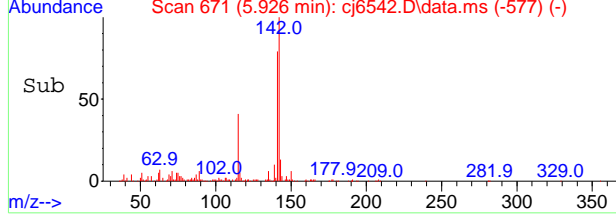
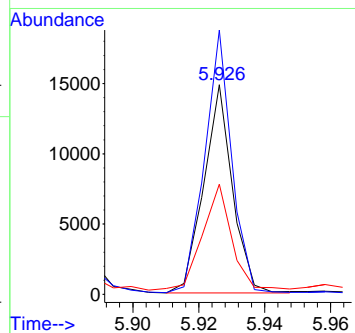
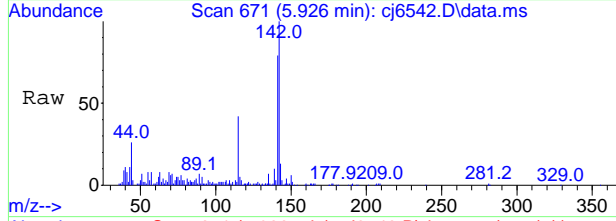
#38  
 Naphthalene  
 Concen: 0.9270 ppm  
 RT: 5.482 min Scan# 588  
 Delta R.T. 0.000 min  
 Lab File: cj6542.D  
 Acq: 10 May 2024 01:32 am

Tgt Ion	Ratio	Lower	Upper
128	100		
129	10.8	0.0	41.4
127	14.2	0.0	43.3



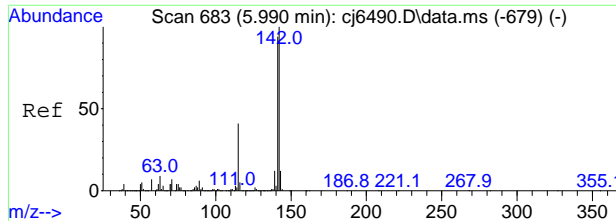
#44  
 2-Methylnaphthalene  
 Concen: 0.5434 ppm  
 RT: 5.926 min Scan# 671  
 Delta R.T. 0.000 min  
 Lab File: cj6542.D  
 Acq: 10 May 2024 01:32 am

Tgt Ion	Ratio	Lower	Upper
141	100		
142	127.1	82.7	142.7
115	50.6	12.4	72.4



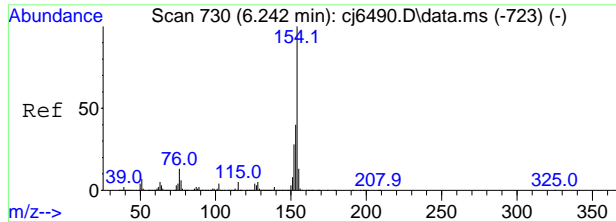
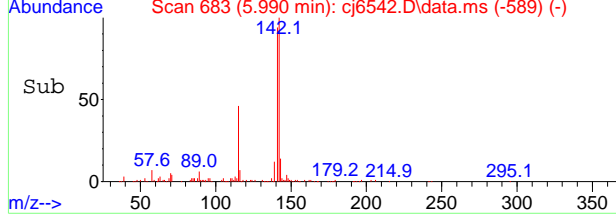
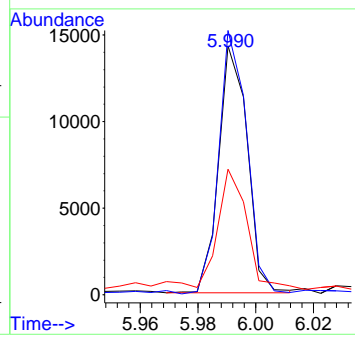
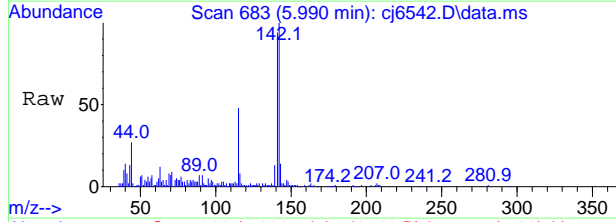
7.1.30  
7





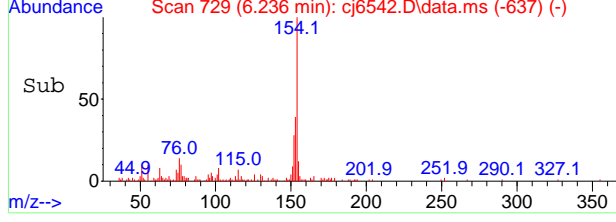
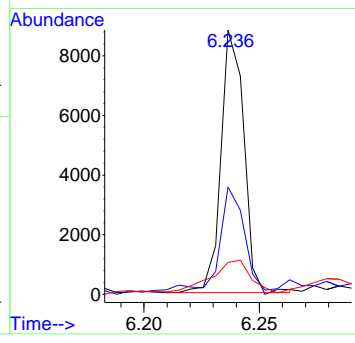
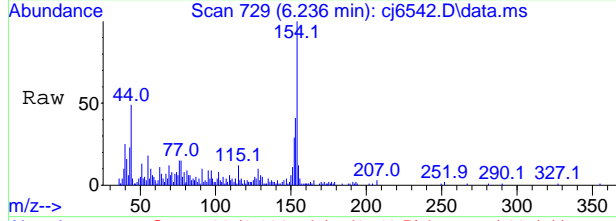
#45  
 1-Methylnaphthalene  
 Concen: 0.6240 ppm  
 RT: 5.990 min Scan# 683  
 Delta R.T. 0.000 min  
 Lab File: cj6542.D  
 Acq: 10 May 2024 01:32 am

Tgt Ion	Ratio	Lower	Upper
141	100		
142	106.2	77.0	137.0
115	46.6	14.2	74.2



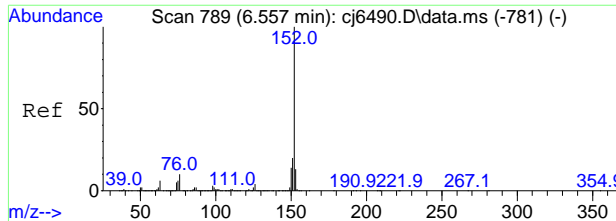
#53  
 Biphenyl  
 Concen: 0.2761 ppm  
 RT: 6.236 min Scan# 729  
 Delta R.T. -0.006 min  
 Lab File: cj6542.D  
 Acq: 10 May 2024 01:32 am

Tgt Ion	Ratio	Lower	Upper
154	100		
153	37.4	10.5	70.5
155	10.8	0.0	42.8



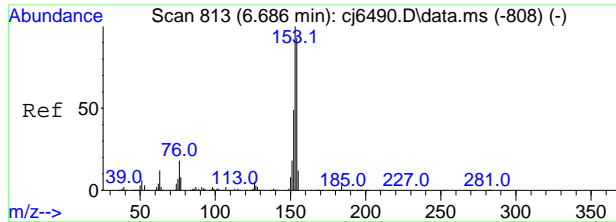
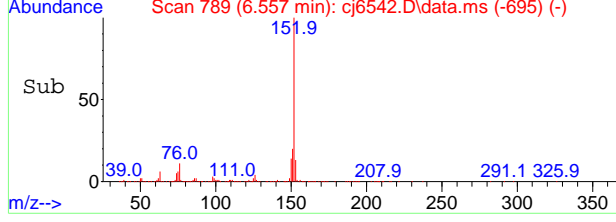
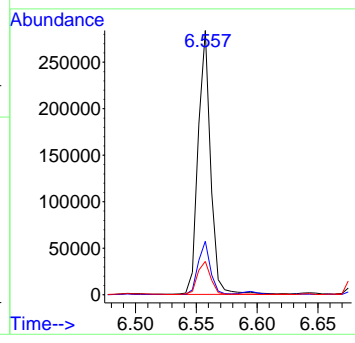
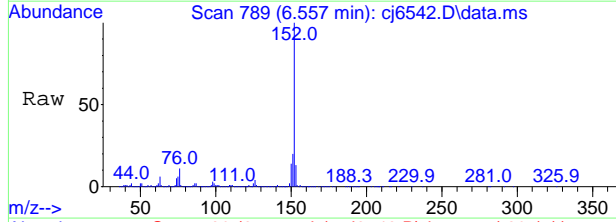
7.1.30  
7





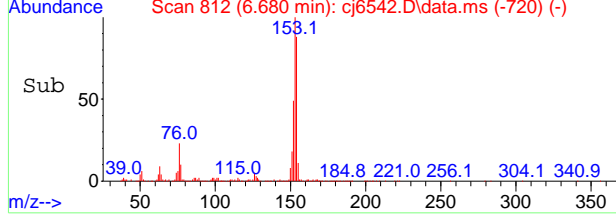
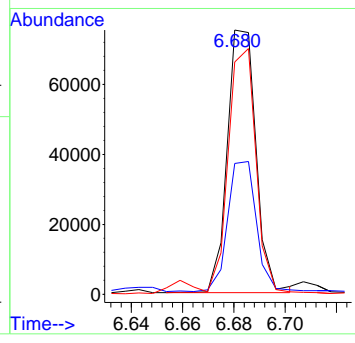
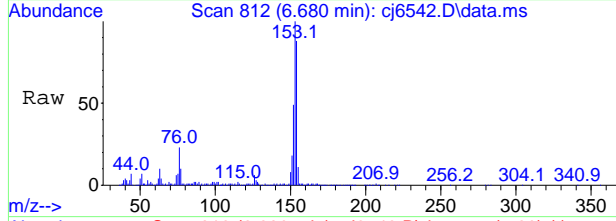
#56  
 Acenaphthylene  
 Concen: 8.2104 ppm  
 RT: 6.557 min Scan# 789  
 Delta R.T. 0.000 min  
 Lab File: cj6542.D  
 Acq: 10 May 2024 01:32 am

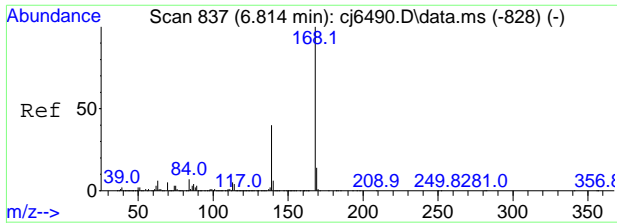
Tgt Ion	Ratio	Lower	Upper
152	100		
151	20.1	0.0	50.3
153	12.5	0.0	43.4



#59  
 Acenaphthene  
 Concen: 3.3004 ppm  
 RT: 6.680 min Scan# 812  
 Delta R.T. -0.006 min  
 Lab File: cj6542.D  
 Acq: 10 May 2024 01:32 am

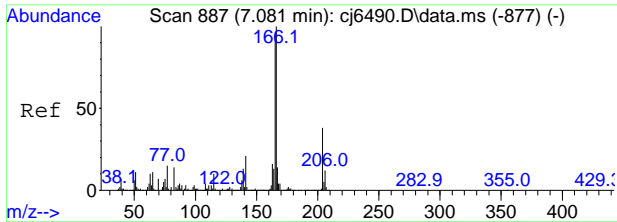
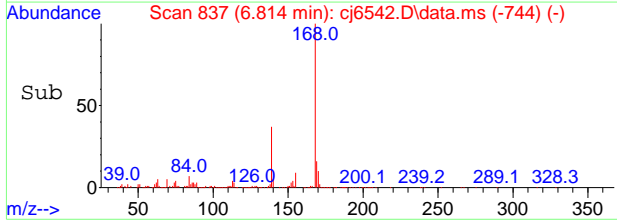
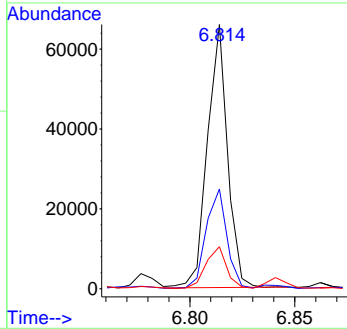
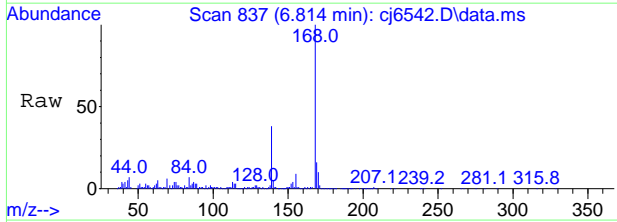
Tgt Ion	Ratio	Lower	Upper
153	100		
152	48.9	18.8	78.8
154	87.8	62.9	122.9





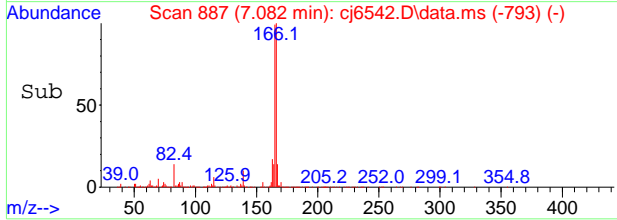
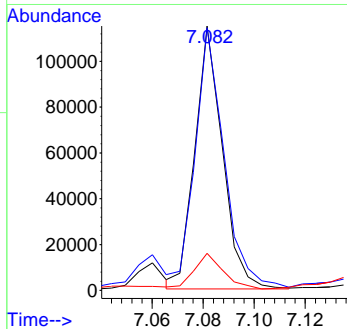
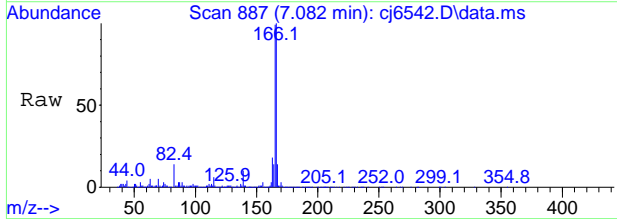
#62  
 Dibenzofuran  
 Concen: 1.7882 ppm  
 RT: 6.814 min Scan# 837  
 Delta R.T. 0.000 min  
 Lab File: cj6542.D  
 Acq: 10 May 2024 01:32 am

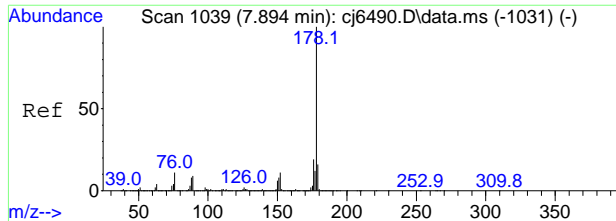
Tgt Ion	Ratio	Lower	Upper
168	100		
139	37.5	10.0	70.0
169	14.7	0.0	43.7



#66  
 Fluorene  
 Concen: 4.4707 ppm m  
 RT: 7.082 min Scan# 887  
 Delta R.T. 0.000 min  
 Lab File: cj6542.D  
 Acq: 10 May 2024 01:32 am

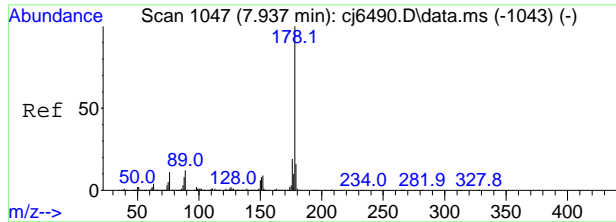
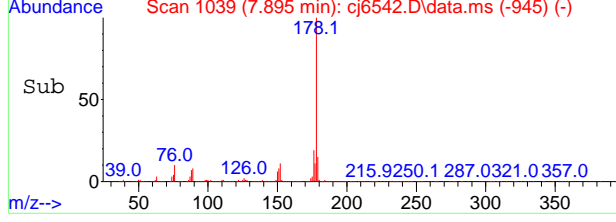
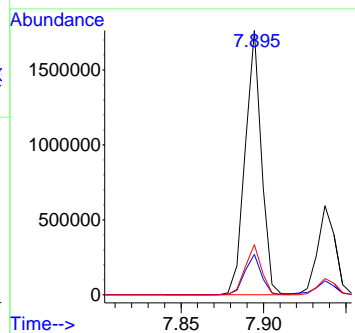
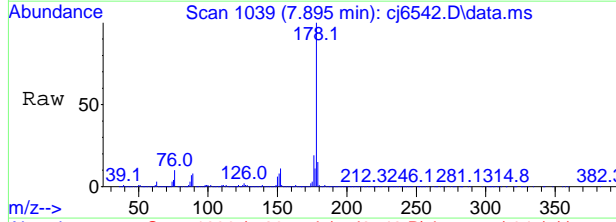
Tgt Ion	Ratio	Lower	Upper
166	100		
165	99.3	65.4	125.4
167	14.1	0.0	43.8





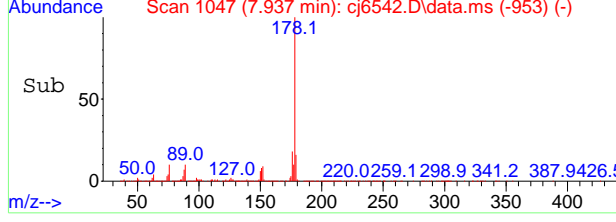
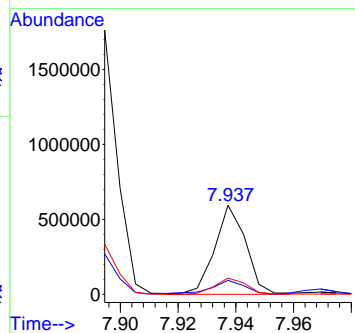
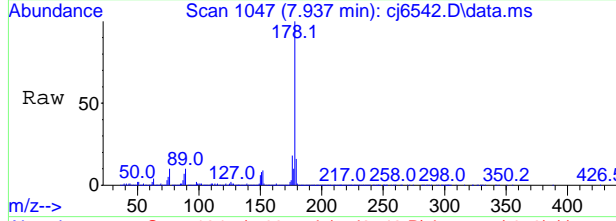
#78  
Phenanthrene  
Concen: 44.4723 ppm  
RT: 7.895 min Scan# 1039  
Delta R.T. 0.001 min  
Lab File: cj6542.D  
Acq: 10 May 2024 01:32 am

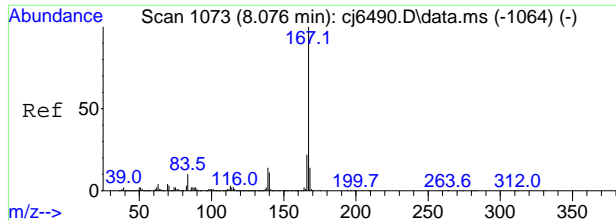
Tgt Ion	Ratio	Lower	Upper
178	100		
179	15.2	0.0	45.5
176	18.9	0.0	49.2



#79  
Anthracene  
Concen: 16.2991 ppm  
RT: 7.937 min Scan# 1047  
Delta R.T. 0.000 min  
Lab File: cj6542.D  
Acq: 10 May 2024 01:32 am

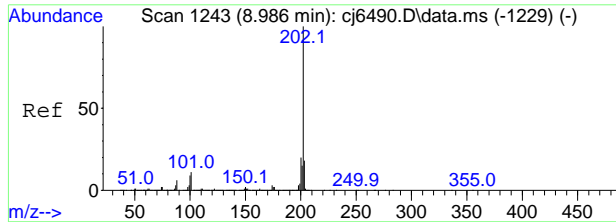
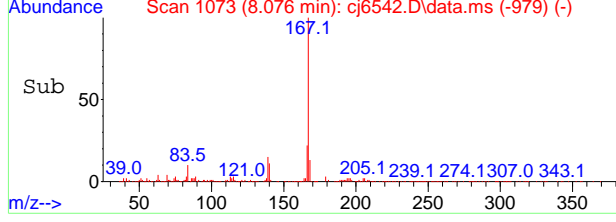
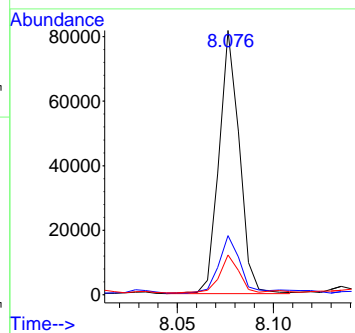
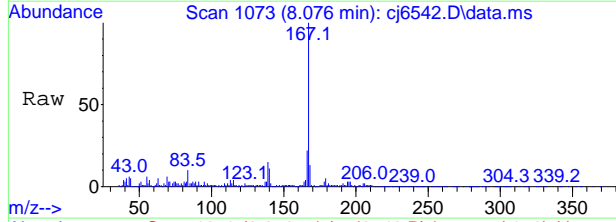
Tgt Ion	Ratio	Lower	Upper
178	100		
179	14.5	0.0	46.1
176	18.2	0.0	48.7





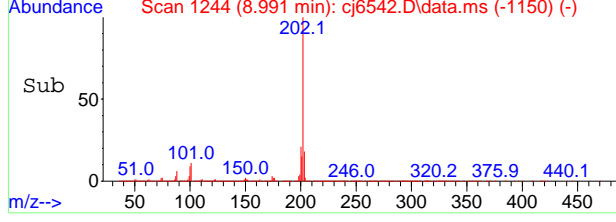
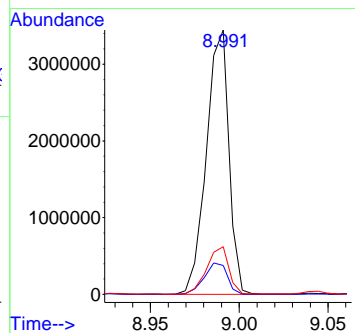
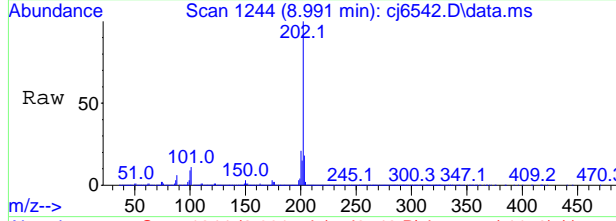
#80  
 Carbazole  
 Concen: 2.3489 ppm  
 RT: 8.076 min Scan# 1073  
 Delta R.T. 0.000 min  
 Lab File: cj6542.D  
 Acq: 10 May 2024 01:32 am

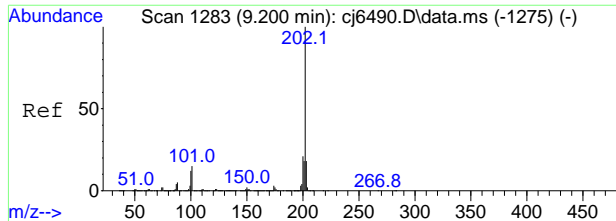
Tgt Ion	Ratio	Lower	Upper
167	100		
166	21.4	0.0	51.7
139	14.3	0.0	43.8



#82  
 Fluoranthene  
 Concen: 102.7265 ppm  
 RT: 8.991 min Scan# 1244  
 Delta R.T. 0.005 min  
 Lab File: cj6542.D  
 Acq: 10 May 2024 01:32 am

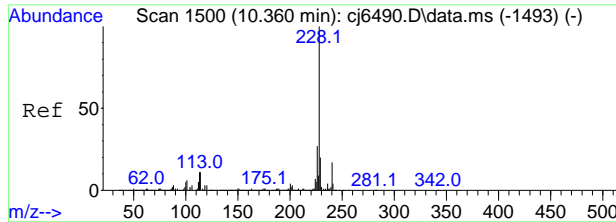
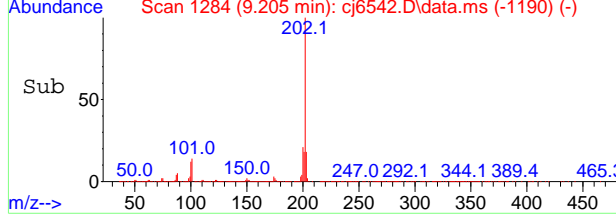
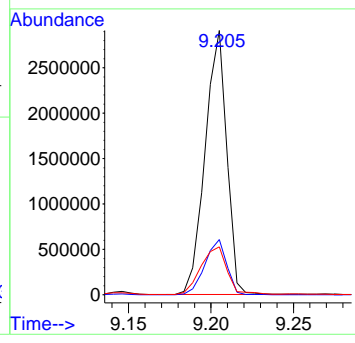
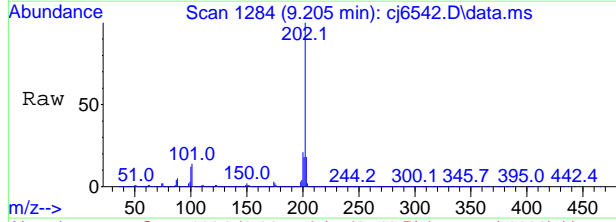
Tgt Ion	Ratio	Lower	Upper
202	100		
101	10.9	0.0	41.4
203	18.0	0.0	47.6





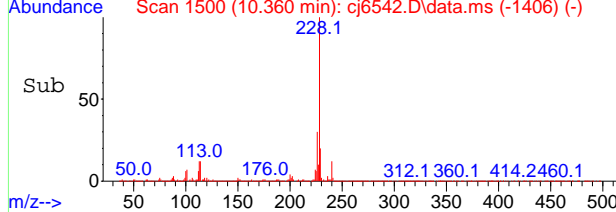
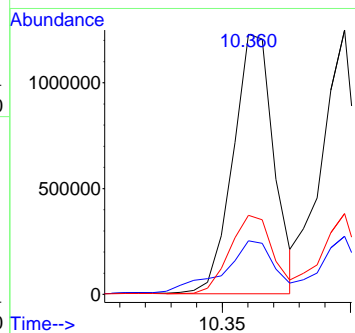
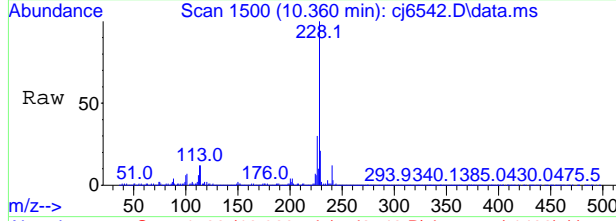
#86  
 Pyrene  
 Concen: 96.5234 ppm  
 RT: 9.205 min Scan# 1284  
 Delta R.T. 0.005 min  
 Lab File: cj6542.D  
 Acq: 10 May 2024 01:32 am

Tgt Ion	Ratio	Lower	Upper
202	100		
200	20.9	0.0	51.4
203	18.0	0.0	47.8

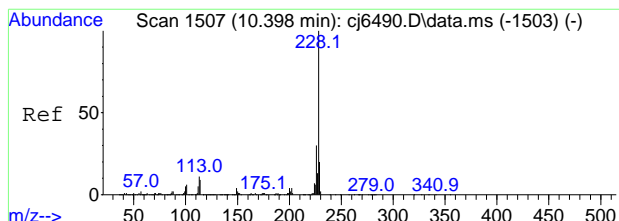


#89  
 Benzo[a]anthracene  
 Concen: 52.5480 ppm  
 RT: 10.360 min Scan# 1500  
 Delta R.T. 0.000 min  
 Lab File: cj6542.D  
 Acq: 10 May 2024 01:32 am

Tgt Ion	Ratio	Lower	Upper
228	100		
229	19.6	0.0	49.8
226	30.2	0.0	57.1

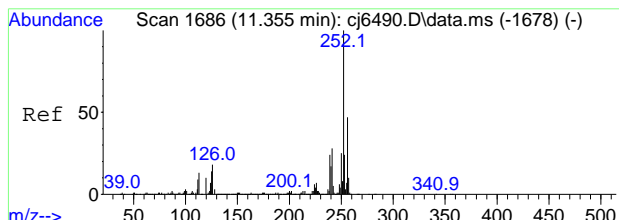
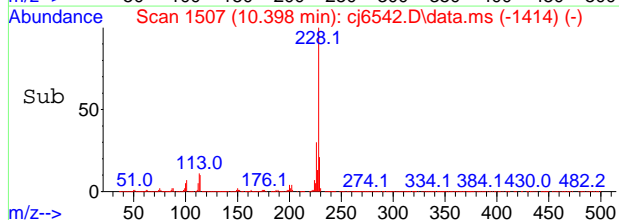
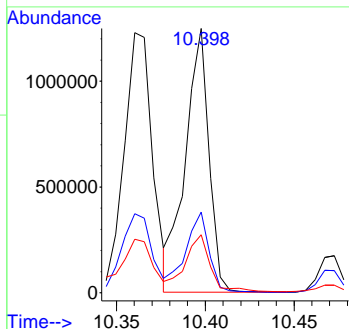
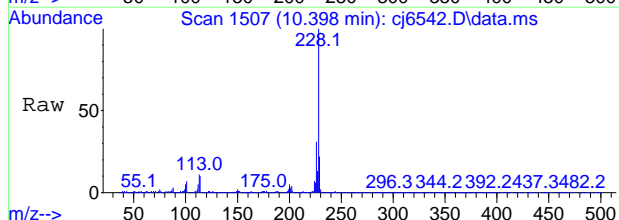






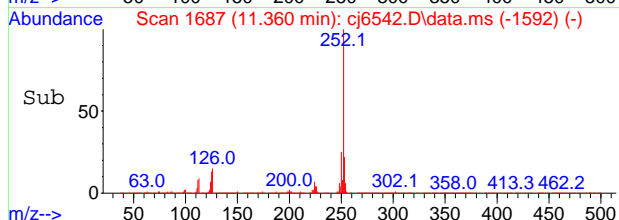
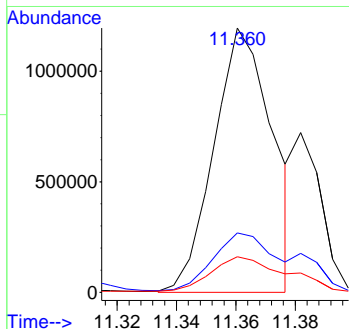
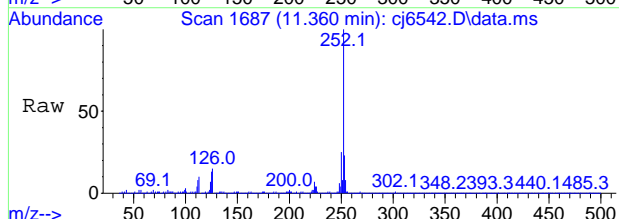
#91  
 Chrysene  
 Concen: 48.3479 ppm  
 RT: 10.398 min Scan# 1507  
 Delta R.T. -0.000 min  
 Lab File: cj6542.D  
 Acq: 10 May 2024 01:32 am

Tgt Ion	Ratio	Lower	Upper
228	100		
226	30.3	0.0	59.9
229	21.4	0.0	49.8

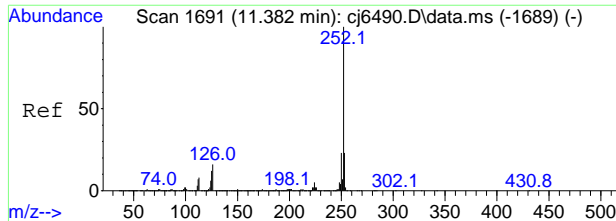


#95  
 Benzo[b]fluoranthene  
 Concen: 65.5939 ppm m  
 RT: 11.360 min Scan# 1687  
 Delta R.T. 0.005 min  
 Lab File: cj6542.D  
 Acq: 10 May 2024 01:32 am

Tgt Ion	Ratio	Lower	Upper
252	100		
253	22.5	0.0	54.7
125	13.5	0.0	44.2



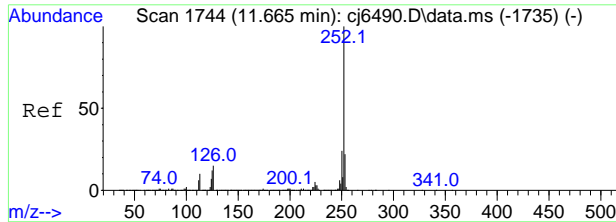
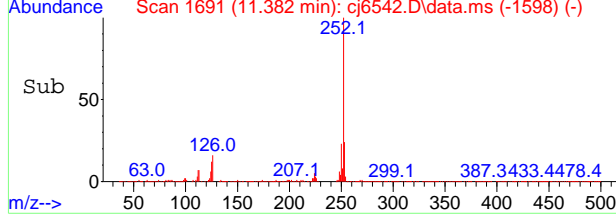
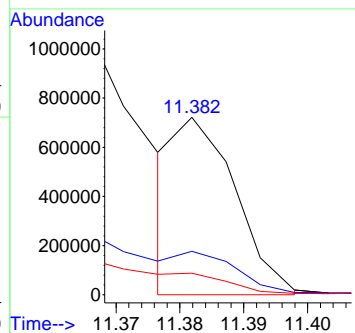
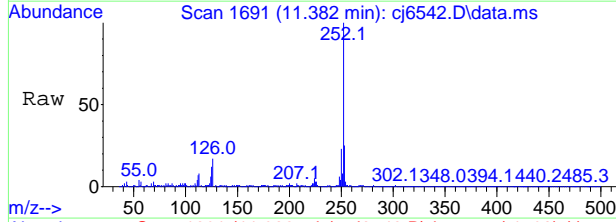
7.1.30  
7



#96  
 Benzo[k]fluoranthene  
 Concen: 20.4555 ppm m  
 RT: 11.382 min Scan# 1691  
 Delta R.T. -0.000 min  
 Lab File: cj6542.D  
 Acq: 10 May 2024 01:32 am

Tgt Ion: 252 Resp: 459431

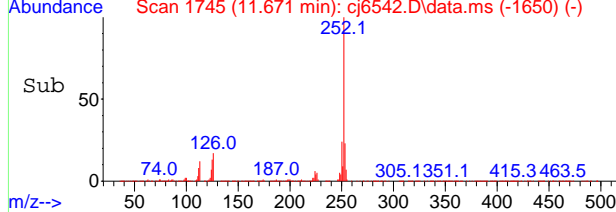
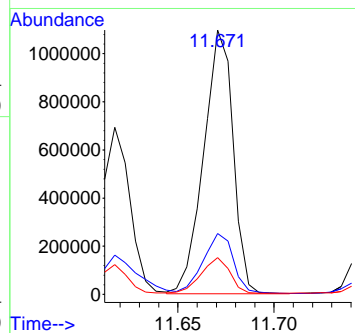
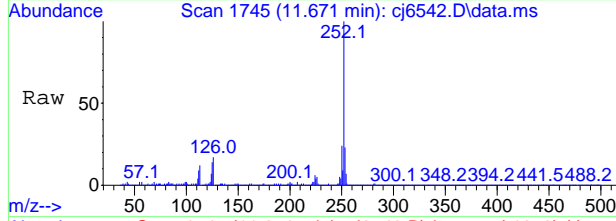
Ion	Ratio	Lower	Upper
252	100		
253	24.5	0.0	52.6
125	12.1	0.0	42.4



#97  
 Benzo[a]pyrene  
 Concen: 56.4039 ppm  
 RT: 11.671 min Scan# 1745  
 Delta R.T. 0.006 min  
 Lab File: cj6542.D  
 Acq: 10 May 2024 01:32 am

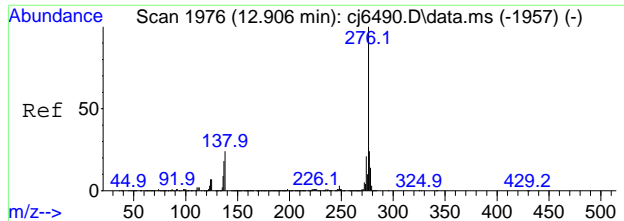
Tgt Ion: 252 Resp: 1165454

Ion	Ratio	Lower	Upper
252	100		
253	22.2	0.0	51.9
125	13.5	0.0	42.1



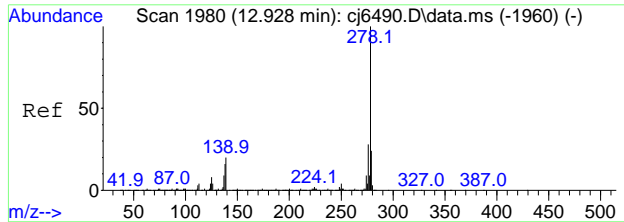
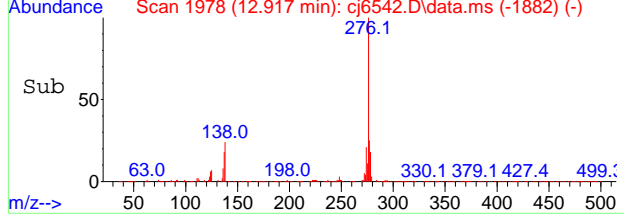
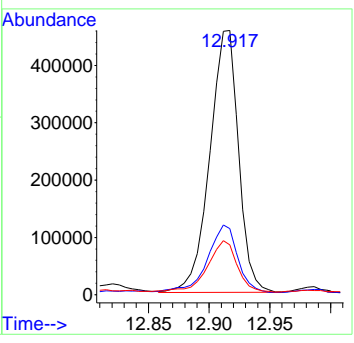
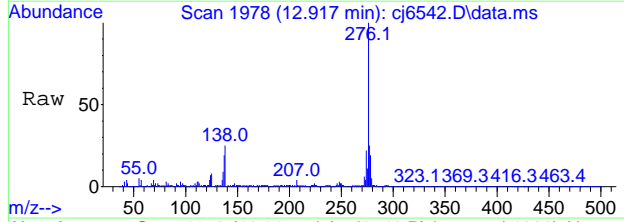
7.1.30  
7





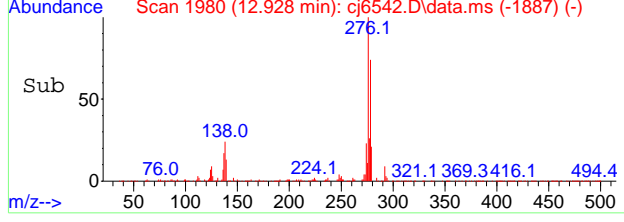
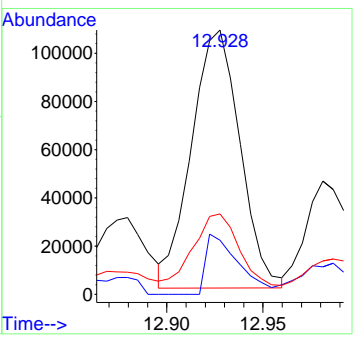
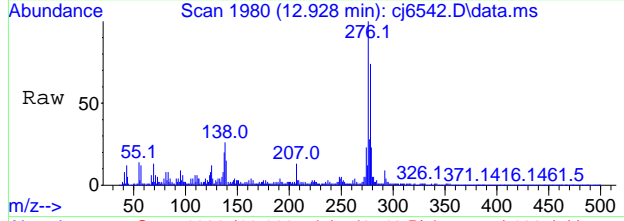
#98  
 Indeno[1,2,3-cd]pyrene  
 Concen: 30.0792 ppm  
 RT: 12.917 min Scan# 1978  
 Delta R.T. 0.011 min  
 Lab File: cj6542.D  
 Acq: 10 May 2024 01:32 am

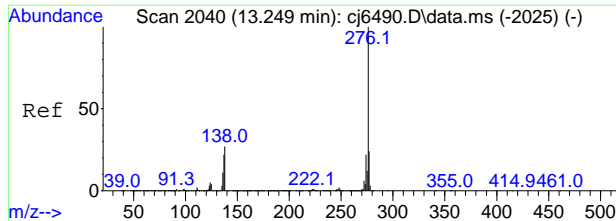
Tgt Ion	Ratio	Lower	Upper
276	100		
138	24.2	0.0	54.2
137	17.9	0.0	47.9



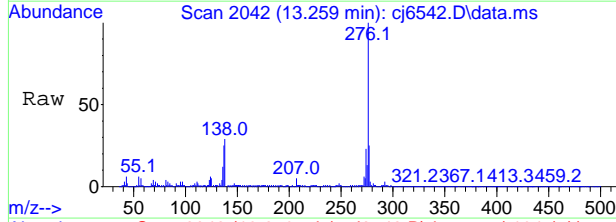
#100  
 Dibenz[a,h]anthracene  
 Concen: 9.4157 ppm  
 RT: 12.928 min Scan# 1980  
 Delta R.T. -0.000 min  
 Lab File: cj6542.D  
 Acq: 10 May 2024 01:32 am

Tgt Ion	Ratio	Lower	Upper
278	100		
139	20.5	0.0	49.8
279	28.8	0.0	54.1



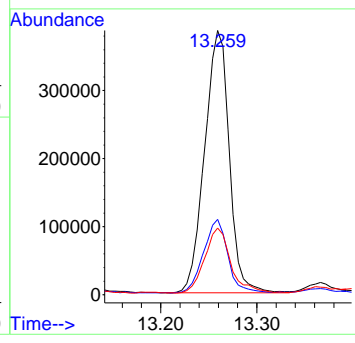
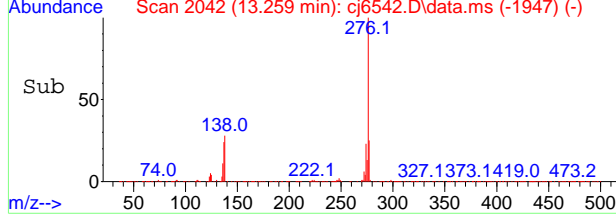


#102  
 Benzo[g,h,i]perylene  
 Concen: 35.4108 ppm  
 RT: 13.259 min Scan# 2042  
 Delta R.T. 0.010 min  
 Lab File: cj6542.D  
 Acq: 10 May 2024 01:32 am



Tgt Ion: 276 Resp: 687385

Ion	Ratio	Lower	Upper
276	100		
138	27.9	0.0	56.7
277	24.7	0.0	54.1



7.1.30  
7

LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6542.D  
Acq On : 10 May 2024 01:32 am  
Operator : rocquans  
Sample : jd87833-15  
Misc : op54460,ecj297,31.7,,,1,1  
ALS Vial : 33 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON  
Sampling : 1  
Start Thrs: 0.02  
Stop Thrs : 0  
Filtering: 5  
Min Area: 1000 Area counts  
Max Peaks: 100  
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

Signal : TIC: cj6542.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.252	353	358	362	rVB	991142	570486	7.83%	0.576%
2	4.429	381	391	396	rVB	2375711	1467697	20.14%	1.483%
3	4.487	399	402	407	rVB	533018	278209	3.82%	0.281%
4	4.664	431	435	440	rVB	2798511	2008678	27.57%	2.029%
5	4.760	446	453	460	rVB	236274	166997	2.29%	0.169%
6	4.824	460	465	470	rVB	332483	225226	3.09%	0.228%
7	5.012	495	500	504	rVB	1848614	1285913	17.65%	1.299%
8	5.472	580	586	591	rVB	3968659	2538913	34.84%	2.565%
9	6.167	710	716	723	rVB	4088955	2496752	34.27%	2.522%
10	6.557	784	789	794	rVB	623495	460786	6.32%	0.465%
11	6.659	800	808	811	rVB	4198822	2825316	38.77%	2.854%
12	6.680	811	812	816	rVB	285422	194572	2.67%	0.197%
13	7.082	876	887	893	rVB	386374	354839	4.87%	0.358%
14	7.274	919	923	927	rVB	1651688	1198181	16.44%	1.210%
15	7.381	939	943	949	rVB3	148335	146170	2.01%	0.148%
16	7.782	1013	1018	1025	rVB2	175804	222046	3.05%	0.224%
17	7.873	1025	1035	1037	rVB	3692653	3047242	41.82%	3.078%
18	7.895	1037	1039	1043	rVB	4227756	2737939	37.58%	2.766%
19	7.937	1043	1047	1050	rVB	1411230	1027553	14.10%	1.038%
20	8.076	1067	1073	1076	rVB	212474	199191	2.73%	0.201%
21	8.322	1113	1119	1122	rVB	494385	485432	6.66%	0.490%
22	8.349	1122	1124	1127	rVB	600285	366371	5.03%	0.370%
23	8.392	1130	1132	1135	rVB	306496	214206	2.94%	0.216%
24	8.424	1135	1138	1148	rVB2	1197851	1345158	18.46%	1.359%
25	8.601	1162	1171	1178	rVB2	399477	655444	9.00%	0.662%
26	8.740	1191	1197	1200	rVB3	128424	163561	2.24%	0.165%
27	8.836	1209	1215	1218	rVB	399075	428579	5.88%	0.433%
28	8.868	1218	1221	1224	rVB	208612	215709	2.96%	0.218%
29	8.911	1227	1229	1235	rVB2	438051	433638	5.95%	0.438%
30	8.991	1235	1244	1250	rVB	7932863	7249969	99.50%	7.323%
31	9.039	1250	1253	1256	rVB2	188607	205662	2.82%	0.208%
32	9.071	1256	1259	1263	rVB	276352	251092	3.45%	0.254%
33	9.125	1263	1269	1276	rVB4	335675	518807	7.12%	0.524%
34	9.205	1276	1284	1290	rVB	6792642	7214029	99.01%	7.287%
35	9.248	1290	1292	1300	rVB2	219077	287006	3.94%	0.290%
36	9.317	1300	1305	1308	rVB	382181	343063	4.71%	0.347%
37	9.355	1308	1312	1318	rVB	3163167	2682919	36.82%	2.710%
38	9.419	1318	1324	1327	rVB2	446325	665677	9.14%	0.672%
39	9.521	1331	1343	1347	rVB	973144	1368158	18.78%	1.382%
40	9.585	1347	1355	1358	rVB	782810	775749	10.65%	0.784%



7.1.31  
7

LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6542.D  
Acq On : 10 May 2024 01:32 am  
Operator : rocquans  
Sample : jd87833-15  
Misc : op54460,ecj297,31.7,,,1,1  
ALS Vial : 33 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON  
Sampling : 1  
Start Thrs: 0.02  
Stop Thrs : 0  
Filtering: 5  
Min Area: 1000 Area counts  
Max Peaks: 100  
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS, zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

Table with 10 columns: Retention Time, Abundance, and Percent Area. Rows 41-85 showing peak data for various compounds.

7.1.31  
7

LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6542.D  
Acq On : 10 May 2024 01:32 am  
Operator : rocquans  
Sample : jd87833-15  
Misc : op54460,ecj297,31.7,,,1,1  
ALS Vial : 33 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON Filtering: 5  
Sampling : 1 Min Area: 1000 Area counts  
Start Thrs: 0.02 Max Peaks: 100  
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

86	12.179	1835	1840	1844	rBV2	182973	298937	4.10%	0.302%
87	12.484	1888	1897	1902	rVB6	109864	237984	3.27%	0.240%
88	12.569	1904	1913	1917	rBV7	108959	202366	2.78%	0.204%
89	12.655	1917	1929	1942	rVB7	184146	892588	12.25%	0.902%
90	12.783	1944	1953	1964	rBV4	365220	826809	11.35%	0.835%
91	12.917	1964	1978	1986	rVB2	1395642	2787531	38.26%	2.816%
92	12.981	1986	1990	1998	rBV2	134718	239430	3.29%	0.242%
93	13.056	1998	2004	2009	rBV2	302567	577501	7.93%	0.583%
94	13.104	2009	2013	2017	rVV4	302111	527969	7.25%	0.533%
95	13.142	2017	2020	2034	rVV5	163652	368875	5.06%	0.373%
96	13.259	2034	2042	2057	rVB	1129737	2151323	29.52%	2.173%
97	13.436	2066	2075	2090	rVB	399272	1125921	15.45%	1.137%
98	13.719	2122	2128	2136	rVB	68520	168807	2.32%	0.171%
99	13.848	2147	2152	2162	rVB5	110339	250083	3.43%	0.253%
100	13.981	2169	2177	2194	rVB5	109847	437477	6.00%	0.442%

Sum of corrected areas: 98999273

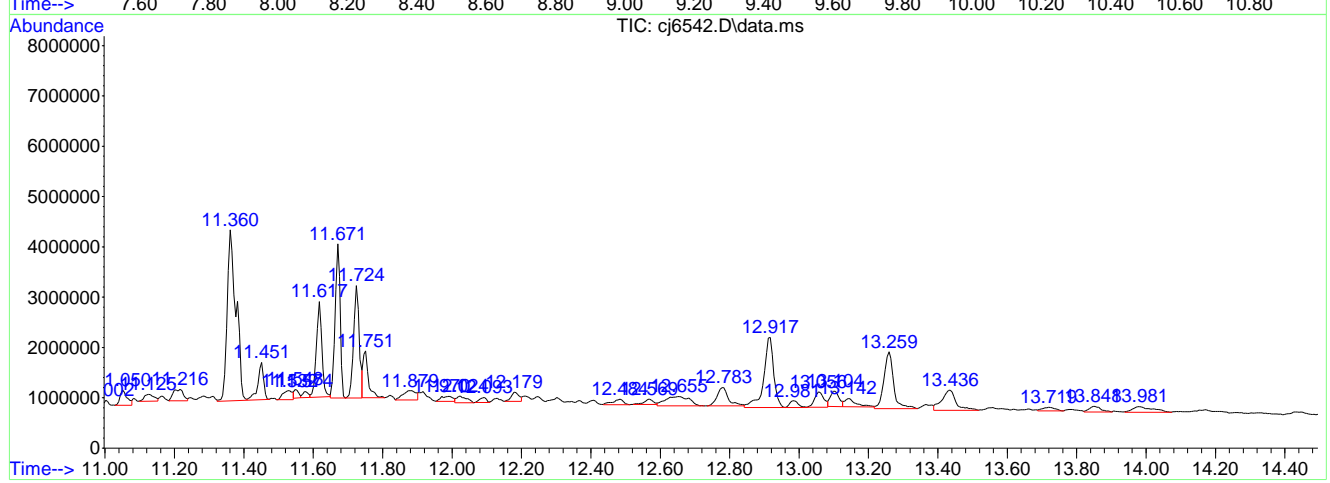
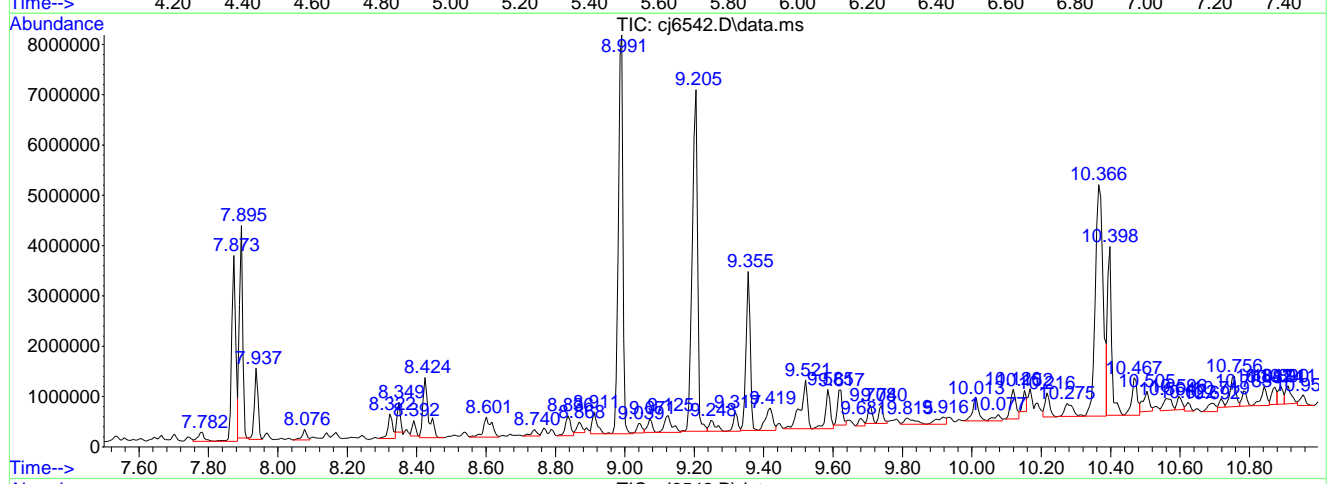
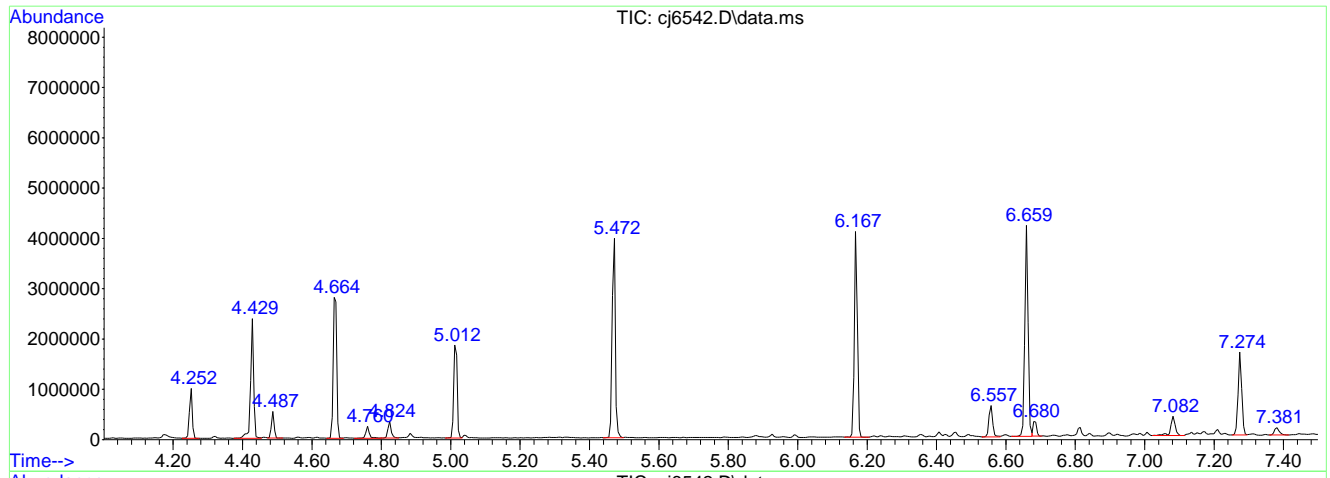
7.1.31  
7

LSC Report - Integrated Chromatogram

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6542.D  
Acq On : 10 May 2024 01:32 am  
Operator : rocquans  
Sample : jd87833-15  
Misc : op54460,ecj297,31.7,,1,1  
ALS Vial : 33 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p



7.1.31  
7





Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6542.D  
Acq On : 10 May 2024 01:32 am  
Operator : rocquans  
Sample : jd87833-15  
Misc : op54460,ecj297,31.7,,,1,1  
ALS Vial : 33 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

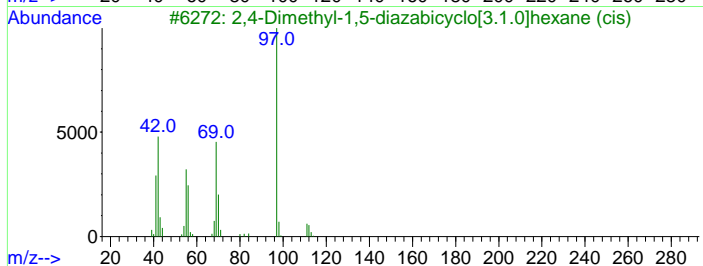
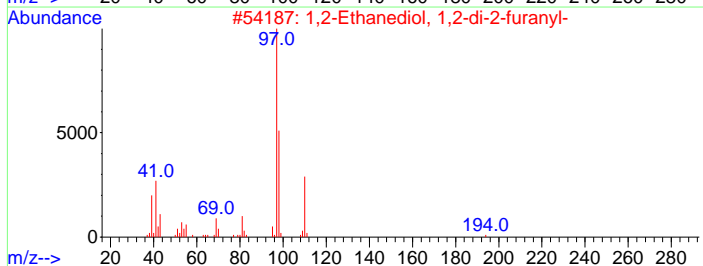
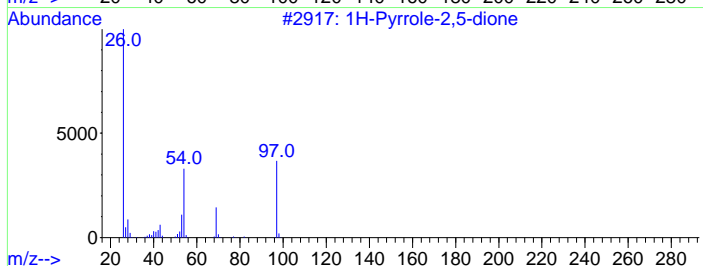
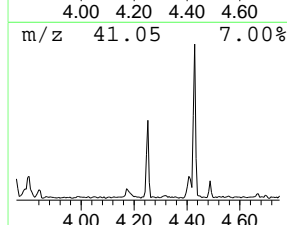
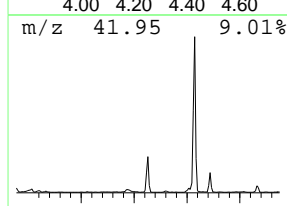
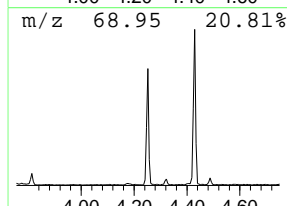
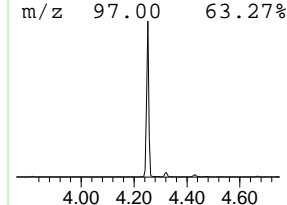
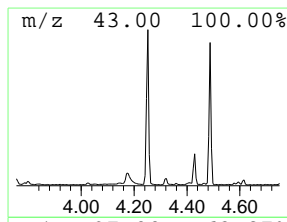
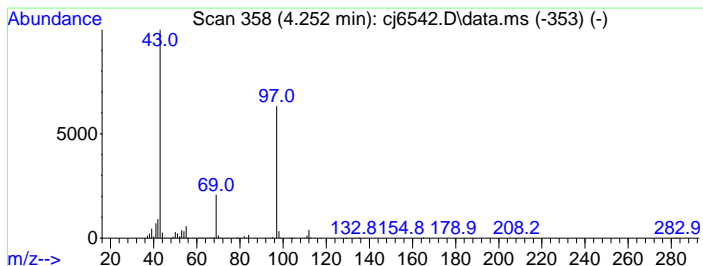
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 1 Unknown Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.252	11.36 ppm	570486	1,4-Dichlorobenzene-d4a	4.669

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			1H-Pyrrole-2,5-dione	97	C4H3NO2	000541-59-3	50
2			1,2-Ethanediol, 1,2-di-2-furanyl-	194	C10H10O4	004464-77-1	28
3			2,4-Dimethyl-1,5-diazabicyclo[3....	112	C6H12N2	100463-01-2	23
4			5-Hexen-2-one	98	C6H10O	000109-49-9	10
5			5-Hexen-2-one	98	C6H10O	000109-49-9	10



7.1.31  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6542.D  
Acq On : 10 May 2024 01:32 am  
Operator : rocquans  
Sample : jd87833-15  
Misc : op54460,ecj297,31.7,,1,1  
ALS Vial : 33 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

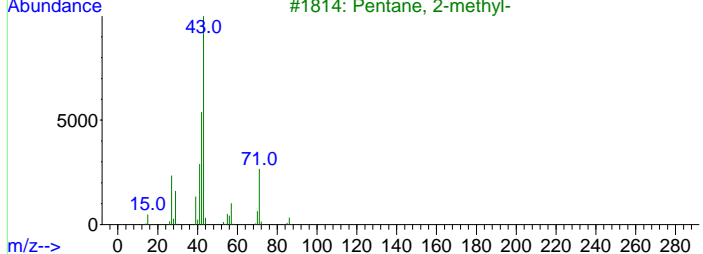
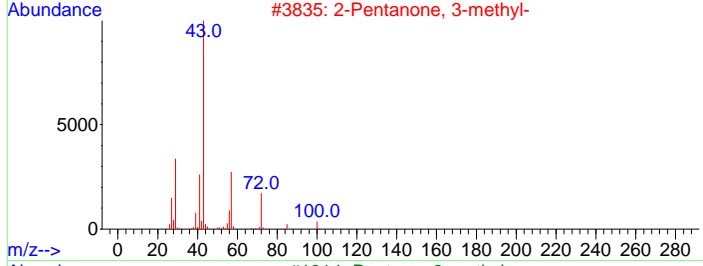
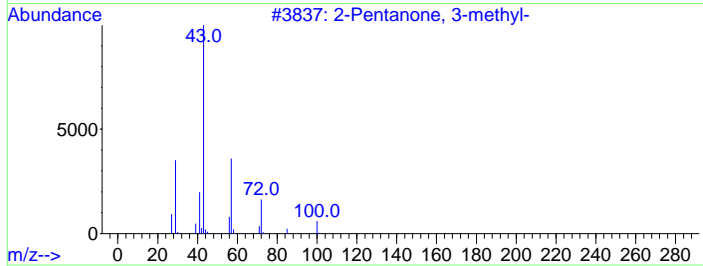
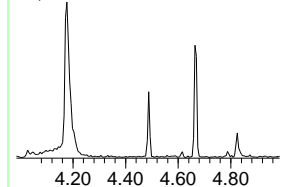
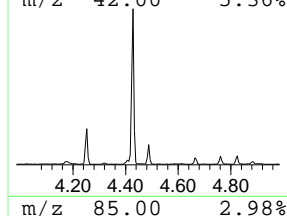
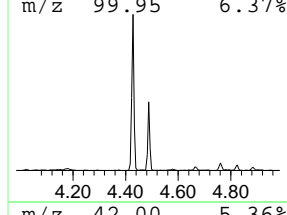
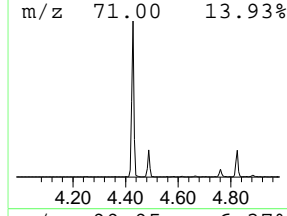
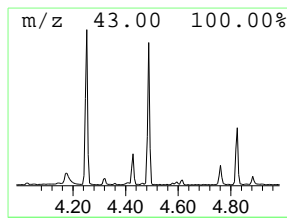
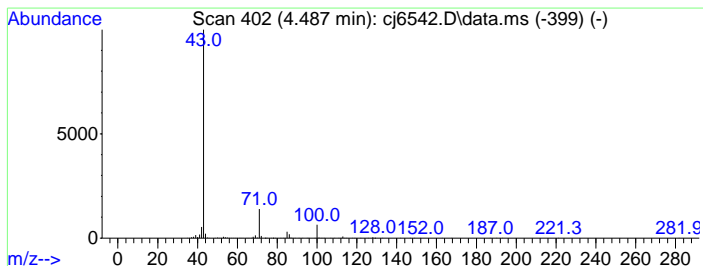
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 2 Unknown Concentration Rank 21

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.487	5.54 ppm	278209	1,4-Dichlorobenzene-d4a	4.669

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2-Pentanone, 3-methyl-	100	C6H12O	000565-61-7	9
2		2-Pentanone, 3-methyl-	100	C6H12O	000565-61-7	9
3		Pentane, 2-methyl-	86	C6H14	000107-83-5	9
4		2-Pentanone, 3-methyl-	100	C6H12O	000565-61-7	7
5		Heptane	100	C7H16	000142-82-5	7



7.1.31  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6542.D  
Acq On : 10 May 2024 01:32 am  
Operator : rocquans  
Sample : jd87833-15  
Misc : op54460,ecj297,31.7,,1,1  
ALS Vial : 33 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

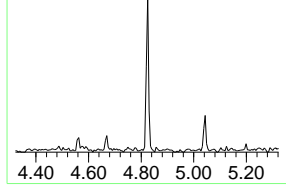
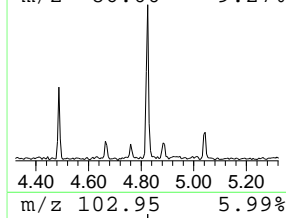
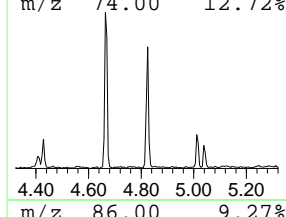
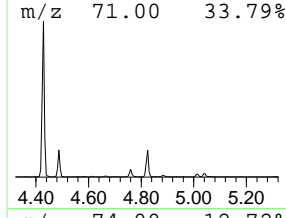
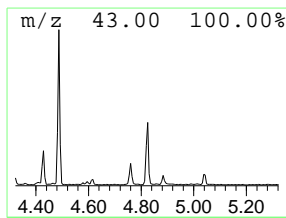
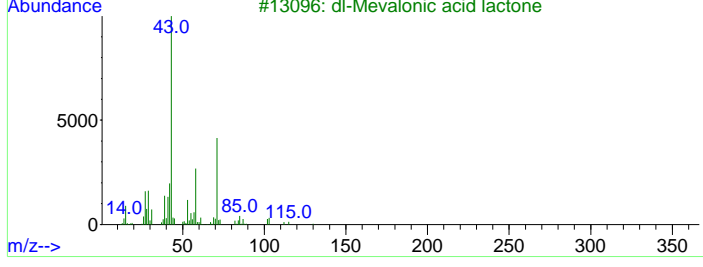
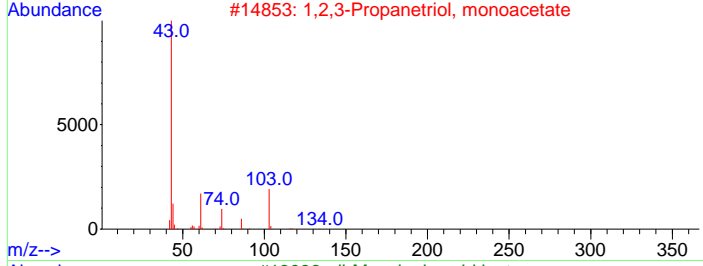
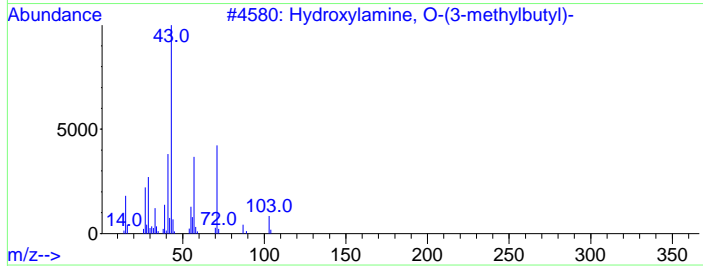
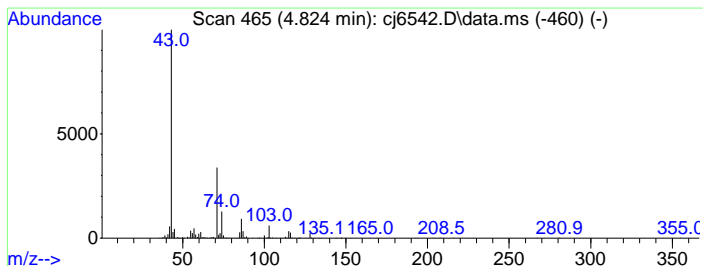
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 3 Unknown Concentration Rank 25

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.824	4.49 ppm	225226	1,4-Dichlorobenzene-d4a	4.669

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Hydroxylamine, O-(3-methylbutyl)-	103	C5H13NO	019411-65-5	47
2		1,2,3-Propanetriol, monoacetate	134	C5H10O4	026446-35-5	32
3		dl-Mevalonic acid lactone	130	C6H10O3	000674-26-0	28
4		2-Propanone, 1-(acetyloxy)-	116	C5H8O3	000592-20-1	27
5		Propanoic acid, 2-methyl-, 2-pro...	128	C7H12O2	015727-77-2	23



7.1.31  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6542.D  
Acq On : 10 May 2024 01:32 am  
Operator : rocquans  
Sample : jd87833-15  
Misc : op54460,ecj297,31.7,,1,1  
ALS Vial : 33 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

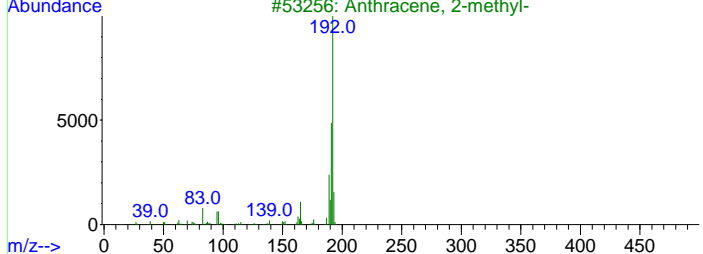
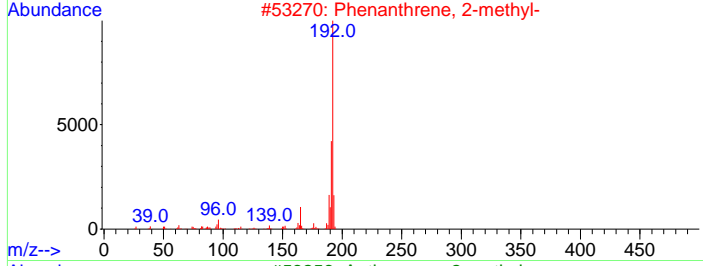
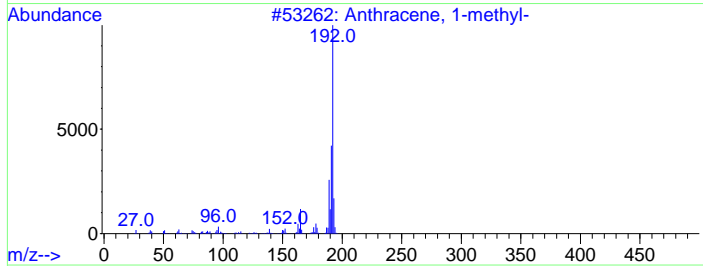
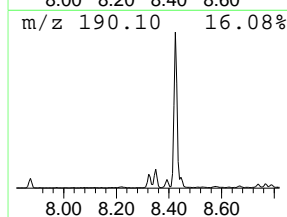
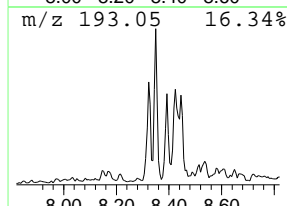
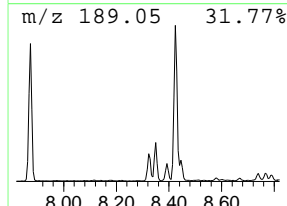
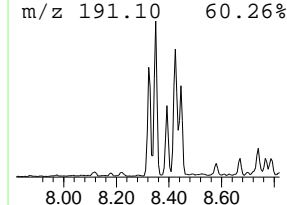
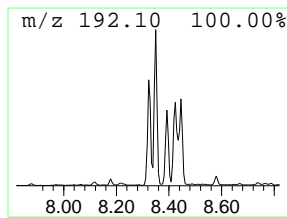
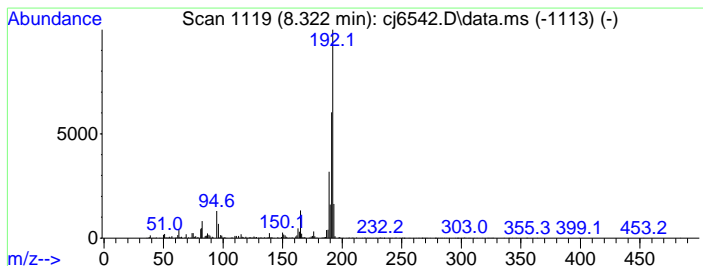
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 4 Anthracene, methyl Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.322	6.37 ppm	485432	Phenanthrene-d10b	7.873

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Anthracene, 1-methyl-	192	C15H12	000610-48-0	95
2		Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	93
3		Anthracene, 2-methyl-	192	C15H12	000613-12-7	93
4		Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	93
5		Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	93



7.1.31  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6542.D  
Acq On : 10 May 2024 01:32 am  
Operator : rocquans  
Sample : jd87833-15  
Misc : op54460,ecj297,31.7,,1,1  
ALS Vial : 33 Sample Multiplier: 1

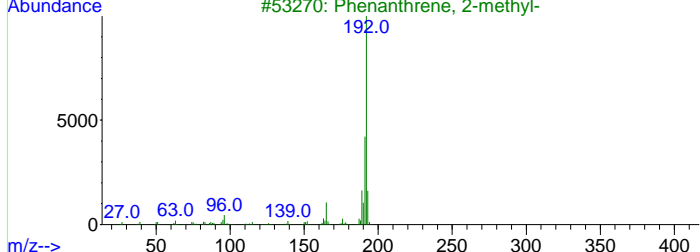
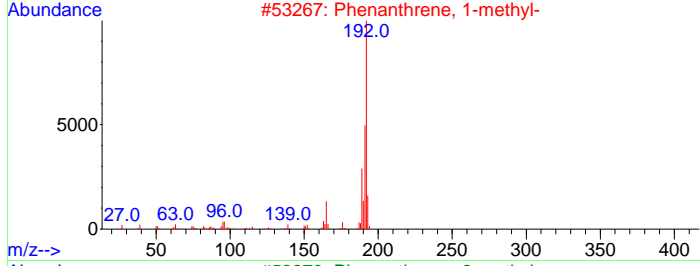
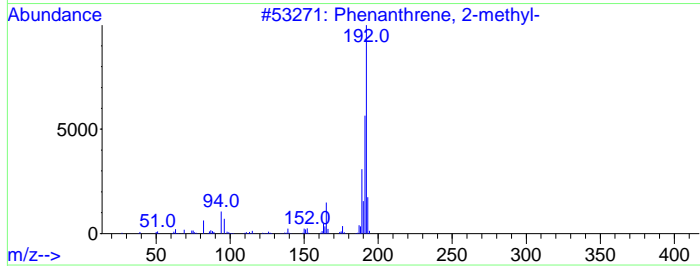
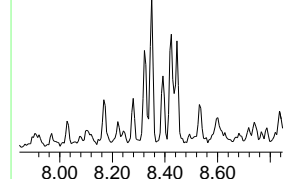
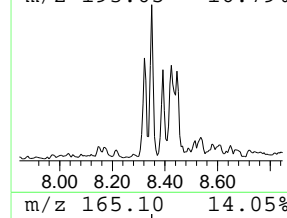
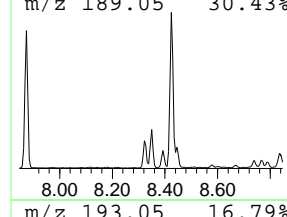
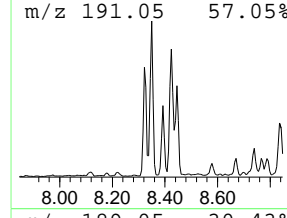
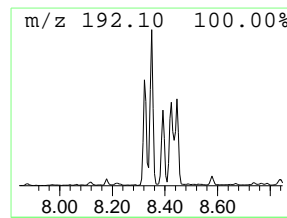
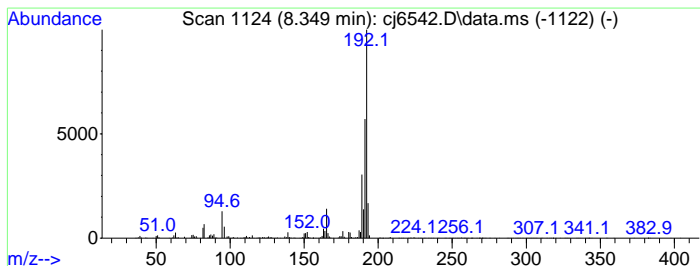
Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 5 Phenanthrene, methyl Concentration Rank 22

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.349	4.81 ppm	366371	Phenanthrene-d10b	7.873

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	98
2		Phenanthrene, 1-methyl-	192	C15H12	000832-69-9	97
3		Phenanthrene, 2-methyl-	192	C15H12	002531-84-2	97
4		Anthracene, 2-methyl-	192	C15H12	000613-12-7	96
5		1H-Cyclopropa[1]phenanthrene,1a,...	192	C15H12	000949-41-7	96



7.1.31  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6542.D  
 Acq On : 10 May 2024 01:32 am  
 Operator : rocquans  
 Sample : jd87833-15  
 Misc : op54460,ecj297,31.7,,,1,1  
 ALS Vial : 33 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

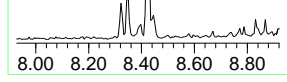
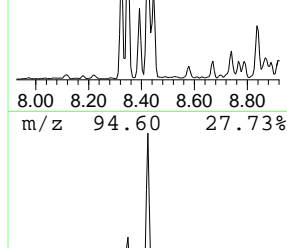
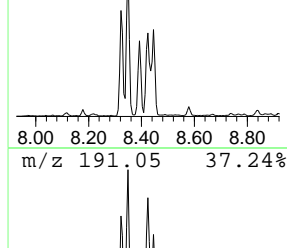
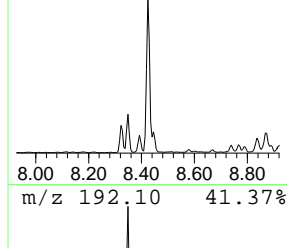
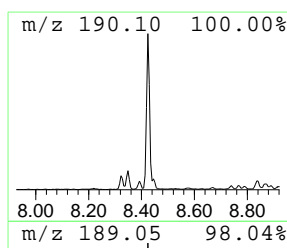
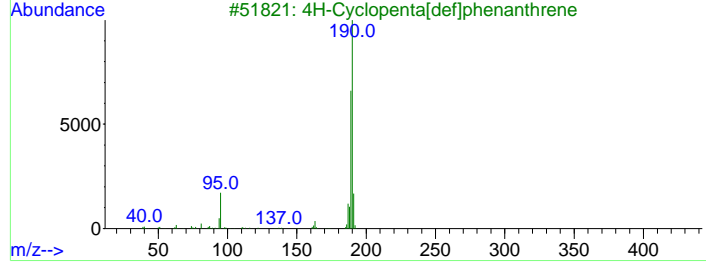
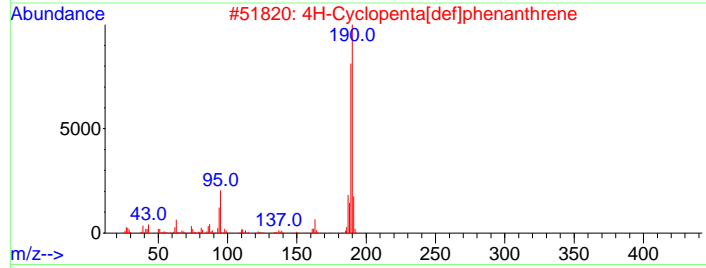
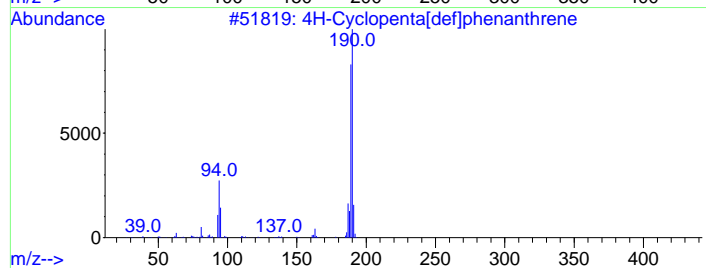
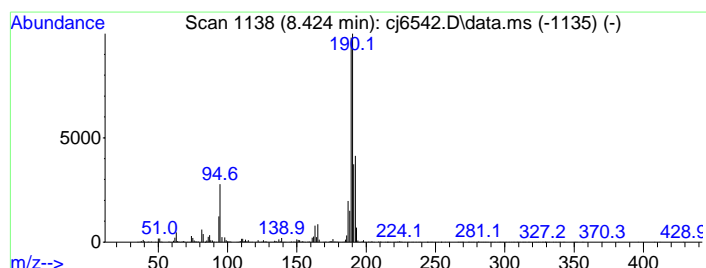
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 6 4H-Cyclopenta[def]phenanthrene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.424	17.66 ppm	1345160	Phenanthrene-d10b	7.873

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	4H-Cyclopenta[def]phenanthrene	190	C15H10	000203-64-5	93
2		4H-Cyclopenta[def]phenanthrene	190	C15H10	000203-64-5	64
3		4H-Cyclopenta[def]phenanthrene	190	C15H10	000203-64-5	50
4		2,2'-Bis(4,5-dimethylimidazole)	190	C10H14N4	069286-06-2	37
5		Carbonic acid, ethyl 2-formyl-4,...	262	C10H8Cl2O4	1000331-34-4	17



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6542.D  
Acq On : 10 May 2024 01:32 am  
Operator : rocquans  
Sample : jd87833-15  
Misc : op54460,ecj297,31.7,,1,1  
ALS Vial : 33 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

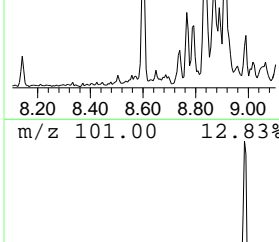
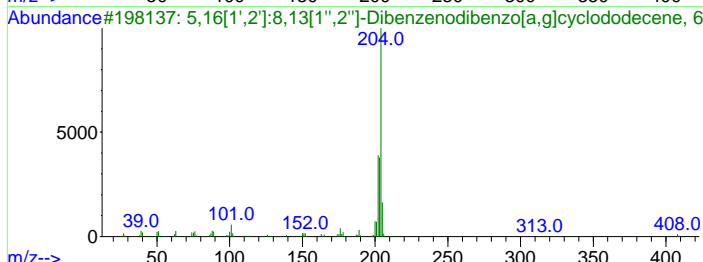
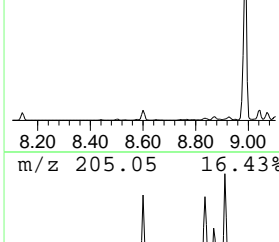
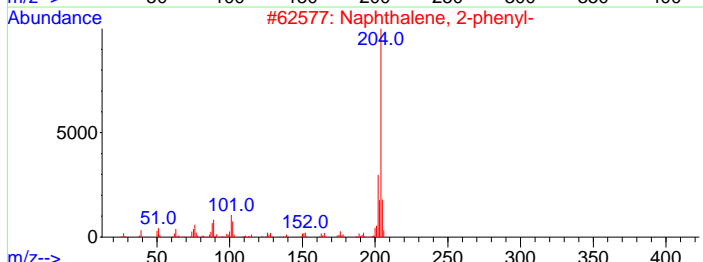
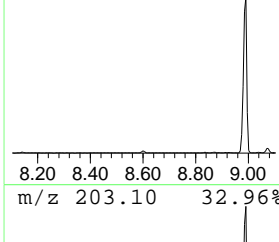
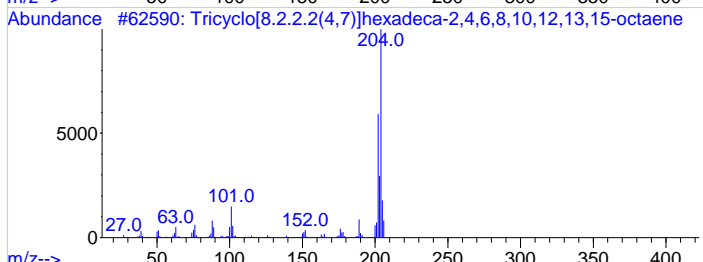
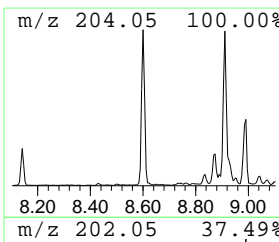
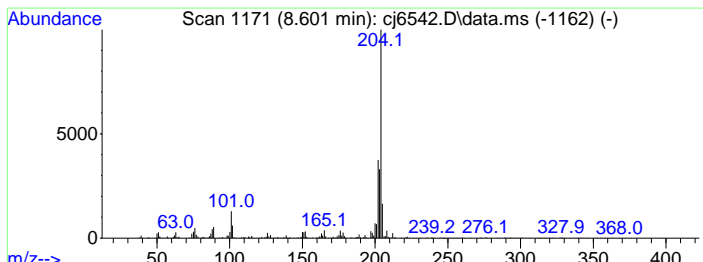
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 7 Unknown Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.601	8.60 ppm	655444	Phenanthrene-d10b	7.873

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Tricyclo[8.2.2.2(4,7)]hexadeca-2...	204	C16H12	006572-60-7	90
2		Naphthalene, 2-phenyl-	204	C16H12	000612-94-2	89
3		5,16[1',2']:8,13[1'',2'']-Dibenz...	408	C32H24	005672-97-9	87
4		Naphthalene, 2-phenyl-	204	C16H12	000612-94-2	76
5		Naphthalene, 2-phenyl-	204	C16H12	000612-94-2	74



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6542.D  
 Acq On : 10 May 2024 01:32 am  
 Operator : rocquans  
 Sample : jd87833-15  
 Misc : op54460,ecj297,31.7,,1,1  
 ALS Vial : 33 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

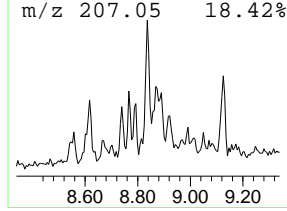
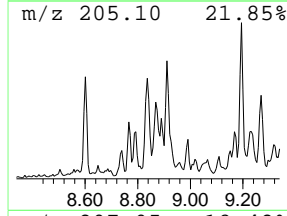
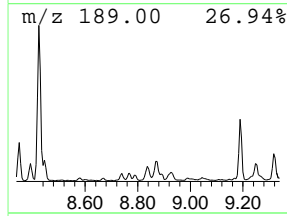
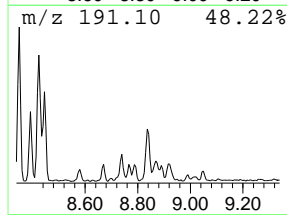
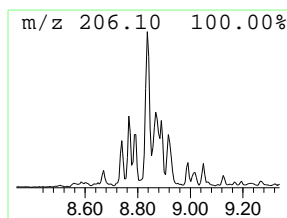
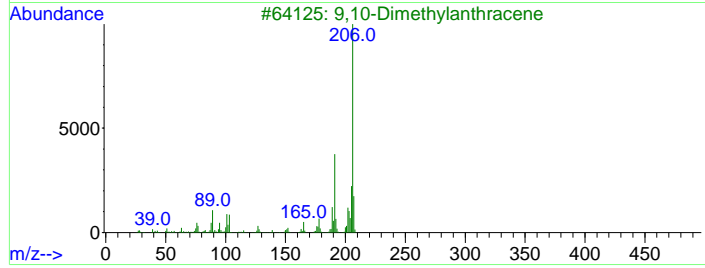
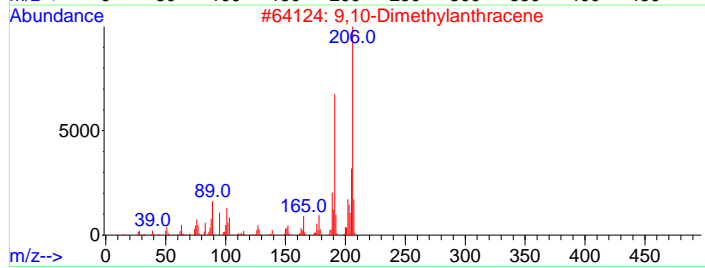
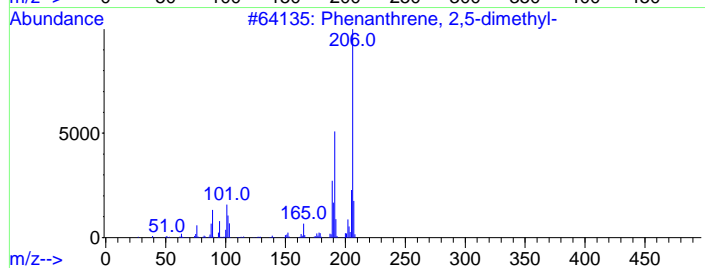
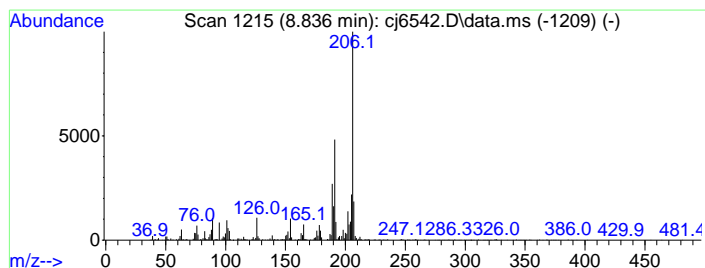
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 8 Phenanthrene, dimethyl Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.836	5.63 ppm	428579	Phenanthrene-d10b	7.873

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Phenanthrene, 2,5-dimethyl-	206	C16H14	003674-66-6	98
2		9,10-Dimethylanthracene	206	C16H14	000781-43-1	93
3		9,10-Dimethylanthracene	206	C16H14	000781-43-1	93
4		Phenanthrene, 3,6-dimethyl-	206	C16H14	001576-67-6	93
5		Anthracene, 1,4-dimethyl-	206	C16H14	000781-92-0	92



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6542.D  
Acq On : 10 May 2024 01:32 am  
Operator : rocquans  
Sample : jd87833-15  
Misc : op54460,ecj297,31.7,,1,1  
ALS Vial : 33 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

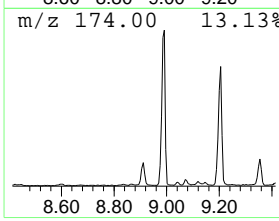
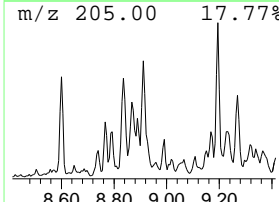
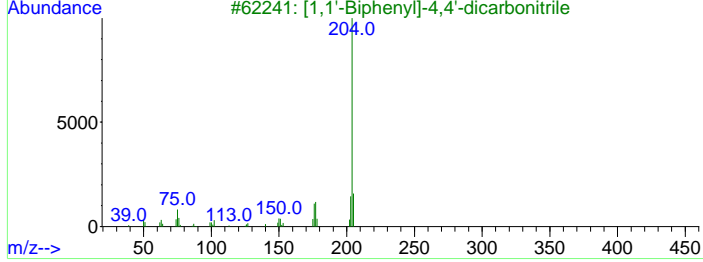
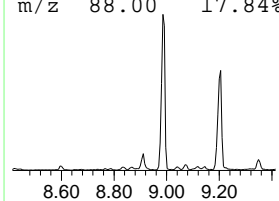
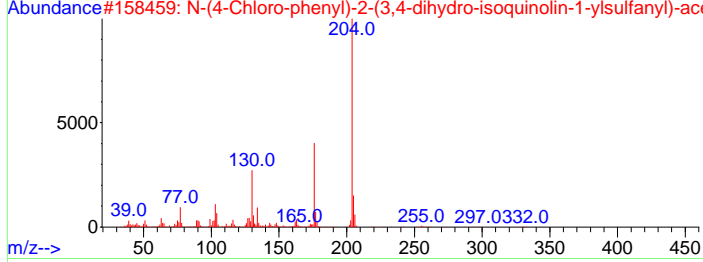
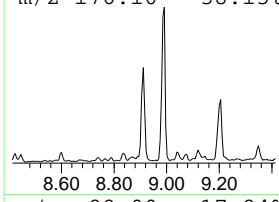
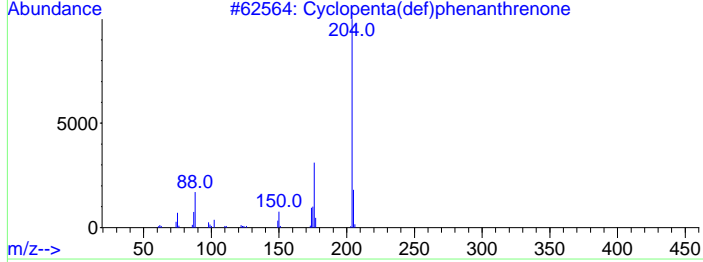
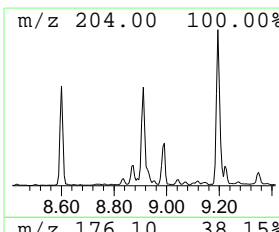
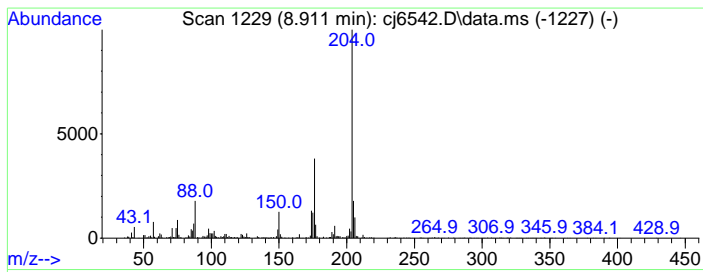
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 9 Unknown Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.911	5.69 ppm	433638	Phenanthrene-d10b	7.873

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Cyclopenta(def)phenanthrenone	204	C15H8O	005737-13-3	96
2		N-(4-Chloro-phenyl)-2-(3,4-dihyd...	330	C17H15ClN2OS	1000296-34-3	59
3		[1,1'-Biphenyl]-4,4'-dicarbonitrile	204	C14H8N2	001591-30-6	52
4		1,2,4,8-Tetramethylbicyclo[6.3.0...	204	C15H24	137235-51-9	45
5		[1,1'-Biphenyl]-4,4'-dicarbonitrile	204	C14H8N2	001591-30-6	43



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6542.D  
Acq On : 10 May 2024 01:32 am  
Operator : rocquans  
Sample : jd87833-15  
Misc : op54460,ecj297,31.7,,1,1  
ALS Vial : 33 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

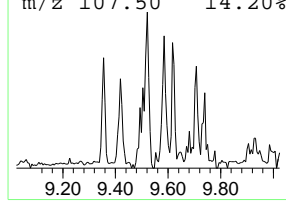
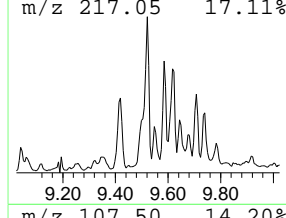
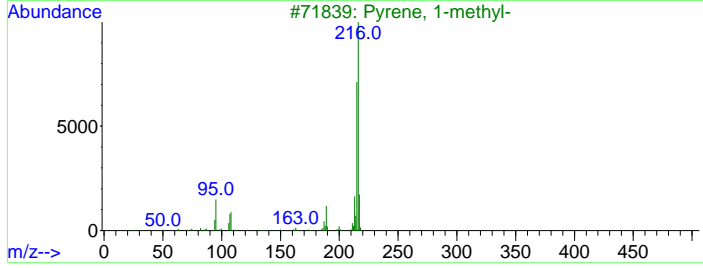
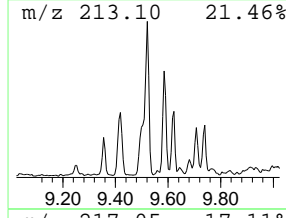
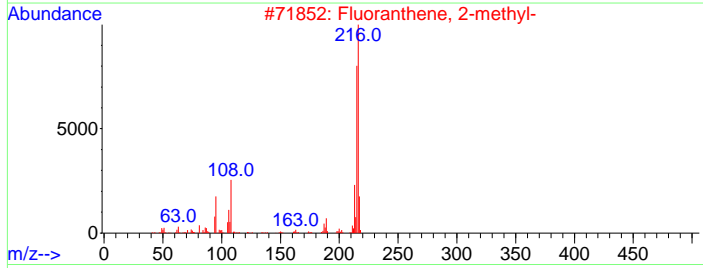
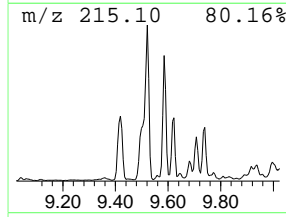
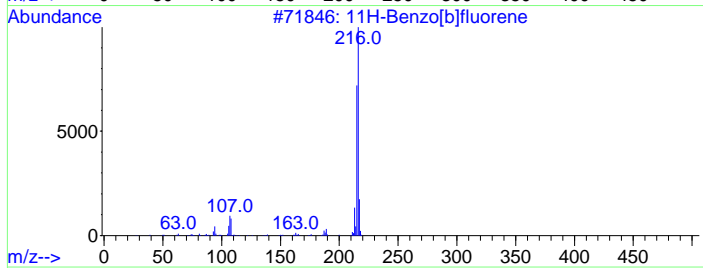
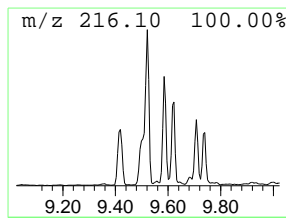
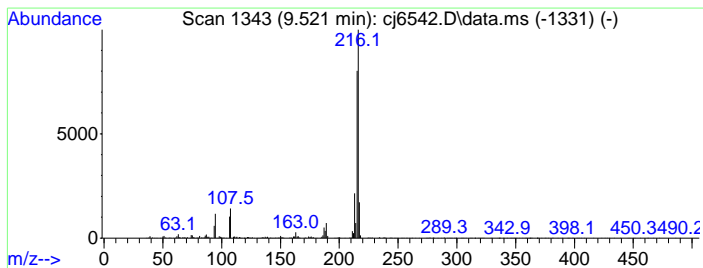
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 10 Fluoranthene, methyl Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.521	7.51 ppm	1368160	Chrysene-d12	10.371

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			11H-Benzo[b]fluorene	216	C17H12	000243-17-4	95
2			Fluoranthene, 2-methyl-	216	C17H12	033543-31-6	94
3			Pyrene, 1-methyl-	216	C17H12	002381-21-7	94
4			Pyrene, 2-methyl-	216	C17H12	003442-78-2	93
5			11H-Benzo[b]fluorene	216	C17H12	000243-17-4	91



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6542.D  
Acq On : 10 May 2024 01:32 am  
Operator : rocquans  
Sample : jd87833-15  
Misc : op54460,ecj297,31.7,,1,1  
ALS Vial : 33 Sample Multiplier: 1

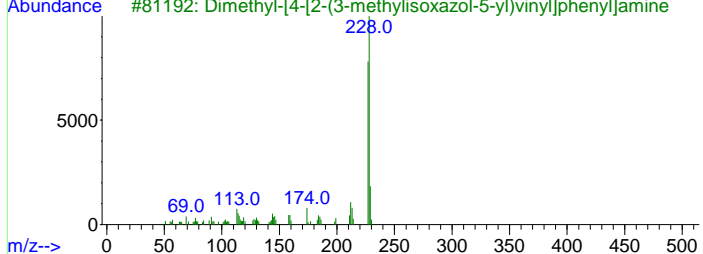
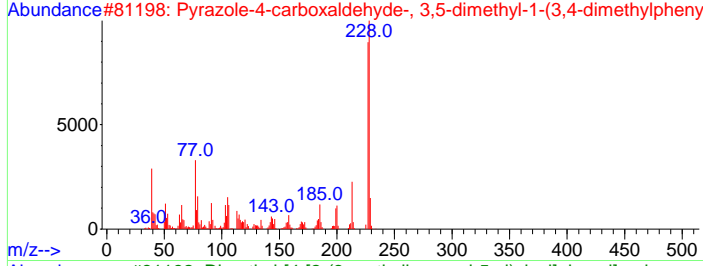
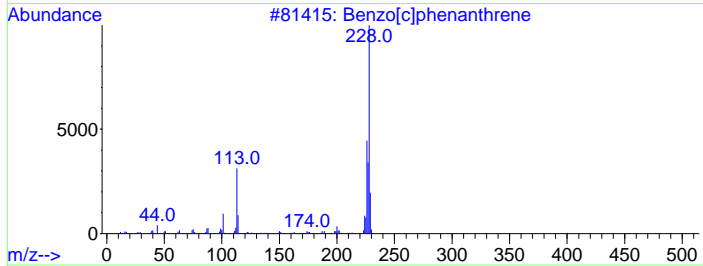
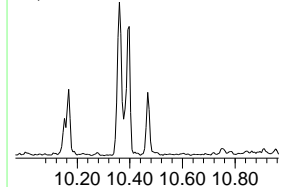
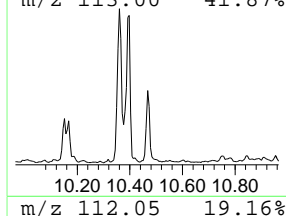
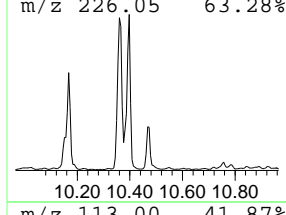
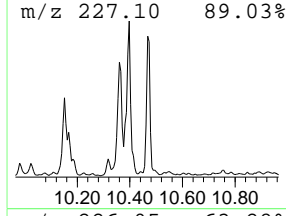
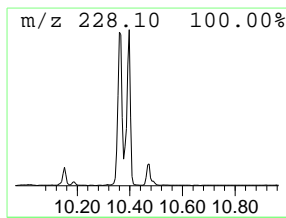
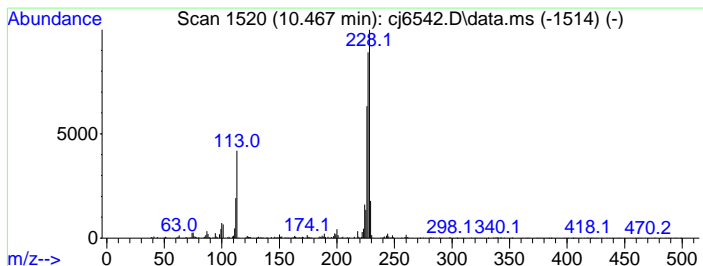
Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 11 Unknown Concentration Rank 23

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.467	4.66 ppm	849615	Chrysene-d12a	10.371

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Benzo[c]phenanthrene	228	C18H12	000195-19-7	49
2			Pyrazole-4-carboxaldehyde-, 3,5-...	228	C14H16N2O	1000272-54-8	43
3			Dimethyl-[4-[2-(3-methylisoxazol...	228	C14H16N2O	1000306-39-6	43
4			Cyclopenta(cd)pyrene, 3,4-dihydro-	228	C18H12	025732-74-5	43
5			1,3,5-Triazine-2(1H)-thione, 4-(...	227	C9H17N5S	023613-02-7	38



7.1.31  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6542.D  
Acq On : 10 May 2024 01:32 am  
Operator : rocquans  
Sample : jd87833-15  
Misc : op54460,ecj297,31.7,,1,1  
ALS Vial : 33 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

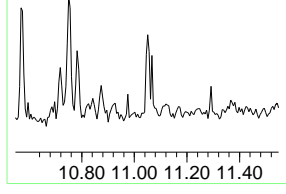
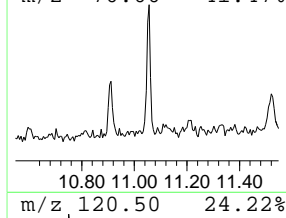
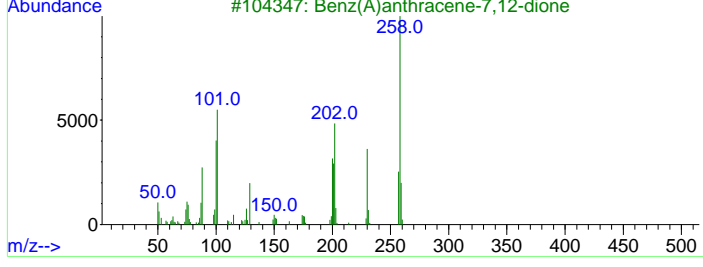
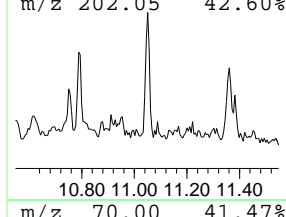
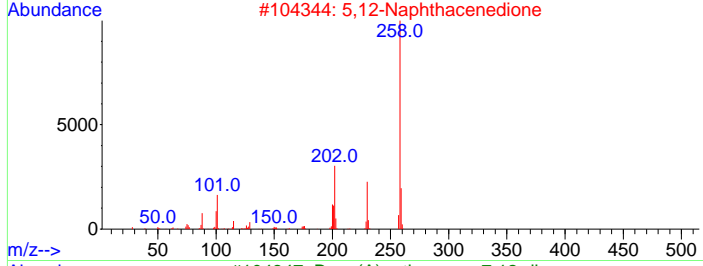
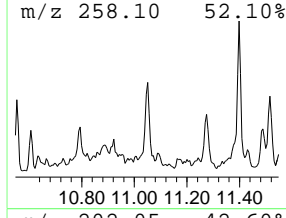
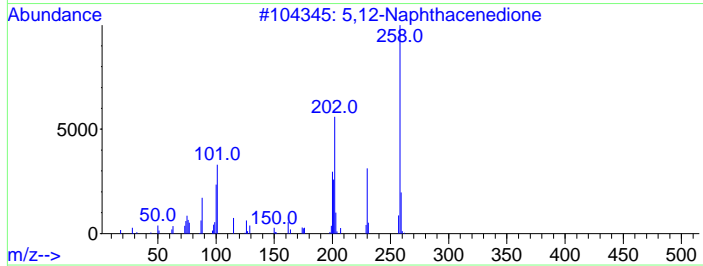
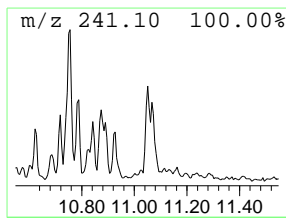
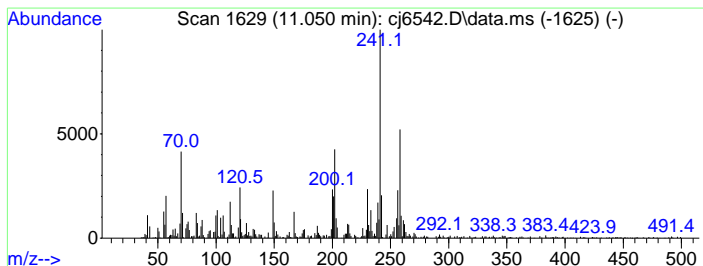
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 12 Unknown Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.050	6.78 ppm	435480	Perylene-d12	11.724

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			5,12-Naphthacenedione	258	C18H10O2	001090-13-7	84
2			5,12-Naphthacenedione	258	C18H10O2	001090-13-7	64
3			Benz(A)anthracene-7,12-dione	258	C18H10O2	002498-66-0	42
4			Phenol, 4,4'-(1-methylethylidene...	256	C17H20O2	000079-97-0	38
5			Benzene, 1,1'-(1-methylethyliden...	256	C17H20O2	001568-83-8	38



7.1.31  
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Library Search Compound Report

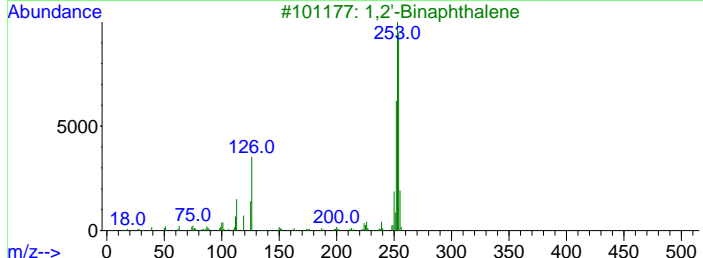
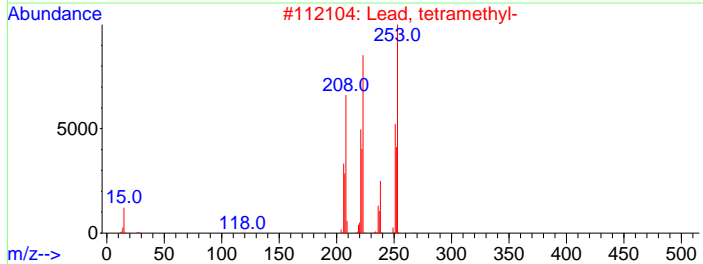
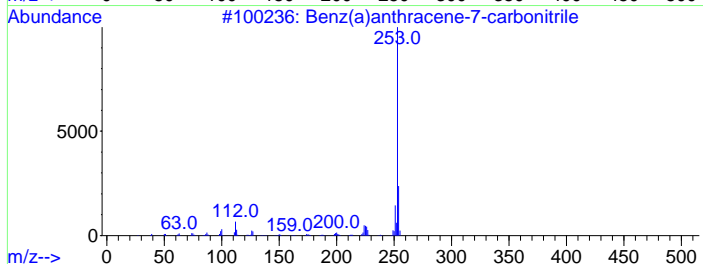
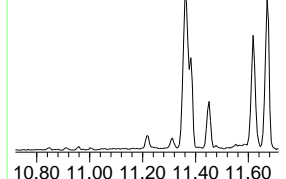
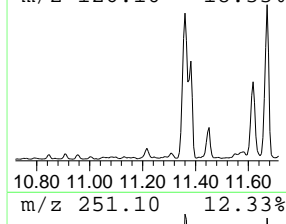
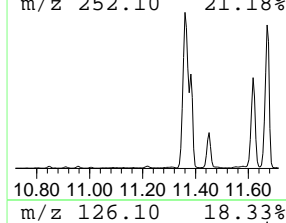
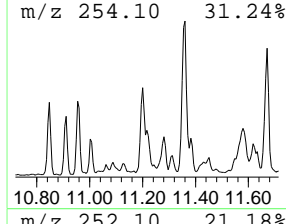
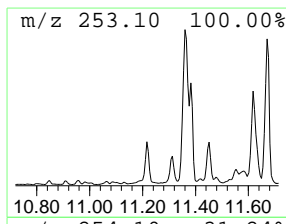
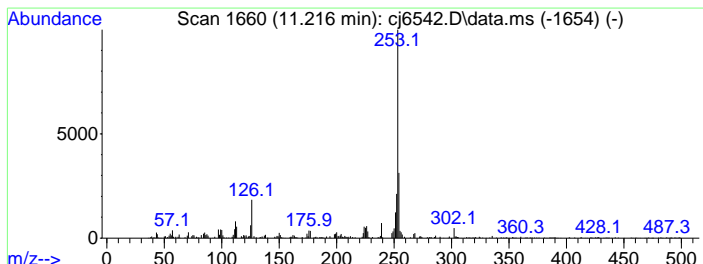
Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\
Data File : cj6542.D
Acq On : 10 May 2024 01:32 am
Operator : rocquans
Sample : jd87833-15
Misc : op54460,ecj297,31.7,,1,1
ALS Vial : 33 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: lscint.p

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Peak Number 13 Unknown Concentration Rank 13

Table with 7 columns: R.T., EstConc, Area, Relative to ISTD, R.T., Hit# of 5, Tentative ID, MW, MolForm, CAS#, Qual. Row 1: 11.216, 7.38 ppm, 474113, Perylene-d12, 11.724.



7.1.31
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6542.D  
Acq On : 10 May 2024 01:32 am  
Operator : rocquans  
Sample : jd87833-15  
Misc : op54460,ecj297,31.7,,,1,1  
ALS Vial : 33 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

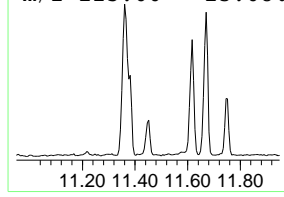
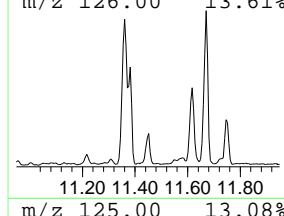
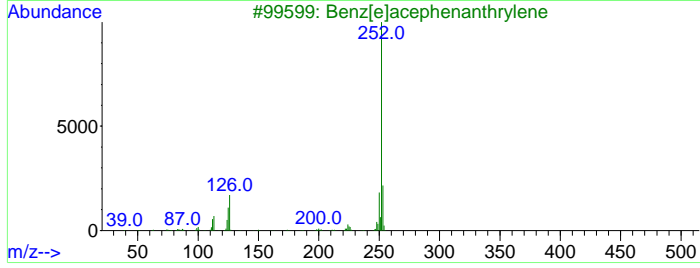
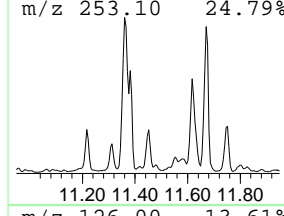
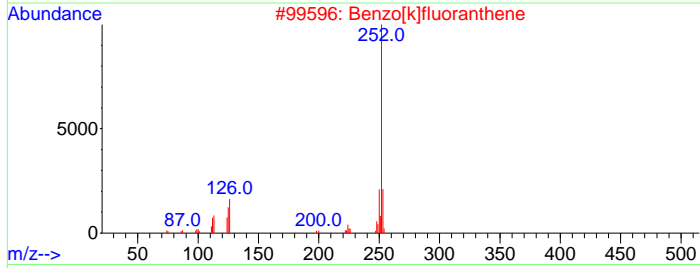
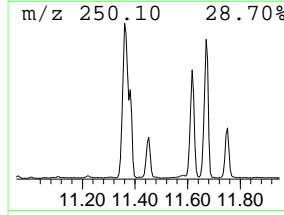
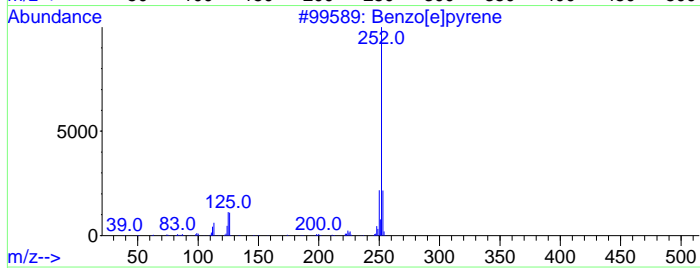
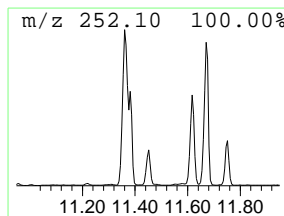
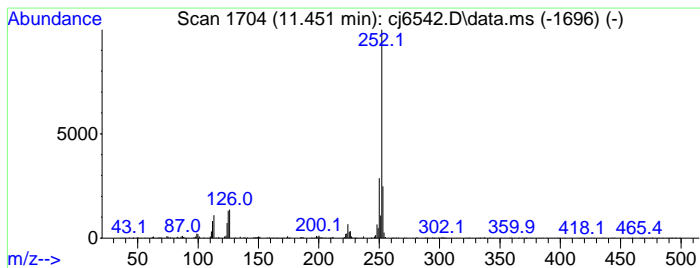
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 14 Unknown PHA Substance Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.451	13.27 ppm	852660	Perylene-d12	11.724

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Benzo[e]pyrene	252	C20H12	000192-97-2	98
2			Benzo[k]fluoranthene	252	C20H12	000207-08-9	96
3			Benz[e]acephenanthrylene	252	C20H12	000205-99-2	95
4			Benzo[k]fluoranthene	252	C20H12	000207-08-9	93
5			Benzo[e]pyrene	252	C20H12	000192-97-2	93



7.1.31  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6542.D  
Acq On : 10 May 2024 01:32 am  
Operator : rocquans  
Sample : jd87833-15  
Misc : op54460,ecj297,31.7,,,1,1  
ALS Vial : 33 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

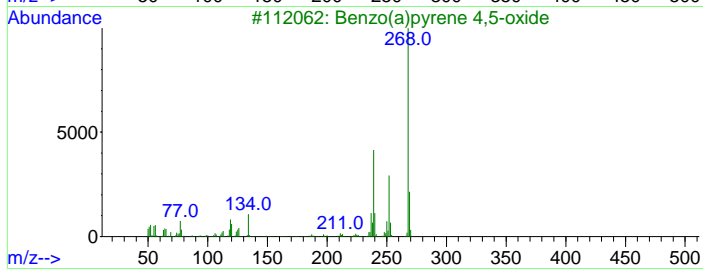
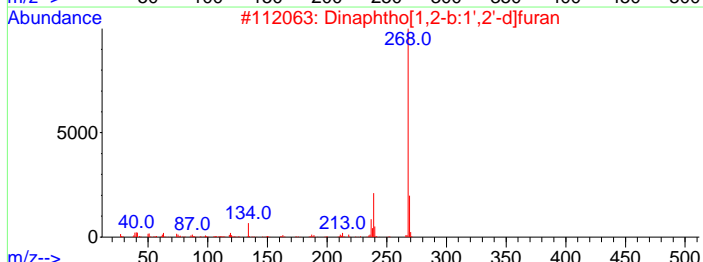
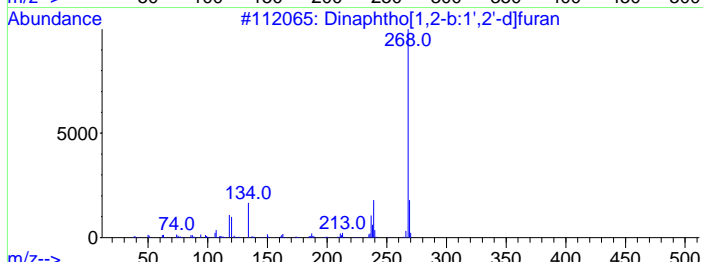
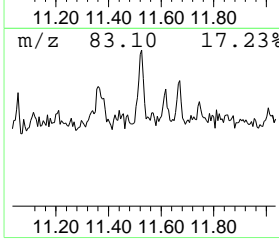
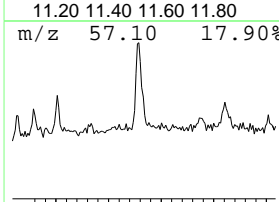
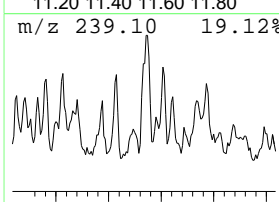
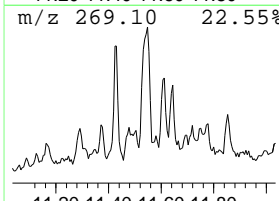
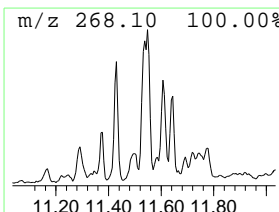
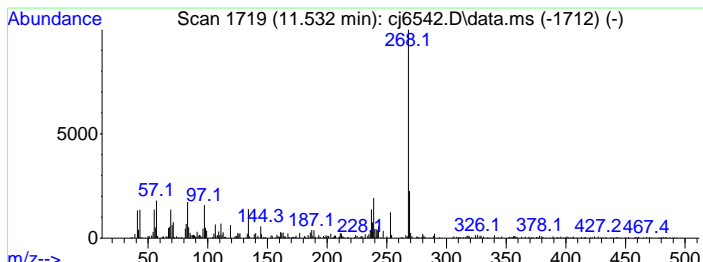
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 15 Unknown Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.532	5.66 ppm	363283	Perylene-d12	11.724

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Dinaphtho[1,2-b:1',2'-d]furan	268	C20H12O	000207-93-2	93
2		Dinaphtho[1,2-b:1',2'-d]furan	268	C20H12O	000207-93-2	87
3		Benzo(a)pyrene 4,5-oxide	268	C20H12O	037574-47-3	74
4		Benzo(a)pyren-7-ol	268	C20H12O	037994-82-4	62
5		Dinaphtho[2,1-b:1',2'-d]furan	268	C20H12O	000194-63-8	58



7.1.31  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6542.D  
Acq On : 10 May 2024 01:32 am  
Operator : rocquans  
Sample : jd87833-15  
Misc : op54460,ecj297,31.7,,,1,1  
ALS Vial : 33 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

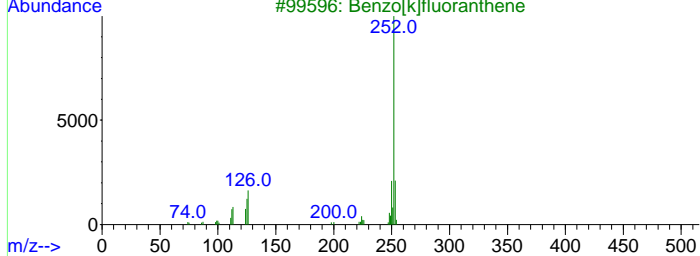
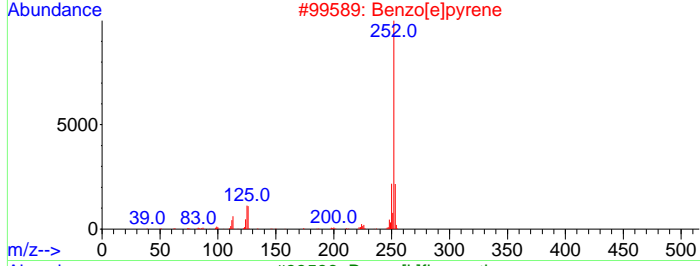
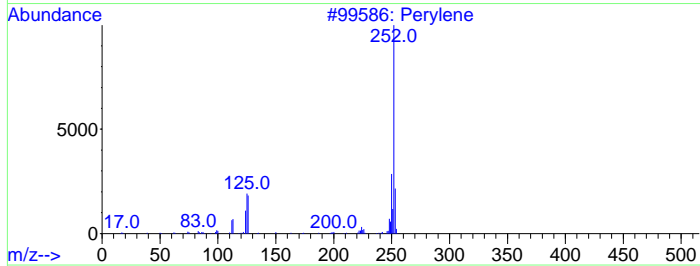
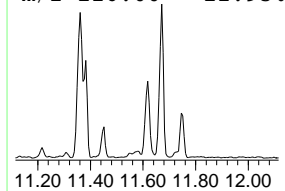
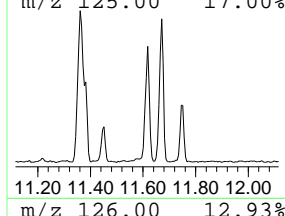
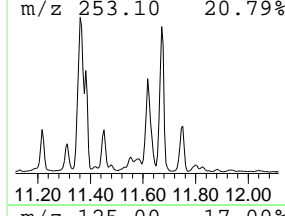
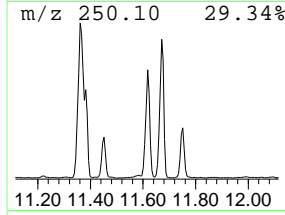
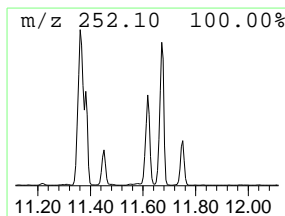
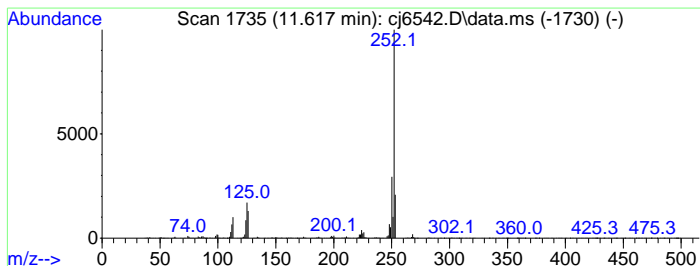
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 16 Unknown PHA Substance Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.617	32.67 ppm	2098500	Perylene-d12	11.724

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Perylene	252	C20H12	000198-55-0	98
2		Benzo[e]pyrene	252	C20H12	000192-97-2	98
3		Benzo[k]fluoranthene	252	C20H12	000207-08-9	98
4		Perylene	252	C20H12	000198-55-0	96
5		Benz[e]acephenanthrylene	252	C20H12	000205-99-2	94



7.1.31  
7



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6542.D  
Acq On : 10 May 2024 01:32 am  
Operator : rocquans  
Sample : jd87833-15  
Misc : op54460,ecj297,31.7,,1,1  
ALS Vial : 33 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

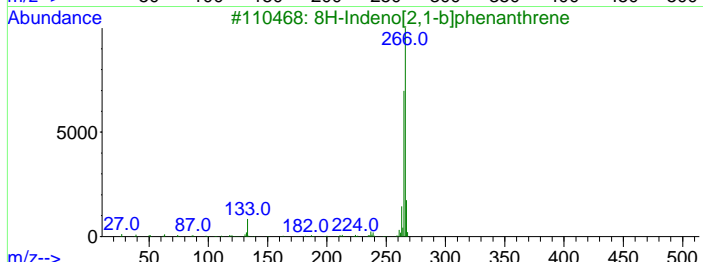
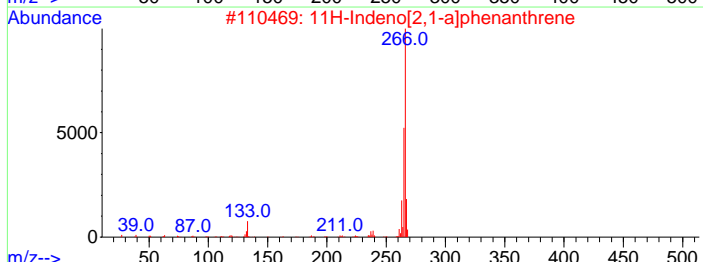
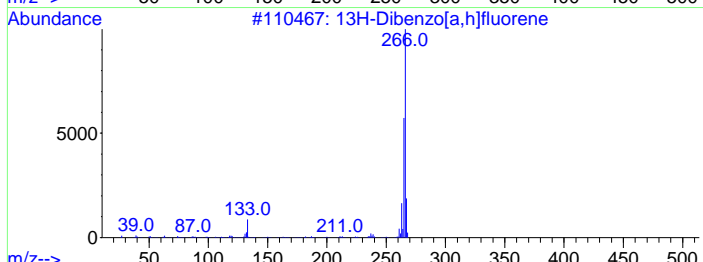
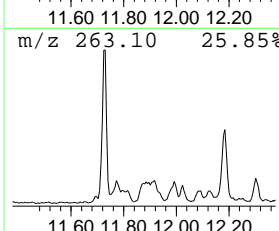
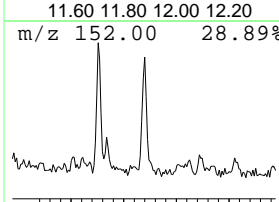
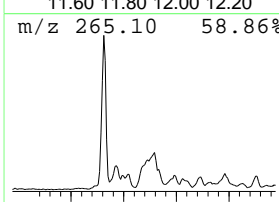
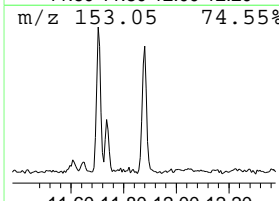
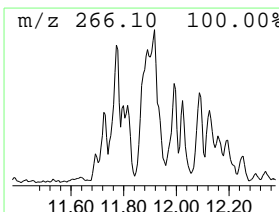
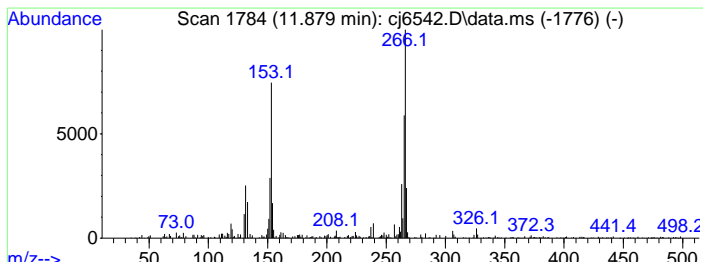
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 17 Unknown Concentration Rank 11

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.879	7.62 ppm	489636	Perylene-d12	11.724

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			13H-Dibenzo[a,h]fluorene	266	C21H14	000239-85-0	50
2			11H-Indeno[2,1-a]phenanthrene	266	C21H14	000220-97-3	45
3			8H-Indeno[2,1-b]phenanthrene	266	C21H14	000241-28-1	43
4			Perylene, 3-methyl-	266	C21H14	024471-47-4	38
5			4H-1-Benzopyran-4-one, 3-hydroxy...	266	C17H14O3	078396-37-9	35



7.1.31  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6542.D  
 Acq On : 10 May 2024 01:32 am  
 Operator : rocquans  
 Sample : jd87833-15  
 Misc : op54460,ecj297,31.7,,,1,1  
 ALS Vial : 33 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

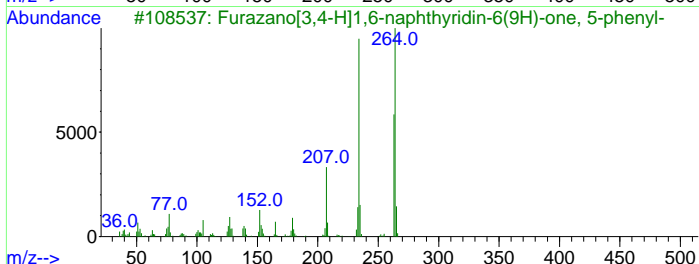
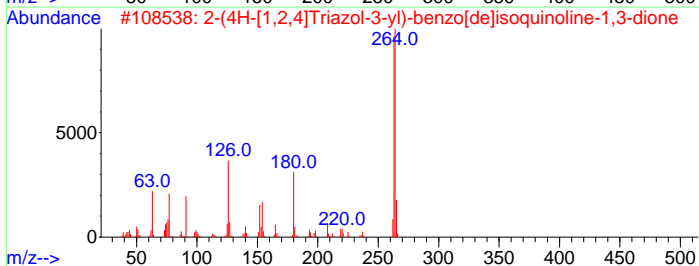
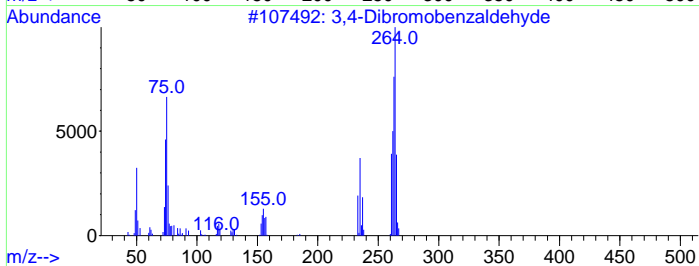
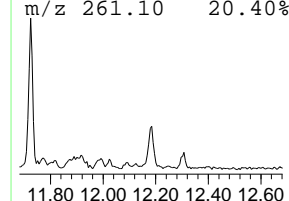
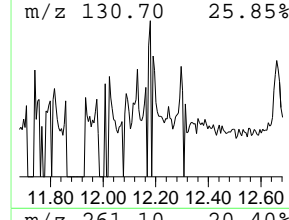
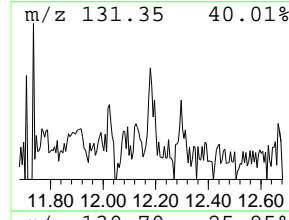
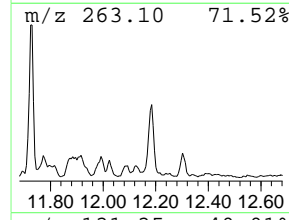
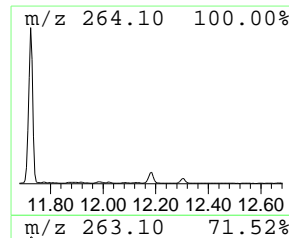
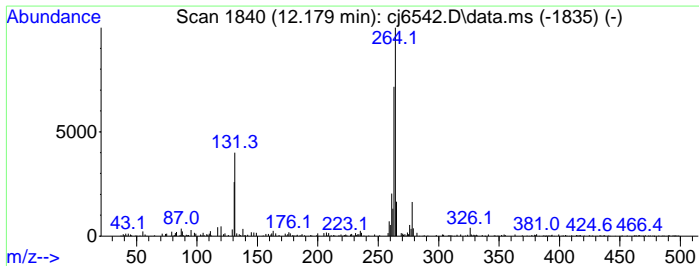
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 18 Unknown Concentration Rank 24

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.179	4.65 ppm	298937	Perylene-d12	11.724

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	3,4-Dibromobenzaldehyde	262	C7H4Br2O	074003-55-7	52
2		2-(4H-[1,2,4]Triazol-3-yl)-benzo...	264	C14H8N4O2	1000318-09-6	47
3		Furazano[3,4-H]1,6-naphthyridin-...	264	C14H8N4O2	296245-19-7	43
4		Boroxin, ethyldiphenyl-	264	C14H15B3O3	1000151-82-0	36
5		7,9-Diamino-5,6,8,10-tetraaza-be...	264	C13H8N6O	052559-29-2	27



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6542.D  
Acq On : 10 May 2024 01:32 am  
Operator : rocquans  
Sample : jd87833-15  
Misc : op54460,ecj297,31.7,,1,1  
ALS Vial : 33 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

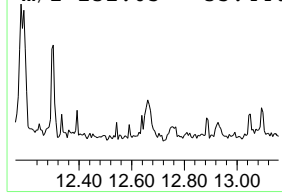
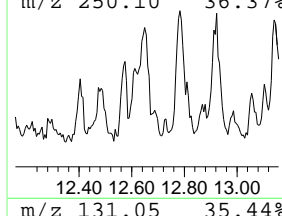
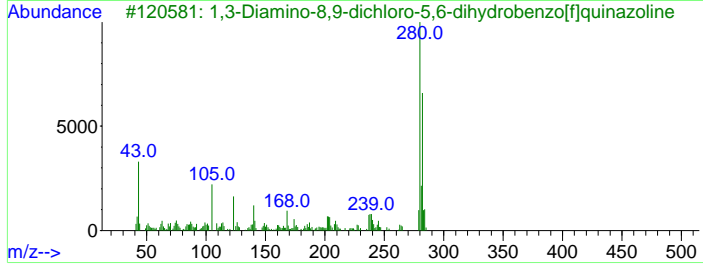
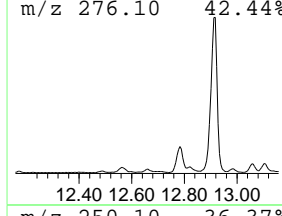
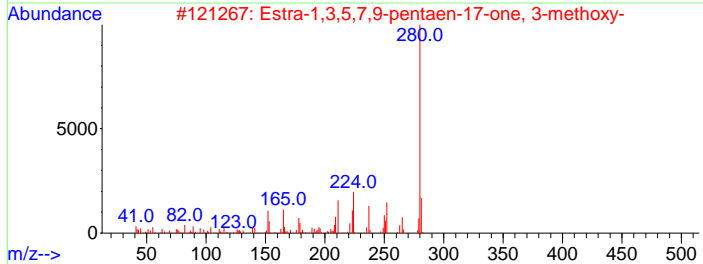
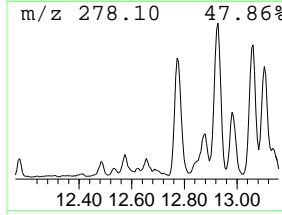
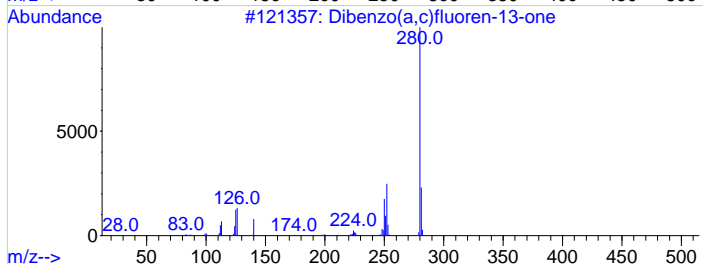
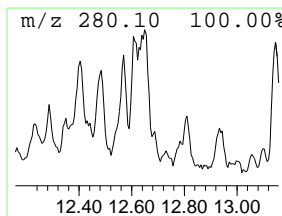
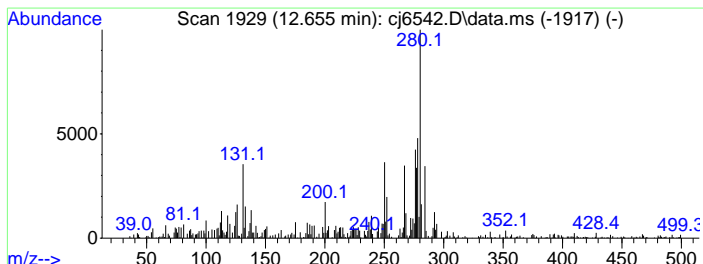
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 19 Unknown Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.655	13.90 ppm	892588	Perylene-d12	11.724

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Dibenzo(a,c)fluoren-13-one	280	C21H12O	063041-47-4	41
2			Estra-1,3,5,7,9-pentaen-17-one, ...	280	C19H20O2	003907-67-3	38
3			1,3-Diamino-8,9-dichloro-5,6-dih...	280	C12H10Cl2N4	037436-48-9	38
4			6-Benzo(a)pyrenecarboxaldehyde	280	C21H12O	013312-42-0	30
5			Benzene, 1,2-bis(2-pyridin-2-yle...	280	C20H12N2	350587-04-1	30



7.1.31  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6542.D  
Acq On : 10 May 2024 01:32 am  
Operator : rocquans  
Sample : jd87833-15  
Misc : op54460,ecj297,31.7,,1,1  
ALS Vial : 33 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

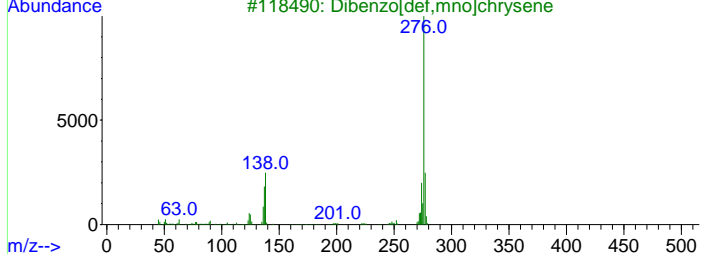
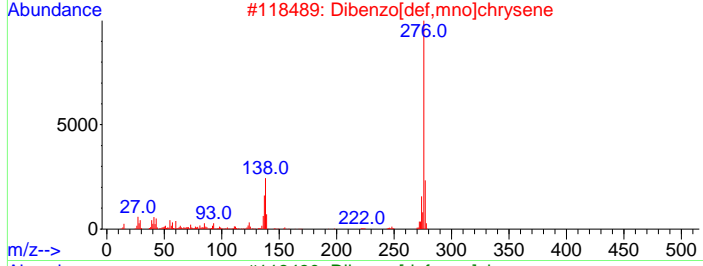
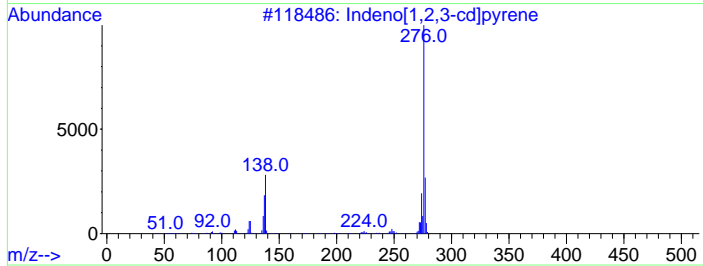
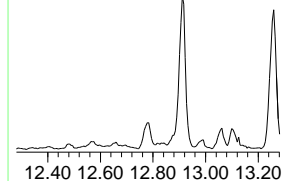
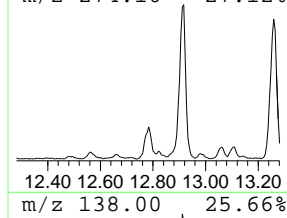
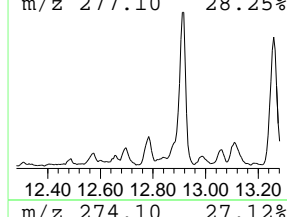
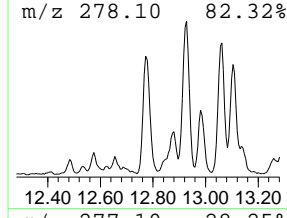
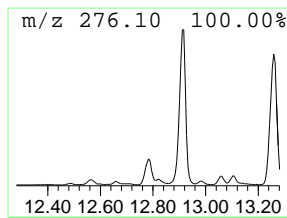
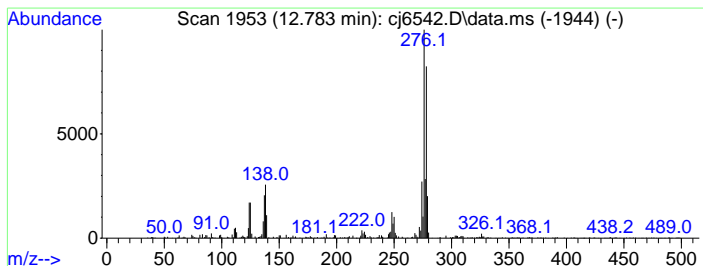
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 20 Unknown Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.783	12.87 ppm	826809	Perylene-d12	11.724

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Indeno[1,2,3-cd]pyrene	276	C22H12	000193-39-5	89
2			Dibenzo[def,mno]chrysene	276	C22H12	000191-26-4	86
3			Dibenzo[def,mno]chrysene	276	C22H12	000191-26-4	55
4			Pyrene, 1-phenyl-	278	C22H14	005101-27-9	55
5			Benzo[ghi]perylene	276	C22H12	000191-24-2	50



7.1.31  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6542.D  
 Acq On : 10 May 2024 01:32 am  
 Operator : rocquans  
 Sample : jd87833-15  
 Misc : op54460,ecj297,31.7,,,1,1  
 ALS Vial : 33 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

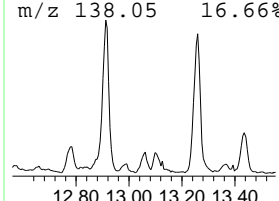
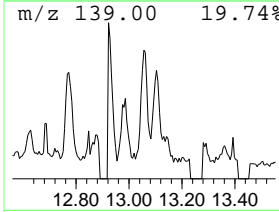
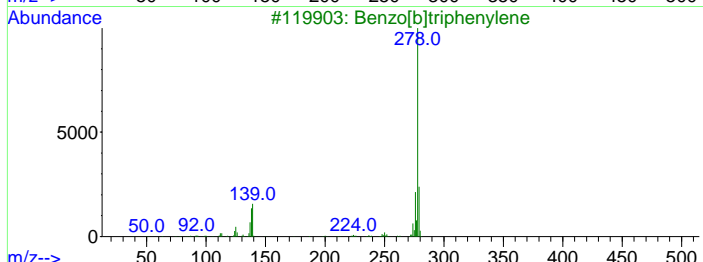
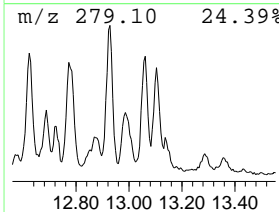
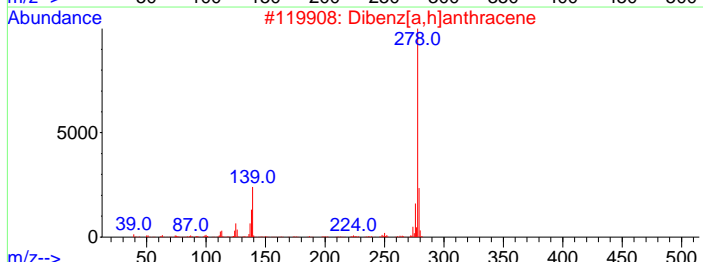
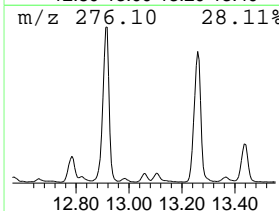
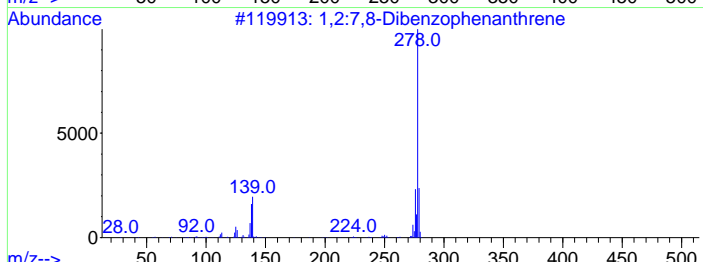
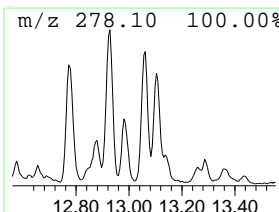
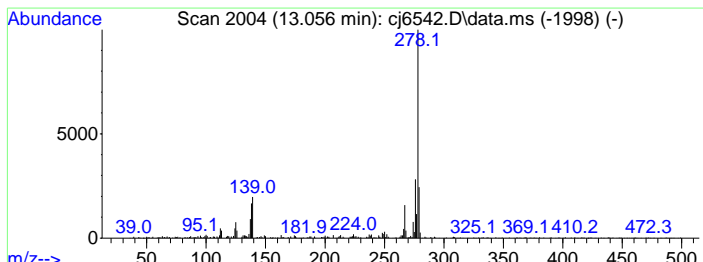
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 21 Unknown Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.056	8.99 ppm	577501	Perylene-d12	11.724

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	1,2:7,8-Dibenzophenanthrene	278	C22H14	000213-46-7	98
2		Dibenz[a,h]anthracene	278	C22H14	000053-70-3	96
3		Benzo[b]triphenylene	278	C22H14	000215-58-7	96
4		Dibenz[a,h]anthracene	278	C22H14	000053-70-3	95
5		Dibenz[a,h]anthracene	278	C22H14	000053-70-3	95



7.1.31  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6542.D  
Acq On : 10 May 2024 01:32 am  
Operator : rocquans  
Sample : jd87833-15  
Misc : op54460,ecj297,31.7,,,1,1  
ALS Vial : 33 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

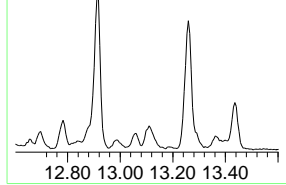
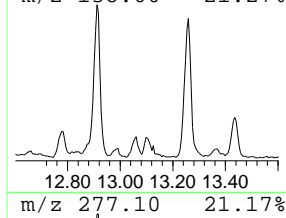
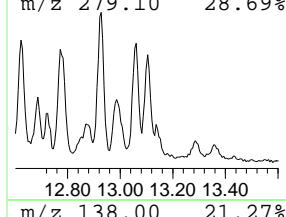
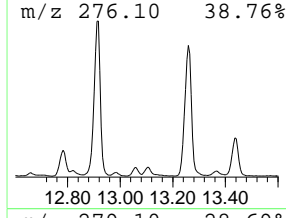
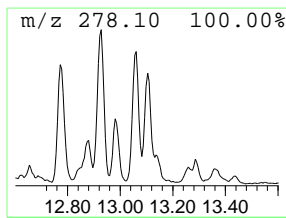
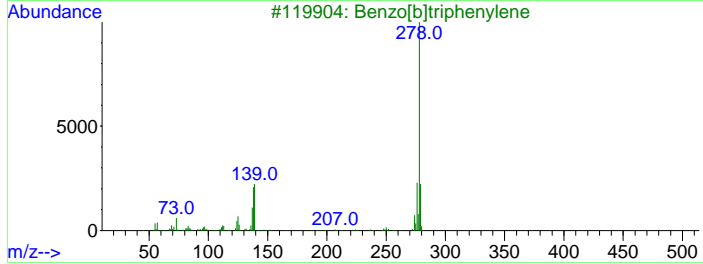
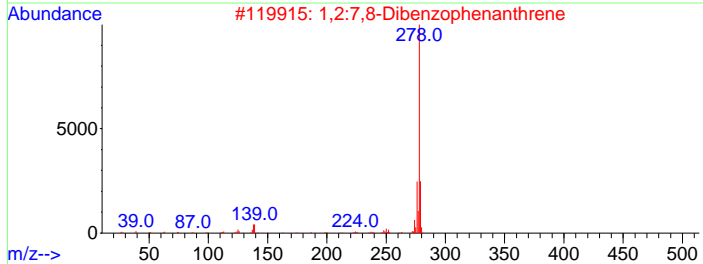
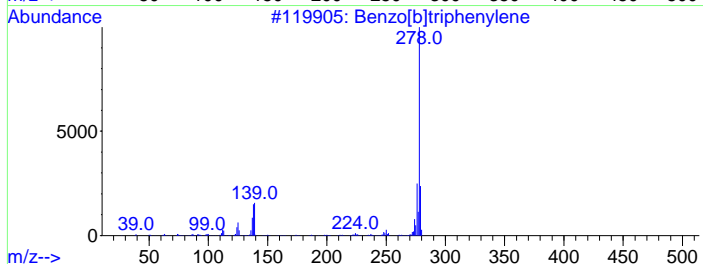
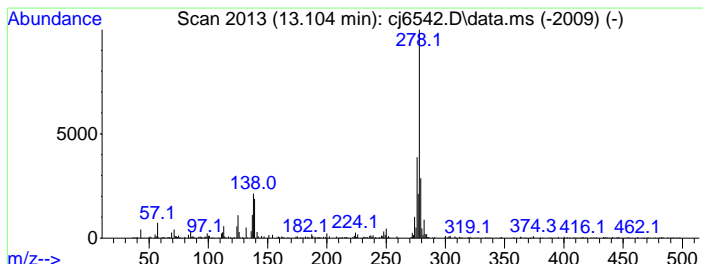
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 22 Unknown Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.104	8.22 ppm	527969	Perylene-d12	11.724

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Benzo[b]triphenylene	278	C22H14	000215-58-7	93
2			1,2:7,8-Dibenzophenanthrene	278	C22H14	000213-46-7	86
3			Benzo[b]triphenylene	278	C22H14	000215-58-7	83
4			Benzo[b]chrysene	278	C22H14	000214-17-5	78
5			Pyrene, 1-phenyl-	278	C22H14	005101-27-9	78



7.1.31  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6542.D  
Acq On : 10 May 2024 01:32 am  
Operator : rocquans  
Sample : jd87833-15  
Misc : op54460,ecj297,31.7,,,1,1  
ALS Vial : 33 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

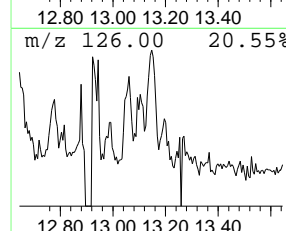
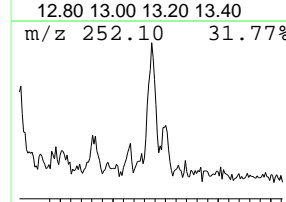
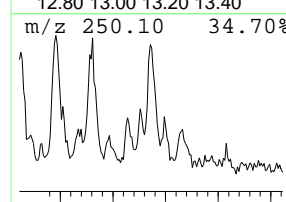
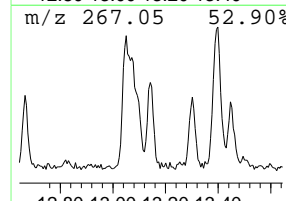
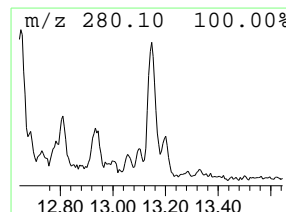
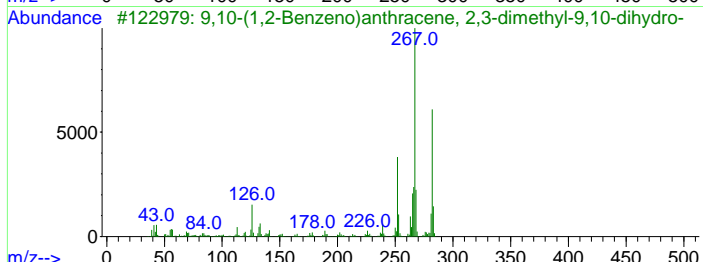
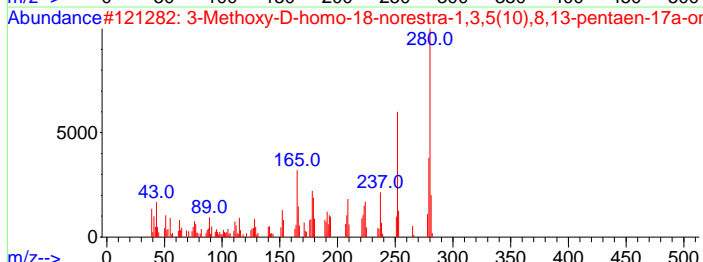
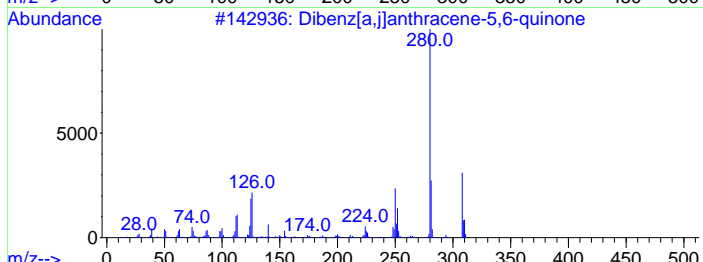
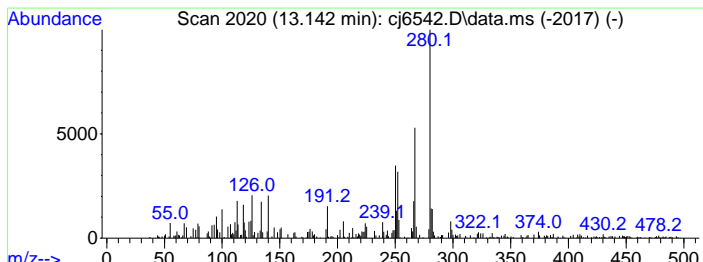
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 23 Unknown Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.142	5.74 ppm	368875	Perylene-d12	11.724

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Dibenz[a,j]anthracene-5,6-quinone	308	C22H12O2	052755-66-5	50
2			3-Methoxy-D-homo-18-norestra-1,3...	280	C19H20O2	021070-83-7	41
3			9,10-(1,2-Benzo)anthracene, 2,...	282	C22H18	027884-45-3	41
4			3-Hydroxy-D-homoestra-1,3,5(10),...	280	C19H20O2	1000215-90-6	38
5			4,5-Ethylene-8,9-dimethoxy-4,5-d...	267	C17H17NO2	107208-75-3	30



7.1.31  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6542.D  
 Acq On : 10 May 2024 01:32 am  
 Operator : rocquans  
 Sample : jd87833-15  
 Misc : op54460,ecj297,31.7,,,1,1  
 ALS Vial : 33 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

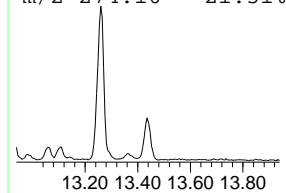
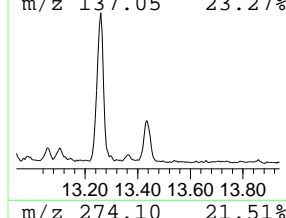
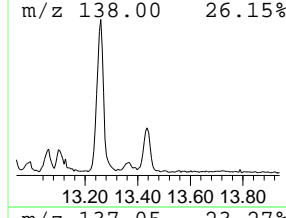
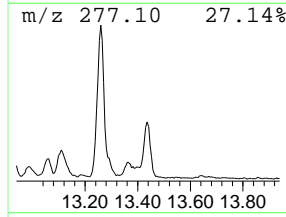
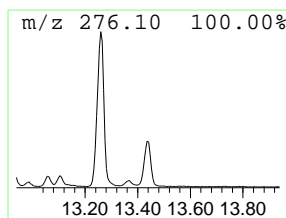
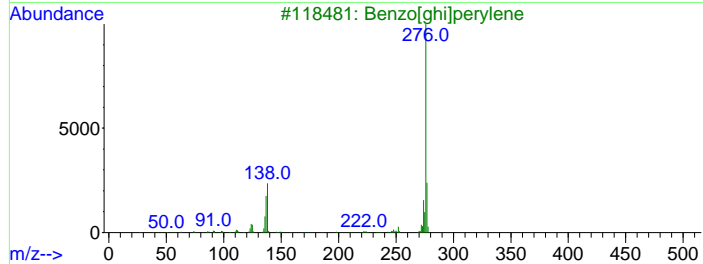
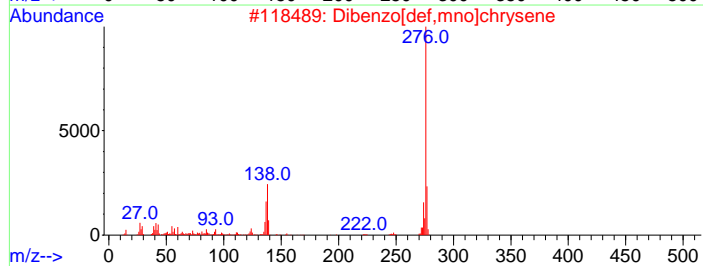
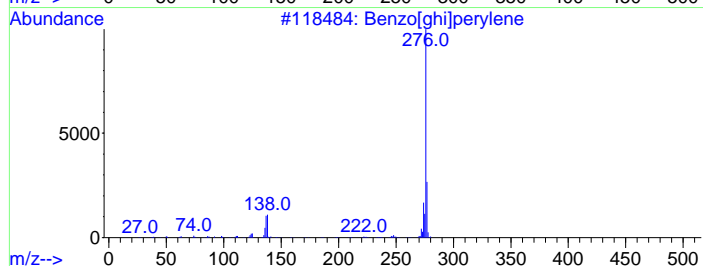
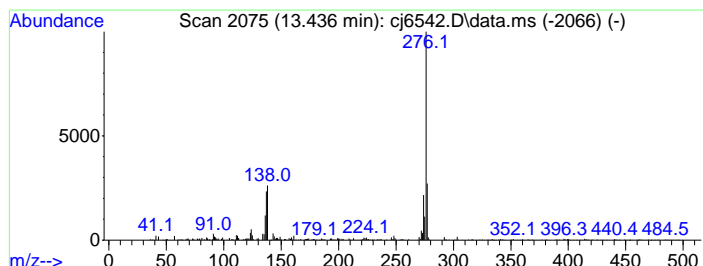
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 24 Unknown Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.436	17.53 ppm	1125920	Perylene-d12	11.724

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Benzo[ghi]perylene	276	C22H12	000191-24-2	95
2			Dibenzo[def,mno]chrysene	276	C22H12	000191-26-4	93
3			Benzo[ghi]perylene	276	C22H12	000191-24-2	93
4			Indeno[1,2,3-cd]pyrene	276	C22H12	000193-39-5	90
5			Benzo[ghi]perylene	276	C22H12	000191-24-2	89



7.1.31  
7



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6542.D  
Acq On : 10 May 2024 01:32 am  
Operator : rocquans  
Sample : jd87833-15  
Misc : op54460,ecj297,31.7,,1,1  
ALS Vial : 33 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

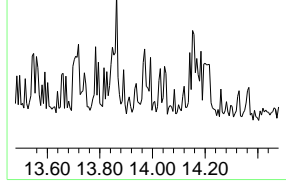
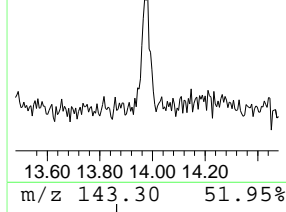
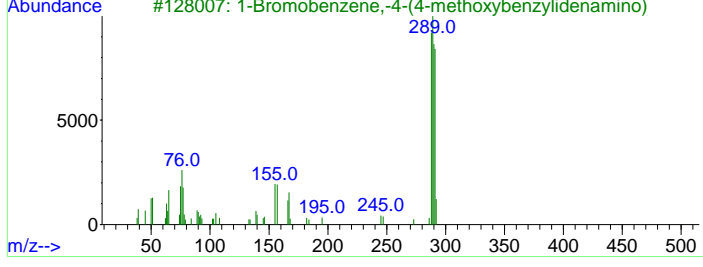
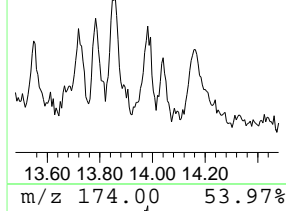
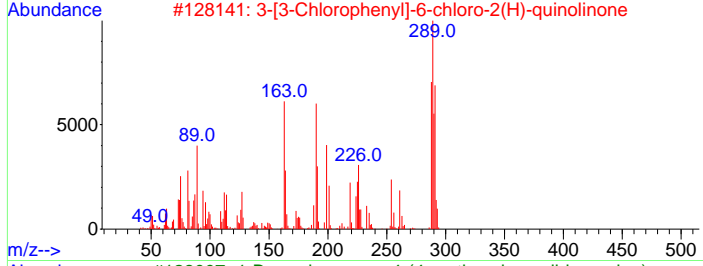
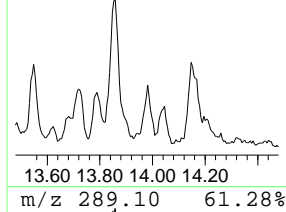
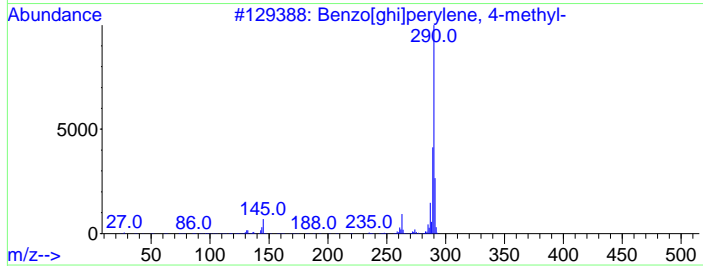
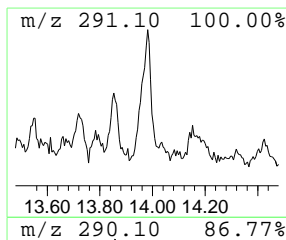
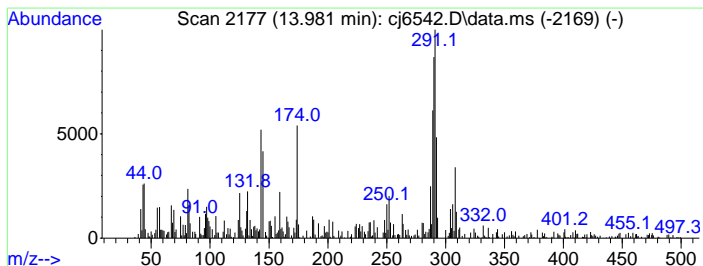
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 25 Unknown Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.981	6.81 ppm	437477	Perylene-d12	11.724

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Benzo[ghi]perylene, 4-methyl-	290	C23H14	019224-38-5	27
2		3-[3-Chlorophenyl]-6-chloro-2(H)...	289	C15H9Cl2NO	1000253-83-5	25
3		1-Bromobenzene, -4-(4-methoxybenz...	289	C14H12BrNO	1000221-92-5	18
4		10-Cyclohexyl-2,3-dihydro-1H-pyr...	290	C20H22N2	157056-89-8	14
5		Benzene, 1-methyl-2-(1-naphthylm...	290	C18H14N2O2	1000263-22-5	14



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Tentatively Identified Compound (LSC) summary

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6542.D  
Acq On : 10 May 2024 01:32 am  
Operator : rocquans  
Sample : jd87833-15  
Misc : op54460,ecj297,31.7,,,1,1  
ALS Vial : 33 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
Unknown	4.252	11.4	ppm	570486	2	4.669	2008680	40.0
Unknown	4.487	5.5	ppm	278209	2	4.669	2008680	40.0
Unknown	4.824	4.5	ppm	225226	2	4.669	2008680	40.0
Anthracene, methyl	8.322	6.4	ppm	485432	8	7.873	3047240	40.0
Phenanthrene, m...	8.349	4.8	ppm	366371	8	7.873	3047240	40.0
4H-Cyclopenta[d...	8.424	17.7	ppm	1345160	8	7.873	3047240	40.0
Unknown	8.601	8.6	ppm	655444	8	7.873	3047240	40.0
Phenanthrene, d...	8.836	5.6	ppm	428579	8	7.873	3047240	40.0
Unknown	8.911	5.7	ppm	433638	8	7.873	3047240	40.0
Fluoranthene, m...	9.521	7.5	ppm	1368160	9	10.371	7286490	40.0
Unknown	10.467	4.7	ppm	849615	10	10.371	7286490	40.0
Unknown	11.050	6.8	ppm	435480	11	11.724	2569320	40.0
Unknown	11.216	7.4	ppm	474113	11	11.724	2569320	40.0
Unknown PHA Sub...	11.451	13.3	ppm	852660	11	11.724	2569320	40.0
Unknown	11.532	5.7	ppm	363283	11	11.724	2569320	40.0
Unknown PHA Sub...	11.617	32.7	ppm	2098500	11	11.724	2569320	40.0
Unknown	11.879	7.6	ppm	489636	11	11.724	2569320	40.0
Unknown	12.179	4.7	ppm	298937	11	11.724	2569320	40.0
Unknown	12.655	13.9	ppm	892588	11	11.724	2569320	40.0
Unknown	12.783	12.9	ppm	826809	11	11.724	2569320	40.0
Unknown	13.056	9.0	ppm	577501	11	11.724	2569320	40.0
Unknown	13.104	8.2	ppm	527969	11	11.724	2569320	40.0
Unknown	13.142	5.7	ppm	368875	11	11.724	2569320	40.0
Unknown	13.436	17.5	ppm	1125920	11	11.724	2569320	40.0
Unknown	13.981	6.8	ppm	437477	11	11.724	2569320	40.0

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## Quantitation Report (QT Reviewed)

Data Path : X:\Dayton SVOA GCMS\nerirose\ecj302\  
 Data File : cj6681.D  
 Acq On : 13 May 2024 10:23 am  
 Operator : kaleigh  
 Sample : jd87833-15 Inst : GCMSCJ  
 Misc : op54460,ecj302,31.7,,,1,5  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 13 17:30:10 2024  
 Quant Method : X:\Dayton SVOA GCMS\nerirose\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
 QLast Update : Mon May 13 16:52:36 2024  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.601	152	248539	40.00	ppm	0.00
24) Naphthalene-d8	5.403	136	902996	40.00	ppm	0.00
46) Acenaphthene-d10	6.585	164	516050	40.00	ppm	0.00
69) Phenanthrene-d10	7.789	188	929339	40.00	ppm	0.00
84) Chrysene-d12	10.276	240	702274	40.00	ppm	0.00
93) Perylene-d12	11.613	264	684568	40.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.601	152	248539	40.00	ppm	0.00
105) Phenanthrene-d10a	7.789	188	929339	40.00	ppm	0.00
107) Naphthalene-d8a	5.403	136	902996	40.00	ppm	0.00
109) Phenanthrene-d10b	7.789	188	929339	40.00	ppm	0.00
112) Chrysene-d12a	10.276	240	702274	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.750	112	47458	6.64	ppm	0.00
Spiked Amount	50.000		Recovery	=	13.28%	
8) Phenol-d5	4.376	99	64939	7.05	ppm	0.00
Spiked Amount	50.000		Recovery	=	14.10%	
25) Nitrobenzene-d5	4.949	82	61962	6.70	ppm	0.00
Spiked Amount	50.000		Recovery	=	13.40%	
51) 2-Fluorobiphenyl	6.099	172	121485	7.48	ppm	0.00
Spiked Amount	50.000		Recovery	=	14.96%	
74) 2,4,6-Tribromophenol	7.200	330	17121	8.40	ppm	0.00
Spiked Amount	50.000		Recovery	=	16.80%	
87) Terphenyl-d14	9.265	244	138306	7.97	ppm	0.00
Spiked Amount	50.000		Recovery	=	15.94%	
110) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount	50.000		Recovery	=	0.00%	
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount	50.000		Recovery	=	0.00%	
Target Compounds						
						Qvalue
38) Naphthalene	5.419	128	3975	0.1838	ppm	98
56) Acenaphthylene	6.484	152	25232	1.2606	ppm	98
59) Acenaphthene	6.607	153	8421	0.5916	ppm	89
62) Dibenzofuran	6.740	168	6595	0.3339	ppm	96
66) Fluorene	7.002	166	12911m	0.8274	ppm	
78) Phenanthrene	7.810	178	187942	8.3680	ppm	99
79) Anthracene	7.853	178	61413	2.7308	ppm	99
80) Carbazole	7.997	167	9082	0.4334	ppm	98
82) Fluoranthene	8.896	202	495195	20.3658	ppm	98
86) Pyrene	9.110	202	436125	18.2607	ppm	98
89) Benzo[a]anthracene	10.265	228	227721	10.0851	ppm	96
91) Chrysene	10.297	228	186381	8.9465	ppm	97
95) Benzo[b]fluoranthene	11.255	252	259921m	12.5688	ppm	
96) Benzo[k]fluoranthene	11.276	252	75379m	4.0508	ppm	
97) Benzo[a]pyrene	11.554	252	181566	10.6059	ppm	98
98) Indeno[1,2,3-cd]pyrene	12.752	276	116921	5.6495	ppm	95
100) Dibenz[a,h]anthracene	12.774	278	28100	1.6993	ppm	92
102) Benzo[g,h,i]perylene	13.084	276	109029	6.7792	ppm	97
-----						

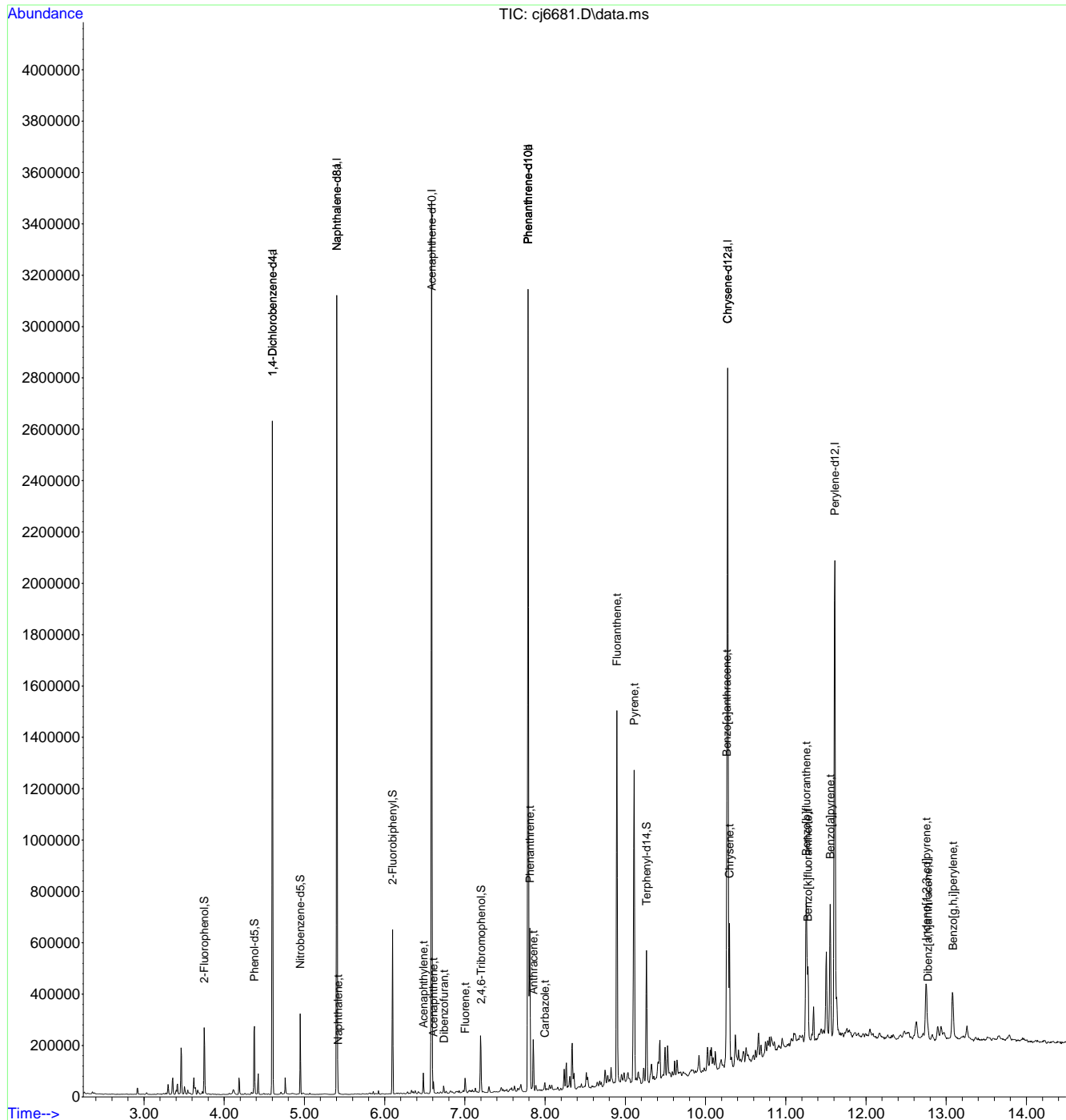
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : X:\Dayton SVOA GCMS\nerirose\ecj302\  
 Data File : cj6681.D  
 Acq On : 13 May 2024 10:23 am  
 Operator : kaleigh  
 Sample : jd87833-15  
 Misc : op54460,ecj302,31.7,,,1,5  
 ALS Vial : 8 Sample Multiplier: 1

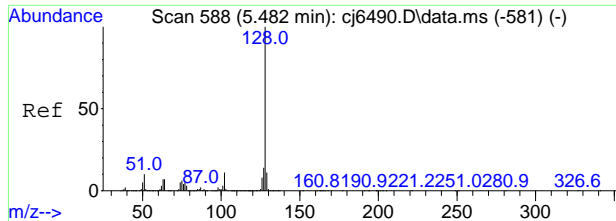
Inst : GCMS CJ

Quant Time: May 13 17:30:10 2024  
 Quant Method : X:\Dayton SVOA GCMS\nerirose\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
 QLast Update : Mon May 13 16:52:36 2024  
 Response via : Initial Calibration



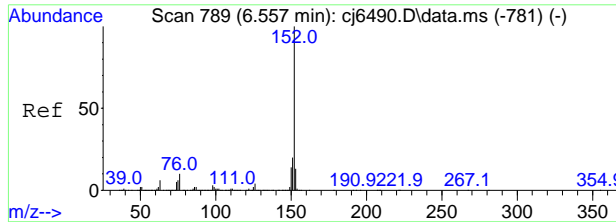
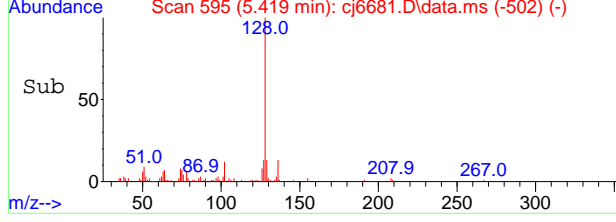
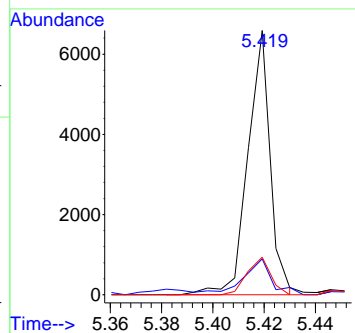
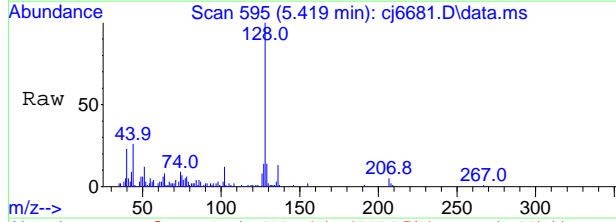
7.1.32  
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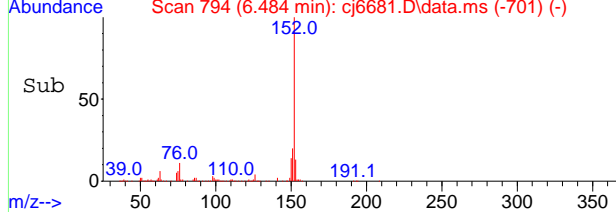
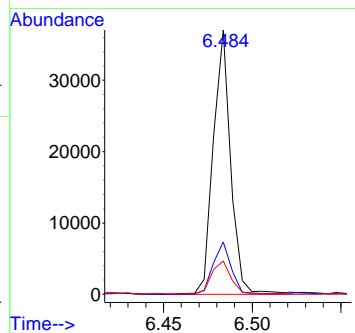
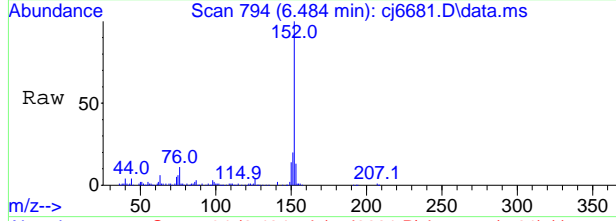
#38  
 Naphthalene  
 Concen: 0.1838 ppm  
 RT: 5.419 min Scan# 595  
 Delta R.T. -0.000 min  
 Lab File: cj6681.D  
 Acq: 13 May 2024 10:23 am

Tgt Ion	Ratio	Lower	Upper
128	100		
129	11.2	0.0	41.4
127	14.4	0.0	43.4

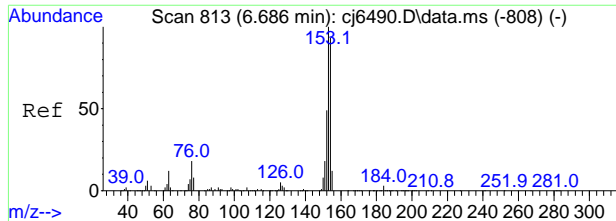


#56  
 Acenaphthylene  
 Concen: 1.2606 ppm  
 RT: 6.484 min Scan# 794  
 Delta R.T. -0.000 min  
 Lab File: cj6681.D  
 Acq: 13 May 2024 10:23 am

Tgt Ion	Ratio	Lower	Upper
152	100		
151	19.5	0.0	50.2
153	12.6	0.0	43.2

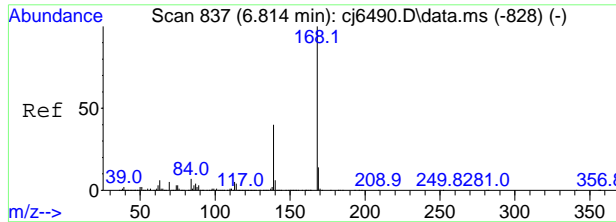
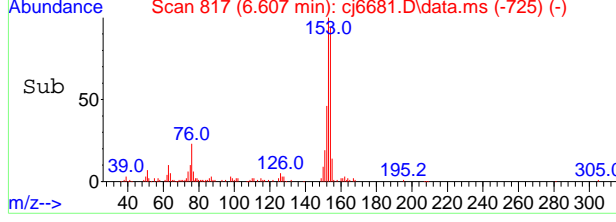
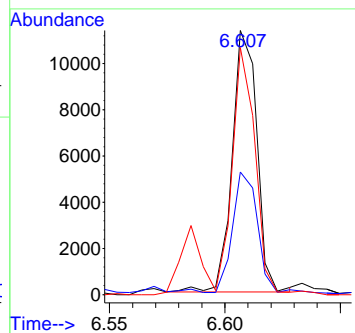
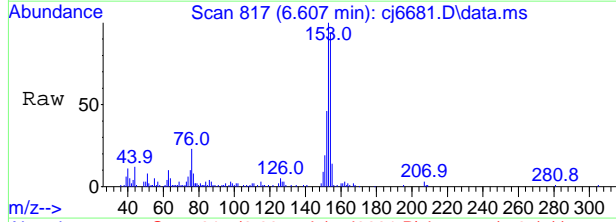


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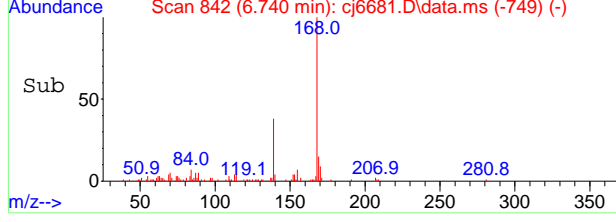
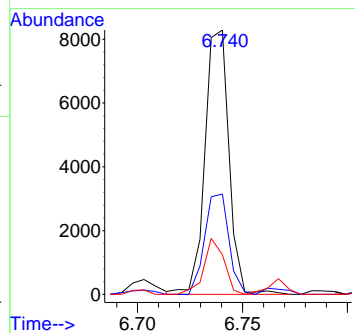
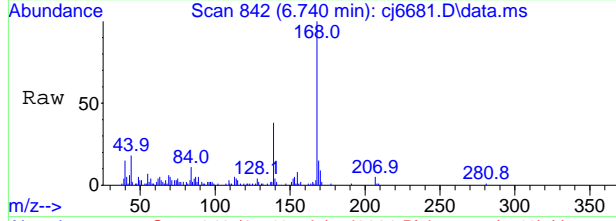
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 Acenaphthene  
 Concen: 0.5916 ppm  
 RT: 6.607 min Scan# 817  
 Delta R.T. -0.006 min  
 Lab File: cj6681.D  
 Acq: 13 May 2024 10:23 am

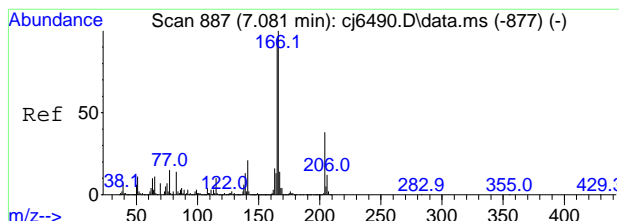
Tgt Ion	Resp	Lower	Upper
153	8421		
152	46.0	16.8	76.8
154	94.9	50.5	110.5



#62  
 Dibenzofuran  
 Concen: 0.3339 ppm  
 RT: 6.740 min Scan# 842  
 Delta R.T. -0.000 min  
 Lab File: cj6681.D  
 Acq: 13 May 2024 10:23 am

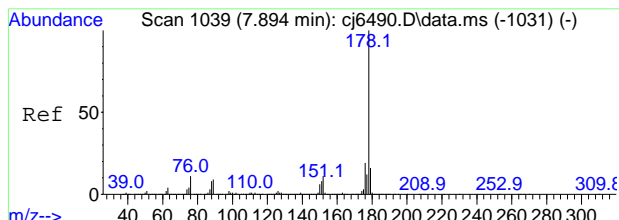
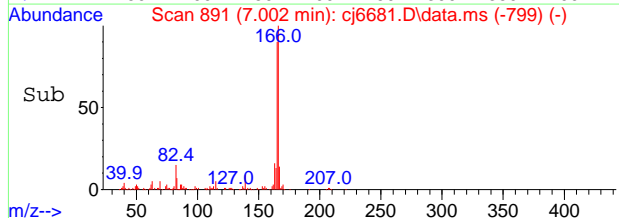
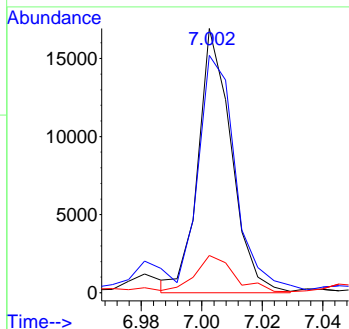
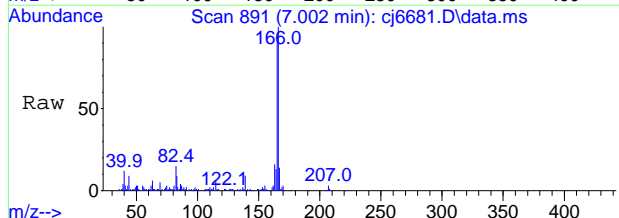
Tgt Ion	Resp	Lower	Upper
168	6595		
139	37.4	10.6	70.6
169	14.2	0.0	43.4





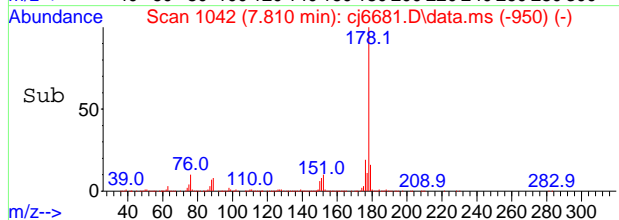
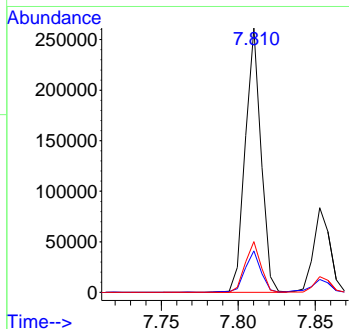
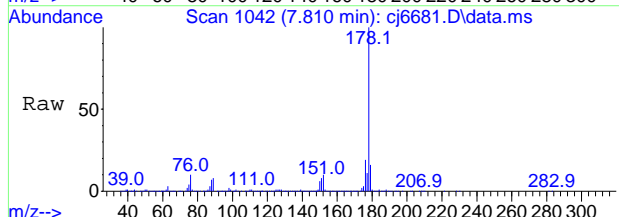
#66  
 Fluorene  
 Concen: 0.8274 ppm m  
 RT: 7.002 min Scan# 891  
 Delta R.T. -0.006 min  
 Lab File: cj6681.D  
 Acq: 13 May 2024 10:23 am

Tgt Ion:166	Resp:	12911
Ion Ratio	Lower	Upper
166	100	
165	89.8	67.8 127.8
167	14.1	0.0 43.6

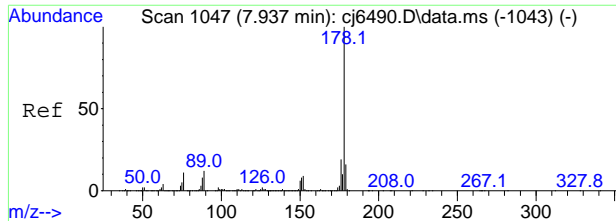


#78  
 Phenanthrene  
 Concen: 8.3680 ppm  
 RT: 7.810 min Scan# 1042  
 Delta R.T. -0.006 min  
 Lab File: cj6681.D  
 Acq: 13 May 2024 10:23 am

Tgt Ion:178	Resp:	187942
Ion Ratio	Lower	Upper
178	100	
179	15.6	0.0 45.3
176	19.2	0.0 48.8

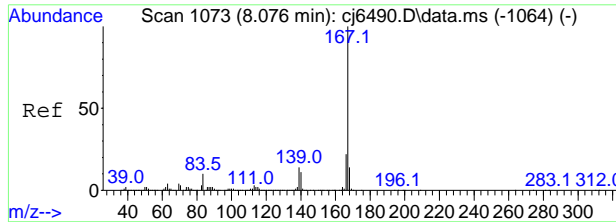
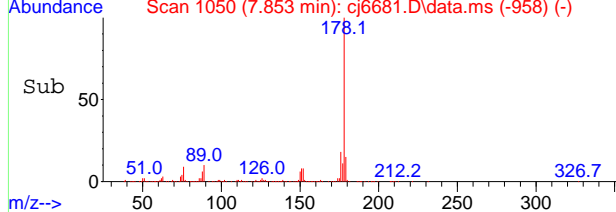
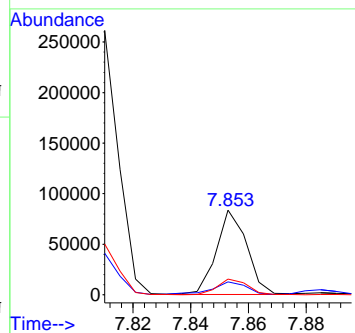
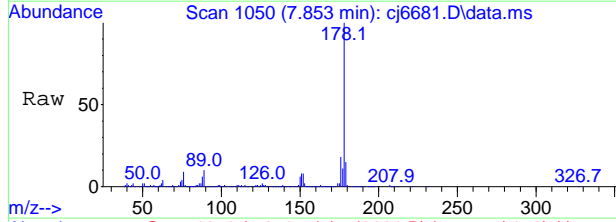


7.1.32  
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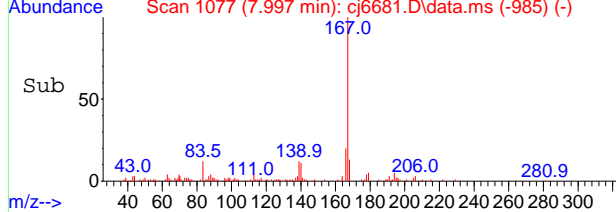
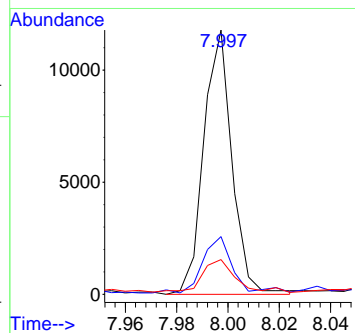
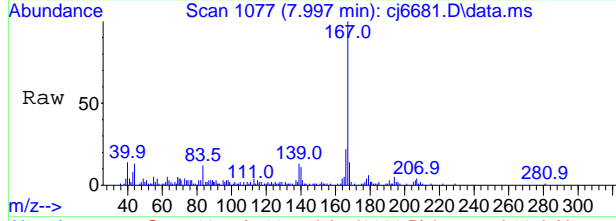
#79  
 Anthracene  
 Concen: 2.7308 ppm  
 RT: 7.853 min Scan# 1050  
 Delta R.T. -0.006 min  
 Lab File: cj6681.D  
 Acq: 13 May 2024 10:23 am

Tgt Ion	Ratio	Lower	Upper
178	100		
179	14.5	0.0	45.3
176	18.4	0.0	48.1



#80  
 Carbazole  
 Concen: 0.4334 ppm  
 RT: 7.997 min Scan# 1077  
 Delta R.T. -0.006 min  
 Lab File: cj6681.D  
 Acq: 13 May 2024 10:23 am

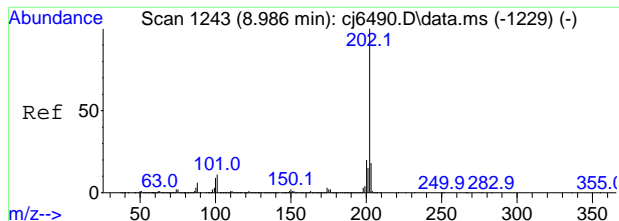
Tgt Ion	Ratio	Lower	Upper
167	100		
166	20.7	0.0	51.6
139	12.2	0.0	43.3



7.1.32  
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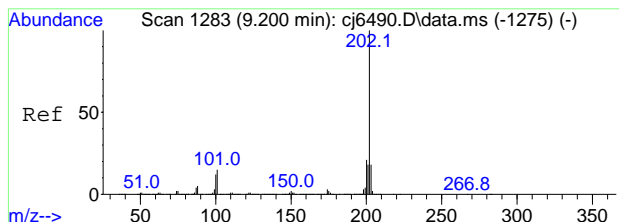
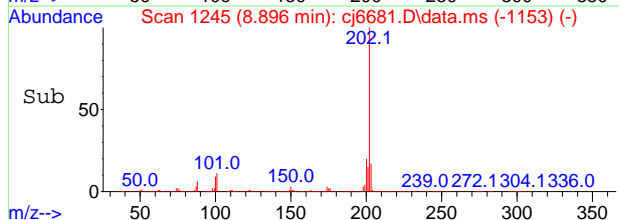
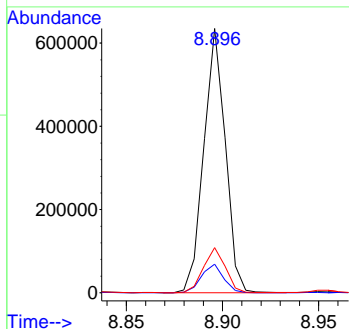
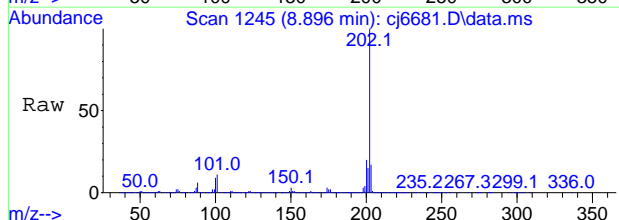






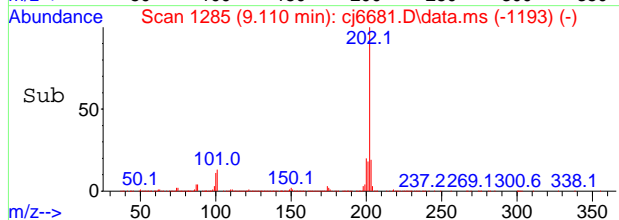
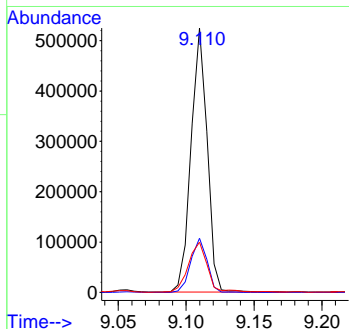
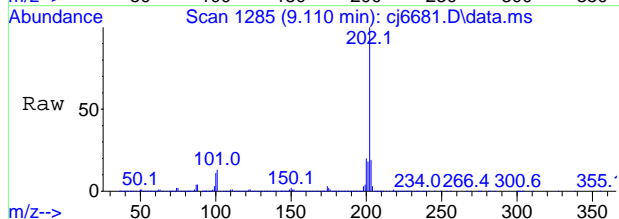
#82  
 Fluoranthene  
 Concen: 20.3658 ppm  
 RT: 8.896 min Scan# 1245  
 Delta R.T. -0.006 min  
 Lab File: cj6681.D  
 Acq: 13 May 2024 10:23 am

Tgt Ion	Ratio	Lower	Upper
202	100		
101	10.8	0.0	40.6
203	17.0	0.0	48.2

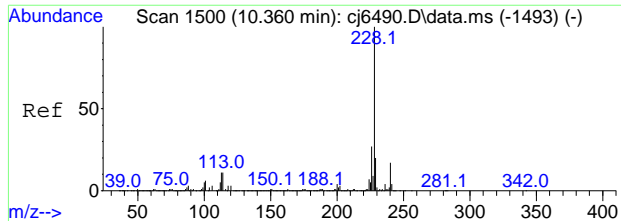


#86  
 Pyrene  
 Concen: 18.2607 ppm  
 RT: 9.110 min Scan# 1285  
 Delta R.T. -0.006 min  
 Lab File: cj6681.D  
 Acq: 13 May 2024 10:23 am

Tgt Ion	Ratio	Lower	Upper
202	100		
200	20.4	0.0	51.6
203	18.9	0.0	48.0

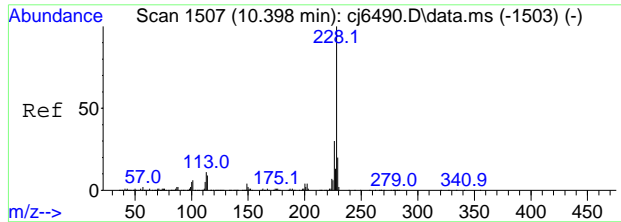
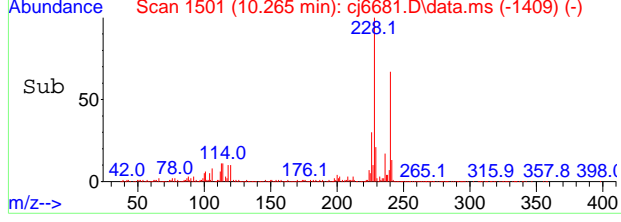
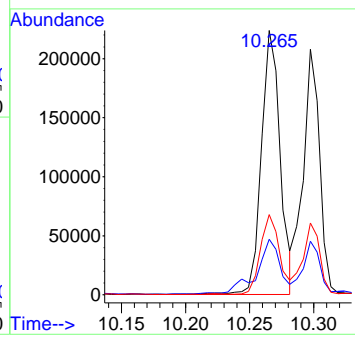
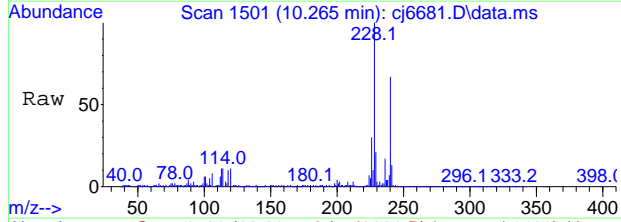


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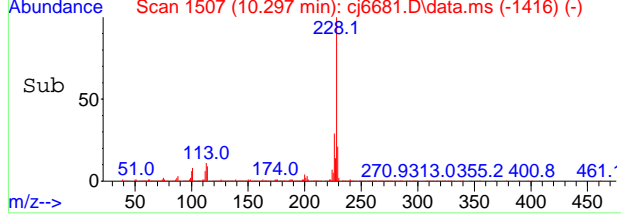
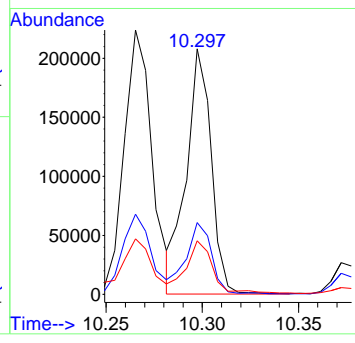
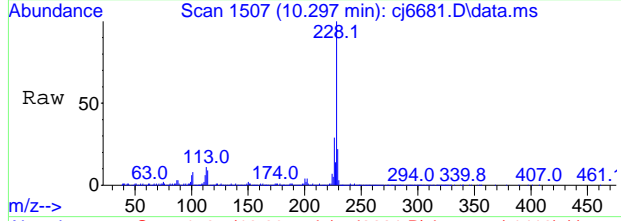
#89  
 Benzo[a]anthracene  
 Concen: 10.0851 ppm  
 RT: 10.265 min Scan# 1501  
 Delta R.T. -0.006 min  
 Lab File: cj6681.D  
 Acq: 13 May 2024 10:23 am

Tgt Ion	Ratio	Lower	Upper
228	100		
229	20.6	0.0	49.8
226	30.0	0.0	56.9

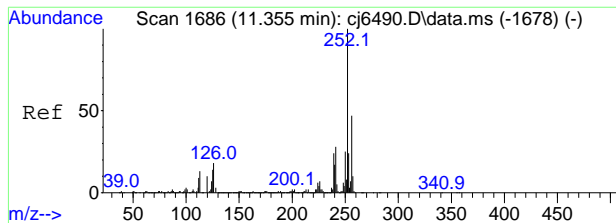


#91  
 Chrysene  
 Concen: 8.9465 ppm  
 RT: 10.297 min Scan# 1507  
 Delta R.T. -0.011 min  
 Lab File: cj6681.D  
 Acq: 13 May 2024 10:23 am

Tgt Ion	Ratio	Lower	Upper
228	100		
226	28.8	0.1	60.1
229	21.3	0.0	49.6

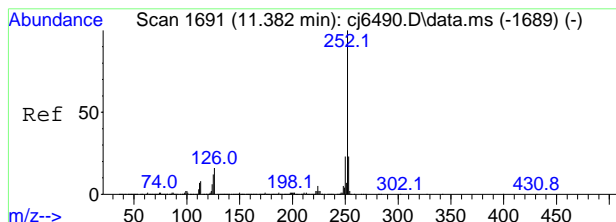
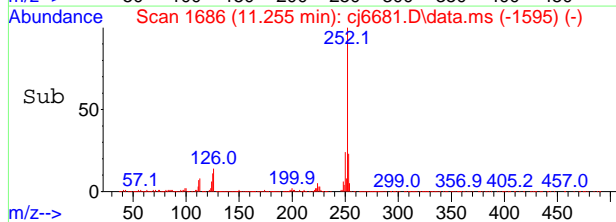
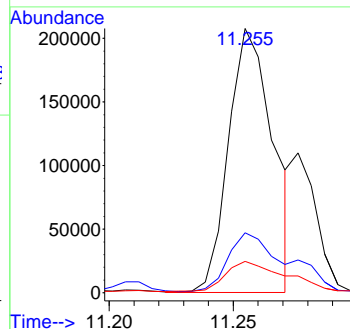
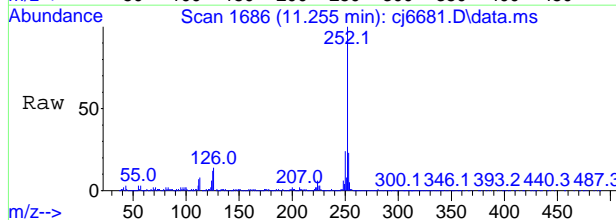


7.1.32  
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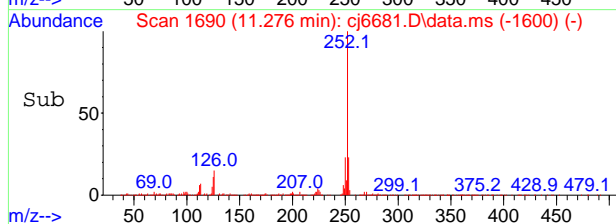
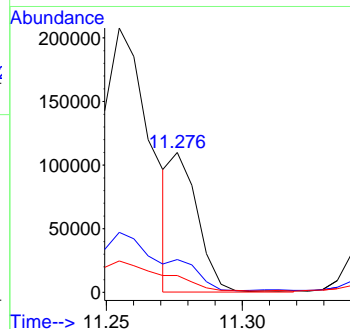
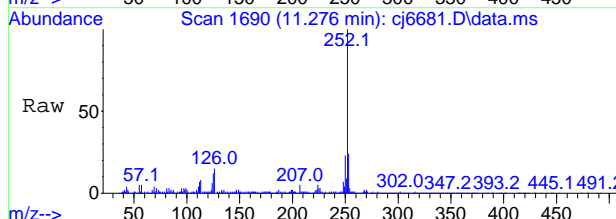
#95  
 Benzo[b]fluoranthene  
 Concen: 12.5688 ppm m  
 RT: 11.255 min Scan# 1686  
 Delta R.T. -0.011 min  
 Lab File: cj6681.D  
 Acq: 13 May 2024 10:23 am

Tgt Ion	Ratio	Lower	Upper
252	100		
253	22.7	0.0	52.9
125	11.8	0.0	39.9

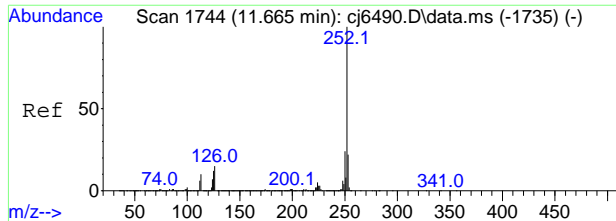


#96  
 Benzo[k]fluoranthene  
 Concen: 4.0508 ppm m  
 RT: 11.276 min Scan# 1690  
 Delta R.T. -0.017 min  
 Lab File: cj6681.D  
 Acq: 13 May 2024 10:23 am

Tgt Ion	Ratio	Lower	Upper
252	100		
253	23.6	0.0	52.1
125	12.1	0.0	39.2

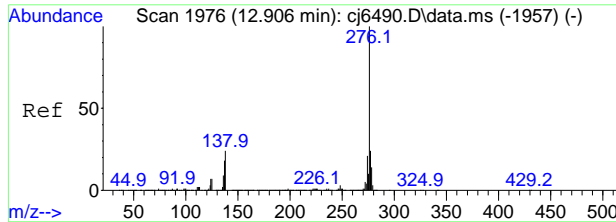
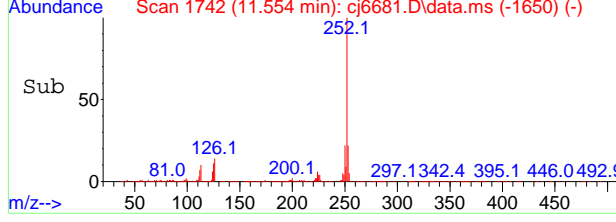
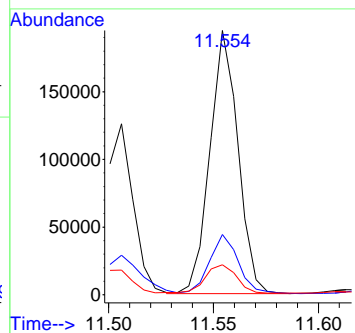
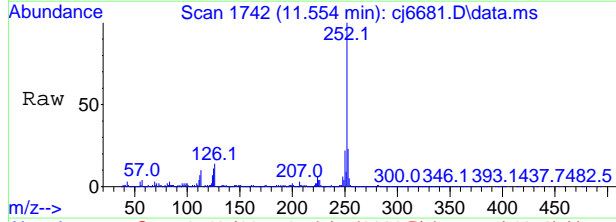


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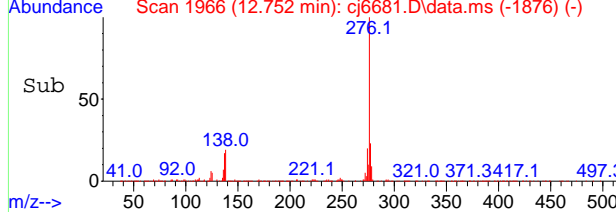
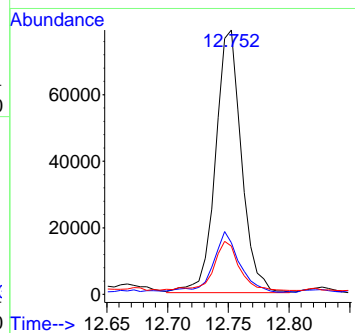
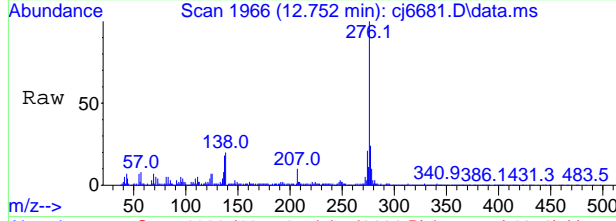
#97  
 Benzo[a]pyrene  
 Concen: 10.6059 ppm  
 RT: 11.554 min Scan# 1742  
 Delta R.T. -0.006 min  
 Lab File: cj6681.D  
 Acq: 13 May 2024 10:23 am

Tgt Ion	Ratio	Lower	Upper
252	100		
253	21.8	0.0	51.8
125	10.7	0.0	42.3



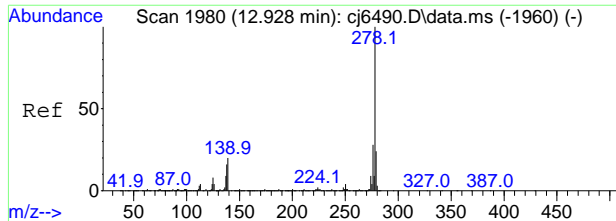
#98  
 Indeno[1,2,3-cd]pyrene  
 Concen: 5.6495 ppm  
 RT: 12.752 min Scan# 1966  
 Delta R.T. -0.017 min  
 Lab File: cj6681.D  
 Acq: 13 May 2024 10:23 am

Tgt Ion	Ratio	Lower	Upper
276	100		
138	18.6	0.0	52.4
137	16.7	0.0	46.6

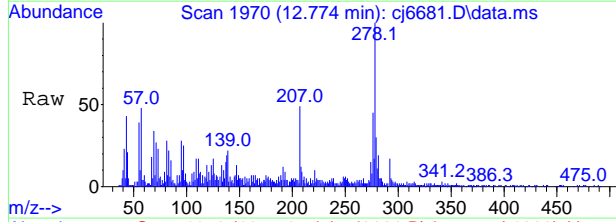


7.1.32  
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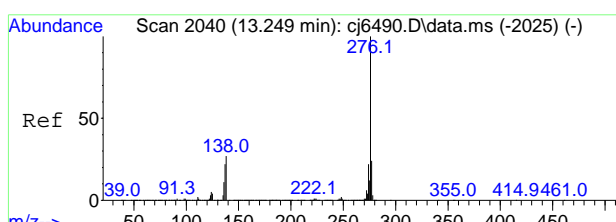
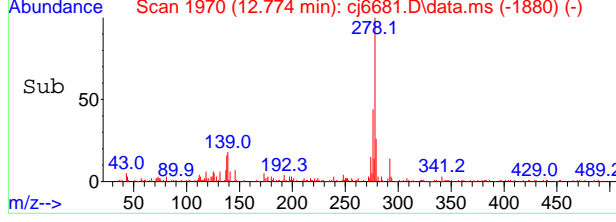
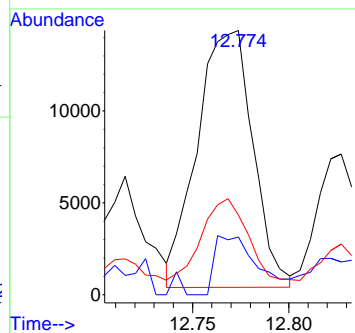




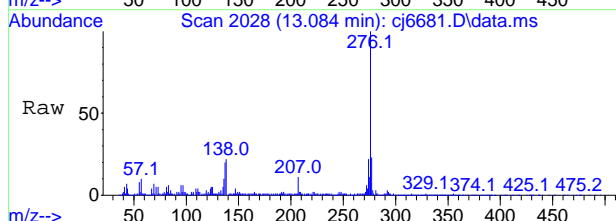
#100  
 Dibenz[a,h]anthracene  
 Concen: 1.6993 ppm  
 RT: 12.774 min Scan# 1970  
 Delta R.T. -0.017 min  
 Lab File: cj6681.D  
 Acq: 13 May 2024 10:23 am



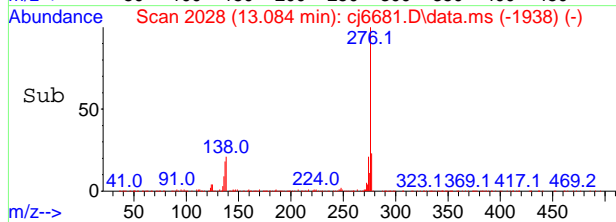
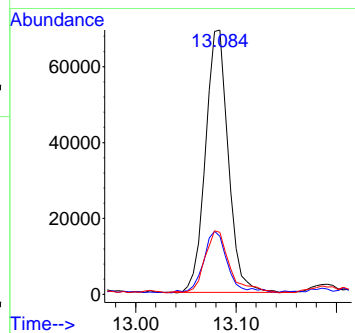
Tgt Ion	Ratio	Lower	Upper
278	100		
139	20.9	0.0	47.4
279	27.0	0.0	53.2



#102  
 Benzo[g,h,i]perylene  
 Concen: 6.7792 ppm  
 RT: 13.084 min Scan# 2028  
 Delta R.T. -0.016 min  
 Lab File: cj6681.D  
 Acq: 13 May 2024 10:23 am



Tgt Ion	Ratio	Lower	Upper
276	100		
138	21.2	0.0	53.6
277	22.9	0.0	53.9



7.1.32  
7



Quantitation Report (QT/LSC Reviewed)

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6537.D  
Acq On : 09 May 2024 11:57 pm  
Operator : rocquans  
Sample : jd87833-16 Inst : GCMSJCJ  
Misc : op54460,ecj297,30.3,,,1,1  
ALS Vial : 28 Sample Multiplier: 1

Quant Time: May 10 19:47:57 2024  
Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
QLast Update : Thu May 09 12:05:48 2024  
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.664	152	350487	40.00	ppm	0.00
24) Naphthalene-d8	5.466	136	1242220	40.00	ppm	0.00
46) Acenaphthene-d10	6.659	164	702587	40.00	ppm	0.00
69) Phenanthrene-d10	7.873	188	1226551	40.00	ppm	0.00
84) Chrysene-d12	10.366	240	877665	40.00	ppm	0.00
93) Perylene-d12	11.719	264	892449	40.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.664	152	350487	40.00	ppm	0.00
105) Phenanthrene-d10a	7.873	188	1226551	40.00	ppm	0.00
107) Naphthalene-d8a	5.466	136	1242220	40.00	ppm	0.00
109) Phenanthrene-d10b	7.873	188	1226551	40.00	ppm	0.00
112) Chrysene-d12a	10.366	240	877665	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.808	112	350797	34.82	ppm	0.01
Spiked Amount 50.000			Recovery =	69.64%		
8) Phenol-d5	4.423	99	477714	36.76	ppm	0.00
Spiked Amount 50.000			Recovery =	73.52%		
25) Nitrobenzene-d5	5.012	82	460122	36.18	ppm	0.00
Spiked Amount 50.000			Recovery =	72.36%		
51) 2-Fluorobiphenyl	6.167	172	837534	37.88	ppm	0.00
Spiked Amount 50.000			Recovery =	75.76%		
74) 2,4,6-Tribromophenol	7.274	330	120669	44.87	ppm	0.00
Spiked Amount 50.000			Recovery =	89.74%		
87) Terphenyl-d14	9.355	244	865442	39.91	ppm	0.00
Spiked Amount 50.000			Recovery =	79.82%		
110) 1-chlorooctadecane	0.000	57	0	0.00	ppm	0.00
Spiked Amount 50.000			Recovery =	0.00%		
111) o-terphenyl	0.000	230	0	0.00	ppm	0.00
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						
						Qvalue
21) 3&4-Methylphenol	4.910	108	2978	0.2978	ppm	77
38) Naphthalene	5.482	128	17876	0.6007	ppm	98
44) 2-Methylnaphthalene	5.926	141	7705	0.4367	ppm	93
53) Biphenyl	6.236	154	5138	0.2128	ppm	95
56) Acenaphthylene	6.552	152	145542	5.3409	ppm	98
59) Acenaphthene	6.680	153	21537	1.1114	ppm	95
62) Dibenzofuran	6.814	168	18786	0.6986	ppm	94
66) Fluorene	7.082	166	36194m	1.7037	ppm	
78) Phenanthrene	7.889	178	471612	15.9101	ppm	99
79) Anthracene	7.937	178	206310	6.9509	ppm	97
80) Carbazole	8.076	167	32020	1.1577	ppm	98
82) Fluoranthene	8.986	202	1476231	46.0012	ppm	99
86) Pyrene	9.200	202	1380707	46.2578	ppm	99
89) Benzo[a]anthracene	10.360	228	775213	27.4712	ppm	97
91) Chrysene	10.392	228	694152	26.6615	ppm	98
95) Benzo[b]fluoranthene	11.355	252	946020m	35.0902	ppm	
96) Benzo[k]fluoranthene	11.377	252	222254m	9.1616	ppm	
97) Benzo[a]pyrene	11.665	252	629163	28.1910	ppm	100
98) Indeno[1,2,3-cd]pyrene	12.901	276	401298	14.8737	ppm	98
100) Dibenz[a,h]anthracene	12.917	278	105024	4.8716	ppm	95
102) Benzo[g,h,i]perylene	13.243	276	363682	17.3457	ppm	100
104) Benzaldehyde	4.386	105	2581	0.2573	ppm	85
-----						

(#) = qualifier out of range (m) = manual integration (+) = signals summed

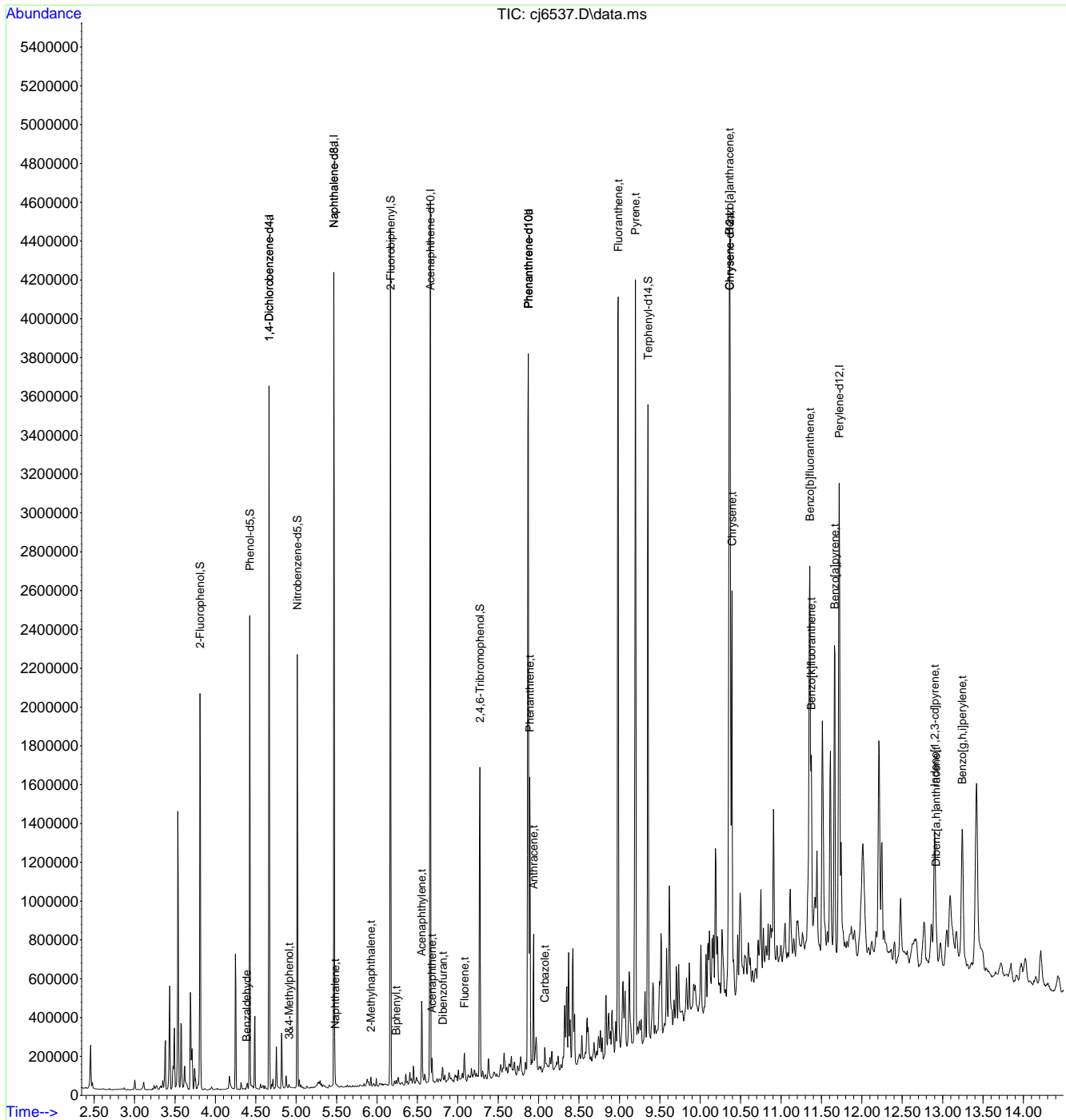


7.1.33  
7

Quantitation Report (QT/LSC Reviewed)

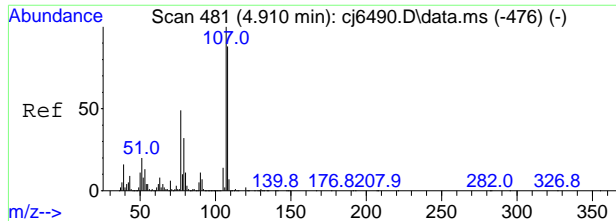
Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6537.D  
Acq On : 09 May 2024 11:57 pm  
Operator : rocquans  
Sample : jd87833-16 Inst : GCMS CJ  
Misc : op54460,ecj297,30.3,,,1,1  
ALS Vial : 28 Sample Multiplier: 1

Quant Time: May 10 19:47:57 2024  
Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
QLast Update : Thu May 09 12:05:48 2024  
Response via : Initial Calibration



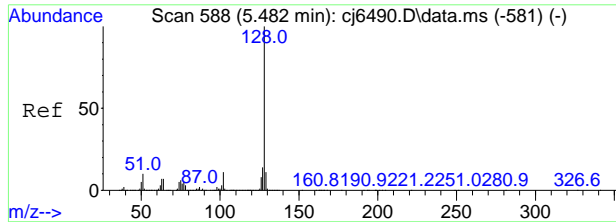
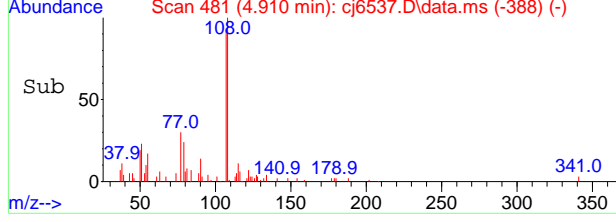
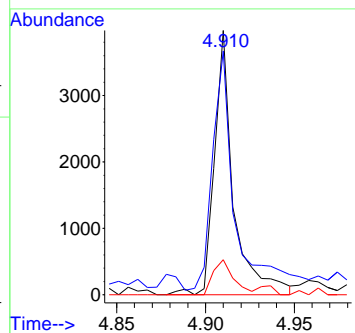
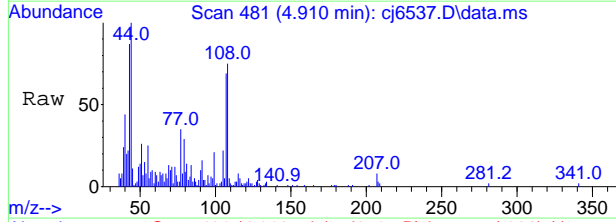
7.1.33  
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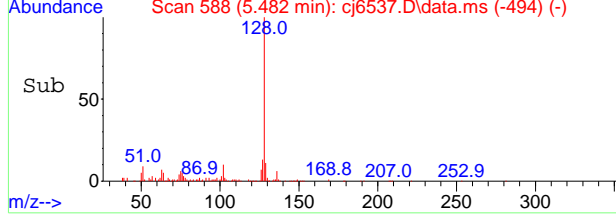
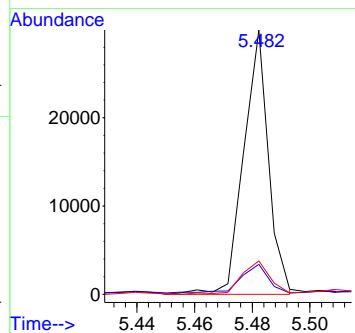
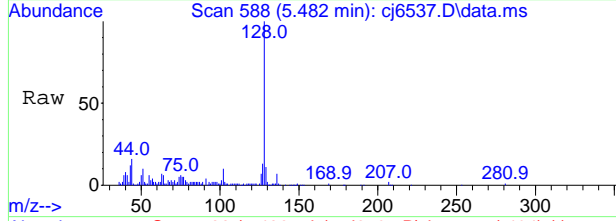
#21  
 3&4-Methylphenol  
 Concen: 0.2978 ppm  
 RT: 4.910 min Scan# 481  
 Delta R.T. -0.000 min  
 Lab File: cj6537.D  
 Acq: 09 May 2024 11:57 pm

Tgt Ion	Ratio	Lower	Upper
108	100		
107	86.7	83.2	143.2
90	13.6	0.0	42.4



#38  
 Naphthalene  
 Concen: 0.6007 ppm  
 RT: 5.482 min Scan# 588  
 Delta R.T. 0.000 min  
 Lab File: cj6537.D  
 Acq: 09 May 2024 11:57 pm

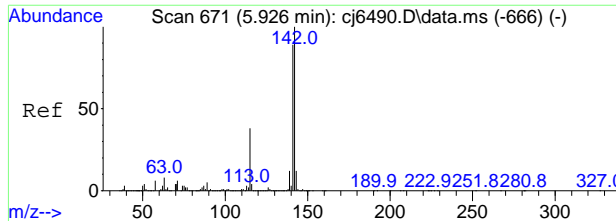
Tgt Ion	Ratio	Lower	Upper
128	100		
129	10.9	0.0	41.4
127	12.2	0.0	43.3



7.1.33  
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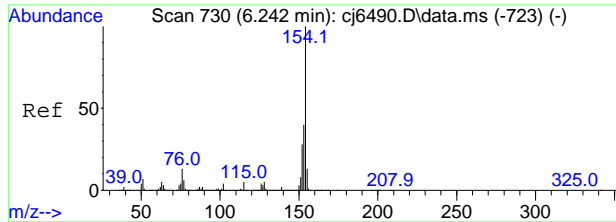
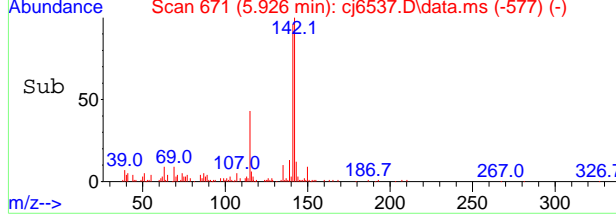
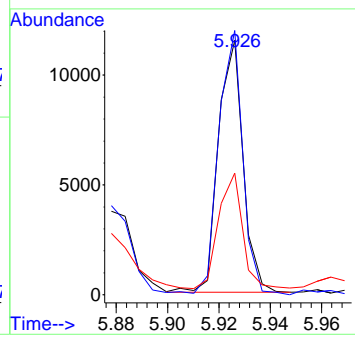
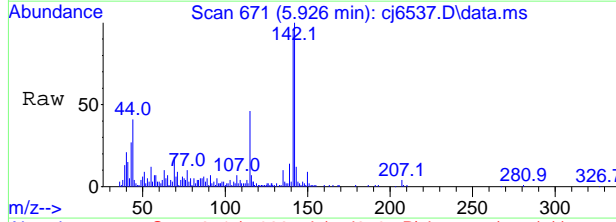






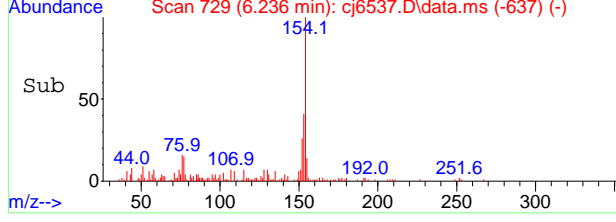
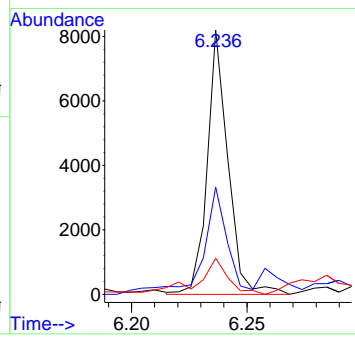
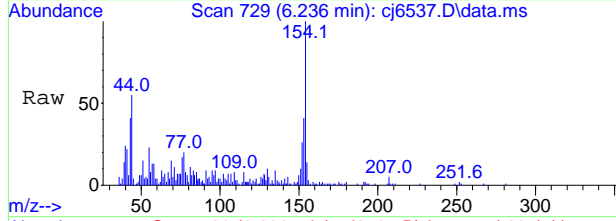
#44  
 2-Methylnaphthalene  
 Concen: 0.4367 ppm  
 RT: 5.926 min Scan# 671  
 Delta R.T. 0.000 min  
 Lab File: cj6537.D  
 Acq: 09 May 2024 11:57 pm

Tgt Ion	Ratio	Lower	Upper
141	100		
142	104.6	82.7	142.7
115	45.0	12.4	72.4



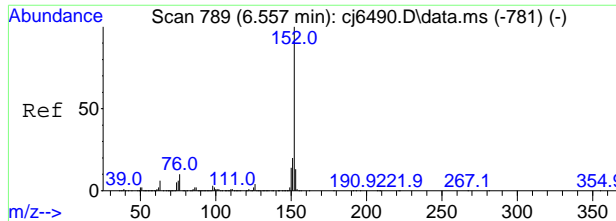
#53  
 Biphenyl  
 Concen: 0.2128 ppm  
 RT: 6.236 min Scan# 729  
 Delta R.T. -0.006 min  
 Lab File: cj6537.D  
 Acq: 09 May 2024 11:57 pm

Tgt Ion	Ratio	Lower	Upper
154	100		
153	37.3	10.5	70.5
155	10.3	0.0	42.8



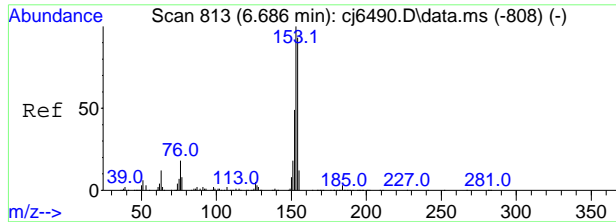
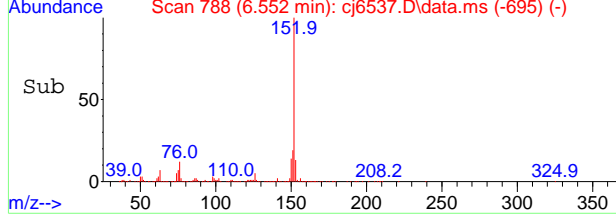
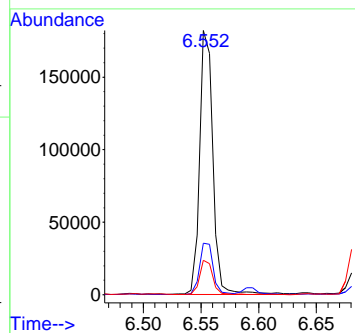
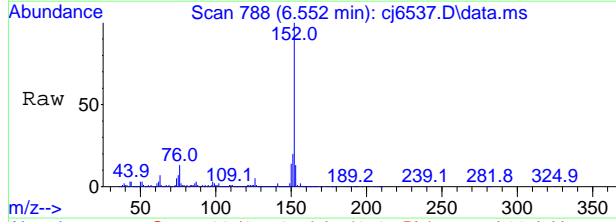
7.1.33  
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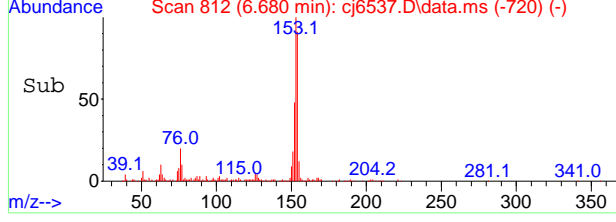
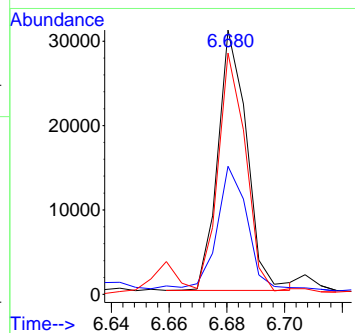
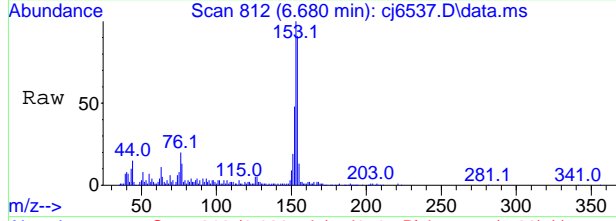
#56  
 Acenaphthylene  
 Concen: 5.3409 ppm  
 RT: 6.552 min Scan# 788  
 Delta R.T. -0.005 min  
 Lab File: cj6537.D  
 Acq: 09 May 2024 11:57 pm

Tgt Ion	Resp	Lower	Upper
152	145542		
151	19.4	0.0	50.3
153	12.9	0.0	43.4



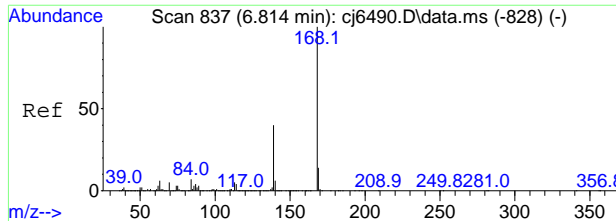
#59  
 Acenaphthene  
 Concen: 1.1114 ppm  
 RT: 6.680 min Scan# 812  
 Delta R.T. -0.006 min  
 Lab File: cj6537.D  
 Acq: 09 May 2024 11:57 pm

Tgt Ion	Resp	Lower	Upper
153	21537		
152	47.0	18.8	78.8
154	86.5	62.9	122.9



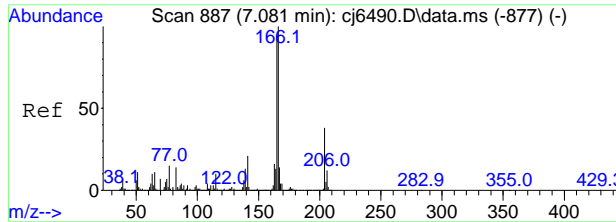
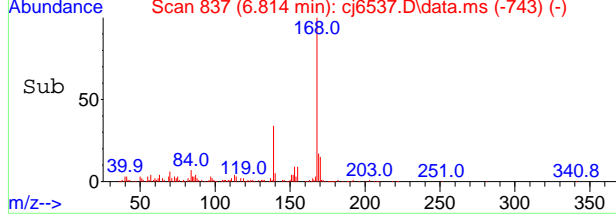
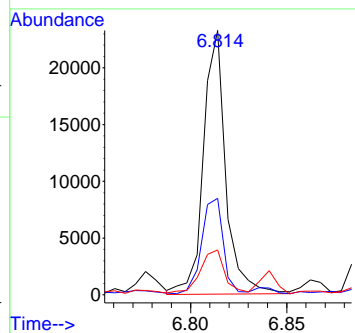
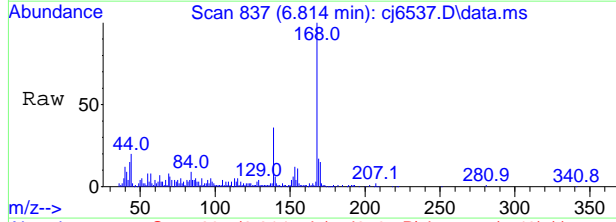
7.1.33  
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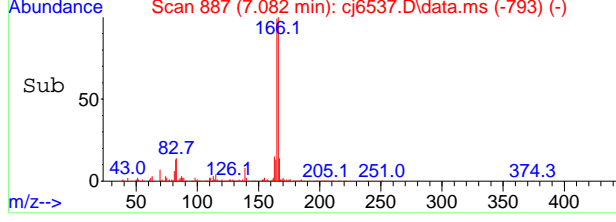
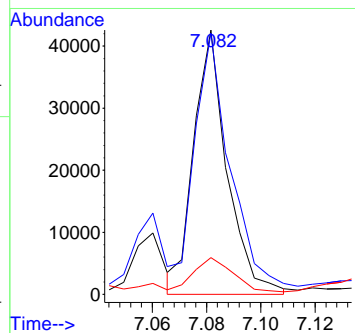
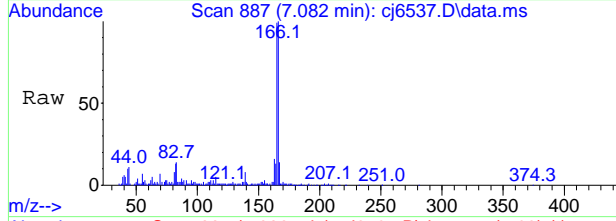
#62  
 Dibenzofuran  
 Concen: 0.6986 ppm  
 RT: 6.814 min Scan# 837  
 Delta R.T. 0.000 min  
 Lab File: cj6537.D  
 Acq: 09 May 2024 11:57 pm

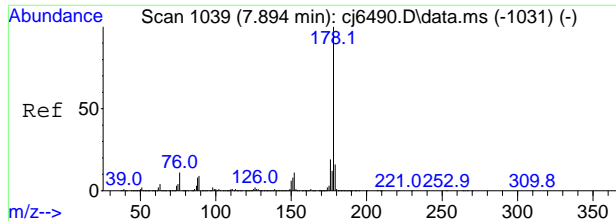
Tgt Ion	Ratio	Lower	Upper
168	100		
139	36.4	10.0	70.0
169	16.7	0.0	43.7



#66  
 Fluorene  
 Concen: 1.7037 ppm m  
 RT: 7.082 min Scan# 887  
 Delta R.T. 0.001 min  
 Lab File: cj6537.D  
 Acq: 09 May 2024 11:57 pm

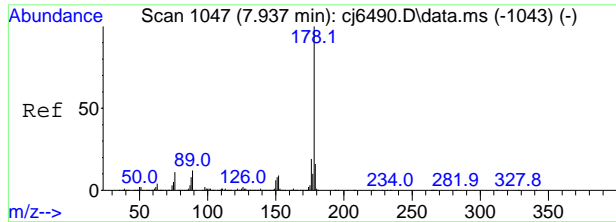
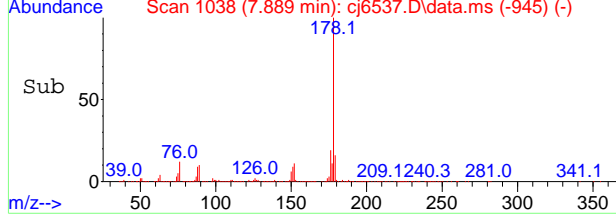
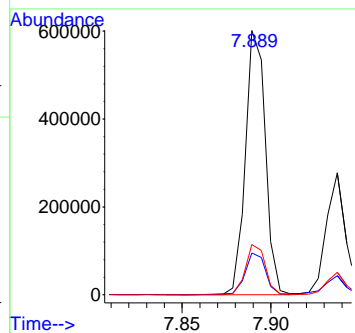
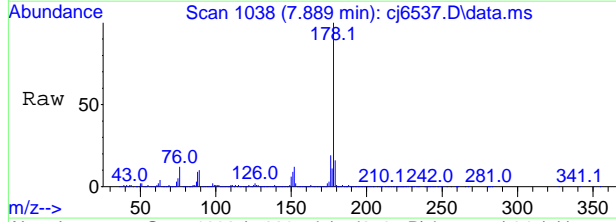
Tgt Ion	Ratio	Lower	Upper
166	100		
165	98.8	65.4	125.4
167	13.9	0.0	43.8





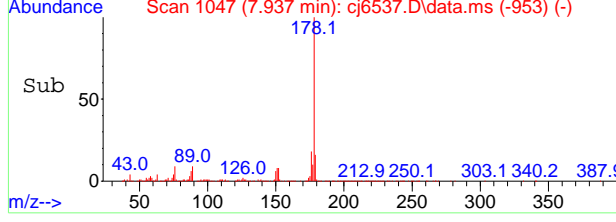
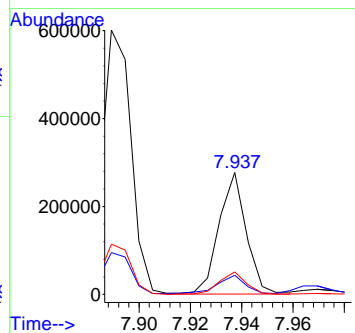
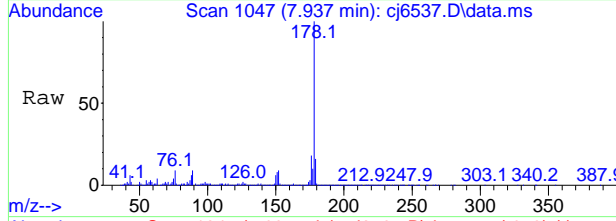
#78  
 Phenanthrene  
 Concen: 15.9101 ppm  
 RT: 7.889 min Scan# 1038  
 Delta R.T. -0.005 min  
 Lab File: cj6537.D  
 Acq: 09 May 2024 11:57 pm

Tgt Ion	Ratio	Lower	Upper
178	100		
179	15.7	0.0	45.5
176	18.9	0.0	49.2



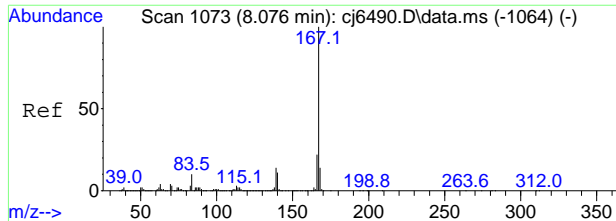
#79  
 Anthracene  
 Concen: 6.9509 ppm  
 RT: 7.937 min Scan# 1047  
 Delta R.T. 0.000 min  
 Lab File: cj6537.D  
 Acq: 09 May 2024 11:57 pm

Tgt Ion	Ratio	Lower	Upper
178	100		
179	14.0	0.0	46.1
176	18.4	0.0	48.7



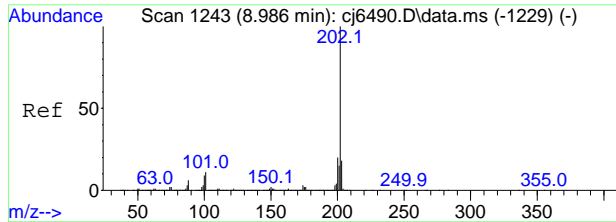
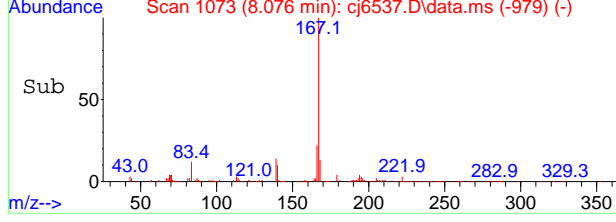
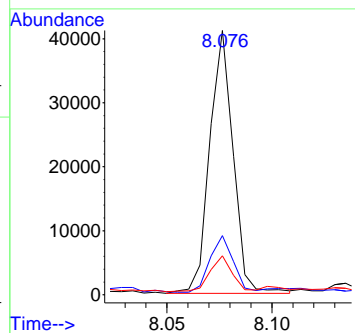
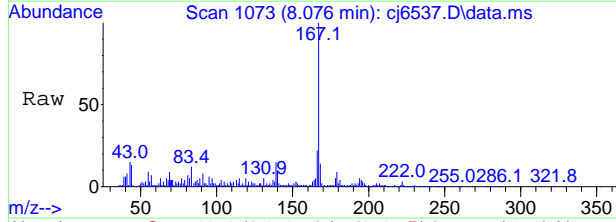
7.1.33  
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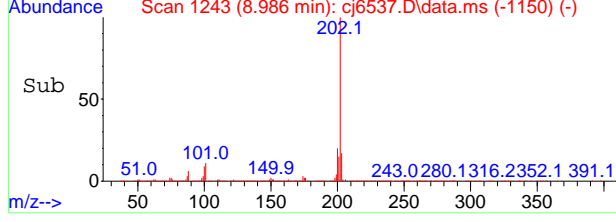
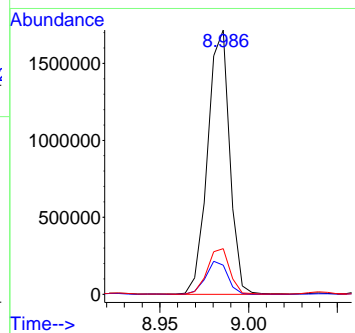
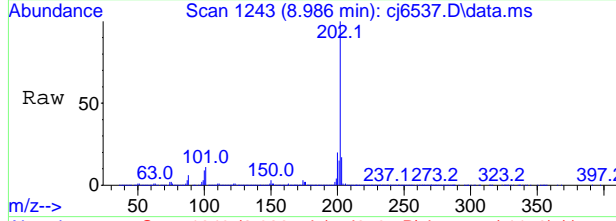
#80  
 Carbazole  
 Concen: 1.1577 ppm  
 RT: 8.076 min Scan# 1073  
 Delta R.T. 0.000 min  
 Lab File: cj6537.D  
 Acq: 09 May 2024 11:57 pm

Tgt Ion	Ratio	Lower	Upper
167	100		
166	20.8	0.0	51.7
139	13.2	0.0	43.8



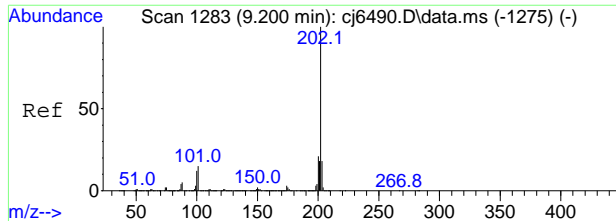
#82  
 Fluoranthene  
 Concen: 46.0012 ppm  
 RT: 8.986 min Scan# 1243  
 Delta R.T. -0.000 min  
 Lab File: cj6537.D  
 Acq: 09 May 2024 11:57 pm

Tgt Ion	Ratio	Lower	Upper
202	100		
101	11.0	0.0	41.4
203	17.1	0.0	47.6



7.1.33  
7

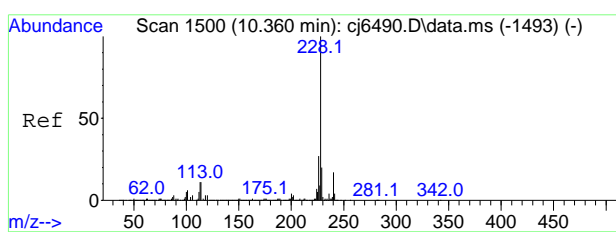
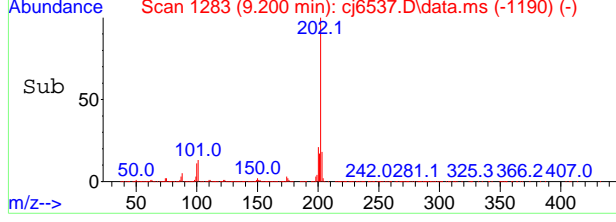
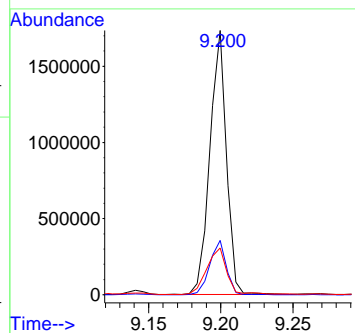
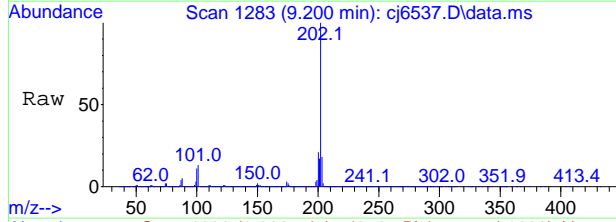




#86  
 Pyrene  
 Concen: 46.2578 ppm  
 RT: 9.200 min Scan# 1283  
 Delta R.T. -0.000 min  
 Lab File: cj6537.D  
 Acq: 09 May 2024 11:57 pm

Tgt Ion: 202 Resp: 1380707

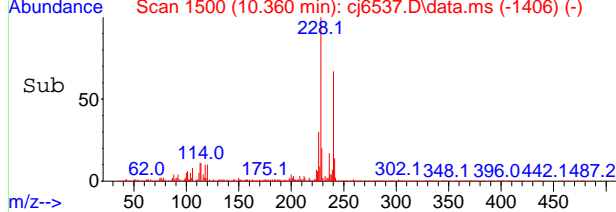
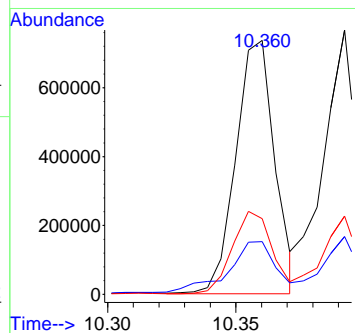
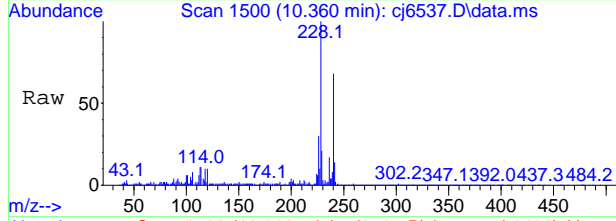
Ion	Ratio	Lower	Upper
202	100		
200	20.6	0.0	51.4
203	17.5	0.0	47.8



#89  
 Benzo[a]anthracene  
 Concen: 27.4712 ppm  
 RT: 10.360 min Scan# 1500  
 Delta R.T. 0.000 min  
 Lab File: cj6537.D  
 Acq: 09 May 2024 11:57 pm

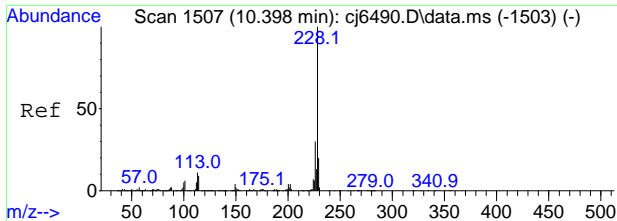
Tgt Ion: 228 Resp: 775213

Ion	Ratio	Lower	Upper
228	100		
229	19.7	0.0	49.8
226	29.7	0.0	57.1



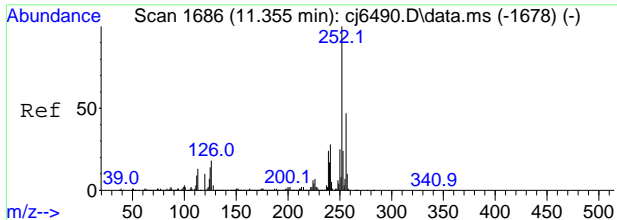
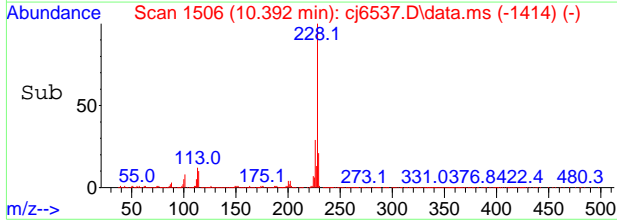
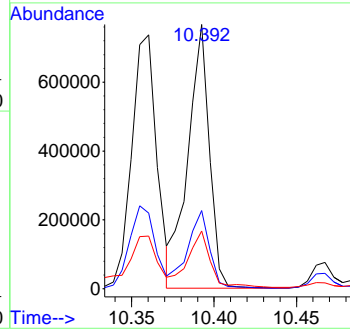
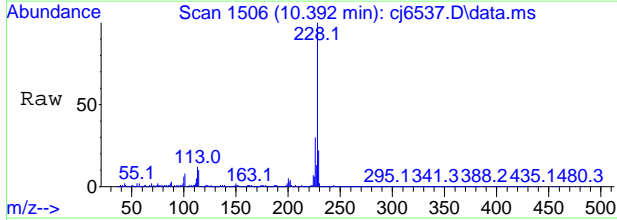
7.1.33  
7





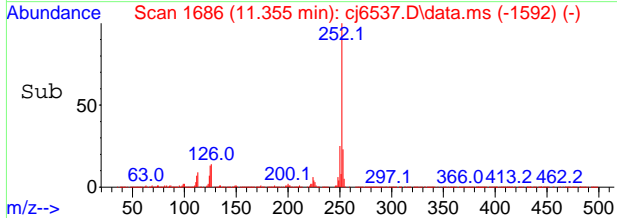
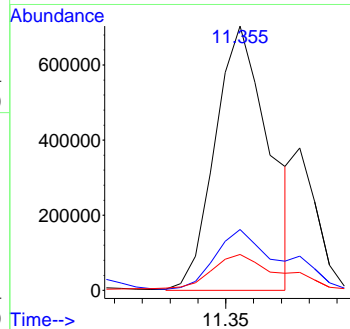
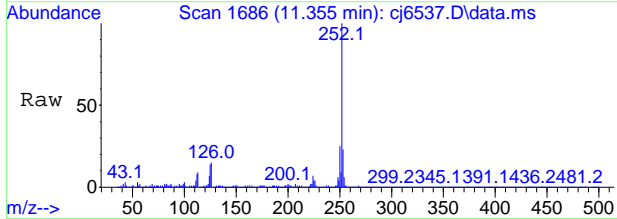
#91  
 Chrysene  
 Concen: 26.6615 ppm  
 RT: 10.392 min Scan# 1506  
 Delta R.T. -0.006 min  
 Lab File: cj6537.D  
 Acq: 09 May 2024 11:57 pm

Tgt Ion	Ratio	Lower	Upper
228	100		
226	29.5	0.0	59.9
229	21.2	0.0	49.8

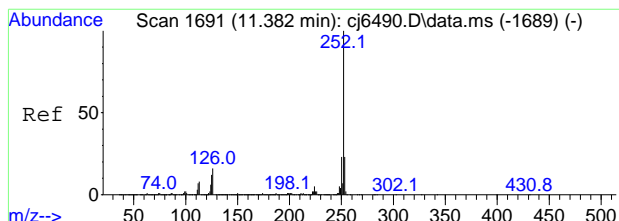


#95  
 Benzo[b]fluoranthene  
 Concen: 35.0902 ppm m  
 RT: 11.355 min Scan# 1686  
 Delta R.T. 0.000 min  
 Lab File: cj6537.D  
 Acq: 09 May 2024 11:57 pm

Tgt Ion	Ratio	Lower	Upper
252	100		
253	23.0	0.0	54.7
125	13.6	0.0	44.2

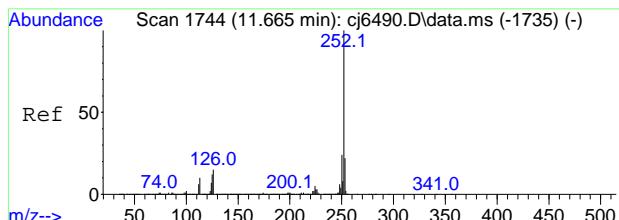
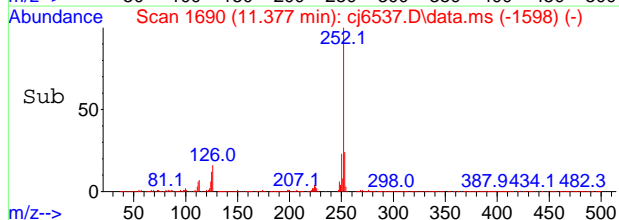
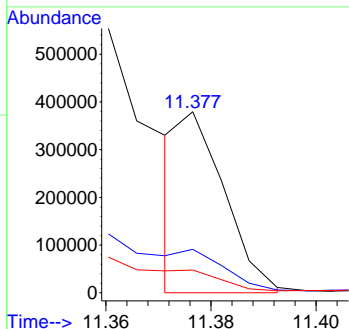
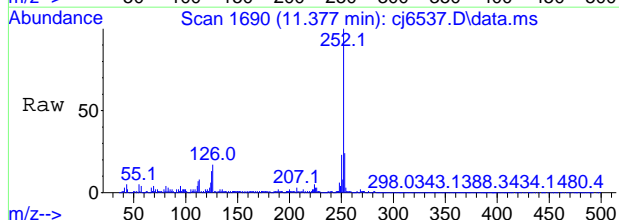


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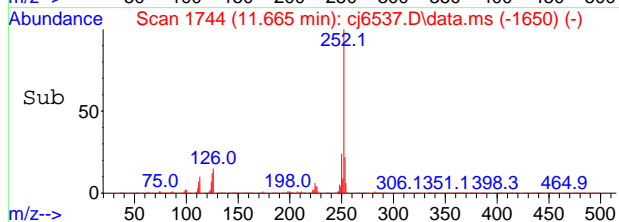
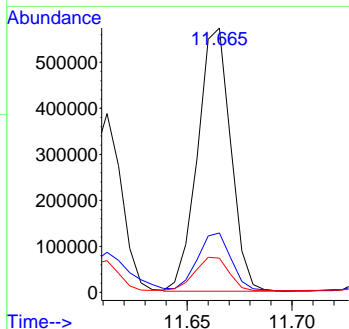
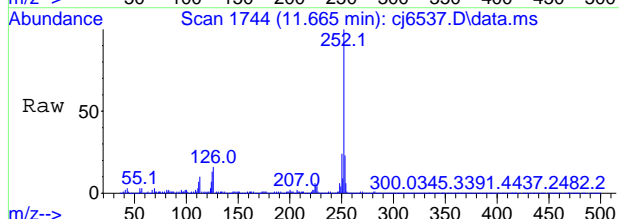
#96  
 Benzo[k]fluoranthene  
 Concen: 9.1616 ppm m  
 RT: 11.377 min Scan# 1690  
 Delta R.T. -0.005 min  
 Lab File: cj6537.D  
 Acq: 09 May 2024 11:57 pm

Tgt Ion	Ratio	Lower	Upper
252	100		
253	24.0	0.0	52.6
125	12.6	0.0	42.4



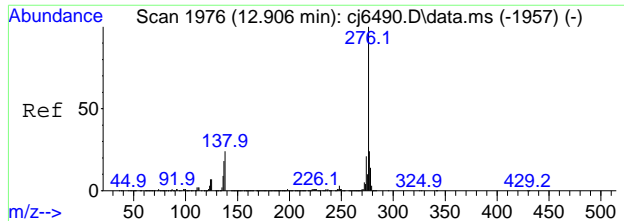
#97  
 Benzo[a]pyrene  
 Concen: 28.1910 ppm  
 RT: 11.665 min Scan# 1744  
 Delta R.T. 0.000 min  
 Lab File: cj6537.D  
 Acq: 09 May 2024 11:57 pm

Tgt Ion	Ratio	Lower	Upper
252	100		
253	21.7	0.0	51.9
125	12.3	0.0	42.1



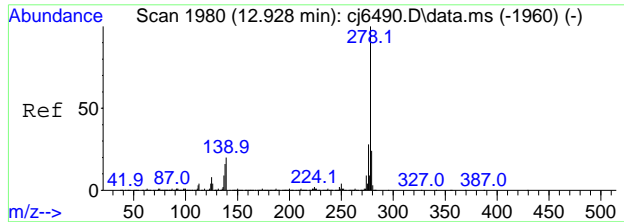
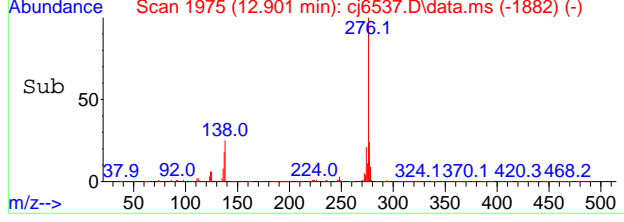
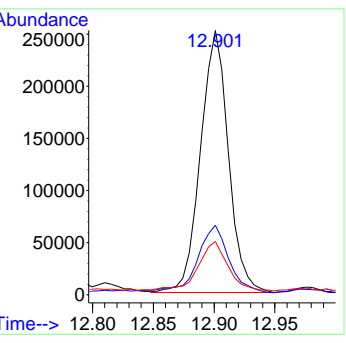
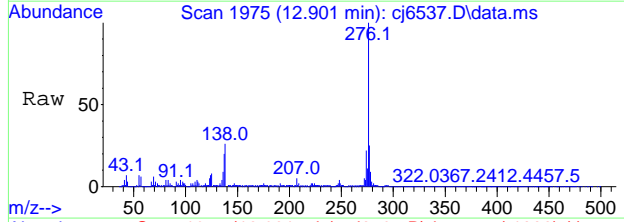
7.1.33  
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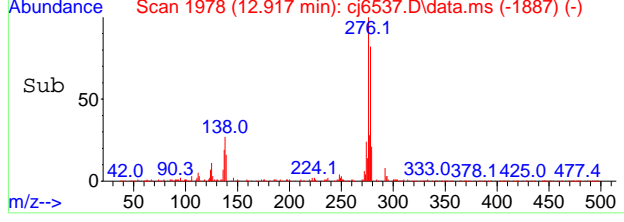
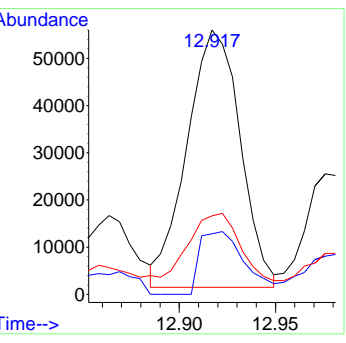
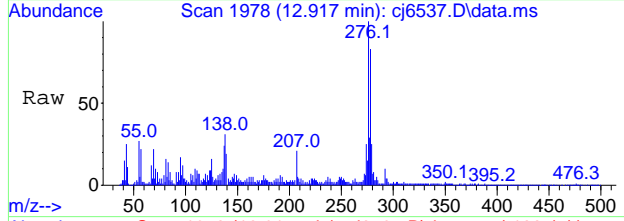
#98  
 Indeno[1,2,3-cd]pyrene  
 Concen: 14.8737 ppm  
 RT: 12.901 min Scan# 1975  
 Delta R.T. -0.005 min  
 Lab File: cj6537.D  
 Acq: 09 May 2024 11:57 pm

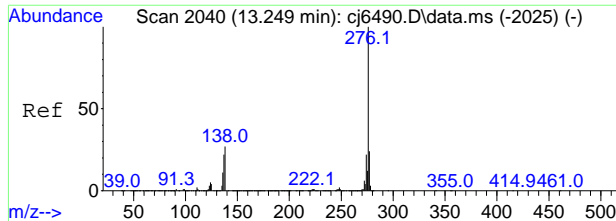
Tgt Ion	Resp	Lower	Upper
276	401298		
138	25.2	0.0	54.2
137	18.7	0.0	47.9



#100  
 Dibenz[a,h]anthracene  
 Concen: 4.8716 ppm  
 RT: 12.917 min Scan# 1978  
 Delta R.T. -0.011 min  
 Lab File: cj6537.D  
 Acq: 09 May 2024 11:57 pm

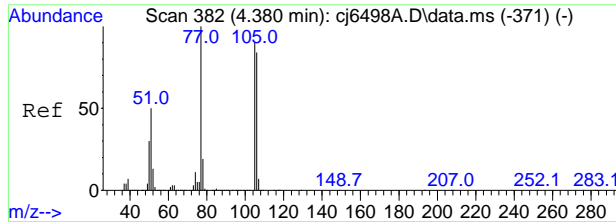
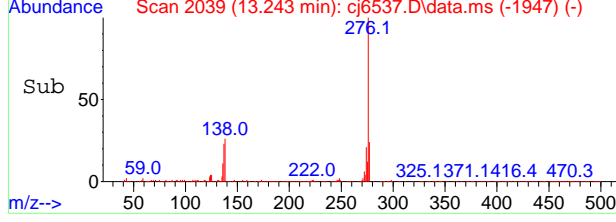
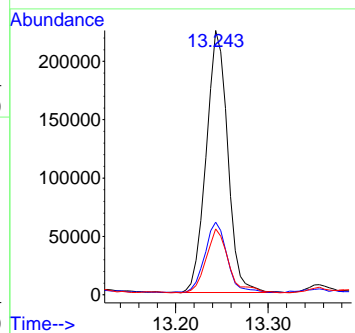
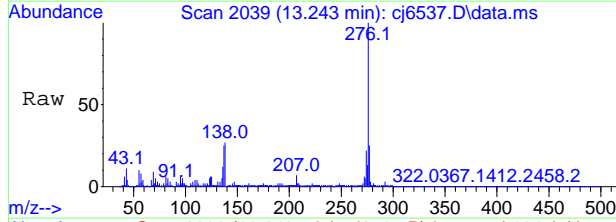
Tgt Ion	Resp	Lower	Upper
278	105024		
139	23.0	0.0	49.8
279	25.9	0.0	54.1





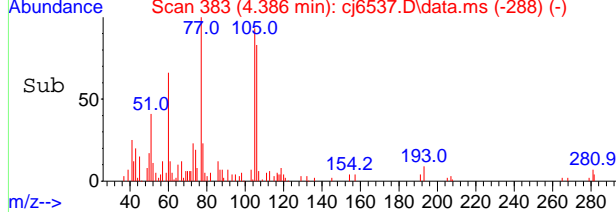
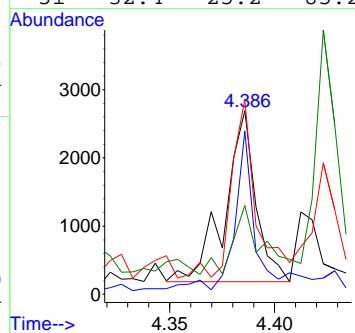
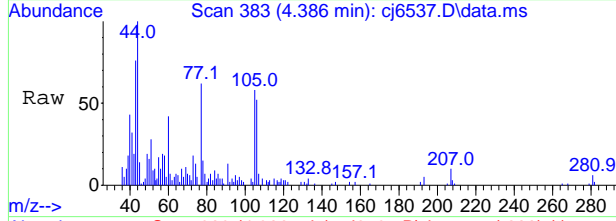
#102  
 Benzo[g,h,i]perylene  
 Concen: 17.3457 ppm  
 RT: 13.243 min Scan# 2039  
 Delta R.T. -0.006 min  
 Lab File: cj6537.D  
 Acq: 09 May 2024 11:57 pm

Tgt Ion	Ratio	Lower	Upper
276	100		
138	26.6	0.0	56.7
277	24.3	0.0	54.1



#104  
 Benzaldehyde  
 Concen: 0.2573 ppm  
 RT: 4.386 min Scan# 383  
 Delta R.T. 0.006 min  
 Lab File: cj6537.D  
 Acq: 09 May 2024 11:57 pm

Tgt Ion	Ratio	Lower	Upper
105	100		
106	88.0	62.5	122.5
77	93.8	80.6	140.6
51	32.4	25.2	85.2



7.1.33  
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LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6537.D  
Acq On : 09 May 2024 11:57 pm  
Operator : rocquans  
Sample : jd87833-16  
Misc : op54460,ecj297,30.3,,,1,1  
ALS Vial : 28 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON  
Sampling : 1  
Start Thrs: 0.02  
Stop Thrs : 0  
Filtering: 5  
Min Area: 1000 Area counts  
Max Peaks: 100  
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

Signal : TIC: cj6537.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.247	354	357	361	rVB	697896	450709	8.00%	0.500%
2	4.423	387	390	399	rBV	2436812	1423372	25.25%	1.578%
3	4.487	399	402	412	rVB	377144	247872	4.40%	0.275%
4	4.664	431	435	439	rBV	3623672	2147244	38.09%	2.380%
5	4.819	461	464	470	rBV	285071	198086	3.51%	0.220%
6	5.012	495	500	504	rBV	2235212	1315114	23.33%	1.458%
7	5.466	577	585	599	rVB	4198932	2728566	48.41%	3.024%
8	6.167	710	716	722	rVB	4413919	2540461	45.07%	2.816%
9	6.552	785	788	793	rBV	429731	352072	6.25%	0.390%
10	6.659	800	808	811	rBV	4540936	3055653	54.21%	3.387%
11	7.274	917	923	927	rVB	1595776	1245326	22.09%	1.380%
12	7.873	1030	1035	1037	rBV	3684497	3206071	56.88%	3.553%
13	7.889	1037	1038	1042	rVB	1476114	933584	16.56%	1.035%
14	7.937	1042	1047	1050	rBV	667139	479722	8.51%	0.532%
15	7.969	1050	1053	1057	rVB4	169524	189249	3.36%	0.210%
16	8.076	1067	1073	1082	rBV3	127900	215881	3.83%	0.239%
17	8.322	1112	1119	1121	rBV	324135	363883	6.46%	0.403%
18	8.349	1121	1124	1126	rVB	313607	242421	4.30%	0.269%
19	8.371	1126	1128	1134	rVB2	543308	551912	9.79%	0.612%
20	8.424	1134	1138	1146	rVB2	597386	777423	13.79%	0.862%
21	8.601	1164	1171	1178	rVB4	214097	374509	6.64%	0.415%
22	8.836	1209	1215	1218	rBV	327965	366140	6.50%	0.406%
23	8.868	1218	1221	1226	rBV3	166026	205438	3.64%	0.228%
24	8.911	1226	1229	1234	rVB3	218650	278383	4.94%	0.309%
25	8.986	1234	1243	1248	rBV	3892961	3660586	64.94%	4.057%
26	9.045	1248	1254	1256	rBV3	341853	450494	7.99%	0.499%
27	9.071	1256	1259	1263	rVB	284768	287283	5.10%	0.318%
28	9.119	1263	1268	1276	rBV5	384218	528676	9.38%	0.586%
29	9.200	1276	1283	1287	rBV	3934843	3636230	64.51%	4.030%
30	9.317	1300	1305	1307	rBV	264925	226753	4.02%	0.251%
31	9.355	1307	1312	1318	rVB	3266073	2691742	47.75%	2.983%
32	9.414	1318	1323	1327	rBV2	288186	401779	7.13%	0.445%
33	9.515	1331	1342	1346	rBV	516479	813986	14.44%	0.902%
34	9.585	1346	1355	1358	rBV	437600	513323	9.11%	0.569%
35	9.617	1358	1361	1369	rVB2	717726	829633	14.72%	0.920%
36	9.702	1374	1377	1380	rVB	266991	212206	3.76%	0.235%
37	9.735	1380	1383	1387	rBV	278229	248176	4.40%	0.275%
38	9.831	1394	1401	1404	rBV6	222109	282658	5.01%	0.313%
39	9.863	1404	1407	1412	rVV2	253290	220729	3.92%	0.245%
40	9.922	1412	1418	1428	rVB8	140894	335219	5.95%	0.372%



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LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6537.D  
Acq On : 09 May 2024 11:57 pm  
Operator : rocquans  
Sample : jd87833-16  
Misc : op54460,ecj297,30.3,,,1,1  
ALS Vial : 28 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON  
Sampling : 1  
Start Thrs: 0.02  
Stop Thrs : 0  
Filtering: 5  
Min Area: 1000 Area counts  
Max Peaks: 100  
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS, zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

Retention	Area	%Area	Height	%Height	Label
41	10.007	1428	1434	1440	rVB
42	10.071	1440	1446	1448	rBV3
43	10.098	1448	1451	1452	rBV2
44	10.114	1452	1454	1458	rVB2
45	10.146	1458	1460	1462	rBV
46	10.189	1465	1468	1471	rBV3
47	10.269	1480	1483	1493	rVB3
48	10.366	1493	1501	1504	rBV2
49	10.392	1504	1506	1514	rVB
50	10.462	1514	1519	1522	rBV3
51	10.494	1522	1525	1533	rVV5
52	10.553	1533	1536	1541	rVV3
53	10.596	1541	1544	1547	rVV2
54	10.687	1556	1561	1564	rVV4
55	10.719	1564	1567	1569	rVV2
56	10.751	1569	1573	1576	rVV
57	10.783	1576	1579	1582	rVV2
58	10.815	1582	1585	1587	rVV3
59	10.842	1587	1590	1592	rVV2
60	10.868	1592	1595	1597	rVV3
61	10.906	1597	1602	1608	rVV2
62	10.949	1608	1610	1614	rVV
63	11.002	1614	1620	1622	rVV5
64	11.050	1622	1629	1633	rVV4
65	11.114	1637	1641	1646	rVV3
66	11.157	1646	1649	1653	rVV2
67	11.205	1653	1658	1664	rVV4
68	11.264	1666	1669	1674	rVV3
69	11.355	1674	1686	1694	rVV
70	11.419	1694	1698	1700	rVV3
71	11.446	1700	1703	1711	rVV
72	11.510	1711	1715	1724	rVV3
73	11.574	1724	1727	1729	rVV4
74	11.612	1729	1734	1739	rVV
75	11.660	1739	1743	1748	rVV
76	11.719	1748	1754	1766	rVV2
77	11.815	1770	1772	1775	rVV3
78	11.869	1775	1782	1787	rVV7
79	11.911	1787	1790	1796	rVV3
80	12.013	1796	1809	1819	rVV10
81	12.211	1835	1846	1850	rVV2
82	12.248	1850	1853	1857	rVV
83	12.275	1857	1858	1868	rVB7
84	12.478	1887	1896	1904	rBV7
85	12.628	1916	1924	1926	rBV3



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LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6537.D  
Acq On : 09 May 2024 11:57 pm  
Operator : rocquans  
Sample : jd87833-16  
Misc : op54460,ecj297,30.3,,,1,1  
ALS Vial : 28 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON Filtering: 5  
Sampling : 1 Min Area: 1000 Area counts  
Start Thrs: 0.02 Max Peaks: 100  
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

86	12.767	1940	1950	1961	rBV4	228689	546735	9.70%	0.606%
87	12.864	1961	1968	1970	rVV2	217744	380024	6.74%	0.421%
88	12.901	1970	1975	1983	rVV2	696254	1262316	22.39%	1.399%
89	12.970	1984	1988	1995	rVV3	121904	212170	3.76%	0.235%
90	13.051	1997	2003	2006	rVV	188343	347737	6.17%	0.385%
91	13.094	2006	2011	2022	rVV5	364614	1082910	19.21%	1.200%
92	13.174	2022	2026	2031	rVV3	179178	353896	6.28%	0.392%
93	13.243	2031	2039	2049	rVB	705891	1317301	23.37%	1.460%
94	13.420	2062	2072	2092	rVV3	971522	2488063	44.14%	2.758%
95	13.719	2122	2128	2137	rVB3	67703	163356	2.90%	0.181%
96	13.848	2146	2152	2158	rVB6	97295	183676	3.26%	0.204%
97	13.971	2169	2175	2179	rVV8	99283	218850	3.88%	0.243%
98	14.024	2180	2185	2193	rVB10	125793	281126	4.99%	0.312%
99	14.217	2214	2221	2231	rVB3	186534	391782	6.95%	0.434%
100	14.425	2252	2260	2269	rVB3	85979	234629	4.16%	0.260%

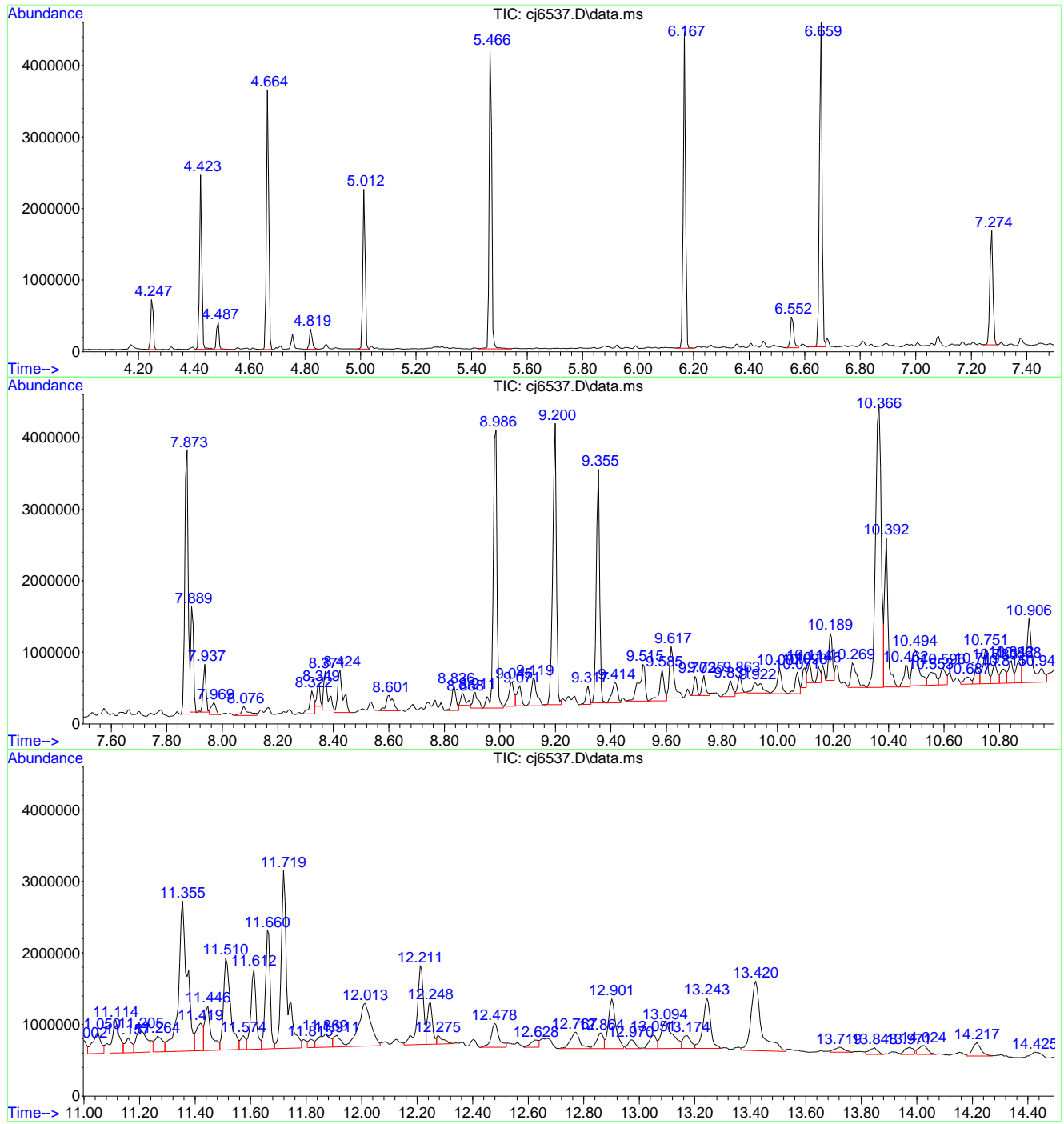
Sum of corrected areas: 90223856

LSC Report - Integrated Chromatogram

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6537.D  
Acq On : 09 May 2024 11:57 pm  
Operator : rocquans  
Sample : jd87833-16  
Misc : op54460,ecj297,30.3,,1,1  
ALS Vial : 28 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p



7.1.34  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\
Data File : cj6537.D
Acq On : 09 May 2024 11:57 pm
Operator : rocquans
Sample : jd87833-16
Misc : op54460,ecj297,30.3,,1,1
ALS Vial : 28 Sample Multiplier: 1

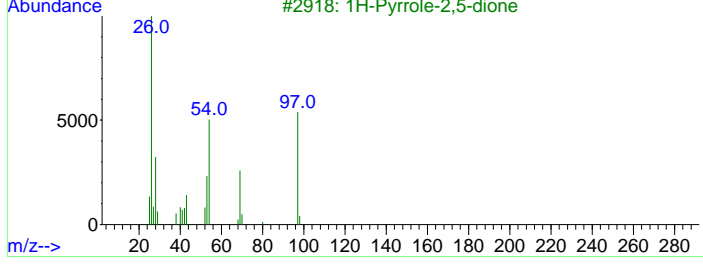
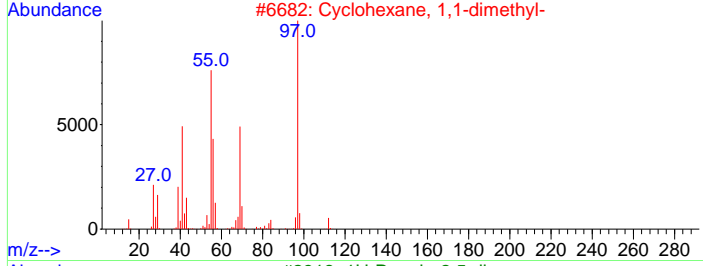
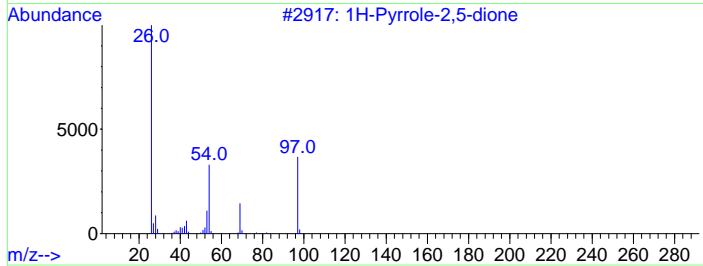
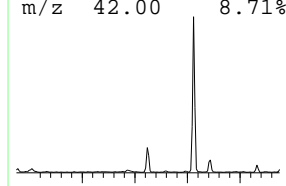
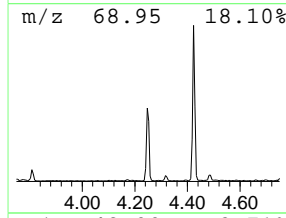
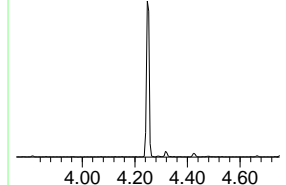
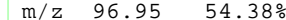
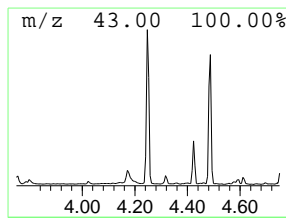
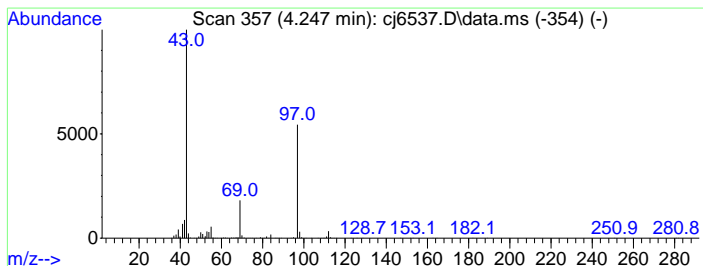
Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: lscint.p

\*\*\*\*\*
Peak Number 1 Unknown Concentration Rank 11

Table with 5 columns: R.T., EstConc, Area, Relative to ISTD, R.T.
Row 1: 4.247, 8.40 ppm, 450709, 1,4-Dichlorobenzene-d4a, 4.664

Table with 7 columns: Hit# of 5, Tentative ID, MW, MolForm, CAS#, Qual
Row 1: 1 1H-Pyrrole-2,5-dione, 97, C4H3NO2, 000541-59-3, 42
Row 2: 2 Cyclohexane, 1,1-dimethyl-, 112, C8H16, 000590-66-9, 33
Row 3: 3 1H-Pyrrole-2,5-dione, 97, C4H3NO2, 000541-59-3, 28
Row 4: 4 2,4-Dimethyl-1,5-diazabicyclo[3...., 112, C6H12N2, 100463-01-2, 28
Row 5: 5 4-Methyl-2-pyrazolin-5-one, 98, C4H6N2O, 013315-23-6, 28



7.1.34
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6537.D  
Acq On : 09 May 2024 11:57 pm  
Operator : rocquans  
Sample : jd87833-16  
Misc : op54460,ecj297,30.3,,1,1  
ALS Vial : 28 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

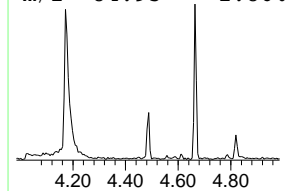
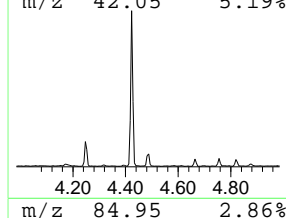
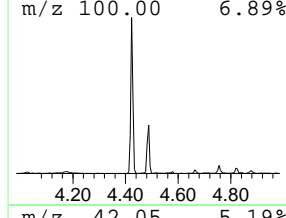
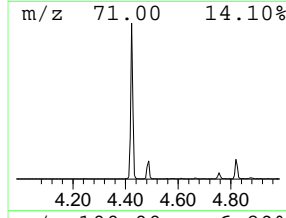
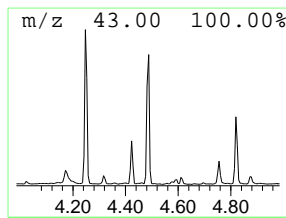
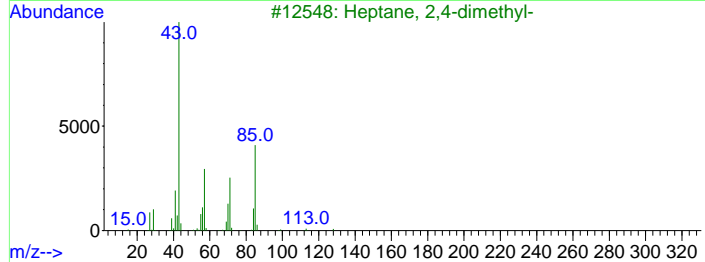
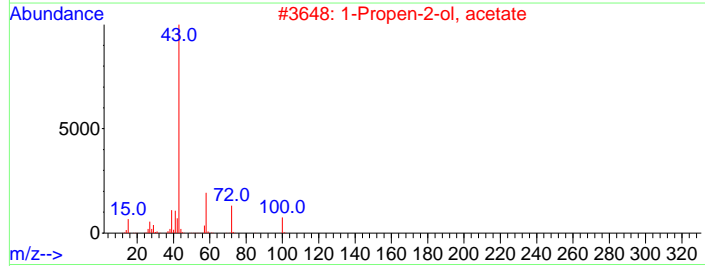
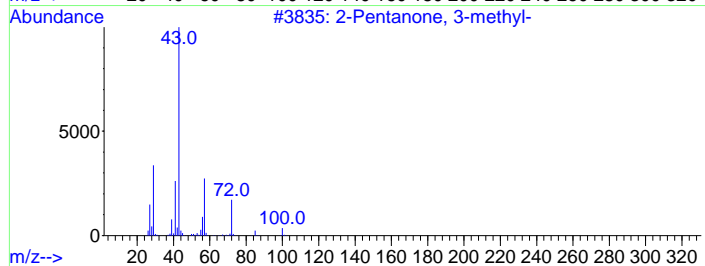
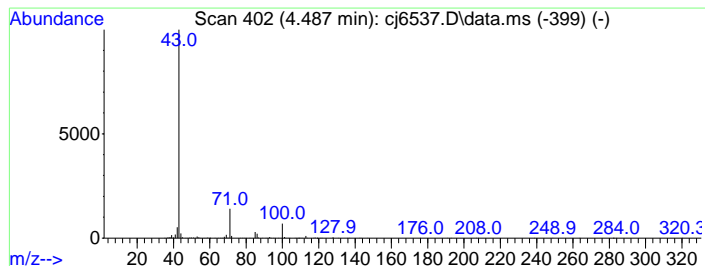
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 2 Unknown Concentration Rank 25

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.487	4.62 ppm	247872	1,4-Dichlorobenzene-d4a	4.664

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2-Pentanone, 3-methyl-	100	C6H12O	000565-61-7	9
2		1-Propen-2-ol, acetate	100	C5H8O2	000108-22-5	9
3		Heptane, 2,4-dimethyl-	128	C9H20	002213-23-2	9
4		2-Pentanone, 3-methyl-	100	C6H12O	000565-61-7	9
5		Pentane, 2-methyl-	86	C6H14	000107-83-5	9



7.1.34  
7



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6537.D  
Acq On : 09 May 2024 11:57 pm  
Operator : rocquans  
Sample : jd87833-16  
Misc : op54460,ecj297,30.3,,1,1  
ALS Vial : 28 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

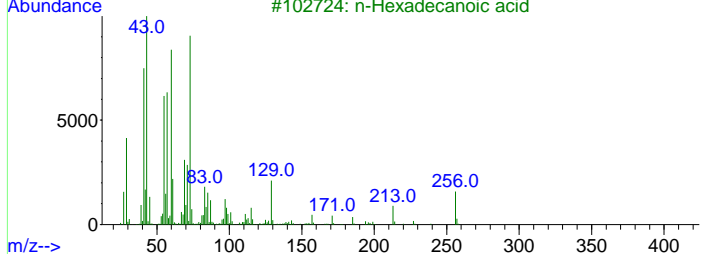
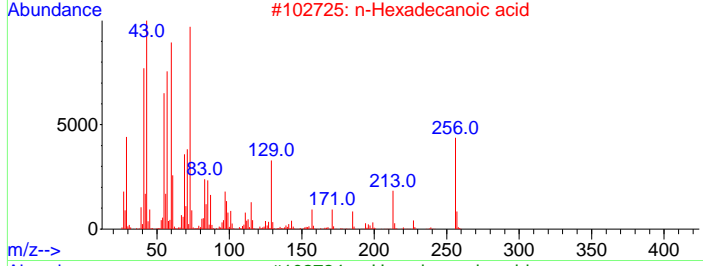
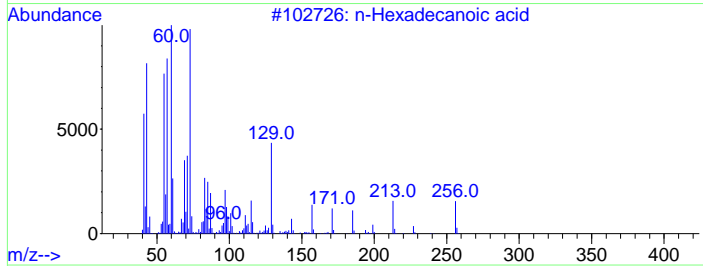
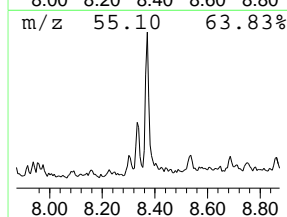
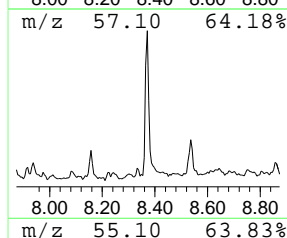
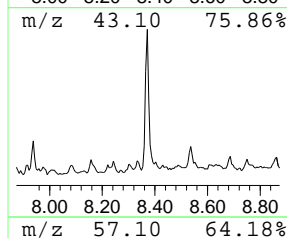
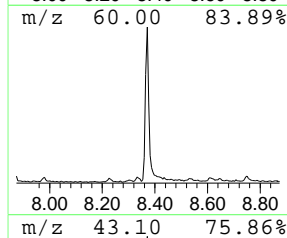
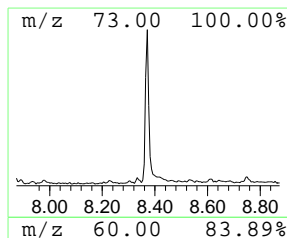
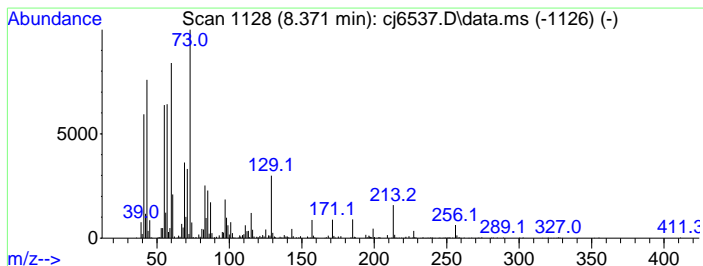
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 3 n-Hexadecanoic acid Concentration Rank 14

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.371	6.89 ppm	551912	Phenanthrene-d10b	7.873

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	n-Hexadecanoic acid	256	C16H32O2	000057-10-3	99
2		n-Hexadecanoic acid	256	C16H32O2	000057-10-3	96
3		n-Hexadecanoic acid	256	C16H32O2	000057-10-3	95
4		Tridecanoic acid	214	C13H26O2	000638-53-9	95
5		Pentadecanoic acid	242	C15H30O2	001002-84-2	91



7.1.34  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6537.D  
 Acq On : 09 May 2024 11:57 pm  
 Operator : rocquans  
 Sample : jd87833-16  
 Misc : op54460,ecj297,30.3,,,1,1  
 ALS Vial : 28 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

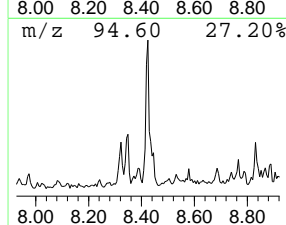
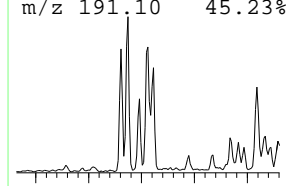
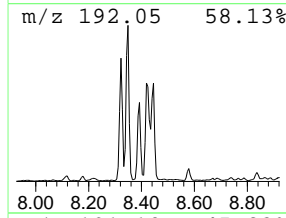
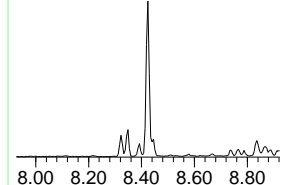
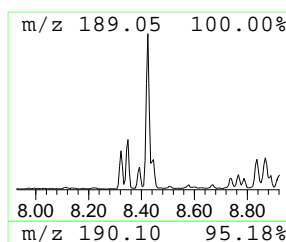
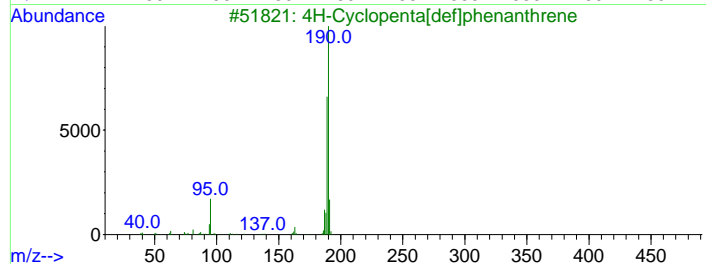
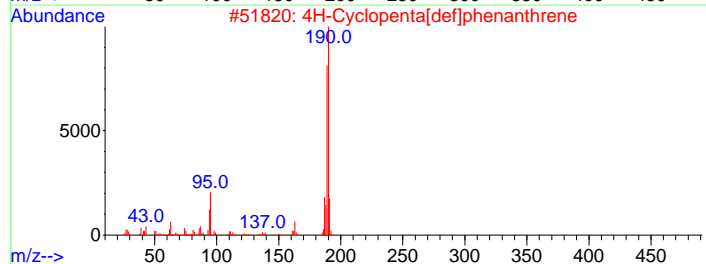
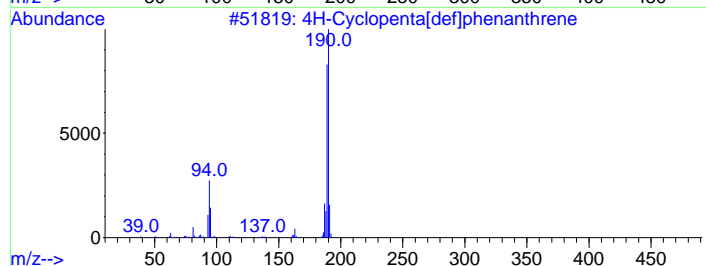
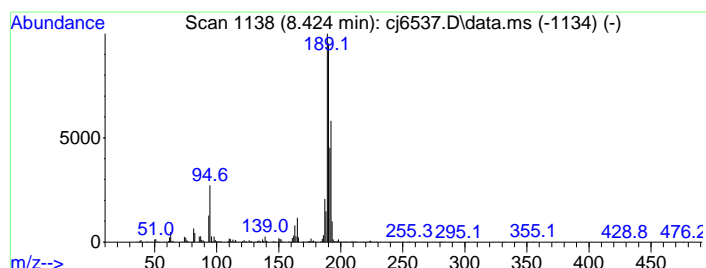
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 4 4H-Cyclopenta[def]phenanthrene Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.424	9.70 ppm	777423	Phenanthrene-d10b	7.873

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	4H-Cyclopenta[def]phenanthrene	190	C15H10	000203-64-5	64
2		4H-Cyclopenta[def]phenanthrene	190	C15H10	000203-64-5	55
3		4H-Cyclopenta[def]phenanthrene	190	C15H10	000203-64-5	38
4		1H-Indene, 2-phenyl-	192	C15H12	004505-48-0	35
5		Phenanthrene, 4-methyl-	192	C15H12	000832-64-4	35



7.1.34  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6537.D  
Acq On : 09 May 2024 11:57 pm  
Operator : rocquans  
Sample : jd87833-16  
Misc : op54460,ecj297,30.3,,,1,1  
ALS Vial : 28 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

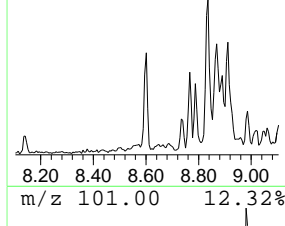
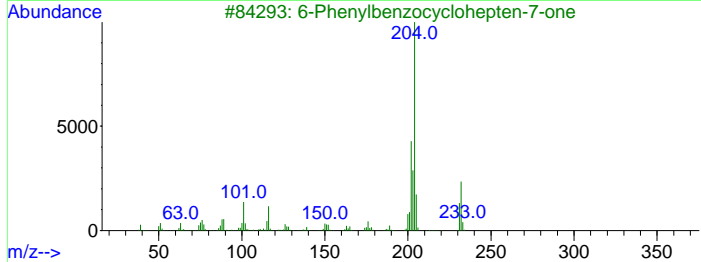
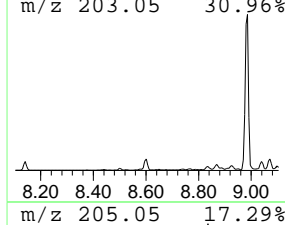
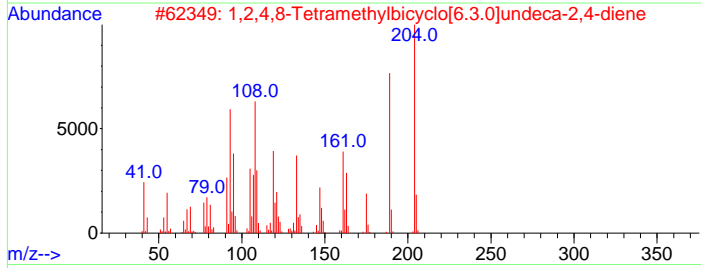
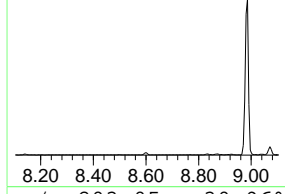
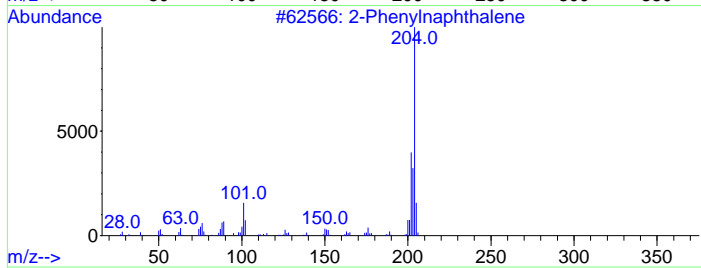
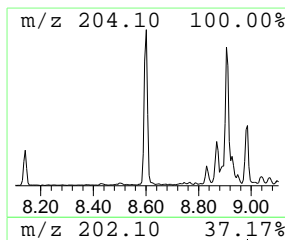
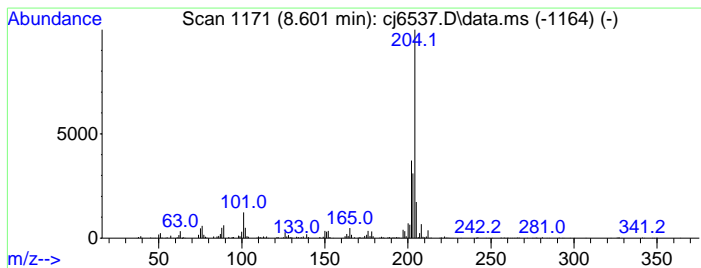
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 5 Unknown Concentration Rank 24

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.601	4.67 ppm	374509	Phenanthrene-d10b	7.873

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	2-Phenyl-naphthalene	204	C16H12	035465-71-5	89
2		1,2,4,8-Tetramethylbicyclo[6.3.0...]	204	C15H24	137235-51-9	86
3		6-Phenylbenzocyclohepten-7-one	232	C17H12O	093327-56-1	86
4		5,16[1',2']:8,13[1'',2'']-Dibenz...	408	C32H24	005672-97-9	86
5		Naphthalene, 2-phenyl-	204	C16H12	000612-94-2	81



7.1.34  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6537.D  
Acq On : 09 May 2024 11:57 pm  
Operator : rocquans  
Sample : jd87833-16  
Misc : op54460,ecj297,30.3,,1,1  
ALS Vial : 28 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

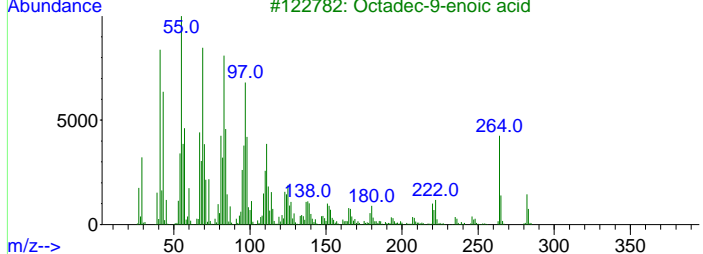
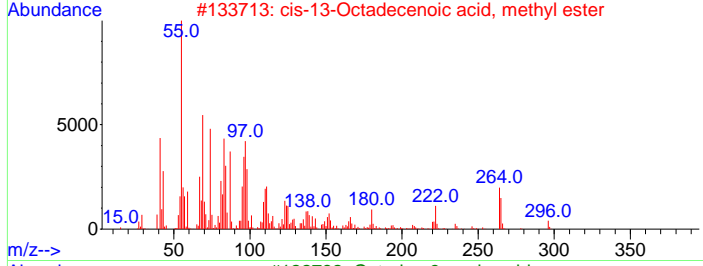
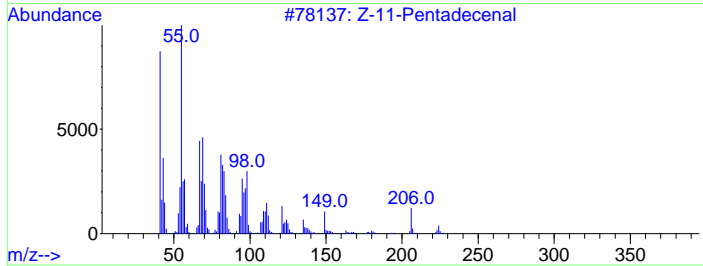
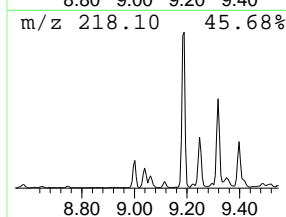
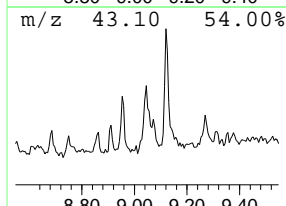
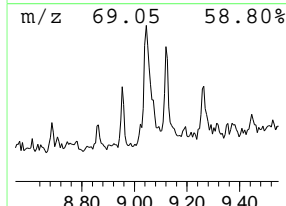
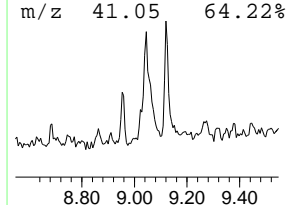
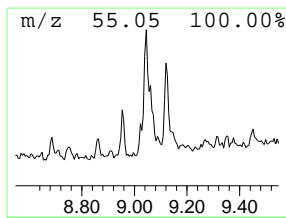
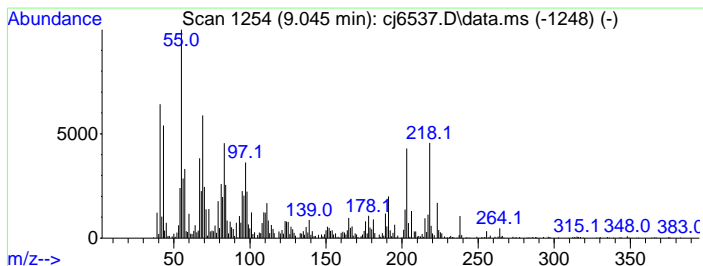
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 6 Unknown Concentration Rank 22

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.045	5.62 ppm	450494	Phenanthrene-d10b	7.873

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Z-11-Pentadecenal	224	C15H28O	1000130-84-6	56
2		cis-13-Octadecenoic acid, methyl...	296	C19H36O2	1000333-58-3	47
3		Octadec-9-enoic acid	282	C18H34O2	1000190-13-7	42
4		6-Octadecenoic acid, methyl este...	296	C19H36O2	002777-58-4	38
5		6-Octadecenoic acid, (Z)-	282	C18H34O2	000593-39-5	38



7.1.34  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6537.D  
Acq On : 09 May 2024 11:57 pm  
Operator : rocquans  
Sample : jd87833-16  
Misc : op54460,ecj297,30.3,,1,1  
ALS Vial : 28 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

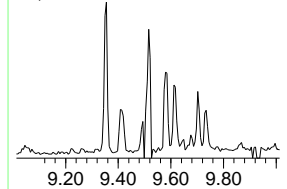
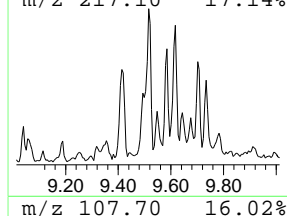
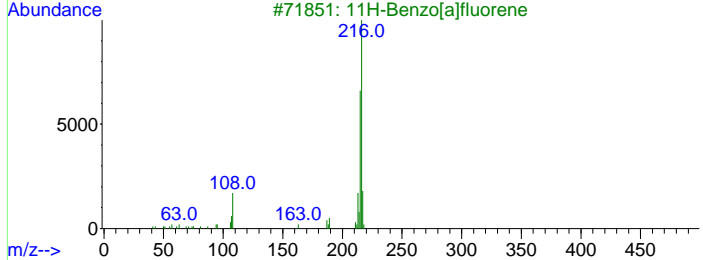
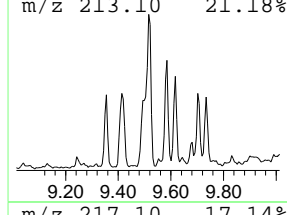
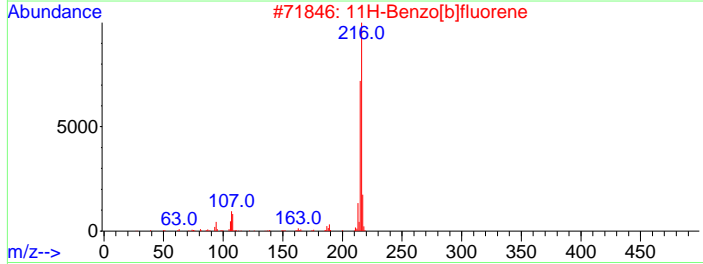
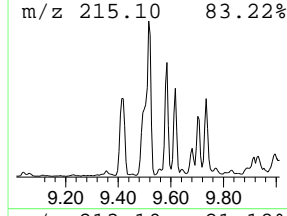
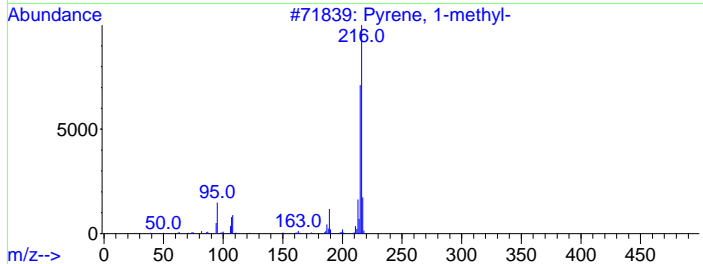
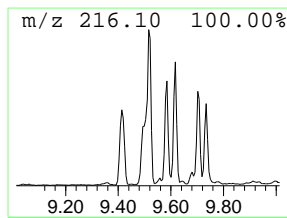
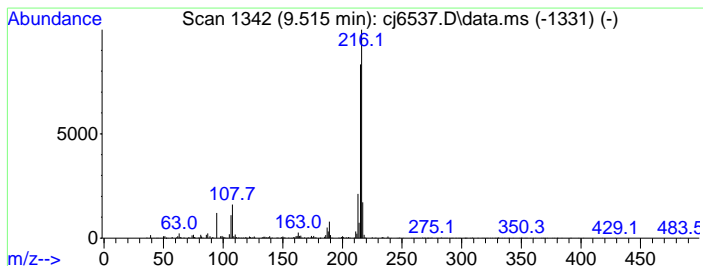
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 7 Unknown Concentration Rank 19

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.515	5.78 ppm	813986	Chrysene-d12	10.366

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Pyrene, 1-methyl-	216	C17H12	002381-21-7	94
2		11H-Benzo[b]fluorene	216	C17H12	000243-17-4	94
3		11H-Benzo[a]fluorene	216	C17H12	000238-84-6	93
4		Pyrene, 1-methyl-	216	C17H12	002381-21-7	91
5		Fluoranthene, 2-methyl-	216	C17H12	033543-31-6	91



7.1.34  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6537.D  
Acq On : 09 May 2024 11:57 pm  
Operator : rocquans  
Sample : jd87833-16  
Misc : op54460,ecj297,30.3,,,1,1  
ALS Vial : 28 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

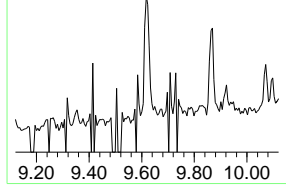
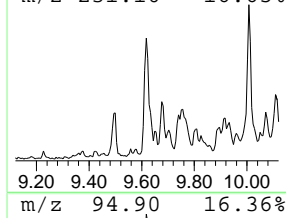
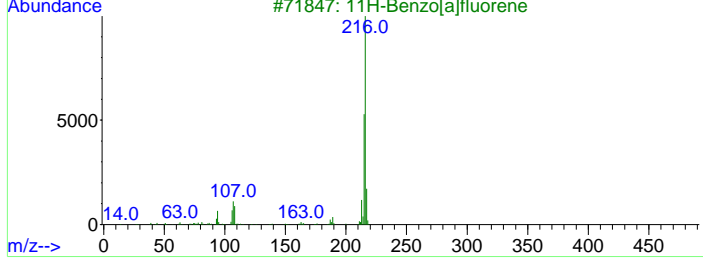
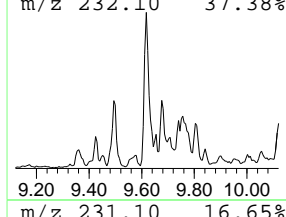
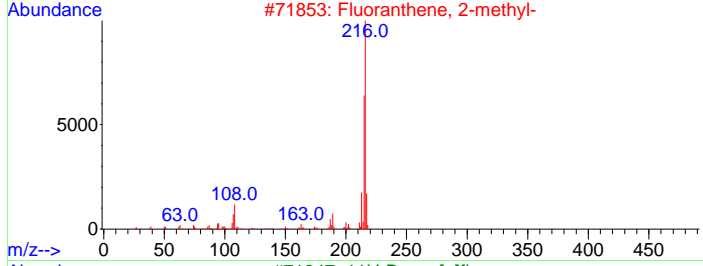
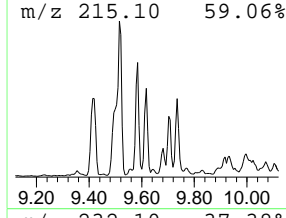
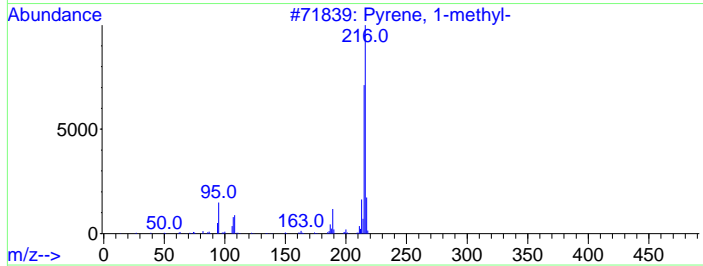
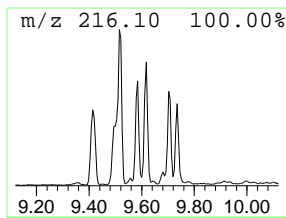
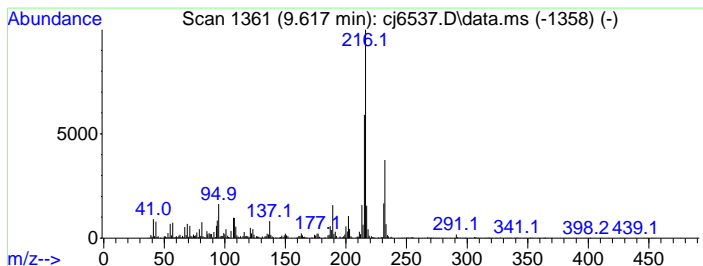
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 8 Unknown Concentration Rank 18

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.617	5.89 ppm	829633	Chrysene-d12	10.366

Hit#	of 5	Tentative ID	MW	MolForm	CAS#	Qual
1		Pyrene, 1-methyl-	216	C17H12	002381-21-7	97
2		Fluoranthene, 2-methyl-	216	C17H12	033543-31-6	95
3		11H-Benzo[a]fluorene	216	C17H12	000238-84-6	93
4		Pyrene, 1-methyl-	216	C17H12	002381-21-7	93
5		Pyrene, 1-methyl-	216	C17H12	002381-21-7	92



7.1.34  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6537.D  
Acq On : 09 May 2024 11:57 pm  
Operator : rocquans  
Sample : jd87833-16  
Misc : op54460,ecj297,30.3,,,1,1  
ALS Vial : 28 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

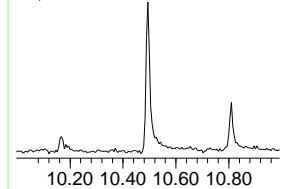
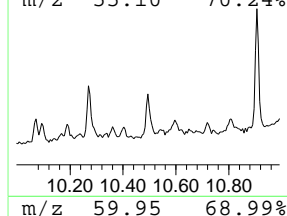
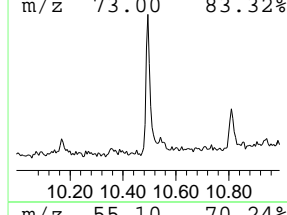
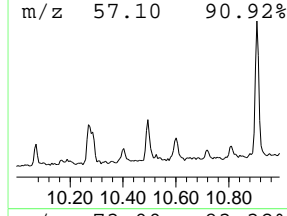
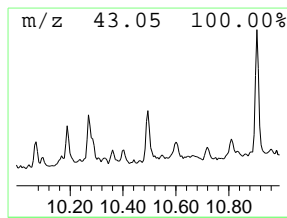
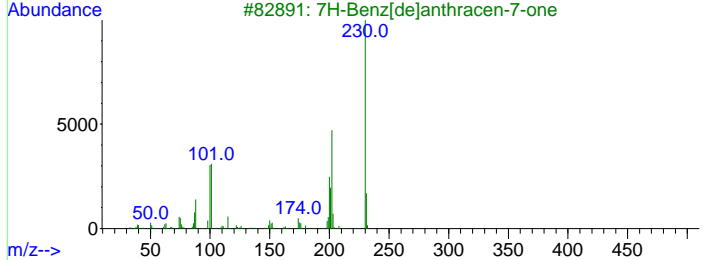
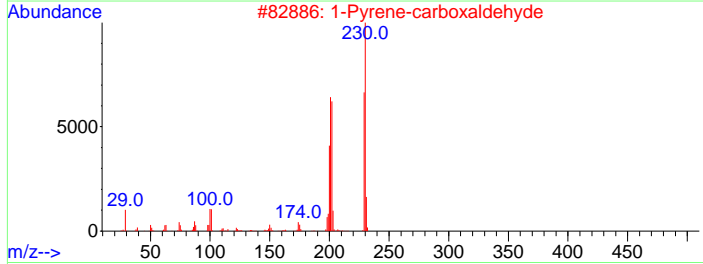
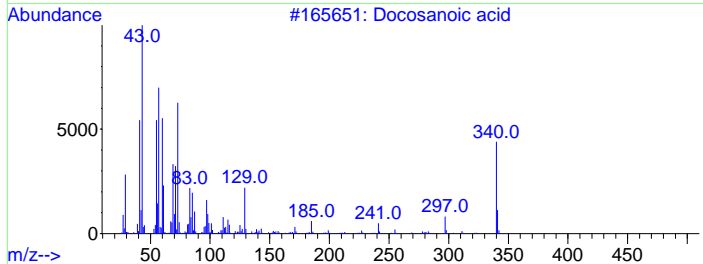
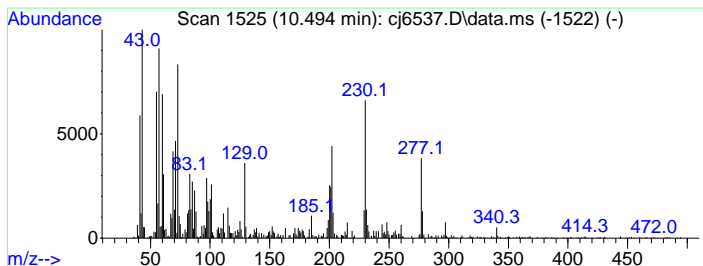
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 9 Unknown Concentration Rank 17

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.494	6.51 ppm	917414	Chrysene-d12a	10.366

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Docosanoic acid	340	C22H44O2	000112-85-6	64
2			1-Pyrene-carboxaldehyde	230	C17H10O	003029-19-4	52
3			7H-Benz[de]anthracen-7-one	230	C17H10O	000082-05-3	46
4			7H-Benz[de]anthracen-7-one	230	C17H10O	000082-05-3	46
5			6H-Benz[de]anthracen-6-one	230	C17H10O	080252-14-8	42



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Library Search Compound Report

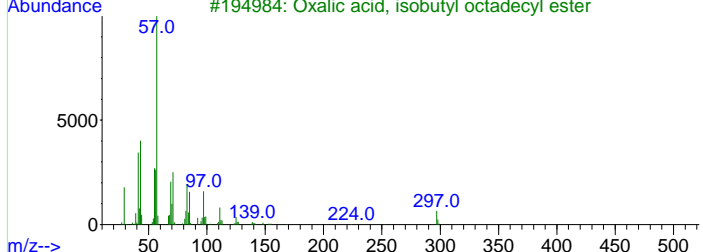
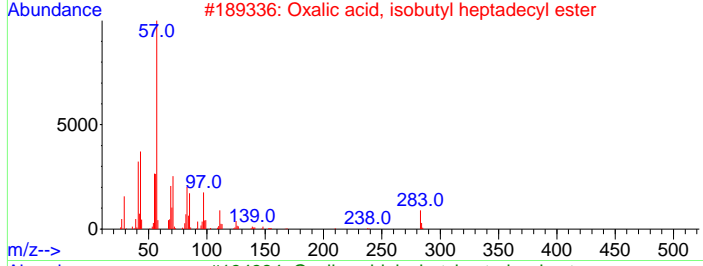
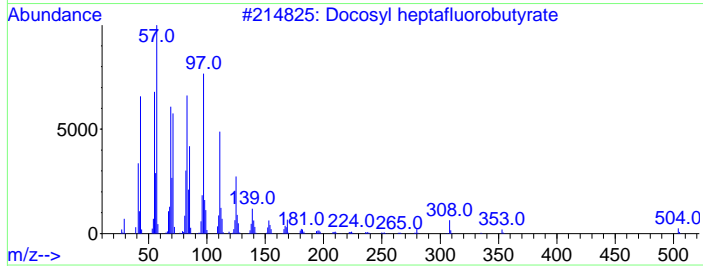
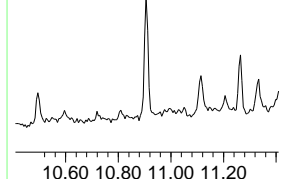
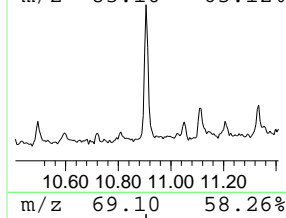
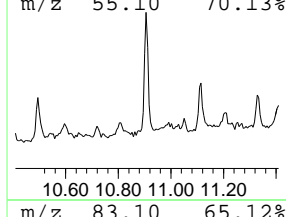
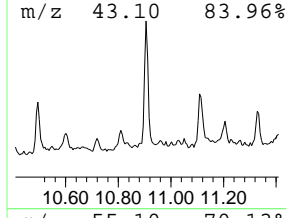
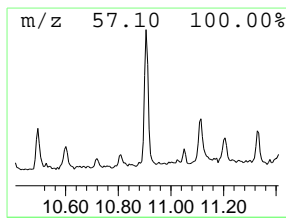
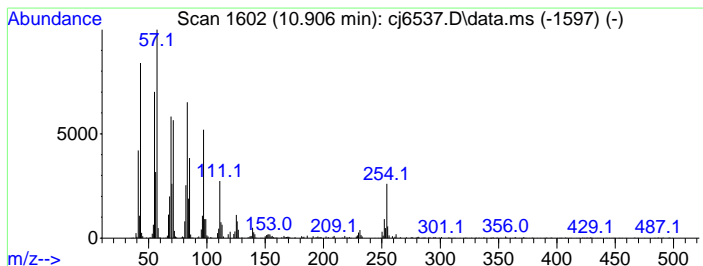
Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6537.D  
Acq On : 09 May 2024 11:57 pm  
Operator : rocquans  
Sample : jd87833-16  
Misc : op54460,ecj297,30.3,,,1,1  
ALS Vial : 28 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 10 Unknown Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.906	8.80 ppm	1239640	Chrysene-d12a	10.366
Hit# of	5	Tentative ID	MW MolForm	CAS# Qual
1		Docosyl heptafluorobutyrate	522 C26H45F7O2	1000351-83-1 83
2		Oxalic acid, isobutyl heptadecyl...	384 C23H44O4	1000309-38-2 83
3		Oxalic acid, isobutyl octadecyl ...	398 C24H46O4	1000309-38-3 83
4		17-Pentatriacontene	491 C35H70	006971-40-0 83
5		Heneicosyl heptafluorobutyrate	508 C25H43F7O2	1000351-83-8 76



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6537.D  
Acq On : 09 May 2024 11:57 pm  
Operator : rocquans  
Sample : jd87833-16  
Misc : op54460,ecj297,30.3,,1,1  
ALS Vial : 28 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

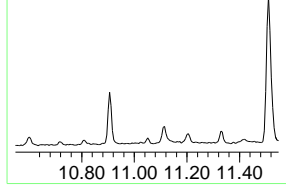
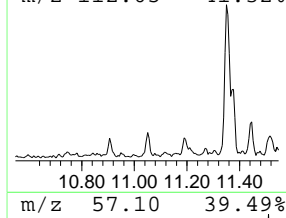
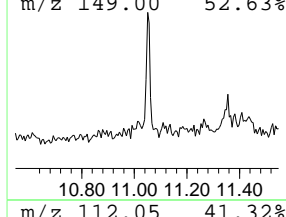
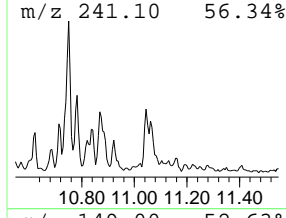
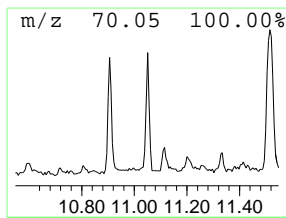
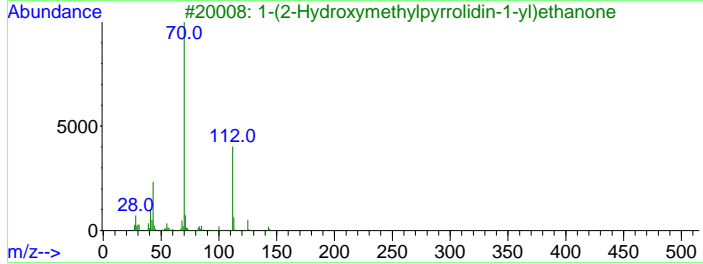
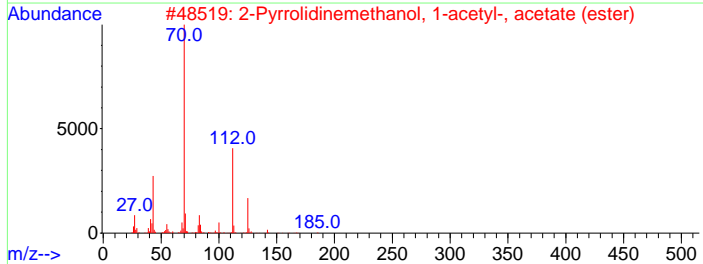
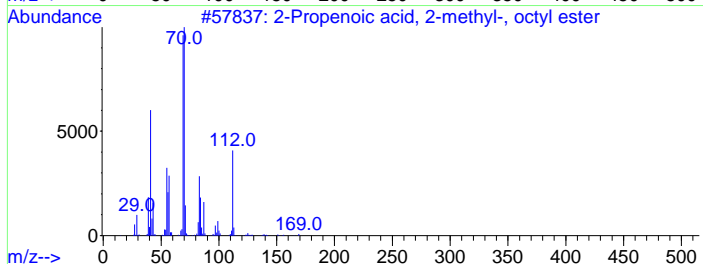
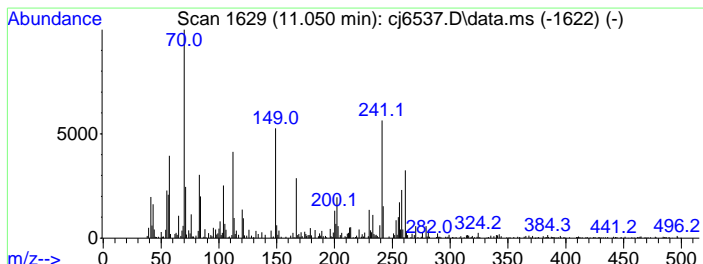
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 11 Unknown Concentration Rank 16

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.050	6.56 ppm	622219	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			2-Propenoic acid, 2-methyl-, oct...	198	C12H22O2	002157-01-9	16
2			2-Pyrrolidinemethanol, 1-acetyl-...	185	C9H15NO3	042366-60-9	16
3			1-(2-Hydroxymethylpyrrolidin-1-y...	143	C7H13NO2	1000192-83-2	16
4			2-Heptene, 3-methyl-	112	C8H16	003404-75-9	16
5			Silane, [(3.alpha.,5.alpha.,17....	436	C25H48O2Si2	010426-36-5	11



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6537.D  
Acq On : 09 May 2024 11:57 pm  
Operator : rocquans  
Sample : jd87833-16  
Misc : op54460,ecj297,30.3,,1,1  
ALS Vial : 28 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

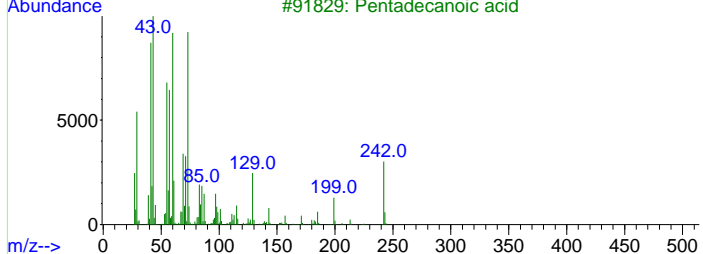
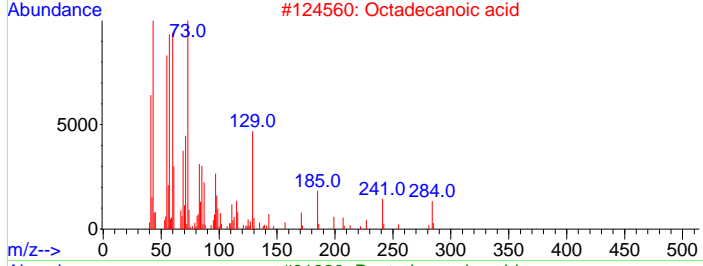
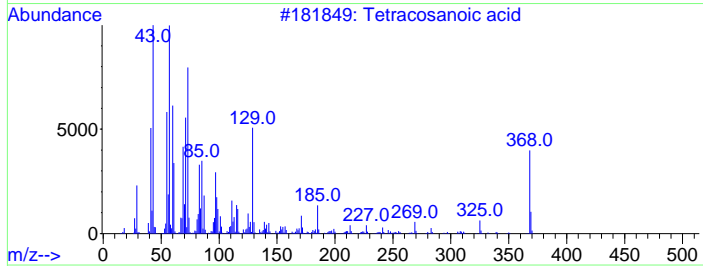
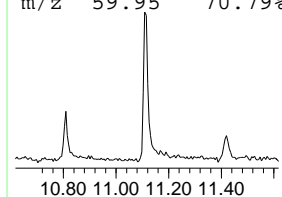
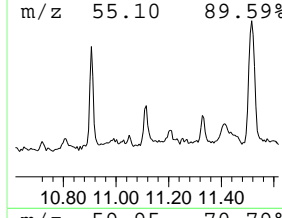
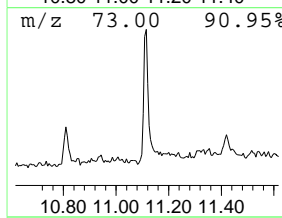
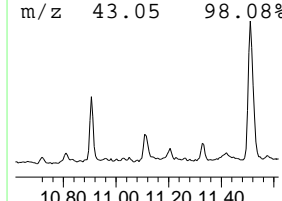
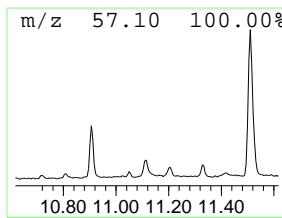
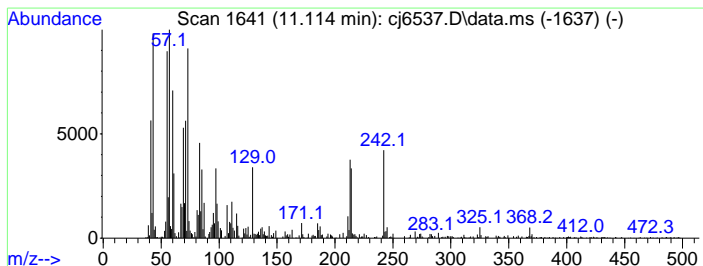
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 12 Unknown acid Concentration Rank 12

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.115	7.96 ppm	755329	Perylene-d12	11.719

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		Tetracosanoic acid	368	C24H48O2	000557-59-5	49
2		Octadecanoic acid	284	C18H36O2	000057-11-4	49
3		Pentadecanoic acid	242	C15H30O2	001002-84-2	45
4		Ether, dodecyl isopropyl	228	C15H32O	029379-42-8	38
5		Decanoic acid, silver(1+) salt	278	C10H19AgO2	013126-67-5	38



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6537.D  
Acq On : 09 May 2024 11:57 pm  
Operator : rocquans  
Sample : jd87833-16  
Misc : op54460,ecj297,30.3,,1,1  
ALS Vial : 28 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

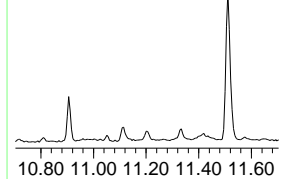
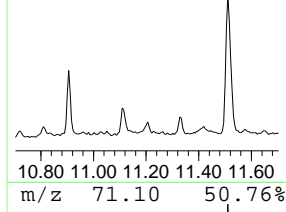
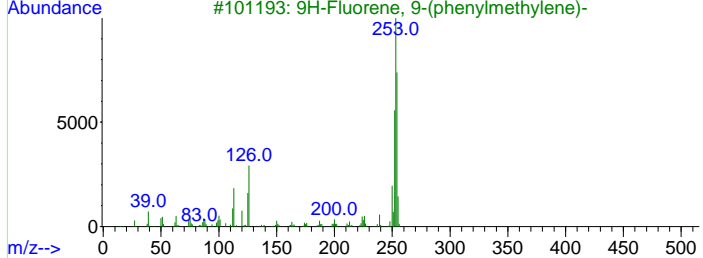
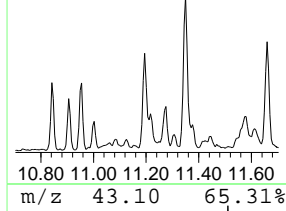
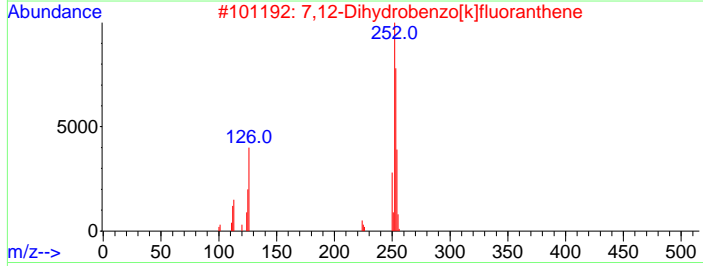
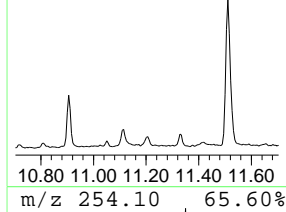
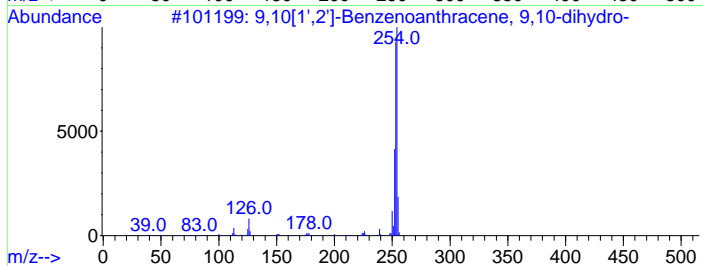
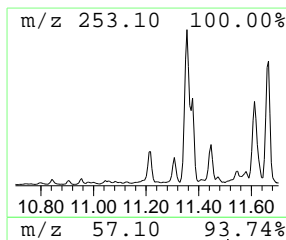
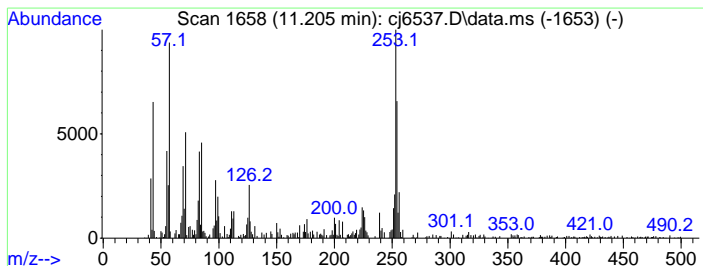
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 13 Unknown Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.205	8.41 ppm	798403	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			9,10[1',2']-Benzenoanthracene, 9...	254	C20H14	000477-75-8	89
2			7,12-Dihydrobenzo[k]fluoranthene	254	C20H14	1000080-17-7	68
3			9H-Fluorene, 9-(phenylmethylene)-	254	C20H14	001836-87-9	55
4			4,6'-Biazulenyl	254	C20H14	094154-49-1	50
5			4,4'-Biazulenyl	254	C20H14	094053-54-0	42



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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6537.D  
Acq On : 09 May 2024 11:57 pm  
Operator : rocquans  
Sample : jd87833-16  
Misc : op54460,ecj297,30.3,,1,1  
ALS Vial : 28 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

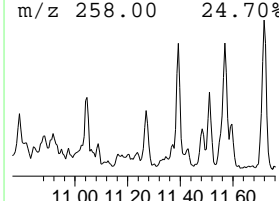
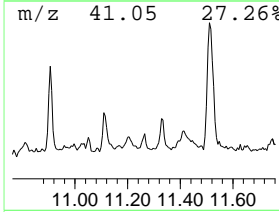
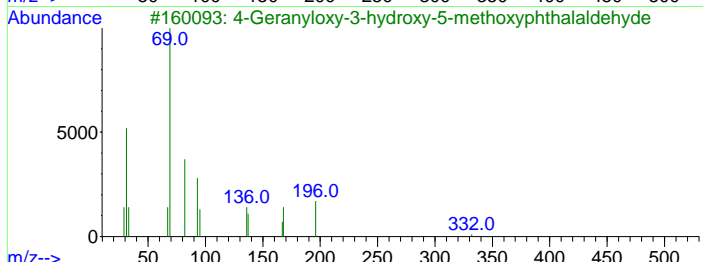
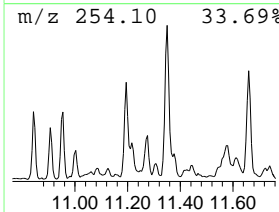
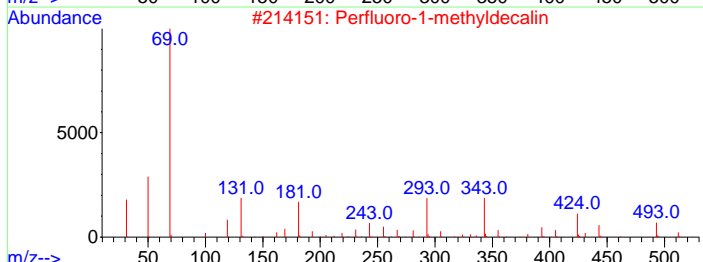
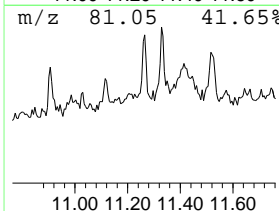
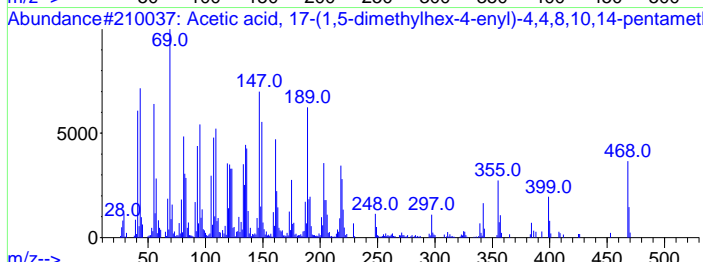
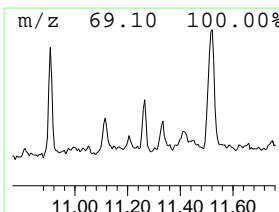
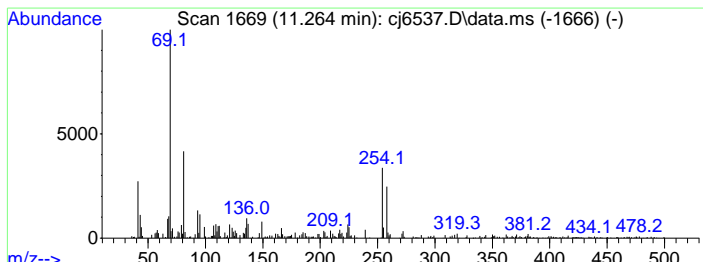
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 14 Unknown Concentration Rank 23

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.264	4.73 ppm	449295	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Acetic acid, 17-(1,5-dimethylhex...	468	C32H52O2	1000195-12-9	10
2			Perfluoro-1-methyldecalin	512	C11F20	000306-92-3	4
3			4-Geranyloxy-3-hydroxy-5-methoxy...	332	C19H24O5	076878-70-1	4
4			p-Menthon-8-thiol	186	C10H18OS	033281-91-3	2
5			N-[4,6-Bis-(2,2,2-trifluoro-1-tr...	444	C9H4F12N4O3	1000303-36-1	2



7.1.34  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6537.D  
Acq On : 09 May 2024 11:57 pm  
Operator : rocquans  
Sample : jd87833-16  
Misc : op54460,ecj297,30.3,,,1,1  
ALS Vial : 28 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

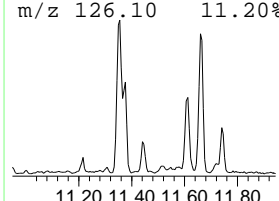
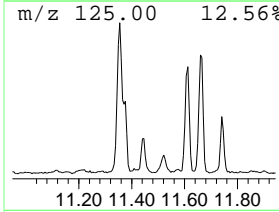
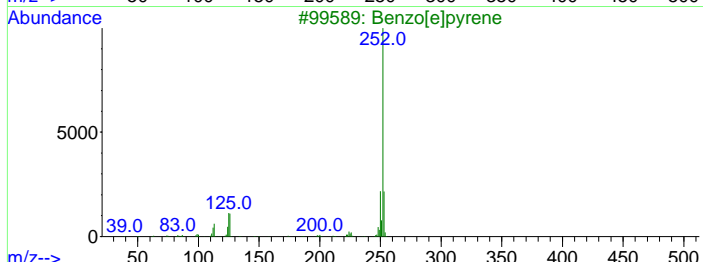
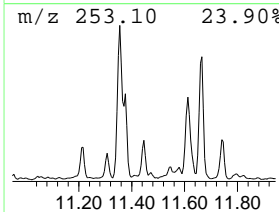
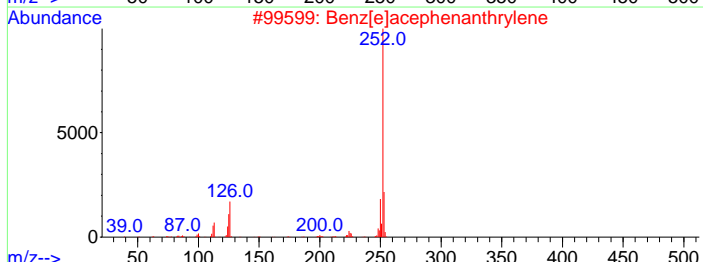
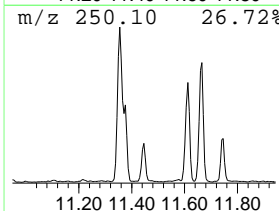
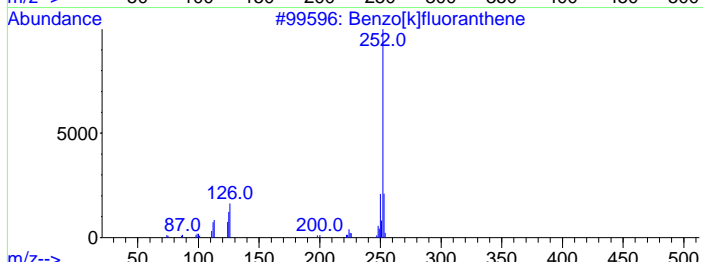
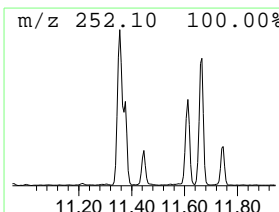
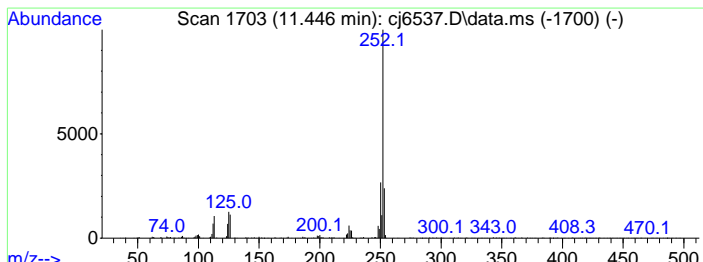
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 15 Unknown PHA Substance Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.446	10.27 ppm	974979	Perylene-d12	11.719

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Benzo[k]fluoranthene	252	C20H12	000207-08-9	94
2		Benzo[e]acephenanthrylene	252	C20H12	000205-99-2	93
3		Benzo[e]pyrene	252	C20H12	000192-97-2	93
4		Benzo[e]acephenanthrylene	252	C20H12	000205-99-2	90
5		Benzo[e]acephenanthrylene	252	C20H12	000205-99-2	89



7.1.34  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6537.D  
Acq On : 09 May 2024 11:57 pm  
Operator : rocquans  
Sample : jd87833-16  
Misc : op54460,ecj297,30.3,,1,1  
ALS Vial : 28 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

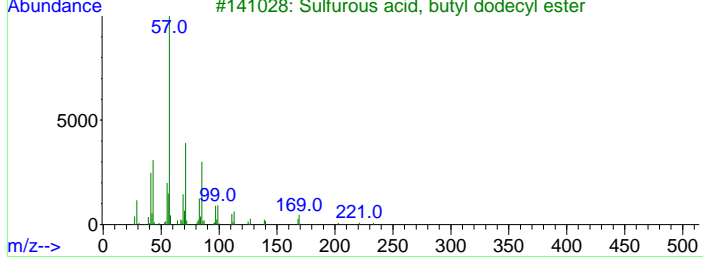
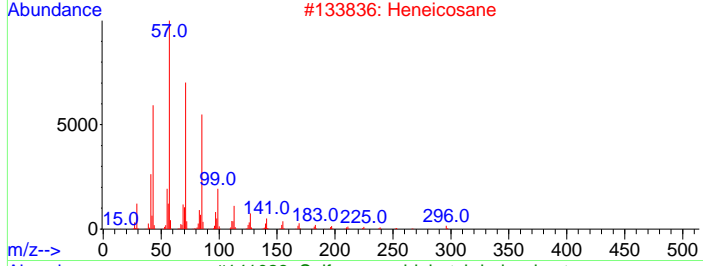
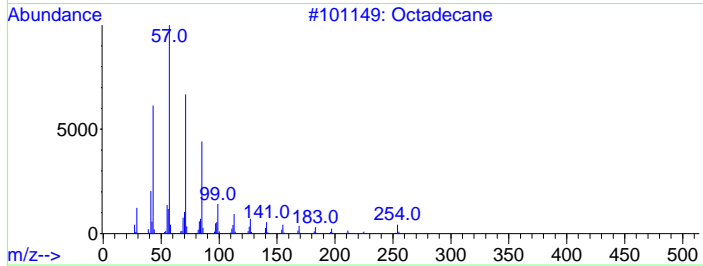
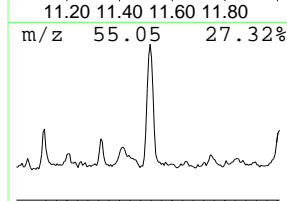
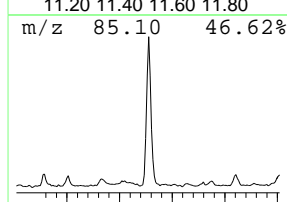
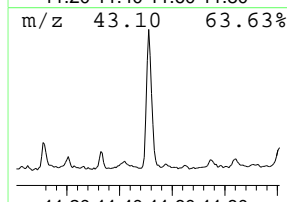
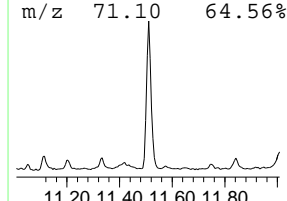
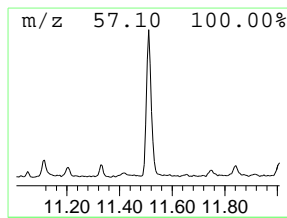
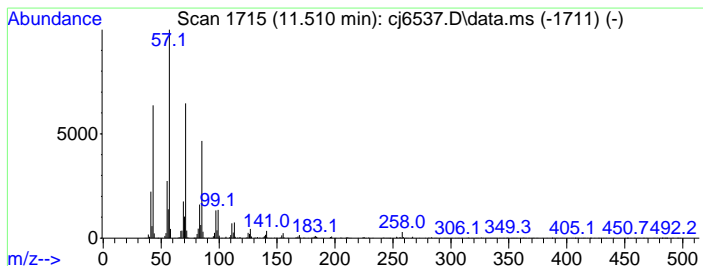
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 16 Alkane Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.510	23.97 ppm	2274720	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Octadecane	254	C18H38	000593-45-3	96
2			Heneicosane	296	C21H44	000629-94-7	94
3			Sulfurous acid, butyl dodecyl ester	306	C16H34O3S	1000309-17-9	91
4			1-Iodo-2-methylundecane	296	C12H25I	073105-67-6	90
5			Octacosane	394	C28H58	000630-02-4	90



7.1.34  
7



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6537.D  
Acq On : 09 May 2024 11:57 pm  
Operator : rocquans  
Sample : jd87833-16  
Misc : op54460,ecj297,30.3,,,1,1  
ALS Vial : 28 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

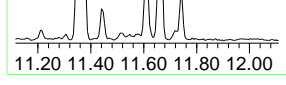
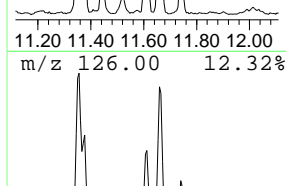
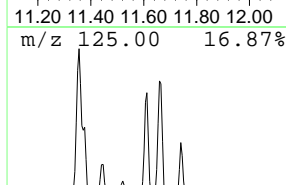
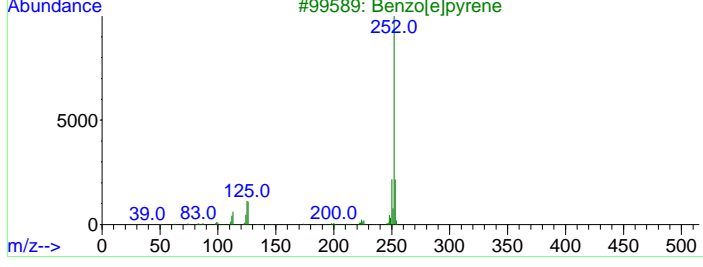
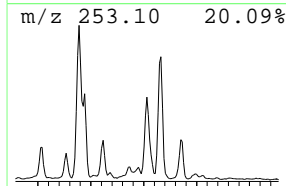
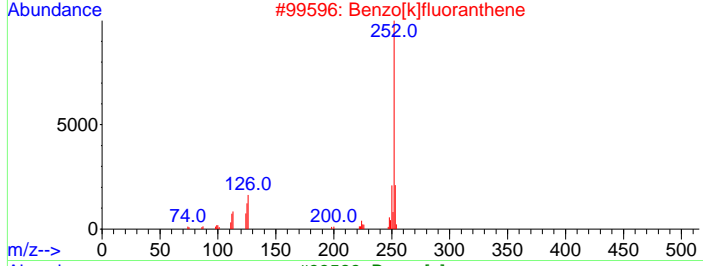
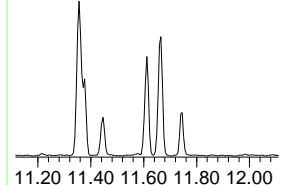
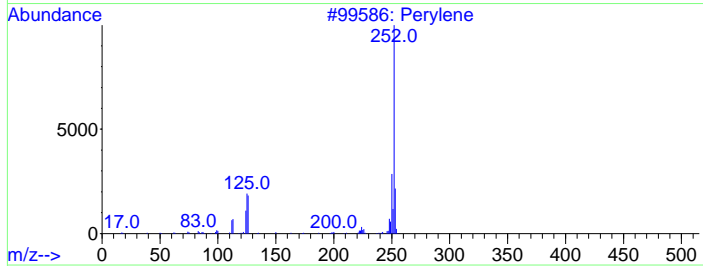
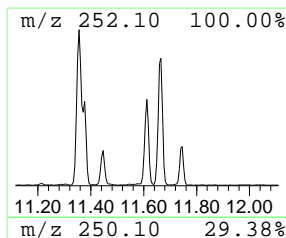
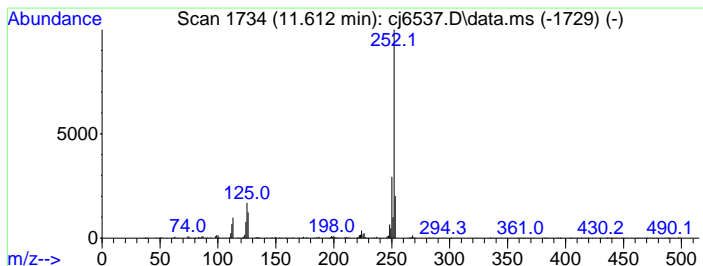
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 17 Unknown PHA Substance Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.612	15.63 ppm	1483180	Perylene-d12	11.719

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Perylene	252	C20H12	000198-55-0	98
2		Benzo[k]fluoranthene	252	C20H12	000207-08-9	98
3		Benzo[e]pyrene	252	C20H12	000192-97-2	98
4		Benzo[e]acephenanthrylene	252	C20H12	000205-99-2	96
5		Benzo[j]fluoranthene	252	C20H12	000205-82-3	93



7.1.34  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6537.D  
Acq On : 09 May 2024 11:57 pm  
Operator : rocquans  
Sample : jd87833-16  
Misc : op54460,ecj297,30.3,,,1,1  
ALS Vial : 28 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

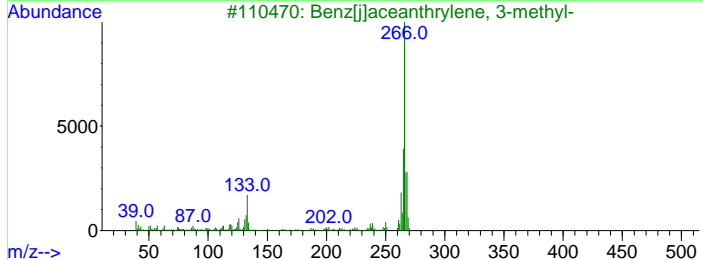
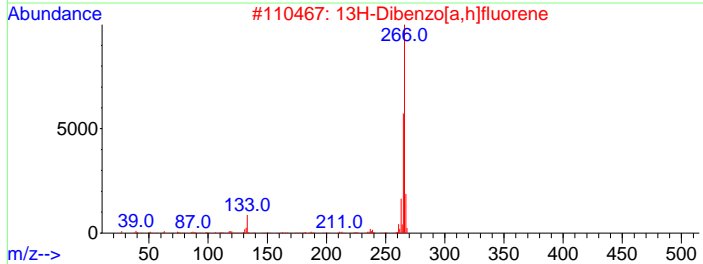
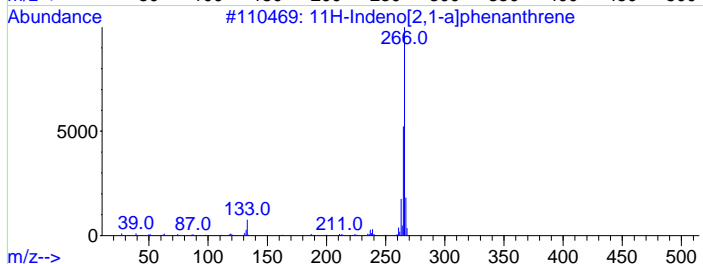
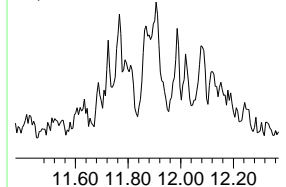
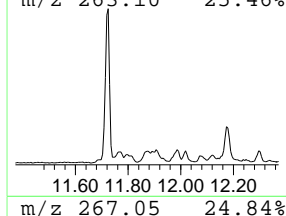
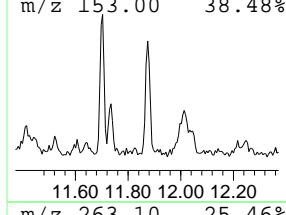
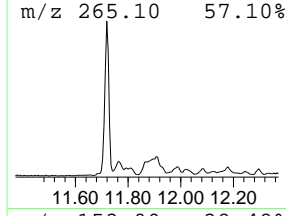
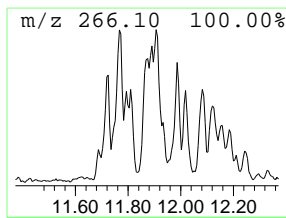
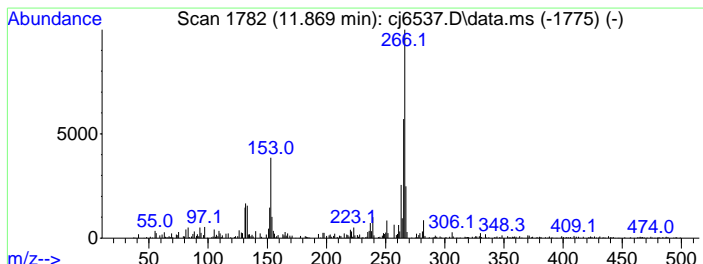
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 18 Unknown Concentration Rank 21

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.869	5.75 ppm	545561	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			11H-Indeno[2,1-a]phenanthrene	266	C21H14	000220-97-3	64
2			13H-Dibenzo[a,h]fluorene	266	C21H14	000239-85-0	60
3			Benz[j]aceanthrylene, 3-methyl-	266	C21H14	003343-10-0	55
4			1-Phosphacyclopent-2-ene, 1,5-di...	266	C18H19P	1000162-78-2	53
5			8H-Indeno[2,1-b]phenanthrene	266	C21H14	000241-28-1	50



7.1.34  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6537.D  
 Acq On : 09 May 2024 11:57 pm  
 Operator : rocquans  
 Sample : jd87833-16  
 Misc : op54460,ecj297,30.3,,,1,1  
 ALS Vial : 28 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

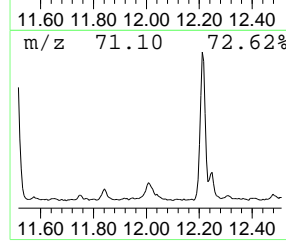
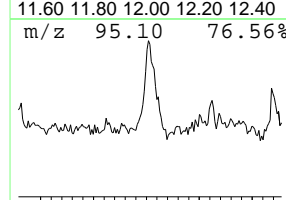
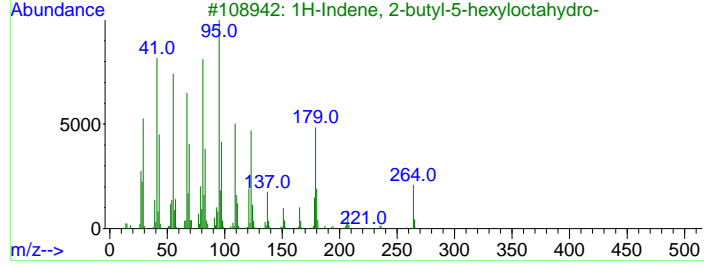
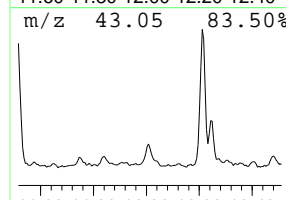
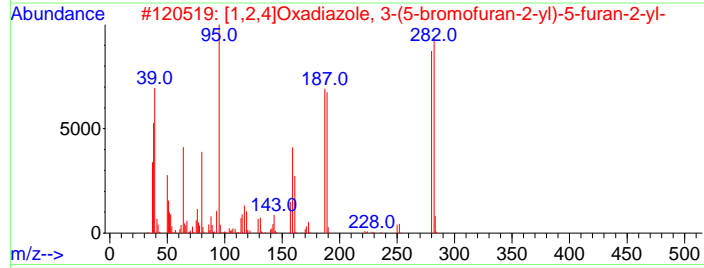
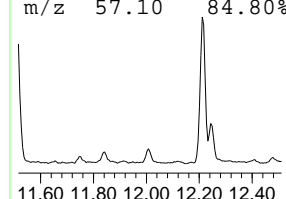
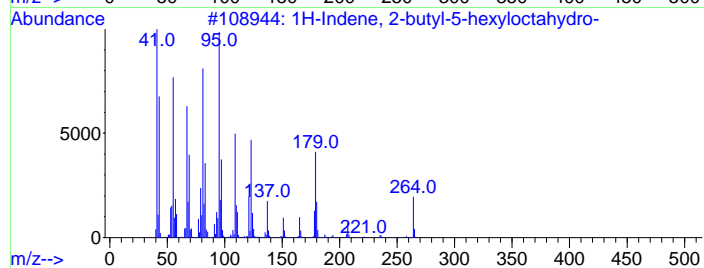
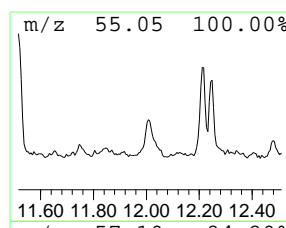
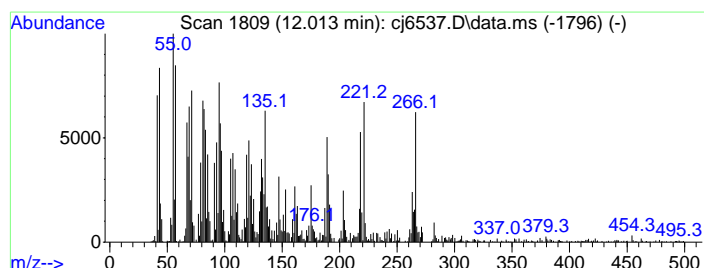
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 19 Unknown Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.013	19.54 ppm	1854200	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			1H-Indene, 2-butyl-5-hexyloctahydro...	264	C19H36	055044-33-2	55
2			[1,2,4]Oxadiazole, 3-(5-bromofur...	280	C10H5BrN2O3	1000303-56-3	53
3			1H-Indene, 2-butyl-5-hexyloctahydro...	264	C19H36	055044-33-2	53
4			1-Hydroxypyrene	218	C16H10O	005315-79-7	47
5			2,2,6-Trimethyl-1-(2-methyl-cycl...	218	C15H22O	1000188-72-8	42



7.1.34  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6537.D  
Acq On : 09 May 2024 11:57 pm  
Operator : rocquans  
Sample : jd87833-16  
Misc : op54460,ecj297,30.3,,,1,1  
ALS Vial : 28 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

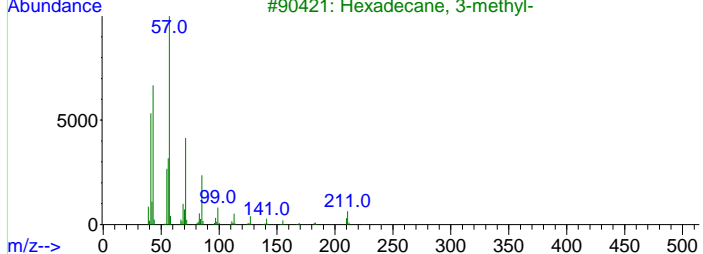
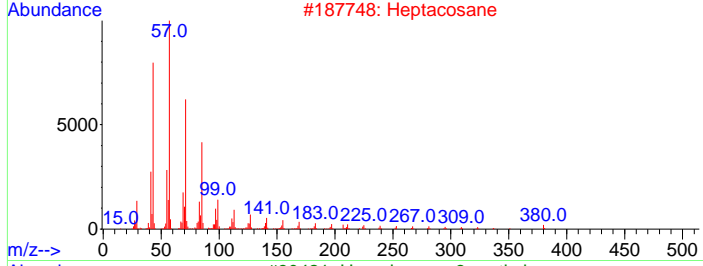
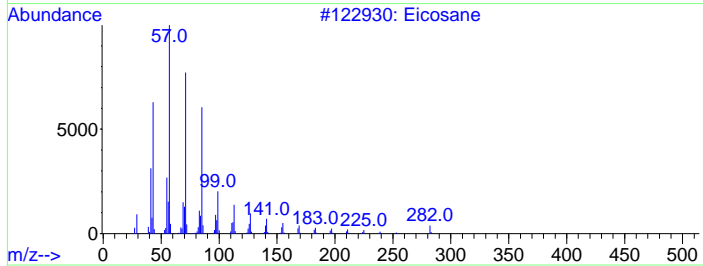
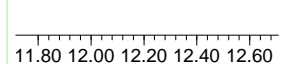
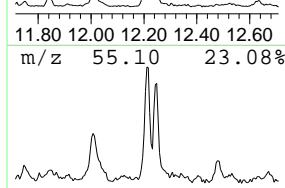
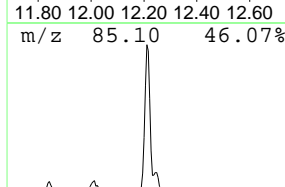
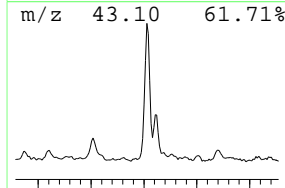
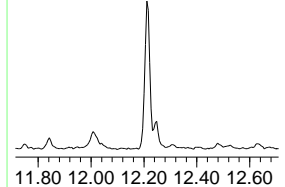
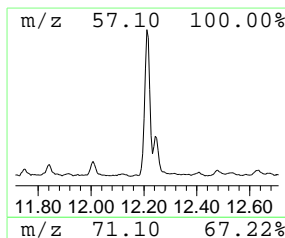
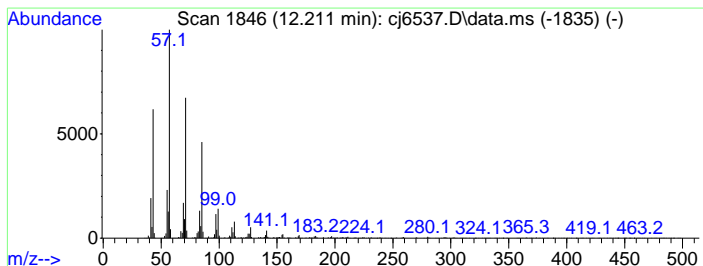
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 20 Alkane Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.211	18.64 ppm	1768990	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1	Eicosane			282	C20H42	000112-95-8	96
2	Heptacosane			380	C27H56	000593-49-7	91
3	Hexadecane, 3-methyl-			240	C17H36	006418-43-5	91
4	Heneicosane, 11-decyl-			437	C31H64	055320-06-4	91
5	Tetratetracontane			619	C44H90	007098-22-8	90



7.1.34  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6537.D  
Acq On : 09 May 2024 11:57 pm  
Operator : rocquans  
Sample : jd87833-16  
Misc : op54460,ecj297,30.3,,1,1  
ALS Vial : 28 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

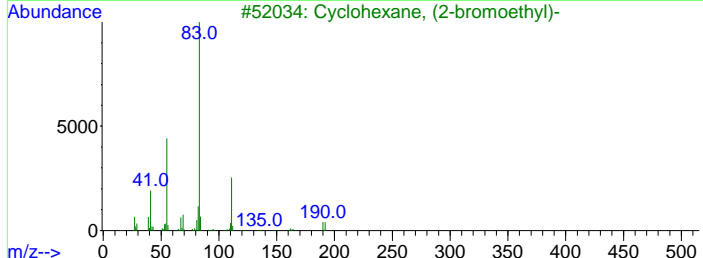
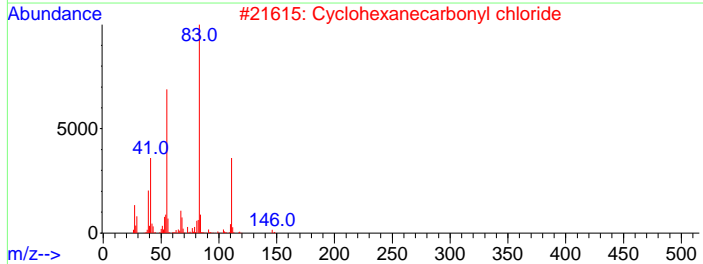
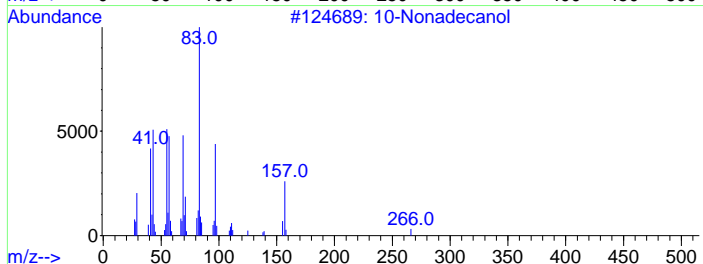
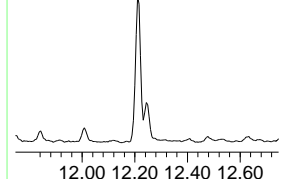
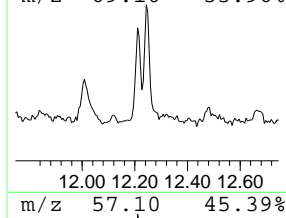
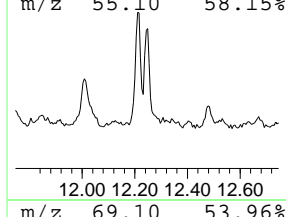
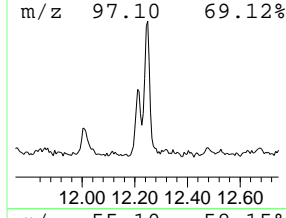
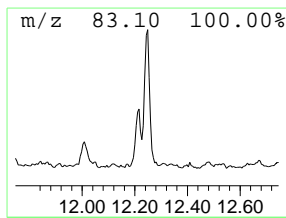
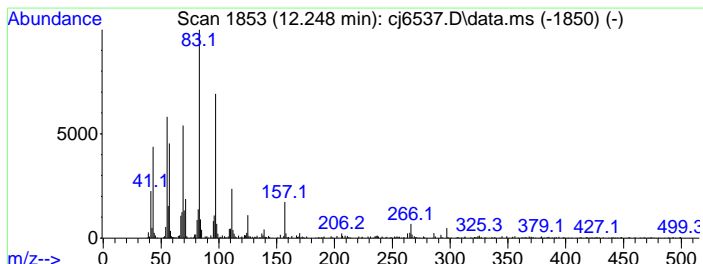
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 21 Unknown Concentration Rank 13

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.248	7.63 ppm	724478	Perylene-d12	11.719

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	10-Nonadecanol	284	C19H40O	016840-84-9	64
2		Cyclohexanecarbonyl chloride	146	C7H11ClO	002719-27-9	43
3		Cyclohexane, (2-bromoethyl)-	190	C8H15Br	001647-26-3	43
4		3-Dodecylcyclohexanone	266	C18H34O	138695-42-8	38
5		5-Methyl-3-heptene	112	C8H16	050422-80-5	35



7.1.34  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6537.D  
Acq On : 09 May 2024 11:57 pm  
Operator : rocquans  
Sample : jd87833-16  
Misc : op54460,ecj297,30.3,,1,1  
ALS Vial : 28 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

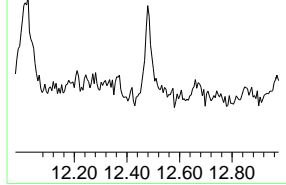
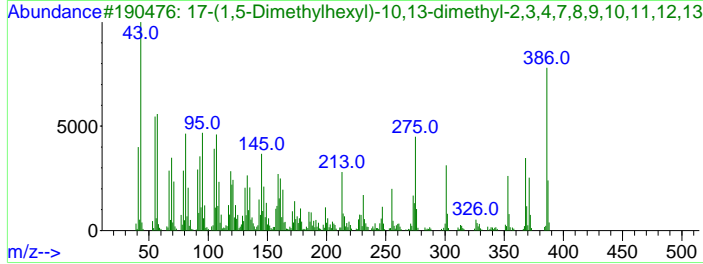
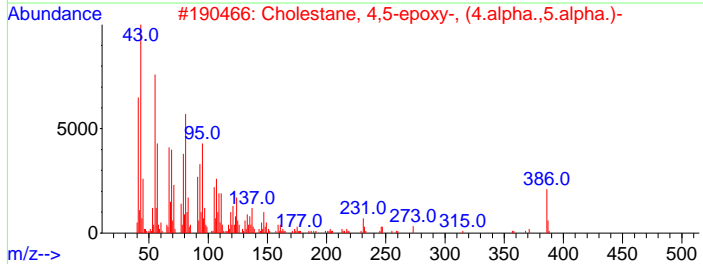
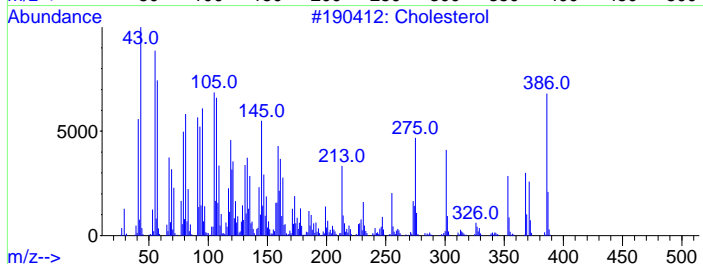
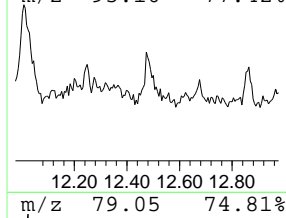
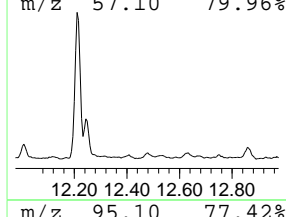
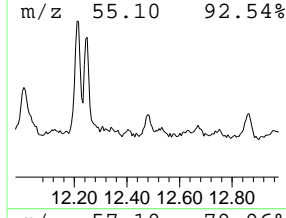
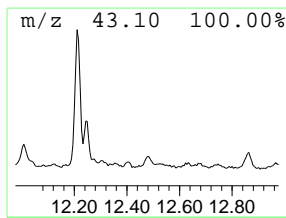
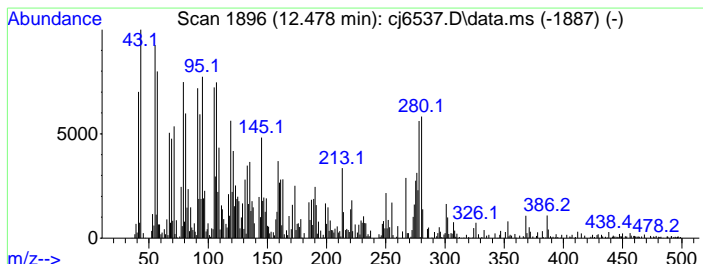
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 22 Unknown Concentration Rank 15

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.478	6.75 ppm	640769	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Cholesterol	386	C27H46O	000057-88-5	94
2			Cholestane, 4,5-epoxy-, (4.alpha...	386	C27H46O	006079-19-2	46
3			17-(1,5-Dimethylhexyl)-10,13-dim...	386	C27H46O	1000210-38-4	43
4			Cholest-5-en-3-ol (3.beta.)-, ac...	428	C29H48O2	000604-35-3	38
5			Malononitrile, 2-(1,7,7-trimethy...	280	C18H20N2O	1000164-42-4	35



7.1.34  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6537.D  
Acq On : 09 May 2024 11:57 pm  
Operator : rocquans  
Sample : jd87833-16  
Misc : op54460,ecj297,30.3,,1,1  
ALS Vial : 28 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

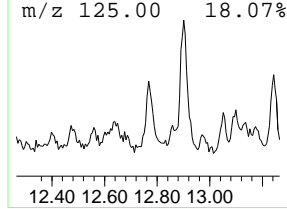
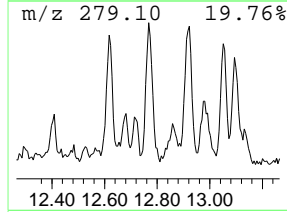
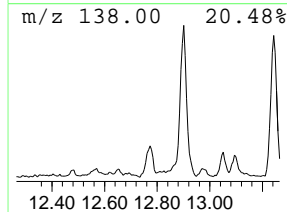
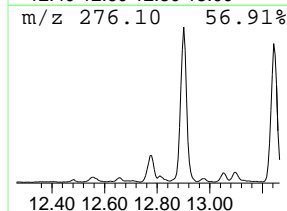
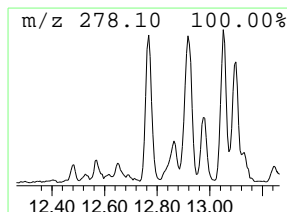
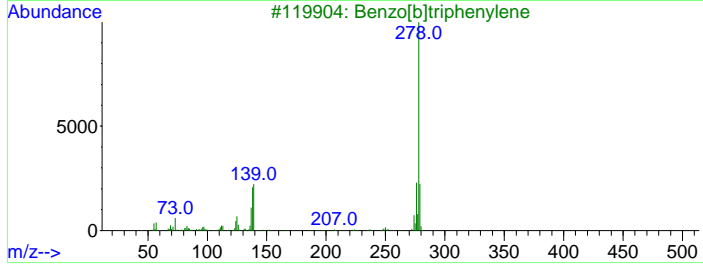
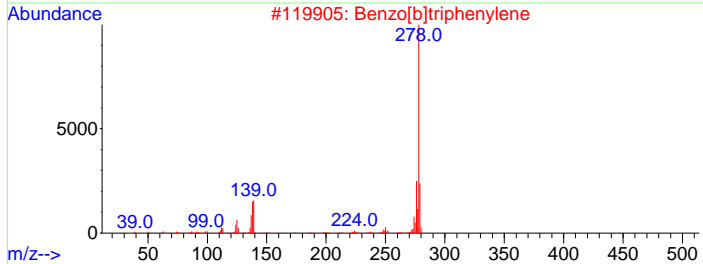
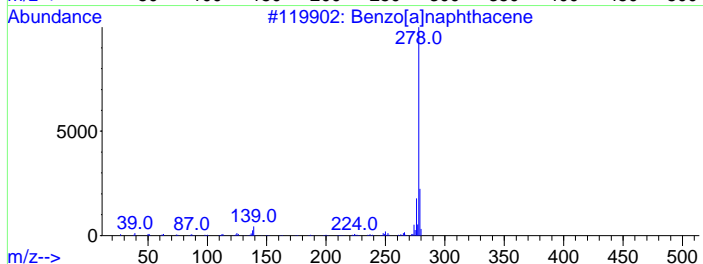
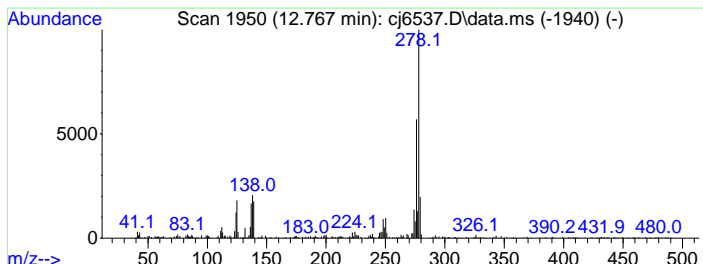
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 23 Unknown Concentration Rank 20

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.767	5.76 ppm	546735	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Benzo[a]naphthacene	278	C22H14	000226-88-0	76
2			Benzo[b]triphenylene	278	C22H14	000215-58-7	70
3			Benzo[b]triphenylene	278	C22H14	000215-58-7	64
4			Benzoic acid, 3,5-dibromo-2-hydr...	308	C8H6Br2O3	021702-79-4	59
5			Benz[a]anthracene-7,12-dicarboni...	278	C20H10N2	035215-32-8	53



7.1.34  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6537.D  
Acq On : 09 May 2024 11:57 pm  
Operator : rocquans  
Sample : jd87833-16  
Misc : op54460,ecj297,30.3,,,1,1  
ALS Vial : 28 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

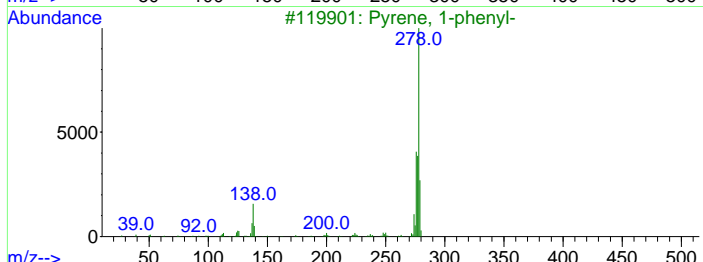
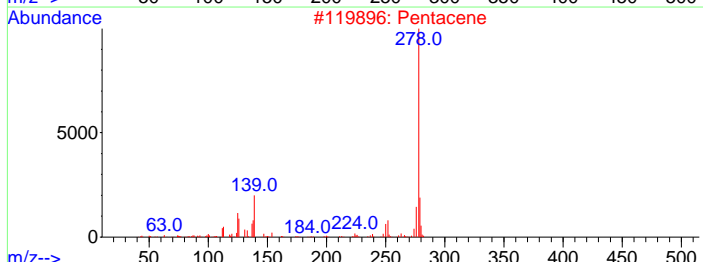
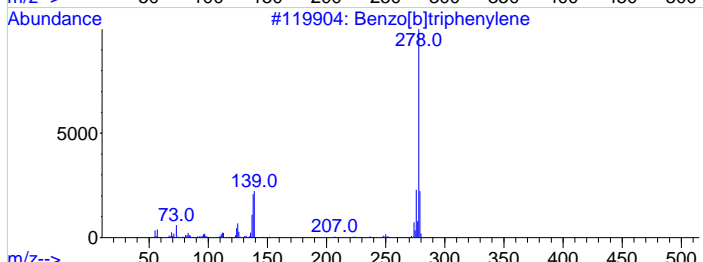
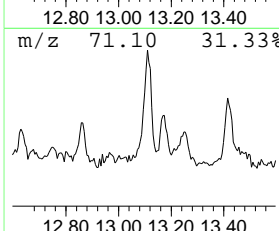
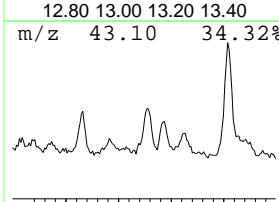
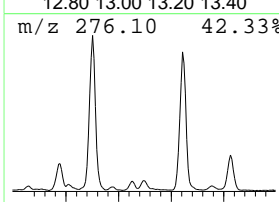
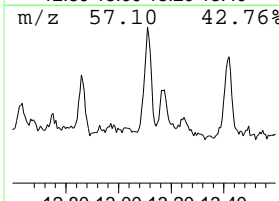
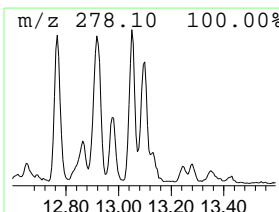
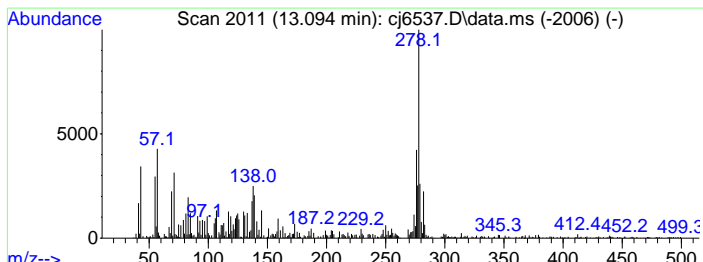
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 24 Unknown Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.094	11.41 ppm	1082910	Perylene-d12	11.719

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			Benzo[b]triphenylene	278	C22H14	000215-58-7	64
2			Pentacene	278	C22H14	000135-48-8	64
3			Pyrene, 1-phenyl-	278	C22H14	005101-27-9	60
4			Benzo[b]triphenylene	278	C22H14	000215-58-7	60
5			1,2:7,8-Dibenzophenanthrene	278	C22H14	000213-46-7	55



7.1.34  
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Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6537.D  
Acq On : 09 May 2024 11:57 pm  
Operator : rocquans  
Sample : jd87833-16  
Misc : op54460,ecj297,30.3,,,1,1  
ALS Vial : 28 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

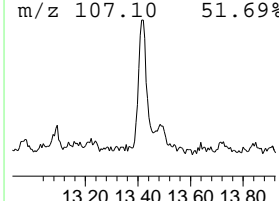
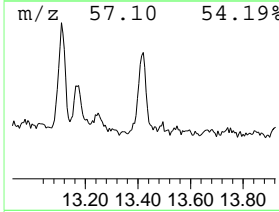
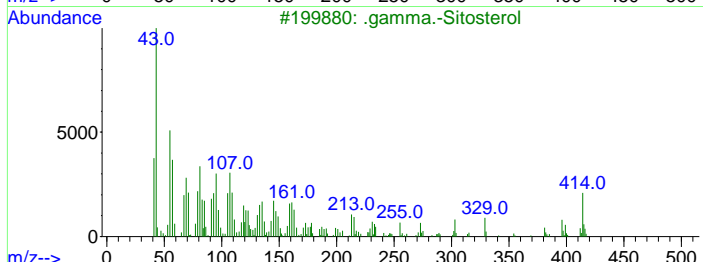
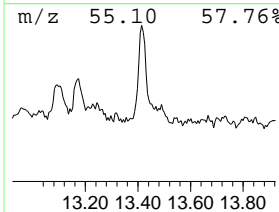
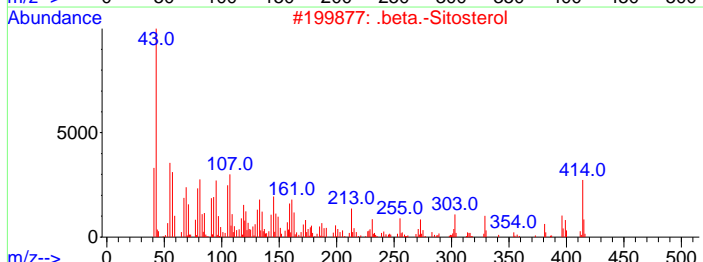
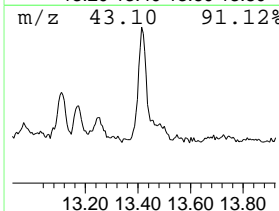
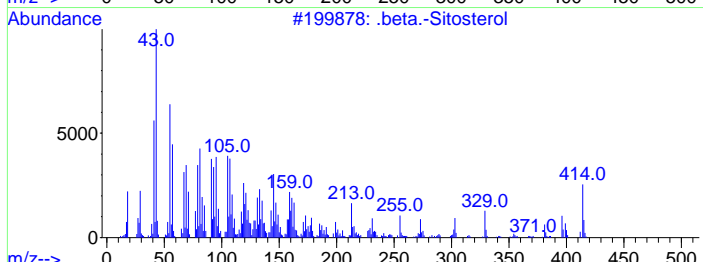
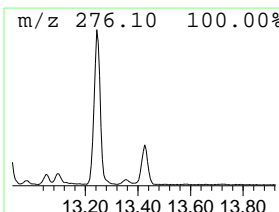
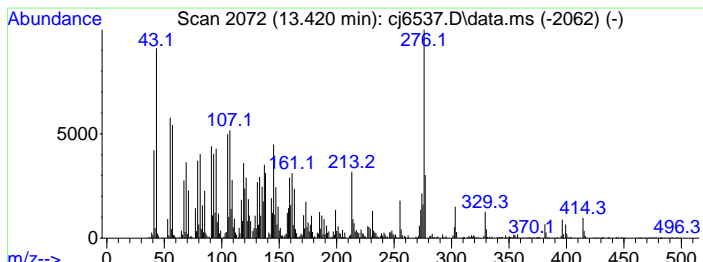
TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

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Peak Number 25 Unknown Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.420	26.21 ppm	2488060	Perylene-d12	11.719

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	.beta.-Sitosterol	414	C29H50O	000083-46-5	97
2		.beta.-Sitosterol	414	C29H50O	000083-46-5	90
3		.gamma.-Sitosterol	414	C29H50O	000083-47-6	83
4		Indeno[1,2,3-cd]pyrene	276	C22H12	000193-39-5	55
5		Benzo[ghi]perylene	276	C22H12	000191-24-2	53



7.1.34  
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Tentatively Identified Compound (LSC) summary

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6537.D  
Acq On : 09 May 2024 11:57 pm  
Operator : rocquans  
Sample : jd87833-16  
Misc : op54460,ecj297,30.3,,,1,1  
ALS Vial : 28 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
Unknown	4.247	8.4	ppm	450709	2	4.664	2147240	40.0
Unknown	4.487	4.6	ppm	247872	2	4.664	2147240	40.0
n-Hexadecanoic ...	8.371	6.9	ppm	551912	8	7.873	3206070	40.0
4H-Cyclopenta[d...]	8.424	9.7	ppm	777423	8	7.873	3206070	40.0
Unknown	8.601	4.7	ppm	374509	8	7.873	3206070	40.0
Unknown	9.045	5.6	ppm	450494	8	7.873	3206070	40.0
Unknown	9.515	5.8	ppm	813986	9	10.366	5636690	40.0
Unknown	9.617	5.9	ppm	829633	9	10.366	5636690	40.0
Unknown	10.494	6.5	ppm	917414	10	10.366	5636690	40.0
Unknown	10.906	8.8	ppm	1239640	10	10.366	5636690	40.0
Unknown	11.050	6.6	ppm	622219	11	11.719	3796660	40.0
Unknown acid	11.115	8.0	ppm	755329	11	11.719	3796660	40.0
Unknown	11.205	8.4	ppm	798403	11	11.719	3796660	40.0
Unknown	11.264	4.7	ppm	449295	11	11.719	3796660	40.0
Unknown PHA Sub...	11.446	10.3	ppm	974979	11	11.719	3796660	40.0
Alkane	11.510	24.0	ppm	2274720	11	11.719	3796660	40.0
Unknown PHA Sub...	11.612	15.6	ppm	1483180	11	11.719	3796660	40.0
Unknown	11.869	5.8	ppm	545561	11	11.719	3796660	40.0
Unknown	12.013	19.5	ppm	1854200	11	11.719	3796660	40.0
Alkane	12.211	18.6	ppm	1768990	11	11.719	3796660	40.0
Unknown	12.248	7.6	ppm	724478	11	11.719	3796660	40.0
Unknown	12.478	6.8	ppm	640769	11	11.719	3796660	40.0
Unknown	12.767	5.8	ppm	546735	11	11.719	3796660	40.0
Unknown	13.094	11.4	ppm	1082910	11	11.719	3796660	40.0
Unknown	13.420	26.2	ppm	2488060	11	11.719	3796660	40.0

7.1.34  
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Quantitation Report (QT/LSC Reviewed)

Data Path : X:\Dayton SVOA GCMS\danielas\ECJ298\  
 Data File : cj6555.D  
 Acq On : 10 May 2024 12:26 pm  
 Operator : karimam  
 Sample : jd87833-17 Inst : GCMSCJ  
 Misc : op54467,ecj298,1000,,,1,1  
 ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 10 17:20:09 2024  
 Quant Method : X:\Dayton SVOA GCMS\danielas\METHODS\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
 QLast Update : Fri May 10 16:32:52 2024  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.648	152	373478	40.00	ppm	0.00
24) Naphthalene-d8	5.455	136	1363075	40.00	ppm	0.00
46) Acenaphthene-d10	6.643	164	803570	40.00	ppm	0.00
69) Phenanthrene-d10	7.852	188	1500212	40.00	ppm	0.00
84) Chrysene-d12	10.339	240	1166943	40.00	ppm	-0.01
93) Perylene-d12	11.687	264	1162453	40.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	4.648	152	373478	40.00	ppm	0.00
105) Phenanthrene-d10a	7.852	188	1500212	40.00	ppm	0.00
107) Naphthalene-d8a	5.455	136	1363075	40.00	ppm	0.00
109) Phenanthrene-d10b	7.852	188	1500212	40.00	ppm	0.00
112) Chrysene-d12a	10.339	240	1166943	40.00	ppm	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	3.792	112	188436	17.55	ppm	0.00
Spiked Amount 50.000			Recovery =	35.10%		
8) Phenol-d5	4.407	99	170690	12.33	ppm	0.00
Spiked Amount 50.000			Recovery =	24.66%		
25) Nitrobenzene-d5	4.995	82	461773	33.09	ppm	0.00
Spiked Amount 50.000			Recovery =	66.18%		
51) 2-Fluorobiphenyl	6.151	172	816257	32.28	ppm	0.00
Spiked Amount 50.000			Recovery =	64.56%		
74) 2,4,6-Tribromophenol	7.253	330	124134	37.74	ppm	-0.01
Spiked Amount 50.000			Recovery =	75.48%		
87) Terphenyl-d14	9.328	244	743243	25.78	ppm	0.00
Spiked Amount 50.000			Recovery =	51.56%		
110) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						
					Qvalue	
26) Nitrobenzene	5.012	77	3751	0.2619	ppm	81
39) 4-Chloroaniline	5.493	127	1031	0.0751	ppm	69
53) Biphenyl	6.220	154	2036	0.0737	ppm	96
81) Di-n-butylphthalate	8.376	149	5206	0.1246	ppm	98
86) Pyrene	9.173	202	1276	0.0322	ppm	92
88) Butylbenzylphthalate	9.815	149	2035	0.1149	ppm	87
89) Benzo[a]anthracene	10.339	228	4879	0.1300	ppm	61
91) Chrysene	10.360	228	1290	0.0373	ppm	83
92) bis(2-Ethylhexyl)phtha...	10.382	149	3076	0.1173	ppm	92
97) Benzo[a]pyrene	11.687	252	4874	0.1677	ppm	92
102) Benzo[g,h,i]perylene	13.179	276	1241	0.0454	ppm	72
-----						

(#) = qualifier out of range (m) = manual integration (+) = signals summed

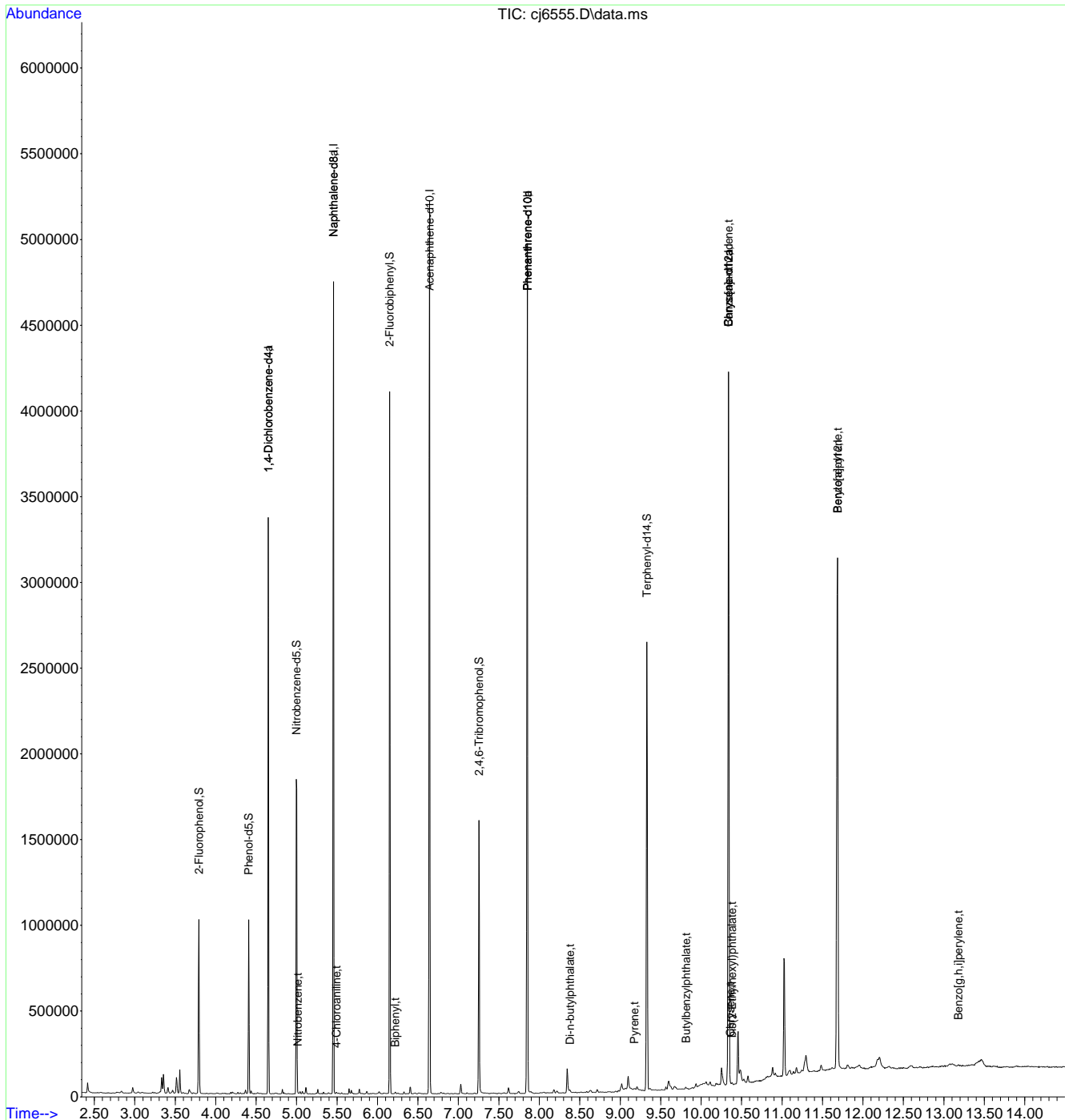
7.1.35  
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Quantitation Report (QT/LSC Reviewed)

Data Path : X:\Dayton SVOA GCMS\danielas\ECJ298\  
Data File : cj6555.D  
Acq On : 10 May 2024 12:26 pm  
Operator : karimam  
Sample : jd87833-17  
Misc : op54467,ecj298,1000,,,1,1  
ALS Vial : 11 Sample Multiplier: 1

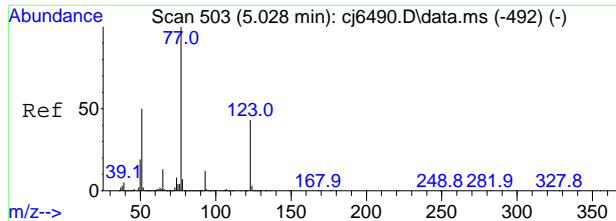
Inst : GCMS CJ

Quant Time: May 10 17:20:09 2024  
Quant Method : X:\Dayton SVOA GCMS\danielas\METHODS\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
QLast Update : Fri May 10 16:32:52 2024  
Response via : Initial Calibration



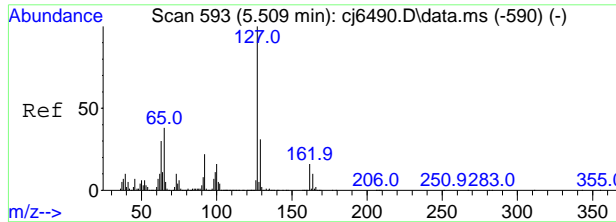
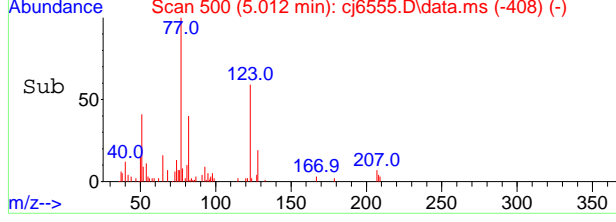
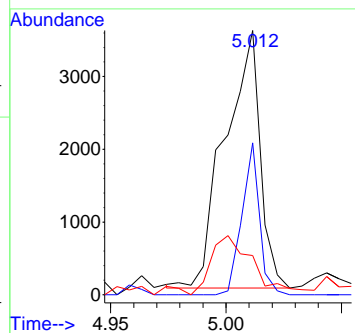
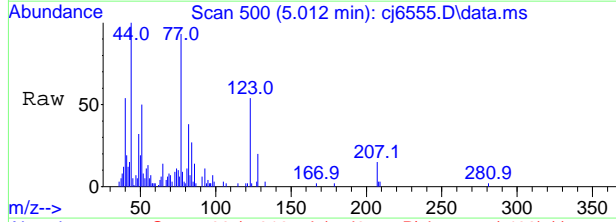
7.1.35  
7





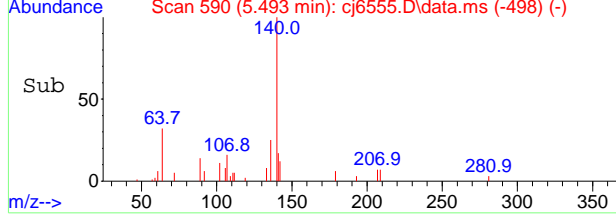
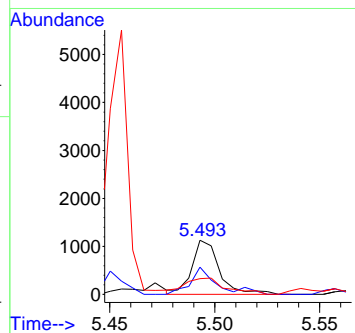
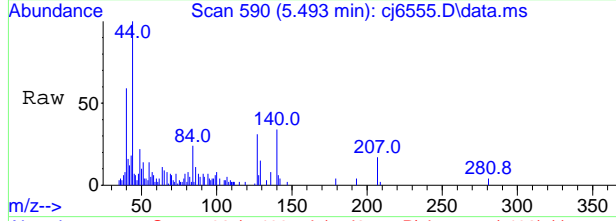
#26  
Nitrobenzene  
Concen: 0.2619 ppm  
RT: 5.012 min Scan# 500  
Delta R.T. -0.005 min  
Lab File: cj6555.D  
Acq: 10 May 2024 12:26 pm

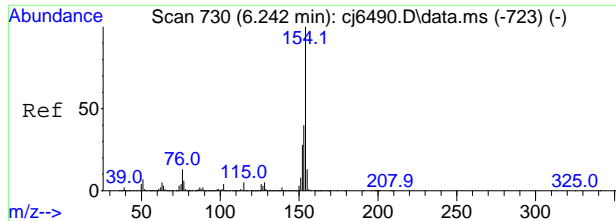
Tgt Ion	Ratio	Lower	Upper
77	100		
123	59.4	13.6	73.6
65	12.5	0.0	43.7



#39  
4-Chloroaniline  
Concen: 0.0751 ppm  
RT: 5.493 min Scan# 590  
Delta R.T. -0.005 min  
Lab File: cj6555.D  
Acq: 10 May 2024 12:26 pm

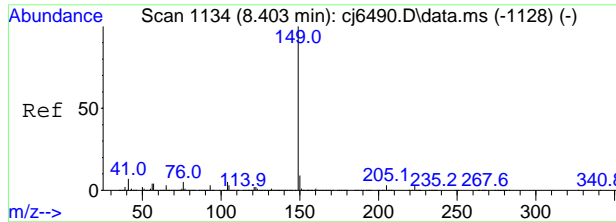
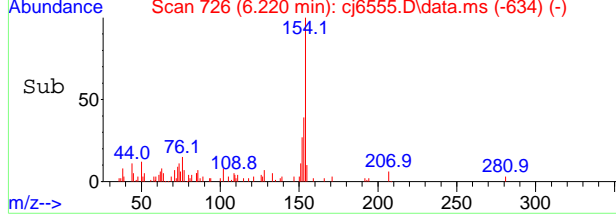
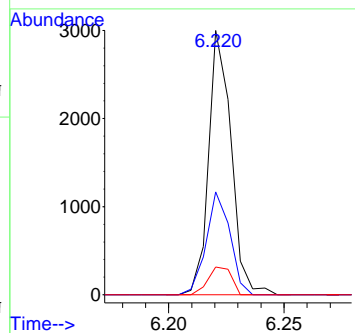
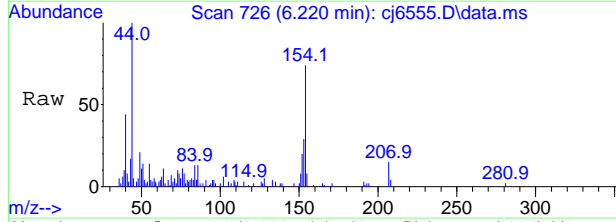
Tgt Ion	Ratio	Lower	Upper
127	100		
129	52.5	1.2	61.2
65	22.8	7.3	67.3





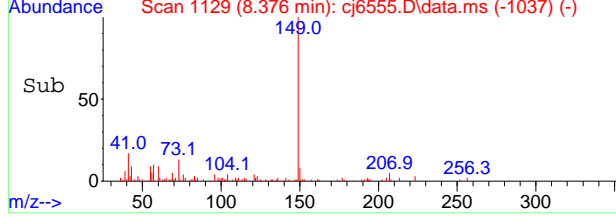
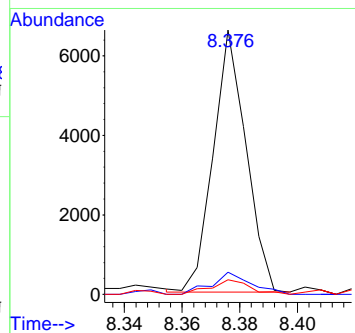
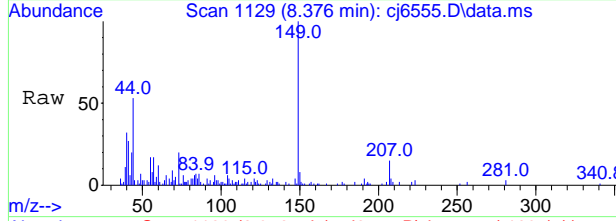
#53  
 Biphenyl  
 Concen: 0.0737 ppm  
 RT: 6.220 min Scan# 726  
 Delta R.T. -0.005 min  
 Lab File: cj6555.D  
 Acq: 10 May 2024 12:26 pm

Tgt Ion	Ratio	Lower	Upper
154	100		
153	38.9	10.5	70.5
155	10.5	0.0	43.4



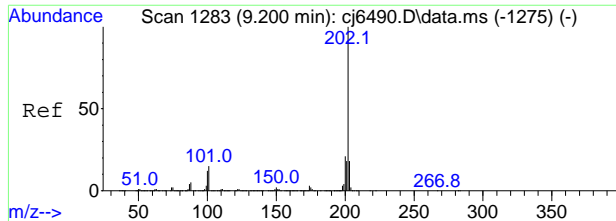
#81  
 Di-n-butylphthalate  
 Concen: 0.1246 ppm  
 RT: 8.376 min Scan# 1129  
 Delta R.T. -0.005 min  
 Lab File: cj6555.D  
 Acq: 10 May 2024 12:26 pm

Tgt Ion	Ratio	Lower	Upper
149	100		
150	8.5	0.0	39.5
104	5.6	0.0	35.3



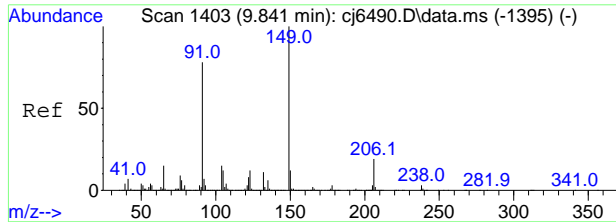
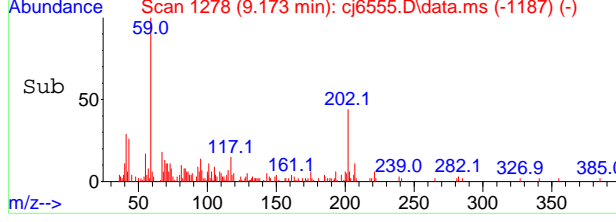
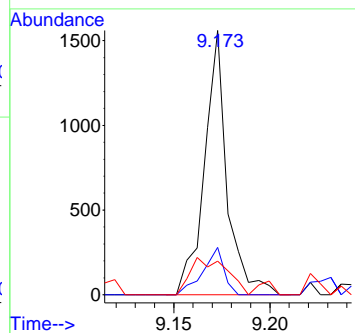
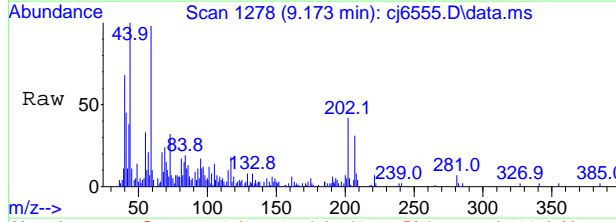
7.1.35  
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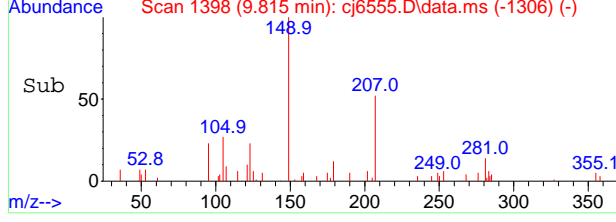
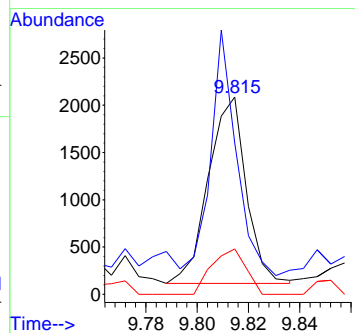
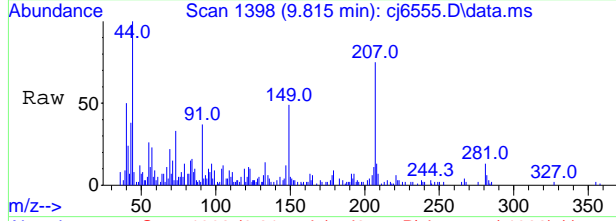
#86  
 Pyrene  
 Concen: 0.0322 ppm  
 RT: 9.173 min Scan# 1278  
 Delta R.T. -0.011 min  
 Lab File: cj6555.D  
 Acq: 10 May 2024 12:26 pm

Tgt Ion	Ratio	Lower	Upper
202	100		
200	17.9	0.0	51.1
203	12.7	0.0	47.2



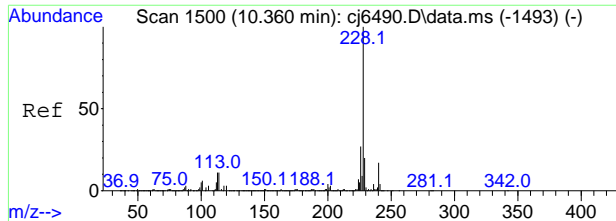
#88  
 Butylbenzylphthalate  
 Concen: 0.1149 ppm  
 RT: 9.815 min Scan# 1398  
 Delta R.T. -0.005 min  
 Lab File: cj6555.D  
 Acq: 10 May 2024 12:26 pm

Tgt Ion	Ratio	Lower	Upper
149	100		
91	63.7	44.0	104.0
206	24.7	0.0	48.0



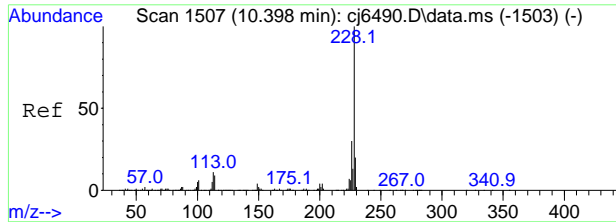
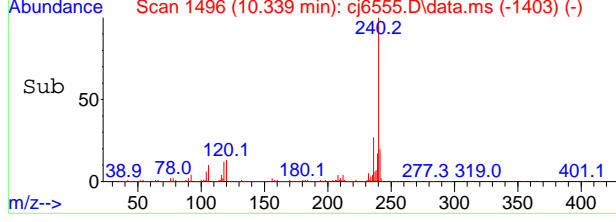
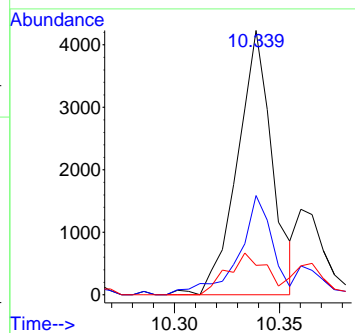
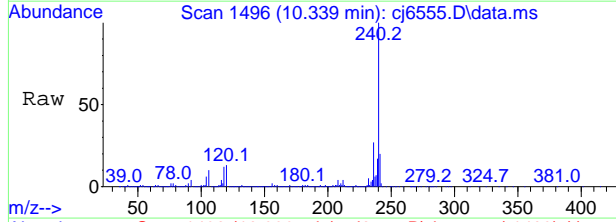
7.1.35  
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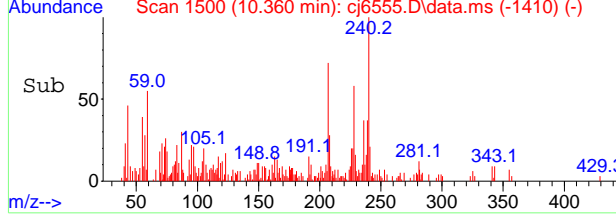
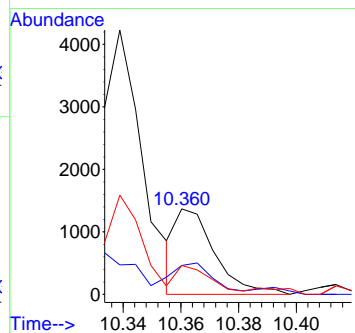
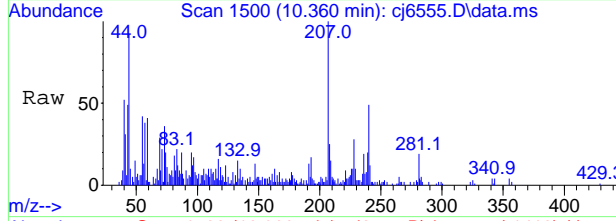
#89  
 Benzo[a]anthracene  
 Concen: 0.1300 ppm  
 RT: 10.339 min Scan# 1496  
 Delta R.T. -0.000 min  
 Lab File: cj6555.D  
 Acq: 10 May 2024 12:26 pm

Tgt Ion	Ratio	Lower	Upper
228	100		
229	40.0	0.0	49.6
226	8.8	0.0	57.0



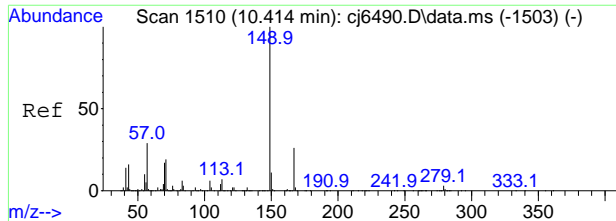
#91  
 Chrysene  
 Concen: 0.0373 ppm  
 RT: 10.360 min Scan# 1500  
 Delta R.T. -0.016 min  
 Lab File: cj6555.D  
 Acq: 10 May 2024 12:26 pm

Tgt Ion	Ratio	Lower	Upper
228	100		
226	31.9	0.0	60.0
229	36.6	0.0	49.4



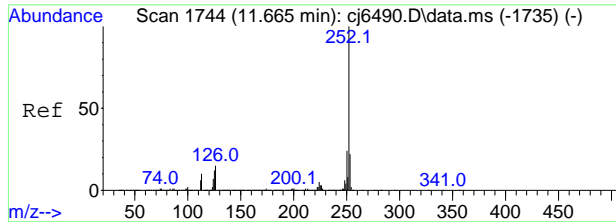
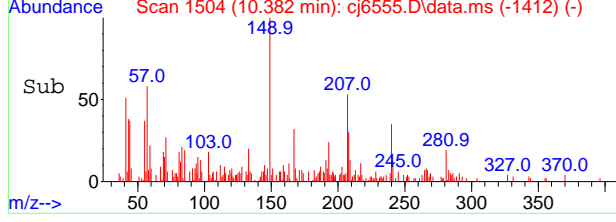
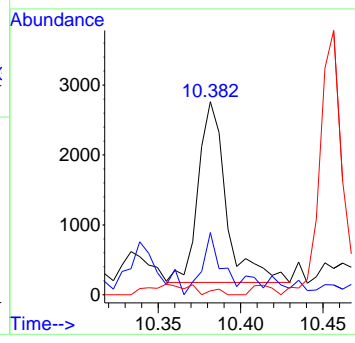
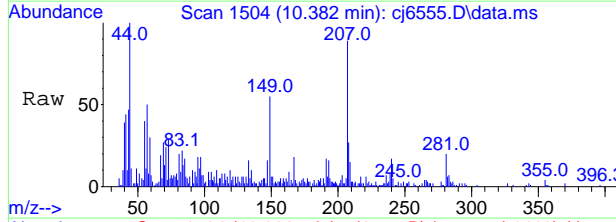
7.1.35  
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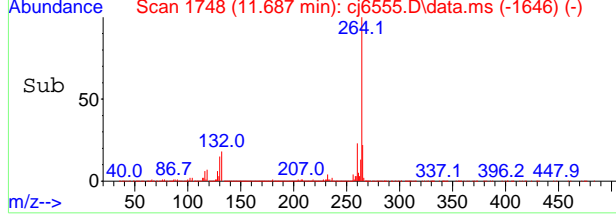
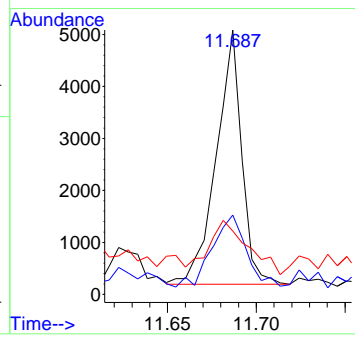
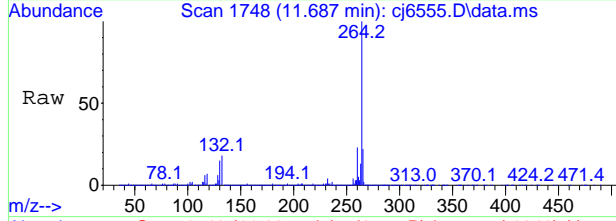
#92  
bis(2-Ethylhexyl)phthalate  
Concen: 0.1173 ppm  
RT: 10.382 min Scan# 1504  
Delta R.T. -0.005 min  
Lab File: cj6555.D  
Acq: 10 May 2024 12:26 pm

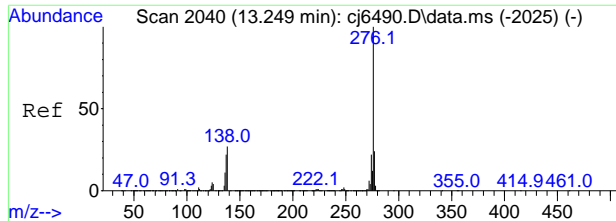
Tgt Ion	Ratio	Lower	Upper
149	100		
167	29.9	0.0	55.7
279	0.0	0.0	32.8



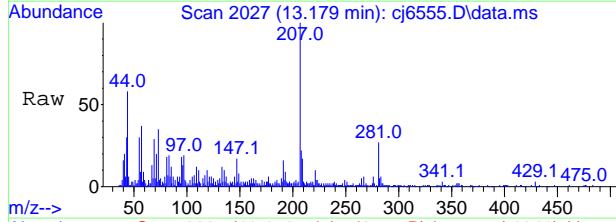
#97  
Benzo[a]pyrene  
Concen: 0.1677 ppm  
RT: 11.687 min Scan# 1748  
Delta R.T. 0.048 min  
Lab File: cj6555.D  
Acq: 10 May 2024 12:26 pm

Tgt Ion	Ratio	Lower	Upper
252	100		
253	27.3	0.0	51.8
125	12.0	0.0	43.2

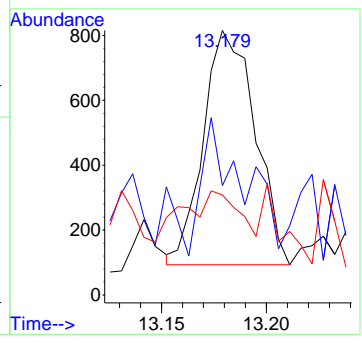
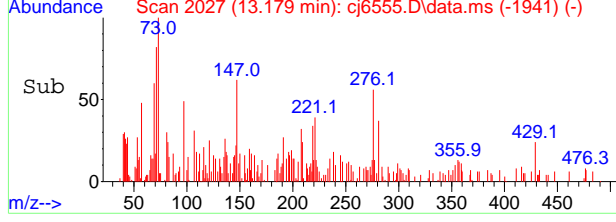




#102  
 Benzo[g,h,i]perylene  
 Concen: 0.0454 ppm  
 RT: 13.179 min Scan# 2027  
 Delta R.T. -0.037 min  
 Lab File: cj6555.D  
 Acq: 10 May 2024 12:26 pm



Tgt Ion	Ratio	Lower	Upper
276	100		
138	9.0	0.0	56.2
277	12.9	0.0	54.1



7.1.35  
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LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\danielas\ECJ298\  
Data File : cj6555.D  
Acq On : 10 May 2024 12:26 pm  
Operator : karimam  
Sample : jd87833-17  
Misc : op54467,ecj298,1000,,,1,1  
ALS Vial : 11 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON Filtering: 5  
Sampling : 1 Min Area: 1000 Area counts  
Start Thrs: 0.02 Max Peaks: 100  
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\danielas\METHODS\mCJ296.m  
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

Signal : TIC: cj6555.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.417	10	15	27	rVB	58666	63610	1.69%	0.196%
2	2.835	89	93	100	rVB2	12691	15427	0.41%	0.048%
3	2.974	110	119	126	rBV	33036	35814	0.95%	0.110%
4	3.038	126	131	136	rVV7	7333	10491	0.28%	0.032%
5	3.091	136	141	146	rVV7	6603	10531	0.28%	0.032%
6	3.332	174	186	188	rBV	93295	91109	2.43%	0.281%
7	3.353	188	190	195	rVV	111233	91563	2.44%	0.282%
8	3.412	196	201	206	rVV	34409	33728	0.90%	0.104%
9	3.466	206	211	215	rVV	18891	23706	0.63%	0.073%
10	3.514	215	220	225	rVV	93883	87428	2.33%	0.270%
11	3.557	225	228	233	rVV	139751	95428	2.54%	0.294%
12	3.674	246	250	257	rVB2	24970	33353	0.89%	0.103%
13	3.792	265	272	278	rBV	1016992	697304	18.58%	2.150%
14	4.209	348	350	357	rVB3	10861	12825	0.34%	0.040%
15	4.370	375	380	383	rVV	21113	14016	0.37%	0.043%
16	4.407	383	387	391	rVV	1013787	586423	15.62%	1.808%
17	4.439	391	393	399	rVB	18291	14695	0.39%	0.045%
18	4.648	428	432	439	rVB	3363088	2279775	60.74%	7.030%
19	4.744	444	450	460	rVB	5792	10623	0.28%	0.033%
20	4.824	460	465	467	rBV	27635	17019	0.45%	0.052%
21	4.995	492	497	503	rBV	1834983	1335867	35.59%	4.120%
22	5.113	515	519	525	rVB	37946	30908	0.82%	0.095%
23	5.263	539	547	550	rVB2	27297	24446	0.65%	0.075%
24	5.456	577	583	587	rVB	4736974	2918748	77.76%	9.001%
25	5.648	616	619	622	rVB2	31893	22341	0.60%	0.069%
26	5.675	622	624	630	rVB2	21802	17458	0.47%	0.054%
27	5.776	635	643	646	rBV	29303	24488	0.65%	0.076%
28	5.867	655	660	666	rVB2	15698	14695	0.39%	0.045%
29	6.022	682	689	694	rBV5	12009	14473	0.39%	0.045%
30	6.151	706	713	718	rVB	4094866	2446728	65.19%	7.545%
31	6.327	743	746	749	rBV	14147	10229	0.27%	0.032%
32	6.402	756	760	767	rVB	39364	33978	0.91%	0.105%
33	6.509	776	780	787	rBV9	5737	10916	0.29%	0.034%
34	6.643	797	805	815	rVB	5206072	3519468	93.77%	10.853%
35	6.782	827	831	835	rVB6	8920	10081	0.27%	0.031%
36	7.028	873	877	887	rBV	57381	55306	1.47%	0.171%
37	7.253	913	919	931	rBV	1595051	1171246	31.20%	3.612%
38	7.568	971	978	982	rBV8	6867	12976	0.35%	0.040%
39	7.616	982	987	992	rVB	35016	34568	0.92%	0.107%
40	7.745	1006	1011	1016	rVB	13139	15133	0.40%	0.047%



7.1.36  
7

LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\danielas\ECJ298\  
Data File : cj6555.D  
Acq On : 10 May 2024 12:26 pm  
Operator : karimam  
Sample : jd87833-17  
Misc : op54467,ecj298,1000,,,1,1  
ALS Vial : 11 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON  
Sampling : 1  
Start Thrs: 0.02  
Stop Thrs : 0  
Filtering: 5  
Min Area: 1000 Area counts  
Max Peaks: 100  
Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\danielas\METHODS\mCJ296.m  
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

Table with 10 columns: Retention Time, Abundance, and Percent. Contains 85 rows of peak data.



7.1.36  
7

LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\danielas\ECJ298\  
Data File : cj6555.D  
Acq On : 10 May 2024 12:26 pm  
Operator : karimam  
Sample : jd87833-17  
Misc : op54467,ecj298,1000,,,1,1  
ALS Vial : 11 Sample Multiplier: 1

Integration Parameters: lscint.p  
Integrator: RTE  
Smoothing : ON Filtering: 5  
Sampling : 1 Min Area: 1000 Area counts  
Start Thrs: 0.02 Max Peaks: 100  
Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
Peak separation: 5

Method : X:\Dayton SVOA GCMS\danielas\METHODS\mCJ296.m  
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

86	11.687	1740	1748	1759	rVV	2980656	3358208	89.47%	10.356%
87	11.804	1765	1770	1778	rBV9	22330	38770	1.03%	0.120%
88	11.949	1787	1797	1807	rVB9	19254	57654	1.54%	0.178%
89	12.104	1819	1826	1827	rBV6	13663	20128	0.54%	0.062%
90	12.206	1828	1845	1857	rVB7	67316	261844	6.98%	0.807%
91	12.329	1858	1868	1872	rVV7	12764	32663	0.87%	0.101%
92	12.596	1909	1918	1925	rBV7	16377	50952	1.36%	0.157%
93	12.703	1933	1938	1945	rVB7	9423	17407	0.46%	0.054%
94	12.976	1986	1989	1992	rVV5	9328	10427	0.28%	0.032%
95	13.077	2001	2008	2010	rBV7	14307	22915	0.61%	0.071%
96	13.104	2010	2013	2023	rVV7	14200	30401	0.81%	0.094%
97	13.339	2056	2057	2060	rVV3	11538	13463	0.36%	0.042%
98	13.430	2064	2074	2075	rVV9	32844	81559	2.17%	0.252%
99	13.463	2075	2080	2092	rVB10	44140	130418	3.47%	0.402%
100	13.901	2155	2162	2173	rBV10	8729	24801	0.66%	0.076%

Sum of corrected areas: 32427708



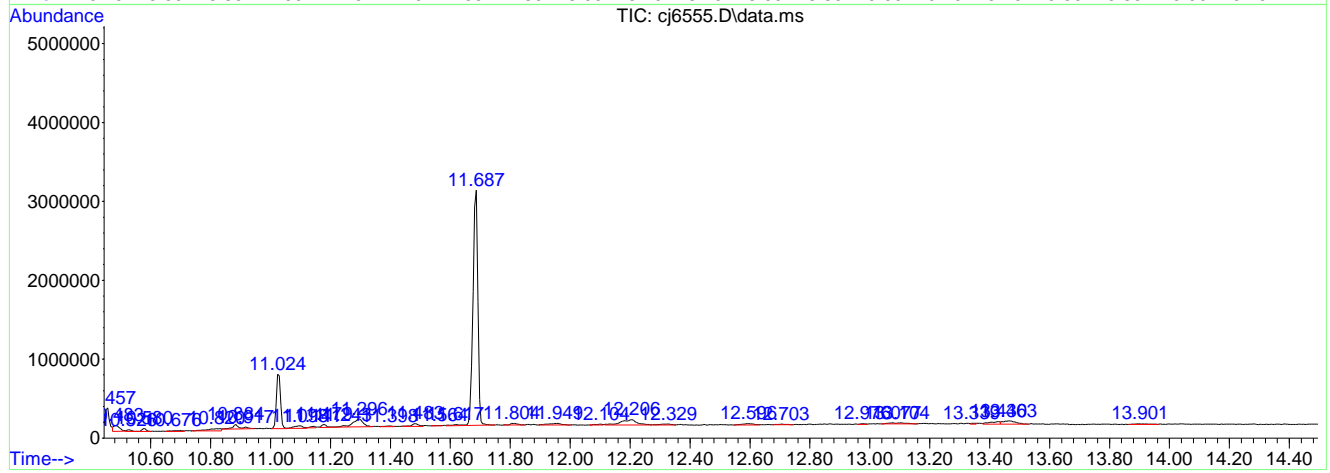
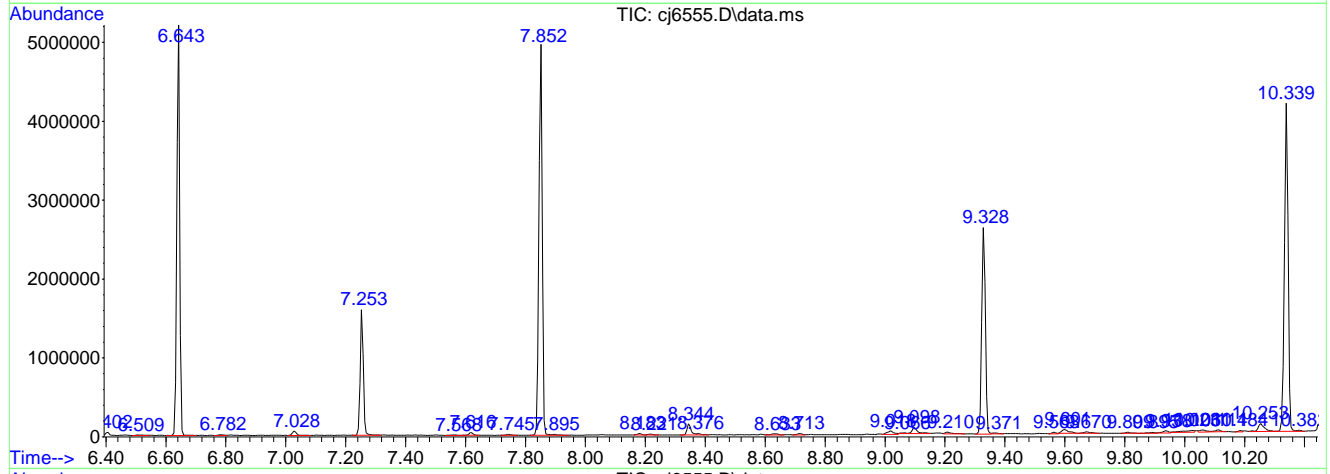
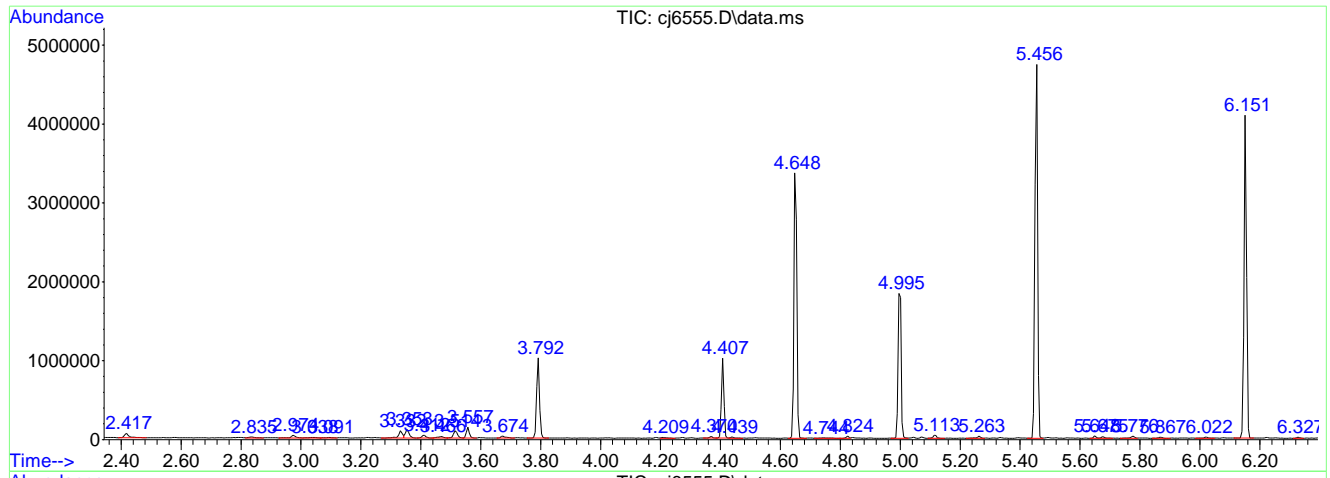
7.1.36  
7

LSC Report - Integrated Chromatogram

Data Path : X:\Dayton SVOA GCMS\danielas\ECJ298\  
Data File : cj6555.D  
Acq On : 10 May 2024 12:26 pm  
Operator : karimam  
Sample : jd87833-17  
Misc : op54467,ecj298,1000,,1,1  
ALS Vial : 11 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\danielas\METHODS\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p



7.1.36  
7



Library Search Compound Report

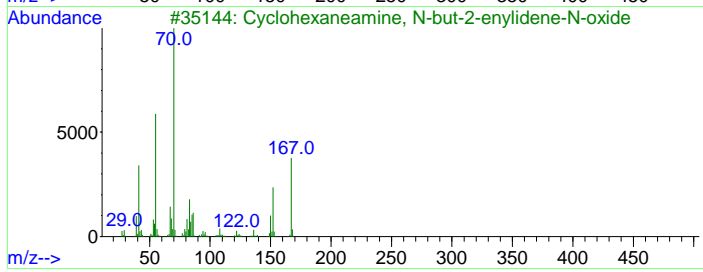
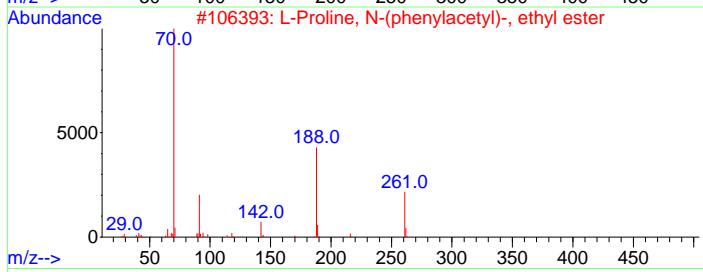
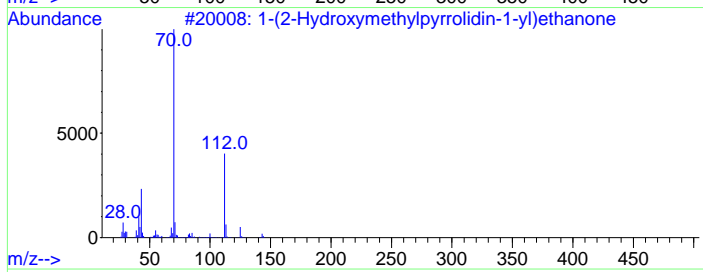
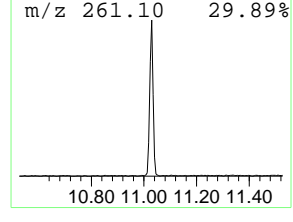
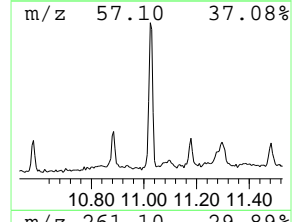
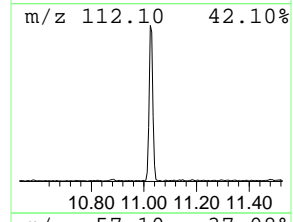
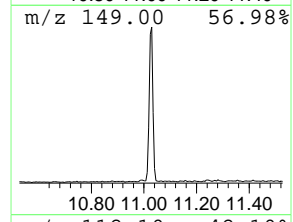
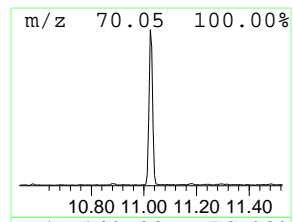
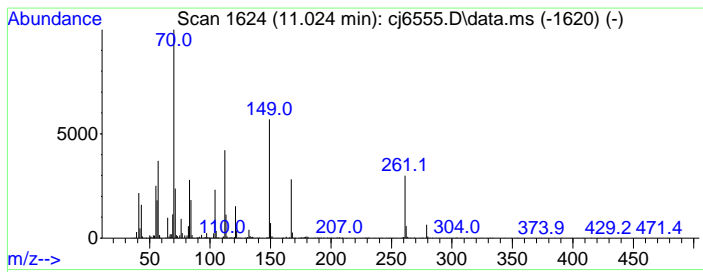
Data Path : X:\Dayton SVOA GCMS\danielas\ECJ298\
Data File : cj6555.D
Acq On : 10 May 2024 12:26 pm
Operator : karimam
Sample : jd87833-17
Misc : op54467,ecj298,1000,,,1,1
ALS Vial : 11 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\danielas\METHODS\mCJ296.m
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L
TIC Integration Parameters: lscint.p

\*\*\*\*\*
Peak Number 1 unknown Concentration Rank 1

Table with 7 columns: R.T., EstConc, Area, Relative to ISTD, R.T., Hit# of, Tentative ID, MW, MolForm, CAS#, Qual. Row 1: 11.024, 7.78 ppm, 652853, Perylene-d12, 11.687, 5, Perylene-d12, 418, C24H28F2O4, 1000315-53-1, 14



7.1.36
7

Tentatively Identified Compound (LSC) summary

Data Path : X:\Dayton SVOA GCMS\danielas\ECJ298\  
Data File : cj6555.D  
Acq On : 10 May 2024 12:26 pm  
Operator : karimam  
Sample : jd87833-17  
Misc : op54467,ecj298,1000,,,1,1  
ALS Vial : 11 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\danielas\METHODS\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
unknown	11.024	7.8	ppm	652853	11	11.687	3358210	40.0

7.1.36  
7



## Quantitation Report (QT Reviewed)

Data Path : X:\Dayton SVOA GCMS\nerirose\em8483\  
 Data File : m195578.D  
 Acq On : 14 May 2024 12:23 pm  
 Operator : kaleigh  
 Sample : jd87833-17 Inst : MSM  
 Misc : op54618,em8483,1000,,,1,1  
 ALS Vial : 22 Sample Multiplier: 1

Quant Time: May 14 18:06:59 2024  
 Quant Method : X:\Dayton SVOA GCMS\nerirose\methods\MM8478.M  
 Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um  
 QLast Update : Tue May 14 18:01:32 2024  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) 1,4-Dichlorobenzene-d4	3.691	152	130260	40.00	ppm	0.00
24) Naphthalene-d8	4.434	136	522071	40.00	ppm	0.00
46) Acenaphthene-d10	5.657	164	281784	40.00	ppm	0.00
69) Phenanthrene-d10	7.019	188	563768	40.00	ppm	0.00
84) Chrysene-d12	10.015	240	512881	40.00	ppm	0.00
93) Perylene-d12	11.623	264	589730	40.00	ppm	0.00
103) 1,4-Dichlorobenzene-d4a	3.691	152	130260	40.00	ppm	0.00
105) Acenaphthene-d10a	5.657	164	281784	40.00	ppm	0.00
107) Chrysene-d12a	10.015	240	512881	40.00	ppm	0.00
109) Phenanthrene-d10a	7.019	188	563768	40.00	ppm	0.00
111) Naphthalene-d8a	4.434	136	522071	40.00	ppm	0.00
113) Chrysene-d12b	10.015	240	512881	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.007	112	68467	19.74	ppm	0.00
Spiked Amount	50.000		Recovery	=	39.48%	
8) Phenol-d5	3.467	99	65778	12.98	ppm	0.00
Spiked Amount	50.000		Recovery	=	25.96%	
25) Nitrobenzene-d5	4.001	82	195814	37.09	ppm	0.00
Spiked Amount	50.000		Recovery	=	74.18%	
51) 2-Fluorobiphenyl	5.139	172	371676	41.70	ppm	0.00
Spiked Amount	50.000		Recovery	=	83.40%	
74) 2,4,6-Tribromophenol	6.340	330	49260	41.38	ppm	0.00
Spiked Amount	50.000		Recovery	=	82.76%	
87) Terphenyl-d14	8.786	244	378506	33.26	ppm	0.00
Spiked Amount	50.000		Recovery	=	66.52%	
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount	50.000		Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount	50.000		Recovery	=	0.00%	

Target Compounds Qvalue

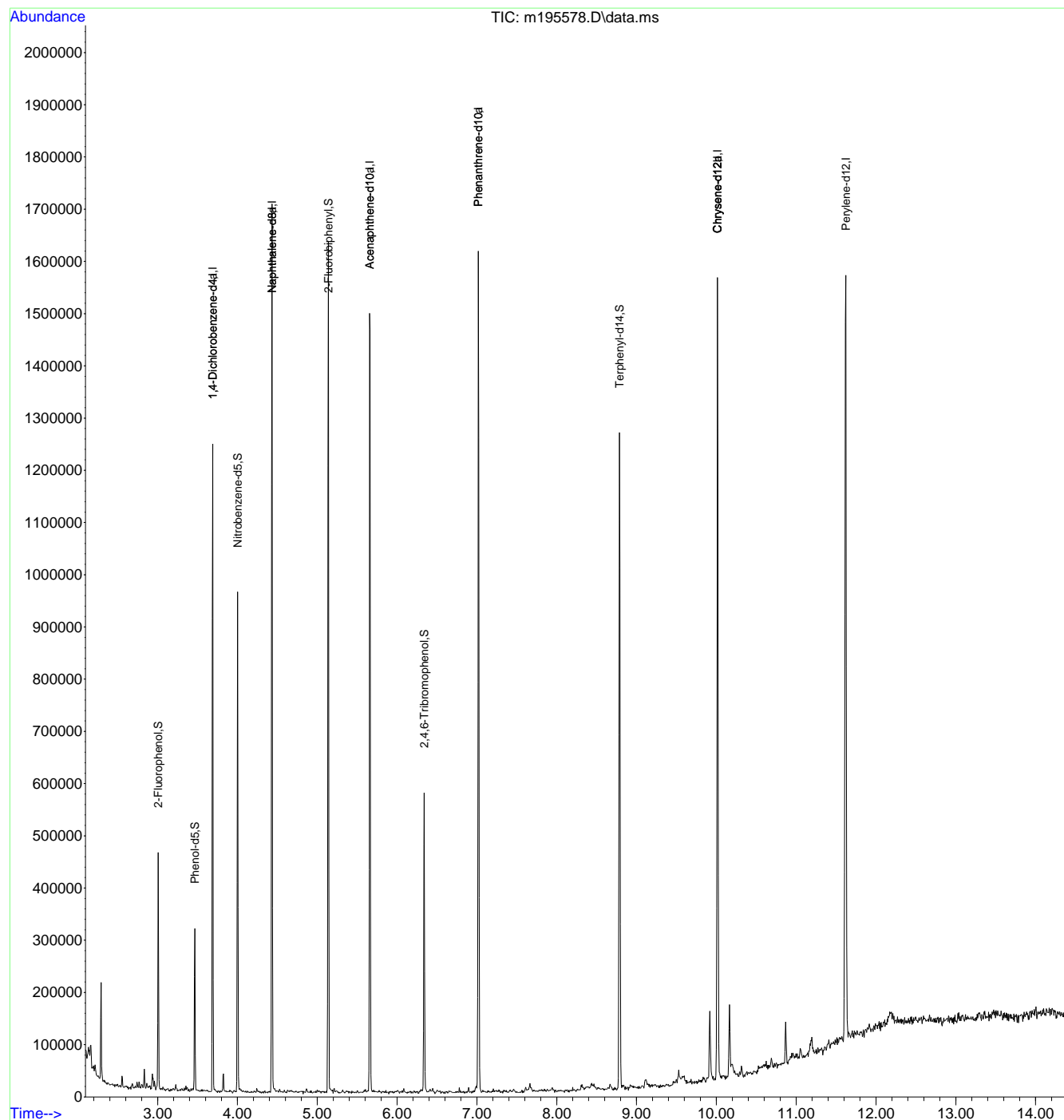
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(#) = qualifier out of range (m) = manual integration (+) = signals summed

## Quantitation Report (QT Reviewed)

Data Path : X:\Dayton SVOA GCMS\nerirose\em8483\  
Data File : m195578.D  
Acq On : 14 May 2024 12:23 pm  
Operator : kaleigh  
Sample : jd87833-17 Inst : MSM  
Misc : op54618,em8483,1000,,,1,1  
ALS Vial : 22 Sample Multiplier: 1

Quant Time: May 14 18:06:59 2024  
Quant Method : X:\Dayton SVOA GCMS\nerirose\methods\MM8478.M  
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um  
QLast Update : Tue May 14 18:01:32 2024  
Response via : Initial Calibration





## Quantitation Report (QT Reviewed)

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6516.D  
 Acq On : 09 May 2024 05:22 pm  
 Operator : rocquans  
 Sample : op54460-mb1 Inst : GCMS CJ  
 Misc : op54460,ecj297,30.0,,,1,1  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 10 15:01:08 2024  
 Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
 QLast Update : Thu May 09 12:05:48 2024  
 Response via : Initial Calibration

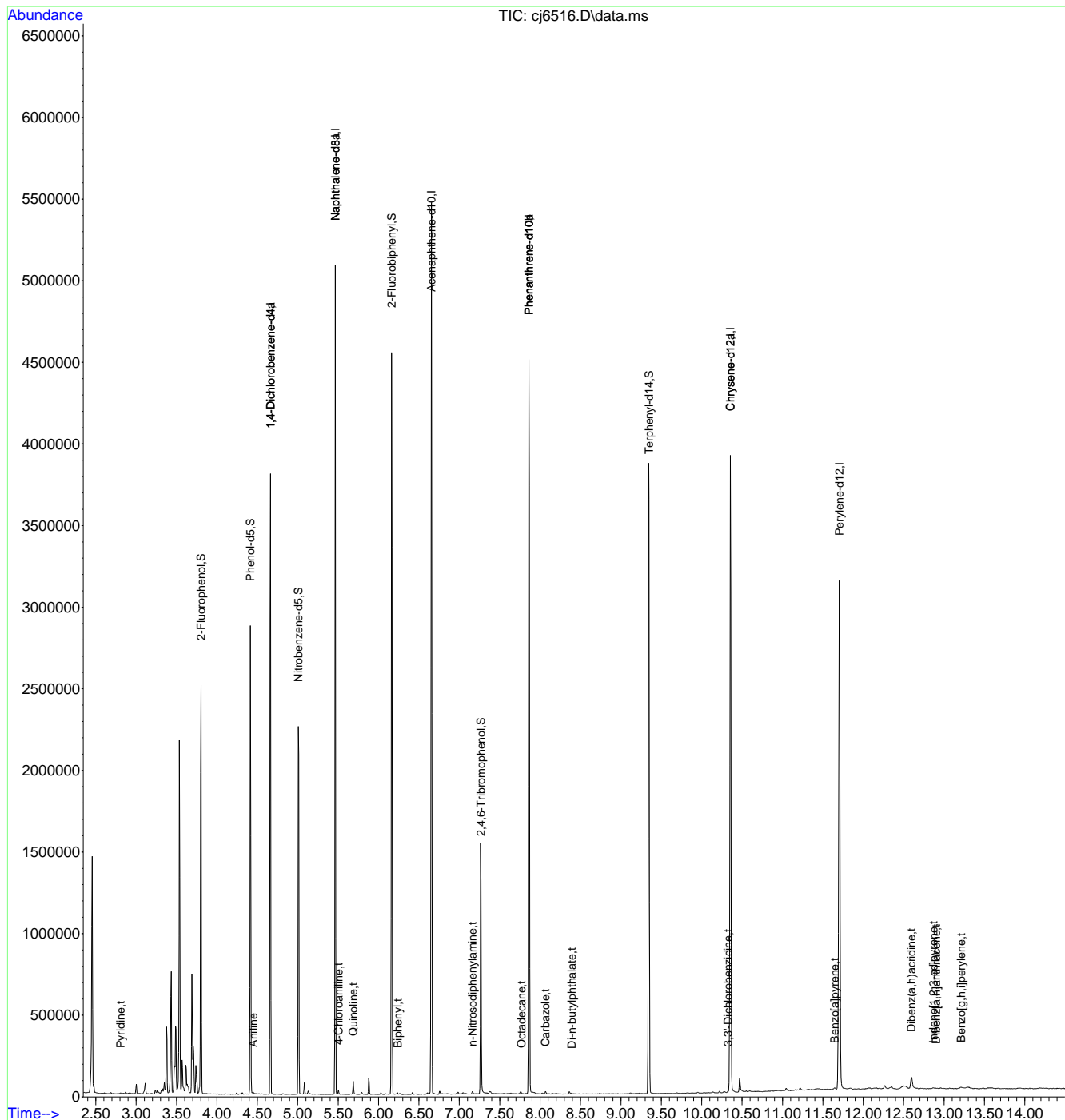
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.664	152	406045	40.00	ppm	0.00
24) Naphthalene-d8	5.466	136	1462855	40.00	ppm	0.00
46) Acenaphthene-d10	6.654	164	806560	40.00	ppm	0.00
69) Phenanthrene-d10	7.863	188	1445161	40.00	ppm	-0.01
84) Chrysene-d12	10.355	240	1127868	40.00	ppm	-0.02
93) Perylene-d12	11.703	264	1169922	40.00	ppm	-0.02
103) 1,4-Dichlorobenzene-d4a	4.664	152	406045	40.00	ppm	0.00
105) Phenanthrene-d10a	7.863	188	1445161	40.00	ppm	0.00
107) Naphthalene-d8a	5.466	136	1462855	40.00	ppm	0.00
109) Phenanthrene-d10b	7.863	188	1445161	40.00	ppm	# 0.00
112) Chrysene-d12a	10.355	240	1127868	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.803	112	437322	37.47	ppm	0.00
Spiked Amount 50.000			Recovery =	74.94%		
8) Phenol-d5	4.413	99	587942	39.06	ppm	0.00
Spiked Amount 50.000			Recovery =	78.12%		
25) Nitrobenzene-d5	5.006	82	555457	37.08	ppm	0.00
Spiked Amount 50.000			Recovery =	74.16%		
51) 2-Fluorobiphenyl	6.162	172	1005012	39.60	ppm	0.00
Spiked Amount 50.000			Recovery =	79.20%		
74) 2,4,6-Tribromophenol	7.269	330	125299	39.54	ppm	0.00
Spiked Amount 50.000			Recovery =	79.08%		
87) Terphenyl-d14	9.349	244	1182307	42.43	ppm	0.00
Spiked Amount 50.000			Recovery =	84.86%		
110) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						
					Qvalue	
3) Pyridine	2.808	79	3273	0.2293	ppm	86
10) Aniline	4.450	93	1431	0.0717	ppm	# 52
27) Quinoline	5.686	129	17294	0.7657	ppm	94
39) 4-Chloroaniline	5.504	127	3893	0.2641	ppm	92
53) Biphenyl	6.237	154	2496	0.0901	ppm	87
71) n-Nitrosodiphenylamine	7.162	169	2636	0.1336	ppm	75
80) Carbazole	8.066	167	6093	0.1870	ppm	98
81) Di-n-butylphthalate	8.392	149	1482	0.0368	ppm	66
83) Octadecane	7.766	57	1474	0.0743	ppm	82
90) 3,3'-Dichlorobenzidine	10.323	252	1659	0.1322	ppm	94
97) Benzo[a]pyrene	11.644	252	3052	0.1043	ppm	95
98) Indeno[1,2,3-cd]pyrene	12.869	276	4522	0.1279	ppm	86
99) Dibenz(a,h)acridine	12.596	279	39152	1.6648	ppm	96
100) Dibenz[a,h]anthracene	12.901	278	2514	0.0890	ppm	66
102) Benzo[g,h,i]perylene	13.211	276	4666	0.1698	ppm	90
-----						

(#) = qualifier out of range (m) = manual integration (+) = signals summed

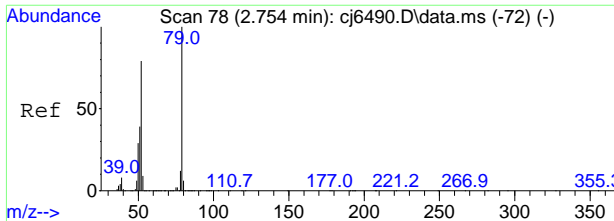
Quantitation Report (QT Reviewed)

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6516.D  
Acq On : 09 May 2024 05:22 pm  
Operator : rocquans  
Sample : op54460-mb1 Inst : GCMS CJ  
Misc : op54460,ecj297,30.0,,,1,1  
ALS Vial : 7 Sample Multiplier: 1

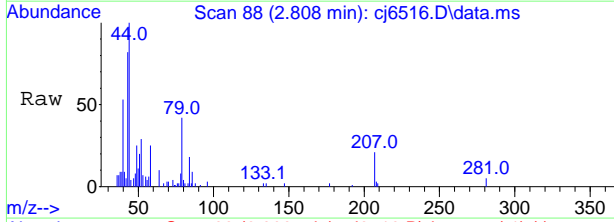
Quant Time: May 10 15:01:08 2024  
Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
QLast Update : Thu May 09 12:05:48 2024  
Response via : Initial Calibration



7.2.1  
7

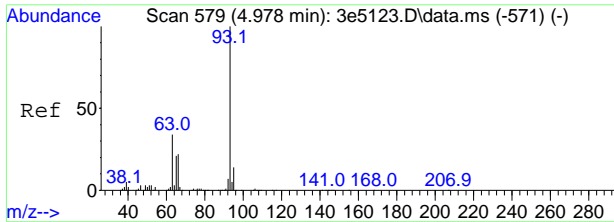
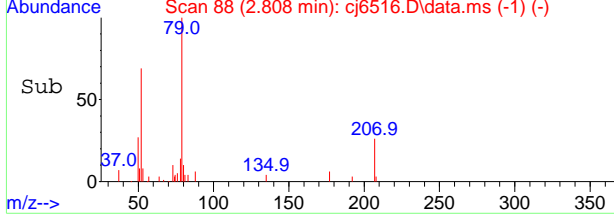
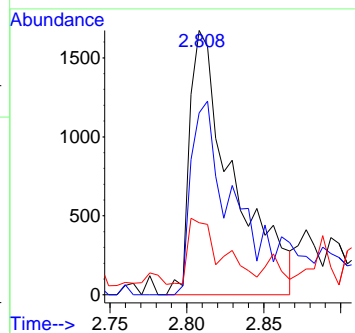


#3  
 Pyridine  
 Concen: 0.2293 ppm  
 RT: 2.808 min Scan# 88  
 Delta R.T. 0.054 min  
 Lab File: cj6516.D  
 Acq: 09 May 2024 05:22 pm



Tgt Ion: 79 Resp: 3273

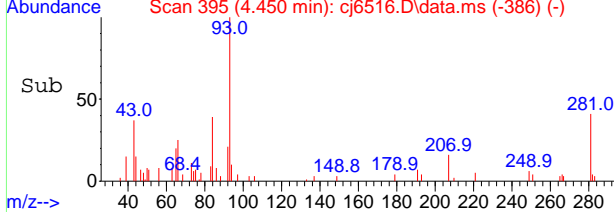
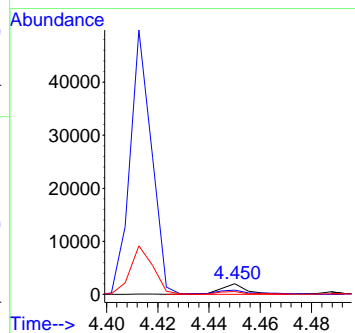
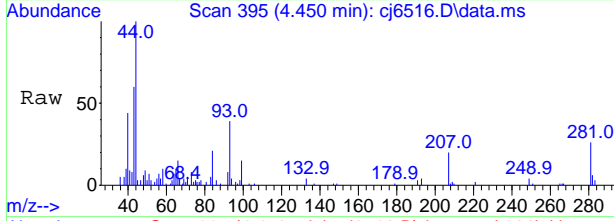
Ion	Ratio	Lower	Upper
79	100		
52	64.2	48.6	108.6
50	24.4	0.0	58.9



#10  
 Aniline  
 Concen: 0.0717 ppm  
 RT: 4.450 min Scan# 395  
 Delta R.T. 0.000 min  
 Lab File: cj6516.D  
 Acq: 09 May 2024 05:22 pm

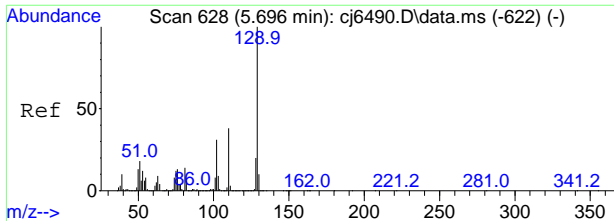
Tgt Ion: 93 Resp: 1431

Ion	Ratio	Lower	Upper
93	100		
66	1.4	9.7	69.7#
65	10.7	0.0	51.1



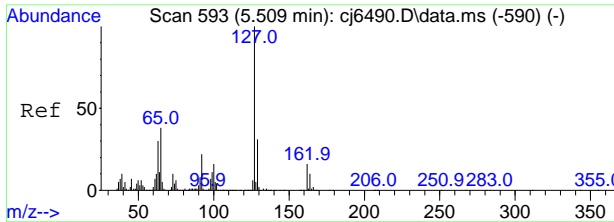
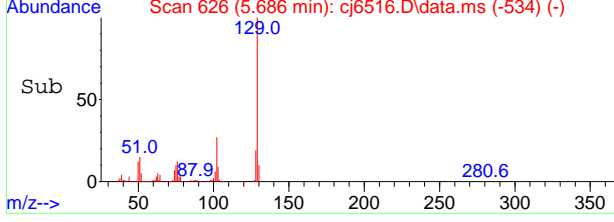
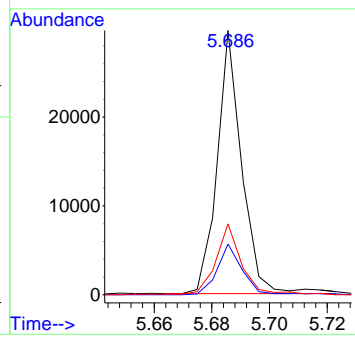
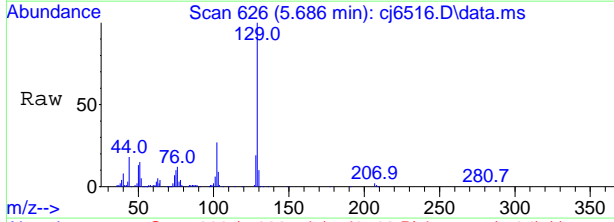
7.2.1  
7





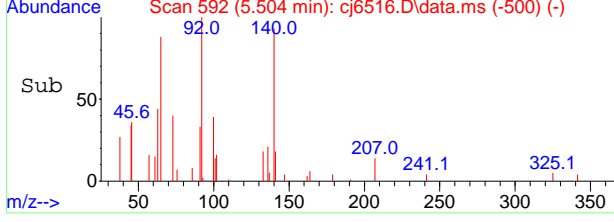
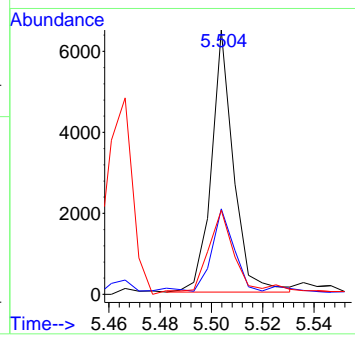
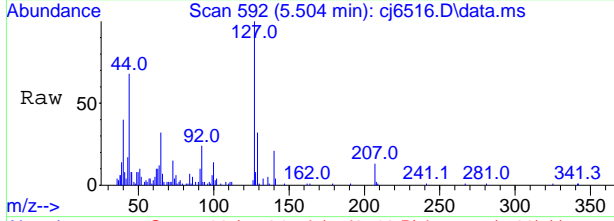
#27  
 Quinoline  
 Concen: 0.7657 ppm  
 RT: 5.686 min Scan# 626  
 Delta R.T. -0.010 min  
 Lab File: cj6516.D  
 Acq: 09 May 2024 05:22 pm

Tgt Ion	Ratio	Lower	Upper
129	100		
128	19.2	0.0	50.3
102	26.4	1.4	61.4



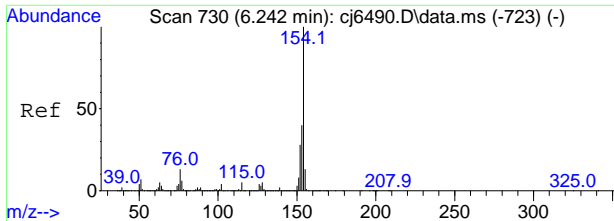
#39  
 4-Chloroaniline  
 Concen: 0.2641 ppm  
 RT: 5.504 min Scan# 592  
 Delta R.T. -0.005 min  
 Lab File: cj6516.D  
 Acq: 09 May 2024 05:22 pm

Tgt Ion	Ratio	Lower	Upper
127	100		
129	30.6	1.5	61.5
65	30.7	8.2	68.2



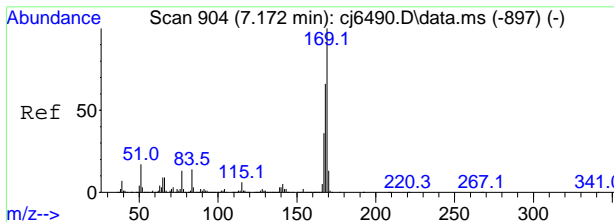
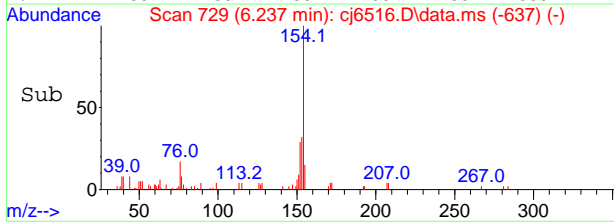
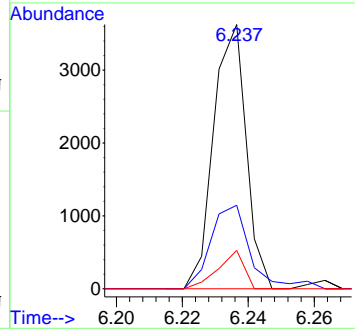
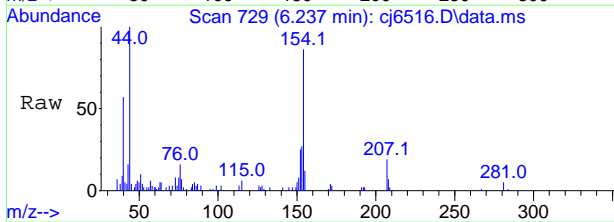
7.2.1  
7





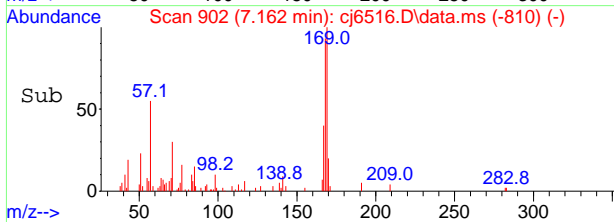
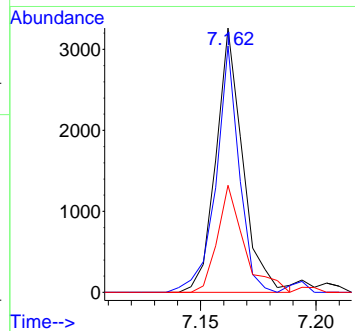
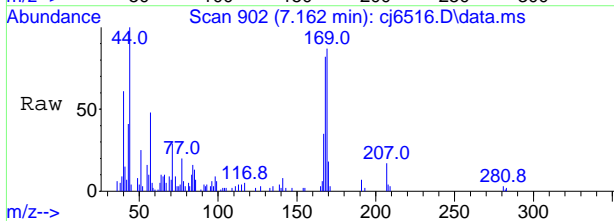
#53  
 Biphenyl  
 Concen: 0.0901 ppm  
 RT: 6.237 min Scan# 729  
 Delta R.T. -0.005 min  
 Lab File: cj6516.D  
 Acq: 09 May 2024 05:22 pm

Tgt Ion	Ratio	Lower	Upper
154	100		
153	30.7	10.5	70.5
155	14.6	0.0	42.8

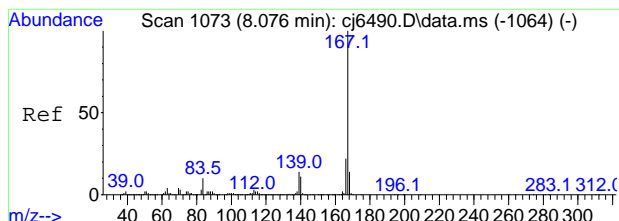


#71  
 n-Nitrosodiphenylamine  
 Concen: 0.1336 ppm  
 RT: 7.162 min Scan# 902  
 Delta R.T. -0.010 min  
 Lab File: cj6516.D  
 Acq: 09 May 2024 05:22 pm

Tgt Ion	Ratio	Lower	Upper
169	100		
168	93.2	36.1	96.1
167	41.0	5.7	65.7

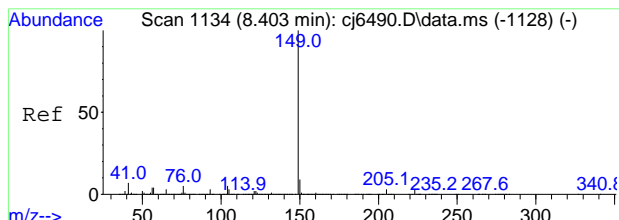
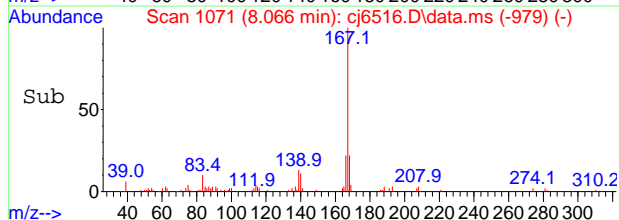
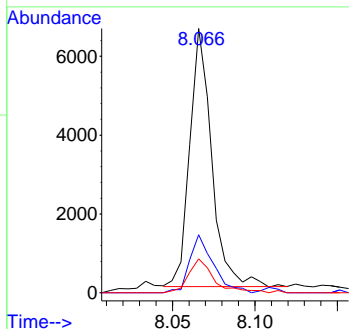
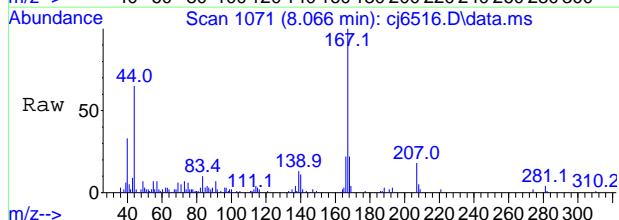


7.2.1  
 7



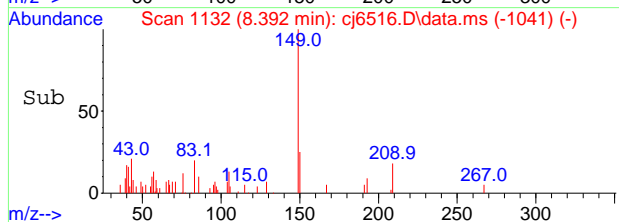
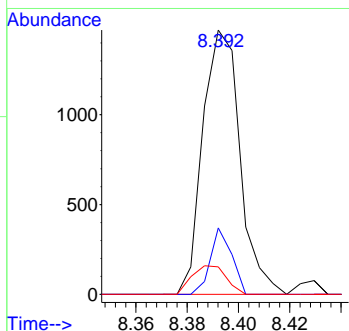
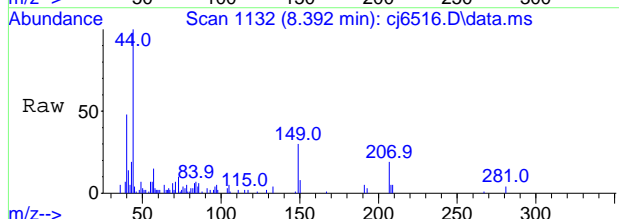
#80  
 Carbazole  
 Concen: 0.1870 ppm  
 RT: 8.066 min Scan# 1071  
 Delta R.T. -0.010 min  
 Lab File: cj6516.D  
 Acq: 09 May 2024 05:22 pm

Tgt Ion	Resp	Lower	Upper
167	6093		
166	22.5	0.0	51.7
139	13.2	0.0	43.8

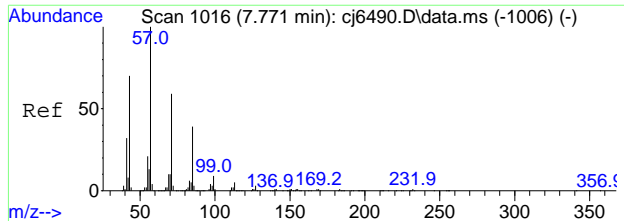


#81  
 Di-n-butylphthalate  
 Concen: 0.0368 ppm  
 RT: 8.392 min Scan# 1132  
 Delta R.T. -0.011 min  
 Lab File: cj6516.D  
 Acq: 09 May 2024 05:22 pm

Tgt Ion	Resp	Lower	Upper
149	1482		
150	25.1	0.0	39.3
104	10.5	0.0	35.2

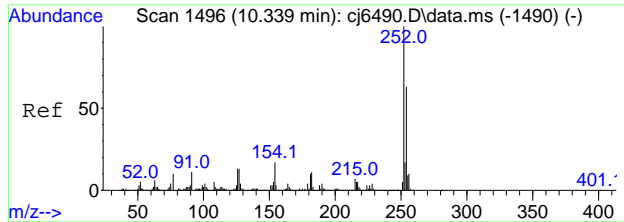
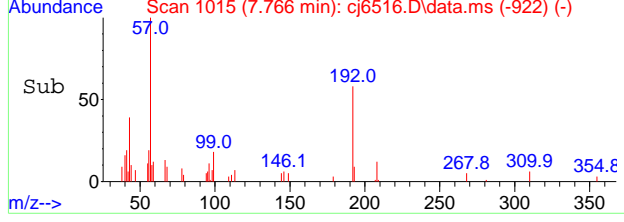
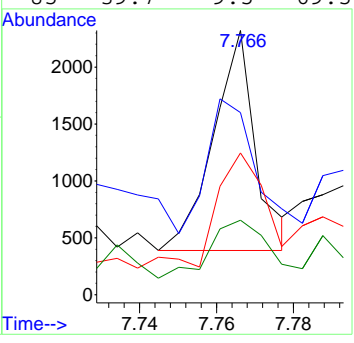
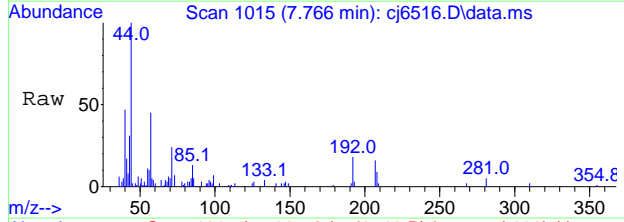


7.2.1  
7



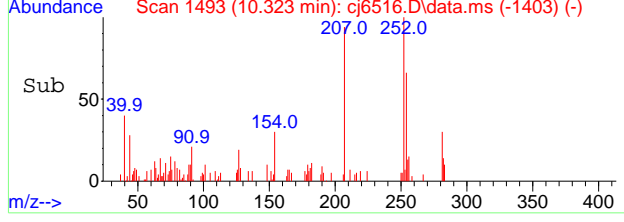
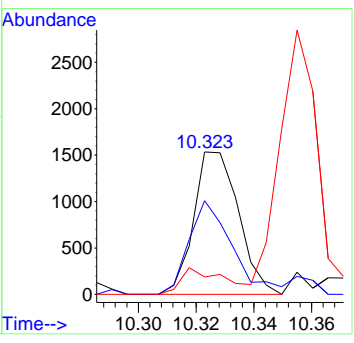
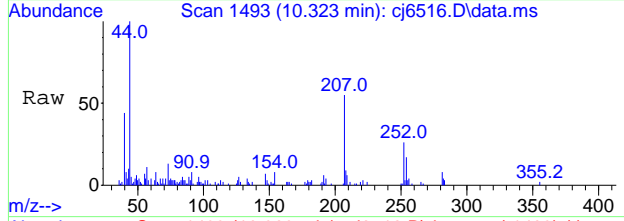
#83  
 Octadecane  
 Concen: 0.0743 ppm  
 RT: 7.766 min Scan# 1015  
 Delta R.T. -0.005 min  
 Lab File: cj6516.D  
 Acq: 09 May 2024 05:22 pm

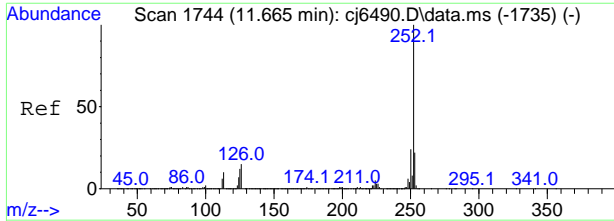
Tgt Ion	Resp	Lower	Upper
57	100		
43	44.8	40.1	100.1
71	48.6	29.4	89.4
85	39.7	9.5	69.5



#90  
 3,3'-Dichlorobenzidine  
 Concen: 0.1322 ppm  
 RT: 10.323 min Scan# 1493  
 Delta R.T. -0.016 min  
 Lab File: cj6516.D  
 Acq: 09 May 2024 05:22 pm

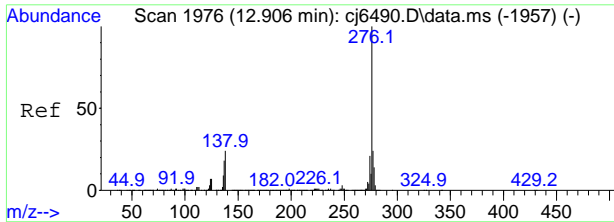
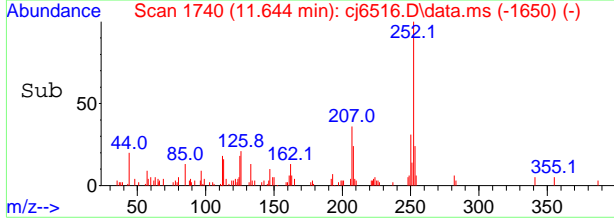
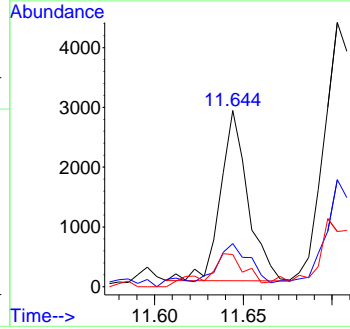
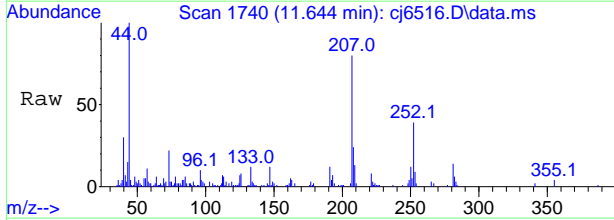
Tgt Ion	Resp	Lower	Upper
252	100		
254	63.0	32.8	92.8
126	0.0	0.0	43.2





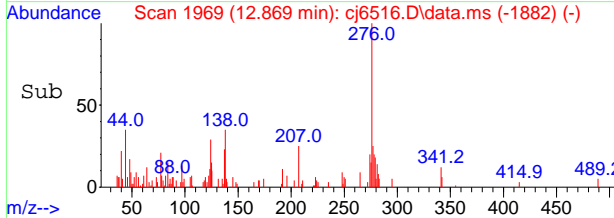
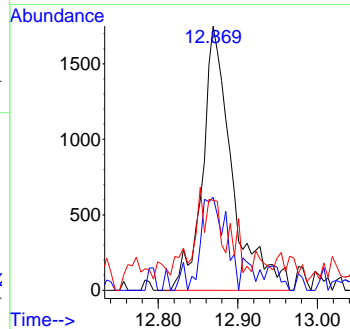
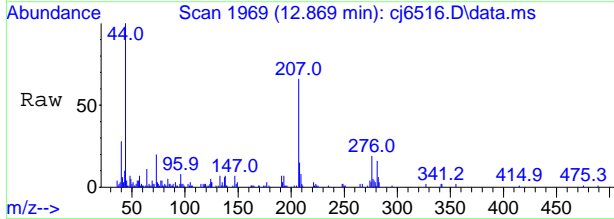
#97  
 Benzo[a]pyrene  
 Concen: 0.1043 ppm  
 RT: 11.644 min Scan# 1740  
 Delta R.T. -0.021 min  
 Lab File: cj6516.D  
 Acq: 09 May 2024 05:22 pm

Tgt Ion	Ratio	Lower	Upper
252	100		
253	21.9	0.0	51.9
125	17.8	0.0	42.1



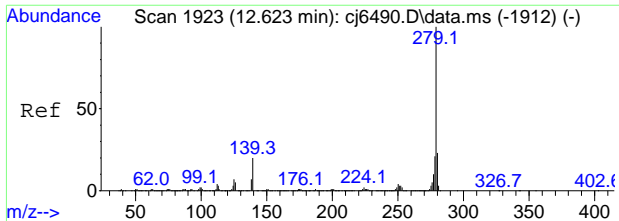
#98  
 Indeno[1,2,3-cd]pyrene  
 Concen: 0.1279 ppm  
 RT: 12.869 min Scan# 1969  
 Delta R.T. -0.037 min  
 Lab File: cj6516.D  
 Acq: 09 May 2024 05:22 pm

Tgt Ion	Ratio	Lower	Upper
276	100		
138	31.5	0.0	54.2
137	23.9	0.0	47.9



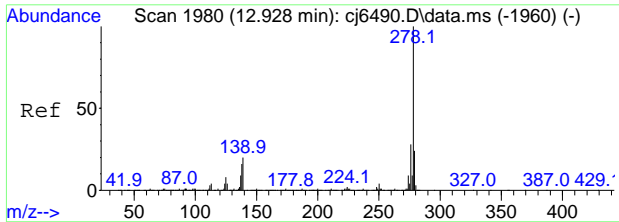
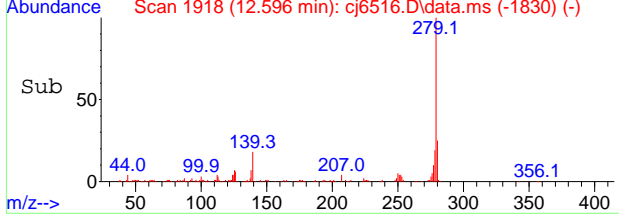
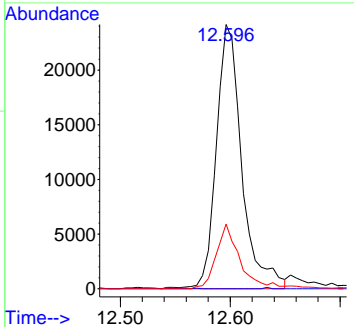
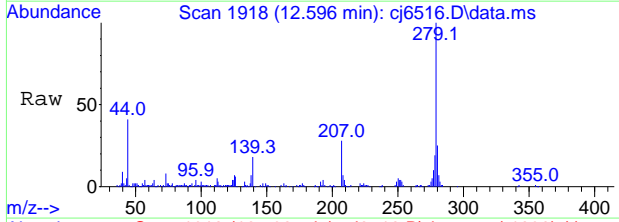
7.2.1  
7





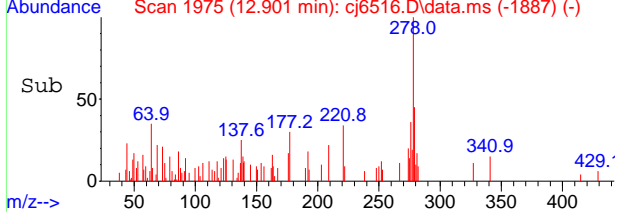
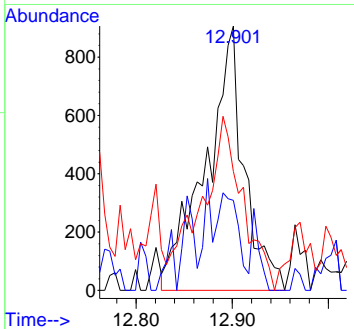
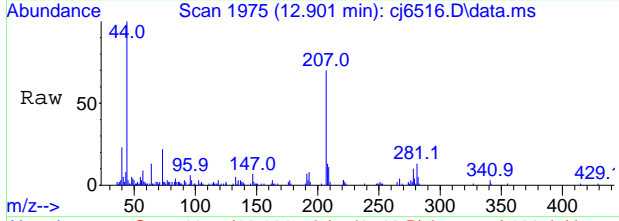
#99  
 Dibenz(a,h)acridine  
 Concen: 1.6648 ppm  
 RT: 12.596 min Scan# 1918  
 Delta R.T. -0.027 min  
 Lab File: cj6516.D  
 Acq: 09 May 2024 05:22 pm

Tgt Ion	Ratio	Lower	Upper
279	100		
140	0.0	0.0	30.0
280	24.5	0.0	52.7



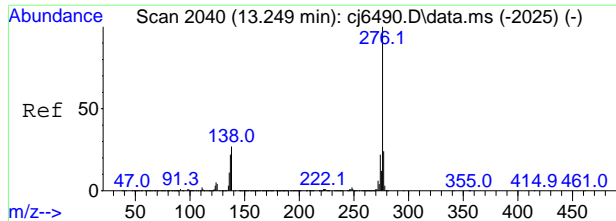
#100  
 Dibenz[a,h]anthracene  
 Concen: 0.0890 ppm  
 RT: 12.901 min Scan# 1975  
 Delta R.T. -0.027 min  
 Lab File: cj6516.D  
 Acq: 09 May 2024 05:22 pm

Tgt Ion	Ratio	Lower	Upper
278	100		
139	43.7	0.0	49.8
279	33.2	0.0	54.1

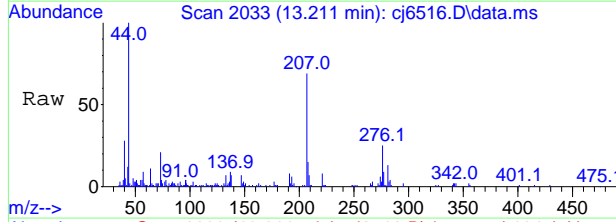


7.2.1  
7

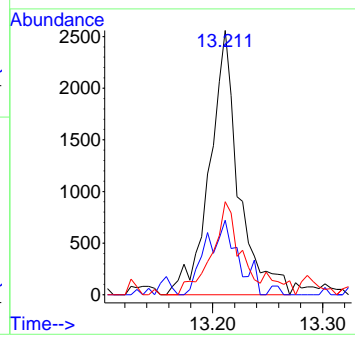
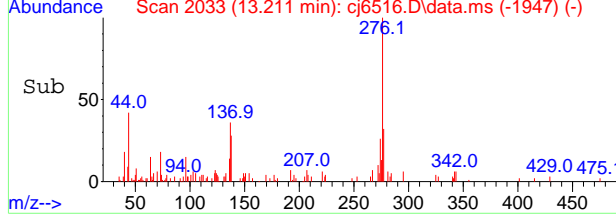




#102  
 Benzo[g,h,i]perylene  
 Concen: 0.1698 ppm  
 RT: 13.211 min Scan# 2033  
 Delta R.T. -0.038 min  
 Lab File: cj6516.D  
 Acq: 09 May 2024 05:22 pm



Tgt Ion	Ratio	Lower	Upper
276	100		
138	24.7	0.0	56.7
277	32.5	0.0	54.1



7.2.1  
7



## LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6516.D  
 Acq On : 09 May 2024 05:22 pm  
 Operator : rocquans  
 Sample : op54460-mb1  
 Misc : op54460,ecj297,30.0,,,1,1  
 ALS Vial : 7 Sample Multiplier: 1

Integration Parameters: lscint.p

Integrator: RTE  
 Smoothing : ON  
 Sampling : 1  
 Start Thrs: 0.02  
 Stop Thrs : 0

Filtering: 5  
 Min Area: 1000 Area counts  
 Max Peaks: 100  
 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Title : Semi Volatile GC/MS, zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

Signal : TIC: cj6516.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	4.247	354	357	360	rVB2	9990	8464	0.23%	0.026%
2	4.311	366	369	373	rVV	9795	7264	0.20%	0.023%
3	4.413	383	388	393	rVV	2871830	1693992	46.81%	5.258%
4	4.445	393	394	405	rVV	14948	22039	0.61%	0.068%
5	4.664	430	435	442	rVB	3803536	2457379	67.91%	7.627%
6	4.739	446	449	461	rVB	4497	11224	0.31%	0.035%
7	4.814	461	463	472	rBV2	6641	10609	0.29%	0.033%
8	5.006	492	499	507	rBV	2254715	1587066	43.86%	4.926%
9	5.081	510	513	518	rVV	72041	45714	1.26%	0.142%
10	5.129	518	522	532	rVB	20510	21962	0.61%	0.068%
11	5.466	579	585	589	rBV	5079283	3104663	85.79%	9.636%
12	5.504	589	592	596	rVB2	26915	17328	0.48%	0.054%
13	5.686	622	626	637	rVB	80938	54747	1.51%	0.170%
14	5.793	639	646	650	rBV2	13127	14124	0.39%	0.044%
15	5.878	656	662	666	rBV	101271	69401	1.92%	0.215%
16	6.028	684	690	695	rVB3	11213	11673	0.32%	0.036%
17	6.087	695	701	708	rBV8	5976	10270	0.28%	0.032%
18	6.162	708	715	722	rVB	4545178	3014838	83.31%	9.357%
19	6.237	722	729	731	rBV4	9435	9589	0.26%	0.030%
20	6.263	731	734	741	rVB7	8992	11887	0.33%	0.037%
21	6.418	757	763	766	rBV2	11618	9841	0.27%	0.031%
22	6.541	783	786	792	rBV6	3981	7472	0.21%	0.023%
23	6.606	792	798	801	rBV5	10038	12611	0.35%	0.039%
24	6.654	801	807	823	rVB	5464032	3535503	97.70%	10.973%
25	6.755	823	826	830	rBV3	19374	18702	0.52%	0.058%
26	6.846	840	843	854	rVB3	3812	7469	0.21%	0.023%
27	6.985	862	869	872	rBV3	14803	19143	0.53%	0.059%
28	7.050	876	881	884	rVB3	8372	9495	0.26%	0.029%
29	7.076	884	886	893	rVB8	5034	6785	0.19%	0.021%
30	7.162	896	902	907	rBV4	17499	17423	0.48%	0.054%
31	7.263	916	921	933	rBV	1536694	1201533	33.20%	3.729%
32	7.376	939	942	950	rVB4	14188	20731	0.57%	0.064%
33	7.638	986	991	1000	rBV8	6191	11555	0.32%	0.036%
34	7.761	1007	1014	1022	rBV3	14479	22341	0.62%	0.069%
35	7.863	1028	1033	1040	rVV	4499211	3618838	100.00%	11.232%
36	7.911	1040	1042	1050	rVB8	10422	18877	0.52%	0.059%
37	8.066	1066	1071	1077	rVB3	15931	16845	0.47%	0.052%
38	8.157	1083	1088	1091	rBV6	4928	7434	0.21%	0.023%
39	8.360	1120	1126	1130	rVV4	15585	17489	0.48%	0.054%
40	8.809	1207	1210	1216	rVB8	3820	7576	0.21%	0.024%

## LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6516.D  
 Acq On : 09 May 2024 05:22 pm  
 Operator : rocquans  
 Sample : op54460-mb1  
 Misc : op54460,ecj297,30.0,,,1,1  
 ALS Vial : 7 Sample Multiplier: 1

## Integration Parameters: lscint.p

Integrator: RTE  
 Smoothing : ON  
 Sampling : 1  
 Start Thrs: 0.02  
 Stop Thrs : 0

Filtering: 5  
 Min Area: 1000 Area counts  
 Max Peaks: 100  
 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

41	9.114	1262	1267	1277	rBV8	6322	11867	0.33%	0.037%
42	9.344	1305	1310	1322	rBV	3863971	3435309	94.93%	10.662%
43	9.692	1372	1375	1379	rBV6	4728	6607	0.18%	0.021%
44	9.820	1395	1399	1402	rBV6	4881	8355	0.23%	0.026%
45	9.884	1405	1411	1413	rVV7	4714	7079	0.20%	0.022%
46	9.954	1421	1424	1428	rVV6	7352	9405	0.26%	0.029%
47	10.136	1451	1458	1463	rVV10	7593	13272	0.37%	0.041%
48	10.221	1470	1474	1478	rBV7	11506	11014	0.30%	0.034%
49	10.275	1478	1484	1490	rBV9	7631	13480	0.37%	0.042%
50	10.355	1490	1499	1512	rVV	3904517	3373647	93.22%	10.471%
51	10.473	1516	1521	1529	rVV	88510	107027	2.96%	0.332%
52	10.553	1532	1536	1539	rVV6	9714	13054	0.36%	0.041%
53	10.596	1539	1544	1551	rVV10	9052	20380	0.56%	0.063%
54	10.660	1551	1556	1559	rVV7	5651	9204	0.25%	0.029%
55	10.788	1579	1580	1586	rVV6	4423	6971	0.19%	0.022%
56	10.869	1591	1595	1598	rVV6	9058	13023	0.36%	0.040%
57	10.917	1598	1604	1606	rVV7	5993	12386	0.34%	0.038%
58	10.949	1606	1610	1612	rVV5	7465	11198	0.31%	0.035%
59	11.045	1617	1628	1634	rVV8	19689	40434	1.12%	0.125%
60	11.082	1634	1635	1638	rVV3	6529	6447	0.18%	0.020%
61	11.163	1644	1650	1652	rVV5	10579	17936	0.50%	0.056%
62	11.184	1652	1654	1655	rVV2	8926	6713	0.19%	0.021%
63	11.222	1657	1661	1667	rVV6	19270	34491	0.95%	0.107%
64	11.318	1671	1679	1684	rVV10	10378	31790	0.88%	0.099%
65	11.355	1684	1686	1688	rVV3	8707	8875	0.25%	0.028%
66	11.409	1688	1696	1697	rVV8	11082	22508	0.62%	0.070%
67	11.441	1697	1702	1710	rVV8	12532	43116	1.19%	0.134%
68	11.489	1710	1711	1714	rVV3	8608	9434	0.26%	0.029%
69	11.537	1714	1720	1722	rVV7	8907	19187	0.53%	0.060%
70	11.558	1722	1724	1728	rVV5	8880	14542	0.40%	0.045%
71	11.585	1728	1729	1733	rVV4	7656	10429	0.29%	0.032%
72	11.644	1733	1740	1744	rVV9	15729	33796	0.93%	0.105%
73	11.703	1744	1751	1769	rVV	3122409	3461284	95.65%	10.743%
74	11.831	1769	1775	1782	rVV	10603	34528	0.95%	0.107%
75	11.890	1782	1786	1790	rVV6	6176	11660	0.32%	0.036%
76	11.944	1790	1796	1800	rVV8	7068	15463	0.43%	0.048%
77	11.992	1800	1805	1809	rVV8	5207	11232	0.31%	0.035%
78	12.029	1809	1812	1814	rVV4	6599	8102	0.22%	0.025%
79	12.083	1814	1822	1825	rVV9	9978	26874	0.74%	0.083%
80	12.141	1825	1833	1836	rVV9	8088	23701	0.65%	0.074%
81	12.163	1836	1837	1840	rVV3	9855	8802	0.24%	0.027%
82	12.200	1840	1844	1849	rVV8	6349	13481	0.37%	0.042%
83	12.270	1849	1857	1860	rVV9	21638	38258	1.06%	0.119%
84	12.350	1864	1872	1878	rVV9	13731	32307	0.89%	0.100%
85	12.500	1885	1900	1911	rBV3	21002	94714	2.62%	0.294%

## LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6516.D  
 Acq On : 09 May 2024 05:22 pm  
 Operator : rocquans  
 Sample : op54460-mb1  
 Misc : op54460,ecj297,30.0,,,1,1  
 ALS Vial : 7 Sample Multiplier: 1

## Integration Parameters: lscint.p

Integrator: RTE  
 Smoothing : ON Filtering: 5  
 Sampling : 1 Min Area: 1000 Area counts  
 Start Thrs: 0.02 Max Peaks: 100  
 Stop Thrs : 0 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

86	12.596	1911	1918	1930	rVV2	68918	115218	3.18%	0.358%
87	12.714	1938	1940	1942	rVV3	6464	7631	0.21%	0.024%
88	12.741	1942	1945	1948	rVV5	6383	9457	0.26%	0.029%
89	12.869	1964	1969	1972	rVV7	8264	16167	0.45%	0.050%
90	12.890	1972	1973	1976	rVV3	7698	6868	0.19%	0.021%
91	12.960	1983	1986	1991	rVV7	6605	11079	0.31%	0.034%
92	13.072	2003	2007	2010	rVB6	5614	7081	0.20%	0.022%
93	13.211	2024	2033	2038	rBV8	11282	27927	0.77%	0.087%
94	13.302	2043	2050	2061	rVB8	11118	38275	1.06%	0.119%
95	13.489	2081	2085	2087	rVB5	5545	6559	0.18%	0.020%
96	13.671	2116	2119	2123	rVB5	4972	7845	0.22%	0.024%
97	13.912	2159	2164	2166	rBV6	5245	6748	0.19%	0.021%
98	13.939	2166	2169	2175	rVB8	4040	7045	0.19%	0.022%
99	14.179	2206	2214	2215	rBV8	5754	7636	0.21%	0.024%
100	14.265	2229	2230	2237	rVB7	5412	8051	0.22%	0.025%

Sum of corrected areas: 32218865

7.2.2

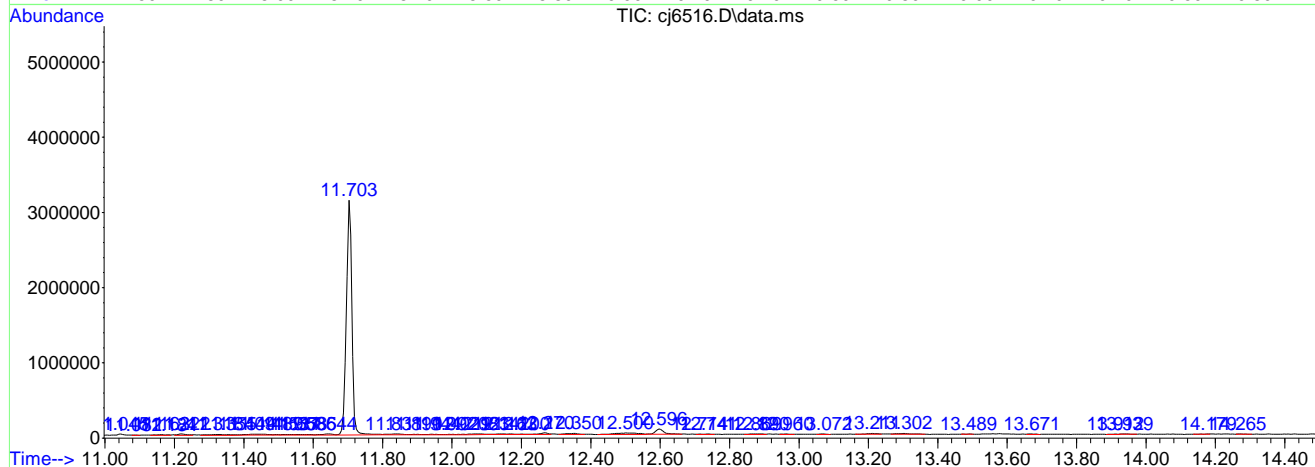
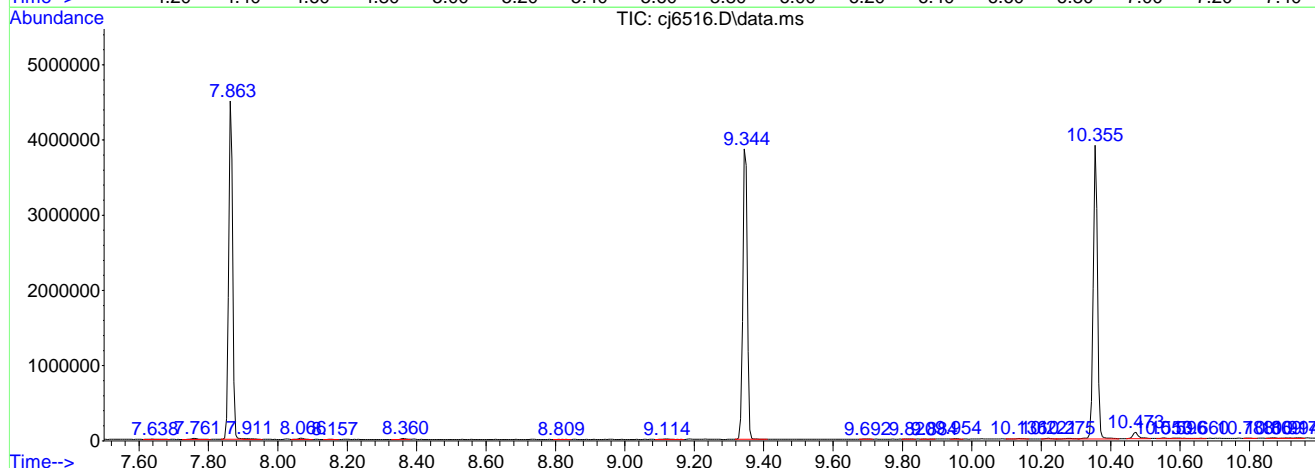
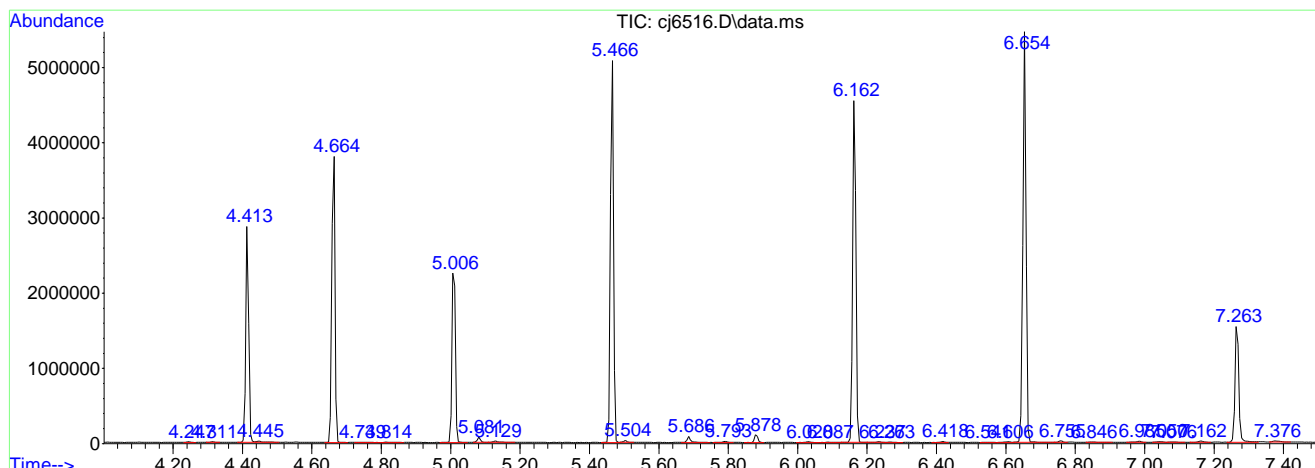
7

LSC Report - Integrated Chromatogram

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
 Data File : cj6516.D  
 Acq On : 09 May 2024 05:22 pm  
 Operator : rocquans  
 Sample : op54460-mb1  
 Misc : op54460,ecj297,30.0,,,1,1  
 ALS Vial : 7 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p



7.22  
7

Tentatively Identified Compound (LSC) summary

Data Path : X:\Dayton SVOA GCMS\hayderm\BATCH\Mayo\ecj297\  
Data File : cj6516.D  
Acq On : 09 May 2024 05:22 pm  
Operator : rocquans  
Sample : op54460-mb1  
Misc : op54460,ecj297,30.0,,,1,1  
ALS Vial : 7 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\methods\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc

No Library Search Compounds Detected

\*\*\*\*\*

## Quantitation Report (LSC Reviewed)

Data Path : X:\Dayton SVOA GCMS\danielas\ECJ298\  
 Data File : cj6550.D  
 Acq On : 10 May 2024 10:50 am  
 Operator : karimam  
 Sample : op54467b-mb1 Inst : GCMSJC  
 Misc : op54467b,ecj298,1000,,,1,1  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 10 16:36:32 2024  
 Quant Method : X:\Dayton SVOA GCMS\danielas\METHODS\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
 QLast Update : Thu May 09 12:05:48 2024  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.653	152	306406	40.00	ppm	-0.01
24) Naphthalene-d8	5.455	136	1119253	40.00	ppm	-0.02
46) Acenaphthene-d10	6.643	164	658396	40.00	ppm	-0.02
69) Phenanthrene-d10	7.852	188	1238122	40.00	ppm	-0.02
84) Chrysene-d12	10.344	240	974687	40.00	ppm	-0.03
93) Perylene-d12	11.687	264	956983	40.00	ppm	-0.03
103) 1,4-Dichlorobenzene-d4a	4.653	152	306406	40.00	ppm	-0.01
105) Phenanthrene-d10a	7.852	188	1238122	40.00	ppm	-0.02
107) Naphthalene-d8a	5.455	136	1119253	40.00	ppm	-0.01
109) Phenanthrene-d10b	7.852	188	1238122	40.00	ppm	-0.02
112) Chrysene-d12a	10.344	240	974687	40.00	ppm	-0.02
System Monitoring Compounds						
5) 2-Fluorophenol	3.792	112	149221	16.94	ppm	0.00
Spiked Amount 50.000			Recovery =	33.88%		
8) Phenol-d5	4.407	99	145709	12.83	ppm	-0.01
Spiked Amount 50.000			Recovery =	25.66%		
25) Nitrobenzene-d5	5.001	82	500844	43.70	ppm	-0.01
Spiked Amount 50.000			Recovery =	87.40%		
51) 2-Fluorobiphenyl	6.151	172	857238	41.38	ppm	-0.02
Spiked Amount 50.000			Recovery =	82.76%		
74) 2,4,6-Tribromophenol	7.258	330	82026	30.22	ppm	-0.02
Spiked Amount 50.000			Recovery =	60.44%		
87) Terphenyl-d14	9.333	244	665952	27.65	ppm	-0.02
Spiked Amount 50.000			Recovery =	55.30%		
110) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						
18) Acetophenone	4.899	105	2702	0.1918	ppm	# 71
26) Nitrobenzene	5.011	77	3045	0.2590	ppm	88
53) Biphenyl	6.220	154	2327	0.1029	ppm	98
89) Benzo[a]anthracene	10.344	228	4327	0.1381	ppm	69
91) Chrysene	10.365	228	1159	0.0401	ppm	98
95) Benzo[b]fluoranthene	11.318	252	1833	0.0634	ppm	67
96) Benzo[k]fluoranthene	11.344	252	1067m	0.0410	ppm	
97) Benzo[a]pyrene	11.687	252	4196	0.1753	ppm	84

(#) = qualifier out of range (m) = manual integration (+) = signals summed

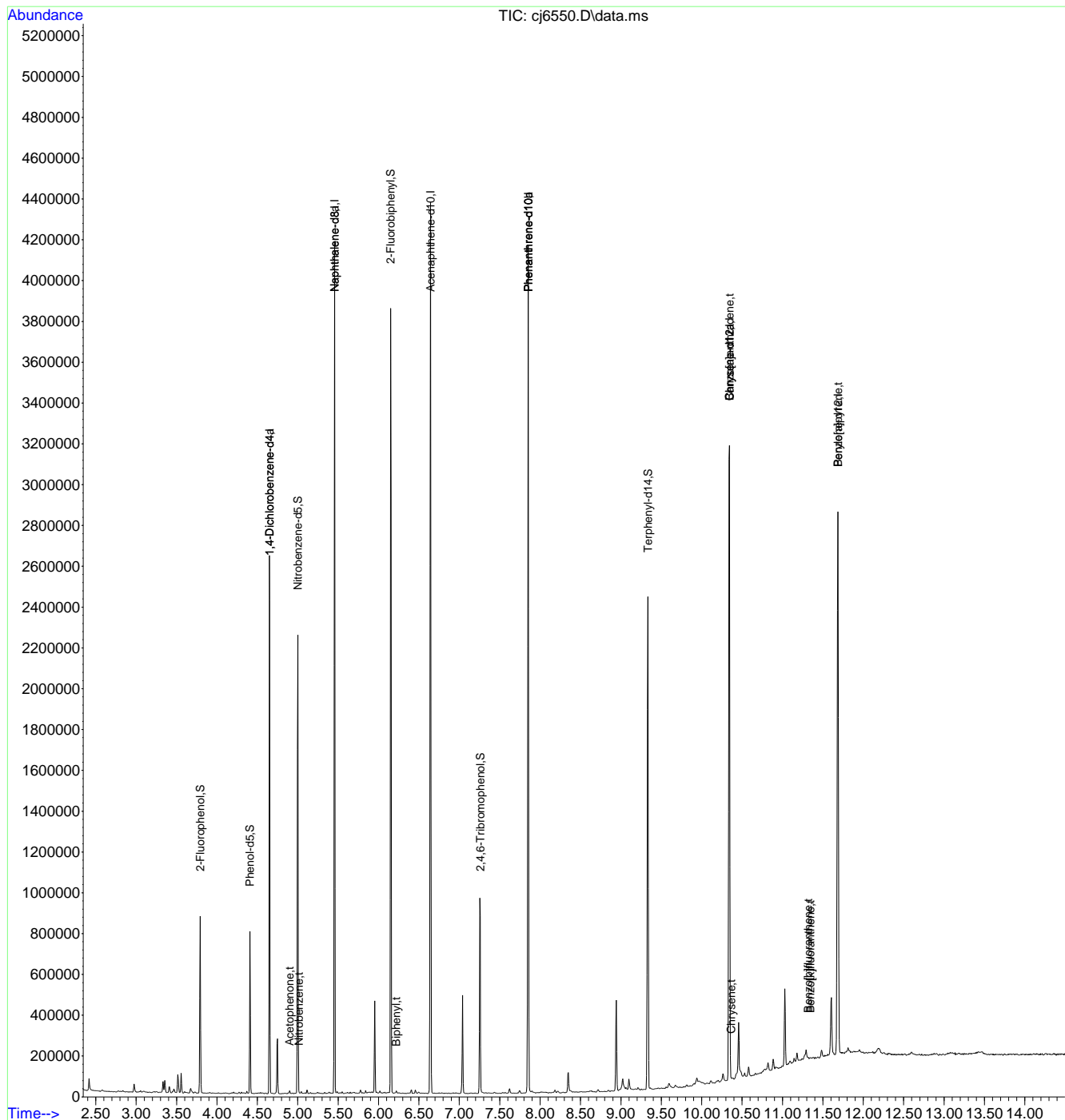
7.2.3  
7



Quantitation Report (LSC Reviewed)

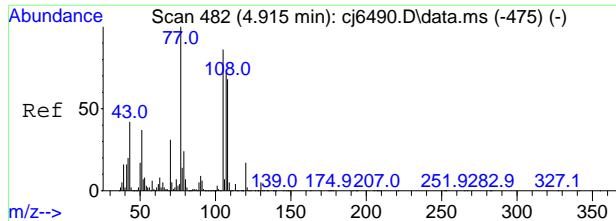
Data Path : X:\Dayton SVOA GCMS\danielas\ECJ298\  
 Data File : cj6550.D  
 Acq On : 10 May 2024 10:50 am  
 Operator : karimam  
 Sample : op54467b-mb1 Inst : GCMSCJ  
 Misc : op54467b,ecj298,1000,,,1,1  
 ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 10 16:36:32 2024  
 Quant Method : X:\Dayton SVOA GCMS\danielas\METHODS\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022  
 QLast Update : Thu May 09 12:05:48 2024  
 Response via : Initial Calibration



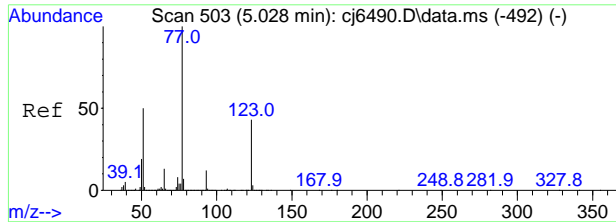
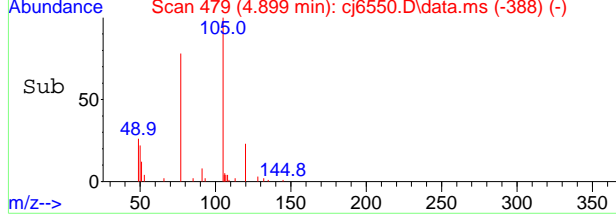
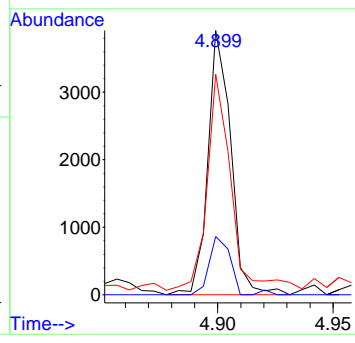
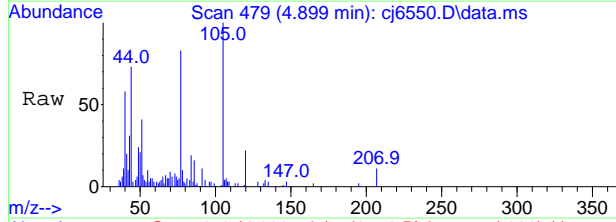
7.2.3  
7





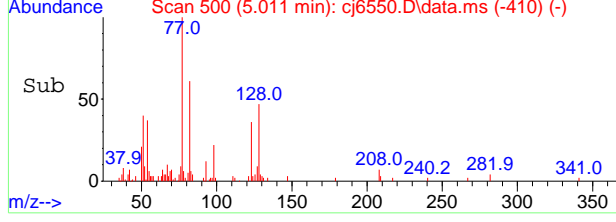
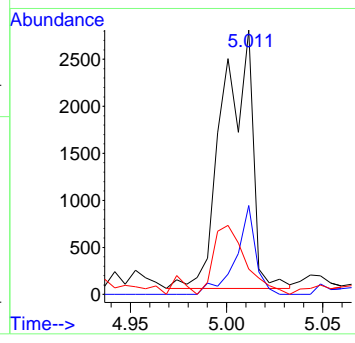
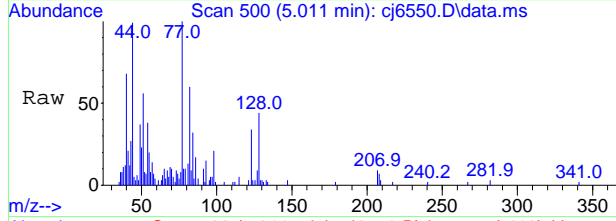
#18  
Acetophenone  
Concen: 0.1918 ppm  
RT: 4.899 min Scan# 479  
Delta R.T. -0.016 min  
Lab File: cj6550.D  
Acq: 10 May 2024 10:50 am

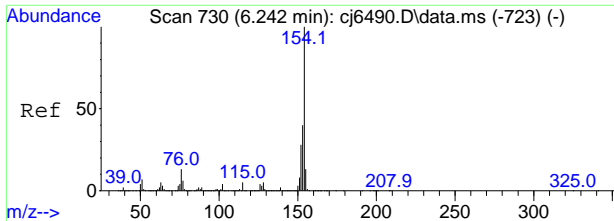
Tgt Ion	Ratio	Lower	Upper
105	100		
120	22.0	0.0	49.8
77	80.2	86.0	146.0#



#26  
Nitrobenzene  
Concen: 0.2590 ppm  
RT: 5.011 min Scan# 500  
Delta R.T. -0.017 min  
Lab File: cj6550.D  
Acq: 10 May 2024 10:50 am

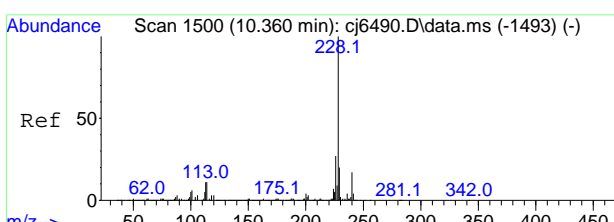
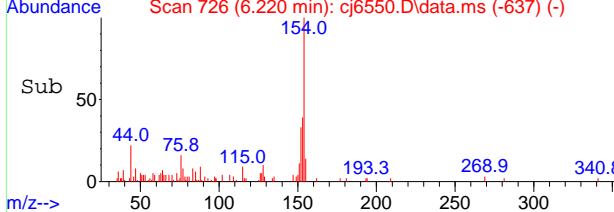
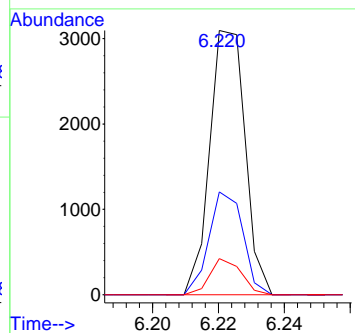
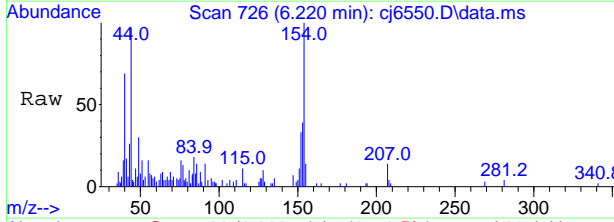
Tgt Ion	Ratio	Lower	Upper
77	100		
123	34.6	13.0	73.0
65	9.8	0.0	43.5





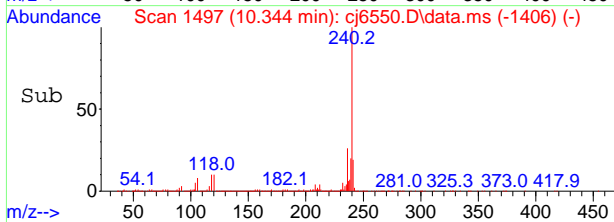
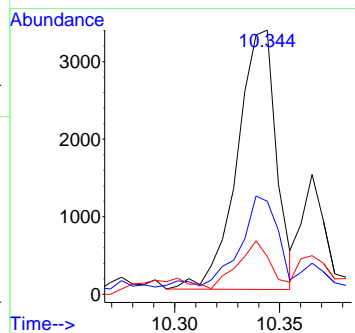
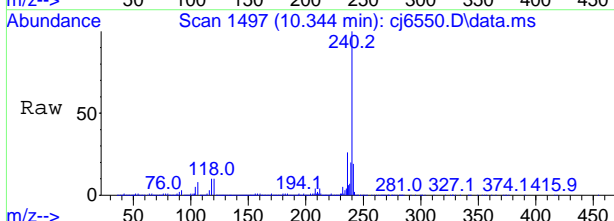
#53  
 Biphenyl  
 Concen: 0.1029 ppm  
 RT: 6.220 min Scan# 726  
 Delta R.T. -0.022 min  
 Lab File: cj6550.D  
 Acq: 10 May 2024 10:50 am

Tgt Ion	Ratio	Lower	Upper
154	100		
153	38.9	10.5	70.5
155	13.7	0.0	42.8



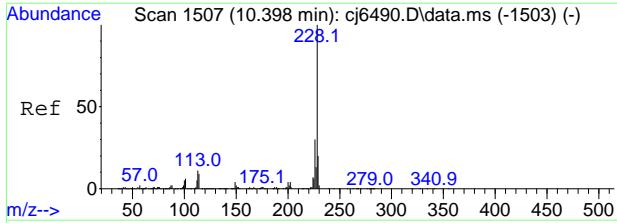
#89  
 Benzo[a]anthracene  
 Concen: 0.1381 ppm  
 RT: 10.344 min Scan# 1497  
 Delta R.T. -0.016 min  
 Lab File: cj6550.D  
 Acq: 10 May 2024 10:50 am

Tgt Ion	Ratio	Lower	Upper
228	100		
229	33.9	0.0	49.8
226	10.6	0.0	57.1



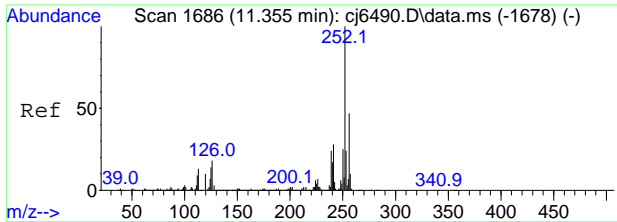
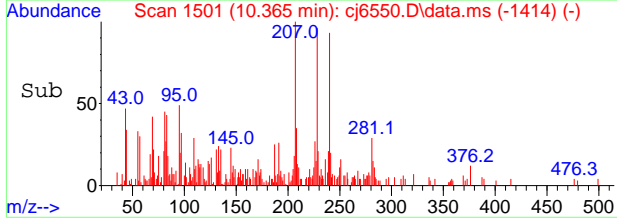
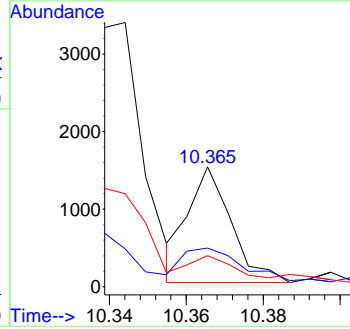
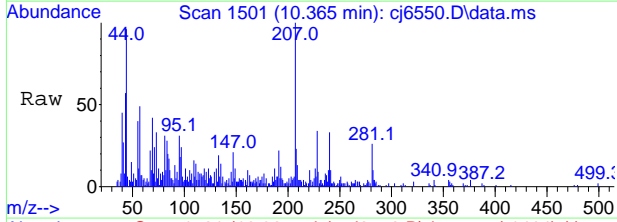
7.2.3  
7





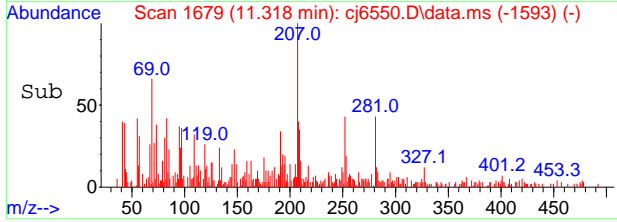
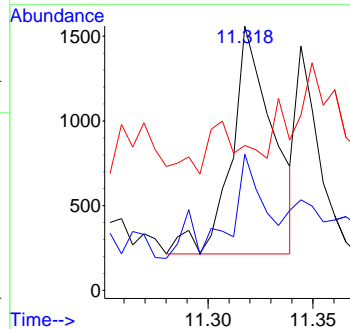
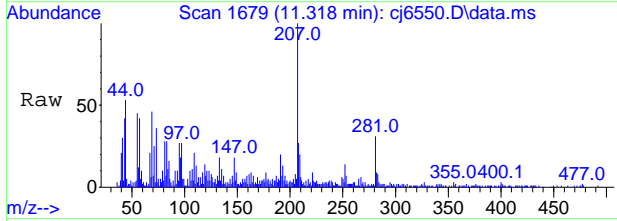
#91  
 Chrysene  
 Concen: 0.0401 ppm  
 RT: 10.365 min Scan# 1501  
 Delta R.T. -0.033 min  
 Lab File: cj6550.D  
 Acq: 10 May 2024 10:50 am

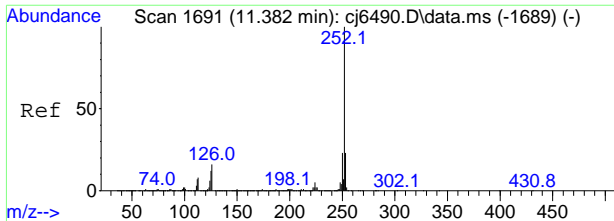
Tgt Ion	Ratio	Lower	Upper
228	100		
226	30.7	0.0	59.9
229	18.5	0.0	49.8



#95  
 Benzo[b]fluoranthene  
 Concen: 0.0634 ppm  
 RT: 11.318 min Scan# 1679  
 Delta R.T. -0.037 min  
 Lab File: cj6550.D  
 Acq: 10 May 2024 10:50 am

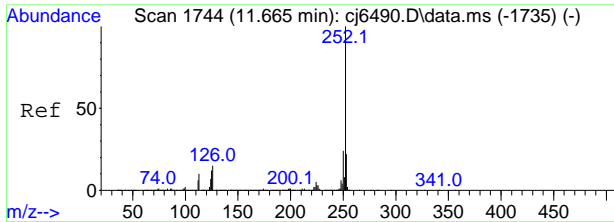
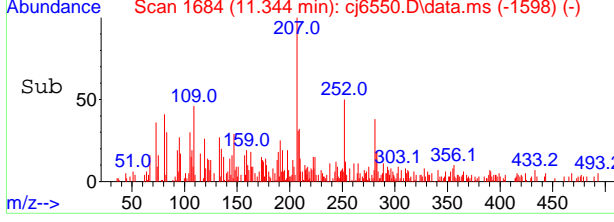
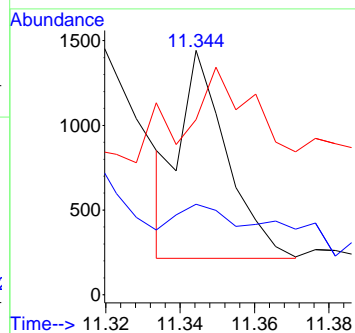
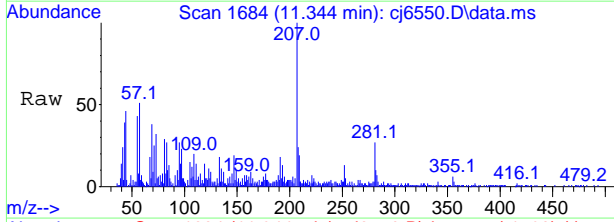
Tgt Ion	Ratio	Lower	Upper
252	100		
253	43.6	0.0	54.7
125	4.3	0.0	44.2





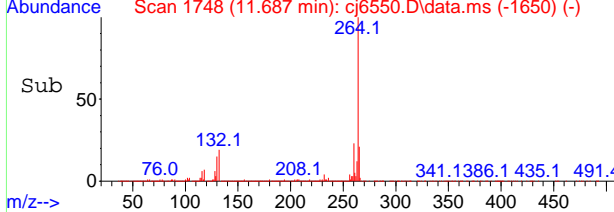
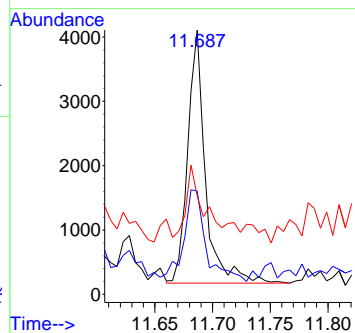
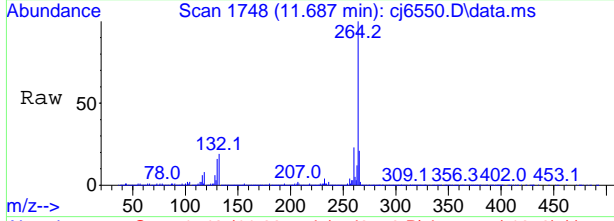
#96  
 Benzo[k]fluoranthene  
 Concen: 0.0410 ppm m  
 RT: 11.344 min Scan# 1684  
 Delta R.T. -0.038 min  
 Lab File: cj6550.D  
 Acq: 10 May 2024 10:50 am

Tgt Ion	Ratio	Lower	Upper
252	100		
253	37.1	0.0	52.6
125	71.7	0.0	42.4#



#97  
 Benzo[a]pyrene  
 Concen: 0.1753 ppm  
 RT: 11.687 min Scan# 1748  
 Delta R.T. 0.022 min  
 Lab File: cj6550.D  
 Acq: 10 May 2024 10:50 am

Tgt Ion	Ratio	Lower	Upper
252	100		
253	32.1	0.0	51.9
125	9.2	0.0	42.1



7.2.3  
7



## LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\danielas\ECJ298\  
 Data File : cj6550.D  
 Acq On : 10 May 2024 10:50 am  
 Operator : karimam  
 Sample : op54467b-mbl  
 Misc : op54467b,ecj298,1000,,,1,1  
 ALS Vial : 6 Sample Multiplier: 1

Integration Parameters: lscint.p

Integrator: RTE  
 Smoothing : ON  
 Sampling : 1  
 Start Thrs: 0.02  
 Stop Thrs : 0

Filtering: 5  
 Min Area: 1000 Area counts  
 Max Peaks: 100  
 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

Method : X:\Dayton SVOA GCMS\danielas\METHODS\mCJ296.m  
 Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

Signal : TIC: cj6550.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	2.417	11	15	28	rVV	60238	64130	2.08%	0.228%
2	2.583	40	46	53	rBV9	7455	13198	0.43%	0.047%
3	2.974	116	119	127	rBV	40876	36295	1.17%	0.129%
4	3.054	127	134	137	rBV7	6908	7815	0.25%	0.028%
5	3.091	137	141	151	rVB9	7450	19100	0.62%	0.068%
6	3.220	159	165	168	rBV7	5680	9179	0.30%	0.033%
7	3.332	179	186	188	rVV	52349	40790	1.32%	0.145%
8	3.353	188	190	194	rVB	60747	46355	1.50%	0.164%
9	3.412	194	201	205	rVB	31010	32272	1.04%	0.115%
10	3.466	205	211	215	rBV	19777	25153	0.81%	0.089%
11	3.514	215	220	225	rVB	88741	74448	2.41%	0.264%
12	3.557	225	228	232	rVB	97062	66773	2.16%	0.237%
13	3.674	246	250	257	rBV2	22856	29326	0.95%	0.104%
14	3.792	265	272	287	rVB	867975	566312	18.33%	2.009%
15	4.107	328	331	339	rVB8	4066	7670	0.25%	0.027%
16	4.273	358	362	365	rBV4	7575	7673	0.25%	0.027%
17	4.370	376	380	383	rVV2	12428	8817	0.29%	0.031%
18	4.407	383	387	397	rVB	795447	463575	15.01%	1.645%
19	4.648	427	432	442	rBV	2638581	1868336	60.48%	6.629%
20	4.749	442	451	459	rVB	270049	205683	6.66%	0.730%
21	4.899	473	479	482	rBV3	15267	14538	0.47%	0.052%
22	5.001	493	498	503	rBV	2247446	1435768	46.48%	5.094%
23	5.113	517	519	523	rBV2	17200	13782	0.45%	0.049%
24	5.247	537	544	546	rBV6	7184	8483	0.27%	0.030%
25	5.386	563	570	576	rBV9	8183	11847	0.38%	0.042%
26	5.455	579	583	587	rBV	4173115	2396152	77.57%	8.501%
27	5.552	598	601	604	rVB4	9401	8819	0.29%	0.031%
28	5.616	604	613	617	rBV4	7384	12814	0.41%	0.045%
29	5.776	636	643	650	rBV2	16050	19302	0.62%	0.068%
30	5.840	651	655	658	rBV4	13353	9992	0.32%	0.035%
31	5.953	671	676	684	rVB	451780	278156	9.00%	0.987%
32	6.017	684	688	693	rVB2	11228	9162	0.30%	0.033%
33	6.151	702	713	719	rVB	3847402	2594778	84.00%	9.206%
34	6.220	719	726	729	rBV4	12199	13781	0.45%	0.049%
35	6.407	754	761	764	rBV	17301	14195	0.46%	0.050%
36	6.456	766	770	775	rVB4	16873	14277	0.46%	0.051%
37	6.643	798	805	812	rBV	4365973	2881322	93.28%	10.223%
38	7.039	870	879	887	rVB	482348	355976	11.52%	1.263%
39	7.253	914	919	929	rBV	958342	789705	25.56%	2.802%
40	7.622	982	988	996	rBV	23125	24553	0.79%	0.087%

## LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\danielas\ECJ298\  
 Data File : cj6550.D  
 Acq On : 10 May 2024 10:50 am  
 Operator : karimam  
 Sample : op54467b-mb1  
 Misc : op54467b,ecj298,1000,,,1,1  
 ALS Vial : 6 Sample Multiplier: 1

## Integration Parameters: lscint.p

Integrator: RTE  
 Smoothing : ON  
 Sampling : 1  
 Start Thrs: 0.02  
 Stop Thrs : 0

Filtering: 5  
 Min Area: 1000 Area counts  
 Max Peaks: 100  
 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

Method : X:\Dayton SVOA GCMS\danielas\METHODS\mCJ296.m  
 Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

41	7.745	1003	1011	1018	rBV2	14136	17915	0.58%	0.064%
42	7.852	1024	1031	1037	rBV	4155347	3089053	100.00%	10.960%
43	7.900	1037	1040	1048	rVB6	9932	15507	0.50%	0.055%
44	8.183	1084	1093	1096	rVV3	14319	18683	0.60%	0.066%
45	8.221	1096	1100	1105	rVB8	9510	14883	0.48%	0.053%
46	8.290	1105	1113	1117	rBV10	4289	9809	0.32%	0.035%
47	8.349	1117	1124	1134	rBV2	99918	117004	3.79%	0.415%
48	8.718	1188	1193	1198	rBV3	12923	18336	0.59%	0.065%
49	8.846	1211	1217	1221	rBV9	7610	11147	0.36%	0.040%
50	8.884	1221	1224	1229	rBV7	5152	8317	0.27%	0.030%
51	8.943	1229	1235	1240	rBV	446118	355490	11.51%	1.261%
52	9.023	1240	1250	1256	rBV6	57738	99200	3.21%	0.352%
53	9.060	1256	1257	1261	rVB4	9960	9149	0.30%	0.032%
54	9.098	1261	1264	1274	rVB	51163	49861	1.61%	0.177%
55	9.210	1282	1285	1290	rVB3	13058	15790	0.51%	0.056%
56	9.333	1302	1308	1313	rBV	2415503	1947172	63.03%	6.909%
57	9.456	1321	1331	1335	rBV	7059	18168	0.59%	0.064%
58	9.558	1346	1350	1352	rBV5	9138	9331	0.30%	0.033%
59	9.595	1352	1357	1365	rVB3	22689	35274	1.14%	0.125%
60	9.676	1367	1372	1380	rBV4	13090	19834	0.64%	0.070%
61	9.815	1394	1398	1404	rBV8	10093	15447	0.50%	0.055%
62	9.906	1409	1415	1416	rBV6	13686	18050	0.58%	0.064%
63	9.938	1416	1421	1424	rBV4	30332	41581	1.35%	0.148%
64	9.964	1425	1426	1440	rVB3	15645	41203	1.33%	0.146%
65	10.066	1440	1445	1450	rBV9	5860	11181	0.36%	0.040%
66	10.119	1450	1455	1458	rBV5	14643	20876	0.68%	0.074%
67	10.205	1463	1471	1474	rBV8	14504	29940	0.97%	0.106%
68	10.264	1474	1482	1489	rBV3	41337	67290	2.18%	0.239%
69	10.344	1489	1497	1503	rBV	3113693	2897124	93.79%	10.279%
70	10.456	1507	1518	1528	rBV	278723	373005	12.08%	1.323%
71	10.531	1528	1532	1535	rBV5	17580	12838	0.42%	0.046%
72	10.579	1537	1541	1547	rBV2	45632	50100	1.62%	0.178%
73	10.665	1547	1557	1559	rBV2	14792	25498	0.83%	0.090%
74	10.783	1570	1579	1581	rBV10	20968	46313	1.50%	0.164%
75	10.820	1581	1586	1591	rVB5	38373	42704	1.38%	0.152%
76	10.884	1594	1598	1602	rBV	54177	57391	1.86%	0.204%
77	10.916	1602	1604	1611	rBV8	10283	18575	0.60%	0.066%
78	11.029	1611	1625	1631	rBV	390495	389864	12.62%	1.383%
79	11.093	1631	1637	1641	rBV8	19287	31175	1.01%	0.111%
80	11.141	1641	1646	1650	rBV8	25239	34672	1.12%	0.123%
81	11.178	1650	1653	1657	rBV	43173	43207	1.40%	0.153%
82	11.243	1662	1665	1667	rVV4	7391	8235	0.27%	0.029%
83	11.291	1667	1674	1681	rVV4	47992	93091	3.01%	0.330%
84	11.435	1698	1701	1705	rVV6	6779	7827	0.25%	0.028%
85	11.483	1705	1710	1714	rBV5	39899	53719	1.74%	0.191%

## LSC Area Percent Report

Data Path : X:\Dayton SVOA GCMS\danielas\ECJ298\  
 Data File : cj6550.D  
 Acq On : 10 May 2024 10:50 am  
 Operator : karimam  
 Sample : op54467b-ml  
 Misc : op54467b,ecj298,1000,,,1,1  
 ALS Vial : 6 Sample Multiplier: 1

## Integration Parameters: lscint.p

Integrator: RTE  
 Smoothing : ON  
 Sampling : 1  
 Start Thrs: 0.02  
 Stop Thrs : 0

Filtering: 5  
 Min Area: 1000 Area counts  
 Max Peaks: 100  
 Peak Location: TOP

If leading or trailing edge < 100 prefer < Baseline drop else tangent >  
 Peak separation: 5

Method : X:\Dayton SVOA GCMS\danielas\METHODS\mCJ296.m  
 Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

86	11.606	1727	1733	1740	rVV	283573	314924	10.19%	1.117%
87	11.687	1740	1748	1755	rBV	2659984	2760248	89.36%	9.793%
88	11.810	1763	1771	1781	rBV9	29324	72065	2.33%	0.256%
89	11.954	1795	1798	1804	rVB8	14464	18601	0.60%	0.066%
90	12.184	1833	1841	1851	rVB8	28582	82145	2.66%	0.291%
91	12.254	1851	1854	1859	rVB7	7514	10616	0.34%	0.038%
92	12.596	1914	1918	1931	rVB7	14377	32377	1.05%	0.115%
93	12.949	1981	1984	1988	rBV6	8358	9166	0.30%	0.033%
94	12.986	1988	1991	1995	rBV6	6423	8705	0.28%	0.031%
95	13.045	1996	2002	2003	rBV6	10931	11870	0.38%	0.042%
96	13.179	2025	2027	2032	rVB6	6964	8677	0.28%	0.031%
97	13.425	2069	2073	2076	rBV6	7301	10559	0.34%	0.037%
98	14.110	2197	2201	2205	rBV7	5931	7771	0.25%	0.028%
99	14.265	2225	2230	2232	rVB6	6662	9761	0.32%	0.035%
100	14.361	2245	2248	2253	rVB7	11207	16476	0.53%	0.058%

Sum of corrected areas: 28185092

7.2.4

7

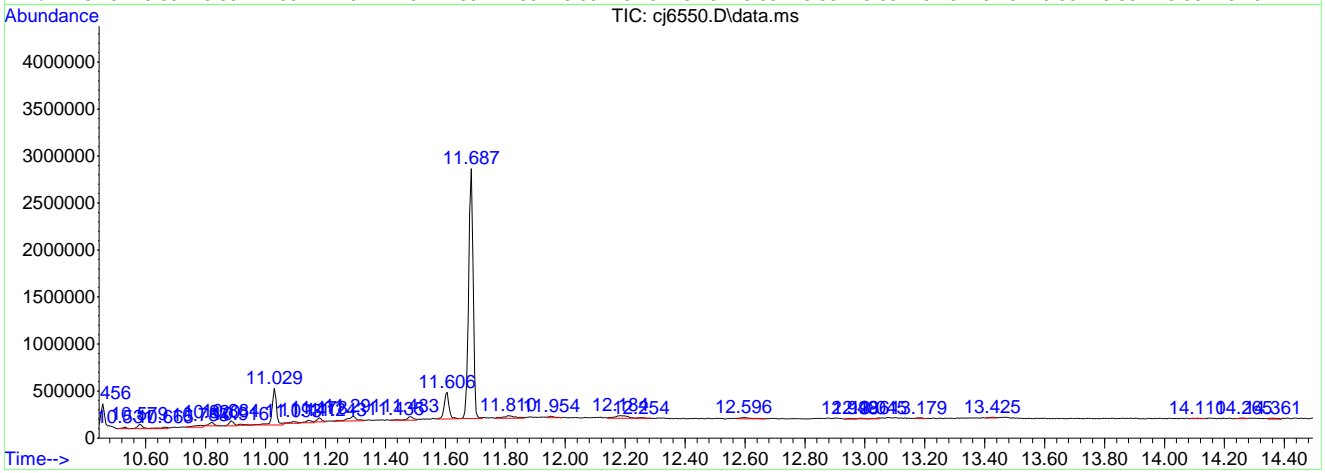
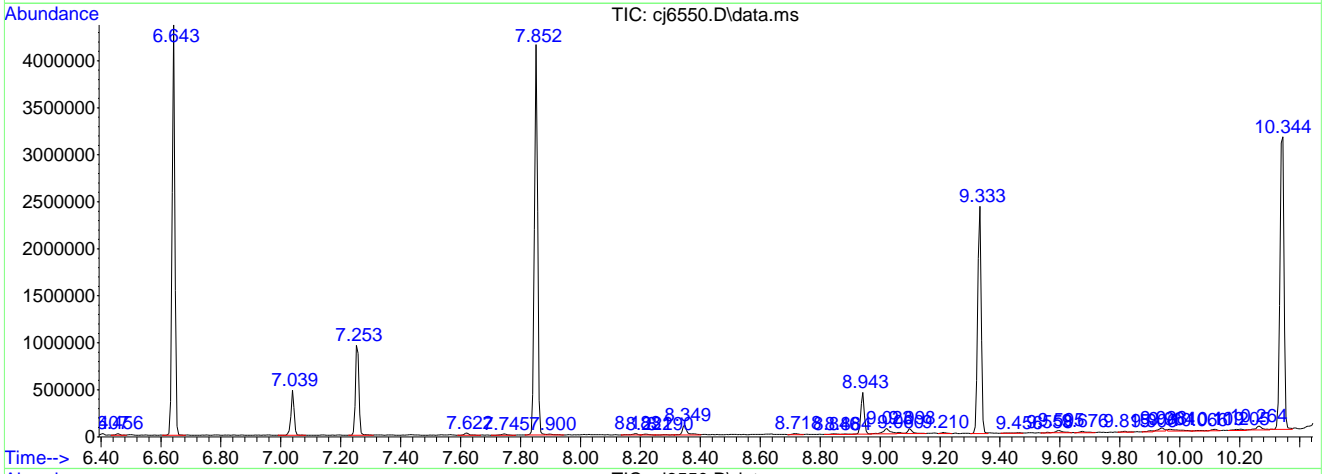
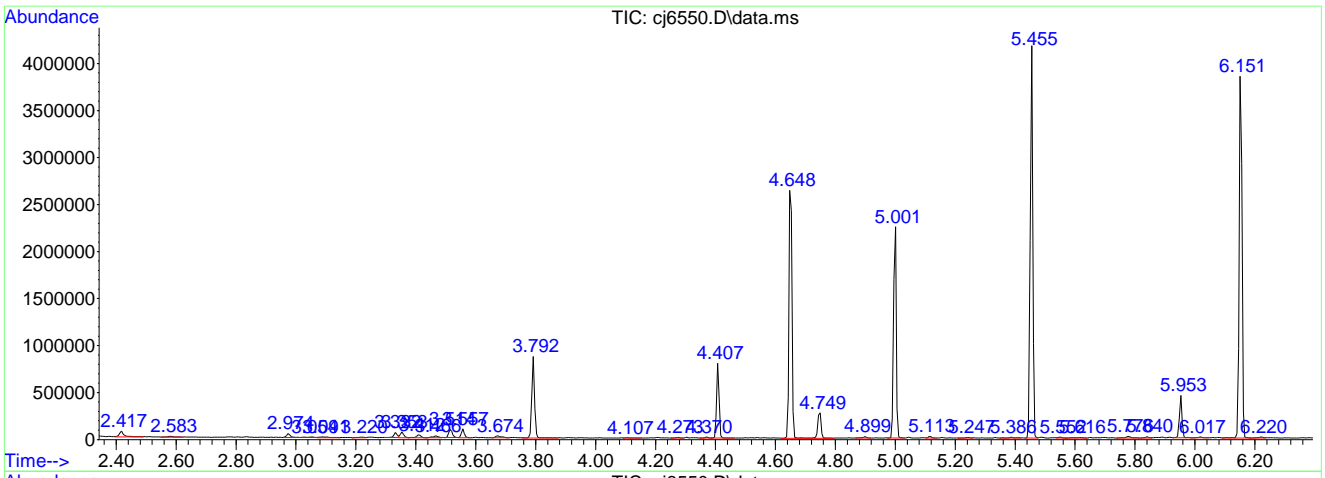


LSC Report - Integrated Chromatogram

Data Path : X:\Dayton SVOA GCMS\danielas\ECJ298\  
Data File : cj6550.D  
Acq On : 10 May 2024 10:50 am  
Operator : karimam  
Sample : op54467b-mb1  
Misc : op54467b,ecj298,1000,,1,1  
ALS Vial : 6 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\danielas\METHODS\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p



7.2.4  
7



Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\danielas\ECJ298\  
 Data File : cj6550.D  
 Acq On : 10 May 2024 10:50 am  
 Operator : karimam  
 Sample : op54467b-mb1  
 Misc : op54467b,ecj298,1000,,1,1  
 ALS Vial : 6 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\danielas\METHODS\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

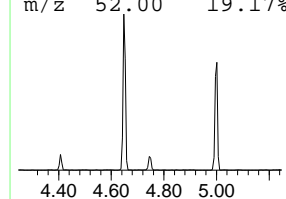
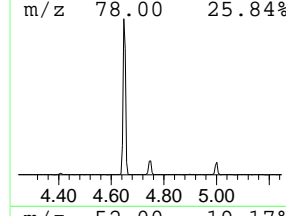
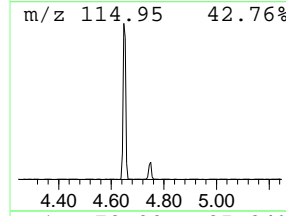
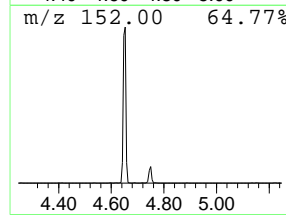
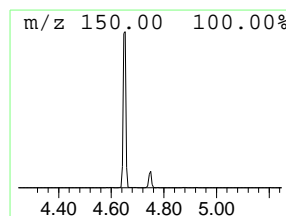
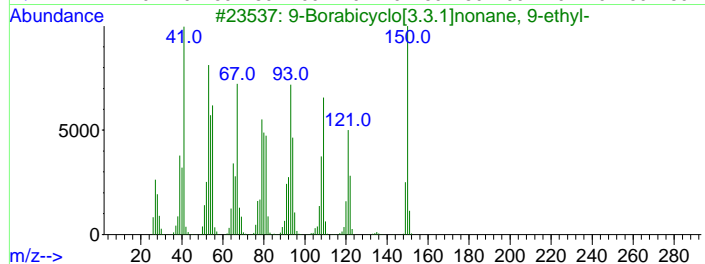
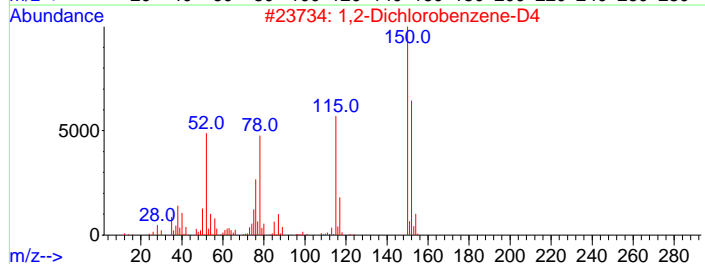
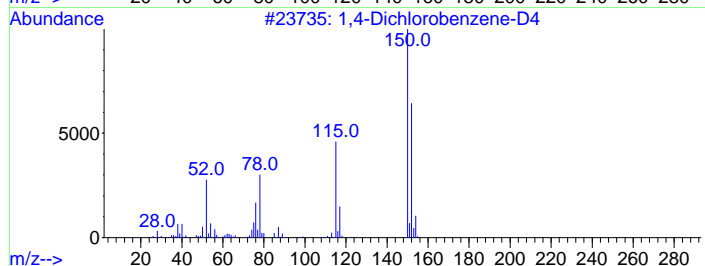
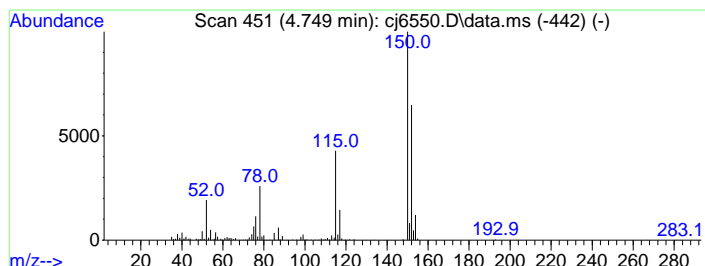
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 1 Internal standard added for... Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.749	4.40 ppm	205683	1,4-Dichlorobenzene-d4a	4.653

Hit#	of 5	Tentative ID	MW	MolForm	CAS#	Qual
1		1,4-Dichlorobenzene-D4	150	C6D4Cl2	003855-82-1	95
2		1,2-Dichlorobenzene-D4	150	C6D4Cl2	002199-69-1	94
3		9-Borabicyclo[3.3.1]nonane, 9-ethyl-	150	C10H19B	052102-17-7	38
4		Benzenamine, N,N-dimethyl-4-nitro-	150	C8H10N2O	000138-89-6	12
5		3-(4-Nitrobenzoyl)-2-thioxo-4-thio-	431	C17H9N3O7S2	329218-74-8	10



7.2.4  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\danielas\ECJ298\  
 Data File : cj6550.D  
 Acq On : 10 May 2024 10:50 am  
 Operator : karimam  
 Sample : op54467b-mb1  
 Misc : op54467b,ecj298,1000,,1,1  
 ALS Vial : 6 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\danielas\METHODS\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

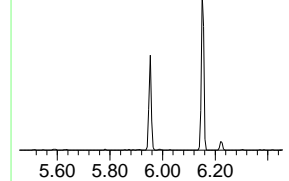
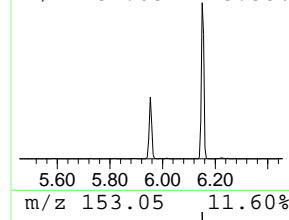
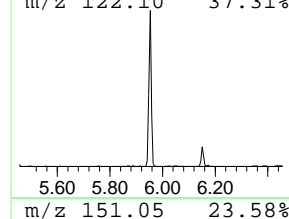
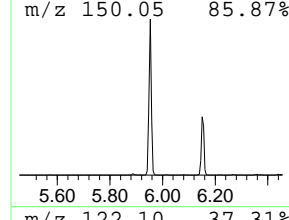
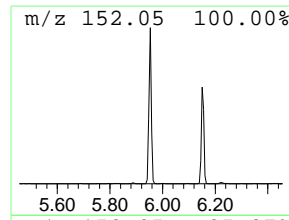
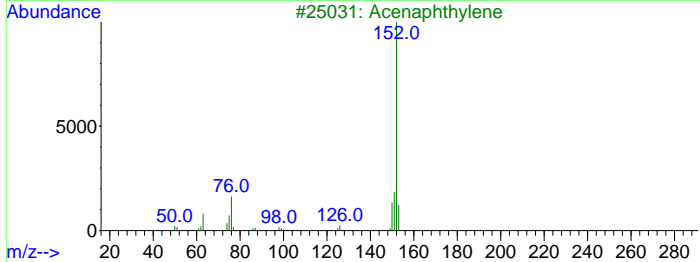
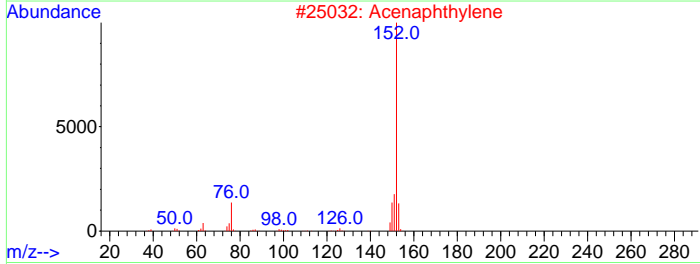
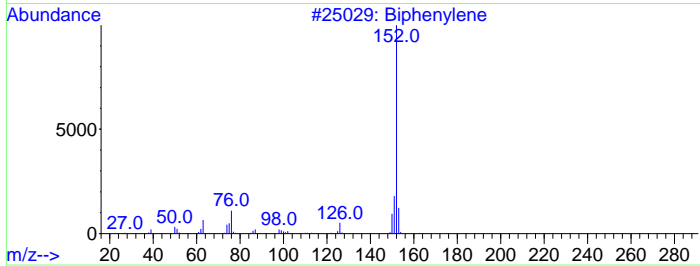
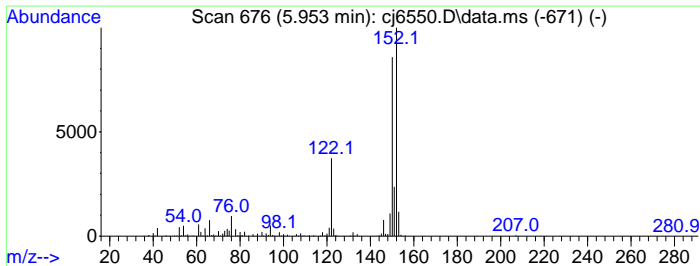
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 2 unknown Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.953	4.64 ppm	278156	Naphthalene-d8a	5.455

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Biphenylene	152	C12H8	000259-79-0	43
2		Acenaphthylene	152	C12H8	000208-96-8	43
3		Acenaphthylene	152	C12H8	000208-96-8	38
4		[1,2,4]Triazololo[1,5-a]pyrimidin-...	150	C6H6N4O	002503-56-2	38
5		5,6-Dihydro-4-methylthieno(2,3-d...	152	C7H8N2S	092204-06-3	35



7.2.4

7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\danielas\ECJ298\  
Data File : cj6550.D  
Acq On : 10 May 2024 10:50 am  
Operator : karimam  
Sample : op54467b-mb1  
Misc : op54467b,ecj298,1000,,1,1  
ALS Vial : 6 Sample Multiplier: 1

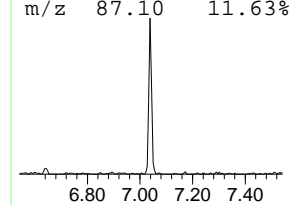
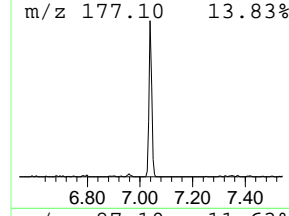
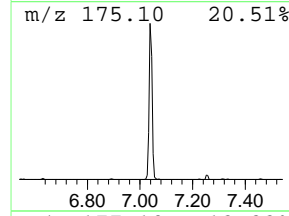
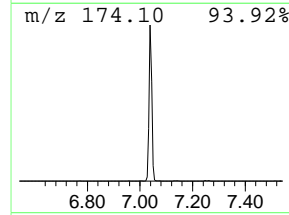
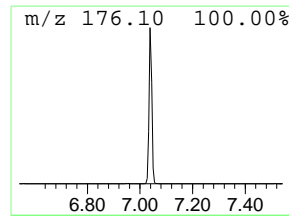
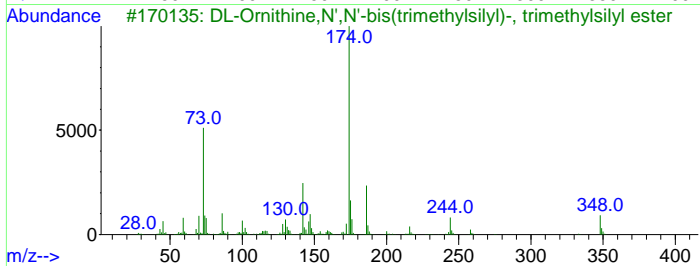
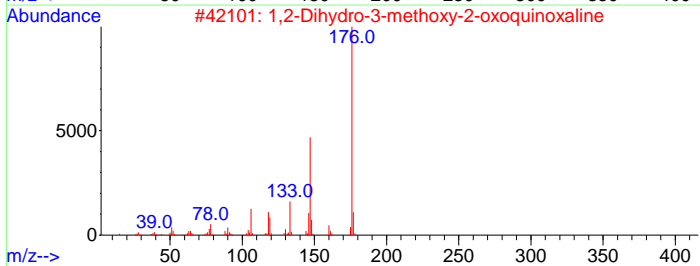
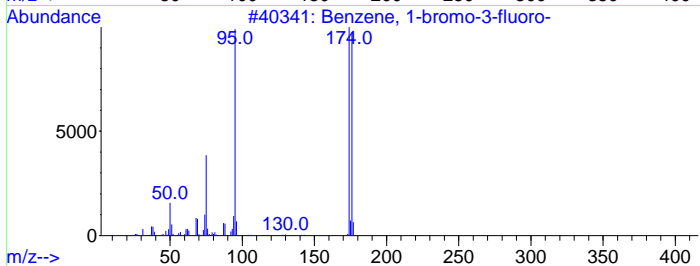
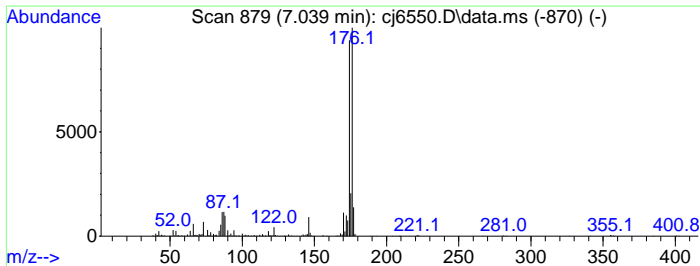
Quant Method : X:\Dayton SVOA GCMS\danielas\METHODS\mCJ296.m  
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
TIC Integration Parameters: lscint.p

\*\*\*\*\*  
Peak Number 3 system artifact Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.039	4.94 ppm	355976	Acenaphthene-d10	6.643

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Benzene, 1-bromo-3-fluoro-	174	C6H4BrF	001073-06-9	42
2		1,2-Dihydro-3-methoxy-2-oxoquino...	176	C9H8N2O2	035676-71-2	27
3		DL-Ornithine,N',N'-bis(trimethyl...	348	C14H36N2O2Si3	1000333-14-1	25
4		Tris(trimethylsilyl)ornithine, m...	362	C15H38N2O2Si3	1000073-88-2	23
5		Acetic acid 5-phenyl-[1,3,4]oxad...	218	C11H10N2O3	1000275-76-2	17



7.24  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\danielas\ECJ298\  
 Data File : cj6550.D  
 Acq On : 10 May 2024 10:50 am  
 Operator : karimam  
 Sample : op54467b-mb1  
 Misc : op54467b,ecj298,1000,,1,1  
 ALS Vial : 6 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\danielas\METHODS\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

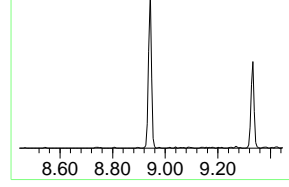
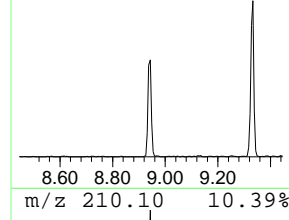
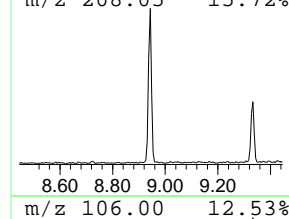
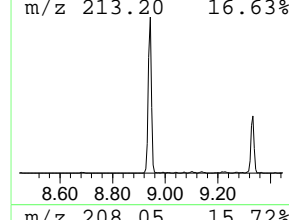
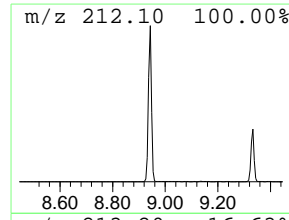
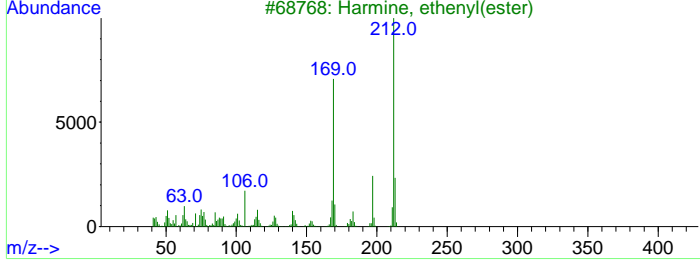
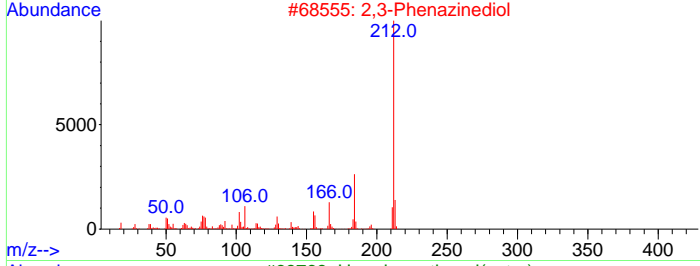
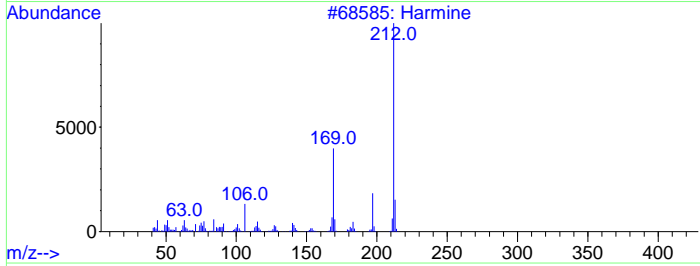
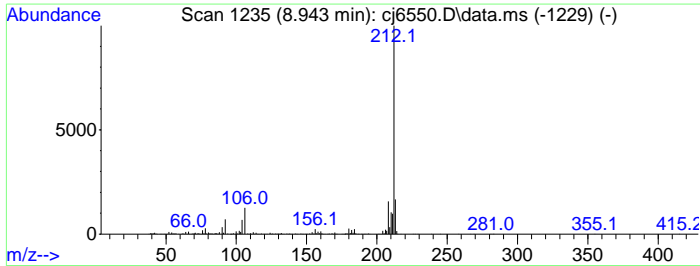
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 4 unknown Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
8.943	4.60 ppm	355490	Phenanthrene-d10b	7.852

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	Harmine	212	C13H12N2O	000442-51-3	72
2		2,3-Phenazinediol	212	C12H8N2O2	019220-18-9	64
3		Harmine, ethenyl(ester)	212	C14H12O2	074797-84-5	64
4		Acridin-9-amine, 1,2,3,4-tetrahy...	212	C14H16N2	005778-78-9	59
5		1,3-Diamino-5,6-dihydrobenzo[f]q...	212	C12H12N4	016061-72-6	59



7.24  
7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\danielas\ECJ298\  
 Data File : cj6550.D  
 Acq On : 10 May 2024 10:50 am  
 Operator : karimam  
 Sample : op54467b-mb1  
 Misc : op54467b,ecj298,1000,,1,1  
 ALS Vial : 6 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\danielas\METHODS\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

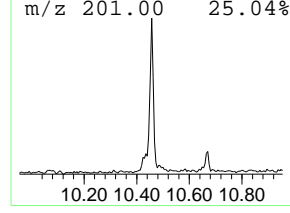
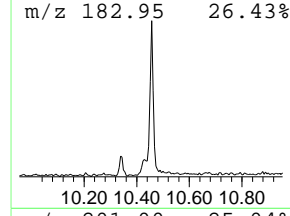
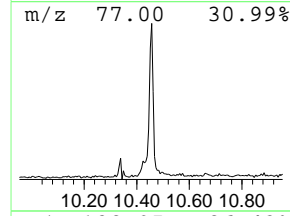
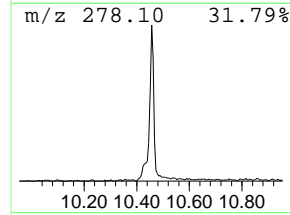
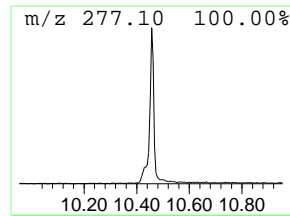
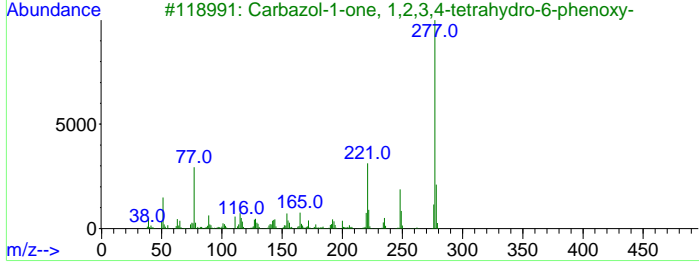
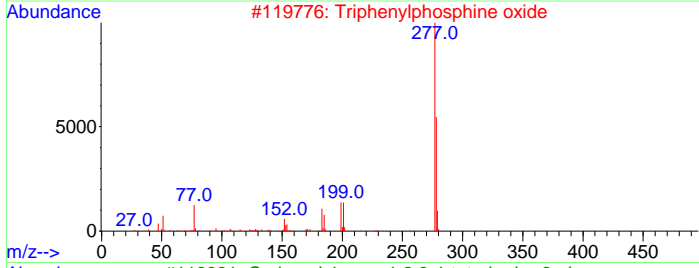
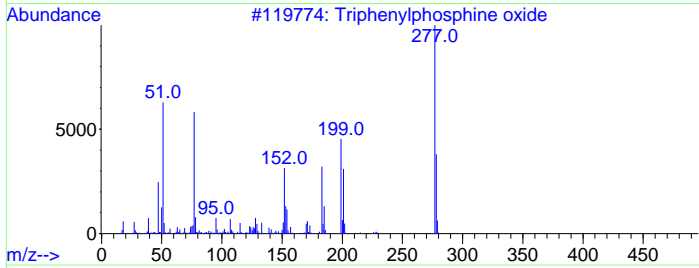
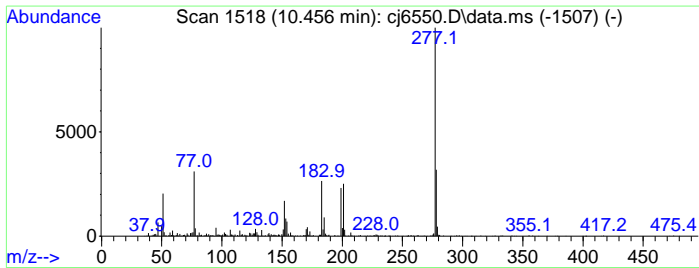
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 5 system artifact Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.456	5.15 ppm	373005	Chrysene-d12a	10.344

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Triphenylphosphine oxide	278	C18H15OP	000791-28-6	97
2	Triphenylphosphine oxide	278	C18H15OP	000791-28-6	83
3	Carbazol-1-one, 1,2,3,4-tetrahyd...	277	C18H15NO2	299962-12-2	43
4	4-Nitro-4'-methyldiphenylsulfone	277	C13H11NO4S	004094-37-5	43
5	Triphenylphosphine oxide	278	C18H15OP	000791-28-6	43



7.2.4

7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\danielas\ECJ298\  
 Data File : cj6550.D  
 Acq On : 10 May 2024 10:50 am  
 Operator : karimam  
 Sample : op54467b-mb1  
 Misc : op54467b,ecj298,1000,,1,1  
 ALS Vial : 6 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\danielas\METHODS\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

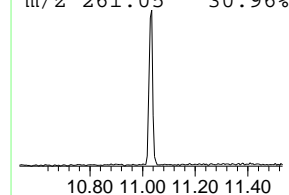
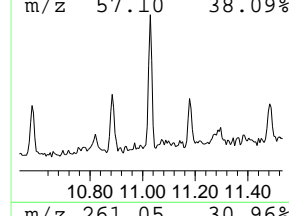
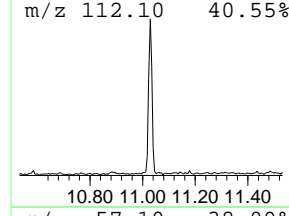
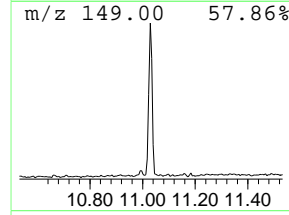
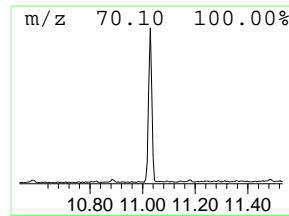
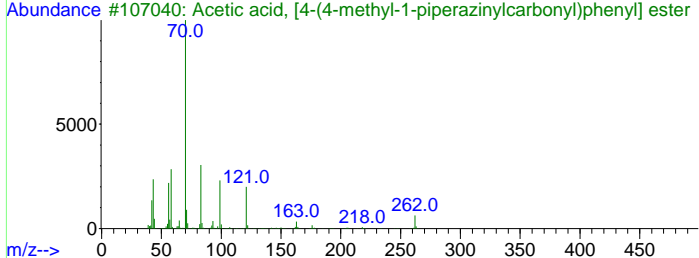
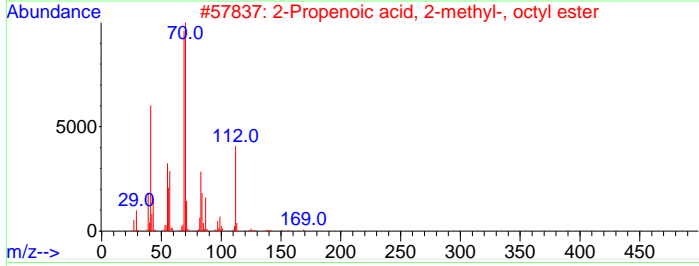
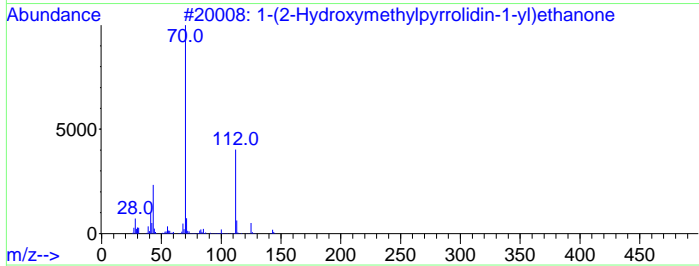
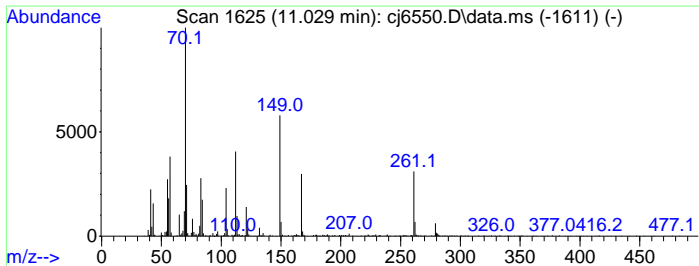
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

\*\*\*\*\*  
 Peak Number 6 unknown Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.029	5.65 ppm	389864	Perylene-d12	11.687

Hit#	of	Tentative ID	MW	MolForm	CAS#	Qual
1	5	1-(2-Hydroxymethylpyrrolidin-1-y...	143	C7H13NO2	1000192-83-2	38
2		2-Propenoic acid, 2-methyl-, oct...	198	C12H22O2	002157-01-9	25
3		Acetic acid, [4-(4-methyl-1-pipe...	262	C14H18N2O3	346699-90-9	22
4		Phthalic acid, 3,5-difluoropheny...	418	C24H28F2O4	1000315-53-1	14
5		Bis(2-ethylhexyl) phthalate	390	C24H38O4	000117-81-7	12



7.2.4

7

Library Search Compound Report

Data Path : X:\Dayton SVOA GCMS\danielas\ECJ298\  
 Data File : cj6550.D  
 Acq On : 10 May 2024 10:50 am  
 Operator : karimam  
 Sample : op54467b-mb1  
 Misc : op54467b,ecj298,1000,,1,1  
 ALS Vial : 6 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\danielas\METHODS\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

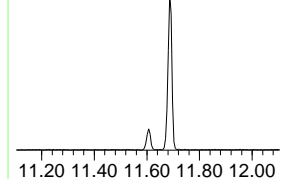
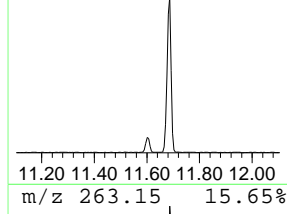
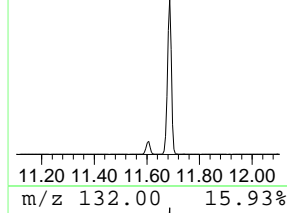
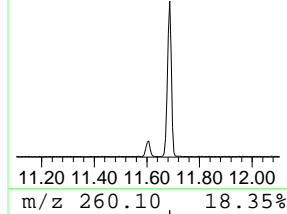
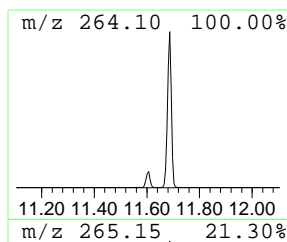
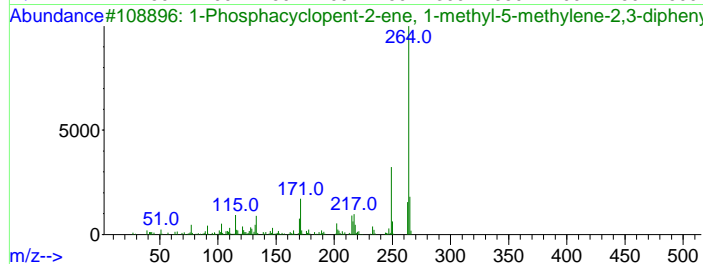
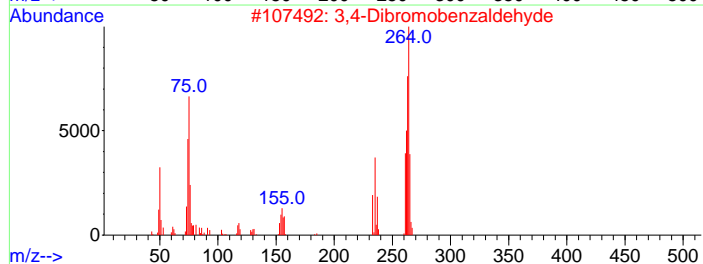
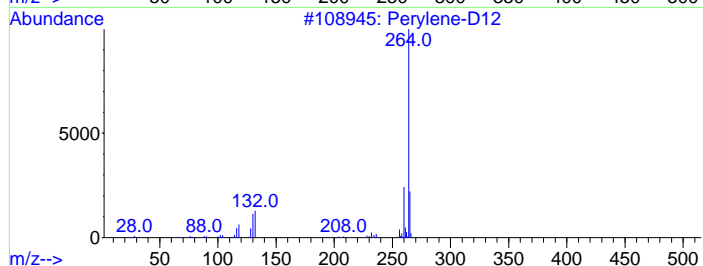
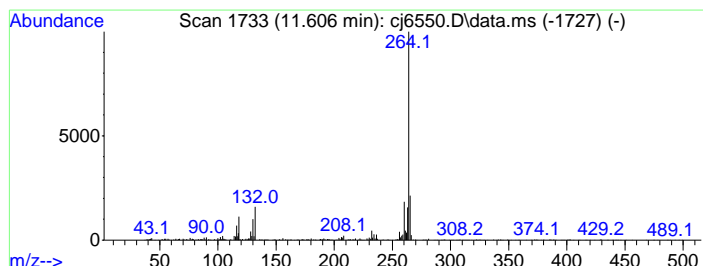
TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

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 Peak Number 7 Internal standard added for... Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.606	4.56 ppm	314924	Perylene-d12	11.687

Hit# of	5	Tentative ID	MW	MolForm	CAS#	Qual
1		Perylene-D12	264	C20D12	001520-96-3	96
2		3,4-Dibromobenzaldehyde	262	C7H4Br2O	074003-55-7	58
3		1-Phosphacyclopent-2-ene, 1-meth...	264	C18H17P	1000161-67-7	58
4		Benzenamine, 4-methyl-N-[2-[1-(4...	307	C17H17N5O	274690-74-3	56
5		2-Trifluoromethyl-1,8-phenanthro...	264	C13H7F3N2O	1000255-81-8	53



7.2.4  
7



Tentatively Identified Compound (LSC) summary

Data Path : X:\Dayton SVOA GCMS\danielas\ECJ298\  
 Data File : cj6550.D  
 Acq On : 10 May 2024 10:50 am  
 Operator : karimam  
 Sample : op54467b-mb1  
 Misc : op54467b,ecj298,1000,,,1,1  
 ALS Vial : 6 Sample Multiplier: 1

Quant Method : X:\Dayton SVOA GCMS\danielas\METHODS\mCJ296.m  
 Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuWed Aug 10 17:05:37 2022

TIC Library : C:\Database\NIST08.L  
 TIC Integration Parameters: lscint.p

TIC Top Hit name	RT	EstConc	Units	Response	--Internal Standard--			
					#	RT	Resp	Conc
Internal standa...	4.749	4.4	ppm	205683	2	4.653	1868340	40.0
unknown	5.953	4.6	ppm	278156	4	5.455	2396150	40.0
system artifact	7.039	4.9	ppm	355976	5	6.643	2881320	40.0
unknown	8.943	4.6	ppm	355490	8	7.852	3089050	40.0
system artifact	10.456	5.2	ppm	373005	10	10.344	2897120	40.0
unknown	11.029	5.7	ppm	389864	11	11.687	2760250	40.0
Internal standa...	11.606	4.6	ppm	314924	11	11.687	2760250	40.0

7.2.4  
7

## GC/LC Semi-volatiles

### QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Internal Standard Area Summaries
- DDT/Endrin Breakdown Checks
- GC Identification Summaries (Hits)
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

**Method Blank Summary**

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54399-MB1 <sup>a</sup>	1G196195.D	1	05/08/24	CP	05/07/24	OP54399	G1G7004

The QC reported here applies to the following samples:

Method: SW846 8081B

JD87833-17

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0080	0.0041	ug/l	
319-84-6	alpha-BHC	ND	0.0080	0.0042	ug/l	
319-85-7	beta-BHC	ND	0.0080	0.0064	ug/l	
319-86-8	delta-BHC	ND	0.0080	0.0053	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0080	0.0048	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0080	0.0039	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0080	0.0034	ug/l	
57-74-9	Chlordane (alpha and gamma)	ND	0.0080	0.0034	ug/l	
60-57-1	Dieldrin	ND	0.0080	0.0061	ug/l	
72-54-8	4,4' -DDD	ND	0.0080	0.0046	ug/l	
72-55-9	4,4' -DDE	ND	0.0080	0.0040	ug/l	
50-29-3	4,4' -DDT	0.19	0.0080	0.0055	ug/l	B
72-20-8	Endrin	ND	0.0080	0.0048	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0080	0.0044	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0080	0.0054	ug/l	
53494-70-5	Endrin ketone	ND	0.0080	0.0050	ug/l	
959-98-8	Endosulfan-I	ND	0.0080	0.0042	ug/l	
33213-65-9	Endosulfan-II	ND	0.0080	0.0039	ug/l	
76-44-8	Heptachlor	ND	0.0080	0.0036	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0080	0.0048	ug/l	
72-43-5	Methoxychlor	ND	0.016	0.0054	ug/l	
8001-35-2	Toxaphene	ND	0.20	0.13	ug/l	

CAS No.	Surrogate Recoveries	Limits	
877-09-8	Tetrachloro-m-xylene	36%	10-175%
877-09-8	Tetrachloro-m-xylene	35%	10-175%
2051-24-3	Decachlorobiphenyl	41%	10-128%
2051-24-3	Decachlorobiphenyl	33%	10-128%

(a) Detection due to lab contamination.

**Method Blank Summary**

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54554-MB1 <sup>a</sup>	1G196359.D	1	05/14/24	RK	05/13/24	OP54554	G1G7013

The QC reported here applies to the following samples:

Method: SW846 8081B

JD87833-17R

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.0080	0.0041	ug/l	
319-84-6	alpha-BHC	ND	0.0080	0.0042	ug/l	
319-85-7	beta-BHC	ND	0.0080	0.0064	ug/l	
319-86-8	delta-BHC	ND	0.0080	0.0053	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.0080	0.0048	ug/l	
5103-71-9	alpha-Chlordane	ND	0.0080	0.0039	ug/l	
5103-74-2	gamma-Chlordane	ND	0.0080	0.0034	ug/l	
57-74-9	Chlordane (alpha and gamma)	ND	0.0080	0.0034	ug/l	
60-57-1	Dieldrin	ND	0.0080	0.0061	ug/l	
72-54-8	4,4' -DDD	ND	0.0080	0.0046	ug/l	
72-55-9	4,4' -DDE	ND	0.0080	0.0040	ug/l	
50-29-3	4,4' -DDT	0.012	0.0080	0.0055	ug/l	B
72-20-8	Endrin	ND	0.0080	0.0048	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.0080	0.0044	ug/l	
7421-93-4	Endrin aldehyde	ND	0.0080	0.0054	ug/l	
53494-70-5	Endrin ketone	ND	0.0080	0.0050	ug/l	
959-98-8	Endosulfan-I	ND	0.0080	0.0042	ug/l	
33213-65-9	Endosulfan-II	ND	0.0080	0.0039	ug/l	
76-44-8	Heptachlor	ND	0.0080	0.0036	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.0080	0.0048	ug/l	
72-43-5	Methoxychlor	ND	0.016	0.0054	ug/l	
8001-35-2	Toxaphene	ND	0.20	0.13	ug/l	

CAS No.	Surrogate Recoveries	Limits	
877-09-8	Tetrachloro-m-xylene	67%	10-175%
877-09-8	Tetrachloro-m-xylene	65%	10-175%
2051-24-3	Decachlorobiphenyl	84%	10-128%
2051-24-3	Decachlorobiphenyl	67%	10-128%

(a) Detection due to lab contamination.

**Method Blank Summary**

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54400-MB1	3G141337.D	1	05/08/24	CP	05/07/24	OP54400	G3G5173

The QC reported here applies to the following samples:

Method: SW846 8082A

JD87833-17

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.40	0.16	ug/l	
11104-28-2	Aroclor 1221	ND	0.40	0.34	ug/l	
11141-16-5	Aroclor 1232	ND	0.40	0.21	ug/l	
53469-21-9	Aroclor 1242	ND	0.40	0.37	ug/l	
12672-29-6	Aroclor 1248	ND	0.40	0.35	ug/l	
11097-69-1	Aroclor 1254	ND	0.40	0.33	ug/l	
11096-82-5	Aroclor 1260	ND	0.40	0.33	ug/l	
11100-14-4	Aroclor 1268	ND	0.40	0.14	ug/l	
37324-23-5	Aroclor 1262	ND	0.40	0.36	ug/l	

CAS No.	Surrogate Recoveries	Limits	
877-09-8	Tetrachloro-m-xylene	33%	10-169%
877-09-8	Tetrachloro-m-xylene	29%	10-169%
2051-24-3	Decachlorobiphenyl	28%	10-130%
2051-24-3	Decachlorobiphenyl	26%	10-130%

**Method Blank Summary**

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54452-MB1 <sup>a</sup>	8G56337.D	1	05/09/24	CP	05/08/24	OP54452	G8G2470

The QC reported here applies to the following samples:

Method: SW846 8081B

JD87833-1, JD87833-3, JD87833-4, JD87833-5, JD87833-7, JD87833-8, JD87833-10, JD87833-11, JD87833-12, JD87833-14, JD87833-15, JD87833-16

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.40	0.078	ug/kg	
319-84-6	alpha-BHC	ND	0.40	0.046	ug/kg	
319-85-7	beta-BHC	0.088	0.40	0.058	ug/kg	JB
319-86-8	delta-BHC	0.11	0.40	0.060	ug/kg	JB
58-89-9	gamma-BHC (Lindane)	ND	0.40	0.070	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.40	0.054	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.40	0.060	ug/kg	
57-74-9	Chlordane (alpha and gamma)	ND	0.40	0.054	ug/kg	
60-57-1	Dieldrin	ND	0.40	0.064	ug/kg	
72-54-8	4,4' -DDD	ND	0.40	0.042	ug/kg	
72-55-9	4,4' -DDE	ND	0.40	0.048	ug/kg	
50-29-3	4,4' -DDT	ND	0.40	0.070	ug/kg	
72-20-8	Endrin	ND	0.40	0.058	ug/kg	
1031-07-8	Endosulfan sulfate	0.080	0.40	0.048	ug/kg	JB
7421-93-4	Endrin aldehyde	ND	0.40	0.12	ug/kg	
959-98-8	Endosulfan-I	ND	0.40	0.054	ug/kg	
33213-65-9	Endosulfan-II	ND	0.40	0.056	ug/kg	
76-44-8	Heptachlor	ND	0.40	0.052	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.40	0.072	ug/kg	
72-43-5	Methoxychlor	ND	0.40	0.16	ug/kg	
53494-70-5	Endrin ketone	ND	0.40	0.064	ug/kg	
8001-35-2	Toxaphene	ND	5.0	3.3	ug/kg	

CAS No.	Surrogate Recoveries	Limits	
877-09-8	Tetrachloro-m-xylene	97%	46-145%
877-09-8	Tetrachloro-m-xylene	98%	46-145%
2051-24-3	Decachlorobiphenyl	88%	29-163%
2051-24-3	Decachlorobiphenyl	95%	29-163%

(a) Detections due to lab contamination.

**Method Blank Summary**

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54453-MB1	2G231733.D	1	05/09/24	MLC	05/08/24	OP54453	G2G6085

The QC reported here applies to the following samples:

Method: SW846 8082A

JD87833-1, JD87833-3, JD87833-4, JD87833-5, JD87833-7, JD87833-8, JD87833-10, JD87833-11, JD87833-12, JD87833-14, JD87833-15, JD87833-16

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	20	8.5	ug/kg	
11104-28-2	Aroclor 1221	ND	20	6.7	ug/kg	
11141-16-5	Aroclor 1232	ND	20	17	ug/kg	
53469-21-9	Aroclor 1242	ND	20	12	ug/kg	
12672-29-6	Aroclor 1248	ND	20	4.3	ug/kg	
11097-69-1	Aroclor 1254	ND	20	2.2	ug/kg	
11096-82-5	Aroclor 1260	ND	20	6.9	ug/kg	
11100-14-4	Aroclor 1268	ND	20	2.0	ug/kg	
37324-23-5	Aroclor 1262	ND	20	1.7	ug/kg	

CAS No.	Surrogate Recoveries	Limits	
877-09-8	Tetrachloro-m-xylene	100%	42-159%
877-09-8	Tetrachloro-m-xylene	99%	42-159%
2051-24-3	Decachlorobiphenyl	100%	18-154%
2051-24-3	Decachlorobiphenyl	94%	18-154%

# Blank Spike Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54452-BS1	8G56338.D	1	05/09/24	CP	05/08/24	OP54452	G8G2470

**The QC reported here applies to the following samples:** **Method:** SW846 8081B

JD87833-1, JD87833-3, JD87833-4, JD87833-5, JD87833-7, JD87833-8, JD87833-10, JD87833-11, JD87833-12, JD87833-14, JD87833-15, JD87833-16

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
309-00-2	Aldrin	5	4.2	84	71-115
319-84-6	alpha-BHC	5	4.3	86	69-110
319-85-7	beta-BHC	5	4.4	88	67-115
319-86-8	delta-BHC	5	4.4	88	58-110
58-89-9	gamma-BHC (Lindane)	5	4.2	84	70-108
5103-71-9	alpha-Chlordane	5	4.3	86	69-112
5103-74-2	gamma-Chlordane	5	4.4	88	68-111
57-74-9	Chlordane (alpha and gamma)	10	8.7	87	67-110
60-57-1	Dieldrin	5	4.3	86	71-112
72-54-8	4,4' -DDD	5	4.7	94	69-120
72-55-9	4,4' -DDE	5	3.9	78	71-108
50-29-3	4,4' -DDT	5	3.5	70 <sup>a</sup>	57-112
72-20-8	Endrin	5	4.3	86	71-121
1031-07-8	Endosulfan sulfate	5	4.1	82	68-108
7421-93-4	Endrin aldehyde	5	4.4	88	66-126
959-98-8	Endosulfan-I	5	4.4	88	65-114
33213-65-9	Endosulfan-II	5	4.6	92	65-115
76-44-8	Heptachlor	5	4.2	84	66-114
1024-57-3	Heptachlor epoxide	5	4.3	86	69-118
72-43-5	Methoxychlor	5	3.6	72 <sup>a</sup>	61-111
53494-70-5	Endrin ketone	5	4.2	84	70-108

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	106%	46-145%
877-09-8	Tetrachloro-m-xylene	99%	46-145%
2051-24-3	Decachlorobiphenyl	94%	29-163%
2051-24-3	Decachlorobiphenyl	97%	29-163%

(a) Reported from the 2nd signal. The % D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.

\* = Outside of Control Limits.



# Blank Spike Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54453-BS1	2G231734.D	1	05/09/24	MLC	05/08/24	OP54453	G2G6085

**The QC reported here applies to the following samples:** **Method:** SW846 8082A

JD87833-1, JD87833-3, JD87833-4, JD87833-5, JD87833-7, JD87833-8, JD87833-10, JD87833-11, JD87833-12, JD87833-14, JD87833-15, JD87833-16

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
12674-11-2	Aroclor 1016	40	37.8	95 <sup>a</sup>	74-153
11104-28-2	Aroclor 1221		ND		50-150
11141-16-5	Aroclor 1232		ND		50-150
53469-21-9	Aroclor 1242		ND		50-150
12672-29-6	Aroclor 1248		ND		50-150
11097-69-1	Aroclor 1254		ND		50-150
11096-82-5	Aroclor 1260	40	39.3	98 <sup>a</sup>	68-147
11100-14-4	Aroclor 1268		ND		50-150
37324-23-5	Aroclor 1262		ND		50-150

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	98%	42-159%
877-09-8	Tetrachloro-m-xylene	98%	42-159%
2051-24-3	Decachlorobiphenyl	101%	18-154%
2051-24-3	Decachlorobiphenyl	94%	18-154%

(a) Reported from the 1st signal. The %D of the CCV on the 2nd signal exceeds the method criteria of 20%, so it being used for confirmation only.

\* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54399-BS1	1G196196.D	1	05/08/24	CP	05/07/24	OP54399	G1G7004
OP54399-BSD	1G196197.D	1	05/08/24	CP	05/07/24	OP54399	G1G7004

The QC reported here applies to the following samples:

Method: SW846 8081B

JD87833-17

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
309-00-2	Aldrin	0.2	0.12	60	0.12	60	0	40-161/45
319-84-6	alpha-BHC	0.2	0.14	70	0.15	75	7	40-169/48
319-85-7	beta-BHC	0.2	0.12	60	0.13	65	8	40-166/44
319-86-8	delta-BHC	0.2	0.10	50	0.11	55	10	40-158/47
58-89-9	gamma-BHC (Lindane)	0.2	0.13	65	0.14	70	7	40-169/47
5103-71-9	alpha-Chlordane	0.2	0.13	65	0.14	70	7	40-172/43
5103-74-2	gamma-Chlordane	0.2	0.13	65	0.14	70	7	40-177/48
57-74-9	Chlordane (alpha and gamma)	0.4	0.27	68	0.28	70	4	40-171/43
60-57-1	Dieldrin	0.2	0.14	70	0.15	75	7	40-175/44
72-54-8	4,4'-DDD	0.2	0.14	70	0.14	70	0	40-166/45
72-55-9	4,4'-DDE	0.2	0.11	55	0.12	60	9	40-165/45
50-29-3	4,4'-DDT	0.2	0.15	75	0.17	85	13	40-187/48
72-20-8	Endrin	0.2	0.14	70	0.15	75	7	40-179/46
1031-07-8	Endosulfan sulfate	0.2	0.12	60	0.13	65	8	40-168/49
7421-93-4	Endrin aldehyde	0.2	0.12	60	0.13	65	8	40-165/54
53494-70-5	Endrin ketone	0.2	0.12	60	0.12	60	0	40-165/46
959-98-8	Endosulfan-I	0.2	0.13	65	0.14	70	7	40-168/45
33213-65-9	Endosulfan-II	0.2	0.13	65	0.14	70	7	40-183/46
76-44-8	Heptachlor	0.2	0.12	60	0.13	65	8	40-165/46
1024-57-3	Heptachlor epoxide	0.2	0.13	65	0.14	70	7	40-171/44
72-43-5	Methoxychlor	0.2	0.14	70	0.15	75	7	40-175/52

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	57%	61%	10-175%
877-09-8	Tetrachloro-m-xylene	55%	58%	10-175%
2051-24-3	Decachlorobiphenyl	36%	42%	10-128%
2051-24-3	Decachlorobiphenyl	31%	36%	10-128%

\* = Outside of Control Limits.

8.3.1  
8

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54554-BS1	1G196360.D	1	05/14/24	RK	05/13/24	OP54554	G1G7013
OP54554-BSD	1G196361.D	1	05/14/24	RK	05/13/24	OP54554	G1G7013

The QC reported here applies to the following samples:

Method: SW846 8081B

JD87833-17R

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
309-00-2	Aldrin	0.2	0.16	80	0.086	43	60* a	40-161/45
319-84-6	alpha-BHC	0.2	0.17	85	0.086	43	66* a	40-169/48
319-85-7	beta-BHC	0.2	0.18	90	0.081	41	80* a	40-166/44
319-86-8	delta-BHC	0.2	0.18	90	0.098	49	59* a	40-158/47
58-89-9	gamma-BHC (Lindane)	0.2	0.17	85	0.092	46	60* a	40-169/47
5103-71-9	alpha-Chlordane	0.2	0.16	80	0.097	49	49* a	40-172/43
5103-74-2	gamma-Chlordane	0.2	0.18	90	0.099	50	58* a	40-177/48
57-74-9	Chlordane (alpha and gamma)	0.4	0.34	85	0.20	50	52* a	40-171/43
60-57-1	Dieldrin	0.2	0.19	95	0.11	55	53* a	40-175/44
72-54-8	4,4'-DDD	0.2	0.19	95	0.11	55	53* a	40-166/45
72-55-9	4,4'-DDE	0.2	0.16	80	0.088	44	58* a	40-165/45
50-29-3	4,4'-DDT	0.2	0.23	115	0.12	60	63* a	40-187/48
72-20-8	Endrin	0.2	0.19	95	0.11	55	53* a	40-179/46
1031-07-8	Endosulfan sulfate	0.2	0.19	95	0.11	55	58* a	40-168/49
7421-93-4	Endrin aldehyde	0.2	0.18	90	0.10	50	57* a	40-165/54
53494-70-5	Endrin ketone	0.2	0.20	100	0.11	55	58* a	40-165/46
959-98-8	Endosulfan-I	0.2	0.17	85	0.099	50	53* a	40-168/45
33213-65-9	Endosulfan-II	0.2	0.19	95	0.11	55	53* a	40-183/46
76-44-8	Heptachlor	0.2	0.17	85	0.091	46	61* a	40-165/46
1024-57-3	Heptachlor epoxide	0.2	0.18	90	0.10	50	57* a	40-171/44
72-43-5	Methoxychlor	0.2	0.20	100	0.12	60	50	40-175/52

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	74%	42%	10-175%
877-09-8	Tetrachloro-m-xylene	72%	43%	10-175%
2051-24-3	Decachlorobiphenyl	79%	33%	10-128%
2051-24-3	Decachlorobiphenyl	66%	27%	10-128%

(a) Analytical precision exceeds in-house control limits.

\* = Outside of Control Limits.

8.3.2  
8

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54400-BS1	3G141338.D	1	05/08/24	CP	05/07/24	OP54400	G3G5173
OP54400-BSD	3G141339.D	1	05/08/24	CP	05/07/24	OP54400	G3G5173

The QC reported here applies to the following samples:

Method: SW846 8082A

JD87833-17

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	1.6	0.92	58	1.1	69	18	40-152/49
11104-28-2	Aroclor 1221		ND		ND		nc	50-150/30
11141-16-5	Aroclor 1232		ND		ND		nc	50-150/30
53469-21-9	Aroclor 1242		ND		ND		nc	50-150/30
12672-29-6	Aroclor 1248		ND		ND		nc	50-150/30
11097-69-1	Aroclor 1254		ND		ND		nc	50-150/30
11096-82-5	Aroclor 1260	1.6	0.71	44	0.85	53	18	29-157/55
11100-14-4	Aroclor 1268		ND		ND		nc	50-150/30
37324-23-5	Aroclor 1262		ND		ND		nc	50-150/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	56%	57%	10-169%
877-09-8	Tetrachloro-m-xylene	50%	56%	10-169%
2051-24-3	Decachlorobiphenyl	22%	34%	10-130%
2051-24-3	Decachlorobiphenyl	20%	34%	10-130%

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54452-MS	8G56349.D	1	05/09/24	CP	05/08/24	OP54452	G8G2470
OP54452-MSD	8G56350.D	1	05/09/24	CP	05/08/24	OP54452	G8G2470
JD87772-1	8G56363.D	1	05/09/24	CP	05/08/24	OP54452	G8G2470

**The QC reported here applies to the following samples:** **Method:** SW846 8081B

JD87833-1, JD87833-3, JD87833-4, JD87833-5, JD87833-7, JD87833-8, JD87833-10, JD87833-11, JD87833-12, JD87833-14, JD87833-15, JD87833-16

CAS No.	Compound	JD87772-1 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
309-00-2	Aldrin	ND	5.21	4.3	82	5.12	4.5	88	5	34-125/32
319-84-6	alpha-BHC	ND	5.21	5.4	104	5.12	5.9	115	9	43-124/28
319-85-7	beta-BHC	ND	5.21	4.1	79	5.12	4.1	80	0	21-145/34
319-86-8	delta-BHC	ND	5.21	4.6	88	5.12	4.6	90	0	36-119/32
58-89-9	gamma-BHC (Lindane)	ND	5.21	4.2	81	5.12	4.2	82	0	48-118/28
5103-71-9	alpha-Chlordane	ND	5.21	4.0	77	5.12	4.3	84	7	28-132/33
5103-74-2	gamma-Chlordane	ND	5.21	3.8	73	5.12	4.0	78	5	20-132/33
57-74-9	Chlordane (alpha and gamma)	ND	10.4	7.0	67	10.2	7.5	73	7	20-125/32
60-57-1	Dieldrin	ND	5.21	3.9	75	5.12	4.2	82	7	32-134/32
72-54-8	4,4'-DDD	ND	5.21	4.7	90	5.12	5.0	98	6	28-135/33
72-55-9	4,4'-DDE	ND	5.21	3.5	67	5.12	3.7	72	6	23-133/32
50-29-3	4,4'-DDT	ND	5.21	2.1	40	5.12	2.2	43	5	10-144/41
72-20-8	Endrin	ND	5.21	3.8	73	5.12	4.1	80	8	33-143/33
1031-07-8	Endosulfan sulfate	ND	5.21	3.6	69	5.12	4.0	78	11	18-133/34
7421-93-4	Endrin aldehyde	ND	5.21	3.6	69	5.12	4.0	78	11	20-139/36
959-98-8	Endosulfan-I	ND	5.21	4.1	79	5.12	4.5	88	9	32-127/31
33213-65-9	Endosulfan-II	ND	5.21	3.9	75	5.12	4.2	82	7	28-128/33
76-44-8	Heptachlor	ND	5.21	4.0	77	5.12	4.0	78	0	30-133/34
1024-57-3	Heptachlor epoxide	ND	5.21	4.6	88	5.12	4.9	96	6	37-131/32
72-43-5	Methoxychlor	ND	5.21	2.1	40	5.12	2.4	47	13	13-136/37
53494-70-5	Endrin ketone	ND	5.21	3.6	69	5.12	3.9	76	8	24-149/34
8001-35-2	Toxaphene	ND		ND			ND		nc	70-130/30

CAS No.	Surrogate Recoveries	MS	MSD	JD87772-1	Limits
877-09-8	Tetrachloro-m-xylene	104%	114%	96%	46-145%
877-09-8	Tetrachloro-m-xylene	94%	95%	93%	46-145%
2051-24-3	Decachlorobiphenyl	76%	83%	71%	29-163%
2051-24-3	Decachlorobiphenyl	85%	80%	76%	29-163%

\* = Outside of Control Limits.

8.4.1  
8

# Matrix Spike/Matrix Spike Duplicate Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54453-MS	2G231735.D	1	05/09/24	MLC	05/08/24	OP54453	G2G6085
OP54453-MSD	2G231736.D	1	05/09/24	MLC	05/08/24	OP54453	G2G6085
JD87772-2	2G231758.D	1	05/09/24	MLC	05/08/24	OP54453	G2G6085

**The QC reported here applies to the following samples:** **Method:** SW846 8082A

JD87833-1, JD87833-3, JD87833-4, JD87833-5, JD87833-7, JD87833-8, JD87833-10, JD87833-11, JD87833-12, JD87833-14, JD87833-15, JD87833-16

CAS No.	Compound	JD87772-2 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND	40.3	36.4	90	41.9	38.8	93	6	41-167/46
11104-28-2	Aroclor 1221	ND		ND			ND		nc	50-150/30
11141-16-5	Aroclor 1232	ND		ND			ND		nc	50-150/30
53469-21-9	Aroclor 1242	ND		ND			ND		nc	50-150/17
12672-29-6	Aroclor 1248	ND		ND			ND		nc	50-150/16
11097-69-1	Aroclor 1254	ND		ND			ND		nc	10-165/38
11096-82-5	Aroclor 1260	ND	40.3	41.4	103	41.9	41.5	99	0	13-183/49
11100-14-4	Aroclor 1268	ND		ND			ND		nc	50-150/30
37324-23-5	Aroclor 1262	ND		ND			ND		nc	50-150/11

CAS No.	Surrogate Recoveries	MS	MSD	JD87772-2	Limits
877-09-8	Tetrachloro-m-xylene	97%	99%	97%	42-159%
877-09-8	Tetrachloro-m-xylene	98%	99%	96%	42-159%
2051-24-3	Decachlorobiphenyl	98%	99%	65%	18-154%
2051-24-3	Decachlorobiphenyl	95%	94%	83%	18-154%

\* = Outside of Control Limits.

# Internal Standard Area Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b>	G1G7004-CC6859	<b>Injection Date:</b>	05/07/24
<b>Lab File ID:</b>	1G196193.D	<b>Injection Time:</b>	23:51
<b>Instrument ID:</b>	GC1G	<b>Method:</b>	SW846 8081B

	IS 1 AREA	RT	IS 2 AREA	RT
Initial Cal <sup>a</sup>	362997836	1.26	467282198	1.30
Check Std <sup>b</sup>	452768491	1.14	408878720	1.23
Upper Limit <sup>c</sup>	544496754	1.64	700923297	1.73
Lower Limit <sup>d</sup>	181498918	0.64	233641099	0.73

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
OP54399-MB1 <sup>e</sup>	435295033	1.14	384230361	1.23
OP54399-BS1	405131724	1.14	365896156	1.23
OP54399-BSD	402529578	1.14	366611497	1.23
OP54397A-MB1	404117471	1.14	365756718	1.23
OP54397-MB1	404117471	1.14	365756718	1.23
OP54397A-BS1	425947834	1.14	386007108	1.24
OP54397-BS1	425947834	1.14	386007108	1.24
OP54397A-BSD	395156267	1.14	358769088	1.24
OP54397-BSD	395156267	1.14	358769088	1.24
ZZZZZZ	511717045	1.14	471391461	1.24
ZZZZZZ	531538188	1.14	491340038	1.24
ZZZZZZ	393536607	1.14	381560296	1.23
ZZZZZZ	371925786	1.14	360158169	1.23
ZZZZZZ	421438892	1.14	392650384	1.24
ZZZZZZ	361997350	1.14	328484491	1.23
ZZZZZZ	418184325	1.14	385925479	1.23
ZZZZZZ	477556053	1.14	434703816	1.24
ZZZZZZ	400750790	1.14	328361654	1.23
JD87833-17 <sup>f</sup>	373410495	1.14	347923210	1.24
ZZZZZZ	457596621	1.14	393715862	1.24
ZZZZZZ	382547225	1.14	342062537	1.24
ZZZZZZ	438570326	1.14	410011252	1.24

**IS 1** = 1-Bromo-2-nitrobenzene (Signal #2)  
**IS 2** = 1-Bromo-2-nitrobenzene (Signal #1)

- (a) Initial Cal is: G1G6859-ICC6859 1G192517.D 01/29/24 07:07. Area is AVERAGE of initial cal points.
- (b) Check Std Limit = -50 to + 50% of initial cal area.
- (c) Upper Limit = + 50% of initial standard area; Retention time + 0.5 minutes of check standard.
- (d) Lower Limit = -50% of initial standard area; Retention time -0.5 minutes of check standard.
- (e) Detection due to lab contamination.
- (f) Detection likely due to lab contamination.

8.5.1  
8

# Internal Standard Area Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G1G7013-CC6859	<b>Injection Date:</b> 05/14/24
<b>Lab File ID:</b> 1G196352.D	<b>Injection Time:</b> 08:13
<b>Instrument ID:</b> GC1G	<b>Method:</b> SW846 8081B

	IS 1 AREA	RT	IS 2 AREA	RT
Initial Cal <sup>a</sup>	362997836	1.26	467282198	1.30
Check Std <sup>b</sup>	366823048	1.13	346035586	1.22
Upper Limit <sup>c</sup>	544496754	1.63	700923297	1.72
Lower Limit <sup>d</sup>	181498918	0.63	233641099	0.72

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
OP54558A-MB1 <sup>e</sup>	322528729	1.13	351522801	1.22
OP54558A-BS1	336883904	1.13	337071699	1.22
OP54558A-BSD	378058927	1.13	367546049	1.22
OP54558A-BS13	343961757	1.13	359504597	1.22
OP54558A-BS14	378114345	1.13	365669991	1.22
OP54554-MB1 <sup>e</sup>	361755387	1.13	349171278	1.22
OP54554A-MB1 <sup>e</sup>	361755387	1.13	349171278	1.22
OP54554-BS1	381736872	1.13	381808212	1.22
OP54554A-BS1	381736872	1.13	381808212	1.22
OP54554-BSD	381615440	1.13	378720665	1.22
OP54554A-BSD	381615440	1.13	378720665	1.22
OP54554A-BS13	366899256	1.13	362680173	1.22
OP54554A-BS14	373529042	1.13	339276968	1.22
ZZZZZZ	459883956	1.13	524440334	1.21
ZZZZZZ	444434259	1.12	351134488	1.21
ZZZZZZ	378059888	1.13	335791285	1.22
ZZZZZZ	339999133	1.13	349509756	1.22
ZZZZZZ	322808905	1.13	314249642	1.22
ZZZZZZ	441571545	1.13	423516745	1.22

**IS 1** = 1-Bromo-2-nitrobenzene (Signal #2)  
**IS 2** = 1-Bromo-2-nitrobenzene (Signal #1)

- (a) Initial Cal is: G1G6859-ICC6859 1G192517.D 01/29/24 07:07. Area is AVERAGE of initial cal points.
- (b) Check Std Limit = -50 to + 50% of initial cal area.
- (c) Upper Limit = + 50% of initial standard area; Retention time + 0.5 minutes of check standard.
- (d) Lower Limit = -50% of initial standard area; Retention time -0.5 minutes of check standard.
- (e) Detection due to lab contamination.

8.5.2  
8



# Internal Standard Area Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G1G7016-CC6859	<b>Injection Date:</b> 05/15/24
<b>Lab File ID:</b> 1G196428.D	<b>Injection Time:</b> 10:36
<b>Instrument ID:</b> GC1G	<b>Method:</b> SW846 8081B

IS 1		IS 2	
AREA	RT	AREA	RT

Initial Cal <sup>a</sup>	362997836	1.26	467282198	1.30
Check Std <sup>b</sup>	365423344	1.14	341397966	1.23
Upper Limit <sup>c</sup>	544496754	1.64	700923297	1.73
Lower Limit <sup>d</sup>	181498918	0.64	233641099	0.73

Lab Sample ID	IS 1 AREA	IS 1 RT	IS 2 AREA	IS 2 RT
ZZZZZZ	366429941	1.13	353621017	1.23
JD87833-17R <sup>e</sup>	389651278	1.14	388933824	1.23
ZZZZZZ	389739710	1.14	401682587	1.23
ZZZZZZ	386153794	1.14	385201752	1.23
ZZZZZZ	374175480	1.14	359907523	1.23

**IS 1** = 1-Bromo-2-nitrobenzene (Signal #2)  
**IS 2** = 1-Bromo-2-nitrobenzene (Signal #1)

- (a) Initial Cal is: G1G6859-ICC6859 1G192517.D 01/29/24 07:07. Area is AVERAGE of initial cal points.
- (b) Check Std Limit = -50 to + 50% of initial cal area.
- (c) Upper Limit = + 50% of initial standard area; Retention time + 0.5 minutes of check standard.
- (d) Lower Limit = -50% of initial standard area; Retention time -0.5 minutes of check standard.
- (e) Sample extracted outside the holding time. Detections likely due to lab contamination.

8.5.3  
8

# Internal Standard Area Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G8G2470-CC2430	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 8G56335.D	<b>Injection Time:</b> 00:37
<b>Instrument ID:</b> GC8G	<b>Method:</b> SW846 8081B

	IS 1 AREA	RT	IS 2 AREA	RT
Initial Cal <sup>a</sup>	983345442	4.93	690047387	4.46
Check Std <sup>b</sup>	993660503	4.91	630205362	4.46
Upper Limit <sup>c</sup>	1475018163	4.41	1035071084	4.96
Lower Limit <sup>d</sup>	491672721	4.41	345023694	3.96

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
OP54452-MB1 <sup>e</sup>	1069446516	4.91	679299502	4.46
OP54452-BS1	1016671929	4.91	628376793	4.46
ZZZZZZ	1092087652	4.91	686206579	4.46
ZZZZZZ	1189823018	4.91	784839607	4.46
ZZZZZZ	1217845543	4.91	818609653	4.46
ZZZZZZ	1121975105	4.91	655079701	4.46
ZZZZZZ	1061968543	4.91	626161816	4.46
ZZZZZZ	1107015574	4.91	704632390	4.46
ZZZZZZ	1104588077	4.91	689682723	4.46
ZZZZZZ	1116236089	4.91	677858378	4.46
OP54452-MS	930321526	4.91	623719216	4.46
OP54452-MSD	1003091698	4.91	637351091	4.46
JD87833-1	1071450736	4.91	892443921	4.46
JD87833-3	901151787	4.91	613152319	4.46
JD87833-4	1025969784	4.91	792313903	4.46
JD87833-7	931818456	4.91	657488842	4.46
JD87833-8	984272214	4.91	662136178	4.46
JD87833-10	1003140844	4.91	805738036	4.46
JD87833-12	887232198	4.91	791057542	4.45
JD87833-14	949733832	4.91	662476006	4.46
JD87833-15	917719570	4.91	633236995	4.46
JD87833-16	915524055	4.91	1028912023	4.46
JD87772-1	984666291	4.91	664882351	4.46
ZZZZZZ	1006846624	4.91	661767457	4.46
ZZZZZZ	985486932	4.91	643668329	4.46
ZZZZZZ	872811966	4.91	670379996	4.46
ZZZZZZ	875566969	4.91	628596513	4.46

**IS 1** = 1-Bromo-2-nitrobenzene (Signal #2)  
**IS 2** = 1-Bromo-2-nitrobenzene (Signal #1)

(a) Initial Cal is: G8G2430-ICC2430 8G55359.D 04/03/24 07:03. Area is AVERAGE of initial cal points.  
 (b) Check Std Limit = -50 to + 50% of initial cal area.

8.5.4  
8

# Internal Standard Area Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G8G2470-CC2430	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 8G56335.D	<b>Injection Time:</b> 00:37
<b>Instrument ID:</b> GC8G	<b>Method:</b> SW846 8081B

Lab	IS 1	IS 2		
Sample ID	AREA	RT	AREA	RT

- (c) Upper Limit = + 50% of initial standard area; Retention time + 0.5 minutes of check standard.
- (d) Lower Limit = -50% of initial standard area; Retention time -0.5 minutes of check standard.
- (e) Detections due to lab contamination.

# Internal Standard Area Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G8G2471-CC2430	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 8G56374.D	<b>Injection Time:</b> 15:31
<b>Instrument ID:</b> GC8G	<b>Method:</b> SW846 8081B

	IS 1 AREA	RT	IS 2 AREA	RT
Initial Cal <sup>a</sup>	983345442	4.93	690047387	4.46
Check Std <sup>b</sup>	961010320	4.92	657012953	4.47
Upper Limit <sup>c</sup>	1475018163	5.42	1035071084	4.97
Lower Limit <sup>d</sup>	491672721	4.42	345023694	3.97

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
OP54426-MB1	998962447	4.92	669302694	4.47
OP54426-BS1	963176623	4.92	629956904	4.47
ZZZZZZ	1123491234	4.92	744605284	4.47
ZZZZZZ	1037811147	4.92	683204373	4.47
ZZZZZZ	1126329952	4.92	685081981	4.47
OP54426-MS	982665837	4.92	627087643	4.47
OP54426-MSD	1014125335	4.92	646078151	4.47
LB1891-1	963020119	4.92	620531054	4.47
ZZZZZZ	1028103169	4.92	652998998	4.47
ZZZZZZ	1005718328	4.92	643322535	4.47
ZZZZZZ	1030903126	4.92	652525804	4.47
ZZZZZZ	999123829	4.92	633646283	4.47
ZZZZZZ	1039927052	4.92	652041076	4.47
ZZZZZZ	951879747	4.92	614272531	4.47
ZZZZZZ	1084467752	4.92	686241923	4.47
ZZZZZZ	1048344794	4.92	725578850	4.47
ZZZZZZ	1064129634	4.92	677851790	4.47
ZZZZZZ	1010909529	4.92	635961675	4.47
ZZZZZZ	1017243593	4.92	678518070	4.47
ZZZZZZ	1460724147	4.92	775468348	4.46
ZZZZZZ	906687961	4.92	586605557	4.47
ZZZZZZ	798580851	4.92	599232251	4.47
ZZZZZZ	908819054	4.92	604393872	4.47
ZZZZZZ	945628598	4.92	684995590	4.46
JD87833-5	972687823	4.92	635755160	4.47

**IS 1** = 1-Bromo-2-nitrobenzene (Signal #2)  
**IS 2** = 1-Bromo-2-nitrobenzene (Signal #1)

- (a) Initial Cal is: G8G2430-ICC2430 8G55359.D 04/03/24 07:03. Area is AVERAGE of initial cal points.
- (b) Check Std Limit = -50 to + 50% of initial cal area.
- (c) Upper Limit = + 50% of initial standard area; Retention time + 0.5 minutes of check standard.
- (d) Lower Limit = -50% of initial standard area; Retention time -0.5 minutes of check standard.

8.5.5  
8

# Internal Standard Area Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G8G2472-CC2430	<b>Injection Date:</b> 05/10/24
<b>Lab File ID:</b> 8G56407.D	<b>Injection Time:</b> 04:36
<b>Instrument ID:</b> GC8G	<b>Method:</b> SW846 8081B

	IS 1 AREA	RT	IS 2 AREA	RT
Initial Cal <sup>a</sup>	983345442	4.93	690047387	4.46
Check Std <sup>b</sup>	1042142584	4.92	675271441	4.47
Upper Limit <sup>c</sup>	1475018163	4.42	1035071084	4.97
Lower Limit <sup>d</sup>	491672721	4.42	345023694	3.97

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
OP54526-MB1	1065754715	4.92	691892702	4.47
OP54526-BS1	1031466788	4.92	676861981	4.47
OP54526-LS12	914710582	4.92	623911083	4.46
OP54526-MS	914710582	4.92	623911083	4.46
OP54526-MSD	851204654	4.92	563651275	4.47
OP54526-LB12	992314902	4.92	622212432	4.47
ZZZZZZ	110366473	4.92	725030817	4.46
JD87790-2	888323349	4.92	590519014	4.47
ZZZZZZ	845803805	4.92	679824004	4.47
ZZZZZZ	960322649	4.92	587076924	4.47
ZZZZZZ	848769113	4.92	507754623	4.47
ZZZZZZ	968302933	4.92	584742270	4.47
ZZZZZZ	1020131646	4.92	761953615	4.47
ZZZZZZ	1060848534	4.92	655082261	4.47
ZZZZZZ	1473680069	4.92	867570936	4.46
ZZZZZZ	1078248826	4.92	100531037	4.47
ZZZZZZ	861475611	4.92	583537376	4.47
ZZZZZZ	886325757	4.92	640401650	4.47
ZZZZZZ	989859234	4.92	903076057	4.47
ZZZZZZ	981392026	4.92	610668228	4.47
ZZZZZZ	1097425169	4.92	627832426	4.46
ZZZZZZ	979039014	4.92	599998631	4.47
ZZZZZZ	1066141264	4.92	651475320	4.47
ZZZZZZ	1123171325	4.92	687804362	4.47
ZZZZZZ	880348287	4.92	692675431	4.47
ZZZZZZ	1107524718	4.92	758718286	4.46
JD87833-11	1053488676	4.95	601827581	4.50

**IS 1** = 1-Bromo-2-nitrobenzene (Signal #2)  
**IS 2** = 1-Bromo-2-nitrobenzene (Signal #1)

(a) Initial Cal is: G8G2430-ICC2430 8G55359.D 04/03/24 07:03. Area is AVERAGE of initial cal points.  
 (b) Check Std Limit = -50 to + 50% of initial cal area.

8.5.6  
8

# Internal Standard Area Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G8G2472-CC2430	<b>Injection Date:</b> 05/10/24
<b>Lab File ID:</b> 8G56407.D	<b>Injection Time:</b> 04:36
<b>Instrument ID:</b> GC8G	<b>Method:</b> SW846 8081B

Lab	IS 1	IS 2		
Sample ID	AREA	RT	AREA	RT

- (c) Upper Limit = + 50% of initial standard area; Retention time + 0.5 minutes of check standard.
- (d) Lower Limit = -50% of initial standard area; Retention time -0.5 minutes of check standard.

8.5.6  
8

# DDT/Endrin Breakdown Check

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Sample:</b> G1G6859-DDT	<b>Injection Date:</b> 01/29/24
<b>Lab File ID:</b> 1G192510.D	<b>Injection Time:</b> 04:36
<b>Instrument ID:</b> GC1G	

Compound	Response Signal 1	Response Signal 2
4,4' -DDD	30454895	26937875
4,4' -DDE	8081068	8014062
4,4' -DDT	1465227398	1038255686

DDT Breakdown <sup>a</sup>	2.6 %	3.3 %
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Endrin aldehyde	0	0
Endrin ketone	7264382	0
Endrin	860629168	713034344

Endrin Breakdown <sup>b</sup>	0.8 %	0 %
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(a) Calculated as:  $(DDD + DDE) / (DDD + DDE + DDT) \times 100$

(b) Calculated as:  $(\text{Endrin Aldehyde} + \text{Endrin Ketone}) / (\text{Endrin Aldehyde} + \text{Endrin Ketone} + \text{Endrin}) \times 100$

**This check applies to the following Samples, MS, MSD, Blanks, and Standards:**

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
G1G6859-IC6859	1G192513.D	01/29/24	06:02	01:26	Initial cal 1
G1G6859-IC6859	1G192514.D	01/29/24	06:18	01:42	Initial cal 2
G1G6859-IC6859	1G192515.D	01/29/24	06:35	01:59	Initial cal 5
G1G6859-IC6859	1G192516.D	01/29/24	06:51	02:15	Initial cal 10
G1G6859-ICC6859	1G192517.D	01/29/24	07:07	02:31	Initial cal 25
G1G6859-IC6859	1G192518.D	01/29/24	07:23	02:47	Initial cal 50
G1G6859-IC6859	1G192519.D	01/29/24	07:40	03:04	Initial cal 75
G1G6859-IC6859	1G192520.D	01/29/24	07:56	03:20	Initial cal 100
G1G6859-IC6859	1G192521.D	01/29/24	08:12	03:36	Initial cal 500
G1G6859-IC6859	1G192522.D	01/29/24	08:28	03:52	Initial cal 500
G1G6859-ICV6859	1G192523.D	01/29/24	08:45	04:09	Initial cal verification 25
G1G6859-ICV6859	1G192524.D	01/29/24	09:01	04:25	Initial cal verification 500
G1G6859-ICV6859	1G192525.D	01/29/24	09:17	04:41	Initial cal verification 500

8.6.1  
8

# DDT/Endrin Breakdown Check

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Sample:</b> G1G7004-DDT	<b>Injection Date:</b> 05/07/24
<b>Lab File ID:</b> 1G196190.D	<b>Injection Time:</b> 23:05
<b>Instrument ID:</b> GC1G	

Compound	Response Signal 1	Response Signal 2
4,4' -DDD	12350753	14431803
4,4' -DDE	15856256	20574921
4,4' -DDT	501166449	498524795

DDT Breakdown <sup>a</sup>	5.3 %	6.6 %
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Endrin aldehyde	1276544	1758932
Endrin ketone	2460158	2538657
Endrin	349432908	387132193

Endrin Breakdown <sup>b</sup>	1.1 %	1.1 %
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(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100

(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

**This check applies to the following Samples, MS, MSD, Blanks, and Standards:**

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
G1G7004-CC6859	1G196193.D	05/07/24	23:51	00:46	Continuing cal 50
OP54399-MB1	1G196195.D	05/08/24	00:24	01:20	Method Blank
OP54399-BS1	1G196196.D	05/08/24	00:40	01:35	Blank Spike
OP54399-BSD	1G196197.D	05/08/24	00:55	01:50	Blank Spike Duplicate
OP54397A-MB1	1G196198.D	05/08/24	01:10	02:05	Method Blank
OP54397-MB1	1G196198.D	05/08/24	01:10	02:06	Method Blank
OP54397A-BS1	1G196199.D	05/08/24	01:26	02:21	Blank Spike
OP54397-BS1	1G196199.D	05/08/24	01:26	02:21	Blank Spike
OP54397A-BSD	1G196200.D	05/08/24	01:41	02:36	Blank Spike Duplicate
OP54397-BSD	1G196200.D	05/08/24	01:41	02:36	Blank Spike Duplicate
ZZZZZZ	1G196201.D	05/08/24	01:56	02:51	(unrelated sample)
ZZZZZZ	1G196202.D	05/08/24	02:12	03:07	(unrelated sample)
ZZZZZZ	1G196203.D	05/08/24	02:27	03:22	(unrelated sample)
ZZZZZZ	1G196204.D	05/08/24	02:42	03:37	(unrelated sample)
ZZZZZZ	1G196205.D	05/08/24	02:57	03:53	(unrelated sample)
ZZZZZZ	1G196206.D	05/08/24	03:13	04:08	(unrelated sample)
ZZZZZZ	1G196207.D	05/08/24	03:28	04:23	(unrelated sample)
ZZZZZZ	1G196208.D	05/08/24	03:43	04:38	(unrelated sample)
ZZZZZZ	1G196209.D	05/08/24	03:59	04:54	(unrelated sample)
JD87833-17	1G196210.D	05/08/24	04:14	05:09	FIELD BLANK
ZZZZZZ	1G196211.D	05/08/24	04:29	05:24	(unrelated sample)
ZZZZZZ	1G196212.D	05/08/24	04:45	05:40	(unrelated sample)
ZZZZZZ	1G196213.D	05/08/24	05:00	05:55	(unrelated sample)
G1G7004-CC6859	1G196214.D	05/08/24	05:15	06:10	Continuing cal 25

8.6.2  
8



# DDT/Endrin Breakdown Check

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Sample:</b> G1G7004-DDT	<b>Injection Date:</b> 05/07/24
<b>Lab File ID:</b> 1G196190.D	<b>Injection Time:</b> 23:05
<b>Instrument ID:</b> GC1G	

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	1G196216.D	05/08/24	05:46	06:41	(unrelated sample)
ZZZZZZ	1G196217.D	05/08/24	06:01	06:56	(unrelated sample)
ZZZZZZ	1G196219.D	05/08/24	06:32	07:27	(unrelated sample)
ZZZZZZ	1G196220.D	05/08/24	06:47	07:42	(unrelated sample)

# DDT/Endrin Breakdown Check

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Sample:</b> G1G7013-DDT	<b>Injection Date:</b> 05/14/24
<b>Lab File ID:</b> 1G196349.D	<b>Injection Time:</b> 07:22
<b>Instrument ID:</b> GC1G	

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	11497502	11641157
4,4'-DDE	5332096	4382031
4,4'-DDT	727562927	691949661

DDT Breakdown <sup>a</sup>	2.3 %	2.3 %
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Endrin aldehyde	2721444	788239
Endrin ketone	3736646	6690759
Endrin	435822952	470769124

Endrin Breakdown <sup>b</sup>	1.5 %	1.6 %
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(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100

(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

**This check applies to the following Samples, MS, MSD, Blanks, and Standards:**

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
G1G7013-CC6859	1G196352.D	05/14/24	08:13	00:51	Continuing cal 25
OP54558A-MB1	1G196354.D	05/14/24	08:52	01:29	Method Blank
OP54558A-BS1	1G196355.D	05/14/24	09:07	01:45	Blank Spike
OP54558A-BSD	1G196356.D	05/14/24	09:22	02:00	Blank Spike Duplicate
OP54558A-BS13	1G196357.D	05/14/24	09:38	02:15	Blank Spike
OP54558A-BS14	1G196358.D	05/14/24	09:53	02:31	Blank Spike
OP54554-MB1	1G196359.D	05/14/24	10:08	02:46	Method Blank
OP54554A-MB1	1G196359.D	05/14/24	10:08	02:46	Method Blank
OP54554-BS1	1G196360.D	05/14/24	10:24	03:02	Blank Spike
OP54554A-BS1	1G196360.D	05/14/24	10:24	03:02	Blank Spike
OP54554-BSD	1G196361.D	05/14/24	10:39	03:17	Blank Spike Duplicate
OP54554A-BSD	1G196361.D	05/14/24	10:39	03:17	Blank Spike Duplicate
OP54554A-BS13	1G196362.D	05/14/24	10:54	03:32	Blank Spike
OP54554A-BS14	1G196363.D	05/14/24	11:10	03:48	Blank Spike
ZZZZZZ	1G196364.D	05/14/24	11:25	04:03	(unrelated sample)
ZZZZZZ	1G196365.D	05/14/24	11:41	04:18	(unrelated sample)
ZZZZZZ	1G196366.D	05/14/24	11:56	04:33	(unrelated sample)
ZZZZZZ	1G196367.D	05/14/24	12:11	04:48	(unrelated sample)
ZZZZZZ	1G196368.D	05/14/24	12:27	05:04	(unrelated sample)
ZZZZZZ	1G196369.D	05/14/24	12:42	05:20	(unrelated sample)
G1G7013-CC6859	1G196372.D	05/14/24	13:28	06:06	Continuing cal 50

8.6.3  
8

# DDT/Endrin Breakdown Check

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Sample:</b> G1G7016-DDT	<b>Injection Date:</b> 05/15/24
<b>Lab File ID:</b> 1G196427.D	<b>Injection Time:</b> 10:21
<b>Instrument ID:</b> GC1G	

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	7831981	7481398
4,4'-DDE	2829673	4627931
4,4'-DDT	638701903	661221788

DDT Breakdown <sup>a</sup>	1.6 %	1.8 %
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Endrin aldehyde	0	0
Endrin ketone	2941329	2146229
Endrin	400868933	458850832

Endrin Breakdown <sup>b</sup>	0.7 %	0.5 %
-------------------------------	-------	-------

(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100

(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

**This check applies to the following Samples, MS, MSD, Blanks, and Standards:**

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
G1G7016-CC6859	1G196428.D	05/15/24	10:36	00:15	Continuing cal 25
ZZZZZZ	1G196430.D	05/15/24	11:33	01:13	(unrelated sample)
JD87833-17R	1G196431.D	05/15/24	11:49	01:28	FIELD BLANK
ZZZZZZ	1G196433.D	05/15/24	12:19	01:58	(unrelated sample)
ZZZZZZ	1G196434.D	05/15/24	12:35	02:14	(unrelated sample)
ZZZZZZ	1G196435.D	05/15/24	12:50	02:30	(unrelated sample)
G1G7016-CC6859	1G196437.D	05/15/24	13:42	03:21	Continuing cal 50
OP54620A-MB1	1G196439.D	05/15/24	14:13	03:53	Method Blank
OP54620-MB1	1G196439.D	05/15/24	14:13	03:53	Method Blank
OP54620-BS1	1G196440.D	05/15/24	14:29	04:08	Blank Spike
OP54620A-BS1	1G196440.D	05/15/24	14:29	04:08	Blank Spike
OP54620A-BSD	1G196441.D	05/15/24	14:44	04:23	Blank Spike Duplicate
OP54554A-MB2	1G196442.D	05/15/24	14:59	04:39	Method Blank
OP54554A-BS2	1G196443.D	05/15/24	15:15	04:54	Blank Spike
OP54554A-BSD2	1G196444.D	05/15/24	15:30	05:09	Blank Spike Duplicate
OP54554A-BS132	1G196445.D	05/15/24	15:45	05:25	Blank Spike
OP54554A-BS142	1G196446.D	05/15/24	16:01	05:40	Blank Spike
OP54620-MS	1G196447.D	05/15/24	16:16	05:56	Matrix Spike
OP54620-MSD	1G196448.D	05/15/24	16:31	06:11	Matrix Spike Duplicate
LB2107-14	1G196449.D	05/15/24	16:47	06:26	(used for QC only; not part of job JD87833)
ZZZZZZ	1G196450.D	05/15/24	17:02	06:42	(unrelated sample)
ZZZZZZ	1G196451.D	05/15/24	17:18	06:57	(unrelated sample)
ZZZZZZ	1G196452.D	05/15/24	17:33	07:12	(unrelated sample)
G1G7016-CC6859	1G196453.D	05/15/24	17:48	07:28	Continuing cal 25

8.6.4  
8

# DDT/Endrin Breakdown Check

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Sample:</b> G8G2430-DDT	<b>Injection Date:</b> 04/03/24
<b>Lab File ID:</b> 8G55351.D	<b>Injection Time:</b> 00:00
<b>Instrument ID:</b> GC8G	

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	10502101	55857861
4,4'-DDE	0	0
4,4'-DDT	1238405481	1682091445

DDT Breakdown <sup>a</sup>	0.8 %	3.2 %
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Endrin aldehyde	18535388	10530139
Endrin ketone	15561254	21297902
Endrin	717631228	1231582580

Endrin Breakdown <sup>b</sup>	4.5 %	2.5 %
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(a) Calculated as:  $(DDD + DDE) / (DDD + DDE + DDT) \times 100$

(b) Calculated as:  $(\text{Endrin Aldehyde} + \text{Endrin Ketone}) / (\text{Endrin Aldehyde} + \text{Endrin Ketone} + \text{Endrin}) \times 100$

**This check applies to the following Samples, MS, MSD, Blanks, and Standards:**

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
G8G2430-IC2430	8G55356.D	04/03/24	05:57	05:57	Initial cal 0.2
G8G2430-IC2430	8G55357.D	04/03/24	06:19	06:19	Initial cal 0.5
G8G2430-IC2430	8G55358.D	04/03/24	06:41	06:41	Initial cal 1
G8G2430-ICC2430	8G55359.D	04/03/24	07:03	07:03	Initial cal 2.5
G8G2430-IC2430	8G55360.D	04/03/24	07:24	07:24	Initial cal 5.0
G8G2430-IC2430	8G55361.D	04/03/24	07:46	07:46	Initial cal 7.5
G8G2430-IC2430	8G55362.D	04/03/24	08:08	08:08	Initial cal 10
G8G2430-IC2430	8G55363.D	04/03/24	08:30	08:30	Initial cal 50
G8G2430-IC2430	8G55364.D	04/03/24	08:52	08:52	Initial cal 50
G8G2430-ICV2430	8G55365.D	04/03/24	09:13	09:13	Initial cal verification 2.5
G8G2430-ICV2430	8G55366.D	04/03/24	09:35	09:35	Initial cal verification 50
G8G2430-ICV2430	8G55367.D	04/03/24	09:57	09:57	Initial cal verification 50

8.6.5  
8

# DDT/Endrin Breakdown Check

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Sample:</b> G8G2470-DDT	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 8G56334.D	<b>Injection Time:</b> 00:15
<b>Instrument ID:</b> GC8G	

Compound	Response Signal 1	Response Signal 2
4,4' -DDD	125681860	279263845
4,4' -DDE	13489876	20776611
4,4' -DDT	1014491207	1735673271

DDT Breakdown <sup>a</sup>	12.1 %	14.7 %
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Endrin aldehyde	10144297	18849774
Endrin ketone	25080209	46897645
Endrin	741629214	1204909074

Endrin Breakdown <sup>b</sup>	4.5 %	5.2 %
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(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100

(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

**This check applies to the following Samples, MS, MSD, Blanks, and Standards:**

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
G8G2470-CC2430	8G56335.D	05/09/24	00:37	00:22	Continuing cal 2.5
OP54452-MB1	8G56337.D	05/09/24	01:20	01:05	Method Blank
OP54452-BS1	8G56338.D	05/09/24	01:42	01:27	Blank Spike
ZZZZZZ	8G56339.D	05/09/24	02:04	01:49	(unrelated sample)
ZZZZZZ	8G56341.D	05/09/24	02:47	02:32	(unrelated sample)
ZZZZZZ	8G56342.D	05/09/24	03:09	02:54	(unrelated sample)
ZZZZZZ	8G56343.D	05/09/24	03:31	03:16	(unrelated sample)
ZZZZZZ	8G56344.D	05/09/24	03:52	03:37	(unrelated sample)
ZZZZZZ	8G56345.D	05/09/24	04:14	03:59	(unrelated sample)
ZZZZZZ	8G56346.D	05/09/24	04:36	04:21	(unrelated sample)
ZZZZZZ	8G56347.D	05/09/24	04:58	04:43	(unrelated sample)
OP54452-MS	8G56349.D	05/09/24	05:41	05:26	Matrix Spike
OP54452-MSD	8G56350.D	05/09/24	06:03	05:48	Matrix Spike Duplicate
JD87833-1	8G56351.D	05/09/24	06:24	06:09	SB-1
JD87833-3	8G56352.D	05/09/24	06:46	06:31	SB-3
JD87833-4	8G56353.D	05/09/24	07:08	06:53	SB-4
JD87833-7	8G56355.D	05/09/24	07:52	07:37	SB-7
JD87833-8	8G56356.D	05/09/24	08:13	07:58	SB-8
JD87833-10	8G56357.D	05/09/24	08:35	08:20	SB-10
JD87833-12	8G56359.D	05/09/24	09:19	09:04	SB-12
JD87833-14	8G56360.D	05/09/24	09:40	09:25	SB-14
JD87833-15	8G56361.D	05/09/24	10:02	09:47	DUPE 1
JD87833-16	8G56362.D	05/09/24	10:24	10:09	DUPE 2
JD87772-1	8G56363.D	05/09/24	10:45	10:30	(used for QC only; not part of job JD87833)

8.6.6  
8

# DDT/Endrin Breakdown Check

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Sample:</b> G8G2470-DDT	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 8G56334.D	<b>Injection Time:</b> 00:15
<b>Instrument ID:</b> GC8G	

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	8G56364.D	05/09/24	11:07	10:52	(unrelated sample)
ZZZZZZ	8G56365.D	05/09/24	11:29	11:14	(unrelated sample)
ZZZZZZ	8G56366.D	05/09/24	11:50	11:35	(unrelated sample)
ZZZZZZ	8G56367.D	05/09/24	12:12	11:57	(unrelated sample)

8.6.6  
8

# DDT/Endrin Breakdown Check

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Sample:</b> G8G2471-DDT	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 8G56373.D	<b>Injection Time:</b> 15:09
<b>Instrument ID:</b> GC8G	

Compound	Response Signal 1	Response Signal 2
4,4' -DDD	119488654	221963711
4,4' -DDE	10504391	15731545
4,4' -DDT	1089426066	1690111074

DDT Breakdown <sup>a</sup>	10.7 %	12.3 %
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Endrin aldehyde	5644719	9232589
Endrin ketone	20278873	30748165
Endrin	771918556	1077798378

Endrin Breakdown <sup>b</sup>	3.2 %	3.6 %
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(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100

(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

**This check applies to the following Samples, MS, MSD, Blanks, and Standards:**

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
G8G2471-CC2430	8G56374.D	05/09/24	15:31	00:22	Continuing cal 5
OP54426-MB1	8G56377.D	05/09/24	16:44	01:35	Method Blank
OP54426-BS1	8G56378.D	05/09/24	17:06	01:57	Blank Spike
ZZZZZZ	8G56379.D	05/09/24	17:28	02:19	(unrelated sample)
ZZZZZZ	8G56380.D	05/09/24	17:50	02:41	(unrelated sample)
ZZZZZZ	8G56381.D	05/09/24	18:11	03:02	(unrelated sample)
OP54426-MS	8G56382.D	05/09/24	18:33	03:24	Matrix Spike
OP54426-MSD	8G56383.D	05/09/24	18:55	03:46	Matrix Spike Duplicate
LB1891-1	8G56384.D	05/09/24	19:17	04:08	(used for QC only; not part of job JD87833)
ZZZZZZ	8G56385.D	05/09/24	19:39	04:30	(unrelated sample)
ZZZZZZ	8G56386.D	05/09/24	20:00	04:51	(unrelated sample)
ZZZZZZ	8G56387.D	05/09/24	20:22	05:13	(unrelated sample)
ZZZZZZ	8G56388.D	05/09/24	20:44	05:35	(unrelated sample)
ZZZZZZ	8G56389.D	05/09/24	21:05	05:56	(unrelated sample)
ZZZZZZ	8G56390.D	05/09/24	21:27	06:18	(unrelated sample)
ZZZZZZ	8G56391.D	05/09/24	21:49	06:40	(unrelated sample)
ZZZZZZ	8G56392.D	05/09/24	22:10	07:01	(unrelated sample)
ZZZZZZ	8G56393.D	05/09/24	22:32	07:23	(unrelated sample)
ZZZZZZ	8G56394.D	05/09/24	22:54	07:45	(unrelated sample)
ZZZZZZ	8G56395.D	05/09/24	23:16	08:07	(unrelated sample)
ZZZZZZ	8G56396.D	05/09/24	23:37	08:28	(unrelated sample)
ZZZZZZ	8G56397.D	05/09/24	23:59	08:50	(unrelated sample)
ZZZZZZ	8G56398.D	05/10/24	00:21	09:12	(unrelated sample)
ZZZZZZ	8G56399.D	05/10/24	00:43	09:34	(unrelated sample)

8.6.7  
8

# DDT/Endrin Breakdown Check

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Sample:</b> G8G2471-DDT	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 8G56373.D	<b>Injection Time:</b> 15:09
<b>Instrument ID:</b> GC8G	

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	8G56400.D	05/10/24	01:05	09:56	(unrelated sample)
JD87833-5	8G56401.D	05/10/24	01:27	10:18	SB-5



# DDT/Endrin Breakdown Check

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Sample:</b> G8G2472-DDT	<b>Injection Date:</b> 05/10/24
<b>Lab File ID:</b> 8G56406.D	<b>Injection Time:</b> 04:14
<b>Instrument ID:</b> GC8G	

Compound	Response Signal 1	Response Signal 2
4,4' -DDD	116408772	232392567
4,4' -DDE	12302224	17988304
4,4' -DDT	1128025545	1843270843

DDT Breakdown <sup>a</sup>	10.2 %	12 %
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Endrin aldehyde	6381146	10720443
Endrin ketone	22635551	36292047
Endrin	768210519	1133842516

Endrin Breakdown <sup>b</sup>	3.6 %	4 %
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(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100

(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

**This check applies to the following Samples, MS, MSD, Blanks, and Standards:**

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
G8G2472-CC2430	8G56407.D	05/10/24	04:36	00:22	Continuing cal 2.5
OP54526-MB1	8G56409.D	05/10/24	05:20	01:06	Method Blank
OP54526-BS1	8G56410.D	05/10/24	05:41	01:27	Blank Spike
OP54526-MS	8G56411.D	05/10/24	06:03	01:49	Matrix Spike
OP54526-LS12	8G56411.D	05/10/24	06:03	01:49	Leachate Spike
OP54526-MSD	8G56412.D	05/10/24	06:25	02:11	Matrix Spike Duplicate
OP54526-LB12	8G56413.D	05/10/24	06:47	02:33	Leachate Blank
ZZZZZZ	8G56414.D	05/10/24	07:09	02:55	(unrelated sample)
JD87790-2	8G56415.D	05/10/24	07:31	03:17	(used for QC only; not part of job JD87833)
ZZZZZZ	8G56416.D	05/10/24	07:53	03:39	(unrelated sample)
ZZZZZZ	8G56417.D	05/10/24	08:15	04:01	(unrelated sample)
ZZZZZZ	8G56418.D	05/10/24	08:37	04:23	(unrelated sample)
ZZZZZZ	8G56419.D	05/10/24	08:58	04:44	(unrelated sample)
ZZZZZZ	8G56420.D	05/10/24	09:20	05:06	(unrelated sample)
ZZZZZZ	8G56421.D	05/10/24	09:42	05:28	(unrelated sample)
ZZZZZZ	8G56422.D	05/10/24	10:04	05:50	(unrelated sample)
ZZZZZZ	8G56423.D	05/10/24	10:26	06:12	(unrelated sample)
ZZZZZZ	8G56424.D	05/10/24	10:48	06:34	(unrelated sample)
ZZZZZZ	8G56425.D	05/10/24	11:10	06:56	(unrelated sample)
ZZZZZZ	8G56426.D	05/10/24	11:31	07:17	(unrelated sample)
ZZZZZZ	8G56427.D	05/10/24	11:53	07:39	(unrelated sample)
ZZZZZZ	8G56428.D	05/10/24	12:15	08:01	(unrelated sample)
ZZZZZZ	8G56429.D	05/10/24	12:37	08:23	(unrelated sample)
ZZZZZZ	8G56430.D	05/10/24	12:59	08:45	(unrelated sample)

8.6.8  
8

# DDT/Endrin Breakdown Check

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Sample:</b> G8G2472-DDT	<b>Injection Date:</b> 05/10/24
<b>Lab File ID:</b> 8G56406.D	<b>Injection Time:</b> 04:14
<b>Instrument ID:</b> GC8G	

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	8G56431.D	05/10/24	13:21	09:07	(unrelated sample)
ZZZZZZ	8G56432.D	05/10/24	13:42	09:28	(unrelated sample)
ZZZZZZ	8G56433.D	05/10/24	14:04	09:50	(unrelated sample)
JD87833-11	8G56434.D	05/10/24	15:41	11:27	SB-11

8.6.8  
8

# GC Identification Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G1G7004-CC6859	<b>Injection Date:</b> 05/07/24
<b>Lab File ID:</b> 1G196193.D	<b>Injection Time:</b> 23:51
<b>Instrument ID:</b> GC1G	<b>Method:</b> SW846 8081B

<b>Sample ID:</b> JD87833-17	<b>Injection Date:</b> 05/08/24
<b>Lab File ID:</b> 1G196210.D	<b>Injection Time:</b> 04:14
<b>Client ID:</b> FIELD BLANK	

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
4,4'-DDT	1 <sup>a</sup>	5.24	5.23	0.020	B	ug/1	9.5
4,4'-DDT	2	6.13	6.13	0.022		ug/1	

(a) Final result reported from this column.

8.7.1

8

## GC Identification Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G1G7016-CC6859	<b>Injection Date:</b> 05/15/24
<b>Lab File ID:</b> 1G196428.D	<b>Injection Time:</b> 10:36
<b>Instrument ID:</b> GC1G	<b>Method:</b> SW846 8081B

<b>Sample ID:</b> JD87833-17R	<b>Injection Date:</b> 05/15/24
<b>Lab File ID:</b> 1G196431.D	<b>Injection Time:</b> 11:49
<b>Client ID:</b> FIELD BLANK	

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
4,4'-DDT	1 <sup>a</sup>	5.25	5.23	0.0048	J	ug/1	20.6
4,4'-DDT	2	6.13	6.13	0.0059	J	ug/1	

(a) Final result reported from this column.

# GC Identification Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G1G7004-CC6859	<b>Injection Date:</b> 05/07/24
<b>Lab File ID:</b> 1G196193.D	<b>Injection Time:</b> 23:51
<b>Instrument ID:</b> GC1G	<b>Method:</b> SW846 8081B

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<b>Sample ID:</b> OP54399-BS1	<b>Injection Date:</b> 05/08/24
<b>Lab File ID:</b> 1G196196.D	<b>Injection Time:</b> 00:40
<b>Client ID:</b> Blank Spike	

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 <sup>a</sup>	2.99	2.99	0.12		ug/l	0.0
Aldrin	2	3.33	3.33	0.12		ug/l	
alpha-BHC	1	2.07	2.07	0.14		ug/l	
alpha-BHC	2 <sup>a</sup>	2.21	2.21	0.14		ug/l	0.0
beta-BHC	1	2.40	2.40	0.14		ug/l	
beta-BHC	2 <sup>a</sup>	2.62	2.61	0.12		ug/l	15.4
delta-BHC	1	2.56	2.55	0.11		ug/l	
delta-BHC	2 <sup>a</sup>	2.91	2.91	0.10		ug/l	9.5
gamma-BHC (Lindane)	1 <sup>a</sup>	2.31	2.31	0.13		ug/l	
gamma-BHC (Lindane)	2	2.53	2.53	0.13		ug/l	0.0
alpha-Chlordane	1	3.92	3.92	0.14		ug/l	
alpha-Chlordane	2 <sup>a</sup>	4.48	4.48	0.13		ug/l	7.4
gamma-Chlordane	1	3.77	3.77	0.13		ug/l	
gamma-Chlordane	2 <sup>a</sup>	4.28	4.28	0.13		ug/l	0.0
Chlordane (alpha and gamma)	n/a <sup>b</sup>			0.27		ug/l	
Dieldrin	1	4.38	4.38	0.15		ug/l	
Dieldrin	2 <sup>a</sup>	4.94	4.94	0.14		ug/l	6.9
4,4'-DDD	1	4.85	4.85	0.14		ug/l	
4,4'-DDD	2 <sup>a</sup>	5.63	5.63	0.14		ug/l	0.0
4,4'-DDE	1 <sup>a</sup>	4.05	4.05	0.11		ug/l	
4,4'-DDE	2	4.74	4.74	0.13		ug/l	16.7
4,4'-DDT	1	5.24	5.23	0.15		ug/l	
4,4'-DDT	2 <sup>a</sup>	6.13	6.13	0.15		ug/l	0.0
Endrin	1	4.69	4.69	0.15		ug/l	
Endrin	2 <sup>a</sup>	5.39	5.39	0.14		ug/l	6.9
Endosulfan sulfate	1 <sup>a</sup>	6.29	6.28	0.12		ug/l	
Endosulfan sulfate	2	6.76	6.76	0.12		ug/l	0.0
Endrin aldehyde	1	5.62	5.61	0.12		ug/l	
Endrin aldehyde	2 <sup>a</sup>	6.28	6.28	0.12		ug/l	0.0
Endrin ketone	1	6.74	6.73	0.12		ug/l	
Endrin ketone	2 <sup>a</sup>	7.67	7.66	0.12		ug/l	0.0
Endosulfan-I	1	4.08	4.08	0.16		ug/l	
Endosulfan-I	2 <sup>a</sup>	4.55	4.55	0.13		ug/l	20.7
Endosulfan-II	1	5.01	5.01	0.14		ug/l	
Endosulfan-II	2 <sup>a</sup>	5.74	5.74	0.13		ug/l	7.4
Heptachlor	1 <sup>a</sup>	2.71	2.71	0.12		ug/l	
Heptachlor	2	2.97	2.97	0.13		ug/l	8.0
Heptachlor epoxide	1	3.62	3.62	0.14		ug/l	
Heptachlor epoxide	2 <sup>a</sup>	4.02	4.02	0.13		ug/l	7.4
Methoxychlor	1	6.04	6.03	0.15		ug/l	
Methoxychlor	2 <sup>a</sup>	7.35	7.35	0.14		ug/l	6.9

8.7.3  
8

## GC Identification Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G1G7004-CC6859	<b>Injection Date:</b> 05/07/24
<b>Lab File ID:</b> 1G196193.D	<b>Injection Time:</b> 23:51
<b>Instrument ID:</b> GC1G	<b>Method:</b> SW846 8081B

<b>Sample ID:</b> OP54399-BS1	<b>Injection Date:</b> 05/08/24
<b>Lab File ID:</b> 1G196196.D	<b>Injection Time:</b> 00:40
<b>Client ID:</b> Blank Spike	

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
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- (a) QC results reported from this column.
- (b) Final reported result.

8.7.3  
8

# GC Identification Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G1G7013-CC6859	<b>Injection Date:</b> 05/14/24
<b>Lab File ID:</b> 1G196352.D	<b>Injection Time:</b> 08:13
<b>Instrument ID:</b> GC1G	<b>Method:</b> SW846 8081B

<b>Sample ID:</b> OP54554-BS1	<b>Injection Date:</b> 05/14/24
<b>Lab File ID:</b> 1G196360.D	<b>Injection Time:</b> 10:24
<b>Client ID:</b> Blank Spike	

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 <sup>a</sup>	2.98	2.99	0.16		ug/l	0.0
Aldrin	2	3.32	3.33	0.16		ug/l	
alpha-BHC	1	2.06	2.06	0.17		ug/l	
alpha-BHC	2 <sup>a</sup>	2.20	2.20	0.17		ug/l	0.0
beta-BHC	1 <sup>a</sup>	2.39	2.39	0.18		ug/l	
beta-BHC	2	2.61	2.61	0.19		ug/l	5.4
delta-BHC	1	2.54	2.55	0.19		ug/l	
delta-BHC	2 <sup>a</sup>	2.91	2.91	0.18		ug/l	5.4
gamma-BHC (Lindane)	1 <sup>a</sup>	2.30	2.31	0.17		ug/l	
gamma-BHC (Lindane)	2	2.52	2.52	0.18		ug/l	5.7
alpha-Chlordane	1	3.92	3.93	0.18		ug/l	
alpha-Chlordane	2 <sup>a</sup>	4.47	4.47	0.16		ug/l	11.8
gamma-Chlordane	1	3.76	3.77	0.19		ug/l	
gamma-Chlordane	2 <sup>a</sup>	4.27	4.28	0.18		ug/l	5.4
Chlordane (alpha and gamma)	n/a <sup>b</sup>			0.34		ug/l	
Dieldrin	1	4.38	4.39	0.20		ug/l	
Dieldrin	2 <sup>a</sup>	4.93	4.94	0.19		ug/l	5.1
4,4'-DDD	1 <sup>a</sup>	4.83	4.84	0.19		ug/l	
4,4'-DDD	2	5.62	5.62	0.20		ug/l	5.1
4,4'-DDE	1	4.04	4.04	0.17		ug/l	
4,4'-DDE	2 <sup>a</sup>	4.73	4.73	0.16		ug/l	6.1
4,4'-DDT	1 <sup>a</sup>	5.22	5.23	0.23		ug/l	
4,4'-DDT	2	6.12	6.12	0.23		ug/l	0.0
Endrin	1 <sup>a</sup>	4.68	4.69	0.19		ug/l	
Endrin	2	5.38	5.39	0.19		ug/l	0.0
Endosulfan sulfate	1 <sup>a</sup>	6.27	6.28	0.19		ug/l	
Endosulfan sulfate	2	6.75	6.75	0.20		ug/l	5.1
Endrin aldehyde	1	5.60	5.61	0.22		ug/l	
Endrin aldehyde	2 <sup>a</sup>	6.27	6.28	0.18		ug/l	20.0
Endrin ketone	1	6.72	6.73	0.21		ug/l	
Endrin ketone	2 <sup>a</sup>	7.66	7.66	0.20		ug/l	4.9
Endosulfan-I	1	4.07	4.09	0.20		ug/l	
Endosulfan-I	2 <sup>a</sup>	4.54	4.55	0.17		ug/l	16.2
Endosulfan-II	1	4.99	5.01	0.19		ug/l	
Endosulfan-II	2 <sup>a</sup>	5.73	5.73	0.19		ug/l	0.0
Heptachlor	1	2.70	2.71	0.17		ug/l	
Heptachlor	2 <sup>a</sup>	2.97	2.97	0.17		ug/l	0.0
Heptachlor epoxide	1	3.61	3.62	0.19		ug/l	
Heptachlor epoxide	2 <sup>a</sup>	4.02	4.02	0.18		ug/l	5.4
Methoxychlor	1 <sup>a</sup>	6.02	6.02	0.20		ug/l	
Methoxychlor	2	7.34	7.34	0.25		ug/l	22.2

8.7.4  
8

# GC Identification Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G1G7013-CC6859	<b>Injection Date:</b> 05/14/24
<b>Lab File ID:</b> 1G196352.D	<b>Injection Time:</b> 08:13
<b>Instrument ID:</b> GC1G	<b>Method:</b> SW846 8081B
<hr/>	
<b>Sample ID:</b> OP54554-BS1	<b>Injection Date:</b> 05/14/24
<b>Lab File ID:</b> 1G196360.D	<b>Injection Time:</b> 10:24
<b>Client ID:</b> Blank Spike	

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
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- (a) QC results reported from this column.
- (b) Final reported result.

8.7.4

8



# GC Identification Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G1G7004-CC6859	<b>Injection Date:</b> 05/07/24
<b>Lab File ID:</b> 1G196193.D	<b>Injection Time:</b> 23:51
<b>Instrument ID:</b> GC1G	<b>Method:</b> SW846 8081B

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<b>Sample ID:</b> OP54399-BSD	<b>Injection Date:</b> 05/08/24
<b>Lab File ID:</b> 1G196197.D	<b>Injection Time:</b> 00:55
<b>Client ID:</b> Blank Spike Duplicate	

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 <sup>a</sup>	2.99	2.99	0.12		ug/l	8.0
Aldrin	2	3.33	3.33	0.13		ug/l	
alpha-BHC	1	2.07	2.07	0.15		ug/l	0.0
alpha-BHC	2 <sup>a</sup>	2.21	2.21	0.15		ug/l	
beta-BHC	1	2.40	2.40	0.14		ug/l	7.4
beta-BHC	2 <sup>a</sup>	2.62	2.61	0.13		ug/l	
delta-BHC	1	2.56	2.55	0.11		ug/l	0.0
delta-BHC	2 <sup>a</sup>	2.92	2.91	0.11		ug/l	
gamma-BHC (Lindane)	1 <sup>a</sup>	2.31	2.31	0.14		ug/l	0.0
gamma-BHC (Lindane)	2	2.53	2.53	0.14		ug/l	
alpha-Chlordane	1	3.92	3.92	0.14		ug/l	0.0
alpha-Chlordane	2 <sup>a</sup>	4.48	4.48	0.14		ug/l	
gamma-Chlordane	1	3.77	3.77	0.14		ug/l	0.0
gamma-Chlordane	2 <sup>a</sup>	4.28	4.28	0.14		ug/l	
Chlordane (alpha and gamma)	n/a <sup>b</sup>			0.28		ug/l	
Dieldrin	1	4.38	4.38	0.15		ug/l	0.0
Dieldrin	2 <sup>a</sup>	4.94	4.94	0.15		ug/l	
4,4'-DDD	1 <sup>a</sup>	4.85	4.85	0.14		ug/l	0.0
4,4'-DDD	2	5.63	5.63	0.14		ug/l	
4,4'-DDE	1 <sup>a</sup>	4.05	4.05	0.12		ug/l	8.0
4,4'-DDE	2	4.74	4.74	0.13		ug/l	
4,4'-DDT	1 <sup>a</sup>	5.24	5.23	0.17		ug/l	0.0
4,4'-DDT	2	6.13	6.13	0.17		ug/l	
Endrin	1	4.69	4.69	0.15		ug/l	0.0
Endrin	2 <sup>a</sup>	5.39	5.39	0.15		ug/l	
Endosulfan sulfate	1	6.29	6.28	0.13		ug/l	0.0
Endosulfan sulfate	2 <sup>a</sup>	6.76	6.76	0.13		ug/l	
Endrin aldehyde	1	5.61	5.61	0.13		ug/l	0.0
Endrin aldehyde	2 <sup>a</sup>	6.28	6.28	0.13		ug/l	
Endrin ketone	1	6.73	6.73	0.13		ug/l	8.0
Endrin ketone	2 <sup>a</sup>	7.66	7.66	0.12		ug/l	
Endosulfan-I	1	4.08	4.08	0.16		ug/l	13.3
Endosulfan-I	2 <sup>a</sup>	4.55	4.55	0.14		ug/l	
Endosulfan-II	1	5.01	5.01	0.15		ug/l	6.9
Endosulfan-II	2 <sup>a</sup>	5.74	5.74	0.14		ug/l	
Heptachlor	1 <sup>a</sup>	2.71	2.71	0.13		ug/l	0.0
Heptachlor	2	2.97	2.97	0.13		ug/l	
Heptachlor epoxide	1	3.62	3.62	0.15		ug/l	6.9
Heptachlor epoxide	2 <sup>a</sup>	4.02	4.02	0.14		ug/l	
Methoxychlor	1	6.03	6.03	0.16		ug/l	6.5
Methoxychlor	2 <sup>a</sup>	7.35	7.35	0.15		ug/l	

8.7.5  
8

## GC Identification Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G1G7004-CC6859	<b>Injection Date:</b> 05/07/24
<b>Lab File ID:</b> 1G196193.D	<b>Injection Time:</b> 23:51
<b>Instrument ID:</b> GC1G	<b>Method:</b> SW846 8081B

<b>Sample ID:</b> OP54399-BSD	<b>Injection Date:</b> 05/08/24
<b>Lab File ID:</b> 1G196197.D	<b>Injection Time:</b> 00:55
<b>Client ID:</b> Blank Spike Duplicate	

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
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- (a) QC results reported from this column.
- (b) Final reported result.

8.7.5

8

# GC Identification Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G1G7013-CC6859	<b>Injection Date:</b> 05/14/24
<b>Lab File ID:</b> 1G196352.D	<b>Injection Time:</b> 08:13
<b>Instrument ID:</b> GC1G	<b>Method:</b> SW846 8081B

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<b>Sample ID:</b> OP54554-BSD	<b>Injection Date:</b> 05/14/24
<b>Lab File ID:</b> 1G196361.D	<b>Injection Time:</b> 10:39
<b>Client ID:</b> Blank Spike Duplicate	

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 <sup>a</sup>	2.98	2.99	0.086		ug/l	2.3
Aldrin	2	3.33	3.33	0.088		ug/l	
alpha-BHC	1 <sup>a</sup>	2.06	2.06	0.086		ug/l	4.5
alpha-BHC	2	2.20	2.20	0.090		ug/l	
beta-BHC	1	2.39	2.39	0.093		ug/l	13.8
beta-BHC	2 <sup>a</sup>	2.61	2.61	0.081		ug/l	
delta-BHC	1	2.54	2.55	0.11		ug/l	11.5
delta-BHC	2 <sup>a</sup>	2.91	2.91	0.098		ug/l	
gamma-BHC (Lindane)	1 <sup>a</sup>	2.30	2.31	0.092		ug/l	5.3
gamma-BHC (Lindane)	2	2.52	2.52	0.097		ug/l	
alpha-Chlordane	1	3.92	3.93	0.10		ug/l	3.0
alpha-Chlordane	2 <sup>a</sup>	4.47	4.47	0.097		ug/l	
gamma-Chlordane	1	3.76	3.77	0.10		ug/l	1.0
gamma-Chlordane	2 <sup>a</sup>	4.27	4.28	0.099		ug/l	
Chlordane (alpha and gamma)	n/a <sup>b</sup>			0.20		ug/l	
Dieldrin	1	4.38	4.39	0.11		ug/l	0.0
Dieldrin	2 <sup>a</sup>	4.94	4.94	0.11		ug/l	
4,4'-DDD	1 <sup>a</sup>	4.84	4.84	0.11		ug/l	0.0
4,4'-DDD	2	5.62	5.62	0.11		ug/l	
4,4'-DDE	1	4.04	4.04	0.091		ug/l	3.4
4,4'-DDE	2 <sup>a</sup>	4.73	4.73	0.088		ug/l	
4,4'-DDT	1 <sup>a</sup>	5.22	5.23	0.12		ug/l	0.0
4,4'-DDT	2	6.12	6.12	0.12		ug/l	
Endrin	1	4.68	4.69	0.11		ug/l	0.0
Endrin	2 <sup>a</sup>	5.39	5.39	0.11		ug/l	
Endosulfan sulfate	1	6.28	6.28	0.11		ug/l	0.0
Endosulfan sulfate	2 <sup>a</sup>	6.75	6.75	0.11		ug/l	
Endrin aldehyde	1	5.60	5.61	0.11		ug/l	9.5
Endrin aldehyde	2 <sup>a</sup>	6.28	6.28	0.10		ug/l	
Endrin ketone	1	6.72	6.73	0.12		ug/l	8.7
Endrin ketone	2 <sup>a</sup>	7.66	7.66	0.11		ug/l	
Endosulfan-I	1	4.08	4.09	0.12		ug/l	19.2
Endosulfan-I	2 <sup>a</sup>	4.55	4.55	0.099		ug/l	
Endosulfan-II	1	5.00	5.01	0.11		ug/l	0.0
Endosulfan-II	2 <sup>a</sup>	5.73	5.73	0.11		ug/l	
Heptachlor	1 <sup>a</sup>	2.70	2.71	0.091		ug/l	2.2
Heptachlor	2	2.97	2.97	0.093		ug/l	
Heptachlor epoxide	1	3.61	3.62	0.10		ug/l	0.0
Heptachlor epoxide	2 <sup>a</sup>	4.02	4.02	0.10		ug/l	
Methoxychlor	1 <sup>a</sup>	6.02	6.02	0.12		ug/l	0.0
Methoxychlor	2	7.35	7.34	0.12		ug/l	

8.7.6  
8

## GC Identification Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G1G7013-CC6859	<b>Injection Date:</b> 05/14/24
<b>Lab File ID:</b> 1G196352.D	<b>Injection Time:</b> 08:13
<b>Instrument ID:</b> GC1G	<b>Method:</b> SW846 8081B

<b>Sample ID:</b> OP54554-BSD	<b>Injection Date:</b> 05/14/24
<b>Lab File ID:</b> 1G196361.D	<b>Injection Time:</b> 10:39
<b>Client ID:</b> Blank Spike Duplicate	

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
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- (a) QC results reported from this column.
- (b) Final reported result.

8.7.6  
8

# GC Identification Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G3G5173-CC5160	<b>Injection Date:</b> 05/08/24
<b>Lab File ID:</b> 3G141327.D	<b>Injection Time:</b> 00:33
<b>Instrument ID:</b> GC3G	<b>Method:</b> SW846 8082A

<b>Sample ID:</b> OP54400-BS1	<b>Injection Date:</b> 05/08/24
<b>Lab File ID:</b> 3G141338.D	<b>Injection Time:</b> 03:36
<b>Client ID:</b> Blank Spike	

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aroclor 1016	1			1.2		ug/l	26.4
Aroclor 1016	2 <sup>a</sup>			0.92		ug/l	
AR1016-B	1	4.33	4.33	1.2		ug/l	
AR1016-B	2	5.32	5.31	1.0		ug/l	
AR1016-C	1	4.93	4.93	1.2		ug/l	
AR1016-C	2	5.98	5.97	0.88		ug/l	
AR1016-D	1	5.10	5.11	1.1		ug/l	
AR1016-D	2	6.17	6.16	0.88		ug/l	
Aroclor 1260	1			0.86		ug/l	19.1
Aroclor 1260	2 <sup>a</sup>			0.71		ug/l	
AR1260-B	1	8.24	8.25	0.88		ug/l	
AR1260-B	2	9.58	9.58	0.73		ug/l	
AR1260-C	1	8.59	8.59	0.85		ug/l	
AR1260-C	2	10.02	10.02	0.68		ug/l	
AR1260-D	1	9.02	9.03	0.86		ug/l	
AR1260-D	2	10.36	10.36	0.71		ug/l	

(a) QC results reported from this column.

8.7.7  
8

# GC Identification Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G3G5173-CC5160	<b>Injection Date:</b> 05/08/24
<b>Lab File ID:</b> 3G141327.D	<b>Injection Time:</b> 00:33
<b>Instrument ID:</b> GC3G	<b>Method:</b> SW846 8082A

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<b>Sample ID:</b> OP54400-BSD	<b>Injection Date:</b> 05/08/24
<b>Lab File ID:</b> 3G141339.D	<b>Injection Time:</b> 03:53
<b>Client ID:</b> Blank Spike Duplicate	

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aroclor 1016	1			1.2		ug/l	8.7
Aroclor 1016	2 <sup>a</sup>			1.1		ug/l	
AR1016-B	1	4.33	4.33	1.2		ug/l	
AR1016-B	2	5.32	5.31	1.1		ug/l	
AR1016-C	1	4.93	4.93	1.2		ug/l	
AR1016-C	2	5.98	5.97	1.0		ug/l	
AR1016-D	1	5.10	5.11	1.1		ug/l	
AR1016-D	2	6.17	6.16	1.1		ug/l	
Aroclor 1260	1			1.0		ug/l	16.2
Aroclor 1260	2 <sup>a</sup>			0.85		ug/l	
AR1260-B	1	8.24	8.25	1.0		ug/l	
AR1260-B	2	9.58	9.58	0.94		ug/l	
AR1260-C	1	8.59	8.59	1.1		ug/l	
AR1260-C	2	10.02	10.02	0.83		ug/l	
AR1260-D	1	9.02	9.03	0.99		ug/l	
AR1260-D	2	10.36	10.36	0.78		ug/l	

(a) QC results reported from this column.

8.7.8  
8

# GC Identification Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G8G2470-CC2430	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 8G56335.D	<b>Injection Time:</b> 00:37
<b>Instrument ID:</b> GC8G	<b>Method:</b> SW846 8081B

<b>Sample ID:</b> JD87833-1	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 8G56351.D	<b>Injection Time:</b> 06:24
<b>Client ID:</b> SB-1	

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
alpha-Chlordane	1	7.52	7.55	0.0012		mg/kg	85.7
alpha-Chlordane <sup>a</sup>	2 <sup>b</sup>	9.06	9.07	0.00048	J	mg/kg	
Chlordane (alpha and gamma)	n/a <sup>c</sup>			0.00048	J	mg/kg	
Dieldrin	1	8.01	8.02	0.00055		mg/kg	24.5
Dieldrin	2 <sup>b</sup>	9.57	9.58	0.00043	J	mg/kg	
4,4' -DDD	1 <sup>b</sup>	8.43	8.46	0.0015		mg/kg	6.5
4,4' -DDD	2	10.25	10.26	0.0016		mg/kg	
4,4' -DDE	1	7.66	7.68	0.0027		mg/kg	7.7
4,4' -DDE	2 <sup>b</sup>	9.33	9.33	0.0025		mg/kg	
4,4' -DDT <sup>d</sup>	1	8.83	8.85	0.0013		mg/kg	51.4
4,4' -DDT <sup>e</sup>	2 <sup>b</sup>	10.77	10.78	0.0022		mg/kg	
Heptachlor epoxide	1	7.23	7.24	0.00043	J	mg/kg	20.5
Heptachlor epoxide	2 <sup>b</sup>	8.56	8.57	0.00035	J	mg/kg	

- (a) More than 40 % RPD for detected concentrations between the two GC columns.
- (b) Final result reported from this column.
- (c) Final reported result.
- (d) Associated CCV outside of control limits low.
- (e) Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only. More than 40% RPD for detected concentrations between the two GC columns.

8.7.9  
8

# GC Identification Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G8G2470-CC2430	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 8G56335.D	<b>Injection Time:</b> 00:37
<b>Instrument ID:</b> GC8G	<b>Method:</b> SW846 8081B

<b>Sample ID:</b> JD87833-3	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 8G56352.D	<b>Injection Time:</b> 06:46
<b>Client ID:</b> SB-3	

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
beta-BHC	1	5.90	5.91	0.0022		mg/kg	177.7
beta-BHC <sup>a</sup>	2 <sup>b</sup>	6.90	6.89	0.00013	JB	mg/kg	
alpha-Chlordane	1	7.54	7.55	0.0012		mg/kg	20.2
alpha-Chlordane	2 <sup>b</sup>	9.06	9.07	0.00098		mg/kg	
gamma-Chlordane	1	7.38	7.40	0.00071		mg/kg	32.8
gamma-Chlordane	2 <sup>b</sup>	8.84	8.85	0.00051		mg/kg	
Chlordane (alpha and gamma)	n/a <sup>c</sup>			0.0015		mg/kg	
Dieldrin <sup>a</sup>	1 <sup>b</sup>	8.01	8.02	0.00012	J	mg/kg	82.9
Dieldrin <sup>a</sup>	2	9.56	9.58	0.00029	J	mg/kg	
4,4'-DDD	1	8.43	8.46	0.00093		mg/kg	16.3
4,4'-DDD	2 <sup>b</sup>	10.25	10.26	0.00079		mg/kg	
4,4'-DDE	1	7.66	7.68	0.00068		mg/kg	40.7
4,4'-DDE <sup>a</sup>	2 <sup>b</sup>	9.32	9.33	0.00045		mg/kg	
4,4'-DDT <sup>d</sup>	1	8.82	8.85	0.0020		mg/kg	58.1
4,4'-DDT <sup>a</sup>	2 <sup>b</sup>	10.77	10.78	0.0011		mg/kg	
Heptachlor epoxide	1	7.23	7.24	0.00069		mg/kg	117.2
Heptachlor epoxide <sup>a</sup>	2 <sup>b</sup>	8.57	8.57	0.00018	J	mg/kg	

- (a) More than 40 % RPD for detected concentrations between the two GC columns.
- (b) Final result reported from this column.
- (c) Final reported result.
- (d) Associated CCV outside of control limits low.

8.7.10  
8



# GC Identification Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G8G2470-CC2430	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 8G56335.D	<b>Injection Time:</b> 00:37
<b>Instrument ID:</b> GC8G	<b>Method:</b> SW846 8081B

<b>Sample ID:</b> JD87833-4	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 8G56353.D	<b>Injection Time:</b> 07:08
<b>Client ID:</b> SB-4	

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
beta-BHC	1	5.91	5.91	0.0020		mg/kg	173.8
beta-BHC <sup>a</sup>	2 <sup>b</sup>	6.90	6.89	0.00014	JB	mg/kg	
alpha-Chlordane	1	7.54	7.55	0.0012		mg/kg	0.0
alpha-Chlordane	2 <sup>b</sup>	9.07	9.07	0.0012		mg/kg	
gamma-Chlordane	1	7.39	7.40	0.00057		mg/kg	21.4
gamma-Chlordane	2 <sup>b</sup>	8.85	8.85	0.00046		mg/kg	
Chlordane (alpha and gamma)	n/a <sup>c</sup>			0.0017		mg/kg	
Dieldrin	1 <sup>b</sup>	8.01	8.02	0.00021	J	mg/kg	28.6
Dieldrin	2	9.57	9.58	0.00028	J	mg/kg	
4,4'-DDD	1	8.44	8.46	0.00061		mg/kg	41.6
4,4'-DDD <sup>a</sup>	2 <sup>b</sup>	10.25	10.26	0.00040	J	mg/kg	
4,4'-DDE	1	7.66	7.68	0.00027	J	mg/kg	63.4
4,4'-DDE <sup>a</sup>	2 <sup>b</sup>	9.33	9.33	0.00014	J	mg/kg	
4,4'-DDT <sup>d</sup>	1	8.82	8.85	0.0010		mg/kg	61.4
4,4'-DDT <sup>a</sup>	2 <sup>b</sup>	10.78	10.78	0.00053		mg/kg	
Heptachlor epoxide	1	7.23	7.24	0.00045		mg/kg	60.9
Heptachlor epoxide <sup>a</sup>	2 <sup>b</sup>	8.57	8.57	0.00024	J	mg/kg	

- (a) More than 40 % RPD for detected concentrations between the two GC columns.
- (b) Final result reported from this column.
- (c) Final reported result.
- (d) Associated CCV outside of control limits low.

8.7.11  
8

# GC Identification Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G8G2471-CC2430	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 8G56374.D	<b>Injection Time:</b> 15:31
<b>Instrument ID:</b> GC8G	<b>Method:</b> SW846 8081B

<b>Sample ID:</b> JD87833-5	<b>Injection Date:</b> 05/10/24
<b>Lab File ID:</b> 8G56401.D	<b>Injection Time:</b> 01:27
<b>Client ID:</b> SB-5	

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
alpha-Chlordane	1	7.56	7.57	0.0012	J	mg/kg	62.3
alpha-Chlordane <sup>a</sup>	2 <sup>b</sup>	9.07	9.09	0.00063	J	mg/kg	
Chlordane (alpha and gamma)	n/a <sup>c</sup>			0.00063	J	mg/kg	
4,4' -DDD	1	8.45	8.47	0.0011	J	mg/kg	40.4
4,4' -DDD <sup>a</sup>	2 <sup>b</sup>	10.27	10.27	0.00073	J	mg/kg	
4,4' -DDT	1	8.84	8.86	0.0014	J	mg/kg	7.4
4,4' -DDT	2 <sup>b</sup>	10.79	10.80	0.0013	J	mg/kg	

- (a) More than 40 % RPD for detected concentrations between the two GC columns.
- (b) Final result reported from this column.
- (c) Final reported result.

8.7.12  
8

# GC Identification Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G8G2470-CC2430	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 8G56335.D	<b>Injection Time:</b> 00:37
<b>Instrument ID:</b> GC8G	<b>Method:</b> SW846 8081B

<b>Sample ID:</b> JD87833-7	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 8G56335.D	<b>Injection Time:</b> 07:52
<b>Client ID:</b> SB-7	

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
beta-BHC	1	5.90	5.91	0.0011		mg/kg	152.0
beta-BHC <sup>a</sup>	2 <sup>b</sup>	6.90	6.89	0.00015	JB	mg/kg	
alpha-Chlordane	1	7.54	7.55	0.0011		mg/kg	24.5
alpha-Chlordane	2 <sup>b</sup>	9.06	9.07	0.00086		mg/kg	
gamma-Chlordane	1	7.38	7.40	0.00062		mg/kg	34.0
gamma-Chlordane	2 <sup>b</sup>	8.84	8.85	0.00044		mg/kg	
Chlordane (alpha and gamma)	n/a <sup>c</sup>			0.0013		mg/kg	
Dieldrin	1	8.01	8.02	0.00023	J	mg/kg	42.1
Dieldrin <sup>a</sup>	2 <sup>b</sup>	9.56	9.58	0.00015	J	mg/kg	
4,4'-DDD	1	8.43	8.46	0.00086		mg/kg	21.9
4,4'-DDD	2 <sup>b</sup>	10.25	10.26	0.00069		mg/kg	
4,4'-DDE	1	7.66	7.68	0.00073		mg/kg	24.6
4,4'-DDE	2 <sup>b</sup>	9.32	9.33	0.00057		mg/kg	
4,4'-DDT <sup>d</sup>	1	8.81	8.85	0.0011		mg/kg	85.7
4,4'-DDT <sup>a</sup>	2 <sup>b</sup>	10.77	10.78	0.00044		mg/kg	
Heptachlor epoxide	1	7.23	7.24	0.00060		mg/kg	66.7
Heptachlor epoxide <sup>a</sup>	2 <sup>b</sup>	8.56	8.57	0.00030	J	mg/kg	

- (a) More than 40 % RPD for detected concentrations between the two GC columns.
- (b) Final result reported from this column.
- (c) Final reported result.
- (d) Associated CCV outside of control limits low.

8.7.13  
8

# GC Identification Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G8G2470-CC2430	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 8G56335.D	<b>Injection Time:</b> 00:37
<b>Instrument ID:</b> GC8G	<b>Method:</b> SW846 8081B

<b>Sample ID:</b> JD87833-8	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 8G56356.D	<b>Injection Time:</b> 08:13
<b>Client ID:</b> SB-8	

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
beta-BHC	1	5.91	5.91	0.0014		mg/kg	166.0
beta-BHC <sup>a</sup>	2 <sup>b</sup>	6.90	6.89	0.00013	JB	mg/kg	
alpha-Chlordane	1	7.54	7.55	0.00078		mg/kg	34.6
alpha-Chlordane	2 <sup>b</sup>	9.06	9.07	0.00055		mg/kg	
gamma-Chlordane	1	7.38	7.40	0.00039	J	mg/kg	60.0
gamma-Chlordane <sup>a</sup>	2 <sup>b</sup>	8.85	8.85	0.00021	J	mg/kg	
Chlordane (alpha and gamma)	n/a <sup>c</sup>			0.00076		mg/kg	
4,4'-DDD	1	8.44	8.46	0.00066		mg/kg	27.6
4,4'-DDD	2 <sup>b</sup>	10.25	10.26	0.00050		mg/kg	
4,4'-DDE	1	7.66	7.68	0.00047		mg/kg	72.5
4,4'-DDE <sup>a</sup>	2 <sup>b</sup>	9.33	9.33	0.00022	J	mg/kg	
4,4'-DDT <sup>d</sup>	1	8.81	8.85	0.00096		mg/kg	72.3
4,4'-DDT <sup>a</sup>	2 <sup>b</sup>	10.77	10.78	0.00045		mg/kg	
Heptachlor epoxide	1	7.23	7.24	0.00041		mg/kg	87.7
Heptachlor epoxide <sup>a</sup>	2 <sup>b</sup>	8.57	8.57	0.00016	J	mg/kg	

- (a) More than 40 % RPD for detected concentrations between the two GC columns.
- (b) Final result reported from this column.
- (c) Final reported result.
- (d) Associated CCV outside of control limits low.

8.7.14  
8

# GC Identification Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G8G2470-CC2430	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 8G56335.D	<b>Injection Time:</b> 00:37
<b>Instrument ID:</b> GC8G	<b>Method:</b> SW846 8081B

<b>Sample ID:</b> JD87833-10	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 8G56357.D	<b>Injection Time:</b> 08:35
<b>Client ID:</b> SB-10	

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
beta-BHC	1	5.91	5.91	0.00021	J	mg/kg	33.3
beta-BHC	2 <sup>a</sup>	6.90	6.89	0.00015	JB	mg/kg	
alpha-Chlordane	1	7.54	7.55	0.00026	J	mg/kg	41.9
alpha-Chlordane <sup>b</sup>	2 <sup>a</sup>	9.06	9.07	0.00017	J	mg/kg	
Chlordane (alpha and gamma)	n/a <sup>c</sup>			0.00017	J	mg/kg	
4,4'-DDD	1	8.44	8.46	0.00017	J	mg/kg	0.0
4,4'-DDD	2 <sup>a</sup>	10.25	10.26	0.00017	J	mg/kg	
4,4'-DDE	1	7.66	7.68	0.00033	J	mg/kg	31.6
4,4'-DDE	2 <sup>a</sup>	9.33	9.33	0.00024	J	mg/kg	
4,4'-DDT <sup>d</sup>	1	8.82	8.85	0.00016	J	mg/kg	56.0
4,4'-DDT <sup>b</sup>	2 <sup>a</sup>	10.77	10.78	0.000090	J	mg/kg	

- (a) Final result reported from this column.
- (b) More than 40 % RPD for detected concentrations between the two GC columns.
- (c) Final reported result.
- (d) Associated CCV outside of control limits low.

8.7.15  
8

# GC Identification Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G8G2472-CC2430	<b>Injection Date:</b> 05/10/24
<b>Lab File ID:</b> 8G56407.D	<b>Injection Time:</b> 04:36
<b>Instrument ID:</b> GC8G	<b>Method:</b> SW846 8081B

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<b>Sample ID:</b> JD87833-11	<b>Injection Date:</b> 05/10/24
<b>Lab File ID:</b> 8G56434.D	<b>Injection Time:</b> 15:41
<b>Client ID:</b> SB-11	

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
alpha-Chlordane	1	7.59	7.56	0.0021		mg/kg	71.8
alpha-Chlordane <sup>a</sup>	2 <sup>b</sup>	9.10	9.08	0.00099		mg/kg	
gamma-Chlordane <sup>a</sup>	1 <sup>b</sup>	7.41	7.40	0.00034	J	mg/kg	80.7
gamma-Chlordane <sup>a</sup>	2	8.88	8.86	0.00080		mg/kg	
Chlordane (alpha and gamma)	n/a <sup>c</sup>			0.0013		mg/kg	
4,4'-DDD	1	8.49	8.46	0.00076		mg/kg	9.7
4,4'-DDD	2 <sup>b</sup>	10.28	10.27	0.00069		mg/kg	
4,4'-DDE	1	7.71	7.68	0.0068		mg/kg	21.1
4,4'-DDE	2 <sup>b</sup>	9.36	9.34	0.0055		mg/kg	
4,4'-DDT <sup>d</sup>	1	8.88	8.86	0.0014		mg/kg	19.4
4,4'-DDT <sup>e</sup>	2 <sup>b</sup>	10.80	10.79	0.0017		mg/kg	

- (a) More than 40 % RPD for detected concentrations between the two GC columns.
- (b) Final result reported from this column.
- (c) Final reported result.
- (d) Associated CCV outside of control limits low.
- (e) Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.

8.7.16  
8

# GC Identification Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G8G2470-CC2430	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 8G56335.D	<b>Injection Time:</b> 00:37
<b>Instrument ID:</b> GC8G	<b>Method:</b> SW846 8081B

<b>Sample ID:</b> JD87833-14	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 8G56360.D	<b>Injection Time:</b> 09:40
<b>Client ID:</b> SB-14	

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
beta-BHC	1	5.91	5.91	0.00060		mg/kg	
beta-BHC <sup>a</sup>	2 <sup>b</sup>	6.90	6.89	0.000090	JB	mg/kg	147.8
alpha-Chlordane	1	7.54	7.55	0.0068		mg/kg	
alpha-Chlordane <sup>a</sup>	2 <sup>b</sup>	9.06	9.07	0.0044		mg/kg	42.9
gamma-Chlordane	1	7.39	7.40	0.0031		mg/kg	
gamma-Chlordane	2 <sup>b</sup>	8.85	8.85	0.0026		mg/kg	17.5
Chlordane (alpha and gamma)	n/a <sup>c</sup>			0.0069		mg/kg	
Dieldrin	1	8.01	8.02	0.00073		mg/kg	
Dieldrin	2 <sup>b</sup>	9.58	9.58	0.00061		mg/kg	17.9
4,4'-DDD	1	8.44	8.46	0.0046		mg/kg	
4,4'-DDD	2 <sup>b</sup>	10.25	10.26	0.0040		mg/kg	14.0
4,4'-DDE	1	7.66	7.68	0.0110		mg/kg	
4,4'-DDE	2 <sup>b</sup>	9.33	9.33	0.0090		mg/kg	20.0
4,4'-DDT <sup>d</sup>	1	8.83	8.85	0.0024		mg/kg	
4,4'-DDT <sup>e</sup>	2 <sup>b</sup>	10.78	10.78	0.0029		mg/kg	18.9
Heptachlor epoxide	1	7.23	7.24	0.0016		mg/kg	
Heptachlor epoxide <sup>a</sup>	2 <sup>b</sup>	8.57	8.57	0.00076		mg/kg	71.2

- (a) More than 40 % RPD for detected concentrations between the two GC columns.
- (b) Final result reported from this column.
- (c) Final reported result.
- (d) Associated CCV outside of control limits low.
- (e) Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.

8.7.17  
8

# GC Identification Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G8G2470-CC2430	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 8G56335.D	<b>Injection Time:</b> 00:37
<b>Instrument ID:</b> GC8G	<b>Method:</b> SW846 8081B

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<b>Sample ID:</b> JD87833-15	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 8G56361.D	<b>Injection Time:</b> 10:02
<b>Client ID:</b> DUPE 1	

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
beta-BHC	1	5.91	5.91	0.0013		mg/kg	163.6
beta-BHC <sup>a</sup>	2 <sup>b</sup>	6.90	6.89	0.00013	JB	mg/kg	
alpha-Chlordane	1	7.55	7.55	0.00018	J	mg/kg	18.2
alpha-Chlordane	2 <sup>b</sup>	9.07	9.07	0.00015	J	mg/kg	
Chlordane (alpha and gamma)	n/a <sup>c</sup>			0.00015	J	mg/kg	
4,4'-DDD	1	8.44	8.46	0.00057		mg/kg	92.3
4,4'-DDD <sup>a</sup>	2 <sup>b</sup>	10.24	10.26	0.00021	J	mg/kg	
4,4'-DDT <sup>d</sup>	1	8.81	8.85	0.00087		mg/kg	105.3
4,4'-DDT <sup>a</sup>	2 <sup>b</sup>	10.77	10.78	0.00027	J	mg/kg	

- (a) More than 40 % RPD for detected concentrations between the two GC columns.
- (b) Final result reported from this column.
- (c) Final reported result.
- (d) Associated CCV outside of control limits low.

8.7.18  
8



# GC Identification Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G8G2470-CC2430	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 8G56335.D	<b>Injection Time:</b> 00:37
<b>Instrument ID:</b> GC8G	<b>Method:</b> SW846 8081B

<b>Sample ID:</b> JD87833-16	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 8G56362.D	<b>Injection Time:</b> 10:24
<b>Client ID:</b> DUPE 2	

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
alpha-Chlordane	1	7.54	7.55	0.0016		mg/kg	20.7
alpha-Chlordane	2 <sup>a</sup>	9.07	9.07	0.0013		mg/kg	
gamma-Chlordane	1 <sup>a</sup>	7.39	7.40	0.00068		mg/kg	27.8
gamma-Chlordane	2	8.85	8.85	0.00090		mg/kg	
Chlordane (alpha and gamma)	n/a <sup>b</sup>			0.0020		mg/kg	
Dieldrin	1	8.01	8.02	0.00030	J	mg/kg	6.9
Dieldrin	2 <sup>a</sup>	9.58	9.58	0.00028	J	mg/kg	
4,4'-DDD <sup>c</sup>	1 <sup>a</sup>	8.44	8.46	0.00073		mg/kg	40.4
4,4'-DDD <sup>c</sup>	2	10.25	10.26	0.0011		mg/kg	
4,4'-DDE	1 <sup>a</sup>	7.66	7.68	0.0044		mg/kg	30.8
4,4'-DDE	2	9.33	9.33	0.0060		mg/kg	
4,4'-DDT <sup>d</sup>	1	8.83	8.85	0.00043		mg/kg	73.5
4,4'-DDT <sup>e</sup>	2 <sup>a</sup>	10.78	10.78	0.00093		mg/kg	
Heptachlor epoxide	1	7.23	7.24	0.00036	J	mg/kg	5.7
Heptachlor epoxide	2 <sup>a</sup>	8.57	8.57	0.00034	J	mg/kg	

- (a) Final result reported from this column.
- (b) Final reported result.
- (c) More than 40 % RPD for detected concentrations between the two GC columns.
- (d) Associated CCV outside of control limits low.
- (e) Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only. More than 40% RPD for detected concentrations between the two GC columns.

8.7.19  
8

# GC Identification Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G8G2470-CC2430	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 8G56335.D	<b>Injection Time:</b> 00:37
<b>Instrument ID:</b> GC8G	<b>Method:</b> SW846 8081B

<b>Sample ID:</b> OP54452-BS1	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 8G56338.D	<b>Injection Time:</b> 01:42
<b>Client ID:</b> Blank Spike	

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1	6.58	6.58	4.5		ug/kg	6.9
Aldrin	2 <sup>a</sup>	7.77	7.77	4.2		ug/kg	
alpha-BHC	1	5.53	5.53	6.1		ug/kg	34.6
alpha-BHC	2 <sup>a</sup>	6.38	6.38	4.3		ug/kg	
beta-BHC	1 <sup>a</sup>	5.91	5.91	4.4		ug/kg	0.0
beta-BHC	2	6.89	6.89	4.4		ug/kg	
delta-BHC	1	6.08	6.08	4.7		ug/kg	6.6
delta-BHC	2 <sup>a</sup>	7.26	7.27	4.4		ug/kg	
gamma-BHC (Lindane)	1	5.81	5.81	4.3		ug/kg	2.4
gamma-BHC (Lindane)	2 <sup>a</sup>	6.79	6.79	4.2		ug/kg	
alpha-Chlordane	1	7.55	7.55	4.6		ug/kg	6.7
alpha-Chlordane	2 <sup>a</sup>	9.07	9.07	4.3		ug/kg	
gamma-Chlordane	1	7.39	7.40	4.5		ug/kg	2.2
gamma-Chlordane	2 <sup>a</sup>	8.85	8.85	4.4		ug/kg	
Chlordane (alpha and gamma)	n/a <sup>b</sup>			8.7		ug/kg	
Dieldrin	1	8.02	8.02	4.5		ug/kg	4.5
Dieldrin	2 <sup>a</sup>	9.58	9.58	4.3		ug/kg	
4,4'-DDD	1	8.46	8.46	5.4		ug/kg	13.9
4,4'-DDD	2 <sup>a</sup>	10.26	10.26	4.7		ug/kg	
4,4'-DDE	1 <sup>a</sup>	7.68	7.68	3.9		ug/kg	7.4
4,4'-DDE	2	9.33	9.33	4.2		ug/kg	
4,4'-DDT	1	8.85	8.85	3.1		ug/kg	12.1
4,4'-DDT <sup>c</sup>	2 <sup>a</sup>	10.78	10.78	3.5		ug/kg	
Endrin	1	8.32	8.32	4.4		ug/kg	2.3
Endrin	2 <sup>a</sup>	10.07	10.07	4.3		ug/kg	
Endosulfan sulfate	1	9.87	9.87	4.7		ug/kg	13.6
Endosulfan sulfate	2 <sup>a</sup>	11.44	11.43	4.1		ug/kg	
Endrin aldehyde	1 <sup>a</sup>	9.22	9.22	4.4		ug/kg	0.0
Endrin aldehyde	2	10.97	10.97	4.4		ug/kg	
Endosulfan-I	1	7.71	7.71	5.3		ug/kg	18.6
Endosulfan-I	2 <sup>a</sup>	9.16	9.16	4.4		ug/kg	
Endosulfan-II	1	8.62	8.63	4.8		ug/kg	4.3
Endosulfan-II	2 <sup>a</sup>	10.41	10.41	4.6		ug/kg	
Heptachlor	1 <sup>a</sup>	6.27	6.27	4.2		ug/kg	11.2
Heptachlor	2	7.34	7.34	4.7		ug/kg	
Heptachlor epoxide	1	7.24	7.24	5.0		ug/kg	15.1
Heptachlor epoxide	2 <sup>a</sup>	8.57	8.57	4.3		ug/kg	
Methoxychlor	1	9.61	9.62	3.1		ug/kg	14.9
Methoxychlor <sup>c</sup>	2 <sup>a</sup>	12.00	12.00	3.6		ug/kg	
Endrin ketone	1	10.28	10.28	4.4		ug/kg	4.7
Endrin ketone	2 <sup>a</sup>	12.37	12.37	4.2		ug/kg	

8.7.20  
8

## GC Identification Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G8G2470-CC2430	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 8G56335.D	<b>Injection Time:</b> 00:37
<b>Instrument ID:</b> GC8G	<b>Method:</b> SW846 8081B

<b>Sample ID:</b> OP54452-BS1	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 8G56338.D	<b>Injection Time:</b> 01:42
<b>Client ID:</b> Blank Spike	

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
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- (a) QC results reported from this column.
- (b) Final reported result.
- (c) Reported from the 2nd signal. The %D of the CCV on the 1st signal exceeds the method criteria of 20%, so it being used for confirmation only.

8.7.20  
8

# GC Identification Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G8G2470-CC2430	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 8G56335.D	<b>Injection Time:</b> 00:37
<b>Instrument ID:</b> GC8G	<b>Method:</b> SW846 8081B

<b>Sample ID:</b> OP54452-MS	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 8G56349.D	<b>Injection Time:</b> 05:41
<b>Client ID:</b> Matrix Spike	

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 <sup>a</sup>	6.57	6.58	4.3		ug/kg	17.7
Aldrin	2	7.77	7.77	3.6		ug/kg	
alpha-BHC	1 <sup>a</sup>	5.52	5.53	5.4		ug/kg	27.4
alpha-BHC	2	6.37	6.38	4.1		ug/kg	
beta-BHC	1 <sup>a</sup>	5.89	5.91	4.1		ug/kg	2.4
beta-BHC	2	6.88	6.89	4.2		ug/kg	
delta-BHC	1 <sup>a</sup>	6.06	6.08	4.6		ug/kg	11.5
delta-BHC	2	7.26	7.27	4.1		ug/kg	
gamma-BHC (Lindane)	1 <sup>a</sup>	5.80	5.81	4.2		ug/kg	7.4
gamma-BHC (Lindane)	2	6.78	6.79	3.9		ug/kg	
alpha-Chlordane	1 <sup>a</sup>	7.54	7.55	4.0		ug/kg	10.5
alpha-Chlordane	2	9.06	9.07	3.6		ug/kg	
gamma-Chlordane	1 <sup>a</sup>	7.38	7.40	3.8		ug/kg	11.1
gamma-Chlordane	2	8.84	8.85	3.4		ug/kg	
Chlordane (alpha and gamma)	n/a <sup>b</sup>			7.0		ug/kg	
Dieldrin	1 <sup>a</sup>	8.01	8.02	3.9		ug/kg	10.8
Dieldrin	2	9.58	9.58	3.5		ug/kg	
4,4'-DDD	1 <sup>a</sup>	8.44	8.46	4.7		ug/kg	23.8
4,4'-DDD	2	10.25	10.26	3.7		ug/kg	
4,4'-DDE	1 <sup>a</sup>	7.66	7.68	3.5		ug/kg	2.9
4,4'-DDE	2	9.33	9.33	3.4		ug/kg	
4,4'-DDT	1 <sup>a</sup>	8.83	8.85	2.1		ug/kg	13.3
4,4'-DDT	2	10.77	10.78	2.4		ug/kg	
Endrin	1 <sup>a</sup>	8.31	8.32	3.8		ug/kg	2.7
Endrin	2	10.06	10.07	3.7		ug/kg	
Endosulfan sulfate	1 <sup>a</sup>	9.86	9.87	3.6		ug/kg	8.7
Endosulfan sulfate	2	11.43	11.43	3.3		ug/kg	
Endrin aldehyde	1 <sup>a</sup>	9.21	9.22	3.6		ug/kg	8.7
Endrin aldehyde	2	10.97	10.97	3.3		ug/kg	
Endosulfan-I	1 <sup>a</sup>	7.70	7.71	4.1		ug/kg	13.0
Endosulfan-I	2	9.15	9.16	3.6		ug/kg	
Endosulfan-II	1 <sup>a</sup>	8.61	8.63	3.9		ug/kg	13.7
Endosulfan-II	2	10.41	10.41	3.4		ug/kg	
Heptachlor	1 <sup>a</sup>	6.26	6.27	4.0		ug/kg	2.5
Heptachlor	2	7.34	7.34	4.1		ug/kg	
Heptachlor epoxide	1 <sup>a</sup>	7.23	7.24	4.6		ug/kg	24.4
Heptachlor epoxide	2	8.56	8.57	3.6		ug/kg	
Methoxychlor	1 <sup>a</sup>	9.60	9.62	2.1		ug/kg	32.0
Methoxychlor	2	12.00	12.00	2.9		ug/kg	
Endrin ketone	1 <sup>a</sup>	10.28	10.28	3.6		ug/kg	5.7
Endrin ketone	2	12.37	12.37	3.4		ug/kg	

8.7.21  
8

## GC Identification Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G8G2470-CC2430	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 8G56335.D	<b>Injection Time:</b> 00:37
<b>Instrument ID:</b> GC8G	<b>Method:</b> SW846 8081B

<b>Sample ID:</b> OP54452-MS	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 8G56349.D	<b>Injection Time:</b> 05:41
<b>Client ID:</b> Matrix Spike	

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
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- (a) QC results reported from this column.
- (b) Final reported result.

8.7.21

8

# GC Identification Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G8G2470-CC2430	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 8G56335.D	<b>Injection Time:</b> 00:37
<b>Instrument ID:</b> GC8G	<b>Method:</b> SW846 8081B

<b>Sample ID:</b> OP54452-MSD	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 8G56350.D	<b>Injection Time:</b> 06:03
<b>Client ID:</b> Matrix Spike Duplicate	

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 <sup>a</sup>	6.57	6.58	4.5		ug/kg	16.9
Aldrin	2	7.77	7.77	3.8		ug/kg	
alpha-BHC	1 <sup>a</sup>	5.52	5.53	5.9		ug/kg	36.0
alpha-BHC	2	6.37	6.38	4.1		ug/kg	
beta-BHC	1 <sup>a</sup>	5.89	5.91	4.1		ug/kg	2.4
beta-BHC	2	6.88	6.89	4.2		ug/kg	
delta-BHC	1 <sup>a</sup>	6.06	6.08	4.6		ug/kg	6.7
delta-BHC	2	7.26	7.27	4.3		ug/kg	
gamma-BHC (Lindane)	1 <sup>a</sup>	5.80	5.81	4.2		ug/kg	4.9
gamma-BHC (Lindane)	2	6.79	6.79	4.0		ug/kg	
alpha-Chlordane	1 <sup>a</sup>	7.54	7.55	4.3		ug/kg	9.8
alpha-Chlordane	2	9.06	9.07	3.9		ug/kg	
gamma-Chlordane	1 <sup>a</sup>	7.39	7.40	4.0		ug/kg	10.5
gamma-Chlordane	2	8.85	8.85	3.6		ug/kg	
Chlordane (alpha and gamma)	n/a <sup>b</sup>			7.5		ug/kg	
Dieldrin	1 <sup>a</sup>	8.01	8.02	4.2		ug/kg	10.0
Dieldrin	2	9.58	9.58	3.8		ug/kg	
4,4'-DDD	1 <sup>a</sup>	8.44	8.46	5.0		ug/kg	17.4
4,4'-DDD	2	10.25	10.26	4.2		ug/kg	
4,4'-DDE	1 <sup>a</sup>	7.66	7.68	3.7		ug/kg	5.6
4,4'-DDE	2	9.33	9.33	3.5		ug/kg	
4,4'-DDT	1 <sup>a</sup>	8.84	8.85	2.2		ug/kg	12.8
4,4'-DDT	2	10.77	10.78	2.5		ug/kg	
Endrin	1 <sup>a</sup>	8.31	8.32	4.1		ug/kg	2.5
Endrin	2	10.07	10.07	4.0		ug/kg	
Endosulfan sulfate	1 <sup>a</sup>	9.86	9.87	4.0		ug/kg	13.3
Endosulfan sulfate	2	11.43	11.43	3.5		ug/kg	
Endrin aldehyde	1 <sup>a</sup>	9.21	9.22	4.0		ug/kg	10.5
Endrin aldehyde	2	10.97	10.97	3.6		ug/kg	
Endosulfan-I	1 <sup>a</sup>	7.70	7.71	4.5		ug/kg	16.9
Endosulfan-I	2	9.15	9.16	3.8		ug/kg	
Endosulfan-II	1 <sup>a</sup>	8.61	8.63	4.2		ug/kg	7.4
Endosulfan-II	2	10.41	10.41	3.9		ug/kg	
Heptachlor	1 <sup>a</sup>	6.26	6.27	4.0		ug/kg	2.5
Heptachlor	2	7.34	7.34	4.1		ug/kg	
Heptachlor epoxide	1 <sup>a</sup>	7.23	7.24	4.9		ug/kg	22.7
Heptachlor epoxide	2	8.57	8.57	3.9		ug/kg	
Methoxychlor	1 <sup>a</sup>	9.60	9.62	2.4		ug/kg	28.6
Methoxychlor	2	12.00	12.00	3.2		ug/kg	
Endrin ketone	1 <sup>a</sup>	10.28	10.28	3.9		ug/kg	10.8
Endrin ketone	2	12.37	12.37	3.5		ug/kg	

8.7.22  
8

## GC Identification Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G8G2470-CC2430	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 8G56335.D	<b>Injection Time:</b> 00:37
<b>Instrument ID:</b> GC8G	<b>Method:</b> SW846 8081B

<b>Sample ID:</b> OP54452-MSD	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 8G56350.D	<b>Injection Time:</b> 06:03
<b>Client ID:</b> Matrix Spike Duplicate	

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
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- (a) QC results reported from this column.
- (b) Final reported result.

8.7.22  
8

# GC Identification Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G2G6085-CC6081	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 2G231731.D	<b>Injection Time:</b> 04:02
<b>Instrument ID:</b> GC2G	<b>Method:</b> SW846 8082A

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<b>Sample ID:</b> OP54453-BS1	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 2G231734.D	<b>Injection Time:</b> 05:15
<b>Client ID:</b> Blank Spike	

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aroclor 1016 <sup>a</sup>	1 <sup>b</sup>			37.8		ug/kg	9.1
Aroclor 1016 <sup>a</sup>	2			34.5		ug/kg	
AR1016-B	1	5.25	5.26	38.8		ug/kg	
AR1016-B	2	6.02	6.02	37.2		ug/kg	
AR1016-C	1	5.62	5.62	38.3		ug/kg	
AR1016-C	2	6.52	6.52	32.2		ug/kg	
AR1016-D	1	5.75	5.75	36.5		ug/kg	
AR1016-D	2	6.69	6.69	34.1		ug/kg	
Aroclor 1260 <sup>a</sup>	1 <sup>b</sup>			39.3		ug/kg	26.5
Aroclor 1260 <sup>a</sup>	2			30.1		ug/kg	
AR1260-A	1	8.55	8.55	37.2		ug/kg	
AR1260-A	2	10.42	10.42	29.1		ug/kg	
AR1260-B	1	8.79	8.79	41.4		ug/kg	
AR1260-B	2	10.52	10.52	31.4		ug/kg	
AR1260-C	1	9.26	9.26	39.3		ug/kg	
AR1260-C	2	10.86	10.86	29.9		ug/kg	

- (a) Reported from the 1st signal. The %D of the CCV on the 2nd signal exceeds the method criteria of 20%, so it being used for confirmation only.
- (b) QC results reported from this column.

8.7.23  
8



# GC Identification Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G2G6085-CC6081	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 2G231731.D	<b>Injection Time:</b> 04:02
<b>Instrument ID:</b> GC2G	<b>Method:</b> SW846 8082A

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<b>Sample ID:</b> OP54453-MS	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 2G231735.D	<b>Injection Time:</b> 05:39
<b>Client ID:</b> Matrix Spike	

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aroclor 1016	1 <sup>a</sup>			36.4		ug/kg	5.6
Aroclor 1016	2			34.4		ug/kg	
AR1016-B	1	5.25	5.26	37.4		ug/kg	
AR1016-B	2	6.02	6.02	37.3		ug/kg	
AR1016-C	1	5.62	5.62	37.7		ug/kg	
AR1016-C	2	6.52	6.52	32.2		ug/kg	
AR1016-D	1	5.75	5.75	34.2		ug/kg	
AR1016-D	2	6.69	6.69	33.5		ug/kg	
Aroclor 1260	1 <sup>a</sup>			41.4		ug/kg	30.0
Aroclor 1260	2			30.6		ug/kg	
AR1260-A	1	8.55	8.55	40.9		ug/kg	
AR1260-A	2	10.42	10.42	30.1		ug/kg	
AR1260-B	1	8.79	8.79	41.4		ug/kg	
AR1260-B	2	10.52	10.52	30.7		ug/kg	
AR1260-C	1	9.26	9.26	41.7		ug/kg	
AR1260-C	2	10.85	10.86	31.0		ug/kg	

(a) QC results reported from this column.

8.7.24  
8

# GC Identification Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G2G6085-CC6081	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 2G231731.D	<b>Injection Time:</b> 04:02
<b>Instrument ID:</b> GC2G	<b>Method:</b> SW846 8082A

<b>Sample ID:</b> OP54453-MSD	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 2G231736.D	<b>Injection Time:</b> 06:03
<b>Client ID:</b> Matrix Spike Duplicate	

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aroclor 1016	1 <sup>a</sup>			38.8		ug/kg	5.3
Aroclor 1016	2			36.8		ug/kg	
AR1016-B	1	5.25	5.26	38.8		ug/kg	
AR1016-B	2	6.02	6.02	39.1		ug/kg	
AR1016-C	1	5.62	5.62	39.3		ug/kg	
AR1016-C	2	6.52	6.52	34.5		ug/kg	
AR1016-D	1	5.75	5.75	38.3		ug/kg	
AR1016-D	2	6.69	6.69	36.7		ug/kg	
Aroclor 1260	1 <sup>a</sup>			41.5		ug/kg	28.0
Aroclor 1260	2			31.3		ug/kg	
AR1260-A	1	8.55	8.55	38.3		ug/kg	
AR1260-A	2	10.42	10.42	30.8		ug/kg	
AR1260-B	1	8.79	8.79	43.0		ug/kg	
AR1260-B	2	10.52	10.52	31.4		ug/kg	
AR1260-C	1	9.26	9.26	43.1		ug/kg	
AR1260-C	2	10.86	10.86	31.8		ug/kg	

(a) QC results reported from this column.

8.7.25  
8

# Surrogate Recovery Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Method:</b> SW846 8081B	<b>Matrix:</b> AQ
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 <sup>a</sup>	S1 <sup>b</sup>	S2 <sup>a</sup>	S2 <sup>b</sup>
JD87833-17	1G196210.D	54	55	28	25
JD87833-17R	1G196431.D	88	92	29	27
OP54399-BS1	1G196196.D	57	55	36	31
OP54399-BSD	1G196197.D	61	58	42	36
OP54399-MB1	1G196195.D	36	35	41	33
OP54554-BS1	1G196360.D	74	72	79	66
OP54554-BSD	1G196361.D	42	43	33	27
OP54554-MB1	1G196359.D	67	65	84	67

Surrogate Compounds	Recovery Limits
---------------------	-----------------

S1 = Tetrachloro-m-xylene	10-175%
S2 = Decachlorobiphenyl	10-128%

- (a) Recovery from GC signal #1
- (b) Recovery from GC signal #2

8.8.1  
8

# Surrogate Recovery Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Method:</b> SW846 8082A	<b>Matrix:</b> AQ
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 <sup>a</sup>	S1 <sup>b</sup>	S2 <sup>a</sup>	S2 <sup>b</sup>
JD87833-17	3G141341.D	46	46	19	18
OP54400-BS1	3G141338.D	56	50	22	20
OP54400-BSD	3G141339.D	57	56	34	34
OP54400-MB1	3G141337.D	33	29	28	26

Surrogate Compounds	Recovery Limits
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S1 = Tetrachloro-m-xylene	10-169%
S2 = Decachlorobiphenyl	10-130%

- (a) Recovery from GC signal #1
- (b) Recovery from GC signal #2

8.8.2  
8

# Surrogate Recovery Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Method:</b> SW846 8081B	<b>Matrix:</b> SO
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 <sup>a</sup>	S1 <sup>b</sup>	S2 <sup>a</sup>	S2 <sup>b</sup>
JD87833-1	8G56351.D	80	83	54	86
JD87833-3	8G56352.D	97	84	55	127
JD87833-4	8G56353.D	75	75	44	112
JD87833-5	8G56401.D	90	84	54	104
JD87833-7	8G56355.D	87	84	58	111
JD87833-8	8G56356.D	89	81	50	108
JD87833-10	8G56357.D	81	86	58	88
JD87833-11	8G56434.D	98	80	68	83
JD87833-12	8G56359.D	68	89	47	81
JD87833-14	8G56360.D	99	88	61	88
JD87833-15	8G56361.D	93	83	56	107
JD87833-16	8G56362.D	59	89	46	106
OP54452-BS1	8G56338.D	106	99	94	97
OP54452-MB1	8G56337.D	97	98	88	95
OP54452-MS	8G56349.D	104	94	76	85
OP54452-MSD	8G56350.D	114	95	83	80

<b>Surrogate Compounds</b>	<b>Recovery Limits</b>
----------------------------	------------------------

S1 = Tetrachloro-m-xylene	46-145%
S2 = Decachlorobiphenyl	29-163%

- (a) Recovery from GC signal #1
- (b) Recovery from GC signal #2

8.8.3  
8

# Surrogate Recovery Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Method:</b> SW846 8082A	<b>Matrix:</b> SO
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 <sup>a</sup>	S1 <sup>b</sup>	S2 <sup>a</sup>	S2 <sup>b</sup>
JD87833-1	2G231737.D	95	90	94	103
JD87833-3	2G231738.D	81	78	80	123
JD87833-4	2G231739.D	81	77	73	118
JD87833-5	2G231744.D	78	75	76	122
JD87833-7	2G231745.D	77	77	67	110
JD87833-8	2G231746.D	80	76	66	108
JD87833-10	2G231747.D	89	81	68	91
JD87833-11	2G231748.D	79	80	63	96
JD87833-12	2G231749.D	66	71	54	89
JD87833-14	2G231750.D	87	79	61	96
JD87833-15	2G231755.D	82	82	68	109
JD87833-16	2G231756.D	80	78	67	88
OP54453-BS1	2G231734.D	98	98	101	94
OP54453-MB1	2G231733.D	100	99	100	94
OP54453-MS	2G231735.D	97	98	98	95
OP54453-MSD	2G231736.D	99	99	99	94

<b>Surrogate Compounds</b>	<b>Recovery Limits</b>
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S1 = Tetrachloro-m-xylene	42-159%
S2 = Decachlorobiphenyl	18-154%

- (a) Recovery from GC signal #1
- (b) Recovery from GC signal #2

8.8.4  
8

# GC Surrogate Retention Time Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G3G5173-CC5160	<b>Injection Date:</b> 05/08/24
<b>Lab File ID:</b> 3G141327.D	<b>Injection Time:</b> 00:33
<b>Instrument ID:</b> GC3G	<b>Method:</b> SW846 8082A

	S1 <sup>a</sup> RT	S1 <sup>b</sup> RT	S2 <sup>a</sup> RT	S2 <sup>b</sup> RT
Check Std	3.47	4.06	10.98	12.59

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 <sup>a</sup> RT	S1 <sup>b</sup> RT	S2 <sup>a</sup> RT	S2 <sup>b</sup> RT
OP54398-MB1	3G141329.D	05/08/24	01:07	3.47	4.08	10.98	12.59
OP54398-BS1	3G141330.D	05/08/24	01:23	3.47	4.07	10.97	12.59
OP54398-BSD	3G141331.D	05/08/24	01:40	3.47	4.07	10.97	12.59
ZZZZZZ	3G141332.D	05/08/24	01:56	3.42	4.07	10.97	12.59
ZZZZZZ	3G141333.D	05/08/24	02:13	3.47	4.08	10.97	12.59
ZZZZZZ	3G141334.D	05/08/24	02:30	3.47	4.08	10.97	12.59
ZZZZZZ	3G141335.D	05/08/24	02:46	3.51	4.11	11.00	12.61
OP54400-MB1	3G141337.D	05/08/24	03:20	3.47	4.08	10.97	12.59
OP54400-BS1	3G141338.D	05/08/24	03:36	3.47	4.08	10.97	12.59
OP54400-BSD	3G141339.D	05/08/24	03:53	3.47	4.08	10.97	12.59
ZZZZZZ	3G141340.D	05/08/24	04:10	3.47	4.08	10.97	12.59
JD87833-17	3G141341.D	05/08/24	04:26	3.47	4.08	10.97	12.59
OP54402A-MB1	3G141343.D	05/08/24	05:00	3.47	4.08	10.97	12.59
OP54402A-BS1	3G141344.D	05/08/24	05:16	3.47	4.08	10.97	12.59
OP54402A-BSD	3G141345.D	05/08/24	05:33	3.47	4.08	10.97	12.59
ZZZZZZ	3G141346.D	05/08/24	05:49	3.47	4.08	10.97	12.59
ZZZZZZ	3G141347.D	05/08/24	06:06	3.47	4.08	10.97	12.59
ZZZZZZ	3G141348.D	05/08/24	06:23	3.47	4.08	10.97	12.59

**Surrogate Compounds**

S1 = Tetrachloro-m-xylene  
 S2 = Decachlorobiphenyl

- (a) Retention time from GC signal #1
- (b) Retention time from GC signal #2

8.9.1  
8

# GC Surrogate Retention Time Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G1G7004-CC6859	<b>Injection Date:</b> 05/07/24
<b>Lab File ID:</b> 1G196193.D	<b>Injection Time:</b> 23:51
<b>Instrument ID:</b> GC1G	<b>Method:</b> SW846 8081B

	S1 <sup>a</sup> RT	S1 <sup>b</sup> RT	S2 <sup>a</sup> RT	S2 <sup>b</sup> RT
Check Std	1.70	1.73	8.61	9.95

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 <sup>a</sup> RT	S1 <sup>b</sup> RT	S2 <sup>a</sup> RT	S2 <sup>b</sup> RT
OP54399-MB1	1G196195.D	05/08/24	00:24	1.70	1.73	8.61	9.95
OP54399-BS1	1G196196.D	05/08/24	00:40	1.70	1.73	8.61	9.95
OP54399-BSD	1G196197.D	05/08/24	00:55	1.70	1.73	8.61	9.95
OP54397A-MB1	1G196198.D	05/08/24	01:10	1.70	1.73	8.61	9.95
OP54397-MB1	1G196198.D	05/08/24	01:10	1.70	1.73	8.61	9.95
OP54397A-BS1	1G196199.D	05/08/24	01:26	1.70	1.74	8.61	9.95
OP54397-BS1	1G196199.D	05/08/24	01:26	1.70	1.74	8.61	9.95
OP54397A-BSD	1G196200.D	05/08/24	01:41	1.70	1.74	8.61	9.95
OP54397-BSD	1G196200.D	05/08/24	01:41	1.70	1.74	8.61	9.95
ZZZZZZ	1G196201.D	05/08/24	01:56	1.70	1.74	8.61	9.94
ZZZZZZ	1G196202.D	05/08/24	02:12	1.70	1.73	8.61	9.95
ZZZZZZ	1G196203.D	05/08/24	02:27	1.69	1.73	8.61	9.95
ZZZZZZ	1G196204.D	05/08/24	02:42	1.69	1.73	8.61	9.95
ZZZZZZ	1G196205.D	05/08/24	02:57	1.70	1.74	8.61	9.95
ZZZZZZ	1G196206.D	05/08/24	03:13	1.70	1.73	8.61	9.95
ZZZZZZ	1G196207.D	05/08/24	03:28	1.69	1.73	8.61	9.95
ZZZZZZ	1G196208.D	05/08/24	03:43	1.70	1.74	8.61	9.95
ZZZZZZ	1G196209.D	05/08/24	03:59	1.69	1.73	8.60	9.94
JD87833-17	1G196210.D	05/08/24	04:14	1.70	1.74	8.61	9.95
ZZZZZZ	1G196211.D	05/08/24	04:29	1.69	1.74	8.61	9.95
ZZZZZZ	1G196212.D	05/08/24	04:45	1.70	1.74	8.61	9.95
ZZZZZZ	1G196213.D	05/08/24	05:00	1.70	1.73	8.61	9.94

## Surrogate Compounds

S1 = Tetrachloro-m-xylene  
 S2 = Decachlorobiphenyl

- (a) Retention time from GC signal #1
- (b) Retention time from GC signal #2

8.9.2  
8



# GC Surrogate Retention Time Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G1G7013-CC6859	<b>Injection Date:</b> 05/14/24
<b>Lab File ID:</b> 1G196352.D	<b>Injection Time:</b> 08:13
<b>Instrument ID:</b> GC1G	<b>Method:</b> SW846 8081B

	S1 <sup>a</sup> RT	S1 <sup>b</sup> RT	S2 <sup>a</sup> RT	S2 <sup>b</sup> RT
Check Std	1.69	1.72	8.61	9.95

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 <sup>a</sup> RT	S1 <sup>b</sup> RT	S2 <sup>a</sup> RT	S2 <sup>b</sup> RT
OP54558A-MB1	1G196354.D	05/14/24	08:52	1.68	1.72	8.60	9.94
OP54558A-BS1	1G196355.D	05/14/24	09:07	1.68	1.73	8.60	9.95
OP54558A-BSD	1G196356.D	05/14/24	09:22	1.68	1.72	8.60	9.94
OP54558A-BS13	1G196357.D	05/14/24	09:38	1.68	1.73	8.60	9.95
OP54558A-BS14	1G196358.D	05/14/24	09:53	1.68	1.72	8.60	9.95
OP54554-MB1	1G196359.D	05/14/24	10:08	1.68	1.72	8.60	9.95
OP54554A-MB1	1G196359.D	05/14/24	10:08	1.68	1.72	8.60	9.95
OP54554-BS1	1G196360.D	05/14/24	10:24	1.68	1.72	8.60	9.94
OP54554A-BS1	1G196360.D	05/14/24	10:24	1.68	1.72	8.60	9.94
OP54554-BSD	1G196361.D	05/14/24	10:39	1.68	1.72	8.60	9.95
OP54554A-BSD	1G196361.D	05/14/24	10:39	1.68	1.72	8.60	9.95
OP54554A-BS13	1G196362.D	05/14/24	10:54	1.68	1.72	8.60	9.95
OP54554A-BS14	1G196363.D	05/14/24	11:10	1.68	1.73	8.60	9.95
ZZZZZZ	1G196364.D	05/14/24	11:25	1.67	1.73	8.60	9.94
ZZZZZZ	1G196365.D	05/14/24	11:41	1.68	1.72	8.60	9.95
ZZZZZZ	1G196366.D	05/14/24	11:56	1.68	1.74	8.60	9.95
ZZZZZZ	1G196367.D	05/14/24	12:11	1.68	1.72	8.60	9.94
ZZZZZZ	1G196368.D	05/14/24	12:27	1.68	1.73	8.60	9.94
ZZZZZZ	1G196369.D	05/14/24	12:42	1.68	1.72	8.60	9.95

**Surrogate Compounds**

S1 = Tetrachloro-m-xylene  
 S2 = Decachlorobiphenyl

- (a) Retention time from GC signal #1
- (b) Retention time from GC signal #2

8.9.3  
8

# GC Surrogate Retention Time Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G1G7016-CC6859	<b>Injection Date:</b> 05/15/24
<b>Lab File ID:</b> 1G196428.D	<b>Injection Time:</b> 10:36
<b>Instrument ID:</b> GC1G	<b>Method:</b> SW846 8081B

	S1 <sup>a</sup> RT	S1 <sup>b</sup> RT	S2 <sup>a</sup> RT	S2 <sup>b</sup> RT
Check Std	1.69	1.73	8.60	9.95

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 <sup>a</sup> RT	S1 <sup>b</sup> RT	S2 <sup>a</sup> RT	S2 <sup>b</sup> RT
ZZZZZZ	1G196430.D	05/15/24	11:33	1.69	1.73	8.62	9.96
JD87833-17R	1G196431.D	05/15/24	11:49	1.69	1.73	8.61	9.96
ZZZZZZ	1G196433.D	05/15/24	12:19	1.69	1.73	8.60	9.95
ZZZZZZ	1G196434.D	05/15/24	12:35	1.69	1.73	8.61	9.95
ZZZZZZ	1G196435.D	05/15/24	12:50	1.69	1.73	8.60	9.96

## Surrogate Compounds

S1 = Tetrachloro-m-xylene  
 S2 = Decachlorobiphenyl

- (a) Retention time from GC signal #1
- (b) Retention time from GC signal #2

8.9.4  
8

# GC Surrogate Retention Time Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G8G2470-CC2430	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 8G56335.D	<b>Injection Time:</b> 00:37
<b>Instrument ID:</b> GC8G	<b>Method:</b> SW846 8081B

	S1 <sup>a</sup> RT	S1 <sup>b</sup> RT	S2 <sup>a</sup> RT	S2 <sup>b</sup> RT
Check Std	5.07	5.73	12.05	14.19

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 <sup>a</sup> RT	S1 <sup>b</sup> RT	S2 <sup>a</sup> RT	S2 <sup>b</sup> RT
OP54452-MB1	8G56337.D	05/09/24	01:20	5.07	5.73	12.05	14.19
OP54452-BS1	8G56338.D	05/09/24	01:42	5.07	5.73	12.05	14.19
ZZZZZZ	8G56339.D	05/09/24	02:04	5.07	5.73	12.05	14.19
ZZZZZZ	8G56341.D	05/09/24	02:47	5.07	5.73	12.05	14.18
ZZZZZZ	8G56342.D	05/09/24	03:09	5.07	5.73	12.05	14.19
ZZZZZZ	8G56343.D	05/09/24	03:31	5.07	5.73	12.04	14.18
ZZZZZZ	8G56344.D	05/09/24	03:52	5.07	5.73	12.04	14.18
ZZZZZZ	8G56345.D	05/09/24	04:14	5.06	5.73	12.04	14.18
ZZZZZZ	8G56346.D	05/09/24	04:36	5.07	5.73	12.04	14.18
ZZZZZZ	8G56347.D	05/09/24	04:58	5.07	5.73	12.04	14.18
OP54452-MS	8G56349.D	05/09/24	05:41	5.07	5.73	12.04	14.19
OP54452-MSD	8G56350.D	05/09/24	06:03	5.07	5.73	12.05	14.18
JD87833-1	8G56351.D	05/09/24	06:24	5.07	5.73	12.04	14.18
JD87833-3	8G56352.D	05/09/24	06:46	5.07	5.73	12.04	14.18
JD87833-4	8G56353.D	05/09/24	07:08	5.07	5.74	12.04	14.18
JD87833-7	8G56355.D	05/09/24	07:52	5.07	5.73	12.04	14.18
JD87833-8	8G56356.D	05/09/24	08:13	5.07	5.73	12.04	14.18
JD87833-10	8G56357.D	05/09/24	08:35	5.07	5.73	12.04	14.18
JD87833-12	8G56359.D	05/09/24	09:19	5.07	5.73	12.04	14.19
JD87833-14	8G56360.D	05/09/24	09:40	5.07	5.74	12.04	14.18
JD87833-15	8G56361.D	05/09/24	10:02	5.07	5.74	12.04	14.18
JD87833-16	8G56362.D	05/09/24	10:24	5.07	5.74	12.04	14.19
JD87772-1	8G56363.D	05/09/24	10:45	5.07	5.74	12.05	14.18
ZZZZZZ	8G56364.D	05/09/24	11:07	5.07	5.74	12.05	14.19
ZZZZZZ	8G56365.D	05/09/24	11:29	5.07	5.73	12.04	14.18
ZZZZZZ	8G56366.D	05/09/24	11:50	5.07	5.74	12.05	14.19
ZZZZZZ	8G56367.D	05/09/24	12:12	5.07	5.73	12.04	14.18

## Surrogate Compounds

S1 = Tetrachloro-m-xylene  
 S2 = Decachlorobiphenyl

- (a) Retention time from GC signal #1
- (b) Retention time from GC signal #2

8.9.5  
8

# GC Surrogate Retention Time Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G8G2471-CC2430	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 8G56374.D	<b>Injection Time:</b> 15:31
<b>Instrument ID:</b> GC8G	<b>Method:</b> SW846 8081B

	S1 <sup>a</sup> RT	S1 <sup>b</sup> RT	S2 <sup>a</sup> RT	S2 <sup>b</sup> RT
Check Std	5.08	5.75	12.07	14.20

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 <sup>a</sup> RT	S1 <sup>b</sup> RT	S2 <sup>a</sup> RT	S2 <sup>b</sup> RT
OP54426-MB1	8G56377.D	05/09/24	16:44	5.09	5.75	12.07	14.20
OP54426-BS1	8G56378.D	05/09/24	17:06	5.09	5.75	12.07	14.20
ZZZZZZ	8G56379.D	05/09/24	17:28	5.08	5.75	12.07	14.20
ZZZZZZ	8G56380.D	05/09/24	17:50	5.08	5.75	12.06	14.20
ZZZZZZ	8G56381.D	05/09/24	18:11	5.08	5.75	12.06	14.20
OP54426-MS	8G56382.D	05/09/24	18:33	5.08	5.75	12.06	14.20
OP54426-MSD	8G56383.D	05/09/24	18:55	5.08	5.75	12.06	14.20
LB1891-1	8G56384.D	05/09/24	19:17	5.08	5.74	12.06	14.19
ZZZZZZ	8G56385.D	05/09/24	19:39	5.08	5.75	12.06	14.20
ZZZZZZ	8G56386.D	05/09/24	20:00	5.08	5.75	12.06	14.20
ZZZZZZ	8G56387.D	05/09/24	20:22	5.09	5.75	12.06	14.20
ZZZZZZ	8G56388.D	05/09/24	20:44	5.08	5.75	12.06	14.20
ZZZZZZ	8G56389.D	05/09/24	21:05	5.08	5.75	12.07	14.20
ZZZZZZ	8G56390.D	05/09/24	21:27	5.08	5.75	12.06	14.20
ZZZZZZ	8G56391.D	05/09/24	21:49	5.08	5.74	12.06	14.20
ZZZZZZ	8G56392.D	05/09/24	22:10	5.08	5.74	12.06	14.20
ZZZZZZ	8G56393.D	05/09/24	22:32	5.08	5.74	12.06	14.20
ZZZZZZ	8G56394.D	05/09/24	22:54	5.08	5.74	12.06	14.19
ZZZZZZ	8G56395.D	05/09/24	23:16	5.08	5.74	12.06	14.20
ZZZZZZ	8G56396.D	05/09/24	23:37	5.08	5.74	12.06	14.19
ZZZZZZ	8G56397.D	05/09/24	23:59	5.08	5.74	12.06	14.19
ZZZZZZ	8G56398.D	05/10/24	00:21	5.08	5.74	12.06	14.19
ZZZZZZ	8G56399.D	05/10/24	00:43	5.08	5.74	12.06	14.19
ZZZZZZ	8G56400.D	05/10/24	01:05	5.07	5.74	12.06	14.19
JD87833-5	8G56401.D	05/10/24	01:27	5.08	5.74	12.06	14.19

## Surrogate Compounds

S1 = Tetrachloro-m-xylene  
 S2 = Decachlorobiphenyl

- (a) Retention time from GC signal #1
- (b) Retention time from GC signal #2

8.9.6  
8

# GC Surrogate Retention Time Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G8G2472-CC2430	<b>Injection Date:</b> 05/10/24
<b>Lab File ID:</b> 8G56407.D	<b>Injection Time:</b> 04:36
<b>Instrument ID:</b> GC8G	<b>Method:</b> SW846 8081B

	S1 <sup>a</sup> RT	S1 <sup>b</sup> RT	S2 <sup>a</sup> RT	S2 <sup>b</sup> RT
Check Std	5.08	5.74	12.06	14.19

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 <sup>a</sup> RT	S1 <sup>b</sup> RT	S2 <sup>a</sup> RT	S2 <sup>b</sup> RT
OP54526-MB1	8G56409.D	05/10/24	05:20	5.08	5.74	12.07	14.19
OP54526-BS1	8G56410.D	05/10/24	05:41	5.08	5.74	12.07	14.20
OP54526-LS12	8G56411.D	05/10/24	06:03	5.08	5.74	12.06	14.19
OP54526-MS	8G56411.D	05/10/24	06:03	5.08	5.74	12.06	14.19
OP54526-MSD	8G56412.D	05/10/24	06:25	5.08	5.74	12.06	14.19
OP54526-LB12	8G56413.D	05/10/24	06:47	5.08	5.74	12.06	14.19
ZZZZZZ	8G56414.D	05/10/24	07:09	5.08	5.74	12.06	14.19
JD87790-2	8G56415.D	05/10/24	07:31	5.08	5.74	12.06	14.19
ZZZZZZ	8G56416.D	05/10/24	07:53	5.08	5.74	12.06	14.19
ZZZZZZ	8G56417.D	05/10/24	08:15	5.08	5.74	12.06	14.19
ZZZZZZ	8G56418.D	05/10/24	08:37	5.08	5.74	12.06	14.19
ZZZZZZ	8G56419.D	05/10/24	08:58	5.08	5.74	12.06	14.19
ZZZZZZ	8G56420.D	05/10/24	09:20	5.08	5.74	12.06	14.19
ZZZZZZ	8G56421.D	05/10/24	09:42	5.08	5.74	12.06	14.19
ZZZZZZ	8G56422.D	05/10/24	10:04	5.08	5.74	12.06	14.19
ZZZZZZ	8G56423.D	05/10/24	10:26	5.08	5.74	12.06	14.19
ZZZZZZ	8G56424.D	05/10/24	10:48	5.08	5.74	12.06	14.19
ZZZZZZ	8G56425.D	05/10/24	11:10	5.08	5.74	12.06	14.19
ZZZZZZ	8G56426.D	05/10/24	11:31	5.08	5.74	12.06	14.19
ZZZZZZ	8G56427.D	05/10/24	11:53	5.08	5.74	12.06	14.19
ZZZZZZ	8G56428.D	05/10/24	12:15	5.08	5.74	12.06	14.19
ZZZZZZ	8G56429.D	05/10/24	12:37	5.08	5.74	12.06	14.19
ZZZZZZ	8G56430.D	05/10/24	12:59	5.08	5.74	12.06	14.19
ZZZZZZ	8G56431.D	05/10/24	13:21	5.08	5.74	12.06	14.19
ZZZZZZ	8G56432.D	05/10/24	13:42	5.08	5.74	12.06	14.19
ZZZZZZ	8G56433.D	05/10/24	14:04	5.08	5.74	12.06	14.19
JD87833-11	8G56434.D	05/10/24	15:41	5.12	5.79	12.08	14.20

## Surrogate Compounds

S1 = Tetrachloro-m-xylene  
 S2 = Decachlorobiphenyl

- (a) Retention time from GC signal #1
- (b) Retention time from GC signal #2

8.9.7  
8

# GC Surrogate Retention Time Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G2G6085-CC6081	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 2G231731.D	<b>Injection Time:</b> 04:02
<b>Instrument ID:</b> GC2G	<b>Method:</b> SW846 8082A

	S1 <sup>a</sup> RT	S1 <sup>b</sup> RT	S2 <sup>a</sup> RT	S2 <sup>b</sup> RT
Check Std	4.69	5.18	11.32	12.43

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 <sup>a</sup> RT	S1 <sup>b</sup> RT	S2 <sup>a</sup> RT	S2 <sup>b</sup> RT
OP54453-MB1	2G231733.D	05/09/24	04:51	4.69	5.18	11.32	12.43
OP54453-BS1	2G231734.D	05/09/24	05:15	4.69	5.18	11.32	12.43
OP54453-MS	2G231735.D	05/09/24	05:39	4.69	5.18	11.32	12.43
OP54453-MSD	2G231736.D	05/09/24	06:03	4.69	5.18	11.32	12.43
JD87833-1	2G231737.D	05/09/24	06:27	4.69	5.18	11.31	12.43
JD87833-3	2G231738.D	05/09/24	06:51	4.69	5.18	11.31	12.43
JD87833-4	2G231739.D	05/09/24	07:15	4.69	5.18	11.32	12.43

## Surrogate Compounds

S1 = Tetrachloro-m-xylene  
 S2 = Decachlorobiphenyl

- (a) Retention time from GC signal #1
- (b) Retention time from GC signal #2

8.9.8

# GC Surrogate Retention Time Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G2G6085-CC6081	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 2G231742.D	<b>Injection Time:</b> 08:28
<b>Instrument ID:</b> GC2G	<b>Method:</b> SW846 8082A

	S1 <sup>a</sup> RT	S1 <sup>b</sup> RT	S2 <sup>a</sup> RT	S2 <sup>b</sup> RT
Check Std	4.69	5.18	11.31	12.43

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 <sup>a</sup> RT	S1 <sup>b</sup> RT	S2 <sup>a</sup> RT	S2 <sup>b</sup> RT
JD87833-5	2G231744.D	05/09/24	09:16	4.69	5.18	11.31	12.43
JD87833-7	2G231745.D	05/09/24	09:40	4.69	5.18	11.32	12.43
JD87833-8	2G231746.D	05/09/24	10:04	4.69	5.18	11.32	12.43
JD87833-10	2G231747.D	05/09/24	10:28	4.69	5.18	11.31	12.43
JD87833-11	2G231748.D	05/09/24	10:52	4.69	5.18	11.32	12.43
JD87833-12	2G231749.D	05/09/24	11:15	4.69	5.18	11.32	12.43
JD87833-14	2G231750.D	05/09/24	11:39	4.69	5.18	11.31	12.43

## Surrogate Compounds

S1 = Tetrachloro-m-xylene

S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1

(b) Retention time from GC signal #2

# GC Surrogate Retention Time Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> G2G6085-CC6081	<b>Injection Date:</b> 05/09/24
<b>Lab File ID:</b> 2G231753.D	<b>Injection Time:</b> 12:51
<b>Instrument ID:</b> GC2G	<b>Method:</b> SW846 8082A

	S1 <sup>a</sup> RT	S1 <sup>b</sup> RT	S2 <sup>a</sup> RT	S2 <sup>b</sup> RT
Check Std	4.69	5.18	11.31	12.44

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 <sup>a</sup> RT	S1 <sup>b</sup> RT	S2 <sup>a</sup> RT	S2 <sup>b</sup> RT
JD87833-15	2G231755.D	05/09/24	13:39	4.69	5.18	11.31	12.43
JD87833-16	2G231756.D	05/09/24	14:03	4.69	5.18	11.31	12.43
ZZZZZZ	2G231757.D	05/09/24	14:28	4.69	5.18	11.31	12.43
JD87772-2	2G231758.D	05/09/24	14:52	4.69	5.18	11.31	12.43
ZZZZZZ	2G231759.D	05/09/24	15:16	4.69	5.18	11.31	12.44
ZZZZZZ	2G231760.D	05/09/24	15:40	4.69	5.18	11.32	12.43
ZZZZZZ	2G231761.D	05/09/24	16:04	4.69	5.18	11.31	12.43

## Surrogate Compounds

S1 = Tetrachloro-m-xylene  
 S2 = Decachlorobiphenyl

- (a) Retention time from GC signal #1
- (b) Retention time from GC signal #2

8.9.10  
8



# Initial Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G1G6859-ICC6859  
**Lab FileID:** 1G192517.D

## Response Factor Report GC1G

Method : C:\msdchem\1\methods\1PST6859.M (ChemStation Integrator)  
Title : PEST/PCB  
Last Update : Mon Jan 29 09:45:50 2024  
Response via : Initial Calibration

### Calibration Files

2 =1g192514.d 5 =1g192515.d 10 =1g192516.d 25 =1g192517.d  
50 =1g192518.d 100 =1g192520.d 1 =1g192513.d 75 =1g192519.d

Compound	2	5	10	25	50	100	1	75	Avg	%RSD
1) I 1-bromo-2-nitrobenzen -----ISTD-----										
2) Tetrachloro-	1.042	0.909	0.906	0.918	0.929	0.937	1.084	0.935	0.958	7.01
3) Hexachlorobe	1.087	1.023	1.036	1.052	1.043	1.042	1.167	1.049	1.062	4.35
4) alpha-BHC	1.179	1.185	1.229	1.358	1.430	1.514	1.328	1.500	1.340	10.04
5) gamma-BHC	1.119	1.088	1.122	1.226	1.277	1.339	1.176	1.322	1.209	8.04
6) Heptachlor	1.245	1.246	1.251	1.328	1.345	1.391	1.266	1.408	1.310	5.11
7) beta-BHC	0.576	0.535	0.532	0.551	0.557	0.575	0.572	0.580	0.560	3.38
8) delta-BHC	0.880	0.836	0.980	1.102	1.170	1.270	0.889	1.261	1.048	16.74
9) Aldrin	1.144	1.105	1.107	1.196	1.231	1.284	1.151	1.279	1.187	6.05
10) Alachlor		0.156	0.150	0.153	0.149	0.149		0.155	0.152	1.95
11) Heptachlor E	1.172	1.108	1.113	1.162	1.172	1.199	1.124	1.195	1.156	3.12
12) gamma-Chlord	1.147	1.097	1.094	1.161	1.181	1.230	1.165	1.217	1.161	4.28
13) alpha-Chlord	1.136	1.098	1.087	1.147	1.156	1.193	1.233	1.186	1.155	4.24
14) Endosulfan I	1.129	1.079	1.092	1.137	1.146	1.179	1.112	1.181	1.132	3.30
15) 4,4'-DDE	0.860	0.840	0.858	0.944	1.005	1.062	0.904	1.045	0.940	9.40
16) Dieldrin	1.114	1.055	1.063	1.133	1.172	1.224	1.071	1.215	1.131	5.95
17) Endrin	1.037	1.007	1.006	1.069	1.101	1.156	1.118	1.144	1.080	5.50
18) 4,4'-DDD	0.794	0.742	0.761	0.819	0.857	0.938	0.758	0.927	0.824	9.24
19) Endosulfan I	1.038	0.947	0.960	0.999	1.016	1.067	1.048	1.060	1.017	4.44
20) 4,4'-DDT	0.657	0.692	0.720	0.801	0.852	0.934	0.644	0.908	0.776	14.65
21) Endrin Aldeh	0.677	0.747	0.727	0.746	0.745	0.734	0.744	0.737	0.732	3.17
22) Endosulfan S	0.973	0.898	0.887	0.920	0.930	0.949	1.046	0.951	0.944	5.30
23) Methoxychlor	0.498	0.482	0.487	0.508	0.510	0.519	0.496	0.522	0.503	2.89
24) Mirex	0.968	0.904	0.882	0.874	0.846	0.830	0.941	0.846	0.886	5.51
25) Endrin Keton	1.045	1.024	1.016	1.075	1.096	1.115	1.030	1.114	1.064	3.84
26) Decachlorobi	1.010	0.985	0.952	0.955	0.932	0.924	1.117	0.929	0.976	6.59
27) I 1-bromo-2-nitrobenzen -----ISTD-----										
28) Toxaphene{A}					0.006			0.006		0.00
29) Toxaphene{B}					0.009			0.009		0.00
30) Toxaphene{C}					0.017			0.017		0.00
31) Toxaphene{D}					0.018			0.018		0.00
32) Toxaphene{E}					0.023			0.023		0.00
33) I 1-bromo-2-nitrobenzen -----ISTD-----										
34) Chlordane {A}					0.067			0.067		0.00
35) Chlordane {B}					0.040			0.040		0.00
36) Chlordane {C}					0.130			0.130		0.00
37) Chlordane {D}					0.206			0.206		0.00
38) Chlordane {E}					0.030			0.030		0.00

Signal #2

1) I 1-bromo-2-nitrobenzen -----ISTD-----  
2) Tetrachloro- 0.873 0.572 0.572 0.590 0.580 0.616 0.614 0.591 0.626 16.17

# Initial Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G1G6859-ICC6859  
**Lab FileID:** 1G192517.D

3)	Hexachlorobe	1.386	1.402	1.378	1.394	1.377	1.366	1.349	1.367	1.377	1.23
4)	alpha-BHC	1.328	1.282	1.318	1.444	1.512	1.602	1.363	1.564	1.427	8.54
5)	gamma-BHC	1.261	1.186	1.215	1.301	1.353	1.414	1.367	1.384	1.310	6.33
6)	Heptachlor	1.329	1.289	1.322	1.396	1.444	1.494	1.293	1.470	1.380	5.96
7)	beta-BHC	0.502	0.447	0.461	0.490	0.492	0.506	0.592	0.502	0.499	8.61
8)	delta-BHC	1.163	1.091	1.121	1.216	1.286	1.356	1.212	1.314	1.220	7.69
9)	Aldrin	1.231	1.184	1.231	1.306	1.341	1.402	1.145	1.374	1.277	7.27
10)	Alachlor		0.137	0.126	0.124	0.122	0.121		0.121	0.125	5.01
11)	Heptachlor E	1.220	1.139	1.150	1.184	1.211	1.255	1.168	1.233	1.195	3.44
12)	gamma-Chlord	1.208	1.156	1.183	1.216	1.236	1.294	1.154	1.268	1.215	4.15
13)	alpha-Chlord	1.195	1.127	1.135	1.170	1.186	1.232	1.190	1.212	1.181	3.04
14)	Endosulfan I	1.225	1.122	1.120	1.144	1.162	1.202	1.118	1.186	1.160	3.52
15)	4,4'-DDE	1.146	1.039	1.061	1.118	1.143	1.198	1.032	1.170	1.113	5.59
16)	Dieldrin	1.267	1.157	1.186	1.226	1.257	1.313	1.134	1.290	1.229	5.24
17)	Endrin	1.156	1.086	1.090	1.131	1.157	1.220	1.134	1.205	1.147	4.21
18)	4,4'-DDD	0.814	0.787	0.818	0.850	0.866	0.912	0.801	0.903	0.844	5.54
19)	Endosulfan I	1.090	1.002	1.045	1.066	1.075	1.117	0.977	1.125	1.062	4.91
20)	4,4'-DDT	0.614	0.632	0.684	0.749	0.795	0.864	0.589	0.842	0.721	14.77
21)	Endrin Aldeh	0.812	0.769	0.717	0.728	0.730	0.754	0.821	0.753	0.761	5.07
22)	Endosulfan S	0.974	0.870	0.882	0.896	0.908	0.950	0.856	0.940	0.909	4.59
23)	Methoxychlor	0.425	0.425	0.412	0.430	0.435	0.459	0.440	0.450	0.435	3.43
24)	Mirex	0.862	0.772	0.740	0.717	0.692	0.699	0.882	0.699	0.758	9.94
25)	Endrin Keton	1.106	1.028	1.043	1.060	1.056	1.105	0.875	1.109	1.048	7.31
26)	Decachlorobi	1.352	1.020	1.031	1.009	1.012	0.995	1.087	1.012	1.065	11.22
27)	I 1-bromo-2-nitrobenzen	-----ISTD-----									
28)	Toxaphene{A}					0.006			0.006	0.00	
29)	Toxaphene{B}					0.027			0.027	0.00	
30)	Toxaphene{C}					0.012			0.012	0.00	
31)	Toxaphene{D}					0.022			0.022	0.00	
32)	Toxaphene{E}					0.019			0.019	0.00	
33)	I 1-bromo-2-nitrobenzen	-----ISTD-----									
34)	Chlordane {A}					0.068			0.068	0.00	
35)	Chlordane {B}					0.036			0.036	0.00	
36)	Chlordane {C}					0.135			0.135	0.00	
37)	Chlordane {D}					0.214			0.214	0.00	
38)	Chlordane {E}					0.031			0.031	0.00	

(#) = Out of Range ### Number of calibration levels exceeded format ###

1PST6859.M

Mon Jan 29 09:55:34 2024

8.10.1

8

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G1G6859-ICV6859  
**Lab FileID:** 1G192523.D

## Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\1G6859\1g192523.d\ECD1A.CH Vial: 14  
Signal #2 : C:\msdchem\1\data\1G6859\1g192523.d\ECD2B.CH  
Acq On : 29 Jan 2024 8:45 am Operator: rebeccak  
Sample : icv6859-25 (Pest Mix) Inst : GC1G  
Misc : op51957,g1g6859,250,,,2,1 Multiplr: 1.00  
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\methods\1PST6859.M (ChemStation Integrator)  
Title : PEST/PCB  
Last Update : Mon Jan 29 09:45:50 2024  
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	106	0.00	1.27-	1.33
2 SAB	Tetrachloro-m-xylene	0.958	0.893	6.8	103	0.00	1.74-	1.80
3	Hexachlorobenzene	1.062	1.124	-5.8	113	0.00	2.02-	2.08
4 A	alpha-BHC	1.340	1.269	5.3	99	0.00	2.13-	2.19
5 MA	gamma-BHC	1.209	1.129	6.6	97	0.00	2.38-	2.44
6 MA	Heptachlor	1.310	1.248	4.7	99	0.00	2.79-	2.85
7 B	beta-BHC	0.560	0.528	5.7	101	0.00	2.45-	2.51
8 B	delta-BHC	1.048	1.045	0.3	100	0.00	2.61-	2.67
9 MB	Aldrin	1.187	1.122	5.5	99	0.00	3.08-	3.14
10	Alachlor	0.152	0.152	0.0	105	0.00	3.21-	3.27
11 B	Heptachlor Epoxide	1.156	1.084	6.2	98	0.00	3.73-	3.79
12 B	gamma-Chlordane	1.161	1.089	6.2	99	0.00	3.89-	3.95
13 B	alpha-Chlordane	1.155	1.066	7.7	98	0.00	4.04-	4.10
14 A	Endosulfan I	1.132	1.066	5.8	99	0.00	4.21-	4.27
15 B	4,4'-DDE	0.940	0.860	8.5	96	0.00	4.16-	4.22
16 MA	Dieldrin	1.131	1.058	6.5	98	0.00	4.52-	4.58
17 MA	Endrin	1.080	1.012	6.3	100	0.00	4.83-	4.89
18 A	4,4'-DDD	0.824	0.783	5.0	101	0.00	4.97-	5.04
19 B	Endosulfan II	1.017	0.948	6.8	100	0.00	5.15-	5.21
20 MA	4,4'-DDT	0.776	0.753	3.0	99	0.00	5.38-	5.44
21 B	Endrin Aldehyde	0.732	0.776	-6.0	110	0.00	5.78-	5.84
22 B	Endosulfan Sulfate	0.944	0.884	6.4	101	0.00	6.47-	6.53
23 A	Methoxychlor	0.503	0.461	8.3	96	0.00	6.18-	6.24
24	Mirex	0.886	0.962	-8.6	116	0.00	6.29-	6.35
25 B	Endrin Ketone	1.064	1.009	5.2	99	0.00	6.92-	6.98
26 SA	Decachlorobiphenyl	0.976	0.928	4.9	102	0.00	8.81-	8.87
27 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	106	0.00	1.20-	1.40
28 L8	Toxaphene{A}			-----NA-----				
29 L8	Toxaphene{B}			-----NA-----				
30 L8	Toxaphene{C}			-----NA-----				
31 L8	Toxaphene{D}			-----NA-----				
32 L8	Toxaphene{E}			-----NA-----				
33 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	106	0.00	1.20-	1.40
34	Chlordane {A}			-----NA-----				
35	Chlordane {B}			-----NA-----				
36	Chlordane {C}			-----NA-----				
37	Chlordane {D}			-----NA-----				
38	Chlordane {E}			-----NA-----				

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G1G6859-ICV6859  
**Lab FileID:** 1G192523.D

\*\*\*\*\* Signal #2 \*\*\*\*\*

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	105	0.00	1.23-	1.29
2	SAB	Tetrachloro-m-xylene	0.626	0.576	8.0	102	0.00	1.85-	1.91
3		Hexachlorobenzene	1.377	1.524	-10.7	115	0.00	2.24-	2.30
4	A	alpha-BHC	1.427	1.356	5.0	98	0.00	2.34-	2.40
5	MA	gamma-BHC	1.310	1.217	7.1	98	0.00	2.68-	2.74
6	MA	Heptachlor	1.380	1.334	3.3	100	0.00	3.15-	3.21
7	B	beta-BHC	0.499	0.466	6.6	100	0.00	2.76-	2.82
8	B	delta-BHC	1.220	1.123	8.0	97	0.00	3.07-	3.13
9	MB	Aldrin	1.277	1.238	3.1	99	0.00	3.52-	3.58
10		Alachlor	0.125	0.120	4.0	102	0.00	3.38-	3.44
11	B	Heptachlor Epoxide	1.195	1.123	6.0	99	0.00	4.24-	4.30
12	B	gamma-Chlordane	1.215	1.158	4.7	100	0.00	4.51-	4.57
13	B	alpha-Chlordane	1.181	1.103	6.6	99	0.00	4.71-	4.77
14	A	Endosulfan I	1.160	1.076	7.2	99	0.00	4.79-	4.85
15	B	4,4'-DDE	1.113	1.065	4.3	100	0.00	4.98-	5.04
16	MA	Dieldrin	1.229	1.171	4.7	100	0.00	5.20-	5.26
17	MA	Endrin	1.147	1.083	5.6	100	0.00	5.66-	5.72
18	A	4,4'-DDD	0.844	0.794	5.9	98	0.00	5.89-	5.95
19	B	Endosulfan II	1.062	1.022	3.8	101	0.00	6.01-	6.07
20	MA	4,4'-DDT	0.721	0.710	1.5	99	0.00	6.41-	6.47
21	B	Endrin Aldehyde	0.761	0.762	-0.1	110	0.00	6.57-	6.63
22	B	Endosulfan Sulfate	0.909	0.867	4.6	101	0.00	7.06-	7.12
23	A	Methoxychlor	0.435	0.409	6.0	100	0.00	7.65-	7.71
24		Mirex	0.758	0.803	-5.9	117	0.00	7.90-	7.96
25	B	Endrin Ketone	1.048	1.023	2.4	101	0.00	7.99-	8.05
26	SA	Decachlorobiphenyl	1.065	1.021	4.1	106	0.00	10.22-	10.28
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	105	0.00	1.16-	1.36
28	L8	Toxaphene{A}			-----NA-----				
29	L8	Toxaphene{B}			-----NA-----				
30	L8	Toxaphene{C}			-----NA-----				
31	L8	Toxaphene{D}			-----NA-----				
32	L8	Toxaphene{E}			-----NA-----				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	105	0.00	1.16-	1.36
34		Chlordane {A}			-----NA-----				
35		Chlordane {B}			-----NA-----				
36		Chlordane {C}			-----NA-----				
37		Chlordane {D}			-----NA-----				
38		Chlordane {E}			-----NA-----				

(#) = Out of Range  
 1g192517.d 1PST6859.M

SPCC's out = 0 CCC's out = 0  
 Mon Jan 29 09:53:13 2024

8.10.2  
8

# Initial Calibration Verification

Job Number: JD87833  
Account: MTXFPNJ Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

Sample: G1G6859-ICV6859  
Lab FileID: 1G192524.D

## Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\1G6859\1g192524.d\ECD1A.CH Vial: 15  
Signal #2 : C:\msdchem\1\data\1G6859\1g192524.d\ECD2B.CH  
Acq On : 29 Jan 2024 9:01 am Operator: rebeccak  
Sample : icv6859-500 (Chlordane) Inst : GC1G  
Misc : op51957,g1g6859,250,,,2,1 Multiplr: 1.00  
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\methods\1PST6859.M (ChemStation Integrator)  
Title : PEST/PCB  
Last Update : Mon Jan 29 09:45:50 2024  
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	106	0.00	1.27-	1.33
2 SAB	Tetrachloro-m-xylene	0.958	0.995	-3.9	114	0.00	1.74-	1.80
3	Hexachlorobenzene			-----NA-----				
4 A	alpha-BHC			-----NA-----				
5 MA	gamma-BHC			-----NA-----				
6 MA	Heptachlor			-----NA-----				
7 B	beta-BHC			-----NA-----				
8 B	delta-BHC			-----NA-----				
9 MB	Aldrin			-----NA-----				
10	Alachlor			-----NA-----				
11 B	Heptachlor Epoxide			-----NA-----				
12 B	gamma-Chlordane			-----NA-----				
13 B	alpha-Chlordane			-----NA-----				
14 A	Endosulfan I			-----NA-----				
15 B	4,4'-DDE			-----NA-----				
16 MA	Dieldrin			-----NA-----				
17 MA	Endrin			-----NA-----				
18 A	4,4'-DDD			-----NA-----				
19 B	Endosulfan II			-----NA-----				
20 MA	4,4'-DDT			-----NA-----				
21 B	Endrin Aldehyde			-----NA-----				
22 B	Endosulfan Sulfate			-----NA-----				
23 A	Methoxychlor			-----NA-----				
24	Mirex			-----NA-----				
25 B	Endrin Ketone			-----NA-----				
26 SA	Decachlorobiphenyl	0.976	0.944	3.3	108	0.00	8.80-	8.86
27 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	1.20-	1.40
28 L8	Toxaphene{A}			-----NA-----				
29 L8	Toxaphene{B}			-----NA-----				
30 L8	Toxaphene{C}			-----NA-----				
31 L8	Toxaphene{D}			-----NA-----				
32 L8	Toxaphene{E}			-----NA-----				
33 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	106	0.00	1.20-	1.40
34	Chlordane {A}	0.067	0.068	-1.5	107	0.00	2.72-	2.92
35	Chlordane {B}	0.040	0.042	-5.0	109	0.00	3.15-	3.35
36	Chlordane {C}	0.130	0.137	-5.4	111	0.00	3.81-	4.01
37	Chlordane {D}	0.206	0.218	-5.8	112	0.00	3.96-	4.16
38	Chlordane {E}	0.030	0.030	0.0	108	0.00	4.99-	5.19

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G1G6859-ICV6859  
**Lab FileID:** 1G192524.D

\*\*\*\*\* Signal #2 \*\*\*\*\*

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	105	0.00	1.23- 1.29
2	SAB	Tetrachloro-m-xylene	0.626	0.657	-5.0	119	0.00	1.84- 1.90
3		Hexachlorobenzene					-----NA-----	
4	A	alpha-BHC					-----NA-----	
5	MA	gamma-BHC					-----NA-----	
6	MA	Heptachlor					-----NA-----	
7	B	beta-BHC					-----NA-----	
8	B	delta-BHC					-----NA-----	
9	MB	Aldrin					-----NA-----	
10		Alachlor					-----NA-----	
11	B	Heptachlor Epoxide					-----NA-----	
12	B	gamma-Chlordane					-----NA-----	
13	B	alpha-Chlordane					-----NA-----	
14	A	Endosulfan I					-----NA-----	
15	B	4,4'-DDE					-----NA-----	
16	MA	Dieldrin					-----NA-----	
17	MA	Endrin					-----NA-----	
18	A	4,4'-DDD					-----NA-----	
19	B	Endosulfan II					-----NA-----	
20	MA	4,4'-DDT					-----NA-----	
21	B	Endrin Aldehyde					-----NA-----	
22	B	Endosulfan Sulfate					-----NA-----	
23	A	Methoxychlor					-----NA-----	
24		Mirex					-----NA-----	
25	B	Endrin Ketone					-----NA-----	
26	SA	Decachlorobiphenyl	1.065	1.066	-0.1	111	0.00	10.21-10.27
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	1.16- 1.36
28	L8	Toxaphene{A}					-----NA-----	
29	L8	Toxaphene{B}					-----NA-----	
30	L8	Toxaphene{C}					-----NA-----	
31	L8	Toxaphene{D}					-----NA-----	
32	L8	Toxaphene{E}					-----NA-----	
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	106	0.00	1.16- 1.36
34		Chlordane {A}	0.068	0.069	-1.5	107	0.00	3.08- 3.28
35		Chlordane {B}	0.036	0.036	0.0	105	0.00	3.63- 3.83
36		Chlordane {C}	0.135	0.141	-4.4	110	0.00	4.44- 4.64
37		Chlordane {D}	0.214	0.225	-5.1	111	0.00	4.64- 4.84
38		Chlordane {E}	0.031	0.031	0.0	106	0.00	6.01- 6.21

(#) = Out of Range  
1g192518.d 1PST6859.M

SPCC's out = 0 CCC's out = 0  
Mon Jan 29 09:54:04 2024

8.10.3

8

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G1G6859-ICV6859  
**Lab FileID:** 1G192525.D

## Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\1G6859\1g192525.d\ECD1A.CH Vial: 16  
Signal #2 : C:\msdchem\1\data\1G6859\1g192525.d\ECD2B.CH  
Acq On : 29 Jan 2024 9:17 am Operator: rebeccak  
Sample : icv6859-500 (Toxaphene) Inst : GC1G  
Misc : op51957,g1g6859,250,,,2,1 Multiplr: 1.00  
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\methods\1PST6859.M (ChemStation Integrator)  
Title : PEST/PCB  
Last Update : Mon Jan 29 09:45:50 2024  
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	106	0.00	1.27-	1.33
2 SAB	Tetrachloro-m-xylene	0.958	0.920	4.0	105	0.00	1.74-	1.80
3	Hexachlorobenzene			-----NA-----				
4 A	alpha-BHC			-----NA-----				
5 MA	gamma-BHC			-----NA-----				
6 MA	Heptachlor			-----NA-----				
7 B	beta-BHC			-----NA-----				
8 B	delta-BHC			-----NA-----				
9 MB	Aldrin			-----NA-----				
10	Alachlor			-----NA-----				
11 B	Heptachlor Epoxide			-----NA-----				
12 B	gamma-Chlordane			-----NA-----				
13 B	alpha-Chlordane			-----NA-----				
14 A	Endosulfan I			-----NA-----				
15 B	4,4'-DDE			-----NA-----				
16 MA	Dieldrin			-----NA-----				
17 MA	Endrin			-----NA-----				
18 A	4,4'-DDD			-----NA-----				
19 B	Endosulfan II			-----NA-----				
20 MA	4,4'-DDT			-----NA-----				
21 B	Endrin Aldehyde			-----NA-----				
22 B	Endosulfan Sulfate			-----NA-----				
23 A	Methoxychlor			-----NA-----				
24	Mirex			-----NA-----				
25 B	Endrin Ketone			-----NA-----				
26 SA	Decachlorobiphenyl	0.976	0.922	5.5	105	0.00	8.80-	8.86
27 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	1.20-	1.40
28 L8	Toxaphene{A}	0.006	0.006	0.0	102	0.00	3.95-	4.15
29 L8	Toxaphene{B}	0.009	0.008	11.1	97	0.00	4.58-	4.78
30 L8	Toxaphene{C}	0.017	0.018	-5.9	106	0.00	5.25-	5.45
31 L8	Toxaphene{D}	0.018	0.019	-5.6	106	0.00	5.59-	5.79
32 L8	Toxaphene{E}	0.023	0.024	-4.3	104	0.00	6.24-	6.44
33 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	105	0.00	1.20-	1.40
34	Chlordane {A}			-----NA-----				
35	Chlordane {B}			-----NA-----				
36	Chlordane {C}			-----NA-----				
37	Chlordane {D}			-----NA-----				
38	Chlordane {E}			-----NA-----				

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G1G6859-ICV6859  
**Lab FileID:** 1G192525.D

\*\*\*\*\* Signal #2 \*\*\*\*\*

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.23- 1.29
2	SAB	Tetrachloro-m-xylene	0.626	0.606	3.2	109	0.00	1.84- 1.90
3		Hexachlorobenzene					-----NA-----	
4	A	alpha-BHC					-----NA-----	
5	MA	gamma-BHC					-----NA-----	
6	MA	Heptachlor					-----NA-----	
7	B	beta-BHC					-----NA-----	
8	B	delta-BHC					-----NA-----	
9	MB	Aldrin					-----NA-----	
10		Alachlor					-----NA-----	
11	B	Heptachlor Epoxide					-----NA-----	
12	B	gamma-Chlordane					-----NA-----	
13	B	alpha-Chlordane					-----NA-----	
14	A	Endosulfan I					-----NA-----	
15	B	4,4'-DDE					-----NA-----	
16	MA	Dieldrin					-----NA-----	
17	MA	Endrin					-----NA-----	
18	A	4,4'-DDD					-----NA-----	
19	B	Endosulfan II					-----NA-----	
20	MA	4,4'-DDT					-----NA-----	
21	B	Endrin Aldehyde					-----NA-----	
22	B	Endosulfan Sulfate					-----NA-----	
23	A	Methoxychlor					-----NA-----	
24		Mirex					-----NA-----	
25	B	Endrin Ketone					-----NA-----	
26	SA	Decachlorobiphenyl	1.065	1.006	5.5	104	0.00	10.21-10.27
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	100	0.00	1.16- 1.36
28	L8	Toxaphene{A}	0.006	0.006	0.0	96	0.00	5.28- 5.48
29	L8	Toxaphene{B}	0.027	0.027	0.0	98	0.00	6.08- 6.28
30	L8	Toxaphene{C}	0.012	0.012	0.0	99	0.00	6.39- 6.59
31	L8	Toxaphene{D}	0.022	0.022	0.0	100	0.00	6.52- 6.72
32	L8	Toxaphene{E}	0.019	0.020	-5.3	103	0.00	7.40- 7.60
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	105	0.00	1.16- 1.36
34		Chlordane {A}					-----NA-----	
35		Chlordane {B}					-----NA-----	
36		Chlordane {C}					-----NA-----	
37		Chlordane {D}					-----NA-----	
38		Chlordane {E}					-----NA-----	

(#) = Out of Range  
 1g192518.d 1PST6859.M

SPCC's out = 0 CCC's out = 0  
 Mon Jan 29 09:54:16 2024

8.10.4

8



# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G1G7004-CC6859  
**Lab FileID:** 1G196193.D

## Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\1G7004\1g196193.D\ECD1A.CH Vial: 4  
Signal #2 : C:\msdchem\1\data\1G7004\1g196193.D\ECD2B.CH  
Acq On : 07 May 2024 11:51 pm Operator: christp  
Sample : cc6859-50 Inst : GC1G  
Misc : op54355,g1g7004,1000,,,5,1 Multiplr: 1.00  
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\methods\1PST6859a.M (ChemStation Integrator)  
Title : PEST/PCB  
Last Update : Wed Apr 24 15:50:16 2024  
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	88	0.00	1.20-	1.26
2 SAB	Tetrachloro-m-xylene	0.958	1.009	-5.3	95	0.00	1.67-	1.73
3	Hexachlorobenzene	1.062	1.346	-26.7#	113	0.00	1.94-	2.00
4 A	alpha-BHC	1.340	1.471	-9.8	90	0.00	2.04-	2.10
5 MA	gamma-BHC	1.209	1.217	-0.7	84	0.00	2.28-	2.34
6 MA	Heptachlor	1.310	1.324	-1.1	86	-0.01	2.68-	2.74
7 B	beta-BHC	0.560	0.544	2.9	86	0.00	2.37-	2.43
8 B	delta-BHC	1.048	0.856	18.3	64	0.00	2.52-	2.58
9 MB	Aldrin	1.187	1.259	-6.1	90	-0.01	2.96-	3.02
10	Alachlor	0.152	0.151	0.7	89	-0.01	3.09-	3.15
11 B	Heptachlor Epoxide	1.156	1.152	0.3	86	-0.02	3.59-	3.65
12 B	gamma-Chlordane	1.161	1.149	1.0	85	-0.02	3.74-	3.80
13 B	alpha-Chlordane	1.155	1.143	1.0	87	-0.02	3.89-	3.95
14 A	Endosulfan I	1.132	1.209	-6.8	92	-0.02	4.05-	4.11
15 B	4,4'-DDE	0.940	1.000	-6.4	87	-0.02	4.02-	4.08
16 MA	Dieldrin	1.131	1.185	-4.8	89	-0.02	4.35-	4.41
17 MA	Endrin	1.080	1.137	-5.3	90	-0.02	4.66-	4.72
18 A	4,4'-DDD	0.824	0.863	-4.7	88	-0.02	4.81-	4.88
19 B	Endosulfan II	1.017	0.999	1.8	86	-0.02	4.98-	5.04
20 MA	4,4'-DDT	0.776	0.758	2.3	78	-0.02	5.20-	5.26
21 B	Endrin Aldehyde	0.732	0.660	9.8	78	-0.02	5.58-	5.64
22 B	Endosulfan Sulfate	0.944	0.779	17.5	73	-0.03	6.25-	6.31
23 A	Methoxychlor	0.503	0.487	3.2	84	-0.02	6.00-	6.06
24	Mirex	0.886	0.865	2.4	90	-0.03	6.09-	6.15
25 B	Endrin Ketone	1.064	0.880	17.3	70	-0.03	6.70-	6.76
26 SA	Decachlorobiphenyl	0.976	1.068	-9.4	101	-0.03	8.58-	8.64
27 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	83	0.00	1.13-	1.33
28 L8	Toxaphene{A}			-----NA-----				
29 L8	Toxaphene{B}			-----NA-----				
30 L8	Toxaphene{C}			-----NA-----				
31 L8	Toxaphene{D}			-----NA-----				
32 L8	Toxaphene{E}			-----NA-----				
33 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	88	0.00	1.13-	1.33
34	Chlordane {A}			-----NA-----				
35	Chlordane {B}			-----NA-----				
36	Chlordane {C}			-----NA-----				
37	Chlordane {D}			-----NA-----				
38	Chlordane {E}			-----NA-----				

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G1G7004-CC6859  
**Lab FileID:** 1G196193.D

\*\*\*\*\* Signal #2 \*\*\*\*\*

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	125	0.00	1.11-	1.17
2	SAB	Tetrachloro-m-xylene	0.626	0.636	-1.6	137	-0.01	1.70-	1.76
3		Hexachlorobenzene	1.377	1.371	0.4	125	-0.02	2.08-	2.14
4	A	alpha-BHC	1.427	1.520	-6.5	126	-0.02	2.18-	2.24
5	MA	gamma-BHC	1.310	1.252	4.4	116	-0.02	2.50-	2.56
6	MA	Heptachlor	1.380	1.423	-3.1	123	-0.02	2.94-	3.00
7	B	beta-BHC	0.499	0.460	7.8	117	-0.02	2.58-	2.64
8	B	delta-BHC	1.220	0.987	19.1	96	-0.02	2.88-	2.94
9	MB	Aldrin	1.277	1.343	-5.2	125	-0.03	3.30-	3.36
10		Alachlor	0.125	0.121	3.2	124	-0.02	3.17-	3.23
11	B	Heptachlor Epoxide	1.195	1.140	4.6	118	-0.03	3.99-	4.05
12	B	gamma-Chlordane	1.215	1.173	3.5	119	-0.03	4.25-	4.31
13	B	alpha-Chlordane	1.181	1.143	3.2	121	-0.04	4.45-	4.51
14	A	Endosulfan I	1.160	1.100	5.2	119	-0.04	4.52-	4.58
15	B	4,4'-DDE	1.113	1.131	-1.6	124	-0.04	4.71-	4.77
16	MA	Dieldrin	1.229	1.223	0.5	122	-0.04	4.91-	4.97
17	MA	Endrin	1.147	1.144	0.3	124	-0.04	5.36-	5.42
18	A	4,4'-DDD	0.844	0.851	-0.8	123	-0.04	5.60-	5.66
19	B	Endosulfan II	1.062	1.010	4.9	118	-0.04	5.71-	5.77
20	MA	4,4'-DDT	0.721	0.692	4.0	109	-0.05	6.10-	6.16
21	B	Endrin Aldehyde	0.761	0.642	15.6	110	-0.04	6.25-	6.31
22	B	Endosulfan Sulfate	0.909	0.759	16.5	105	-0.05	6.73-	6.79
23	A	Methoxychlor	0.435	0.411	5.5	118	-0.05	7.32-	7.38
24		Mirex	0.758	0.664	12.4	120	-0.05	7.54-	7.60
25	B	Endrin Ketone	1.048	0.824	21.4#	98	-0.05	7.63-	7.69
26	SA	Decachlorobiphenyl	1.065	0.987	7.3	122	-0.05	9.92-	9.98
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	121	-0.01	1.04-	1.24
28	L8	Toxaphene{A}			-----NA-----				
29	L8	Toxaphene{B}			-----NA-----				
30	L8	Toxaphene{C}			-----NA-----				
31	L8	Toxaphene{D}			-----NA-----				
32	L8	Toxaphene{E}			-----NA-----				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	127	-0.01	1.04-	1.24
34		Chlordane {A}			-----NA-----				
35		Chlordane {B}			-----NA-----				
36		Chlordane {C}			-----NA-----				
37		Chlordane {D}			-----NA-----				
38		Chlordane {E}			-----NA-----				

(#) = Out of Range  
 1g195781.D 1PST6859a.M

SPPC's out = 0 CCC's out = 0  
 Wed May 08 19:34:07 2024

8.10.5  
8

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G1G7004-CC6859  
**Lab FileID:** 1G196214.D

## Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\1G7004\1g196214.D\ECD1A.CH Vial: 2  
 Signal #2 : C:\msdchem\1\data\1G7004\1g196214.D\ECD2B.CH  
 Acq On : 08 May 2024 5:15 am Operator: christp  
 Sample : cc6859-25 Inst : GC1G  
 Misc : op54397,g1g7004,1000,,,5,1 Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\methods\1PST6859a.M (ChemStation Integrator)  
 Title : PEST/PCB  
 Last Update : Wed Apr 24 15:50:16 2024  
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	77	0.00	1.21-	1.27
2 SAB	Tetrachloro-m-xylene	0.958	0.980	-2.3	82	0.00	1.67-	1.73
3	Hexachlorobenzene	1.062	1.313	-23.6#	96	0.00	1.95-	2.01
4 A	alpha-BHC	1.340	1.362	-1.6	77	0.00	2.04-	2.10
5 MA	gamma-BHC	1.209	1.200	0.7	75	0.00	2.29-	2.35
6 MA	Heptachlor	1.310	1.325	-1.1	77	-0.01	2.68-	2.74
7 B	beta-BHC	0.560	0.532	5.0	74	0.00	2.38-	2.44
8 B	delta-BHC	1.048	0.877	16.3	61	0.00	2.54-	2.60
9 MB	Aldrin	1.187	1.264	-6.5	81	-0.01	2.96-	3.02
10	Alachlor	0.152	0.157	-3.3	79	0.00	3.10-	3.16
11 B	Heptachlor Epoxide	1.156	1.238	-7.1	82	-0.01	3.59-	3.65
12 B	gamma-Chlordane	1.161	1.232	-6.1	81	-0.01	3.74-	3.80
13 B	alpha-Chlordane	1.155	1.208	-4.6	81	-0.02	3.90-	3.96
14 A	Endosulfan I	1.132	1.497	-32.2#	101	-0.02	4.05-	4.11
15 B	4,4'-DDE	0.940	0.716	23.8#	58	0.00	4.03-	4.09
16 MA	Dieldrin	1.131	1.196	-5.7	81	-0.02	4.36-	4.42
17 MA	Endrin	1.080	1.121	-3.8	80	-0.02	4.66-	4.72
18 A	4,4'-DDD	0.824	0.863	-4.7	81	0.00	4.83-	4.90
19 B	Endosulfan II	1.017	1.009	0.8	77	-0.02	4.98-	5.04
20 MA	4,4'-DDT	0.776	0.769	0.9	74	-0.01	5.21-	5.27
21 B	Endrin Aldehyde	0.732	0.713	2.6	73	-0.02	5.59-	5.65
22 B	Endosulfan Sulfate	0.944	0.793	16.0	66	-0.02	6.26-	6.32
23 A	Methoxychlor	0.503	0.471	6.4	71	0.00	6.02-	6.08
24	Mirex	0.886	1.017	-14.8	89	-0.02	6.09-	6.15
25 B	Endrin Ketone	1.064	0.878	17.5	63	-0.02	6.71-	6.77
26 SA	Decachlorobiphenyl	0.976	1.138	-16.6	91	-0.02	8.59-	8.65
27 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	77	0.00	1.14-	1.34
28 L8	Toxaphene{A}			-----NA-----				
29 L8	Toxaphene{B}			-----NA-----				
30 L8	Toxaphene{C}			-----NA-----				
31 L8	Toxaphene{D}			-----NA-----				
32 L8	Toxaphene{E}			-----NA-----				
33 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	77	0.00	1.14-	1.34
34	Chlordane {A}			-----NA-----				
35	Chlordane {B}			-----NA-----				
36	Chlordane {C}			-----NA-----				
37	Chlordane {D}			-----NA-----				
38	Chlordane {E}			-----NA-----				

8.10.6

8

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G1G7004-CC6859  
**Lab FileID:** 1G196214.D

\*\*\*\*\* Signal #2 \*\*\*\*\*

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	103	0.00	1.11-	1.17
2	SAB	Tetrachloro-m-xylene	0.626	0.631	-0.8	110	-0.01	1.71-	1.77
3		Hexachlorobenzene	1.377	1.386	-0.7	102	-0.01	2.08-	2.14
4	A	alpha-BHC	1.427	1.447	-1.4	103	-0.02	2.18-	2.24
5	MA	gamma-BHC	1.310	1.278	2.4	101	-0.02	2.50-	2.56
6	MA	Heptachlor	1.380	1.456	-5.5	107	-0.02	2.94-	3.00
7	B	beta-BHC	0.499	0.442	11.4	93	-0.01	2.59-	2.65
8	B	delta-BHC	1.220	1.014	16.9	86	-0.02	2.89-	2.95
9	MB	Aldrin	1.277	1.335	-4.5	105	-0.03	3.30-	3.36
10		Alachlor	0.125	0.123	1.6	102	-0.02	3.17-	3.23
11	B	Heptachlor Epoxide	1.195	1.167	2.3	102	-0.03	3.99-	4.05
12	B	gamma-Chlordane	1.215	1.198	1.4	101	-0.03	4.25-	4.31
13	B	alpha-Chlordane	1.181	1.182	-0.1	104	-0.04	4.45-	4.51
14	A	Endosulfan I	1.160	1.140	1.7	103	-0.04	4.52-	4.58
15	B	4,4'-DDE	1.113	1.125	-1.1	104	-0.03	4.71-	4.77
16	MA	Dieldrin	1.229	1.228	0.1	103	-0.04	4.91-	4.97
17	MA	Endrin	1.147	1.138	0.8	104	-0.04	5.36-	5.42
18	A	4,4'-DDD	0.844	0.826	2.1	100	-0.03	5.60-	5.66
19	B	Endosulfan II	1.062	1.028	3.2	99	-0.04	5.71-	5.77
20	MA	4,4'-DDT	0.721	0.692	4.0	95	-0.04	6.10-	6.16
21	B	Endrin Aldehyde	0.761	0.681	10.5	96	-0.04	6.26-	6.32
22	B	Endosulfan Sulfate	0.909	0.752	17.3	86	-0.04	6.73-	6.79
23	A	Methoxychlor	0.435	0.423	2.8	101	-0.04	7.33-	7.39
24		Mirex	0.758	0.731	3.6	105	-0.05	7.55-	7.61
25	B	Endrin Ketone	1.048	0.813	22.4#	79	-0.05	7.64-	7.70
26	SA	Decachlorobiphenyl	1.065	1.017	4.5	104	-0.05	9.92-	9.98
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	103	0.00	1.04-	1.24
28	L8	Toxaphene{A}			-----NA-----				
29	L8	Toxaphene{B}			-----NA-----				
30	L8	Toxaphene{C}			-----NA-----				
31	L8	Toxaphene{D}			-----NA-----				
32	L8	Toxaphene{E}			-----NA-----				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	103	0.00	1.04-	1.24
34		Chlordane {A}			-----NA-----				
35		Chlordane {B}			-----NA-----				
36		Chlordane {C}			-----NA-----				
37		Chlordane {D}			-----NA-----				
38		Chlordane {E}			-----NA-----				

(#) = Out of Range  
 1g195816.D 1PST6859a.M

SPCC's out = 0 CCC's out = 0  
 Wed May 08 19:35:28 2024

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G1G7013-CC6859  
**Lab FileID:** 1G196352.D

## Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\ch...3\lg196352.d\ECD1A.CH Vial: 2  
 Signal #2 : C:\msdchem\1\data\chris2\lg7013\lg196352.d\ECD2B.CH  
 Acq On : 14-May-24, 08:13:33 Operator: rebeccak  
 Sample : cc6859-25 Inst : GC1G  
 Misc : op54560,lg7013,950,,,5,1 Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\dat...7013\1PST6859a.M (ChemStation Integrator)  
 Title : PEST/PCB  
 Last Update : Wed May 15 07:20:57 2024  
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	75	0.00	1.19-	1.25
2 SAB	Tetrachloro-m-xylene	0.958	0.906	5.4	74	0.00	1.66-	1.72
3	Hexachlorobenzene	1.062	1.416	-33.3#	101	0.00	1.93-	1.99
4 A	alpha-BHC	1.340	1.353	-1.0	75	0.00	2.03-	2.09
5 MA	gamma-BHC	1.209	1.204	0.4	73	0.00	2.28-	2.34
6 MA	Heptachlor	1.310	1.330	-1.5	75	0.00	2.68-	2.74
7 B	beta-BHC	0.560	0.503	10.2	68	0.00	2.36-	2.42
8 B	delta-BHC	1.048	1.124	-7.3	76	0.00	2.52-	2.58
9 MB	Aldrin	1.187	1.227	-3.4	77	0.00	2.96-	3.02
10	Alachlor	0.152	0.157	-3.3	77	0.00	3.09-	3.15
11 B	Heptachlor Epoxide	1.156	1.200	-3.8	77	0.00	3.59-	3.65
12 B	gamma-Chlordane	1.161	1.217	-4.8	78	0.00	3.74-	3.80
13 B	alpha-Chlordane	1.155	1.211	-4.8	79	0.00	3.90-	3.96
14 A	Endosulfan I	1.132	1.199	-5.9	79	0.00	4.06-	4.12
15 B	4,4'-DDE	0.940	1.098	-16.8	87	0.00	4.01-	4.07
16 MA	Dieldrin	1.131	1.236	-9.3	82	0.00	4.36-	4.42
17 MA	Endrin	1.080	1.193	-10.5	83	0.00	4.66-	4.72
18 A	4,4'-DDD	0.824	0.955	-15.9	87	0.00	4.81-	4.88
19 B	Endosulfan II	1.017	1.112	-9.3	83	0.00	4.98-	5.04
20 MA	4,4'-DDT	0.776	0.906	-16.8	85	0.00	5.20-	5.26
21 B	Endrin Aldehyde	0.732	0.777	-6.1	78	0.00	5.58-	5.64
22 B	Endosulfan Sulfate	0.944	1.001	-6.0	81	0.00	6.25-	6.31
23 A	Methoxychlor	0.503	0.594	-18.1	87	0.00	5.99-	6.05
24	Mirex	0.886	0.972	-9.7	83	0.00	6.09-	6.15
25 B	Endrin Ketone	1.064	1.216	-14.3	85	0.00	6.70-	6.76
26 SA	Decachlorobiphenyl	0.976	1.255	-28.6#	98	0.00	8.58-	8.64
27 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	75	0.00	1.12-	1.32
28 L8	Toxaphene{A}			-----NA-----				
29 L8	Toxaphene{B}			-----NA-----				
30 L8	Toxaphene{C}			-----NA-----				
31 L8	Toxaphene{D}			-----NA-----				
32 L8	Toxaphene{E}			-----NA-----				
33 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	75	0.00	1.12-	1.32
34	Chlordane {A}			-----NA-----				
35	Chlordane {B}			-----NA-----				
36	Chlordane {C}			-----NA-----				
37	Chlordane {D}			-----NA-----				
38	Chlordane {E}			-----NA-----				

8.10.7

8

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G1G7013-CC6859  
**Lab FileID:** 1G196352.D

\*\*\*\*\* Signal #2 \*\*\*\*\*

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	103	0.00	1.10-	1.16
2	SAB	Tetrachloro-m-xylene	0.626	0.597	4.6	104	0.00	1.69-	1.75
3		Hexachlorobenzene	1.377	1.355	1.6	100	0.00	2.07-	2.13
4	A	alpha-BHC	1.427	1.447	-1.4	103	0.00	2.17-	2.23
5	MA	gamma-BHC	1.310	1.330	-1.5	105	0.00	2.49-	2.55
6	MA	Heptachlor	1.380	1.422	-3.0	105	0.00	2.94-	3.00
7	B	beta-BHC	0.499	0.474	5.0	100	0.00	2.58-	2.64
8	B	delta-BHC	1.220	1.283	-5.2	109	0.00	2.88-	2.94
9	MB	Aldrin	1.277	1.329	-4.1	105	0.00	3.30-	3.36
10		Alachlor	0.125	0.125	0.0	104	0.00	3.16-	3.22
11	B	Heptachlor Epoxide	1.195	1.219	-2.0	106	0.00	3.99-	4.05
12	B	gamma-Chlordane	1.215	1.225	-0.8	104	0.00	4.25-	4.31
13	B	alpha-Chlordane	1.181	1.200	-1.6	106	0.00	4.44-	4.50
14	A	Endosulfan I	1.160	1.183	-2.0	107	0.00	4.52-	4.58
15	B	4,4'-DDE	1.113	1.156	-3.9	107	0.00	4.70-	4.76
16	MA	Dieldrin	1.229	1.282	-4.3	108	0.00	4.91-	4.97
17	MA	Endrin	1.147	1.211	-5.6	110	0.00	5.36-	5.42
18	A	4,4'-DDD	0.844	0.927	-9.8	112	0.00	5.59-	5.65
19	B	Endosulfan II	1.062	1.117	-5.2	108	0.00	5.70-	5.76
20	MA	4,4'-DDT	0.721	0.822	-14.0	113	0.00	6.09-	6.15
21	B	Endrin Aldehyde	0.761	0.740	2.8	105	0.00	6.25-	6.31
22	B	Endosulfan Sulfate	0.909	0.971	-6.8	112	0.00	6.72-	6.78
23	A	Methoxychlor	0.435	0.499	-14.7	120	0.00	7.31-	7.37
24		Mirex	0.758	0.735	3.0	106	0.00	7.54-	7.60
25	B	Endrin Ketone	1.048	1.150	-9.7	112	0.00	7.63-	7.69
26	SA	Decachlorobiphenyl	1.065	1.117	-4.9	114	0.00	9.92-	9.98
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	103	0.00	1.03-	1.23
28	L8	Toxaphene{A}			-----NA-----				
29	L8	Toxaphene{B}			-----NA-----				
30	L8	Toxaphene{C}			-----NA-----				
31	L8	Toxaphene{D}			-----NA-----				
32	L8	Toxaphene{E}			-----NA-----				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	103	0.00	1.03-	1.23
34		Chlordane {A}			-----NA-----				
35		Chlordane {B}			-----NA-----				
36		Chlordane {C}			-----NA-----				
37		Chlordane {D}			-----NA-----				
38		Chlordane {E}			-----NA-----				

(#) = Out of Range  
 1g196080.D 1PST6859a.M

SPCC's out = 0 CCC's out = 0  
 Wed May 15 08:09:42 2024

8.10.7  
 8

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G1G7013-CC6859  
**Lab FileID:** 1G196372.D

## Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\1G7013\lg196372.d\ECD1A.CH Vial: 4  
 Signal #2 : C:\msdchem\1\data\1G7013\lg196372.d\ECD2B.CH  
 Acq On : 14-May-24, 13:28:43 Operator: rebeccak  
 Sample : cc6859-50 Inst : GC1G  
 Misc : op54397a,lg7013,1000,,,5,1 Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\dat...7013\1PST6859a.M (ChemStation Integrator)  
 Title : PEST/PCB  
 Last Update : Wed May 15 07:20:57 2024  
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	92	0.00	1.19-	1.25
2 SAB	Tetrachloro-m-xylene	0.958	0.968	-1.0	96	0.00	1.65-	1.71
3	Hexachlorobenzene	1.062	1.378	-29.8#	121	0.00	1.93-	1.99
4 A	alpha-BHC	1.340	1.506	-12.4	97	0.00	2.03-	2.09
5 MA	gamma-BHC	1.209	1.323	-9.4	95	0.00	2.27-	2.33
6 MA	Heptachlor	1.310	1.414	-7.9	97	0.00	2.67-	2.73
7 B	beta-BHC	0.560	0.564	-0.7	93	0.00	2.36-	2.42
8 B	delta-BHC	1.048	1.169	-11.5	92	0.00	2.51-	2.57
9 MB	Aldrin	1.187	1.340	-12.9	100	0.00	2.95-	3.01
10	Alachlor	0.152	0.159	-4.6	98	0.00	3.08-	3.14
11 B	Heptachlor Epoxide	1.156	1.287	-11.3	101	-0.01	3.58-	3.64
12 B	gamma-Chlordane	1.161	1.328	-14.4	103	-0.01	3.73-	3.79
13 B	alpha-Chlordane	1.155	1.313	-13.7	104	-0.01	3.88-	3.94
14 A	Endosulfan I	1.132	1.423	-25.7#	114	-0.01	4.04-	4.10
15 B	4,4'-DDE	0.940	1.042	-10.9	95	0.00	4.01-	4.07
16 MA	Dieldrin	1.131	1.334	-17.9	105	-0.01	4.35-	4.41
17 MA	Endrin	1.080	1.272	-17.8	106	-0.01	4.65-	4.71
18 A	4,4'-DDD	0.824	0.976	-18.4	105	0.00	4.80-	4.87
19 B	Endosulfan II	1.017	1.190	-17.0	108	-0.01	4.97-	5.03
20 MA	4,4'-DDT	0.776	0.985	-26.9#	106	0.00	5.19-	5.25
21 B	Endrin Aldehyde	0.732	0.806	-10.1	99	0.00	5.57-	5.63
22 B	Endosulfan Sulfate	0.944	1.069	-13.2	106	0.00	6.24-	6.30
23 A	Methoxychlor	0.503	0.586	-16.5	106	0.00	5.99-	6.05
24	Mirex	0.886	1.068	-20.5#	116	-0.01	6.08-	6.14
25 B	Endrin Ketone	1.064	1.307	-22.8#	109	0.00	6.69-	6.75
26 SA	Decachlorobiphenyl	0.976	1.303	-33.5#	128	0.00	8.57-	8.63
27 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	87	0.00	1.12-	1.32
28 L8	Toxaphene{A}			-----NA-----				
29 L8	Toxaphene{B}			-----NA-----				
30 L8	Toxaphene{C}			-----NA-----				
31 L8	Toxaphene{D}			-----NA-----				
32 L8	Toxaphene{E}			-----NA-----				
33 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	91	0.00	1.12-	1.32
34	Chlordane {A}			-----NA-----				
35	Chlordane {B}			-----NA-----				
36	Chlordane {C}			-----NA-----				
37	Chlordane {D}			-----NA-----				
38	Chlordane {E}			-----NA-----				

8.10.8

8

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G1G7013-CC6859  
**Lab FileID:** 1G196372.D

\*\*\*\*\* Signal #2 \*\*\*\*\*

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	129	0.00	1.10-	1.16
2	SAB	Tetrachloro-m-xylene	0.626	0.607	3.0	135	0.00	1.69-	1.75
3		Hexachlorobenzene	1.377	1.304	5.3	122	0.00	2.07-	2.13
4	A	alpha-BHC	1.427	1.552	-8.8	133	0.00	2.17-	2.23
5	MA	gamma-BHC	1.310	1.384	-5.6	132	0.00	2.49-	2.55
6	MA	Heptachlor	1.380	1.475	-6.9	132	0.00	2.94-	3.00
7	B	beta-BHC	0.499	0.488	2.2	128	0.00	2.58-	2.64
8	B	delta-BHC	1.220	1.267	-3.9	127	0.00	2.88-	2.94
9	MB	Aldrin	1.277	1.380	-8.1	133	0.00	3.29-	3.35
10		Alachlor	0.125	0.122	2.4	130	0.00	3.16-	3.22
11	B	Heptachlor Epoxide	1.195	1.271	-6.4	136	0.00	3.99-	4.05
12	B	gamma-Chlordane	1.215	1.290	-6.2	135	0.00	4.24-	4.30
13	B	alpha-Chlordane	1.181	1.253	-6.1	137	0.00	4.44-	4.50
14	A	Endosulfan I	1.160	1.214	-4.7	135	0.00	4.51-	4.57
15	B	4,4'-DDE	1.113	1.186	-6.6	134	0.00	4.70-	4.76
16	MA	Dieldrin	1.229	1.344	-9.4	138	0.00	4.90-	4.96
17	MA	Endrin	1.147	1.258	-9.7	140	0.00	5.35-	5.41
18	A	4,4'-DDD	0.844	0.935	-10.8	140	0.00	5.59-	5.65
19	B	Endosulfan II	1.062	1.171	-10.3	141	0.00	5.70-	5.76
20	MA	4,4'-DDT	0.721	0.864	-19.8	141	0.00	6.09-	6.15
21	B	Endrin Aldehyde	0.761	0.763	-0.3	135	0.00	6.25-	6.31
22	B	Endosulfan Sulfate	0.909	1.008	-10.9	143	0.00	6.72-	6.78
23	A	Methoxychlor	0.435	0.493	-13.3	146	0.00	7.31-	7.37
24		Mirex	0.758	0.753	0.7	141	0.00	7.54-	7.60
25	B	Endrin Ketone	1.048	1.149	-9.6	141	0.00	7.63-	7.69
26	SA	Decachlorobiphenyl	1.065	1.145	-7.5	146	0.00	9.91-	9.97
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	124	0.00	1.03-	1.23
28	L8	Toxaphene{A}			-----NA-----				
29	L8	Toxaphene{B}			-----NA-----				
30	L8	Toxaphene{C}			-----NA-----				
31	L8	Toxaphene{D}			-----NA-----				
32	L8	Toxaphene{E}			-----NA-----				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	130	0.00	1.03-	1.23
34		Chlordane {A}			-----NA-----				
35		Chlordane {B}			-----NA-----				
36		Chlordane {C}			-----NA-----				
37		Chlordane {D}			-----NA-----				
38		Chlordane {E}			-----NA-----				

(#) = Out of Range  
 1g196250.d 1PST6859a.M

SPCC's out = 0 CCC's out = 0  
 Wed May 15 11:31:38 2024

8.10.8

8



# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G1G7016-CC6859  
**Lab FileID:** 1G196428.D

## Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\1G7016\1g196428.d\ECD1A.CH Vial: 2  
 Signal #2 : C:\msdchem\1\data\1G7016\1g196428.d\ECD2B.CH  
 Acq On : 15 May 2024 10:36 am Operator: mahalia  
 Sample : cc6859-25 Inst : GC1G  
 Misc : op54640,g1g7016,1000,,,5,1 Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\methods\1PST6859a.M (ChemStation Integrator)  
 Title : PEST/PCB  
 Last Update : Wed May 15 14:04:07 2024  
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	74	0.00	1.20-	1.26
2 SAB	Tetrachloro-m-xylene	0.958	0.901	5.9	72	0.00	1.66-	1.72
3	Hexachlorobenzene	1.062	1.371	-29.1#	96	0.00	1.94-	2.00
4 A	alpha-BHC	1.340	1.337	0.2	73	0.00	2.04-	2.10
5 MA	gamma-BHC	1.209	1.189	1.7	72	0.00	2.28-	2.34
6 MA	Heptachlor	1.310	1.289	1.6	72	0.00	2.67-	2.73
7 B	beta-BHC	0.560	0.487	13.0	65	0.00	2.37-	2.43
8 B	delta-BHC	1.048	1.069	-2.0	72	0.00	2.53-	2.59
9 MB	Aldrin	1.187	1.191	-0.3	74	0.00	2.96-	3.02
10	Alachlor	0.152	0.135	11.2	65	0.00	3.09-	3.15
11 B	Heptachlor Epoxide	1.156	1.152	0.3	73	0.00	3.58-	3.64
12 B	gamma-Chlordane	1.161	1.171	-0.9	74	0.00	3.73-	3.79
13 B	alpha-Chlordane	1.155	1.172	-1.5	75	0.00	3.89-	3.95
14 A	Endosulfan I	1.132	1.358	-20.0	88	0.00	4.05-	4.11
15 B	4,4'-DDE	0.940	0.869	7.6	68	0.00	4.02-	4.08
16 MA	Dieldrin	1.131	1.164	-2.9	76	0.00	4.35-	4.41
17 MA	Endrin	1.080	1.124	-4.1	78	0.00	4.65-	4.71
18 A	4,4'-DDD	0.824	0.867	-5.2	78	0.00	4.82-	4.89
19 B	Endosulfan II	1.017	1.043	-2.6	77	0.00	4.97-	5.03
20 MA	4,4'-DDT	0.776	0.781	-0.6	72	0.00	5.20-	5.26
21 B	Endrin Aldehyde	0.732	0.734	-0.3	73	0.00	5.58-	5.64
22 B	Endosulfan Sulfate	0.944	0.919	2.6	74	0.00	6.25-	6.31
23 A	Methoxychlor	0.503	0.461	8.3	67	0.00	6.01-	6.07
24	Mirex	0.886	0.957	-8.0	81	0.00	6.08-	6.14
25 B	Endrin Ketone	1.064	1.128	-6.0	77	0.00	6.70-	6.76
26 SA	Decachlorobiphenyl	0.976	1.167	-19.6	90	0.00	8.57-	8.63
27 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	74	0.00	1.13-	1.33
28 L8	Toxaphene{A}			-----NA-----				
29 L8	Toxaphene{B}			-----NA-----				
30 L8	Toxaphene{C}			-----NA-----				
31 L8	Toxaphene{D}			-----NA-----				
32 L8	Toxaphene{E}			-----NA-----				
33 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	74	0.00	1.13-	1.33
34	Chlordane {A}			-----NA-----				
35	Chlordane {B}			-----NA-----				
36	Chlordane {C}			-----NA-----				
37	Chlordane {D}			-----NA-----				
38	Chlordane {E}			-----NA-----				

8.10.9  
8

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G1G7016-CC6859  
**Lab FileID:** 1G196428.D

\*\*\*\*\* Signal #2 \*\*\*\*\*

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	103	0.00	1.11-	1.17
2	SAB	Tetrachloro-m-xylene	0.626	0.609	2.7	106	0.00	1.70-	1.76
3		Hexachlorobenzene	1.377	1.335	3.1	98	0.00	2.08-	2.14
4	A	alpha-BHC	1.427	1.503	-5.3	107	0.00	2.17-	2.23
5	MA	gamma-BHC	1.310	1.351	-3.1	107	0.00	2.49-	2.55
6	MA	Heptachlor	1.380	1.496	-8.4	110	0.00	2.94-	3.00
7	B	beta-BHC	0.499	0.486	2.6	102	0.00	2.58-	2.64
8	B	delta-BHC	1.220	1.221	-0.1	103	0.00	2.88-	2.94
9	MB	Aldrin	1.277	1.365	-6.9	107	0.00	3.30-	3.36
10		Alachlor	0.125	0.115	8.0	95	0.00	3.16-	3.22
11	B	Heptachlor Epoxide	1.195	1.236	-3.4	107	0.00	3.99-	4.05
12	B	gamma-Chlordane	1.215	1.244	-2.4	105	0.00	4.24-	4.30
13	B	alpha-Chlordane	1.181	1.223	-3.6	107	0.00	4.44-	4.50
14	A	Endosulfan I	1.160	1.189	-2.5	107	0.00	4.52-	4.58
15	B	4,4'-DDE	1.113	1.151	-3.4	106	0.00	4.70-	4.76
16	MA	Dieldrin	1.229	1.316	-7.1	110	0.00	4.91-	4.97
17	MA	Endrin	1.147	1.234	-7.6	112	0.00	5.36-	5.42
18	A	4,4'-DDD	0.844	0.905	-7.2	109	0.00	5.60-	5.66
19	B	Endosulfan II	1.062	1.133	-6.7	109	0.00	5.70-	5.76
20	MA	4,4'-DDT	0.721	0.799	-10.8	110	0.00	6.10-	6.16
21	B	Endrin Aldehyde	0.761	0.717	5.8	101	0.00	6.25-	6.31
22	B	Endosulfan Sulfate	0.909	0.942	-3.6	108	0.00	6.72-	6.78
23	A	Methoxychlor	0.435	0.454	-4.4	109	0.00	7.32-	7.38
24		Mirex	0.758	0.744	1.8	107	0.00	7.54-	7.60
25	B	Endrin Ketone	1.048	1.111	-6.0	108	0.00	7.63-	7.69
26	SA	Decachlorobiphenyl	1.065	1.098	-3.1	112	0.00	9.92-	9.98
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	103	0.00	1.04-	1.24
28	L8	Toxaphene{A}			-----NA-----				
29	L8	Toxaphene{B}			-----NA-----				
30	L8	Toxaphene{C}			-----NA-----				
31	L8	Toxaphene{D}			-----NA-----				
32	L8	Toxaphene{E}			-----NA-----				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	103	0.00	1.04-	1.24
34		Chlordane {A}			-----NA-----				
35		Chlordane {B}			-----NA-----				
36		Chlordane {C}			-----NA-----				
37		Chlordane {D}			-----NA-----				
38		Chlordane {E}			-----NA-----				

(#) = Out of Range  
 1g195816.D 1PST6859a.M

SPCC's out = 0 CCC's out = 0  
 Wed May 15 14:11:20 2024

8.10.9

8

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G1G7016-CC6859  
**Lab FileID:** 1G196437.D

## Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\1G7016\1g196437.d\ECD1A.CH Vial: 4  
 Signal #2 : C:\msdchem\1\data\1G7016\1g196437.d\ECD2B.CH  
 Acq On : 15 May 2024 1:42 pm Operator: mahalia1  
 Sample : cc6859-50 Inst : GC1G  
 Misc : op54620,g1g7016,1000,,,5,1 Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\methods\1PST6859a.M (ChemStation Integrator)  
 Title : PEST/PCB  
 Last Update : Wed May 15 14:04:07 2024  
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	1.21-	1.27
2 SAB	Tetrachloro-m-xylene	0.958	0.915	4.5	99	0.00	1.66-	1.72
3	Hexachlorobenzene	1.062	1.282	-20.7#	124	0.00	1.94-	2.00
4 A	alpha-BHC	1.340	1.405	-4.9	99	0.00	2.04-	2.10
5 MA	gamma-BHC	1.209	1.207	0.2	95	0.00	2.28-	2.34
6 MA	Heptachlor	1.310	1.342	-2.4	100	0.00	2.68-	2.74
7 B	beta-BHC	0.560	0.537	4.1	97	0.00	2.38-	2.44
8 B	delta-BHC	1.048	1.085	-3.5	93	0.00	2.53-	2.59
9 MB	Aldrin	1.187	1.231	-3.7	101	0.00	2.96-	3.02
10	Alachlor	0.152	0.140	7.9	94	0.00	3.09-	3.15
11 B	Heptachlor Epoxide	1.156	1.176	-1.7	101	0.00	3.59-	3.65
12 B	gamma-Chlordane	1.161	1.209	-4.1	103	0.00	3.74-	3.80
13 B	alpha-Chlordane	1.155	1.186	-2.7	103	0.00	3.89-	3.95
14 A	Endosulfan I	1.132	2.248	-98.6#	197#	0.00	4.05-	4.11
15 B	4,4'-DDE	0.940	2.261	-140.5#	226#	0.03	4.05-	4.11
16 MA	Dieldrin	1.131	1.206	-6.6	104	0.00	4.35-	4.41
17 MA	Endrin	1.080	1.149	-6.4	105	0.00	4.65-	4.71
18 A	4,4'-DDD	0.824	0.800	2.9	94	0.02	4.84-	4.91
19 B	Endosulfan II	1.017	1.134	-11.5	112	0.00	4.98-	5.04
20 MA	4,4'-DDT	0.776	0.835	-7.6	99	0.00	5.21-	5.27
21 B	Endrin Aldehyde	0.732	0.773	-5.6	105	0.00	5.58-	5.64
22 B	Endosulfan Sulfate	0.944	0.949	-0.5	103	0.00	6.25-	6.31
23 A	Methoxychlor	0.503	0.360	28.4#	71	0.02	6.02-	6.08
24	Mirex	0.886	1.052	-18.7	125	0.00	6.08-	6.14
25 B	Endrin Ketone	1.064	1.151	-8.2	106	0.00	6.70-	6.76
26 SA	Decachlorobiphenyl	0.976	1.101	-12.8	119	0.00	8.58-	8.64
27 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	95	0.00	1.14-	1.34
28 L8	Toxaphene{A}			-----NA-----				
29 L8	Toxaphene{B}			-----NA-----				
30 L8	Toxaphene{C}			-----NA-----				
31 L8	Toxaphene{D}			-----NA-----				
32 L8	Toxaphene{E}			-----NA-----				
33 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	100	0.00	1.14-	1.34
34	Chlordane {A}			-----NA-----				
35	Chlordane {B}			-----NA-----				
36	Chlordane {C}			-----NA-----				
37	Chlordane {D}			-----NA-----				
38	Chlordane {E}			-----NA-----				

8.10.10

8

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G1G7016-CC6859  
**Lab FileID:** 1G196437.D

\*\*\*\*\* Signal #2 \*\*\*\*\*

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	132	0.00	1.11-	1.17
2	SAB	Tetrachloro-m-xylene	0.626	0.602	3.8	137	0.00	1.70-	1.76
3		Hexachlorobenzene	1.377	1.316	4.4	126	0.00	2.08-	2.14
4	A	alpha-BHC	1.427	1.575	-10.4	137	0.00	2.17-	2.23
5	MA	gamma-BHC	1.310	1.371	-4.7	133	0.00	2.50-	2.56
6	MA	Heptachlor	1.380	1.555	-12.7	142	0.00	2.94-	3.00
7	B	beta-BHC	0.499	0.503	-0.8	134	0.00	2.59-	2.65
8	B	delta-BHC	1.220	1.170	4.1	120	0.00	2.89-	2.95
9	MB	Aldrin	1.277	1.375	-7.7	135	0.00	3.30-	3.36
10		Alachlor	0.125	0.115	8.0	124	0.00	3.17-	3.23
11	B	Heptachlor Epoxide	1.195	1.249	-4.5	136	0.00	3.99-	4.05
12	B	gamma-Chlordane	1.215	1.253	-3.1	133	0.00	4.25-	4.31
13	B	alpha-Chlordane	1.181	1.217	-3.0	135	0.00	4.44-	4.50
14	A	Endosulfan I	1.160	1.191	-2.7	135	0.00	4.52-	4.58
15	B	4,4'-DDE	1.113	1.157	-4.0	133	0.00	4.71-	4.77
16	MA	Dieldrin	1.229	1.303	-6.0	136	0.00	4.91-	4.97
17	MA	Endrin	1.147	1.217	-6.1	138	0.00	5.36-	5.42
18	A	4,4'-DDD	0.844	0.839	0.6	127	0.00	5.61-	5.67
19	B	Endosulfan II	1.062	1.160	-9.2	142	0.00	5.70-	5.76
20	MA	4,4'-DDT	0.721	0.816	-13.2	135	0.00	6.10-	6.16
21	B	Endrin Aldehyde	0.761	0.708	7.0	128	0.00	6.25-	6.31
22	B	Endosulfan Sulfate	0.909	0.928	-2.1	135	0.00	6.72-	6.78
23	A	Methoxychlor	0.435	0.444	-2.1	134	0.00	7.33-	7.39
24		Mirex	0.758	0.724	4.5	138	0.00	7.54-	7.60
25	B	Endrin Ketone	1.048	1.111	-6.0	139	0.00	7.63-	7.69
26	SA	Decachlorobiphenyl	1.065	1.093	-2.6	142	0.00	9.92-	9.98
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	126	0.00	1.04-	1.24
28	L8	Toxaphene{A}			-----NA-----				
29	L8	Toxaphene{B}			-----NA-----				
30	L8	Toxaphene{C}			-----NA-----				
31	L8	Toxaphene{D}			-----NA-----				
32	L8	Toxaphene{E}			-----NA-----				
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	133	0.00	1.04-	1.24
34		Chlordane {A}			-----NA-----				
35		Chlordane {B}			-----NA-----				
36		Chlordane {C}			-----NA-----				
37		Chlordane {D}			-----NA-----				
38		Chlordane {E}			-----NA-----				

(#) = Out of Range  
 1g195781.D 1PST6859a.M

SPCC's out = 0 CCC's out = 0  
 Wed May 15 14:23:43 2024

8.10.10

8

# Initial Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G2G6081-ICC6081  
**Lab FileID:** 2G231556.D

Response Factor Report GC2G

Method : C:\msdchem\1\MET...PCBLVI6081full.M (ChemStation Integrator)  
 Title :  
 Last Update : Thu May 02 10:45:47 2024  
 Response via : Initial Calibration

Calibration Files

50 =2G231603.d 250 =2G231605.d 500 =2G231606.d 1000=2G231607.d  
 2000=2G231608.d 3000=2G231609.d 5000=2G231610.d 10k =2G231611.d  
 20k =2G231612.d 100 =2G231582.d = =

Compound	50	250	500	1000	2000	3000	5000	10k	20k	100	Avg	%RSD
1) Tetrachloro-m-xylene	4.091	4.817	4.495	4.573	4.104	4.109	4.023	4.152		4.907	4.363 E8	7.81
2) AR1221-A				2.637							2.637 E6	0.00
3) AR1221-B				4.558							4.558 E6	0.00
4) AR1221-C				1.450							1.450 E7	0.00
5) AR1221-D				2.035							2.035 E6	0.00
6) AR1221-E				3.303							3.303 E6	0.00
7) AR1232-A				9.974							9.974 E6	0.00
8) AR1232-B				7.284							7.284 E6	0.00
9) AR1232-C				1.420							1.420 E7	0.00
10) AR1232-D				5.554							5.554 E6	0.00
11) AR1232-E				5.697							5.697 E6	0.00
12) AR1242-A	2.144	1.206	1.235	1.177	1.098	1.090	1.152	0.985	0.890	1.650	1.263 E7	29.20
----- Quadratic regression ----- Coefficient = 0.9973												
Response Ratio = 51366681.13373 + 11122372.80748 *A + -1087.40523 *A^2												
13) AR1242-B	4.219	2.378	2.386	2.336	2.219	2.203	2.379	2.086	1.935	3.180	2.532 E7	26.76
----- Quadratic regression ----- Coefficient = 0.9970												
Response Ratio = 98562237.41619 + 22035826.20841 *A + -1142.15981 *A^2												
14) AR1242-C	3.183	1.790	1.721	1.702	1.613	1.604	1.697	1.518	1.371	2.510	1.871 E7	29.43
----- Quadratic regression ----- Coefficient = 0.9972												
Response Ratio = 79620718.83982 + 16118588.88491 *A + -1074.59871 *A^2												
15) AR1242-D	1.976	1.297	1.075	1.132	1.084	1.046	1.115	0.976	0.908	1.546	1.215 E7	26.43
----- Quadratic regression ----- Coefficient = 0.9979												
Response Ratio = 45314836.68287 + 10776660.91918 *A + -844.90358 *A^2												
16) AR1242-E	2.247	1.283	1.576	1.681	1.562	1.582	1.705	1.521	1.433	1.725	1.632 E7	15.54
----- Quadratic regression ----- Coefficient = 0.9873												

8.10.11

8

# Initial Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G2G6081-ICC6081  
**Lab FileID:** 2G231556.D

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$$\text{Response Ratio} = 30794628.10779 + 15185126.98267 *A + -109.31555 *A^2$$

- 17) AR1248-A  
1.002 0.569 0.589 0.567 0.524 0.511 0.497 0.485 0.450 0.796 0.599 E7 28.49  
----- Quadratic regression ----- Coefficient = 1.0000  
Response Ratio = 30704579.27738 + 5118199.23501 \*A + -316.49971 \*A^2
  
- 18) AR1248-B  
2.940 1.582 1.599 1.585 1.450 1.430 1.419 1.392 1.336 2.130 1.686 E7 29.32  
----- Quadratic regression ----- Coefficient = 1.0000  
Response Ratio = 75189749.97349 + 14314978.75546 \*A + -495.83539 \*A^2
  
- 19) AR1248-C  
5.647 2.983 2.963 2.840 2.634 2.568 2.498 2.393 2.213 4.024 3.076 E7 33.54  
----- Quadratic regression ----- Coefficient = 1.0000  
Response Ratio = 190568746.01617 + 25505798.13859 \*A + -1737.88283 \*A^2
  
- 20) AR1248-D  
3.295 1.812 1.842 1.765 1.656 1.611 1.570 1.507 1.384 2.447 1.889 E7 30.29  
----- Quadratic regression ----- Coefficient = 1.0000  
Response Ratio = 99194931.94584 + 16147725.71899 \*A + -1178.82562 \*A^2
  
- 21) AR1248-E  
0.300 1.749 1.781 1.723 1.609 1.570 1.533 1.487 1.416 2.266 1.543 E7 32.21  
----- Quadratic regression ----- Coefficient = 0.9994  
Response Ratio = -25718812.03855 + 15778110.08034 \*A + -806.36856 \*A^2
  
- 22) AR1248-F  
4.767 3.043 3.088 3.011 2.814 2.747 2.699 2.632 2.453 3.673 3.093 E7 21.88  
----- Quadratic regression ----- Coefficient = 1.0000  
Response Ratio = 117024058.93066 + 27778937.58940 \*A + -1648.40667 \*A^2
  
- 23) AR1248-G  
4.146 3.020 3.147 2.994 2.641 2.783 2.602 2.680 2.383 3.248 2.964 E7 16.69  
----- Quadratic regression ----- Coefficient = 0.9995  
Response Ratio = -16151630.01304 + 28593742.55863 \*A + -2351.33614 \*A^2
  
- 24) AR1254-A  
2.794 1.567 1.704 1.432 1.353 1.360 1.253 1.254 1.131 1.656 1.550 E7 30.58  
----- Quadratic regression ----- Coefficient = 0.9998  
Response Ratio = 79097590.73451 + 13377930.66905 \*A + -1049.62655 \*A^2
  
- 25) AR1254-B  
4.931 3.003 3.106 2.812 2.648 2.687 2.302 2.454 2.174 2.866 2.898 E7 26.67  
----- Quadratic regression ----- Coefficient = 0.9991  
Response Ratio = 112911932.10866 + 25993875.59886 \*A + -2134.05979 \*A^2
  
- 26) AR1254-C  
2.534 1.587 1.685 1.519 1.439 1.460 1.308 1.360 1.251 1.610 1.575 E7 23.08  
----- Quadratic regression ----- Coefficient = 0.9996  
Response Ratio = 59711577.07268 + 14178749.24221 \*A + -840.16999 \*A^2
  
- 27) AR1254-D  
5.001 3.111 3.295 2.991 2.797 2.835 2.513 2.612 2.341 3.182 3.068 E7 24.25  
----- Quadratic regression ----- Coefficient = 0.9995  
Response Ratio = 115852928.05737 + 27699504.14972 \*A + -2155.12580 \*A^2
  
- 28) AR1254-E  
3.376 2.300 2.476 2.270 2.188 2.231 2.024 2.170 2.029 2.093 2.316 E7 17.11  
----- Quadratic regression ----- Coefficient = 0.9995

8.10.11  
8

# Initial Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G2G6081-ICC6081  
**Lab FileID:** 2G231556.D

$$\text{Response Ratio} = 7064421.71936 + 22132149.70420 *A + -904.41724 *A^2$$

29)	AR1254-F	3.970 2.464 2.640 2.397 2.268 2.295 2.076 2.136 1.940 2.566 2.475 E7 22.98		
		----- Quadratic regression ----- Coefficient = 0.9996		
		Response Ratio = 80761804.61441 + 22548852.34070 *A + -1583.11441 *A^2		
30)	AR1254-G	5.354 3.227 3.492 3.175 3.018 3.072 2.810 2.894 2.642 3.397 3.308 E7 23.10		
		----- Quadratic regression ----- Coefficient = 0.9997		
		Response Ratio = 73560151.24555 + 30431010.42895 *A + -2005.15607 *A^2		
31)	AR1016-A	7.064 7.893 7.286 7.561 6.930 6.901 6.803 7.179 9.529 7.461 E6 11.38		
32)	AR1016-B	1.537 1.590 1.509 1.503 1.345 1.337 1.292 1.318 1.941 1.486 E7 13.65		
33)	AR1016-C	3.304 3.400 3.221 3.260 2.904 2.900 2.888 2.992 3.975 3.205 E7 10.88		
34)	AR1016-D	1.466 1.378 1.300 1.288 1.153 1.156 1.134 1.185 1.673 1.304 E7 13.72		
35)	AR1016-E	1.497 1.503 1.427 1.426 1.279 1.292 1.269 1.335 1.858 1.432 E7 12.81		
36)	AR1260-A	3.709 4.102 3.974 4.023 3.619 3.665 3.640 3.799 4.512 3.894 E7 7.51		
37)	AR1260-B	2.756 2.907 2.823 2.853 2.566 2.593 2.559 2.650 3.303 2.779 E7 8.47		
38)	AR1260-C	2.332 2.498 2.428 2.434 2.166 2.218 2.177 2.269 2.689 2.357 E7 7.32		
39)	AR1260-D	6.493 7.041 6.901 6.997 6.252 6.239 5.999 5.983 7.527 6.604 E7 8.13		
40)	AR1260-E	6.261 6.397 6.289 6.404 5.716 5.872 5.716 6.007 7.324 6.221 E7 7.97		
41)	AR1262-A		2.625	2.625 E7 0.00
42)	AR1262-B		4.181	4.181 E7 0.00
43)	AR1262-C		3.096	3.096 E7 0.00
44)	AR1262-D		7.890	7.890 E7 0.00
45)	AR1262-E		8.341	8.341 E7 0.00
46)	AR1268-A		8.875	8.875 E7 0.00
47)	AR1268-B		8.404	8.404 E7 0.00
48)	AR1268-C		7.161	7.161 E7 0.00
49)	AR1268-D		2.635	2.635 E7 0.00
50)	AR1268-E		1.768	1.768 E8 0.00
51)	Decachlorobiphenyl	4.076 4.023 4.049 3.617 3.650 3.646	4.592 3.951 E8	8.86

Signal #2

1)	Tetrachloro-m-xylene	5.455 6.041 5.857 6.054 5.502 5.603 5.607 5.975 6.706 5.867 E8 6.66		
2)	AR1221-A			

# Initial Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G2G6081-ICC6081  
**Lab FileID:** 2G231556.D

3)	AR1221-B	2.838		2.838 E6	0.00
4)	AR1221-C	6.390		6.390 E6	0.00
5)	AR1221-D	1.527		1.527 E7	0.00
6)	AR1221-E	4.691		4.691 E6	0.00
7)	AR1232-A	3.482		3.482 E6	0.00
8)	AR1232-B	1.098		1.098 E7	0.00
9)	AR1232-C	9.119		9.119 E6	0.00
10)	AR1232-D	2.030		2.030 E7	0.00
11)	AR1232-E	7.557		7.557 E6	0.00
12)	AR1242-A	5.610		5.610 E6	0.00
		2.953 1.654 1.615 1.542 1.434 1.354 1.427 1.219 1.132 2.337	1.667 E7	33.57	
		----- Quadratic regression ----- Coefficient = 0.9970			
		Response Ratio = 77988760.06958 + 14391088.41124 *A + -1676.05656 *A^2			
13)	AR1242-B	6.790 4.005 3.887 3.652 3.479 3.400 3.639 3.122 2.800 5.101	3.988 E7	29.08	
		----- Quadratic regression ----- Coefficient = 0.9986			
		Response Ratio = 161801662.45289 + 35169454.66277 *A + -3513.36966 *A^2			
14)	AR1242-C	2.488 1.664 1.413 1.344 1.280 1.245 1.326 1.164 1.084 1.894	1.490 E7	28.46	
		----- Quadratic regression ----- Coefficient = 0.9979			
		Response Ratio = 59223127.18154 + 13160877.51681 *A + -1243.99764 *A^2			
15)	AR1242-D	2.191 1.236 1.204 1.133 1.077 1.044 1.125 0.986 0.923 1.598	1.252 E7	30.22	
		----- Quadratic regression ----- Coefficient = 0.9985			
		Response Ratio = 54982516.48098 + 10723805.27869 *A + -732.42192 *A^2			
16)	AR1242-E	2.666 1.502 1.542 1.443 1.387 1.349 1.459 1.302 1.226 2.081	1.596 E7	27.72	
		----- Quadratic regression ----- Coefficient = 0.9973			
		Response Ratio = 64671622.67024 + 13783842.31573 *A + -706.50807 *A^2			
17)	AR1248-A	1.515 0.809 0.807 0.753 0.690 0.661 0.650 0.617 0.570 1.141	0.821 E7	35.53	
		----- Quadratic regression ----- Coefficient = 0.9979			
		Response Ratio = 41951569.34335 + 6886012.37765 *A + -658.34310 *A^2			
18)	AR1248-B	4.635 2.496 2.517 2.395 2.252 2.197 2.156 2.097 1.940 3.520	2.621 E7	31.71	
		----- Quadratic regression ----- Coefficient = 0.9982			
		Response Ratio = 121886232.36894 + 22128459.35107 *A + -1378.21246 *A^2			
19)	AR1248-C	2.882 1.525 1.516 1.447 1.353 1.320 1.289 1.251 1.155 2.134	1.587 E7	33.32	
		----- Quadratic regression ----- Coefficient = 0.9985			
		Response Ratio = 77717241.77452 + 13270904.80564 *A + -874.69415 *A^2			
20)	AR1248-D				



# Initial Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G2G6081-ICC6081  
**Lab FileID:** 2G231556.D

- 
- 3.793 2.029 2.038 1.954 1.811 1.768 1.719 1.645 1.514 2.833 2.110 E7 32.83  
----- Quadratic regression ----- Coefficient = 0.9983  
Response Ratio = 100367059.08333 + 17867289.90766 \*A + -1420.37517 \*A^2
- 21) AR1248-E  
3.675 1.961 2.000 1.925 1.807 1.776 1.741 1.693 1.580 2.748 2.091 E7 30.73  
----- Quadratic regression ----- Coefficient = 0.9980  
Response Ratio = 94887353.98864 + 17664088.30138 \*A + -911.74284 \*A^2
- 22) AR1248-F  
5.385 2.904 2.895 2.787 2.607 2.551 2.497 2.418 2.233 4.002 3.028 E7 31.69  
----- Quadratic regression ----- Coefficient = 0.9986  
Response Ratio = 140696402.49021 + 25593711.43172 \*A + -1637.02980 \*A^2
- 23) AR1248-G  
5.309 2.787 2.854 2.763 2.603 2.554 2.524 2.469 2.327 3.891 3.008 E7 30.48  
----- Quadratic regression ----- Coefficient = 0.9977  
Response Ratio = 137251654.55041 + 25206249.07304 \*A + -876.60481 \*A^2
- 24) AR1254-A  
4.561 2.503 2.605 2.316 2.157 2.172 1.947 2.005 1.848 2.784 2.490 E7 31.60  
----- Quadratic regression ----- Coefficient = 0.9885  
Response Ratio = 111360224.77891 + 21257162.18363 \*A + -1454.92133 \*A^2
- 25) AR1254-B  
5.395 2.983 3.118 2.780 2.607 2.645 2.200 2.458 2.273 3.343 2.980 E7 30.94  
----- Quadratic regression ----- Coefficient = 0.9878  
Response Ratio = 131181307.25423 + 25403761.11692 \*A + -1459.41447 \*A^2
- 26) AR1254-C  
4.075 2.258 2.370 2.122 2.004 2.041 1.866 1.945 1.842 2.629 2.315 E7 28.70  
----- Quadratic regression ----- Coefficient = 0.9929  
Response Ratio = 97667142.27987 + 19684780.39489 \*A + -623.78805 \*A^2
- 27) AR1254-D  
7.628 4.290 4.532 4.079 3.845 3.911 3.572 3.618 2.655 4.747 4.288 E7 30.55  
----- Quadratic regression ----- Coefficient = 0.9882  
Response Ratio = 167565333.74287 + 38745333.82208 \*A + -5409.53443 \*A^2
- 28) AR1254-E  
5.967 3.389 3.598 3.247 3.026 3.104 2.852 2.923 2.221 3.685 3.401 E7 29.20  
----- Quadratic regression ----- Coefficient = 0.9875  
Response Ratio = 128650317.70449 + 30640488.35776 \*A + -3678.35509 \*A^2
- 29) AR1254-F  
5.825 3.298 3.510 3.168 3.085 3.119 2.920 3.025 2.869 3.647 3.446 E7 25.27  
----- Quadratic regression ----- Coefficient = 0.9906  
Response Ratio = 127516085.25747 + 29724278.41744 \*A + -306.83912 \*A^2
- 30) AR1254-G  
7.093 4.117 4.373 4.006 3.792 3.887 3.480 3.717 2.840 4.695 4.200 E7 26.98  
----- Quadratic regression ----- Coefficient = 0.9916  
Response Ratio = 148749196.34688 + 38050341.75433 \*A + -4124.74543 \*A^2
- 31) AR1016-A  
8.815 9.562 8.842 9.088 7.850 7.819 7.531 7.949 9.991 8.605 E6 10.02
- 32) AR1016-B  
1.977 2.086 1.959 1.927 1.672 1.653 1.603 1.666 2.352 1.877 E7 13.33
- 33) AR1016-C  
5.025 4.901 4.705 4.775 4.243 4.273 4.192 4.322 5.703 4.682 E7 10.54
-

# Initial Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G2G6081-ICC6081  
**Lab FileID:** 2G231556.D

34)	AR1016-D	1.686	1.763	1.669	1.772	1.555	1.570	1.535	1.605	1.897	1.673	E7	7.21
35)	AR1016-E	1.465	1.534	1.442	1.466	1.306	1.309	1.303	1.378	1.675	1.431	E7	8.64
36)	AR1260-A	4.804	4.835	4.757	4.883	4.460	4.573	4.612	4.942	5.472	4.815	E7	6.06
37)	AR1260-B	3.196	3.295	3.231	3.347	3.060	3.112	3.137	3.138	3.624	3.238	E7	5.28
38)	AR1260-C	3.105	2.894	2.814	2.893	2.639	2.701	2.732	2.883	3.246	2.879	E7	6.75
39)	AR1260-D	7.221	7.173	7.110	7.403	6.707	6.793	6.093	4.012	7.886	6.711	E7	16.80
40)	AR1260-E	5.609	6.037	5.896	6.212	5.638	5.818	5.941	6.437	6.523	6.012	E7	5.39
41)	AR1262-A				3.215						3.215	E7	0.00
42)	AR1262-B				4.890						4.890	E7	0.00
43)	AR1262-C				3.546						3.546	E7	0.00
44)	AR1262-D				8.271						8.271	E7	0.00
45)	AR1262-E				8.098						8.098	E7	0.00
46)	AR1268-A				9.681						9.681	E7	0.00
47)	AR1268-B				8.173						8.173	E7	0.00
48)	AR1268-C				7.080						7.080	E7	0.00
49)	AR1268-D				2.752						2.752	E7	0.00
50)	AR1268-E				1.878						1.878	E8	0.00
51)	Decachlorobiphenyl	3.854	3.717	3.755	3.748	3.811	3.590	3.642	4.022	4.219	3.818	E8	5.12

-----  
 (#) = Out of Range ### Number of calibration levels exceeded format ###

2PCBLVI6081full1.M

Thu May 02 11:30:24 2024

8.10.11

8

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G2G6081-ICV6081  
**Lab FileID:** 2G231562.D

## Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\2G6081\2G231562.d\ECD1A.CH Vial: 0  
 Signal #2 : C:\msdchem\1\DATA\2G6081\2G231562.d\ECD2B.CH  
 Acq On : 29 Apr 2024 8:02 am Operator: christp  
 Sample : icv6081-100 Inst : GC2G  
 Misc : op53681,G2G6081,5.0,,,10,1 Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\METHODS\2PCBLVI6081.M (ChemStation Integrator)  
 Title :  
 Last Update : Wed May 01 05:40:30 2024  
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 S	Tetrachloro-m-xylene	436.345	480.120 E6	-10.0	105	0.00	4.65-	4.71
2	AR1221-A			NA				
3	AR1221-B			NA				
4	AR1221-C			NA				
5	AR1221-D			NA				
6	AR1221-E			NA				
7	AR1232-A			NA				
8	AR1232-B			NA				
9	AR1232-C			NA				
10	AR1232-D			NA				
11	AR1232-E			NA				
12	AR1242-A			NA				
13	AR1242-B			NA				
14	AR1242-C			NA				
15	AR1242-D			NA				
16	AR1242-E			NA				
17	AR1248-A			NA				
18	AR1248-B			NA				
19	AR1248-C			NA				
20	AR1248-D			NA				
21	AR1248-E			NA				
22	AR1248-F			NA				
23	AR1248-G			NA				
24	AR1254-A			NA				
25	AR1254-B			NA				
26	AR1254-C			NA				
27	AR1254-D			NA				
28	AR1254-E			NA				
29	AR1254-F			NA				
30	AR1254-G			NA				
31	AR1016-A	7.461	7.097 E6	4.9	94	0.00	4.94-	5.00
32	AR1016-B	14.857	15.119 E6	-1.8	101	0.00	5.22-	5.28
33	AR1016-C	32.048	31.955 E6	0.3	98	0.00	5.59-	5.65
34	AR1016-D	13.036	12.807 E6	1.8	99	0.00	5.71-	5.77
35	AR1016-E	14.318	13.728 E6	4.1	96	0.00	6.06-	6.12
36	AR1260-A	38.935	41.688 E6	-7.1	104	0.00	8.50-	8.56
37	AR1260-B	27.790	23.624 E6	15.0	83	0.00	8.74-	8.80
38	AR1260-C	23.568	21.001 E6	10.9	86	0.00	9.21-	9.27
39	AR1260-D	66.037	59.596 E6	9.8	85	0.02	9.71-	9.77
40	AR1260-E	62.209	52.353 E6	15.8	82	0.00	10.05-	10.20
41	AR1262-A			NA				

8.10.12  
8

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G2G6081-ICV6081  
**Lab FileID:** 2G231562.D

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42	AR1262-B								-----NA-----
43	AR1262-C								-----NA-----
44	AR1262-D								-----NA-----
45	AR1262-E								-----NA-----
46	AR1268-A								-----NA-----
47	AR1268-B								-----NA-----
48	AR1268-C								-----NA-----
49	AR1268-D								-----NA-----
50	AR1268-E								-----NA-----
51 S	Decachlorobiphenyl	395.051	464.108	E6	-17.5	115	0.00	11.28-11.34	

\*\*\*\*\* Signal #2 \*\*\*\*\*

1 S	Tetrachloro-m-xylene	586.663	645.419	E6	-10.0	107	0.00	5.14- 5.20	
2	AR1221-A								-----NA-----
3	AR1221-B								-----NA-----
4	AR1221-C								-----NA-----
5	AR1221-D								-----NA-----
6	AR1221-E								-----NA-----
7	AR1232-A								-----NA-----
8	AR1232-B								-----NA-----
9	AR1232-C								-----NA-----
10	AR1232-D								-----NA-----
11	AR1232-E								-----NA-----
12	AR1242-A								-----NA-----
13	AR1242-B								-----NA-----
14	AR1242-C								-----NA-----
15	AR1242-D								-----NA-----
16	AR1242-E								-----NA-----
17	AR1248-A								-----NA-----
18	AR1248-B								-----NA-----
19	AR1248-C								-----NA-----
20	AR1248-D								-----NA-----
21	AR1248-E								-----NA-----
22	AR1248-F								-----NA-----
23	AR1248-G								-----NA-----
24	AR1254-A								-----NA-----
25	AR1254-B								-----NA-----
26	AR1254-C								-----NA-----
27	AR1254-D								-----NA-----
28	AR1254-E								-----NA-----
29	AR1254-F								-----NA-----
30	AR1254-G								-----NA-----
31	AR1016-A	8.605	8.792	E6	-2.2	97	0.00	5.60- 5.66	
32	AR1016-B	18.771	19.421	E6	-3.5	101	0.00	5.98- 6.04	
33	AR1016-C	46.822	47.164	E6	-0.7	99	0.00	6.48- 6.54	
34	AR1016-D	16.725	17.171	E6	-2.7	97	0.00	6.65- 6.71	
35	AR1016-E	14.308	13.849	E6	3.2	94	0.00	7.29- 7.35	
36	AR1260-A	48.153	51.398	E6	-6.7	105	0.03	10.38-10.44	
37	AR1260-B	32.379	27.508	E6	15.0	82	0.00	10.48-10.54	
38	AR1260-C	28.786	25.386	E6	11.8	88	0.00	10.82-10.88	
39	AR1260-D	67.110	63.363	E6	5.6	86	0.00	11.06-11.12	
40	AR1260-E	60.122	50.531	E6	16.0	81	0.02	11.42-11.48	
41	AR1262-A								-----NA-----
42	AR1262-B								-----NA-----
43	AR1262-C								-----NA-----
44	AR1262-D								-----NA-----
45	AR1262-E								-----NA-----
46	AR1268-A								-----NA-----
47	AR1268-B								-----NA-----

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8.10.12  
8

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G2G6081-ICV6081  
**Lab FileID:** 2G231562.D

---

48	AR1268-C					-----NA-----			
49	AR1268-D					-----NA-----			
50	AR1268-E					-----NA-----			
51 S	Decachlorobiphenyl	381.754	436.000	E6	-14.2	116	0.00	12.40-12.46	

---

(#) = Out of Range                      SPCC's out = 0    CCC's out = 0  
2G231556.d 2PCBLVI6081.M              Wed May 01 05:45:23 2024

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G2G6081-ICV6081  
**Lab FileID:** 2G231570.D

## Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\2G6081\2G231570.d\ECD1A.CH Vial: 0  
Signal #2 : C:\msdchem\1\DATA\2G6081\2G231570.d\ECD2B.CH  
Acq On : 29 Apr 2024 11:22 am Operator: christp  
Sample : icv6081-100 Inst : GC2G  
Misc : op53681,G2G6081,5.0,,,10,1 Multiplr: 1.00  
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\METHODS\2PCBLVI6081.M (ChemStation Integrator)  
Title :  
Last Update : Wed May 01 05:40:30 2024  
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 S	Tetrachloro-m-xylene	436.345	463.969 E6	-6.3	101	0.00	4.65	4.71
2	AR1221-A	2.637	2.255 E6	14.5	86	0.00	4.16	4.36
3	AR1221-B	4.558	3.949 E6	13.4	87	0.00	4.72	4.92
4	AR1221-C	14.502	12.548 E6	13.5	87	0.00	4.87	5.07
5	AR1221-D	2.035	1.820 E6	10.6	89	0.00	5.15	5.35
6	AR1221-E	3.303	2.328 E6	29.5#	70	0.00	5.52	5.72
7	AR1232-A							
8	AR1232-B							
9	AR1232-C							
10	AR1232-D							
11	AR1232-E							
12	AR1242-A							
13	AR1242-B							
14	AR1242-C							
15	AR1242-D							
16	AR1242-E							
17	AR1248-A							
18	AR1248-B							
19	AR1248-C							
20	AR1248-D							
21	AR1248-E							
22	AR1248-F							
23	AR1248-G							
24	AR1254-A							
25	AR1254-B							
26	AR1254-C							
27	AR1254-D							
28	AR1254-E							
29	AR1254-F							
30	AR1254-G							
31	AR1016-A							
32	AR1016-B							
33	AR1016-C							
34	AR1016-D							
35	AR1016-E							
36	AR1260-A							
37	AR1260-B							
38	AR1260-C							
39	AR1260-D							
40	AR1260-E							
41	AR1262-A							

8.10.13  
8

Initial Calibration Verification

Job Number: JD87833
Account: MTXFPNJ Matrix New World Engineering, Inc.
Project: Ridgewood Berm Sampling, Ridgewood, NJ

Sample: G2G6081-ICV6081
Lab FileID: 2G231570.D

Table with columns for sample ID, name, and numerical values. Row 51 S: Decachlorobiphenyl 395.051 434.368 E6 -10.0 107 0.00 11.28-11.34

\*\*\*\*\* Signal #2 \*\*\*\*\*

Table with columns for sample ID, name, and numerical values. Row 1 S: Tetrachloro-m-xylene 586.663 597.640 E6 -1.9 99 0.00 5.14- 5.20

8.10.13
8

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G2G6081-ICV6081  
**Lab FileID:** 2G231570.D

---

48	AR1268-C					-----NA-----			
49	AR1268-D					-----NA-----			
50	AR1268-E					-----NA-----			
51 S	Decachlorobiphenyl	381.754	398.422	E6	-4.4	106	0.01	12.41-12.47	

---

(#) = Out of Range                      SPCC's out = 0    CCC's out = 0  
 2G231556.d 2PCBLVI6081.M            Wed May 01 05:45:32 2024

8.10.13  
8



# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G2G6081-ICV6081  
**Lab FileID:** 2G231572.D

## Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\2G6081\2G231572.d\ECD1A.CH Vial: 0  
 Signal #2 : C:\msdchem\1\DATA\2G6081\2G231572.d\ECD2B.CH  
 Acq On : 29 Apr 2024 12:13 pm Operator: christp  
 Sample : icv6081-100 Inst : GC2G  
 Misc : op53681,G2G6081,5.0,,,10,1 Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\METHODS\2PCBLVI6081.M (ChemStation Integrator)  
 Title :  
 Last Update : Wed May 01 05:40:30 2024  
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 S	Tetrachloro-m-xylene	436.345	454.376 E6	-4.1	99	0.00	4.66-	4.72
2	AR1221-A			NA				
3	AR1221-B			NA				
4	AR1221-C			NA				
5	AR1221-D			NA				
6	AR1221-E			NA				
7	AR1232-A	9.974	8.342 E6	16.4	84	0.00	4.88-	5.08
8	AR1232-B	7.284	6.176 E6	15.2	85	0.00	5.15-	5.35
9	AR1232-C	14.198	12.378 E6	12.8	87	0.00	5.52-	5.72
10	AR1232-D	5.554	4.894 E6	11.9	88	0.00	5.65-	5.85
11	AR1232-E	5.697	4.893 E6	14.1	86	0.00	5.99-	6.19
12	AR1242-A			NA				
13	AR1242-B			NA				
14	AR1242-C			NA				
15	AR1242-D			NA				
16	AR1242-E			NA				
17	AR1248-A			NA				
18	AR1248-B			NA				
19	AR1248-C			NA				
20	AR1248-D			NA				
21	AR1248-E			NA				
22	AR1248-F			NA				
23	AR1248-G			NA				
24	AR1254-A			NA				
25	AR1254-B			NA				
26	AR1254-C			NA				
27	AR1254-D			NA				
28	AR1254-E			NA				
29	AR1254-F			NA				
30	AR1254-G			NA				
31	AR1016-A			NA				
32	AR1016-B			NA				
33	AR1016-C			NA				
34	AR1016-D			NA				
35	AR1016-E			NA				
36	AR1260-A			NA				
37	AR1260-B			NA				
38	AR1260-C			NA				
39	AR1260-D			NA				
40	AR1260-E			NA				
41	AR1262-A			NA				

8.10.14  
8

# Initial Calibration Verification

Job Number: JD87833

Sample: G2G6081-ICV6081

Account: MTXFPNJ Matrix New World Engineering, Inc.

Lab FileID: 2G231572.D

Project: Ridgewood Berm Sampling, Ridgewood, NJ

42	AR1262-B									
43	AR1262-C									
44	AR1262-D									
45	AR1262-E									
46	AR1268-A									
47	AR1268-B									
48	AR1268-C									
49	AR1268-D									
50	AR1268-E									
51 S	Decachlorobiphenyl	395.051	437.005	E6	-10.6	108	0.00		11.28-11.34	

\*\*\*\*\* Signal #2 \*\*\*\*\*

1 S	Tetrachloro-m-xylene	586.663	610.240	E6	-4.0	101	0.00		5.15- 5.21	
2	AR1221-A									
3	AR1221-B									
4	AR1221-C									
5	AR1221-D									
6	AR1221-E									
7	AR1232-A	10.980	10.084	E6	8.2	92	0.00		5.53- 5.73	
8	AR1232-B	9.119	8.502	E6	6.8	93	0.00		5.92- 6.12	
9	AR1232-C	20.297	18.678	E6	8.0	92	0.00		6.42- 6.62	
10	AR1232-D	7.557	6.608	E6	12.6	87	0.00		6.58- 6.78	
11	AR1232-E	5.610	5.077	E6	9.5	90	0.00		7.22- 7.42	
12	AR1242-A									
13	AR1242-B									
14	AR1242-C									
15	AR1242-D									
16	AR1242-E									
17	AR1248-A									
18	AR1248-B									
19	AR1248-C									
20	AR1248-D									
21	AR1248-E									
22	AR1248-F									
23	AR1248-G									
24	AR1254-A									
25	AR1254-B									
26	AR1254-C									
27	AR1254-D									
28	AR1254-E									
29	AR1254-F									
30	AR1254-G									
31	AR1016-A									
32	AR1016-B									
33	AR1016-C									
34	AR1016-D									
35	AR1016-E									
36	AR1260-A									
37	AR1260-B									
38	AR1260-C									
39	AR1260-D									
40	AR1260-E									
41	AR1262-A									
42	AR1262-B									
43	AR1262-C									
44	AR1262-D									
45	AR1262-E									
46	AR1268-A									
47	AR1268-B									

8.10.14  
8

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G2G6081-ICV6081  
**Lab FileID:** 2G231572.D

---

48	AR1268-C					-----NA-----			
49	AR1268-D					-----NA-----			
50	AR1268-E					-----NA-----			
51 S	Decachlorobiphenyl	381.754	406.133	E6	-6.4	108	0.00	12.40-12.46	

---

(#) = Out of Range                      SPCC's out = 0    CCC's out = 0  
2G231556.d 2PCBLVI6081.M              Wed May 01 05:45:36 2024

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G2G6081-ICV6081  
**Lab FileID:** 2G231573.D

## Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\2G6081\2G231573.d\ECD1A.CH Vial: 0  
Signal #2 : C:\msdchem\1\DATA\2G6081\2G231573.d\ECD2B.CH  
Acq On : 29 Apr 2024 12:38 pm Operator: christp  
Sample : icv6081-100 Inst : GC2G  
Misc : op53681,G2G6081,5.0,,,10,1 Multiplr: 1.00  
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\METHODS\2PCBLVI6081.M (ChemStation Integrator)  
Title :  
Last Update : Wed May 01 05:40:30 2024  
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 S	Tetrachloro-m-xylene	436.345	453.873 E6	-4.0	99	0.00	4.65-	4.71
2	AR1221-A			NA				
3	AR1221-B			NA				
4	AR1221-C			NA				
5	AR1221-D			NA				
6	AR1221-E			NA				
7	AR1232-A			NA				
8	AR1232-B			NA				
9	AR1232-C			NA				
10	AR1232-D			NA				
11	AR1232-E			NA				
12	AR1242-A			NA				
13	AR1242-B			NA				
14	AR1242-C			NA				
15	AR1242-D			NA				
16	AR1242-E			NA				
17	AR1248-A			NA				
18	AR1248-B			NA				
19	AR1248-C			NA				
20	AR1248-D			NA				
21	AR1248-E			NA				
22	AR1248-F			NA				
23	AR1248-G			NA				
24	AR1254-A			NA				
25	AR1254-B			NA				
26	AR1254-C			NA				
27	AR1254-D			NA				
28	AR1254-E			NA				
29	AR1254-F			NA				
30	AR1254-G			NA				
31	AR1016-A			NA				
32	AR1016-B			NA				
33	AR1016-C			NA				
34	AR1016-D			NA				
35	AR1016-E			NA				
36	AR1260-A			NA				
37	AR1260-B			NA				
38	AR1260-C			NA				
39	AR1260-D			NA				
40	AR1260-E			NA				
41	AR1262-A	26.252	24.231 E6	7.7	92	0.00	7.90-	8.10

8.10.15

8

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G2G6081-ICV6081  
**Lab FileID:** 2G231573.D

42	AR1262-B	41.812	38.701	E6	7.4	93	0.00	8.68- 8.88
43	AR1262-C	30.962	27.510	E6	11.1	89	0.00	9.14- 9.34
44	AR1262-D	78.899	72.492	E6	8.1	92	0.00	9.64- 9.84
45	AR1262-E	83.413	75.771	E6	9.2	91	0.00	10.07-10.27
46	AR1268-A							-----NA-----
47	AR1268-B							-----NA-----
48	AR1268-C							-----NA-----
49	AR1268-D							-----NA-----
50	AR1268-E							-----NA-----
51 S	Decachlorobiphenyl	395.051	441.547	E6	-11.8	109	0.00	11.28-11.34
***** Signal #2 *****								
1 S	Tetrachloro-m-xylene	586.663	609.549	E6	-3.9	101	0.00	5.14- 5.20
2	AR1221-A							-----NA-----
3	AR1221-B							-----NA-----
4	AR1221-C							-----NA-----
5	AR1221-D							-----NA-----
6	AR1221-E							-----NA-----
7	AR1232-A							-----NA-----
8	AR1232-B							-----NA-----
9	AR1232-C							-----NA-----
10	AR1232-D							-----NA-----
11	AR1232-E							-----NA-----
12	AR1242-A							-----NA-----
13	AR1242-B							-----NA-----
14	AR1242-C							-----NA-----
15	AR1242-D							-----NA-----
16	AR1242-E							-----NA-----
17	AR1248-A							-----NA-----
18	AR1248-B							-----NA-----
19	AR1248-C							-----NA-----
20	AR1248-D							-----NA-----
21	AR1248-E							-----NA-----
22	AR1248-F							-----NA-----
23	AR1248-G							-----NA-----
24	AR1254-A							-----NA-----
25	AR1254-B							-----NA-----
26	AR1254-C							-----NA-----
27	AR1254-D							-----NA-----
28	AR1254-E							-----NA-----
29	AR1254-F							-----NA-----
30	AR1254-G							-----NA-----
31	AR1016-A							-----NA-----
32	AR1016-B							-----NA-----
33	AR1016-C							-----NA-----
34	AR1016-D							-----NA-----
35	AR1016-E							-----NA-----
36	AR1260-A							-----NA-----
37	AR1260-B							-----NA-----
38	AR1260-C							-----NA-----
39	AR1260-D							-----NA-----
40	AR1260-E							-----NA-----
41	AR1262-A	32.146	29.758	E6	7.4	93	0.00	9.84-10.04
42	AR1262-B	48.900	45.080	E6	7.8	92	0.00	10.41-10.61
43	AR1262-C	35.459	32.738	E6	7.7	92	0.00	10.75-10.95
44	AR1262-D	82.706	76.740	E6	7.2	93	0.00	10.99-11.19
45	AR1262-E	80.981	74.598	E6	7.9	92	0.00	11.33-11.53
46	AR1268-A							-----NA-----
47	AR1268-B							-----NA-----

8.10.15

8

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G2G6081-ICV6081  
**Lab FileID:** 2G231573.D

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48	AR1268-C					-----NA-----			
49	AR1268-D					-----NA-----			
50	AR1268-E					-----NA-----			
51 S	Decachlorobiphenyl	381.754	410.457	E6	-7.5	110	0.00	12.40-12.46	

---

(#) = Out of Range                      SPCC's out = 0    CCC's out = 0  
2G231556.d 2PCBLVI6081.M              Wed May 01 05:45:38 2024

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G2G6081-ICV6081  
**Lab FileID:** 2G231574.D

## Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\2G6081\2G231574.d\ECD1A.CH Vial: 0  
Signal #2 : C:\msdchem\1\DATA\2G6081\2G231574.d\ECD2B.CH  
Acq On : 29 Apr 2024 13:04 pm Operator: christp  
Sample : icv6081-100 Inst : GC2G  
Misc : op53681,G2G6081,5.0,,,10,1 Multiplr: 1.00  
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\METHODS\2PCBLVI6081.M (ChemStation Integrator)  
Title :  
Last Update : Wed May 01 05:40:30 2024  
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 S	Tetrachloro-m-xylene	436.345	512.789 E6	-17.5	112	0.00	4.65-	4.71
2	AR1221-A			NA				
3	AR1221-B			NA				
4	AR1221-C			NA				
5	AR1221-D			NA				
6	AR1221-E			NA				
7	AR1232-A			NA				
8	AR1232-B			NA				
9	AR1232-C			NA				
10	AR1232-D			NA				
11	AR1232-E			NA				
12	AR1242-A			NA				
13	AR1242-B			NA				
14	AR1242-C			NA				
15	AR1242-D			NA				
16	AR1242-E			NA				
17	AR1248-A			NA				
18	AR1248-B			NA				
19	AR1248-C			NA				
20	AR1248-D			NA				
21	AR1248-E			NA				
22	AR1248-F			NA				
23	AR1248-G			NA				
24	AR1254-A			NA				
25	AR1254-B			NA				
26	AR1254-C			NA				
27	AR1254-D			NA				
28	AR1254-E			NA				
29	AR1254-F			NA				
30	AR1254-G			NA				
31	AR1016-A			NA				
32	AR1016-B			NA				
33	AR1016-C			NA				
34	AR1016-D			NA				
35	AR1016-E			NA				
36	AR1260-A			NA				
37	AR1260-B			NA				
38	AR1260-C			NA				
39	AR1260-D			NA				
40	AR1260-E			NA				
41	AR1262-A			NA				

8.10.16

8

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G2G6081-ICV6081  
**Lab FileID:** 2G231574.D

42	AR1262-B									-----NA-----
43	AR1262-C									-----NA-----
44	AR1262-D									-----NA-----
45	AR1262-E									-----NA-----
46	AR1268-A	88.746	76.354	E6	14.0	86	0.00			10.07-10.27
47	AR1268-B	84.035	72.503	E6	13.7	86	0.00			10.12-10.32
48	AR1268-C	71.614	62.126	E6	13.2	87	0.00			10.35-10.55
49	AR1268-D	26.346	23.306	E6	11.5	88	0.00			10.74-10.94
50	AR1268-E	176.795	152.805	E6	13.6	86	0.00			11.03-11.23
51 S	Decachlorobiphenyl	395.051	1202.202	E6	-204.3#	297#	0.00			11.28-11.34

\*\*\*\*\* Signal #2 \*\*\*\*\*

1 S	Tetrachloro-m-xylene	586.663	608.483	E6	-3.7	101	0.00			5.14- 5.20
2	AR1221-A									-----NA-----
3	AR1221-B									-----NA-----
4	AR1221-C									-----NA-----
5	AR1221-D									-----NA-----
6	AR1221-E									-----NA-----
7	AR1232-A									-----NA-----
8	AR1232-B									-----NA-----
9	AR1232-C									-----NA-----
10	AR1232-D									-----NA-----
11	AR1232-E									-----NA-----
12	AR1242-A									-----NA-----
13	AR1242-B									-----NA-----
14	AR1242-C									-----NA-----
15	AR1242-D									-----NA-----
16	AR1242-E									-----NA-----
17	AR1248-A									-----NA-----
18	AR1248-B									-----NA-----
19	AR1248-C									-----NA-----
20	AR1248-D									-----NA-----
21	AR1248-E									-----NA-----
22	AR1248-F									-----NA-----
23	AR1248-G									-----NA-----
24	AR1254-A									-----NA-----
25	AR1254-B									-----NA-----
26	AR1254-C									-----NA-----
27	AR1254-D									-----NA-----
28	AR1254-E									-----NA-----
29	AR1254-F									-----NA-----
30	AR1254-G									-----NA-----
31	AR1016-A									-----NA-----
32	AR1016-B									-----NA-----
33	AR1016-C									-----NA-----
34	AR1016-D									-----NA-----
35	AR1016-E									-----NA-----
36	AR1260-A									-----NA-----
37	AR1260-B									-----NA-----
38	AR1260-C									-----NA-----
39	AR1260-D									-----NA-----
40	AR1260-E									-----NA-----
41	AR1262-A									-----NA-----
42	AR1262-B									-----NA-----
43	AR1262-C									-----NA-----
44	AR1262-D									-----NA-----
45	AR1262-E									-----NA-----
46	AR1268-A	96.812	82.216	E6	15.1	85	0.00			11.33-11.53
47	AR1268-B	81.735	69.626	E6	14.8	85	0.00			11.38-11.58

8.10.16

8



# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G2G6081-ICV6081  
**Lab FileID:** 2G231574.D

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48	AR1268-C	70.800	60.136	E6	15.1	85	0.00	11.61-11.81
49	AR1268-D	27.515	23.469	E6	14.7	85	0.00	11.84-12.04
50	AR1268-E	187.769	160.894	E6	14.3	86	0.00	12.11-12.31
51 S	Decachlorobiphenyl	381.754	1154.634	E6	-202.5#	308#	0.00	12.40-12.46

---

---

(#) = Out of Range  
2G231556.d 2PCBLVI6081.M

SPCC's out = 0 CCC's out = 0  
Wed May 01 05:45:40 2024

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G2G6081-ICV6081  
**Lab FileID:** 2G231591.D

## Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\2G6081\2G231591.d\ECD1A.CH Vial: 0  
Signal #2 : C:\msdchem\1\DATA\2G6081\2G231591.d\ECD2B.CH  
Acq On : 01 May 2024 11:52 am Operator: rebeccak  
Sample : icv6081-100 (ar1242) Inst : GC2G  
Misc : op53681,G2G6081,5.0,,,10,1 Multiplr: 1.00  
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\MET...PCBLVI6081full.M (ChemStation Integrator)  
Title :  
Last Update : Thu May 02 10:45:47 2024  
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 S	Tetrachloro-m-xylene	436.345	455.365 E6	-4.4	100	0.00	4.65	4.71
2	AR1221-A			NA				
3	AR1221-B			NA				
4	AR1221-C			NA				
5	AR1221-D			NA				
6	AR1221-E			NA				
7	AR1232-A			NA				
8	AR1232-B			NA				
9	AR1232-C			NA				
10	AR1232-D			NA				
11	AR1232-E			NA				
		True	Calc.	% Drift				
12	AR1242-A	100.000	110.799	-10.8	108	0.00	5.15	5.35
13	AR1242-B	100.000	111.099	-11.1	108	0.00	5.51	5.71
14	AR1242-C	100.000	110.491	-10.5	109	0.00	5.64	5.84
15	AR1242-D	100.000	106.411	-6.4	104	0.00	5.99	6.19
16	AR1242-E	100.000	107.782	-7.8	99	0.00	6.43	6.63
17	AR1248-A			NA				
18	AR1248-B			NA				
19	AR1248-C			NA				
20	AR1248-D			NA				
21	AR1248-E			NA				
22	AR1248-F			NA				
23	AR1248-G			NA				
24	AR1254-A			NA				
25	AR1254-B			NA				
26	AR1254-C			NA				
27	AR1254-D			NA				
28	AR1254-E			NA				
29	AR1254-F			NA				
30	AR1254-G			NA				
		AvgRF	CCRF	% Dev				
31	AR1016-A			NA				
32	AR1016-B			NA				
33	AR1016-C			NA				
34	AR1016-D			NA				
35	AR1016-E			NA				
36	AR1260-A			NA				
37	AR1260-B			NA				

8.10.17

8

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G2G6081-ICV6081  
**Lab FileID:** 2G231591.D

38	AR1260-C									
39	AR1260-D									
40	AR1260-E									
41	AR1262-A									
42	AR1262-B									
43	AR1262-C									
44	AR1262-D									
45	AR1262-E									
46	AR1268-A									
47	AR1268-B									
48	AR1268-C									
49	AR1268-D									
50	AR1268-E									
51 S	Decachlorobiphenyl	395.051	452.525	E6	-14.5	112	0.00		11.28-11.34	

\*\*\*\*\* Signal #2 \*\*\*\*\*

1 S	Tetrachloro-m-xylene	586.663	621.408	E6	-5.9	103	0.00		5.14- 5.20	
2	AR1221-A									
3	AR1221-B									
4	AR1221-C									
5	AR1221-D									
6	AR1221-E									
7	AR1232-A									
8	AR1232-B									
9	AR1232-C									
10	AR1232-D									
11	AR1232-E									

		True	Calc.		% Drift				
12	AR1242-A	100.000	113.559		-13.6	110	0.00		5.91- 6.11
13	AR1242-B	100.000	109.859		-9.9	109	0.00		6.41- 6.61
14	AR1242-C	100.000	105.357		-5.4	107	0.00		6.58- 6.78
15	AR1242-D	100.000	108.503		-8.5	107	0.00		7.22- 7.42
16	AR1242-E	100.000	102.659		-2.7	102	0.00		7.94- 8.14
17	AR1248-A								
18	AR1248-B								
19	AR1248-C								
20	AR1248-D								
21	AR1248-E								
22	AR1248-F								
23	AR1248-G								
24	AR1254-A								
25	AR1254-B								
26	AR1254-C								
27	AR1254-D								
28	AR1254-E								
29	AR1254-F								
30	AR1254-G								

		AvgRF	CCRF	% Dev
31	AR1016-A			
32	AR1016-B			
33	AR1016-C			
34	AR1016-D			
35	AR1016-E			
36	AR1260-A			
37	AR1260-B			
38	AR1260-C			
39	AR1260-D			

8.10.17

8

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G2G6081-ICV6081  
**Lab FileID:** 2G231591.D

40	AR1260-E								
41	AR1262-A								
42	AR1262-B								
43	AR1262-C								
44	AR1262-D								
45	AR1262-E								
46	AR1268-A								
47	AR1268-B								
48	AR1268-C								
49	AR1268-D								
50	AR1268-E								
51 S	Decachlorobiphenyl	381.754	416.681	E6	-9.1	111	0.00	12.40-12.46	

(#) = Out of Range                                  SPCC's out = 0    CCC's out = 0  
2G231607.d 2PCBLVI6081full.M                                  Thu May 02 11:22:28 2024

8.10.17  
8

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G2G6081-ICV6081  
**Lab FileID:** 2G231602.D

## Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\2G6081\2G231602.d\ECD1A.CH Vial: 0  
Signal #2 : C:\msdchem\1\DATA\2G6081\2G231602.d\ECD2B.CH  
Acq On : 01 May 2024 16:32 pm Operator: rebeccak  
Sample : icv6081-100 (ar1248) Inst : GC2G  
Misc : op53681,G2G6081,5.0,,,10,1 Multiplr: 1.00  
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\MET...PCBLVI6081full.M (ChemStation Integrator)  
Title :  
Last Update : Thu May 02 10:45:47 2024  
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 S	Tetrachloro-m-xylene	436.345	435.950 E6	0.1	95	0.00	4.65-	4.71
2	AR1221-A			-----NA-----				
3	AR1221-B			-----NA-----				
4	AR1221-C			-----NA-----				
5	AR1221-D			-----NA-----				
6	AR1221-E			-----NA-----				
7	AR1232-A			-----NA-----				
8	AR1232-B			-----NA-----				
9	AR1232-C			-----NA-----				
10	AR1232-D			-----NA-----				
11	AR1232-E			-----NA-----				
		----- True	Calc.	% Drift				
12	AR1242-A			-----NA-----				
13	AR1242-B			-----NA-----				
14	AR1242-C			-----NA-----				
15	AR1242-D			-----NA-----				
16	AR1242-E			-----NA-----				
17	AR1248-A	100.000	98.350	1.7	94	0.00	5.15-	5.35
18	AR1248-B	100.000	97.893	2.1	93	0.00	5.52-	5.72
19	AR1248-C	100.000	96.954	3.0	93	0.00	5.79-	5.99
20	AR1248-D	100.000	96.514	3.5	93	0.00	5.99-	6.19
21	AR1248-E	100.000	102.122	-2.1	92	0.00	6.07-	6.27
22	AR1248-F	100.000	94.385	5.6	90	0.00	6.43-	6.63
23	AR1248-G	100.000	96.608	3.4	91	0.00	6.26-	7.26
24	AR1254-A			-----NA-----				
25	AR1254-B			-----NA-----				
26	AR1254-C			-----NA-----				
27	AR1254-D			-----NA-----				
28	AR1254-E			-----NA-----				
29	AR1254-F			-----NA-----				
30	AR1254-G			-----NA-----				
		----- AvgRF	CCRF	% Dev				
31	AR1016-A			-----NA-----				
32	AR1016-B			-----NA-----				
33	AR1016-C			-----NA-----				
34	AR1016-D			-----NA-----				
35	AR1016-E			-----NA-----				
36	AR1260-A			-----NA-----				
37	AR1260-B			-----NA-----				

8.10.18

8

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G2G6081-ICV6081  
**Lab FileID:** 2G231602.D

38	AR1260-C									
39	AR1260-D									
40	AR1260-E									
41	AR1262-A									
42	AR1262-B									
43	AR1262-C									
44	AR1262-D									
45	AR1262-E									
46	AR1268-A									
47	AR1268-B									
48	AR1268-C									
49	AR1268-D									
50	AR1268-E									
51 S	Decachlorobiphenyl	395.051	429.440	E6	-8.7	106	0.00		11.28-11.34	

\*\*\*\*\* Signal #2 \*\*\*\*\*

1 S	Tetrachloro-m-xylene	586.663	601.068	E6	-2.5	99	0.00		5.14- 5.20	
2	AR1221-A									
3	AR1221-B									
4	AR1221-C									
5	AR1221-D									
6	AR1221-E									
7	AR1232-A									
8	AR1232-B									
9	AR1232-C									
10	AR1232-D									
11	AR1232-E									

		True	Calc.	% Drift				
12	AR1242-A							
13	AR1242-B							
14	AR1242-C							
15	AR1242-D							
16	AR1242-E							
17	AR1248-A	100.000	98.381	1.6	95	0.00		5.91- 6.11
18	AR1248-B	100.000	97.665	2.3	95	0.00		6.38- 6.58
19	AR1248-C	100.000	97.498	2.5	94	0.00		6.82- 7.02
20	AR1248-D	100.000	98.005	2.0	94	0.00		7.22- 7.42
21	AR1248-E	100.000	97.633	2.4	94	0.00		7.42- 7.62
22	AR1248-F	100.000	96.553	3.4	93	0.00		7.94- 8.14
23	AR1248-G	100.000	96.940	3.1	93	0.00		8.01- 9.01
24	AR1254-A							
25	AR1254-B							
26	AR1254-C							
27	AR1254-D							
28	AR1254-E							
29	AR1254-F							
30	AR1254-G							

		AvgRF	CCRF	% Dev	
31	AR1016-A				
32	AR1016-B				
33	AR1016-C				
34	AR1016-D				
35	AR1016-E				
36	AR1260-A				
37	AR1260-B				
38	AR1260-C				
39	AR1260-D				

8.10.18  
8

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G2G6081-ICV6081  
**Lab FileID:** 2G231602.D

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40	AR1260-E										-----NA-----
41	AR1262-A										-----NA-----
42	AR1262-B										-----NA-----
43	AR1262-C										-----NA-----
44	AR1262-D										-----NA-----
45	AR1262-E										-----NA-----
46	AR1268-A										-----NA-----
47	AR1268-B										-----NA-----
48	AR1268-C										-----NA-----
49	AR1268-D										-----NA-----
50	AR1268-E										-----NA-----
51 S	Decachlorobiphenyl	381.754	410.404	E6	-7.5	110	0.00	12.40-12.46			

---

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(#) = Out of Range                                  SPCC's out = 0    CCC's out = 0  
2G231607.d 2PCBLVI6081full.M                                  Thu May 02 11:22:34 2024

8.10.18  
8

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G2G6081-ICV6081  
**Lab FileID:** 2G231613.D

## Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\2G6081\2G231613.d\ECD1A.CH Vial: 0  
Signal #2 : C:\msdchem\1\DATA\2G6081\2G231613.d\ECD2B.CH  
Acq On : 01 May 2024 21:07 pm Operator: rebeccak  
Sample : icv6081-100 (ar1254) Inst : GC2G  
Misc : op53681,G2G6081,5.0,,,10,1 Multiplr: 1.00  
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\MET...PCBLVI6081full.M (ChemStation Integrator)  
Title :  
Last Update : Thu May 02 10:45:47 2024  
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 S	Tetrachloro-m-xylene	436.345	430.485 E6	1.3	94	0.00	4.65-	4.71
2	AR1221-A			NA				
3	AR1221-B			NA				
4	AR1221-C			NA				
5	AR1221-D			NA				
6	AR1221-E			NA				
7	AR1232-A			NA				
8	AR1232-B			NA				
9	AR1232-C			NA				
10	AR1232-D			NA				
11	AR1232-E			NA				
		True	Calc.	% Drift				
12	AR1242-A			NA				
13	AR1242-B			NA				
14	AR1242-C			NA				
15	AR1242-D			NA				
16	AR1242-E			NA				
17	AR1248-A			NA				
18	AR1248-B			NA				
19	AR1248-C			NA				
20	AR1248-D			NA				
21	AR1248-E			NA				
22	AR1248-F			NA				
23	AR1248-G			NA				
24	AR1254-A	100.000	93.614	6.4	92	0.00	5.96-	6.96
25	AR1254-B	100.000	95.686	4.3	92	0.00	6.65-	6.85
26	AR1254-C	100.000	93.960	6.0	91	0.00	7.00-	7.20
27	AR1254-D	100.000	94.307	5.7	91	0.00	7.17-	7.37
28	AR1254-E	100.000	93.350	6.7	91	0.00	7.58-	7.78
29	AR1254-F	100.000	95.794	4.2	93	0.00	7.90-	8.10
30	AR1254-G	100.000	94.684	5.3	92	0.00	8.43-	8.63
		AvgRF	CCRF	% Dev				
31	AR1016-A			NA				
32	AR1016-B			NA				
33	AR1016-C			NA				
34	AR1016-D			NA				
35	AR1016-E			NA				
36	AR1260-A			NA				
37	AR1260-B			NA				



# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G2G6081-ICV6081  
**Lab FileID:** 2G231613.D

38	AR1260-C								
39	AR1260-D								
40	AR1260-E								
41	AR1262-A								
42	AR1262-B								
43	AR1262-C								
44	AR1262-D								
45	AR1262-E								
46	AR1268-A								
47	AR1268-B								
48	AR1268-C								
49	AR1268-D								
50	AR1268-E								
51 S	Decachlorobiphenyl	395.051	430.966	E6	-9.1	106	0.00	11.28-11.34	

\*\*\*\*\* Signal #2 \*\*\*\*\*

1 S	Tetrachloro-m-xylene	586.663	580.589	E6	1.0	96	0.00	5.14- 5.20	
2	AR1221-A								
3	AR1221-B								
4	AR1221-C								
5	AR1221-D								
6	AR1221-E								
7	AR1232-A								
8	AR1232-B								
9	AR1232-C								
10	AR1232-D								
11	AR1232-E								

		True	Calc.	% Drift					
12	AR1242-A								
13	AR1242-B								
14	AR1242-C								
15	AR1242-D								
16	AR1242-E								
17	AR1248-A								
18	AR1248-B								
19	AR1248-C								
20	AR1248-D								
21	AR1248-E								
22	AR1248-F								
23	AR1248-G								
24	AR1254-A	100.000	93.812	6.2	90	0.00	7.54- 8.54		
25	AR1254-B	100.000	92.932	7.1	89	0.00	8.29- 8.49		
26	AR1254-C	100.000	93.154	6.8	91	0.00	9.03- 9.23		
27	AR1254-D	100.000	92.826	7.2	91	0.00	9.24- 9.44		
28	AR1254-E	100.000	91.318	8.7	89	0.00	9.59- 9.79		
29	AR1254-F	100.000	95.545	4.5	94	0.00	10.06-10.26		
30	AR1254-G	100.000	94.080	5.9	92	0.00	10.31-10.51		

		AvgRF	CCRF	% Dev					
31	AR1016-A								
32	AR1016-B								
33	AR1016-C								
34	AR1016-D								
35	AR1016-E								
36	AR1260-A								
37	AR1260-B								
38	AR1260-C								
39	AR1260-D								

8.10.19  
8

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G2G6081-ICV6081  
**Lab FileID:** 2G231613.D

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40	AR1260-E	-----NA-----
41	AR1262-A	-----NA-----
42	AR1262-B	-----NA-----
43	AR1262-C	-----NA-----
44	AR1262-D	-----NA-----
45	AR1262-E	-----NA-----
46	AR1268-A	-----NA-----
47	AR1268-B	-----NA-----
48	AR1268-C	-----NA-----
49	AR1268-D	-----NA-----
50	AR1268-E	-----NA-----
51 S	Decachlorobiphenyl	381.754 440.166 E6 -15.3 117 0.00 12.40-12.46

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(#) = Out of Range                      SPCC's out = 0    CCC's out = 0  
2G231607.d 2PCBLVI6081full.M                      Thu May 02 11:22:36 2024

8.10.19

8

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G2G6085-CC6081  
**Lab FileID:** 2G231731.D

## Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\ma...5\2G231731.d\ECD1A.CH Vial: 0  
 Signal #2 : C:\msdchem\1\data\maryan...G6085\2G231731.d\ECD2B.CH  
 Acq On : 09-May-24, 04:02:50 Operator: mahalia  
 Sample : cc6081-100 Inst : GC2G  
 Misc : op54385,G2G6085,5.0,,,10,1 Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\dat...PCBLVI6081full.M (ChemStation Integrator)  
 Title :  
 Last Update : Thu May 09 12:25:10 2024  
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 S	Tetrachloro-m-xylene	436.345	473.049 E6	-8.4	103	0.00	4.66-	4.72
2	AR1221-A			NA				
3	AR1221-B			NA				
4	AR1221-C			NA				
5	AR1221-D			NA				
6	AR1221-E			NA				
7	AR1232-A			NA				
8	AR1232-B			NA				
9	AR1232-C			NA				
10	AR1232-D			NA				
11	AR1232-E			NA				
		True	Calc.	% Drift				
12	AR1242-A			NA				
13	AR1242-B			NA				
14	AR1242-C			NA				
15	AR1242-D			NA				
16	AR1242-E			NA				
17	AR1248-A			NA				
18	AR1248-B			NA				
19	AR1248-C			NA				
20	AR1248-D			NA				
21	AR1248-E			NA				
22	AR1248-F			NA				
23	AR1248-G			NA				
24	AR1254-A			NA				
25	AR1254-B			NA				
26	AR1254-C			NA				
27	AR1254-D			NA				
28	AR1254-E			NA				
29	AR1254-F			NA				
30	AR1254-G			NA				
		AvgRF	CCRF	% Dev				
31	AR1016-A	7.461	8.690 E6	-16.5	115	0.00	4.95-	5.01
32	AR1016-B	14.857	16.530 E6	-11.3	110	0.00	5.23-	5.29
33	AR1016-C	32.048	36.555 E6	-14.1	112	0.00	5.59-	5.65
34	AR1016-D	13.036	13.913 E6	-6.7	108	0.00	5.72-	5.78
35	AR1016-E	14.318	14.607 E6	-2.0	102	0.00	6.07-	6.13
36	AR1260-A	38.935	44.415 E6	-14.1	110	0.00	8.52-	8.58
37	AR1260-B	27.790	34.141 E6	-22.9#	120	0.00	8.76-	8.82

8.10.20  
8

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G2G6085-CC6081  
**Lab FileID:** 2G231731.D

38	AR1260-C	23.568	27.052	E6	-14.8	111	0.00	9.23-	9.29
39	AR1260-D	66.037	75.236	E6	-13.9	108	0.00	9.72-	9.78
40	AR1260-E	62.209	66.261	E6	-6.5	103	0.00	10.06-	10.21
41	AR1262-A								
42	AR1262-B								
43	AR1262-C								
44	AR1262-D								
45	AR1262-E								
46	AR1268-A								
47	AR1268-B								
48	AR1268-C								
49	AR1268-D								
50	AR1268-E								
51 S	Decachlorobiphenyl	395.051	423.557	E6	-7.2	105	0.00	11.29-	11.35

\*\*\*\*\* Signal #2 \*\*\*\*\*

1 S	Tetrachloro-m-xylene	586.663	617.653	E6	-5.3	102	0.00	5.15-	5.21
2	AR1221-A								
3	AR1221-B								
4	AR1221-C								
5	AR1221-D								
6	AR1221-E								
7	AR1232-A								
8	AR1232-B								
9	AR1232-C								
10	AR1232-D								
11	AR1232-E								

	True	Calc.	% Drift
12	AR1242-A		
13	AR1242-B		
14	AR1242-C		
15	AR1242-D		
16	AR1242-E		
17	AR1248-A		
18	AR1248-B		
19	AR1248-C		
20	AR1248-D		
21	AR1248-E		
22	AR1248-F		
23	AR1248-G		
24	AR1254-A		
25	AR1254-B		
26	AR1254-C		
27	AR1254-D		
28	AR1254-E		
29	AR1254-F		
30	AR1254-G		

	AvgRF	CCRF	% Dev
31	AR1016-A	8.605	9.124 E6 -6.0 100 0.00 5.60- 5.66
32	AR1016-B	18.771	19.242 E6 -2.5 100 0.00 5.99- 6.05
33	AR1016-C	46.822	47.085 E6 -0.6 99 0.00 6.49- 6.55
34	AR1016-D	16.725	17.075 E6 -2.1 96 0.00 6.66- 6.72
35	AR1016-E	14.308	13.822 E6 3.4 94 0.00 7.30- 7.36
36	AR1260-A	48.153	42.712 E6 11.3 87 0.00 10.39-10.45
37	AR1260-B	32.379	29.391 E6 9.2 88 0.00 10.49-10.55
38	AR1260-C	28.786	25.738 E6 10.6 89 0.00 10.83-10.89
39	AR1260-D	67.110	67.677 E6 -0.8 91 0.00 11.07-11.13

8.10.20  
8

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G2G6085-CC6081  
**Lab FileID:** 2G231731.D

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40	AR1260-E	60.122	58.100	E6	3.4	94	0.00	11.43-11.49
41	AR1262-A				-----NA-----			
42	AR1262-B				-----NA-----			
43	AR1262-C				-----NA-----			
44	AR1262-D				-----NA-----			
45	AR1262-E				-----NA-----			
46	AR1268-A				-----NA-----			
47	AR1268-B				-----NA-----			
48	AR1268-C				-----NA-----			
49	AR1268-D				-----NA-----			
50	AR1268-E				-----NA-----			
51 S	Decachlorobiphenyl	381.754	394.102	E6	-3.2	105	-0.01	12.40-12.46

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(#) = Out of Range                      SPCC's out = 0    CCC's out = 0  
2G231607.d 2PCBLVI6081full.M                      Thu May 09 18:17:25 2024

8.10.20  
8

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G2G6085-CC6081  
**Lab FileID:** 2G231742.D

## Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\ma...5\2G231742.D\ECD1A.CH Vial: 0  
 Signal #2 : C:\msdchem\1\data\maryan...G6085\2G231742.D\ECD2B.CH  
 Acq On : 09-May-24, 08:28:07 Operator: christp  
 Sample : cc6081-50 Inst : GC2G  
 Misc : op54453,G2G6085,5.0,,,10,1 Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\dat...PCBLVI6081full.M (ChemStation Integrator)  
 Title :  
 Last Update : Thu May 09 12:25:10 2024  
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 S	Tetrachloro-m-xylene	436.345	496.048 E6	-13.7	110	0.00	4.66-	4.72
2	AR1221-A			NA				
3	AR1221-B			NA				
4	AR1221-C			NA				
5	AR1221-D			NA				
6	AR1221-E			NA				
7	AR1232-A			NA				
8	AR1232-B			NA				
9	AR1232-C			NA				
10	AR1232-D			NA				
11	AR1232-E			NA				
		True	Calc.	% Drift				
12	AR1242-A			NA				
13	AR1242-B			NA				
14	AR1242-C			NA				
15	AR1242-D			NA				
16	AR1242-E			NA				
17	AR1248-A			NA				
18	AR1248-B			NA				
19	AR1248-C			NA				
20	AR1248-D			NA				
21	AR1248-E			NA				
22	AR1248-F			NA				
23	AR1248-G			NA				
24	AR1254-A			NA				
25	AR1254-B			NA				
26	AR1254-C			NA				
27	AR1254-D			NA				
28	AR1254-E			NA				
29	AR1254-F			NA				
30	AR1254-G			NA				
		AvgRF	CCRF	% Dev				
31	AR1016-A	7.461	8.785 E6	-17.7	121	0.00	4.95-	5.01
32	AR1016-B	14.857	16.000 E6	-7.7	106	0.00	5.22-	5.28
33	AR1016-C	32.048	35.373 E6	-10.4	110	0.00	5.59-	5.65
34	AR1016-D	13.036	13.098 E6	-0.5	101	0.00	5.71-	5.77
35	AR1016-E	14.318	13.413 E6	6.3	94	0.00	6.07-	6.13
36	AR1260-A	38.935	42.485 E6	-9.1	107	0.00	8.52-	8.58
37	AR1260-B	27.790	31.635 E6	-13.8	112	-0.01	8.76-	8.82

8.10.21

8

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G2G6085-CC6081  
**Lab FileID:** 2G231742.D

38	AR1260-C	23.568	22.496	E6	4.5	93	0.00	9.23- 9.29
39	AR1260-D	66.037	66.667	E6	-1.0	97	0.00	9.72- 9.78
40	AR1260-E	62.209	55.169	E6	11.3	88	0.00	10.05-10.21
41	AR1262-A							-----NA-----
42	AR1262-B							-----NA-----
43	AR1262-C							-----NA-----
44	AR1262-D							-----NA-----
45	AR1262-E							-----NA-----
46	AR1268-A							-----NA-----
47	AR1268-B							-----NA-----
48	AR1268-C							-----NA-----
49	AR1268-D							-----NA-----
50	AR1268-E							-----NA-----
51 S	Decachlorobiphenyl	395.051	323.904	E6	18.0	81	0.00	11.28-11.34
***** Signal #2 *****								
1 S	Tetrachloro-m-xylene	586.663	641.959	E6	-9.4	110	0.00	5.15- 5.21
2	AR1221-A							-----NA-----
3	AR1221-B							-----NA-----
4	AR1221-C							-----NA-----
5	AR1221-D							-----NA-----
6	AR1221-E							-----NA-----
7	AR1232-A							-----NA-----
8	AR1232-B							-----NA-----
9	AR1232-C							-----NA-----
10	AR1232-D							-----NA-----
11	AR1232-E							-----NA-----
		----- True	Calc.	% Drift	-----			
12	AR1242-A							-----NA-----
13	AR1242-B							-----NA-----
14	AR1242-C							-----NA-----
15	AR1242-D							-----NA-----
16	AR1242-E							-----NA-----
17	AR1248-A							-----NA-----
18	AR1248-B							-----NA-----
19	AR1248-C							-----NA-----
20	AR1248-D							-----NA-----
21	AR1248-E							-----NA-----
22	AR1248-F							-----NA-----
23	AR1248-G							-----NA-----
24	AR1254-A							-----NA-----
25	AR1254-B							-----NA-----
26	AR1254-C							-----NA-----
27	AR1254-D							-----NA-----
28	AR1254-E							-----NA-----
29	AR1254-F							-----NA-----
30	AR1254-G							-----NA-----
		----- AvgRF	CCRF	% Dev	-----			
31	AR1016-A	8.605	9.583	E6	-11.4	108	0.00	5.60- 5.66
32	AR1016-B	18.771	19.325	E6	-3.0	99	0.00	5.99- 6.05
33	AR1016-C	46.822	44.144	E6	5.7	94	0.00	6.49- 6.55
34	AR1016-D	16.725	16.235	E6	2.9	97	0.00	6.65- 6.71
35	AR1016-E	14.308	12.979	E6	9.3	90	0.00	7.30- 7.36
36	AR1260-A	48.153	36.049	E6	25.1#	76	0.00	10.39-10.45
37	AR1260-B	32.379	24.610	E6	24.0#	76	0.00	10.49-10.55
38	AR1260-C	28.786	21.530	E6	25.2#	77	0.00	10.82-10.88
39	AR1260-D	67.110	56.691	E6	15.5	80	0.00	11.07-11.13

8.10.21

8

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G2G6085-CC6081  
**Lab FileID:** 2G231742.D

40	AR1260-E	60.122	50.158	E6	16.6	85	0.00	11.43-11.49
41	AR1262-A				-----NA-----			
42	AR1262-B				-----NA-----			
43	AR1262-C				-----NA-----			
44	AR1262-D				-----NA-----			
45	AR1262-E				-----NA-----			
46	AR1268-A				-----NA-----			
47	AR1268-B				-----NA-----			
48	AR1268-C				-----NA-----			
49	AR1268-D				-----NA-----			
50	AR1268-E				-----NA-----			
51 S	Decachlorobiphenyl	381.754	580.076	E6	-52.0#	154#	-0.01	12.40-12.46

(#) = Out of Range                      SPCC's out = 0    CCC's out = 0  
 2G231695.D 2PCBLVI6081full.M                      Thu May 09 13:32:32 2024

8.10.21

8



# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G2G6085-CC6081  
**Lab FileID:** 2G231753.D

## Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\ma...5\2G231753.D\ECD1A.CH Vial: 0  
 Signal #2 : C:\msdchem\1\data\maryan...G6085\2G231753.D\ECD2B.CH  
 Acq On : 09-May-24, 12:51:14 Operator: christp  
 Sample : cc6081-100 Inst : GC2G  
 Misc : op54453,G2G6085,5.0,,,10,1 Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\dat...PCBLVI6081full.M (ChemStation Integrator)  
 Title :  
 Last Update : Thu May 09 12:25:10 2024  
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 S	Tetrachloro-m-xylene	436.345	487.618 E6	-11.8	107	0.00	4.66-	4.72
2	AR1221-A			NA				
3	AR1221-B			NA				
4	AR1221-C			NA				
5	AR1221-D			NA				
6	AR1221-E			NA				
7	AR1232-A			NA				
8	AR1232-B			NA				
9	AR1232-C			NA				
10	AR1232-D			NA				
11	AR1232-E			NA				
		True	Calc.	% Drift				
12	AR1242-A			NA				
13	AR1242-B			NA				
14	AR1242-C			NA				
15	AR1242-D			NA				
16	AR1242-E			NA				
17	AR1248-A			NA				
18	AR1248-B			NA				
19	AR1248-C			NA				
20	AR1248-D			NA				
21	AR1248-E			NA				
22	AR1248-F			NA				
23	AR1248-G			NA				
24	AR1254-A			NA				
25	AR1254-B			NA				
26	AR1254-C			NA				
27	AR1254-D			NA				
28	AR1254-E			NA				
29	AR1254-F			NA				
30	AR1254-G			NA				
		AvgRF	CCRF	% Dev				
31	AR1016-A	7.461	8.472 E6	-13.6	112	0.00	4.95-	5.01
32	AR1016-B	14.857	15.637 E6	-5.3	104	0.00	5.22-	5.28
33	AR1016-C	32.048	35.227 E6	-9.9	108	0.00	5.59-	5.65
34	AR1016-D	13.036	13.272 E6	-1.8	103	0.00	5.71-	5.77
35	AR1016-E	14.318	13.778 E6	3.8	97	0.00	6.07-	6.13
36	AR1260-A	38.935	39.140 E6	-0.5	97	-0.01	8.52-	8.58
37	AR1260-B	27.790	30.879 E6	-11.1	108	-0.01	8.76-	8.82

8.10.22  
8

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G2G6085-CC6081  
**Lab FileID:** 2G231753.D

38	AR1260-C	23.568	21.735	E6	7.8	89	0.00	9.23- 9.29
39	AR1260-D	66.037	61.375	E6	7.1	88	0.00	9.72- 9.78
40	AR1260-E	62.209	47.587	E6	23.5#	74	0.00	10.05-10.21
41	AR1262-A				-----NA-----			
42	AR1262-B				-----NA-----			
43	AR1262-C				-----NA-----			
44	AR1262-D				-----NA-----			
45	AR1262-E				-----NA-----			
46	AR1268-A				-----NA-----			
47	AR1268-B				-----NA-----			
48	AR1268-C				-----NA-----			
49	AR1268-D				-----NA-----			
50	AR1268-E				-----NA-----			
51 S	Decachlorobiphenyl	395.051	281.564	E6	28.7#	70	0.00	11.28-11.34
***** Signal #2 *****								
1 S	Tetrachloro-m-xylene	586.663	641.133	E6	-9.3	106	0.00	5.15- 5.21
2	AR1221-A				-----NA-----			
3	AR1221-B				-----NA-----			
4	AR1221-C				-----NA-----			
5	AR1221-D				-----NA-----			
6	AR1221-E				-----NA-----			
7	AR1232-A				-----NA-----			
8	AR1232-B				-----NA-----			
9	AR1232-C				-----NA-----			
10	AR1232-D				-----NA-----			
11	AR1232-E				-----NA-----			
		----- True	Calc.	% Drift	-----			
12	AR1242-A				-----NA-----			
13	AR1242-B				-----NA-----			
14	AR1242-C				-----NA-----			
15	AR1242-D				-----NA-----			
16	AR1242-E				-----NA-----			
17	AR1248-A				-----NA-----			
18	AR1248-B				-----NA-----			
19	AR1248-C				-----NA-----			
20	AR1248-D				-----NA-----			
21	AR1248-E				-----NA-----			
22	AR1248-F				-----NA-----			
23	AR1248-G				-----NA-----			
24	AR1254-A				-----NA-----			
25	AR1254-B				-----NA-----			
26	AR1254-C				-----NA-----			
27	AR1254-D				-----NA-----			
28	AR1254-E				-----NA-----			
29	AR1254-F				-----NA-----			
30	AR1254-G				-----NA-----			
		----- AvgRF	CCRF	% Dev	-----			
31	AR1016-A	8.605	9.059	E6	-5.3	100	0.00	5.60- 5.66
32	AR1016-B	18.771	19.103	E6	-1.8	99	0.00	5.99- 6.05
33	AR1016-C	46.822	43.832	E6	6.4	92	0.00	6.49- 6.55
34	AR1016-D	16.725	15.436	E6	7.7	87	0.00	6.66- 6.72
35	AR1016-E	14.308	12.275	E6	14.2	84	0.00	7.30- 7.36
36	AR1260-A	48.153	32.036	E6	33.5#	66	0.00	10.39-10.45
37	AR1260-B	32.379	21.206	E6	34.5#	63	0.00	10.49-10.55
38	AR1260-C	28.786	18.371	E6	36.2#	63	0.00	10.83-10.89
39	AR1260-D	67.110	48.089	E6	28.3#	65	0.00	11.07-11.13

8.10.22

8

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G2G6085-CC6081  
**Lab FileID:** 2G231753.D

40	AR1260-E	60.122	42.831	E6	28.8#	69	0.00	11.43-11.49
41	AR1262-A				-----NA-----			
42	AR1262-B				-----NA-----			
43	AR1262-C				-----NA-----			
44	AR1262-D				-----NA-----			
45	AR1262-E				-----NA-----			
46	AR1268-A				-----NA-----			
47	AR1268-B				-----NA-----			
48	AR1268-C				-----NA-----			
49	AR1268-D				-----NA-----			
50	AR1268-E				-----NA-----			
51 S	Decachlorobiphenyl	381.754	341.948	E6	10.4	91	-0.01	12.41-12.47

(#) = Out of Range                      SPCC's out = 0    CCC's out = 0  
 2G231607.d 2PCBLVI6081full.M              Thu May 09 18:21:56 2024

8.10.22  
8

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G2G6085-CC6081  
**Lab FileID:** 2G231764.D

## Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\2g6085\2G231764.D\ECD1A.CH Vial: 0  
 Signal #2 : C:\msdchem\1\data\2g6085\2G231764.D\ECD2B.CH  
 Acq On : 09 May 2024 5:16 pm Operator: christp  
 Sample : cc6081-50 Inst : GC2G  
 Misc : op54453,G2G6085,5.4,,,10,1 Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\met...PCBLVI6081full.M (ChemStation Integrator)  
 Title :  
 Last Update : Thu May 02 10:45:47 2024  
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 S	Tetrachloro-m-xylene	436.345	486.640 E6	-11.5	108	0.00	4.66-	4.72
2	AR1221-A			-----NA-----				
3	AR1221-B			-----NA-----				
4	AR1221-C			-----NA-----				
5	AR1221-D			-----NA-----				
6	AR1221-E			-----NA-----				
7	AR1232-A			-----NA-----				
8	AR1232-B			-----NA-----				
9	AR1232-C			-----NA-----				
10	AR1232-D			-----NA-----				
11	AR1232-E			-----NA-----				
	----- True		Calc.	% Drift				
12	AR1242-A			-----NA-----				
13	AR1242-B			-----NA-----				
14	AR1242-C			-----NA-----				
15	AR1242-D			-----NA-----				
16	AR1242-E			-----NA-----				
17	AR1248-A			-----NA-----				
18	AR1248-B			-----NA-----				
19	AR1248-C			-----NA-----				
20	AR1248-D			-----NA-----				
21	AR1248-E			-----NA-----				
22	AR1248-F			-----NA-----				
23	AR1248-G			-----NA-----				
24	AR1254-A			-----NA-----				
25	AR1254-B			-----NA-----				
26	AR1254-C			-----NA-----				
27	AR1254-D			-----NA-----				
28	AR1254-E			-----NA-----				
29	AR1254-F			-----NA-----				
30	AR1254-G			-----NA-----				
	----- AvgRF		CCRF	% Dev				
31	AR1016-A	7.461	8.391 E6	-12.5	115	0.00	4.95-	5.01
32	AR1016-B	14.857	15.749 E6	-6.0	104	0.00	5.22-	5.28
33	AR1016-C	32.048	34.551 E6	-7.8	107	0.00	5.59-	5.65
34	AR1016-D	13.036	12.988 E6	0.4	100	0.00	5.71-	5.77
35	AR1016-E	14.318	13.291 E6	7.2	93	0.00	6.07-	6.13
36	AR1260-A	38.935	42.485 E6	-9.1	107	0.02	8.52-	8.58
37	AR1260-B	27.790	31.066 E6	-11.8	110	0.02	8.76-	8.82

8.10.23  
8

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G2G6085-CC6081  
**Lab FileID:** 2G231764.D

38	AR1260-C	23.568	22.413	E6	4.9	92	0.02	9.23- 9.29
39	AR1260-D	66.037	62.614	E6	5.2	91	0.03	9.72- 9.78
40	AR1260-E	62.209	58.911	E6	5.3	94	0.00	10.05-10.21
41	AR1262-A							-----NA-----
42	AR1262-B							-----NA-----
43	AR1262-C							-----NA-----
44	AR1262-D							-----NA-----
45	AR1262-E							-----NA-----
46	AR1268-A							-----NA-----
47	AR1268-B							-----NA-----
48	AR1268-C							-----NA-----
49	AR1268-D							-----NA-----
50	AR1268-E							-----NA-----
51 S	Decachlorobiphenyl	395.051	298.216	E6	24.5#	74	0.00	11.28-11.34

\*\*\*\*\* Signal #2 \*\*\*\*\*

1 S	Tetrachloro-m-xylene	586.663	639.324	E6	-9.0	109	0.00	5.15- 5.21
2	AR1221-A							-----NA-----
3	AR1221-B							-----NA-----
4	AR1221-C							-----NA-----
5	AR1221-D							-----NA-----
6	AR1221-E							-----NA-----
7	AR1232-A							-----NA-----
8	AR1232-B							-----NA-----
9	AR1232-C							-----NA-----
10	AR1232-D							-----NA-----
11	AR1232-E							-----NA-----

		True	Calc.	% Drift	
12	AR1242-A			-----NA-----	
13	AR1242-B			-----NA-----	
14	AR1242-C			-----NA-----	
15	AR1242-D			-----NA-----	
16	AR1242-E			-----NA-----	
17	AR1248-A			-----NA-----	
18	AR1248-B			-----NA-----	
19	AR1248-C			-----NA-----	
20	AR1248-D			-----NA-----	
21	AR1248-E			-----NA-----	
22	AR1248-F			-----NA-----	
23	AR1248-G			-----NA-----	
24	AR1254-A			-----NA-----	
25	AR1254-B			-----NA-----	
26	AR1254-C			-----NA-----	
27	AR1254-D			-----NA-----	
28	AR1254-E			-----NA-----	
29	AR1254-F			-----NA-----	
30	AR1254-G			-----NA-----	

		AvgRF	CCRF	% Dev	
31	AR1016-A	8.605	9.475 E6	-10.1	107 0.00 5.60- 5.66
32	AR1016-B	18.771	19.745 E6	-5.2	101 0.00 5.99- 6.05
33	AR1016-C	46.822	43.021 E6	8.1	91 0.02 6.49- 6.55
34	AR1016-D	16.725	15.452 E6	7.6	93 0.00 6.66- 6.72
35	AR1016-E	14.308	13.015 E6	9.0	90 0.01 7.30- 7.36
36	AR1260-A	48.153	37.820 E6	21.5#	80 0.04 10.39-10.45
37	AR1260-B	32.379	25.451 E6	21.4#	79 0.01 10.49-10.55
38	AR1260-C	28.786	19.500 E6	32.3#	69 0.00 10.82-10.88
39	AR1260-D	67.110	51.001 E6	24.0#	72 0.01 11.07-11.13

8.10.23  
8

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G2G6085-CC6081  
**Lab FileID:** 2G231764.D

40	AR1260-E	60.122	45.824	E6	23.8#	78	0.03	11.43-11.49
41	AR1262-A				-----NA-----			
42	AR1262-B				-----NA-----			
43	AR1262-C				-----NA-----			
44	AR1262-D				-----NA-----			
45	AR1262-E				-----NA-----			
46	AR1268-A				-----NA-----			
47	AR1268-B				-----NA-----			
48	AR1268-C				-----NA-----			
49	AR1268-D				-----NA-----			
50	AR1268-E				-----NA-----			
51 S	Decachlorobiphenyl	381.754	305.460	E6	20.0	81	0.00	12.40-12.46

(#) = Out of Range                      SPCC's out = 0    CCC's out = 0  
 2G231606.d 2PCBLVI6081full.M              Thu May 09 18:26:07 2024

8.10.23

8

# Initial Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G3G5160-ICC5160  
**Lab FileID:** 3G140974.D

## Response Factor Report GC3G

Method : C:\MSDCHEM\1\METHODS\3PCB5160.M (ChemStation Integrator)  
 Title :  
 Last Update : 23 Apr 2024 19:54 pm  
 Response via : Initial Calibration

### Calibration Files

50 =3G140971.d 250 =3G140972.d 500 =3G140973.d 1000=3G140974.d  
 2000 =3G140975.d 3000 =3G140976.d

Compound	50	250	500	1000	2000	3000	Avg	%RSD
1) S Tetrachloro-m-xylen	8.746	7.746	8.718	8.234	7.118	6.840	7.900	E6 10.21
2) AR1221-A				5.856			5.856	E4 0.00
3) AR1221-B				8.729			8.729	E4 0.00
4) AR1221-C				2.033			2.033	E5 0.00
5) AR1221-D				4.713			4.713	E4 0.00
6) AR1221-E				4.835			4.835	E4 0.00
7) AR1232-A				1.426			1.426	E5 0.00
8) AR1232-B				1.039			1.039	E5 0.00
9) AR1232-C				2.211			2.211	E5 0.00
10) AR1232-D				9.464			9.464	E4 0.00
11) AR1232-E				9.332			9.332	E4 0.00
12) AR1242-A				1.957			1.957	E5 0.00
13) AR1242-B				3.996			3.996	E5 0.00
14) AR1242-C				1.705			1.705	E5 0.00
15) AR1242-D				1.852			1.852	E5 0.00
16) AR1242-E				1.476			1.476	E5 0.00
17) AR1248-A				9.354			9.354	E4 0.00
18) AR1248-B				2.520			2.520	E5 0.00
19) AR1248-C				1.451			1.451	E5 0.00
20) AR1248-D				2.090			2.090	E5 0.00
21) AR1248-E				1.471			1.471	E5 0.00
22) AR1248-F				2.440			2.440	E5 0.00
23) AR1248-G				2.093			2.093	E5 0.00
24) AR1254-A				2.258			2.258	E5 0.00
25) AR1254-B				3.123			3.123	E5 0.00
26) AR1254-C				2.540			2.540	E5 0.00
27) AR1254-D				4.359			4.359	E5 0.00
28) AR1254-E				3.072			3.072	E5 0.00
29) AR1254-F				3.019			3.019	E5 0.00
30) AR1254-G				4.379			4.379	E5 0.00
31) AR1262-A				3.466			3.466	E5 0.00
32) AR1262-B				4.396			4.396	E5 0.00
33) AR1262-C				4.179			4.179	E5 0.00
34) AR1262-D				9.474			9.474	E5 0.00
35) AR1262-E				1.030			1.030	E6 0.00
36) AR1268-A				8.907			8.907	E5 0.00
37) AR1268-B				9.936			9.936	E5 0.00
38) AR1268-C				7.917			7.917	E5 0.00
39) AR1268-D				3.299			3.299	E5 0.00
40) AR1268-E				2.566			2.566	E6 0.00
41) AR1016-A	1.633	1.427	1.452	1.291	1.111	1.038	1.325	E5 16.89
42) AR1016-B	3.187	2.716	2.795	2.532	2.161	2.050	2.573	E5 16.41
43) AR1016-C	6.440	5.454	5.764	5.384	4.727	4.518	5.381	E5 13.00
44) AR1016-D	3.016	2.514	2.473	2.272	1.979	1.877	2.355	E5 17.54
45) AR1016-E	2.895	2.574	2.700	2.480	2.177	2.088	2.486	E5 12.39
46) AR1260-A	5.069	4.554	4.969	4.784	4.345	4.194	4.652	E5 7.48
47) AR1260-B	3.110	2.824	3.116	2.980	2.698	2.604	2.889	E5 7.44

8.10.24

8

# Initial Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G3G5160-ICC5160  
**Lab FileID:** 3G140974.D

48)	AR1260-C	3.299	2.953	3.387	3.283	3.028	2.944	3.149	E5	6.22
49)	AR1260-D	7.554	7.042	8.289	7.949	7.242	7.001	7.513	E5	6.92
50)	AR1260-E	7.944	7.377	8.156	7.928	7.233	7.000	7.606	E5	6.11
51) S	Decachlorobiphenyl	6.815	6.290	7.737	7.364	5.940	5.783	6.655	E6	11.84

Signal #2

1) S	Tetrachloro-m-xylen	1.938	1.797	2.023	1.914	1.647	1.577	1.816	E7	9.64
2)	AR1221-A				1.095			1.095	E5	0.00
3)	AR1221-B				2.051			2.051	E5	0.00
4)	AR1221-C				4.615			4.615	E5	0.00
5)	AR1221-D				1.625			1.625	E5	0.00
6)	AR1221-E				1.156			1.156	E5	0.00
7)	AR1232-A				3.228			3.228	E5	0.00
8)	AR1232-B				2.666			2.666	E5	0.00
9)	AR1232-C				5.506			5.506	E5	0.00
10)	AR1232-D				2.189			2.189	E5	0.00
11)	AR1232-E				1.539			1.539	E5	0.00
12)	AR1242-A				4.516			4.516	E5	0.00
13)	AR1242-B				1.009			1.009	E6	0.00
14)	AR1242-C				3.946			3.946	E5	0.00
15)	AR1242-D				3.137			3.137	E5	0.00
16)	AR1242-E				3.868			3.868	E5	0.00
17)	AR1248-A				2.225			2.225	E5	0.00
18)	AR1248-B				6.457			6.457	E5	0.00
19)	AR1248-C				3.767			3.767	E5	0.00
20)	AR1248-D				5.078			5.078	E5	0.00
21)	AR1248-E				4.904			4.904	E5	0.00
22)	AR1248-F				6.976			6.976	E5	0.00
23)	AR1248-G				6.850			6.850	E5	0.00
24)	AR1254-A				6.007			6.007	E5	0.00
25)	AR1254-B				6.732			6.732	E5	0.00
26)	AR1254-C				5.612			5.612	E5	0.00
27)	AR1254-D				1.057			1.057	E6	0.00
28)	AR1254-E				7.961			7.961	E5	0.00
29)	AR1254-F				4.127			4.127	E5	0.00
30)	AR1254-G				8.631			8.631	E5	0.00
31)	AR1262-A				7.914			7.914	E5	0.00
32)	AR1262-B				1.187			1.187	E6	0.00
33)	AR1262-C				1.014			1.014	E6	0.00
34)	AR1262-D				2.317			2.317	E6	0.00
35)	AR1262-E				2.664			2.664	E6	0.00
36)	AR1268-A				2.670			2.670	E6	0.00
37)	AR1268-B				2.588			2.588	E6	0.00
38)	AR1268-C				2.191			2.191	E6	0.00
39)	AR1268-D				8.830			8.830	E5	0.00
40)	AR1268-E				6.339			6.339	E6	0.00
41)	AR1016-A	3.877	3.213	3.375	3.007	2.509	2.347	3.055	E5	18.53
42)	AR1016-B	7.305	6.386	6.673	5.994	5.059	4.667	6.014	E5	16.57
43)	AR1016-C	1.645	1.402	1.483	1.360	1.189	1.112	1.365	E6	14.22
44)	AR1016-D	5.942	5.386	5.777	5.328	4.584	4.274	5.215	E5	12.64
45)	AR1016-E	4.921	4.367	4.607	4.276	3.719	3.510	4.233	E5	12.59
46)	AR1260-A	1.126	0.978	1.051	0.990	0.879	0.841	0.977	E6	10.81
47)	AR1260-B	8.980	8.020	8.660	8.151	7.254	6.993	8.010	E5	9.65
48)	AR1260-C	9.721	8.224	8.941	8.446	7.562	7.280	8.362	E5	10.72
49)	AR1260-D	2.055	1.941	2.122	2.042	1.850	1.783	1.966	E6	6.65
50)	AR1260-E	1.986	1.871	2.098	1.979	1.779	1.683	1.899	E6	8.00
51) S	Decachlorobiphenyl	1.395	1.394	1.755	1.666	1.311	1.264	1.464	E7	13.61

(#) = Out of Range

8.10.24  
8



# Initial Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G3G5160-ICC5160  
**Lab FileID:** 3G140974.D

3PCB5160.M

Thu Apr 25 11:38:32 2024

RPT1

8.10.24

8

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G3G5160-ICV5160  
**Lab FileID:** 3G140987.D

## Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\3G5160\3G140987.d\ECD1A.CH Vial: 19  
Signal #2 : C:\msdchem\1\data\3G5160\3G140987.d\ECD2B.CH  
Acq On : 23 Apr 2024 19:54 pm Operator: mahalia  
Sample : icv5160-1000 (ar1016/1260) Inst : GC3G  
Misc : op53949,g3g5160,15.0,,,1,1 Multiplr: 1.00  
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\3PCB5160.M (ChemStation Integrator)  
Title :  
Last Update : Wed Apr 24 07:06:11 2024  
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min  
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 S	Tetrachloro-m-xylene	7.900	8.976 E6	-13.6	109	0.00	3.44-	3.50
2	AR1221-A			NA				
3	AR1221-B			NA				
4	AR1221-C			NA				
5	AR1221-D			NA				
6	AR1221-E			NA				
7	AR1232-A			NA				
8	AR1232-B			NA				
9	AR1232-C			NA				
10	AR1232-D			NA				
11	AR1232-E			NA				
12	AR1242-A			NA				
13	AR1242-B			NA				
14	AR1242-C			NA				
15	AR1242-D			NA				
16	AR1242-E			NA				
17	AR1248-A			NA				
18	AR1248-B			NA				
19	AR1248-C			NA				
20	AR1248-D			NA				
21	AR1248-E			NA				
22	AR1248-F			NA				
23	AR1248-G			NA				
24	AR1254-A			NA				
25	AR1254-B			NA				
26	AR1254-C			NA				
27	AR1254-D			NA				
28	AR1254-E			NA				
29	AR1254-F			NA				
30	AR1254-G			NA				
31	AR1262-A			NA				
32	AR1262-B			NA				
33	AR1262-C			NA				
34	AR1262-D			NA				
35	AR1262-E			NA				
36	AR1268-A			NA				
37	AR1268-B			NA				
38	AR1268-C			NA				
39	AR1268-D			NA				
40	AR1268-E			NA				
41	AR1016-A	132.538	132.562 E3	-0.0	103	0.00	3.85-	3.91

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G3G5160-ICV5160  
**Lab FileID:** 3G140987.D

42	AR1016-B	257.349	269.358	E3	-4.7	106	0.00	4.30-	4.36
43	AR1016-C	538.119	561.157	E3	-4.3	104	0.00	4.90-	4.96
44	AR1016-D	235.528	236.730	E3	-0.5	104	0.00	5.07-	5.13
45	AR1016-E	248.580	243.091	E3	2.2	98	0.00	5.61-	5.68
46	AR1260-A	465.226	511.836	E3	-10.0	107	0.00	7.67-	7.73
47	AR1260-B	288.893	256.013	E3	11.4	86	0.00	8.21-	8.27
48	AR1260-C	314.897	297.696	E3	5.5	91	0.00	8.55-	8.62
49	AR1260-D	751.304	726.207	E3	3.3	91	0.00	9.00-	9.06
50	AR1260-E	760.628	677.468	E3	10.9	85	0.01	9.40-	9.46
51 S	Decachlorobiphenyl	6.655	8.236	E6	-23.8#	112	0.01	10.94-	11.01

\*\*\*\*\* Signal #2 \*\*\*\*\*

1 S	Tetrachloro-m-xylene	18.161	20.504	E6	-12.9	107	0.00	4.05-	4.11
2	AR1221-A				-----NA-----				
3	AR1221-B				-----NA-----				
4	AR1221-C				-----NA-----				
5	AR1221-D				-----NA-----				
6	AR1221-E				-----NA-----				
7	AR1232-A				-----NA-----				
8	AR1232-B				-----NA-----				
9	AR1232-C				-----NA-----				
10	AR1232-D				-----NA-----				
11	AR1232-E				-----NA-----				
12	AR1242-A				-----NA-----				
13	AR1242-B				-----NA-----				
14	AR1242-C				-----NA-----				
15	AR1242-D				-----NA-----				
16	AR1242-E				-----NA-----				
17	AR1248-A				-----NA-----				
18	AR1248-B				-----NA-----				
19	AR1248-C				-----NA-----				
20	AR1248-D				-----NA-----				
21	AR1248-E				-----NA-----				
22	AR1248-F				-----NA-----				
23	AR1248-G				-----NA-----				
24	AR1254-A				-----NA-----				
25	AR1254-B				-----NA-----				
26	AR1254-C				-----NA-----				
27	AR1254-D				-----NA-----				
28	AR1254-E				-----NA-----				
29	AR1254-F				-----NA-----				
30	AR1254-G				-----NA-----				
31	AR1262-A				-----NA-----				
32	AR1262-B				-----NA-----				
33	AR1262-C				-----NA-----				
34	AR1262-D				-----NA-----				
35	AR1262-E				-----NA-----				
36	AR1268-A				-----NA-----				
37	AR1268-B				-----NA-----				
38	AR1268-C				-----NA-----				
39	AR1268-D				-----NA-----				
40	AR1268-E				-----NA-----				
41	AR1016-A	305.459	303.986	E3	0.5	101	0.00	4.73-	4.79
42	AR1016-B	601.393	626.868	E3	-4.2	105	0.00	5.30-	5.36
43	AR1016-C	1.365	1.434	E6	-5.1	105	0.00	5.95-	6.01
44	AR1016-D	521.521	558.604	E3	-7.1	105	0.00	6.14-	6.20
45	AR1016-E	423.325	435.185	E3	-2.8	102	0.00	6.81-	6.87
46	AR1260-A	0.977	1.052	E6	-7.7	106	0.00	8.91-	8.97
47	AR1260-B	800.981	740.443	E3	7.6	91	0.00	9.56-	9.62

8.10.25

8

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G3G5160-ICV5160  
**Lab FileID:** 3G140987.D

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48	AR1260-C	836.230	796.717	E3	4.7	94	0.00	10.00-10.06
49	AR1260-D	1.966	1.925	E6	2.1	94	0.00	10.34-10.40
50	AR1260-E	1.899	1.768	E6	6.9	89	0.00	10.89-10.95
51 S	Decachlorobiphenyl	14.641	18.184	E6	-24.2#	109	0.00	12.57-12.63

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(#) = Out of Range  
3G140974.d 3PCB5160.M

SPCC's out = 0 CCC's out = 0  
Wed Apr 24 11:02:01 2024 RPT1

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G3G5160-ICV5160  
**Lab FileID:** 3G140988.D

## Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\3G5160\3G140988.d\ECD1A.CH Vial: 20  
Signal #2 : C:\msdchem\1\data\3G5160\3G140988.d\ECD2B.CH  
Acq On : 23 Apr 2024 20:11 pm Operator: mahalia  
Sample : icv5160-1000 (ar1221) Inst : GC3G  
Misc : op53949,g3g5160,15.0,,,1,1 Multiplr: 1.00  
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\3PCB5160.M (ChemStation Integrator)  
Title :  
Last Update : Wed Apr 24 07:06:11 2024  
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min  
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 S	Tetrachloro-m-xylene	7.900	7.708 E6	2.4	94	0.00	3.44-	3.50
2	AR1221-A	58.563	51.314 E3	12.4	88	0.00	2.77-	2.97
3	AR1221-B	87.295	74.789 E3	14.3	86	0.00	3.55-	3.75
4	AR1221-C	203.322	170.722 E3	16.0	84	0.00	3.78-	3.98
5	AR1221-D	47.135	38.413 E3	18.5	81	0.00	4.23-	4.43
6	AR1221-E	48.348	38.025 E3	21.4#	79	0.00	4.83-	5.03
7	AR1232-A							
8	AR1232-B							
9	AR1232-C							
10	AR1232-D							
11	AR1232-E							
12	AR1242-A							
13	AR1242-B							
14	AR1242-C							
15	AR1242-D							
16	AR1242-E							
17	AR1248-A							
18	AR1248-B							
19	AR1248-C							
20	AR1248-D							
21	AR1248-E							
22	AR1248-F							
23	AR1248-G							
24	AR1254-A							
25	AR1254-B							
26	AR1254-C							
27	AR1254-D							
28	AR1254-E							
29	AR1254-F							
30	AR1254-G							
31	AR1262-A							
32	AR1262-B							
33	AR1262-C							
34	AR1262-D							
35	AR1262-E							
36	AR1268-A							
37	AR1268-B							
38	AR1268-C							
39	AR1268-D							
40	AR1268-E							
41	AR1016-A							

8.10.26  
8

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G3G5160-ICV5160  
**Lab FileID:** 3G140988.D

42	AR1016-B										
43	AR1016-C										
44	AR1016-D										
45	AR1016-E										
46	AR1260-A										
47	AR1260-B										
48	AR1260-C										
49	AR1260-D										
50	AR1260-E										
51 S	Decachlorobiphenyl	6.655	6.911	E6	-3.8	94	0.02			10.95-11.02	

\*\*\*\*\* Signal #2 \*\*\*\*\*

1 S	Tetrachloro-m-xylene	18.161	18.166	E6	-0.0	95	0.00			4.05- 4.11	
2	AR1221-A	109.498	94.735	E3	13.5	87	0.00			3.44- 3.50	
3	AR1221-B	205.054	174.079	E3	15.1	85	0.00			4.37- 4.57	
4	AR1221-C	461.480	392.103	E3	15.0	85	0.00			4.66- 4.86	
5	AR1221-D	162.464	137.654	E3	15.3	85	0.00			5.31- 5.51	
6	AR1221-E	115.574	94.702	E3	18.1	82	0.00			5.88- 6.08	
7	AR1232-A										
8	AR1232-B										
9	AR1232-C										
10	AR1232-D										
11	AR1232-E										
12	AR1242-A										
13	AR1242-B										
14	AR1242-C										
15	AR1242-D										
16	AR1242-E										
17	AR1248-A										
18	AR1248-B										
19	AR1248-C										
20	AR1248-D										
21	AR1248-E										
22	AR1248-F										
23	AR1248-G										
24	AR1254-A										
25	AR1254-B										
26	AR1254-C										
27	AR1254-D										
28	AR1254-E										
29	AR1254-F										
30	AR1254-G										
31	AR1262-A										
32	AR1262-B										
33	AR1262-C										
34	AR1262-D										
35	AR1262-E										
36	AR1268-A										
37	AR1268-B										
38	AR1268-C										
39	AR1268-D										
40	AR1268-E										
41	AR1016-A										
42	AR1016-B										
43	AR1016-C										
44	AR1016-D										
45	AR1016-E										
46	AR1260-A										
47	AR1260-B										

8.10.26  
8

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G3G5160-ICV5160  
**Lab FileID:** 3G140988.D

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48	AR1260-C									-----NA-----
49	AR1260-D									-----NA-----
50	AR1260-E									-----NA-----
51 S	Decachlorobiphenyl	14.641	16.339	E6	-11.6	98	0.00	12.57-12.63		-----

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(#) = Out of Range                      SPCC's out = 0    CCC's out = 0  
3G140974.d 3PCB5160.M                Wed Apr 24 11:02:08 2024    RPT1

8.10.26  
8

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G3G5160-ICV5160  
**Lab FileID:** 3G140989.D

## Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\3G5160\3G140989.d\ECD1A.CH Vial: 21  
Signal #2 : C:\msdchem\1\data\3G5160\3G140989.d\ECD2B.CH  
Acq On : 23 Apr 2024 20:28 pm Operator: mahalia  
Sample : icv5160-1000 (ar1254) Inst : GC3G  
Misc : op53949,g3g5160,15.0,,,1,1 Multiplr: 1.00  
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\3PCB5160.M (ChemStation Integrator)  
Title :  
Last Update : Wed Apr 24 07:06:11 2024  
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min  
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 S	Tetrachloro-m-xylene	7.900	7.669 E6	2.9	93	0.00	3.43	3.49
2	AR1221-A			NA				
3	AR1221-B			NA				
4	AR1221-C			NA				
5	AR1221-D			NA				
6	AR1221-E			NA				
7	AR1232-A			NA				
8	AR1232-B			NA				
9	AR1232-C			NA				
10	AR1232-D			NA				
11	AR1232-E			NA				
12	AR1242-A			NA				
13	AR1242-B			NA				
14	AR1242-C			NA				
15	AR1242-D			NA				
16	AR1242-E			NA				
17	AR1248-A			NA				
18	AR1248-B			NA				
19	AR1248-C			NA				
20	AR1248-D			NA				
21	AR1248-E			NA				
22	AR1248-F			NA				
23	AR1248-G			NA				
24	AR1254-A	225.829	207.200 E3	8.2	92	0.00	6.06	6.26
25	AR1254-B	312.276	292.276 E3	6.4	94	0.00	6.41	6.61
26	AR1254-C	253.985	239.623 E3	5.7	94	0.00	6.79	6.99
27	AR1254-D	435.911	414.187 E3	5.0	95	0.00	6.96	7.16
28	AR1254-E	307.197	291.634 E3	5.1	95	0.00	7.34	7.54
29	AR1254-F	301.898	290.456 E3	3.8	96	0.00	7.60	7.80
30	AR1254-G	437.950	423.096 E3	3.4	97	0.00	7.99	8.19
31	AR1262-A			NA				
32	AR1262-B			NA				
33	AR1262-C			NA				
34	AR1262-D			NA				
35	AR1262-E			NA				
36	AR1268-A			NA				
37	AR1268-B			NA				
38	AR1268-C			NA				
39	AR1268-D			NA				
40	AR1268-E			NA				
41	AR1016-A			NA				



# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G3G5160-ICV5160  
**Lab FileID:** 3G140989.D

42	AR1016-B												
43	AR1016-C												
44	AR1016-D												
45	AR1016-E												
46	AR1260-A												
47	AR1260-B												
48	AR1260-C												
49	AR1260-D												
50	AR1260-E												
51 S	Decachlorobiphenyl	6.655	7.278	E6	-9.4	99	0.02					10.95-11.02	

\*\*\*\*\* Signal #2 \*\*\*\*\*

1 S	Tetrachloro-m-xylene	18.161	18.250	E6	-0.5	95	0.00					4.05- 4.11	
2	AR1221-A												
3	AR1221-B												
4	AR1221-C												
5	AR1221-D												
6	AR1221-E												
7	AR1232-A												
8	AR1232-B												
9	AR1232-C												
10	AR1232-D												
11	AR1232-E												
12	AR1242-A												
13	AR1242-B												
14	AR1242-C												
15	AR1242-D												
16	AR1242-E												
17	AR1248-A												
18	AR1248-B												
19	AR1248-C												
20	AR1248-D												
21	AR1248-E												
22	AR1248-F												
23	AR1248-G												
24	AR1254-A	600.685	587.591	E3	2.2	98	0.00					7.34- 7.54	
25	AR1254-B	673.229	652.026	E3	3.1	97	0.00					7.60- 7.80	
26	AR1254-C	561.178	547.706	E3	2.4	98	0.00					8.11- 8.31	
27	AR1254-D	1.057	1.033	E6	2.3	98	0.00					8.28- 8.48	
28	AR1254-E	796.120	783.212	E3	1.6	98	0.00					8.59- 8.79	
29	AR1254-F	412.718	407.356	E3	1.3	99	0.00					9.08- 9.28	
30	AR1254-G	863.096	864.811	E3	-0.2	100	0.00					9.37- 9.57	
31	AR1262-A												
32	AR1262-B												
33	AR1262-C												
34	AR1262-D												
35	AR1262-E												
36	AR1268-A												
37	AR1268-B												
38	AR1268-C												
39	AR1268-D												
40	AR1268-E												
41	AR1016-A												
42	AR1016-B												
43	AR1016-C												
44	AR1016-D												
45	AR1016-E												
46	AR1260-A												
47	AR1260-B												

8.10.27  
8

**Initial Calibration Verification**

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G3G5160-ICV5160  
**Lab FileID:** 3G140989.D

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48	AR1260-C					-----NA-----			
49	AR1260-D					-----NA-----			
50	AR1260-E					-----NA-----			
51 S	Decachlorobiphenyl	14.641	16.185	E6	-10.5	97	0.00	12.57-12.63	

---

---

(#) = Out of Range  
3G140974.d 3PCB5160.M

SPCC's out = 0 CCC's out = 0  
Wed Apr 24 11:02:10 2024 RPT1

8.10.27  
8

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G3G5160-ICV5160  
**Lab FileID:** 3G140990.D

## Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\3G5160\3G140990.d\ECD1A.CH Vial: 22  
Signal #2 : C:\msdchem\1\data\3G5160\3G140990.d\ECD2B.CH  
Acq On : 23 Apr 2024 20:44 pm Operator: mahalia  
Sample : icv5160-1000 (ar1232) Inst : GC3G  
Misc : op53949,g3g5160,15.0,,,1,1 Multiplr: 1.00  
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\3PCB5160.M (ChemStation Integrator)  
Title :  
Last Update : Wed Apr 24 07:06:11 2024  
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min  
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 S	Tetrachloro-m-xylene	7.900	9.202 E6	-16.5	112	0.00	3.44-	3.50
2	AR1221-A			-----NA-----				
3	AR1221-B			-----NA-----				
4	AR1221-C			-----NA-----				
5	AR1221-D			-----NA-----				
6	AR1221-E			-----NA-----				
7	AR1232-A	142.648	157.384 E3	-10.3	110	0.00	3.78-	3.98
8	AR1232-B	103.876	115.340 E3	-11.0	111	0.00	4.23-	4.43
9	AR1232-C	221.142	240.413 E3	-8.7	109	0.00	4.83-	5.03
10	AR1232-D	94.644	103.810 E3	-9.7	110	0.00	5.00-	5.20
11	AR1232-E	93.317	100.853 E3	-8.1	108	0.00	5.54-	5.74
12	AR1242-A			-----NA-----				
13	AR1242-B			-----NA-----				
14	AR1242-C			-----NA-----				
15	AR1242-D			-----NA-----				
16	AR1242-E			-----NA-----				
17	AR1248-A			-----NA-----				
18	AR1248-B			-----NA-----				
19	AR1248-C			-----NA-----				
20	AR1248-D			-----NA-----				
21	AR1248-E			-----NA-----				
22	AR1248-F			-----NA-----				
23	AR1248-G			-----NA-----				
24	AR1254-A			-----NA-----				
25	AR1254-B			-----NA-----				
26	AR1254-C			-----NA-----				
27	AR1254-D			-----NA-----				
28	AR1254-E			-----NA-----				
29	AR1254-F			-----NA-----				
30	AR1254-G			-----NA-----				
31	AR1262-A			-----NA-----				
32	AR1262-B			-----NA-----				
33	AR1262-C			-----NA-----				
34	AR1262-D			-----NA-----				
35	AR1262-E			-----NA-----				
36	AR1268-A			-----NA-----				
37	AR1268-B			-----NA-----				
38	AR1268-C			-----NA-----				
39	AR1268-D			-----NA-----				
40	AR1268-E			-----NA-----				
41	AR1016-A			-----NA-----				

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G3G5160-ICV5160  
**Lab FileID:** 3G140990.D

42	AR1016-B									-----NA-----
43	AR1016-C									-----NA-----
44	AR1016-D									-----NA-----
45	AR1016-E									-----NA-----
46	AR1260-A									-----NA-----
47	AR1260-B									-----NA-----
48	AR1260-C									-----NA-----
49	AR1260-D									-----NA-----
50	AR1260-E									-----NA-----
51 S	Decachlorobiphenyl	6.655	8.100	E6	-21.7#	110	0.02	10.95-11.02		

\*\*\*\*\* Signal #2 \*\*\*\*\*

1 S	Tetrachloro-m-xylene	18.161	20.661	E6	-13.8	108	0.00	4.05- 4.11		
2	AR1221-A									-----NA-----
3	AR1221-B									-----NA-----
4	AR1221-C									-----NA-----
5	AR1221-D									-----NA-----
6	AR1221-E									-----NA-----
7	AR1232-A	322.760	362.817	E3	-12.4	112	0.00	4.66- 4.86		
8	AR1232-B	266.552	298.841	E3	-12.1	112	0.00	5.22- 5.42		
9	AR1232-C	550.620	632.444	E3	-14.9	115	0.00	5.88- 6.08		
10	AR1232-D	218.926	251.602	E3	-14.9	115	0.00	6.07- 6.27		
11	AR1232-E	153.914	176.812	E3	-14.9	115	0.00	6.74- 6.94		
12	AR1242-A									-----NA-----
13	AR1242-B									-----NA-----
14	AR1242-C									-----NA-----
15	AR1242-D									-----NA-----
16	AR1242-E									-----NA-----
17	AR1248-A									-----NA-----
18	AR1248-B									-----NA-----
19	AR1248-C									-----NA-----
20	AR1248-D									-----NA-----
21	AR1248-E									-----NA-----
22	AR1248-F									-----NA-----
23	AR1248-G									-----NA-----
24	AR1254-A									-----NA-----
25	AR1254-B									-----NA-----
26	AR1254-C									-----NA-----
27	AR1254-D									-----NA-----
28	AR1254-E									-----NA-----
29	AR1254-F									-----NA-----
30	AR1254-G									-----NA-----
31	AR1262-A									-----NA-----
32	AR1262-B									-----NA-----
33	AR1262-C									-----NA-----
34	AR1262-D									-----NA-----
35	AR1262-E									-----NA-----
36	AR1268-A									-----NA-----
37	AR1268-B									-----NA-----
38	AR1268-C									-----NA-----
39	AR1268-D									-----NA-----
40	AR1268-E									-----NA-----
41	AR1016-A									-----NA-----
42	AR1016-B									-----NA-----
43	AR1016-C									-----NA-----
44	AR1016-D									-----NA-----
45	AR1016-E									-----NA-----
46	AR1260-A									-----NA-----
47	AR1260-B									-----NA-----

8.10.28  
8

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G3G5160-ICV5160  
**Lab FileID:** 3G140990.D

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48	AR1260-C				-----NA-----				
49	AR1260-D				-----NA-----				
50	AR1260-E				-----NA-----				
51 S	Decachlorobiphenyl	14.641	18.746	E6	-28.0#	113	0.00	12.57-12.63	

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(#) = Out of Range                      SPCC's out = 0    CCC's out = 0  
3G140974.d 3PCB5160.M              Wed Apr 24 11:02:12 2024    RPT1

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G3G5160-ICV5160  
**Lab FileID:** 3G140991.D

## Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\3G5160\3G140991.d\ECD1A.CH Vial: 23  
 Signal #2 : C:\msdchem\1\data\3G5160\3G140991.d\ECD2B.CH  
 Acq On : 23 Apr 2024 21:01 pm Operator: mahalia  
 Sample : icv5160-1000 (ar1262) Inst : GC3G  
 Misc : op53949,g3g5160,15.0,,,1,1 Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\3PCB5160.M (ChemStation Integrator)  
 Title :  
 Last Update : Wed Apr 24 07:06:11 2024  
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min  
 Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 S	Tetrachloro-m-xylene	7.900	7.855 E6	0.6	95	0.00	3.44-	3.50
2	AR1221-A			NA				
3	AR1221-B			NA				
4	AR1221-C			NA				
5	AR1221-D			NA				
6	AR1221-E			NA				
7	AR1232-A			NA				
8	AR1232-B			NA				
9	AR1232-C			NA				
10	AR1232-D			NA				
11	AR1232-E			NA				
12	AR1242-A			NA				
13	AR1242-B			NA				
14	AR1242-C			NA				
15	AR1242-D			NA				
16	AR1242-E			NA				
17	AR1248-A			NA				
18	AR1248-B			NA				
19	AR1248-C			NA				
20	AR1248-D			NA				
21	AR1248-E			NA				
22	AR1248-F			NA				
23	AR1248-G			NA				
24	AR1254-A			NA				
25	AR1254-B			NA				
26	AR1254-C			NA				
27	AR1254-D			NA				
28	AR1254-E			NA				
29	AR1254-F			NA				
30	AR1254-G			NA				
31	AR1262-A	346.601	314.404 E3	9.3	91	0.00	7.60-	7.80
32	AR1262-B	439.628	396.354 E3	9.8	90	0.00	8.15-	8.35
33	AR1262-C	417.854	377.608 E3	9.6	90	0.00	8.49-	8.69
34	AR1262-D	947.367	867.997 E3	8.4	92	0.00	8.93-	9.13
35	AR1262-E	1.030	0.946 E6	8.2	92	0.00	9.38-	9.58
36	AR1268-A			NA				
37	AR1268-B			NA				
38	AR1268-C			NA				
39	AR1268-D			NA				
40	AR1268-E			NA				
41	AR1016-A			NA				

8.10.29  
8

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G3G5160-ICV5160  
**Lab FileID:** 3G140991.D

42	AR1016-B												
43	AR1016-C												
44	AR1016-D												
45	AR1016-E												
46	AR1260-A												
47	AR1260-B												
48	AR1260-C												
49	AR1260-D												
50	AR1260-E												
51 S	Decachlorobiphenyl	6.655	7.438	E6	-11.8	101	0.02					10.95-11.02	

\*\*\*\*\* Signal #2 \*\*\*\*\*

1 S	Tetrachloro-m-xylene	18.161	18.787	E6	-3.4	98	0.00					4.05- 4.11	
2	AR1221-A												
3	AR1221-B												
4	AR1221-C												
5	AR1221-D												
6	AR1221-E												
7	AR1232-A												
8	AR1232-B												
9	AR1232-C												
10	AR1232-D												
11	AR1232-E												
12	AR1242-A												
13	AR1242-B												
14	AR1242-C												
15	AR1242-D												
16	AR1242-E												
17	AR1248-A												
18	AR1248-B												
19	AR1248-C												
20	AR1248-D												
21	AR1248-E												
22	AR1248-F												
23	AR1248-G												
24	AR1254-A												
25	AR1254-B												
26	AR1254-C												
27	AR1254-D												
28	AR1254-E												
29	AR1254-F												
30	AR1254-G												
31	AR1262-A	791.419	758.245	E3	4.2	96	0.00					8.84- 9.04	
32	AR1262-B	1.187	1.161	E6	2.2	98	0.00					9.49- 9.69	
33	AR1262-C	1.014	0.976	E6	3.7	96	0.00					9.93-10.13	
34	AR1262-D	2.317	2.279	E6	1.6	98	0.00					10.27-10.47	
35	AR1262-E	2.664	2.600	E6	2.4	98	0.00					10.79-10.99	
36	AR1268-A												
37	AR1268-B												
38	AR1268-C												
39	AR1268-D												
40	AR1268-E												
41	AR1016-A												
42	AR1016-B												
43	AR1016-C												
44	AR1016-D												
45	AR1016-E												
46	AR1260-A												
47	AR1260-B												

8.10.29  
8

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G3G5160-ICV5160  
**Lab FileID:** 3G140991.D

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48	AR1260-C								-----NA-----
49	AR1260-D								-----NA-----
50	AR1260-E								-----NA-----
51 S	Decachlorobiphenyl	14.641	16.781	E6	-14.6	101	0.00	12.57-12.63	

---

(#) = Out of Range                      SPCC's out = 0    CCC's out = 0  
3G140974.d 3PCB5160.M              Wed Apr 24 11:02:14 2024    RPT1

8.10.29  
8



# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G3G5160-ICV5160  
**Lab FileID:** 3G140992.D

## Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\3G5160\3G140992.d\ECD1A.CH Vial: 24  
Signal #2 : C:\msdchem\1\data\3G5160\3G140992.d\ECD2B.CH  
Acq On : 23 Apr 2024 21:18 pm Operator: mahalia  
Sample : icv5160-1000 (ar1242) Inst : GC3G  
Misc : op53949,g3g5160,15.0,,,1,1 Multiplr: 1.00  
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\3PCB5160.M (ChemStation Integrator)  
Title :  
Last Update : Wed Apr 24 07:06:11 2024  
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min  
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 S	Tetrachloro-m-xylene	7.900	8.094 E6	-2.5	98	0.00	3.44-	3.50
2	AR1221-A							
3	AR1221-B							
4	AR1221-C							
5	AR1221-D							
6	AR1221-E							
7	AR1232-A							
8	AR1232-B							
9	AR1232-C							
10	AR1232-D							
11	AR1232-E							
12	AR1242-A	195.700	214.627 E3	-9.7	110	0.00	4.23-	4.43
13	AR1242-B	399.597	436.048 E3	-9.1	109	0.00	4.83-	5.03
14	AR1242-C	170.519	183.591 E3	-7.7	108	0.00	5.00-	5.20
15	AR1242-D	185.208	192.177 E3	-3.8	104	0.00	5.54-	5.74
16	AR1242-E	147.553	150.138 E3	-1.8	102	0.00	6.16-	6.36
17	AR1248-A							
18	AR1248-B							
19	AR1248-C							
20	AR1248-D							
21	AR1248-E							
22	AR1248-F							
23	AR1248-G							
24	AR1254-A							
25	AR1254-B							
26	AR1254-C							
27	AR1254-D							
28	AR1254-E							
29	AR1254-F							
30	AR1254-G							
31	AR1262-A							
32	AR1262-B							
33	AR1262-C							
34	AR1262-D							
35	AR1262-E							
36	AR1268-A							
37	AR1268-B							
38	AR1268-C							
39	AR1268-D							
40	AR1268-E							
41	AR1016-A							

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G3G5160-ICV5160  
**Lab FileID:** 3G140992.D

42	AR1016-B												
43	AR1016-C												
44	AR1016-D												
45	AR1016-E												
46	AR1260-A												
47	AR1260-B												
48	AR1260-C												
49	AR1260-D												
50	AR1260-E												
51 S	Decachlorobiphenyl	6.655	7.320	E6	-10.0	99	0.02					10.95-11.02	

\*\*\*\*\* Signal #2 \*\*\*\*\*

1 S	Tetrachloro-m-xylene	18.161	18.649	E6	-2.7	97	0.00					4.05- 4.11	
2	AR1221-A												
3	AR1221-B												
4	AR1221-C												
5	AR1221-D												
6	AR1221-E												
7	AR1232-A												
8	AR1232-B												
9	AR1232-C												
10	AR1232-D												
11	AR1232-E												
12	AR1242-A	451.561	503.329	E3	-11.5	111	0.00					5.22- 5.43	
13	AR1242-B	1.009	1.132	E6	-12.2	112	0.00					5.88- 6.08	
14	AR1242-C	394.580	442.820	E3	-12.2	112	0.00					6.07- 6.27	
15	AR1242-D	313.664	343.795	E3	-9.6	110	0.00					6.74- 6.94	
16	AR1242-E	386.834	415.044	E3	-7.3	107	0.00					7.35- 7.55	
17	AR1248-A												
18	AR1248-B												
19	AR1248-C												
20	AR1248-D												
21	AR1248-E												
22	AR1248-F												
23	AR1248-G												
24	AR1254-A												
25	AR1254-B												
26	AR1254-C												
27	AR1254-D												
28	AR1254-E												
29	AR1254-F												
30	AR1254-G												
31	AR1262-A												
32	AR1262-B												
33	AR1262-C												
34	AR1262-D												
35	AR1262-E												
36	AR1268-A												
37	AR1268-B												
38	AR1268-C												
39	AR1268-D												
40	AR1268-E												
41	AR1016-A												
42	AR1016-B												
43	AR1016-C												
44	AR1016-D												
45	AR1016-E												
46	AR1260-A												
47	AR1260-B												

8.10.30  
8

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G3G5160-ICV5160  
**Lab FileID:** 3G140992.D

---

48	AR1260-C					-----NA-----			
49	AR1260-D					-----NA-----			
50	AR1260-E					-----NA-----			
51 S	Decachlorobiphenyl	14.641	16.559	E6	-13.1	99	0.00	12.57-12.63	

---

(#) = Out of Range                      SPCC's out = 0    CCC's out = 0  
3G140974.d 3PCB5160.M                Wed Apr 24 11:02:16 2024    RPT1

8.10.30

8

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G3G5160-ICV5160  
**Lab FileID:** 3G140993.D

## Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\3G5160\3G140993.d\ECD1A.CH Vial: 25  
Signal #2 : C:\msdchem\1\data\3G5160\3G140993.d\ECD2B.CH  
Acq On : 23 Apr 2024 21:34 pm Operator: mahalia  
Sample : icv5160-1000 (ar1268) Inst : GC3G  
Misc : op53949,g3g5160,15.0,,,1,1 Multiplr: 1.00  
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\3PCB5160.M (ChemStation Integrator)  
Title :  
Last Update : Wed Apr 24 07:06:11 2024  
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min  
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 S	Tetrachloro-m-xylene	7.900	8.488 E6	-7.4	103	0.00	3.44-	3.50
2	AR1221-A			NA				
3	AR1221-B			NA				
4	AR1221-C			NA				
5	AR1221-D			NA				
6	AR1221-E			NA				
7	AR1232-A			NA				
8	AR1232-B			NA				
9	AR1232-C			NA				
10	AR1232-D			NA				
11	AR1232-E			NA				
12	AR1242-A			NA				
13	AR1242-B			NA				
14	AR1242-C			NA				
15	AR1242-D			NA				
16	AR1242-E			NA				
17	AR1248-A			NA				
18	AR1248-B			NA				
19	AR1248-C			NA				
20	AR1248-D			NA				
21	AR1248-E			NA				
22	AR1248-F			NA				
23	AR1248-G			NA				
24	AR1254-A			NA				
25	AR1254-B			NA				
26	AR1254-C			NA				
27	AR1254-D			NA				
28	AR1254-E			NA				
29	AR1254-F			NA				
30	AR1254-G			NA				
31	AR1262-A			NA				
32	AR1262-B			NA				
33	AR1262-C			NA				
34	AR1262-D			NA				
35	AR1262-E			NA				
36	AR1268-A	890.739	912.978 E3	-2.5	102	0.00	9.38-	9.58
37	AR1268-B	993.606	1026.950 E3	-3.4	103	0.00	9.43-	9.63
38	AR1268-C	791.719	821.655 E3	-3.8	104	0.00	9.71-	9.91
39	AR1268-D	329.923	340.091 E3	-3.1	103	0.00	10.21-	10.41
40	AR1268-E	2.566	2.697 E6	-5.1	105	0.00	10.61-	10.81
41	AR1016-A			NA				

Initial Calibration Verification

Job Number: JD87833
Account: MTXFPNJ Matrix New World Engineering, Inc.
Project: Ridgewood Berm Sampling, Ridgewood, NJ

Sample: G3G5160-ICV5160
Lab FileID: 3G140993.D

Table with columns for sample ID, name, and numerical values. Rows 42-50 show 'AR1016-B' through 'AR1260-E' with 'NA' values. Row 51 shows 'Decachlorobiphenyl' with values 6.655, 22.115, E6, -232.3#, 300#, 0.01, and 10.95-11.02.

\*\*\*\*\* Signal #2 \*\*\*\*\*

Table with columns for sample ID, name, and numerical values. Rows 1-35 show 'Tetrachloro-m-xylene' and various sample IDs (AR1221-A-E, AR1232-A-F, AR1242-A-F, AR1248-A-F, AR1254-A-G, AR1262-A-E) with 'NA' values. Rows 36-40 show values for 'AR1268-A' through 'AR1268-E'. Rows 41-47 show 'AR1016-A' through 'AR1260-B' with 'NA' values.

8.10.31 8

**Initial Calibration Verification**

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G3G5160-ICV5160  
**Lab FileID:** 3G140993.D

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48	AR1260-C				-----NA-----					
49	AR1260-D				-----NA-----					
50	AR1260-E				-----NA-----					
51 S	Decachlorobiphenyl	14.641	49.455	E6	-237.8#	297#	0.00	12.57-12.63		

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(#) = Out of Range                      SPCC's out = 0    CCC's out = 0  
3G140974.d 3PCB5160.M                Wed Apr 24 11:02:18 2024    RPT1

8.10.31

8

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G3G5160-ICV5160  
**Lab FileID:** 3G140994.D

## Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\3G5160\3G140994.d\ECD1A.CH Vial: 26  
Signal #2 : C:\msdchem\1\data\3G5160\3G140994.d\ECD2B.CH  
Acq On : 23 Apr 2024 21:51 pm Operator: mahalia  
Sample : icv5160-1000 (ar1248) Inst : GC3G  
Misc : op53949,g3g5160,15.0,,,1,1 Multiplr: 1.00  
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\3PCB5160.M (ChemStation Integrator)  
Title :  
Last Update : Wed Apr 24 07:06:11 2024  
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min  
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 S	Tetrachloro-m-xylene	7.900	7.869 E6	0.4	96	0.00	3.44-	3.50
2	AR1221-A			NA				
3	AR1221-B			NA				
4	AR1221-C			NA				
5	AR1221-D			NA				
6	AR1221-E			NA				
7	AR1232-A			NA				
8	AR1232-B			NA				
9	AR1232-C			NA				
10	AR1232-D			NA				
11	AR1232-E			NA				
12	AR1242-A			NA				
13	AR1242-B			NA				
14	AR1242-C			NA				
15	AR1242-D			NA				
16	AR1242-E			NA				
17	AR1248-A	93.535	96.293 E3	-2.9	103	0.00	4.22-	4.42
18	AR1248-B	251.972	257.788 E3	-2.3	102	0.00	4.83-	5.03
19	AR1248-C	145.072	146.690 E3	-1.1	101	0.00	5.24-	5.44
20	AR1248-D	209.048	210.512 E3	-0.7	101	0.00	5.54-	5.74
21	AR1248-E	147.115	149.508 E3	-1.6	102	0.00	5.66-	5.86
22	AR1248-F	243.964	246.191 E3	-0.9	101	0.00	6.12-	6.31
23	AR1248-G	209.281	213.361 E3	-1.9	102	0.00	6.42-	6.62
24	AR1254-A			NA				
25	AR1254-B			NA				
26	AR1254-C			NA				
27	AR1254-D			NA				
28	AR1254-E			NA				
29	AR1254-F			NA				
30	AR1254-G			NA				
31	AR1262-A			NA				
32	AR1262-B			NA				
33	AR1262-C			NA				
34	AR1262-D			NA				
35	AR1262-E			NA				
36	AR1268-A			NA				
37	AR1268-B			NA				
38	AR1268-C			NA				
39	AR1268-D			NA				
40	AR1268-E			NA				
41	AR1016-A			NA				

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G3G5160-ICV5160  
**Lab FileID:** 3G140994.D

42	AR1016-B											
43	AR1016-C											
44	AR1016-D											
45	AR1016-E											
46	AR1260-A											
47	AR1260-B											
48	AR1260-C											
49	AR1260-D											
50	AR1260-E											
51 S	Decachlorobiphenyl	6.655	7.326	E6	-10.1	99	0.02			10.95-11.02		

\*\*\*\*\* Signal #2 \*\*\*\*\*

1 S	Tetrachloro-m-xylene	18.161	18.699	E6	-3.0	98	0.00			4.05- 4.11		
2	AR1221-A											
3	AR1221-B											
4	AR1221-C											
5	AR1221-D											
6	AR1221-E											
7	AR1232-A											
8	AR1232-B											
9	AR1232-C											
10	AR1232-D											
11	AR1232-E											
12	AR1242-A											
13	AR1242-B											
14	AR1242-C											
15	AR1242-D											
16	AR1242-E											
17	AR1248-A	222.501	231.830	E3	-4.2	104	0.00			5.22- 5.42		
18	AR1248-B	645.727	670.867	E3	-3.9	104	0.00			5.88- 6.08		
19	AR1248-C	376.662	392.252	E3	-4.1	104	0.00			6.35- 6.55		
20	AR1248-D	507.836	532.788	E3	-4.9	105	0.00			6.74- 6.94		
21	AR1248-E	490.367	515.702	E3	-5.2	105	0.00			6.92- 7.12		
22	AR1248-F	697.588	732.308	E3	-5.0	105	0.00			7.35- 7.55		
23	AR1248-G	684.958	721.345	E3	-5.3	105	0.00			7.68- 7.88		
24	AR1254-A											
25	AR1254-B											
26	AR1254-C											
27	AR1254-D											
28	AR1254-E											
29	AR1254-F											
30	AR1254-G											
31	AR1262-A											
32	AR1262-B											
33	AR1262-C											
34	AR1262-D											
35	AR1262-E											
36	AR1268-A											
37	AR1268-B											
38	AR1268-C											
39	AR1268-D											
40	AR1268-E											
41	AR1016-A											
42	AR1016-B											
43	AR1016-C											
44	AR1016-D											
45	AR1016-E											
46	AR1260-A											
47	AR1260-B											

8.10.32  
8



# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G3G5160-ICV5160  
**Lab FileID:** 3G140994.D

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48	AR1260-C					-----NA-----			
49	AR1260-D					-----NA-----			
50	AR1260-E					-----NA-----			
51 S	Decachlorobiphenyl	14.641	16.066	E6	-9.7	96	0.01	12.57-12.63	

---

(#) = Out of Range  
3G140974.d 3PCB5160.M

SPCC's out = 0 CCC's out = 0  
Wed Apr 24 11:02:20 2024 RPT1

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G3G5173-CC5160  
**Lab FileID:** 3G141327.D

## Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\marianaf\3G5173\  
 Data File : 3G141327.D  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 08-May-24, 00:33:43  
 Operator : christp  
 Sample : cc5160-1000  
 Misc : op54338a,g3g5173,1000,,,1,1  
 ALS Vial : 29 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 08 13:29:58 2024  
 Quant Method : C:\MSDCHEM\1\METHODS\3PCB5160.M  
 Quant Title :  
 QLast Update : Fri Sep 29 10:09:35 2023  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
 Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min  
 Max. RRF Dev : 20% Max. Rel. Area : 150%

Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1 S Tetrachloro-m-xylene	7.900	9.792 E6	-23.9#	119	0.00
41 AR1016-A	132.538	153.333 E3	-15.7	119	0.00
42 AR1016-B	257.349	293.070 E3	-13.9	116	0.00
43 AR1016-C	538.119	650.413 E3	-20.9#	121	0.00
44 AR1016-D	235.528	262.404 E3	-11.4	115	0.00
45 AR1016-E	248.580	271.259 E3	-9.1	109	0.00
46 AR1260-A	465.226	572.256 E3	-23.0#	120	0.00
47 AR1260-B	288.893	343.192 E3	-18.8	115	0.00
48 AR1260-C	314.897	377.115 E3	-19.8	115	0.00
49 AR1260-D	751.304	979.671 E3	-30.4#	123	0.00
50 AR1260-E	760.628	943.174 E3	-24.0#	119	0.00
51 S Decachlorobiphenyl	6.655	9.196 E6	-38.2#	125	0.00

### Signal #2

1 S Tetrachloro-m-xylene	18.161	22.876 E6	-26.0#	119	-0.01
41 AR1016-A	305.459	351.779 E3	-15.2	117	0.00
42 AR1016-B	601.393	698.933 E3	-16.2	117	0.00
43 AR1016-C	1.365	1.616 E6	-18.4	119	0.00
44 AR1016-D	521.521	625.580 E3	-20.0	117	0.00
45 AR1016-E	423.325	494.450 E3	-16.8	116	0.00
46 AR1260-A	0.977	1.190 E6	-21.8#	120	0.00
47 AR1260-B	800.981	1004.276 E3	-25.4#	123	0.00
48 AR1260-C	836.230	1036.119 E3	-23.9#	123	0.00
49 AR1260-D	1.966	2.640 E6	-34.3#	129	0.00
50 AR1260-E	1.899	2.558 E6	-34.7#	129	0.00
51 S Decachlorobiphenyl	14.641	21.065 E6	-43.9#	126	0.00

Evaluate Continuing Calibration Report - Not Found

8.10.33  
8

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G3G5173-CC5160  
**Lab FileID:** 3G141327.D

2	AR1221-A	58.563	0.000	E3	100.0#	0#	-2.87#
3	AR1221-B	87.295	0.000	E3	100.0#	0#	-3.65#
4	AR1221-C	203.322	0.000	E3	100.0#	0#	-3.88#
5	AR1221-D	47.135	0.000	E3	100.0#	0#	-4.33#
6	AR1221-E	48.348	0.000	E3	100.0#	0#	-4.93#
7	AR1232-A	142.648	0.000	E3	100.0#	0#	-3.88#
8	AR1232-B	103.876	0.000	E3	100.0#	0#	-4.33#
9	AR1232-C	221.142	0.000	E3	100.0#	0#	-4.93#
10	AR1232-D	94.644	0.000	E3	100.0#	0#	-5.10#
11	AR1232-E	93.317	0.000	E3	100.0#	0#	-5.64#
12	AR1242-A	195.700	0.000	E3	100.0#	0#	-4.32#
13	AR1242-B	399.597	0.000	E3	100.0#	0#	-4.93#
14	AR1242-C	170.519	0.000	E3	100.0#	0#	-5.10#
15	AR1242-D	185.208	0.000	E3	100.0#	0#	-5.64#
16	AR1242-E	147.553	0.000	E3	100.0#	0#	-6.25#
17	AR1248-A	93.535	0.000	E3	100.0#	0#	-4.32#
18	AR1248-B	251.972	0.000	E3	100.0#	0#	-4.93#
19	AR1248-C	145.072	0.000	E3	100.0#	0#	-5.34#
20	AR1248-D	209.048	0.000	E3	100.0#	0#	-5.64#
21	AR1248-E	147.115	0.000	E3	100.0#	0#	-5.76#
22	AR1248-F	243.964	0.000	E3	100.0#	0#	-6.21#
23	AR1248-G	209.281	0.000	E3	100.0#	0#	-6.52#
24	AR1254-A	225.829	0.000	E3	100.0#	0#	-6.15#
25	AR1254-B	312.276	0.000	E3	100.0#	0#	-6.51#
26	AR1254-C	253.985	0.000	E3	100.0#	0#	-6.89#
27	AR1254-D	435.911	0.000	E3	100.0#	0#	-7.05#
28	AR1254-E	307.197	0.000	E3	100.0#	0#	-7.44#
29	AR1254-F	301.898	0.000	E3	100.0#	0#	-7.69#
30	AR1254-G	437.950	0.000	E3	100.0#	0#	-8.08#
31	AR1262-A	346.601	0.000	E3	100.0#	0#	-7.69#
32	AR1262-B	439.628	0.000	E3	100.0#	0#	-8.24#
33	AR1262-C	417.854	0.000	E3	100.0#	0#	-8.59#
34	AR1262-D	947.367	0.000	E3	100.0#	0#	-9.02#
35	AR1262-E	1.030	0.000	E6	100.0#	0#	-9.47#
36	AR1268-A	890.739	0.000	E3	100.0#	0#	-9.47#
37	AR1268-B	993.606	0.000	E3	100.0#	0#	-9.53#
38	AR1268-C	791.719	0.000	E3	100.0#	0#	-9.80#
39	AR1268-D	329.923	0.000	E3	100.0#	0#	-10.31#
40	AR1268-E	2.566	0.000	E6	100.0#	0#	-10.71#

Signal #2

2	AR1221-A	109.498	0.000	E3	100.0#	0#	-3.47#
3	AR1221-B	205.054	0.000	E3	100.0#	0#	-4.47#
4	AR1221-C	461.480	0.000	E3	100.0#	0#	-4.76#
5	AR1221-D	162.464	0.000	E3	100.0#	0#	-5.41#
6	AR1221-E	115.574	0.000	E3	100.0#	0#	-5.98#
7	AR1232-A	322.760	0.000	E3	100.0#	0#	-4.76#
8	AR1232-B	266.552	0.000	E3	100.0#	0#	-5.32#
9	AR1232-C	550.620	0.000	E3	100.0#	0#	-5.98#
10	AR1232-D	218.926	0.000	E3	100.0#	0#	-6.17#
11	AR1232-E	153.914	0.000	E3	100.0#	0#	-6.84#
12	AR1242-A	451.561	0.000	E3	100.0#	0#	-5.33#
13	AR1242-B	1.009	0.000	E6	100.0#	0#	-5.98#
14	AR1242-C	394.580	0.000	E3	100.0#	0#	-6.17#
15	AR1242-D	313.664	0.000	E3	100.0#	0#	-6.84#
16	AR1242-E	386.834	0.000	E3	100.0#	0#	-7.45#
17	AR1248-A	222.501	0.000	E3	100.0#	0#	-5.32#
18	AR1248-B	645.727	0.000	E3	100.0#	0#	-5.98#
19	AR1248-C	376.662	0.000	E3	100.0#	0#	-6.44#

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G3G5173-CC5160  
**Lab FileID:** 3G141327.D

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20	AR1248-D	507.836	0.000	E3	100.0#	0#	-6.84#
21	AR1248-E	490.367	0.000	E3	100.0#	0#	-7.02#
22	AR1248-F	697.588	0.000	E3	100.0#	0#	-7.45#
23	AR1248-G	684.958	0.000	E3	100.0#	0#	-7.78#
24	AR1254-A	600.685	0.000	E3	100.0#	0#	-7.44#
25	AR1254-B	673.229	0.000	E3	100.0#	0#	-7.70#
26	AR1254-C	561.178	0.000	E3	100.0#	0#	-8.21#
27	AR1254-D	1.057	0.000	E6	100.0#	0#	-8.38#
28	AR1254-E	796.120	0.000	E3	100.0#	0#	-8.69#
29	AR1254-F	412.718	0.000	E3	100.0#	0#	-9.17#
30	AR1254-G	863.096	0.000	E3	100.0#	0#	-9.47#
31	AR1262-A	791.419	0.000	E3	100.0#	0#	-8.93#
32	AR1262-B	1.187	0.000	E6	100.0#	0#	-9.59#
33	AR1262-C	1.014	0.000	E6	100.0#	0#	-10.02#
34	AR1262-D	2.317	0.000	E6	100.0#	0#	-10.37#
35	AR1262-E	2.664	0.000	E6	100.0#	0#	-10.89#
36	AR1268-A	2.670	0.000	E6	100.0#	0#	-10.89#
37	AR1268-B	2.588	0.000	E6	100.0#	0#	-10.96#
38	AR1268-C	2.191	0.000	E6	100.0#	0#	-11.34#
39	AR1268-D	883.026	0.000	E3	100.0#	0#	-11.73#
40	AR1268-E	6.339	0.000	E6	100.0#	0#	-12.21#

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(#) = Out of Range

SPCC's out = 0 CCC's out = 0

3PCB5160.M Wed May 08 13:30:16 2024

8.10.33

8

# Continuing Calibration Summary

Job Number: JD87833  
Account: MTXFPNJ Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

Sample: G3G5173-CC5160  
Lab FileID: 3G141351.D

## Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\marianaf\3G5173\  
Data File : 3G141351.D  
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
Acq On : 08-May-24, 07:13:12  
Operator : christp  
Sample : cc5160-500  
Misc : op54402a,g3g5173,1000,,,1,1  
ALS Vial : 48 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
Integration File signal 2: autoint2.e  
Quant Time: May 08 13:20:11 2024  
Quant Method : C:\msdchem\1\data\marianaf\3G5173\3PCB5160.M  
Quant Title :  
QLast Update : Tue May 07 06:14:57 2024  
Response via : Initial Calibration  
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2  
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min  
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1 S	Tetrachloro-m-xylene	7.900	9.476 E6	-19.9	109	0.00
41	AR1016-A	132.538	158.057 E3	-19.3	109	0.00
42	AR1016-B	257.349	303.661 E3	-18.0	109	0.00
43	AR1016-C	538.119	630.972 E3	-17.3	109	0.00
44	AR1016-D	235.528	264.672 E3	-12.4	107	0.00
45	AR1016-E	248.580	278.221 E3	-11.9	103	0.00
46	AR1260-A	465.226	534.428 E3	-14.9	108	0.00
47	AR1260-B	288.893	325.874 E3	-12.8	105	0.00
48	AR1260-C	314.897	360.262 E3	-14.4	106	0.00
49	AR1260-D	751.304	873.065 E3	-16.2	105	0.00
50	AR1260-E	760.628	871.947 E3	-14.6	107	0.00
51 S	Decachlorobiphenyl	6.655	8.378 E6	-25.9#	108	0.00

### Signal #2

1 S	Tetrachloro-m-xylene	18.161	22.118 E6	-21.8#	109	0.00
41	AR1016-A	305.459	363.678 E3	-19.1	108	0.00
42	AR1016-B	601.393	718.796 E3	-19.5	108	0.00
43	AR1016-C	1.365	1.620 E6	-18.7	109	0.00
44	AR1016-D	521.521	632.985 E3	-21.4#	110	0.00
45	AR1016-E	423.325	491.808 E3	-16.2	107	0.00
46	AR1260-A	0.977	1.149 E6	-17.6	109	0.00
47	AR1260-B	800.981	949.664 E3	-18.6	110	0.00
48	AR1260-C	836.230	957.387 E3	-14.5	107	0.00
49	AR1260-D	1.966	2.340 E6	-19.0	110	0.00
50	AR1260-E	1.899	2.271 E6	-19.6	108	0.00
51 S	Decachlorobiphenyl	14.641	18.314 E6	-25.1#	104	0.00

Evaluate Continuing Calibration Report - Not Found

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G3G5173-CC5160  
**Lab FileID:** 3G141351.D

2	AR1221-A	58.563	0.000	E3	100.0#	0#	-2.87#
3	AR1221-B	87.295	0.000	E3	100.0#	0#	-3.65#
4	AR1221-C	203.322	0.000	E3	100.0#	0#	-3.88#
5	AR1221-D	47.135	0.000	E3	100.0#	0#	-4.33#
6	AR1221-E	48.348	0.000	E3	100.0#	0#	-4.93#
7	AR1232-A	142.648	0.000	E3	100.0#	0#	-3.88#
8	AR1232-B	103.876	0.000	E3	100.0#	0#	-4.33#
9	AR1232-C	221.142	0.000	E3	100.0#	0#	-4.93#
10	AR1232-D	94.644	0.000	E3	100.0#	0#	-5.10#
11	AR1232-E	93.317	0.000	E3	100.0#	0#	-5.64#
12	AR1242-A	195.700	0.000	E3	100.0#	0#	-4.32#
13	AR1242-B	399.597	0.000	E3	100.0#	0#	-4.93#
14	AR1242-C	170.519	0.000	E3	100.0#	0#	-5.10#
15	AR1242-D	185.208	0.000	E3	100.0#	0#	-5.64#
16	AR1242-E	147.553	0.000	E3	100.0#	0#	-6.25#
17	AR1248-A	93.535	0.000	E3	100.0#	0#	-4.32#
18	AR1248-B	251.972	0.000	E3	100.0#	0#	-4.93#
19	AR1248-C	145.072	0.000	E3	100.0#	0#	-5.34#
20	AR1248-D	209.048	0.000	E3	100.0#	0#	-5.64#
21	AR1248-E	147.115	0.000	E3	100.0#	0#	-5.76#
22	AR1248-F	243.964	0.000	E3	100.0#	0#	-6.21#
23	AR1248-G	209.281	0.000	E3	100.0#	0#	-6.52#
24	AR1254-A	225.829	0.000	E3	100.0#	0#	-6.15#
25	AR1254-B	312.276	0.000	E3	100.0#	0#	-6.51#
26	AR1254-C	253.985	0.000	E3	100.0#	0#	-6.89#
27	AR1254-D	435.911	0.000	E3	100.0#	0#	-7.05#
28	AR1254-E	307.197	0.000	E3	100.0#	0#	-7.44#
29	AR1254-F	301.898	0.000	E3	100.0#	0#	-7.69#
30	AR1254-G	437.950	0.000	E3	100.0#	0#	-8.08#
31	AR1262-A	346.601	0.000	E3	100.0#	0#	-7.69#
32	AR1262-B	439.628	0.000	E3	100.0#	0#	-8.24#
33	AR1262-C	417.854	0.000	E3	100.0#	0#	-8.59#
34	AR1262-D	947.367	0.000	E3	100.0#	0#	-9.02#
35	AR1262-E	1.030	0.000	E6	100.0#	0#	-9.47#
36	AR1268-A	890.739	0.000	E3	100.0#	0#	-9.47#
37	AR1268-B	993.606	0.000	E3	100.0#	0#	-9.53#
38	AR1268-C	791.719	0.000	E3	100.0#	0#	-9.80#
39	AR1268-D	329.923	0.000	E3	100.0#	0#	-10.31#
40	AR1268-E	2.566	0.000	E6	100.0#	0#	-10.71#

Signal #2

2	AR1221-A	109.498	0.000	E3	100.0#	0#	-3.47#
3	AR1221-B	205.054	0.000	E3	100.0#	0#	-4.47#
4	AR1221-C	461.480	0.000	E3	100.0#	0#	-4.76#
5	AR1221-D	162.464	0.000	E3	100.0#	0#	-5.41#
6	AR1221-E	115.574	0.000	E3	100.0#	0#	-5.98#
7	AR1232-A	322.760	0.000	E3	100.0#	0#	-4.76#
8	AR1232-B	266.552	0.000	E3	100.0#	0#	-5.32#
9	AR1232-C	550.620	0.000	E3	100.0#	0#	-5.98#
10	AR1232-D	218.926	0.000	E3	100.0#	0#	-6.17#
11	AR1232-E	153.914	0.000	E3	100.0#	0#	-6.84#
12	AR1242-A	451.561	0.000	E3	100.0#	0#	-5.33#
13	AR1242-B	1.009	0.000	E6	100.0#	0#	-5.98#
14	AR1242-C	394.580	0.000	E3	100.0#	0#	-6.17#
15	AR1242-D	313.664	0.000	E3	100.0#	0#	-6.84#
16	AR1242-E	386.834	0.000	E3	100.0#	0#	-7.45#
17	AR1248-A	222.501	0.000	E3	100.0#	0#	-5.32#
18	AR1248-B	645.727	0.000	E3	100.0#	0#	-5.98#
19	AR1248-C	376.662	0.000	E3	100.0#	0#	-6.44#

8.10.34

8

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G3G5173-CC5160  
**Lab FileID:** 3G141351.D

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20	AR1248-D	507.836	0.000	E3	100.0#	0#	-6.84#
21	AR1248-E	490.367	0.000	E3	100.0#	0#	-7.02#
22	AR1248-F	697.588	0.000	E3	100.0#	0#	-7.45#
23	AR1248-G	684.958	0.000	E3	100.0#	0#	-7.78#
24	AR1254-A	600.685	0.000	E3	100.0#	0#	-7.44#
25	AR1254-B	673.229	0.000	E3	100.0#	0#	-7.70#
26	AR1254-C	561.178	0.000	E3	100.0#	0#	-8.21#
27	AR1254-D	1.057	0.000	E6	100.0#	0#	-8.38#
28	AR1254-E	796.120	0.000	E3	100.0#	0#	-8.69#
29	AR1254-F	412.718	0.000	E3	100.0#	0#	-9.17#
30	AR1254-G	863.096	0.000	E3	100.0#	0#	-9.47#
31	AR1262-A	791.419	0.000	E3	100.0#	0#	-8.93#
32	AR1262-B	1.187	0.000	E6	100.0#	0#	-9.59#
33	AR1262-C	1.014	0.000	E6	100.0#	0#	-10.02#
34	AR1262-D	2.317	0.000	E6	100.0#	0#	-10.37#
35	AR1262-E	2.664	0.000	E6	100.0#	0#	-10.89#
36	AR1268-A	2.670	0.000	E6	100.0#	0#	-10.89#
37	AR1268-B	2.588	0.000	E6	100.0#	0#	-10.96#
38	AR1268-C	2.191	0.000	E6	100.0#	0#	-11.34#
39	AR1268-D	883.026	0.000	E3	100.0#	0#	-11.73#
40	AR1268-E	6.339	0.000	E6	100.0#	0#	-12.21#

---

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

3PCB5160.M Wed May 08 13:20:54 2024

8.10.34

8

# Initial Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G8G2430-ICC2430  
**Lab FileID:** 8G55359.D

## Response Factor Report GC8G

Method : C:\msdchem\1\methods\8PSTLVI2430.M (ChemStation Integrator)  
Title : PEST/PCB  
Last Update : Wed Apr 03 10:35:10 2024  
Response via : Initial Calibration

### Calibration Files

2 =8g55356.d 5 =8g55357.d 10 =8g55358.d 25 =8g55359.d  
50 =8g55360.d 100 =8g55362.d 75 =8g55361.d =

Compound	2	5	10	25	50	100	75	Avg	%RSD
-----									
1) I 1-bromo-2-nitrobenzen	-----ISTD-----								
2) Tetrachloro-	1.227	1.053	0.996	0.984	0.999	1.022	1.013	1.042	8.13
3) hexachlorobe	2.126	1.667	1.695	1.610	1.595	1.559	1.540	1.684	12.00
4) alpha-BHC	0.988	0.939	1.077	1.311	1.487	1.365	1.442	1.230	18.25
5) gamma-BHC	1.455	1.366	1.347	1.396	1.454	1.500	1.470	1.427	4.02
6) Heptachlor	1.769	1.433	1.352	1.344	1.341	1.341	1.334	1.416	11.25
7) beta-BHC	0.846	0.696	0.645	0.644	0.637	0.652	0.639	0.680	11.19
8) delta-BHC	1.320	1.129	1.174	1.211	1.283	1.345	1.338	1.257	6.84
9) Aldrin	1.478	1.245	1.231	1.233	1.266	1.297	1.288	1.291	6.68
10)alachlor		0.230	0.206	0.186	0.173	0.157	0.162	0.186	14.93
11) Heptachlor E	1.216	1.174	1.134	1.082	1.068	1.047	1.058	1.111	5.81
12) gamma-Chlord	1.512	1.340	1.268	1.268	1.277	1.260	1.262	1.312	7.04
13) alpha-Chlord	1.445	1.263	1.200	1.165	1.193	1.178	1.202	1.235	7.89
14) Endosulfan I	1.397	1.256	1.178	1.133	1.161	1.108	1.136	1.196	8.43
15) 4,4'-DDE	1.359	1.169	1.132	1.127	1.149	1.180	1.163	1.183	6.76
16) Dieldrin	1.465	1.358	1.267	1.211	1.226	1.219	1.213	1.280	7.58
17) Endrin	1.282	1.178	1.124	1.094	1.102	1.120	1.098	1.142	5.93
18) 4,4'-DDD	0.740	0.838	0.889	0.861	0.926	0.864	0.942	0.866	7.71
19) Endosulfan I	1.237	1.152	1.094	1.049	1.056	1.046	1.053	1.098	6.55
20) 4,4'-DDT	1.314	0.814	0.955	0.929	0.927	0.973	0.957	0.981	15.89
21) Endrin Aldeh	1.503	1.023	0.962	0.834	0.784	0.757	0.756	0.945	28.22
----- Quadratic regression ----- Coefficient = 0.9985									
Response Ratio = 0.02829 + 0.78671 *A + -0.02603 *A^2									
22) Endosulfan S	1.106	1.081	0.999	0.955	0.945	0.907	0.914	0.987	8.04
23) Methoxychlor	0.590	0.634	0.582	0.533	0.544	0.513	0.509	0.558	8.21
24) Mirex	1.238	1.066	0.967	0.900	0.842	0.804	0.813	0.947	16.72
25) Endrin Keton	1.295	1.228	1.175	1.140	1.144	1.103	1.114	1.171	5.85
26) Decachlorobi		1.353	1.287	1.098	1.051	0.953	1.003	1.124	14.26
-----									
27) I 1-bromo-2-nitrobenzen	-----ISTD-----								
28) Toxaphene{A}					0.006			0.006	0.00
29) Toxaphene{B}					0.010			0.010	0.00
30) Toxaphene{C}					0.011			0.011	0.00
31) Toxaphene{D}					0.012			0.012	0.00
32) Toxaphene{E}					0.026			0.026	0.00
-----									
33) I 1-bromo-2-nitrobenzen	-----ISTD-----								
34) Chlordane {A}					0.067			0.067	0.00
35) Chlordane {B}					0.045			0.045	0.00
36) Chlordane {C}					0.147			0.147	0.00
37) Chlordane {D}					0.230			0.230	0.00
38) Chlordane {E}					0.033			0.033	0.00

Signal #2



# Initial Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G8G2430-ICC2430  
**Lab FileID:** 8G55359.D

1) I	1-bromo-2-nitrobenzen	-----ISTD-----								
2)	Tetrachloro-	1.737	1.538	1.467	1.416	1.448	1.330	1.365	1.471	9.21
3)	hexachlorobe	1.823	1.709	1.612	1.514	1.459	1.432	1.461	1.573	9.42
4)	alpha-BHC	2.247	2.152	2.107	2.052	2.034	2.023	2.058	2.096	3.83
5)	gamma-BHC	1.964	1.899	1.850	1.816	1.802	1.769	1.806	1.844	3.64
6)	Heptachlor	1.785	1.684	1.637	1.556	1.567	1.464	1.546	1.606	6.57
7)	beta-BHC	0.981	0.895	0.837	0.830	0.814	0.789	0.846	0.856	7.48
8)	delta-BHC	1.755	1.647	1.611	1.492	1.451	1.412	1.463	1.548	8.13
9)	Aldrin	1.993	1.846	1.772	1.681	1.623	1.535	1.596	1.721	9.30
10)	alachlor	0.359	0.294	0.246	0.222	0.222	0.196	0.206	0.254	24.55
----- Quadratic regression ----- Coefficient = 0.9999										
Response Ratio = 0.01307 + 0.23104 *A + -0.02164 *A^2										
11)	Heptachlor E	1.811	1.699	1.614	1.544	1.513	1.448	1.494	1.589	8.09
12)	gamma-Chlord	1.777	1.631	1.562	1.578	1.561	1.534	1.566	1.601	5.17
13)	alpha-Chlord	1.716	1.586	1.502	1.430	1.384	1.341	1.385	1.478	9.06
14)	Endosulfan I	1.627	1.635	1.491	1.391	1.362	1.237	1.354	1.442	10.30
15)	4,4'-DDE	1.746	1.587	1.526	1.475	1.451	1.428	1.453	1.524	7.34
16)	Dieldrin	1.893	1.700	1.620	1.564	1.549	1.508	1.544	1.625	8.23
17)	Endrin	1.461	1.377	1.283	1.250	1.196	1.138	1.197	1.272	8.90
18)	4,4'-DDD	1.428	1.321	1.321	1.244	1.200	1.140	1.186	1.263	7.88
19)	Endosulfan I	1.507	1.386	1.371	1.304	1.265	1.202	1.265	1.328	7.62
20)	4,4'-DDT	1.101	0.636	0.923	0.920	0.884	0.935	0.995	0.913	15.50
21)	Endrin Aldehy	1.105	0.973	0.976	0.928	0.886	0.859	0.901	0.947	8.68
22)	Endosulfan S	1.396	1.283	1.212	1.159	1.132	1.093	1.122	1.200	8.96
23)	Methoxychlor	0.286	0.415	0.422	0.424	0.438	0.416	0.453	0.408	13.59
24)	Mirex	1.206	1.066	0.977	0.906	0.878	0.859	0.881	0.967	13.20
25)	Endrin Keton	1.412	1.350	1.292	1.252	1.233	1.209	1.239	1.284	5.69
26)	Decachlorobi	0.811	0.749	0.678	0.664	0.612	0.667		0.697	10.19
27) I	1-bromo-2-nitrobenzen	-----ISTD-----								
28)	Toxaphene{A}					0.009			0.009	0.00
29)	Toxaphene{B}					0.032			0.032	0.00
30)	Toxaphene{C}					0.008			0.008	0.00
31)	Toxaphene{D}					0.023			0.023	0.00
32)	Toxaphene{E}					0.025			0.025	0.00
33) I	1-bromo-2-nitrobenzen	-----ISTD-----								
34)	Chlordane {A}					0.089			0.089	0.00
35)	Chlordane {B}					0.055			0.055	0.00
36)	Chlordane {C}					0.185			0.185	0.00
37)	Chlordane {D}					0.302			0.302	0.00
38)	Chlordane {E}					0.042			0.042	0.00

(#) = Out of Range ### Number of calibration levels exceeded format ###

8PSTLVI2430.M

Wed Apr 03 17:08:09 2024

8.10.35

8

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G8G2430-ICV2430  
**Lab FileID:** 8G55365.D

## Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\G8G2430\8g55365.d\ECD1A.ch Vial: 41  
Signal #2 : C:\msdchem\1\DATA\G8G2430\8g55365.d\ECD2B.ch  
Acq On : 3 Apr 2024 9:13 am Operator: rebeccak  
Sample : icv2430-2.5 (pest mix) Inst : GC8G  
Misc : op53462,g8g2430,5.0,,,10,1 Multiplr: 1.00  
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\METHODS\8PSTLVI2430a.M (ChemStation Integrator)  
Title : PEST/PCB  
Last Update : Wed Apr 03 10:35:10 2024  
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	112	0.00	3.96	4.96
2 SAB	Tetrachloro-m-xylene	1.042	0.983	5.7	112	0.00	5.05	5.11
3	hexachlorobenzene	1.684	1.692	-0.5	118	0.00	5.37	5.43
4 A	alpha-BHC	1.230	1.429	-16.2	122	0.00	5.50	5.56
5 MA	gamma-BHC	1.427	1.294	9.3	104	0.00	5.78	5.84
6 MA	Heptachlor	1.416	1.186	16.2	99	0.00	6.24	6.30
7 B	beta-BHC	0.680	0.581	14.6	101	0.01	5.87	5.93
8 B	delta-BHC	1.257	1.208	3.9	112	0.01	6.04	6.10
9 MB	Aldrin	1.291	1.137	11.9	103	0.00	6.55	6.61
10	alachlor	0.186	0.167	10.2	100	0.00	6.70	6.76
11 B	Heptachlor Epoxide	1.111	0.991	10.8	103	0.00	7.22	7.28
12 B	gamma-Chlordane	1.312	1.118	14.8	99	0.00	7.37	7.43
13 B	alpha-Chlordane	1.235	1.096	11.3	105	0.00	7.53	7.59
14 A	Endosulfan I	1.196	1.057	11.6	105	0.00	7.69	7.75
15 B	4,4'-DDE	1.183	1.040	12.1	103	0.00	7.65	7.71
16 MA	Dieldrin	1.280	1.122	12.3	104	0.00	8.00	8.06
17 MA	Endrin	1.142	1.034	9.5	106	0.00	8.30	8.36
18 A	4,4'-DDD	0.866	0.954	-10.2	124	0.00	8.43	8.49
19 B	Endosulfan II	1.098	1.053	4.1	113	0.00	8.61	8.67
20 MA	4,4'-DDT	0.981	0.812	17.2	98	0.00	8.83	8.88
----- True Calc. % Drift -----								
21 B	Endrin Aldehyde	2.500	2.602	-4.1	116	0.00	9.20	9.26
----- AvgRF CCRF % Dev -----								
22 B	Endosulfan Sulfate	0.987	0.929	5.9	109	0.00	9.85	9.91
23 A	Methoxychlor	0.558	0.507	9.1	107	0.00	9.59	9.65
24	Mirex	0.947	0.966	-2.0	120	0.00	9.71	9.77
25 B	Endrin Ketone	1.171	1.096	6.4	108	0.00	10.27	10.33
26 SA	Decachlorobiphenyl	1.124	1.080	3.9	110	0.00	12.04	12.10
27 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	112	0.00	3.96	4.96
28 L8	Toxaphene{A}			-----NA-----				
29 L8	Toxaphene{B}			-----NA-----				
30 L8	Toxaphene{C}			-----NA-----				
31 L8	Toxaphene{D}			-----NA-----				
32 L8	Toxaphene{E}			-----NA-----				
33 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	112	0.00	3.96	4.96
34	Chlordane {A}			-----NA-----				
35	Chlordane {B}			-----NA-----				

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G8G2430-ICV2430  
**Lab FileID:** 8G55365.D

36 Chlordane {C} -----NA-----  
37 Chlordane {D} -----NA-----  
38 Chlordane {E} -----NA-----

\*\*\*\*\* Signal #2 \*\*\*\*\*

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	108	0.00	4.43- 5.43
2	SAB	Tetrachloro-m-xylene	1.471	1.449	1.5	110	0.00	5.73- 5.79
3		hexachlorobenzene	1.573	1.693	-7.6	120	0.00	6.22- 6.28
4	A	alpha-BHC	2.096	1.977	5.7	104	0.00	6.38- 6.44
5	MA	gamma-BHC	1.844	1.765	4.3	105	0.00	6.79- 6.85
6	MA	Heptachlor	1.606	1.527	4.9	106	0.00	7.35- 7.41
7	B	beta-BHC	0.856	0.868	-1.4	113	0.00	6.89- 6.95
8	B	delta-BHC	1.548	1.483	4.2	107	0.00	7.26- 7.32
9	MB	Aldrin	1.721	1.636	4.9	105	0.00	7.79- 7.85

		True	Calc.	% Drift				
10		alachlor	2.500	2.414	3.4	105	0.00	7.61- 7.67

		AvgRF	CCRF	% Dev				
11	B	Heptachlor Epoxide	1.589	1.488	6.4	104	0.00	8.59- 8.65
12	B	gamma-Chlordane	1.601	1.541	3.7	105	0.00	8.87- 8.93
13	B	alpha-Chlordane	1.478	1.377	6.8	104	0.00	9.09- 9.15
14	A	Endosulfan I	1.442	1.377	4.5	106	0.00	9.18- 9.24
15	B	4,4'-DDE	1.524	1.433	6.0	104	0.00	9.36- 9.42
16	MA	Dieldrin	1.625	1.522	6.3	105	0.00	9.61- 9.67
17	MA	Endrin	1.272	1.207	5.1	104	0.00	10.10-10.16
18	A	4,4'-DDD	1.263	1.205	4.6	104	0.00	10.29-10.35
19	B	Endosulfan II	1.328	1.284	3.3	106	0.00	10.45-10.51
20	MA	4,4'-DDT	0.913	0.826	9.5	97	0.00	10.81-10.87
21	B	Endrin Aldehyde	0.947	0.986	-4.1	114	0.00	11.01-11.07
22	B	Endosulfan Sulfate	1.200	1.133	5.6	105	0.00	11.47-11.53
23	A	Methoxychlor	0.408	0.418	-2.5	106	0.00	12.04-12.10
24		Mirex	0.967	1.017	-5.2	121	0.00	12.35-12.41
25	B	Endrin Ketone	1.284	1.247	2.9	107	0.00	12.42-12.48
26	SA	Decachlorobiphenyl	0.697	0.711	-2.0	113	0.00	14.22-14.28

27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	108	0.00	4.43- 5.43
28	L8	Toxaphene{A}						-----NA-----
29	L8	Toxaphene{B}						-----NA-----
30	L8	Toxaphene{C}						-----NA-----
31	L8	Toxaphene{D}						-----NA-----
32	L8	Toxaphene{E}						-----NA-----

33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	108	0.00	4.43- 5.43
34		Chlordane {A}						-----NA-----
35		Chlordane {B}						-----NA-----
36		Chlordane {C}						-----NA-----
37		Chlordane {D}						-----NA-----
38		Chlordane {E}						-----NA-----

(#) = Out of Range                      SPCC's out = 0    CCC's out = 0  
8g55359.d    8PSTLVI2430a.M              Wed Apr 03 10:39:16 2024

8.10.36  
8

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G8G2430-ICV2430  
**Lab FileID:** 8G55366.D

## Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\G8G2430\8g55366.d\ECD1A.ch Vial: 42  
 Signal #2 : C:\msdchem\1\DATA\G8G2430\8g55366.d\ECD2B.ch  
 Acq On : 3 Apr 2024 9:35 am Operator: rebeccak  
 Sample : icv2430-50 (chlordanane) Inst : GC8G  
 Misc : op53462,g8g2430,5.0,,,10,1 Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\METHODS\8PSTLVI2430a.M (ChemStation Integrator)  
 Title : PEST/PCB  
 Last Update : Wed Apr 03 10:35:10 2024  
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	112	0.00	3.96-	4.96
2 SAB	Tetrachloro-m-xylene	1.042	0.966	7.3	108	0.00	5.04-	5.10
3	hexachlorobenzene			-----NA-----				
4 A	alpha-BHC			-----NA-----				
5 MA	gamma-BHC			-----NA-----				
6 MA	Heptachlor			-----NA-----				
7 B	beta-BHC			-----NA-----				
8 B	delta-BHC			-----NA-----				
9 MB	Aldrin			-----NA-----				
10	alachlor			-----NA-----				
11 B	Heptachlor Epoxide			-----NA-----				
12 B	gamma-Chlordane			-----NA-----				
13 B	alpha-Chlordane			-----NA-----				
14 A	Endosulfan I			-----NA-----				
15 B	4,4'-DDE			-----NA-----				
16 MA	Dieldrin			-----NA-----				
17 MA	Endrin			-----NA-----				
18 A	4,4'-DDD			-----NA-----				
19 B	Endosulfan II			-----NA-----				
20 MA	4,4'-DDT			-----NA-----				
			True	Calc.	% Drift			
21 B	Endrin Aldehyde			-----NA-----				
			AvgRF	CCRF	% Dev			
22 B	Endosulfan Sulfate			-----NA-----				
23 A	Methoxychlor			-----NA-----				
24	Mirex			-----NA-----				
25 B	Endrin Ketone			-----NA-----				
26 SA	Decachlorobiphenyl	1.124	1.011	10.1	107	0.00	12.04-	12.10
27 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	103	0.00	3.96-	4.96
28 L8	Toxaphene{A}			-----NA-----				
29 L8	Toxaphene{B}			-----NA-----				
30 L8	Toxaphene{C}			-----NA-----				
31 L8	Toxaphene{D}			-----NA-----				
32 L8	Toxaphene{E}			-----NA-----				
33 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	98	0.00	3.96-	4.96
34	Chlordane {A}	0.067	0.061	9.0	90	0.00	6.17-	6.37
35	Chlordane {B}	0.045	0.041	8.9	90	0.00	6.62-	6.82

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G8G2430-ICV2430  
**Lab FileID:** 8G55366.D

36	Chlordane {C}	0.147	0.134	8.8	89	0.00	7.30- 7.50
37	Chlordane {D}	0.230	0.212	7.8	91	0.00	7.45- 7.65
38	Chlordane {E}	0.033	0.032	3.0	96	0.00	8.44- 8.64

\*\*\*\*\* Signal #2 \*\*\*\*\*

1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	4.43- 5.43
2 SAB	Tetrachloro-m-xylene	1.471	1.317	10.5	97	0.00	5.72- 5.78
3	hexachlorobenzene						-----NA-----
4 A	alpha-BHC						-----NA-----
5 MA	gamma-BHC						-----NA-----
6 MA	Heptachlor						-----NA-----
7 B	beta-BHC						-----NA-----
8 B	delta-BHC						-----NA-----
9 MB	Aldrin						-----NA-----

		True	Calc.	% Drift			
10	alachlor						-----NA-----

		AvgRF	CCRF	% Dev			
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11 B	Heptachlor Epoxide						-----NA-----
12 B	gamma-Chlordane						-----NA-----
13 B	alpha-Chlordane						-----NA-----
14 A	Endosulfan I						-----NA-----
15 B	4,4'-DDE						-----NA-----
16 MA	Dieldrin						-----NA-----
17 MA	Endrin						-----NA-----
18 A	4,4'-DDD						-----NA-----
19 B	Endosulfan II						-----NA-----
20 MA	4,4'-DDT						-----NA-----
21 B	Endrin Aldehyde						-----NA-----
22 B	Endosulfan Sulfate						-----NA-----
23 A	Methoxychlor						-----NA-----
24	Mirex						-----NA-----
25 B	Endrin Ketone						-----NA-----
26 SA	Decachlorobiphenyl	0.697	0.681	2.3	109	0.00	14.21-14.27

27 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	102	0.00	4.43- 5.43
28 L8	Toxaphene{A}						-----NA-----
29 L8	Toxaphene{B}						-----NA-----
30 L8	Toxaphene{C}						-----NA-----
31 L8	Toxaphene{D}						-----NA-----
32 L8	Toxaphene{E}						-----NA-----

33 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	100	0.00	4.43- 5.43
34	Chlordane {A}	0.089	0.077	13.5	86	0.00	7.28- 7.48
35	Chlordane {B}	0.055	0.049	10.9	89	0.00	7.91- 8.11
36	Chlordane {C}	0.185	0.166	10.3	90	0.00	8.80- 9.00
37	Chlordane {D}	0.302	0.273	9.6	91	0.00	9.02- 9.22
38	Chlordane {E}	0.042	0.038	9.5	92	0.00	10.45-10.65

(#) = Out of Range                      SPCC's out = 0    CCC's out = 0  
 8g55364.d 8PSTLVI2430a.M              Wed Apr 03 10:39:37 2024

8.10.37  
8

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G8G2430-ICV2430  
**Lab FileID:** 8G55367.D

## Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\DATA\G8G2430\8g55367.d\ECD1A.ch Vial: 43  
Signal #2 : C:\msdchem\1\DATA\G8G2430\8g55367.d\ECD2B.ch  
Acq On : 3 Apr 2024 9:57 am Operator: rebeccak  
Sample : icv2430-50 (toxaphene) Inst : GC8G  
Misc : op53462,g8g2430,5.0,,,10,1 Multiplr: 1.00  
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\METHODS\8PSTLVI2430a.M (ChemStation Integrator)  
Title : PEST/PCB  
Last Update : Wed Apr 03 10:35:10 2024  
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	113	0.00	3.96-	4.96
2 SAB	Tetrachloro-m-xylene	1.042	1.014	2.7	115	0.00	5.04-	5.10
3	hexachlorobenzene			-----NA-----				
4 A	alpha-BHC			-----NA-----				
5 MA	gamma-BHC			-----NA-----				
6 MA	Heptachlor			-----NA-----				
7 B	beta-BHC			-----NA-----				
8 B	delta-BHC			-----NA-----				
9 MB	Aldrin			-----NA-----				
10	alachlor			-----NA-----				
11 B	Heptachlor Epoxide			-----NA-----				
12 B	gamma-Chlordane			-----NA-----				
13 B	alpha-Chlordane			-----NA-----				
14 A	Endosulfan I			-----NA-----				
15 B	4,4'-DDE			-----NA-----				
16 MA	Dieldrin			-----NA-----				
17 MA	Endrin			-----NA-----				
18 A	4,4'-DDD			-----NA-----				
19 B	Endosulfan II			-----NA-----				
20 MA	4,4'-DDT			-----NA-----				
			True	Calc.	% Drift			
21 B	Endrin Aldehyde			-----NA-----				
			AvgRF	CCRF	% Dev			
22 B	Endosulfan Sulfate			-----NA-----				
23 A	Methoxychlor			-----NA-----				
24	Mirex			-----NA-----				
25 B	Endrin Ketone			-----NA-----				
26 SA	Decachlorobiphenyl	1.124	1.023	9.0	110	0.00	12.04-	12.10
27 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	3.96-	4.96
28 L8	Toxaphene{A}	0.006	0.006	0.0	99	0.00	7.42-	7.62
29 L8	Toxaphene{B}	0.010	0.010	0.0	102	0.00	8.05-	8.25
30 L8	Toxaphene{C}	0.011	0.016	-45.5#	149	0.00	9.01-	9.21
31 L8	Toxaphene{D}	0.012	0.014	-16.7	121	0.00	9.32-	9.52
32 L8	Toxaphene{E}	0.026	0.023	11.5	94	0.00	9.62-	9.82
33 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	100	0.00	3.96-	4.96
34	Chlordane {A}			-----NA-----				
35	Chlordane {B}			-----NA-----				

# Initial Calibration Verification

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G8G2430-ICV2430  
**Lab FileID:** 8G55367.D

36 Chlordane {C} -----NA-----  
 37 Chlordane {D} -----NA-----  
 38 Chlordane {E} -----NA-----

\*\*\*\*\* Signal #2 \*\*\*\*\*

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	4.43- 5.43
2	SAB	Tetrachloro-m-xylene	1.471	1.470	0.1	106	0.00	5.73- 5.79
3		hexachlorobenzene						-----NA-----
4	A	alpha-BHC						-----NA-----
5	MA	gamma-BHC						-----NA-----
6	MA	Heptachlor						-----NA-----
7	B	beta-BHC						-----NA-----
8	B	delta-BHC						-----NA-----
9	MB	Aldrin						-----NA-----

				True	Calc.	% Drift		
10		alachlor						-----NA-----

				AvgRF	CCRF	% Dev		
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11	B	Heptachlor Epoxide						-----NA-----
12	B	gamma-Chlordane						-----NA-----
13	B	alpha-Chlordane						-----NA-----
14	A	Endosulfan I						-----NA-----
15	B	4,4'-DDE						-----NA-----
16	MA	Dieldrin						-----NA-----
17	MA	Endrin						-----NA-----
18	A	4,4'-DDD						-----NA-----
19	B	Endosulfan II						-----NA-----
20	MA	4,4'-DDT						-----NA-----
21	B	Endrin Aldehyde						-----NA-----
22	B	Endosulfan Sulfate						-----NA-----
23	A	Methoxychlor						-----NA-----
24		Mirex						-----NA-----
25	B	Endrin Ketone						-----NA-----
26	SA	Decachlorobiphenyl	0.697	0.711	-2.0	112	0.00	14.21-14.27
27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	100	0.00	4.43- 5.43
28	L8	Toxaphene{A}	0.009	0.010	-11.1	123	0.00	9.68- 9.88
29	L8	Toxaphene{B}	0.032	0.047	-46.9#	147	0.00	10.51-10.71
30	L8	Toxaphene{C}	0.008	0.007	12.5	83	0.00	10.64-10.84
31	L8	Toxaphene{D}	0.023	0.025	-8.7	108	0.00	10.95-11.15
32	L8	Toxaphene{E}	0.025	0.026	-4.0	105	0.00	11.83-12.03
33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	98	0.00	4.43- 5.43
34		Chlordane {A}						-----NA-----
35		Chlordane {B}						-----NA-----
36		Chlordane {C}						-----NA-----
37		Chlordane {D}						-----NA-----
38		Chlordane {E}						-----NA-----

(#) = Out of Range                      SPCC's out = 0    CCC's out = 0  
 8g55364.d 8PSTLVI2430a.M              Wed Apr 03 10:39:39 2024

8.10.38

8

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G8G2470-CC2430  
**Lab FileID:** 8G56335.D

## Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\nazary...70\8g56335.d\ECD1A.ch Vial: 2  
 Signal #2 : C:\msdchem\1\data\nazary...8G2470\8g56335.d\ECD2B.ch  
 Acq On : 9 May 2024 12:37 am Operator: christp  
 Sample : cc2430-2.5 Inst : GC8G  
 Misc : op54425,g8g2470,5.0,,,10,1 Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\dat...0\8PSTLVI2430a.M (ChemStation Integrator)  
 Title : PEST/PCB  
 Last Update : Thu May 09 12:16:42 2024  
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	98	0.00	3.96	4.96
2 SAB	Tetrachloro-m-xylene	1.042	1.109	-6.4	110	0.00	5.04	5.10
3	hexachlorobenzene	1.684	1.679	0.3	102	0.00	5.37	5.43
4 A	alpha-BHC	1.230	1.795	-45.9#	134	0.00	5.50	5.56
5 MA	gamma-BHC	1.427	1.438	-0.8	101	0.00	5.78	5.84
6 MA	Heptachlor	1.416	1.358	4.1	99	0.00	6.24	6.30
7 B	beta-BHC	0.680	0.688	-1.2	104	0.00	5.88	5.94
8 B	delta-BHC	1.257	1.308	-4.1	105	0.00	6.05	6.11
9 MB	Aldrin	1.291	1.317	-2.0	104	0.00	6.55	6.61
10	alachlor	0.186	0.215	-15.6	113	0.00	6.70	6.76
11 B	Heptachlor Epoxide	1.111	1.210	-8.9	109	0.00	7.21	7.27
12 B	gamma-Chlordane	1.312	1.350	-2.9	104	0.00	7.37	7.43
13 B	alpha-Chlordane	1.235	1.302	-5.4	109	0.00	7.52	7.58
14 A	Endosulfan I	1.196	1.473	-23.2#	127	0.00	7.68	7.74
15 B	4,4'-DDE	1.183	1.034	12.6	90	0.00	7.65	7.71
16 MA	Dieldrin	1.280	1.286	-0.5	104	0.00	7.99	8.05
17 MA	Endrin	1.142	1.152	-0.9	103	0.00	8.29	8.35
18 A	4,4'-DDD	0.866	1.028	-18.7	117	0.00	8.43	8.49
19 B	Endosulfan II	1.098	1.142	-4.0	106	0.00	8.60	8.66
20 MA	4,4'-DDT	0.981	0.690	29.7#	73	0.00	8.82	8.88
----- True		Calc.		% Drift		-----		
21 B	Endrin Aldehyde	2.500	2.414	3.4	94	0.00	9.19	9.25
----- AvgRF		CCRF		% Dev		-----		
22 B	Endosulfan Sulfate	0.987	1.012	-2.5	104	0.00	9.84	9.90
23 A	Methoxychlor	0.558	0.386	30.8#	71	0.00	9.59	9.65
24	Mirex	0.947	0.982	-3.7	107	0.00	9.69	9.75
25 B	Endrin Ketone	1.171	1.127	3.8	97	0.00	10.25	10.31
26 SA	Decachlorobiphenyl	1.124	1.058	5.9	94	0.00	12.02	12.08
27 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	98	0.00	3.96	4.96
28 L8	Toxaphene{A}			-----NA-----				
29 L8	Toxaphene{B}			-----NA-----				
30 L8	Toxaphene{C}			-----NA-----				
31 L8	Toxaphene{D}			-----NA-----				
32 L8	Toxaphene{E}			-----NA-----				
33 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	98	0.00	3.96	4.96
34	Chlordane {A}			-----NA-----				
35	Chlordane {B}			-----NA-----				

8.10.39  
8



# Continuing Calibration Summary

Job Number: JD87833  
 Account: MTXFPNJ Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

Sample: G8G2470-CC2430  
 Lab FileID: 8G56335.D

36 Chlordane {C} -----NA-----  
 37 Chlordane {D} -----NA-----  
 38 Chlordane {E} -----NA-----

\*\*\*\*\* Signal #2 \*\*\*\*\*

1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	106	0.00	4.41- 5.41
2 SAB	Tetrachloro-m-xylene	1.471	1.425	3.1	107	0.00	5.70- 5.76
3	hexachlorobenzene	1.573	1.450	7.8	102	0.00	6.20- 6.26
4 A	alpha-BHC	2.096	2.087	0.4	108	0.00	6.35- 6.41
5 MA	gamma-BHC	1.844	1.747	5.3	102	0.00	6.76- 6.82
6 MA	Heptachlor	1.606	1.669	-3.9	114	0.00	7.31- 7.37
7 B	beta-BHC	0.856	0.888	-3.7	114	0.00	6.86- 6.92
8 B	delta-BHC	1.548	1.477	4.6	105	0.00	7.24- 7.30
9 MB	Aldrin	1.721	1.597	7.2	101	0.00	7.74- 7.80

		True	Calc.	% Drift			
10	alachlor	2.500	2.304	7.8	99	0.00	7.57- 7.63

		AvgRF	CCRF	% Dev			
11 B	Heptachlor Epoxide	1.589	1.510	5.0	104	0.00	8.54- 8.60
12 B	gamma-Chlordane	1.601	1.606	-0.3	108	0.00	8.82- 8.88
13 B	alpha-Chlordane	1.478	1.436	2.8	107	0.00	9.04- 9.10
14 A	Endosulfan I	1.442	1.458	-1.1	111	0.00	9.13- 9.19
15 B	4,4'-DDE	1.524	1.477	3.1	106	0.00	9.30- 9.36
16 MA	Dieldrin	1.625	1.589	2.2	108	0.00	9.55- 9.61
17 MA	Endrin	1.272	1.292	-1.6	110	0.00	10.04-10.10
18 A	4,4'-DDD	1.263	1.328	-5.1	113	0.00	10.23-10.29
19 B	Endosulfan II	1.328	1.373	-3.4	112	0.00	10.38-10.44
20 MA	4,4'-DDT	0.913	0.758	17.0	87	0.00	10.75-10.81
21 B	Endrin Aldehyde	0.947	0.911	3.8	104	0.00	10.94-11.00
22 B	Endosulfan Sulfate	1.200	1.076	10.3	99	0.00	11.40-11.46
23 A	Methoxychlor	0.408	0.353	13.5	88	0.00	11.97-12.03
24	Mirex	0.967	0.891	7.9	104	0.00	12.27-12.33
25 B	Endrin Ketone	1.284	1.180	8.1	100	0.00	12.34-12.40
26 SA	Decachlorobiphenyl	0.697	0.647	7.2	101	0.00	14.16-14.22

27 I 1-bromo-2-nitrobenzene 1.000 1.000 0.0 106 0.00 4.41- 5.41  
 28 L8 Toxaphene{A} -----NA-----  
 29 L8 Toxaphene{B} -----NA-----  
 30 L8 Toxaphene{C} -----NA-----  
 31 L8 Toxaphene{D} -----NA-----  
 32 L8 Toxaphene{E} -----NA-----

33 I 1-bromo-2-nitrobenzene 1.000 1.000 0.0 106 0.00 4.41- 5.41  
 34 Chlordane {A} -----NA-----  
 35 Chlordane {B} -----NA-----  
 36 Chlordane {C} -----NA-----  
 37 Chlordane {D} -----NA-----  
 38 Chlordane {E} -----NA-----

(#) = Out of Range SPCC's out = 0 CCC's out = 0  
 8g56335.d 8PSTLVI2430a.M Thu May 09 12:27:53 2024

8.10.39

8

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G8G2471-CC2430  
**Lab FileID:** 8G56374.D

## Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\G8G2471\8g56374.d\ECD1A.ch Vial: 4  
 Signal #2 : C:\msdchem\1\data\G8G2471\8g56374.d\ECD2B.ch  
 Acq On : 9 May 2024 3:31 pm Operator: tilakp  
 Sample : cc2430-5 Inst : GC8G  
 Misc : op54382,g8g2471,5.0,,,10,1 Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\methods\8PSTLVI2430a.M (ChemStation Integrator)  
 Title : PEST/PCB  
 Last Update : Thu May 09 18:59:04 2024  
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	102	0.00	3.97-	4.97
2 SAB	Tetrachloro-m-xylene	1.042	1.098	-5.4	112	0.00	5.05-	5.11
3	hexachlorobenzene	1.684	1.618	3.9	103	0.00	5.38-	5.44
4 A	alpha-BHC	1.230	1.776	-44.4#	121	0.00	5.51-	5.57
5 MA	gamma-BHC	1.427	1.467	-2.8	103	0.00	5.79-	5.85
6 MA	Heptachlor	1.416	1.360	4.0	103	0.00	6.25-	6.31
7 B	beta-BHC	0.680	0.651	4.3	104	0.00	5.88-	5.94
8 B	delta-BHC	1.257	1.325	-5.4	105	0.00	6.05-	6.11
9 MB	Aldrin	1.291	1.308	-1.3	105	0.00	6.56-	6.62
10	alachlor	0.186	0.196	-5.4	115	0.00	6.71-	6.77
11 B	Heptachlor Epoxide	1.111	1.187	-6.8	113	0.00	7.22-	7.28
12 B	gamma-Chlordane	1.312	1.297	1.1	103	0.00	7.38-	7.44
13 B	alpha-Chlordane	1.235	1.258	-1.9	107	0.00	7.54-	7.60
14 A	Endosulfan I	1.196	1.295	-8.3	113	0.00	7.70-	7.76
15 B	4,4'-DDE	1.183	1.127	4.7	100	0.00	7.66-	7.72
16 MA	Dieldrin	1.280	1.259	1.6	104	0.00	8.00-	8.06
17 MA	Endrin	1.142	1.138	0.4	105	0.00	8.30-	8.36
18 A	4,4'-DDD	0.866	1.035	-19.5	114	0.00	8.44-	8.50
19 B	Endosulfan II	1.098	1.093	0.5	105	0.00	8.61-	8.67
20 MA	4,4'-DDT	0.981	0.789	19.6	87	0.00	8.83-	8.89
----- True Calc. % Drift -----								
21 B	Endrin Aldehyde	5.000	4.926	1.5	101	0.00	9.20-	9.26
----- AvgRF CCRF % Dev -----								
22 B	Endosulfan Sulfate	0.987	0.960	2.7	103	0.00	9.85-	9.91
23 A	Methoxychlor	0.558	0.442	20.8#	83	0.00	9.59-	9.65
24	Mirex	0.947	0.876	7.5	106	0.00	9.71-	9.77
25 B	Endrin Ketone	1.171	1.098	6.2	98	0.00	10.27-	10.33
26 SA	Decachlorobiphenyl	1.124	0.993	11.7	96	0.00	12.04-	12.10
27 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	94	0.00	3.97-	4.97
28 L8	Toxaphene{A}			-----NA-----				
29 L8	Toxaphene{B}			-----NA-----				
30 L8	Toxaphene{C}			-----NA-----				
31 L8	Toxaphene{D}			-----NA-----				
32 L8	Toxaphene{E}			-----NA-----				
33 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	89	0.00	3.97-	4.97
34	Chlordane {A}			-----NA-----				
35	Chlordane {B}			-----NA-----				

8.10.40  
8

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G8G2471-CC2430  
**Lab FileID:** 8G56374.D

36 Chlordane {C} -----NA-----  
 37 Chlordane {D} -----NA-----  
 38 Chlordane {E} -----NA-----

\*\*\*\*\* Signal #2 \*\*\*\*\*

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	102	0.00	4.42-	5.42
2	SAB	Tetrachloro-m-xylene	1.471	1.334	9.3	94	0.00	5.72-	5.78
3		hexachlorobenzene	1.573	1.353	14.0	94	0.00	6.22-	6.28
4	A	alpha-BHC	2.096	1.963	6.3	98	0.00	6.36-	6.42
5	MA	gamma-BHC	1.844	1.680	8.9	95	0.00	6.78-	6.84
6	MA	Heptachlor	1.606	1.606	0.0	104	0.00	7.33-	7.39
7	B	beta-BHC	0.856	0.799	6.7	100	0.00	6.87-	6.93
8	B	delta-BHC	1.548	1.472	4.9	103	0.00	7.25-	7.31
9	MB	Aldrin	1.721	1.505	12.6	95	0.00	7.76-	7.82

			----- True	Calc.	% Drift		-----		
10		alachlor	5.000	4.669	6.6	96	0.00	7.59-	7.65

			----- AvgRF	CCRF	% Dev		-----		
11	B	Heptachlor Epoxide	1.589	1.437	9.6	97	0.00	8.56-	8.62
12	B	gamma-Chlordane	1.601	1.482	7.4	97	0.00	8.84-	8.90
13	B	alpha-Chlordane	1.478	1.356	8.3	100	0.00	9.06-	9.12
14	A	Endosulfan I	1.442	1.325	8.1	99	0.00	9.14-	9.20
15	B	4,4'-DDE	1.524	1.355	11.1	95	0.00	9.32-	9.38
16	MA	Dieldrin	1.625	1.449	10.8	95	0.00	9.57-	9.63
17	MA	Endrin	1.272	1.246	2.0	106	0.00	10.06-	10.12
18	A	4,4'-DDD	1.263	1.219	3.5	104	0.00	10.24-	10.30
19	B	Endosulfan II	1.328	1.217	8.4	98	0.00	10.40-	10.46
20	MA	4,4'-DDT	0.913	0.867	5.0	100	0.00	10.77-	10.83
21	B	Endrin Aldehyde	0.947	0.837	11.6	96	0.00	10.96-	11.02
22	B	Endosulfan Sulfate	1.200	1.009	15.9	91	0.00	11.42-	11.48
23	A	Methoxychlor	0.408	0.410	-0.5	95	0.00	11.99-	12.05
24		Mirex	0.967	0.784	18.9	91	0.00	12.29-	12.35
25	B	Endrin Ketone	1.284	1.083	15.7	89	0.00	12.36-	12.42
26	SA	Decachlorobiphenyl	0.697	0.600	13.9	92	0.00	14.17-	14.23

27	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	98	0.00	4.42-	5.42
28	L8	Toxaphene{A}						-----NA-----	
29	L8	Toxaphene{B}						-----NA-----	
30	L8	Toxaphene{C}						-----NA-----	
31	L8	Toxaphene{D}						-----NA-----	
32	L8	Toxaphene{E}						-----NA-----	

33	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	96	0.00	4.42-	5.42
34		Chlordane {A}						-----NA-----	
35		Chlordane {B}						-----NA-----	
36		Chlordane {C}						-----NA-----	
37		Chlordane {D}						-----NA-----	
38		Chlordane {E}						-----NA-----	

(#) = Out of Range                      SPCC's out = 0    CCC's out = 0  
 8g56374.d    8PSTLVI2430a.M            Thu May 09 19:03:26 2024

8.10.40  
8

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G8G2472-CC2430  
**Lab FileID:** 8G56407.D

## Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\nazary...72\8g56407.d\ECD1A.ch Vial: 2  
 Signal #2 : C:\msdchem\1\data\nazary...8G2472\8g56407.d\ECD2B.ch  
 Acq On : 10 May 2024 4:36 am Operator: christp  
 Sample : cc2430-2.5 Inst : GC8G  
 Misc : op54452,g8g2472,5.0,,,10,1 Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\dat...2\8PSTLVI2430a.M (ChemStation Integrator)  
 Title : PEST/PCB  
 Last Update : Fri May 10 12:20:14 2024  
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT	Window
1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	105	0.00	3.97-	4.97
2 SAB	Tetrachloro-m-xylene	1.042	0.989	5.1	105	0.00	5.05-	5.11
3	hexachlorobenzene	1.684	1.556	7.6	101	0.00	5.37-	5.43
4 A	alpha-BHC	1.230	1.602	-30.2#	128	0.00	5.50-	5.56
5 MA	gamma-BHC	1.427	1.325	7.1	99	0.00	5.78-	5.84
6 MA	Heptachlor	1.416	1.271	10.2	99	0.00	6.24-	6.30
7 B	beta-BHC	0.680	0.617	9.3	100	0.00	5.88-	5.94
8 B	delta-BHC	1.257	1.156	8.0	100	0.00	6.05-	6.11
9 MB	Aldrin	1.291	1.221	5.4	104	0.00	6.55-	6.61
10	alachlor	0.186	0.181	2.7	101	0.00	6.70-	6.76
11 B	Heptachlor Epoxide	1.111	1.113	-0.2	108	0.00	7.22-	7.28
12 B	gamma-Chlordane	1.312	1.260	4.0	104	0.00	7.37-	7.43
13 B	alpha-Chlordane	1.235	1.238	-0.2	111	0.00	7.53-	7.59
14 A	Endosulfan I	1.196	1.299	-8.6	120	0.00	7.69-	7.75
15 B	4,4'-DDE	1.183	1.009	14.7	94	0.00	7.65-	7.71
16 MA	Dieldrin	1.280	1.196	6.6	103	0.00	7.99-	8.05
17 MA	Endrin	1.142	1.070	6.3	102	0.00	8.29-	8.35
18 A	4,4'-DDD	0.866	0.914	-5.5	111	0.00	8.43-	8.49
19 B	Endosulfan II	1.098	1.042	5.1	104	0.00	8.60-	8.66
20 MA	4,4'-DDT	0.981	0.722	26.4#	81	0.00	8.83-	8.89
----- True		Calc.		% Drift		-----		
21 B	Endrin Aldehyde	2.500	2.288	8.5	96	0.00	9.19-	9.25
----- AvgRF		CCRF		% Dev		-----		
22 B	Endosulfan Sulfate	0.987	0.905	8.3	99	0.00	9.84-	9.90
23 A	Methoxychlor	0.558	0.378	32.3#	74	0.00	9.59-	9.65
24	Mirex	0.947	0.931	1.7	108	0.00	9.70-	9.76
25 B	Endrin Ketone	1.171	1.094	6.6	100	0.00	10.26-	10.32
26 SA	Decachlorobiphenyl	1.124	0.987	12.2	94	0.00	12.03-	12.09
27 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	105	0.00	3.97-	4.97
28 L8	Toxaphene{A}			-----NA-----				
29 L8	Toxaphene{B}			-----NA-----				
30 L8	Toxaphene{C}			-----NA-----				
31 L8	Toxaphene{D}			-----NA-----				
32 L8	Toxaphene{E}			-----NA-----				
33 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	105	0.00	3.97-	4.97
34	Chlordane {A}			-----NA-----				
35	Chlordane {B}			-----NA-----				

8.10.41

8

# Continuing Calibration Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** G8G2472-CC2430  
**Lab FileID:** 8G56407.D

36 Chlordane {C} -----NA-----  
 37 Chlordane {D} -----NA-----  
 38 Chlordane {E} -----NA-----

\*\*\*\*\* Signal #2 \*\*\*\*\*

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	111	0.00	4.42-	5.42
2	SAB	Tetrachloro-m-xylene	1.471	1.310	10.9	103	0.00	5.71-	5.77
3		hexachlorobenzene	1.573	1.327	15.6	98	0.00	6.21-	6.27
4	A	alpha-BHC	2.096	1.878	10.4	102	0.00	6.35-	6.41
5	MA	gamma-BHC	1.844	1.612	12.6	99	0.00	6.77-	6.83
6	MA	Heptachlor	1.606	1.571	2.2	113	0.00	7.32-	7.38
7	B	beta-BHC	0.856	0.781	8.8	105	0.00	6.87-	6.93
8	B	delta-BHC	1.548	1.327	14.3	99	0.00	7.24-	7.30
9	MB	Aldrin	1.721	1.484	13.8	98	0.00	7.75-	7.81

			True	Calc.	% Drift				
10		alachlor	2.500	1.969	21.2#	91	0.00	7.58-	7.64

			AvgRF	CCRF	% Dev				
11	B	Heptachlor Epoxide	1.589	1.384	12.9	100	0.00	8.55-	8.61
12	B	gamma-Chlordane	1.601	1.418	11.4	100	0.00	8.83-	8.89
13	B	alpha-Chlordane	1.478	1.286	13.0	100	0.00	9.05-	9.11
14	A	Endosulfan I	1.442	1.290	10.5	103	0.00	9.14-	9.20
15	B	4,4'-DDE	1.524	1.303	14.5	98	0.00	9.31-	9.37
16	MA	Dieldrin	1.625	1.385	14.8	99	0.00	9.56-	9.62
17	MA	Endrin	1.272	1.152	9.4	103	0.00	10.05-	10.11
18	A	4,4'-DDD	1.263	1.140	9.7	102	0.00	10.24-	10.30
19	B	Endosulfan II	1.328	1.143	13.9	98	0.00	10.39-	10.45
20	MA	4,4'-DDT	0.913	0.808	11.5	98	0.00	10.76-	10.82
21	B	Endrin Aldehyde	0.947	0.808	14.7	97	0.00	10.95-	11.01
22	B	Endosulfan Sulfate	1.200	0.961	19.9	92	0.00	11.42-	11.48
23	A	Methoxychlor	0.408	0.383	6.1	101	0.00	11.98-	12.04
24		Mirex	0.967	0.805	16.8	99	0.00	12.28-	12.34
25	B	Endrin Ketone	1.284	1.094	14.8	97	0.00	12.35-	12.41
26	SA	Decachlorobiphenyl	0.697	0.577	17.2	95	0.00	14.16-	14.22

27 I 1-bromo-2-nitrobenzene 1.000 1.000 0.0 112 0.00 4.42- 5.42  
 28 L8 Toxaphene{A} -----NA-----  
 29 L8 Toxaphene{B} -----NA-----  
 30 L8 Toxaphene{C} -----NA-----  
 31 L8 Toxaphene{D} -----NA-----  
 32 L8 Toxaphene{E} -----NA-----

33 I 1-bromo-2-nitrobenzene 1.000 1.000 0.0 112 0.00 4.42- 5.42  
 34 Chlordane {A} -----NA-----  
 35 Chlordane {B} -----NA-----  
 36 Chlordane {C} -----NA-----  
 37 Chlordane {D} -----NA-----  
 38 Chlordane {E} -----NA-----

(#) = Out of Range SPCC's out = 0 CCC's out = 0  
 8g56407.d 8PSTLVI2430a.M Fri May 10 12:38:47 2024

8.10.41

8

# Run Sequence Report

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Run ID:</b> G1G6859	<b>Method:</b> SW846 8081B	<b>Instrument ID:</b> GC1G
------------------------	----------------------------	----------------------------

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
G1G6859-DDT	1G192510.D	01/29/24 04:36	n/a	DDT/Endrin Breakdown Check
G1G6859-IC6859	1G192513.D	01/29/24 06:02	n/a	Initial cal 1
G1G6859-IC6859	1G192514.D	01/29/24 06:18	n/a	Initial cal 2
G1G6859-IC6859	1G192515.D	01/29/24 06:35	n/a	Initial cal 5
G1G6859-IC6859	1G192516.D	01/29/24 06:51	n/a	Initial cal 10
G1G6859-ICC6859	1G192517.D	01/29/24 07:07	n/a	Initial cal 25
G1G6859-IC6859	1G192518.D	01/29/24 07:23	n/a	Initial cal 50
G1G6859-IC6859	1G192519.D	01/29/24 07:40	n/a	Initial cal 75
G1G6859-IC6859	1G192520.D	01/29/24 07:56	n/a	Initial cal 100
G1G6859-IC6859	1G192521.D	01/29/24 08:12	n/a	Initial cal 500
G1G6859-IC6859	1G192522.D	01/29/24 08:28	n/a	Initial cal 500
G1G6859-ICV6859	1G192523.D	01/29/24 08:45	n/a	Initial cal verification 25
G1G6859-ICV6859	1G192524.D	01/29/24 09:01	n/a	Initial cal verification 500
G1G6859-ICV6859	1G192525.D	01/29/24 09:17	n/a	Initial cal verification 500

8.11.1  
8

# Run Sequence Report

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Run ID:</b> G1G7004	<b>Method:</b> SW846 8081B	<b>Instrument ID:</b> GC1G
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Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
G1G7004-DDT	1G196190.D	05/07/24 23:05	n/a	DDT/Endrin Breakdown Check
G1G7004-CC6859	1G196193.D	05/07/24 23:51	n/a	Continuing cal 50
OP54399-MB1	1G196195.D	05/08/24 00:24	OP54399	Method Blank
OP54399-BS1	1G196196.D	05/08/24 00:40	OP54399	Blank Spike
OP54399-BSD	1G196197.D	05/08/24 00:55	OP54399	Blank Spike Duplicate
OP54397A-MB1	1G196198.D	05/08/24 01:10	OP54397A	Method Blank
OP54397-MB1	1G196198.D	05/08/24 01:10	OP54397	Method Blank
OP54397A-BS1	1G196199.D	05/08/24 01:26	OP54397A	Blank Spike
OP54397-BS1	1G196199.D	05/08/24 01:26	OP54397	Blank Spike
OP54397A-BSD	1G196200.D	05/08/24 01:41	OP54397A	Blank Spike Duplicate
OP54397-BSD	1G196200.D	05/08/24 01:41	OP54397	Blank Spike Duplicate
ZZZZZZ	1G196201.D	05/08/24 01:56	OP54355A	(unrelated sample)
ZZZZZZ	1G196202.D	05/08/24 02:12	OP54355A	(unrelated sample)
ZZZZZZ	1G196203.D	05/08/24 02:27	OP54397A	(unrelated sample)
ZZZZZZ	1G196204.D	05/08/24 02:42	OP54397A	(unrelated sample)
ZZZZZZ	1G196205.D	05/08/24 02:57	OP54397A	(unrelated sample)
ZZZZZZ	1G196206.D	05/08/24 03:13	OP54397	(unrelated sample)
ZZZZZZ	1G196207.D	05/08/24 03:28	OP54397	(unrelated sample)
ZZZZZZ	1G196208.D	05/08/24 03:43	OP54397	(unrelated sample)
ZZZZZZ	1G196209.D	05/08/24 03:59	OP54399	(unrelated sample)
JD87833-17	1G196210.D	05/08/24 04:14	OP54399	FIELD BLANK
ZZZZZZ	1G196211.D	05/08/24 04:29	OP54397	(unrelated sample)
ZZZZZZ	1G196212.D	05/08/24 04:45	OP54397	(unrelated sample)
ZZZZZZ	1G196213.D	05/08/24 05:00	OP54397	(unrelated sample)
G1G7004-CC6859	1G196214.D	05/08/24 05:15	n/a	Continuing cal 25
ZZZZZZ	1G196216.D	05/08/24 05:46	OP54397	(unrelated sample)
ZZZZZZ	1G196217.D	05/08/24 06:01	OP54397	(unrelated sample)
ZZZZZZ	1G196219.D	05/08/24 06:32	OP54397	(unrelated sample)
ZZZZZZ	1G196220.D	05/08/24 06:47	OP54397	(unrelated sample)

8.11.2  
8

# Run Sequence Report

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Run ID:</b> G1G7013	<b>Method:</b> EPA 608.3	<b>Instrument ID:</b> GC1G
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Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
G1G7013-DDT	1G196349.D	05/14/24 07:22	n/a	DDT/Endrin Breakdown Check
G1G7013-CC6859	1G196352.D	05/14/24 08:13	n/a	Continuing cal 25
OP54558A-MB1	1G196354.D	05/14/24 08:52	OP54558A	Method Blank
OP54558A-BS1	1G196355.D	05/14/24 09:07	OP54558A	Blank Spike
OP54558A-BSD	1G196356.D	05/14/24 09:22	OP54558A	Blank Spike Duplicate
OP54558A-BS13	1G196357.D	05/14/24 09:38	OP54558A	Blank Spike
OP54558A-BS14	1G196358.D	05/14/24 09:53	OP54558A	Blank Spike
OP54554A-MB1	1G196359.D	05/14/24 10:08	OP54554A	Method Blank
OP54554-MB1	1G196359.D	05/14/24 10:08	OP54554	Method Blank
OP54554A-BS1	1G196360.D	05/14/24 10:24	OP54554A	Blank Spike
OP54554-BS1	1G196360.D	05/14/24 10:24	OP54554	Blank Spike
OP54554-BSD	1G196361.D	05/14/24 10:39	OP54554	Blank Spike Duplicate
OP54554A-BSD	1G196361.D	05/14/24 10:39	OP54554A	Blank Spike Duplicate
OP54554A-BS13	1G196362.D	05/14/24 10:54	OP54554A	Blank Spike
OP54554A-BS14	1G196363.D	05/14/24 11:10	OP54554A	Blank Spike
ZZZZZZ	1G196364.D	05/14/24 11:25	OP54554A	(unrelated sample)
ZZZZZZ	1G196365.D	05/14/24 11:41	OP54554A	(unrelated sample)
ZZZZZZ	1G196366.D	05/14/24 11:56	OP54558A	(unrelated sample)
ZZZZZZ	1G196367.D	05/14/24 12:11	OP54558A	(unrelated sample)
ZZZZZZ	1G196368.D	05/14/24 12:27	OP54558A	(unrelated sample)
ZZZZZZ	1G196369.D	05/14/24 12:42	OP54397A	(unrelated sample)
G1G7013-CC6859	1G196372.D	05/14/24 13:28	n/a	Continuing cal 50

8.11.3  
8



# Run Sequence Report

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Run ID:</b> G1G7016	<b>Method:</b> SW846 8081B	<b>Instrument ID:</b> GC1G
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Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
G1G7016-DDT	1G196427.D	05/15/24 10:21	n/a	DDT/Endrin Breakdown Check
G1G7016-CC6859	1G196428.D	05/15/24 10:36	n/a	Continuing cal 25
ZZZZZZ	1G196430.D	05/15/24 11:33	OP54554	(unrelated sample)
JD87833-17R	1G196431.D	05/15/24 11:49	OP54554	FIELD BLANK
ZZZZZZ	1G196433.D	05/15/24 12:19	OP54554	(unrelated sample)
ZZZZZZ	1G196434.D	05/15/24 12:35	OP54554	(unrelated sample)
ZZZZZZ	1G196435.D	05/15/24 12:50	OP54620	(unrelated sample)
G1G7016-CC6859	1G196437.D	05/15/24 13:42	n/a	Continuing cal 50
OP54620A-MB1	1G196439.D	05/15/24 14:13	OP54620A	Method Blank
OP54620-MB1	1G196439.D	05/15/24 14:13	OP54620	Method Blank
OP54620A-BS1	1G196440.D	05/15/24 14:29	OP54620A	Blank Spike
OP54620-BS1	1G196440.D	05/15/24 14:29	OP54620	Blank Spike
OP54620A-BSD	1G196441.D	05/15/24 14:44	OP54620A	Blank Spike Duplicate
OP54554A-MB2	1G196442.D	05/15/24 14:59	OP54554A	Method Blank
OP54554A-BS2	1G196443.D	05/15/24 15:15	OP54554A	Blank Spike
OP54554A-BSD2	1G196444.D	05/15/24 15:30	OP54554A	Blank Spike Duplicate
OP54554A-BS132	1G196445.D	05/15/24 15:45	OP54554A	Blank Spike
OP54554A-BS142	1G196446.D	05/15/24 16:01	OP54554A	Blank Spike
OP54620-MS	1G196447.D	05/15/24 16:16	OP54620	Matrix Spike
OP54620-MSD	1G196448.D	05/15/24 16:31	OP54620	Matrix Spike Duplicate
LB2107-14	1G196449.D	05/15/24 16:47	OP54620	(used for QC only; not part of job JD87833)
ZZZZZZ	1G196450.D	05/15/24 17:02	OP54620A	(unrelated sample)
ZZZZZZ	1G196451.D	05/15/24 17:18	OP54620A	(unrelated sample)
ZZZZZZ	1G196452.D	05/15/24 17:33	OP54640	(unrelated sample)
G1G7016-CC6859	1G196453.D	05/15/24 17:48	n/a	Continuing cal 25

8.11.4  
8

# Run Sequence Report

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Run ID:</b> G2G6081	<b>Method:</b> SW846 8082A	<b>Instrument ID:</b> GC2G
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Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
G2G6081-IC6081	2G231552.D	04/29/24 03:50	n/a	Initial cal 5
G2G6081-IC6081	2G231553.D	04/29/24 04:15	n/a	Initial cal 10
G2G6081-IC6081	2G231554.D	04/29/24 04:41	n/a	Initial cal 25
G2G6081-IC6081	2G231555.D	04/29/24 05:06	n/a	Initial cal 50
G2G6081-ICC6081	2G231556.D	04/29/24 05:31	n/a	Initial cal 100
G2G6081-IC6081	2G231557.D	04/29/24 05:56	n/a	Initial cal 200
G2G6081-IC6081	2G231558.D	04/29/24 06:22	n/a	Initial cal 300
G2G6081-IC6081	2G231559.D	04/29/24 06:47	n/a	Initial cal 500
G2G6081-IC6081	2G231560.D	04/29/24 07:12	n/a	Initial cal 1000
G2G6081-IC6081	2G231561.D	04/29/24 07:37	n/a	Initial cal 2000
G2G6081-ICV6081	2G231562.D	04/29/24 08:02	n/a	Initial cal verification 100
G2G6081-IC6081	2G231563.D	04/29/24 08:27	n/a	Initial cal 100
G2G6081-IC6081	2G231565.D	04/29/24 09:17	n/a	Initial cal 100
G2G6081-IC6081	2G231566.D	04/29/24 09:42	n/a	Initial cal 100
G2G6081-IC6081	2G231568.D	04/29/24 10:32	n/a	Initial cal 100
G2G6081-ICV6081	2G231570.D	04/29/24 11:22	n/a	Initial cal verification 100
G2G6081-ICV6081	2G231572.D	04/29/24 12:13	n/a	Initial cal verification 100
G2G6081-ICV6081	2G231573.D	04/29/24 12:38	n/a	Initial cal verification 100
G2G6081-ICV6081	2G231574.D	04/29/24 13:04	n/a	Initial cal verification 100
G2G6081-IC6081	2G231581.D	05/01/24 07:42	n/a	Initial cal 5
G2G6081-IC6081	2G231582.D	05/01/24 08:07	n/a	Initial cal 10
G2G6081-IC6081	2G231583.D	05/01/24 08:32	n/a	Initial cal 25
G2G6081-IC6081	2G231584.D	05/01/24 08:57	n/a	Initial cal 50
G2G6081-IC6081	2G231585.D	05/01/24 09:22	n/a	Initial cal 100
G2G6081-IC6081	2G231586.D	05/01/24 09:46	n/a	Initial cal 200
G2G6081-IC6081	2G231587.D	05/01/24 10:12	n/a	Initial cal 300
G2G6081-IC6081	2G231588.D	05/01/24 10:37	n/a	Initial cal 500
G2G6081-IC6081	2G231589.D	05/01/24 11:02	n/a	Initial cal 1000
G2G6081-IC6081	2G231590.D	05/01/24 11:27	n/a	Initial cal 2000
G2G6081-ICV6081	2G231591.D	05/01/24 11:52	n/a	Initial cal verification 100
G2G6081-IC6081	2G231592.D	05/01/24 12:17	n/a	Initial cal 5
G2G6081-IC6081	2G231593.D	05/01/24 12:43	n/a	Initial cal 10
G2G6081-IC6081	2G231594.D	05/01/24 13:08	n/a	Initial cal 25
G2G6081-IC6081	2G231595.D	05/01/24 13:34	n/a	Initial cal 50
G2G6081-IC6081	2G231596.D	05/01/24 13:59	n/a	Initial cal 100
G2G6081-IC6081	2G231597.D	05/01/24 14:24	n/a	Initial cal 200
G2G6081-IC6081	2G231598.D	05/01/24 14:50	n/a	Initial cal 300
G2G6081-IC6081	2G231599.D	05/01/24 15:15	n/a	Initial cal 500
G2G6081-IC6081	2G231600.D	05/01/24 15:41	n/a	Initial cal 1000
G2G6081-IC6081	2G231601.D	05/01/24 16:07	n/a	Initial cal 2000
G2G6081-ICV6081	2G231602.D	05/01/24 16:32	n/a	Initial cal verification 100
G2G6081-IC6081	2G231603.D	05/01/24 16:57	n/a	Initial cal 5
G2G6081-IC6081	2G231604.D	05/01/24 17:21	n/a	Initial cal 10
G2G6081-IC6081	2G231605.D	05/01/24 17:46	n/a	Initial cal 25
G2G6081-IC6081	2G231606.D	05/01/24 18:11	n/a	Initial cal 50
G2G6081-IC6081	2G231607.D	05/01/24 18:35	n/a	Initial cal 100

8.11.5  
8

# Run Sequence Report

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Run ID:</b> G2G6081	<b>Method:</b> SW846 8082A	<b>Instrument ID:</b> GC2G
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<b>Lab Sample ID</b>	<b>Lab File ID</b>	<b>Date/Time Analyzed</b>	<b>Prep QC Batch</b>	<b>Client Sample ID</b>
G2G6081-IC6081	2G231608.D	05/01/24 19:00	n/a	Initial cal 200
G2G6081-IC6081	2G231609.D	05/01/24 19:25	n/a	Initial cal 300
G2G6081-IC6081	2G231610.D	05/01/24 19:51	n/a	Initial cal 500
G2G6081-IC6081	2G231611.D	05/01/24 20:16	n/a	Initial cal 1000
G2G6081-IC6081	2G231612.D	05/01/24 20:42	n/a	Initial cal 2000
G2G6081-ICV6081	2G231613.D	05/01/24 21:07	n/a	Initial cal verification 100

# Run Sequence Report

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Run ID:</b> G2G6085	<b>Method:</b> SW846 8082A	<b>Instrument ID:</b> GC2G
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Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
G2G6085-CC6081	2G231714.D	05/08/24 20:15	n/a	Continuing cal 100
G2G6085-CC6081	2G231731.D	05/09/24 04:02	n/a	Continuing cal 100
OP54453-MB1	2G231733.D	05/09/24 04:51	OP54453	Method Blank
OP54453-BS1	2G231734.D	05/09/24 05:15	OP54453	Blank Spike
OP54453-MS	2G231735.D	05/09/24 05:39	OP54453	Matrix Spike
OP54453-MSD	2G231736.D	05/09/24 06:03	OP54453	Matrix Spike Duplicate
JD87833-1	2G231737.D	05/09/24 06:27	OP54453	SB-1
JD87833-3	2G231738.D	05/09/24 06:51	OP54453	SB-3
JD87833-4	2G231739.D	05/09/24 07:15	OP54453	SB-4
G2G6085-CC6081	2G231742.D	05/09/24 08:28	n/a	Continuing cal 50
JD87833-5	2G231744.D	05/09/24 09:16	OP54453	SB-5
JD87833-7	2G231745.D	05/09/24 09:40	OP54453	SB-7
JD87833-8	2G231746.D	05/09/24 10:04	OP54453	SB-8
JD87833-10	2G231747.D	05/09/24 10:28	OP54453	SB-10
JD87833-11	2G231748.D	05/09/24 10:52	OP54453	SB-11
JD87833-12	2G231749.D	05/09/24 11:15	OP54453	SB-12
JD87833-14	2G231750.D	05/09/24 11:39	OP54453	SB-14
G2G6085-CC6081	2G231753.D	05/09/24 12:51	n/a	Continuing cal 100
JD87833-15	2G231755.D	05/09/24 13:39	OP54453	DUPE 1
JD87833-16	2G231756.D	05/09/24 14:03	OP54453	DUPE 2
ZZZZZZ	2G231757.D	05/09/24 14:28	OP54453	(unrelated sample)
JD87772-2	2G231758.D	05/09/24 14:52	OP54453	(used for QC only; not part of job JD87833)
ZZZZZZ	2G231759.D	05/09/24 15:16	OP54453	(unrelated sample)
ZZZZZZ	2G231760.D	05/09/24 15:40	OP54453	(unrelated sample)
ZZZZZZ	2G231761.D	05/09/24 16:04	OP54453	(unrelated sample)
G2G6085-CC6081	2G231764.D	05/09/24 17:16	n/a	Continuing cal 50
ZZZZZZ	2G231766.D	05/09/24 18:04	OP54453	(unrelated sample)
ZZZZZZ	2G231767.D	05/09/24 18:28	OP54453	(unrelated sample)
G2G6085-CC6081	2G231770.D	05/09/24 19:40	n/a	Continuing cal 100

8.11.6  
8

# Run Sequence Report

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Run ID:</b> G3G5160	<b>Method:</b> SW846 8082A	<b>Instrument ID:</b> GC3G
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Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
G3G5160-IC5160	3G140971.D	04/23/24 15:29	n/a	Initial cal 50
G3G5160-IC5160	3G140972.D	04/23/24 15:45	n/a	Initial cal 250
G3G5160-IC5160	3G140973.D	04/23/24 16:02	n/a	Initial cal 500
G3G5160-ICC5160	3G140974.D	04/23/24 16:19	n/a	Initial cal 1000
G3G5160-IC5160	3G140975.D	04/23/24 16:35	n/a	Initial cal 2000
G3G5160-IC5160	3G140976.D	04/23/24 16:52	n/a	Initial cal 3000
G3G5160-IC5160	3G140980.D	04/23/24 17:58	n/a	Initial cal 1000
G3G5160-IC5160	3G140981.D	04/23/24 18:15	n/a	Initial cal 1000
G3G5160-IC5160	3G140982.D	04/23/24 18:31	n/a	Initial cal 1000
G3G5160-IC5160	3G140983.D	04/23/24 18:48	n/a	Initial cal 1000
G3G5160-IC5160	3G140984.D	04/23/24 19:04	n/a	Initial cal 1000
G3G5160-IC5160	3G140985.D	04/23/24 19:21	n/a	Initial cal 1000
G3G5160-IC5160	3G140986.D	04/23/24 19:38	n/a	Initial cal 1000
G3G5160-ICV5160	3G140987.D	04/23/24 19:54	n/a	Initial cal verification 1000
G3G5160-ICV5160	3G140988.D	04/23/24 20:11	n/a	Initial cal verification 1000
G3G5160-ICV5160	3G140989.D	04/23/24 20:28	n/a	Initial cal verification 1000
G3G5160-ICV5160	3G140990.D	04/23/24 20:44	n/a	Initial cal verification 1000
G3G5160-ICV5160	3G140991.D	04/23/24 21:01	n/a	Initial cal verification 1000
G3G5160-ICV5160	3G140992.D	04/23/24 21:18	n/a	Initial cal verification 1000
G3G5160-ICV5160	3G140993.D	04/23/24 21:34	n/a	Initial cal verification 1000
G3G5160-ICV5160	3G140994.D	04/23/24 21:51	n/a	Initial cal verification 1000

8.11.7  
8

# Run Sequence Report

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Run ID:</b> G3G5173	<b>Method:</b> SW846 8082A	<b>Instrument ID:</b> GC3G
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Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
G3G5173-CC5160	3G141327.D	05/08/24 00:33	n/a	Continuing cal 1000
OP54398-MB1	3G141329.D	05/08/24 01:07	OP54398	Method Blank
OP54398-BS1	3G141330.D	05/08/24 01:23	OP54398	Blank Spike
OP54398-BSD	3G141331.D	05/08/24 01:40	OP54398	Blank Spike Duplicate
ZZZZZZ	3G141332.D	05/08/24 01:56	OP54398	(unrelated sample)
ZZZZZZ	3G141333.D	05/08/24 02:13	OP54398	(unrelated sample)
ZZZZZZ	3G141334.D	05/08/24 02:30	OP54398	(unrelated sample)
ZZZZZZ	3G141335.D	05/08/24 02:46	OP54398	(unrelated sample)
OP54400-MB1	3G141337.D	05/08/24 03:20	OP54400	Method Blank
OP54400-BS1	3G141338.D	05/08/24 03:36	OP54400	Blank Spike
OP54400-BSD	3G141339.D	05/08/24 03:53	OP54400	Blank Spike Duplicate
ZZZZZZ	3G141340.D	05/08/24 04:10	OP54400	(unrelated sample)
JD87833-17	3G141341.D	05/08/24 04:26	OP54400	FIELD BLANK
OP54402A-MB1	3G141343.D	05/08/24 05:00	OP54402A	Method Blank
OP54402A-BS1	3G141344.D	05/08/24 05:16	OP54402A	Blank Spike
OP54402A-BSD	3G141345.D	05/08/24 05:33	OP54402A	Blank Spike Duplicate
ZZZZZZ	3G141346.D	05/08/24 05:49	OP54402A	(unrelated sample)
ZZZZZZ	3G141347.D	05/08/24 06:06	OP54402A	(unrelated sample)
ZZZZZZ	3G141348.D	05/08/24 06:23	OP54402A	(unrelated sample)
G3G5173-CC5160	3G141351.D	05/08/24 07:13	n/a	Continuing cal 500

8.11.8  
8

# Run Sequence Report

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Run ID:</b> G8G2430	<b>Method:</b> SW846 8081B	<b>Instrument ID:</b> GC8G
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Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
G8G2430-DDT	8G55351.D	04/03/24 00:00	n/a	DDT/Endrin Breakdown Check
G8G2430-IC2430	8G55356.D	04/03/24 05:57	n/a	Initial cal 0.2
G8G2430-IC2430	8G55357.D	04/03/24 06:19	n/a	Initial cal 0.5
G8G2430-IC2430	8G55358.D	04/03/24 06:41	n/a	Initial cal 1
G8G2430-ICC2430	8G55359.D	04/03/24 07:03	n/a	Initial cal 2.5
G8G2430-IC2430	8G55360.D	04/03/24 07:24	n/a	Initial cal 5.0
G8G2430-IC2430	8G55361.D	04/03/24 07:46	n/a	Initial cal 7.5
G8G2430-IC2430	8G55362.D	04/03/24 08:08	n/a	Initial cal 10
G8G2430-IC2430	8G55363.D	04/03/24 08:30	n/a	Initial cal 50
G8G2430-IC2430	8G55364.D	04/03/24 08:52	n/a	Initial cal 50
G8G2430-ICV2430	8G55365.D	04/03/24 09:13	n/a	Initial cal verification 2.5
G8G2430-ICV2430	8G55366.D	04/03/24 09:35	n/a	Initial cal verification 50
G8G2430-ICV2430	8G55367.D	04/03/24 09:57	n/a	Initial cal verification 50

8.11.9  
8

# Run Sequence Report

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Run ID:</b> G8G2470	<b>Method:</b> SW846 8081B	<b>Instrument ID:</b> GC8G
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Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
G8G2470-DDT	8G56334.D	05/09/24 00:15	n/a	DDT/Endrin Breakdown Check
G8G2470-CC2430	8G56335.D	05/09/24 00:37	n/a	Continuing cal 2.5
OP54452-MB1	8G56337.D	05/09/24 01:20	OP54452	Method Blank
OP54452-BS1	8G56338.D	05/09/24 01:42	OP54452	Blank Spike
ZZZZZZ	8G56339.D	05/09/24 02:04	OP54425	(unrelated sample)
ZZZZZZ	8G56341.D	05/09/24 02:47	OP54425	(unrelated sample)
ZZZZZZ	8G56342.D	05/09/24 03:09	OP54425	(unrelated sample)
ZZZZZZ	8G56343.D	05/09/24 03:31	OP54382	(unrelated sample)
ZZZZZZ	8G56344.D	05/09/24 03:52	OP54382	(unrelated sample)
ZZZZZZ	8G56345.D	05/09/24 04:14	OP54382	(unrelated sample)
ZZZZZZ	8G56346.D	05/09/24 04:36	OP54382	(unrelated sample)
ZZZZZZ	8G56347.D	05/09/24 04:58	OP54382	(unrelated sample)
OP54452-MS	8G56349.D	05/09/24 05:41	OP54452	Matrix Spike
OP54452-MSD	8G56350.D	05/09/24 06:03	OP54452	Matrix Spike Duplicate
JD87833-1	8G56351.D	05/09/24 06:24	OP54452	SB-1
JD87833-3	8G56352.D	05/09/24 06:46	OP54452	SB-3
JD87833-4	8G56353.D	05/09/24 07:08	OP54452	SB-4
JD87833-7	8G56355.D	05/09/24 07:52	OP54452	SB-7
JD87833-8	8G56356.D	05/09/24 08:13	OP54452	SB-8
JD87833-10	8G56357.D	05/09/24 08:35	OP54452	SB-10
JD87833-12	8G56359.D	05/09/24 09:19	OP54452	SB-12
JD87833-14	8G56360.D	05/09/24 09:40	OP54452	SB-14
JD87833-15	8G56361.D	05/09/24 10:02	OP54452	DUPE 1
JD87833-16	8G56362.D	05/09/24 10:24	OP54452	DUPE 2
JD87772-1	8G56363.D	05/09/24 10:45	OP54452	(used for QC only; not part of job JD87833)
ZZZZZZ	8G56364.D	05/09/24 11:07	OP54452	(unrelated sample)
ZZZZZZ	8G56365.D	05/09/24 11:29	OP54452	(unrelated sample)
ZZZZZZ	8G56366.D	05/09/24 11:50	OP54452	(unrelated sample)
ZZZZZZ	8G56367.D	05/09/24 12:12	OP54452	(unrelated sample)

8.11.10  
8



# Run Sequence Report

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Run ID:</b> G8G2471	<b>Method:</b> SW846 8081B	<b>Instrument ID:</b> GC8G
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Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
G8G2471-DDT	8G56373.D	05/09/24 15:09	n/a	DDT/Endrin Breakdown Check
G8G2471-CC2430	8G56374.D	05/09/24 15:31	n/a	Continuing cal 5
OP54426-MB1	8G56377.D	05/09/24 16:44	OP54426	Method Blank
OP54426-BS1	8G56378.D	05/09/24 17:06	OP54426	Blank Spike
ZZZZZZ	8G56379.D	05/09/24 17:28	OP54425	(unrelated sample)
ZZZZZZ	8G56380.D	05/09/24 17:50	OP54452	(unrelated sample)
ZZZZZZ	8G56381.D	05/09/24 18:11	OP54452	(unrelated sample)
OP54426-MS	8G56382.D	05/09/24 18:33	OP54426	Matrix Spike
OP54426-MSD	8G56383.D	05/09/24 18:55	OP54426	Matrix Spike Duplicate
LB1891-1	8G56384.D	05/09/24 19:17	OP54426	(used for QC only; not part of job JD87833)
ZZZZZZ	8G56385.D	05/09/24 19:39	OP54426	(unrelated sample)
ZZZZZZ	8G56386.D	05/09/24 20:00	OP54426	(unrelated sample)
ZZZZZZ	8G56387.D	05/09/24 20:22	OP54426	(unrelated sample)
ZZZZZZ	8G56388.D	05/09/24 20:44	OP54426	(unrelated sample)
ZZZZZZ	8G56389.D	05/09/24 21:05	OP54426	(unrelated sample)
ZZZZZZ	8G56390.D	05/09/24 21:27	OP54426	(unrelated sample)
ZZZZZZ	8G56391.D	05/09/24 21:49	OP54426	(unrelated sample)
ZZZZZZ	8G56392.D	05/09/24 22:10	OP54426	(unrelated sample)
ZZZZZZ	8G56393.D	05/09/24 22:32	OP54426	(unrelated sample)
ZZZZZZ	8G56394.D	05/09/24 22:54	OP54426	(unrelated sample)
ZZZZZZ	8G56395.D	05/09/24 23:16	OP54426	(unrelated sample)
ZZZZZZ	8G56396.D	05/09/24 23:37	OP54426	(unrelated sample)
ZZZZZZ	8G56397.D	05/09/24 23:59	OP54430	(unrelated sample)
ZZZZZZ	8G56398.D	05/10/24 00:21	OP54430	(unrelated sample)
ZZZZZZ	8G56399.D	05/10/24 00:43	OP54430	(unrelated sample)
ZZZZZZ	8G56400.D	05/10/24 01:05	OP54382	(unrelated sample)
JD87833-5	8G56401.D	05/10/24 01:27	OP54452	SB-5

8.11.11  
8

# Run Sequence Report

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Run ID:</b> G8G2472	<b>Method:</b> SW846 8081B	<b>Instrument ID:</b> GC8G
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Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
G8G2472-DDT	8G56406.D	05/10/24 04:14	n/a	DDT/Endrin Breakdown Check
G8G2472-CC2430	8G56407.D	05/10/24 04:36	n/a	Continuing cal 2.5
OP54526-MB1	8G56409.D	05/10/24 05:20	OP54526	Method Blank
OP54526-BS1	8G56410.D	05/10/24 05:41	OP54526	Blank Spike
OP54526-MS	8G56411.D	05/10/24 06:03	OP54526	Matrix Spike
OP54526-LS12	8G56411.D	05/10/24 06:03	OP54526	Leachate Spike
OP54526-MSD	8G56412.D	05/10/24 06:25	OP54526	Matrix Spike Duplicate
OP54526-LB12	8G56413.D	05/10/24 06:47	OP54526	Leachate Blank
ZZZZZZ	8G56414.D	05/10/24 07:09	OP54526	(unrelated sample)
JD87790-2	8G56415.D	05/10/24 07:31	OP54526	(used for QC only; not part of job JD87833)
ZZZZZZ	8G56416.D	05/10/24 07:53	OP54526	(unrelated sample)
ZZZZZZ	8G56417.D	05/10/24 08:15	OP54526	(unrelated sample)
ZZZZZZ	8G56418.D	05/10/24 08:37	OP54526	(unrelated sample)
ZZZZZZ	8G56419.D	05/10/24 08:58	OP54526	(unrelated sample)
ZZZZZZ	8G56420.D	05/10/24 09:20	OP54526	(unrelated sample)
ZZZZZZ	8G56421.D	05/10/24 09:42	OP54526	(unrelated sample)
ZZZZZZ	8G56422.D	05/10/24 10:04	OP54526	(unrelated sample)
ZZZZZZ	8G56423.D	05/10/24 10:26	OP54526	(unrelated sample)
ZZZZZZ	8G56424.D	05/10/24 10:48	OP54526	(unrelated sample)
ZZZZZZ	8G56425.D	05/10/24 11:10	OP54526	(unrelated sample)
ZZZZZZ	8G56426.D	05/10/24 11:31	OP54526	(unrelated sample)
ZZZZZZ	8G56427.D	05/10/24 11:53	OP54526	(unrelated sample)
ZZZZZZ	8G56428.D	05/10/24 12:15	OP54526	(unrelated sample)
ZZZZZZ	8G56429.D	05/10/24 12:37	OP54526	(unrelated sample)
ZZZZZZ	8G56430.D	05/10/24 12:59	OP54526	(unrelated sample)
ZZZZZZ	8G56431.D	05/10/24 13:21	OP54526	(unrelated sample)
ZZZZZZ	8G56432.D	05/10/24 13:42	OP54526	(unrelated sample)
ZZZZZZ	8G56433.D	05/10/24 14:04	OP54526	(unrelated sample)
JD87833-11	8G56434.D	05/10/24 15:41	OP54452	SB-11

8.11.12  
8

GC/LC Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\1G7004\  
 Data File : 1g196210.D  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 08 May 2024 4:14 am  
 Operator : christp  
 Sample : jd87833-17  
 Misc : op54399,g1g7004,250,,,2,1  
 ALS Vial : 56 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 15 15:07:07 2024  
 Quant Method : C:\msdchem\1\data\carlos\1G7004\1PST6859a.M  
 Quant Title : PEST/PCB  
 QLast Update : Wed May 08 14:18:05 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column  
 Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
 Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
-----						
Internal Standards						
1) I 1-bromo-2...	1.236	1.138	347.9E6	373.4E6	50.000m	50.000m
27) I 1-bromo-2...	1.236	1.138	346.7E6	368.8E6	50.000m	50.000m
33) I 1-bromo-2...	1.236	1.138	350.4E6	369.3E6	50.000m	50.000m
System Monitoring Compounds						
2) SAB Tetrachlo...	1.697	1.735	143.8E6	102.3E6	21.586m	21.884m
Spiked Amount	40.000	Range	30 - 150	Recovery	=	53.96% 54.71%
26) SA Decachlor...	8.614	9.951	76495791	79080498	11.267m	9.944m
Spiked Amount	40.000		Recovery	=	28.17%	24.86%
Target Compounds						
20) MA 4,4'-DDT	5.240	6.128	13256018	14710902	2.455m	2.731m
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

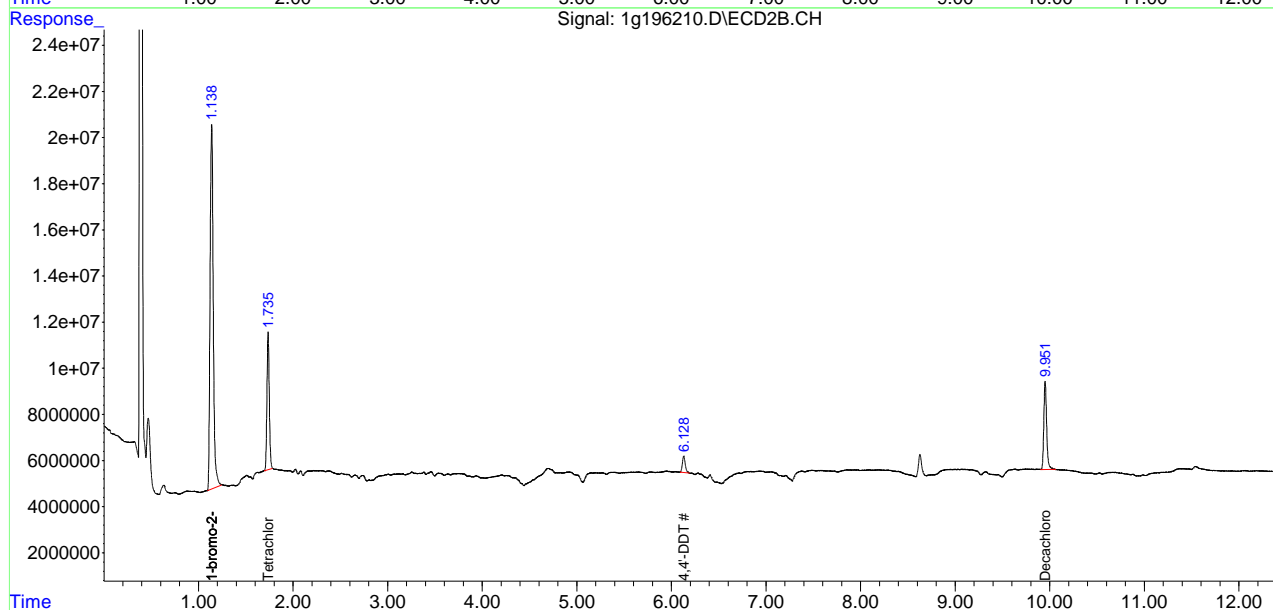
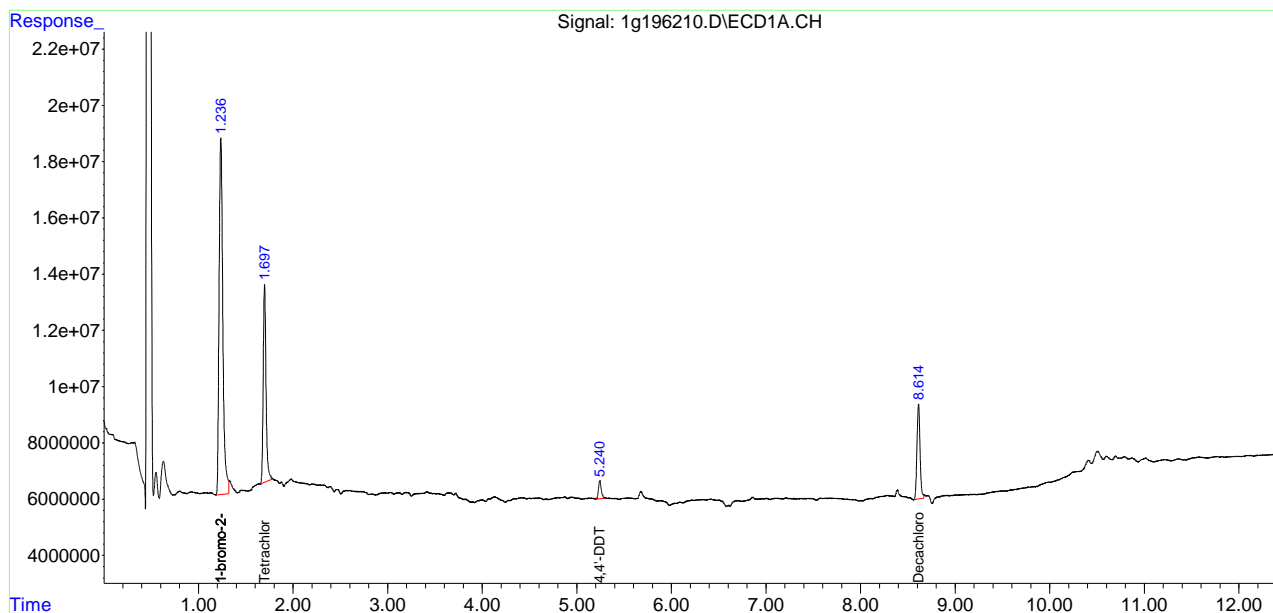
9.1.1  
**9**

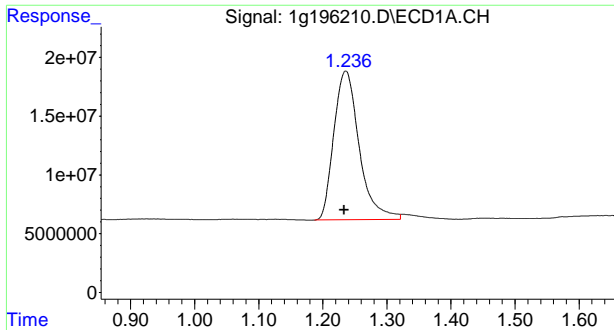
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\1G7004\  
 Data File : 1g196210.D  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 08 May 2024 4:14 am  
 Operator : christp  
 Sample : jd87833-17  
 Misc : op54399,glg7004,250,,,2,1  
 ALS Vial : 56 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

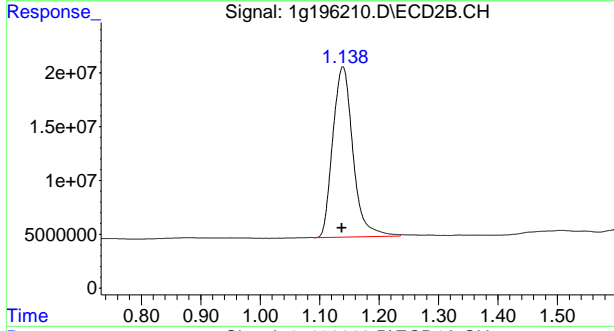
Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 15 15:07:07 2024  
 Quant Method : C:\msdchem\1\data\carlos\1G7004\1PST6859a.M  
 Quant Title : PEST/PCB  
 QLast Update : Wed May 08 14:18:05 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column  
 Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
 Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

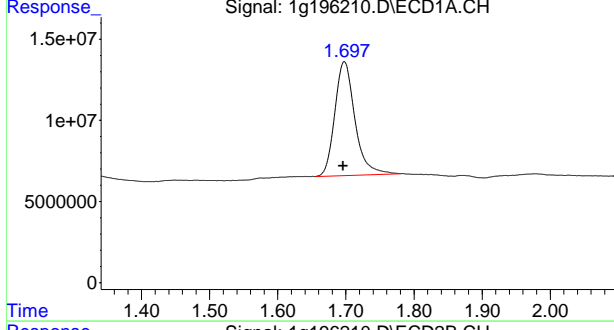




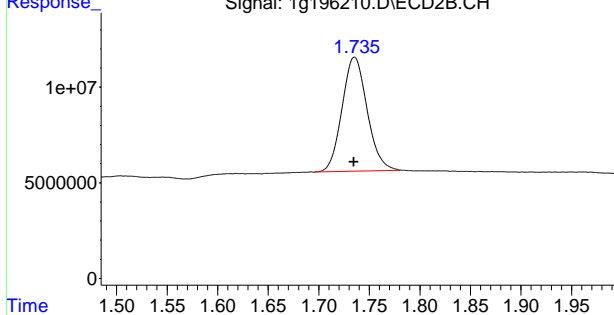
#1 1-bromo-2-nitrobenzene  
 R.T.: 1.236 min  
 Delta R.T.: 0.003 min  
 Response: 347923210  
 Conc: 50.00 PPB m



#1 1-bromo-2-nitrobenzene  
 R.T.: 1.138 min  
 Delta R.T.: 0.000 min  
 Response: 373410495  
 Conc: 50.00 PPB m

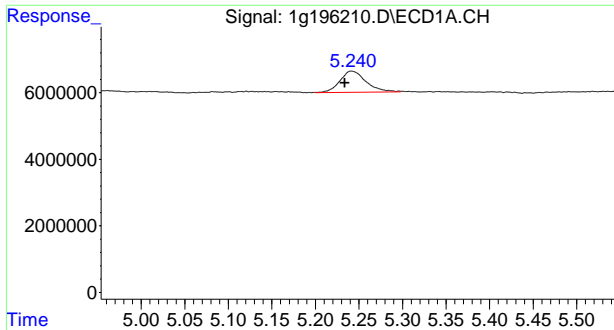


#2 Tetrachloro-m-xylene  
 R.T.: 1.697 min  
 Delta R.T.: 0.002 min  
 Response: 143824409  
 Conc: 21.59 PPB m

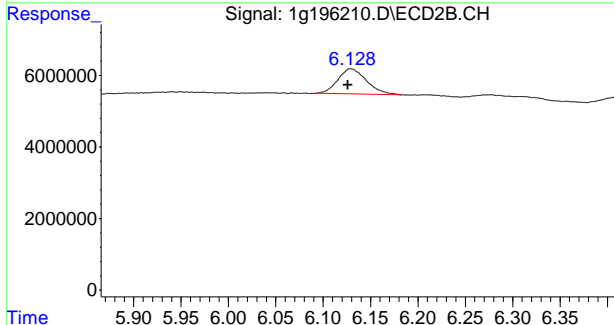


#2 Tetrachloro-m-xylene  
 R.T.: 1.735 min  
 Delta R.T.: 0.000 min  
 Response: 102326294  
 Conc: 21.88 PPB m

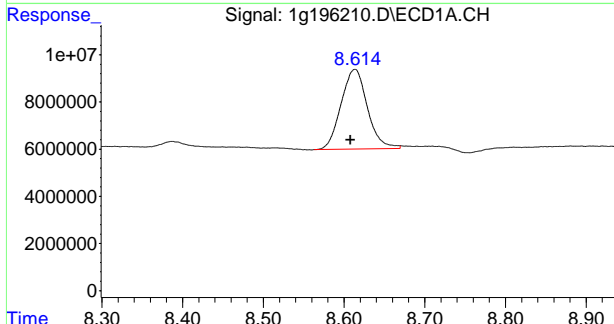
9.1.1  
**9**



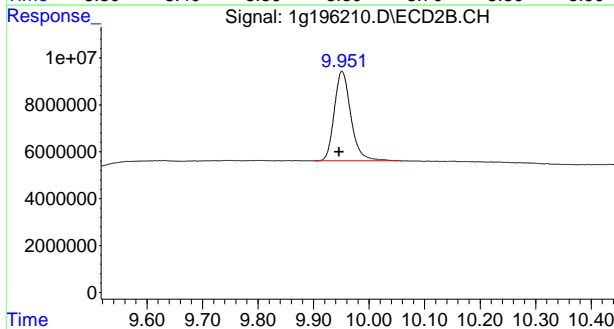
#20 4,4'-DDT  
 R.T.: 5.240 min  
 Delta R.T.: 0.007 min  
 Response: 13256018  
 Conc: 2.45 PPB m



#20 4,4'-DDT  
 R.T.: 6.128 min  
 Delta R.T.: 0.002 min  
 Response: 14710902  
 Conc: 2.73 PPB m

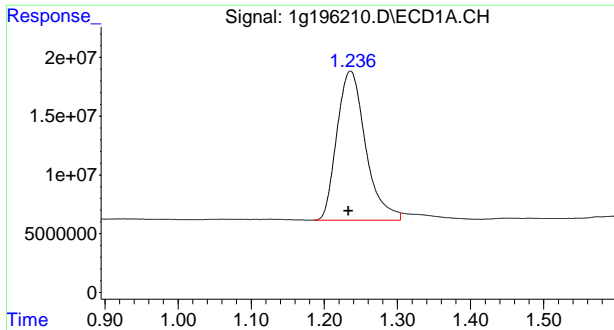


#26 Decachlorobiphenyl  
 R.T.: 8.614 min  
 Delta R.T.: 0.006 min  
 Response: 76495791  
 Conc: 11.27 PPB m

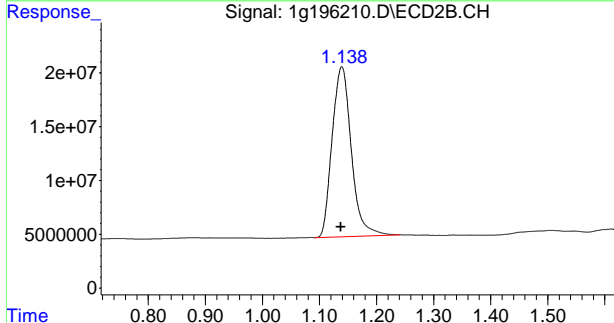


#26 Decachlorobiphenyl  
 R.T.: 9.951 min  
 Delta R.T.: 0.005 min  
 Response: 79080498  
 Conc: 9.94 PPB m

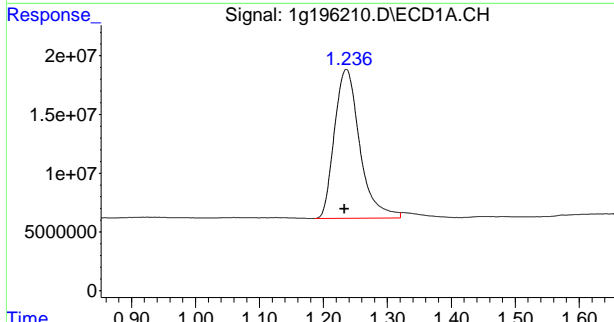
9.1.1  
**9**



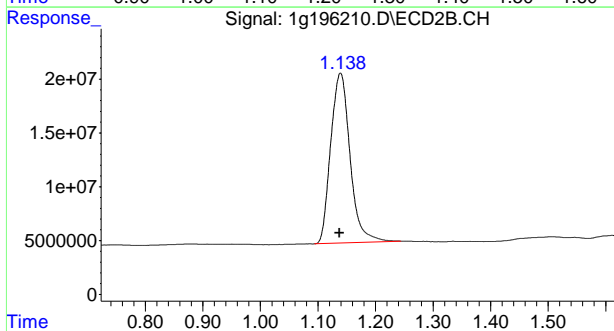
#27 1-bromo-2-nitrobenzeneA  
 R.T.: 1.236 min  
 Delta R.T.: 0.003 min  
 Response: 346694568  
 Conc: 50.00 PPB m



#27 1-bromo-2-nitrobenzeneA  
 R.T.: 1.138 min  
 Delta R.T.: 0.001 min  
 Response: 368760768  
 Conc: 50.00 PPB m



#33 1-bromo-2-nitrobenzeneB  
 R.T.: 1.236 min  
 Delta R.T.: 0.003 min  
 Response: 350412494  
 Conc: 50.00 PPB m



#33 1-bromo-2-nitrobenzeneB  
 R.T.: 1.138 min  
 Delta R.T.: 0.001 min  
 Response: 369320207  
 Conc: 50.00 PPB m

9.1.1  
**9**



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\1G7016\  
 Data File : 1g196431.d  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 15 May 2024 11:49 am  
 Operator : mahaliai  
 Sample : jd87833-17r (Sig #1); jd87833-17 (Sig #2)  
 Misc : op54554,g1g7016,300,,,2,1  
 ALS Vial : 37 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 15 14:14:19 2024  
 Quant Method : C:\msdchem\1\methods\1PST6859a.M  
 Quant Title : PEST/PCB  
 QLast Update : Wed May 15 14:04:07 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column  
 Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
 Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
-----						
Internal Standards						
1) I 1-bromo-2...	1.232	1.137	388.9E6	389.7E6	50.000	50.000
27) I 1-bromo-2...	1.232	1.137	388.9E6	389.7E6	50.000	50.000
33) I 1-bromo-2...	1.232	1.137	388.9E6	389.7E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	1.692	1.730	262.0E6	179.9E6	35.177m	36.863m
Spiked Amount	40.000	Range	30 - 150	Recovery	= 87.94%	92.16%
26) SA Decachlor...	8.612	9.965f	87254664	89638112	11.496	10.802
Spiked Amount	40.000		Recovery	=	28.74%	27.01%
Target Compounds						
20) MA 4,4'-DDT	5.247	6.134	4320682	4939719	0.716m	0.879m
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

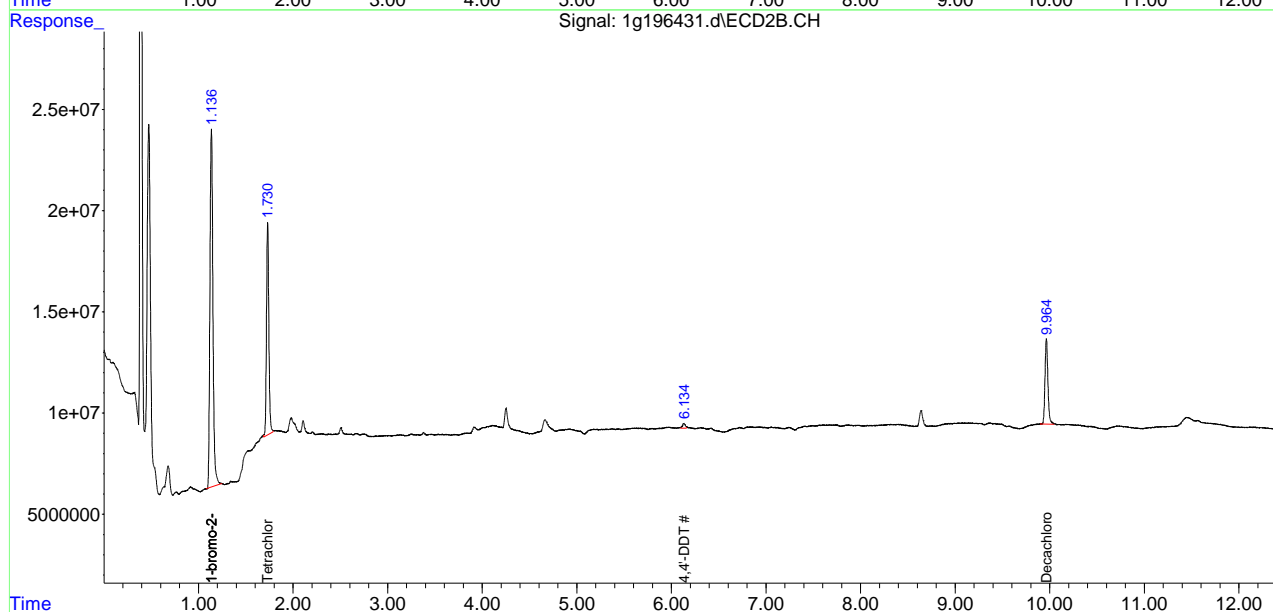
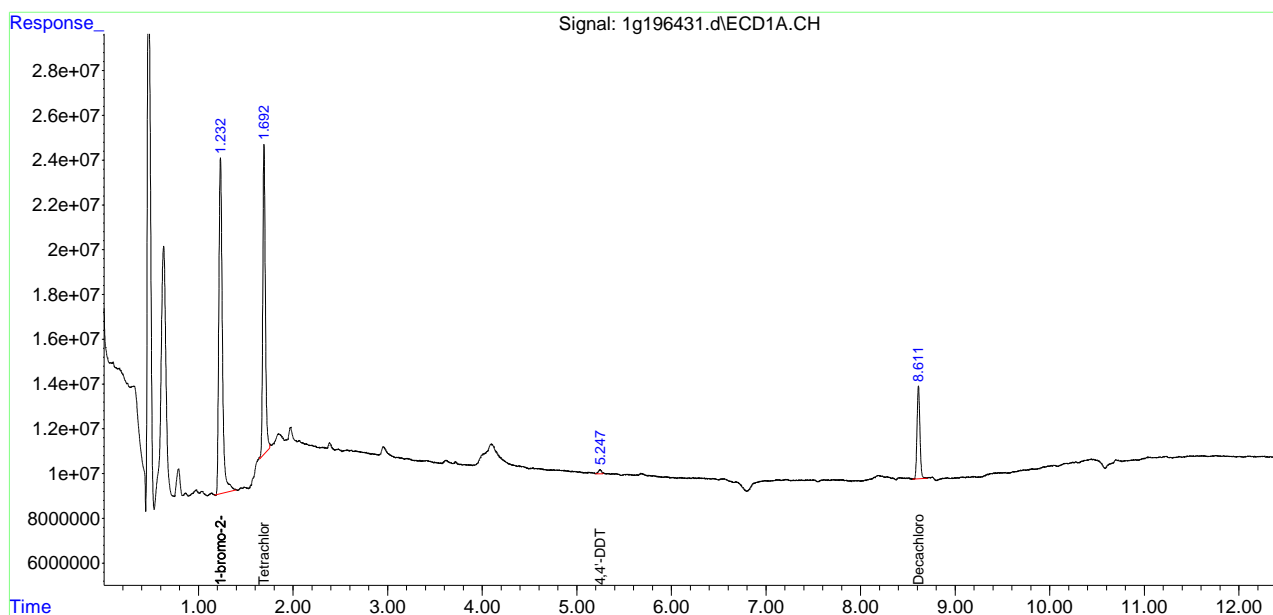
9.12  
 9

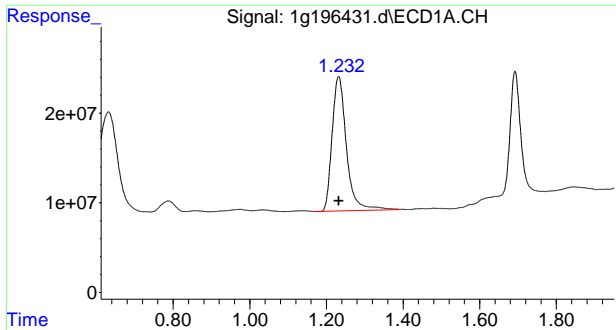
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\1G7016\  
 Data File : 1g196431.d  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 15 May 2024 11:49 am  
 Operator : mahalia  
 Sample : jd87833-17r (Sig #1); jd87833-17 (Sig #2)  
 Misc : op54554,g1g7016,300,,,2,1  
 ALS Vial : 37 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

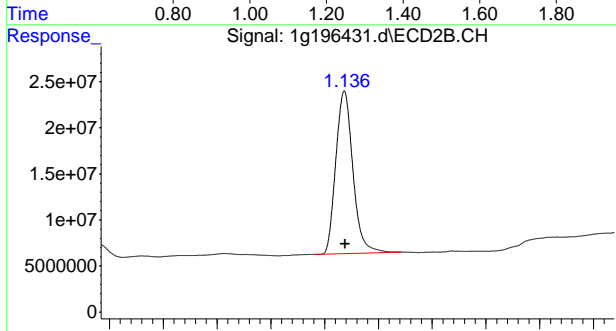
Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 15 14:14:19 2024  
 Quant Method : C:\msdchem\1\methods\1PST6859a.M  
 Quant Title : PEST/PCB  
 QLast Update : Wed May 15 14:04:07 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column  
 Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
 Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

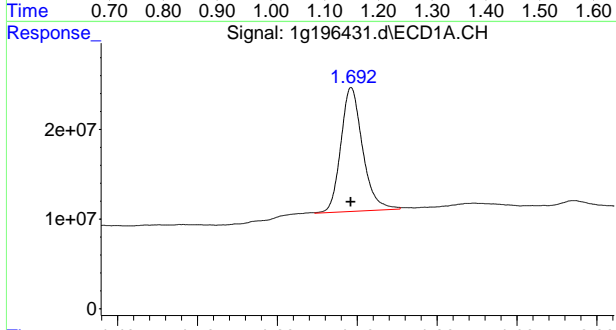




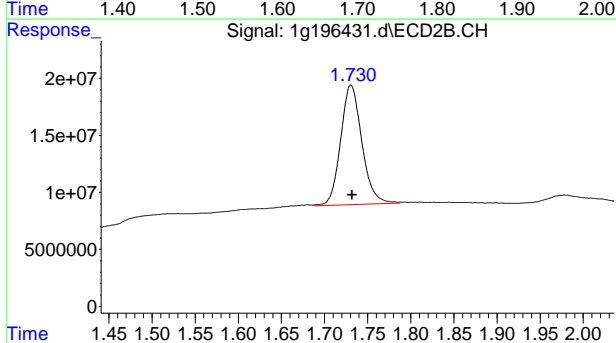
#1 1-bromo-2-nitrobenzene  
 R.T.: 1.232 min  
 Delta R.T.: 0.000 min  
 Response: 388933824  
 Conc: 50.00 PPB



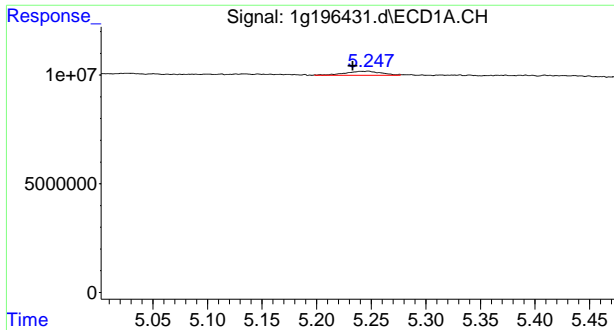
#1 1-bromo-2-nitrobenzene  
 R.T.: 1.137 min  
 Delta R.T.: 0.000 min  
 Response: 389651278  
 Conc: 50.00 PPB



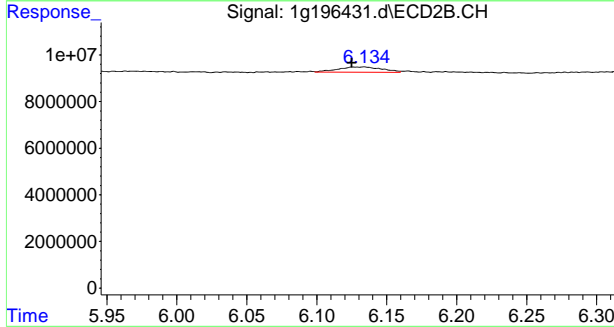
#2 Tetrachloro-m-xylene  
 R.T.: 1.692 min  
 Delta R.T.: 0.000 min  
 Response: 262001078  
 Conc: 35.18 PPB m



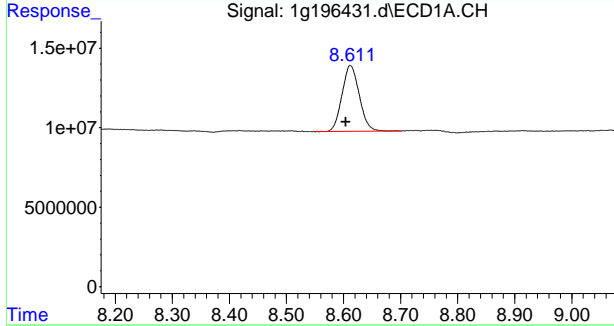
#2 Tetrachloro-m-xylene  
 R.T.: 1.730 min  
 Delta R.T.: -0.002 min  
 Response: 179862824  
 Conc: 36.86 PPB m



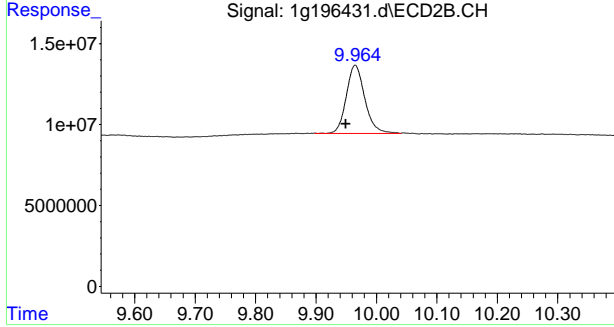
#20 4,4'-DDT  
 R.T.: 5.247 min  
 Delta R.T.: 0.014 min  
 Response: 4320682  
 Conc: 0.72 PPB m



#20 4,4'-DDT  
 R.T.: 6.134 min  
 Delta R.T.: 0.009 min  
 Response: 4939719  
 Conc: 0.88 PPB m

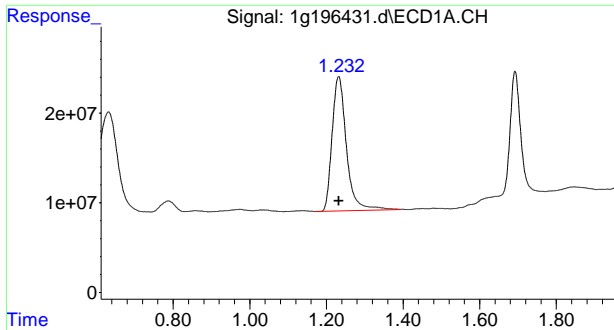


#26 Decachlorobiphenyl  
 R.T.: 8.612 min  
 Delta R.T.: 0.008 min  
 Response: 87254664  
 Conc: 11.50 PPB

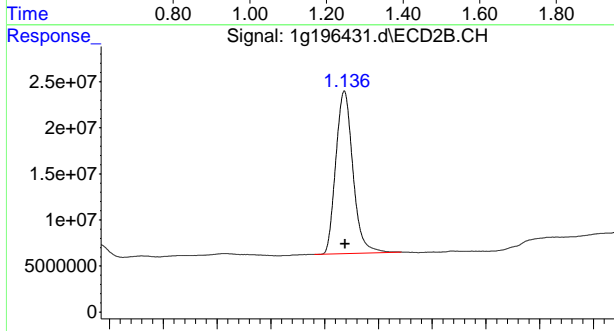


#26 Decachlorobiphenyl  
 R.T.: 9.965 min  
 Delta R.T.: 0.016 min  
 Response: 89638112  
 Conc: 10.80 PPB

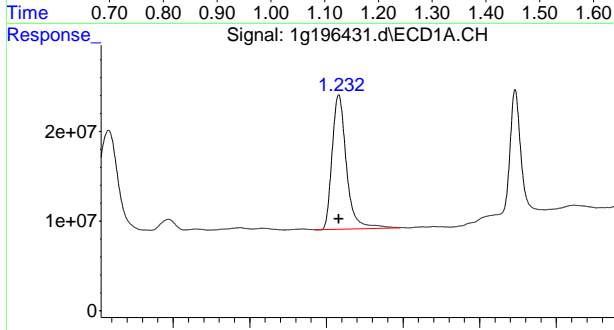
9.12  
**9**



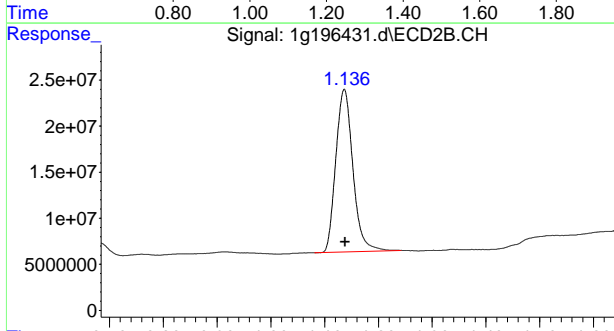
#27 1-bromo-2-nitrobenzeneA  
 R.T.: 1.232 min  
 Delta R.T.: 0.000 min  
 Response: 388933824  
 Conc: 50.00 PPB



#27 1-bromo-2-nitrobenzeneA  
 R.T.: 1.137 min  
 Delta R.T.: 0.000 min  
 Response: 389651278  
 Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB  
 R.T.: 1.232 min  
 Delta R.T.: 0.000 min  
 Response: 388933824  
 Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB  
 R.T.: 1.137 min  
 Delta R.T.: 0.000 min  
 Response: 389651278  
 Conc: 50.00 PPB

9.12  
 9

## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\marianaf\3G5173\  
 Data File : 3G141341.D  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 08-May-24, 04:26:44  
 Operator : christp  
 Sample : jd87833-17  
 Misc : op54400,g3g5173,250,,,2,1  
 ALS Vial : 41 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 08 14:23:00 2024  
 Quant Method : C:\msdchem\1\data\marianaf\3G5173\3PCB5160.M  
 Quant Title :  
 QLast Update : Tue May 07 06:14:57 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
 Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
-----						
System Monitoring Compounds						
1) S Tetrachlo...	3.471	4.079	145.3E6	333.1E6	18.389	18.339
Spiked Amount	40.000		Recovery	=	45.97%	45.85%
51) S Decachlor...	10.971	12.589	50861939	104.6E6	7.643m	7.143m
Spiked Amount	40.000		Recovery	=	19.11%	17.86%

## Target Compounds

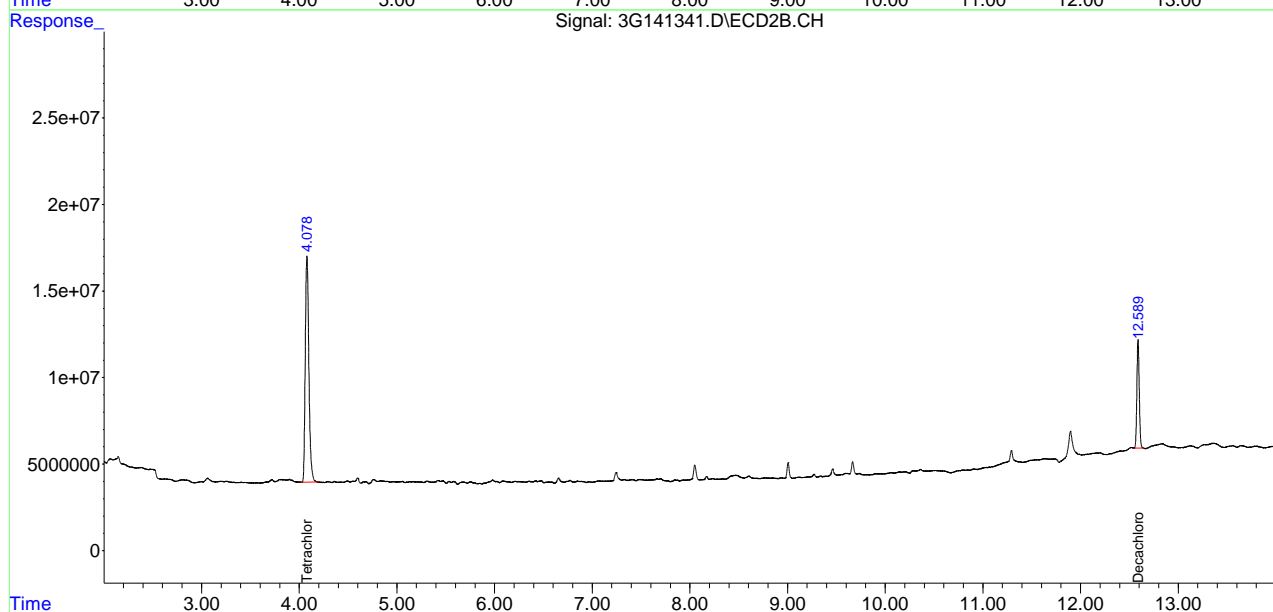
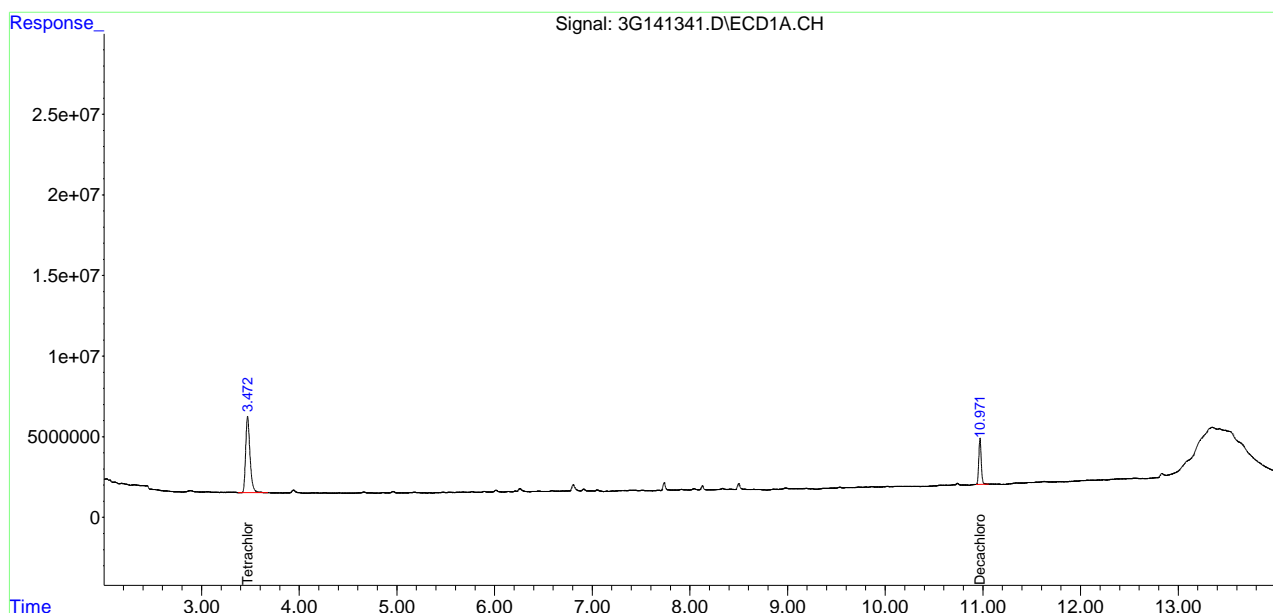
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

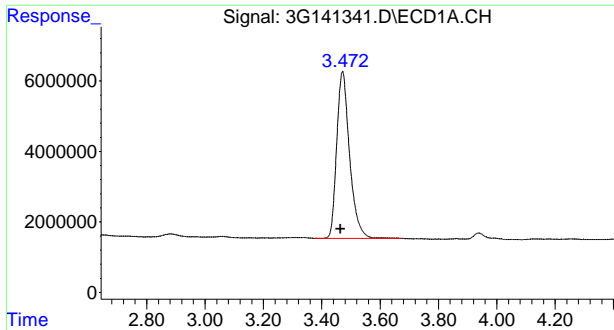
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\marianaf\3G5173\  
 Data File : 3G141341.D  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 08-May-24, 04:26:44  
 Operator : christp  
 Sample : jd87833-17  
 Misc : op54400,g3g5173,250,,,2,1  
 ALS Vial : 41 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

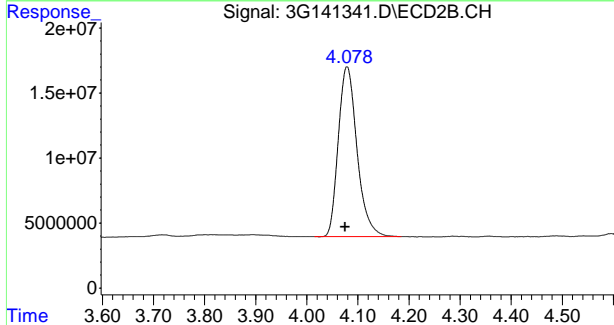
Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 08 14:23:00 2024  
 Quant Method : C:\msdchem\1\data\marianaf\3G5173\3PCB5160.M  
 Quant Title :  
 QLast Update : Tue May 07 06:14:57 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
 Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

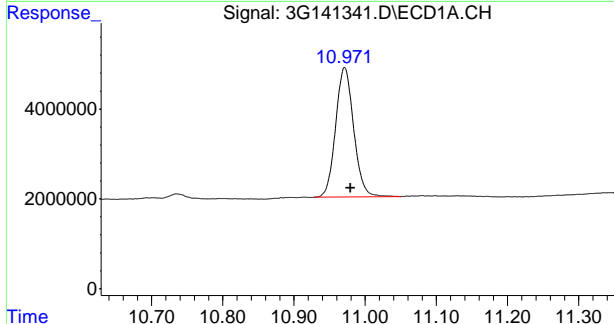




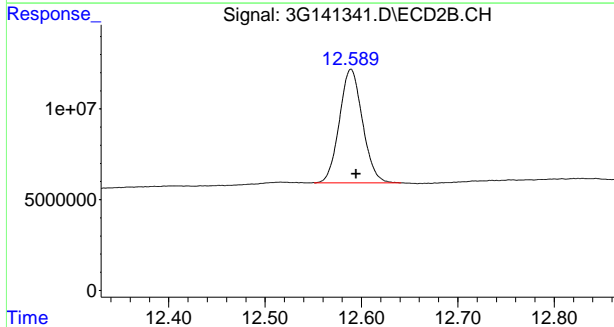
#1 Tetrachloro-m-xylene  
 R.T.: 3.471 min  
 Delta R.T.: 0.007 min  
 Response: 145279621  
 Conc: 18.39 ppb



#1 Tetrachloro-m-xylene  
 R.T.: 4.079 min  
 Delta R.T.: 0.004 min  
 Response: 333053580  
 Conc: 18.34 ppb



#51 Decachlorobiphenyl  
 R.T.: 10.971 min  
 Delta R.T.: -0.008 min  
 Response: 50861939  
 Conc: 7.64 ppb m



#51 Decachlorobiphenyl  
 R.T.: 12.589 min  
 Delta R.T.: -0.006 min  
 Response: 104583787  
 Conc: 7.14 ppb m

9.1.3  
**9**



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\G8G2470\  
 Data File : 8g56351.d  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 9 May 2024 6:24 am  
 Operator : christp  
 Sample : jd87833-1 m  
 Misc : op54452,g8g2470,5.3,,,10,1  
 ALS Vial : 75 Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 10:31:18 2024  
 Quant Method : C:\msdchem\1\data\nazaryne\G8G2470\8PSTLVI2430a.M  
 Quant Title : PEST/PCB  
 QLast Update : Thu May 09 12:16:42 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1ul/column  
 Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
 Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
-----						
Internal Standards						
1) I 1-bromo-2...	4.458	4.908	892.4E6	1071.5E6	5.000	5.000
27) I 1-bromo-2...	4.458	4.908	892.4E6	1071.5E6	5.000	5.000
33) I 1-bromo-2...	4.458	4.908	892.4E6	1071.5E6	5.000	5.000
System Monitoring Compounds						
2) SAB Tetrachlo...	5.067	5.730	598.3E6	1050.3E6	3.216	3.331m
Spiked Amount	40.000	Range 30 - 150	Recovery =		8.04%#	8.33%#
26) SA Decachlor...	12.041	14.183	436.2E6	512.5E6	2.174m	3.432m#
Spiked Amount	40.000		Recovery =		5.43%	8.58%
Target Compounds						
11) B Heptachlo...	7.229	8.564	32595014	44917929	0.164m	0.132m
13) B alpha-Chl...	7.523f	9.062	99077151	57330931	0.449m	0.181m#
15) B 4,4'-DDE	7.656f	9.326	217.4E6	308.7E6	1.030m	0.945m
16) MA Dieldrin	8.009	9.573	47338321	56538086	0.207m	0.162m
18) A 4,4'-DDD	8.434f	10.251	86804397	160.8E6	0.562m	0.594m
20) MA 4,4'-DDT	8.828f	10.772	89043309	165.0E6	0.508m	0.843m#

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

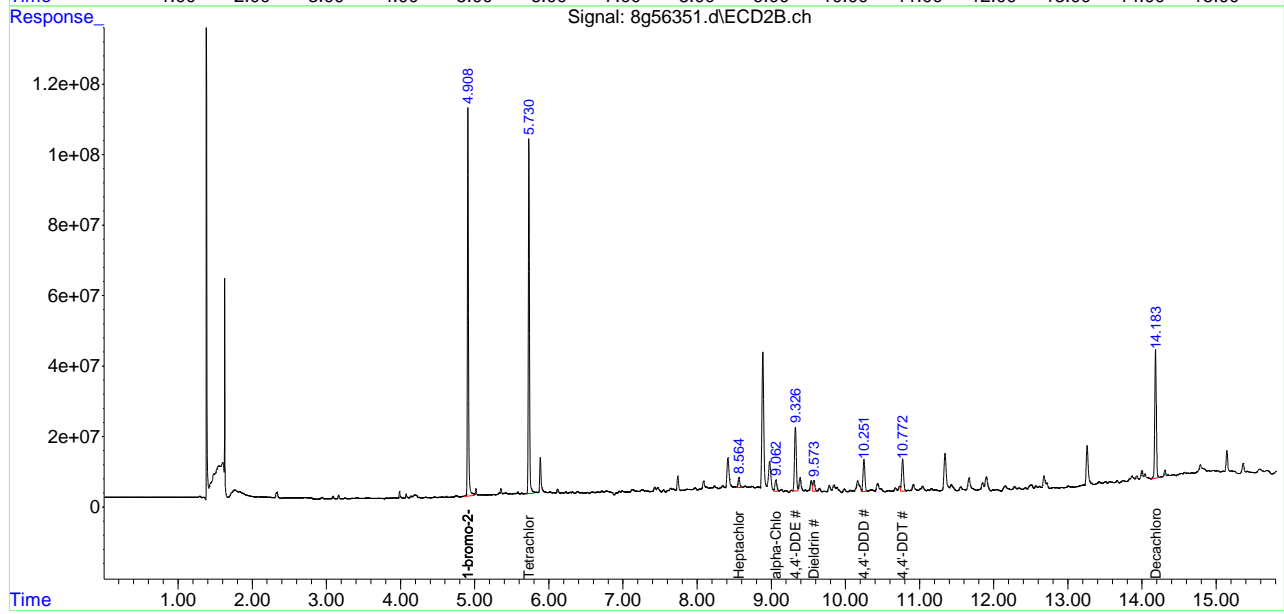
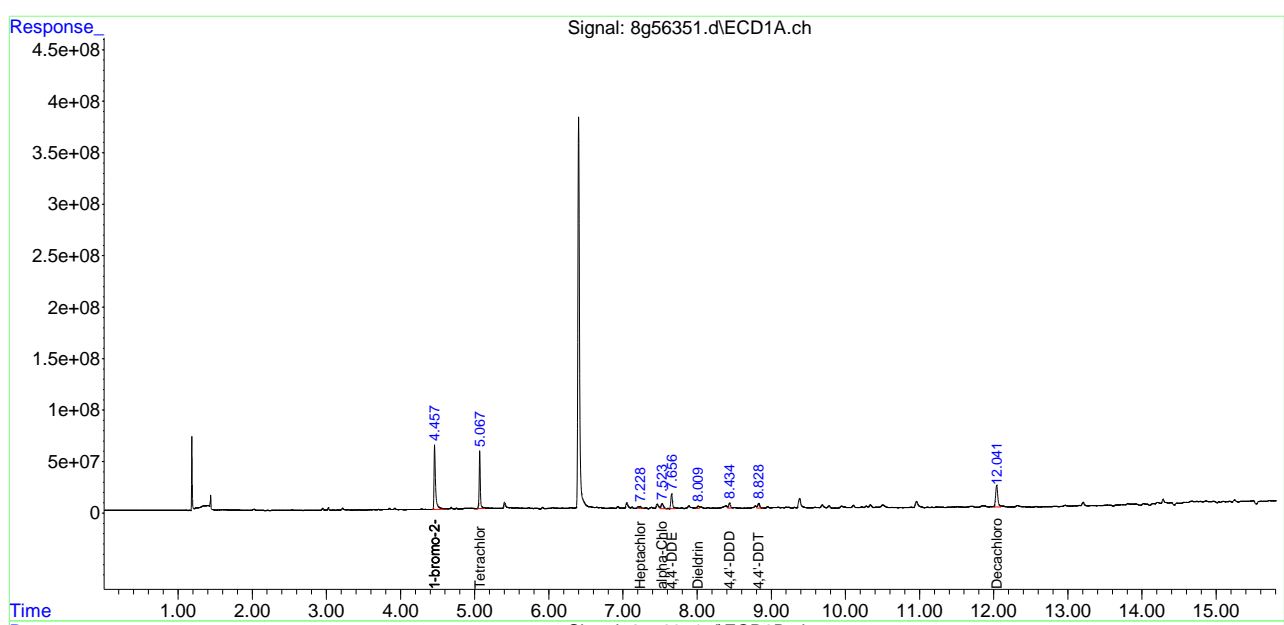
9.14  
 9

Quantitation Report (QT Reviewed)

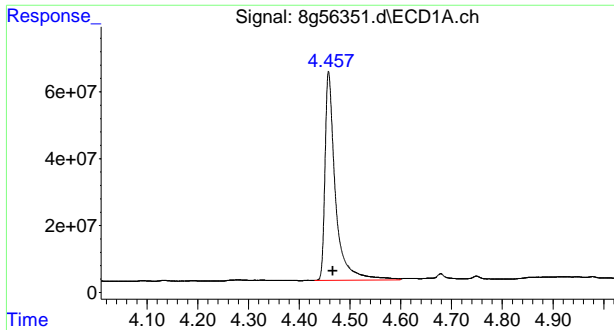
Data Path : C:\msdchem\1\data\G8G2470\  
Data File : 8g56351.d  
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
Acq On : 9 May 2024 6:24 am  
Operator : christp  
Sample : jd87833-1 m  
Misc : op54452,g8g2470,5.3,,,10,1  
ALS Vial : 75 Sample Multiplier: 1

Integration File signal 1: autoint1.e  
Integration File signal 2: autoint2.e  
Quant Time: May 09 10:31:18 2024  
Quant Method : C:\msdchem\1\data\nazaryne\G8G2470\8PSTLVI2430a.M  
Quant Title : PEST/PCB  
QLast Update : Thu May 09 12:16:42 2024  
Response via : Initial Calibration  
Integrator: ChemStation

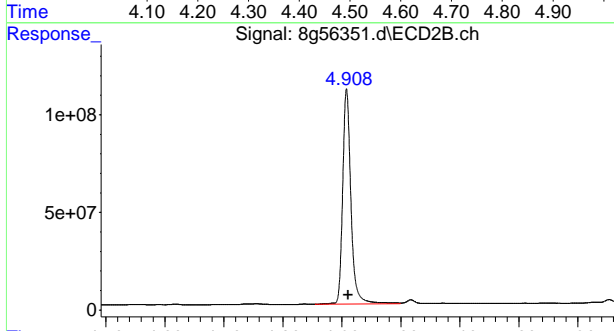
Volume Inj. : 1ul/column  
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



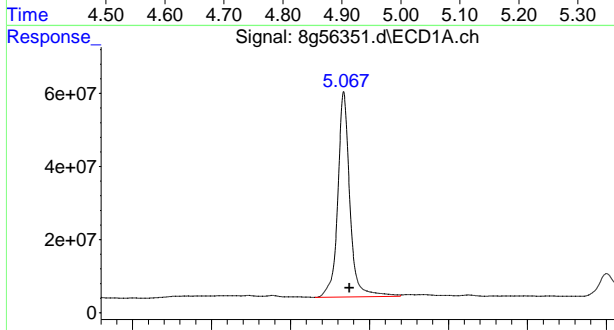
9.14  
9



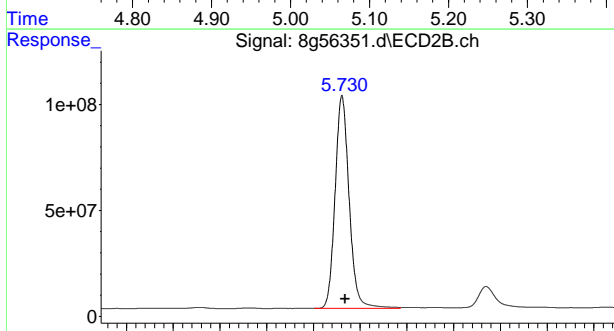
#1 1-bromo-2-nitrobenzene  
 R.T.: 4.458 min  
 Delta R.T.: -0.008 min  
 Response: 892443921  
 Conc: 5.00 PPB



#1 1-bromo-2-nitrobenzene  
 R.T.: 4.908 min  
 Delta R.T.: -0.002 min  
 Response: 1071450736  
 Conc: 5.00 PPB

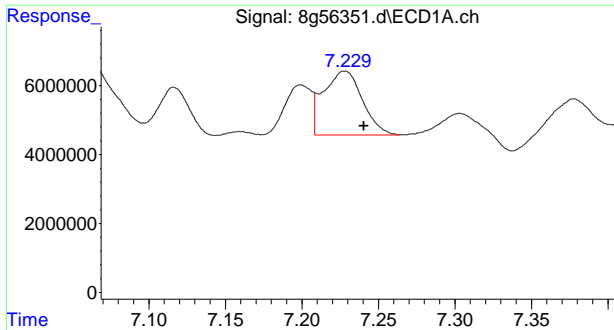


#2 Tetrachloro-m-xylene  
 R.T.: 5.067 min  
 Delta R.T.: -0.007 min  
 Response: 598287440  
 Conc: 3.22 PPB

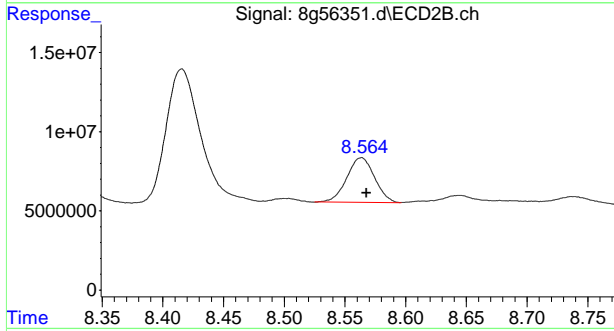


#2 Tetrachloro-m-xylene  
 R.T.: 5.730 min  
 Delta R.T.: -0.003 min  
 Response: 1050340072  
 Conc: 3.33 PPB m

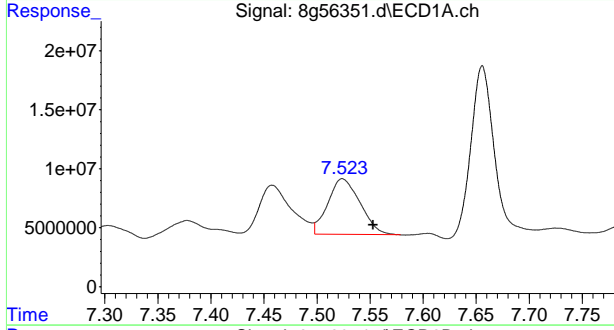
9.1.4  
**9**



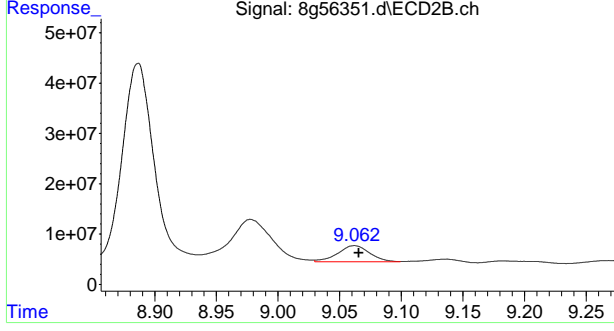
#11 Heptachlor Epoxide  
 R.T.: 7.229 min  
 Delta R.T.: -0.012 min  
 Response: 32595014  
 Conc: 0.16 PPB m



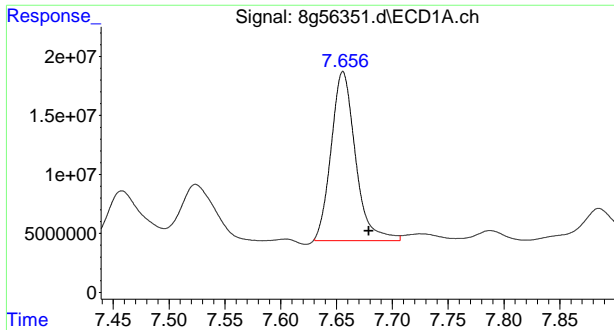
#11 Heptachlor Epoxide  
 R.T.: 8.564 min  
 Delta R.T.: -0.004 min  
 Response: 44917929  
 Conc: 0.13 PPB m



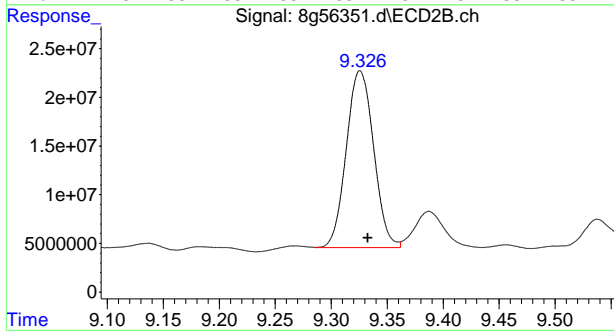
#13 alpha-Chlordane  
 R.T.: 7.523 min  
 Delta R.T.: -0.030 min  
 Response: 99077151  
 Conc: 0.45 PPB m



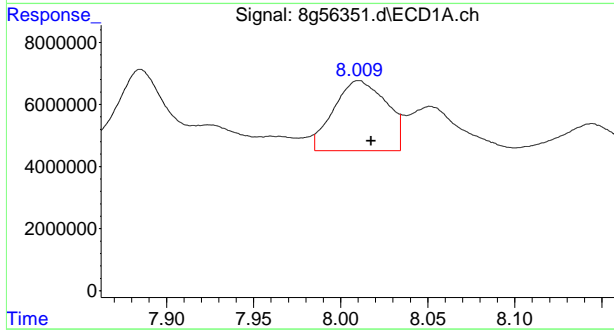
#13 alpha-Chlordane  
 R.T.: 9.062 min  
 Delta R.T.: -0.004 min  
 Response: 57330931  
 Conc: 0.18 PPB m



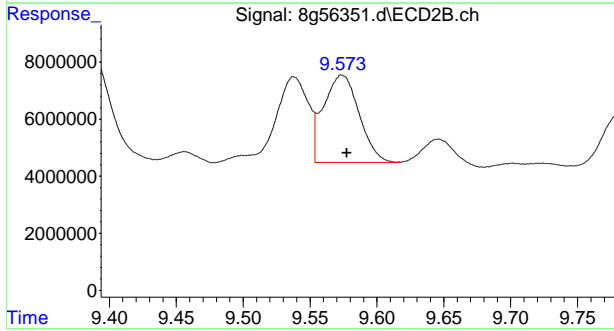
#15 4,4'-DDE  
 R.T.: 7.656 min  
 Delta R.T.: -0.023 min  
 Response: 217377688  
 Conc: 1.03 PPB m



#15 4,4'-DDE  
 R.T.: 9.326 min  
 Delta R.T.: -0.006 min  
 Response: 308678860  
 Conc: 0.95 PPB m

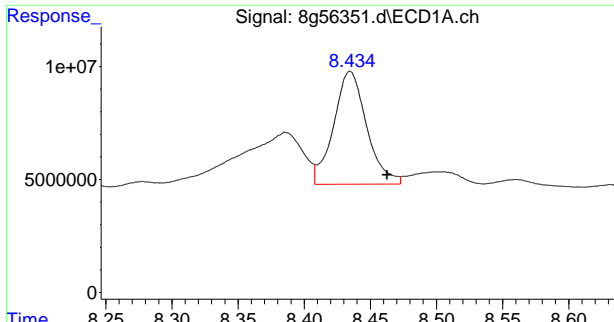


#16 Dieldrin  
 R.T.: 8.009 min  
 Delta R.T.: -0.008 min  
 Response: 47338321  
 Conc: 0.21 PPB m

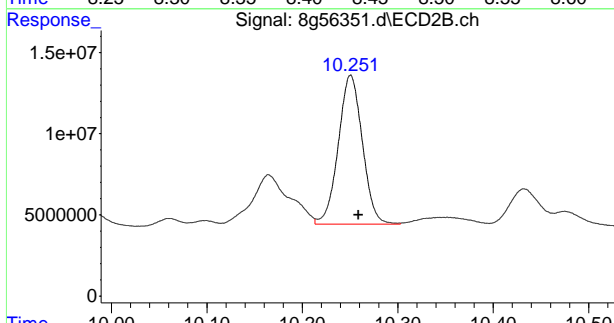


#16 Dieldrin  
 R.T.: 9.573 min  
 Delta R.T.: -0.005 min  
 Response: 56538086  
 Conc: 0.16 PPB m

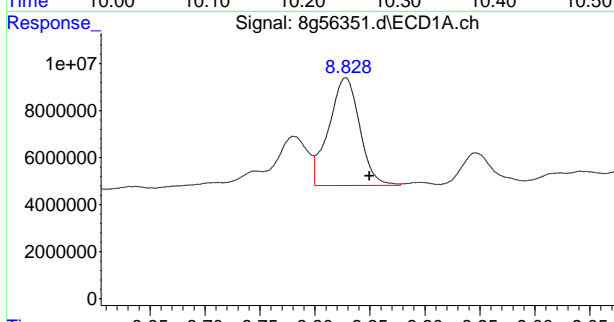
9.1.4  
**9**



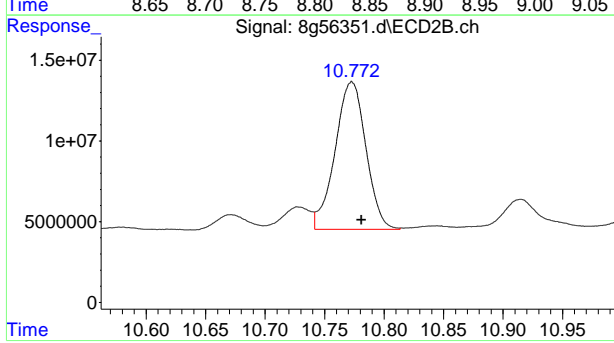
#18 4,4'-DDD  
 R.T.: 8.434 min  
 Delta R.T.: -0.028 min  
 Response: 86804397  
 Conc: 0.56 PPB m



#18 4,4'-DDD  
 R.T.: 10.251 min  
 Delta R.T.: -0.008 min  
 Response: 160796740  
 Conc: 0.59 PPB m

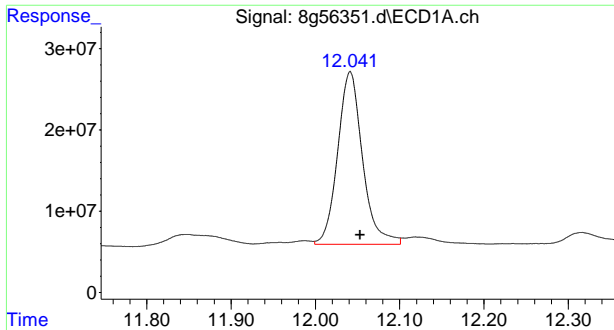


#20 4,4'-DDT  
 R.T.: 8.828 min  
 Delta R.T.: -0.021 min  
 Response: 89043309  
 Conc: 0.51 PPB m

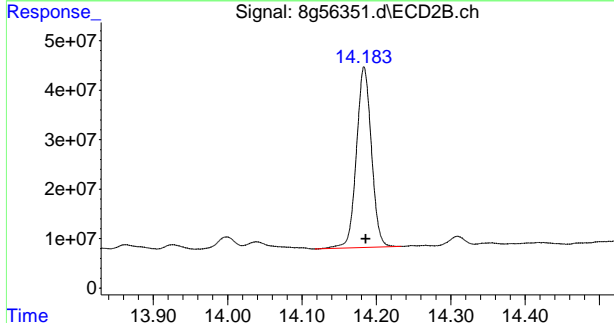


#20 4,4'-DDT  
 R.T.: 10.772 min  
 Delta R.T.: -0.008 min  
 Response: 164956039  
 Conc: 0.84 PPB m

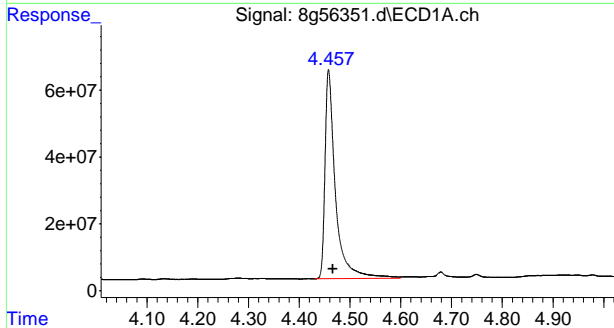
9.1.4  
 9



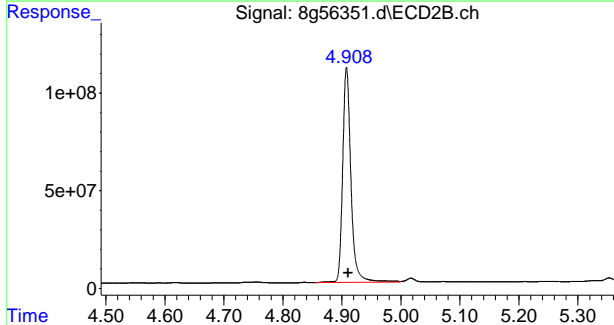
#26 Decachlorobiphenyl  
 R.T.: 12.041 min  
 Delta R.T.: -0.012 min  
 Response: 436196387  
 Conc: 2.17 PPB m



#26 Decachlorobiphenyl  
 R.T.: 14.183 min  
 Delta R.T.: -0.003 min  
 Response: 512457002  
 Conc: 3.43 PPB m

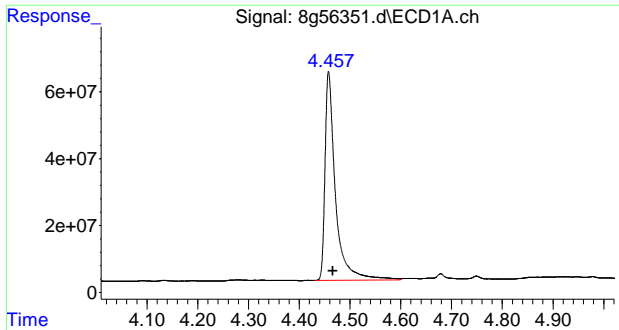


#27 1-bromo-2-nitrobenzeneA  
 R.T.: 4.458 min  
 Delta R.T.: -0.008 min  
 Response: 892443921  
 Conc: 5.00 PPB

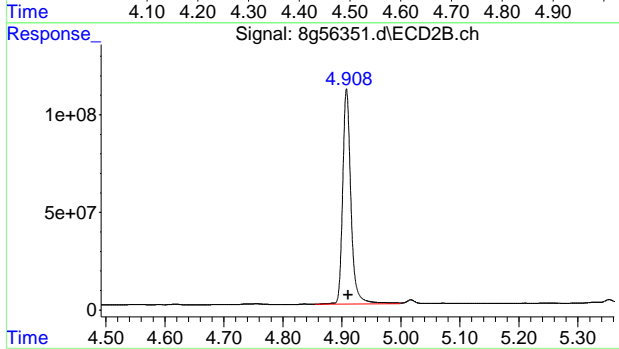


#27 1-bromo-2-nitrobenzeneA  
 R.T.: 4.908 min  
 Delta R.T.: -0.002 min  
 Response: 1071450736  
 Conc: 5.00 PPB

9.1.4  
**9**



#33 1-bromo-2-nitrobenzeneB  
R.T.: 4.458 min  
Delta R.T.: -0.008 min  
Response: 892443921  
Conc: 5.00 PPB



#33 1-bromo-2-nitrobenzeneB  
R.T.: 4.908 min  
Delta R.T.: -0.002 min  
Response: 1071450736  
Conc: 5.00 PPB

9.1.4  
9



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nazaryne\G8G2470\  
 Data File : 8g56352.d  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 9 May 2024 6:46 am  
 Operator : christp  
 Sample : jd87833-3 m  
 Misc : op54452,g8g2470,5.4,,,10,1  
 ALS Vial : 76 Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 15:35:57 2024  
 Quant Method : C:\msdchem\1\data\nazaryne\G8G2470\8PSTLVI2430a.M  
 Quant Title : PEST/PCB  
 QLast Update : Thu May 09 12:16:42 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1ul/column  
 Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
 Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
-----						
Internal Standards						
1) I 1-bromo-2...	4.457	4.908	613.2E6	901.2E6	5.000	5.000m
27) I 1-bromo-2...	4.457	4.908	613.2E6	901.4E6	5.000	5.000m
33) I 1-bromo-2...	4.457	4.908	613.2E6	901.1E6	5.000	5.000m
System Monitoring Compounds						
2) SAB Tetrachlo...	5.068	5.731	493.6E6	890.0E6	3.863m	3.356m
Spiked Amount	40.000	Range 30 - 150	Recovery =		9.66%#	8.39%#
26) SA Decachlor...	12.042	14.183	305.7E6	639.8E6	2.217m	5.094m#
Spiked Amount	40.000		Recovery =		5.54%	12.74%
Target Compounds						
7) B beta-BHC	5.903	6.896	85678795	9262804	1.028m	0.060m#
11) B Heptachlo...	7.227	8.566	44857830	24182043	0.329m	0.084m#
12) B gamma-Chl...	7.382f	8.844	54239258	69811453	0.337m	0.242m#
13) B alpha-Chl...	7.541	9.061	90046224	125.4E6	0.595m	0.471m
15) B 4,4'-DDE	7.656f	9.324	47094904	59492806	0.325m	0.217m#
16) MA Dieldrin	8.008	9.560f	8647877	41269704	0.055m	0.141m#
18) A 4,4'-DDD	8.433f	10.248	46976681	86368294	0.443m	0.379m
20) MA 4,4'-DDT	8.823f	10.772	115.1E6	90085252	0.957m	0.547m#

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

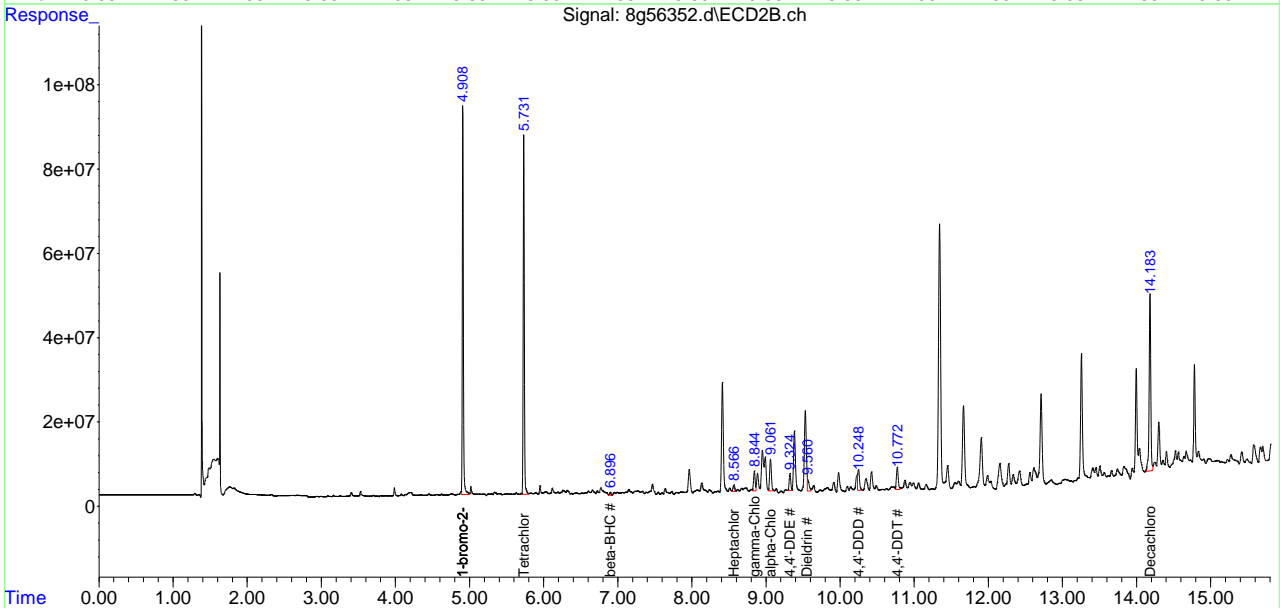
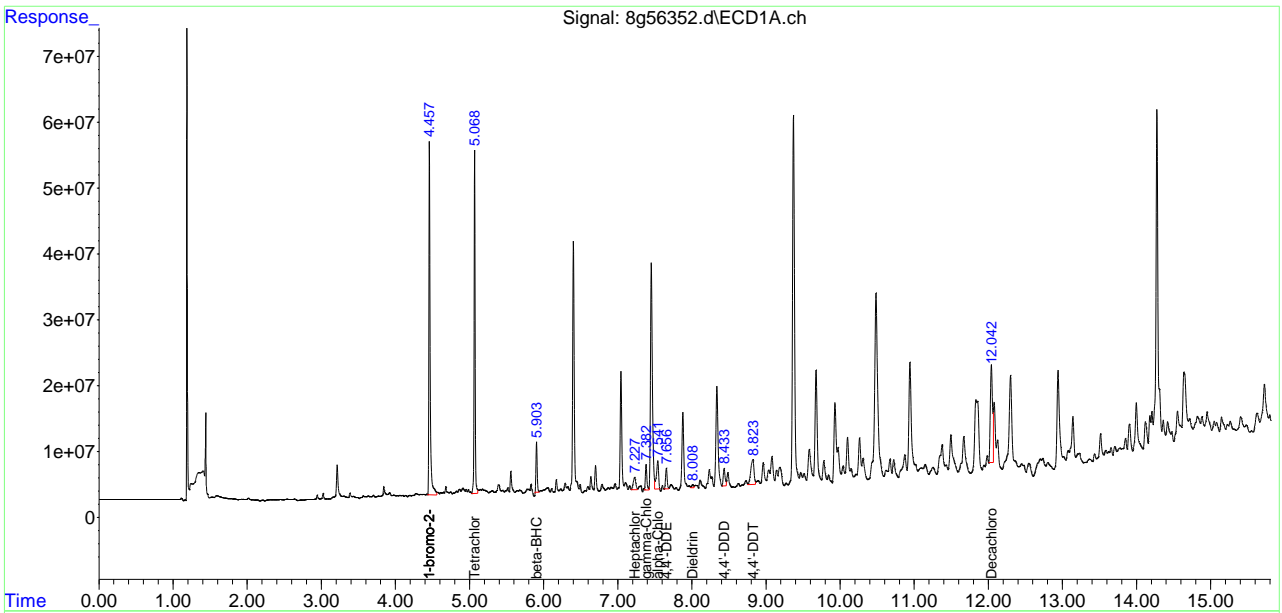
9.15  
**9**

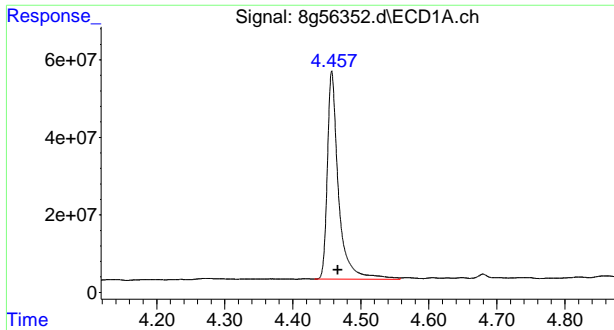
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nazaryne\G8G2470\  
 Data File : 8g56352.d  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 9 May 2024 6:46 am  
 Operator : christp  
 Sample : jd87833-3 m  
 Misc : op54452,g8g2470,5.4,,,10,1  
 ALS Vial : 76 Sample Multiplier: 1

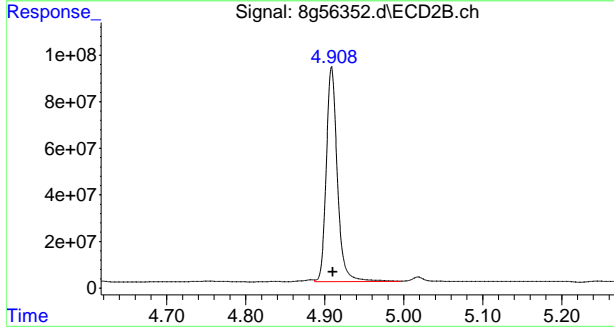
Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 15:35:57 2024  
 Quant Method : C:\msdchem\1\data\nazaryne\G8G2470\8PSTLVI2430a.M  
 Quant Title : PEST/PCB  
 QLast Update : Thu May 09 12:16:42 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1ul/column  
 Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
 Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

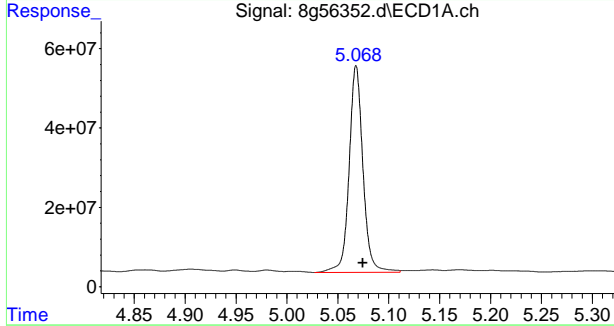




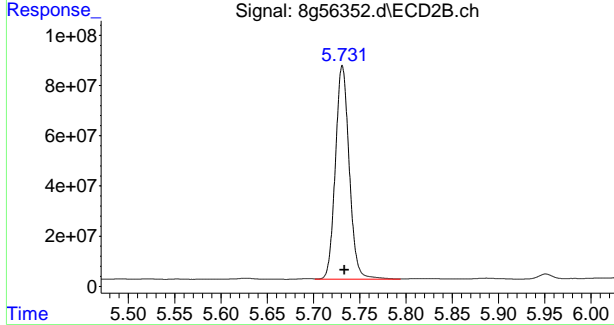
#1 1-bromo-2-nitrobenzene  
 R.T.: 4.457 min  
 Delta R.T.: -0.009 min  
 Response: 613152319  
 Conc: 5.00 PPB



#1 1-bromo-2-nitrobenzene  
 R.T.: 4.908 min  
 Delta R.T.: -0.002 min  
 Response: 901151787  
 Conc: 5.00 PPB m

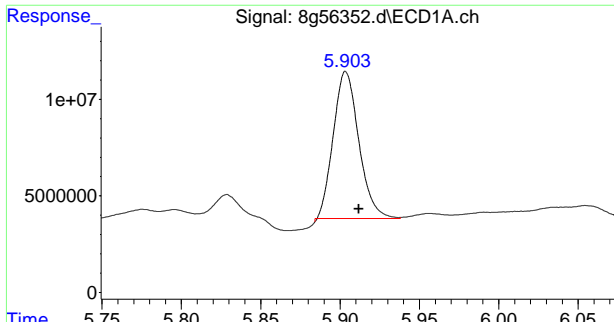


#2 Tetrachloro-m-xylene  
 R.T.: 5.068 min  
 Delta R.T.: -0.007 min  
 Response: 493639850  
 Conc: 3.86 PPB m

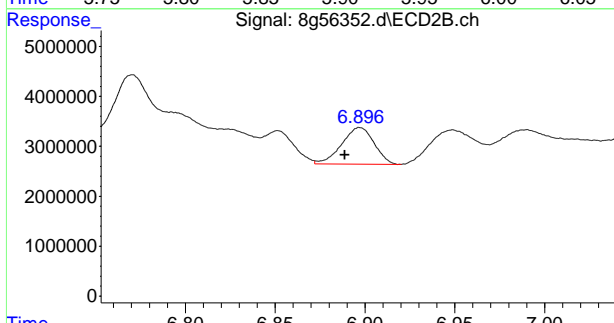


#2 Tetrachloro-m-xylene  
 R.T.: 5.731 min  
 Delta R.T.: -0.003 min  
 Response: 890028561  
 Conc: 3.36 PPB m

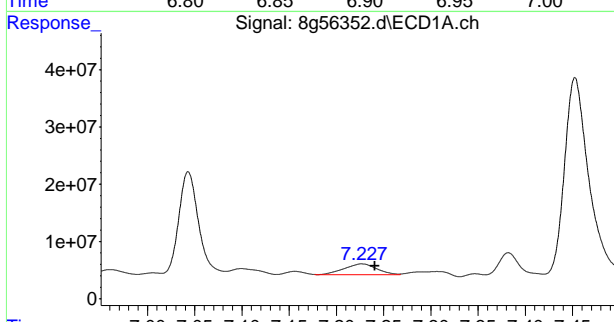
9.15  
**9**



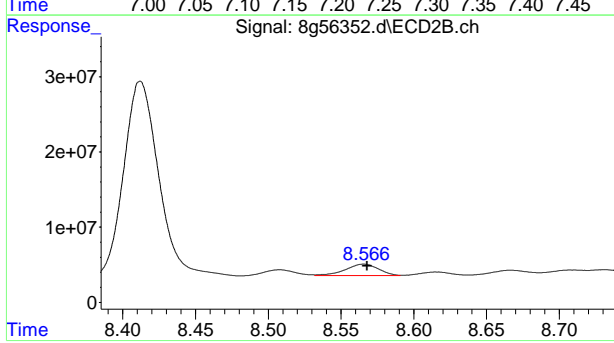
#7 beta-BHC  
 R.T.: 5.903 min  
 Delta R.T.: -0.009 min  
 Response: 85678795  
 Conc: 1.03 PPB m



#7 beta-BHC  
 R.T.: 6.896 min  
 Delta R.T.: 0.007 min  
 Response: 9262804  
 Conc: 0.06 PPB m



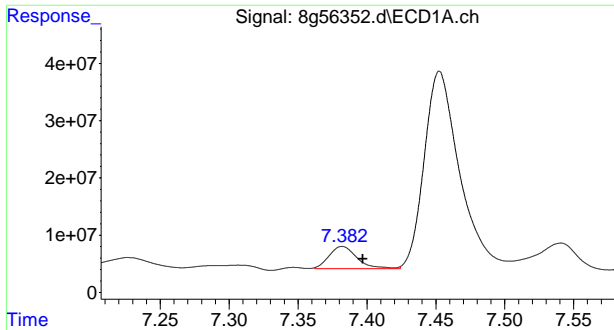
#11 Heptachlor Epoxide  
 R.T.: 7.227 min  
 Delta R.T.: -0.014 min  
 Response: 44857830  
 Conc: 0.33 PPB m



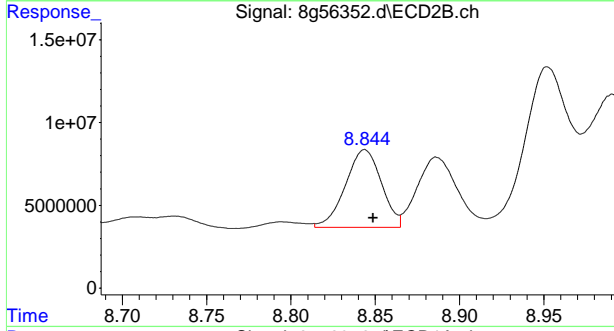
#11 Heptachlor Epoxide  
 R.T.: 8.566 min  
 Delta R.T.: -0.002 min  
 Response: 24182043  
 Conc: 0.08 PPB m

9.1.5  
**9**

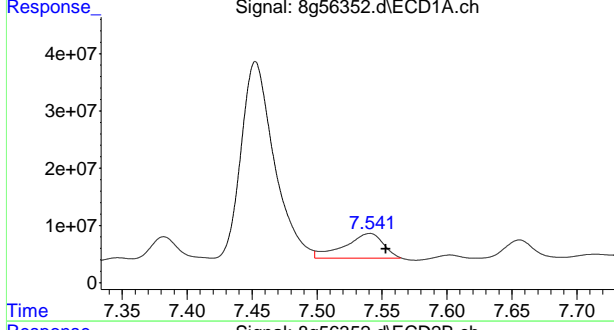




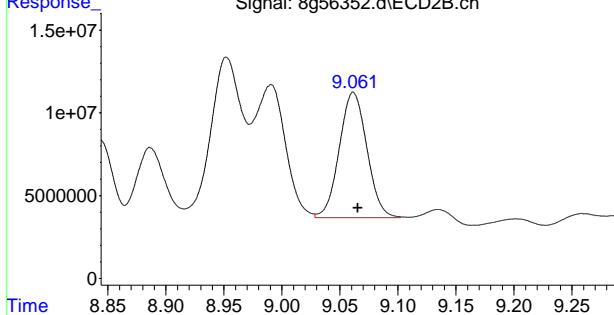
#12 gamma-Chlordane  
 R.T.: 7.382 min  
 Delta R.T.: -0.015 min  
 Response: 54239258  
 Conc: 0.34 PPB m



#12 gamma-Chlordane  
 R.T.: 8.844 min  
 Delta R.T.: -0.005 min  
 Response: 69811453  
 Conc: 0.24 PPB m

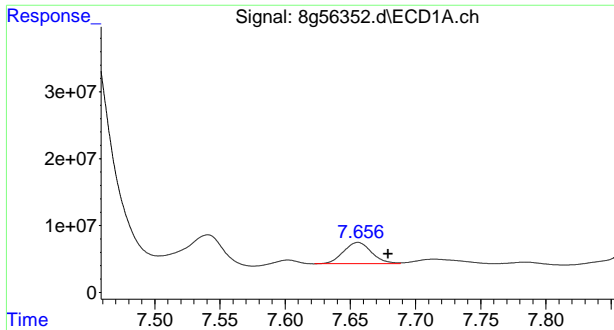


#13 alpha-Chlordane  
 R.T.: 7.541 min  
 Delta R.T.: -0.012 min  
 Response: 90046224  
 Conc: 0.59 PPB m

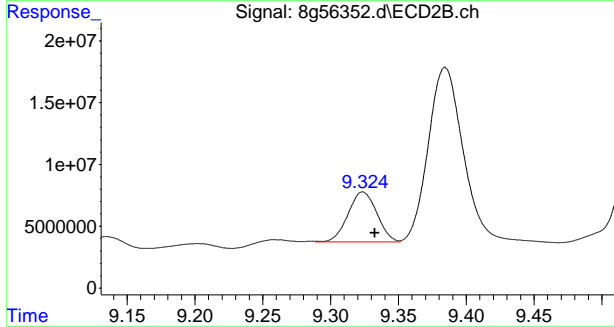


#13 alpha-Chlordane  
 R.T.: 9.061 min  
 Delta R.T.: -0.005 min  
 Response: 125358894  
 Conc: 0.47 PPB m

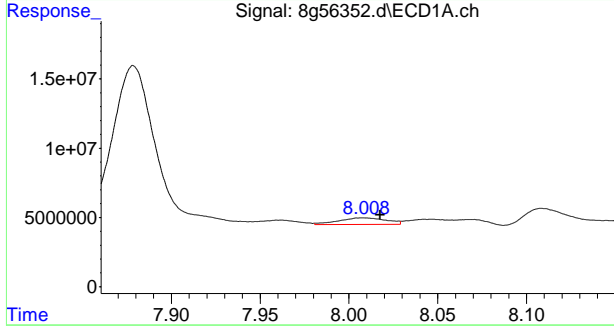
9.15  
**9**



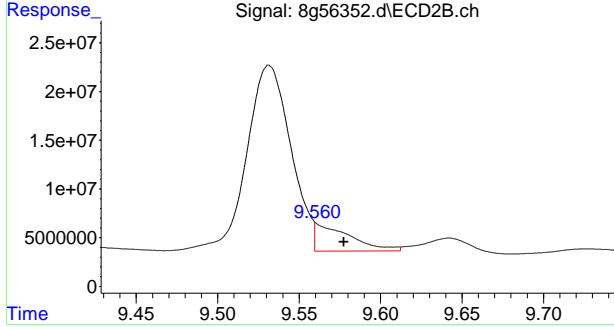
#15 4,4'-DDE  
 R.T.: 7.656 min  
 Delta R.T.: -0.023 min  
 Response: 47094904  
 Conc: 0.32 PPB m



#15 4,4'-DDE  
 R.T.: 9.324 min  
 Delta R.T.: -0.009 min  
 Response: 59492806  
 Conc: 0.22 PPB m

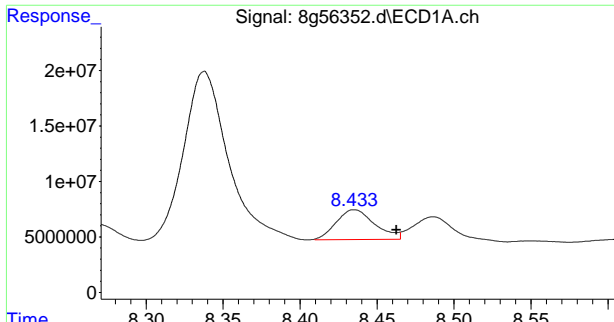


#16 Dieldrin  
 R.T.: 8.008 min  
 Delta R.T.: -0.009 min  
 Response: 8647877  
 Conc: 0.06 PPB m

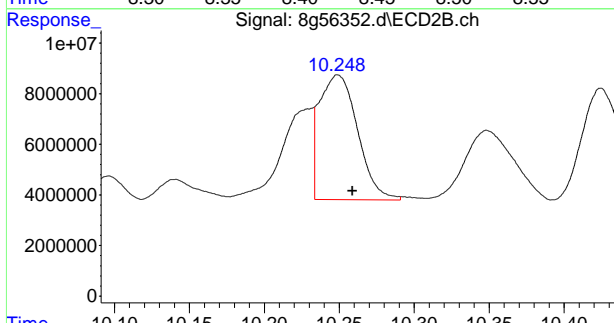


#16 Dieldrin  
 R.T.: 9.560 min  
 Delta R.T.: -0.018 min  
 Response: 41269704  
 Conc: 0.14 PPB m

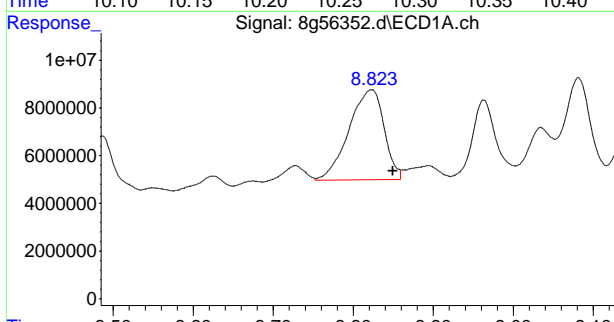
9.15  
**9**



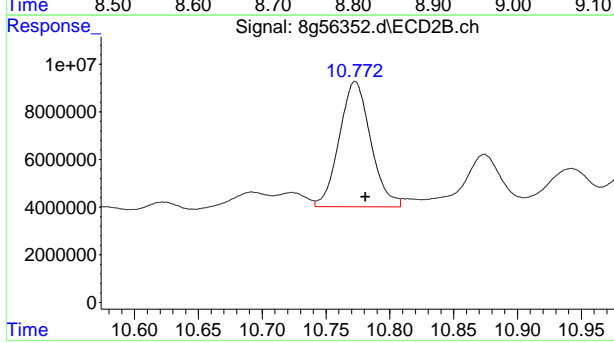
#18 4,4'-DDD  
 R.T.: 8.433 min  
 Delta R.T.: -0.029 min  
 Response: 46976681  
 Conc: 0.44 PPB m



#18 4,4'-DDD  
 R.T.: 10.248 min  
 Delta R.T.: -0.010 min  
 Response: 86368294  
 Conc: 0.38 PPB m

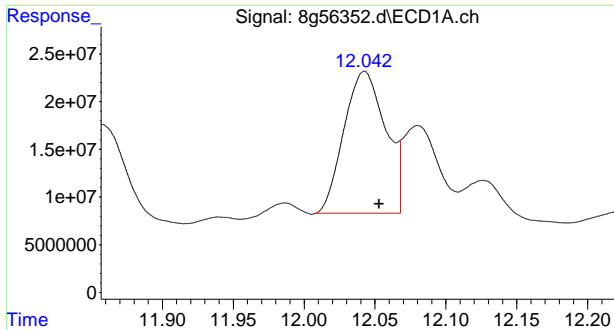


#20 4,4'-DDT  
 R.T.: 8.823 min  
 Delta R.T.: -0.027 min  
 Response: 115135631  
 Conc: 0.96 PPB m

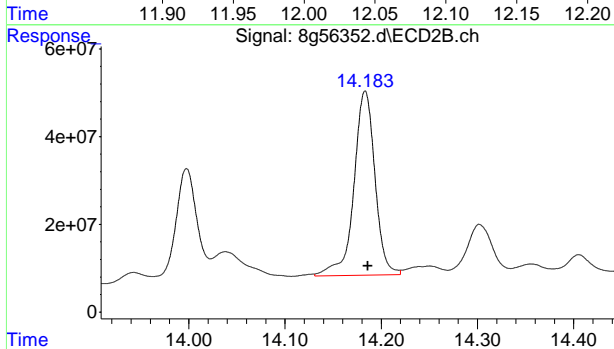


#20 4,4'-DDT  
 R.T.: 10.772 min  
 Delta R.T.: -0.009 min  
 Response: 90085252  
 Conc: 0.55 PPB m

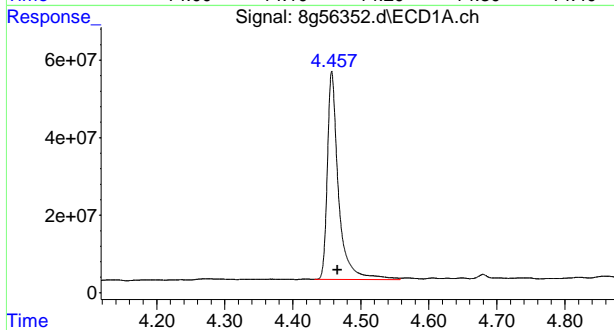
9.15  
**9**



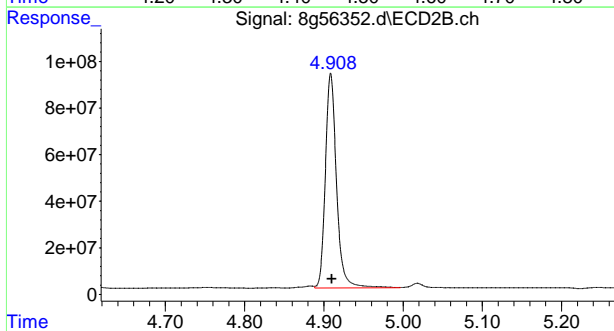
#26 Decachlorobiphenyl  
 R.T.: 12.042 min  
 Delta R.T.: -0.011 min  
 Response: 305655989  
 Conc: 2.22 PPB m



#26 Decachlorobiphenyl  
 R.T.: 14.183 min  
 Delta R.T.: -0.002 min  
 Response: 639818521  
 Conc: 5.09 PPB m



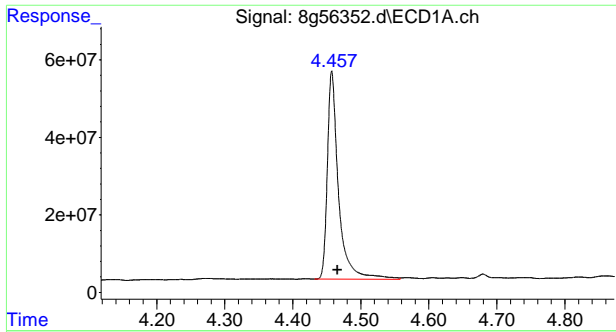
#27 1-bromo-2-nitrobenzeneA  
 R.T.: 4.457 min  
 Delta R.T.: -0.008 min  
 Response: 613152319  
 Conc: 5.00 PPB



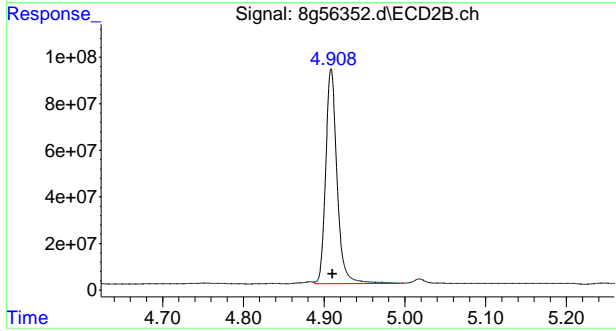
#27 1-bromo-2-nitrobenzeneA  
 R.T.: 4.908 min  
 Delta R.T.: -0.002 min  
 Response: 901434411  
 Conc: 5.00 PPB m

9.15  
**9**





#33 1-bromo-2-nitrobenzeneB  
R.T.: 4.457 min  
Delta R.T.: -0.008 min  
Response: 613152319  
Conc: 5.00 PPB



#33 1-bromo-2-nitrobenzeneB  
R.T.: 4.908 min  
Delta R.T.: -0.002 min  
Response: 901104499  
Conc: 5.00 PPB m

9.1.5  
9

## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nazaryne\G8G2470\  
 Data File : 8g56353.d  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 9 May 2024 7:08 am  
 Operator : christp  
 Sample : jd87833-4 m  
 Misc : op54452,g8g2470,5.4,,,10,1  
 ALS Vial : 77 Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 14:46:34 2024  
 Quant Method : C:\msdchem\1\data\nazaryne\G8G2470\8PSTLVI2430a.M  
 Quant Title : PEST/PCB  
 QLast Update : Thu May 09 12:16:42 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1ul/column  
 Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
 Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
-----						
Internal Standards						
1) I 1-bromo-2...	4.460	4.912	792.3E6	1026.0E6	5.000	5.000
27) I 1-bromo-2...	4.460	4.912	792.3E6	1026.0E6	5.000	5.000
33) I 1-bromo-2...	4.460	4.912	792.3E6	1026.0E6	5.000	5.000
System Monitoring Compounds						
2) SAB Tetrachlo...	5.072	5.736	493.9E6	909.2E6	2.991m	3.011
Spiked Amount	40.000	Range 30 - 150	Recovery =		7.48%#	7.53%#
26) SA Decachlor...	12.044	14.183	316.4E6	642.0E6	1.776m	4.490m#
Spiked Amount	40.000		Recovery =		4.44%	11.23%
Target Compounds						
7) B beta-BHC	5.909	6.903	100.2E6	11941228	0.930	0.068 #
11) B Heptachlo...	7.231	8.569	37451643	36566488	0.213m	0.112m#
12) B gamma-Chl...	7.386	8.846	55951401	71421441	0.269m	0.217m
13) B alpha-Chl...	7.545	9.066	115.6E6	177.5E6	0.591	0.585
15) B 4,4'-DDE	7.662f	9.326	24295070	20496617	0.130m	0.066m#
16) MA Dieldrin	8.010	9.574	19825702	44169523	0.098m	0.132m#
18) A 4,4'-DDD	8.438f	10.248	39305089	48777871	0.287m	0.188m#
20) MA 4,4'-DDT	8.815f	10.776	74614367	47229218	0.480m	0.252m#

SemiQuant Compounds - Not Calibrated on this Instrument

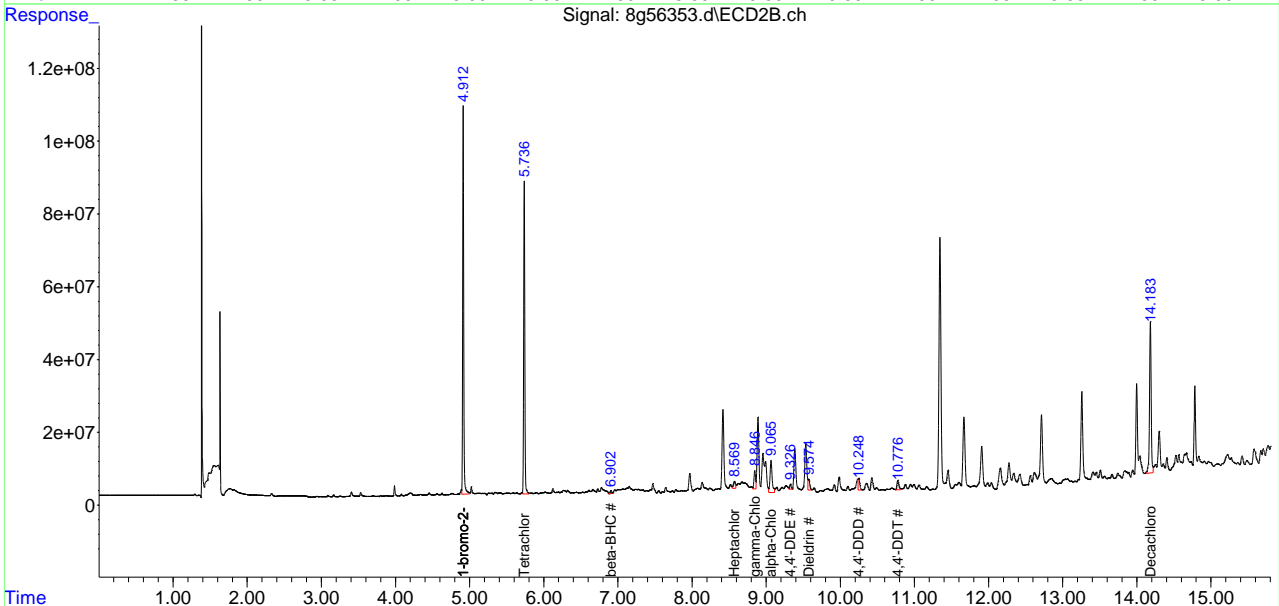
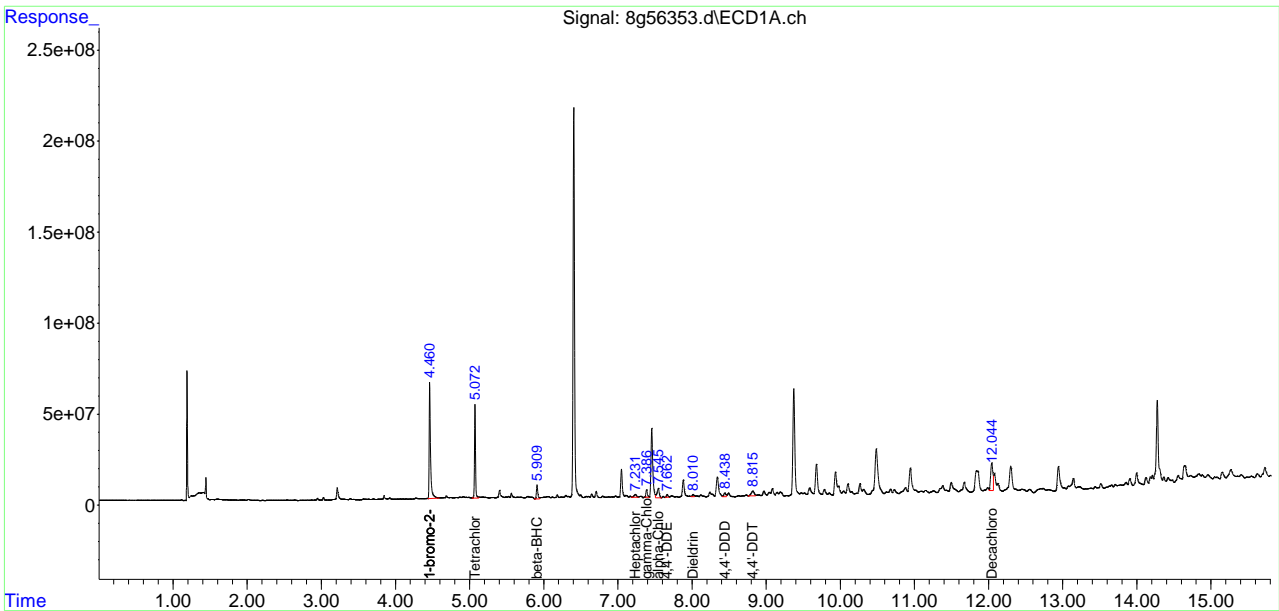
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

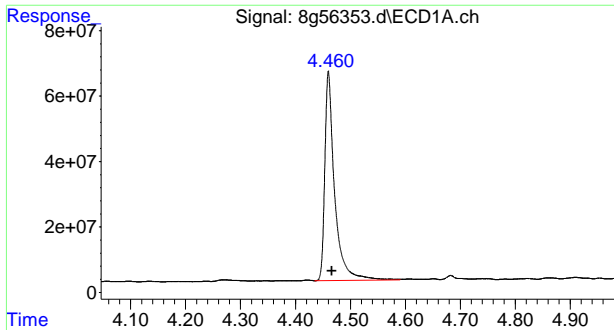
Data Path : C:\msdchem\1\data\nazaryne\G8G2470\  
 Data File : 8g56353.d  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 9 May 2024 7:08 am  
 Operator : christp  
 Sample : jd87833-4 m  
 Misc : op54452,g8g2470,5.4,,,10,1  
 ALS Vial : 77 Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 14:46:34 2024  
 Quant Method : C:\msdchem\1\data\nazaryne\G8G2470\8PSTLVI2430a.M  
 Quant Title : PEST/PCB  
 QLast Update : Thu May 09 12:16:42 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

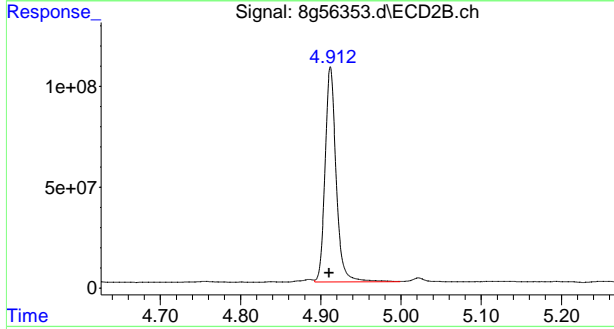
Volume Inj. : 1ul/column  
 Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
 Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



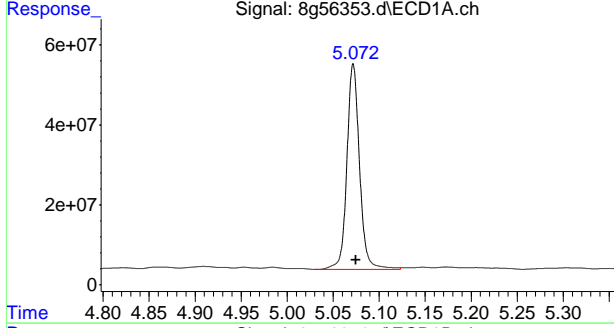
9.16  
6



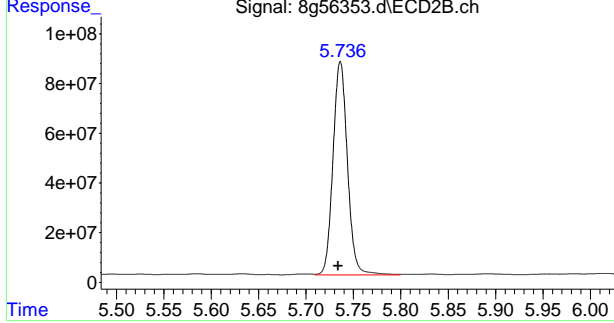
#1 1-bromo-2-nitrobenzene  
 R.T.: 4.460 min  
 Delta R.T.: -0.006 min  
 Response: 792313903  
 Conc: 5.00 PPB



#1 1-bromo-2-nitrobenzene  
 R.T.: 4.912 min  
 Delta R.T.: 0.002 min  
 Response: 1025969781  
 Conc: 5.00 PPB

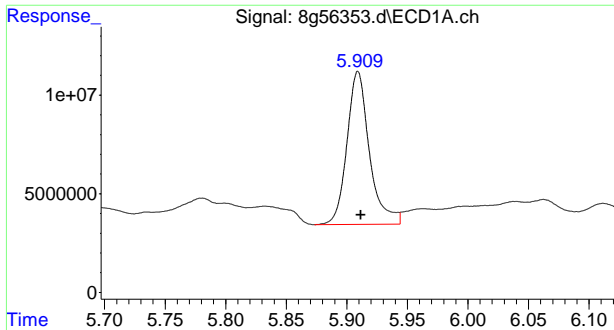


#2 Tetrachloro-m-xylene  
 R.T.: 5.072 min  
 Delta R.T.: -0.003 min  
 Response: 493915296  
 Conc: 2.99 PPB m

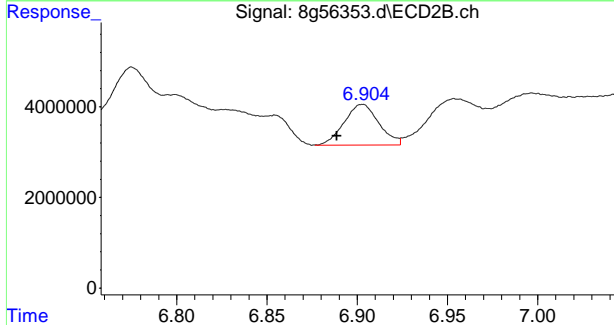


#2 Tetrachloro-m-xylene  
 R.T.: 5.736 min  
 Delta R.T.: 0.003 min  
 Response: 909213050  
 Conc: 3.01 PPB

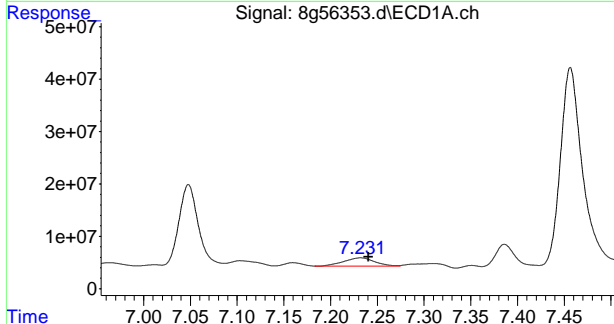
9.1.6  
9



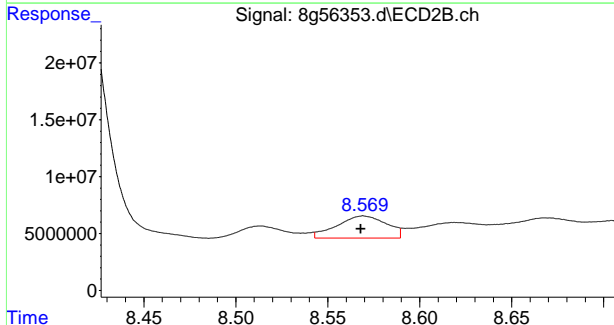
#7 beta-BHC  
 R.T.: 5.909 min  
 Delta R.T.: -0.002 min  
 Response: 100167964  
 Conc: 0.93 PPB



#7 beta-BHC  
 R.T.: 6.903 min  
 Delta R.T.: 0.014 min  
 Response: 11941228  
 Conc: 0.07 PPB

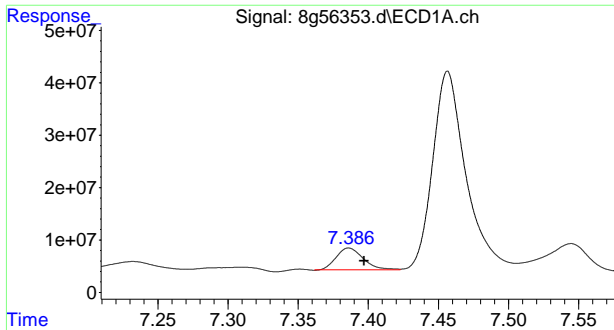


#11 Heptachlor Epoxide  
 R.T.: 7.231 min  
 Delta R.T.: -0.009 min  
 Response: 37451643  
 Conc: 0.21 PPB m

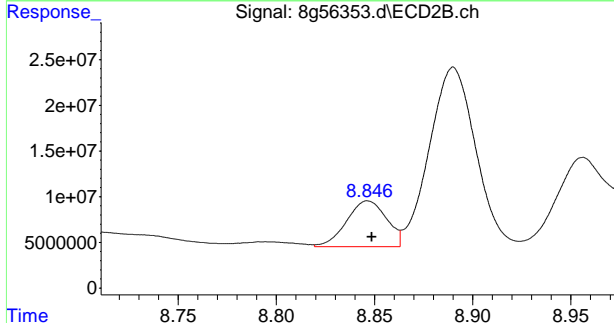


#11 Heptachlor Epoxide  
 R.T.: 8.569 min  
 Delta R.T.: 0.000 min  
 Response: 36566488  
 Conc: 0.11 PPB m

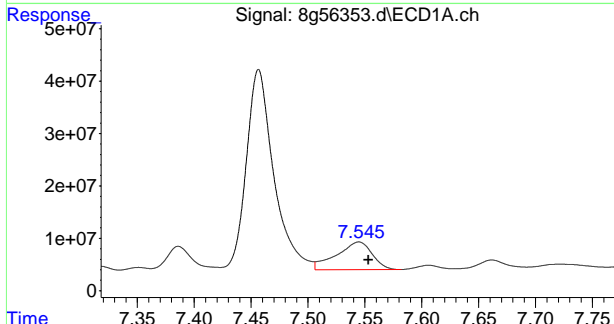
9.1.6  
**9**



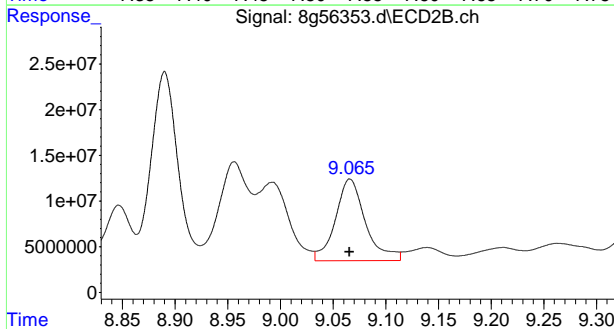
#12 gamma-Chlordane  
 R.T.: 7.386 min  
 Delta R.T.: -0.011 min  
 Response: 55951401  
 Conc: 0.27 PPB m



#12 gamma-Chlordane  
 R.T.: 8.846 min  
 Delta R.T.: -0.003 min  
 Response: 71421441  
 Conc: 0.22 PPB m

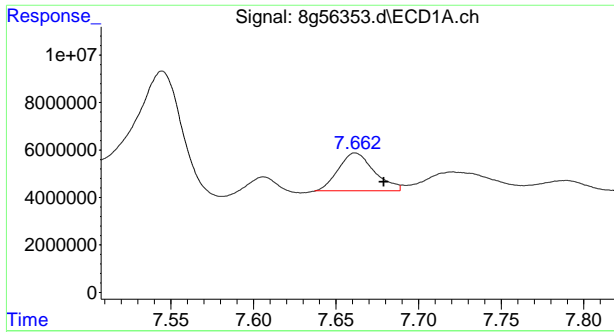


#13 alpha-Chlordane  
 R.T.: 7.545 min  
 Delta R.T.: -0.008 min  
 Response: 115632460  
 Conc: 0.59 PPB

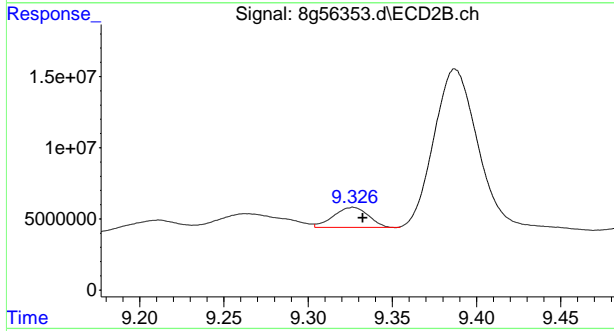


#13 alpha-Chlordane  
 R.T.: 9.066 min  
 Delta R.T.: 0.000 min  
 Response: 177477367  
 Conc: 0.59 PPB

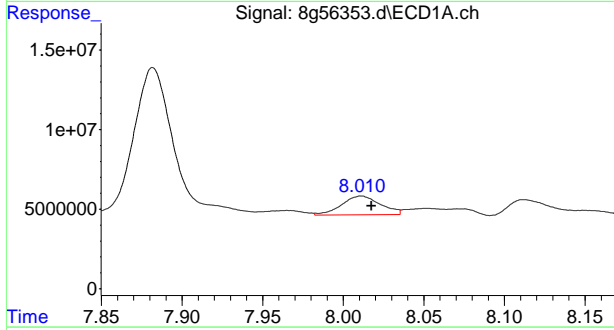
9.1.6  
**9**



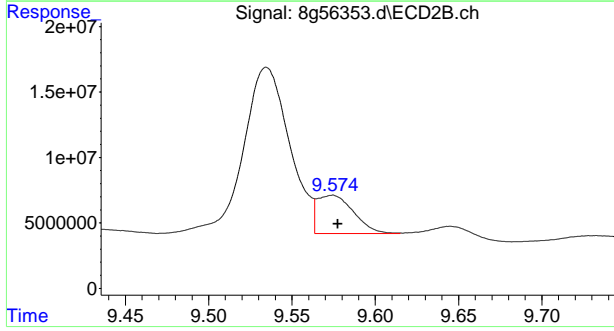
#15 4,4'-DDE  
 R.T.: 7.662 min  
 Delta R.T.: -0.017 min  
 Response: 24295070  
 Conc: 0.13 PPB m



#15 4,4'-DDE  
 R.T.: 9.326 min  
 Delta R.T.: -0.006 min  
 Response: 20496617  
 Conc: 0.07 PPB m

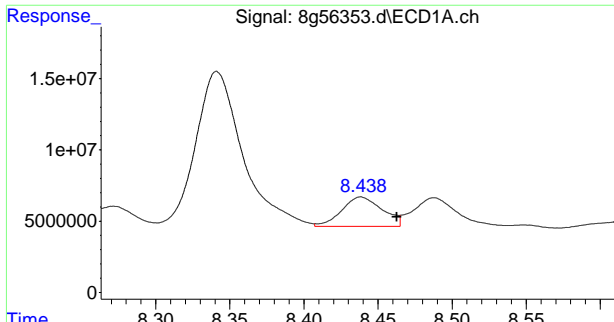


#16 Dieldrin  
 R.T.: 8.010 min  
 Delta R.T.: -0.007 min  
 Response: 19825702  
 Conc: 0.10 PPB m

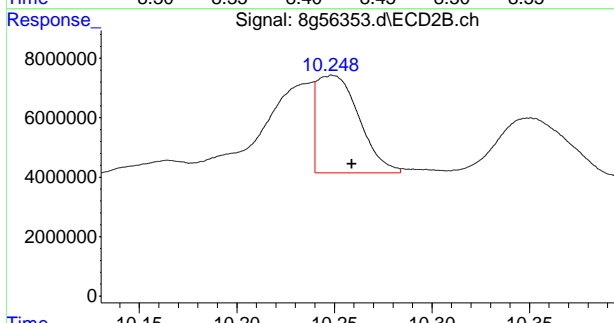


#16 Dieldrin  
 R.T.: 9.574 min  
 Delta R.T.: -0.003 min  
 Response: 44169523  
 Conc: 0.13 PPB m

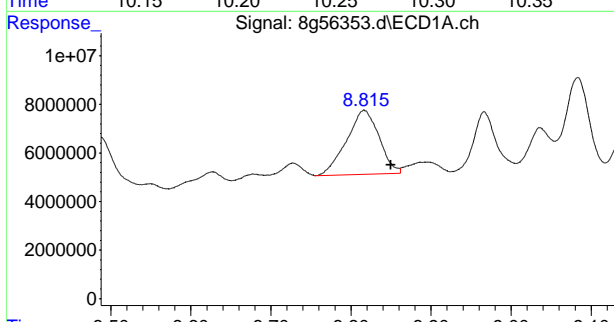
9.1.6  
**9**



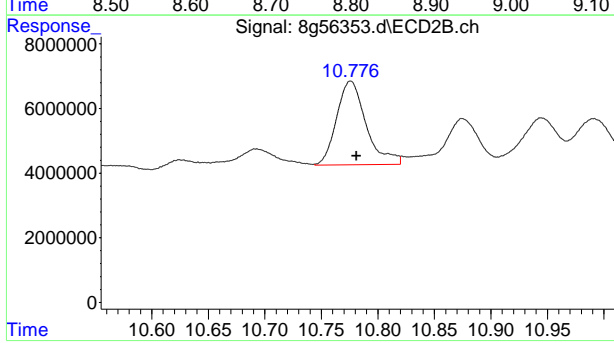
#18 4,4'-DDD  
 R.T.: 8.438 min  
 Delta R.T.: -0.024 min  
 Response: 39305089  
 Conc: 0.29 PPB m



#18 4,4'-DDD  
 R.T.: 10.248 min  
 Delta R.T.: -0.011 min  
 Response: 48777871  
 Conc: 0.19 PPB m



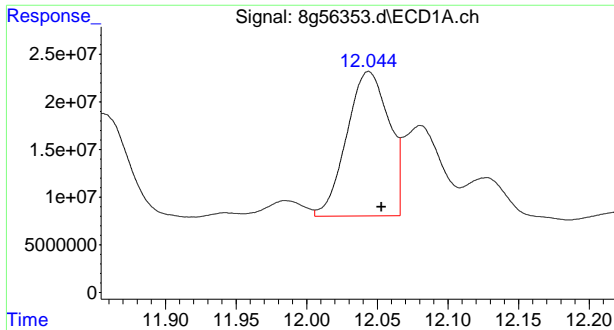
#20 4,4'-DDT  
 R.T.: 8.815 min  
 Delta R.T.: -0.034 min  
 Response: 74614367  
 Conc: 0.48 PPB m



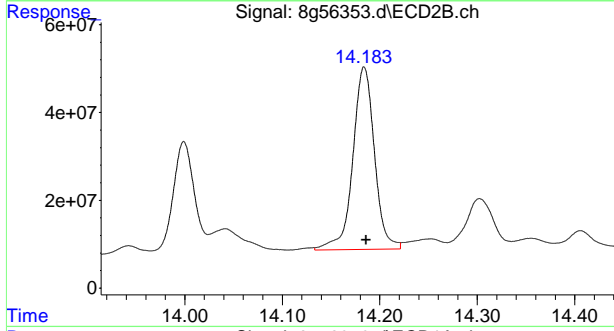
#20 4,4'-DDT  
 R.T.: 10.776 min  
 Delta R.T.: -0.005 min  
 Response: 47229218  
 Conc: 0.25 PPB m

9.1.6  
 9

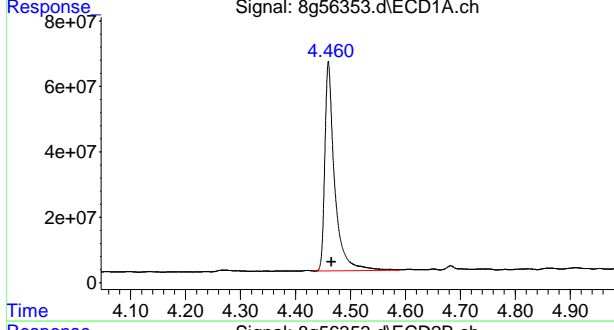




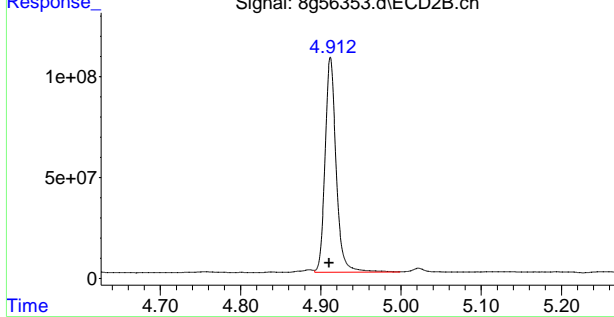
#26 Decachlorobiphenyl  
 R.T.: 12.044 min  
 Delta R.T.: -0.009 min  
 Response: 316433576  
 Conc: 1.78 PPB m



#26 Decachlorobiphenyl  
 R.T.: 14.183 min  
 Delta R.T.: -0.002 min  
 Response: 642030245  
 Conc: 4.49 PPB m

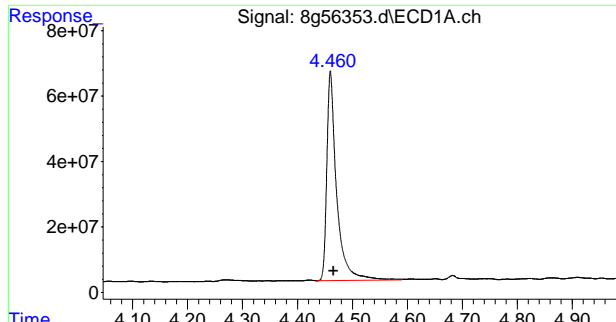


#27 1-bromo-2-nitrobenzeneA  
 R.T.: 4.460 min  
 Delta R.T.: -0.005 min  
 Response: 792313903  
 Conc: 5.00 PPB

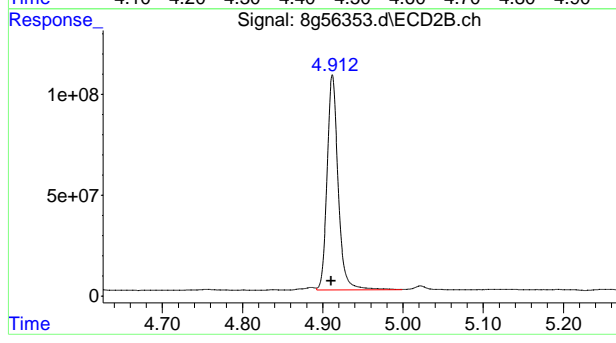


#27 1-bromo-2-nitrobenzeneA  
 R.T.: 4.912 min  
 Delta R.T.: 0.002 min  
 Response: 1025969781  
 Conc: 5.00 PPB

9.1.6  
**9**



#33 1-bromo-2-nitrobenzeneB  
R.T.: 4.460 min  
Delta R.T.: -0.005 min  
Response: 792313903  
Conc: 5.00 PPB



#33 1-bromo-2-nitrobenzeneB  
R.T.: 4.912 min  
Delta R.T.: 0.002 min  
Response: 1025969781  
Conc: 5.00 PPB

9.1.6  
9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\anndg\G8G2471\  
 Data File : 8g56401.d  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 10 May 2024 1:27 am  
 Operator : tilakp  
 Sample : jd87833-5 m  
 Misc : op54452,g8g2471,5.4,,,10,5  
 ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 10 10:06:19 2024  
 Quant Method : C:\msdchem\1\data\anndg\G8G2471\8PSTLVI2430a.M  
 Quant Title : PEST/PCB  
 QLast Update : Fri May 10 08:05:08 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1ul/column  
 Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
 Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
-----						
Internal Standards						
1) I 1-bromo-2...	4.465	4.918	635.8E6	972.7E6	5.000m	5.000
27) I 1-bromo-2...	4.465	4.918	640.5E6	972.7E6	5.000m	5.000
33) I 1-bromo-2...	4.465	4.918	644.3E6	972.7E6	5.000m	5.000
System Monitoring Compounds						
2) SAB Tetrachlo...	5.076	5.740	95661592	193.4E6	0.722	0.676
Spiked Amount	40.000	Range	30 - 150	Recovery	=	1.80%# 1.69%#
26) SA Decachlor...	12.055	14.192	61698492	113.2E6	0.432m	0.835m#
Spiked Amount	40.000		Recovery	=	1.08%	2.09%
Target Compounds						
13) B alpha-Chl...	7.555	9.074	18682122	17423417	0.119m	0.061m#
18) A 4,4'-DDD	8.450f	10.265	11815072	17390306	0.107m	0.071m#
20) MA 4,4'-DDT	8.837f	10.788	16514540	22881894	0.132m	0.129m

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

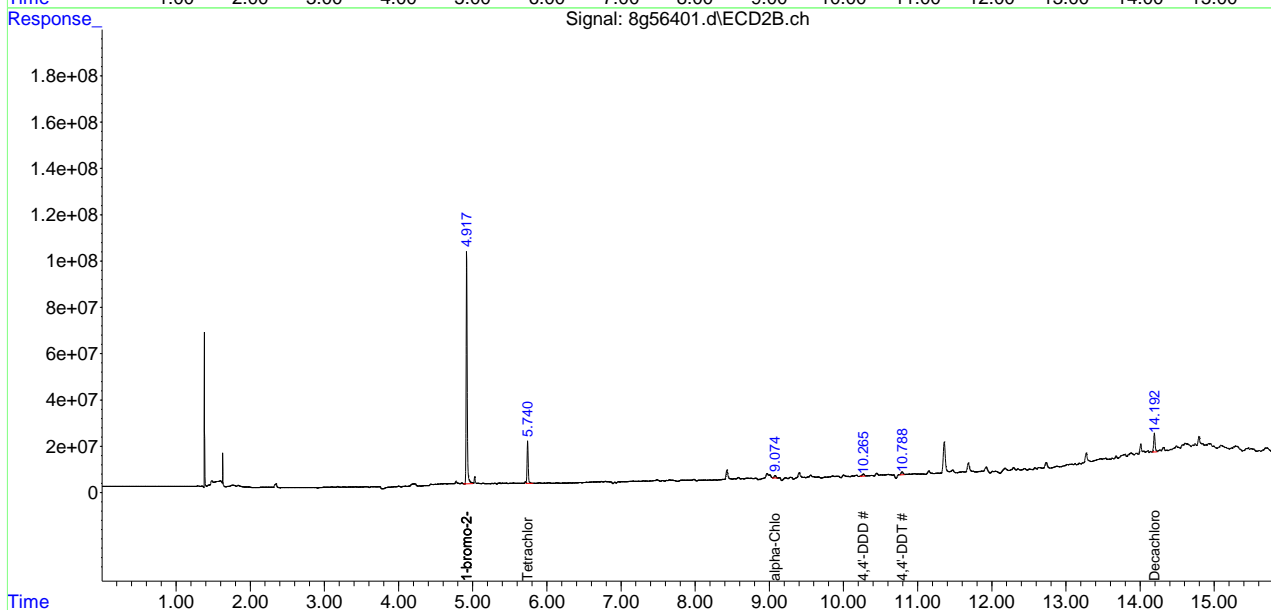
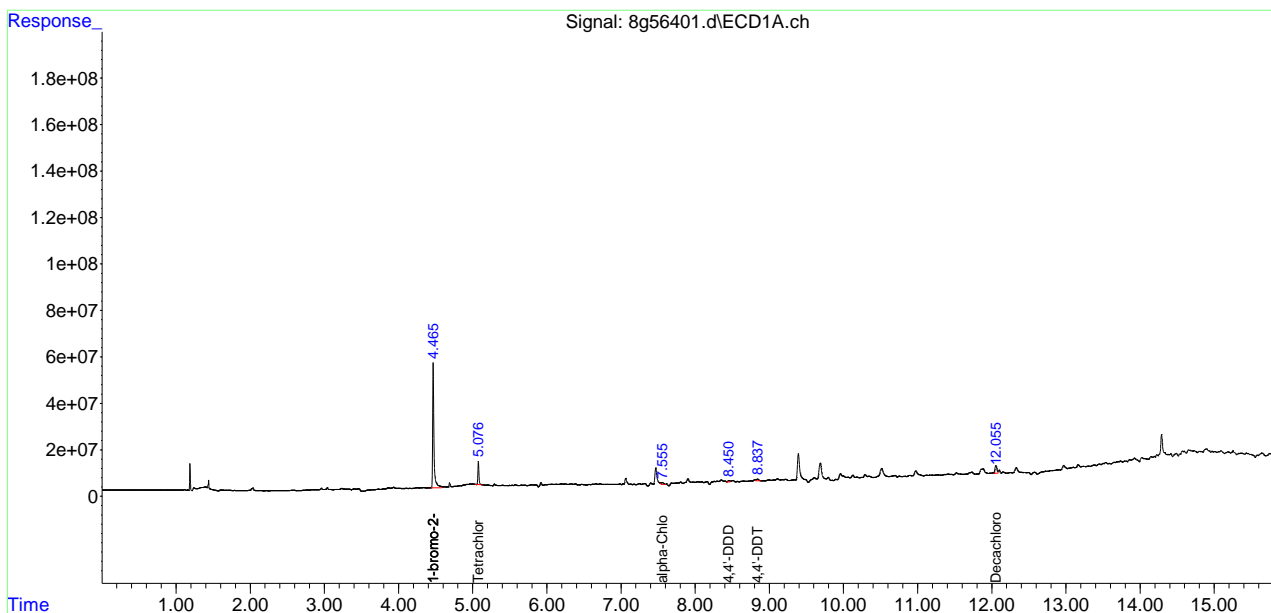
9.17  
**9**

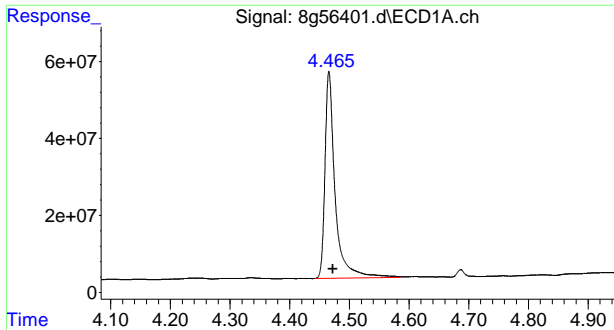
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\anndg\G8G2471\  
 Data File : 8g56401.d  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 10 May 2024 1:27 am  
 Operator : tilakp  
 Sample : jd87833-5 m  
 Misc : op54452,g8g2471,5.4,,,10,5  
 ALS Vial : 22 Sample Multiplier: 1

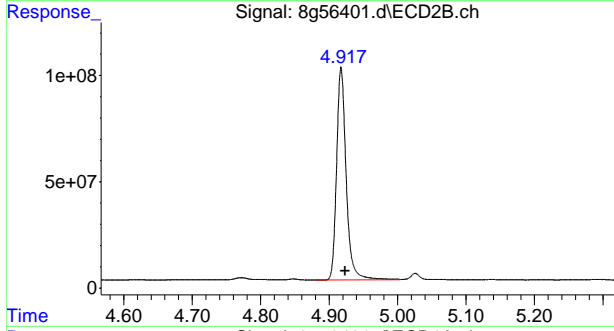
Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 10 10:06:19 2024  
 Quant Method : C:\msdchem\1\data\anndg\G8G2471\8PSTLVI2430a.M  
 Quant Title : PEST/PCB  
 QLast Update : Fri May 10 08:05:08 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1ul/column  
 Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
 Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

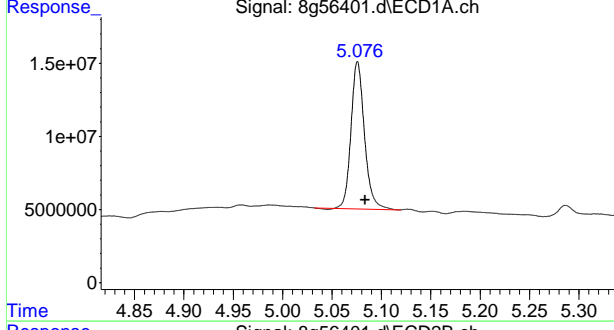




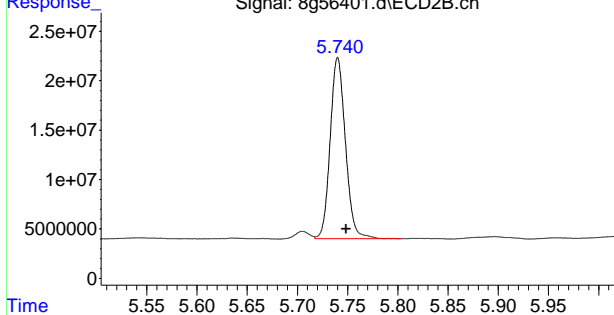
#1 1-bromo-2-nitrobenzene  
 R.T.: 4.465 min  
 Delta R.T.: -0.007 min  
 Response: 635755160  
 Conc: 5.00 PPB m



#1 1-bromo-2-nitrobenzene  
 R.T.: 4.918 min  
 Delta R.T.: -0.005 min  
 Response: 972687823  
 Conc: 5.00 PPB

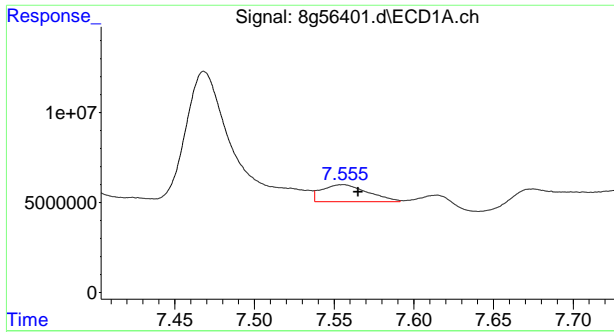


#2 Tetrachloro-m-xylene  
 R.T.: 5.076 min  
 Delta R.T.: -0.008 min  
 Response: 95661592  
 Conc: 0.72 PPB

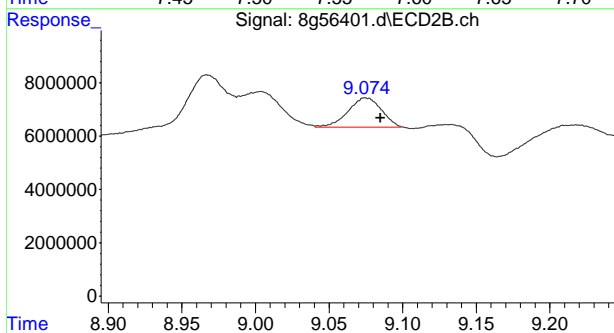


#2 Tetrachloro-m-xylene  
 R.T.: 5.740 min  
 Delta R.T.: -0.008 min  
 Response: 193371860  
 Conc: 0.68 PPB

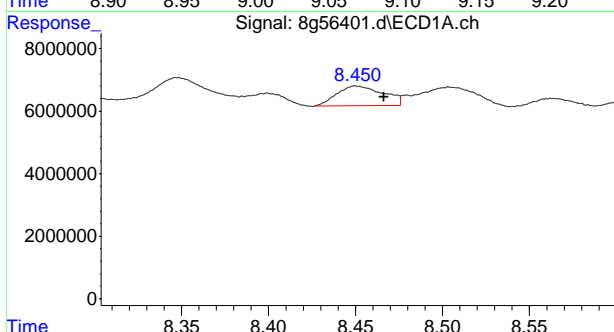
9.1.7  
**9**



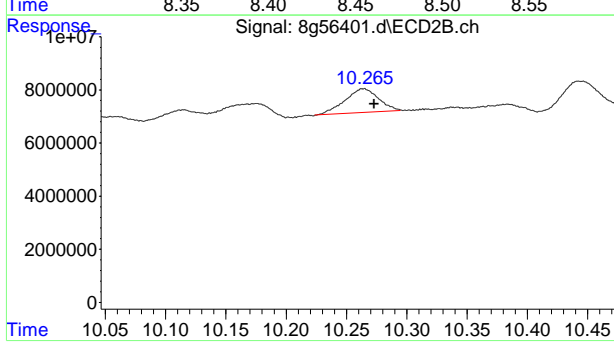
#13 alpha-Chlordane  
 R.T.: 7.555 min  
 Delta R.T.: -0.010 min  
 Response: 18682122  
 Conc: 0.12 PPB m



#13 alpha-Chlordane  
 R.T.: 9.074 min  
 Delta R.T.: -0.011 min  
 Response: 17423417  
 Conc: 0.06 PPB m

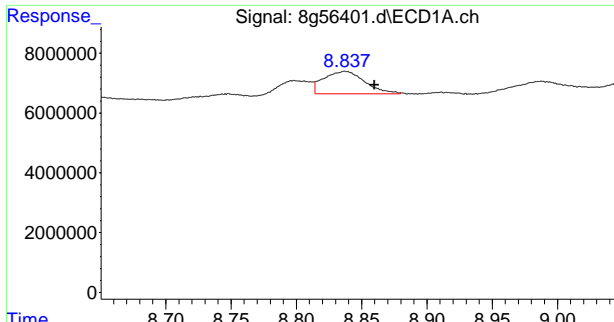


#18 4,4'-DDD  
 R.T.: 8.450 min  
 Delta R.T.: -0.017 min  
 Response: 11815072  
 Conc: 0.11 PPB m

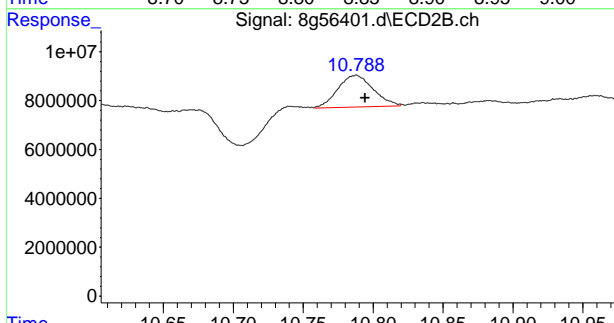


#18 4,4'-DDD  
 R.T.: 10.265 min  
 Delta R.T.: -0.008 min  
 Response: 17390306  
 Conc: 0.07 PPB m

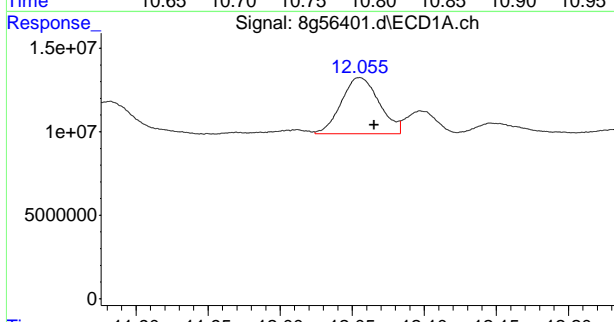
9.1.7  
**9**



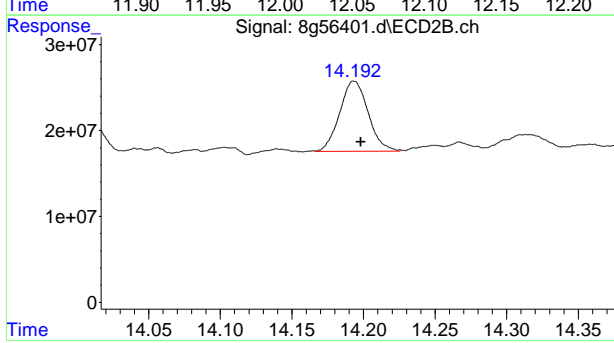
#20 4,4'-DDT  
 R.T.: 8.837 min  
 Delta R.T.: -0.023 min  
 Response: 16514540  
 Conc: 0.13 PPB m



#20 4,4'-DDT  
 R.T.: 10.788 min  
 Delta R.T.: -0.006 min  
 Response: 22881894  
 Conc: 0.13 PPB m

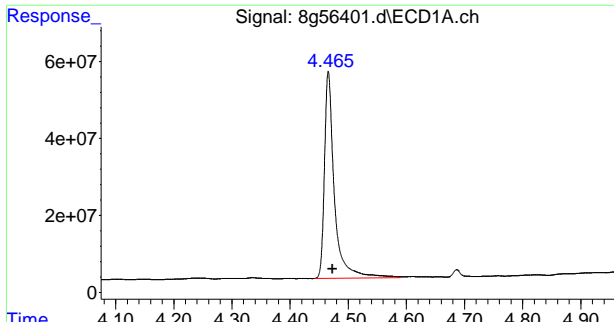


#26 Decachlorobiphenyl  
 R.T.: 12.055 min  
 Delta R.T.: -0.010 min  
 Response: 61698492  
 Conc: 0.43 PPB m

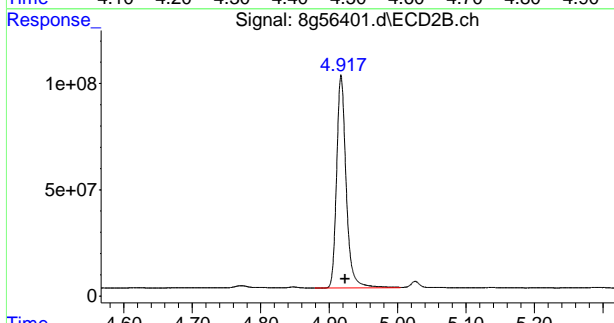


#26 Decachlorobiphenyl  
 R.T.: 14.192 min  
 Delta R.T.: -0.006 min  
 Response: 113228493  
 Conc: 0.84 PPB m

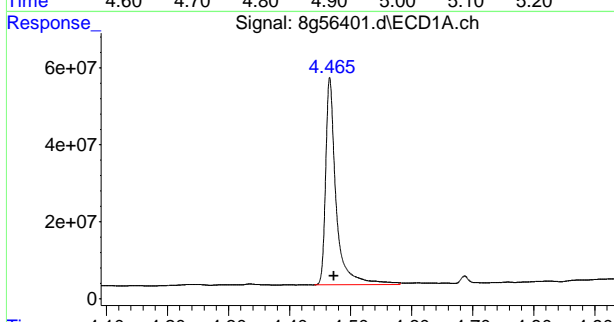
9.1.7  
**9**



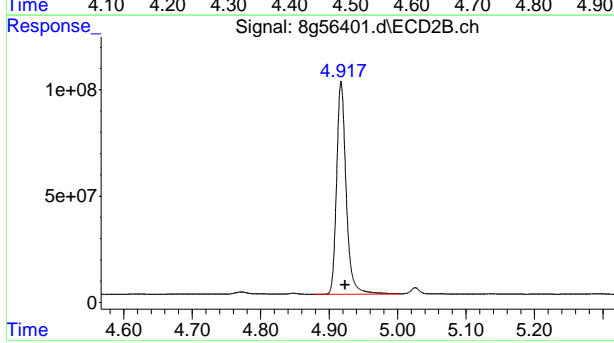
#27 1-bromo-2-nitrobenzeneA  
 R.T.: 4.465 min  
 Delta R.T.: -0.007 min  
 Response: 640506702  
 Conc: 5.00 PPB m



#27 1-bromo-2-nitrobenzeneA  
 R.T.: 4.918 min  
 Delta R.T.: -0.005 min  
 Response: 972687823  
 Conc: 5.00 PPB



#33 1-bromo-2-nitrobenzeneB  
 R.T.: 4.465 min  
 Delta R.T.: -0.007 min  
 Response: 644301896  
 Conc: 5.00 PPB m



#33 1-bromo-2-nitrobenzeneB  
 R.T.: 4.918 min  
 Delta R.T.: -0.005 min  
 Response: 972687823  
 Conc: 5.00 PPB

9.1.7  
 9



## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nazaryne\G8G2470\  
 Data File : 8g56355.d  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 9 May 2024 7:52 am  
 Operator : christp  
 Sample : jd87833-7 m  
 Misc : op54452,g8g2470,5.0,,,10,1  
 ALS Vial : 79 Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 16:18:02 2024  
 Quant Method : C:\msdchem\1\data\nazaryne\G8G2470\8PSTLVI2430a.M  
 Quant Title : PEST/PCB  
 QLast Update : Thu May 09 12:16:42 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1ul/column  
 Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
 Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
-----							
Internal Standards							
1)	I 1-bromo-2...	4.456	4.908	657.5E6	931.8E6	5.000m	5.000
27)	I 1-bromo-2...	4.456	4.908	657.7E6	931.8E6	5.000m	5.000
33)	I 1-bromo-2...	4.456	4.908	659.2E6	931.8E6	5.000m	5.000
System Monitoring Compounds							
2)	SAB Tetrachlo...	5.066	5.731	478.8E6	920.8E6	3.494m	3.358m
	Spiked Amount	40.000	Range 30 - 150	Recovery =		8.74%#	8.39%#
26)	SA Decachlor...	12.042	14.184	341.5E6	578.7E6	2.310m	4.456m#
	Spiked Amount	40.000		Recovery =		5.78%	11.14%
Target Compounds							
7)	B beta-BHC	5.903	6.897	44925166	11261351	0.503m	0.071 #
11)	B Heptachlo...	7.225f	8.565	40061342	40088459	0.274m	0.135m#
12)	B gamma-Chl...	7.381f	8.842	48590961	60032111	0.282m	0.201m#
13)	B alpha-Chl...	7.540	9.062	84160930	107.6E6	0.518m	0.391m
15)	B 4,4'-DDE	7.655f	9.324	51512414	74087877	0.331m	0.261m
16)	MA Dieldrin	8.005	9.563	17641638	20852065	0.105m	0.069m#
18)	A 4,4'-DDD	8.432f	10.250	44711614	73998185	0.393m	0.314m
20)	MA 4,4'-DDT	8.809f	10.774	62133033	33913225	0.482m	0.199m#

SemiQuant Compounds - Not Calibrated on this Instrument

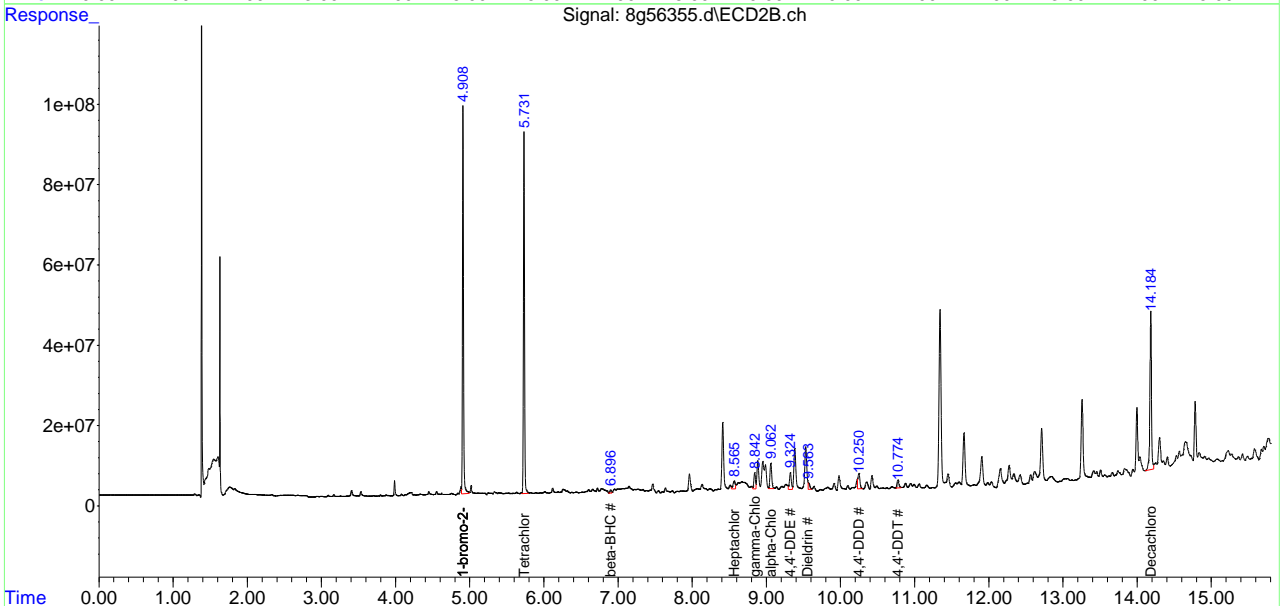
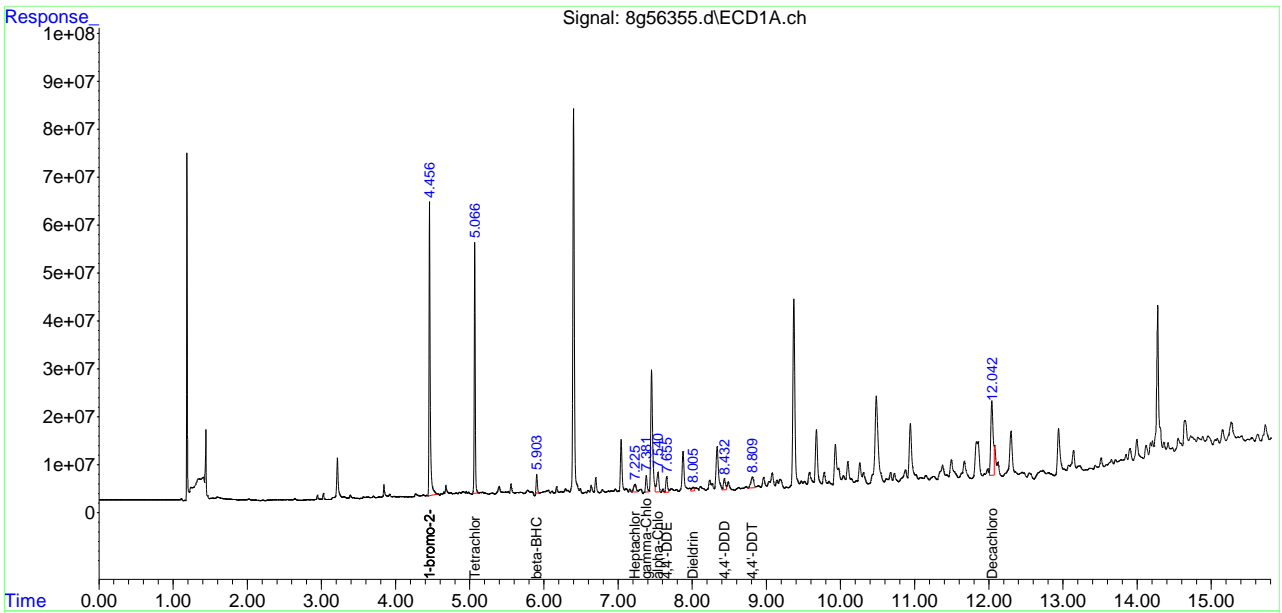
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

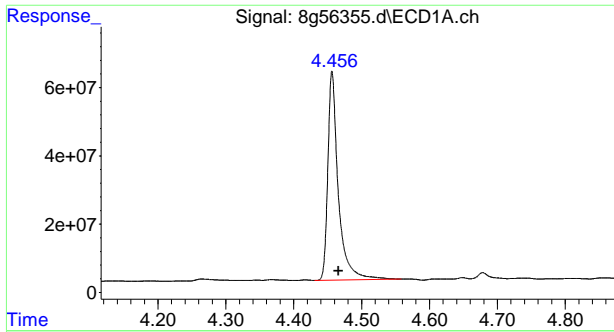
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nazaryne\G8G2470\  
 Data File : 8g56355.d  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 9 May 2024 7:52 am  
 Operator : christp  
 Sample : jd87833-7 m  
 Misc : op54452,g8g2470,5.0,,,10,1  
 ALS Vial : 79 Sample Multiplier: 1

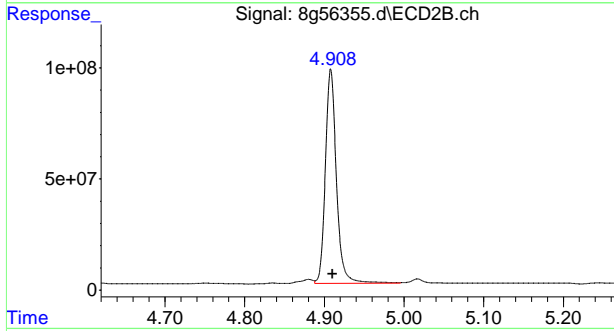
Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 16:18:02 2024  
 Quant Method : C:\msdchem\1\data\nazaryne\G8G2470\8PSTLVI2430a.M  
 Quant Title : PEST/PCB  
 QLast Update : Thu May 09 12:16:42 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1ul/column  
 Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
 Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

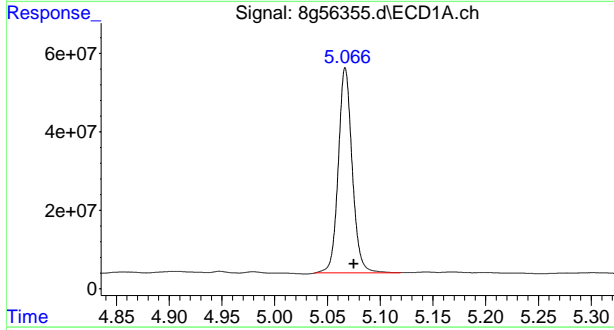




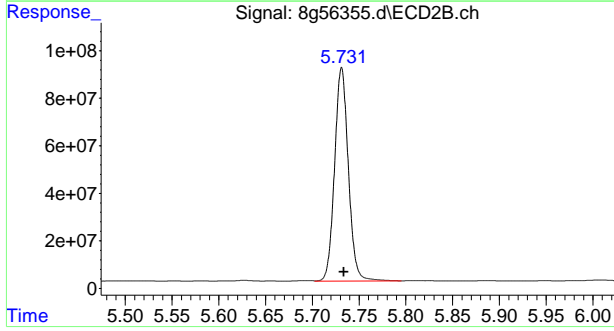
#1 1-bromo-2-nitrobenzene  
 R.T.: 4.456 min  
 Delta R.T.: -0.010 min  
 Response: 657488842  
 Conc: 5.00 PPB m



#1 1-bromo-2-nitrobenzene  
 R.T.: 4.908 min  
 Delta R.T.: -0.002 min  
 Response: 931818456  
 Conc: 5.00 PPB

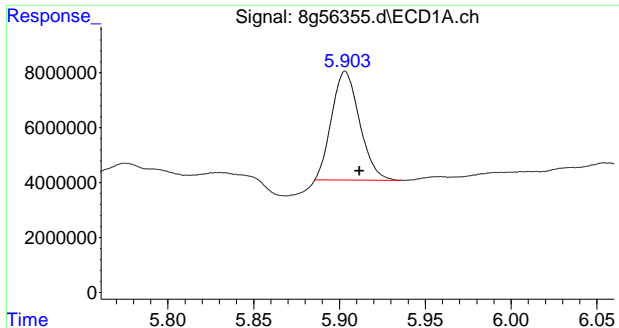


#2 Tetrachloro-m-xylene  
 R.T.: 5.066 min  
 Delta R.T.: -0.008 min  
 Response: 478775982  
 Conc: 3.49 PPB m

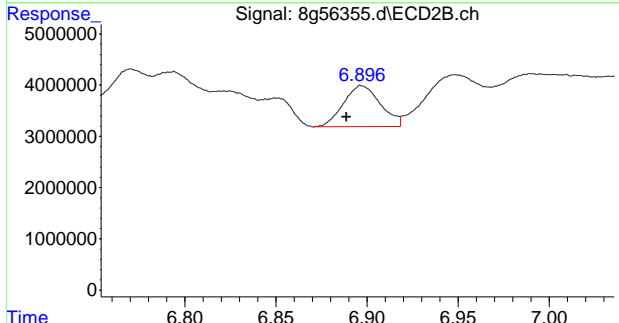


#2 Tetrachloro-m-xylene  
 R.T.: 5.731 min  
 Delta R.T.: -0.002 min  
 Response: 920800962  
 Conc: 3.36 PPB m

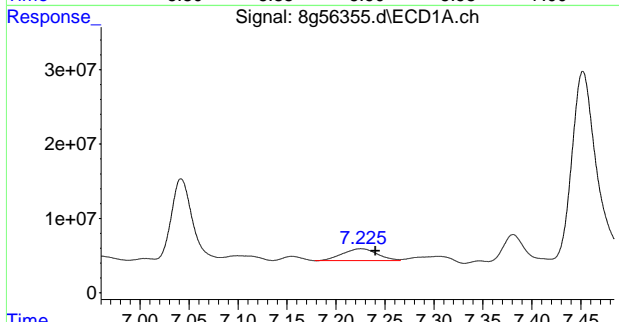
9.1.8  
**9**



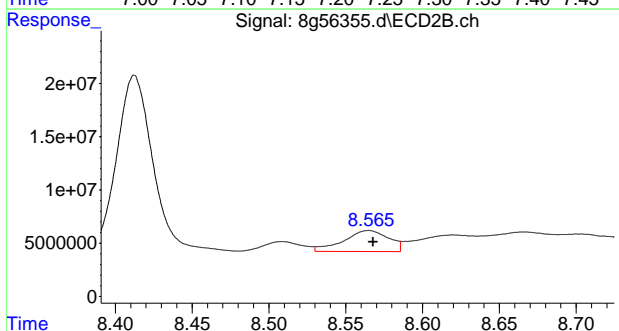
#7 beta-BHC  
 R.T.: 5.903 min  
 Delta R.T.: -0.009 min  
 Response: 44925166  
 Conc: 0.50 PPB m



#7 beta-BHC  
 R.T.: 6.897 min  
 Delta R.T.: 0.008 min  
 Response: 11261351  
 Conc: 0.07 PPB

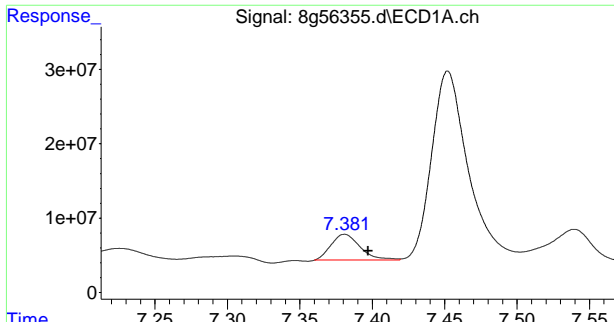


#11 Heptachlor Epoxide  
 R.T.: 7.225 min  
 Delta R.T.: -0.015 min  
 Response: 40061342  
 Conc: 0.27 PPB m



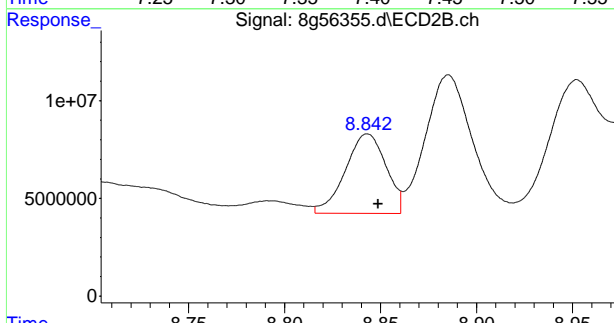
#11 Heptachlor Epoxide  
 R.T.: 8.565 min  
 Delta R.T.: -0.003 min  
 Response: 40088459  
 Conc: 0.14 PPB m

9.1.8  
 9



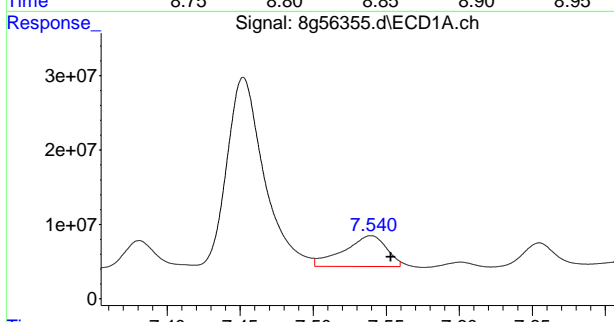
#12 gamma-Chlordane

R.T.: 7.381 min  
 Delta R.T.: -0.016 min  
 Response: 48590961  
 Conc: 0.28 PPB m



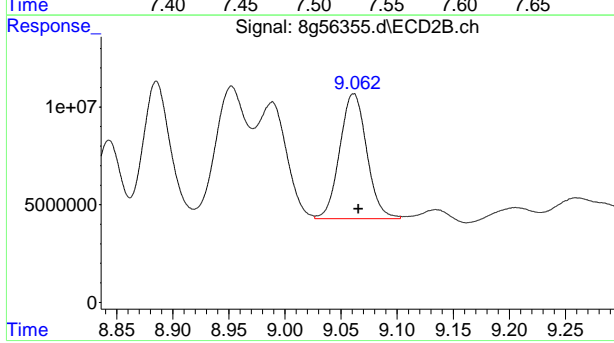
#12 gamma-Chlordane

R.T.: 8.842 min  
 Delta R.T.: -0.006 min  
 Response: 60032111  
 Conc: 0.20 PPB m



#13 alpha-Chlordane

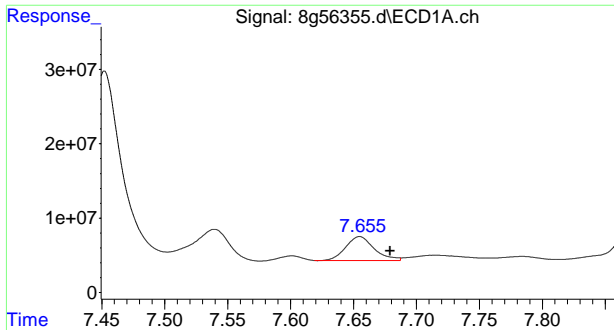
R.T.: 7.540 min  
 Delta R.T.: -0.013 min  
 Response: 84160930  
 Conc: 0.52 PPB m



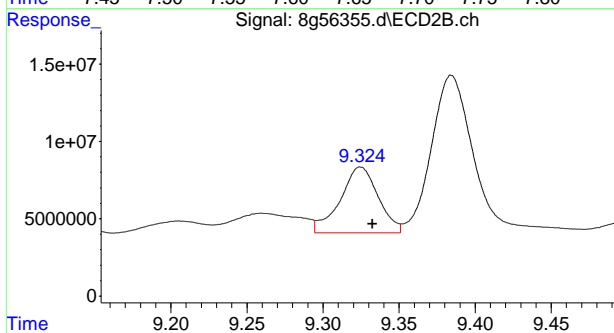
#13 alpha-Chlordane

R.T.: 9.062 min  
 Delta R.T.: -0.003 min  
 Response: 107559801  
 Conc: 0.39 PPB m

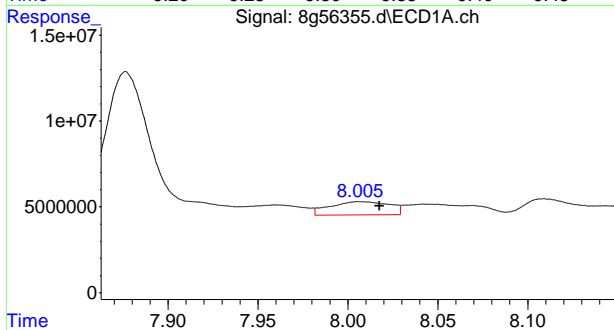
9.18  
 9



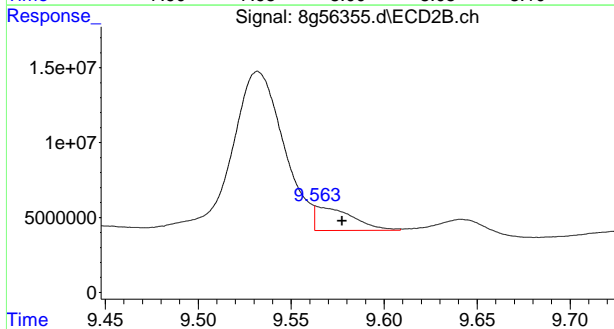
#15 4,4'-DDE  
 R.T.: 7.655 min  
 Delta R.T.: -0.024 min  
 Response: 51512414  
 Conc: 0.33 PPB m



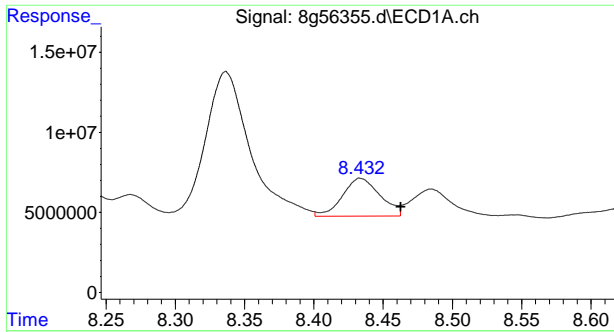
#15 4,4'-DDE  
 R.T.: 9.324 min  
 Delta R.T.: -0.009 min  
 Response: 74087877  
 Conc: 0.26 PPB m



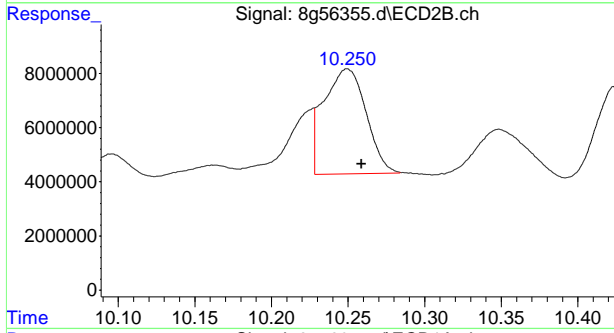
#16 Dieldrin  
 R.T.: 8.005 min  
 Delta R.T.: -0.012 min  
 Response: 17641638  
 Conc: 0.10 PPB m



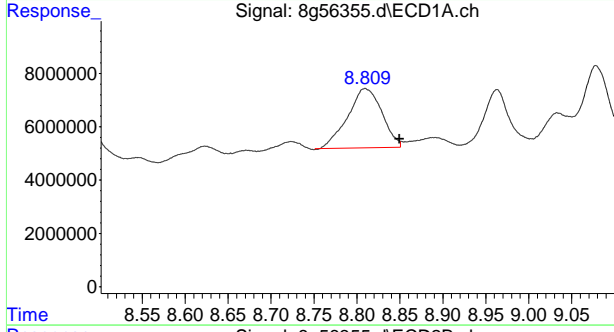
#16 Dieldrin  
 R.T.: 9.563 min  
 Delta R.T.: -0.015 min  
 Response: 20852065  
 Conc: 0.07 PPB m



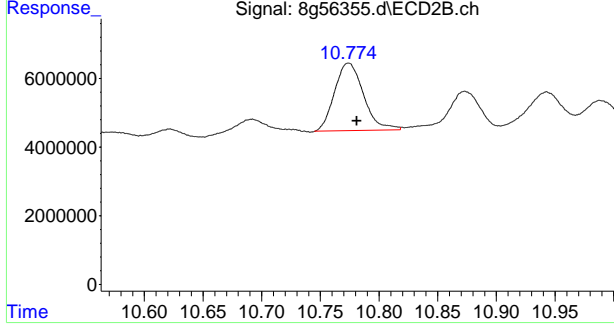
#18 4,4'-DDD  
 R.T.: 8.432 min  
 Delta R.T.: -0.030 min  
 Response: 44711614  
 Conc: 0.39 PPB m



#18 4,4'-DDD  
 R.T.: 10.250 min  
 Delta R.T.: -0.009 min  
 Response: 73998185  
 Conc: 0.31 PPB m

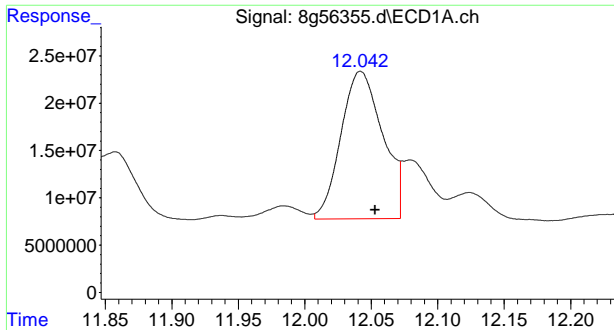


#20 4,4'-DDT  
 R.T.: 8.809 min  
 Delta R.T.: -0.040 min  
 Response: 62133033  
 Conc: 0.48 PPB m

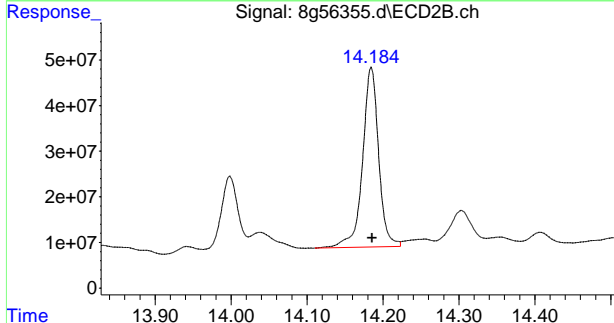


#20 4,4'-DDT  
 R.T.: 10.774 min  
 Delta R.T.: -0.007 min  
 Response: 33913225  
 Conc: 0.20 PPB m

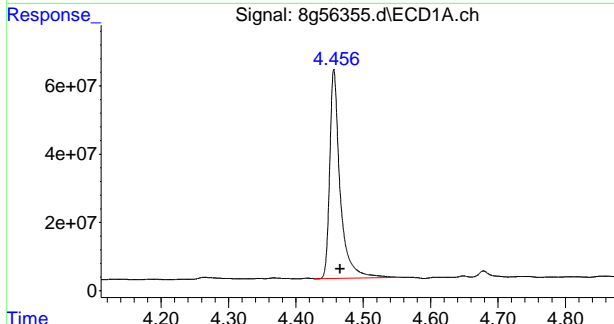
9.1.8  
 9



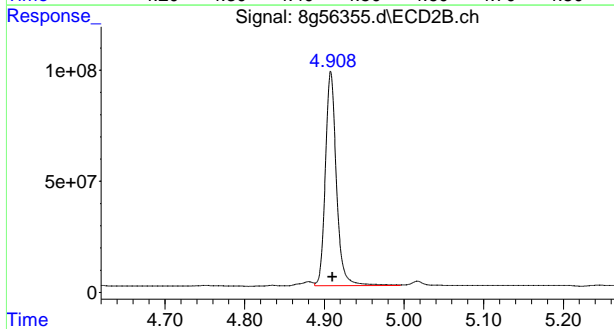
#26 Decachlorobiphenyl  
 R.T.: 12.042 min  
 Delta R.T.: -0.011 min  
 Response: 341532339  
 Conc: 2.31 PPB m



#26 Decachlorobiphenyl  
 R.T.: 14.184 min  
 Delta R.T.: -0.001 min  
 Response: 578743145  
 Conc: 4.46 PPB m

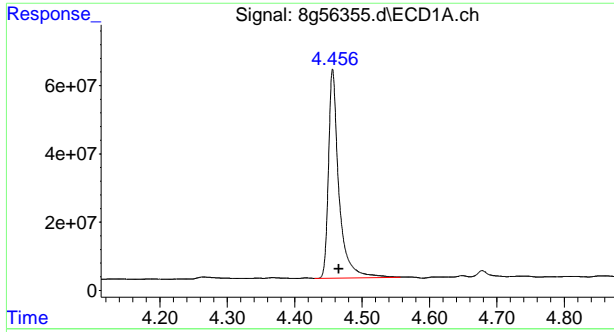


#27 1-bromo-2-nitrobenzeneA  
 R.T.: 4.456 min  
 Delta R.T.: -0.010 min  
 Response: 657671549  
 Conc: 5.00 PPB m

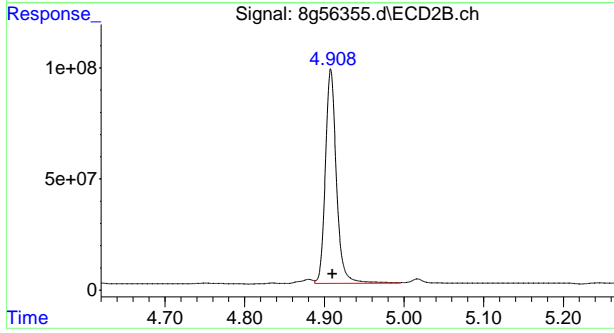


#27 1-bromo-2-nitrobenzeneA  
 R.T.: 4.908 min  
 Delta R.T.: -0.002 min  
 Response: 931818456  
 Conc: 5.00 PPB





#33 1-bromo-2-nitrobenzeneB  
R.T.: 4.456 min  
Delta R.T.: -0.010 min  
Response: 659160682  
Conc: 5.00 PPB m



#33 1-bromo-2-nitrobenzeneB  
R.T.: 4.908 min  
Delta R.T.: -0.002 min  
Response: 931818456  
Conc: 5.00 PPB

9.1.8  
9

## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nazaryne\G8G2470\  
 Data File : 8g56356.d  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 9 May 2024 8:13 am  
 Operator : christp  
 Sample : jd87833-8 m  
 Misc : op54452,g8g2470,5.3,,,10,1  
 ALS Vial : 80 Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 16:25:46 2024  
 Quant Method : C:\msdchem\1\data\nazaryne\G8G2470\8PSTLVI2430a.M  
 Quant Title : PEST/PCB  
 QLast Update : Thu May 09 12:16:42 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1ul/column  
 Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
 Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
-----							
Internal Standards							
1)	I 1-bromo-2...	4.459	4.910	662.1E6	984.3E6	5.000	5.000m
27)	I 1-bromo-2...	4.459	4.910	662.1E6	983.4E6	5.000	5.000m
33)	I 1-bromo-2...	4.459	4.910	662.1E6	983.6E6	5.000	5.000m
System Monitoring Compounds							
2)	SAB Tetrachlo...	5.070	5.734	490.5E6	937.7E6	3.554	3.237
	Spiked Amount	40.000	Range 30 - 150	Recovery =		8.88%#	8.09%#
26)	SA Decachlor...	12.042	14.182	299.7E6	593.6E6	2.013m	4.327m#
	Spiked Amount	40.000		Recovery =		5.03%	10.82%
Target Compounds							
7)	B beta-BHC	5.907	6.901	59387670	10865050	0.660m	0.064 #
11)	B Heptachlo...	7.229	8.569	28896862	23822950	0.196m	0.076m#
12)	B gamma-Chl...	7.384	8.845	32456842	32319786	0.187m	0.103m#
13)	B alpha-Chl...	7.543	9.063	61299953	77267638	0.375m	0.266m#
15)	B 4,4'-DDE	7.660f	9.326	35344647	31359725	0.226	0.105m#
18)	A 4,4'-DDD	8.436f	10.248	36515016	59702396	0.319m	0.240m
20)	MA 4,4'-DDT	8.813f	10.775	60185510	39483863	0.463m	0.220m#

SemiQuant Compounds - Not Calibrated on this Instrument

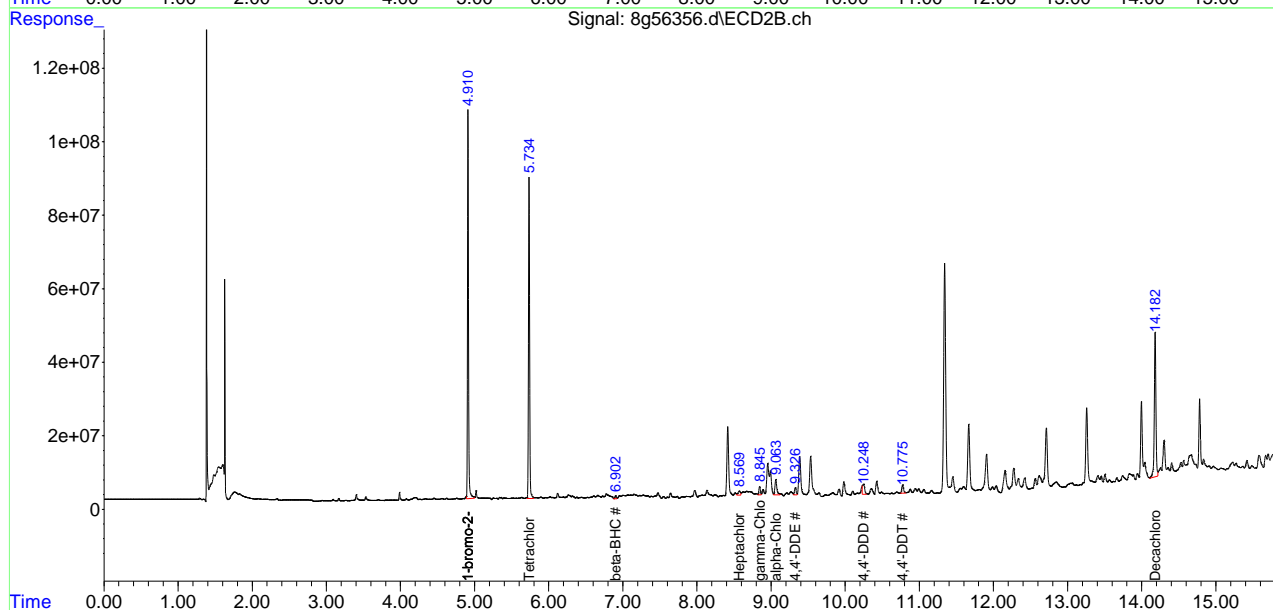
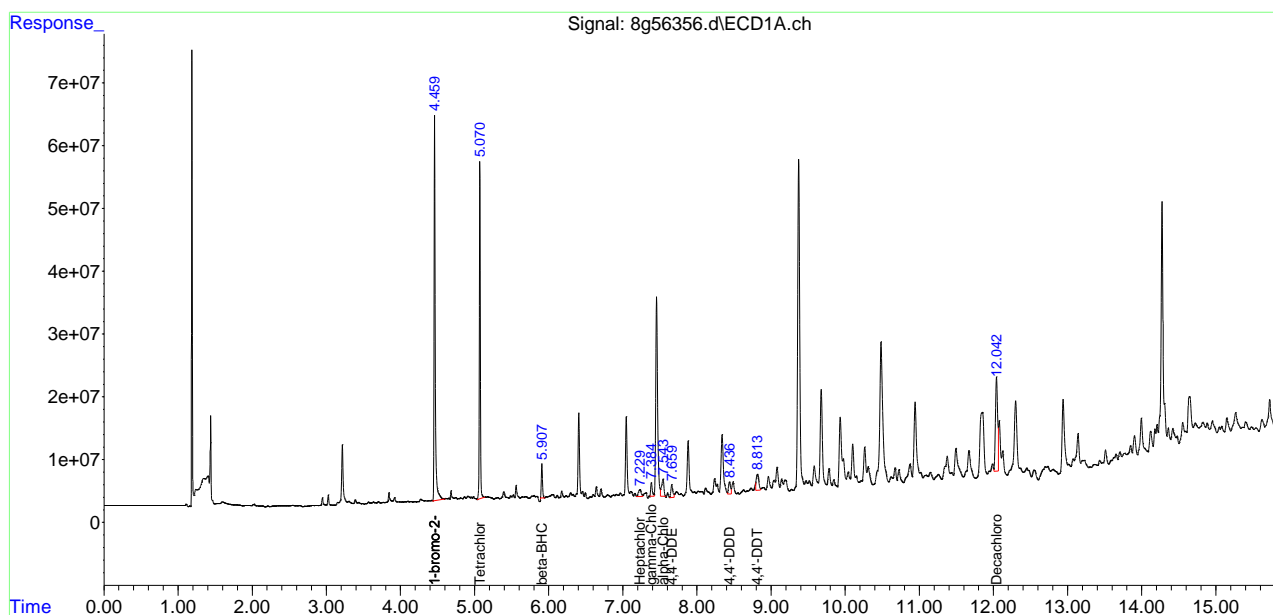
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

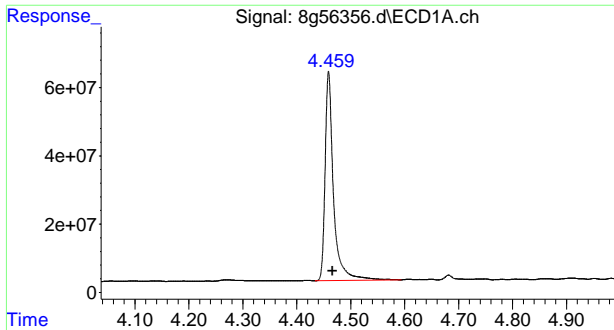
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nazaryne\G8G2470\  
 Data File : 8g56356.d  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 9 May 2024 8:13 am  
 Operator : christp  
 Sample : jd87833-8 m  
 Misc : op54452,g8g2470,5.3,,10,1  
 ALS Vial : 80 Sample Multiplier: 1

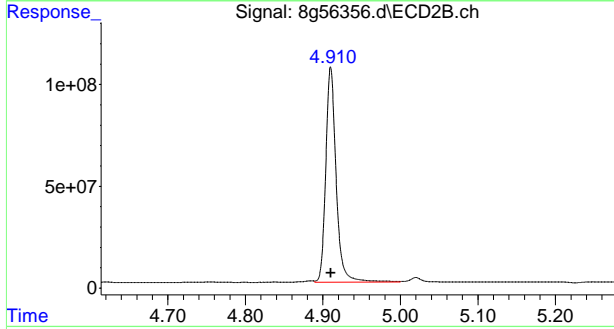
Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 16:25:46 2024  
 Quant Method : C:\msdchem\1\data\nazaryne\G8G2470\8PSTLVI2430a.M  
 Quant Title : PEST/PCB  
 QLast Update : Thu May 09 12:16:42 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1ul/column  
 Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
 Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

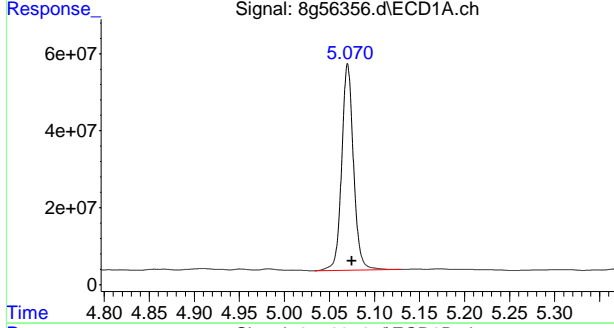




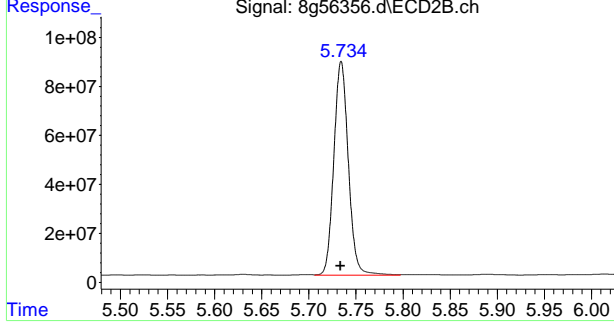
#1 1-bromo-2-nitrobenzene  
 R.T.: 4.459 min  
 Delta R.T.: -0.007 min  
 Response: 662136178  
 Conc: 5.00 PPB



#1 1-bromo-2-nitrobenzene  
 R.T.: 4.910 min  
 Delta R.T.: 0.000 min  
 Response: 984272214  
 Conc: 5.00 PPB m

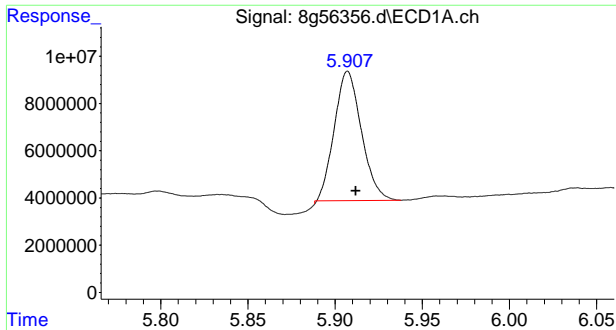


#2 Tetrachloro-m-xylene  
 R.T.: 5.070 min  
 Delta R.T.: -0.004 min  
 Response: 490506061  
 Conc: 3.55 PPB

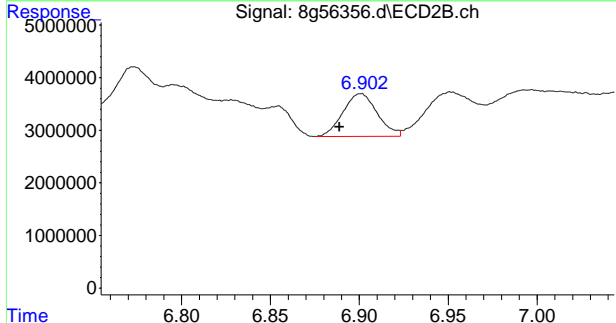


#2 Tetrachloro-m-xylene  
 R.T.: 5.734 min  
 Delta R.T.: 0.000 min  
 Response: 937723627  
 Conc: 3.24 PPB

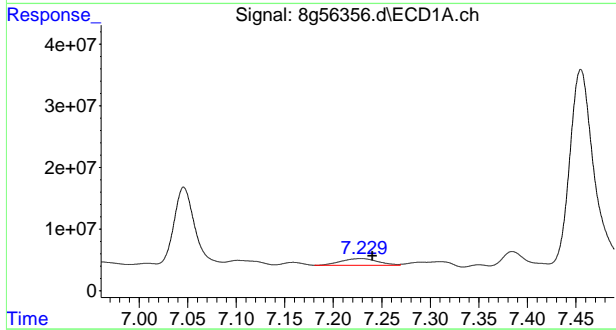
9.1.9  
 9



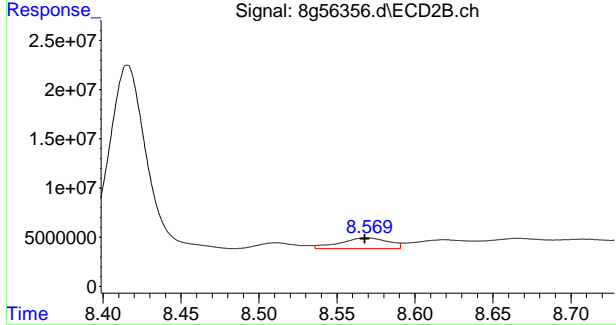
#7 beta-BHC  
 R.T.: 5.907 min  
 Delta R.T.: -0.005 min  
 Response: 59387670  
 Conc: 0.66 PPB m



#7 beta-BHC  
 R.T.: 6.901 min  
 Delta R.T.: 0.012 min  
 Response: 10865050  
 Conc: 0.06 PPB

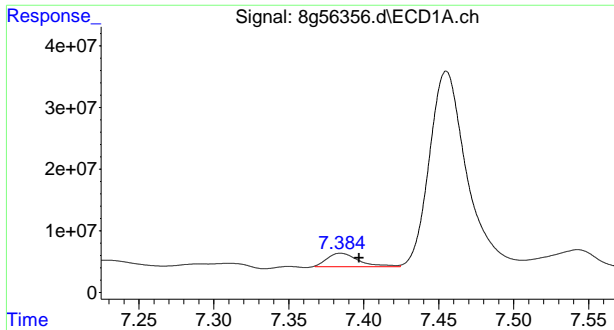


#11 Heptachlor Epoxide  
 R.T.: 7.229 min  
 Delta R.T.: -0.011 min  
 Response: 28896862  
 Conc: 0.20 PPB m

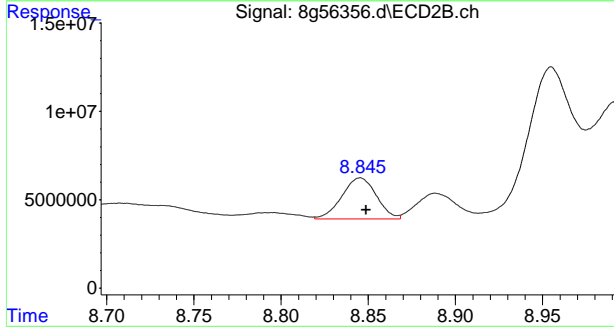


#11 Heptachlor Epoxide  
 R.T.: 8.569 min  
 Delta R.T.: 0.001 min  
 Response: 23822950  
 Conc: 0.08 PPB m

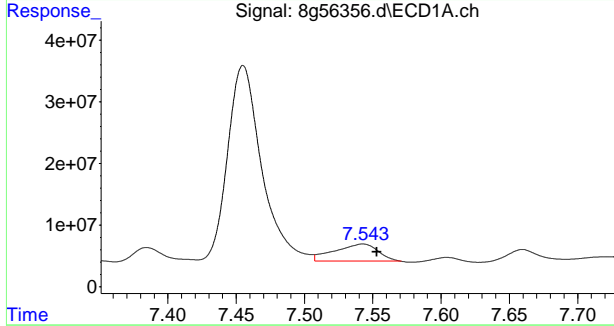
9.1.9  
**9**



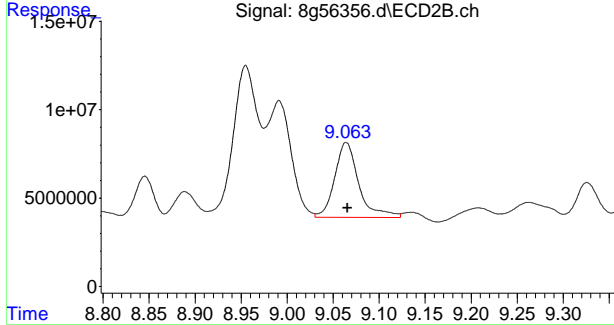
#12 gamma-Chlordane  
 R.T.: 7.384 min  
 Delta R.T.: -0.013 min  
 Response: 32456842  
 Conc: 0.19 PPB m



#12 gamma-Chlordane  
 R.T.: 8.845 min  
 Delta R.T.: -0.003 min  
 Response: 32319786  
 Conc: 0.10 PPB m

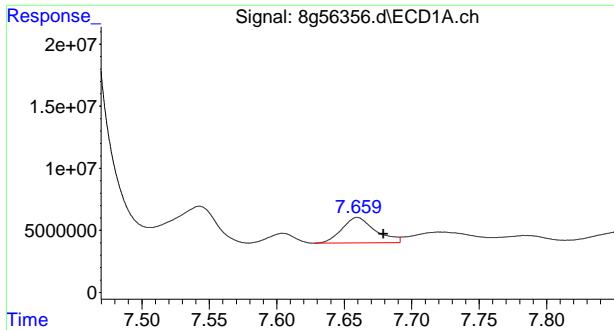


#13 alpha-Chlordane  
 R.T.: 7.543 min  
 Delta R.T.: -0.010 min  
 Response: 61299953  
 Conc: 0.37 PPB m

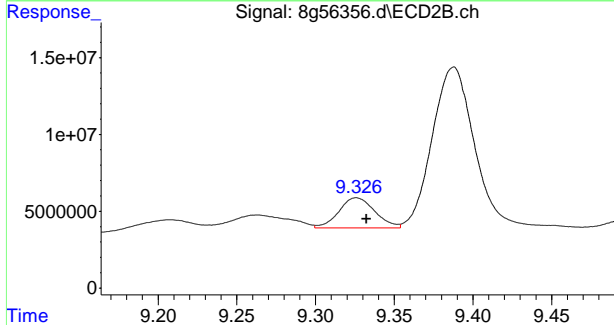


#13 alpha-Chlordane  
 R.T.: 9.063 min  
 Delta R.T.: -0.002 min  
 Response: 77267638  
 Conc: 0.27 PPB m

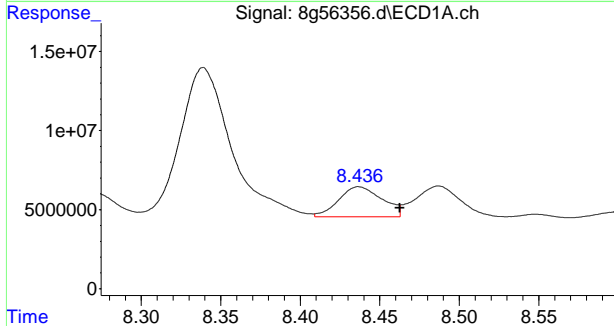
9.19  
**9**



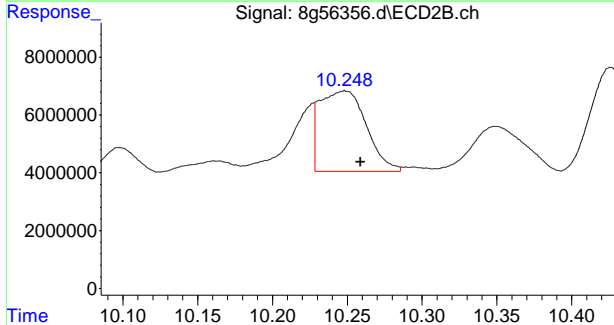
#15 4,4'-DDE  
 R.T.: 7.660 min  
 Delta R.T.: -0.019 min  
 Response: 35344647  
 Conc: 0.23 PPB



#15 4,4'-DDE  
 R.T.: 9.326 min  
 Delta R.T.: -0.007 min  
 Response: 31359725  
 Conc: 0.10 PPB m

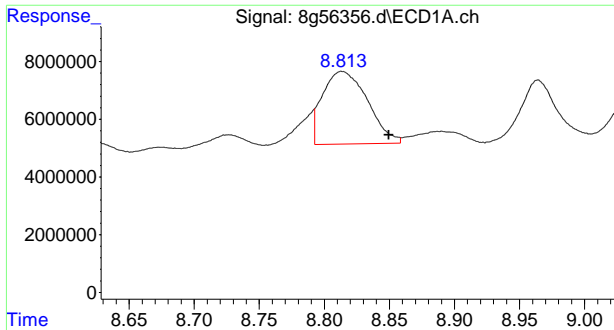


#18 4,4'-DDD  
 R.T.: 8.436 min  
 Delta R.T.: -0.027 min  
 Response: 36515016  
 Conc: 0.32 PPB m

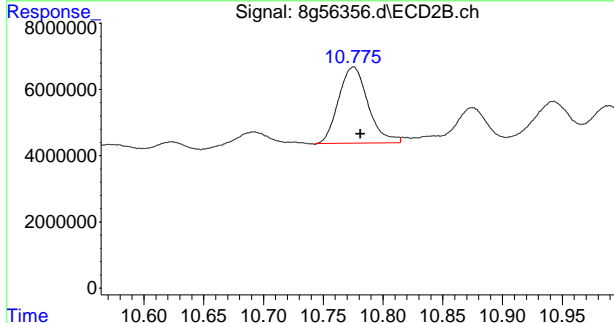


#18 4,4'-DDD  
 R.T.: 10.248 min  
 Delta R.T.: -0.011 min  
 Response: 59702396  
 Conc: 0.24 PPB m

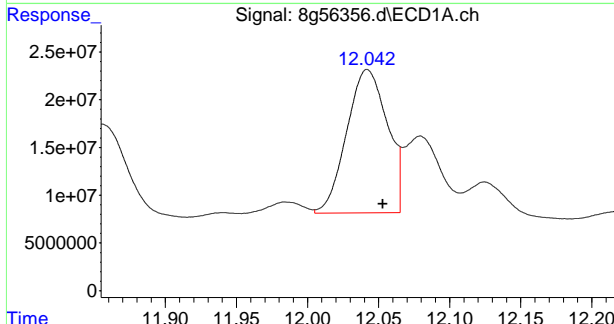
9.1.9  
**9**



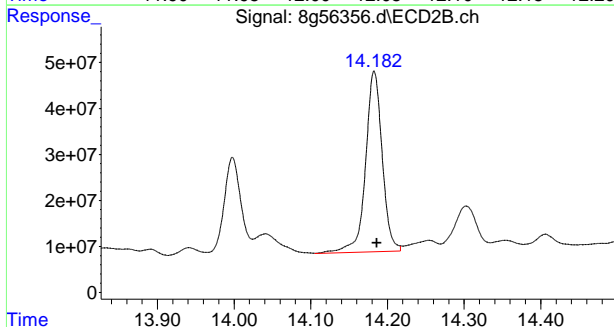
#20 4,4'-DDT  
 R.T.: 8.813 min  
 Delta R.T.: -0.037 min  
 Response: 60185510  
 Conc: 0.46 PPB m



#20 4,4'-DDT  
 R.T.: 10.775 min  
 Delta R.T.: -0.006 min  
 Response: 39483863  
 Conc: 0.22 PPB m



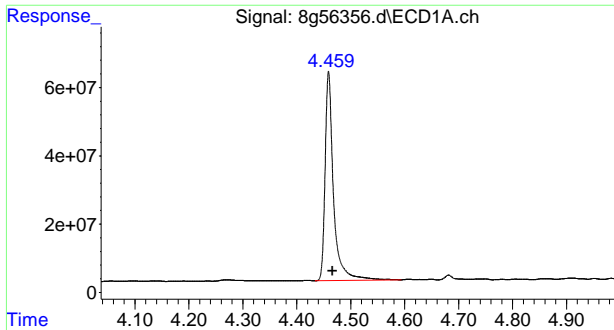
#26 Decachlorobiphenyl  
 R.T.: 12.042 min  
 Delta R.T.: -0.011 min  
 Response: 299733151  
 Conc: 2.01 PPB m



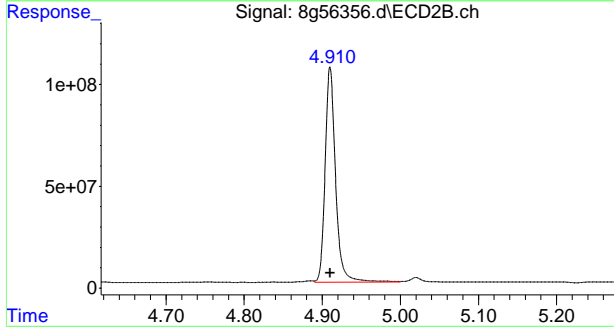
#26 Decachlorobiphenyl  
 R.T.: 14.182 min  
 Delta R.T.: -0.004 min  
 Response: 593619533  
 Conc: 4.33 PPB m

9.1.9  
 9

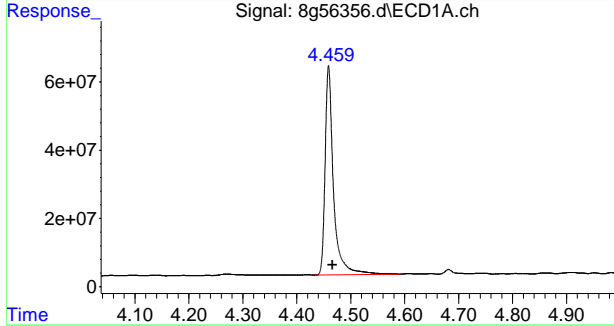




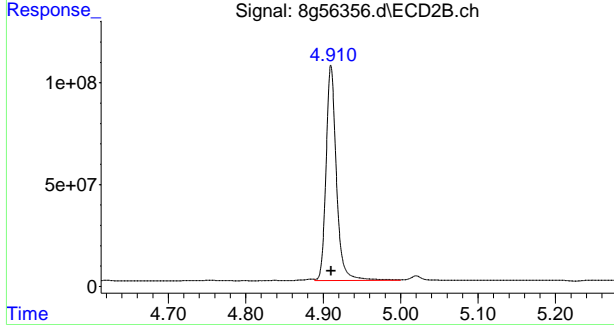
#27 1-bromo-2-nitrobenzeneA  
 R.T.: 4.459 min  
 Delta R.T.: -0.006 min  
 Response: 662136178  
 Conc: 5.00 PPB



#27 1-bromo-2-nitrobenzeneA  
 R.T.: 4.910 min  
 Delta R.T.: 0.000 min  
 Response: 983414832  
 Conc: 5.00 PPB m



#33 1-bromo-2-nitrobenzeneB  
 R.T.: 4.459 min  
 Delta R.T.: -0.006 min  
 Response: 662136178  
 Conc: 5.00 PPB



#33 1-bromo-2-nitrobenzeneB  
 R.T.: 4.910 min  
 Delta R.T.: 0.000 min  
 Response: 983642627  
 Conc: 5.00 PPB m

9.1.9  
**9**

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nazaryne\G8G2470\  
 Data File : 8g56357.d  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 9 May 2024 8:35 am  
 Operator : christp  
 Sample : jd87833-10 m  
 Misc : op54452,g8g2470,5.5,,,10,1  
 ALS Vial : 81 Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 16:31:02 2024  
 Quant Method : C:\msdchem\1\data\nazaryne\G8G2470\8PSTLVI2430a.M  
 Quant Title : PEST/PCB  
 QLast Update : Thu May 09 12:16:42 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1ul/column  
 Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
 Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
-----						
Internal Standards						
1) I 1-bromo-2...	4.459	4.910	805.7E6	1003.1E6	5.000m	5.000m
27) I 1-bromo-2...	4.459	4.910	807.5E6	1002.8E6	5.000m	5.000m
33) I 1-bromo-2...	4.459	4.910	807.4E6	1002.7E6	5.000m	5.000m
System Monitoring Compounds						
2) SAB Tetrachlo...	5.071	5.734	542.1E6	1017.4E6	3.228m	3.446m
Spiked Amount	40.000	Range 30 - 150	Recovery =		8.07%#	8.62%#
26) SA Decachlor...	12.042	14.185	421.1E6	493.7E6	2.324m	3.531m#
Spiked Amount	40.000		Recovery =		5.81%	8.83%
Target Compounds						
7) B beta-BHC	5.910	6.904f	10548222	12130304	0.096m	0.071 #
13) B alpha-Chl...	7.543	9.065	23959237	22766670	0.120m	0.077m#
15) B 4,4'-DDE	7.660f	9.327	28718059	34118792	0.151m	0.112m#
18) A 4,4'-DDD	8.437f	10.251	11206579	19565422	0.080m	0.077m
20) MA 4,4'-DDT	8.817f	10.774	11492731	7661435	0.073m	0.042m#

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

9.1.10  
**9**

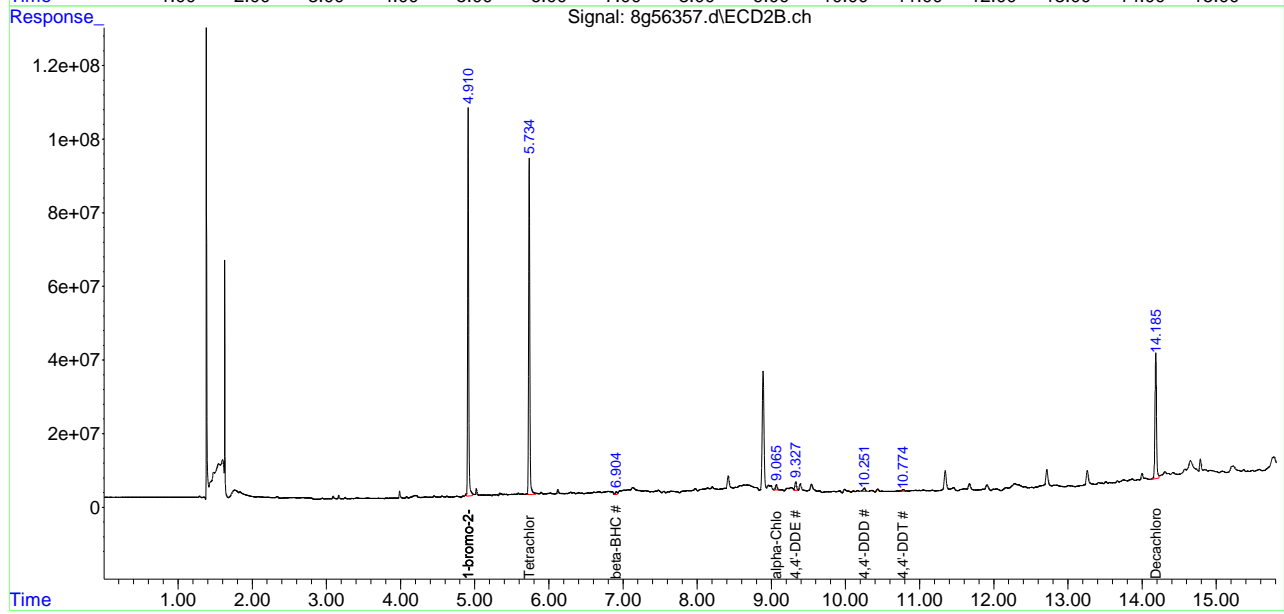
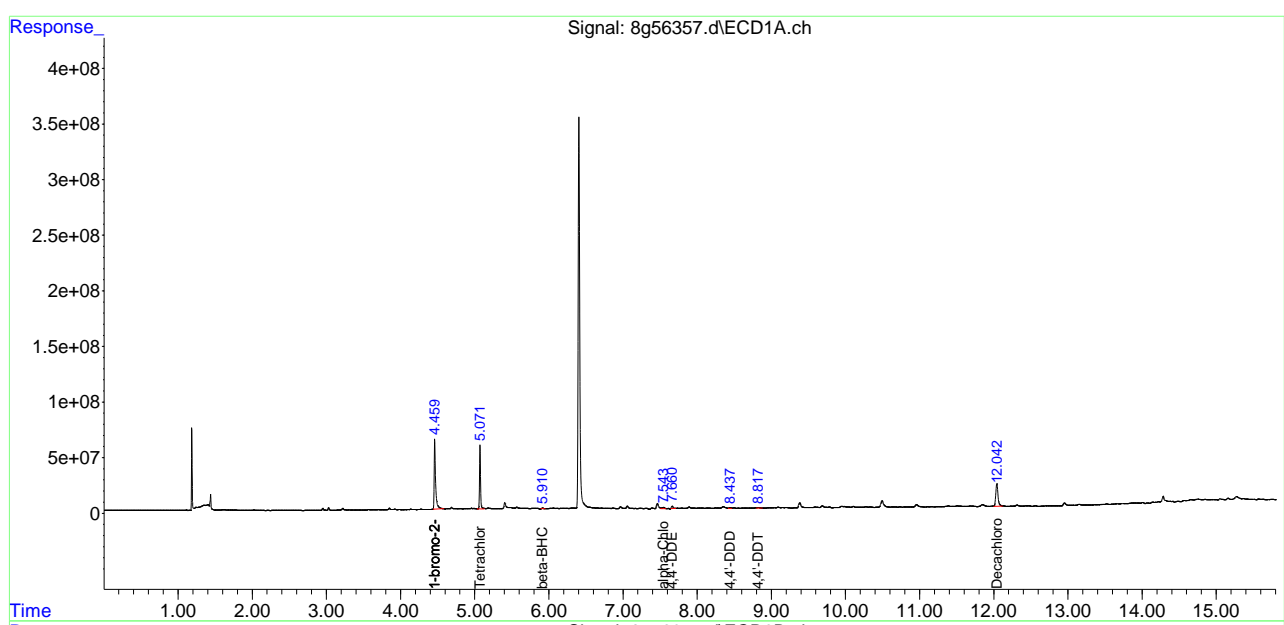


Quantitation Report (QT Reviewed)

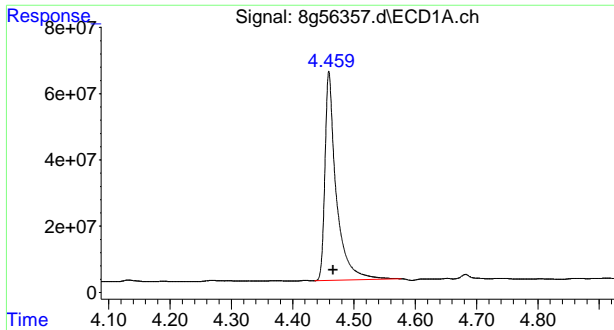
Data Path : C:\msdchem\1\data\nazaryne\G8G2470\  
Data File : 8g56357.d  
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
Acq On : 9 May 2024 8:35 am  
Operator : christp  
Sample : jd87833-10 m  
Misc : op54452,g8g2470,5.5,,,10,1  
ALS Vial : 81 Sample Multiplier: 1

Integration File signal 1: autoint1.e  
Integration File signal 2: autoint2.e  
Quant Time: May 09 16:31:02 2024  
Quant Method : C:\msdchem\1\data\nazaryne\G8G2470\8PSTLVI2430a.M  
Quant Title : PEST/PCB  
QLast Update : Thu May 09 12:16:42 2024  
Response via : Initial Calibration  
Integrator: ChemStation

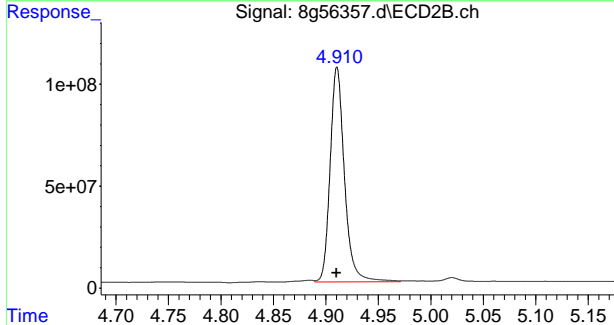
Volume Inj. : 1ul/column  
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



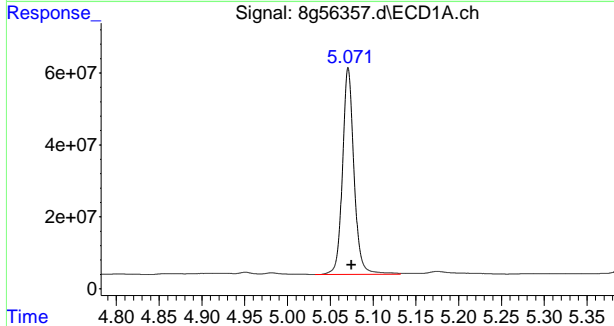
9.1.10  
9



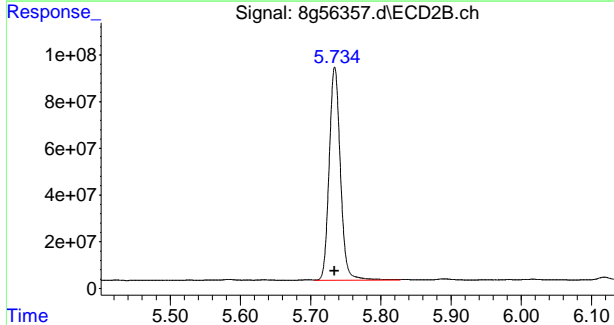
#1 1-bromo-2-nitrobenzene  
 R.T.: 4.459 min  
 Delta R.T.: -0.007 min  
 Response: 805738036  
 Conc: 5.00 PPB m



#1 1-bromo-2-nitrobenzene  
 R.T.: 4.910 min  
 Delta R.T.: 0.000 min  
 Response: 1003140844  
 Conc: 5.00 PPB m

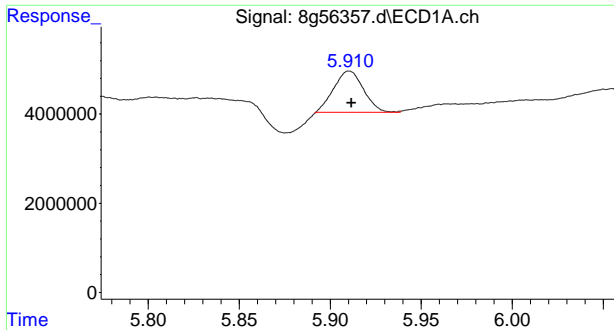


#2 Tetrachloro-m-xylene  
 R.T.: 5.071 min  
 Delta R.T.: -0.004 min  
 Response: 542091219  
 Conc: 3.23 PPB m

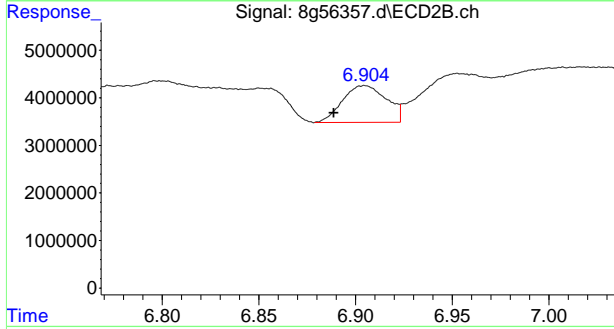


#2 Tetrachloro-m-xylene  
 R.T.: 5.734 min  
 Delta R.T.: 0.000 min  
 Response: 1017410750  
 Conc: 3.45 PPB m

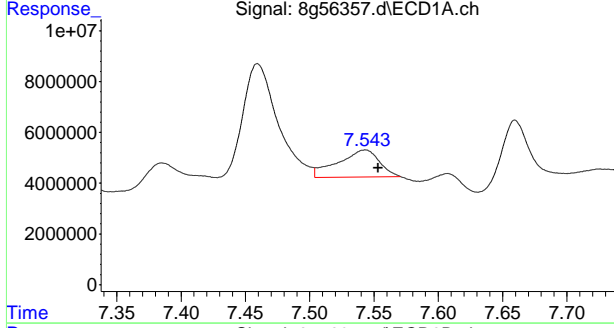
9.1.10  
 9



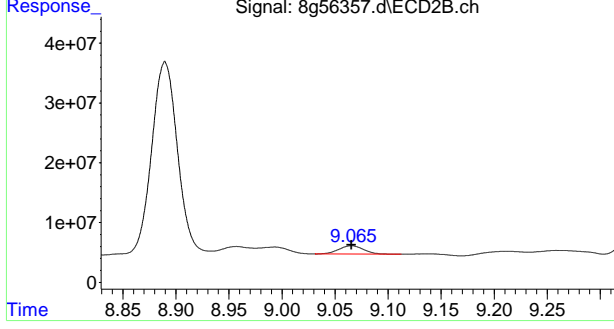
#7 beta-BHC  
 R.T.: 5.910 min  
 Delta R.T.: -0.002 min  
 Response: 10548222  
 Conc: 0.10 PPB m



#7 beta-BHC  
 R.T.: 6.904 min  
 Delta R.T.: 0.016 min  
 Response: 12130304  
 Conc: 0.07 PPB

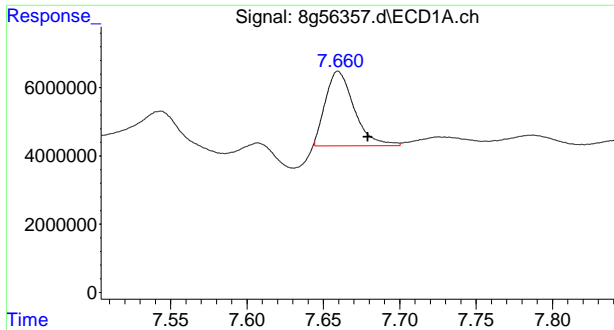


#13 alpha-Chlordane  
 R.T.: 7.543 min  
 Delta R.T.: -0.010 min  
 Response: 23959237  
 Conc: 0.12 PPB m

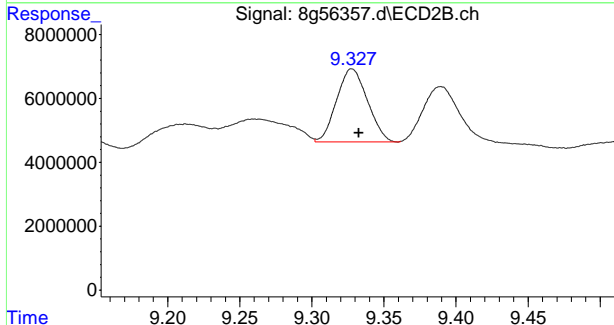


#13 alpha-Chlordane  
 R.T.: 9.065 min  
 Delta R.T.: 0.000 min  
 Response: 22766670  
 Conc: 0.08 PPB m

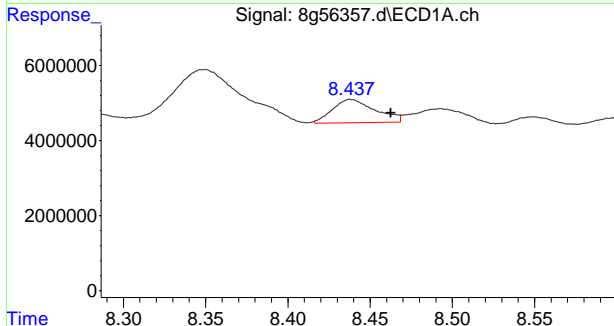
9.1.10  
**9**



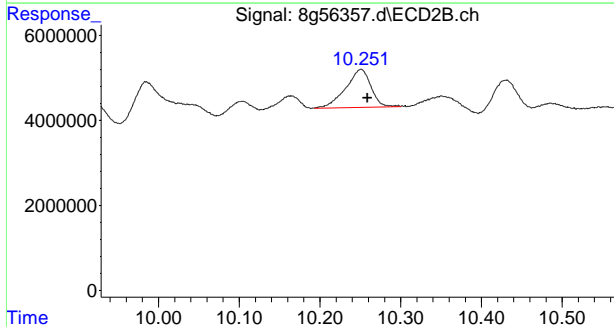
#15 4,4'-DDE  
 R.T.: 7.660 min  
 Delta R.T.: -0.019 min  
 Response: 28718059  
 Conc: 0.15 PPB m



#15 4,4'-DDE  
 R.T.: 9.327 min  
 Delta R.T.: -0.005 min  
 Response: 34118792  
 Conc: 0.11 PPB m

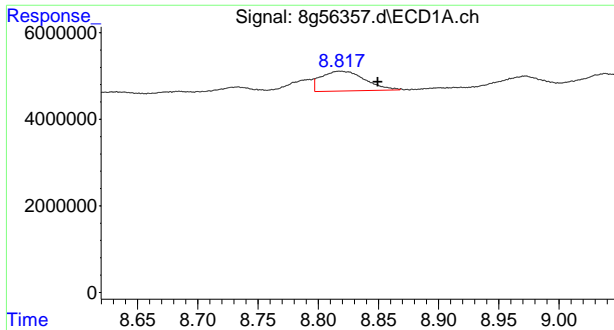


#18 4,4'-DDD  
 R.T.: 8.437 min  
 Delta R.T.: -0.025 min  
 Response: 11206579  
 Conc: 0.08 PPB m

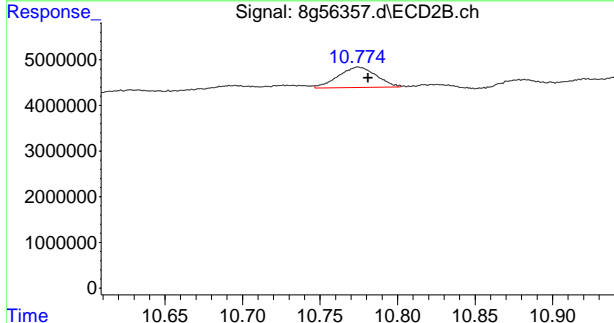


#18 4,4'-DDD  
 R.T.: 10.251 min  
 Delta R.T.: -0.008 min  
 Response: 19565422  
 Conc: 0.08 PPB m

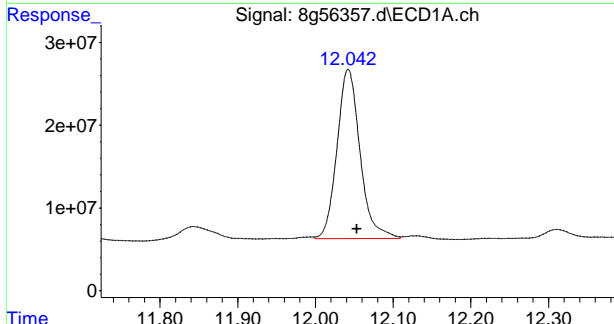
9.1.10  
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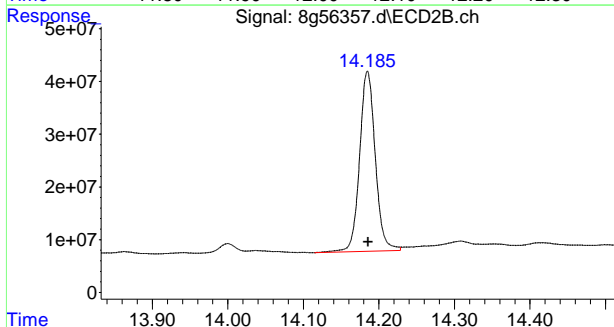
#20 4,4'-DDT  
 R.T.: 8.817 min  
 Delta R.T.: -0.032 min  
 Response: 11492731  
 Conc: 0.07 PPB m



#20 4,4'-DDT  
 R.T.: 10.774 min  
 Delta R.T.: -0.007 min  
 Response: 7661435  
 Conc: 0.04 PPB m

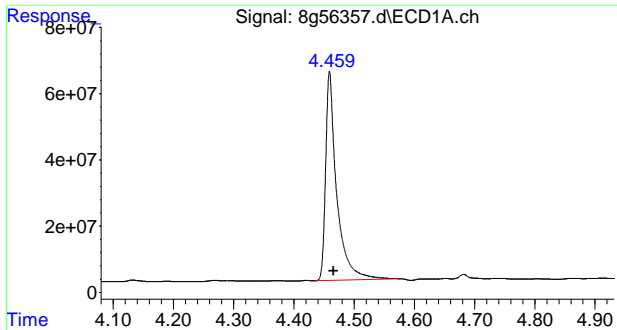


#26 Decachlorobiphenyl  
 R.T.: 12.042 min  
 Delta R.T.: -0.011 min  
 Response: 421095432  
 Conc: 2.32 PPB m

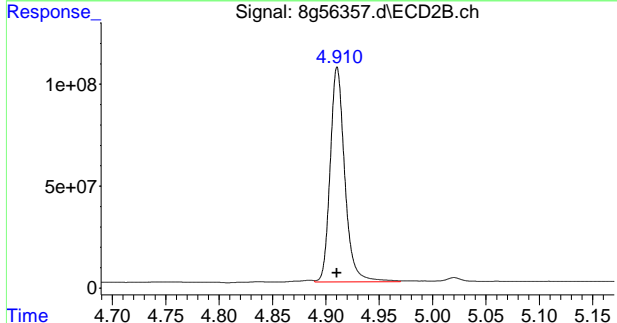


#26 Decachlorobiphenyl  
 R.T.: 14.185 min  
 Delta R.T.: -0.001 min  
 Response: 493669289  
 Conc: 3.53 PPB m

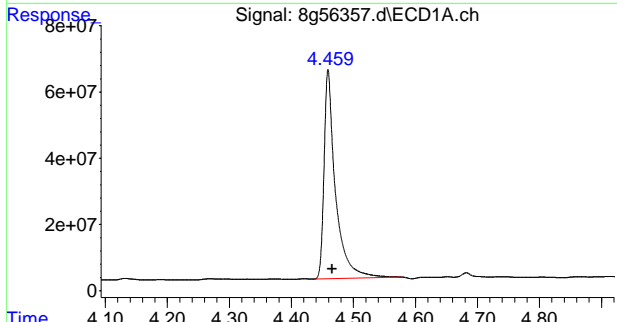
9.1.10  
**9**



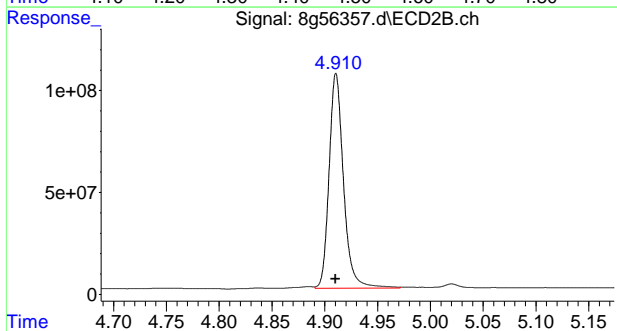
#27 1-bromo-2-nitrobenzeneA  
 R.T.: 4.459 min  
 Delta R.T.: -0.007 min  
 Response: 807469585  
 Conc: 5.00 PPB m



#27 1-bromo-2-nitrobenzeneA  
 R.T.: 4.910 min  
 Delta R.T.: 0.000 min  
 Response: 1002814978  
 Conc: 5.00 PPB m



#33 1-bromo-2-nitrobenzeneB  
 R.T.: 4.459 min  
 Delta R.T.: -0.007 min  
 Response: 807434758  
 Conc: 5.00 PPB m



#33 1-bromo-2-nitrobenzeneB  
 R.T.: 4.910 min  
 Delta R.T.: 0.000 min  
 Response: 1002660970  
 Conc: 5.00 PPB m

9.1.10  
 9



## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\g8g2472\_2\  
 Data File : 8g56434.d  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 10 May 2024 3:41 pm  
 Operator : christp  
 Sample : jd87833-11 m  
 Misc : op54452,g8g2472,5.3,,,10,1  
 ALS Vial : 49 Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 13 06:31:07 2024  
 Quant Method : C:\msdchem\1\data\g8g2472\_2\8PSTLVI2430a.M  
 Quant Title : PEST/PCB  
 QLast Update : Fri May 10 12:20:14 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1ul/column  
 Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
 Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
-----							
Internal Standards							
1)	I 1-bromo-2...	4.501	4.954	601.8E6	1053.5E6	5.000	5.000
27)	I 1-bromo-2...	4.501	4.954	601.8E6	1053.5E6	5.000	5.000
33)	I 1-bromo-2...	4.501	4.954	601.8E6	1053.5E6	5.000	5.000
System Monitoring Compounds							
2)	SAB Tetrachlo...	5.124f	5.787f	491.7E6	994.5E6	3.919m	3.208m
	Spiked Amount	40.000	Range 30 - 150	Recovery =		9.80%#	8.02%#
26)	SA Decachlor...	12.078	14.198	370.4E6	488.7E6	2.737m	3.328m
	Spiked Amount	40.000		Recovery =		6.84%	8.32%
Target Compounds							
12)	B gamma-Chl...	7.408	8.884f	24922364	124.9E6	0.158m	0.370m#
13)	B alpha-Chl...	7.595f	9.102f	145.8E6	143.9E6	0.981m	0.462m#
15)	B 4,4'-DDE	7.712f	9.361f	446.8E6	824.0E6	3.138m	2.566m
18)	A 4,4'-DDD	8.485f	10.282	36704306	85282576	0.352m	0.321m
20)	MA 4,4'-DDT	8.878f	10.802	77039680	147.8E6	0.652	0.768m

SemiQuant Compounds - Not Calibrated on this Instrument

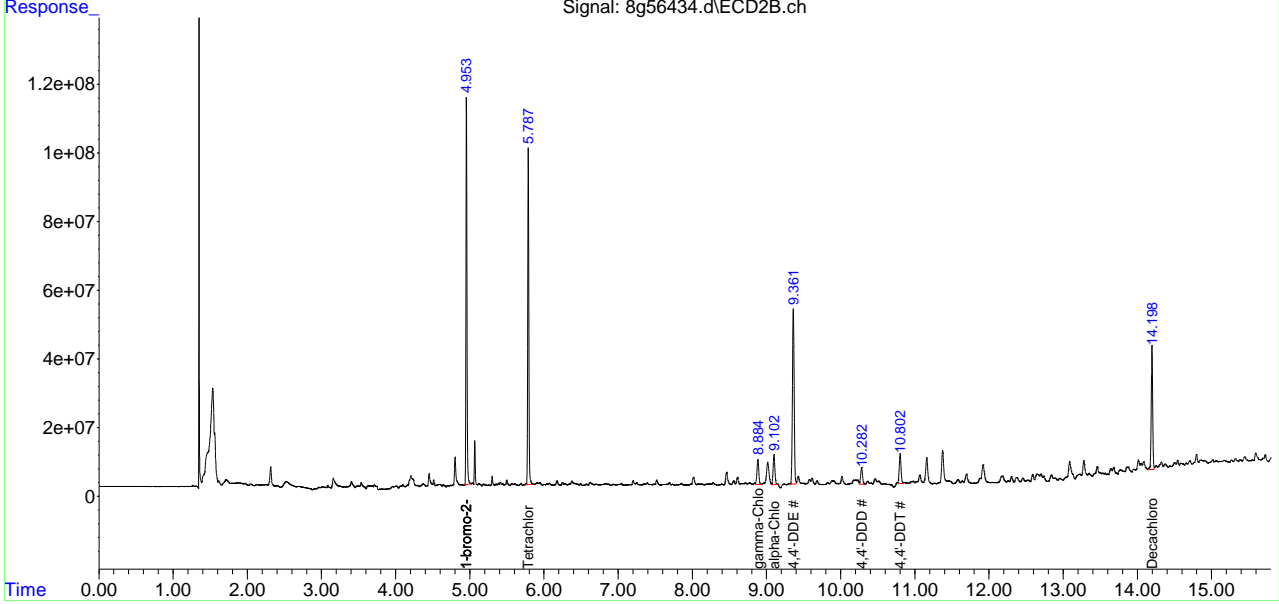
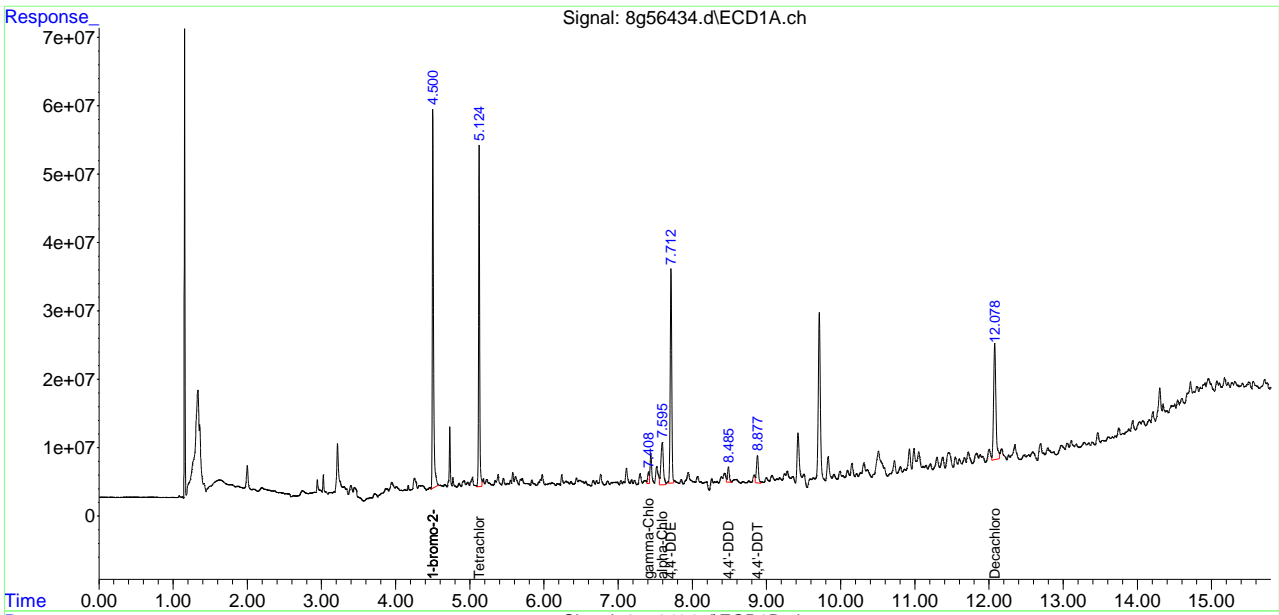
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

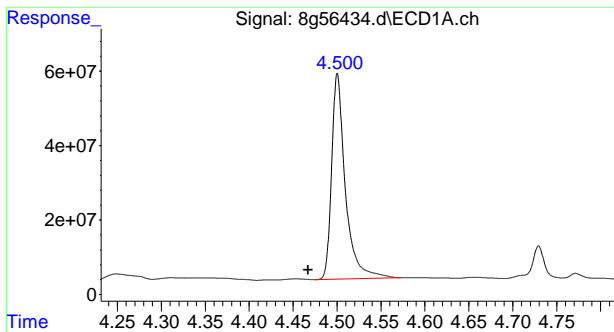
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\g8g2472\_2\  
 Data File : 8g56434.d  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 10 May 2024 3:41 pm  
 Operator : christp  
 Sample : jd87833-11 m  
 Misc : op54452,g8g2472,5.3,,,10,1  
 ALS Vial : 49 Sample Multiplier: 1

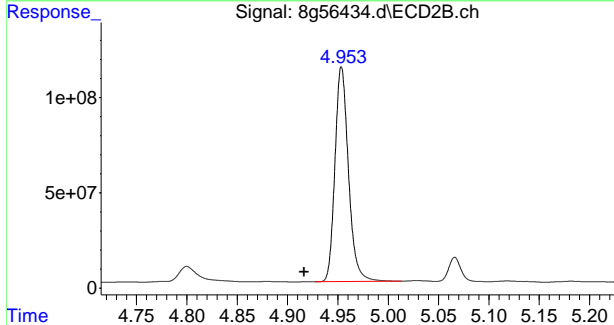
Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 13 06:31:07 2024  
 Quant Method : C:\msdchem\1\data\g8g2472\_2\8PSTLVI2430a.M  
 Quant Title : PEST/PCB  
 QLast Update : Fri May 10 12:20:14 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1ul/column  
 Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
 Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

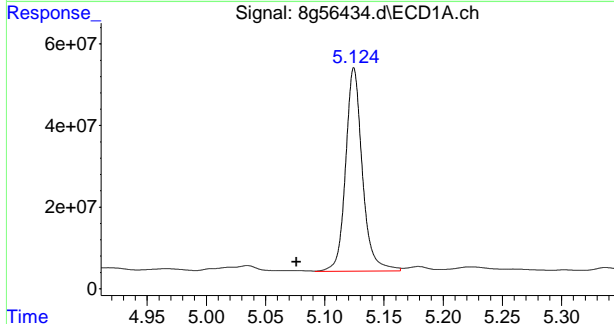




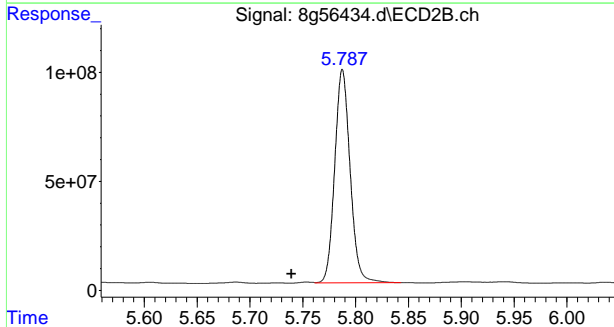
#1 1-bromo-2-nitrobenzene  
 R.T.: 4.501 min  
 Delta R.T.: 0.034 min  
 Response: 601827581  
 Conc: 5.00 PPB



#1 1-bromo-2-nitrobenzene  
 R.T.: 4.954 min  
 Delta R.T.: 0.037 min  
 Response: 1053488676  
 Conc: 5.00 PPB

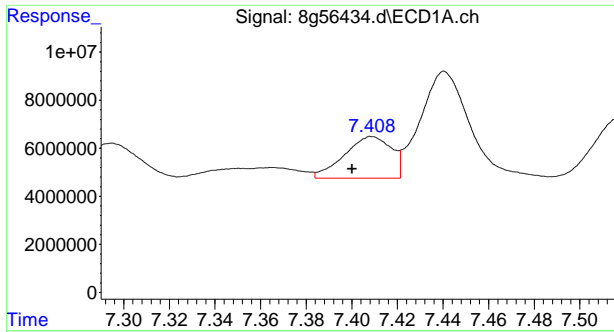


#2 Tetrachloro-m-xylene  
 R.T.: 5.124 min  
 Delta R.T.: 0.048 min  
 Response: 491659494  
 Conc: 3.92 PPB m

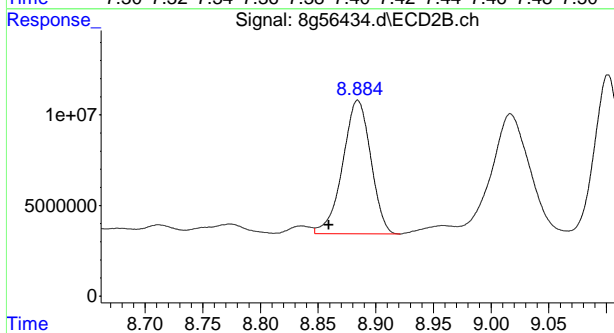


#2 Tetrachloro-m-xylene  
 R.T.: 5.787 min  
 Delta R.T.: 0.048 min  
 Response: 994510680  
 Conc: 3.21 PPB m

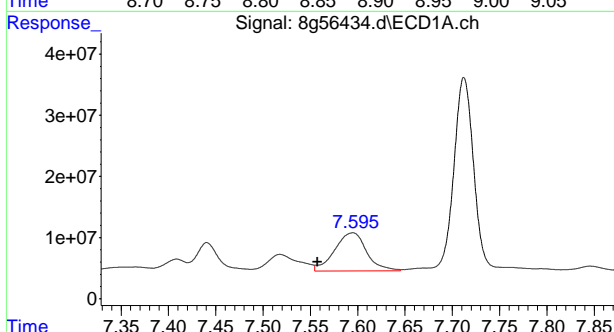
9.1.11  
 9



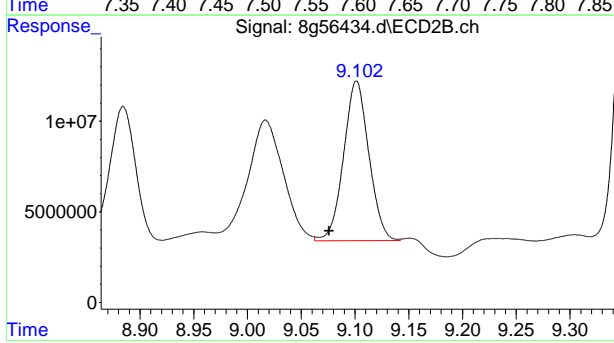
#12 gamma-Chlordane  
 R.T.: 7.408 min  
 Delta R.T.: 0.008 min  
 Response: 24922364  
 Conc: 0.16 PPB m



#12 gamma-Chlordane  
 R.T.: 8.884 min  
 Delta R.T.: 0.025 min  
 Response: 124878907  
 Conc: 0.37 PPB m

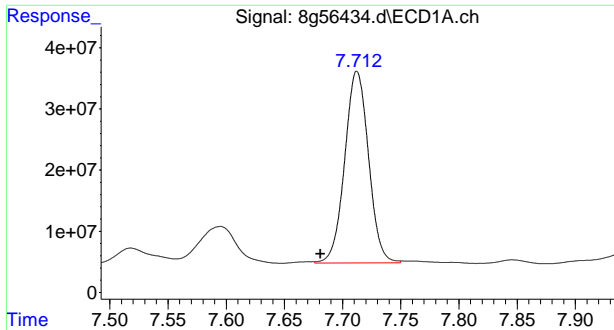


#13 alpha-Chlordane  
 R.T.: 7.595 min  
 Delta R.T.: 0.038 min  
 Response: 145818982  
 Conc: 0.98 PPB m

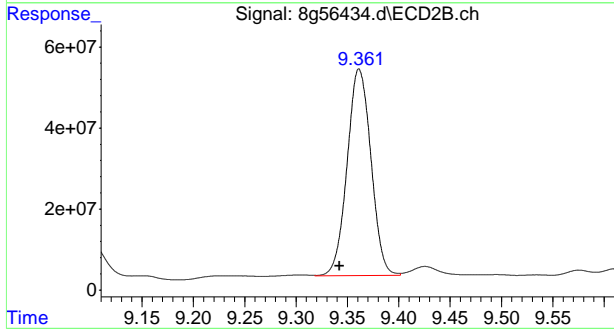


#13 alpha-Chlordane  
 R.T.: 9.102 min  
 Delta R.T.: 0.026 min  
 Response: 143931400  
 Conc: 0.46 PPB m

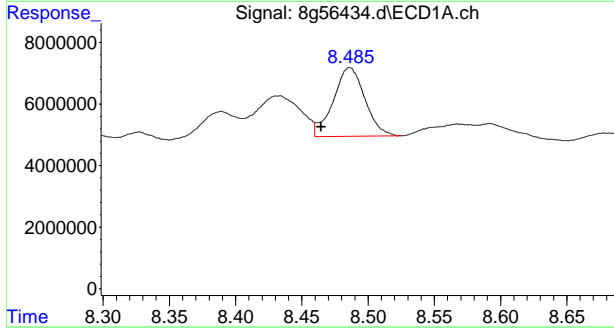
9.1.11  
**9**



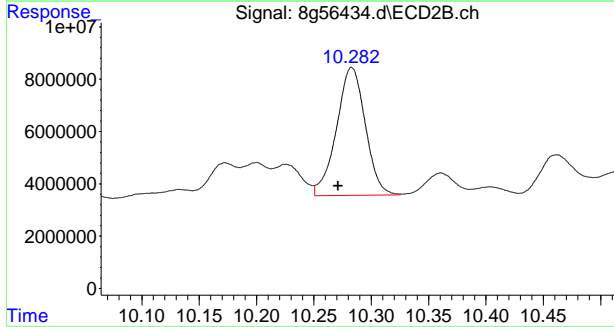
#15 4,4'-DDE  
 R.T.: 7.712 min  
 Delta R.T.: 0.031 min  
 Response: 446768355  
 Conc: 3.14 PPB m



#15 4,4'-DDE  
 R.T.: 9.361 min  
 Delta R.T.: 0.019 min  
 Response: 824013528  
 Conc: 2.57 PPB m

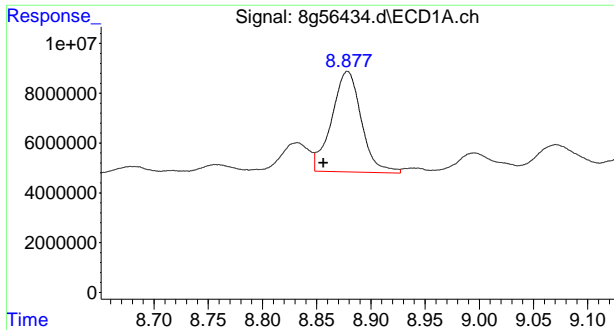


#18 4,4'-DDD  
 R.T.: 8.485 min  
 Delta R.T.: 0.021 min  
 Response: 36704306  
 Conc: 0.35 PPB m

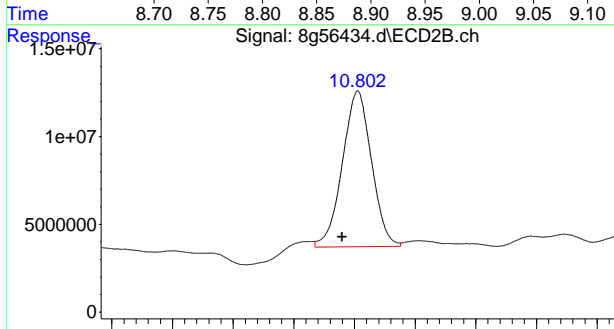


#18 4,4'-DDD  
 R.T.: 10.282 min  
 Delta R.T.: 0.011 min  
 Response: 85282576  
 Conc: 0.32 PPB m

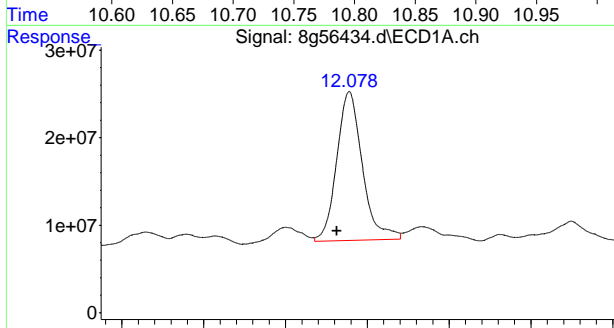
9.1.11  
**9**



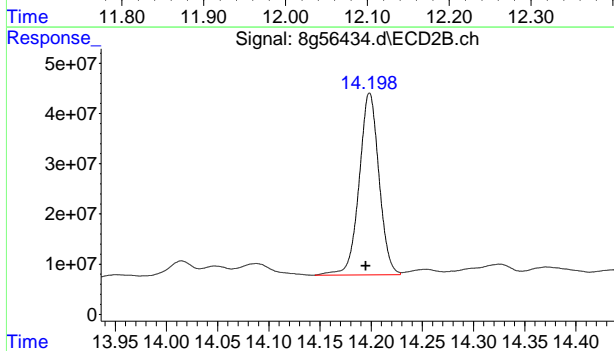
#20 4,4'-DDT  
 R.T.: 8.878 min  
 Delta R.T.: 0.022 min  
 Response: 77039680  
 Conc: 0.65 PPB



#20 4,4'-DDT  
 R.T.: 10.802 min  
 Delta R.T.: 0.013 min  
 Response: 147822026  
 Conc: 0.77 PPB m

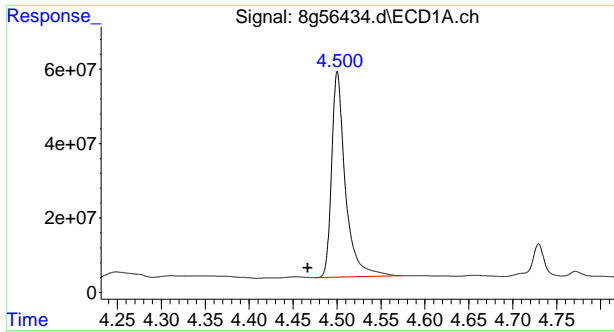


#26 Decachlorobiphenyl  
 R.T.: 12.078 min  
 Delta R.T.: 0.015 min  
 Response: 370411837  
 Conc: 2.74 PPB m

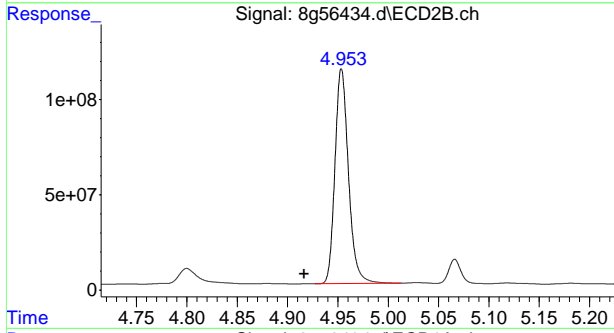


#26 Decachlorobiphenyl  
 R.T.: 14.198 min  
 Delta R.T.: 0.003 min  
 Response: 488708782  
 Conc: 3.33 PPB m

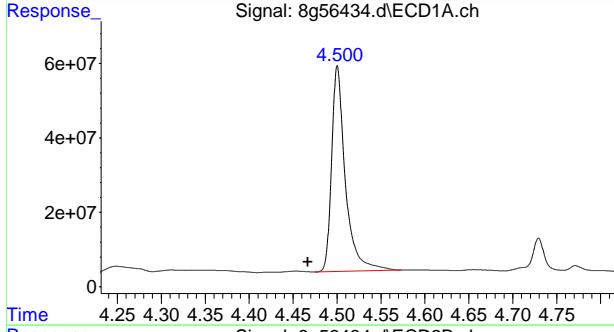
9.1.11  
9



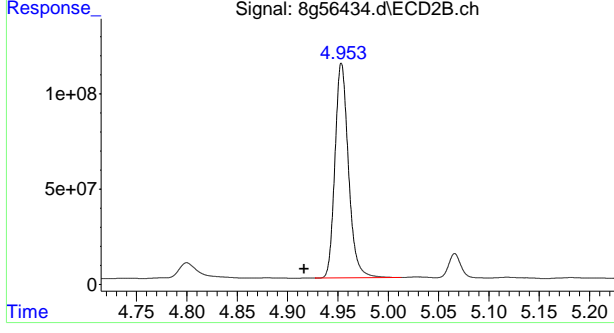
#27 1-bromo-2-nitrobenzeneA  
 R.T.: 4.501 min  
 Delta R.T.: 0.034 min  
 Response: 601827581  
 Conc: 5.00 PPB



#27 1-bromo-2-nitrobenzeneA  
 R.T.: 4.954 min  
 Delta R.T.: 0.037 min  
 Response: 1053488676  
 Conc: 5.00 PPB



#33 1-bromo-2-nitrobenzeneB  
 R.T.: 4.501 min  
 Delta R.T.: 0.034 min  
 Response: 601827581  
 Conc: 5.00 PPB



#33 1-bromo-2-nitrobenzeneB  
 R.T.: 4.954 min  
 Delta R.T.: 0.037 min  
 Response: 1053488676  
 Conc: 5.00 PPB

9.1.11  
 9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nazaryne\G8G2470\  
 Data File : 8g56359.d  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 9 May 2024 9:19 am  
 Operator : christp  
 Sample : jd87833-12 m  
 Misc : op54452,g8g2470,5.4,,,10,1  
 ALS Vial : 83 Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 16:38:34 2024  
 Quant Method : C:\msdchem\1\data\nazaryne\G8G2470\8PSTLVI2430a.M  
 Quant Title : PEST/PCB  
 QLast Update : Thu May 09 12:16:42 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1ul/column  
 Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
 Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
-----						
Internal Standards						
1) I 1-bromo-2...	4.454	4.907	791.1E6	887.2E6	5.000m	5.000
27) I 1-bromo-2...	4.454	4.907	790.8E6	887.2E6	5.000m	5.000
33) I 1-bromo-2...	4.454	4.907	790.0E6	887.2E6	5.000m	5.000
System Monitoring Compounds						
2) SAB Tetrachlo...	5.067	5.730	448.6E6	928.2E6	2.721m	3.555m#
Spiked Amount	40.000	Range 30 - 150	Recovery =		6.80%#	8.89%#
26) SA Decachlor...	12.042	14.185	337.9E6	398.9E6	1.900m	3.226m#
Spiked Amount	40.000		Recovery =		4.75%	8.06%

Target Compounds

SemiQuant Compounds - Not Calibrated on this Instrument

-----  
 (f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

9.1.12  
**9**



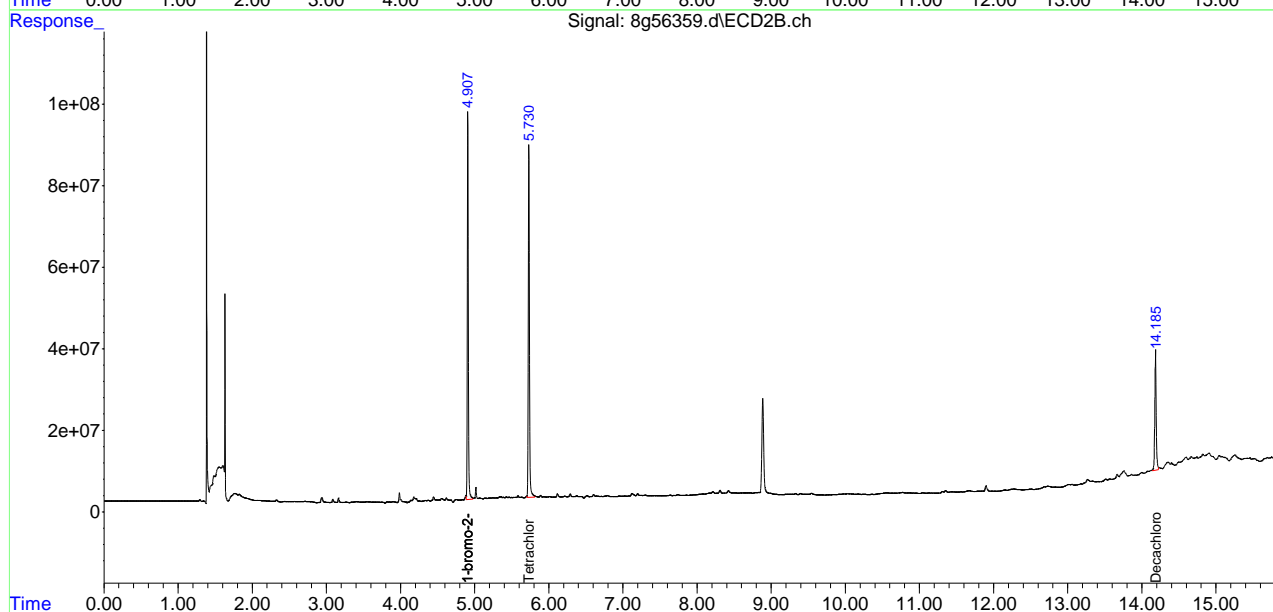
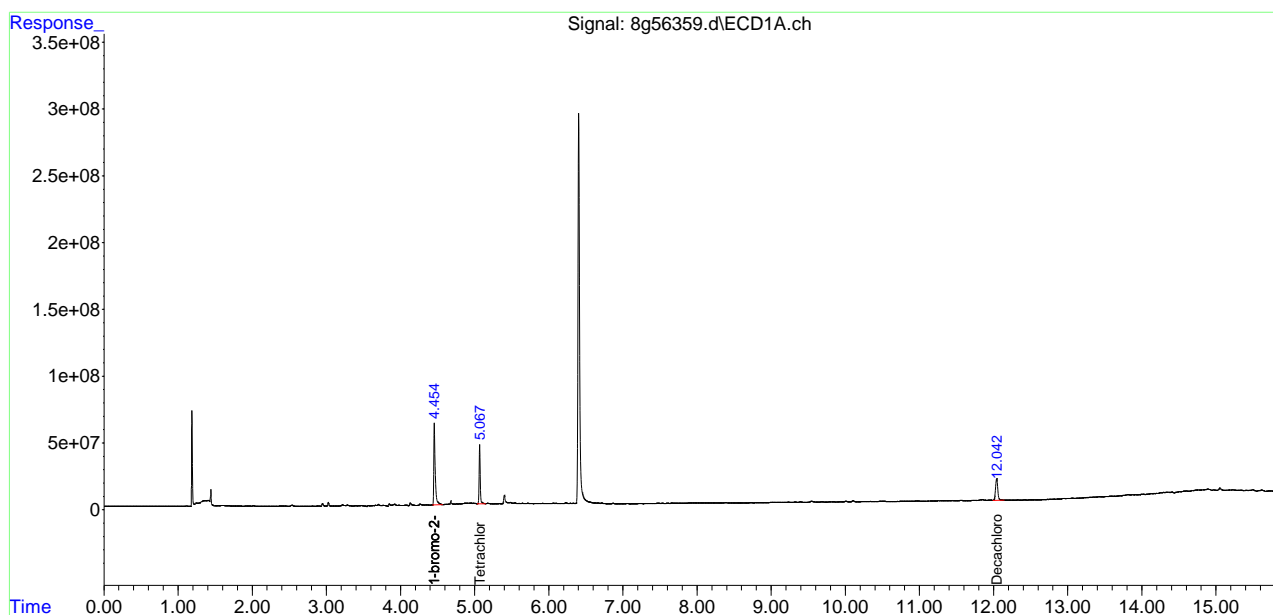


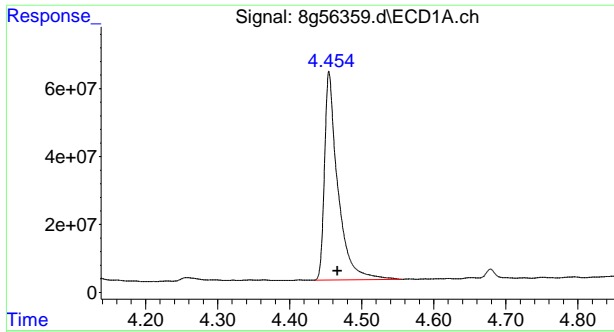
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nazaryne\G8G2470\  
 Data File : 8g56359.d  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 9 May 2024 9:19 am  
 Operator : christp  
 Sample : jd87833-12 m  
 Misc : op54452,g8g2470,5.4,,,10,1  
 ALS Vial : 83 Sample Multiplier: 1

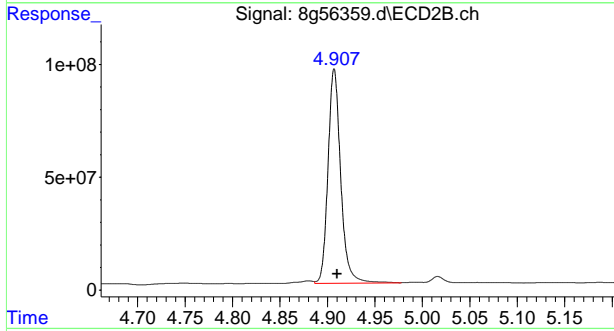
Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 16:38:34 2024  
 Quant Method : C:\msdchem\1\data\nazaryne\G8G2470\8PSTLVI2430a.M  
 Quant Title : PEST/PCB  
 QLast Update : Thu May 09 12:16:42 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1ul/column  
 Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
 Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

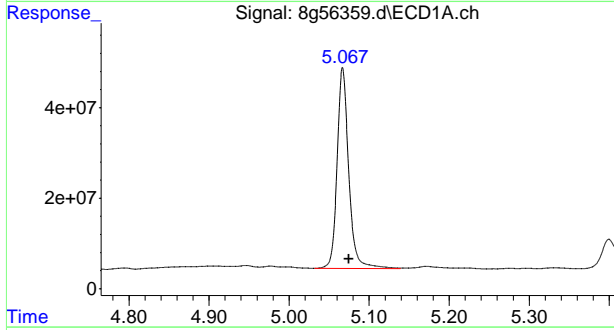




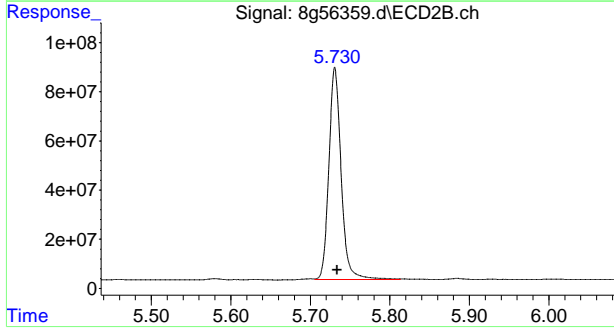
#1 1-bromo-2-nitrobenzene  
 R.T.: 4.454 min  
 Delta R.T.: -0.012 min  
 Response: 791057542  
 Conc: 5.00 PPB m



#1 1-bromo-2-nitrobenzene  
 R.T.: 4.907 min  
 Delta R.T.: -0.003 min  
 Response: 887232198  
 Conc: 5.00 PPB

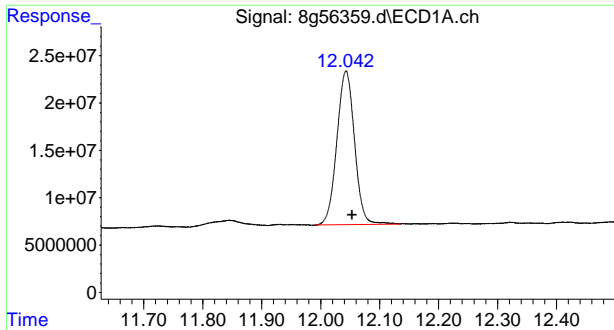


#2 Tetrachloro-m-xylene  
 R.T.: 5.067 min  
 Delta R.T.: -0.008 min  
 Response: 448574833  
 Conc: 2.72 PPB m

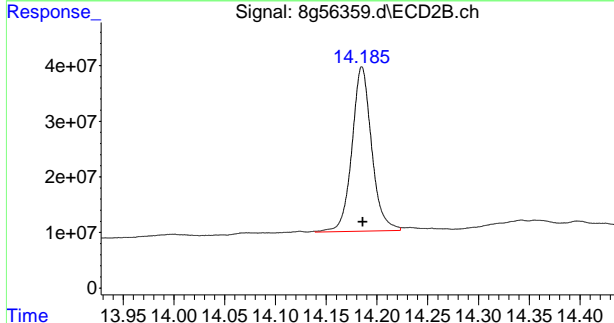


#2 Tetrachloro-m-xylene  
 R.T.: 5.730 min  
 Delta R.T.: -0.003 min  
 Response: 928215499  
 Conc: 3.55 PPB m

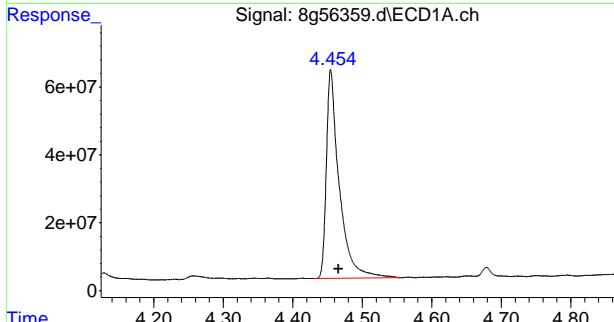
9.1.12  
 9



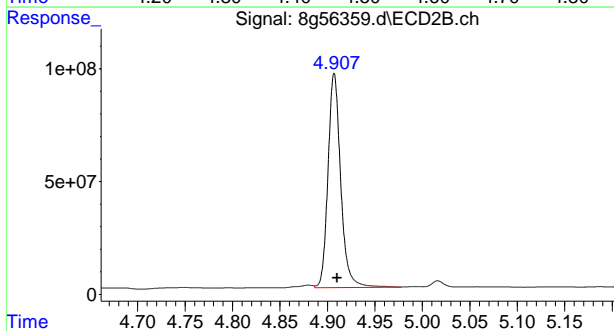
#26 Decachlorobiphenyl  
 R.T.: 12.042 min  
 Delta R.T.: -0.011 min  
 Response: 337921964  
 Conc: 1.90 PPB m



#26 Decachlorobiphenyl  
 R.T.: 14.185 min  
 Delta R.T.: 0.000 min  
 Response: 398878185  
 Conc: 3.23 PPB m

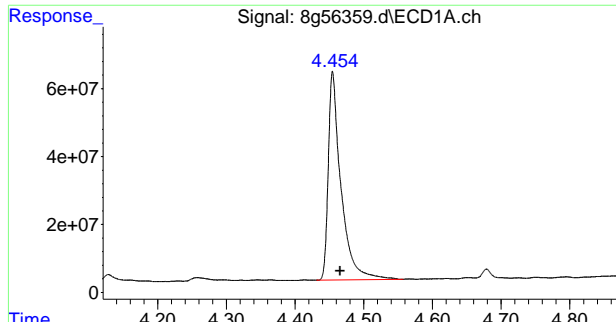


#27 1-bromo-2-nitrobenzeneA  
 R.T.: 4.454 min  
 Delta R.T.: -0.012 min  
 Response: 790774026  
 Conc: 5.00 PPB m

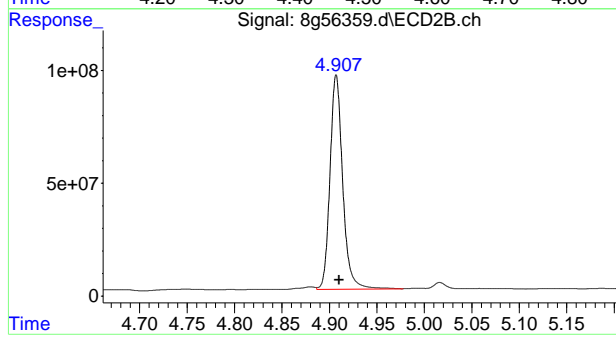


#27 1-bromo-2-nitrobenzeneA  
 R.T.: 4.907 min  
 Delta R.T.: -0.003 min  
 Response: 887232198  
 Conc: 5.00 PPB

9.1.12  
**9**



#33 1-bromo-2-nitrobenzeneB  
R.T.: 4.454 min  
Delta R.T.: -0.012 min  
Response: 789952694  
Conc: 5.00 PPB m



#33 1-bromo-2-nitrobenzeneB  
R.T.: 4.907 min  
Delta R.T.: -0.003 min  
Response: 887232198  
Conc: 5.00 PPB

9.1.12  
9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nazaryne\G8G2470\  
 Data File : 8g56360.d  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 9 May 2024 9:40 am  
 Operator : christp  
 Sample : jd87833-14 m  
 Misc : op54452,g8g2470,5.3,,,10,1  
 ALS Vial : 84 Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 16:45:11 2024  
 Quant Method : C:\msdchem\1\data\nazaryne\G8G2470\8PSTLVI2430a.M  
 Quant Title : PEST/PCB  
 QLast Update : Thu May 09 12:16:42 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1ul/column  
 Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
 Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
-----						
Internal Standards						
1) I 1-bromo-2...	4.460	4.911	662.5E6	949.7E6	5.000	5.000m
27) I 1-bromo-2...	4.460	4.911	662.5E6	949.4E6	5.000	5.000m
33) I 1-bromo-2...	4.460	4.911	662.5E6	948.9E6	5.000	5.000m
System Monitoring Compounds						
2) SAB Tetrachlo...	5.073	5.736	546.1E6	985.4E6	3.955	3.525
Spiked Amount	40.000	Range 30 - 150	Recovery =		9.89%#	8.81%#
26) SA Decachlor...	12.042	14.185	362.2E6	465.4E6	2.431m	3.516m#
Spiked Amount	40.000		Recovery =		6.08%	8.79%
Target Compounds						
7) B beta-BHC	5.910	6.902	25893933	7018734	0.287m	0.043 #
11) B Heptachlo...	7.234	8.569	115.1E6	109.7E6	0.782m	0.363m#
12) B gamma-Chl...	7.387	8.845	258.9E6	375.7E6	1.489m	1.235m
13) B alpha-Chl...	7.544	9.065	532.5E6	588.7E6	3.254m	2.097m#
15) B 4,4'-DDE	7.660f	9.328	828.4E6	1257.9E6	5.286m	4.346m
16) MA Dieldrin	8.013	9.575	59234966	90456665	0.349m	0.293m
18) A 4,4'-DDD	8.437f	10.252	252.3E6	461.0E6	2.200m	1.922m
20) MA 4,4'-DDT	8.834f	10.775	148.2E6	240.1E6	1.140m	1.384m

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

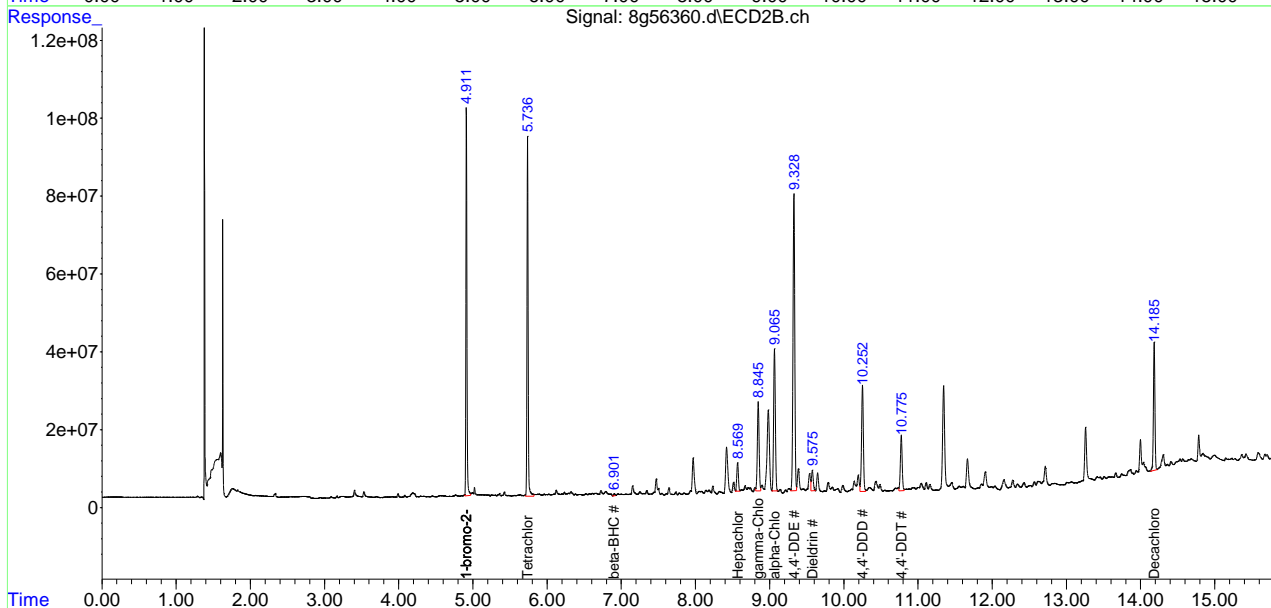
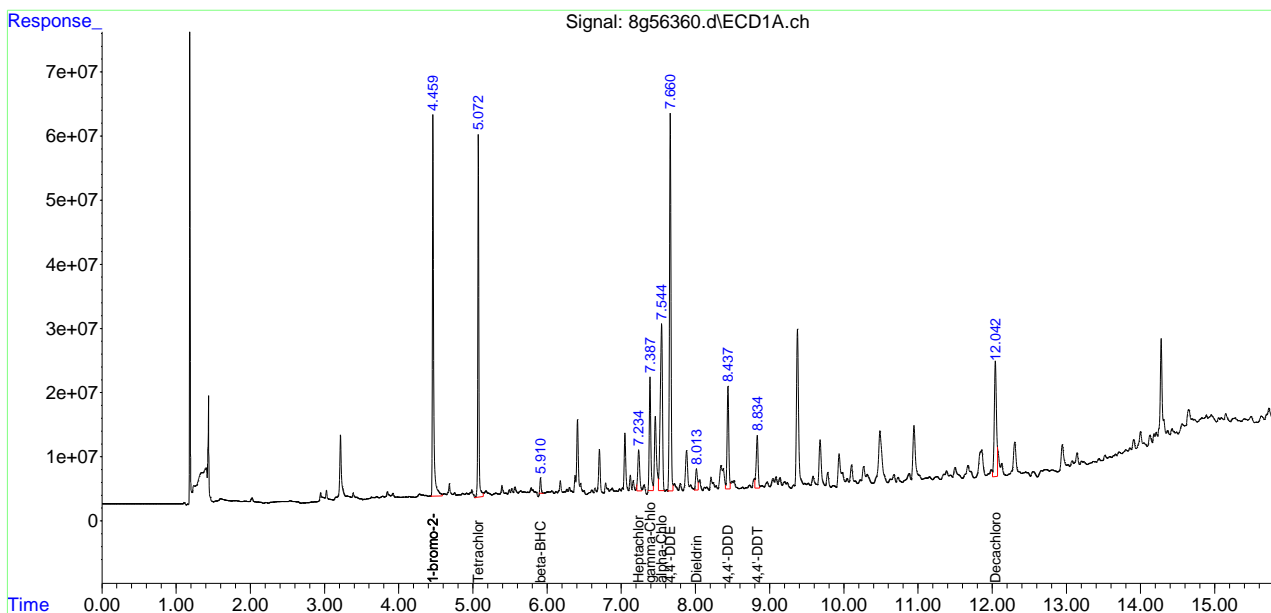
9.1.13  
**9**

Quantitation Report (QT Reviewed)

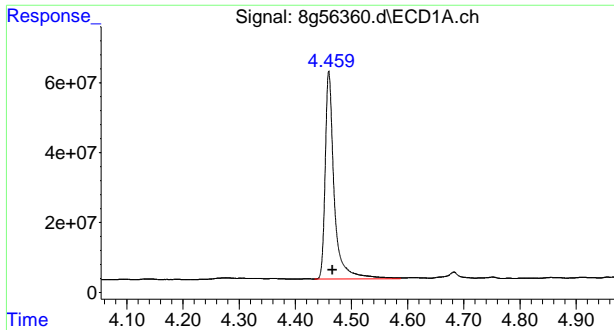
Data Path : C:\msdchem\1\data\nazaryne\G8G2470\  
 Data File : 8g56360.d  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 9 May 2024 9:40 am  
 Operator : christp  
 Sample : jd87833-14 m  
 Misc : op54452,g8g2470,5.3,,10,1  
 ALS Vial : 84 Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 16:45:11 2024  
 Quant Method : C:\msdchem\1\data\nazaryne\G8G2470\8PSTLVI2430a.M  
 Quant Title : PEST/PCB  
 QLast Update : Thu May 09 12:16:42 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

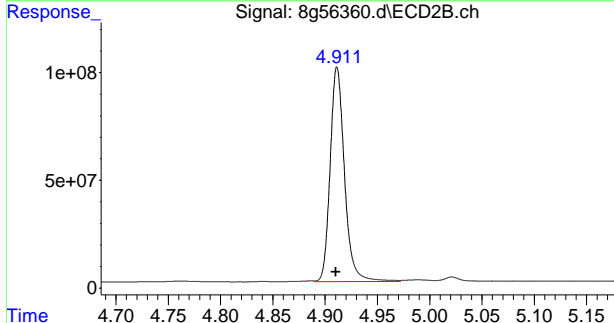
Volume Inj. : 1ul/column  
 Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
 Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



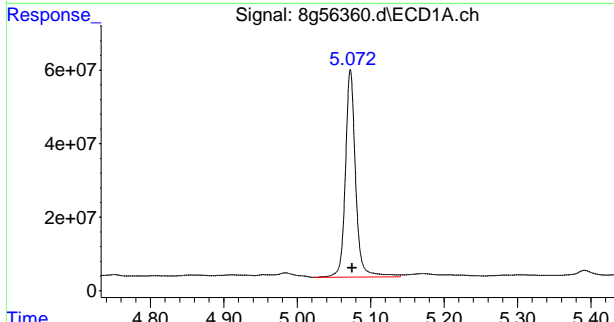
9.1.13  
9



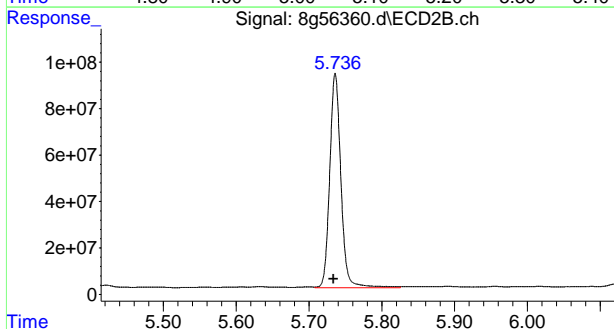
#1 1-bromo-2-nitrobenzene  
 R.T.: 4.460 min  
 Delta R.T.: -0.006 min  
 Response: 662476006  
 Conc: 5.00 PPB



#1 1-bromo-2-nitrobenzene  
 R.T.: 4.911 min  
 Delta R.T.: 0.000 min  
 Response: 949733832  
 Conc: 5.00 PPB m

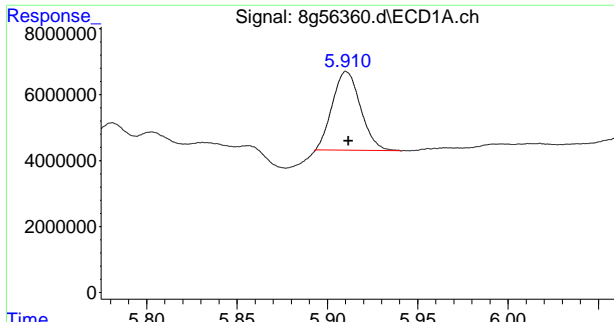


#2 Tetrachloro-m-xylene  
 R.T.: 5.073 min  
 Delta R.T.: -0.002 min  
 Response: 546062585  
 Conc: 3.95 PPB

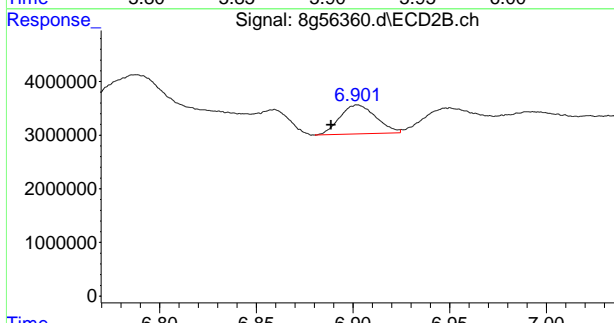


#2 Tetrachloro-m-xylene  
 R.T.: 5.736 min  
 Delta R.T.: 0.003 min  
 Response: 985350794  
 Conc: 3.53 PPB

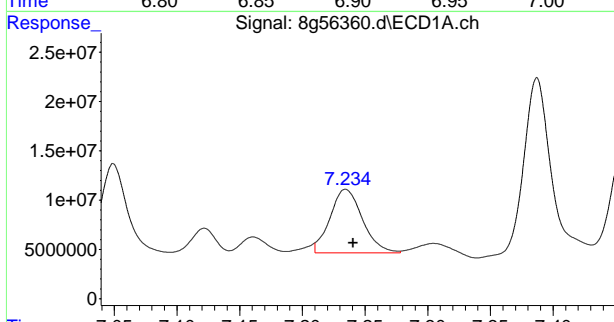
9.1.13  
 9



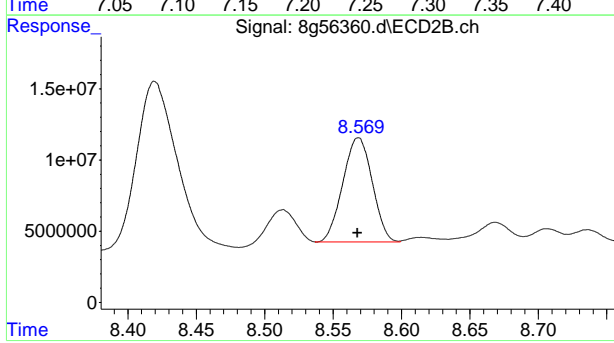
#7 beta-BHC  
 R.T.: 5.910 min  
 Delta R.T.: -0.002 min  
 Response: 25893933  
 Conc: 0.29 PPB m



#7 beta-BHC  
 R.T.: 6.902 min  
 Delta R.T.: 0.014 min  
 Response: 7018734  
 Conc: 0.04 PPB



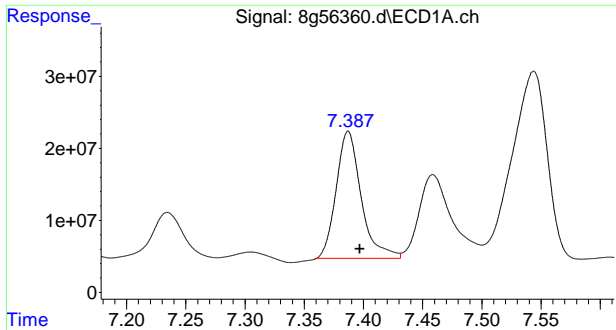
#11 Heptachlor Epoxide  
 R.T.: 7.234 min  
 Delta R.T.: -0.006 min  
 Response: 115091297  
 Conc: 0.78 PPB m



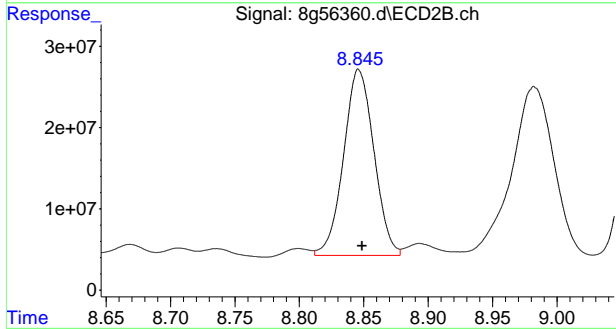
#11 Heptachlor Epoxide  
 R.T.: 8.569 min  
 Delta R.T.: 0.000 min  
 Response: 109700404  
 Conc: 0.36 PPB m

9.1.13  
**9**

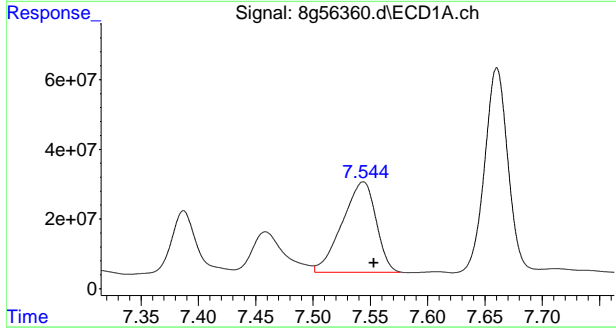




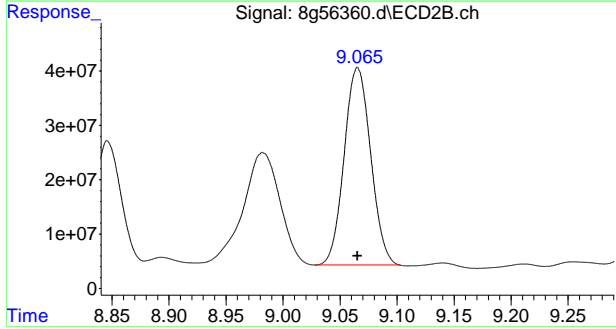
#12 gamma-Chlordane  
 R.T.: 7.387 min  
 Delta R.T.: -0.010 min  
 Response: 258932294  
 Conc: 1.49 PPB m



#12 gamma-Chlordane  
 R.T.: 8.845 min  
 Delta R.T.: -0.004 min  
 Response: 375666871  
 Conc: 1.23 PPB m

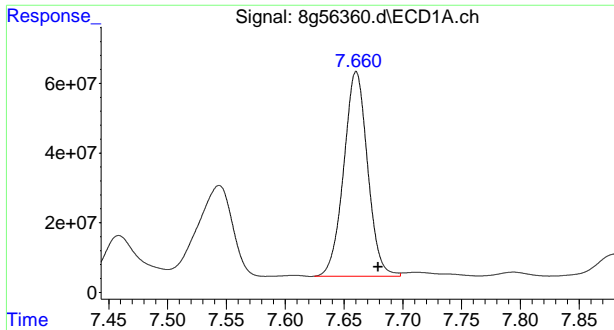


#13 alpha-Chlordane  
 R.T.: 7.544 min  
 Delta R.T.: -0.009 min  
 Response: 532506482  
 Conc: 3.25 PPB m

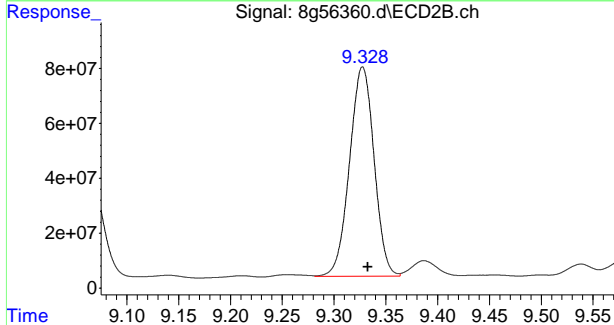


#13 alpha-Chlordane  
 R.T.: 9.065 min  
 Delta R.T.: 0.000 min  
 Response: 588697277  
 Conc: 2.10 PPB m

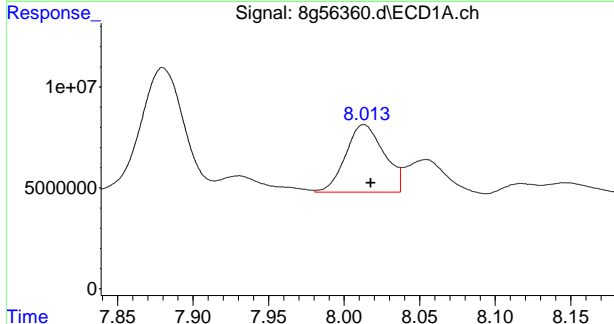
9.1.13  
**9**



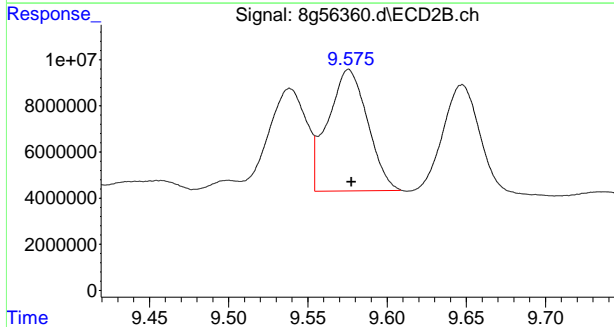
#15 4,4'-DDE  
 R.T.: 7.660 min  
 Delta R.T.: -0.019 min  
 Response: 828404636  
 Conc: 5.29 PPB m



#15 4,4'-DDE  
 R.T.: 9.328 min  
 Delta R.T.: -0.005 min  
 Response: 1257891412  
 Conc: 4.35 PPB m

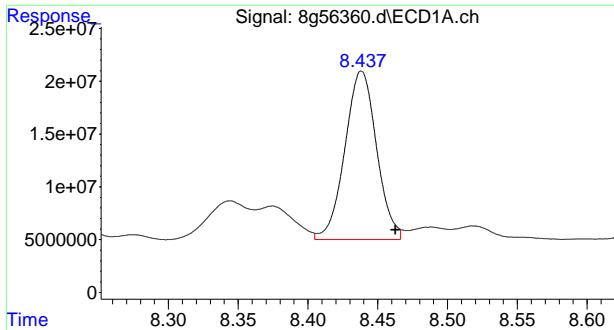


#16 Dieldrin  
 R.T.: 8.013 min  
 Delta R.T.: -0.004 min  
 Response: 59234966  
 Conc: 0.35 PPB m

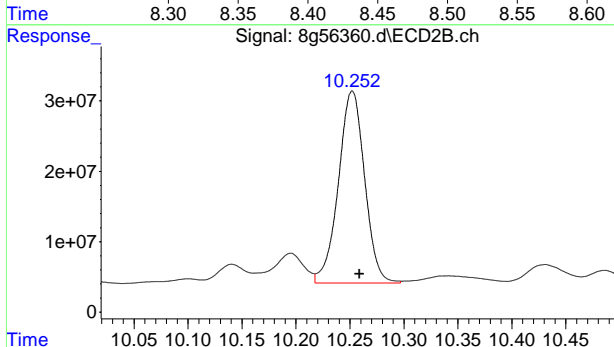


#16 Dieldrin  
 R.T.: 9.575 min  
 Delta R.T.: -0.002 min  
 Response: 90456665  
 Conc: 0.29 PPB m

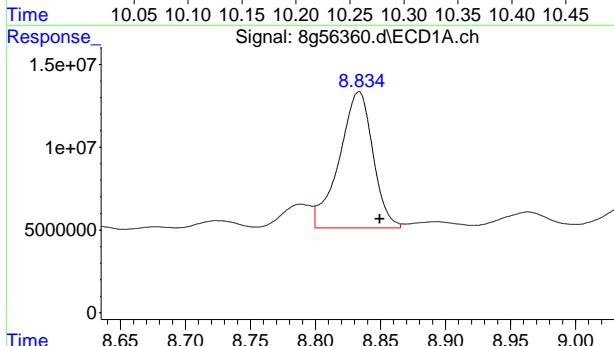
9.1.13  
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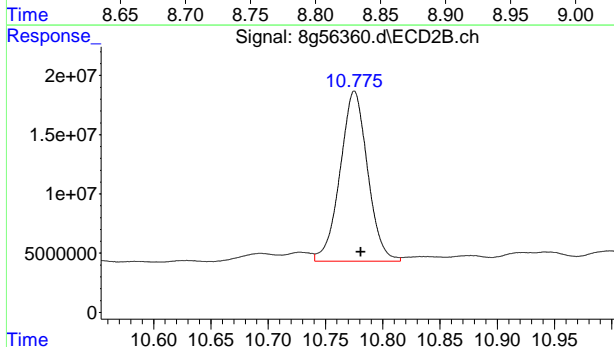
#18 4,4'-DDD  
 R.T.: 8.437 min  
 Delta R.T.: -0.025 min  
 Response: 252309742  
 Conc: 2.20 PPB m



#18 4,4'-DDD  
 R.T.: 10.252 min  
 Delta R.T.: -0.007 min  
 Response: 461038259  
 Conc: 1.92 PPB m

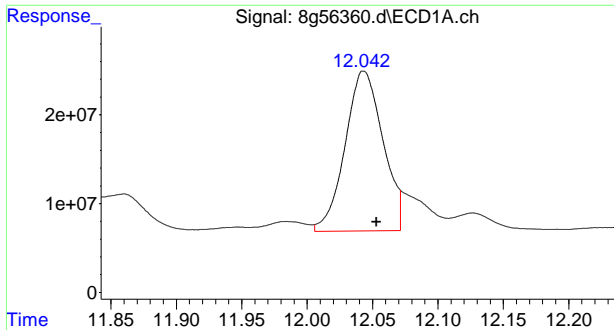


#20 4,4'-DDT  
 R.T.: 8.834 min  
 Delta R.T.: -0.016 min  
 Response: 148191880  
 Conc: 1.14 PPB m

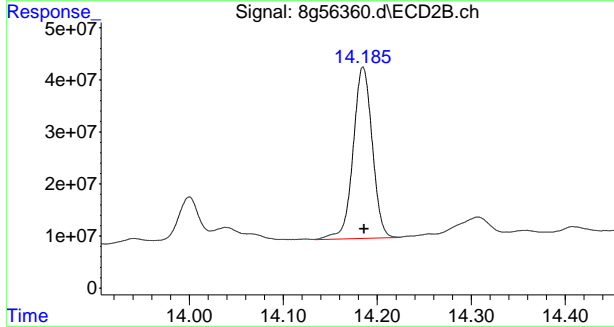


#20 4,4'-DDT  
 R.T.: 10.775 min  
 Delta R.T.: -0.006 min  
 Response: 240062020  
 Conc: 1.38 PPB m

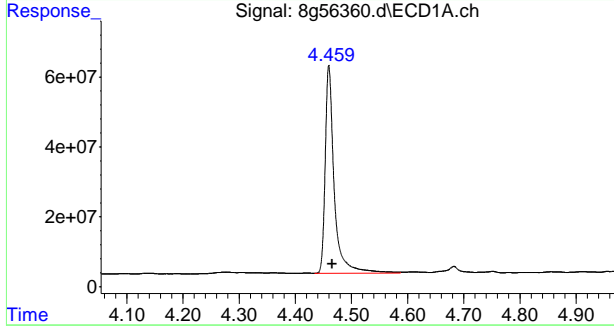
9.1.13  
9



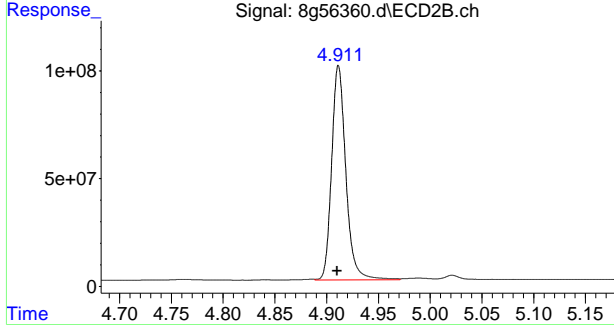
#26 Decachlorobiphenyl  
 R.T.: 12.042 min  
 Delta R.T.: -0.011 min  
 Response: 362220532  
 Conc: 2.43 PPB m



#26 Decachlorobiphenyl  
 R.T.: 14.185 min  
 Delta R.T.: -0.001 min  
 Response: 465388149  
 Conc: 3.52 PPB m

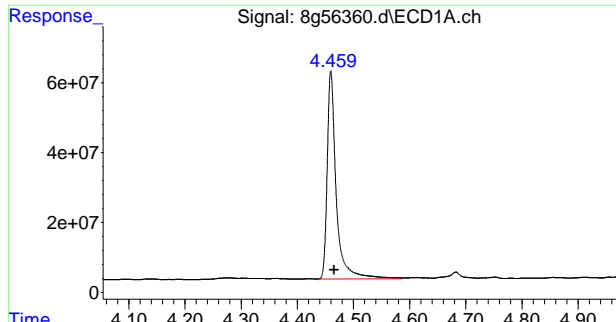


#27 1-bromo-2-nitrobenzeneA  
 R.T.: 4.460 min  
 Delta R.T.: -0.006 min  
 Response: 662476006  
 Conc: 5.00 PPB

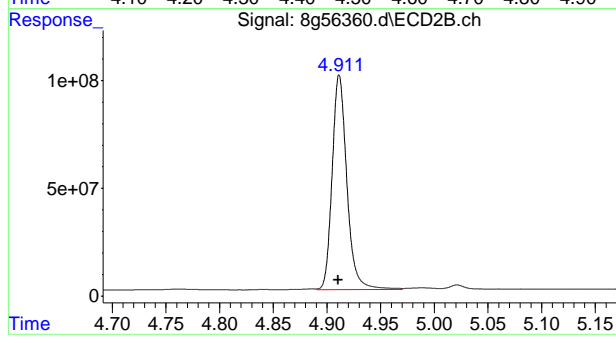


#27 1-bromo-2-nitrobenzeneA  
 R.T.: 4.911 min  
 Delta R.T.: 0.000 min  
 Response: 949408090  
 Conc: 5.00 PPB m

9.1.13  
**9**



#33 1-bromo-2-nitrobenzeneB  
R.T.: 4.460 min  
Delta R.T.: -0.006 min  
Response: 662476006  
Conc: 5.00 PPB



#33 1-bromo-2-nitrobenzeneB  
R.T.: 4.911 min  
Delta R.T.: 0.000 min  
Response: 948949214  
Conc: 5.00 PPB m

9.1.13  
9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nazaryne\G8G2470\  
 Data File : 8g56361.d  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 9 May 2024 10:02 am  
 Operator : christp  
 Sample : jd87833-15 m  
 Misc : op54452,g8g2470,5.1,,,10,1  
 ALS Vial : 85 Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 16:51:38 2024  
 Quant Method : C:\msdchem\1\data\nazaryne\G8G2470\8PSTLVI2430a.M  
 Quant Title : PEST/PCB  
 QLast Update : Thu May 09 12:16:42 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1ul/column  
 Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
 Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
-----						
Internal Standards						
1) I 1-bromo-2...	4.459	4.912	633.2E6	917.7E6	5.000m	5.000
27) I 1-bromo-2...	4.459	4.912	635.4E6	917.7E6	5.000m	5.000
33) I 1-bromo-2...	4.459	4.912	634.5E6	917.7E6	5.000m	5.000
System Monitoring Compounds						
2) SAB Tetrachlo...	5.071	5.737	492.5E6	895.0E6	3.731m	3.314m
Spiked Amount	40.000	Range 30 - 150	Recovery =		9.33%#	8.29%#
26) SA Decachlor...	12.043	14.184	318.2E6	546.0E6	2.235m	4.269m#
Spiked Amount	40.000		Recovery =		5.59%	10.67%
Target Compounds						
7) B beta-BHC	5.909	6.903	50151396	9267516	0.582m	0.059 #
13) B alpha-Chl...	7.547	9.067	13353612	19287286	0.085m	0.071m
18) A 4,4'-DDD	8.440f	10.244	29056121	22339952	0.265m	0.096m#
20) MA 4,4'-DDT	8.813f	10.775	50409533	20706960	0.406m	0.124m#

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

9.1.14  
**9**

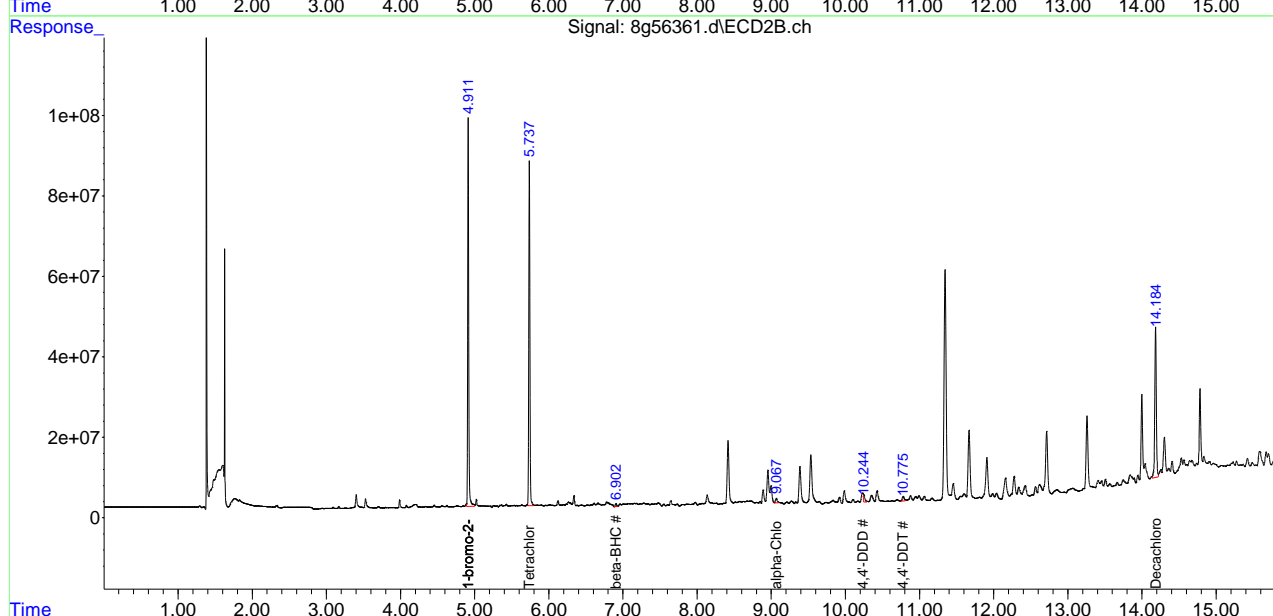
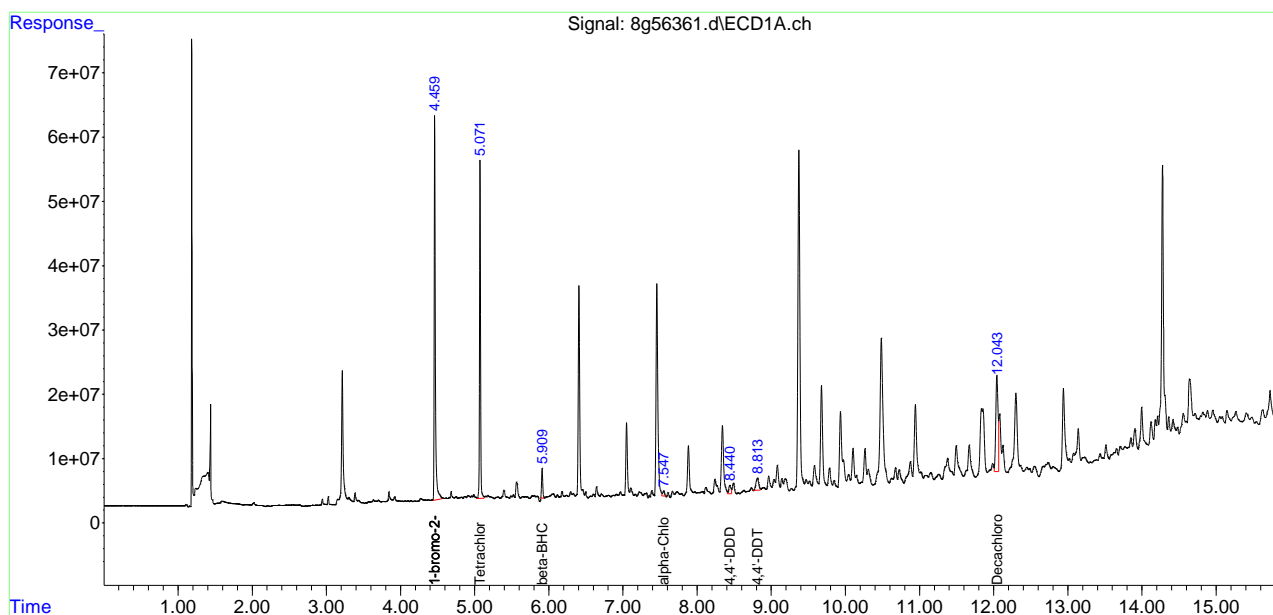


Quantitation Report (QT Reviewed)

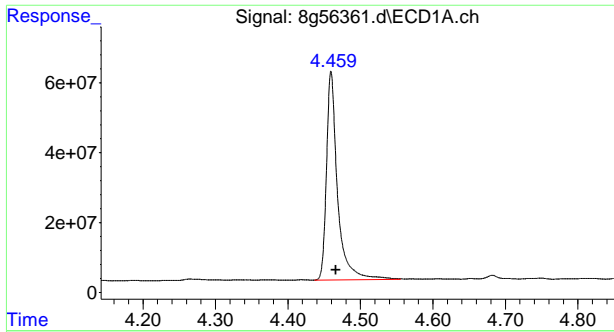
Data Path : C:\msdchem\1\data\nazaryne\G8G2470\  
 Data File : 8g56361.d  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 9 May 2024 10:02 am  
 Operator : christp  
 Sample : jd87833-15 m  
 Misc : op54452,g8g2470,5.1,,,10,1  
 ALS Vial : 85 Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 16:51:38 2024  
 Quant Method : C:\msdchem\1\data\nazaryne\G8G2470\8PSTLVI2430a.M  
 Quant Title : PEST/PCB  
 QLast Update : Thu May 09 12:16:42 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

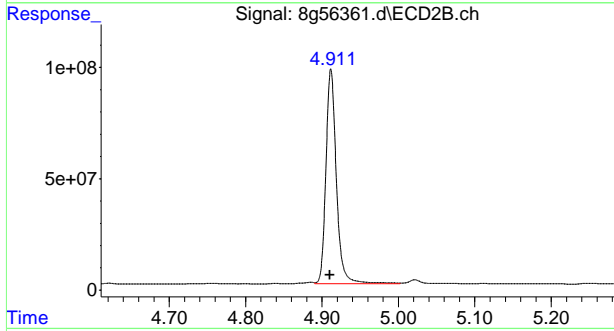
Volume Inj. : 1ul/column  
 Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
 Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



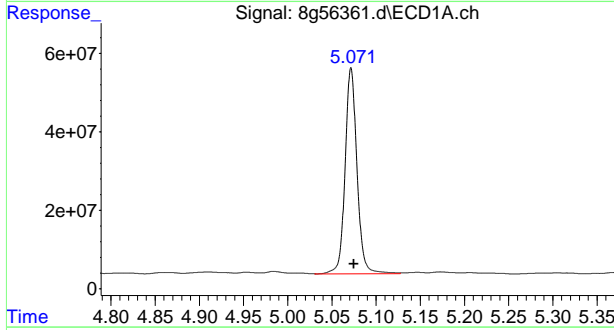
9.1.14  
 9



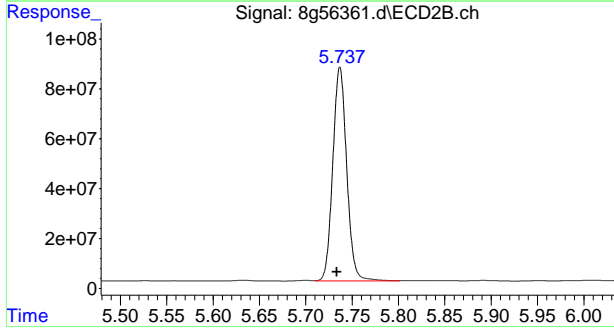
#1 1-bromo-2-nitrobenzene  
 R.T.: 4.459 min  
 Delta R.T.: -0.007 min  
 Response: 633236995  
 Conc: 5.00 PPB m



#1 1-bromo-2-nitrobenzene  
 R.T.: 4.912 min  
 Delta R.T.: 0.002 min  
 Response: 917719570  
 Conc: 5.00 PPB



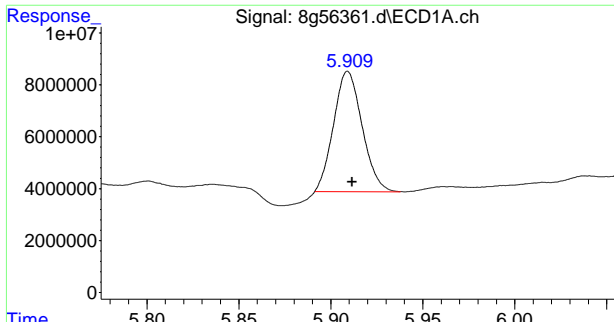
#2 Tetrachloro-m-xylene  
 R.T.: 5.071 min  
 Delta R.T.: -0.003 min  
 Response: 492480932  
 Conc: 3.73 PPB m



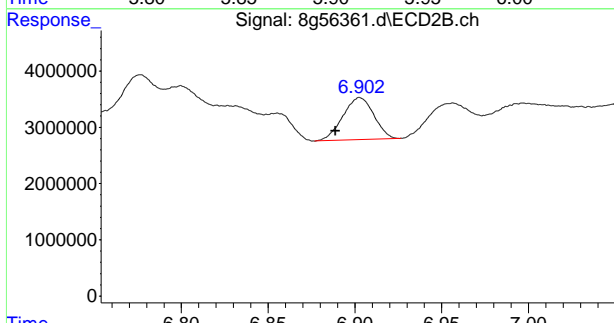
#2 Tetrachloro-m-xylene  
 R.T.: 5.737 min  
 Delta R.T.: 0.003 min  
 Response: 894999708  
 Conc: 3.31 PPB m

9.1.14  
**9**

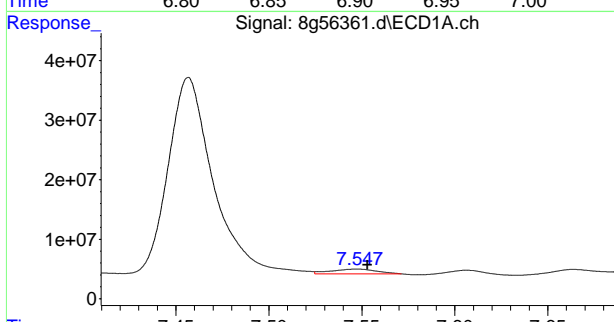




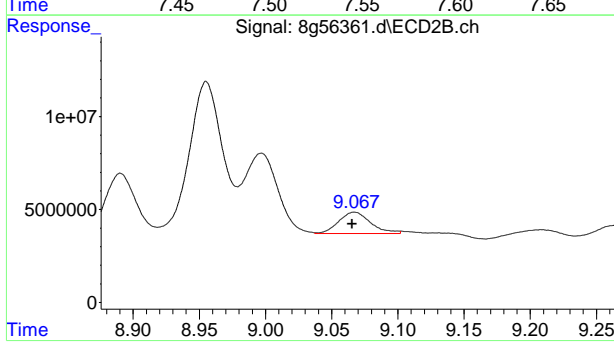
#7 beta-BHC  
 R.T.: 5.909 min  
 Delta R.T.: -0.003 min  
 Response: 50151396  
 Conc: 0.58 PPB m



#7 beta-BHC  
 R.T.: 6.903 min  
 Delta R.T.: 0.014 min  
 Response: 9267516  
 Conc: 0.06 PPB

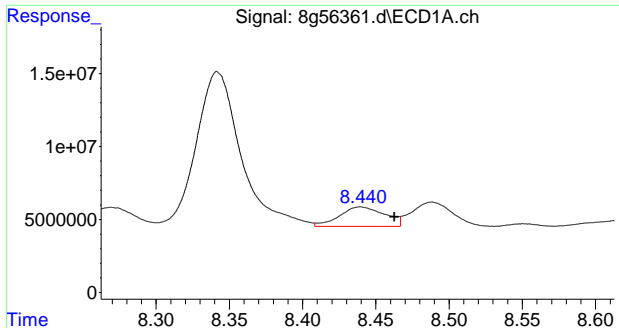


#13 alpha-Chlordane  
 R.T.: 7.547 min  
 Delta R.T.: -0.006 min  
 Response: 13353612  
 Conc: 0.09 PPB m

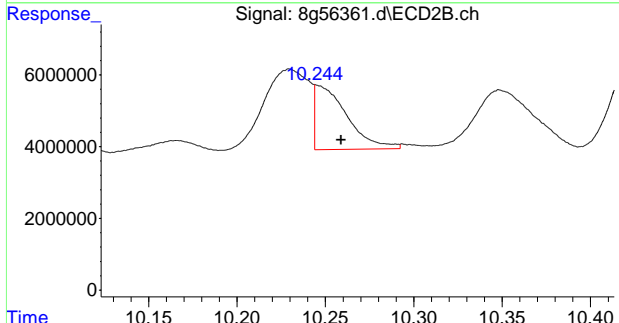


#13 alpha-Chlordane  
 R.T.: 9.067 min  
 Delta R.T.: 0.001 min  
 Response: 19287286  
 Conc: 0.07 PPB m

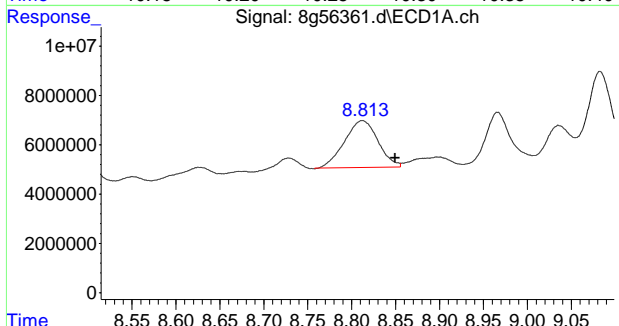
9.1.14  
**9**



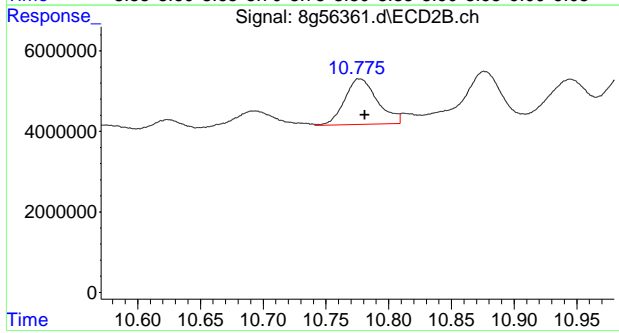
#18 4,4'-DDD  
 R.T.: 8.440 min  
 Delta R.T.: -0.023 min  
 Response: 29056121  
 Conc: 0.27 PPB m



#18 4,4'-DDD  
 R.T.: 10.244 min  
 Delta R.T.: -0.015 min  
 Response: 22339952  
 Conc: 0.10 PPB m

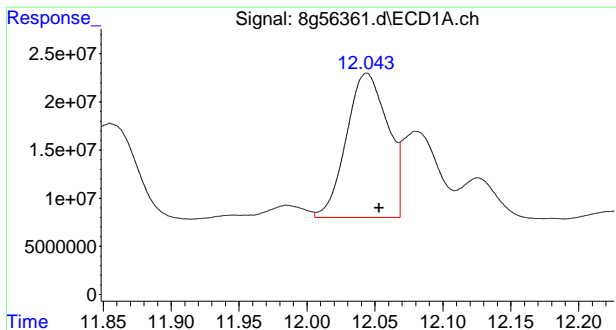


#20 4,4'-DDT  
 R.T.: 8.813 min  
 Delta R.T.: -0.037 min  
 Response: 50409533  
 Conc: 0.41 PPB m

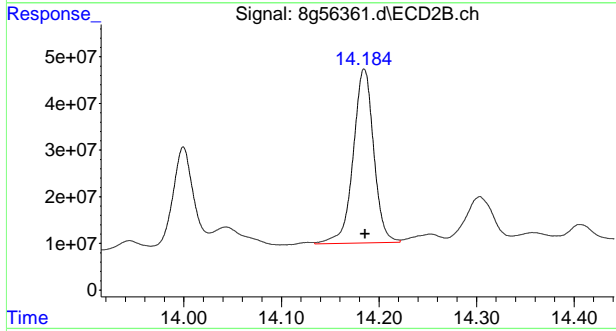


#20 4,4'-DDT  
 R.T.: 10.775 min  
 Delta R.T.: -0.006 min  
 Response: 20706960  
 Conc: 0.12 PPB m

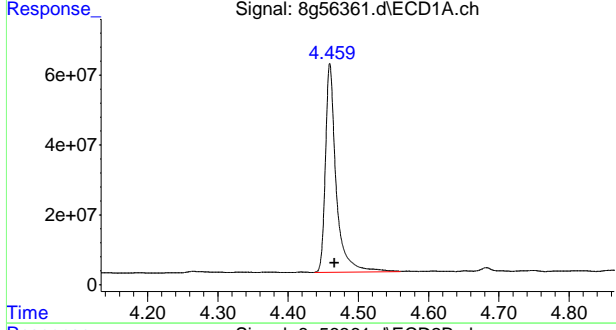
9.1.14  
**9**



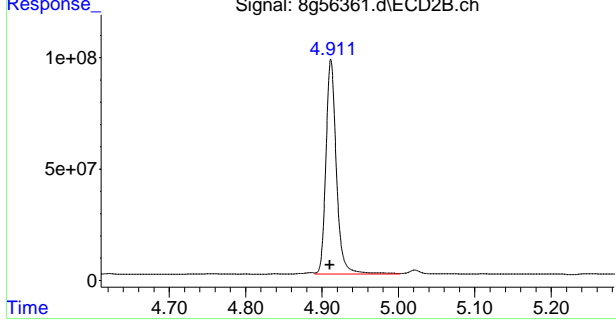
#26 Decachlorobiphenyl  
 R.T.: 12.043 min  
 Delta R.T.: -0.010 min  
 Response: 318247733  
 Conc: 2.23 PPB m



#26 Decachlorobiphenyl  
 R.T.: 14.184 min  
 Delta R.T.: -0.001 min  
 Response: 546046614  
 Conc: 4.27 PPB m

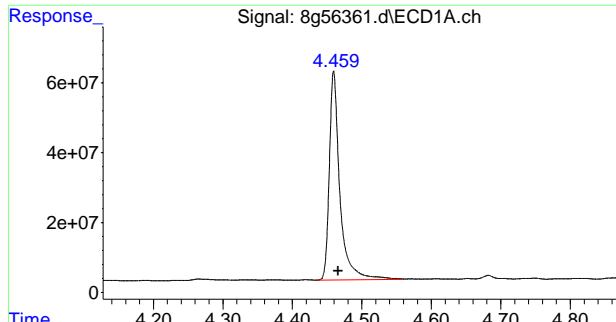


#27 1-bromo-2-nitrobenzeneA  
 R.T.: 4.459 min  
 Delta R.T.: -0.007 min  
 Response: 635403711  
 Conc: 5.00 PPB m

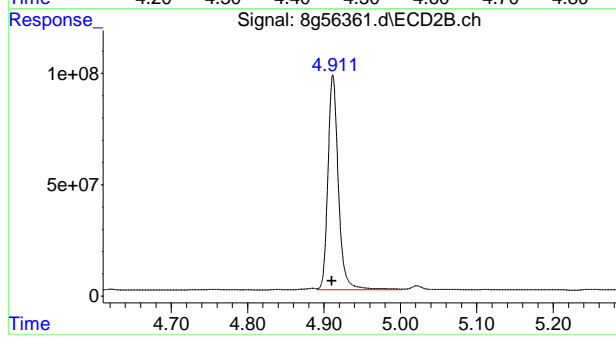


#27 1-bromo-2-nitrobenzeneA  
 R.T.: 4.912 min  
 Delta R.T.: 0.002 min  
 Response: 917719570  
 Conc: 5.00 PPB

9.1.14  
**9**



#33 1-bromo-2-nitrobenzeneB  
R.T.: 4.459 min  
Delta R.T.: -0.007 min  
Response: 634511221  
Conc: 5.00 PPB m



#33 1-bromo-2-nitrobenzeneB  
R.T.: 4.912 min  
Delta R.T.: 0.002 min  
Response: 917719570  
Conc: 5.00 PPB

9.1.14  
9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nazaryne\G8G2470\  
 Data File : 8g56362.d  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 9 May 2024 10:24 am  
 Operator : christp  
 Sample : jd87833-16 m  
 Misc : op54452,g8g2470,5.2,,,10,1  
 ALS Vial : 86 Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 16:59:17 2024  
 Quant Method : C:\msdchem\1\data\nazaryne\G8G2470\8PSTLVI2430a.M  
 Quant Title : PEST/PCB  
 QLast Update : Thu May 09 12:16:42 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1ul/column  
 Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
 Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
-----						
Internal Standards						
1) I 1-bromo-2...	4.461	4.911	1028.9E6	915.5E6	5.000m	5.000m
27) I 1-bromo-2...	4.461	4.911	1032.2E6	912.3E6	5.000m	5.000m
33) I 1-bromo-2...	4.461	4.911	1030.6E6	912.9E6	5.000m	5.000m
System Monitoring Compounds						
2) SAB Tetrachlo...	5.071	5.735	506.1E6	956.5E6	2.360m	3.550m#
Spiked Amount	40.000	Range 30 - 150	Recovery =		5.90%#	8.88%#
26) SA Decachlor...	12.043	14.185	423.6E6	541.9E6	1.831	4.247 #
Spiked Amount	40.000		Recovery =		4.58%	10.62%
Target Compounds						
11) B Heptachlo...	7.233	8.568	39585159	47456208	0.173m	0.163m
12) B gamma-Chl...	7.386	8.847	87075361	126.3E6	0.322m	0.431m#
13) B alpha-Chl...	7.542	9.067	195.6E6	165.9E6	0.770m	0.613m
15) B 4,4'-DDE	7.659f	9.328	505.5E6	802.5E6	2.077	2.876 #
16) MA Dieldrin	8.014	9.575	37194775	39640662	0.141m	0.133m
18) A 4,4'-DDD	8.436f	10.251	62462639	116.1E6	0.351m	0.502m#
20) MA 4,4'-DDT	8.831f	10.775	41478779	73996064	0.205m	0.442m#

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

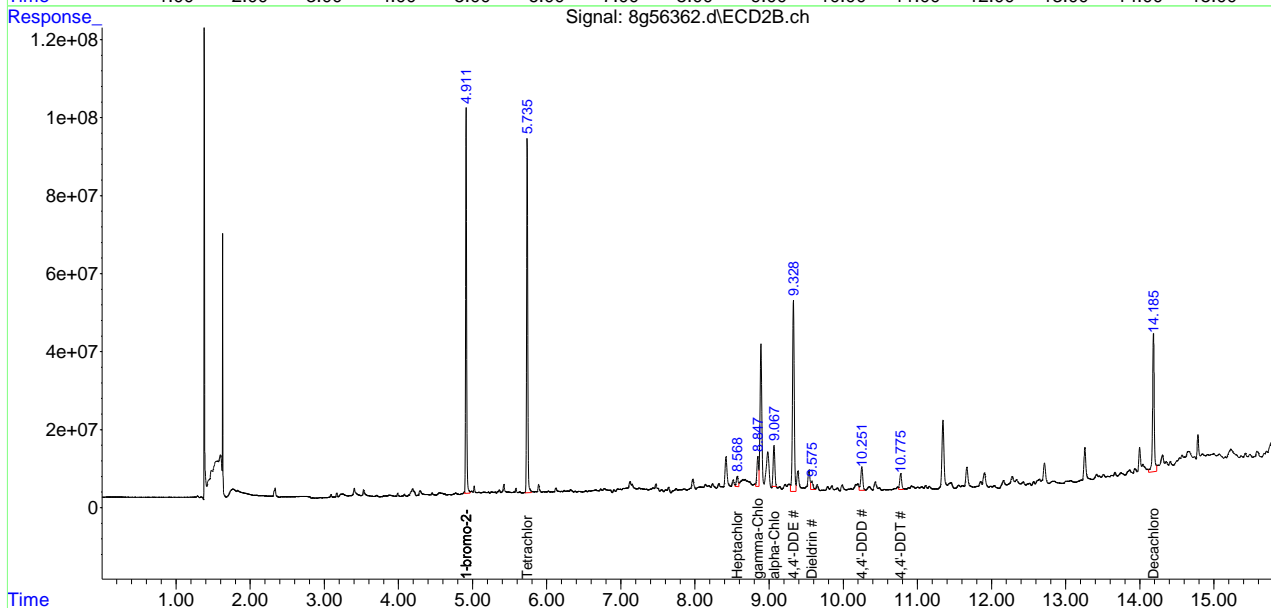
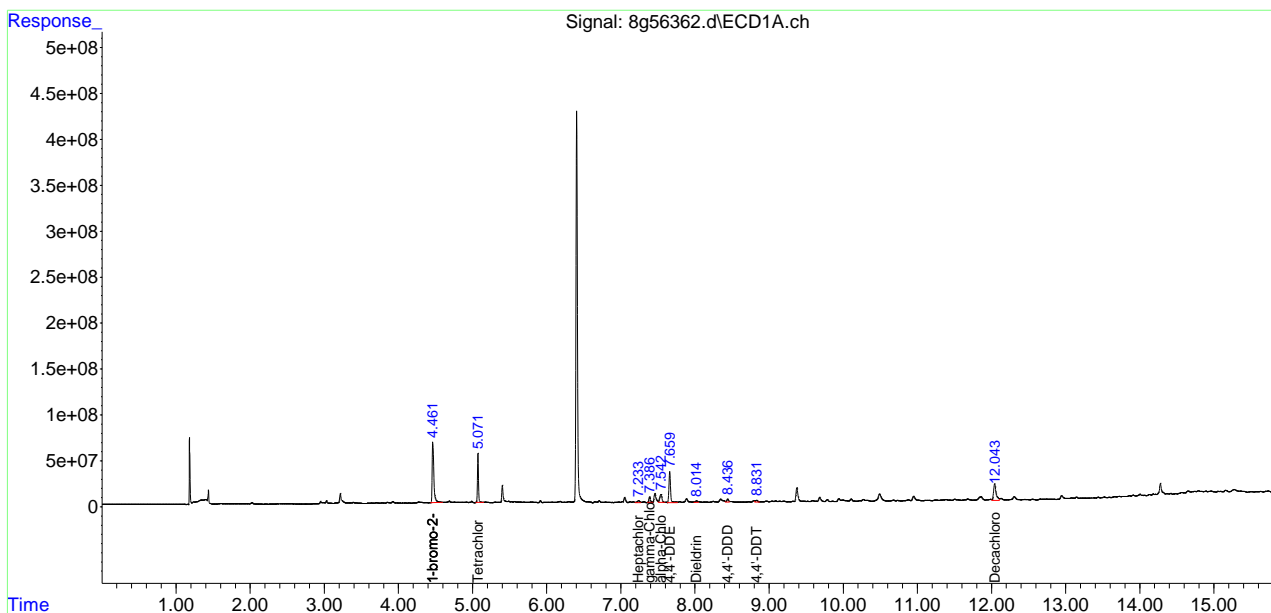
9.1.15  
**9**

Quantitation Report (QT Reviewed)

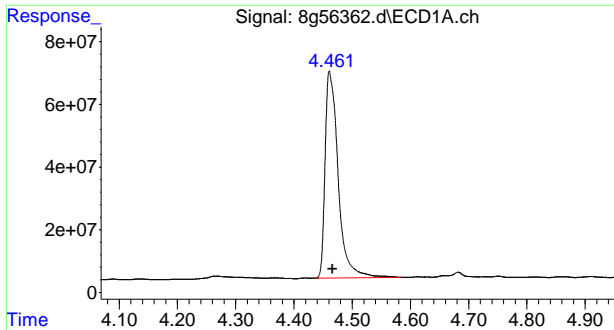
Data Path : C:\msdchem\1\data\nazaryne\G8G2470\  
 Data File : 8g56362.d  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 9 May 2024 10:24 am  
 Operator : christp  
 Sample : jd87833-16 m  
 Misc : op54452,g8g2470,5.2,,,10,1  
 ALS Vial : 86 Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 16:59:17 2024  
 Quant Method : C:\msdchem\1\data\nazaryne\G8G2470\8PSTLVI2430a.M  
 Quant Title : PEST/PCB  
 QLast Update : Thu May 09 12:16:42 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

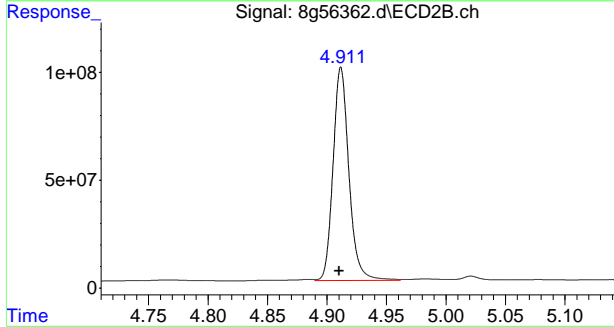
Volume Inj. : 1ul/column  
 Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
 Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



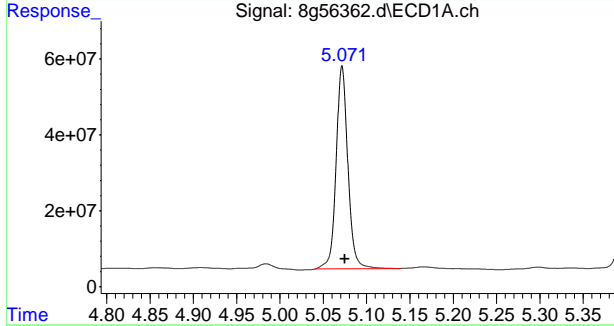
9.1.15  
9



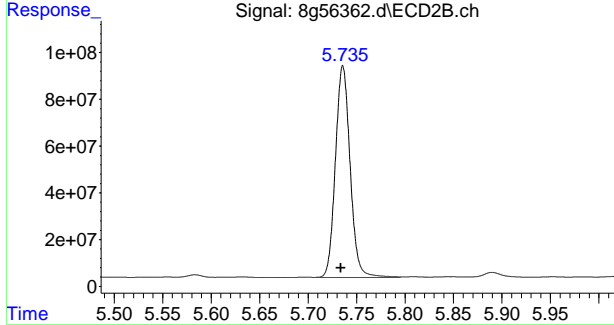
#1 1-bromo-2-nitrobenzene  
 R.T.: 4.461 min  
 Delta R.T.: -0.005 min  
 Response: 1028912023  
 Conc: 5.00 PPB m



#1 1-bromo-2-nitrobenzene  
 R.T.: 4.911 min  
 Delta R.T.: 0.001 min  
 Response: 915524055  
 Conc: 5.00 PPB m

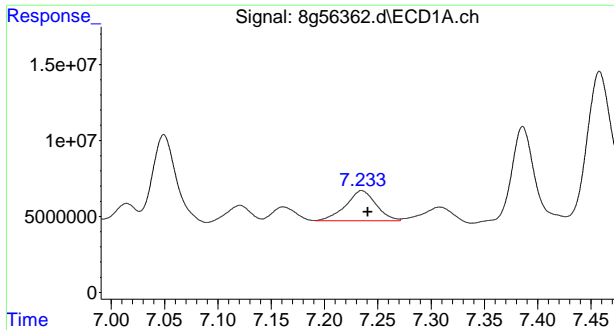


#2 Tetrachloro-m-xylene  
 R.T.: 5.071 min  
 Delta R.T.: -0.003 min  
 Response: 506090380  
 Conc: 2.36 PPB m

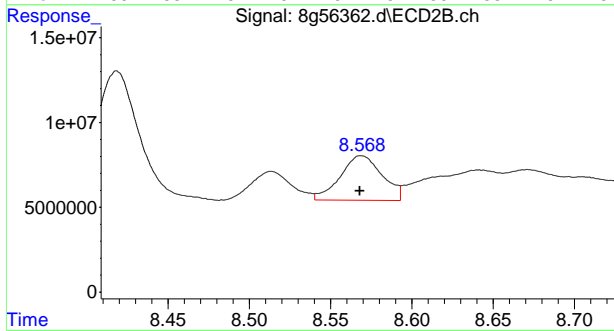


#2 Tetrachloro-m-xylene  
 R.T.: 5.735 min  
 Delta R.T.: 0.002 min  
 Response: 956462614  
 Conc: 3.55 PPB m

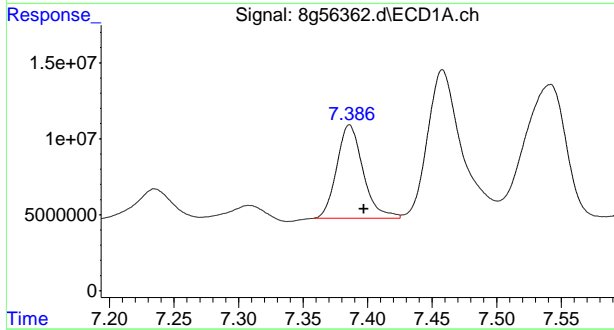
9.1.15  
**9**



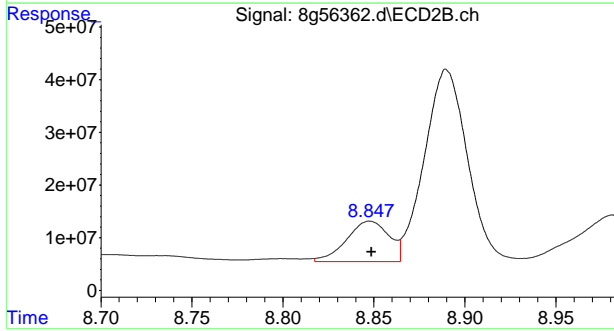
#11 Heptachlor Epoxide  
 R.T.: 7.233 min  
 Delta R.T.: -0.007 min  
 Response: 39585159  
 Conc: 0.17 PPB m



#11 Heptachlor Epoxide  
 R.T.: 8.568 min  
 Delta R.T.: 0.000 min  
 Response: 47456208  
 Conc: 0.16 PPB m



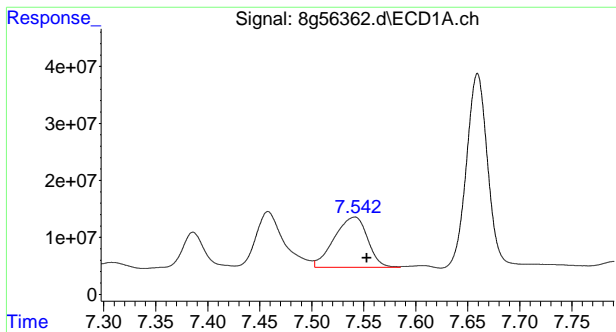
#12 gamma-Chlordane  
 R.T.: 7.386 min  
 Delta R.T.: -0.011 min  
 Response: 87075361  
 Conc: 0.32 PPB m



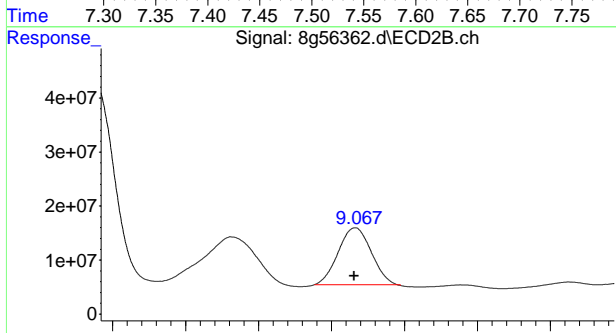
#12 gamma-Chlordane  
 R.T.: 8.847 min  
 Delta R.T.: -0.002 min  
 Response: 126288294  
 Conc: 0.43 PPB m

9.1.15  
**9**

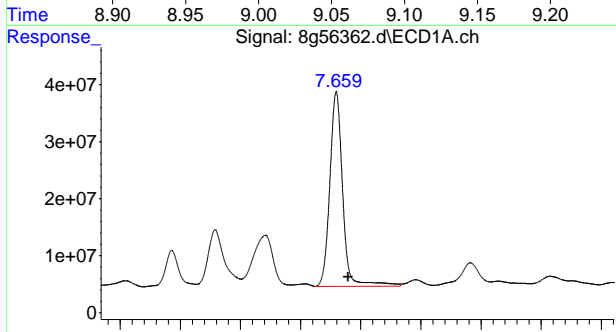




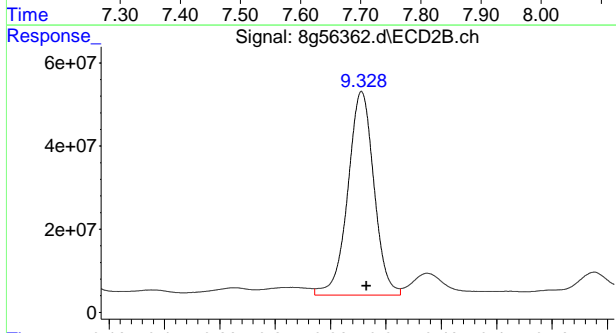
#13 alpha-Chlordane  
 R.T.: 7.542 min  
 Delta R.T.: -0.011 min  
 Response: 195590076  
 Conc: 0.77 PPB m



#13 alpha-Chlordane  
 R.T.: 9.067 min  
 Delta R.T.: 0.002 min  
 Response: 165933514  
 Conc: 0.61 PPB m

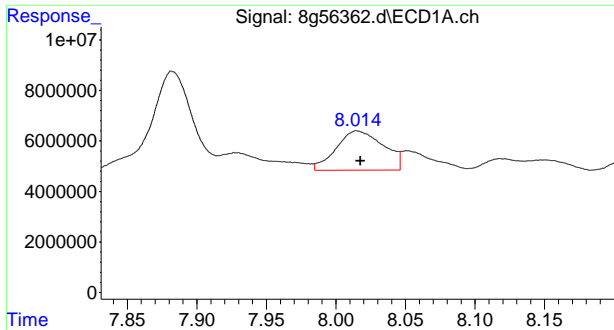


#15 4,4'-DDE  
 R.T.: 7.659 min  
 Delta R.T.: -0.020 min  
 Response: 505464850  
 Conc: 2.08 PPB

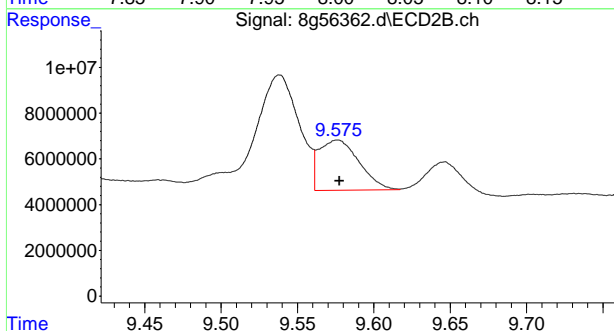


#15 4,4'-DDE  
 R.T.: 9.328 min  
 Delta R.T.: -0.004 min  
 Response: 802515473  
 Conc: 2.88 PPB

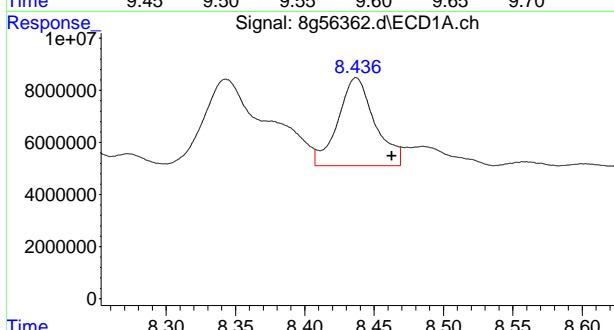
9.1.15  
**9**



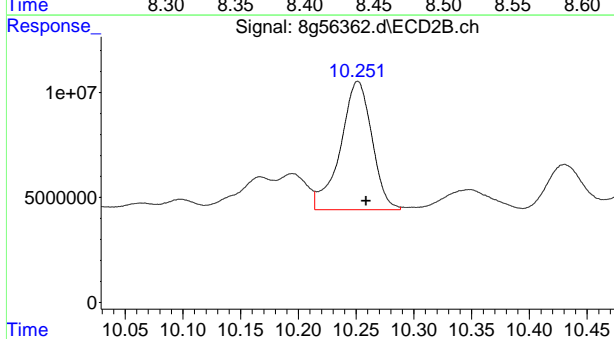
#16 Dieldrin  
 R.T.: 8.014 min  
 Delta R.T.: -0.004 min  
 Response: 37194775  
 Conc: 0.14 PPB m



#16 Dieldrin  
 R.T.: 9.575 min  
 Delta R.T.: -0.002 min  
 Response: 39640662  
 Conc: 0.13 PPB m

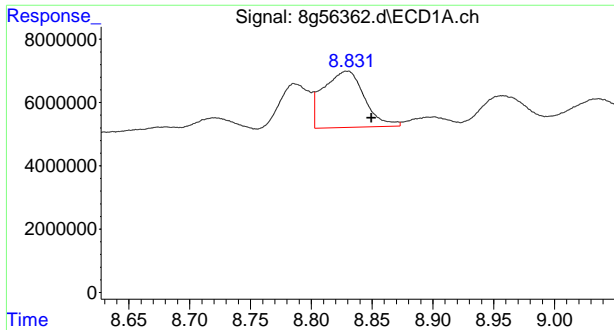


#18 4,4'-DDD  
 R.T.: 8.436 min  
 Delta R.T.: -0.026 min  
 Response: 62462639  
 Conc: 0.35 PPB m

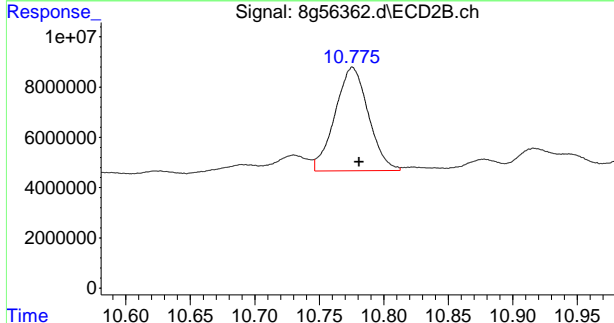


#18 4,4'-DDD  
 R.T.: 10.251 min  
 Delta R.T.: -0.008 min  
 Response: 116097571  
 Conc: 0.50 PPB m

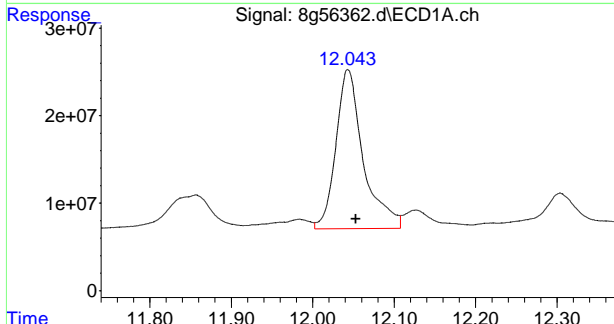
9.1.15  
 9



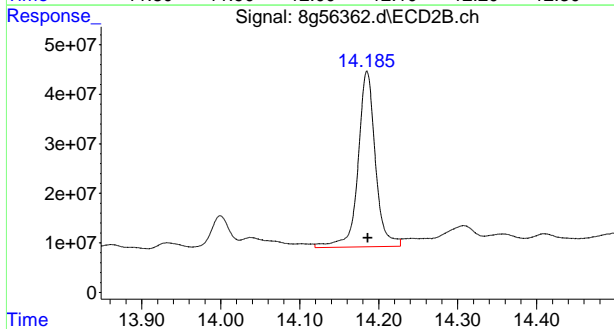
#20 4,4'-DDT  
 R.T.: 8.831 min  
 Delta R.T.: -0.018 min  
 Response: 41478779  
 Conc: 0.21 PPB m



#20 4,4'-DDT  
 R.T.: 10.775 min  
 Delta R.T.: -0.006 min  
 Response: 73996064  
 Conc: 0.44 PPB m

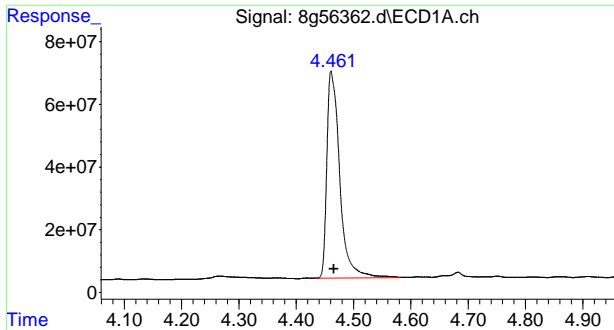


#26 Decachlorobiphenyl  
 R.T.: 12.043 min  
 Delta R.T.: -0.010 min  
 Response: 423596436  
 Conc: 1.83 PPB

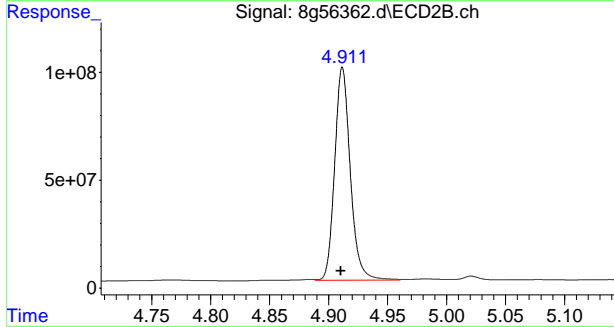


#26 Decachlorobiphenyl  
 R.T.: 14.185 min  
 Delta R.T.: 0.000 min  
 Response: 541853701  
 Conc: 4.25 PPB

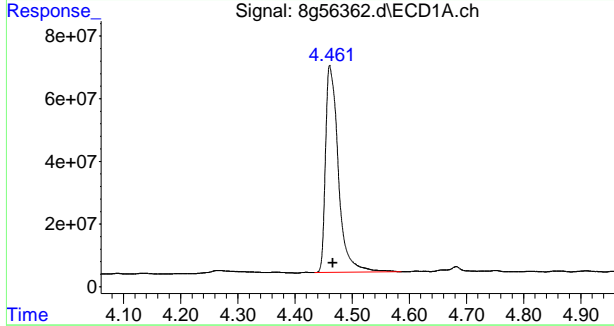
9.1.15  
**9**



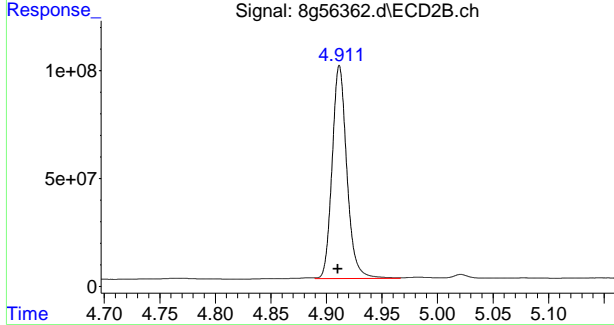
#27 1-bromo-2-nitrobenzeneA  
 R.T.: 4.461 min  
 Delta R.T.: -0.005 min  
 Response: 1032224838  
 Conc: 5.00 PPB m



#27 1-bromo-2-nitrobenzeneA  
 R.T.: 4.911 min  
 Delta R.T.: 0.001 min  
 Response: 912336758  
 Conc: 5.00 PPB m



#33 1-bromo-2-nitrobenzeneB  
 R.T.: 4.461 min  
 Delta R.T.: -0.005 min  
 Response: 1030628685  
 Conc: 5.00 PPB m



#33 1-bromo-2-nitrobenzeneB  
 R.T.: 4.911 min  
 Delta R.T.: 0.001 min  
 Response: 912917369  
 Conc: 5.00 PPB m

9.1.15  
**9**

## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\maryannl\2G6085\  
 Data File : 2G231737.D  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 09-May-24, 06:27:27  
 Operator : christp  
 Sample : jd87833-1 m  
 Misc : op54453,G2G6085,5.3,,,10,1  
 ALS Vial : 0 (Sig #1); 53 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 12:53:52 2024  
 Quant Method : C:\msdchem\1\data\maryannl\2G6085\2PCBLVI6081full.M  
 Quant Title :  
 QLast Update : Thu May 09 12:25:10 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
 Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
-----						
System Monitoring Compounds						
1) S Tetrachlo...	4.688	5.181	1654.8E6	2103.4E6	3.792	3.585
Spiked Amount	40.000		Recovery	=	9.48%	8.96%
51) S Decachlor...	11.315	12.433f	1485.0E6	1572.0E6	3.759	4.118m
Spiked Amount	40.000		Recovery	=	9.40%	10.30%

## Target Compounds

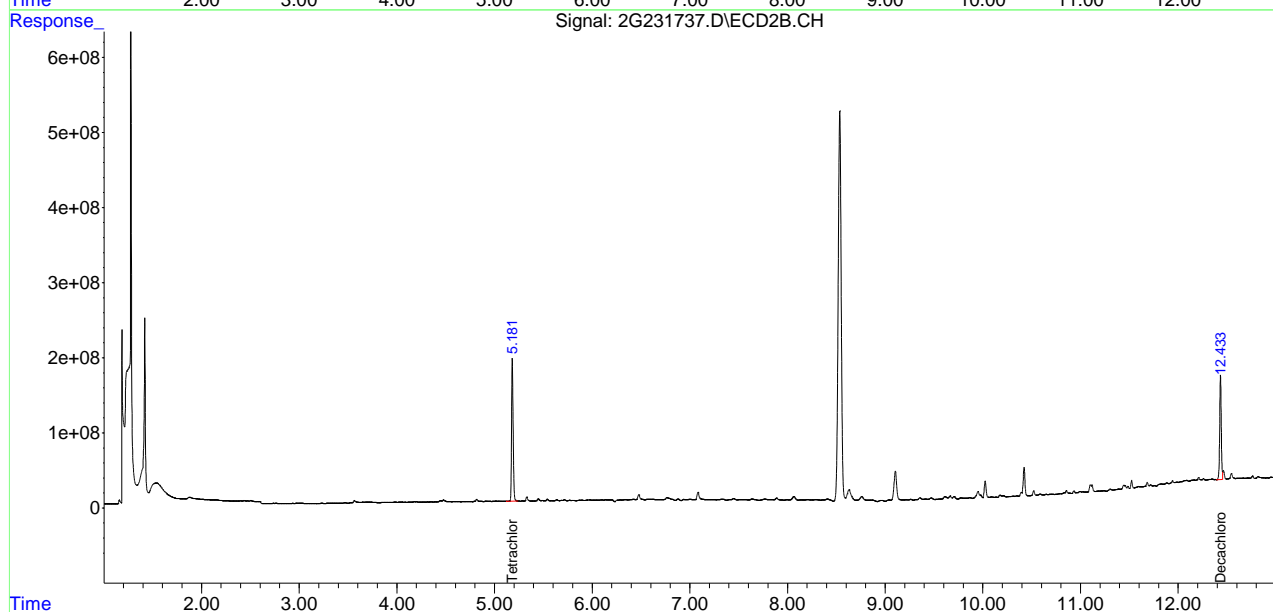
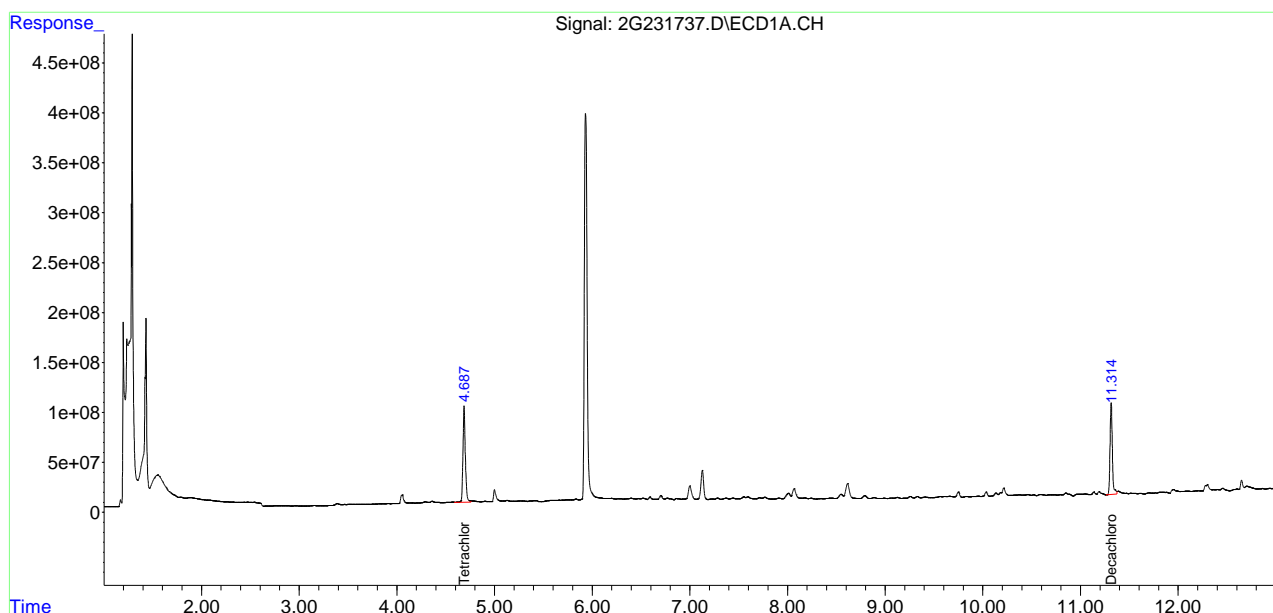
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

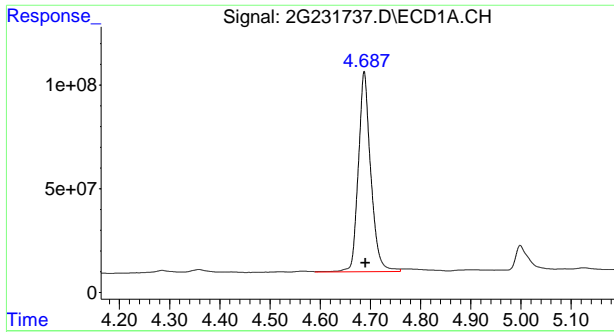
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\maryannl\2G6085\  
 Data File : 2G231737.D  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 09-May-24, 06:27:27  
 Operator : christp  
 Sample : jd87833-1 m  
 Misc : op54453,G2G6085,5.3,,,10,1  
 ALS Vial : 0 (Sig #1); 53 (Sig #2) Sample Multiplier: 1

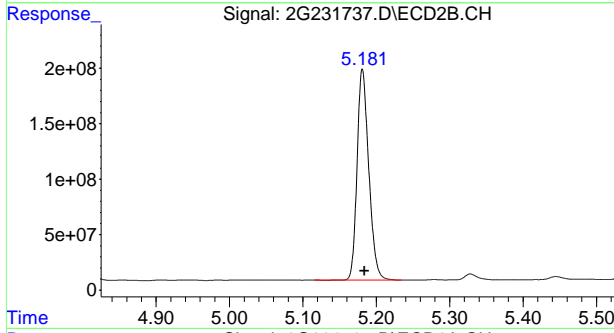
Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 12:53:52 2024  
 Quant Method : C:\msdchem\1\data\maryannl\2G6085\2PCBLVI6081full.M  
 Quant Title :  
 QLast Update : Thu May 09 12:25:10 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
 Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

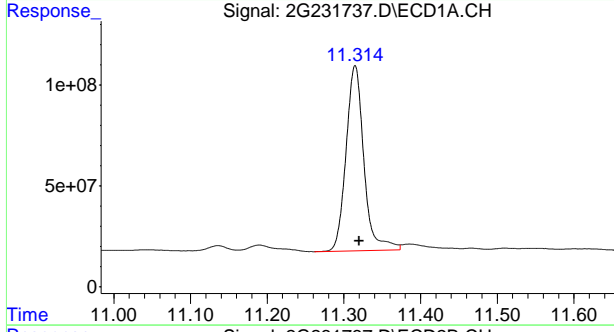




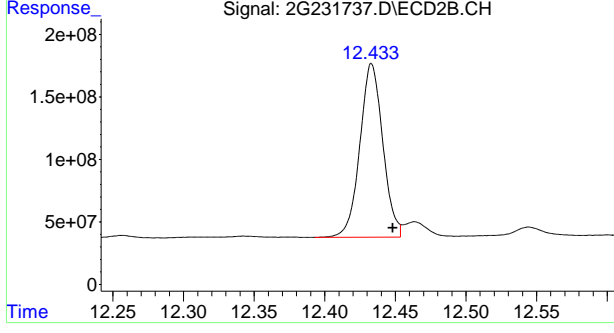
#1 Tetrachloro-m-xylene  
 R.T.: 4.688 min  
 Delta R.T.: -0.002 min  
 Response: 1654838846  
 Conc: 3.79 ppb



#1 Tetrachloro-m-xylene  
 R.T.: 5.181 min  
 Delta R.T.: -0.002 min  
 Response: 2103431364  
 Conc: 3.59 ppb



#51 Decachlorobiphenyl  
 R.T.: 11.315 min  
 Delta R.T.: -0.005 min  
 Response: 1485019642  
 Conc: 3.76 ppb



#51 Decachlorobiphenyl  
 R.T.: 12.433 min  
 Delta R.T.: -0.016 min  
 Response: 1572029402  
 Conc: 4.12 ppb m

9.1.16  
 9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\maryannl\2G6085\  
 Data File : 2G231738.D  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 09-May-24, 06:51:35  
 Operator : christp  
 Sample : jd87833-3 m  
 Misc : op54453,G2G6085,5.4,,,10,1  
 ALS Vial : 0 (Sig #1); 54 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 12:55:19 2024  
 Quant Method : C:\msdchem\1\data\maryannl\2G6085\2PCBLVI6081full.M  
 Quant Title :  
 QLast Update : Thu May 09 12:25:10 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
 Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
-----						
System Monitoring Compounds						
1) S Tetrachlo...	4.688	5.181	1422.2E6	1836.1E6	3.259m	3.130
Spiked Amount	40.000		Recovery	=	8.15%	7.83%
51) S Decachlor...	11.315	12.433	1268.0E6	1873.1E6	3.210	4.907m#
Spiked Amount	40.000		Recovery	=	8.03%	12.27%

Target Compounds

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

9.1.17  
**9**

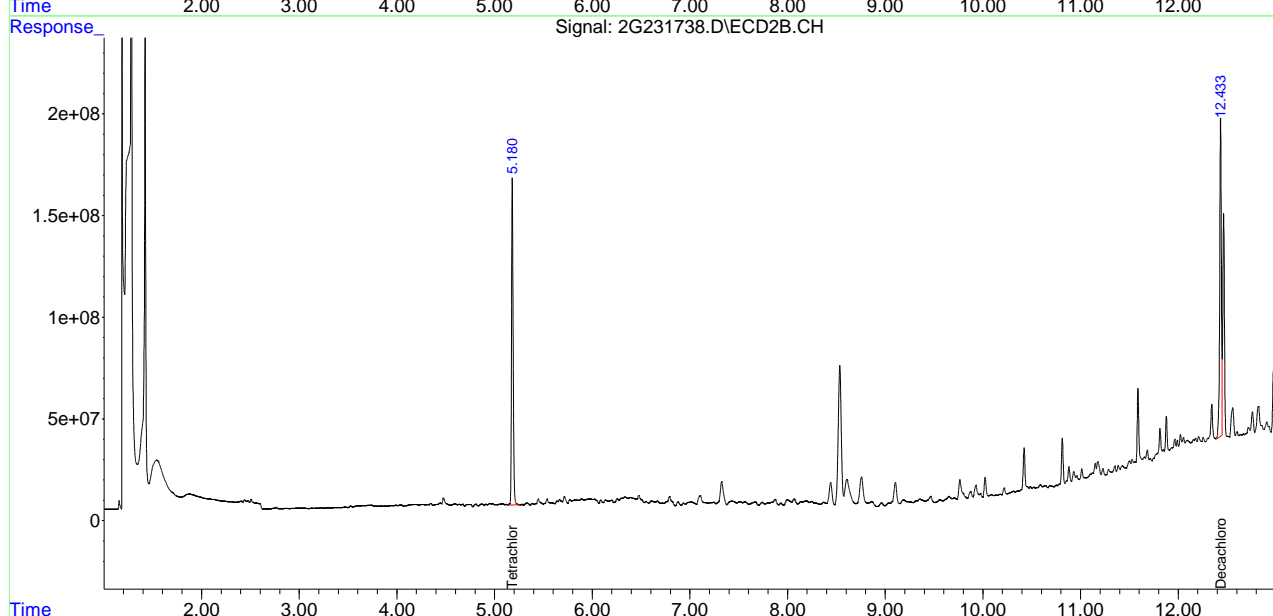
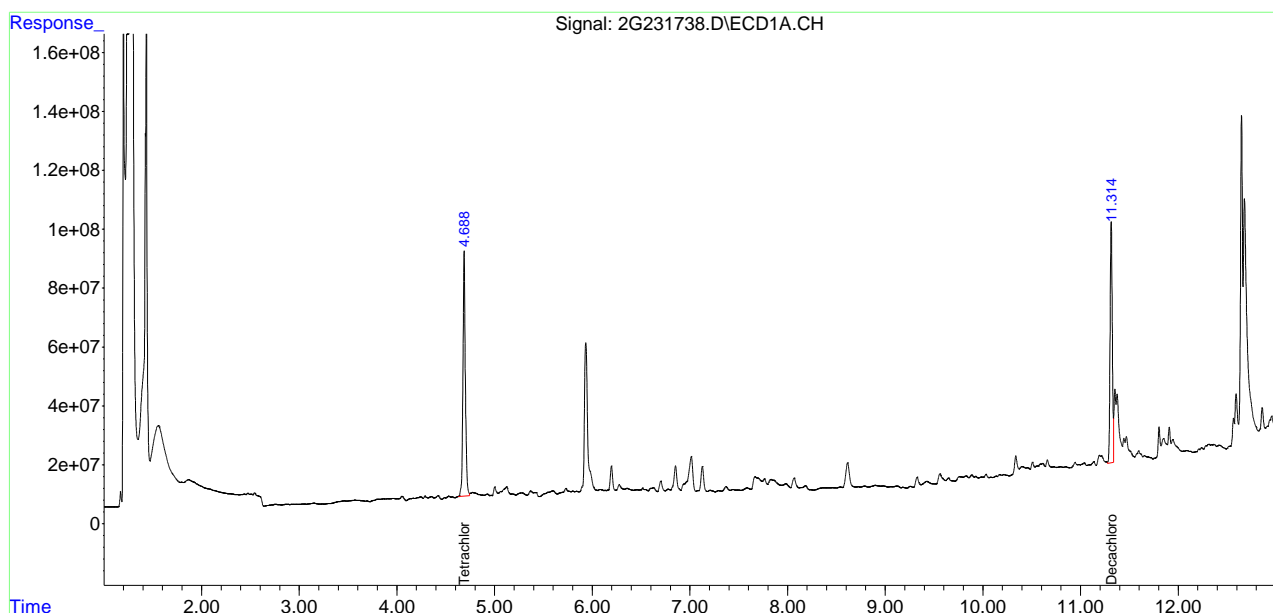


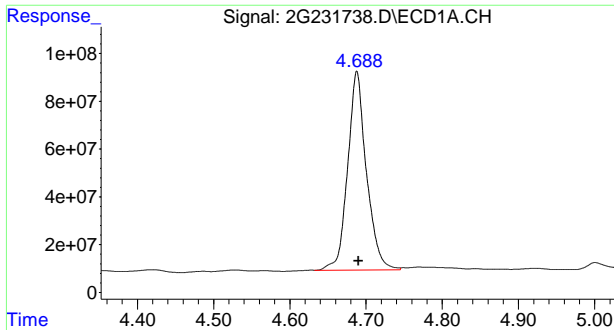
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\maryannl\2G6085\  
 Data File : 2G231738.D  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 09-May-24, 06:51:35  
 Operator : christp  
 Sample : jd87833-3 m  
 Misc : op54453,G2G6085,5.4,,,10,1  
 ALS Vial : 0 (Sig #1); 54 (Sig #2) Sample Multiplier: 1

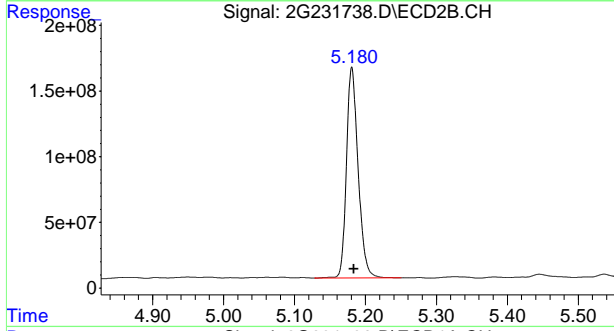
Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 12:55:19 2024  
 Quant Method : C:\msdchem\1\data\maryannl\2G6085\2PCBLVI6081full.M  
 Quant Title :  
 QLast Update : Thu May 09 12:25:10 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
 Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

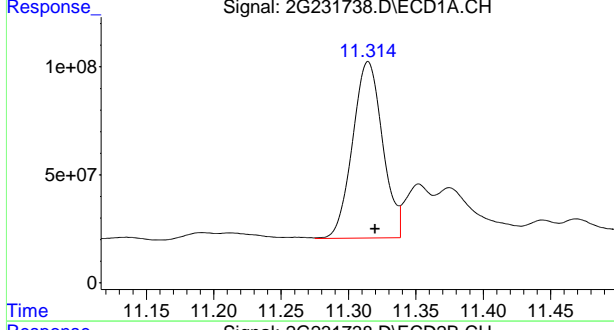




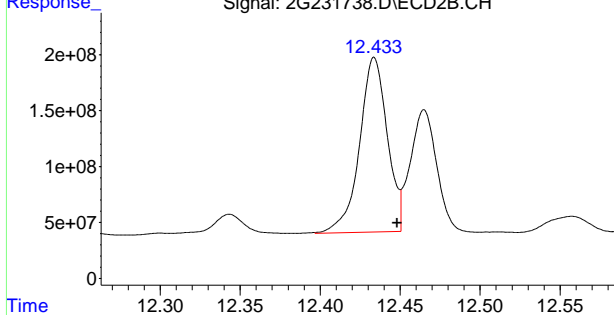
#1 Tetrachloro-m-xylene  
 R.T.: 4.688 min  
 Delta R.T.: -0.002 min  
 Response: 1422231439  
 Conc: 3.26 ppb m



#1 Tetrachloro-m-xylene  
 R.T.: 5.181 min  
 Delta R.T.: -0.003 min  
 Response: 1836117492  
 Conc: 3.13 ppb



#51 Decachlorobiphenyl  
 R.T.: 11.315 min  
 Delta R.T.: -0.005 min  
 Response: 1267951941  
 Conc: 3.21 ppb



#51 Decachlorobiphenyl  
 R.T.: 12.433 min  
 Delta R.T.: -0.015 min  
 Response: 1873116997  
 Conc: 4.91 ppb m

9.1.17  
**9**

## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\maryannl\2G6085\  
 Data File : 2G231739.D  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 09-May-24, 07:15:44  
 Operator : christp  
 Sample : jd87833-4 m  
 Misc : op54453,G2G6085,5.4,,,10,1  
 ALS Vial : 0 (Sig #1); 55 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 12:56:10 2024  
 Quant Method : C:\msdchem\1\data\maryannl\2G6085\2PCBLVI6081full.M  
 Quant Title :  
 QLast Update : Thu May 09 12:25:10 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
 Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
-----						
System Monitoring Compounds						
1) S Tetrachlo...	4.688	5.181	1411.7E6	1803.9E6	3.235	3.075
Spiked Amount	40.000		Recovery	=	8.09%	7.69%
51) S Decachlor...	11.315	12.432f	1146.4E6	1800.7E6	2.902	4.717m#
Spiked Amount	40.000		Recovery	=	7.26%	11.79%

## Target Compounds

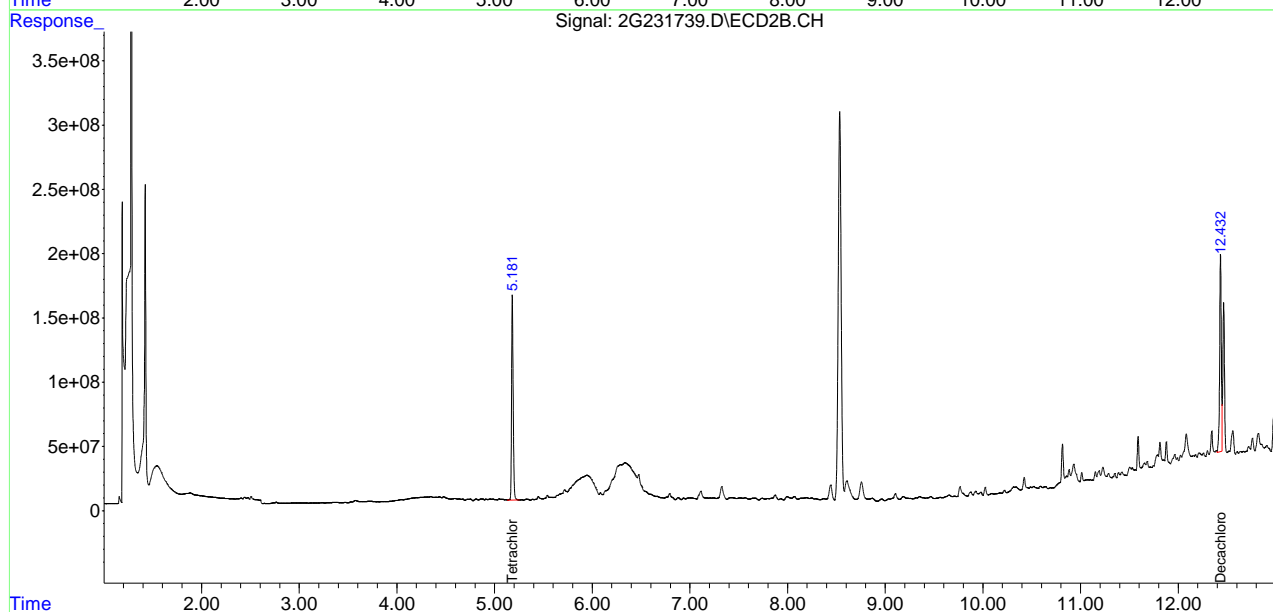
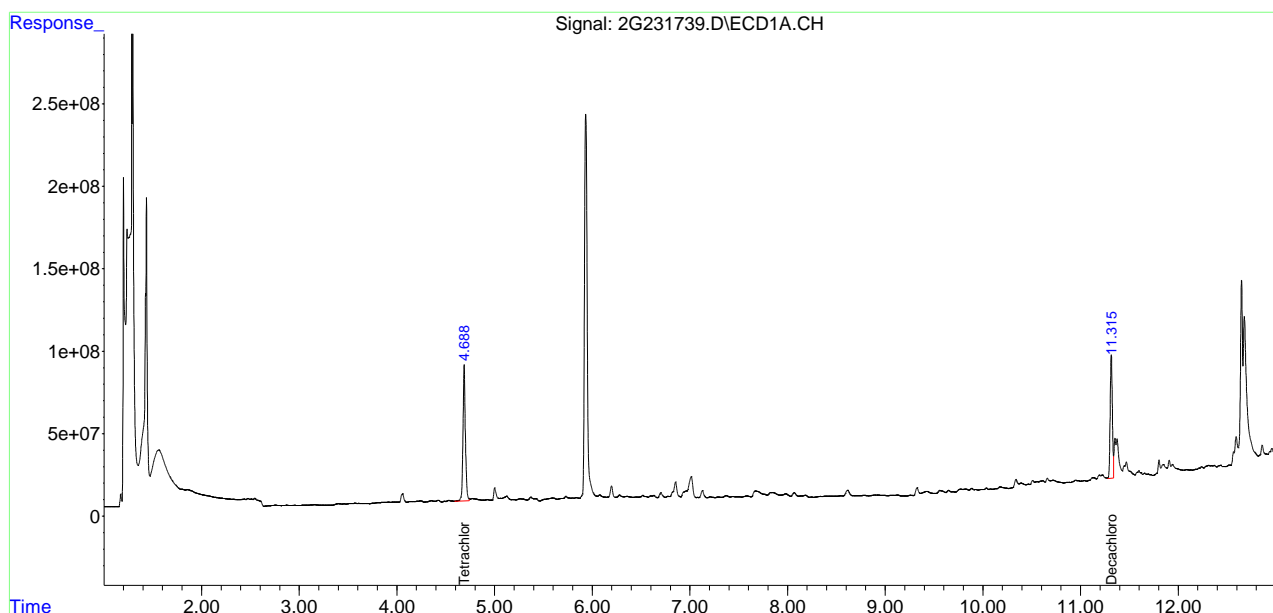
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

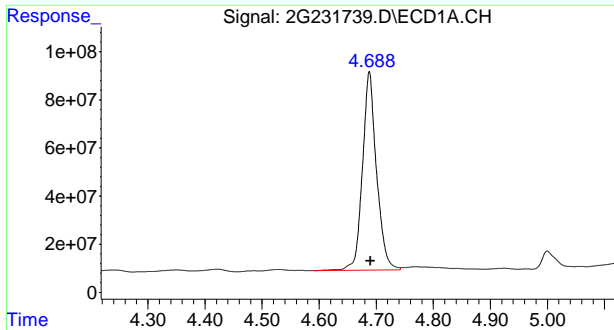
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\maryannl\2G6085\  
 Data File : 2G231739.D  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 09-May-24, 07:15:44  
 Operator : christp  
 Sample : jd87833-4 m  
 Misc : op54453,G2G6085,5.4,,,10,1  
 ALS Vial : 0 (Sig #1); 55 (Sig #2) Sample Multiplier: 1

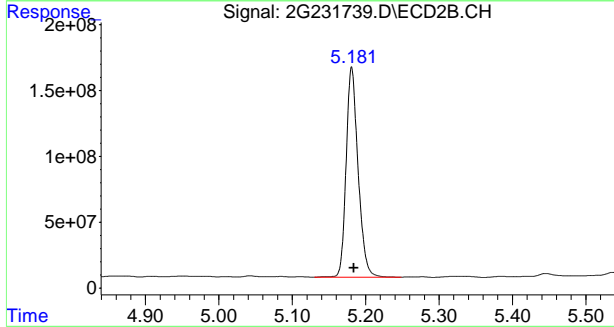
Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 12:56:10 2024  
 Quant Method : C:\msdchem\1\data\maryannl\2G6085\2PCBLVI6081full.M  
 Quant Title :  
 QLast Update : Thu May 09 12:25:10 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
 Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

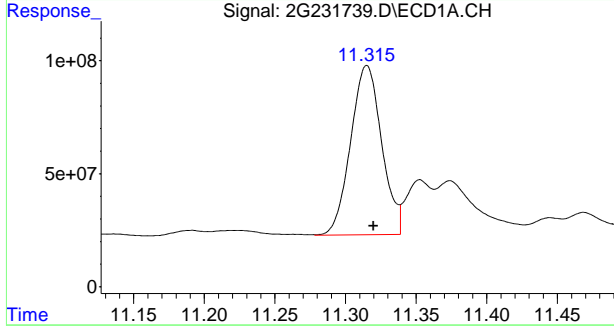




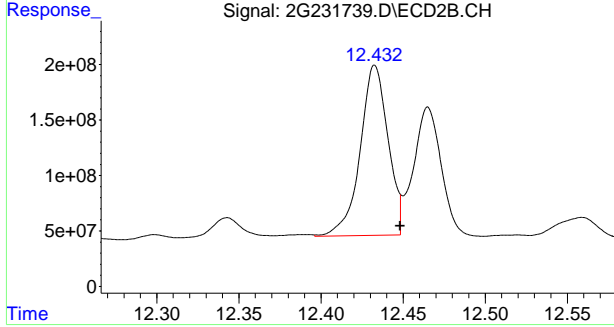
#1 Tetrachloro-m-xylene  
 R.T.: 4.688 min  
 Delta R.T.: -0.002 min  
 Response: 1411725916  
 Conc: 3.24 ppb



#1 Tetrachloro-m-xylene  
 R.T.: 5.181 min  
 Delta R.T.: -0.003 min  
 Response: 1803884068  
 Conc: 3.07 ppb



#51 Decachlorobiphenyl  
 R.T.: 11.315 min  
 Delta R.T.: -0.005 min  
 Response: 1146393589  
 Conc: 2.90 ppb



#51 Decachlorobiphenyl  
 R.T.: 12.432 min  
 Delta R.T.: -0.016 min  
 Response: 1800700084  
 Conc: 4.72 ppb m

9.1.18  
 9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\maryannl\2G6085\  
 Data File : 2G231744.D  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 09-May-24, 09:16:10  
 Operator : christp  
 Sample : jd87833-5 m  
 Misc : op54453,G2G6085,5.4,,,10,1  
 ALS Vial : 0 (Sig #1); 57 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 18:24:57 2024  
 Quant Method : C:\msdchem\1\data\maryannl\2G6085\2PCBLVI6081full.M  
 Quant Title :  
 QLast Update : Thu May 09 12:25:10 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
 Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
-----						
System Monitoring Compounds						
1) S Tetrachlo...	4.688	5.181	1356.9E6	1757.2E6	3.110	2.995
Spiked Amount	40.000		Recovery	=	7.78%	7.49%
51) S Decachlor...	11.315	12.432f	1196.2E6	1857.6E6	3.028	4.866m#
Spiked Amount	40.000		Recovery	=	7.57%	12.16%

Target Compounds

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

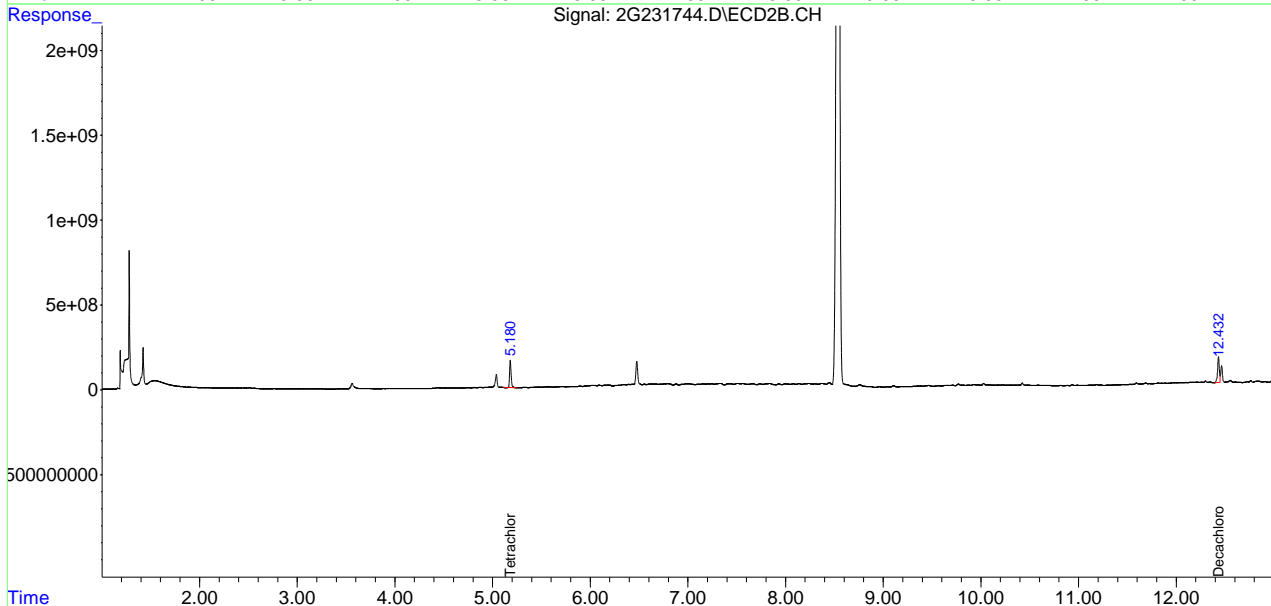
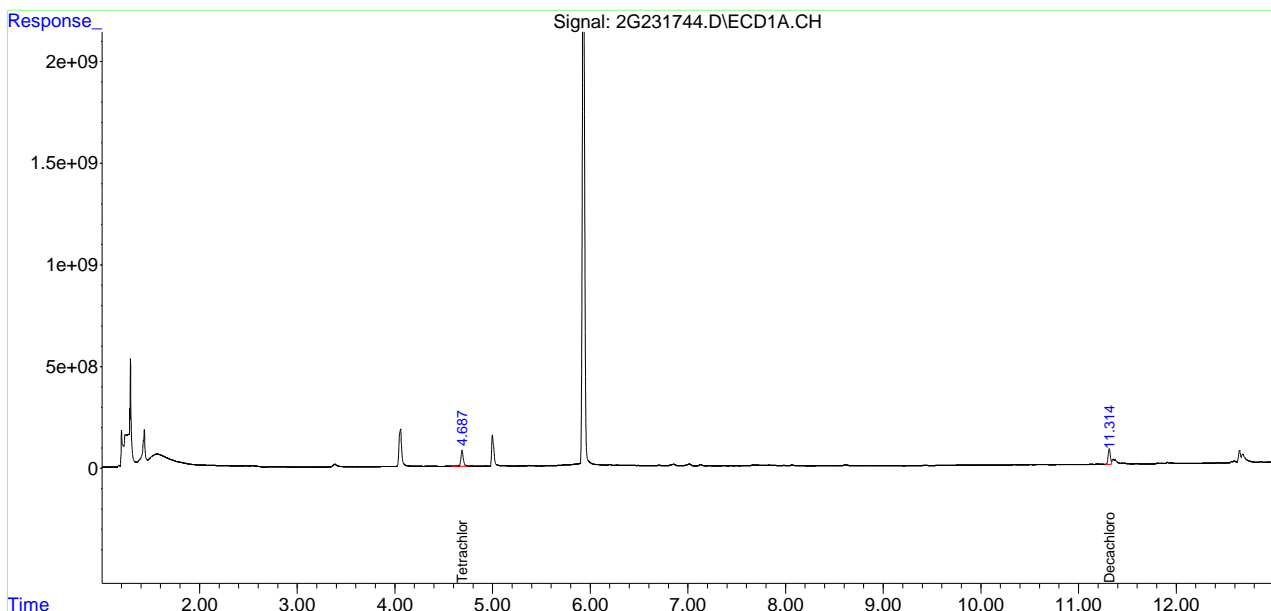
9.1.19  
**9**

Quantitation Report (QT Reviewed)

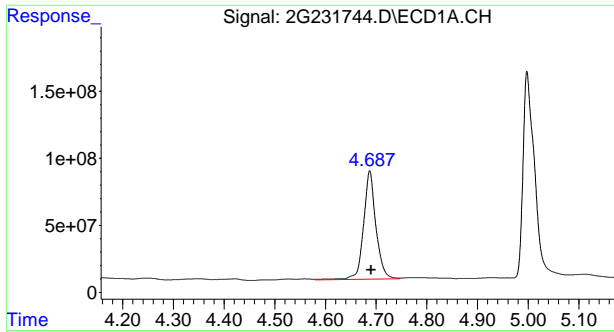
Data Path : C:\msdchem\1\data\maryannl\2G6085\  
 Data File : 2G231744.D  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 09-May-24, 09:16:10  
 Operator : christp  
 Sample : jd87833-5 m  
 Misc : op54453,G2G6085,5.4,,,10,1  
 ALS Vial : 0 (Sig #1); 57 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 18:24:57 2024  
 Quant Method : C:\msdchem\1\data\maryannl\2G6085\2PCBLVI6081full.M  
 Quant Title :  
 QLast Update : Thu May 09 12:25:10 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

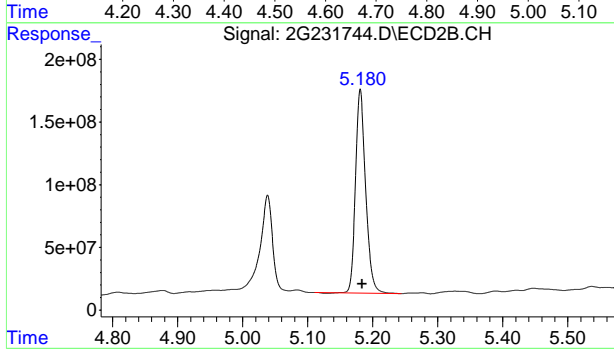
Volume Inj. : 1ul  
 Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



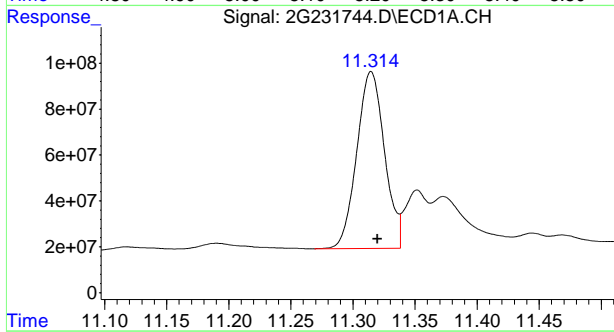
9.1.19  
9



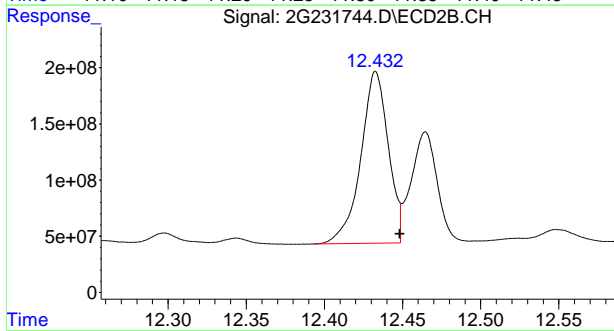
#1 Tetrachloro-m-xylene  
 R.T.: 4.688 min  
 Delta R.T.: -0.002 min  
 Response: 1356876402  
 Conc: 3.11 ppb



#1 Tetrachloro-m-xylene  
 R.T.: 5.181 min  
 Delta R.T.: -0.003 min  
 Response: 1757176728  
 Conc: 3.00 ppb



#51 Decachlorobiphenyl  
 R.T.: 11.315 min  
 Delta R.T.: -0.005 min  
 Response: 1196245534  
 Conc: 3.03 ppb



#51 Decachlorobiphenyl  
 R.T.: 12.432 min  
 Delta R.T.: -0.016 min  
 Response: 1857624684  
 Conc: 4.87 ppb m

9.1.19  
**9**



## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\maryannl\2G6085\  
 Data File : 2G231745.D  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 09-May-24, 09:40:06  
 Operator : christp  
 Sample : jd87833-7 m  
 Misc : op54453,G2G6085,5.0,,,10,1  
 ALS Vial : 0 (Sig #1); 58 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 18:25:49 2024  
 Quant Method : C:\msdchem\1\data\maryannl\2G6085\2PCBLVI6081full.M  
 Quant Title :  
 QLast Update : Thu May 09 12:25:10 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
 Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
-----						
System Monitoring Compounds						
1) S Tetrachlo...	4.687	5.182	1347.6E6	1816.8E6	3.088m	3.097
Spiked Amount	40.000		Recovery	=	7.72%	7.74%
51) S Decachlor...	11.316	12.433	1062.6E6	1679.5E6	2.690	4.400m#
Spiked Amount	40.000		Recovery	=	6.73%	11.00%

## Target Compounds

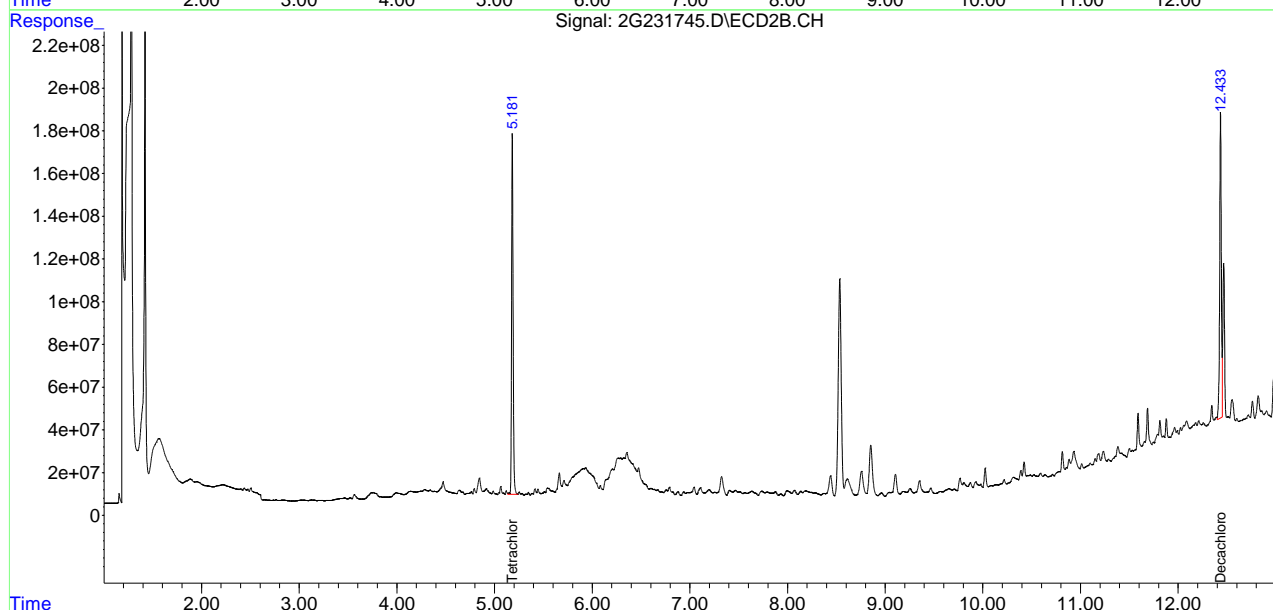
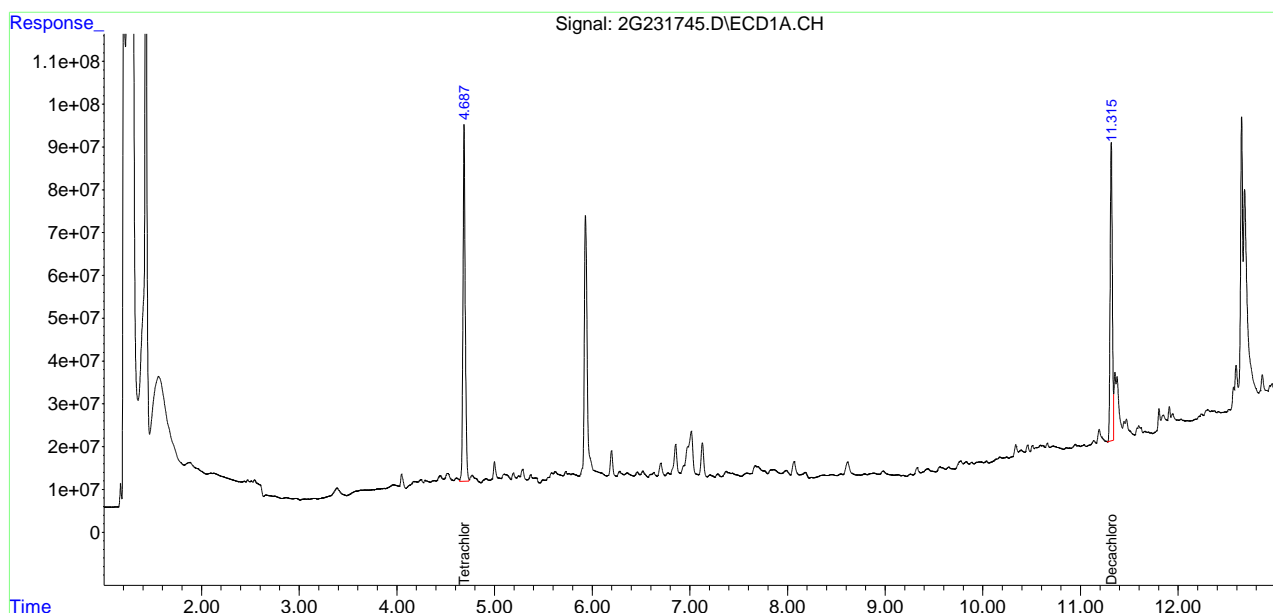
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

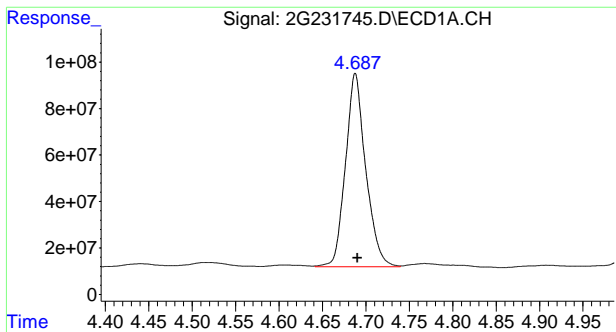
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\maryannl\2G6085\  
 Data File : 2G231745.D  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 09-May-24, 09:40:06  
 Operator : christp  
 Sample : jd87833-7 m  
 Misc : op54453,G2G6085,5.0,,,10,1  
 ALS Vial : 0 (Sig #1); 58 (Sig #2) Sample Multiplier: 1

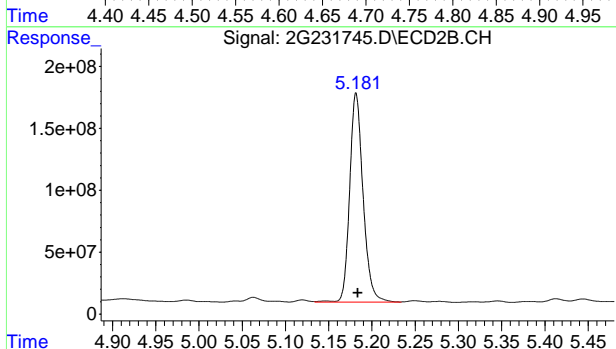
Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 18:25:49 2024  
 Quant Method : C:\msdchem\1\data\maryannl\2G6085\2PCBLVI6081full.M  
 Quant Title :  
 QLast Update : Thu May 09 12:25:10 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
 Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

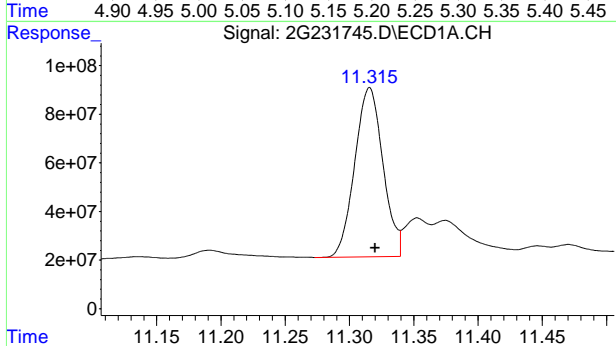




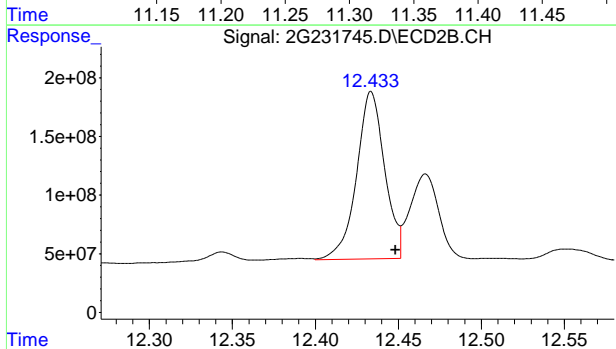
#1 Tetrachloro-m-xylene  
 R.T.: 4.687 min  
 Delta R.T.: -0.003 min  
 Response: 1347613539  
 Conc: 3.09 ppb m



#1 Tetrachloro-m-xylene  
 R.T.: 5.182 min  
 Delta R.T.: -0.002 min  
 Response: 1816820026  
 Conc: 3.10 ppb



#51 Decachlorobiphenyl  
 R.T.: 11.316 min  
 Delta R.T.: -0.004 min  
 Response: 1062628594  
 Conc: 2.69 ppb



#51 Decachlorobiphenyl  
 R.T.: 12.433 min  
 Delta R.T.: -0.015 min  
 Response: 1679541014  
 Conc: 4.40 ppb m

9.1.20  
**9**

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\maryannl\2G6085\  
 Data File : 2G231746.D  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 09-May-24, 10:04:12  
 Operator : christp  
 Sample : jd87833-8 m  
 Misc : op54453,G2G6085,5.3,,,10,1  
 ALS Vial : 0 (Sig #1); 59 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 18:26:58 2024  
 Quant Method : C:\msdchem\1\data\maryannl\2G6085\2PCBLVI6081full.M  
 Quant Title :  
 QLast Update : Thu May 09 12:25:10 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
 Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
-----						
System Monitoring Compounds						
1) S Tetrachlo...	4.688	5.181	1398.4E6	1790.1E6	3.205	3.051
Spiked Amount	40.000		Recovery	=	8.01%	7.63%
51) S Decachlor...	11.316	12.434	1036.4E6	1645.1E6	2.623	4.309m#
Spiked Amount	40.000		Recovery	=	6.56%	10.77%

Target Compounds

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

9.1.21  
**9**

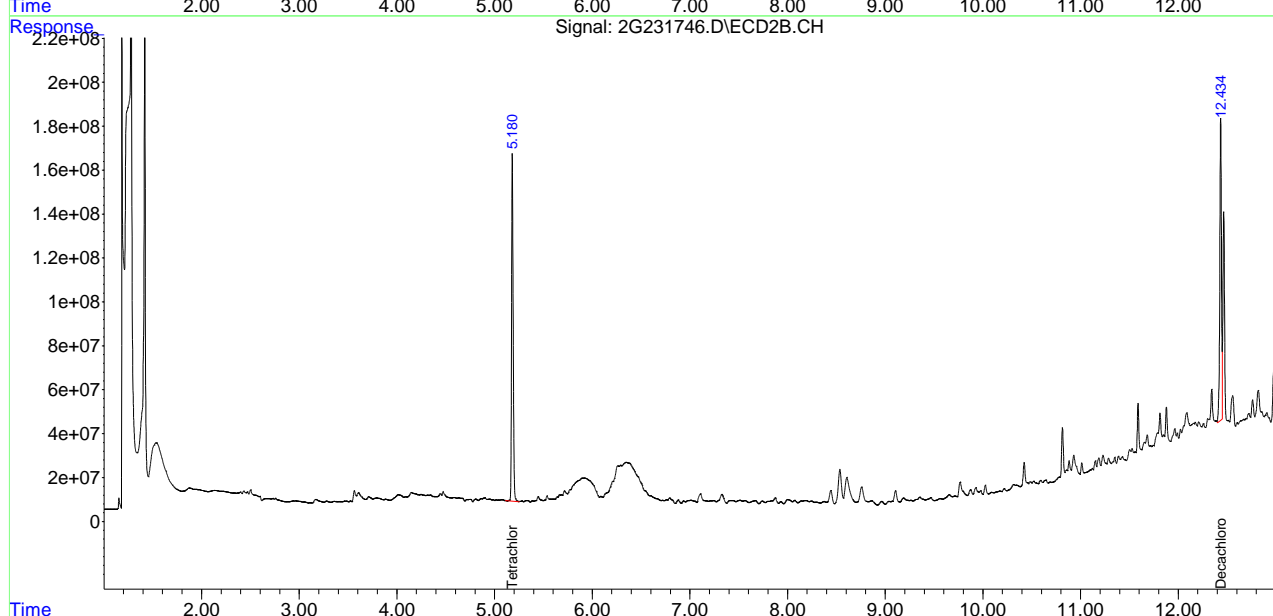
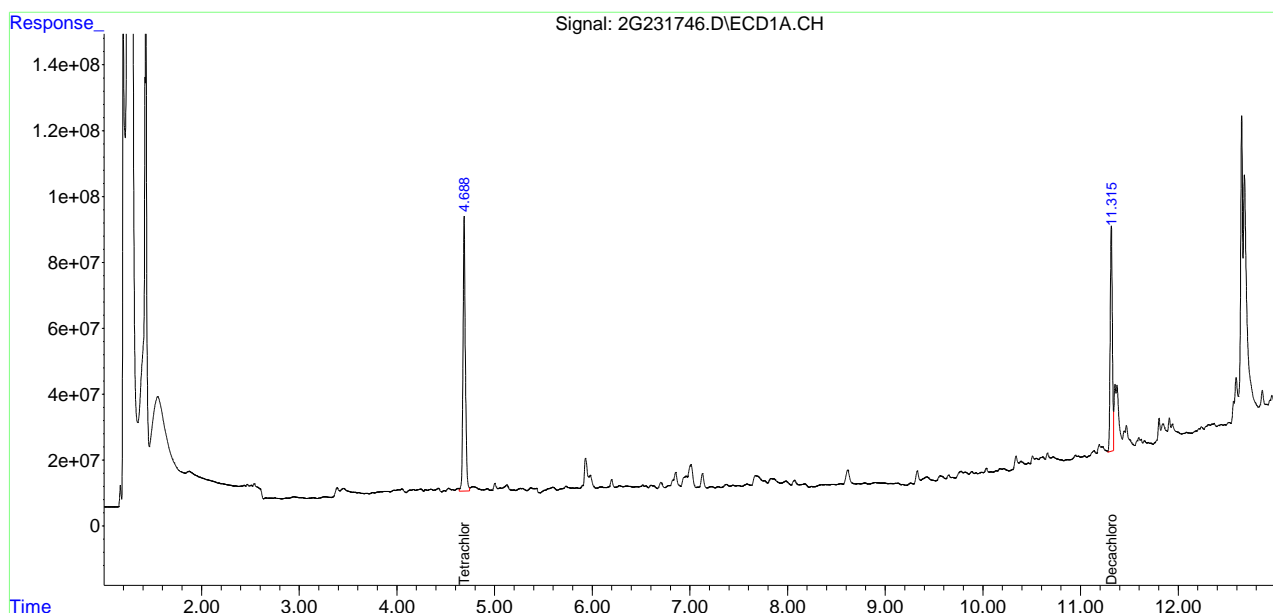


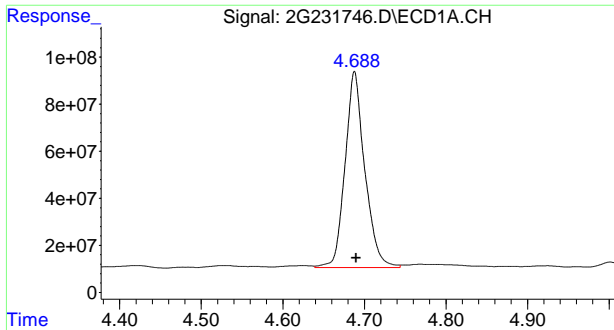
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\maryannl\2G6085\  
 Data File : 2G231746.D  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 09-May-24, 10:04:12  
 Operator : christp  
 Sample : jd87833-8 m  
 Misc : op54453,G2G6085,5.3,,,10,1  
 ALS Vial : 0 (Sig #1); 59 (Sig #2) Sample Multiplier: 1

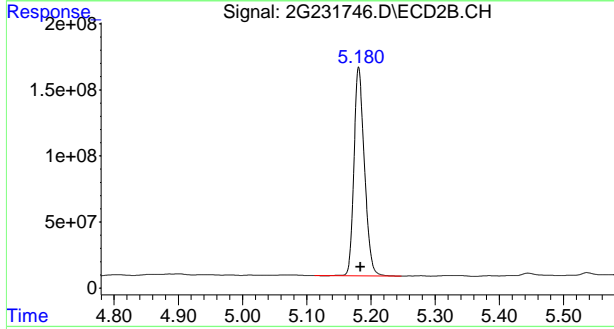
Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 18:26:58 2024  
 Quant Method : C:\msdchem\1\data\maryannl\2G6085\2PCBLVI6081full.M  
 Quant Title :  
 QLast Update : Thu May 09 12:25:10 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
 Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

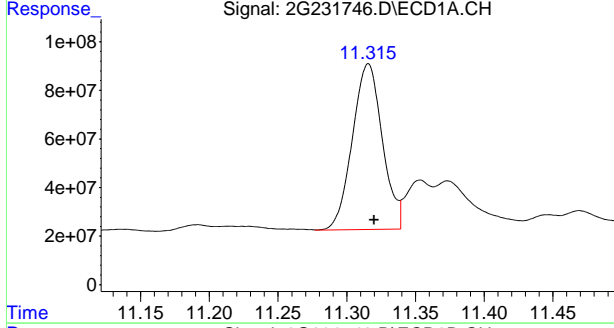




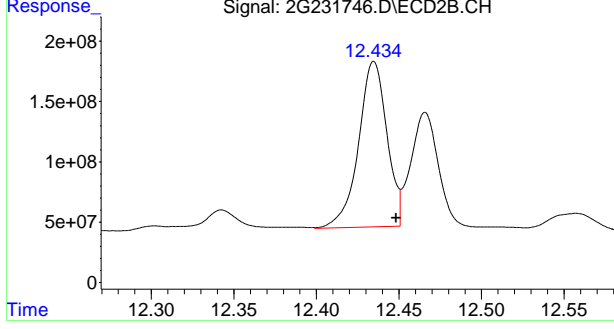
#1 Tetrachloro-m-xylene  
 R.T.: 4.688 min  
 Delta R.T.: -0.002 min  
 Response: 1398392618  
 Conc: 3.20 ppb



#1 Tetrachloro-m-xylene  
 R.T.: 5.181 min  
 Delta R.T.: -0.003 min  
 Response: 1790095258  
 Conc: 3.05 ppb



#51 Decachlorobiphenyl  
 R.T.: 11.316 min  
 Delta R.T.: -0.004 min  
 Response: 1036393642  
 Conc: 2.62 ppb



#51 Decachlorobiphenyl  
 R.T.: 12.434 min  
 Delta R.T.: -0.014 min  
 Response: 1645104392  
 Conc: 4.31 ppb m

9.1.21  
**9**

## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\maryannl\2G6085\  
 Data File : 2G231747.D  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 09-May-24, 10:28:09  
 Operator : christp  
 Sample : jd87833-10 m  
 Misc : op54453,G2G6085,5.5,,,10,1  
 ALS Vial : 0 (Sig #1); 60 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 18:27:43 2024  
 Quant Method : C:\msdchem\1\data\maryannl\2G6085\2PCBLVI6081full.M  
 Quant Title :  
 QLast Update : Thu May 09 12:25:10 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
 Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
-----						
System Monitoring Compounds						
1) S Tetrachlo...	4.687	5.181	1557.7E6	1907.1E6	3.570m	3.251
Spiked Amount	40.000		Recovery	=	8.92%	8.13%
51) S Decachlor...	11.315	12.434	1072.7E6	1388.8E6	2.715	3.638m#
Spiked Amount	40.000		Recovery	=	6.79%	9.10%

## Target Compounds

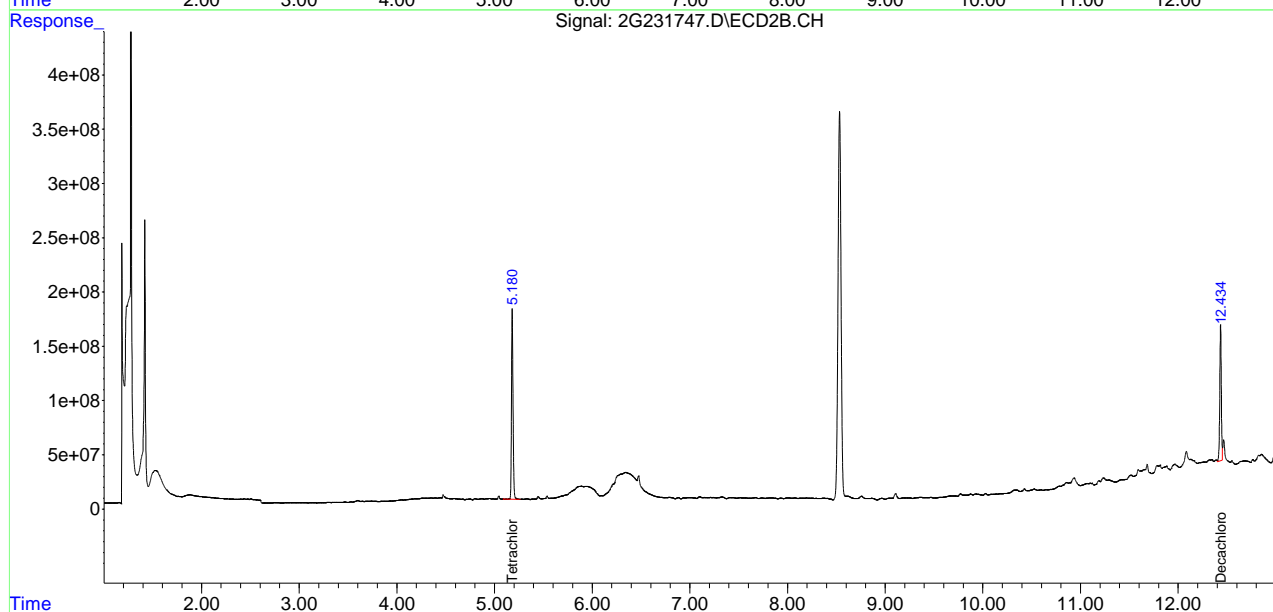
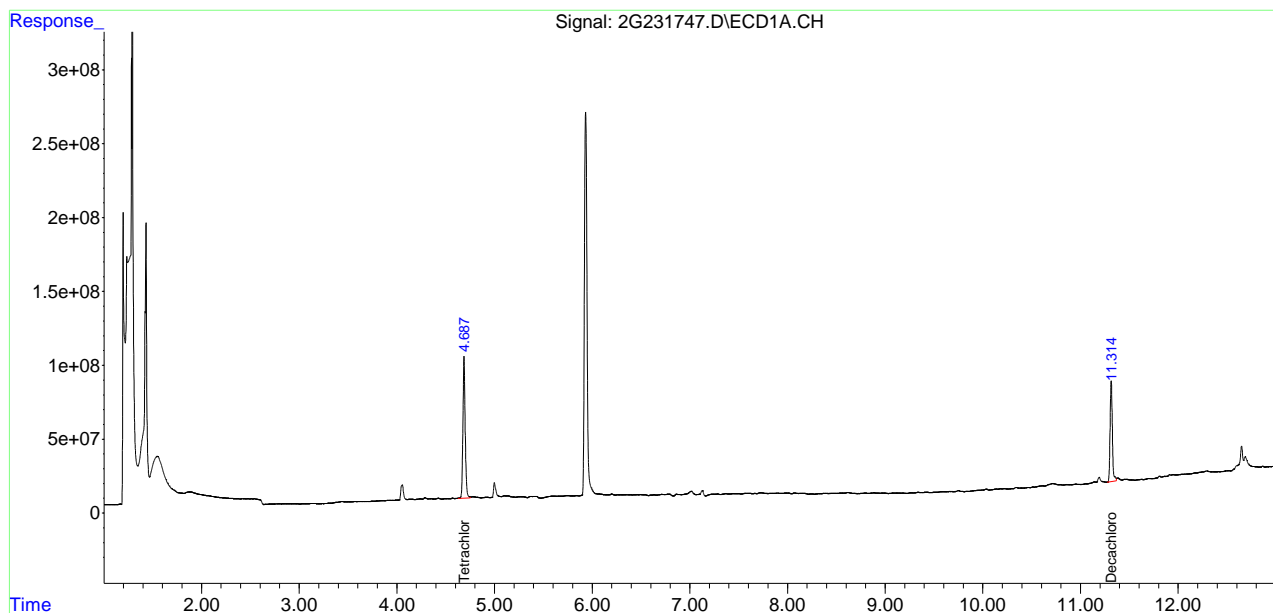
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

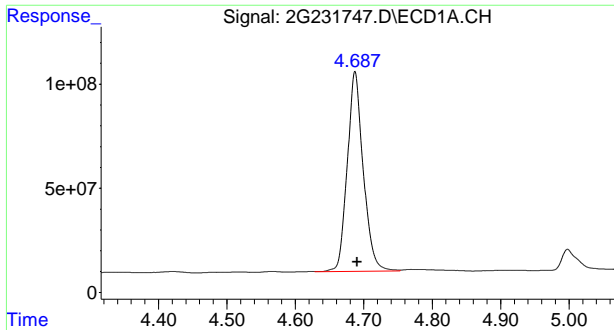
Data Path : C:\msdchem\1\data\maryannl\2G6085\  
 Data File : 2G231747.D  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 09-May-24, 10:28:09  
 Operator : christp  
 Sample : jd87833-10 m  
 Misc : op54453,G2G6085,5.5,,,10,1  
 ALS Vial : 0 (Sig #1); 60 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 18:27:43 2024  
 Quant Method : C:\msdchem\1\data\maryannl\2G6085\2PCBLVI6081full.M  
 Quant Title :  
 QLast Update : Thu May 09 12:25:10 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

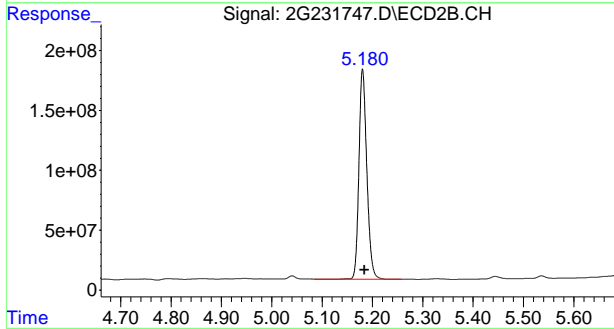
Volume Inj. : 1ul  
 Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



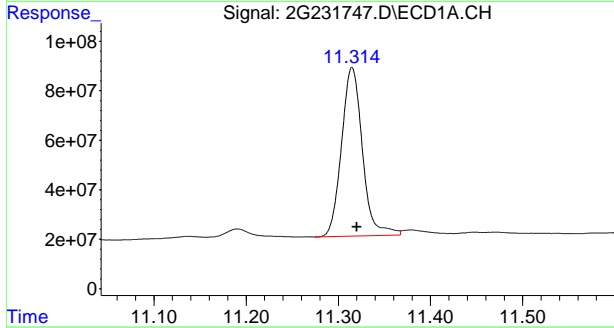




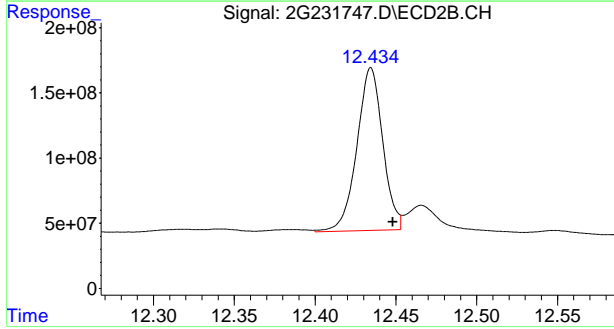
#1 Tetrachloro-m-xylene  
 R.T.: 4.687 min  
 Delta R.T.: -0.003 min  
 Response: 1557747186  
 Conc: 3.57 ppb m



#1 Tetrachloro-m-xylene  
 R.T.: 5.181 min  
 Delta R.T.: -0.003 min  
 Response: 1907115837  
 Conc: 3.25 ppb



#51 Decachlorobiphenyl  
 R.T.: 11.315 min  
 Delta R.T.: -0.005 min  
 Response: 1072742754  
 Conc: 2.72 ppb



#51 Decachlorobiphenyl  
 R.T.: 12.434 min  
 Delta R.T.: -0.014 min  
 Response: 1388772752  
 Conc: 3.64 ppb m

9.1.22  
 9

## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\maryannl\2G6085\  
 Data File : 2G231748.D  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 09-May-24, 10:52:01  
 Operator : christp  
 Sample : jd87833-11 m  
 Misc : op54453,G2G6085,5.3,,,10,1  
 ALS Vial : 0 (Sig #1); 61 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 18:28:22 2024  
 Quant Method : C:\msdchem\1\data\maryannl\2G6085\2PCBLVI6081full.M  
 Quant Title :  
 QLast Update : Thu May 09 12:25:10 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
 Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
-----						
System Monitoring Compounds						
1) S Tetrachlo...	4.688	5.181	1387.0E6	1868.0E6	3.179	3.184
Spiked Amount	40.000		Recovery	=	7.95%	7.96%
51) S Decachlor...	11.315	12.434	1003.2E6	1459.3E6	2.540	3.823m#
Spiked Amount	40.000		Recovery	=	6.35%	9.56%

## Target Compounds

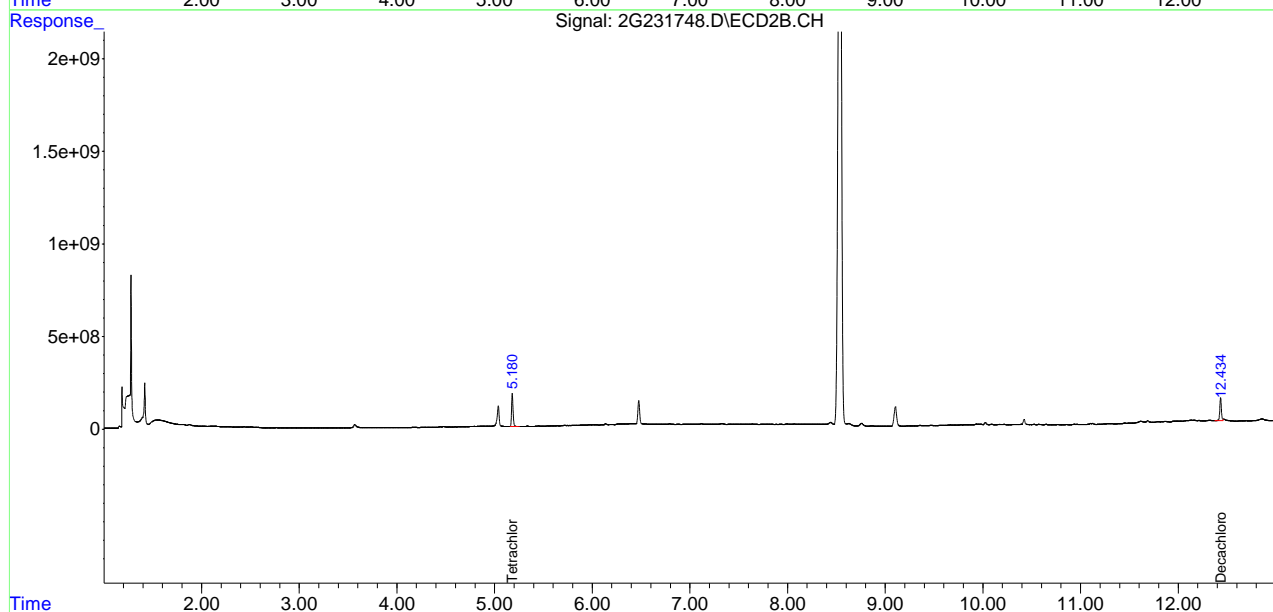
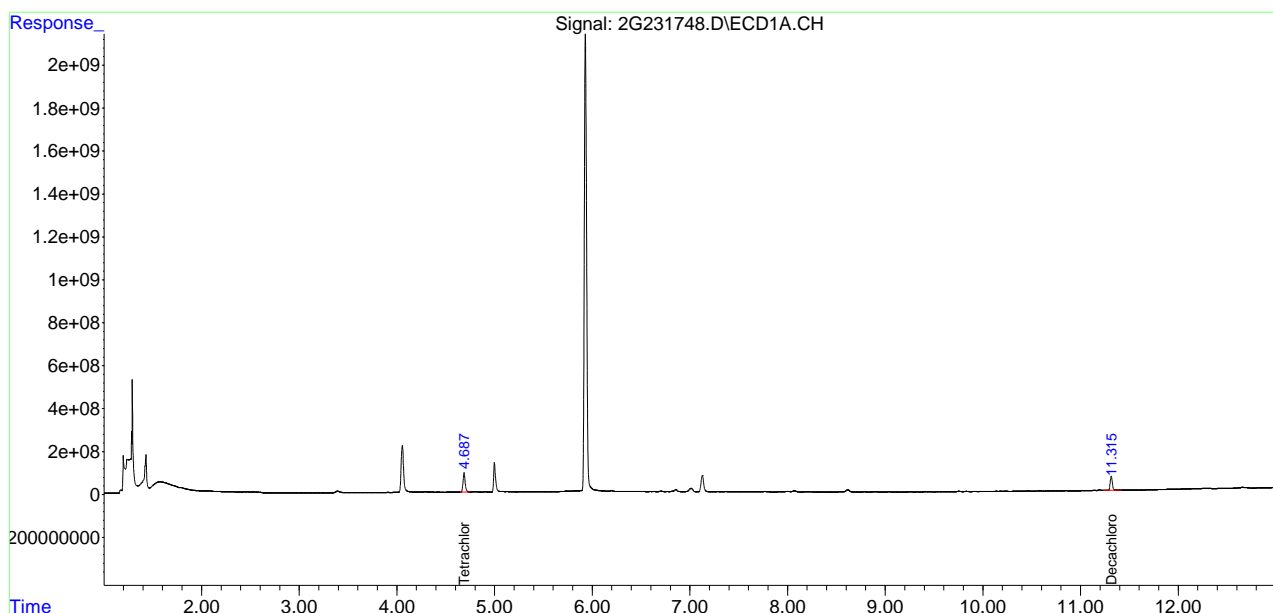
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

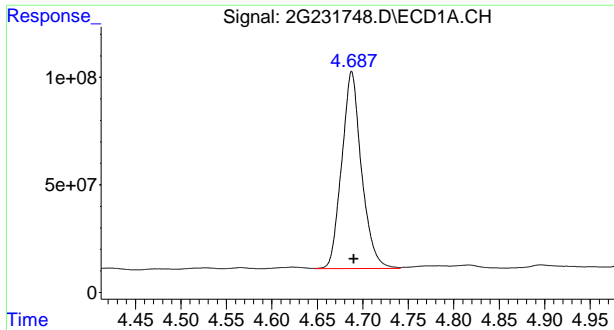
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\maryannl\2G6085\  
 Data File : 2G231748.D  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 09-May-24, 10:52:01  
 Operator : christp  
 Sample : jd87833-11 m  
 Misc : op54453,G2G6085,5.3,,,10,1  
 ALS Vial : 0 (Sig #1); 61 (Sig #2) Sample Multiplier: 1

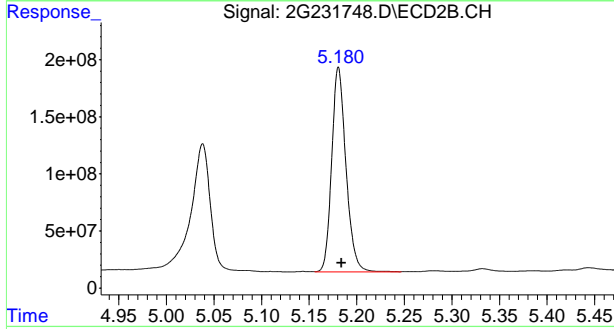
Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 18:28:22 2024  
 Quant Method : C:\msdchem\1\data\maryannl\2G6085\2PCBLVI6081full.M  
 Quant Title :  
 QLast Update : Thu May 09 12:25:10 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
 Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

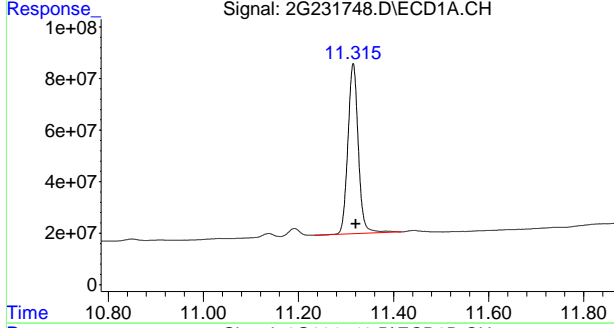




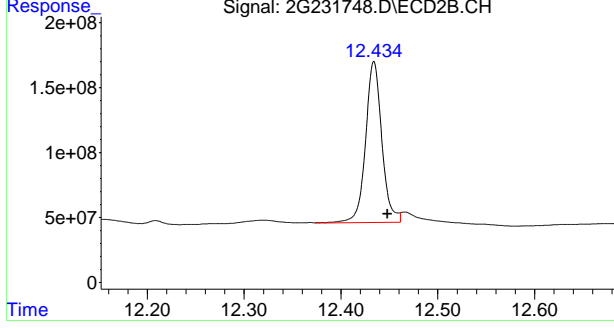
#1 Tetrachloro-m-xylene  
 R.T.: 4.688 min  
 Delta R.T.: -0.002 min  
 Response: 1386977832  
 Conc: 3.18 ppb



#1 Tetrachloro-m-xylene  
 R.T.: 5.181 min  
 Delta R.T.: -0.003 min  
 Response: 1867953716  
 Conc: 3.18 ppb



#51 Decachlorobiphenyl  
 R.T.: 11.315 min  
 Delta R.T.: -0.005 min  
 Response: 1003235718  
 Conc: 2.54 ppb



#51 Decachlorobiphenyl  
 R.T.: 12.434 min  
 Delta R.T.: -0.014 min  
 Response: 1459317128  
 Conc: 3.82 ppb m

9.1.23  
 9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\maryannl\2G6085\  
 Data File : 2G231749.D  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 09-May-24, 11:15:55  
 Operator : christp  
 Sample : jd87833-12 m  
 Misc : op54453,G2G6085,5.4,,,10,1  
 ALS Vial : 0 (Sig #1); 62 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 18:28:55 2024  
 Quant Method : C:\msdchem\1\data\maryannl\2G6085\2PCBLVI6081full.M  
 Quant Title :  
 QLast Update : Thu May 09 12:25:10 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
 Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
-----						
System Monitoring Compounds						
1) S Tetrachlo...	4.687	5.182	1148.3E6	1658.8E6	2.632	2.827
Spiked Amount	40.000		Recovery	=	6.58%	7.07%
51) S Decachlor...	11.315	12.433	858.9E6	1365.0E6	2.174	3.576m#
Spiked Amount	40.000		Recovery	=	5.43%	8.94%

Target Compounds

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

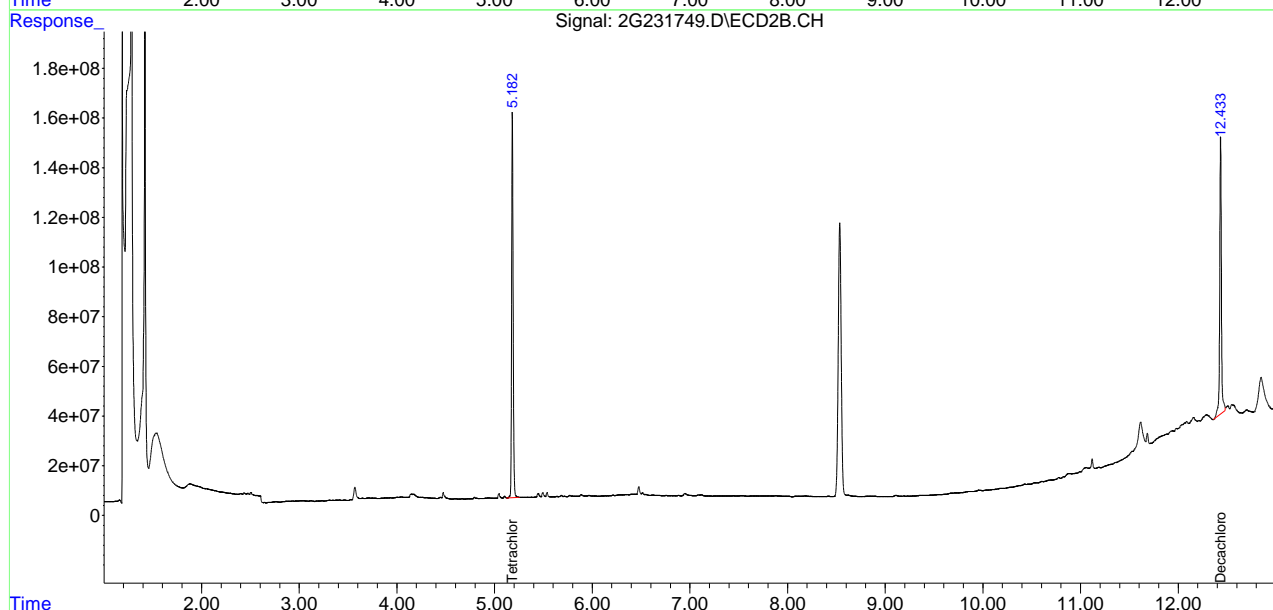
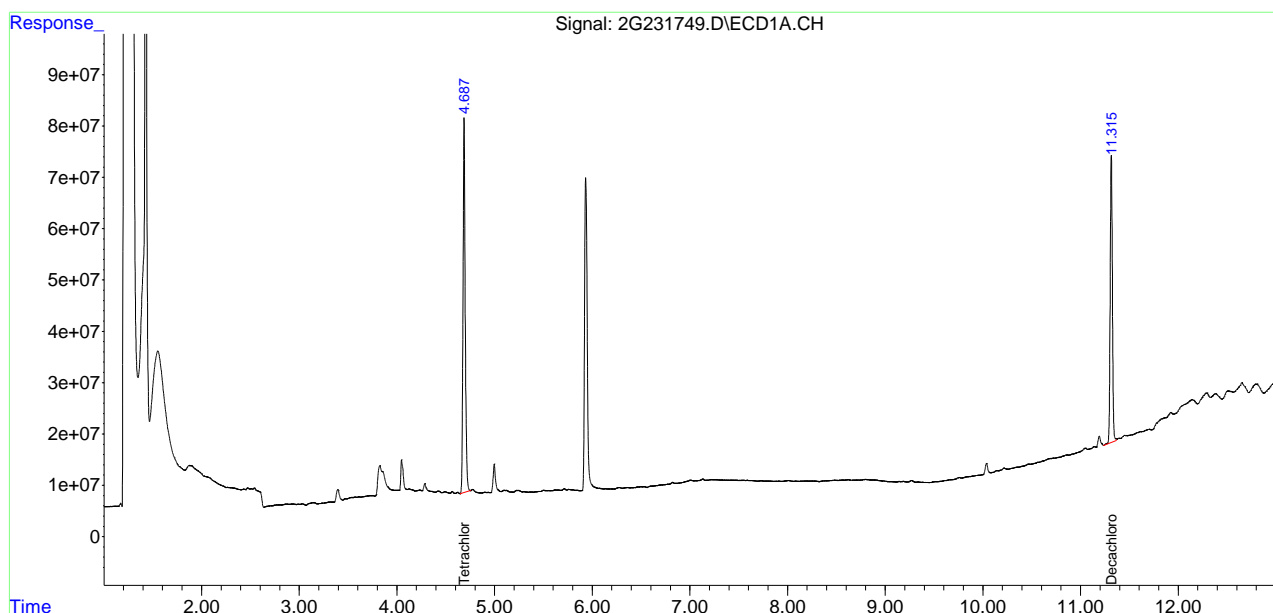
9.1.24  
**9**

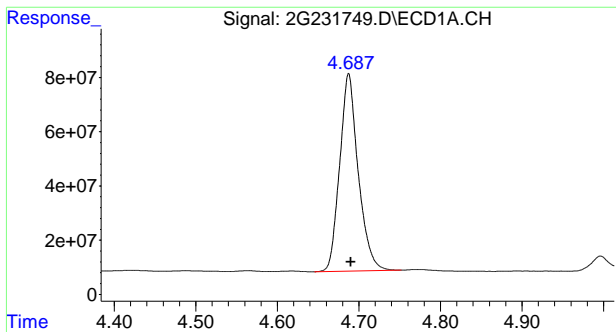
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\maryannl\2G6085\  
 Data File : 2G231749.D  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 09-May-24, 11:15:55  
 Operator : christp  
 Sample : jd87833-12 m  
 Misc : op54453,G2G6085,5.4,,,10,1  
 ALS Vial : 0 (Sig #1); 62 (Sig #2) Sample Multiplier: 1

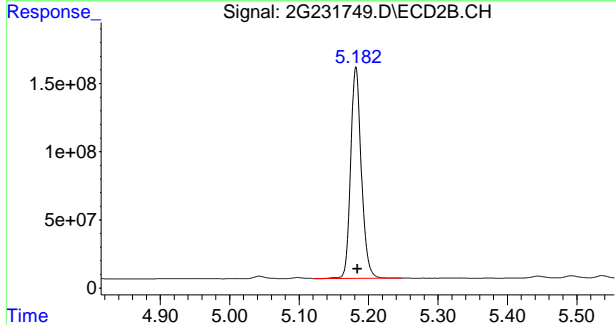
Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 18:28:55 2024  
 Quant Method : C:\msdchem\1\data\maryannl\2G6085\2PCBLVI6081full.M  
 Quant Title :  
 QLast Update : Thu May 09 12:25:10 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
 Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

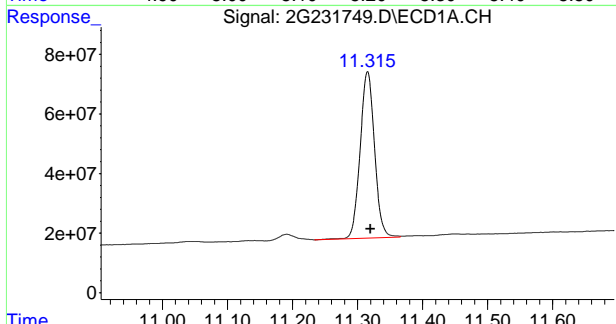




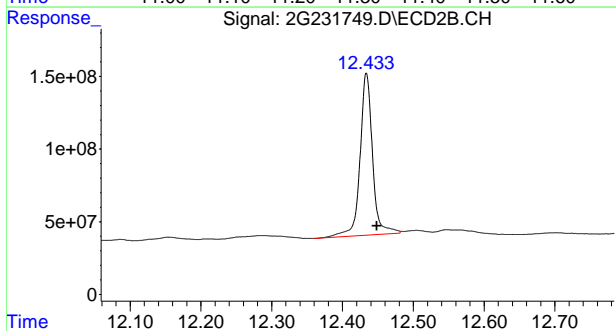
#1 Tetrachloro-m-xylene  
 R.T.: 4.687 min  
 Delta R.T.: -0.003 min  
 Response: 1148253784  
 Conc: 2.63 ppb



#1 Tetrachloro-m-xylene  
 R.T.: 5.182 min  
 Delta R.T.: -0.002 min  
 Response: 1658776076  
 Conc: 2.83 ppb



#51 Decachlorobiphenyl  
 R.T.: 11.315 min  
 Delta R.T.: -0.004 min  
 Response: 858901433  
 Conc: 2.17 ppb



#51 Decachlorobiphenyl  
 R.T.: 12.433 min  
 Delta R.T.: -0.015 min  
 Response: 1365023193  
 Conc: 3.58 ppb m

9.1.24  
**9**

## Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\maryannl\2G6085\  
 Data File : 2G231750.D  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 09-May-24, 11:39:39  
 Operator : christp  
 Sample : jd87833-14 m  
 Misc : op54453,G2G6085,5.3,,,10,1  
 ALS Vial : 0 (Sig #1); 63 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 18:30:20 2024  
 Quant Method : C:\msdchem\1\data\maryannl\2G6085\2PCBLVI6081full.M  
 Quant Title :  
 QLast Update : Thu May 09 12:25:10 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
 Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
-----						
System Monitoring Compounds						
1) S Tetrachlo...	4.688	5.181	1520.0E6	1847.8E6	3.483	3.150
Spiked Amount	40.000		Recovery	=	8.71%	7.88%
51) S Decachlor...	11.314	12.433	969.6E6	1467.4E6	2.454m	3.844 #
Spiked Amount	40.000		Recovery	=	6.13%	9.61%

## Target Compounds

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

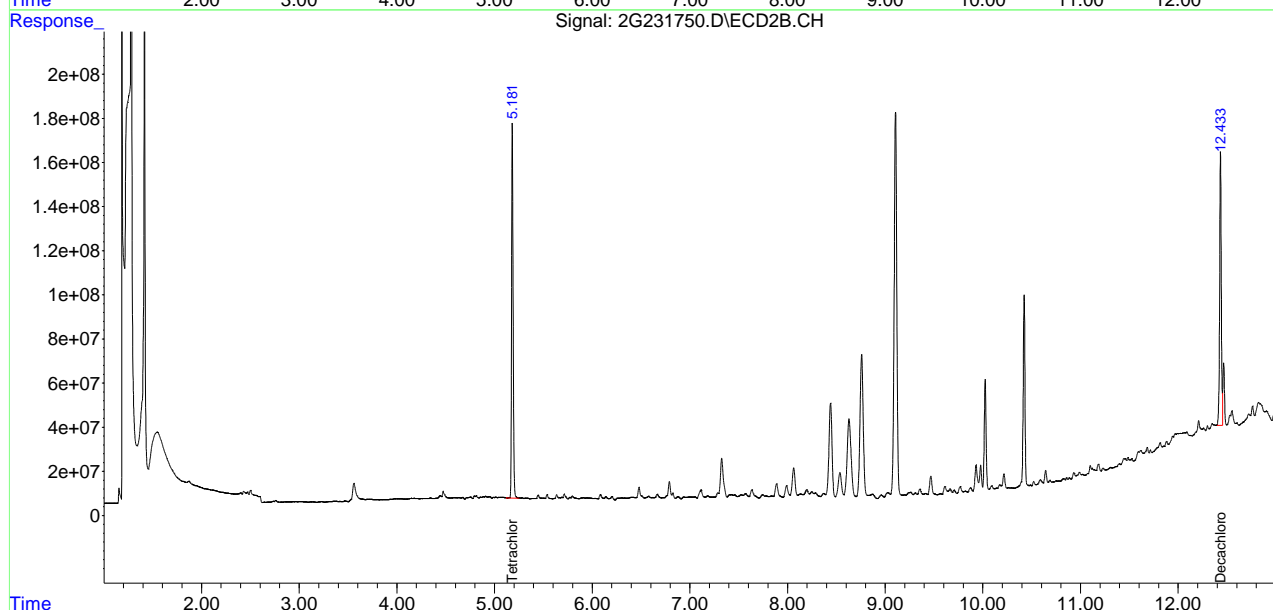
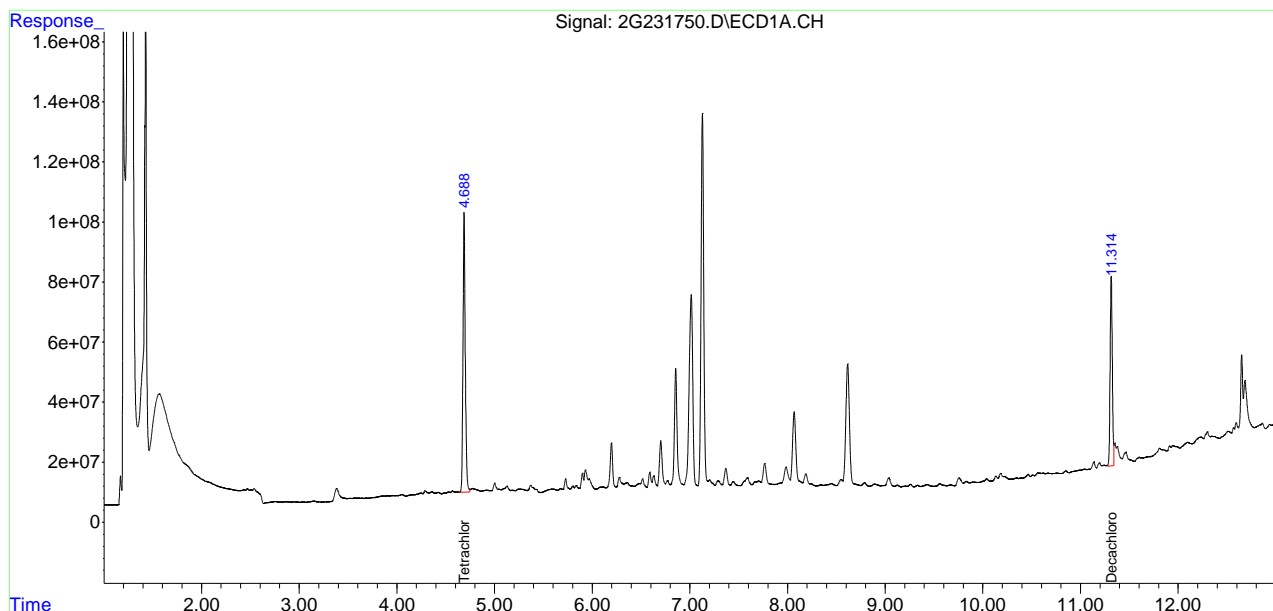


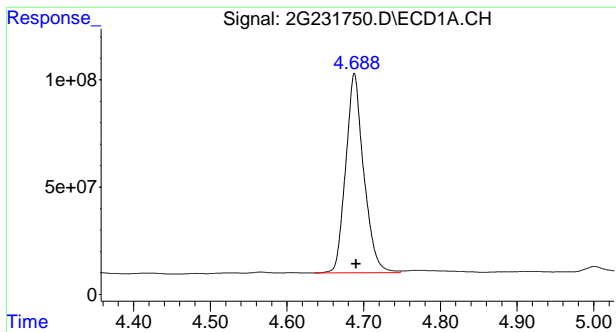
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\maryannl\2G6085\  
 Data File : 2G231750.D  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 09-May-24, 11:39:39  
 Operator : christp  
 Sample : jd87833-14 m  
 Misc : op54453,G2G6085,5.3,,,10,1  
 ALS Vial : 0 (Sig #1); 63 (Sig #2) Sample Multiplier: 1

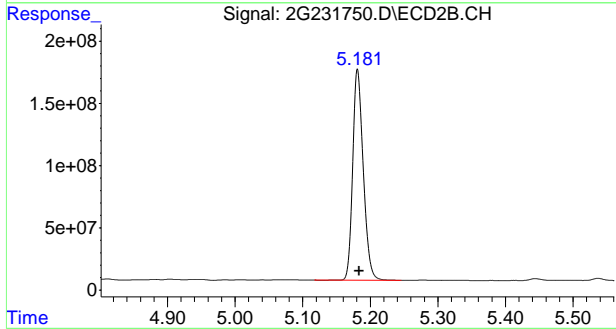
Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 18:30:20 2024  
 Quant Method : C:\msdchem\1\data\maryannl\2G6085\2PCBLVI6081full.M  
 Quant Title :  
 QLast Update : Thu May 09 12:25:10 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
 Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

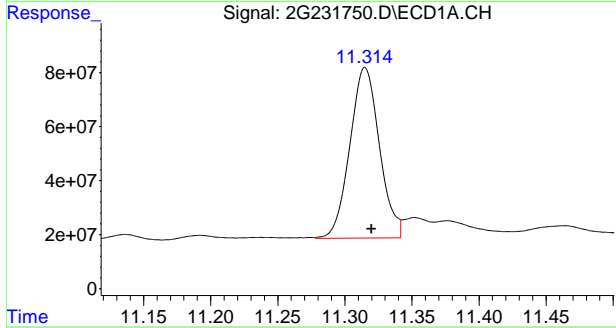




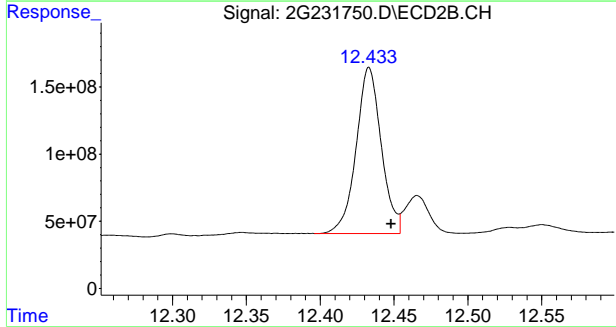
#1 Tetrachloro-m-xylene  
 R.T.: 4.688 min  
 Delta R.T.: -0.002 min  
 Response: 1519973848  
 Conc: 3.48 ppb



#1 Tetrachloro-m-xylene  
 R.T.: 5.181 min  
 Delta R.T.: -0.002 min  
 Response: 1847763820  
 Conc: 3.15 ppb



#51 Decachlorobiphenyl  
 R.T.: 11.314 min  
 Delta R.T.: -0.005 min  
 Response: 969641970  
 Conc: 2.45 ppb m



#51 Decachlorobiphenyl  
 R.T.: 12.433 min  
 Delta R.T.: -0.015 min  
 Response: 1467439009  
 Conc: 3.84 ppb

9.1.25  
**9**

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\maryannl\2G6085\  
 Data File : 2G231755.D  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 09-May-24, 13:39:46  
 Operator : christp  
 Sample : jd87833-15 m  
 Misc : op54453,G2G6085,5.1,,,10,1  
 ALS Vial : 0 (Sig #1); 65 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 18:31:18 2024  
 Quant Method : C:\msdchem\1\data\maryannl\2G6085\2PCBLVI6081full.M  
 Quant Title :  
 QLast Update : Thu May 09 12:25:10 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
 Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
-----						
System Monitoring Compounds						
1) S Tetrachlo...	4.688	5.180	1423.5E6	1922.9E6	3.262	3.278m
Spiked Amount	40.000		Recovery	=	8.15%	8.20%
51) S Decachlor...	11.315	12.435	1070.8E6	1660.2E6	2.711	4.349m#
Spiked Amount	40.000		Recovery	=	6.78%	10.87%

Target Compounds

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

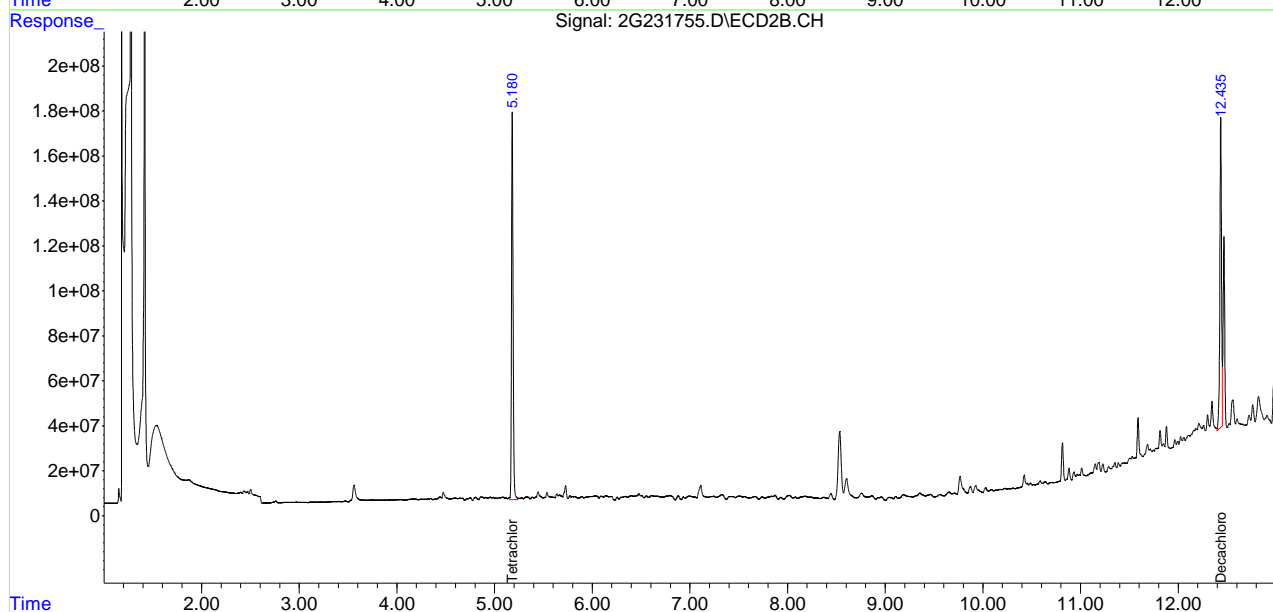
9.1.26  
**9**

Quantitation Report (QT Reviewed)

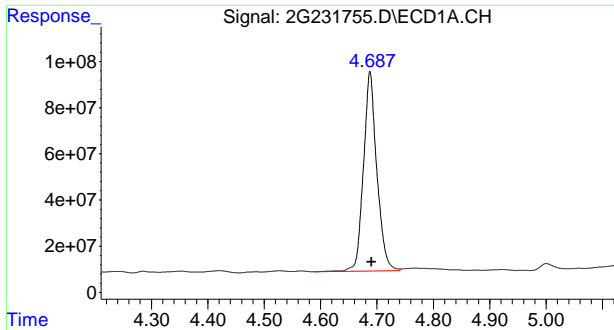
Data Path : C:\msdchem\1\data\maryannl\2G6085\  
 Data File : 2G231755.D  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 09-May-24, 13:39:46  
 Operator : christp  
 Sample : jd87833-15 m  
 Misc : op54453,G2G6085,5.1,,10,1  
 ALS Vial : 0 (Sig #1); 65 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 18:31:18 2024  
 Quant Method : C:\msdchem\1\data\maryannl\2G6085\2PCBLVI6081full.M  
 Quant Title :  
 QLast Update : Thu May 09 12:25:10 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

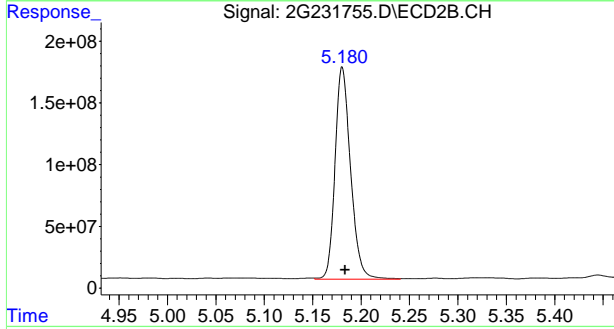
Volume Inj. : 1ul  
 Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



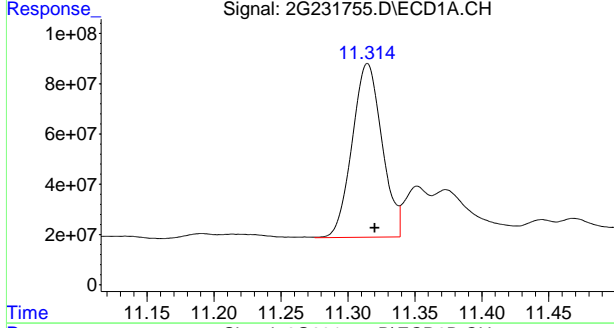
9.1.26  
**9**



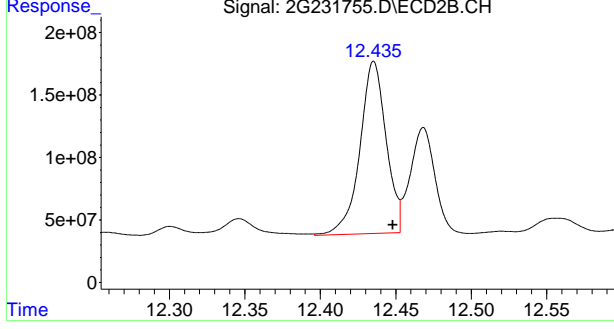
#1 Tetrachloro-m-xylene  
 R.T.: 4.688 min  
 Delta R.T.: -0.002 min  
 Response: 1423454766  
 Conc: 3.26 ppb



#1 Tetrachloro-m-xylene  
 R.T.: 5.180 min  
 Delta R.T.: -0.004 min  
 Response: 1922930610  
 Conc: 3.28 ppb m



#51 Decachlorobiphenyl  
 R.T.: 11.315 min  
 Delta R.T.: -0.005 min  
 Response: 1070827158  
 Conc: 2.71 ppb



#51 Decachlorobiphenyl  
 R.T.: 12.435 min  
 Delta R.T.: -0.013 min  
 Response: 1660186266  
 Conc: 4.35 ppb m

9.1.26  
**9**

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\maryannl\2G6085\  
 Data File : 2G231756.D  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 09-May-24, 14:03:55  
 Operator : christp  
 Sample : jd87833-16 m  
 Misc : op54453,G2G6085,5.2,,,10,1  
 ALS Vial : 0 (Sig #1); 66 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 20:17:12 2024  
 Quant Method : C:\msdchem\1\data\maryannl\2G6085\2PCBLVI6081full.M  
 Quant Title :  
 QLast Update : Thu May 09 12:25:10 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
 Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
-----						
System Monitoring Compounds						
1) S Tetrachlo...	4.688	5.182	1402.3E6	1835.7E6	3.214	3.129
Spiked Amount	40.000		Recovery	=	8.04%	7.82%
51) S Decachlor...	11.314	12.435	1060.5E6	1336.5E6	2.684	3.501m#
Spiked Amount	40.000		Recovery	=	6.71%	8.75%

Target Compounds

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

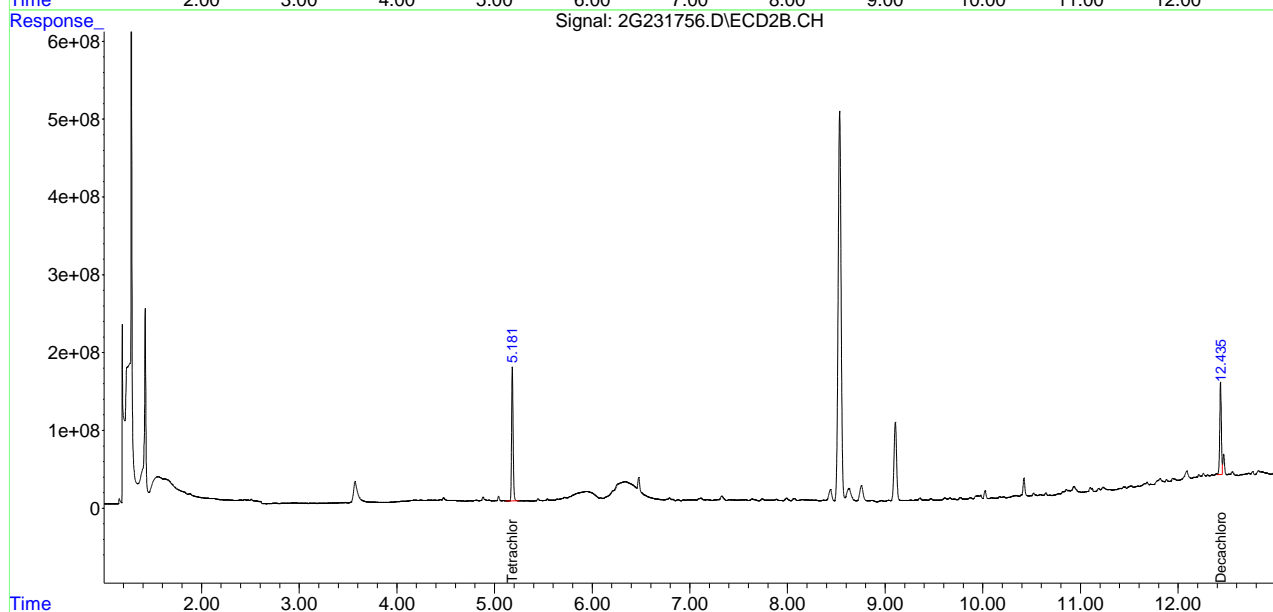
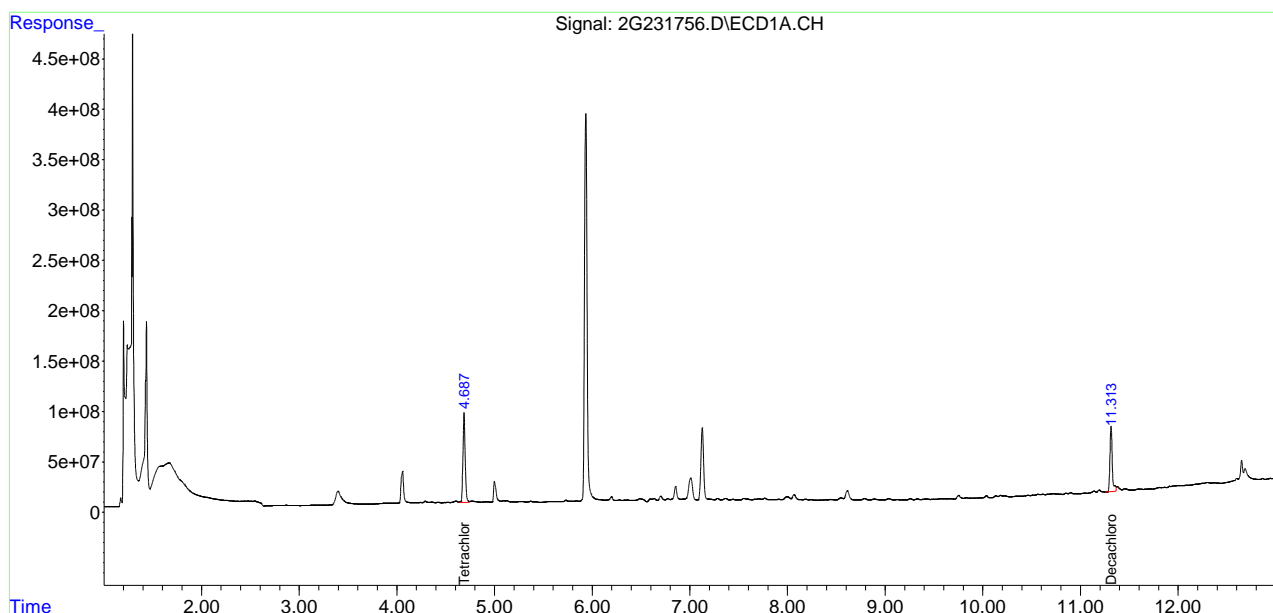
9.1.27  
**9**

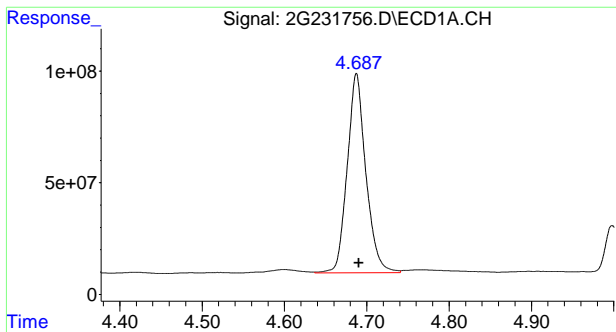
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\maryannl\2G6085\  
 Data File : 2G231756.D  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 09-May-24, 14:03:55  
 Operator : christp  
 Sample : jd87833-16 m  
 Misc : op54453,G2G6085,5.2,,,10,1  
 ALS Vial : 0 (Sig #1); 66 (Sig #2) Sample Multiplier: 1

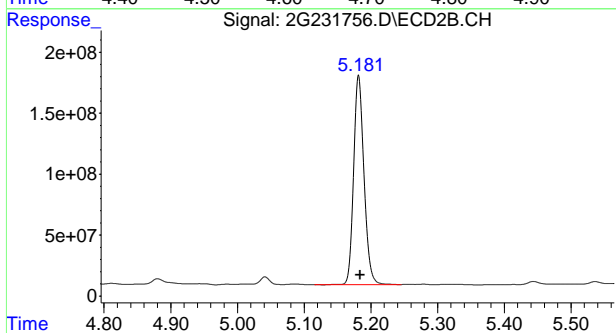
Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 20:17:12 2024  
 Quant Method : C:\msdchem\1\data\maryannl\2G6085\2PCBLVI6081full.M  
 Quant Title :  
 QLast Update : Thu May 09 12:25:10 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
 Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

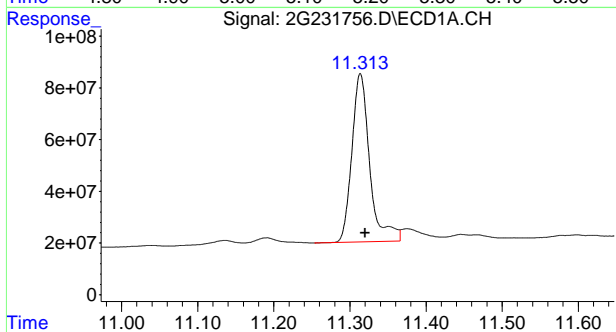




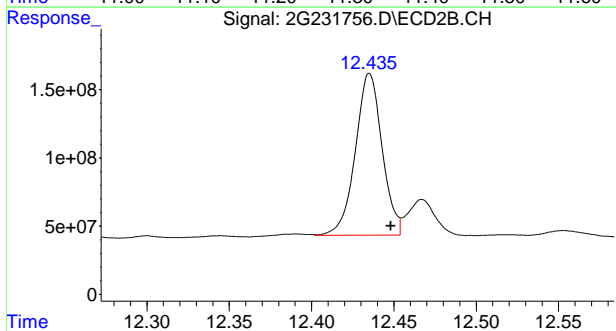
#1 Tetrachloro-m-xylene  
 R.T.: 4.688 min  
 Delta R.T.: -0.003 min  
 Response: 1402281231  
 Conc: 3.21 ppb



#1 Tetrachloro-m-xylene  
 R.T.: 5.182 min  
 Delta R.T.: -0.002 min  
 Response: 1835703619  
 Conc: 3.13 ppb



#51 Decachlorobiphenyl  
 R.T.: 11.314 min  
 Delta R.T.: -0.006 min  
 Response: 1060486249  
 Conc: 2.68 ppb



#51 Decachlorobiphenyl  
 R.T.: 12.435 min  
 Delta R.T.: -0.013 min  
 Response: 1336506887  
 Conc: 3.50 ppb m

9.1.27  
**9**



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\carlos\1G7004\  
 Data File : 1g196195.D  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 08-May-24, 00:24:58  
 Operator : christp  
 Sample : op54399-mb1  
 Misc : op54399,g1g7004,250,,,2,1  
 ALS Vial : 41 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 08 14:30:57 2024  
 Quant Method : C:\msdchem\1\data\carlos\1G7004\1PST6859a.M  
 Quant Title : PEST/PCB  
 QLast Update : Wed May 08 14:18:05 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column  
 Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
 Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
-----						
Internal Standards						
1) I 1-bromo-2...	1.232	1.137	384.2E6	435.3E6	50.000m	50.000m
27) I 1-bromo-2...	1.232	1.137	396.4E6	435.5E6	50.000m	50.000m
33) I 1-bromo-2...	1.232	1.137	398.6E6	434.7E6	50.000m	50.000m
System Monitoring Compounds						
2) SAB Tetrachlo...	1.696	1.734	105.9E6	77144745	14.388	14.153
Spiked Amount	40.000	Range	30 - 150	Recovery	= 35.97%	35.38%
26) SA Decachlor...	8.611	9.951	124.3E6	123.2E6	16.582	13.286
Spiked Amount	40.000		Recovery	=	41.46%	33.22%
Target Compounds						
20) MA 4,4'-DDT	5.237	6.127	146.1E6	150.3E6	24.499	23.942
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

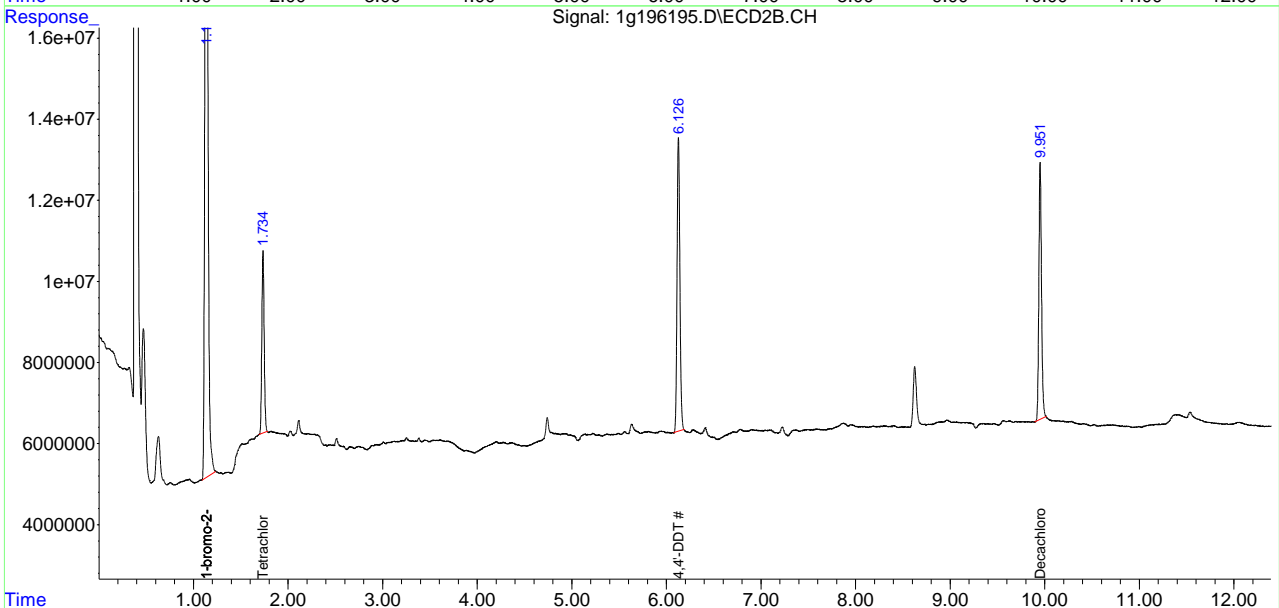
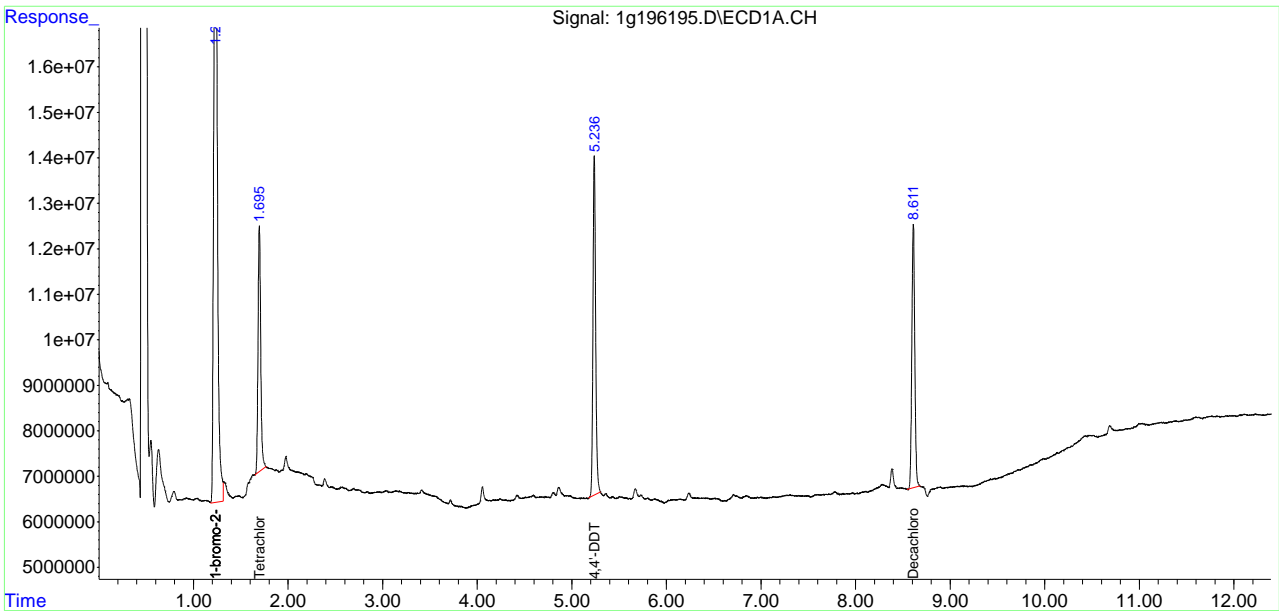
9.2.1  
**9**

Quantitation Report (QT Reviewed)

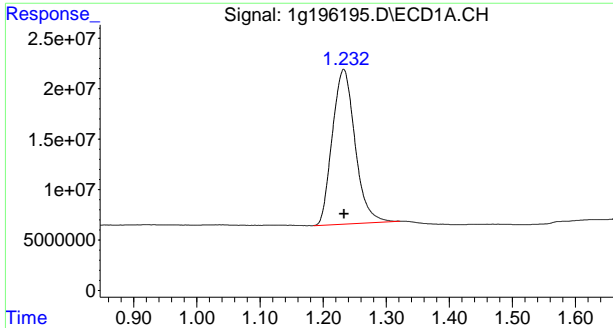
Data Path : C:\msdchem\1\data\carlos\1G7004\  
 Data File : 1g196195.D  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 08-May-24, 00:24:58  
 Operator : christp  
 Sample : op54399-mb1  
 Misc : op54399,1g7004,250,,,2,1  
 ALS Vial : 41 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 08 14:30:57 2024  
 Quant Method : C:\msdchem\1\data\carlos\1G7004\1PST6859a.M  
 Quant Title : PEST/PCB  
 QLast Update : Wed May 08 14:18:05 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

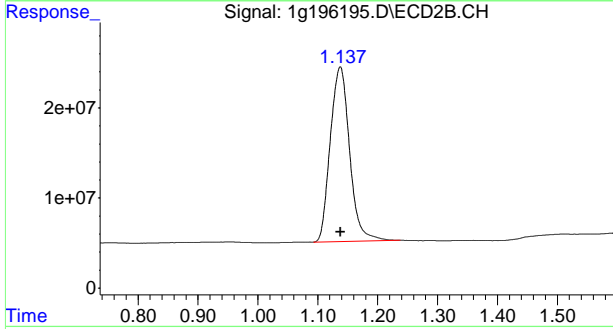
Volume Inj. : 1ul/column  
 Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
 Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



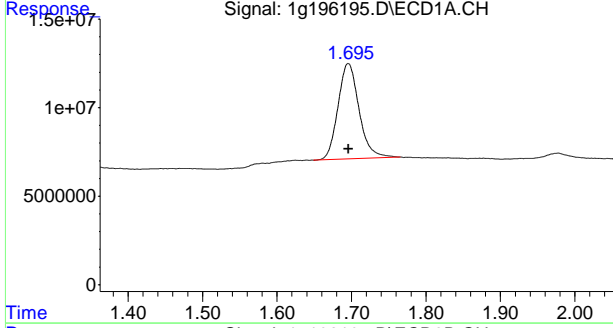
9.2.1  
9



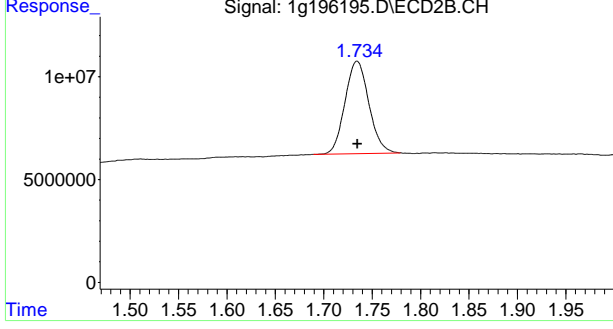
#1 1-bromo-2-nitrobenzene  
 R.T.: 1.232 min  
 Delta R.T.: 0.000 min  
 Response: 384230361  
 Conc: 50.00 PPB m



#1 1-bromo-2-nitrobenzene  
 R.T.: 1.137 min  
 Delta R.T.: 0.000 min  
 Response: 435295033  
 Conc: 50.00 PPB m

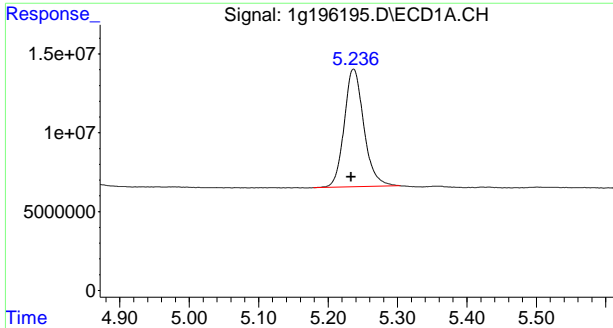


#2 Tetrachloro-m-xylene  
 R.T.: 1.696 min  
 Delta R.T.: 0.000 min  
 Response: 105866424  
 Conc: 14.39 PPB

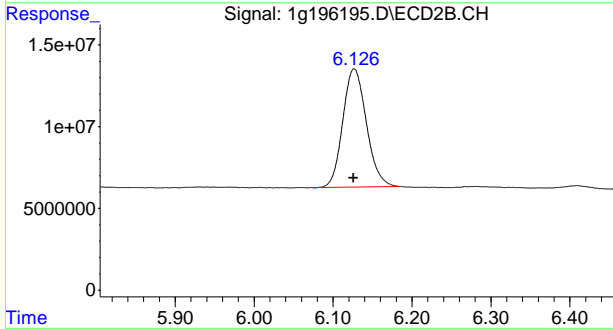


#2 Tetrachloro-m-xylene  
 R.T.: 1.734 min  
 Delta R.T.: 0.000 min  
 Response: 77144745  
 Conc: 14.15 PPB

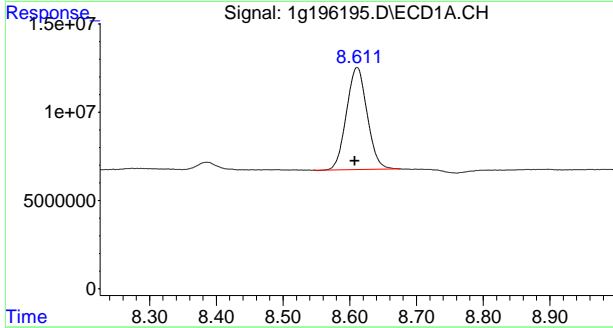
9.2.1  
**9**



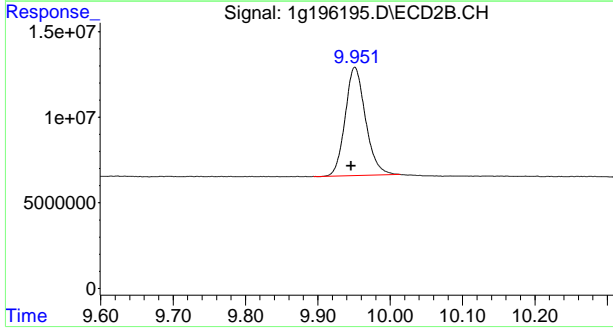
#20 4,4'-DDT  
 R.T.: 5.237 min  
 Delta R.T.: 0.003 min  
 Response: 146090113  
 Conc: 24.50 PPB



#20 4,4'-DDT  
 R.T.: 6.127 min  
 Delta R.T.: 0.000 min  
 Response: 150313220  
 Conc: 23.94 PPB

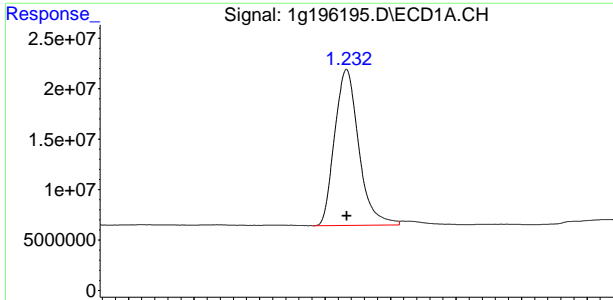


#26 Decachlorobiphenyl  
 R.T.: 8.611 min  
 Delta R.T.: 0.004 min  
 Response: 124335005  
 Conc: 16.58 PPB

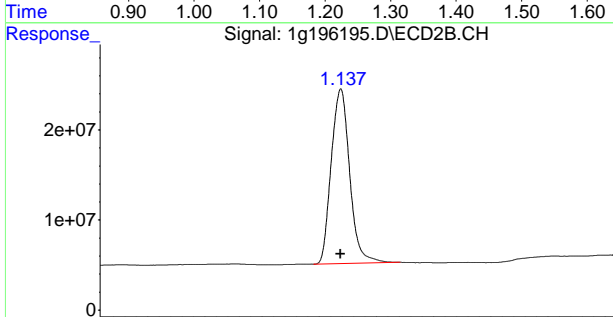


#26 Decachlorobiphenyl  
 R.T.: 9.951 min  
 Delta R.T.: 0.005 min  
 Response: 123175688  
 Conc: 13.29 PPB

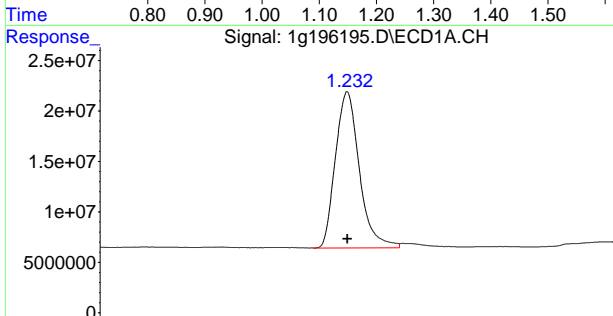
9.2.1  
**9**



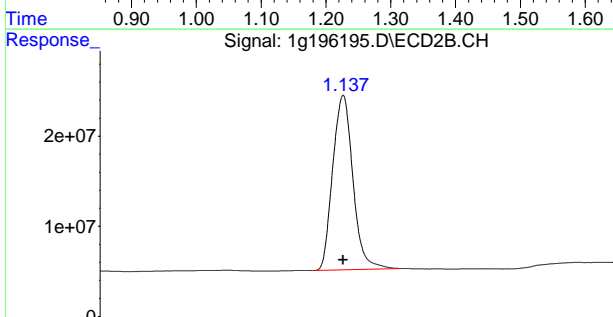
#27 1-bromo-2-nitrobenzeneA  
 R.T.: 1.232 min  
 Delta R.T.: 0.000 min  
 Response: 396413072  
 Conc: 50.00 PPB m



#27 1-bromo-2-nitrobenzeneA  
 R.T.: 1.137 min  
 Delta R.T.: 0.000 min  
 Response: 435535725  
 Conc: 50.00 PPB m



#33 1-bromo-2-nitrobenzeneB  
 R.T.: 1.232 min  
 Delta R.T.: 0.000 min  
 Response: 398604435  
 Conc: 50.00 PPB m



#33 1-bromo-2-nitrobenzeneB  
 R.T.: 1.137 min  
 Delta R.T.: 0.000 min  
 Response: 434736979  
 Conc: 50.00 PPB m

9.2.1  
**9**

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\1G7013\  
 Data File : 1g196359.d  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 14-May-24, 10:08:46  
 Operator : rebeccak  
 Sample : op54554a-mb1  
 Misc : op54554a,glg7013,250,,,2,1  
 ALS Vial : 70 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 15 11:40:49 2024  
 Quant Method : C:\msdchem\1\data\chris2\1G7013\1PST6859a.M  
 Quant Title : PEST/PCB  
 QLast Update : Wed May 15 07:20:57 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column  
 Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
 Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
-----						
Internal Standards						
1) I 1-bromo-2...	1.220	1.127	349.2E6	361.8E6	50.000m	50.000m
27) I 1-bromo-2...	1.220	1.127	343.6E6	354.5E6	50.000m	50.000m
33) I 1-bromo-2...	1.220	1.127	344.6E6	356.2E6	50.000m	50.000m
System Monitoring Compounds						
2) SAB Tetrachlo...	1.682	1.724	178.9E6	118.7E6	26.750m	26.195m
Spiked Amount	40.000	Range	30 - 150	Recovery	= 66.88%	65.49%
26) SA Decachlor...	8.598	9.946	229.5E6	205.8E6	33.684	26.714
Spiked Amount	40.000		Recovery	=	84.21%	66.78%
Target Compounds						
20) MA 4,4'-DDT	5.225	6.118	8242945	8153671	1.521m	1.563m
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

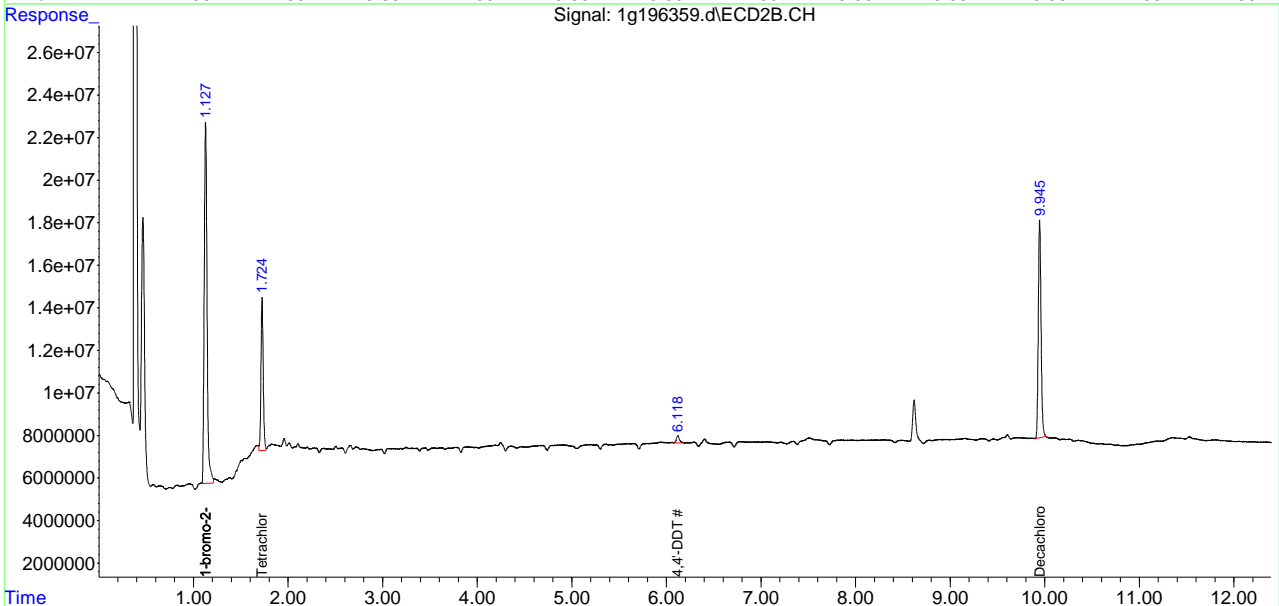
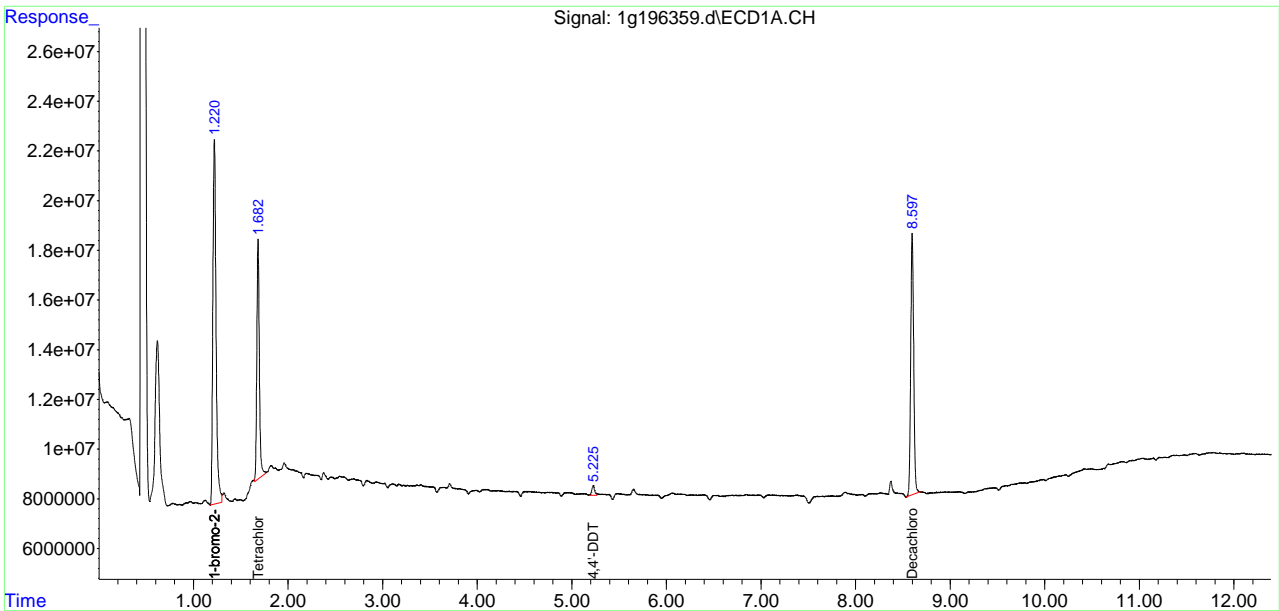
9.22  
 9

Quantitation Report (QT Reviewed)

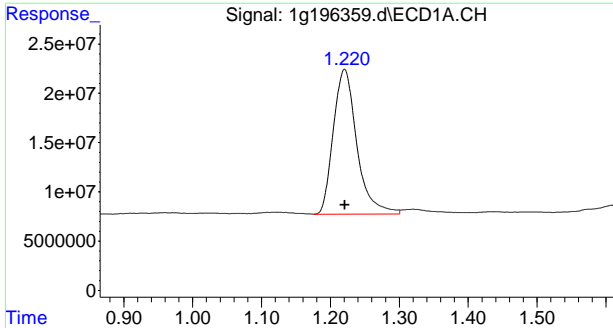
Data Path : C:\msdchem\1\data\1G7013\  
 Data File : 1g196359.d  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 14-May-24, 10:08:46  
 Operator : rebeccak  
 Sample : op54554a-mb1  
 Misc : op54554a,glg7013,250,,,2,1  
 ALS Vial : 70 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 15 11:40:49 2024  
 Quant Method : C:\msdchem\1\data\chris2\1G7013\1PST6859a.M  
 Quant Title : PEST/PCB  
 QLast Update : Wed May 15 07:20:57 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

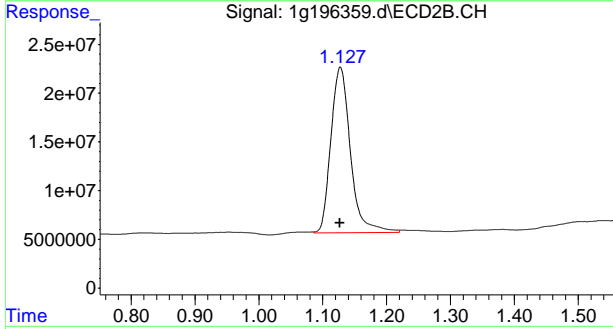
Volume Inj. : 1ul/column  
 Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
 Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



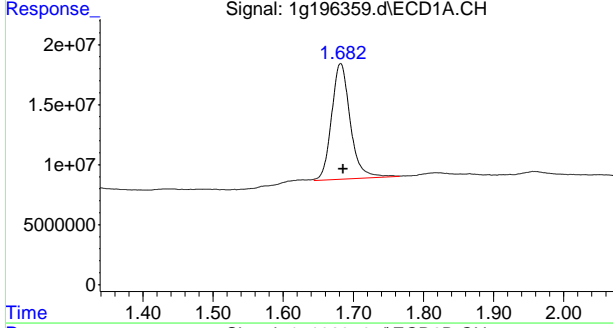
9.22  
9



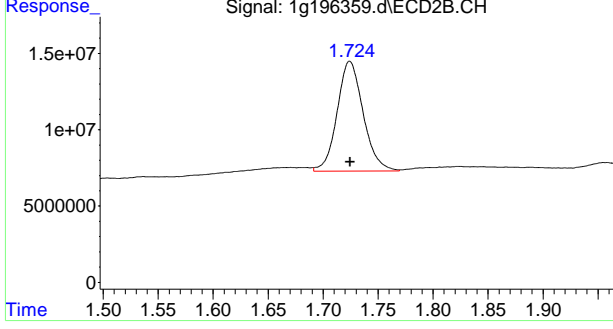
#1 1-bromo-2-nitrobenzene  
 R.T.: 1.220 min  
 Delta R.T.: 0.000 min  
 Response: 349171278  
 Conc: 50.00 PPB m



#1 1-bromo-2-nitrobenzene  
 R.T.: 1.127 min  
 Delta R.T.: 0.000 min  
 Response: 361755387  
 Conc: 50.00 PPB m



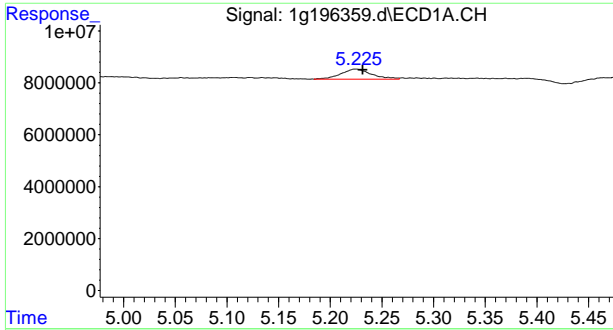
#2 Tetrachloro-m-xylene  
 R.T.: 1.682 min  
 Delta R.T.: -0.004 min  
 Response: 178870712  
 Conc: 26.75 PPB m



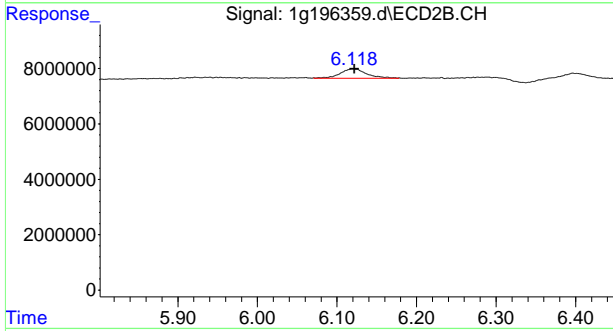
#2 Tetrachloro-m-xylene  
 R.T.: 1.724 min  
 Delta R.T.: 0.000 min  
 Response: 118660444  
 Conc: 26.19 PPB m

9.22  
 9

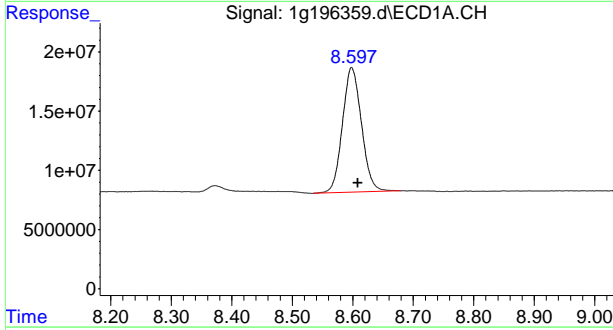




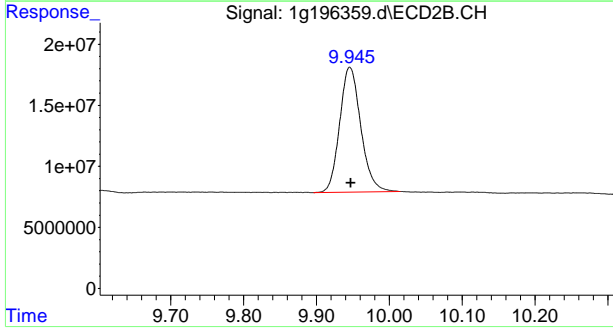
#20 4,4'-DDT  
 R.T.: 5.225 min  
 Delta R.T.: -0.006 min  
 Response: 8242945  
 Conc: 1.52 PPB m



#20 4,4'-DDT  
 R.T.: 6.118 min  
 Delta R.T.: -0.003 min  
 Response: 8153671  
 Conc: 1.56 PPB m

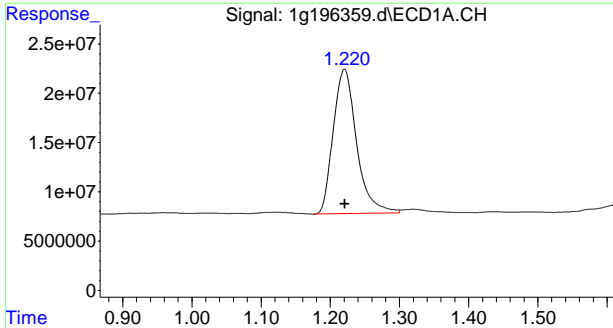


#26 Decachlorobiphenyl  
 R.T.: 8.598 min  
 Delta R.T.: -0.010 min  
 Response: 229516403  
 Conc: 33.68 PPB

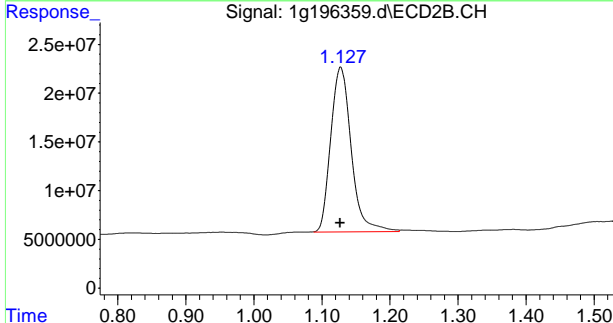


#26 Decachlorobiphenyl  
 R.T.: 9.946 min  
 Delta R.T.: -0.001 min  
 Response: 205820288  
 Conc: 26.71 PPB

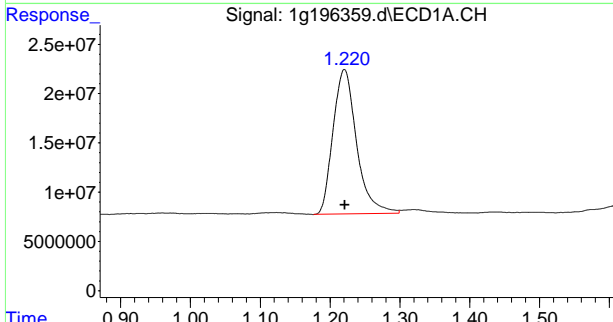
9.22  
 9



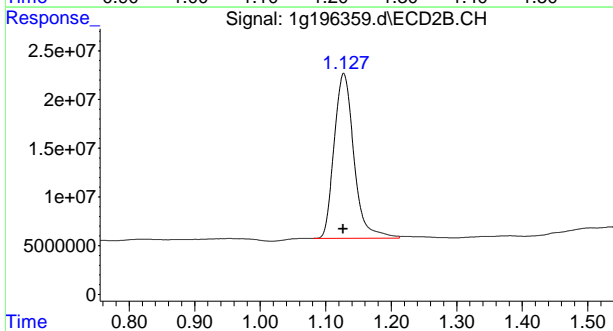
#27 1-bromo-2-nitrobenzeneA  
 R.T.: 1.220 min  
 Delta R.T.: 0.000 min  
 Response: 343614409  
 Conc: 50.00 PPB m



#27 1-bromo-2-nitrobenzeneA  
 R.T.: 1.127 min  
 Delta R.T.: 0.000 min  
 Response: 354541833  
 Conc: 50.00 PPB m



#33 1-bromo-2-nitrobenzeneB  
 R.T.: 1.220 min  
 Delta R.T.: 0.000 min  
 Response: 344634497  
 Conc: 50.00 PPB m



#33 1-bromo-2-nitrobenzeneB  
 R.T.: 1.127 min  
 Delta R.T.: 0.000 min  
 Response: 356177274  
 Conc: 50.00 PPB m

9.2.2  
 9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\maryannl\2G6085\  
 Data File : 2G231733.D  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 09-May-24, 04:51:01  
 Operator : christp  
 Sample : op54453-mb1 m  
 Misc : op54453,G2G6085,5.0,,,10,1  
 ALS Vial : 0 (Sig #1); 49 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 12:46:04 2024  
 Quant Method : C:\msdchem\1\data\maryannl\2G6085\2PCBLVI6081full.M  
 Quant Title :  
 QLast Update : Thu May 09 12:25:10 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
 Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
-----						
System Monitoring Compounds						
1) S Tetrachlo...	4.688	5.182	1740.5E6	2330.6E6	3.989	3.973
Spiked Amount	40.000		Recovery	=	9.97%	9.93%
51) S Decachlor...	11.315	12.435	1576.4E6	1442.1E6	3.990	3.778
Spiked Amount	40.000		Recovery	=	9.98%	9.45%

Target Compounds

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

9.2.3  
9

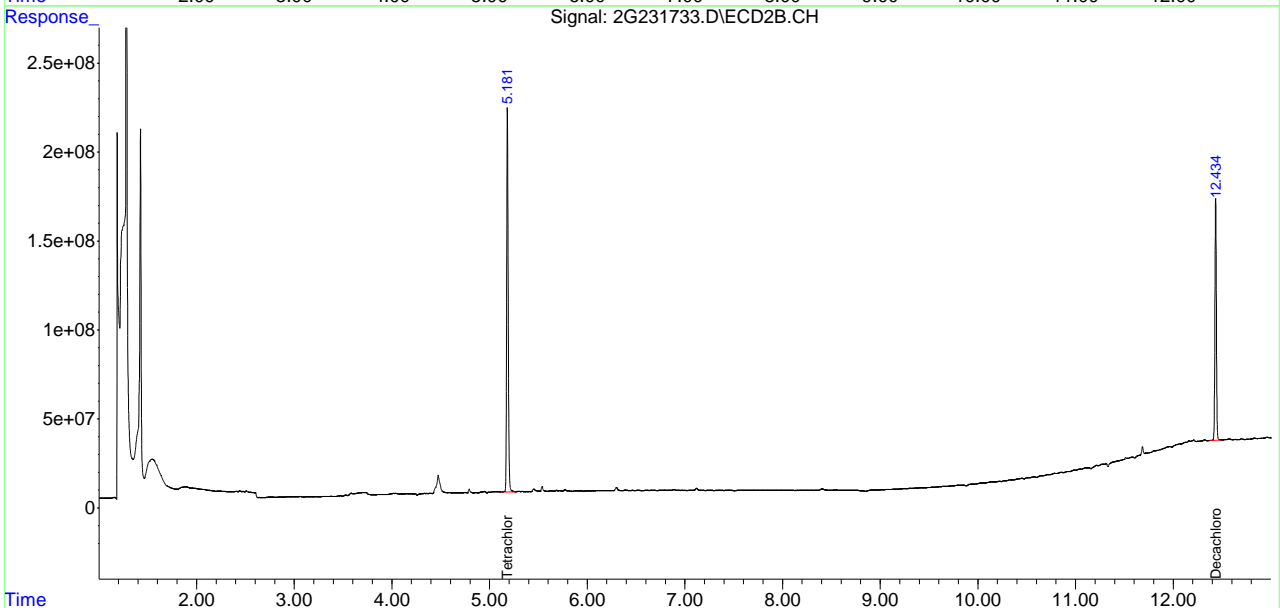
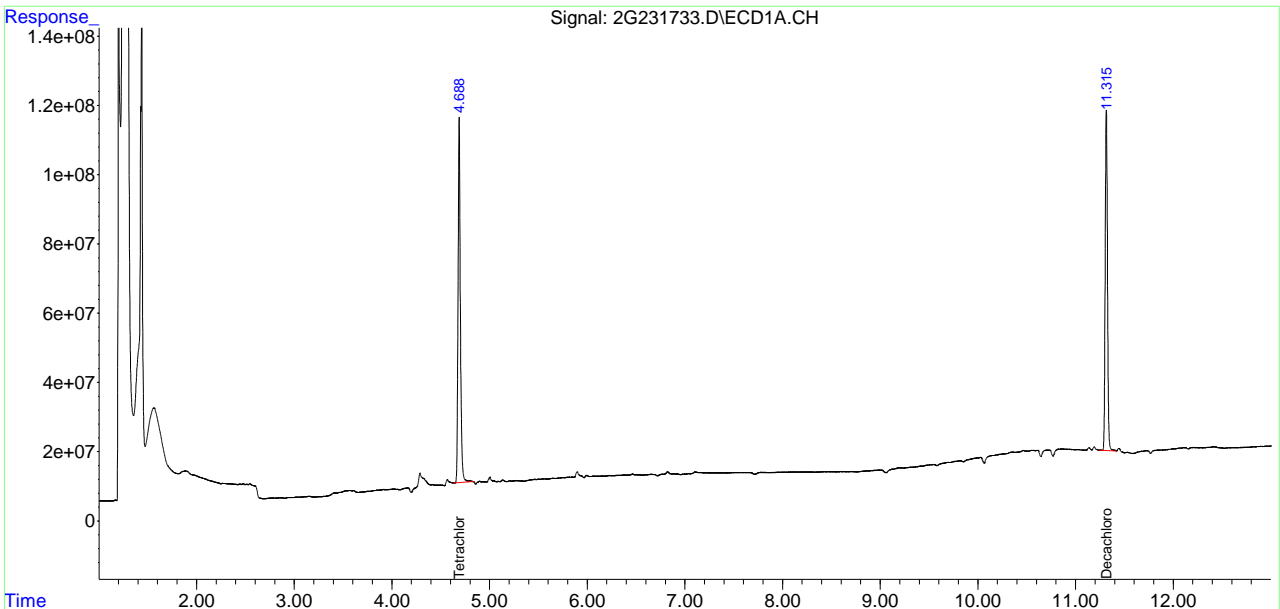


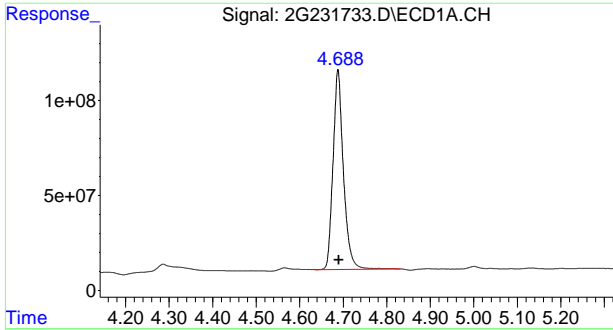
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\maryannl\2G6085\  
 Data File : 2G231733.D  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 09-May-24, 04:51:01  
 Operator : christp  
 Sample : op54453-mb1 m  
 Misc : op54453,G2G6085,5.0,,,10,1  
 ALS Vial : 0 (Sig #1); 49 (Sig #2) Sample Multiplier: 1

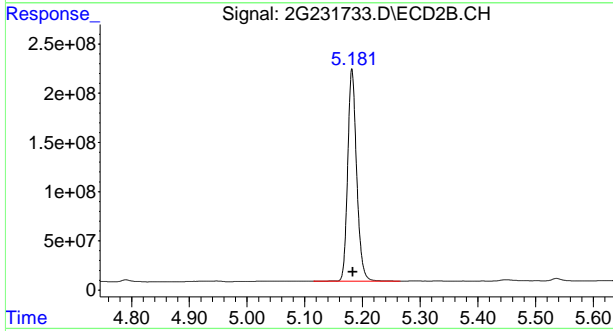
Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 12:46:04 2024  
 Quant Method : C:\msdchem\1\data\maryannl\2G6085\2PCBLVI6081full.M  
 Quant Title :  
 QLast Update : Thu May 09 12:25:10 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
 Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

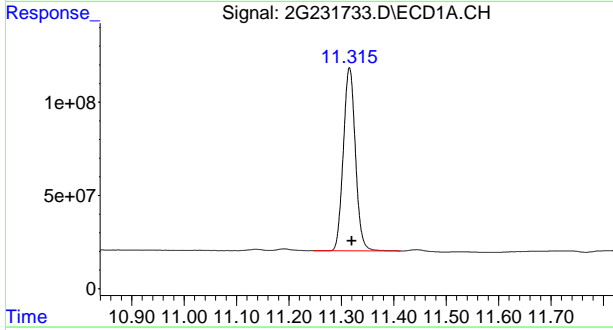




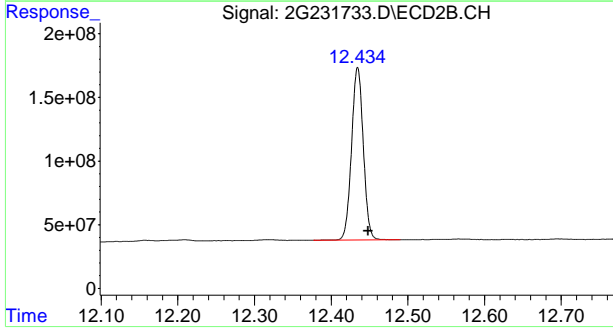
#1 Tetrachloro-m-xylene  
 R.T.: 4.688 min  
 Delta R.T.: -0.002 min  
 Response: 1740508156  
 Conc: 3.99 ppb



#1 Tetrachloro-m-xylene  
 R.T.: 5.182 min  
 Delta R.T.: -0.002 min  
 Response: 2330636049  
 Conc: 3.97 ppb



#51 Decachlorobiphenyl  
 R.T.: 11.315 min  
 Delta R.T.: -0.004 min  
 Response: 1576363755  
 Conc: 3.99 ppb



#51 Decachlorobiphenyl  
 R.T.: 12.435 min  
 Delta R.T.: -0.014 min  
 Response: 1442113832  
 Conc: 3.78 ppb

9.2.3  
**9**

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\marianaf\3G5173\  
 Data File : 3G141337.D  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 08-May-24, 03:20:09  
 Operator : christp  
 Sample : op54400-mb1  
 Misc : op54400,g3g5173,250,,,2,1  
 ALS Vial : 37 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 08 14:01:15 2024  
 Quant Method : C:\msdchem\1\data\marianaf\3G5173\3PCB5160.M  
 Quant Title :  
 QLast Update : Tue May 07 06:14:57 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
 Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
-----						
System Monitoring Compounds						
1) S Tetrachlo...	3.469	4.079	103.6E6	212.5E6	13.116m	11.701
Spiked Amount	40.000		Recovery	=	32.79%	29.25%
51) S Decachlor...	10.972	12.591	73924369	150.7E6	11.108m	10.292m
Spiked Amount	40.000		Recovery	=	27.77%	25.73%

Target Compounds

-----  
 (f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

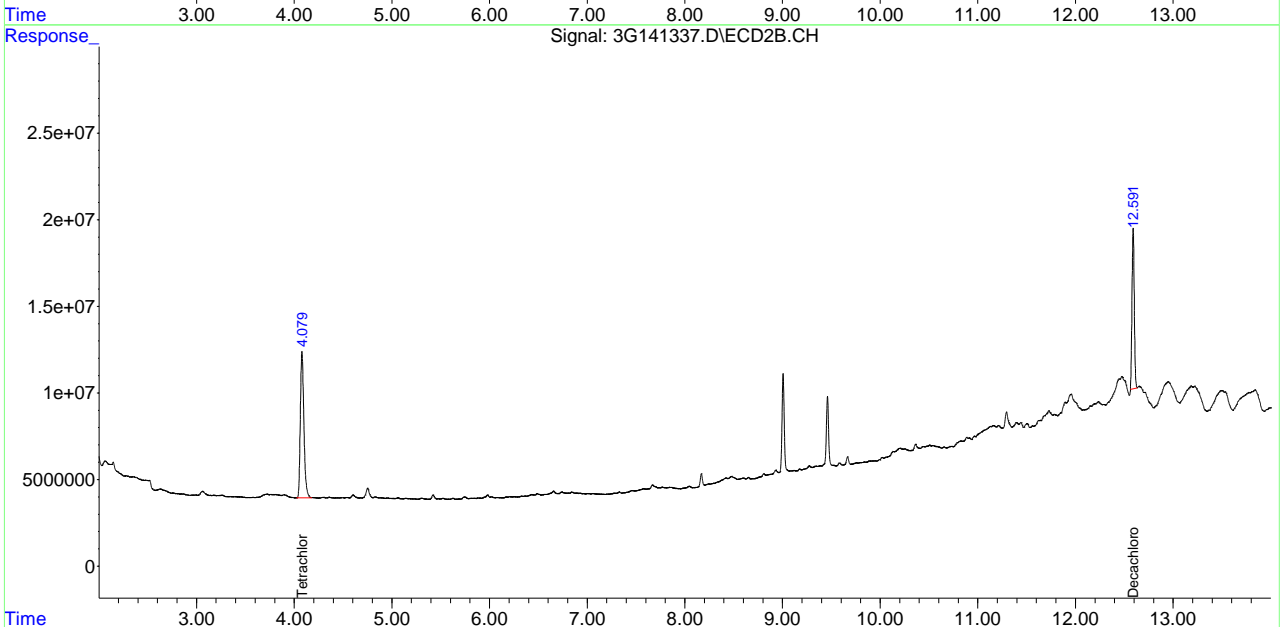
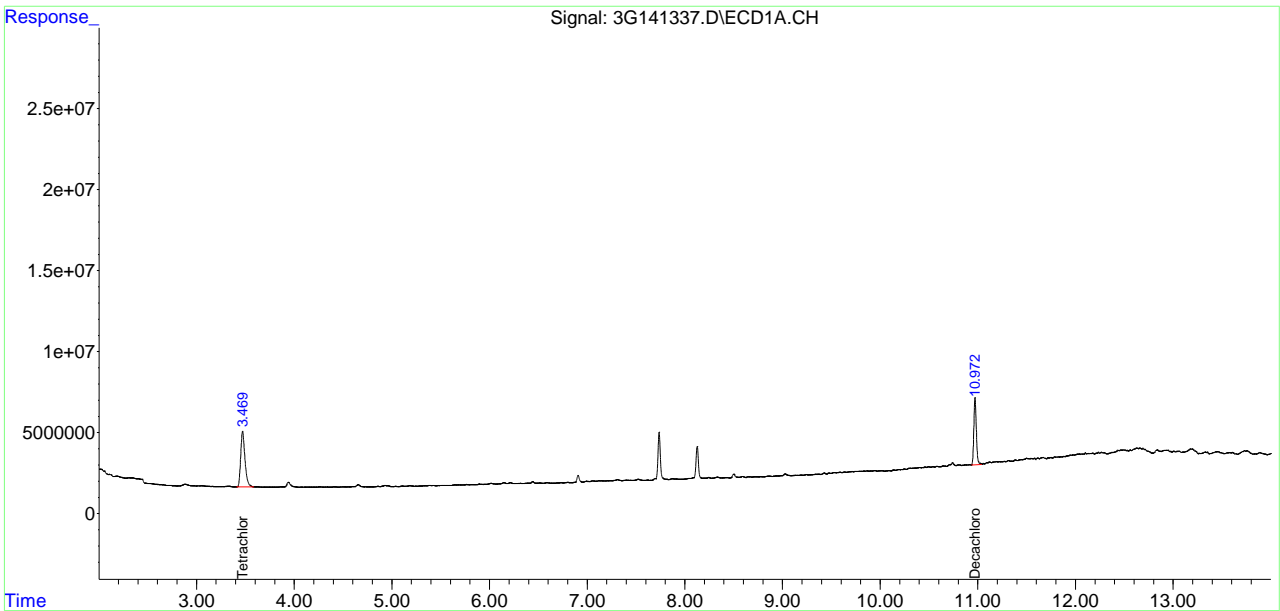
9.2.4  
**9**

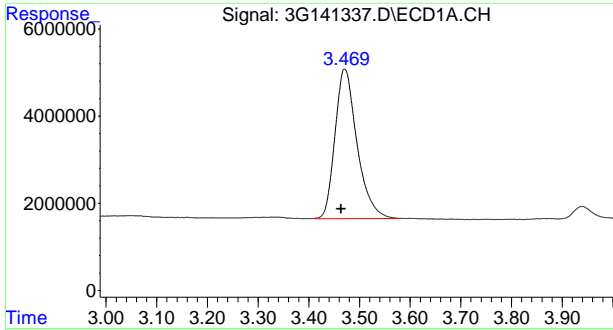
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\marianaf\3G5173\  
 Data File : 3G141337.D  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 08-May-24, 03:20:09  
 Operator : christp  
 Sample : op54400-mb1  
 Misc : op54400,g3g5173,250,,,2,1  
 ALS Vial : 37 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

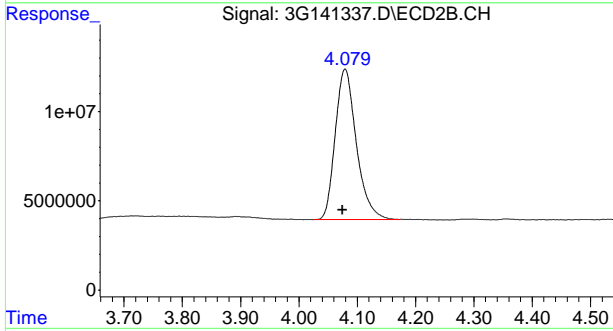
Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 08 14:01:15 2024  
 Quant Method : C:\msdchem\1\data\marianaf\3G5173\3PCB5160.M  
 Quant Title :  
 QLast Update : Tue May 07 06:14:57 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
 Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

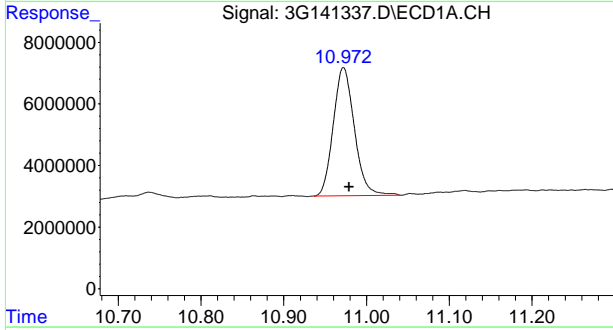




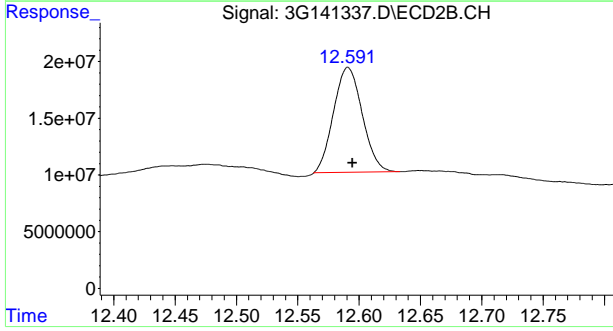
#1 Tetrachloro-m-xylene  
 R.T.: 3.469 min  
 Delta R.T.: 0.005 min  
 Response: 103621266  
 Conc: 13.12 ppb m



#1 Tetrachloro-m-xylene  
 R.T.: 4.079 min  
 Delta R.T.: 0.004 min  
 Response: 212506924  
 Conc: 11.70 ppb



#51 Decachlorobiphenyl  
 R.T.: 10.972 min  
 Delta R.T.: -0.007 min  
 Response: 73924369  
 Conc: 11.11 ppb m



#51 Decachlorobiphenyl  
 R.T.: 12.591 min  
 Delta R.T.: -0.004 min  
 Response: 150691424  
 Conc: 10.29 ppb m

9.2.4  
**9**



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nazaryne\G8G2470\  
 Data File : 8g56337.d  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 9 May 2024 1:20 am  
 Operator : christp  
 Sample : op54452-mb1 m  
 Misc : op54452,g8g2470,5.0,,,10,1  
 ALS Vial : 61 Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 13:26:01 2024  
 Quant Method : C:\msdchem\1\data\nazaryne\G8G2470\8PSTLVI2430a.M  
 Quant Title : PEST/PCB  
 QLast Update : Thu May 09 12:16:42 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1ul/column  
 Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
 Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
-----						
Internal Standards						
1) I 1-bromo-2...	4.461	4.906	679.3E6	1069.4E6	5.000m	5.000m
27) I 1-bromo-2...	4.461	4.906	679.9E6	1070.0E6	5.000m	5.000m
33) I 1-bromo-2...	4.461	4.906	679.0E6	1070.1E6	5.000m	5.000m
System Monitoring Compounds						
2) SAB Tetrachlo...	5.071	5.729	551.3E6	1236.5E6	3.894m	3.929m
Spiked Amount	40.000	Range 30 - 150	Recovery =		9.74%#	9.82%#
26) SA Decachlor...	12.051	14.186	538.8E6	565.1E6	3.528m	3.791m
Spiked Amount	40.000		Recovery =		8.82%	9.48%
Target Compounds						
7) B beta-BHC	5.913	6.886	4180993	8017528	0.045m	0.044m
8) B delta-BHC	6.077	7.262	11443189	18848779	0.067m	0.057m
22) B Endosulfa...	9.866	11.434	6486428	10312099	0.048m	0.040

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

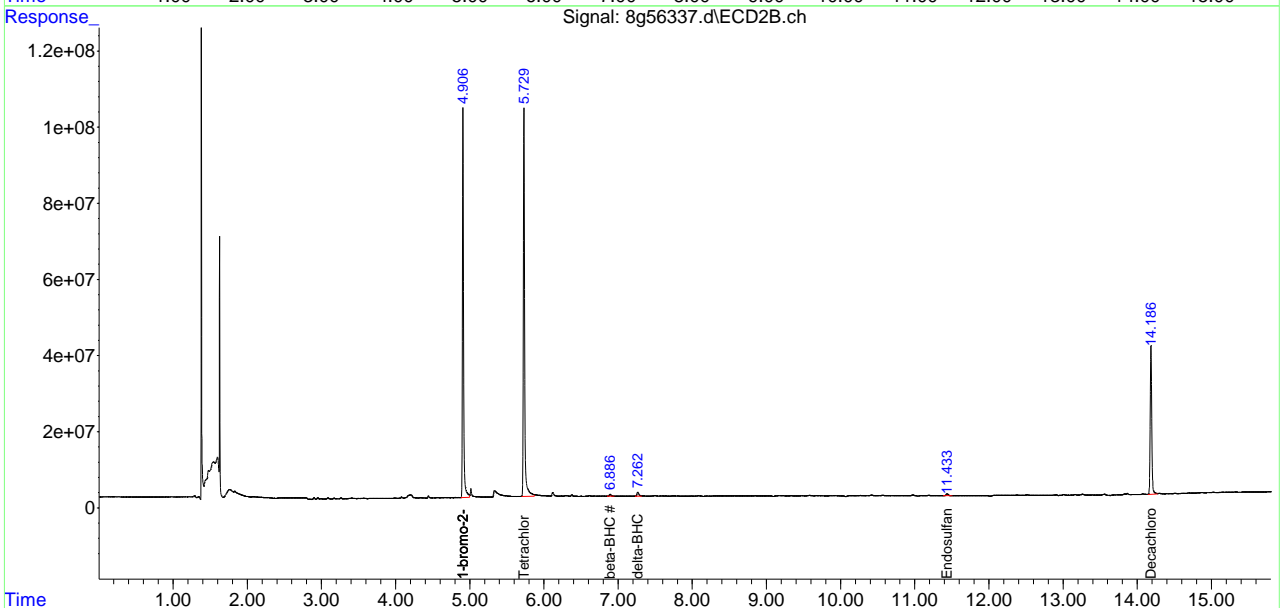
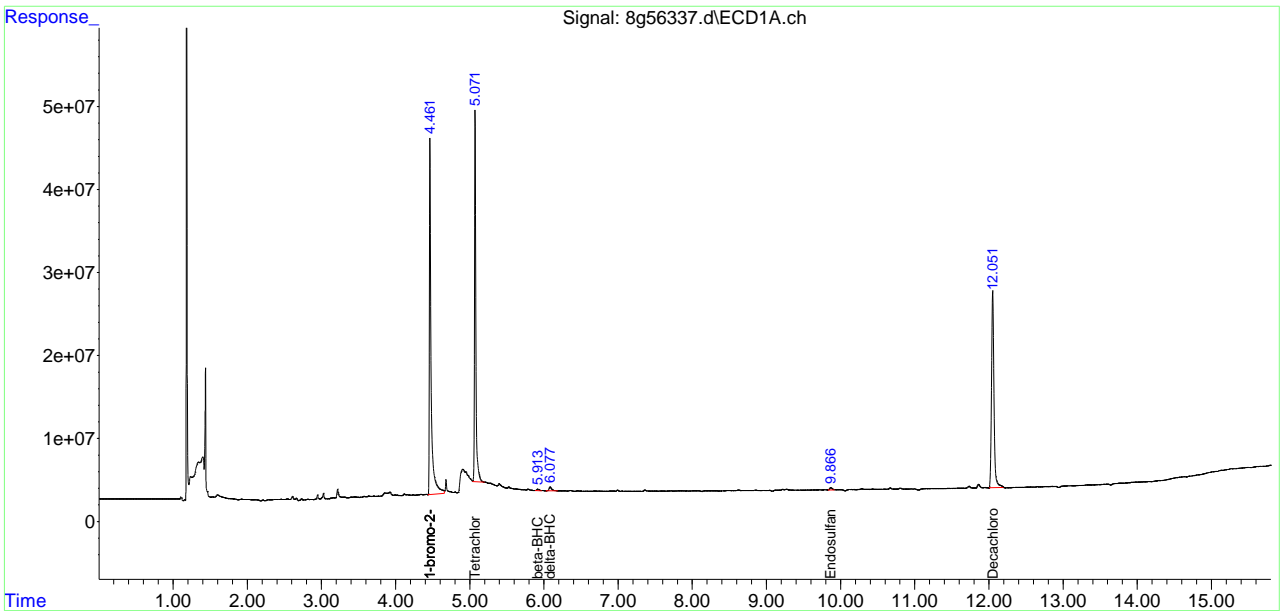
9.2.5  
**9**

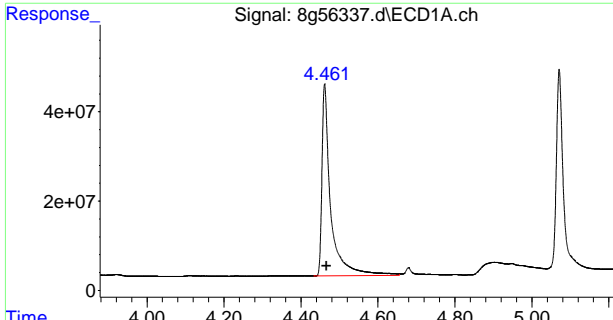
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nazaryne\G8G2470\  
 Data File : 8g56337.d  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 9 May 2024 1:20 am  
 Operator : christp  
 Sample : op54452-mb1 m  
 Misc : op54452,g8g2470,5.0,,,10,1  
 ALS Vial : 61 Sample Multiplier: 1

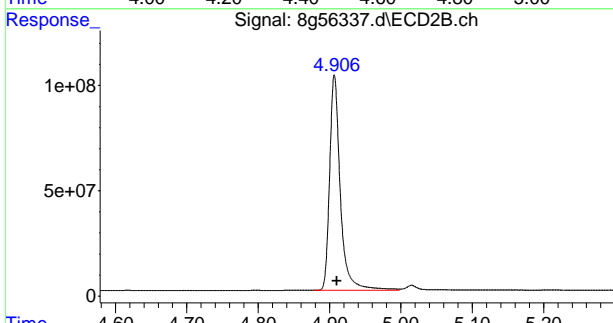
Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 09 13:26:01 2024  
 Quant Method : C:\msdchem\1\data\nazaryne\G8G2470\8PSTLVI2430a.M  
 Quant Title : PEST/PCB  
 QLast Update : Thu May 09 12:16:42 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1ul/column  
 Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
 Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

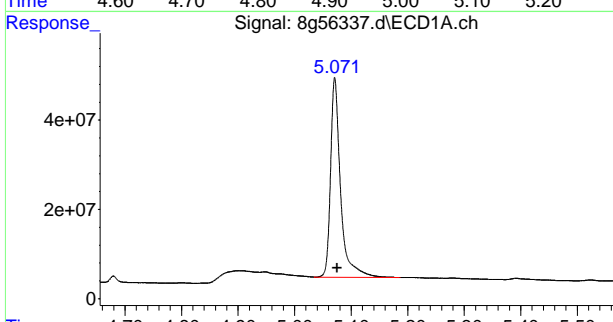




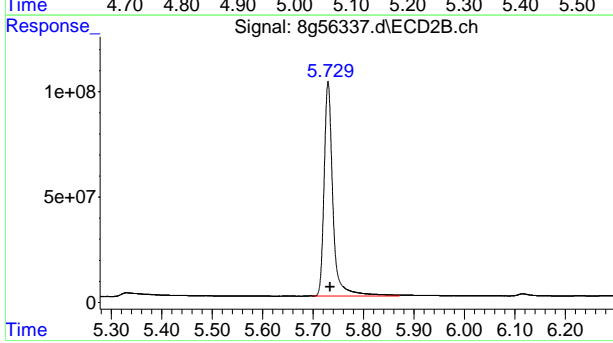
#1 1-bromo-2-nitrobenzene  
 R.T.: 4.461 min  
 Delta R.T.: -0.005 min  
 Response: 679299502  
 Conc: 5.00 PPB m



#1 1-bromo-2-nitrobenzene  
 R.T.: 4.906 min  
 Delta R.T.: -0.004 min  
 Response: 1069446516  
 Conc: 5.00 PPB m

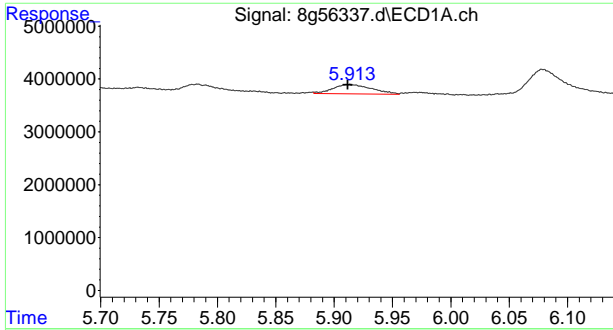


#2 Tetrachloro-m-xylene  
 R.T.: 5.071 min  
 Delta R.T.: -0.004 min  
 Response: 551340518  
 Conc: 3.89 PPB m

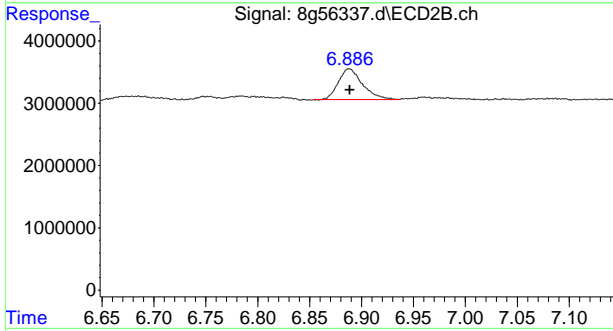


#2 Tetrachloro-m-xylene  
 R.T.: 5.729 min  
 Delta R.T.: -0.004 min  
 Response: 1236464341  
 Conc: 3.93 PPB m

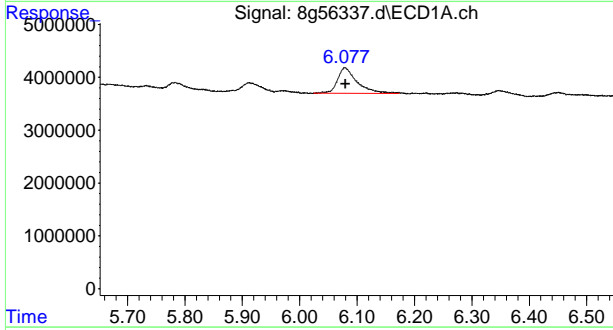
9.2.5  
 9



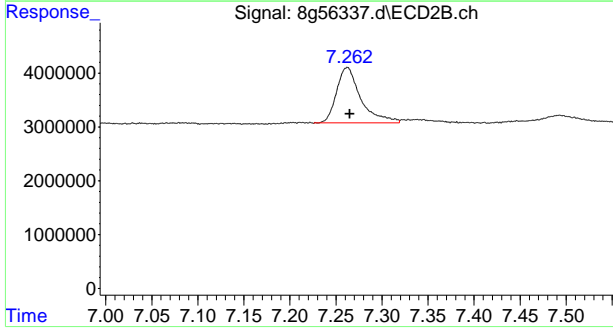
#7 beta-BHC  
 R.T.: 5.913 min  
 Delta R.T.: 0.002 min  
 Response: 4180993  
 Conc: 0.05 PPB m



#7 beta-BHC  
 R.T.: 6.886 min  
 Delta R.T.: -0.002 min  
 Response: 8017528  
 Conc: 0.04 PPB m

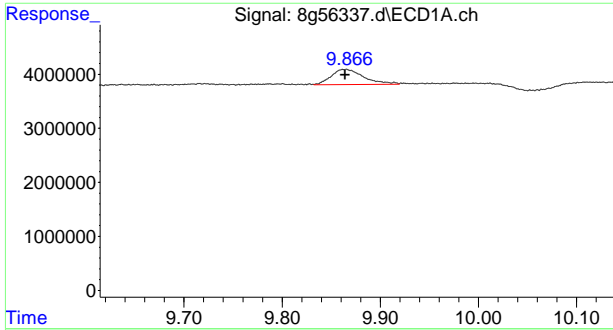


#8 delta-BHC  
 R.T.: 6.077 min  
 Delta R.T.: -0.002 min  
 Response: 11443189  
 Conc: 0.07 PPB m

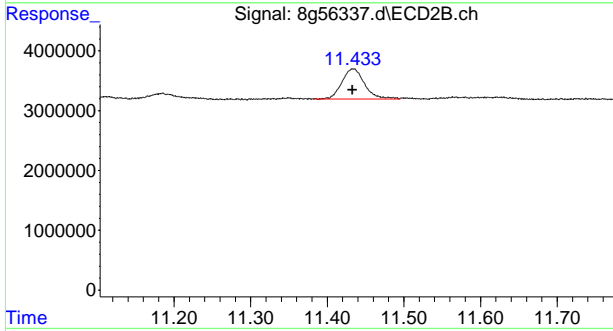


#8 delta-BHC  
 R.T.: 7.262 min  
 Delta R.T.: -0.003 min  
 Response: 18848779  
 Conc: 0.06 PPB m

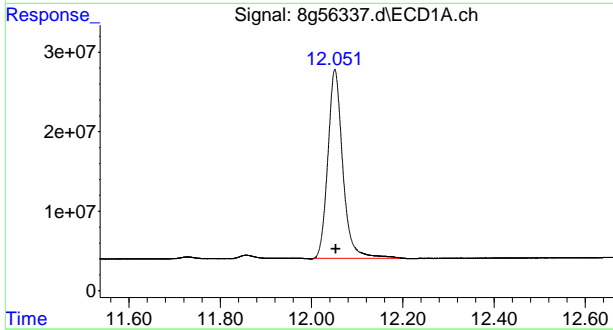
9.2.5  
**9**



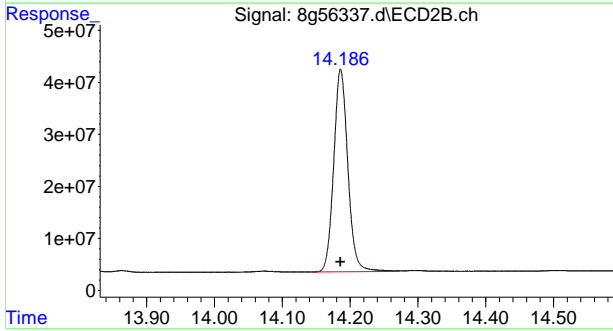
#22 Endosulfan Sulfate  
 R.T.: 9.866 min  
 Delta R.T.: 0.002 min  
 Response: 6486428  
 Conc: 0.05 PPB m



#22 Endosulfan Sulfate  
 R.T.: 11.434 min  
 Delta R.T.: 0.001 min  
 Response: 10312099  
 Conc: 0.04 PPB

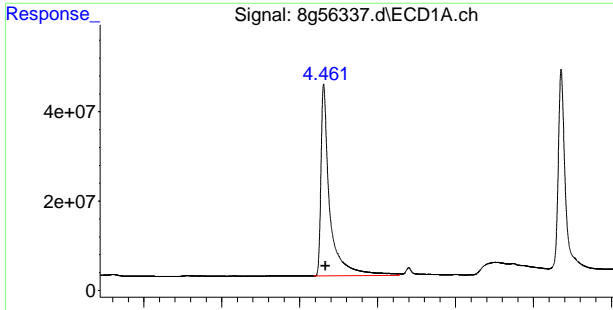


#26 Decachlorobiphenyl  
 R.T.: 12.051 min  
 Delta R.T.: -0.002 min  
 Response: 538845861  
 Conc: 3.53 PPB m

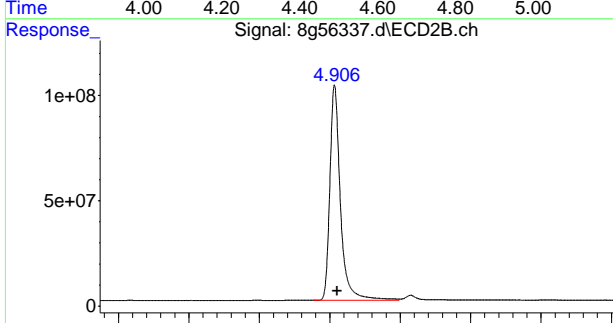


#26 Decachlorobiphenyl  
 R.T.: 14.186 min  
 Delta R.T.: 0.000 min  
 Response: 565087917  
 Conc: 3.79 PPB m

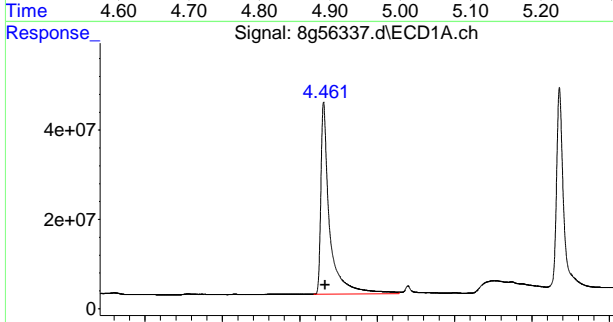
9.2.5  
**9**



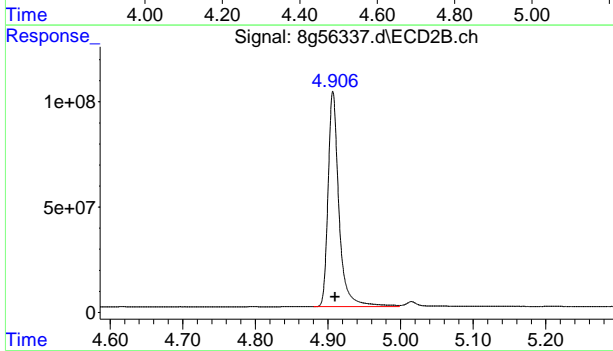
#27 1-bromo-2-nitrobenzeneA  
 R.T.: 4.461 min  
 Delta R.T.: -0.005 min  
 Response: 679866237  
 Conc: 5.00 PPB m



#27 1-bromo-2-nitrobenzeneA  
 R.T.: 4.906 min  
 Delta R.T.: -0.004 min  
 Response: 1070043617  
 Conc: 5.00 PPB m



#33 1-bromo-2-nitrobenzeneB  
 R.T.: 4.461 min  
 Delta R.T.: -0.005 min  
 Response: 678985461  
 Conc: 5.00 PPB m



#33 1-bromo-2-nitrobenzeneB  
 R.T.: 4.906 min  
 Delta R.T.: -0.004 min  
 Response: 1070052938  
 Conc: 5.00 PPB m

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\3G5160\  
 Data File : 3G140974.d  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 23 Apr 2024 16:19 pm  
 Operator : mahalia1  
 Sample : ic5160-1000 (1016/1260)  
 Misc : op53949,g3g5160,15.0,,,1,1  
 ALS Vial : 6 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Apr 24 05:44:20 2024  
 Quant Method : C:\MSDCHEM\1\METHODS\3PCB5160.M  
 Quant Title :  
 QLast Update : Wed Apr 24 05:42:27 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
 Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds

1) S Tetrachlo...	3.465	4.077	329.4E6	765.7E6	56.039	91.118 #
Spiked Amount	40.000		Recovery	=	140.10%	227.79%
51) S Decachlor...	10.970	12.591	294.6E6	666.3E6	69.003	91.566 #
Spiked Amount	40.000		Recovery	=	172.51%	228.92%

Target Compounds

41) AR1016-A	3.882	4.756	129.1E6	300.7E6	1352.527	2250.327 #
42) AR1016-B	4.324	5.325	253.2E6	599.4E6	1414.031	2220.906 #
43) AR1016-C	4.926	5.979	538.4E6	1360.5E6	1327.140m	2191.331m#
44) AR1016-D	5.098	6.170	227.2E6	532.8E6	1367.129	2260.310 #
45) AR1016-E	5.639	6.841	248.0E6	427.6E6	1954.211m	2286.670
46) AR1260-A	7.692	8.934	478.4E6	990.4E6	1372.738	2331.124 #
47) AR1260-B	8.241	9.586	298.0E6	815.1E6	1421.296	2323.031 #
48) AR1260-C	8.585	10.023	328.3E6	844.6E6	1383.027	2305.066 #
49) AR1260-D	9.022	10.367	794.9E6	2042.1E6	1530.805m	2290.926 #
50) AR1260-E	9.423	10.915	792.8E6	1978.9E6	1389.859m	2205.836m#

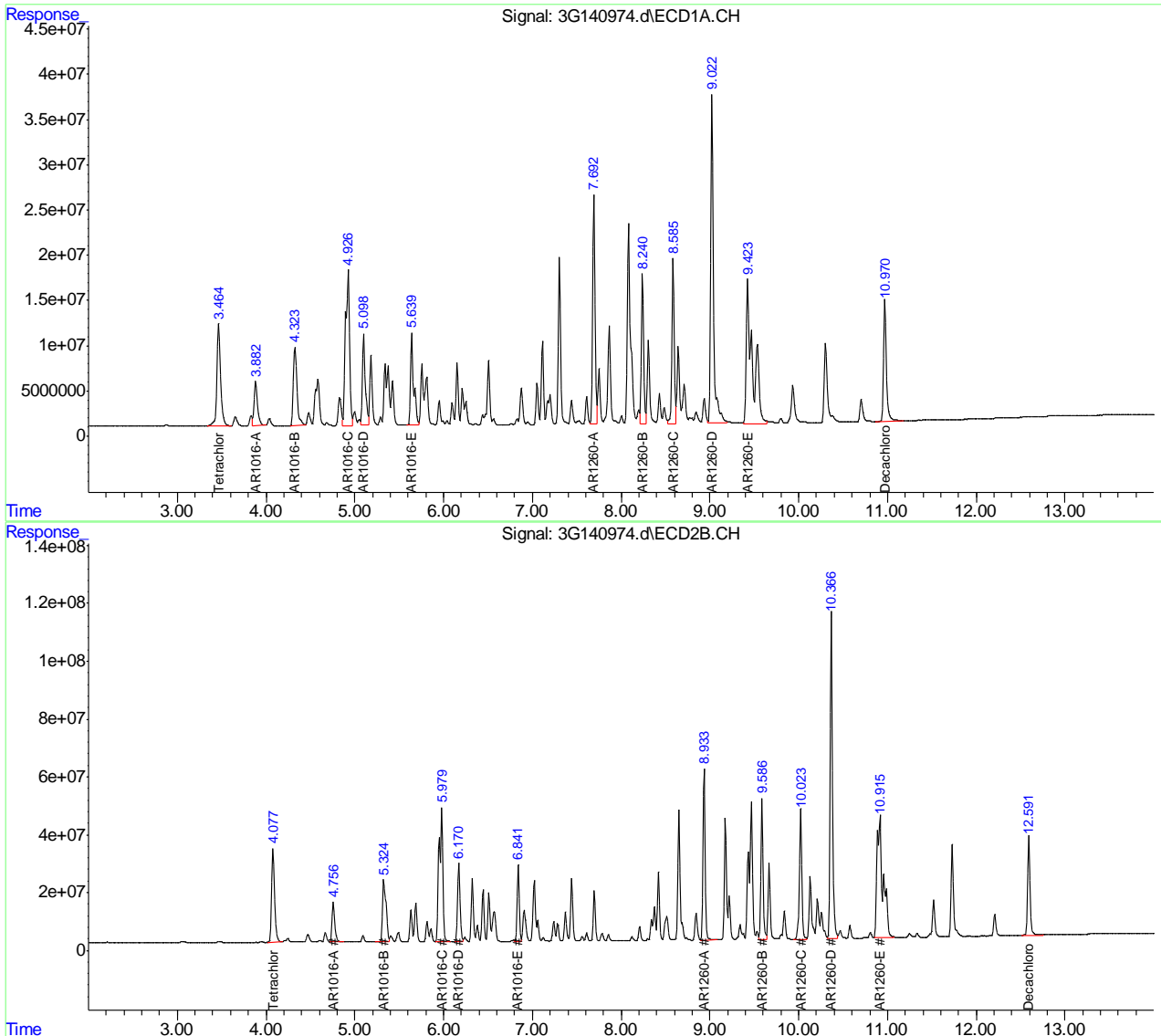
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\3G5160\  
Data File : 3G140974.d  
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
Acq On : 23 Apr 2024 16:19 pm  
Operator : mahalia  
Sample : ic5160-1000 (1016/1260)  
Misc : op53949,g3g5160,15.0,,,1,1  
ALS Vial : 6 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

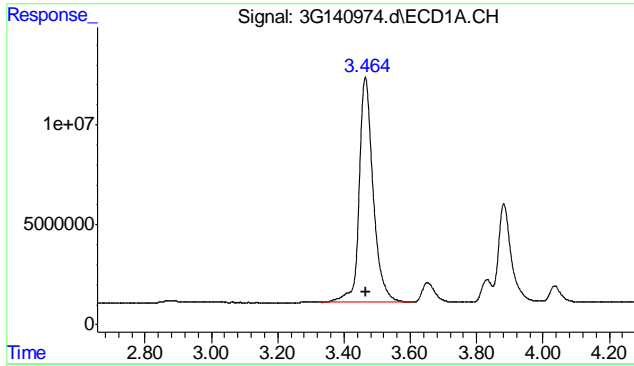
Integration File signal 1: autoint1.e  
Integration File signal 2: autoint2.e  
Quant Time: Apr 24 05:44:20 2024  
Quant Method : C:\MSDCHEM\1\METHODS\3PCB5160.M  
Quant Title :  
QLast Update : Wed Apr 24 05:42:27 2024  
Response via : Initial Calibration  
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2  
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

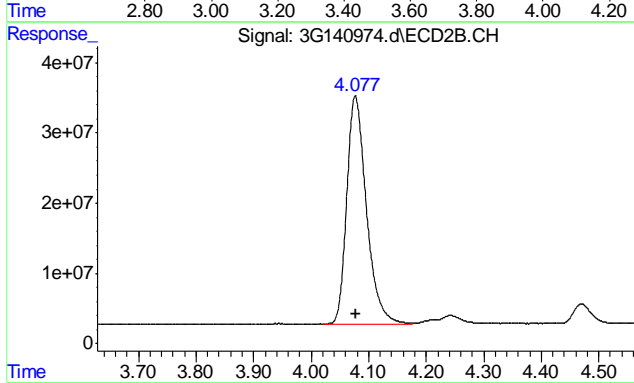


9.3.1  
9

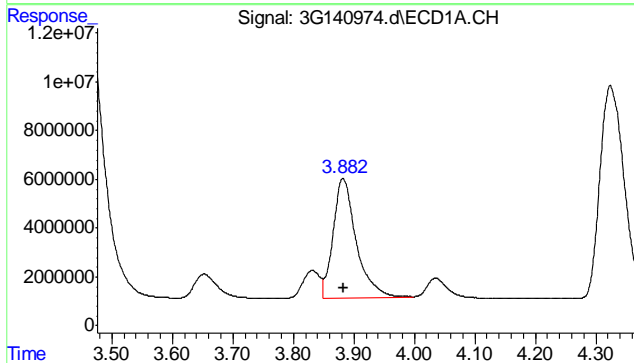




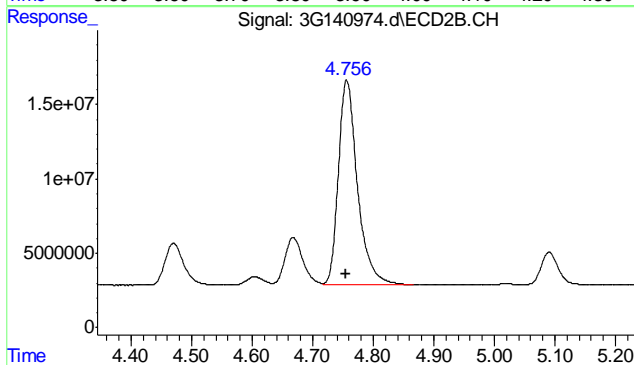
#1 Tetrachloro-m-xylene  
 R.T.: 3.465 min  
 Delta R.T.: 0.000 min  
 Response: 329353673  
 Conc: 56.04 ppb



#1 Tetrachloro-m-xylene  
 R.T.: 4.077 min  
 Delta R.T.: 0.000 min  
 Response: 765748136  
 Conc: 91.12 ppb

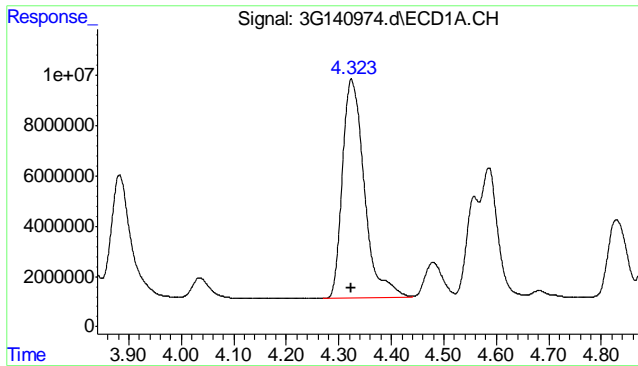


#41 AR1016-A  
 R.T.: 3.882 min  
 Delta R.T.: 0.000 min  
 Response: 129098377  
 Conc: 1352.53 PPB

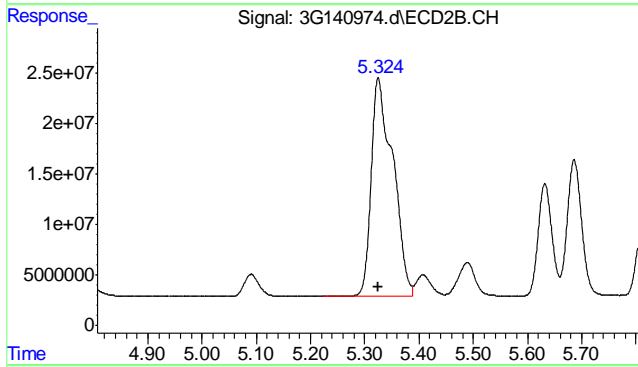


#41 AR1016-A  
 R.T.: 4.756 min  
 Delta R.T.: 0.000 min  
 Response: 300669223  
 Conc: 2250.33 PPB

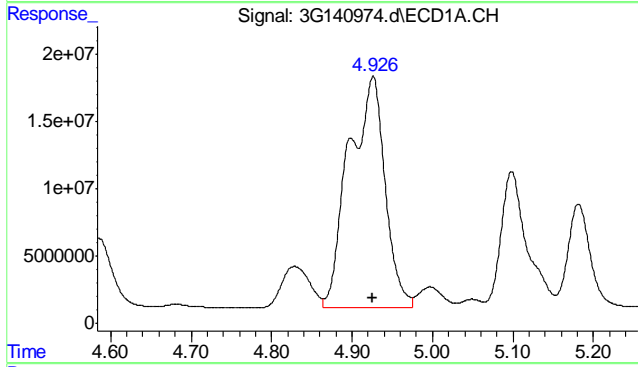
9.3.1  
**9**



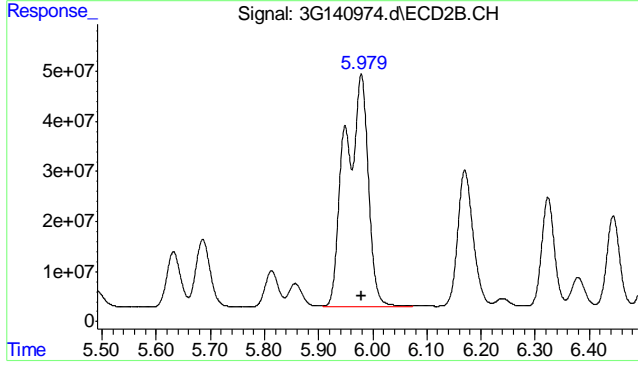
#42 AR1016-B  
 R.T.: 4.324 min  
 Delta R.T.: 0.000 min  
 Response: 253173155  
 Conc: 1414.03 PPB



#42 AR1016-B  
 R.T.: 5.325 min  
 Delta R.T.: 0.000 min  
 Response: 599424345  
 Conc: 2220.91 PPB

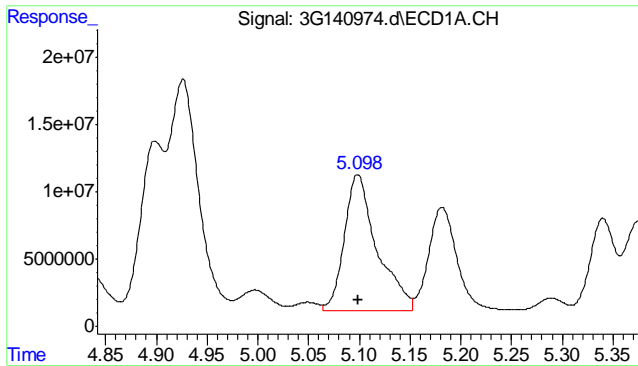


#43 AR1016-C  
 R.T.: 4.926 min  
 Delta R.T.: 0.000 min  
 Response: 538446571  
 Conc: 1327.14 PPB m

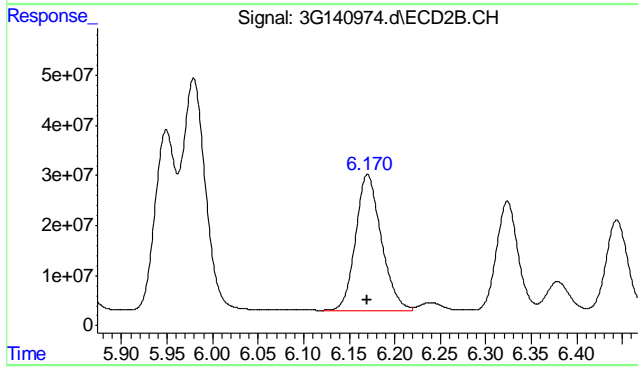


#43 AR1016-C  
 R.T.: 5.979 min  
 Delta R.T.: 0.000 min  
 Response: 1360464593  
 Conc: 2191.33 PPB m

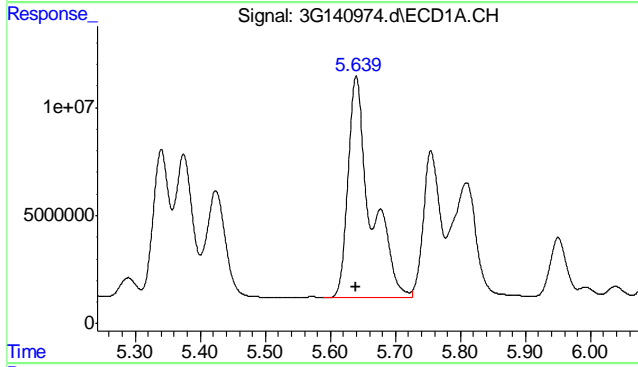
9.3.1  
 9



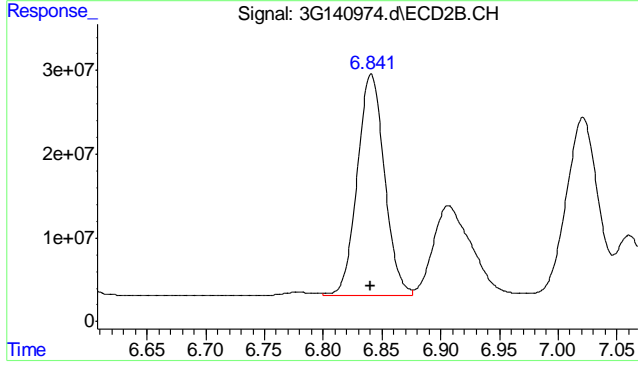
#44 AR1016-D  
 R.T.: 5.098 min  
 Delta R.T.: 0.000 min  
 Response: 227192155  
 Conc: 1367.13 PPB



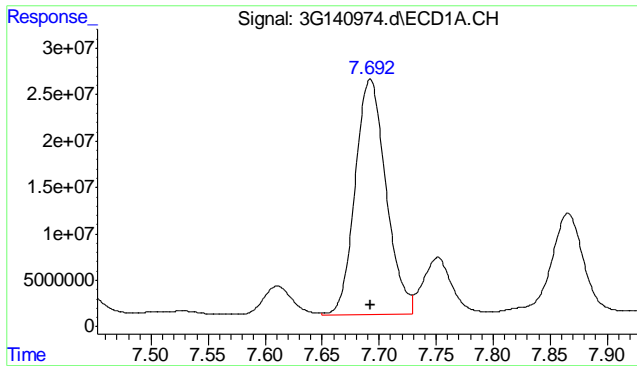
#44 AR1016-D  
 R.T.: 6.170 min  
 Delta R.T.: 0.000 min  
 Response: 532831326  
 Conc: 2260.31 PPB



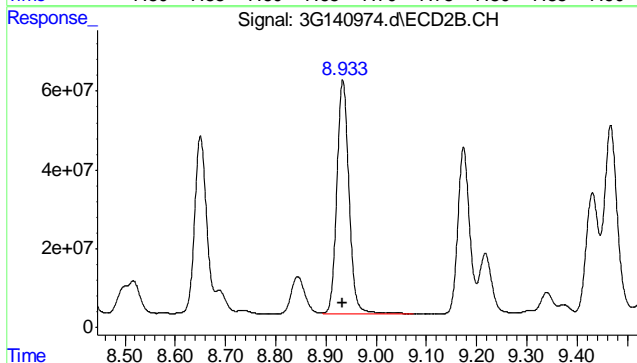
#45 AR1016-E  
 R.T.: 5.639 min  
 Delta R.T.: 0.000 min  
 Response: 248015879  
 Conc: 1954.21 PPB m



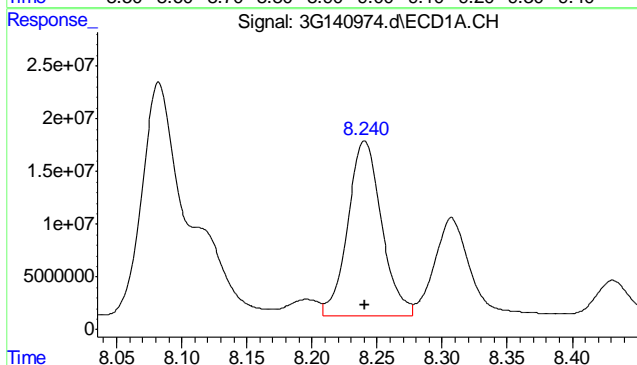
#45 AR1016-E  
 R.T.: 6.841 min  
 Delta R.T.: 0.000 min  
 Response: 427593561  
 Conc: 2286.67 PPB



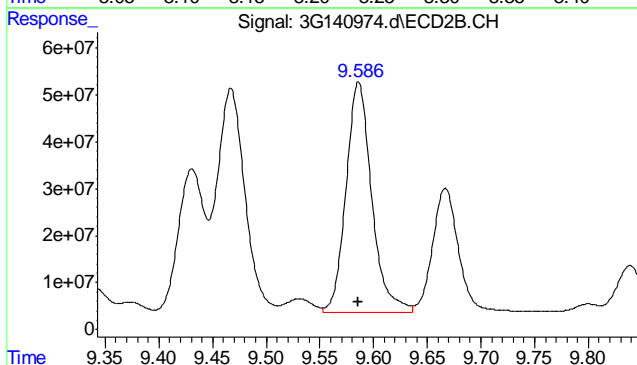
#46 AR1260-A  
R.T.: 7.692 min  
Delta R.T.: 0.000 min  
Response: 478387866  
Conc: 1372.74 PPB



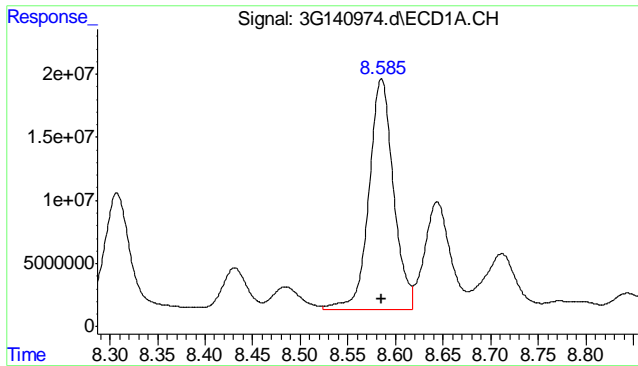
#46 AR1260-A  
R.T.: 8.934 min  
Delta R.T.: 0.000 min  
Response: 990411737  
Conc: 2331.12 PPB



#47 AR1260-B  
R.T.: 8.241 min  
Delta R.T.: 0.000 min  
Response: 298033373  
Conc: 1421.30 PPB



#47 AR1260-B  
R.T.: 9.586 min  
Delta R.T.: 0.000 min  
Response: 815103236  
Conc: 2323.03 PPB



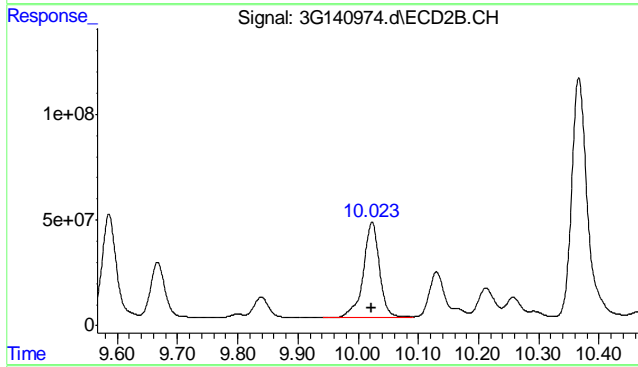
#48 AR1260-C

R.T.: 8.585 min

Delta R.T.: 0.000 min

Response: 328341446

Conc: 1383.03 PPB



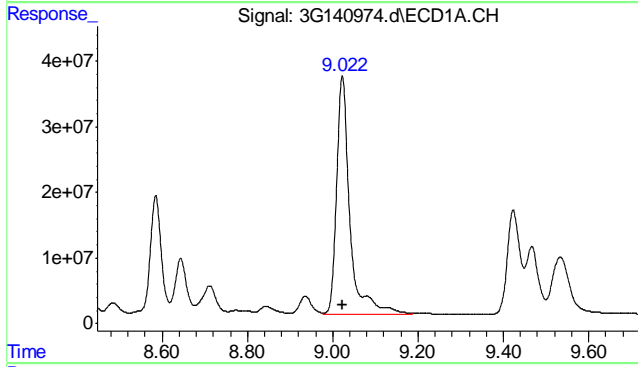
#48 AR1260-C

R.T.: 10.023 min

Delta R.T.: 0.000 min

Response: 844632854

Conc: 2305.07 PPB



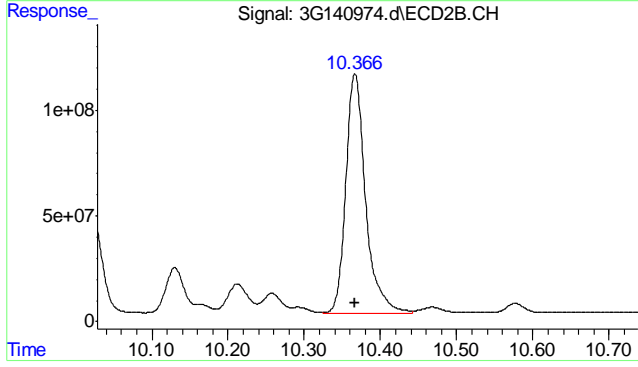
#49 AR1260-D

R.T.: 9.022 min

Delta R.T.: 0.000 min

Response: 794911335

Conc: 1530.80 PPB m



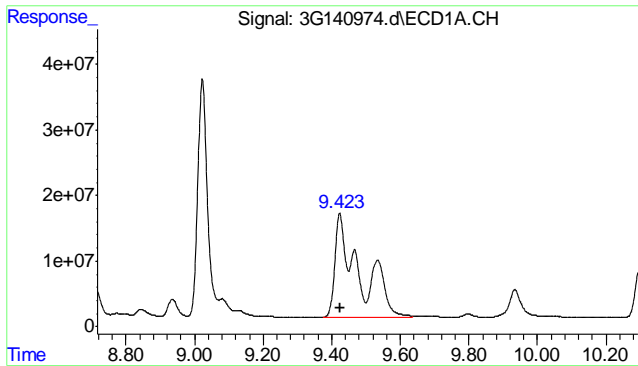
#49 AR1260-D

R.T.: 10.367 min

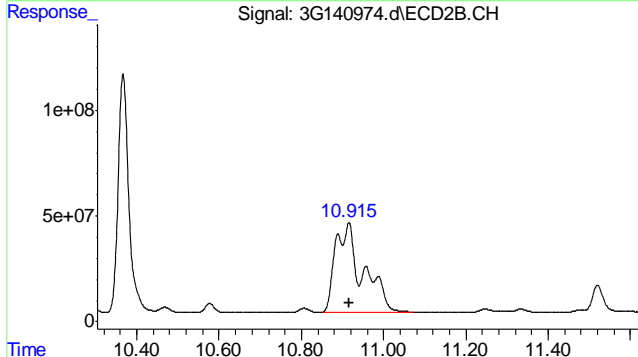
Delta R.T.: 0.000 min

Response: 2042145681

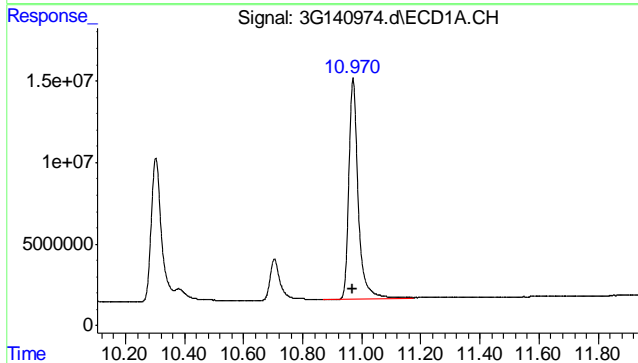
Conc: 2290.93 PPB



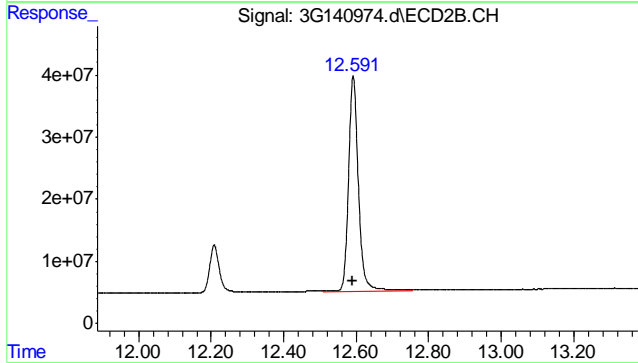
#50 AR1260-E  
R.T.: 9.423 min  
Delta R.T.: 0.000 min  
Response: 792756185  
Conc: 1389.86 PPB m



#50 AR1260-E  
R.T.: 10.915 min  
Delta R.T.: 0.000 min  
Response: 1978856629  
Conc: 2205.84 PPB m



#51 Decachlorobiphenyl  
R.T.: 10.970 min  
Delta R.T.: 0.000 min  
Response: 294575960  
Conc: 69.00 ppb



#51 Decachlorobiphenyl  
R.T.: 12.591 min  
Delta R.T.: 0.000 min  
Response: 666308514  
Conc: 91.57 ppb

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\3G5160\  
 Data File : 3G140980.d  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 23 Apr 2024 17:58 pm  
 Operator : mahalia1  
 Sample : ic5160-1000 (ar1221)  
 Misc : op53949,g3g5160,15.0,,,1,1  
 ALS Vial : 12 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Apr 24 06:14:18 2024  
 Quant Method : C:\MSDCHEM\1\METHODS\3PCB5160.M  
 Quant Title :  
 QLast Update : Wed Apr 24 06:13:13 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
 Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
-----						
System Monitoring Compounds						
1) S Tetrachlo...	3.464	4.077	339.9E6	740.1E6	57.837	88.063 #
Spiked Amount	40.000		Recovery	=	144.59%	220.16%
51) S Decachlor...	10.973	12.594	296.7E6	801.2E6	69.512	110.099 #
Spiked Amount	40.000		Recovery	=	173.78%	275.25%
Target Compounds						
2) AR1221-A	2.872	3.469	58562656	109.5E6	1404.413	2102.568 #
3) AR1221-B	3.654	4.470	87294725	205.1E6	1351.945	2236.193 #
4) AR1221-C	3.882	4.756	203.3E6	461.5E6	1345.992	2127.555 #
5) AR1221-D	4.326	5.409f	47134559	162.5E6	1248.460m	2191.390m#
6) AR1221-E	4.927	5.979	48347682	115.6E6	1090.449m	1837.025m#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

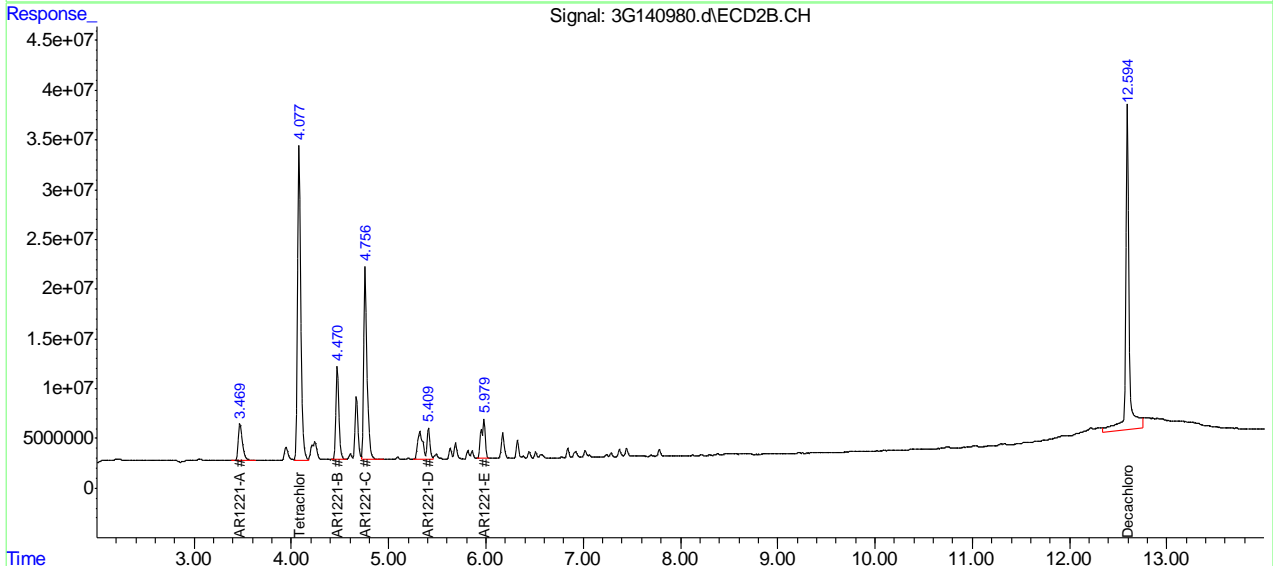
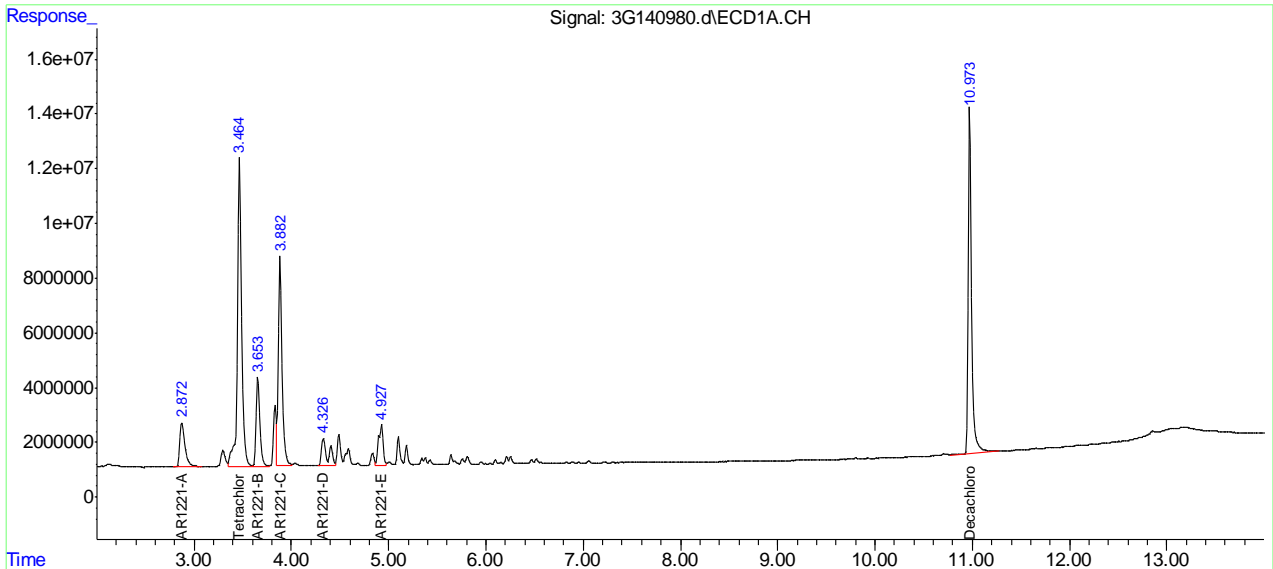
9.3.2  
**9**

Quantitation Report (QT Reviewed)

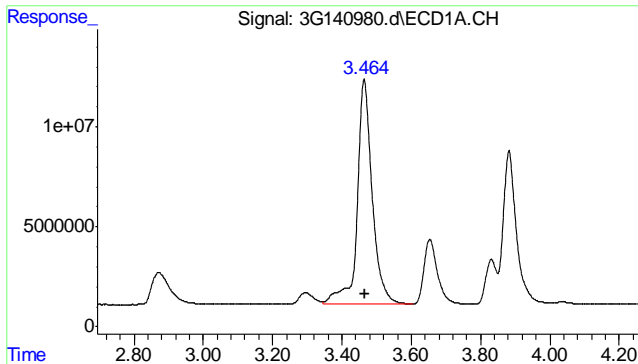
Data Path : C:\msdchem\1\data\3G5160\  
Data File : 3G140980.d  
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
Acq On : 23 Apr 2024 17:58 pm  
Operator : mahalia  
Sample : ic5160-1000 (arl221)  
Misc : op53949,g3g5160,15.0,,,1,1  
ALS Vial : 12 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
Integration File signal 2: autoint2.e  
Quant Time: Apr 24 06:14:18 2024  
Quant Method : C:\MSDCHEM\1\METHODS\3PCB5160.M  
Quant Title :  
QLast Update : Wed Apr 24 06:13:13 2024  
Response via : Initial Calibration  
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

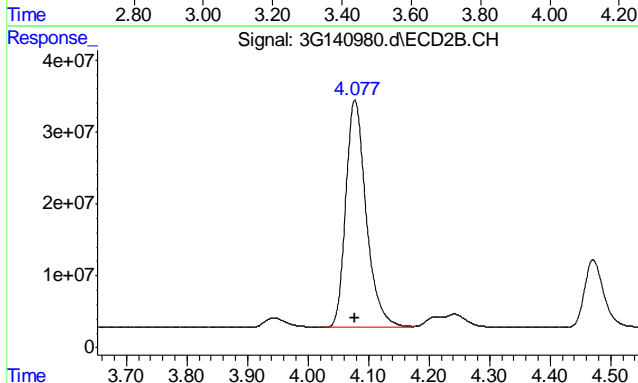
Volume Inj. : 1ul  
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2  
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



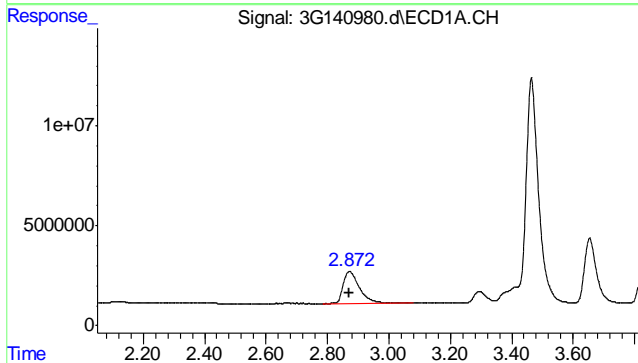




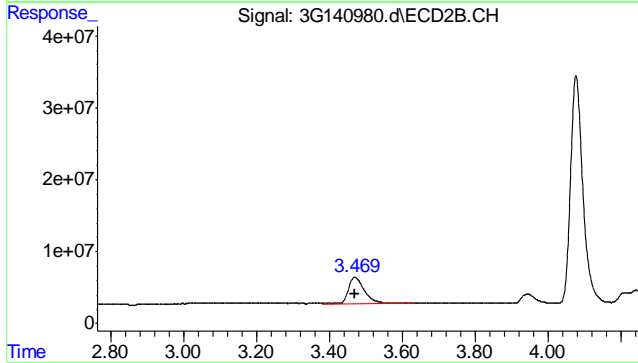
#1 Tetrachloro-m-xylene  
R.T.: 3.464 min  
Delta R.T.: 0.000 min  
Response: 339917923  
Conc: 57.84 ppb



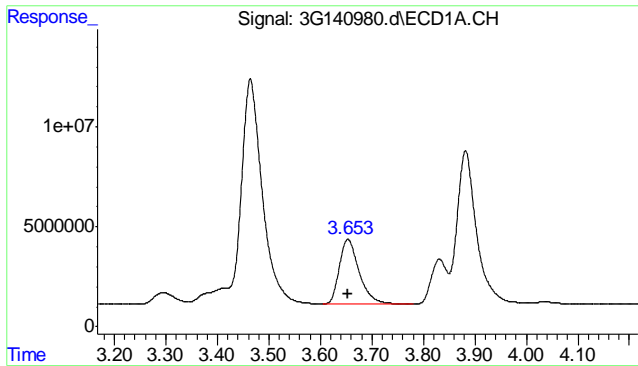
#1 Tetrachloro-m-xylene  
R.T.: 4.077 min  
Delta R.T.: 0.000 min  
Response: 740074952  
Conc: 88.06 ppb



#2 AR1221-A  
R.T.: 2.872 min  
Delta R.T.: 0.000 min  
Response: 58562656  
Conc: 1404.41



#2 AR1221-A  
R.T.: 3.469 min  
Delta R.T.: 0.000 min  
Response: 109497680  
Conc: 2102.57



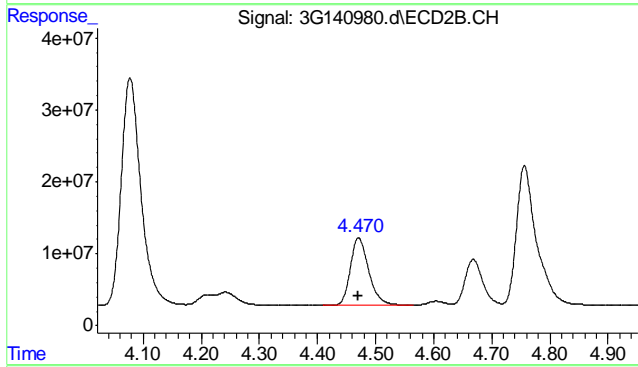
#3 AR1221-B

R.T.: 3.654 min

Delta R.T.: 0.000 min

Response: 87294725

Conc: 1351.95 PPB



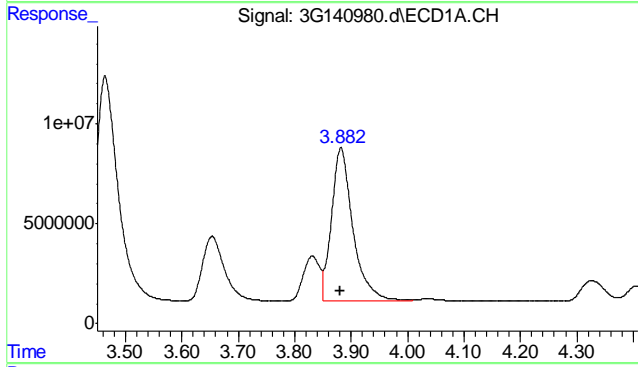
#3 AR1221-B

R.T.: 4.470 min

Delta R.T.: 0.000 min

Response: 205053884

Conc: 2236.19 PPB



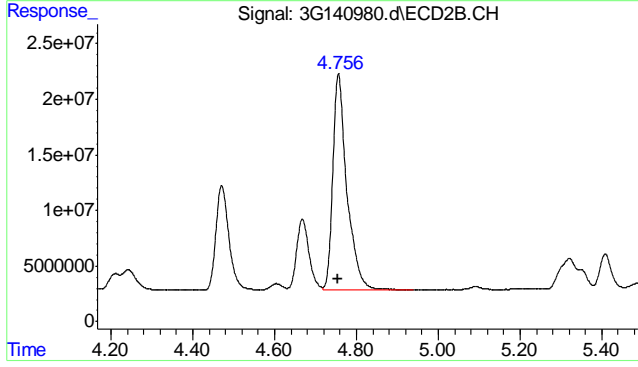
#4 AR1221-C

R.T.: 3.882 min

Delta R.T.: 0.000 min

Response: 203322187

Conc: 1345.99 PPB



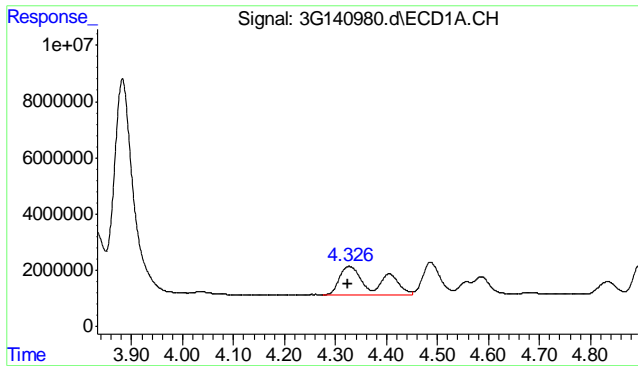
#4 AR1221-C

R.T.: 4.756 min

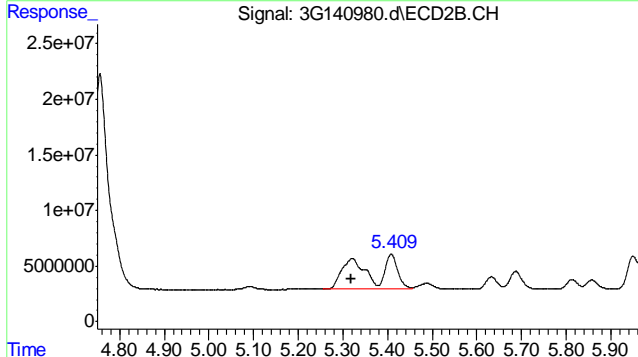
Delta R.T.: 0.000 min

Response: 461479562

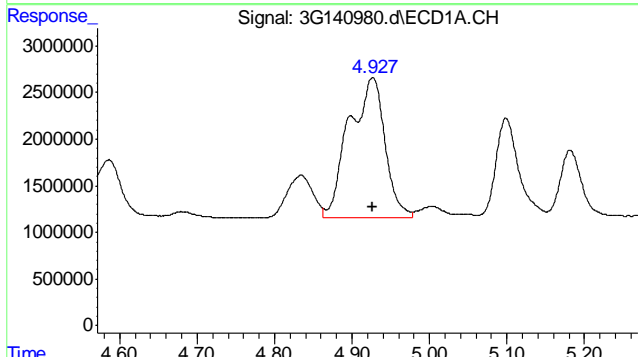
Conc: 2127.55 PPB



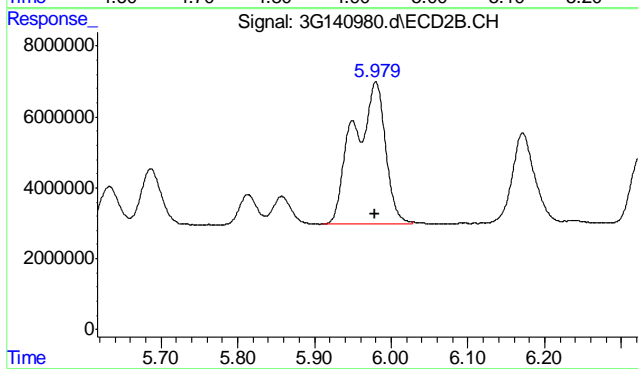
#5 AR1221-D  
 R.T.: 4.326 min  
 Delta R.T.: 0.000 min  
 Response: 47134559  
 Conc: 1248.46 PPB m



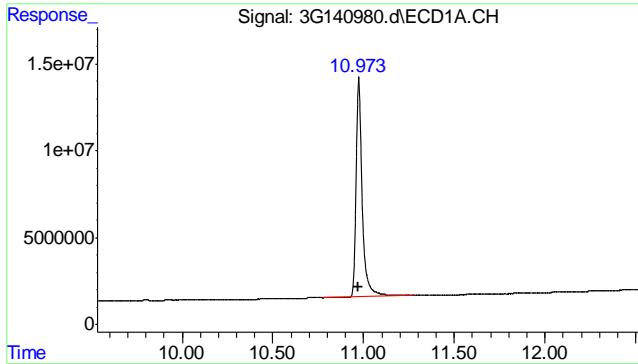
#5 AR1221-D  
 R.T.: 5.409 min  
 Delta R.T.: 0.088 min  
 Response: 162464374  
 Conc: 2191.39 PPB m



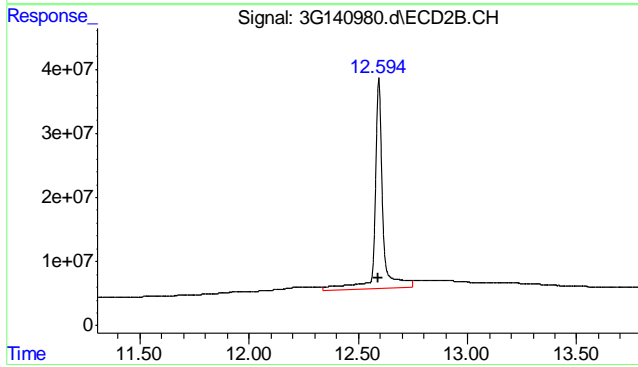
#6 AR1221-E  
 R.T.: 4.927 min  
 Delta R.T.: 0.000 min  
 Response: 48347682  
 Conc: 1090.45 PPB m



#6 AR1221-E  
 R.T.: 5.979 min  
 Delta R.T.: 0.000 min  
 Response: 115574274  
 Conc: 1837.02 PPB m



#51 Decachlorobiphenyl  
 R.T.: 10.973 min  
 Delta R.T.: 0.003 min  
 Response: 296747164  
 Conc: 69.51 ppb



#51 Decachlorobiphenyl  
 R.T.: 12.594 min  
 Delta R.T.: 0.004 min  
 Response: 801168856  
 Conc: 110.10 ppb

9.3.2  
 9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\3G5160\  
 Data File : 3G140981.d  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 23 Apr 2024 18:15 pm  
 Operator : mahalia1  
 Sample : ic5160-1000 (ar1254)  
 Misc : op53949,g3g5160,15.0,,,1,1  
 ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Apr 24 06:16:45 2024  
 Quant Method : C:\MSDCHEM\1\METHODS\3PCB5160.M  
 Quant Title :  
 QLast Update : Wed Apr 24 06:16:01 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
 Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb

System Monitoring Compounds

1) S Tetrachlo...	3.464	4.077	293.5E6	700.8E6	49.944	83.384 #
Spiked Amount	40.000		Recovery	=	124.86%	208.46%
51) S Decachlor...	10.972	12.594	276.9E6	641.6E6	64.867	88.168 #
Spiked Amount	40.000		Recovery	=	162.17%	220.42%

Target Compounds

24) AR1254-A	6.153	7.443	225.8E6	600.7E6	1311.839	2036.395 #
25) AR1254-B	6.507	7.698	312.3E6	673.2E6	1271.508	2066.659 #
26) AR1254-C	6.887	8.208	254.0E6	561.2E6	1271.385	2103.802 #
27) AR1254-D	7.054	8.376	435.9E6	1056.8E6	1235.621	2084.133 #
28) AR1254-E	7.441	8.689	307.2E6	796.1E6	1150.930	2057.670 #
29) AR1254-F	7.694	9.175	301.9E6	412.7E6	1280.318	1869.872 #
30) AR1254-G	8.083	9.467	437.9E6	863.1E6	1192.910	2145.969 #

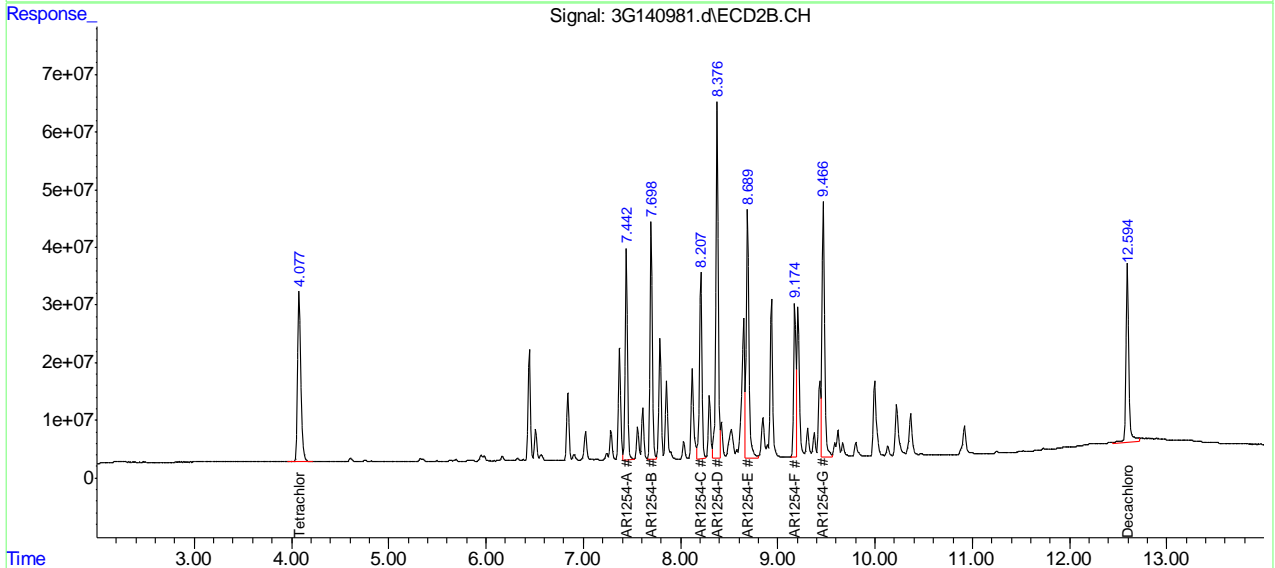
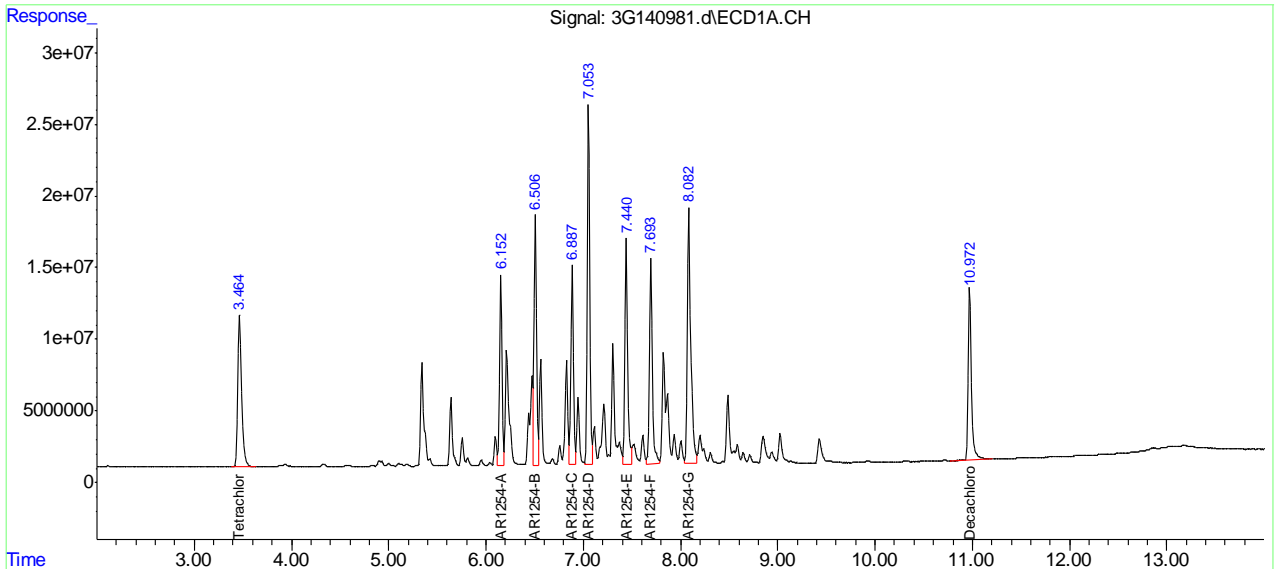
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

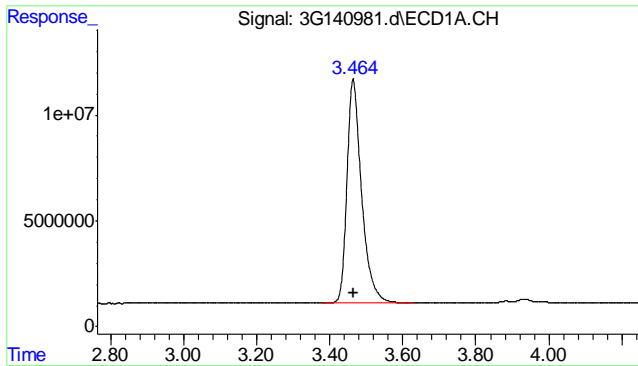
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\3G5160\  
Data File : 3G140981.d  
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
Acq On : 23 Apr 2024 18:15 pm  
Operator : mahalia  
Sample : ic5160-1000 (ar1254)  
Misc : op53949,g3g5160,15.0,,,1,1  
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

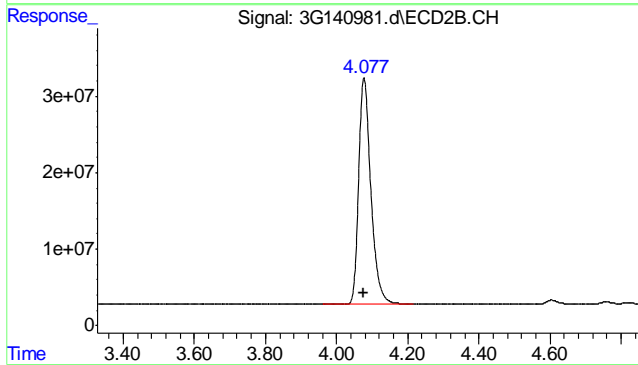
Integration File signal 1: autoint1.e  
Integration File signal 2: autoint2.e  
Quant Time: Apr 24 06:16:45 2024  
Quant Method : C:\MSDCHEM\1\METHODS\3PCB5160.M  
Quant Title :  
QLast Update : Wed Apr 24 06:16:01 2024  
Response via : Initial Calibration  
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2  
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

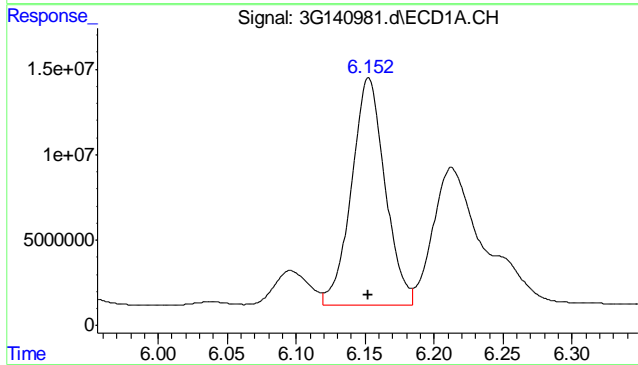




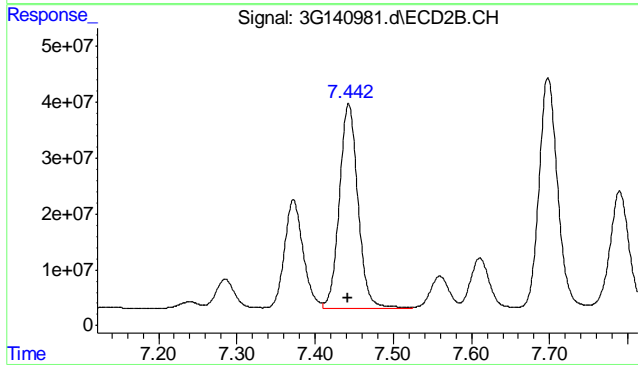
#1 Tetrachloro-m-xylene  
 R.T.: 3.464 min  
 Delta R.T.: 0.000 min  
 Response: 293527944  
 Conc: 49.94 ppb



#1 Tetrachloro-m-xylene  
 R.T.: 4.077 min  
 Delta R.T.: 0.000 min  
 Response: 700758596  
 Conc: 83.38 ppb

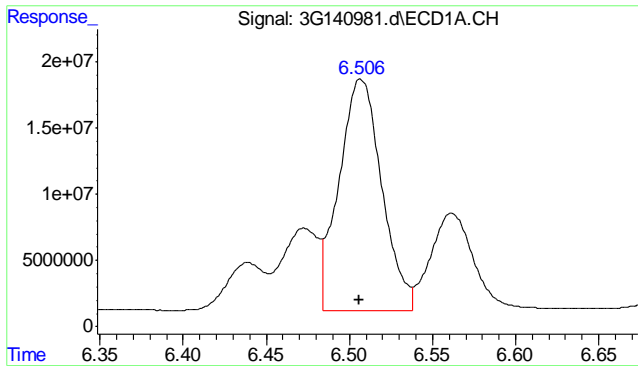


#24 AR1254-A  
 R.T.: 6.153 min  
 Delta R.T.: 0.000 min  
 Response: 225829078  
 Conc: 1311.84 PPB

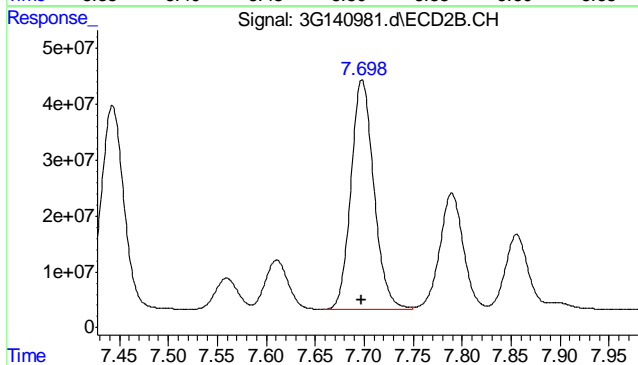


#24 AR1254-A  
 R.T.: 7.443 min  
 Delta R.T.: 0.000 min  
 Response: 600684935  
 Conc: 2036.39 PPB

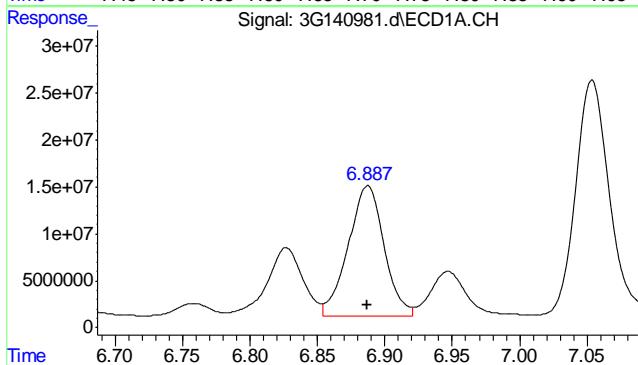
9.3.3  
 9



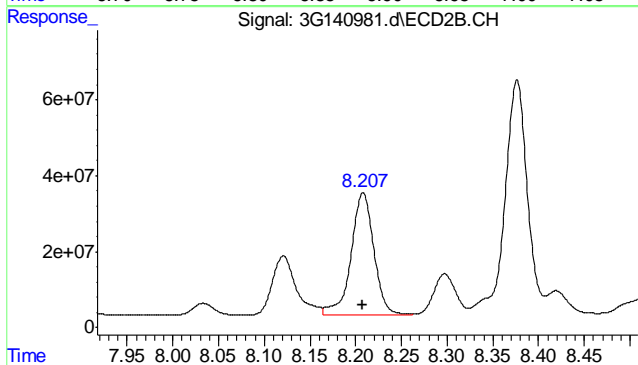
#25 AR1254-B  
 R.T.: 6.507 min  
 Delta R.T.: 0.001 min  
 Response: 312276072  
 Conc: 1271.51 PPB



#25 AR1254-B  
 R.T.: 7.698 min  
 Delta R.T.: 0.000 min  
 Response: 673228748  
 Conc: 2066.66 PPB



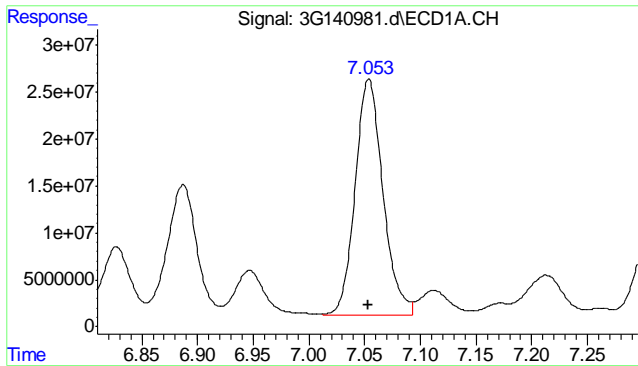
#26 AR1254-C  
 R.T.: 6.887 min  
 Delta R.T.: 0.000 min  
 Response: 253984847  
 Conc: 1271.38 PPB



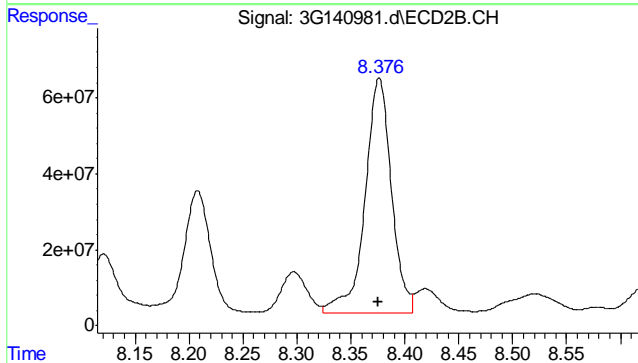
#26 AR1254-C  
 R.T.: 8.208 min  
 Delta R.T.: 0.000 min  
 Response: 561178139  
 Conc: 2103.80 PPB

9.3.3  
 9

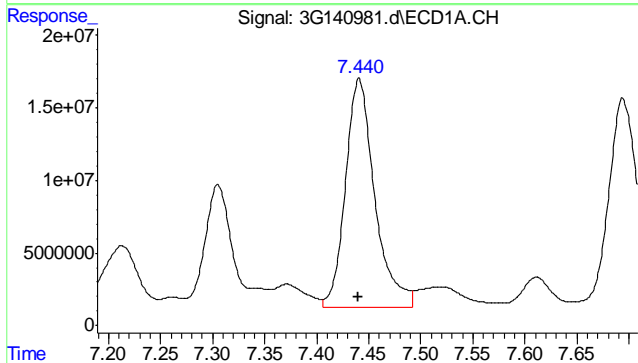




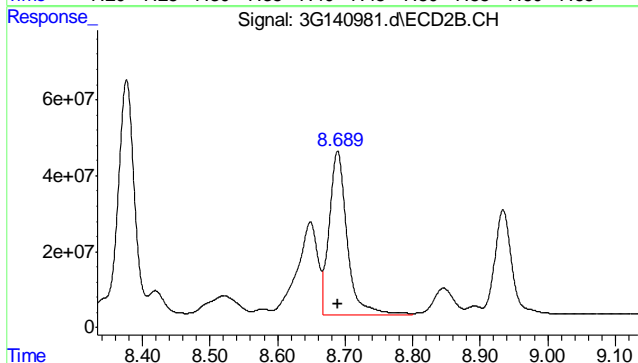
#27 AR1254-D  
 R.T.: 7.054 min  
 Delta R.T.: 0.000 min  
 Response: 435911413  
 Conc: 1235.62 PPB



#27 AR1254-D  
 R.T.: 8.376 min  
 Delta R.T.: 0.000 min  
 Response: 1056781804  
 Conc: 2084.13 PPB

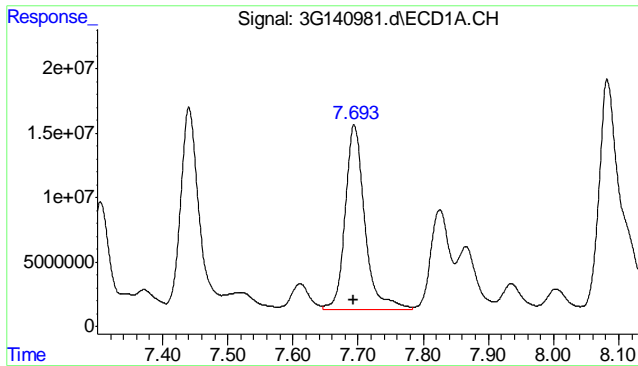


#28 AR1254-E  
 R.T.: 7.441 min  
 Delta R.T.: 0.000 min  
 Response: 307197465  
 Conc: 1150.93 PPB

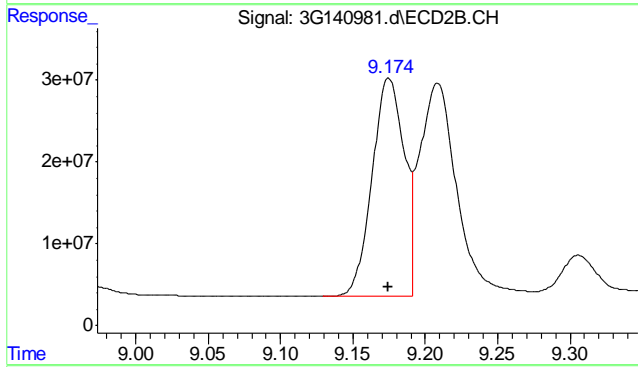


#28 AR1254-E  
 R.T.: 8.689 min  
 Delta R.T.: 0.000 min  
 Response: 796119768  
 Conc: 2057.67 PPB

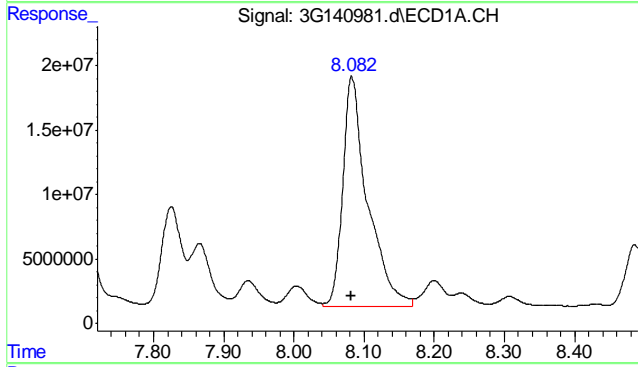
9.3.3  
 9



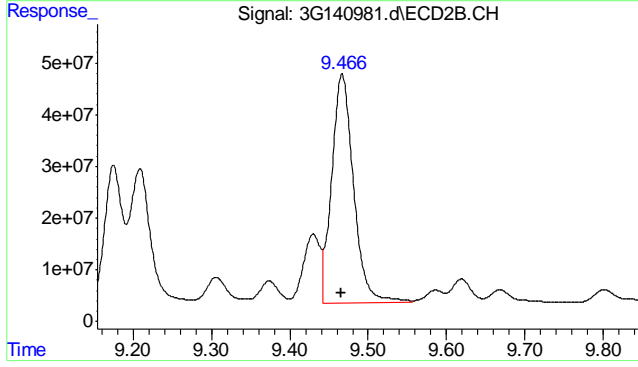
#29 AR1254-F  
 R.T.: 7.694 min  
 Delta R.T.: 0.000 min  
 Response: 301897844  
 Conc: 1280.32 PPB



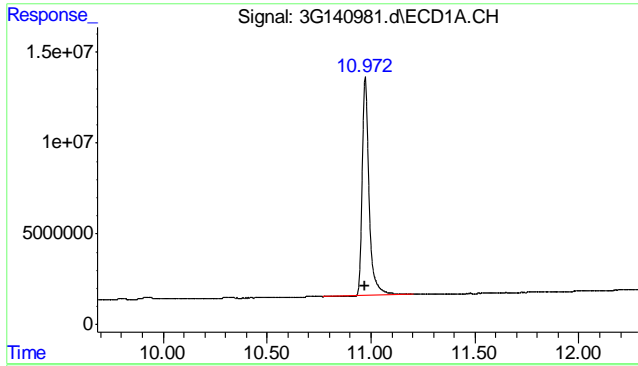
#29 AR1254-F  
 R.T.: 9.175 min  
 Delta R.T.: 0.000 min  
 Response: 412717880  
 Conc: 1869.87 PPB



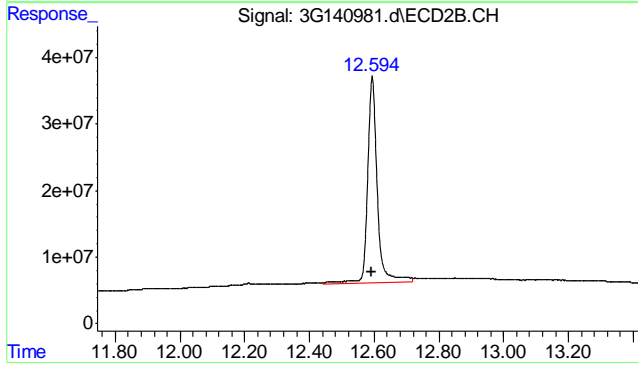
#30 AR1254-G  
 R.T.: 8.083 min  
 Delta R.T.: 0.000 min  
 Response: 437949821  
 Conc: 1192.91 PPB



#30 AR1254-G  
 R.T.: 9.467 min  
 Delta R.T.: 0.000 min  
 Response: 863095795  
 Conc: 2145.97 PPB



#51 Decachlorobiphenyl  
 R.T.: 10.972 min  
 Delta R.T.: 0.002 min  
 Response: 276918324  
 Conc: 64.87 ppb



#51 Decachlorobiphenyl  
 R.T.: 12.594 min  
 Delta R.T.: 0.003 min  
 Response: 641583672  
 Conc: 88.17 ppb

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\3G5160\  
 Data File : 3G140982.d  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 23 Apr 2024 18:31 pm  
 Operator : mahalia1  
 Sample : ic5160-1000 (ar1232)  
 Misc : op53949,g3g5160,15.0,,,1,1  
 ALS Vial : 14 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Apr 24 06:52:24 2024  
 Quant Method : C:\MSDCHEM\1\METHODS\3PCB5160.M  
 Quant Title :  
 QLast Update : Wed Apr 24 06:51:37 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
 Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
-----						
System Monitoring Compounds						
1) S Tetrachlo...	3.465	4.077	281.3E6	625.0E6	47.855	74.370 #
Spiked Amount	40.000		Recovery	=	119.64%	185.93%
51) S Decachlor...	10.973	12.593	248.1E6	577.2E6	58.109	79.320 #
Spiked Amount	40.000		Recovery	=	145.27%	198.30%
Target Compounds						
7) AR1232-A	3.882	4.757	142.6E6	322.8E6	1205.973	1924.233 #
8) AR1232-B	4.325	5.325	103.9E6	266.6E6	1163.473	1917.388 #
9) AR1232-C	4.927	5.979	221.1E6	550.6E6	1156.379m	1929.004m#
10) AR1232-D	5.099	6.170	94644063	218.9E6	1161.692	1937.865 #
11) AR1232-E	5.639	6.841	93316566	153.9E6	1665.690m	1931.653

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

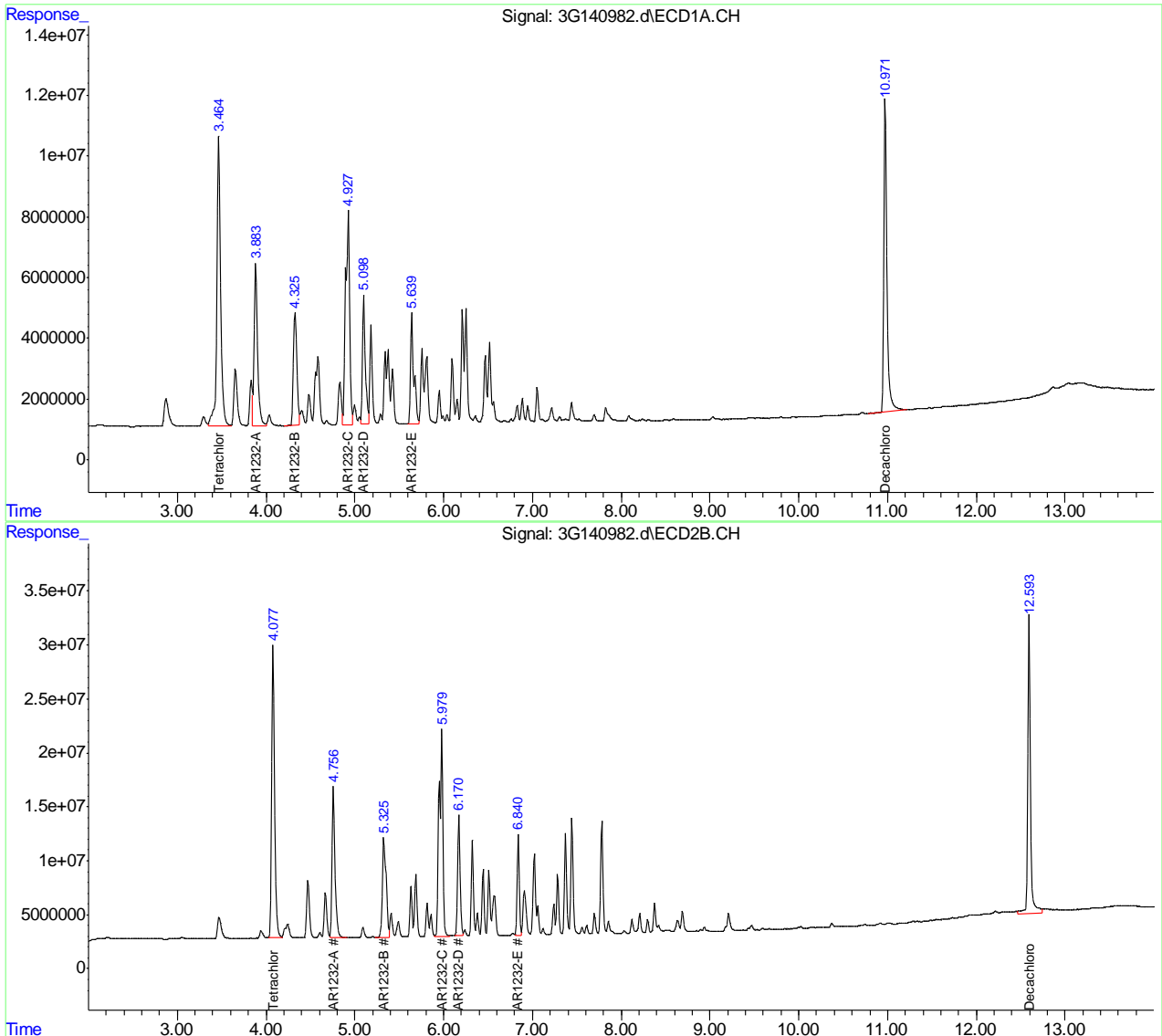
9.3.4  
**9**

Quantitation Report (QT Reviewed)

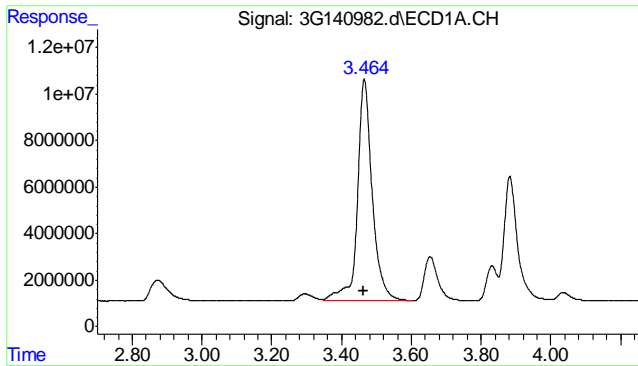
Data Path : C:\msdchem\1\data\3G5160\  
Data File : 3G140982.d  
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
Acq On : 23 Apr 2024 18:31 pm  
Operator : mahalia1  
Sample : ic5160-1000 (arl232)  
Misc : op53949,g3g5160,15.0,,,1,1  
ALS Vial : 14 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
Integration File signal 2: autoint2.e  
Quant Time: Apr 24 06:52:24 2024  
Quant Method : C:\MSDCHEM\1\METHODS\3PCB5160.M  
Quant Title :  
QLast Update : Wed Apr 24 06:51:37 2024  
Response via : Initial Calibration  
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

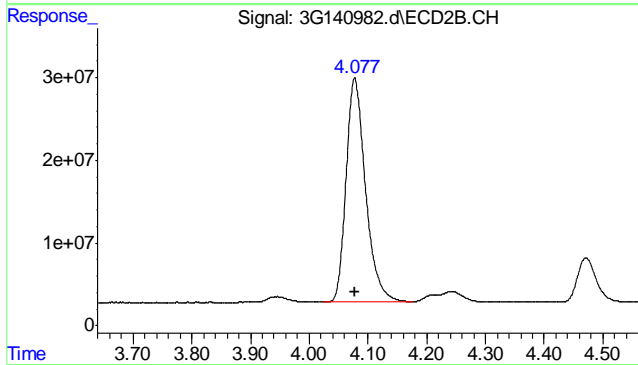
Volume Inj. : 1ul  
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2  
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



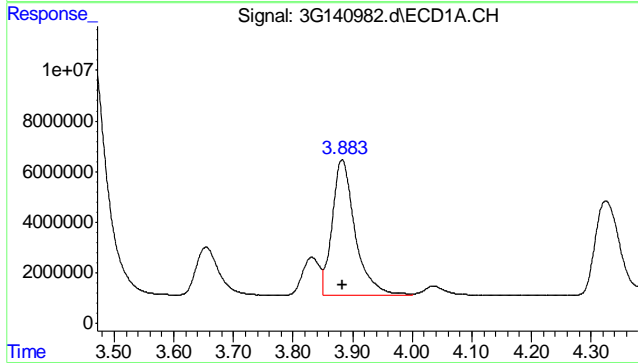
9.3.4  
9



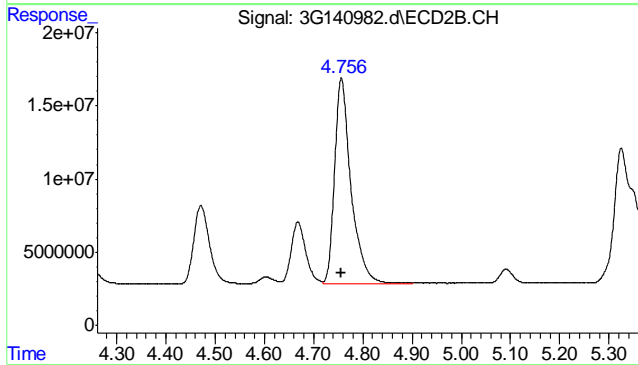
#1 Tetrachloro-m-xylene  
 R.T.: 3.465 min  
 Delta R.T.: 0.000 min  
 Response: 281253634  
 Conc: 47.86 ppb



#1 Tetrachloro-m-xylene  
 R.T.: 4.077 min  
 Delta R.T.: 0.000 min  
 Response: 625005503  
 Conc: 74.37 ppb

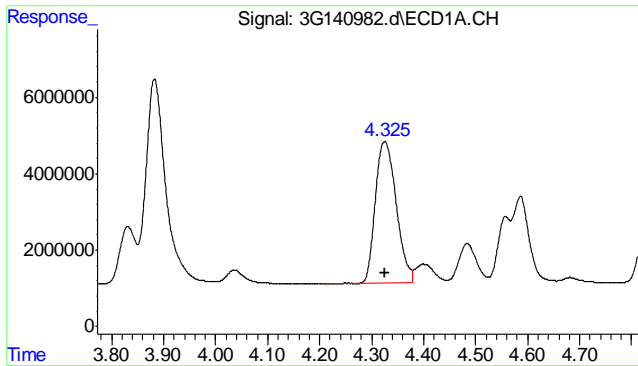


#7 AR1232-A  
 R.T.: 3.882 min  
 Delta R.T.: 0.000 min  
 Response: 142647993  
 Conc: 1205.97 PPB

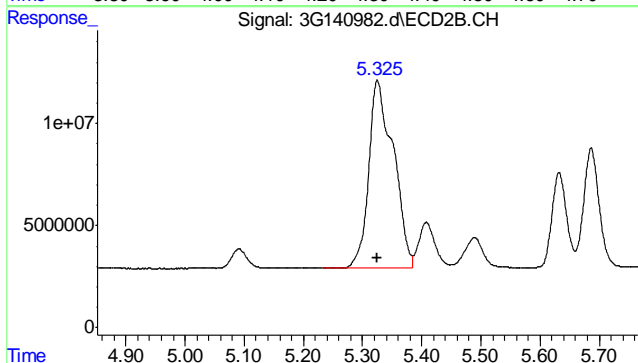


#7 AR1232-A  
 R.T.: 4.757 min  
 Delta R.T.: 0.000 min  
 Response: 322760475  
 Conc: 1924.23 PPB

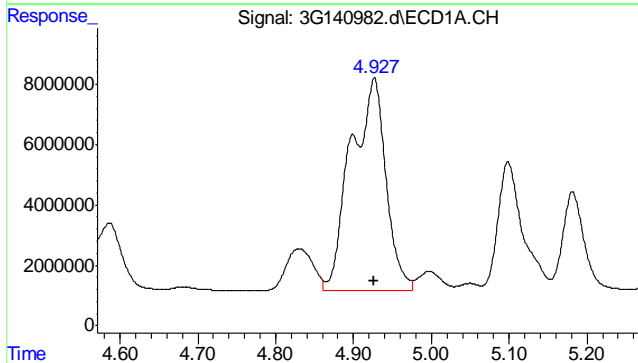
9.3.4  
 9



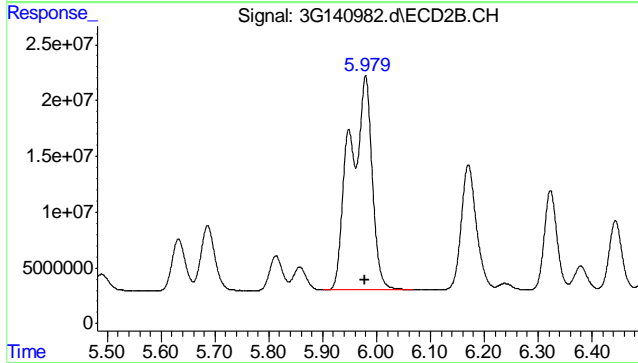
#8 AR1232-B  
R.T.: 4.325 min  
Delta R.T.: 0.000 min  
Response: 103876273  
Conc: 1163.47 PPB



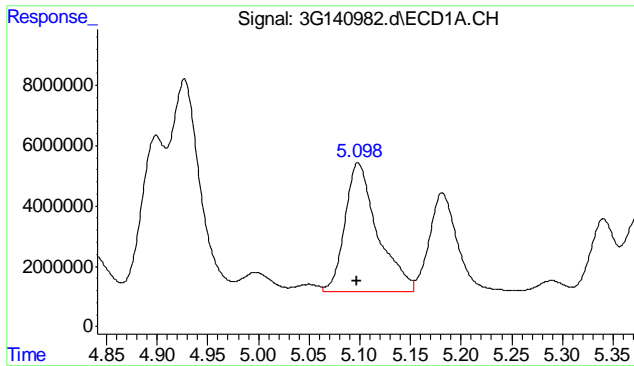
#8 AR1232-B  
R.T.: 5.325 min  
Delta R.T.: 0.000 min  
Response: 266552285  
Conc: 1917.39 PPB



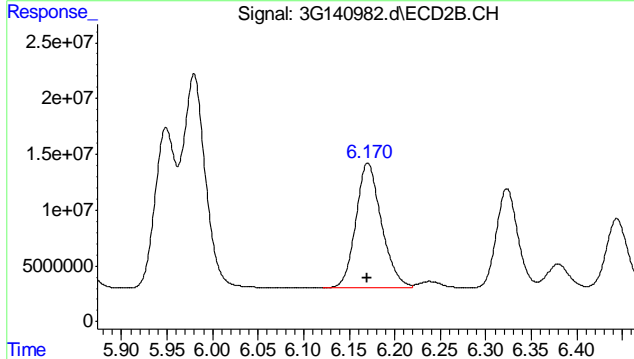
#9 AR1232-C  
R.T.: 4.927 min  
Delta R.T.: 0.000 min  
Response: 221142082  
Conc: 1156.38 PPB m



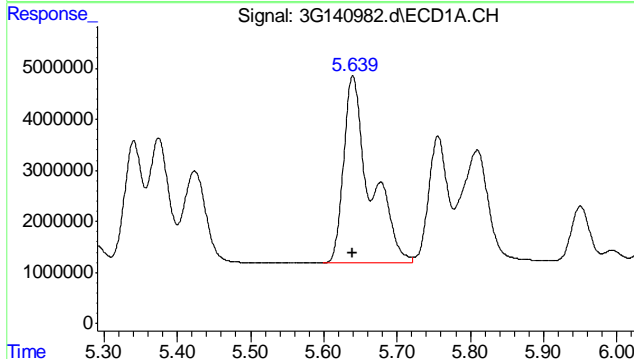
#9 AR1232-C  
R.T.: 5.979 min  
Delta R.T.: 0.000 min  
Response: 550620052  
Conc: 1929.00 PPB m



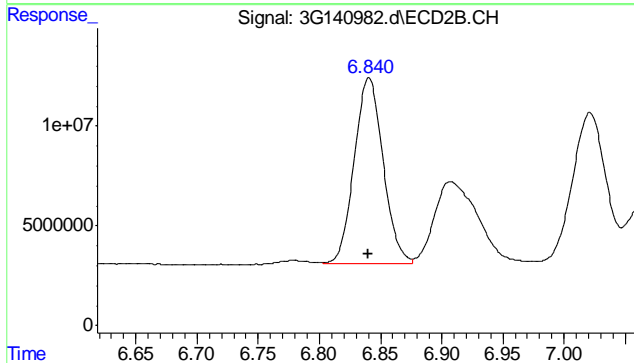
#10 AR1232-D  
 R.T.: 5.099 min  
 Delta R.T.: 0.000 min  
 Response: 94644063  
 Conc: 1161.69 PPB



#10 AR1232-D  
 R.T.: 6.170 min  
 Delta R.T.: 0.000 min  
 Response: 218925804  
 Conc: 1937.87 PPB



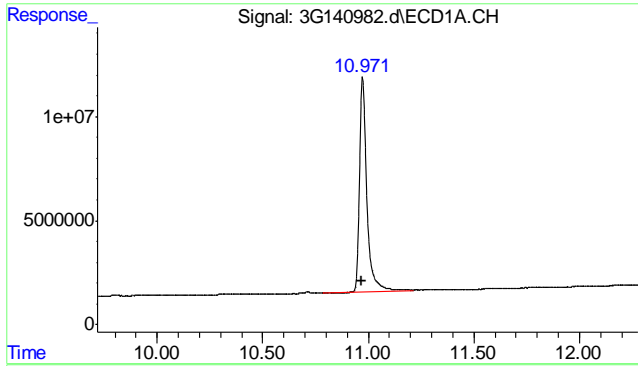
#11 AR1232-E  
 R.T.: 5.639 min  
 Delta R.T.: 0.000 min  
 Response: 93316566  
 Conc: 1665.69 PPB m



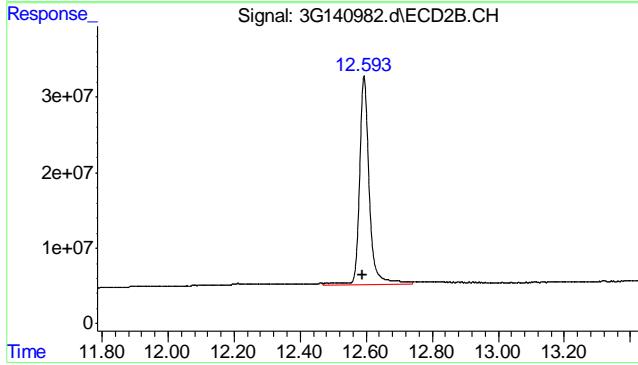
#11 AR1232-E  
 R.T.: 6.841 min  
 Delta R.T.: 0.000 min  
 Response: 153913571  
 Conc: 1931.65 PPB

9.3.4  
 9





#51 Decachlorobiphenyl  
 R.T.: 10.973 min  
 Delta R.T.: 0.002 min  
 Response: 248069160  
 Conc: 58.11 ppb



#51 Decachlorobiphenyl  
 R.T.: 12.593 min  
 Delta R.T.: 0.002 min  
 Response: 577196915  
 Conc: 79.32 ppb

9.3.4  
 9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\3G5160\  
 Data File : 3G140983.d  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 23 Apr 2024 18:48 pm  
 Operator : mahalia1  
 Sample : ic5160-1000 (ar1262)  
 Misc : op53949,g3g5160,15.0,,,1,1  
 ALS Vial : 15 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Apr 24 06:54:39 2024  
 Quant Method : C:\MSDCHEM\1\METHODS\3PCB5160.M  
 Quant Title :  
 QLast Update : Wed Apr 24 06:53:49 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
 Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
-----						
System Monitoring Compounds						
1) S Tetrachlo...	3.464	4.078	288.2E6	686.3E6	49.031	81.663 #
Spiked Amount	40.000		Recovery	=	122.58%	204.16%
51) S Decachlor...	10.973	12.595	275.0E6	622.6E6	64.411	85.554 #
Spiked Amount	40.000		Recovery	=	161.03%	213.89%
Target Compounds						
31) AR1262-A	7.691	8.935	346.6E6	791.4E6	1290.206	2305.929 #
32) AR1262-B	8.242	9.588	439.6E6	1187.1E6	1359.004	2329.536 #
33) AR1262-C	8.586	10.024	417.9E6	1013.9E6	1323.674	2297.603 #
34) AR1262-D	9.023	10.368	947.4E6	2317.1E6	1465.237	2311.650 #
35) AR1262-E	9.469	10.891	1029.6E6	2663.8E6	1387.647m	2281.438m#

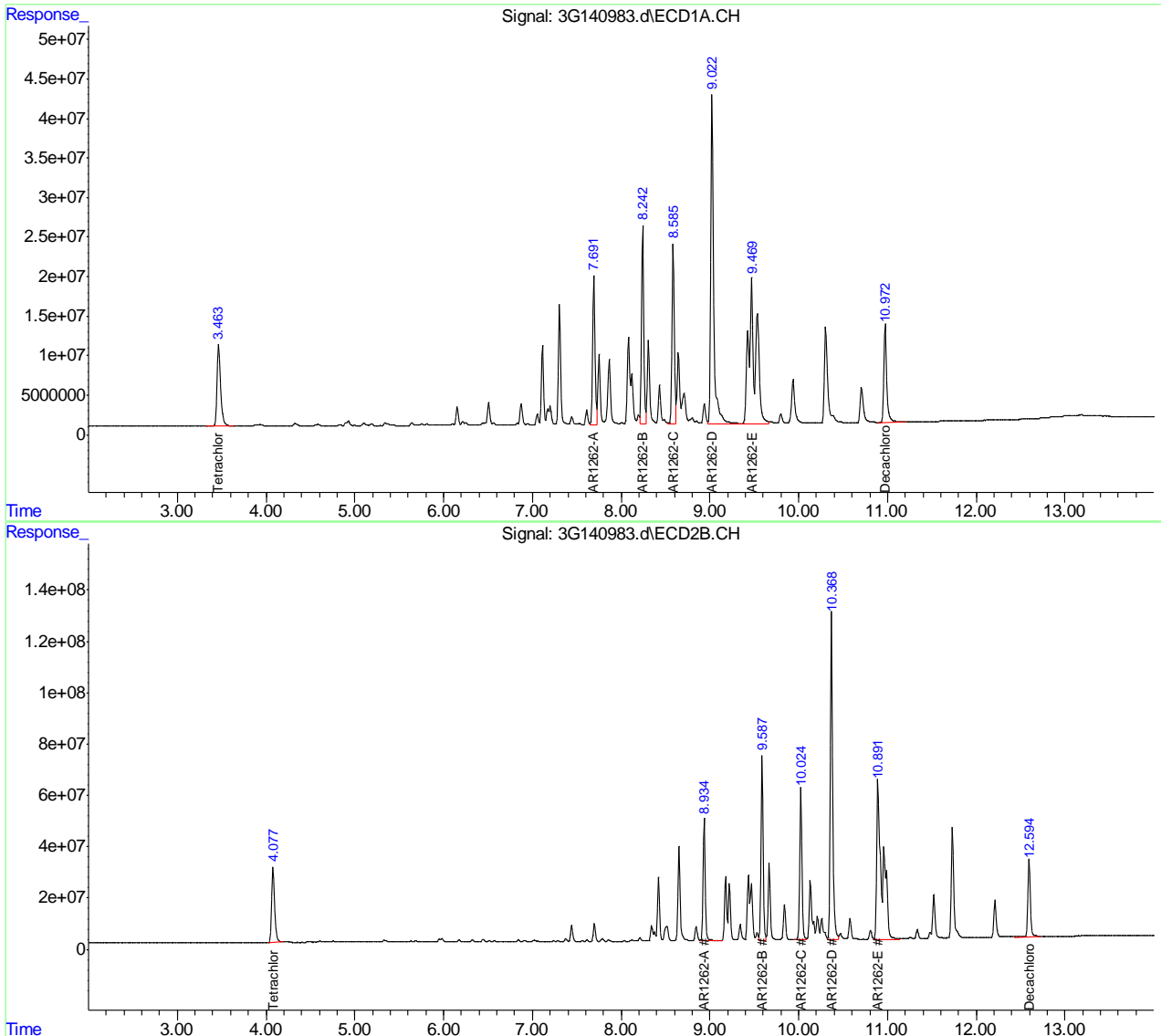
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

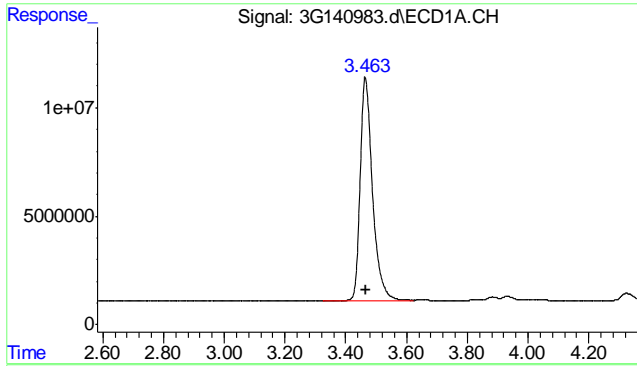
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\3G5160\  
Data File : 3G140983.d  
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
Acq On : 23 Apr 2024 18:48 pm  
Operator : mahalia  
Sample : ic5160-1000 (arl262)  
Misc : op53949,g3g5160,15.0,,,1,1  
ALS Vial : 15 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

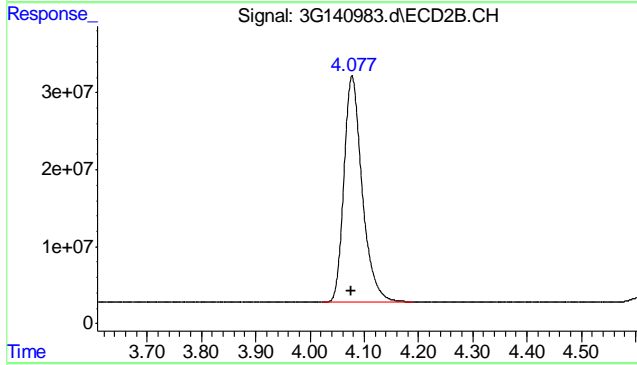
Integration File signal 1: autoint1.e  
Integration File signal 2: autoint2.e  
Quant Time: Apr 24 06:54:39 2024  
Quant Method : C:\MSDCHEM\1\METHODS\3PCB5160.M  
Quant Title :  
QLast Update : Wed Apr 24 06:53:49 2024  
Response via : Initial Calibration  
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2  
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

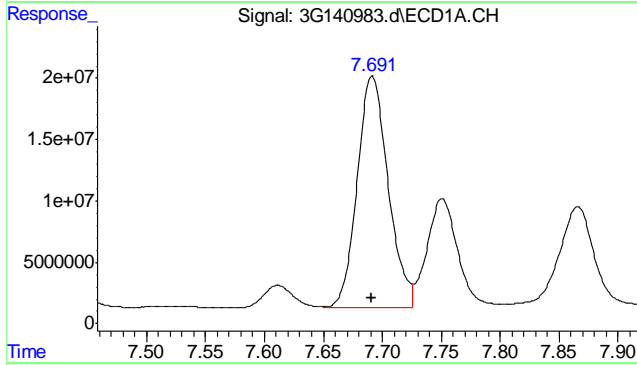




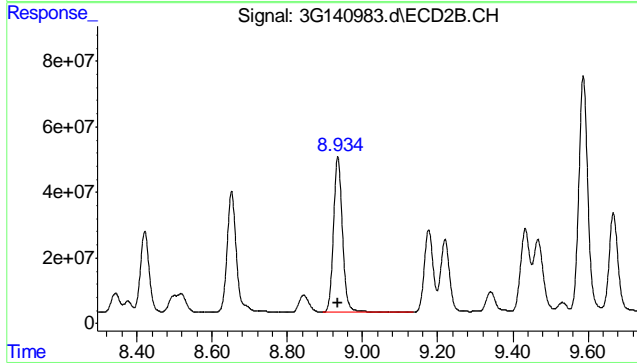
#1 Tetrachloro-m-xylene  
 R.T.: 3.464 min  
 Delta R.T.: 0.000 min  
 Response: 288165847  
 Conc: 49.03 ppb



#1 Tetrachloro-m-xylene  
 R.T.: 4.078 min  
 Delta R.T.: 0.000 min  
 Response: 686291306  
 Conc: 81.66 ppb

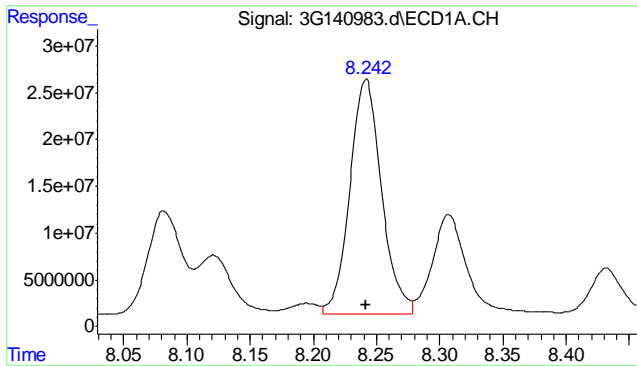


#31 AR1262-A  
 R.T.: 7.691 min  
 Delta R.T.: 0.000 min  
 Response: 346600702  
 Conc: 1290.21 PPB

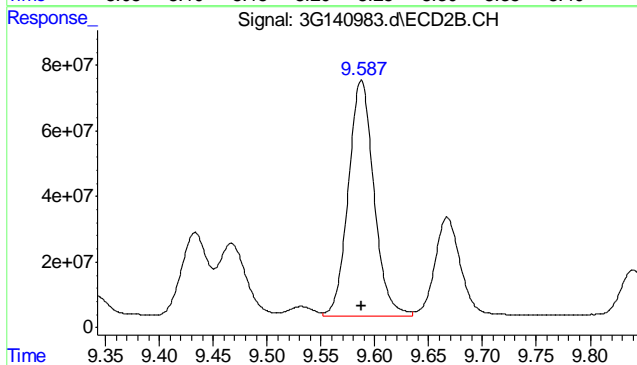


#31 AR1262-A  
 R.T.: 8.935 min  
 Delta R.T.: 0.000 min  
 Response: 791419142  
 Conc: 2305.93 PPB

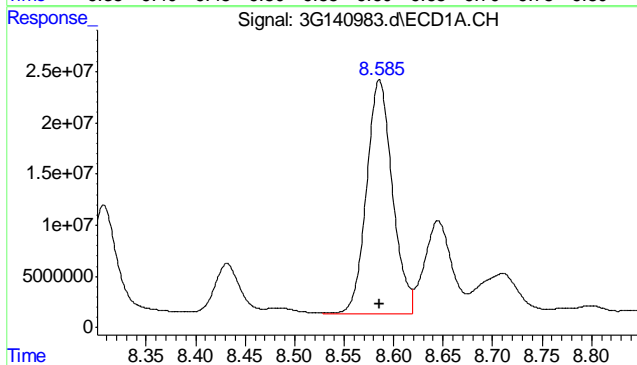
9.3.5  
**9**



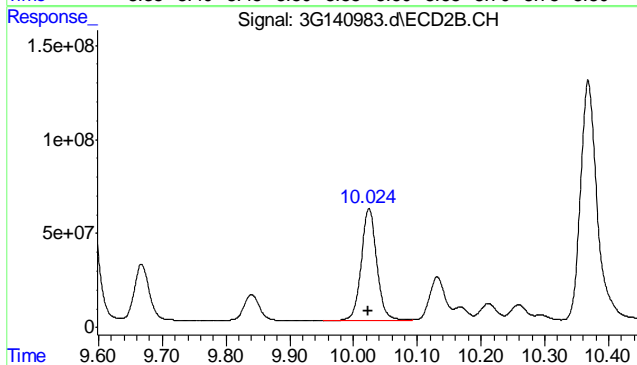
#32 AR1262-B  
 R.T.: 8.242 min  
 Delta R.T.: 0.000 min  
 Response: 439628448  
 Conc: 1359.00 PPB



#32 AR1262-B  
 R.T.: 9.588 min  
 Delta R.T.: 0.000 min  
 Response: 1187086178  
 Conc: 2329.54 PPB

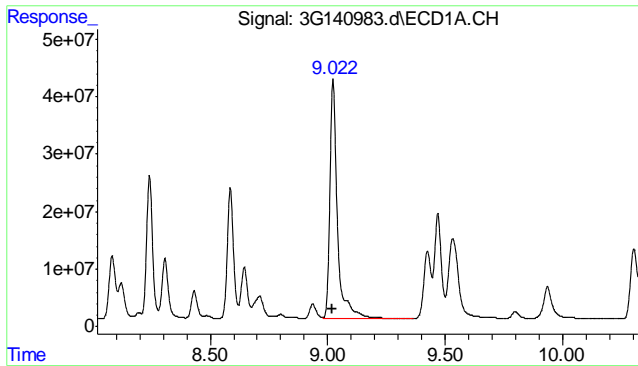


#33 AR1262-C  
 R.T.: 8.586 min  
 Delta R.T.: 0.000 min  
 Response: 417854158  
 Conc: 1323.67 PPB

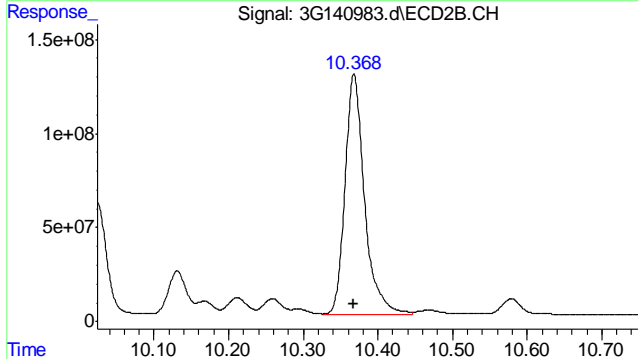


#33 AR1262-C  
 R.T.: 10.024 min  
 Delta R.T.: 0.000 min  
 Response: 1013875593  
 Conc: 2297.60 PPB

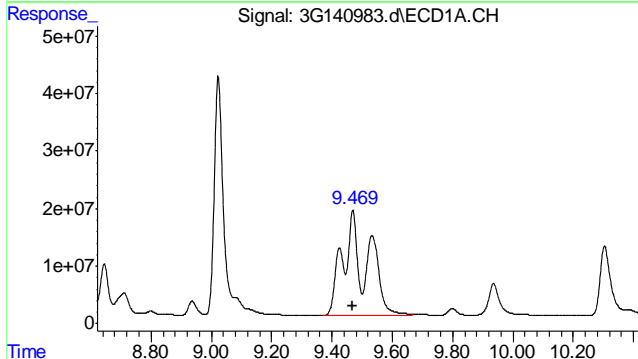
9.3.5  
**9**



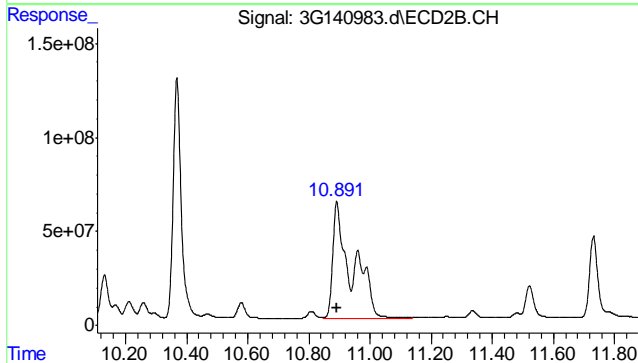
#34 AR1262-D  
 R.T.: 9.023 min  
 Delta R.T.: 0.000 min  
 Response: 947366914  
 Conc: 1465.24 PPB



#34 AR1262-D  
 R.T.: 10.368 min  
 Delta R.T.: 0.000 min  
 Response: 2317133139  
 Conc: 2311.65 PPB

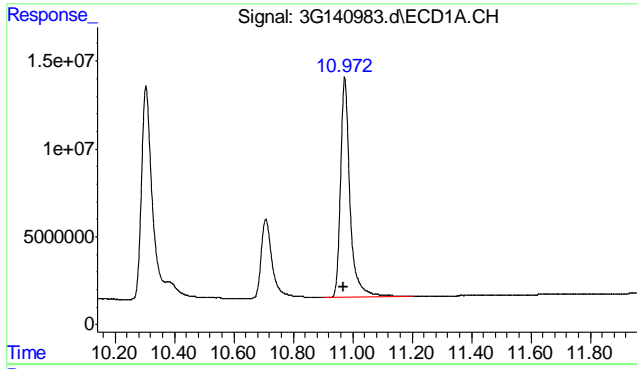


#35 AR1262-E  
 R.T.: 9.469 min  
 Delta R.T.: 0.000 min  
 Response: 1029619284  
 Conc: 1387.65 PPB m

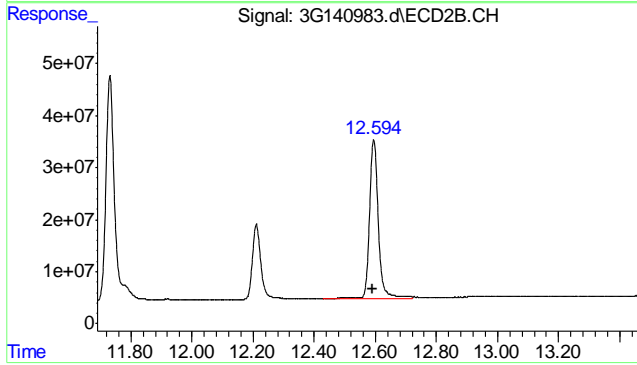


#35 AR1262-E  
 R.T.: 10.891 min  
 Delta R.T.: 0.000 min  
 Response: 2663803329  
 Conc: 2281.44 PPB m

9.3.5  
**9**



#51 Decachlorobiphenyl  
 R.T.: 10.973 min  
 Delta R.T.: 0.003 min  
 Response: 274972180  
 Conc: 64.41 ppb



#51 Decachlorobiphenyl  
 R.T.: 12.595 min  
 Delta R.T.: 0.004 min  
 Response: 622560027  
 Conc: 85.55 ppb

9.3.5  
 9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\3G5160\  
 Data File : 3G140984.d  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 23 Apr 2024 19:04 pm  
 Operator : mahalia1  
 Sample : ic5160-1000 (ar1242)  
 Misc : op53949,g3g5160,15.0,,,1,1  
 ALS Vial : 16 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Apr 24 06:56:49 2024  
 Quant Method : C:\MSDCHEM\1\METHODS\3PCB5160.M  
 Quant Title :  
 QLast Update : Wed Apr 24 06:56:04 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
 Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
-----						
System Monitoring Compounds						
1) S Tetrachlo...	3.465	4.078	284.2E6	646.9E6	48.349	76.971 #
Spiked Amount	40.000		Recovery	=	120.87%	192.43%
51) S Decachlor...	10.975	12.597	256.6E6	564.6E6	60.097	77.586 #
Spiked Amount	40.000		Recovery	=	150.24%	193.96%
Target Compounds						
12) AR1242-A	4.324	5.326	195.7E6	451.6E6	1255.302	1922.433 #
13) AR1242-B	4.925	5.980	399.6E6	1009.3E6	1156.430m	1969.735m#
14) AR1242-C	5.099	6.171	170.5E6	394.6E6	1183.463	1993.489 #
15) AR1242-D	5.640	6.841	185.2E6	313.7E6	1708.979m	2012.224
16) AR1242-E	6.252	7.446	147.6E6	386.8E6	1273.620	2017.015 #

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

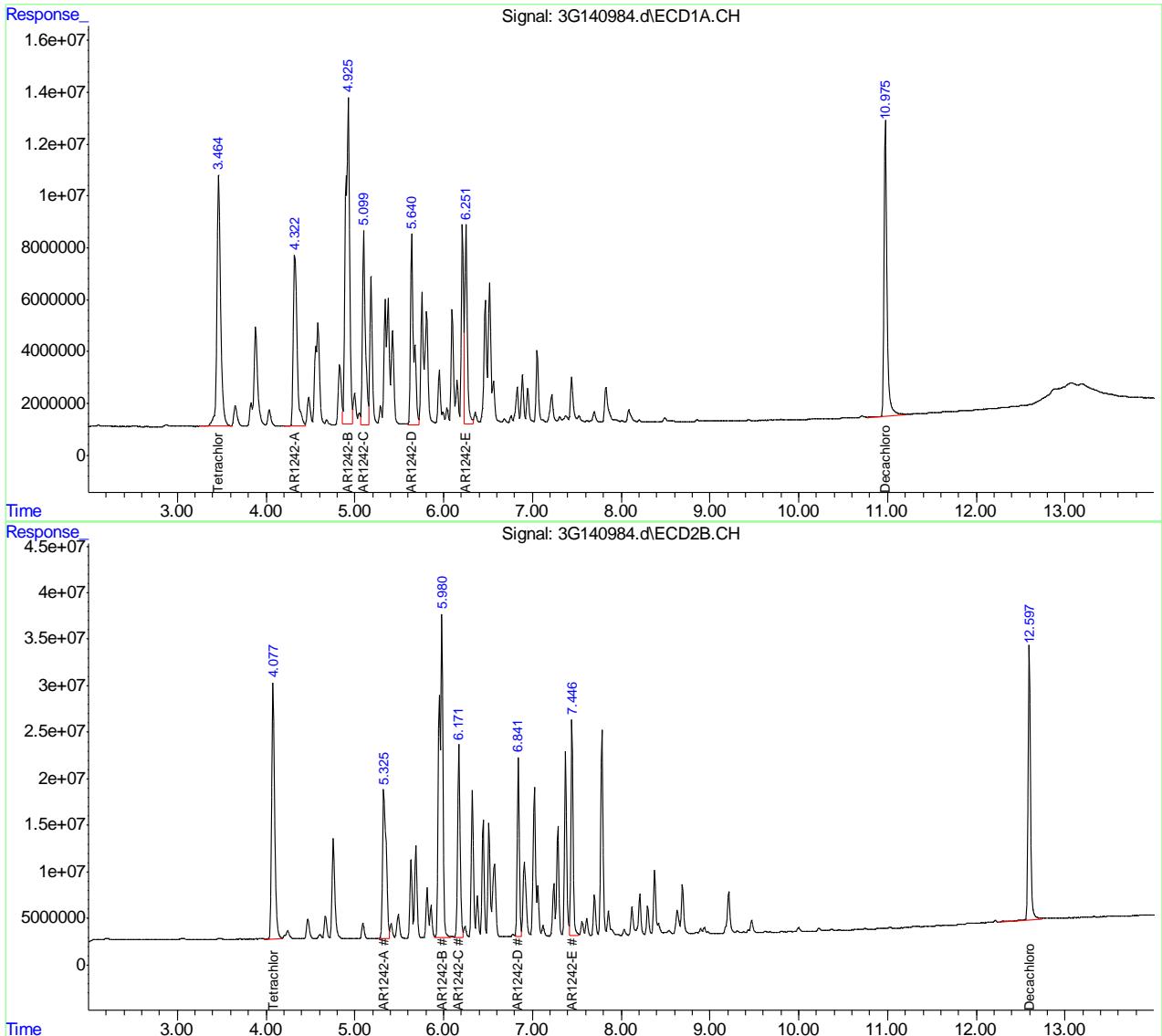


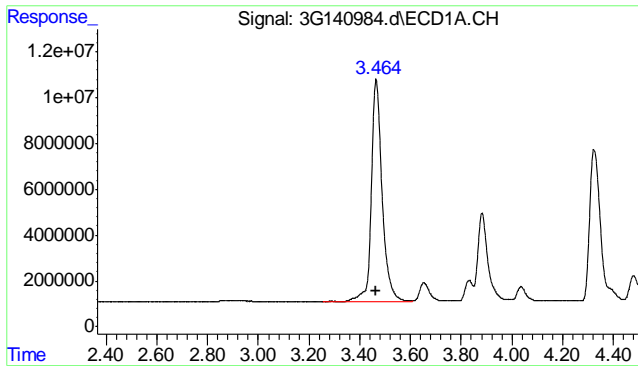
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\3G5160\  
Data File : 3G140984.d  
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
Acq On : 23 Apr 2024 19:04 pm  
Operator : mahalia  
Sample : ic5160-1000 (arl242)  
Misc : op53949,g3g5160,15.0,,,1,1  
ALS Vial : 16 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

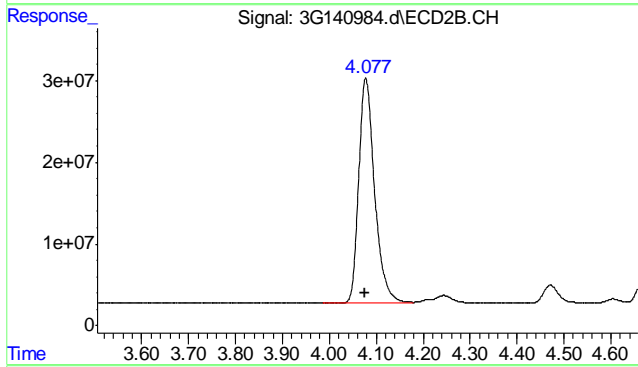
Integration File signal 1: autoint1.e  
Integration File signal 2: autoint2.e  
Quant Time: Apr 24 06:56:49 2024  
Quant Method : C:\MSDCHEM\1\METHODS\3PCB5160.M  
Quant Title :  
QLast Update : Wed Apr 24 06:56:04 2024  
Response via : Initial Calibration  
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2  
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

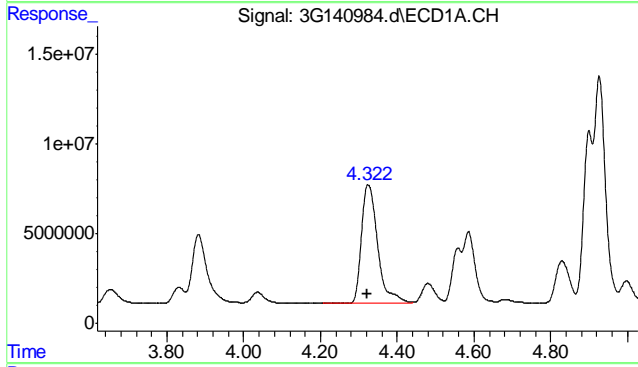




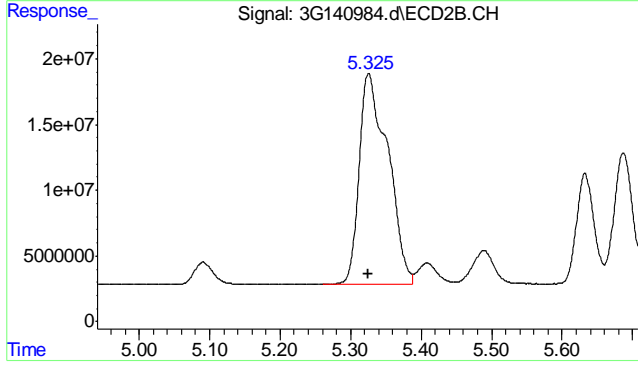
#1 Tetrachloro-m-xylene  
 R.T.: 3.465 min  
 Delta R.T.: 0.000 min  
 Response: 284153667  
 Conc: 48.35 ppb



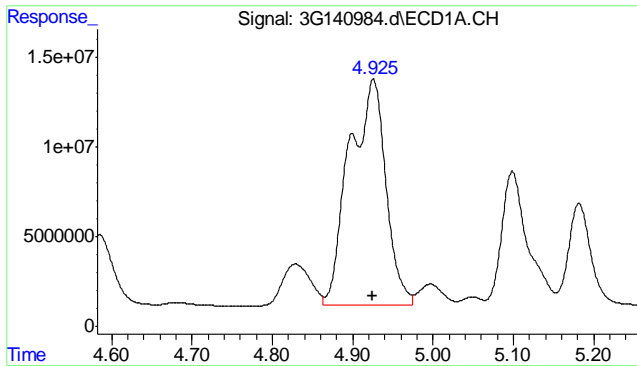
#1 Tetrachloro-m-xylene  
 R.T.: 4.078 min  
 Delta R.T.: 0.000 min  
 Response: 646858258  
 Conc: 76.97 ppb



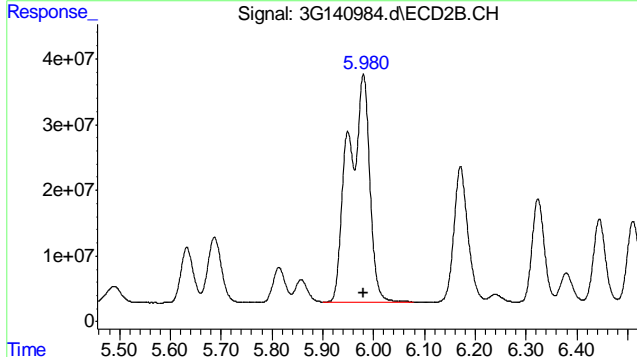
#12 AR1242-A  
 R.T.: 4.324 min  
 Delta R.T.: 0.002 min  
 Response: 195700031  
 Conc: 1255.30 PPB



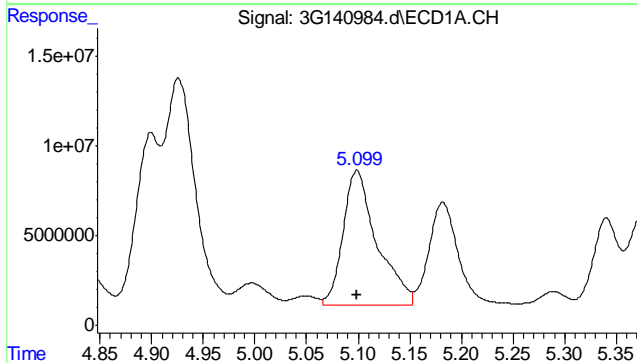
#12 AR1242-A  
 R.T.: 5.326 min  
 Delta R.T.: 0.000 min  
 Response: 451561120  
 Conc: 1922.43 PPB



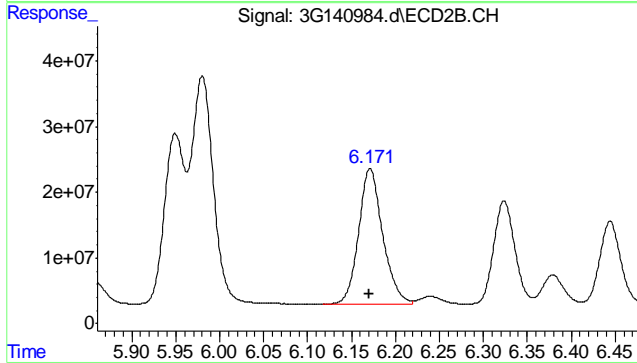
#13 AR1242-B  
 R.T.: 4.925 min  
 Delta R.T.: 0.000 min  
 Response: 399596591  
 Conc: 1156.43 PPB m



#13 AR1242-B  
 R.T.: 5.980 min  
 Delta R.T.: 0.000 min  
 Response: 1009325081  
 Conc: 1969.73 PPB m

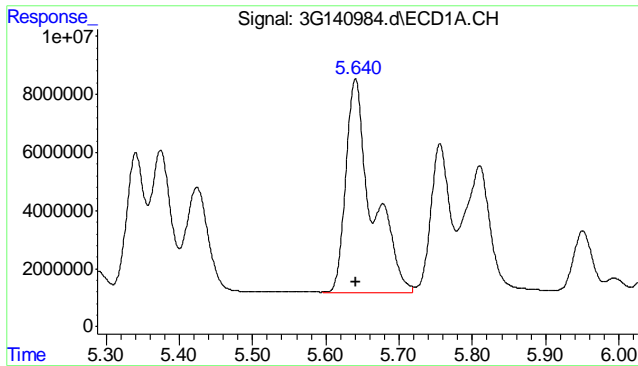


#14 AR1242-C  
 R.T.: 5.099 min  
 Delta R.T.: 0.000 min  
 Response: 170519259  
 Conc: 1183.46 PPB

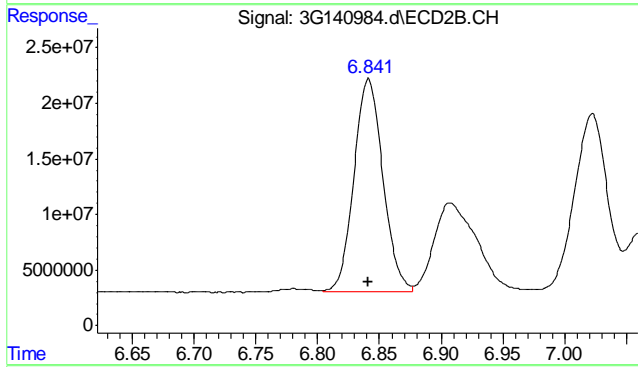


#14 AR1242-C  
 R.T.: 6.171 min  
 Delta R.T.: 0.000 min  
 Response: 394580292  
 Conc: 1993.49 PPB

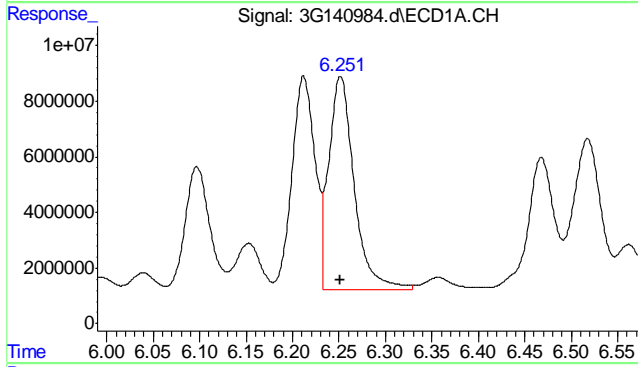
9.3.6  
 9



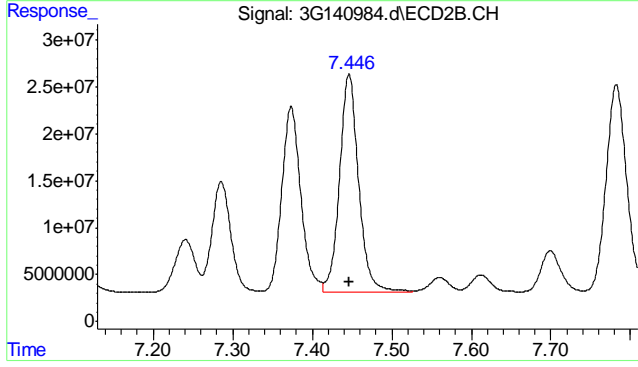
#15 AR1242-D  
 R.T.: 5.640 min  
 Delta R.T.: 0.000 min  
 Response: 185208097  
 Conc: 1708.98 PPB m



#15 AR1242-D  
 R.T.: 6.841 min  
 Delta R.T.: 0.000 min  
 Response: 313664429  
 Conc: 2012.22 PPB

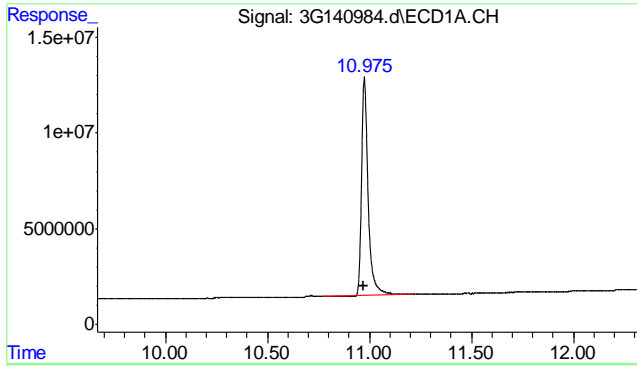


#16 AR1242-E  
 R.T.: 6.252 min  
 Delta R.T.: 0.000 min  
 Response: 147553185  
 Conc: 1273.62 PPB

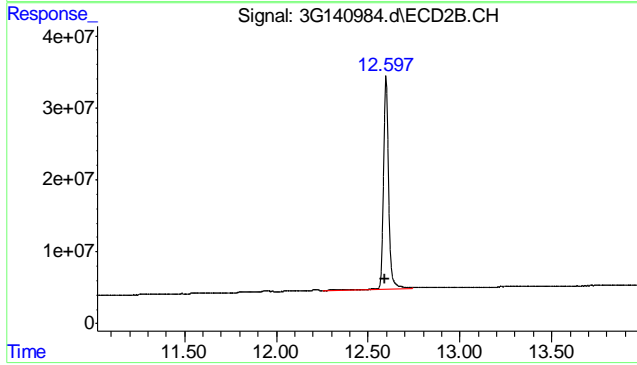


#16 AR1242-E  
 R.T.: 7.446 min  
 Delta R.T.: 0.000 min  
 Response: 386833734  
 Conc: 2017.01 PPB

9.3.6  
**9**



#51 Decachlorobiphenyl  
 R.T.: 10.975 min  
 Delta R.T.: 0.005 min  
 Response: 256554640  
 Conc: 60.10 ppb



#51 Decachlorobiphenyl  
 R.T.: 12.597 min  
 Delta R.T.: 0.007 min  
 Response: 564577323  
 Conc: 77.59 ppb

9.3.6  
**9**

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\3G5160\  
 Data File : 3G140985.d  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 23 Apr 2024 19:21 pm  
 Operator : mahalia1  
 Sample : ic5160-1000 (ar1268)  
 Misc : op53949,g3g5160,15.0,,,1,1  
 ALS Vial : 17 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Apr 24 06:58:14 2024  
 Quant Method : C:\MSDCHEM\1\METHODS\3PCB5160.M  
 Quant Title :  
 QLast Update : Wed Apr 24 06:57:45 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
 Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
-----						
System Monitoring Compounds						
1) S Tetrachlo...	3.465	4.077	297.9E6	704.3E6	50.688	83.800 #
Spiked Amount	40.000		Recovery	=	126.72%	209.50%
51) S Decachlor...	10.976	12.597	819.8E6	1765.8E6	192.039	242.654 #
Spiked Amount	40.000		Recovery	=	480.10%	606.63%
Target Compounds						
36) AR1268-A	9.473	10.893	890.7E6	2670.0E6	1243.372	2170.509 #
37) AR1268-B	9.530	10.962	993.6E6	2588.4E6	1446.800	2180.855 #
38) AR1268-C	9.802	11.338	791.7E6	2191.3E6	1400.758	2149.198 #
39) AR1268-D	10.306	11.733	329.9E6	883.0E6	1334.002	2071.306 #
40) AR1268-E	10.709	12.214	2566.2E6	6338.8E6	1438.187	2015.045 #
-----						

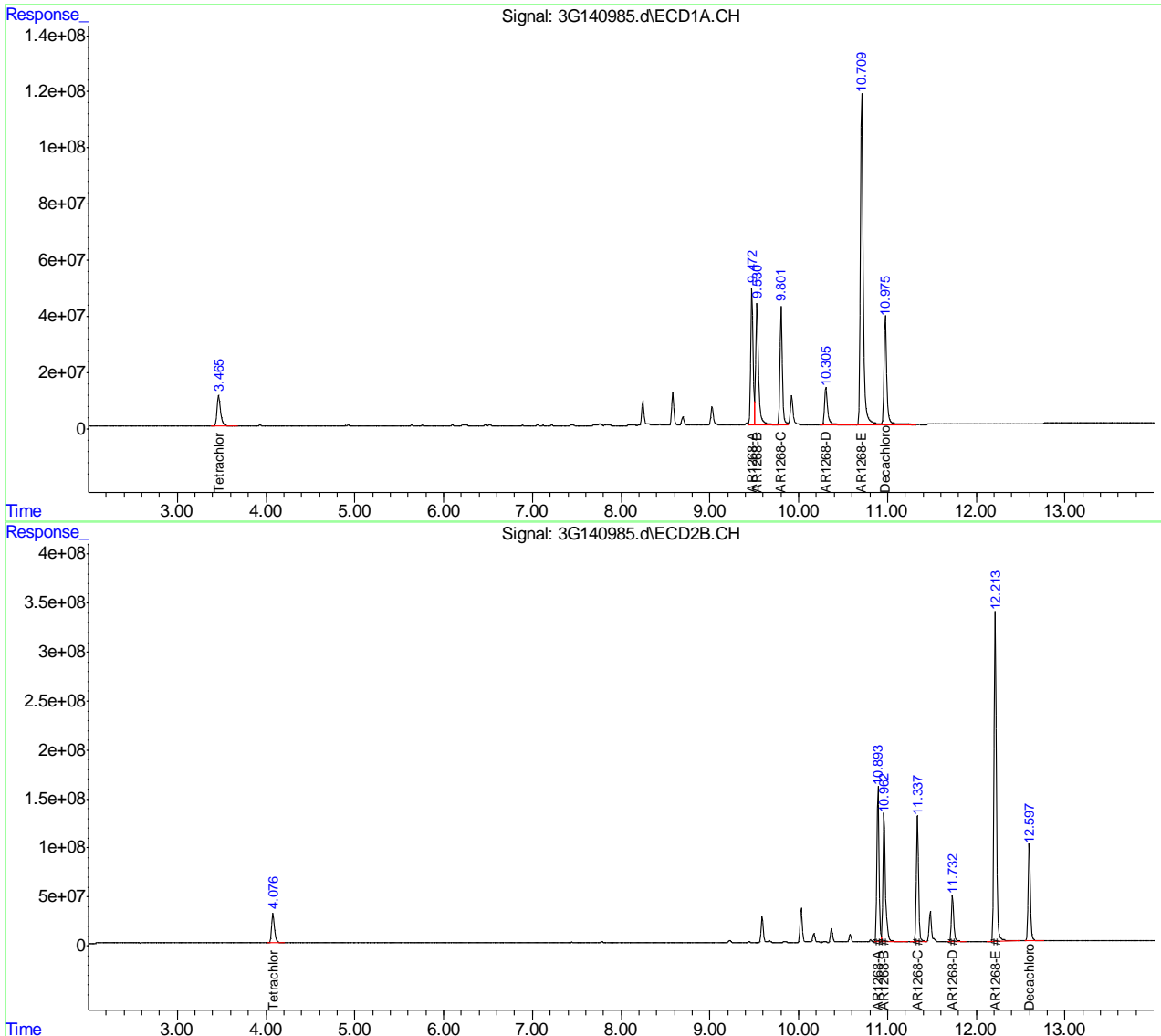
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

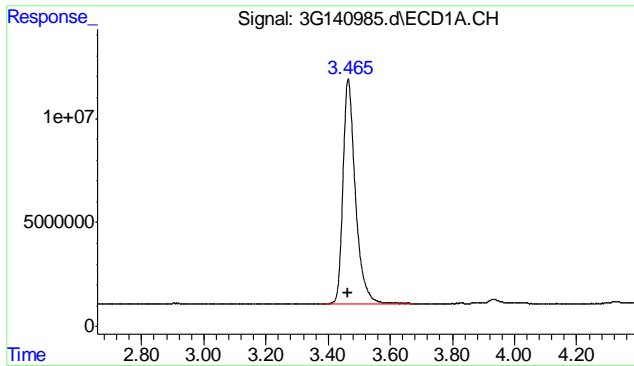
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\3G5160\  
Data File : 3G140985.d  
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
Acq On : 23 Apr 2024 19:21 pm  
Operator : mahalia1  
Sample : ic5160-1000 (arl268)  
Misc : op53949,g3g5160,15.0,,,1,1  
ALS Vial : 17 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

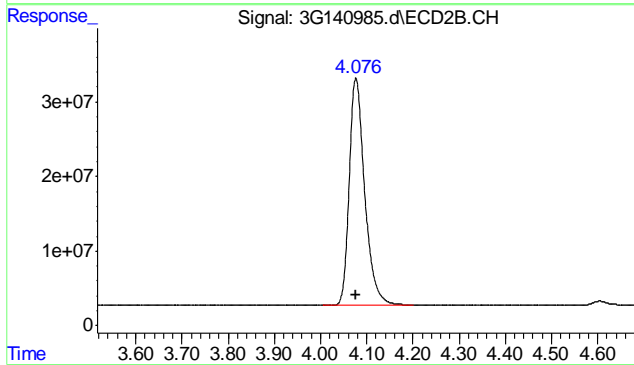
Integration File signal 1: autoint1.e  
Integration File signal 2: autoint2.e  
Quant Time: Apr 24 06:58:14 2024  
Quant Method : C:\MSDCHEM\1\METHODS\3PCB5160.M  
Quant Title :  
QLast Update : Wed Apr 24 06:57:45 2024  
Response via : Initial Calibration  
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2  
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

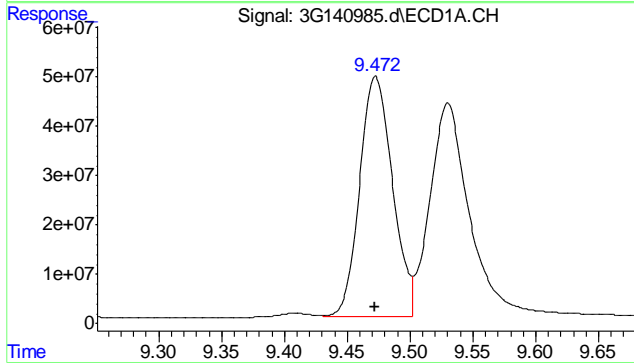




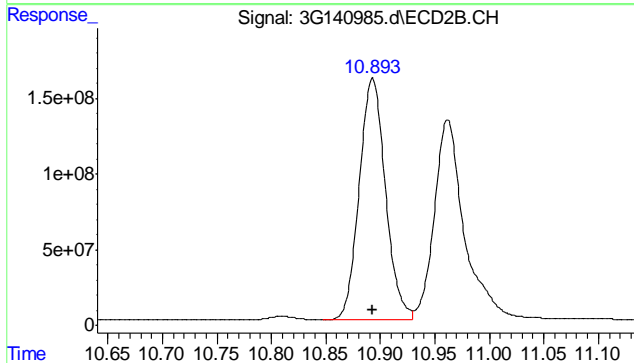
#1 Tetrachloro-m-xylene  
 R.T.: 3.465 min  
 Delta R.T.: 0.000 min  
 Response: 297906144  
 Conc: 50.69 ppb



#1 Tetrachloro-m-xylene  
 R.T.: 4.077 min  
 Delta R.T.: 0.000 min  
 Response: 704254392  
 Conc: 83.80 ppb



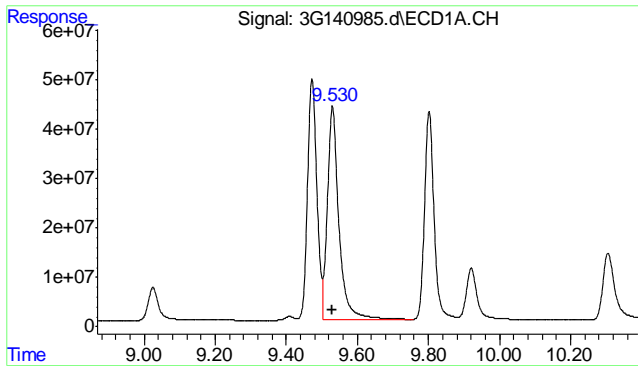
#36 AR1268-A  
 R.T.: 9.473 min  
 Delta R.T.: 0.000 min  
 Response: 890738545  
 Conc: 1243.37 PPB



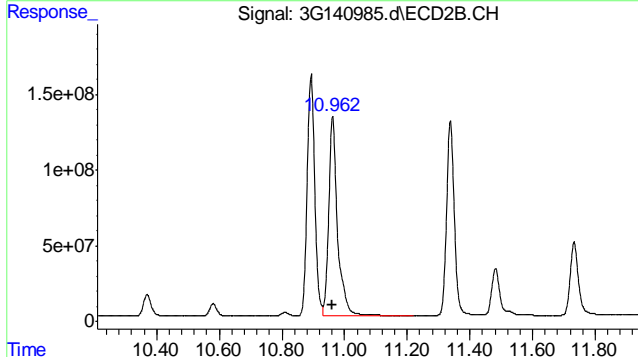
#36 AR1268-A  
 R.T.: 10.893 min  
 Delta R.T.: 0.000 min  
 Response: 2670000902  
 Conc: 2170.51 PPB

9.3.7  
9

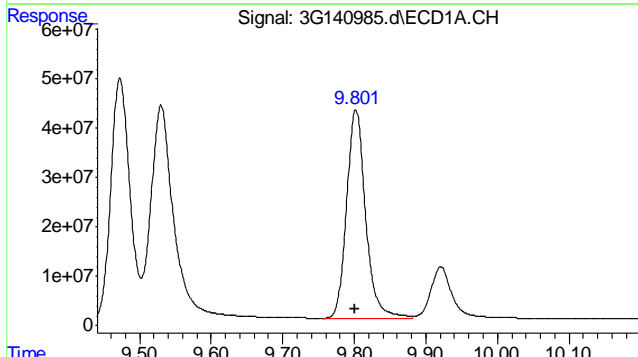




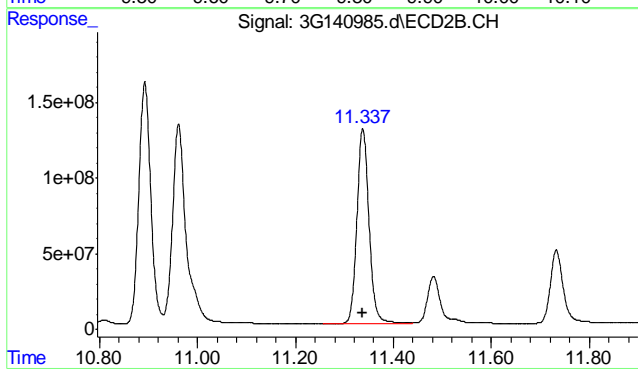
#37 AR1268-B  
R.T.: 9.530 min  
Delta R.T.: 0.000 min  
Response: 993606327  
Conc: 1446.80 PPB



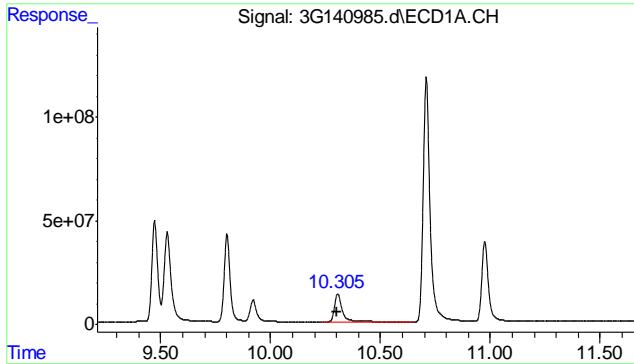
#37 AR1268-B  
R.T.: 10.962 min  
Delta R.T.: 0.000 min  
Response: 2588375597  
Conc: 2180.86 PPB



#38 AR1268-C  
R.T.: 9.802 min  
Delta R.T.: 0.000 min  
Response: 791719181  
Conc: 1400.76 PPB

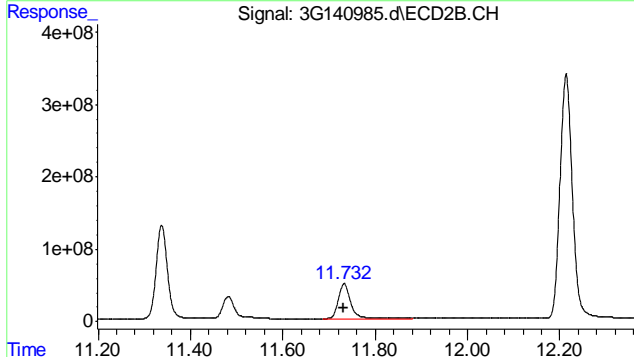


#38 AR1268-C  
R.T.: 11.338 min  
Delta R.T.: 0.000 min  
Response: 2191333696  
Conc: 2149.20 PPB



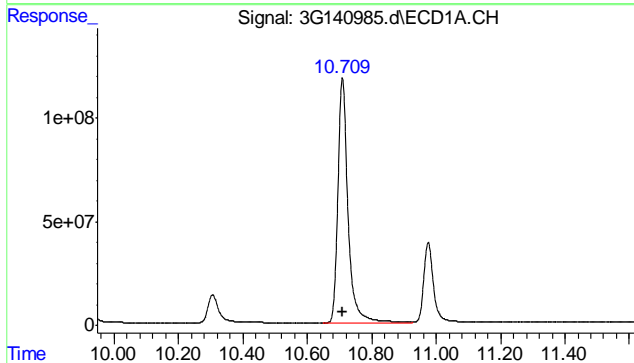
#39 AR1268-D

R.T.: 10.306 min  
Delta R.T.: 0.000 min  
Response: 329922808  
Conc: 1334.00 PPB



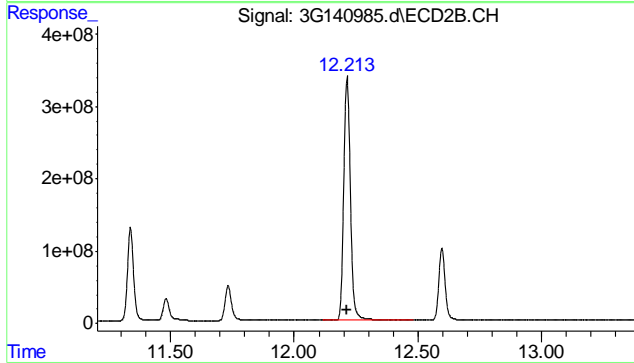
#39 AR1268-D

R.T.: 11.733 min  
Delta R.T.: 0.000 min  
Response: 883026145  
Conc: 2071.31 PPB



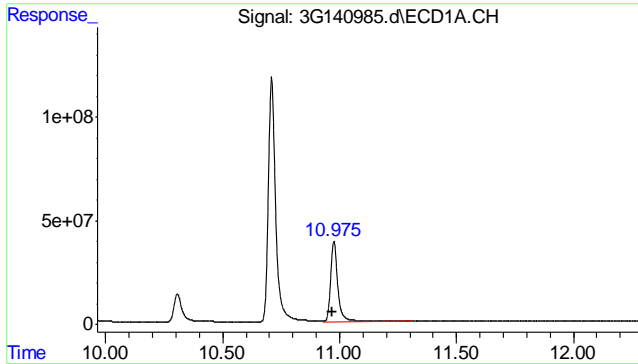
#40 AR1268-E

R.T.: 10.709 min  
Delta R.T.: 0.000 min  
Response: 2566180577  
Conc: 1438.19 PPB

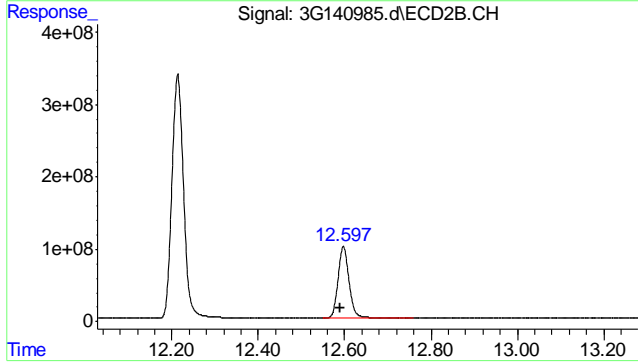


#40 AR1268-E

R.T.: 12.214 min  
Delta R.T.: 0.000 min  
Response: 6338751842  
Conc: 2015.05 PPB



#51 Decachlorobiphenyl  
 R.T.: 10.976 min  
 Delta R.T.: 0.005 min  
 Response: 819816615  
 Conc: 192.04 ppb



#51 Decachlorobiphenyl  
 R.T.: 12.597 min  
 Delta R.T.: 0.007 min  
 Response: 1765753829  
 Conc: 242.65 ppb

9.3.7  
**9**

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\3G5160\  
 Data File : 3G140986.d  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 23 Apr 2024 19:38 pm  
 Operator : mahalia1  
 Sample : ic5160-1000 (ar1248)  
 Misc : op53949,g3g5160,15.0,,,1,1  
 ALS Vial : 18 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Apr 24 07:00:09 2024  
 Quant Method : C:\MSDCHEM\1\METHODS\3PCB5160.M  
 Quant Title :  
 QLast Update : Wed Apr 24 06:59:23 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
 Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
-----						
System Monitoring Compounds						
1) S Tetrachlo...	3.465	4.077	260.9E6	615.5E6	44.392	73.245 #
Spiked Amount	40.000		Recovery	=	110.98%	183.11%
51) S Decachlor...	10.979	12.598	245.2E6	550.9E6	57.441	75.711 #
Spiked Amount	40.000		Recovery	=	143.60%	189.28%
Target Compounds						
17) AR1248-A	4.322	5.325	93535425	222.5E6	1281.391	2108.497 #
18) AR1248-B	4.927	5.978	252.0E6	645.7E6	1232.378m	2140.440m#
19) AR1248-C	5.341	6.444	145.1E6	376.7E6	1239.118	2141.791 #
20) AR1248-D	5.641	6.841	209.0E6	507.8E6	1286.513	2148.761 #
21) AR1248-E	5.757	7.022	147.1E6	490.4E6	1304.085	2195.966 #
22) AR1248-F	6.213	7.445	244.0E6	697.6E6	1390.486	2204.696 #
23) AR1248-G	6.517	7.782	209.3E6	685.0E6	1311.494	2231.007 #
-----						

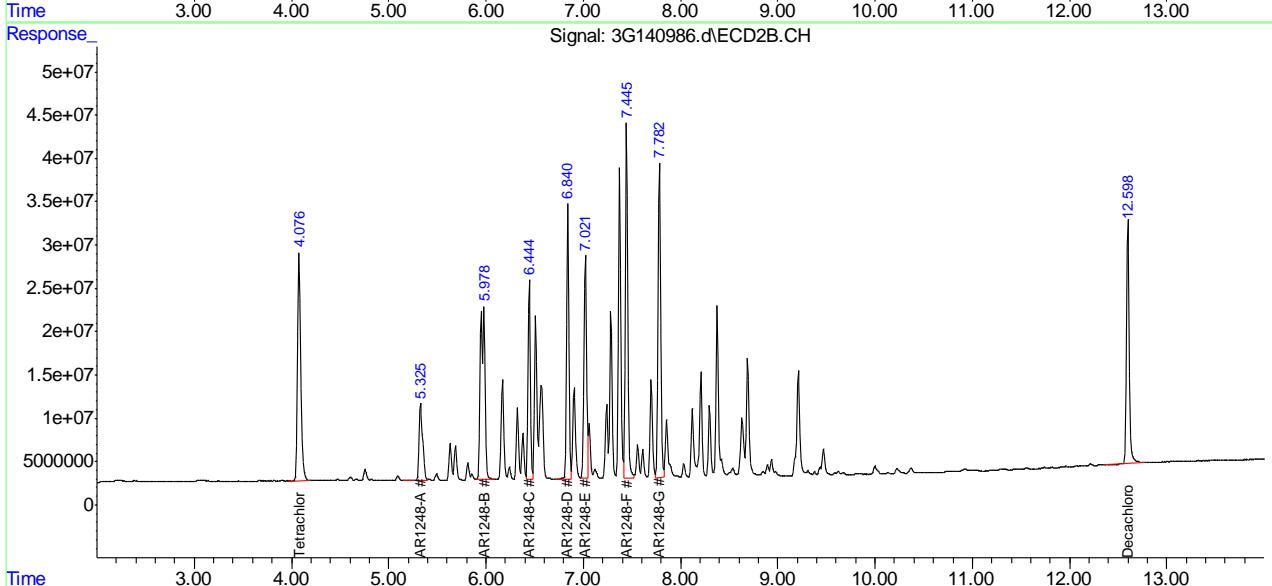
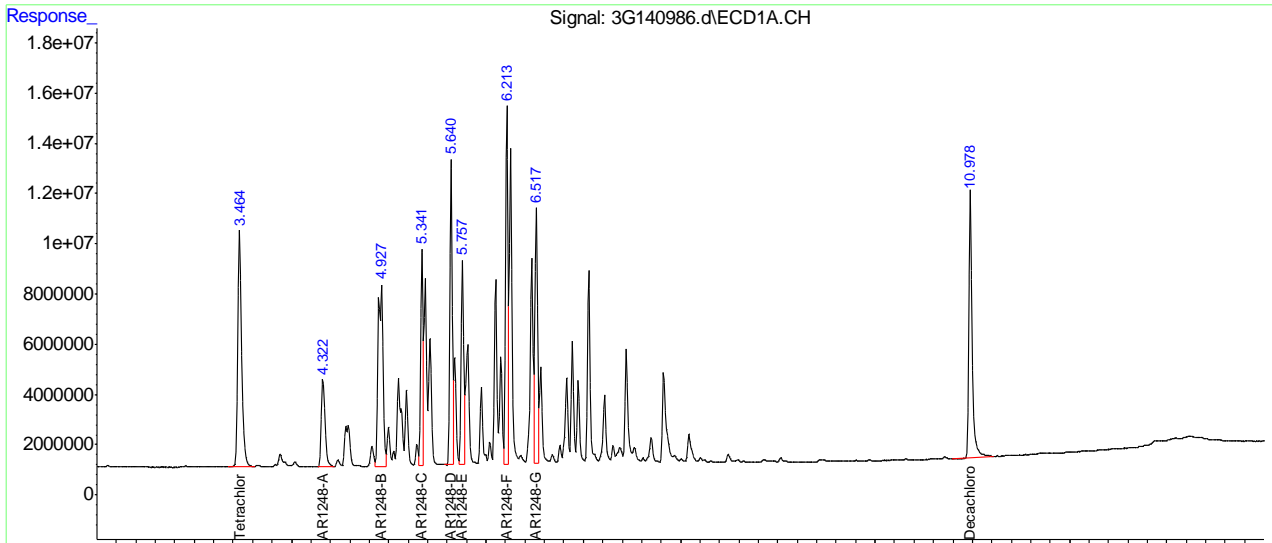
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

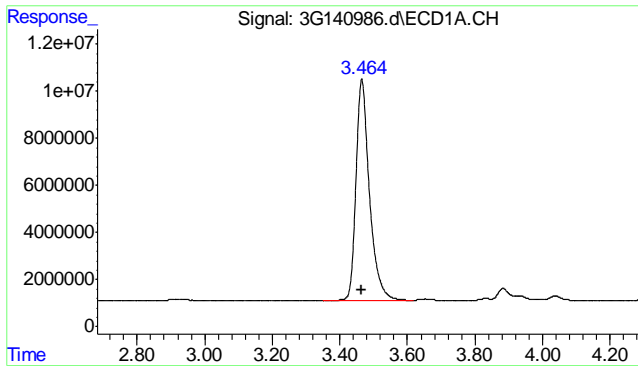
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\3G5160\  
Data File : 3G140986.d  
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
Acq On : 23 Apr 2024 19:38 pm  
Operator : mahalia  
Sample : ic5160-1000 (arl248)  
Misc : op53949,g3g5160,15.0,,,1,1  
ALS Vial : 18 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

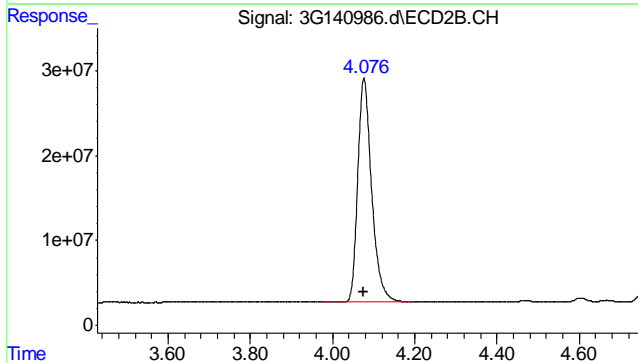
Integration File signal 1: autoint1.e  
Integration File signal 2: autoint2.e  
Quant Time: Apr 24 07:00:09 2024  
Quant Method : C:\MSDCHEM\1\METHODS\3PCB5160.M  
Quant Title :  
QLast Update : Wed Apr 24 06:59:23 2024  
Response via : Initial Calibration  
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2  
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

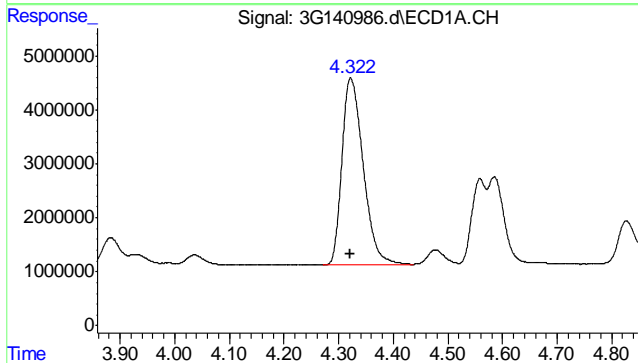




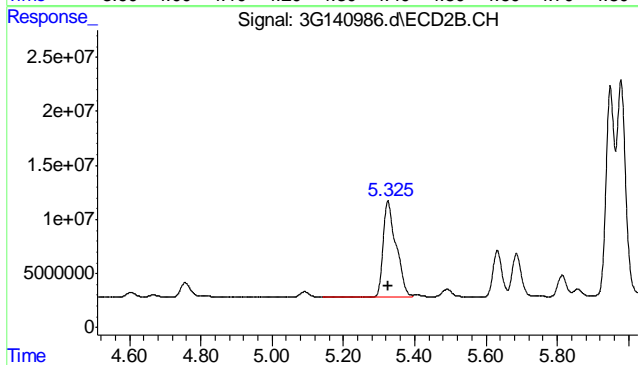
#1 Tetrachloro-m-xylene  
 R.T.: 3.465 min  
 Delta R.T.: 0.000 min  
 Response: 260902231  
 Conc: 44.39 ppb



#1 Tetrachloro-m-xylene  
 R.T.: 4.077 min  
 Delta R.T.: 0.000 min  
 Response: 615545263  
 Conc: 73.24 ppb

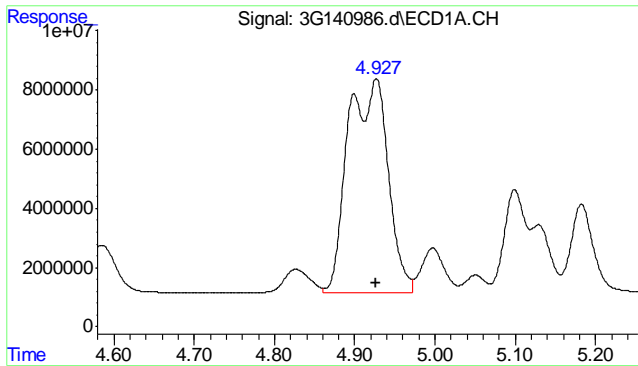


#17 AR1248-A  
 R.T.: 4.322 min  
 Delta R.T.: 0.000 min  
 Response: 93535425  
 Conc: 1281.39 PPB

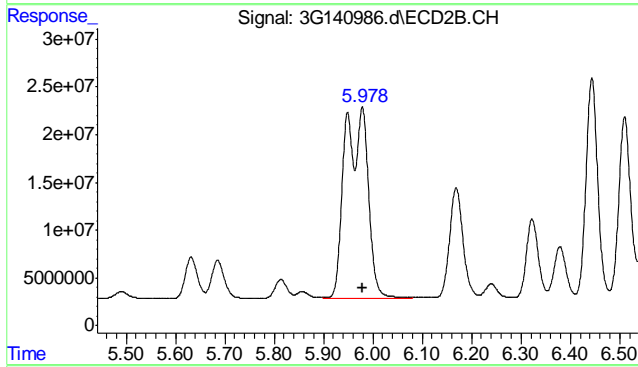


#17 AR1248-A  
 R.T.: 5.325 min  
 Delta R.T.: 0.000 min  
 Response: 222500979  
 Conc: 2108.50 PPB

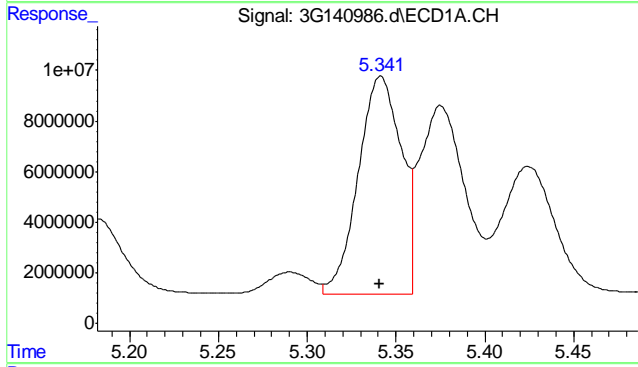
9.3.8  
 9



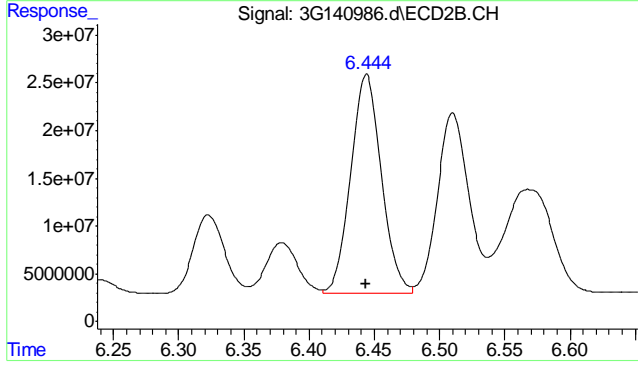
#18 AR1248-B  
 R.T.: 4.927 min  
 Delta R.T.: 0.000 min  
 Response: 251972435  
 Conc: 1232.38 PPB m



#18 AR1248-B  
 R.T.: 5.978 min  
 Delta R.T.: 0.000 min  
 Response: 645727370  
 Conc: 2140.44 PPB m

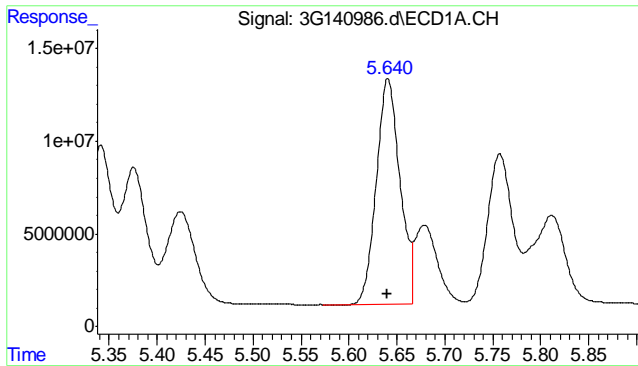


#19 AR1248-C  
 R.T.: 5.341 min  
 Delta R.T.: 0.000 min  
 Response: 145071543  
 Conc: 1239.12 PPB

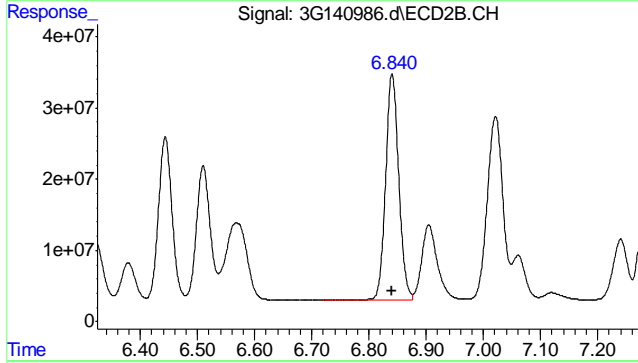


#19 AR1248-C  
 R.T.: 6.444 min  
 Delta R.T.: 0.000 min  
 Response: 376662260  
 Conc: 2141.79 PPB

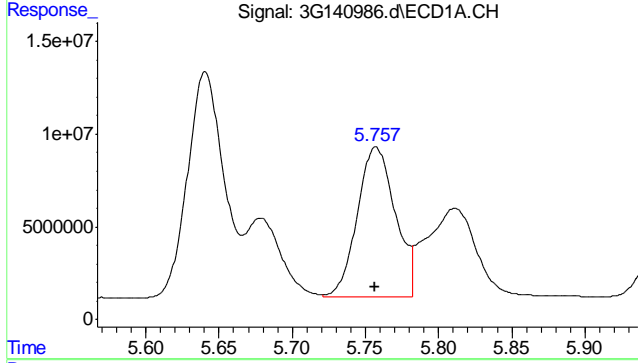
9.3.8  
 9



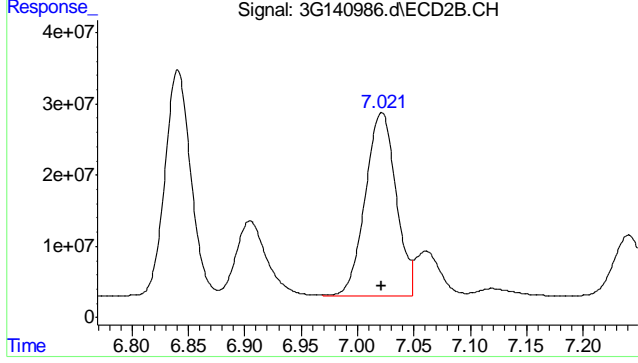
#20 AR1248-D  
 R.T.: 5.641 min  
 Delta R.T.: 0.000 min  
 Response: 209047602  
 Conc: 1286.51 PPB



#20 AR1248-D  
 R.T.: 6.841 min  
 Delta R.T.: 0.000 min  
 Response: 507835636  
 Conc: 2148.76 PPB



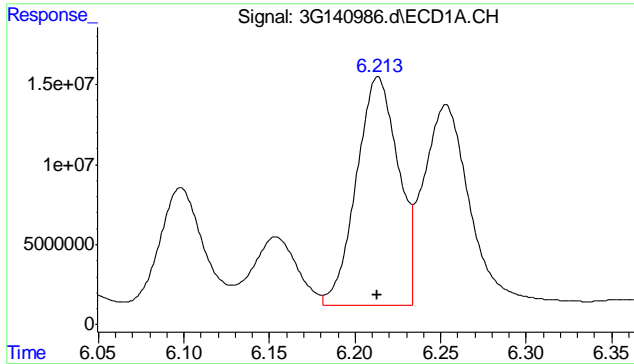
#21 AR1248-E  
 R.T.: 5.757 min  
 Delta R.T.: 0.000 min  
 Response: 147115299  
 Conc: 1304.09 PPB



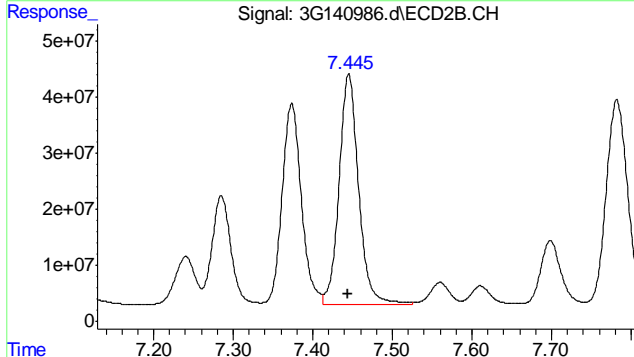
#21 AR1248-E  
 R.T.: 7.022 min  
 Delta R.T.: 0.000 min  
 Response: 490366914  
 Conc: 2195.97 PPB

9.3.8  
 9

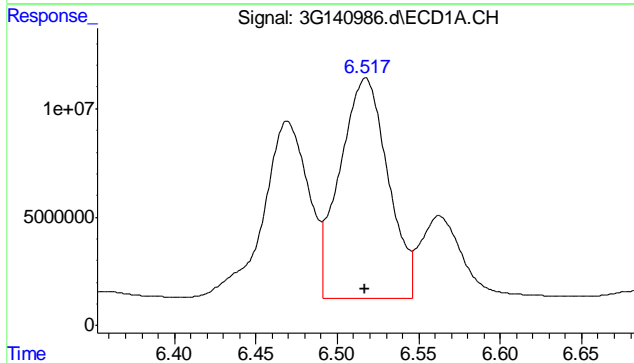




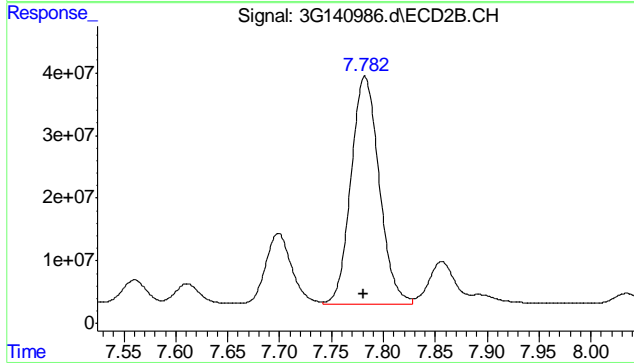
#22 AR1248-F  
R.T.: 6.213 min  
Delta R.T.: 0.000 min  
Response: 243964371  
Conc: 1390.49 PPB



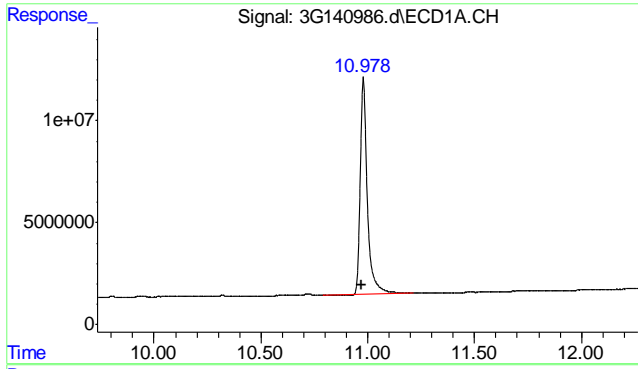
#22 AR1248-F  
R.T.: 7.445 min  
Delta R.T.: 0.000 min  
Response: 697587940  
Conc: 2204.70 PPB



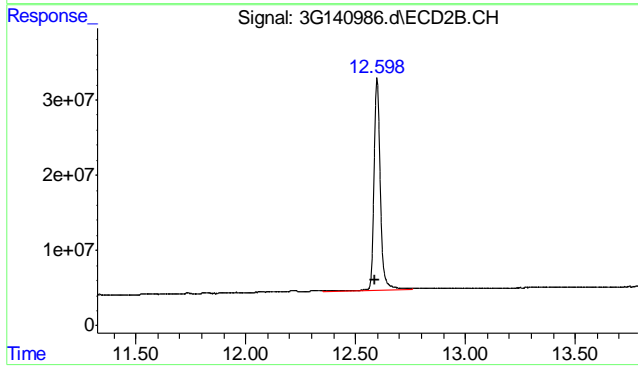
#23 AR1248-G  
R.T.: 6.517 min  
Delta R.T.: 0.000 min  
Response: 209281278  
Conc: 1311.49 PPB



#23 AR1248-G  
R.T.: 7.782 min  
Delta R.T.: 0.000 min  
Response: 684958175  
Conc: 2231.01 PPB



#51 Decachlorobiphenyl  
 R.T.: 10.979 min  
 Delta R.T.: 0.009 min  
 Response: 245214144  
 Conc: 57.44 ppb



#51 Decachlorobiphenyl  
 R.T.: 12.598 min  
 Delta R.T.: 0.007 min  
 Response: 550936242  
 Conc: 75.71 ppb

9.3.8  
 9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\1G6859\  
 Data File : 1g192517.d  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 29 Jan 2024 7:07 am  
 Operator : rebeccak  
 Sample : icc6859-25 (Pest Mix)  
 Misc : op51957,g1g6859,250,,,,2,1  
 ALS Vial : 2 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Jan 29 08:55:05 2024  
 Quant Method : C:\msdchem\1\methods\1PST6859.M  
 Quant Title : PEST/PCB  
 QLast Update : Sun Jan 14 21:56:30 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column  
 Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
 Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.299	1.256	462.5E6	355.8E6	50.000	50.000
27) I 1-bromo-2...	1.299	1.256	462.5E6	355.8E6	50.000	50.000
33) I 1-bromo-2...	1.299	1.256	462.5E6	355.8E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	1.768	1.874	212.2E6	104.9E6	23.407	24.409
Spiked Amount	40.000	Range	30 - 150	Recovery	=	58.52% 61.02%
26) SA Decachlor...	8.834	10.235f	220.9E6	179.5E6	26.438	21.793
Spiked Amount	40.000		Recovery	=	66.09%	54.48%
Target Compounds						
3) Hexachlor...	2.045	2.265	243.3E6	248.0E6	21.882	20.698
4) A alpha-BHC	2.155	2.368	314.0E6	256.8E6	19.728	21.085
5) MA gamma-BHC	2.406	2.705	283.6E6	231.5E6	20.655	20.918
6) MA Heptachlor	2.821	3.177	307.1E6	248.4E6	21.230	21.273
7) B beta-BHC	2.483	2.789	127.4E6	87131567	21.444	20.661
8) B delta-BHC	2.642	3.103	254.9E6	216.3E6	19.323	20.263
9) MB Aldrin	3.114	3.553	276.6E6	232.4E6	20.689	21.118
10) Alachlor	3.244	3.404	35410333	22009477	23.201	21.704
11) B Heptachlo...	3.762	4.272	268.7E6	210.6E6	21.111	20.495
12) B gamma-Chl...	3.914	4.537	268.5E6	216.4E6	21.142	20.810
13) B alpha-Chl...	4.074	4.741	265.3E6	208.2E6	21.566	20.795
14) A Endosulfan I	4.240	4.820	262.9E6	203.5E6	21.712	20.552
15) B 4,4'-DDE	4.188	5.005	218.4E6	198.9E6	19.181	20.965
16) MA Dieldrin	4.550	5.224	262.1E6	218.1E6	20.435	20.515
17) MA Endrin	4.861	5.689	247.3E6	201.2E6	20.313	20.356
18) A 4,4'-DDD	5.006	5.917f	189.4E6	151.2E6	19.337	20.510
19) B Endosulfa...	5.182	6.037	231.0E6	189.6E6	20.682	20.241
20) MA 4,4'-DDT	5.405	6.431f	185.2E6	133.2E6	18.729	18.827
21) B Endrin Al...	5.806	6.598f	172.4E6	129.5E6	21.911	19.144
22) B Endosulfa...	6.493	7.080f	212.8E6	159.5E6	21.105	19.867
23) A Methoxychlor	6.208	7.673f	117.5E6	76469683	19.841	18.198
24) Mirex	6.315	7.926f	202.1E6	127.5E6	23.057	18.821
25) B Endrin Ke...	6.945	8.011f	248.6E6	188.6E6	20.487	20.246
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000

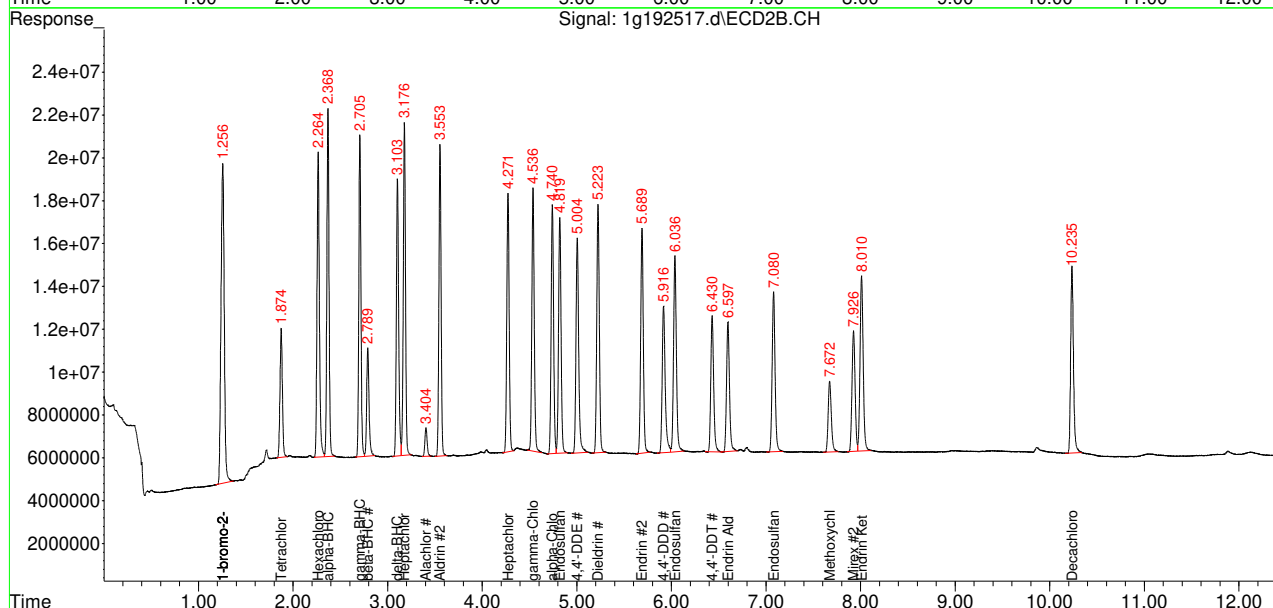
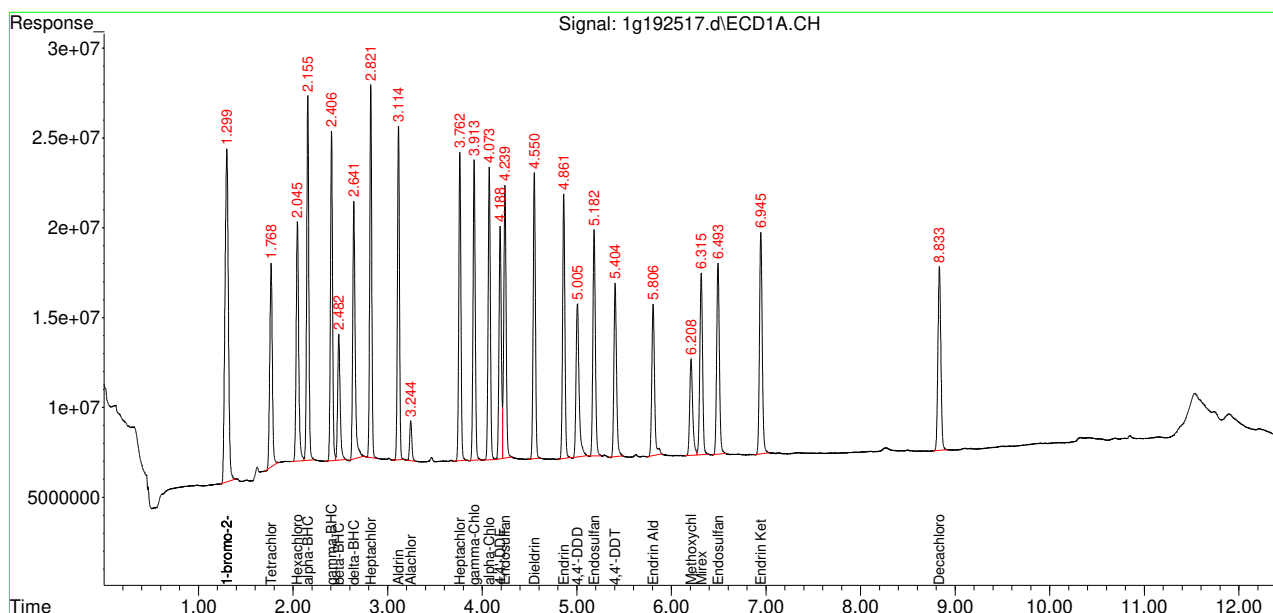
SemiQuant Compounds - Not Calibrated on this Instrument

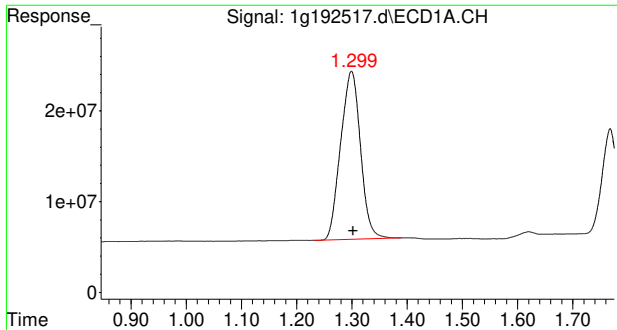
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : C:\msdchem\1\data\1G6859\  
 Data File : 1g192517.d  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 29 Jan 2024 7:07 am  
 Operator : rebeccak  
 Sample : icc6859-25 (Pest Mix)  
 Misc : op51957,g1g6859,250,,,2,1  
 ALS Vial : 2 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

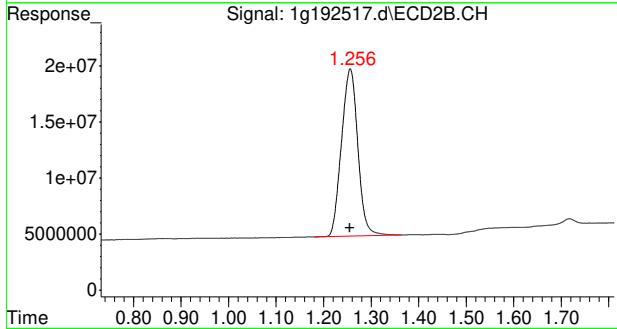
Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Jan 29 08:55:05 2024  
 Quant Method : C:\msdchem\1\methods\1PST6859.M  
 Quant Title : PEST/PCB  
 QLast Update : Sun Jan 14 21:56:30 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column  
 Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
 Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

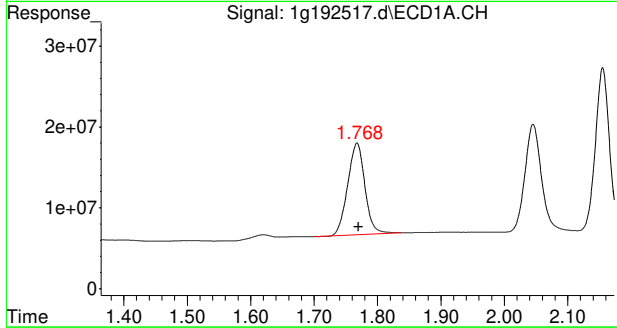




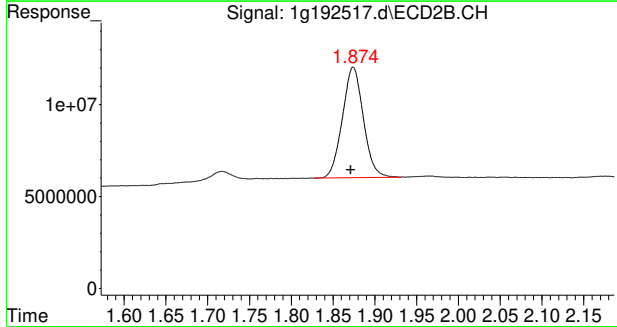
#1 1-bromo-2-nitrobenzene  
 R.T.: 1.299 min  
 Delta R.T.: -0.003 min  
 Response: 462539575  
 Conc: 50.00 PPB



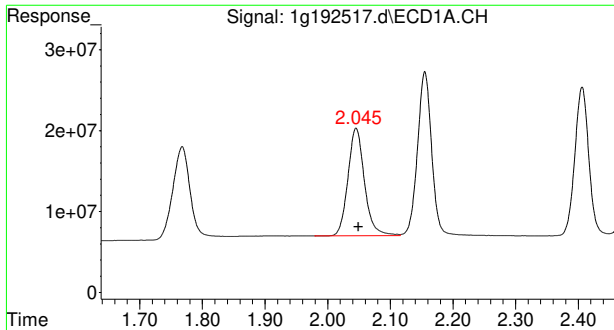
#1 1-bromo-2-nitrobenzene  
 R.T.: 1.256 min  
 Delta R.T.: 0.001 min  
 Response: 355808252  
 Conc: 50.00 PPB



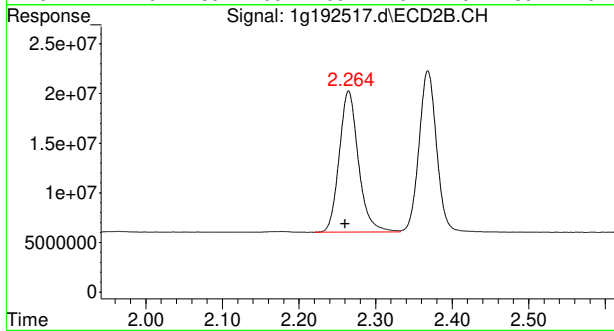
#2 Tetrachloro-m-xylene  
 R.T.: 1.768 min  
 Delta R.T.: -0.002 min  
 Response: 212241883  
 Conc: 23.41 PPB



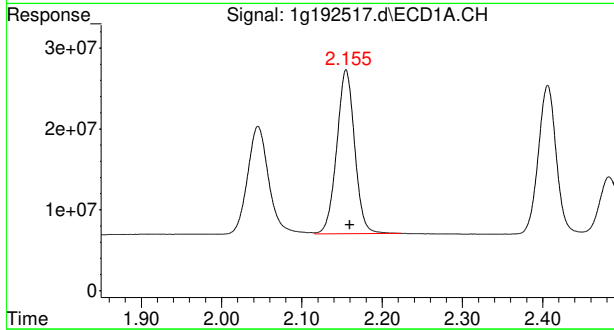
#2 Tetrachloro-m-xylene  
 R.T.: 1.874 min  
 Delta R.T.: 0.003 min  
 Response: 104922995  
 Conc: 24.41 PPB



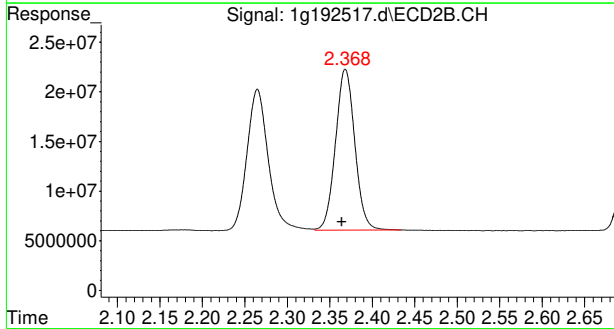
#3 Hexachlorobenzene  
 R.T.: 2.045 min  
 Delta R.T.: -0.003 min  
 Response: 243299341  
 Conc: 21.88 PPB



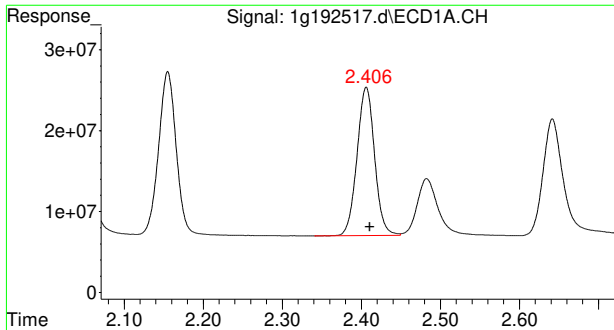
#3 Hexachlorobenzene  
 R.T.: 2.265 min  
 Delta R.T.: 0.004 min  
 Response: 248039769  
 Conc: 20.70 PPB



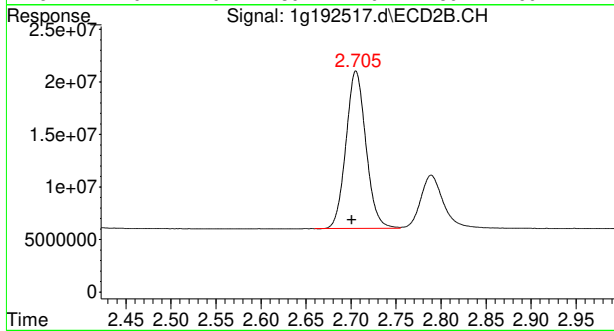
#4 alpha-BHC  
 R.T.: 2.155 min  
 Delta R.T.: -0.005 min  
 Response: 313956181  
 Conc: 19.73 PPB



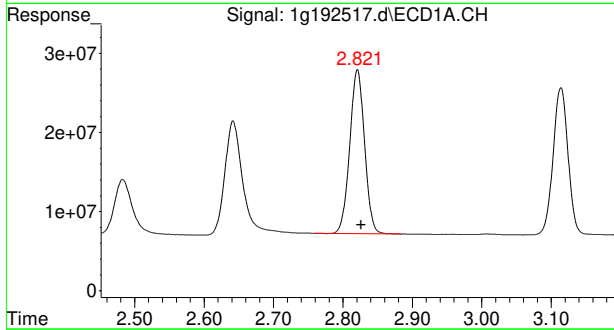
#4 alpha-BHC  
 R.T.: 2.368 min  
 Delta R.T.: 0.004 min  
 Response: 256837759  
 Conc: 21.09 PPB



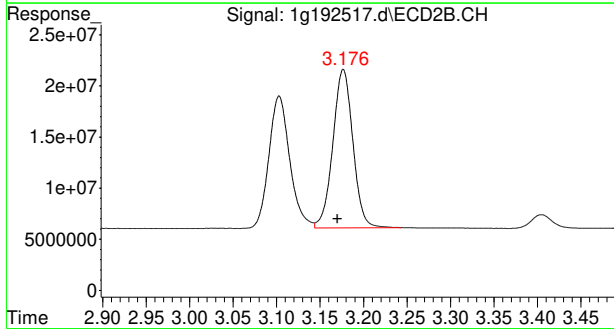
#5 gamma-BHC  
 R.T.: 2.406 min  
 Delta R.T.: -0.004 min  
 Response: 283617205  
 Conc: 20.65 PPB



#5 gamma-BHC  
 R.T.: 2.705 min  
 Delta R.T.: 0.005 min  
 Response: 231515591  
 Conc: 20.92 PPB

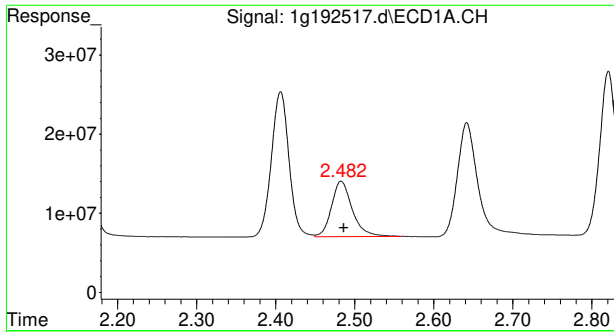


#6 Heptachlor  
 R.T.: 2.821 min  
 Delta R.T.: -0.005 min  
 Response: 307145847  
 Conc: 21.23 PPB

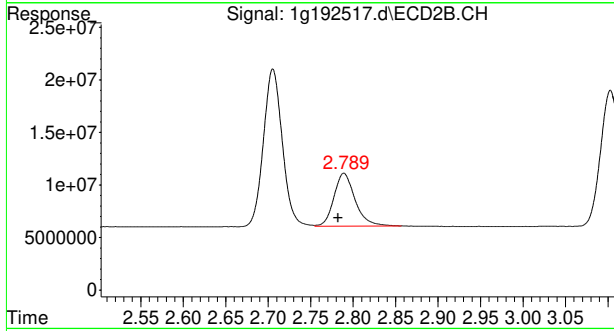


#6 Heptachlor  
 R.T.: 3.177 min  
 Delta R.T.: 0.007 min  
 Response: 248357449  
 Conc: 21.27 PPB

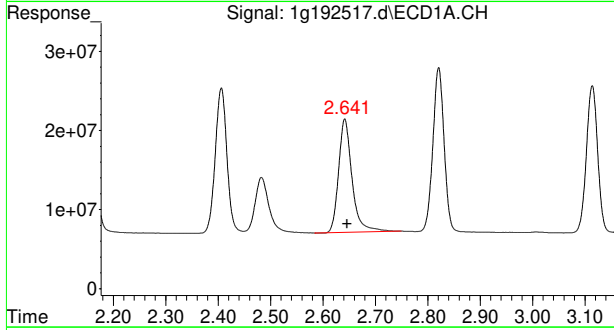
9.3.9  
 9



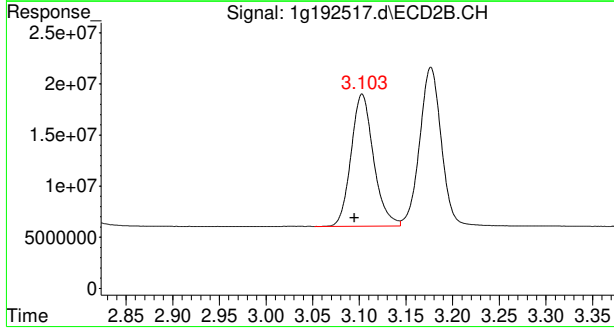
#7 beta-BHC  
 R.T.: 2.483 min  
 Delta R.T.: -0.003 min  
 Response: 127404521  
 Conc: 21.44 PPB



#7 beta-BHC  
 R.T.: 2.789 min  
 Delta R.T.: 0.007 min  
 Response: 87131567  
 Conc: 20.66 PPB



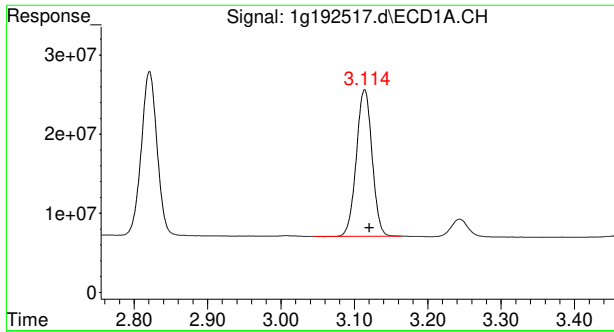
#8 delta-BHC  
 R.T.: 2.642 min  
 Delta R.T.: -0.004 min  
 Response: 254869851  
 Conc: 19.32 PPB



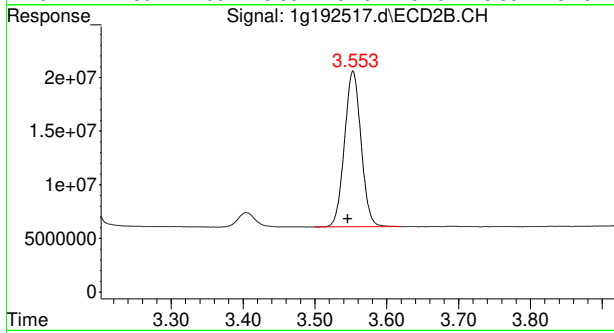
#8 delta-BHC  
 R.T.: 3.103 min  
 Delta R.T.: 0.008 min  
 Response: 216334027  
 Conc: 20.26 PPB

9.3.9  
**9**

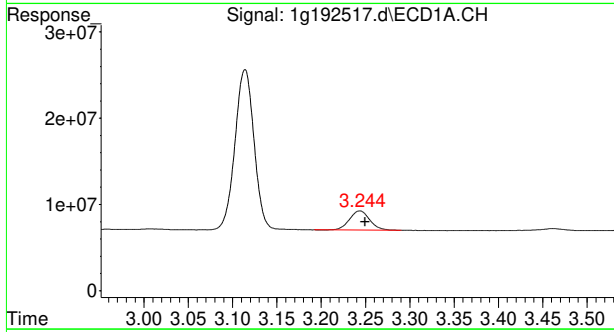




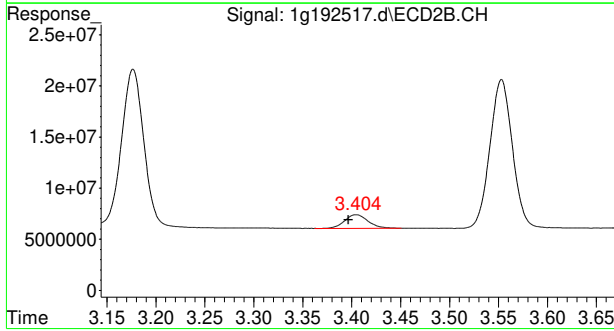
#9 Aldrin  
 R.T.: 3.114 min  
 Delta R.T.: -0.006 min  
 Response: 276584848  
 Conc: 20.69 PPB



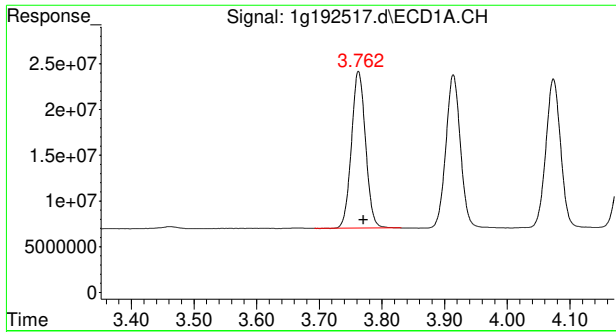
#9 Aldrin  
 R.T.: 3.553 min  
 Delta R.T.: 0.007 min  
 Response: 232382878  
 Conc: 21.12 PPB



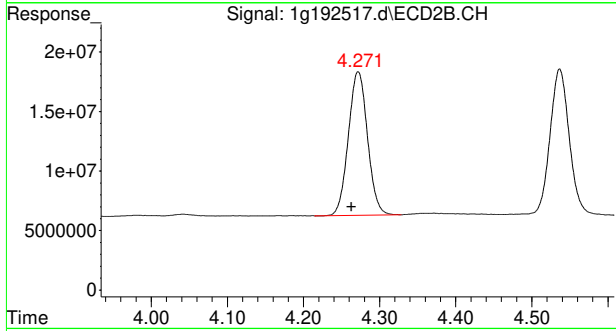
#10 Alachlor  
 R.T.: 3.244 min  
 Delta R.T.: -0.006 min  
 Response: 35410333  
 Conc: 23.20 PPB



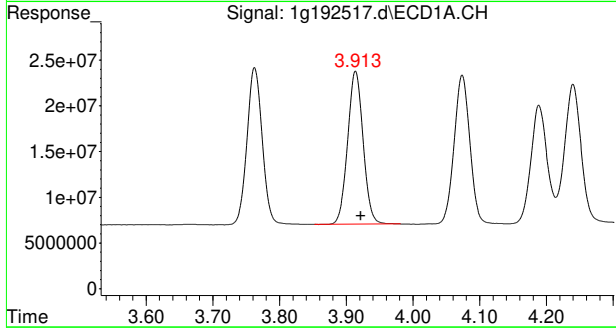
#10 Alachlor  
 R.T.: 3.404 min  
 Delta R.T.: 0.008 min  
 Response: 22009477  
 Conc: 21.70 PPB



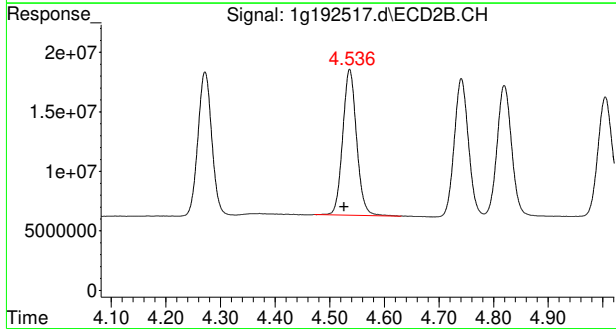
#11 Heptachlor Epoxide  
 R.T.: 3.762 min  
 Delta R.T.: -0.008 min  
 Response: 268672624  
 Conc: 21.11 PPB



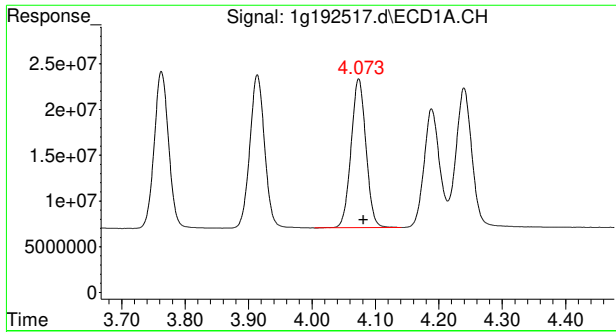
#11 Heptachlor Epoxide  
 R.T.: 4.272 min  
 Delta R.T.: 0.009 min  
 Response: 210607224  
 Conc: 20.49 PPB



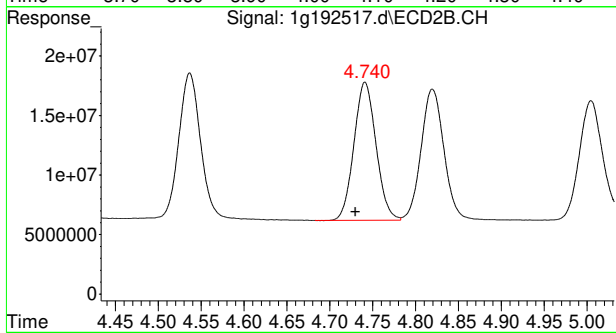
#12 gamma-Chlordane  
 R.T.: 3.914 min  
 Delta R.T.: -0.008 min  
 Response: 268466033  
 Conc: 21.14 PPB



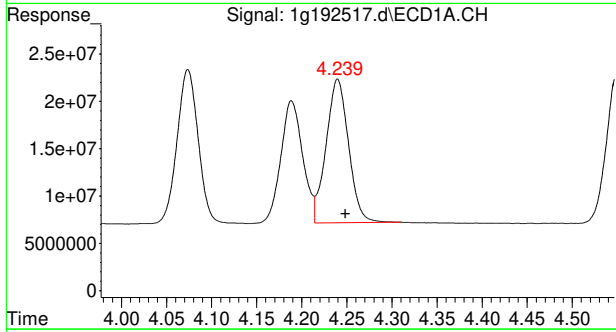
#12 gamma-Chlordane  
 R.T.: 4.537 min  
 Delta R.T.: 0.010 min  
 Response: 216378325  
 Conc: 20.81 PPB



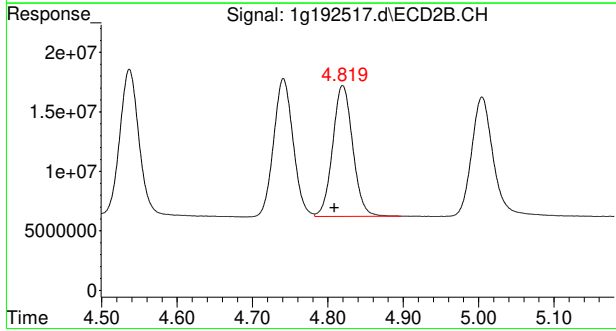
#13 alpha-Chlordane  
 R.T.: 4.074 min  
 Delta R.T.: -0.007 min  
 Response: 265330485  
 Conc: 21.57 PPB



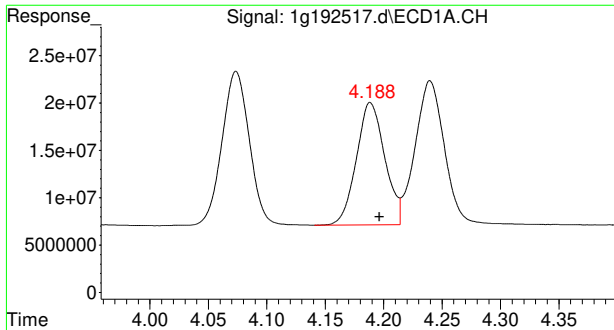
#13 alpha-Chlordane  
 R.T.: 4.741 min  
 Delta R.T.: 0.011 min  
 Response: 208154572  
 Conc: 20.79 PPB



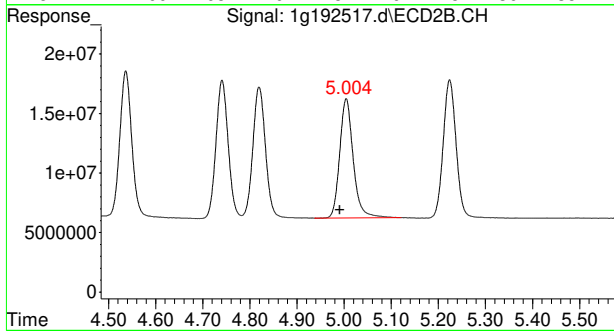
#14 Endosulfan I  
 R.T.: 4.240 min  
 Delta R.T.: -0.009 min  
 Response: 262862441  
 Conc: 21.71 PPB



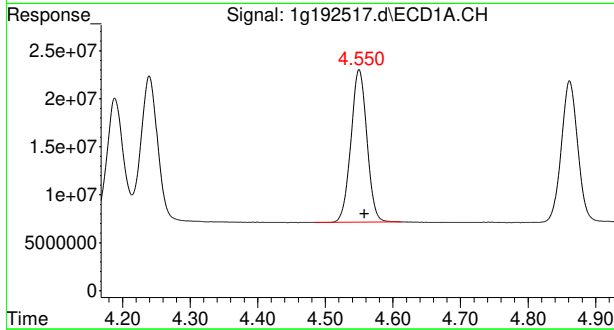
#14 Endosulfan I  
 R.T.: 4.820 min  
 Delta R.T.: 0.011 min  
 Response: 203495953  
 Conc: 20.55 PPB



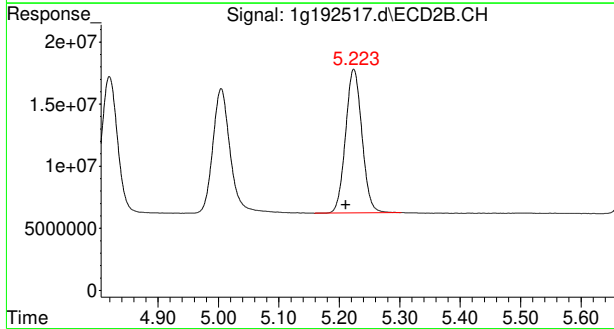
#15 4,4'-DDE  
 R.T.: 4.188 min  
 Delta R.T.: -0.008 min  
 Response: 218352271  
 Conc: 19.18 PPB



#15 4,4'-DDE  
 R.T.: 5.005 min  
 Delta R.T.: 0.014 min  
 Response: 198918656  
 Conc: 20.97 PPB

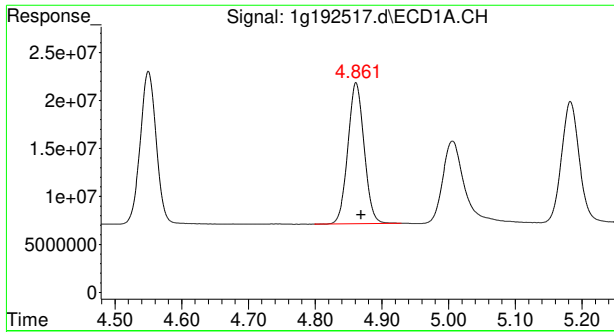


#16 Dieldrin  
 R.T.: 4.550 min  
 Delta R.T.: -0.008 min  
 Response: 262100820  
 Conc: 20.43 PPB

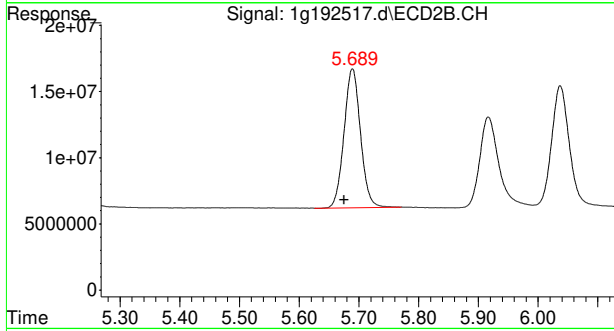


#16 Dieldrin  
 R.T.: 5.224 min  
 Delta R.T.: 0.013 min  
 Response: 218149120  
 Conc: 20.51 PPB

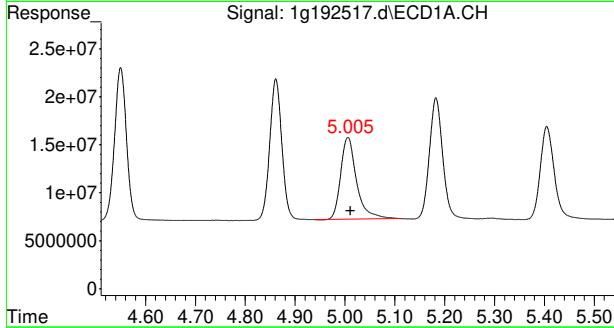
9.3.9  
 9



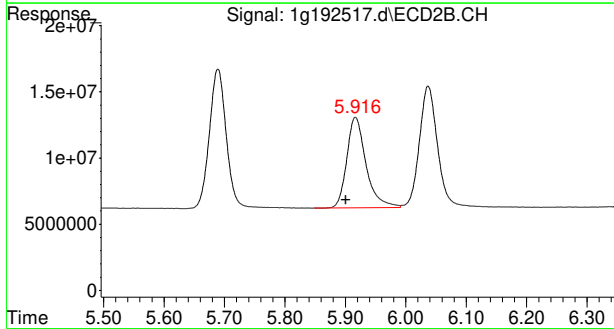
#17 Endrin  
 R.T.: 4.861 min  
 Delta R.T.: -0.008 min  
 Response: 247280873  
 Conc: 20.31 PPB



#17 Endrin  
 R.T.: 5.689 min  
 Delta R.T.: 0.014 min  
 Response: 201158150  
 Conc: 20.36 PPB

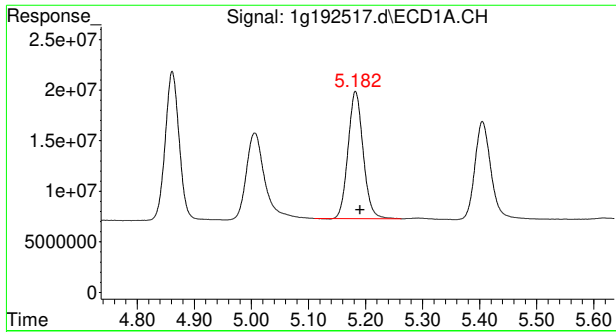


#18 4,4'-DDD  
 R.T.: 5.006 min  
 Delta R.T.: -0.005 min  
 Response: 189415177  
 Conc: 19.34 PPB

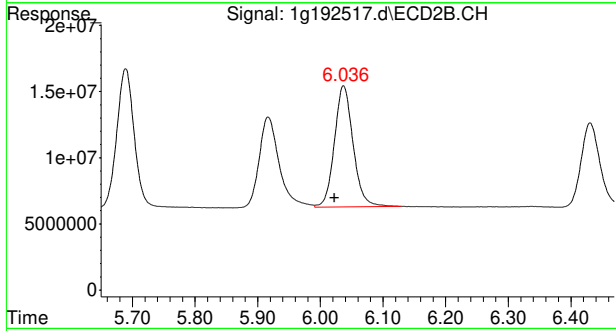


#18 4,4'-DDD  
 R.T.: 5.917 min  
 Delta R.T.: 0.016 min  
 Response: 151249188  
 Conc: 20.51 PPB

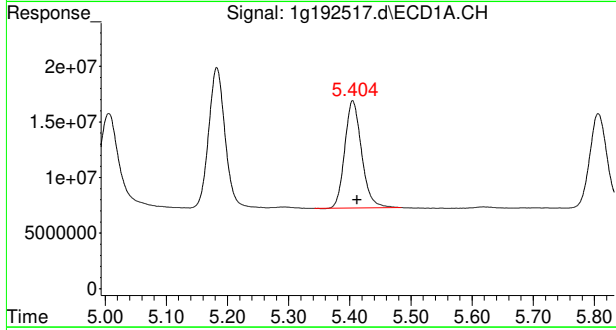
9.3.9  
**9**



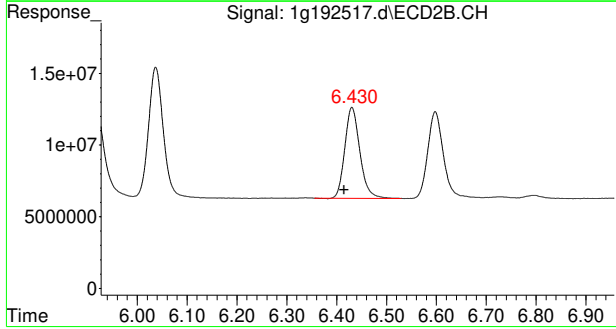
#19 Endosulfan II  
 R.T.: 5.182 min  
 Delta R.T.: -0.008 min  
 Response: 231038239  
 Conc: 20.68 PPB



#19 Endosulfan II  
 R.T.: 6.037 min  
 Delta R.T.: 0.015 min  
 Response: 189646666  
 Conc: 20.24 PPB

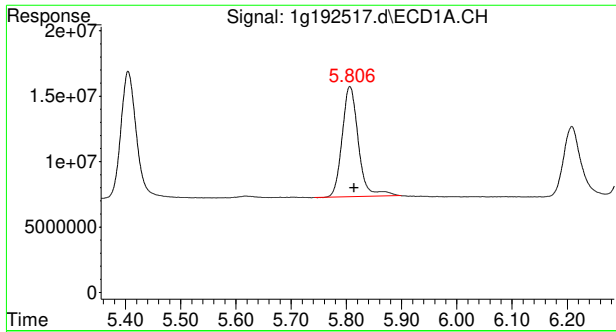


#20 4,4'-DDT  
 R.T.: 5.405 min  
 Delta R.T.: -0.007 min  
 Response: 185202740  
 Conc: 18.73 PPB

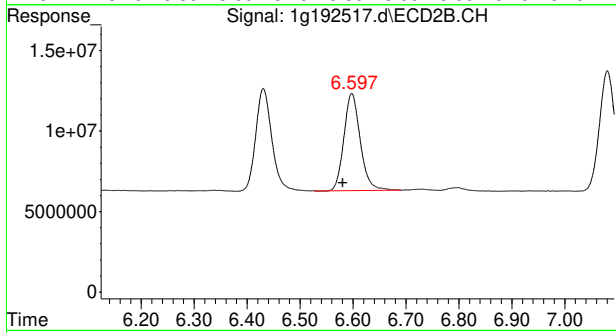


#20 4,4'-DDT  
 R.T.: 6.431 min  
 Delta R.T.: 0.016 min  
 Response: 133162070  
 Conc: 18.83 PPB

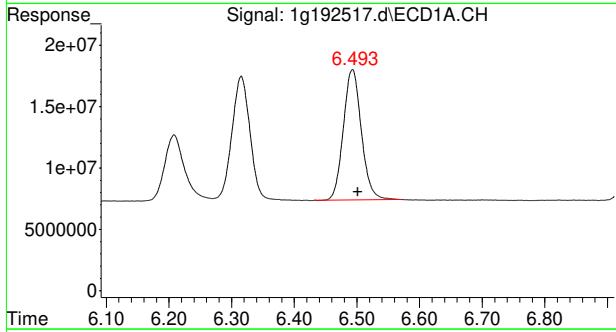
9.3.9  
**9**



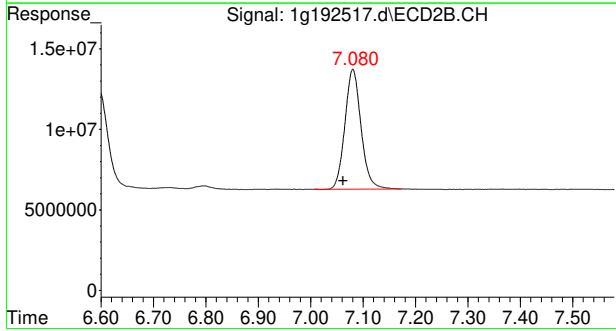
#21 Endrin Aldehyde  
 R.T.: 5.806 min  
 Delta R.T.: -0.008 min  
 Response: 172436761  
 Conc: 21.91 PPB



#21 Endrin Aldehyde  
 R.T.: 6.598 min  
 Delta R.T.: 0.017 min  
 Response: 129472053  
 Conc: 19.14 PPB

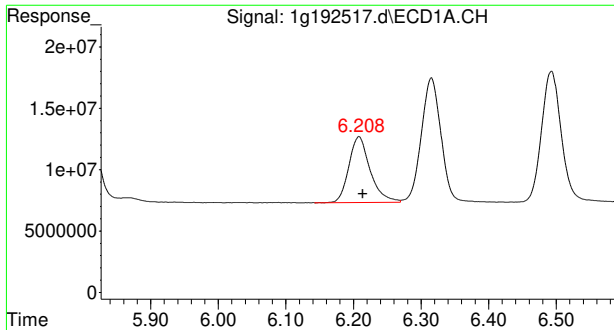


#22 Endosulfan Sulfate  
 R.T.: 6.493 min  
 Delta R.T.: -0.009 min  
 Response: 212824057  
 Conc: 21.10 PPB

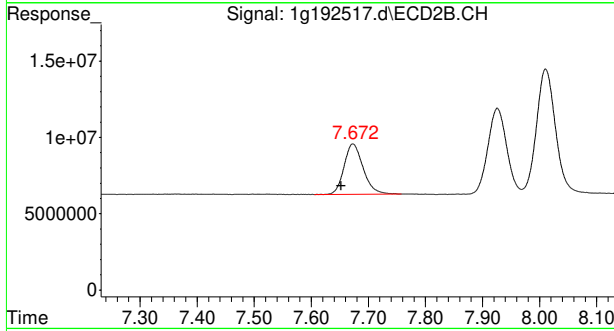


#22 Endosulfan Sulfate  
 R.T.: 7.080 min  
 Delta R.T.: 0.019 min  
 Response: 159459543  
 Conc: 19.87 PPB

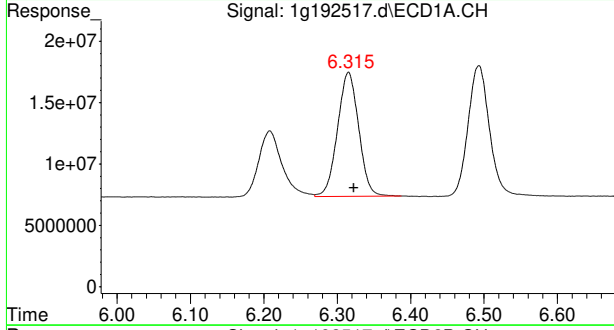
9.3.9  
**9**



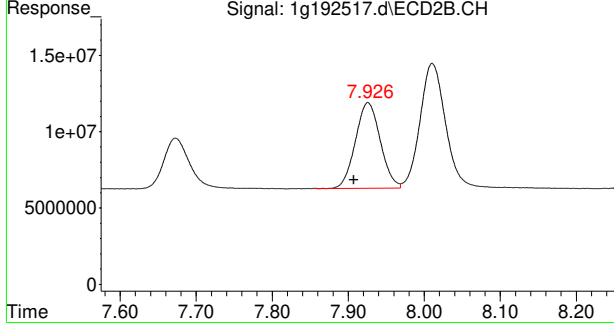
#23 Methoxychlor  
 R.T.: 6.208 min  
 Delta R.T.: -0.005 min  
 Response: 117465590  
 Conc: 19.84 PPB



#23 Methoxychlor  
 R.T.: 7.673 min  
 Delta R.T.: 0.021 min  
 Response: 76469683  
 Conc: 18.20 PPB



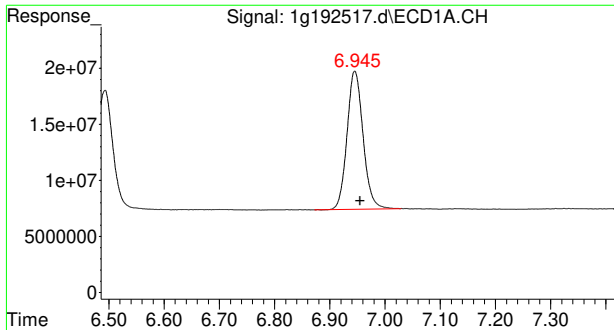
#24 Mirex  
 R.T.: 6.315 min  
 Delta R.T.: -0.007 min  
 Response: 202097591  
 Conc: 23.06 PPB



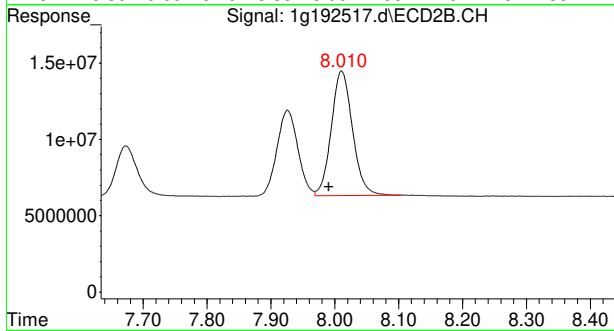
#24 Mirex  
 R.T.: 7.926 min  
 Delta R.T.: 0.019 min  
 Response: 127498387  
 Conc: 18.82 PPB

9.3.9  
**9**

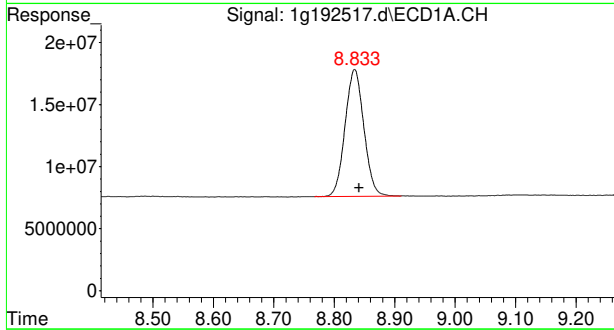




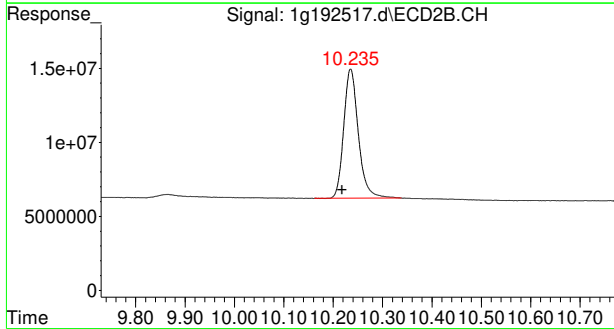
#25 Endrin Ketone  
 R.T.: 6.945 min  
 Delta R.T.: -0.009 min  
 Response: 248639456  
 Conc: 20.49 PPB



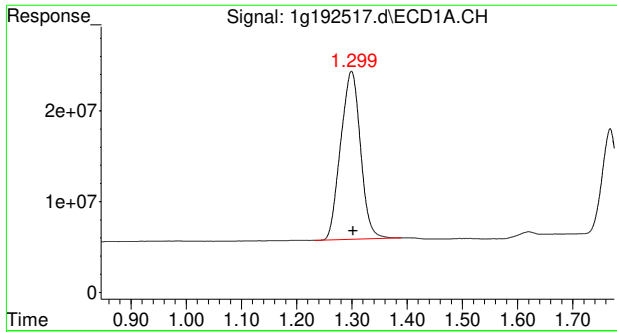
#25 Endrin Ketone  
 R.T.: 8.011 min  
 Delta R.T.: 0.020 min  
 Response: 188557465  
 Conc: 20.25 PPB



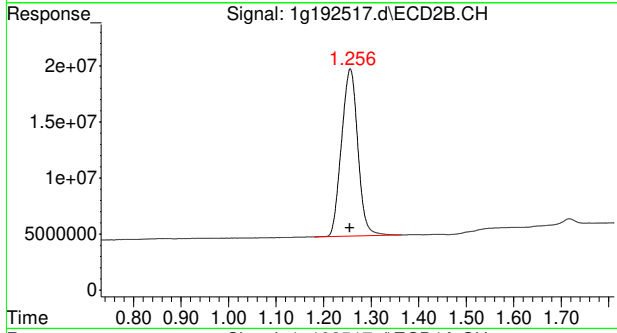
#26 Decachlorobiphenyl  
 R.T.: 8.834 min  
 Delta R.T.: -0.007 min  
 Response: 220931520  
 Conc: 26.44 PPB



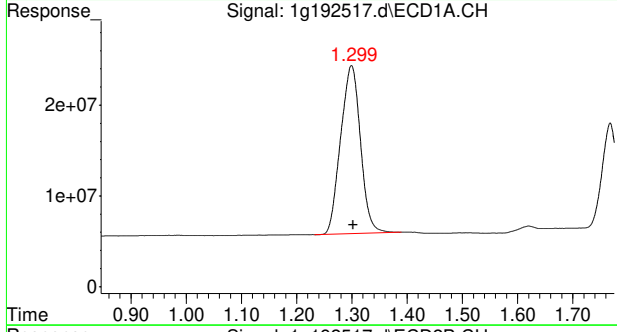
#26 Decachlorobiphenyl  
 R.T.: 10.235 min  
 Delta R.T.: 0.017 min  
 Response: 179529109  
 Conc: 21.79 PPB



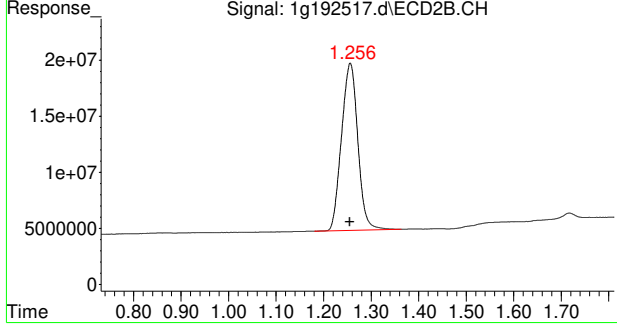
#27 1-bromo-2-nitrobenzeneA  
 R.T.: 1.299 min  
 Delta R.T.: -0.003 min  
 Response: 462539575  
 Conc: 50.00 PPB



#27 1-bromo-2-nitrobenzeneA  
 R.T.: 1.256 min  
 Delta R.T.: 0.001 min  
 Response: 355808252  
 Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB  
 R.T.: 1.299 min  
 Delta R.T.: -0.003 min  
 Response: 462539575  
 Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB  
 R.T.: 1.256 min  
 Delta R.T.: 0.001 min  
 Response: 355808252  
 Conc: 50.00 PPB

9.3.9  
**9**

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\1G6859\  
 Data File : 1g192521.d  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 29 Jan 2024 8:12 am  
 Operator : rebeccak  
 Sample : ic6859-500 (Chlordane)  
 Misc : op51957,g1g6859,250,,,2,1  
 ALS Vial : 12 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Jan 29 09:28:35 2024  
 Quant Method : C:\msdchem\1\methods\1PST6859.M  
 Quant Title : PEST/PCB  
 QLast Update : Mon Jan 29 09:04:20 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column  
 Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
 Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
-----						
Internal Standards						
1) I 1-bromo-2...	1.300	1.257	470.1E6	358.8E6	50.000	50.000
27) I 1-bromo-2...	1.300	1.257	470.1E6	358.8E6	50.000	50.000
33) I 1-bromo-2...	1.300	1.257	470.1E6	358.8E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	1.768	1.875	479.6E6	280.4E6	52.039	64.698
Spiked Amount	40.000	Range 30 - 150	Recovery =	130.10%	161.74%#	
26) SA Decachlor...	8.833	10.235	453.9E6	385.5E6	53.446	46.406
Spiked Amount	40.000		Recovery =	133.62%	116.02%	
Target Compounds						
Sum Toxaphene			0	0	N.D.	N.D.
Average Toxaphene					0.000	0.000
34) Chlordane...	2.821	3.177	314.0E6	244.6E6	521.617	491.890
35) Chlordane...	3.249	3.727	189.3E6	128.5E6	555.231	496.477
36) Chlordane...	3.915	4.537	613.4E6	486.0E6	486.929	484.165
37) Chlordane...	4.065	4.741	967.7E6	768.9E6	486.195	468.562m
38) Chlordane...	5.087	6.110	139.1E6	112.1E6	468.970	471.847

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

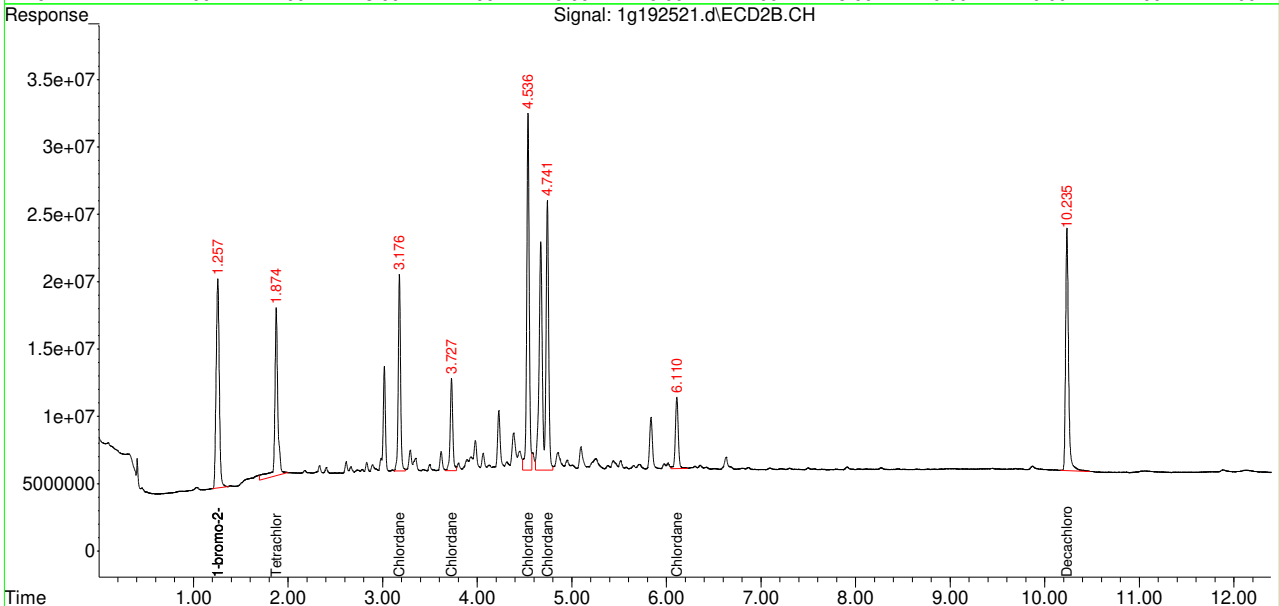
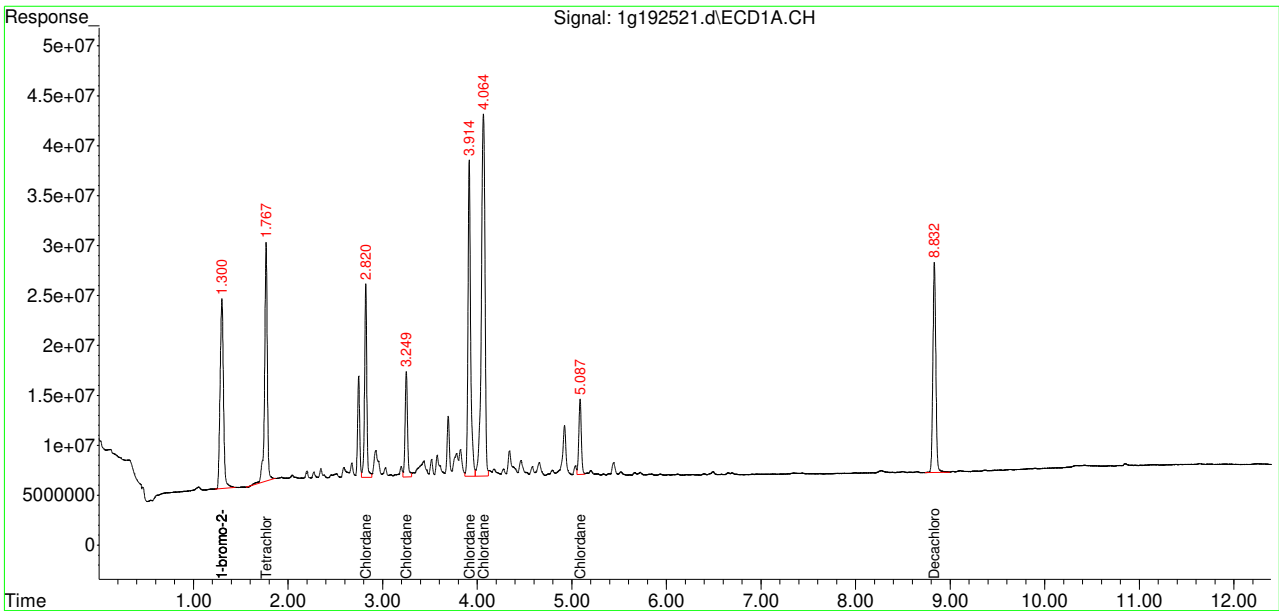
9.3.10  
**9**

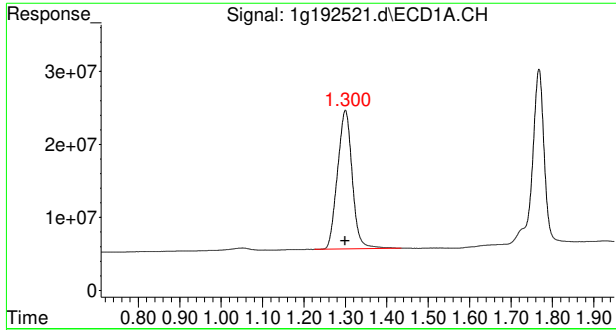
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\1G6859\  
Data File : 1g192521.d  
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
Acq On : 29 Jan 2024 8:12 am  
Operator : rebeccak  
Sample : ic6859-500 (Chlordane)  
Misc : op51957,g1g6859,250,,,2,1  
ALS Vial : 12 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

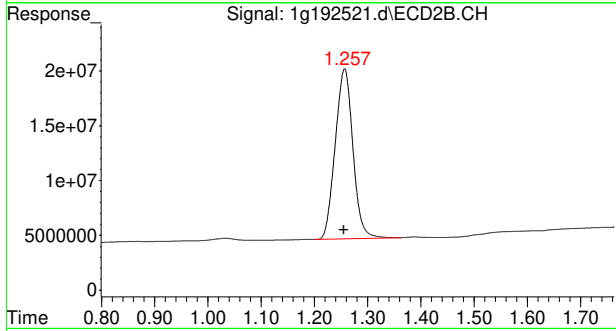
Integration File signal 1: autoint1.e  
Integration File signal 2: autoint2.e  
Quant Time: Jan 29 09:28:35 2024  
Quant Method : C:\msdchem\1\methods\1PST6859.M  
Quant Title : PEST/PCB  
QLast Update : Mon Jan 29 09:04:20 2024  
Response via : Initial Calibration  
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column  
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

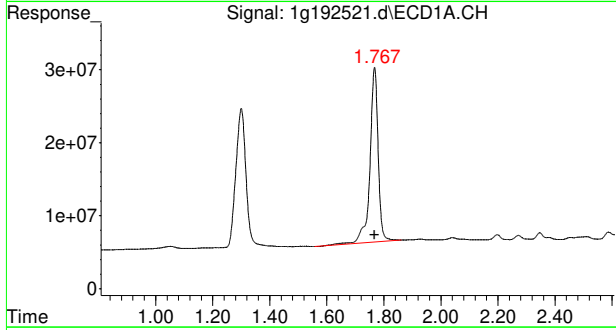




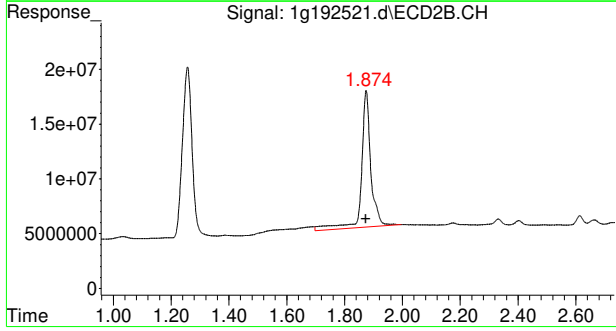
#1 1-bromo-2-nitrobenzene  
 R.T.: 1.300 min  
 Delta R.T.: 0.001 min  
 Response: 470128949  
 Conc: 50.00 PPB



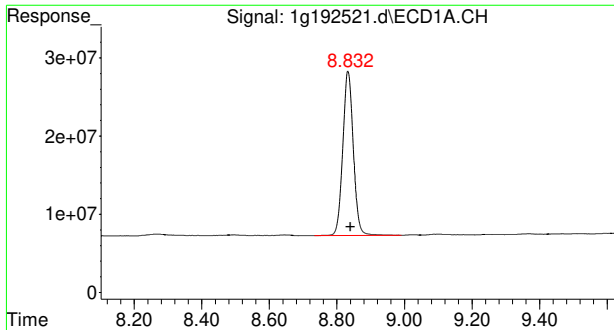
#1 1-bromo-2-nitrobenzene  
 R.T.: 1.257 min  
 Delta R.T.: 0.002 min  
 Response: 358782352  
 Conc: 50.00 PPB



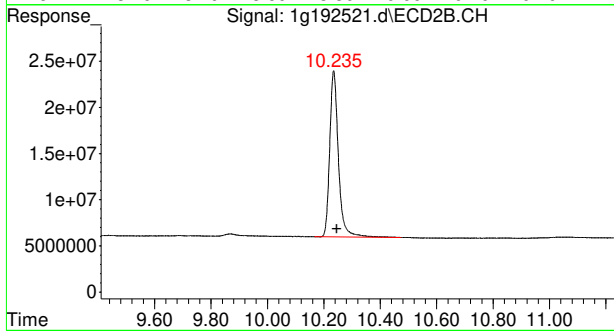
#2 Tetrachloro-m-xylene  
 R.T.: 1.768 min  
 Delta R.T.: 0.000 min  
 Response: 479590507  
 Conc: 52.04 PPB



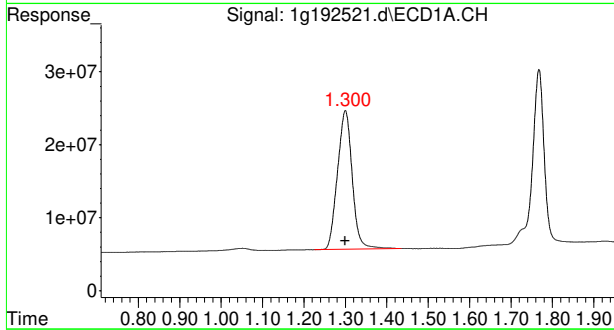
#2 Tetrachloro-m-xylene  
 R.T.: 1.875 min  
 Delta R.T.: 0.002 min  
 Response: 280433182  
 Conc: 64.70 PPB



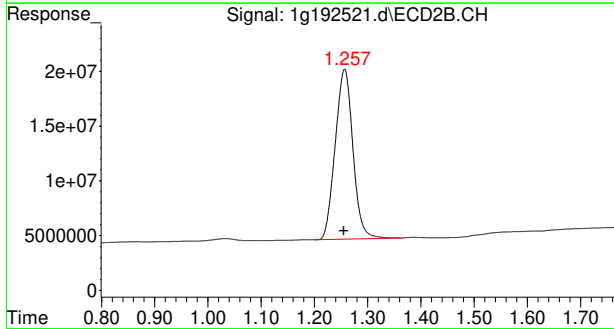
#26 Decachlorobiphenyl  
 R.T.: 8.833 min  
 Delta R.T.: -0.006 min  
 Response: 453949727  
 Conc: 53.45 PPB



#26 Decachlorobiphenyl  
 R.T.: 10.235 min  
 Delta R.T.: -0.011 min  
 Response: 385490093  
 Conc: 46.41 PPB

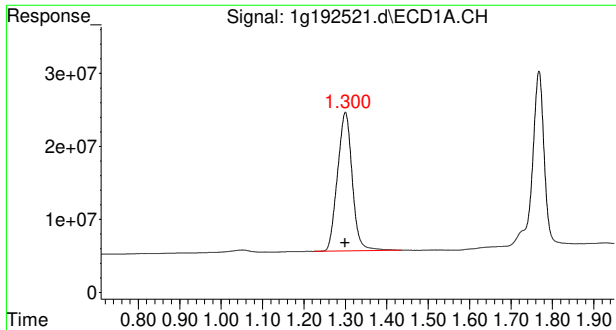


#27 1-bromo-2-nitrobenzeneA  
 R.T.: 1.300 min  
 Delta R.T.: 0.001 min  
 Response: 470128949  
 Conc: 50.00 PPB

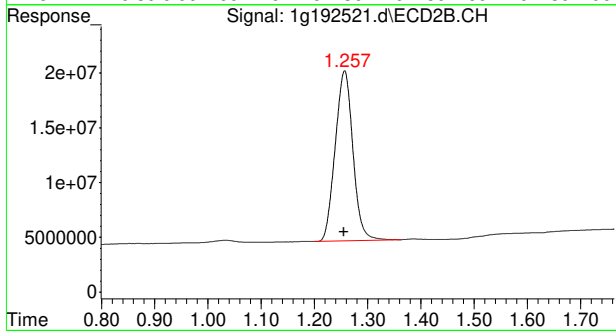


#27 1-bromo-2-nitrobenzeneA  
 R.T.: 1.257 min  
 Delta R.T.: 0.002 min  
 Response: 358782352  
 Conc: 50.00 PPB

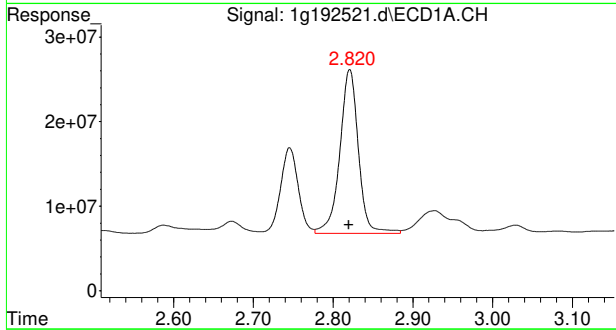
9.3.10  
**9**



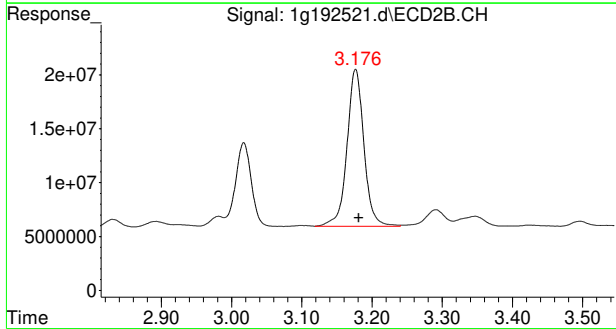
#33 1-bromo-2-nitrobenzeneB  
 R.T.: 1.300 min  
 Delta R.T.: 0.001 min  
 Response: 470128949  
 Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB  
 R.T.: 1.257 min  
 Delta R.T.: 0.002 min  
 Response: 358782352  
 Conc: 50.00 PPB

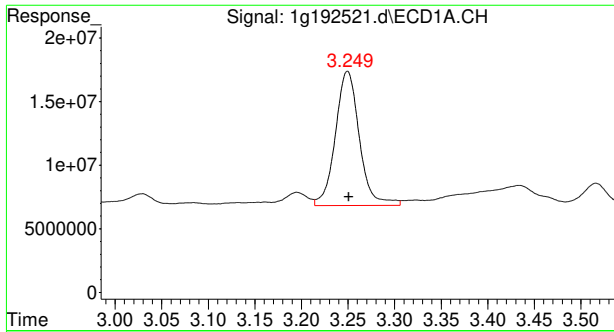


#34 Chlordane {A}  
 R.T.: 2.821 min  
 Delta R.T.: 0.000 min  
 Response: 313959623  
 Conc: 521.62 PPB

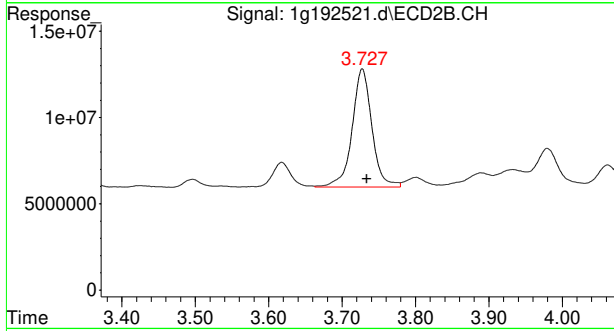


#34 Chlordane {A}  
 R.T.: 3.177 min  
 Delta R.T.: -0.004 min  
 Response: 244553281  
 Conc: 491.89 PPB

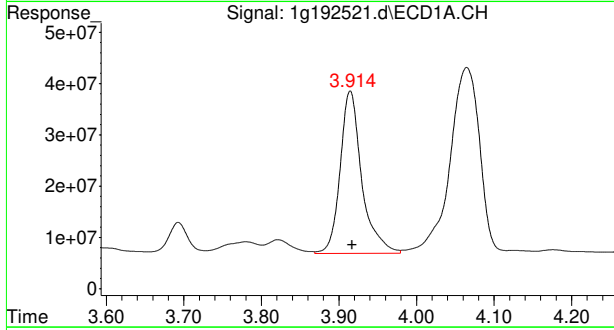
9.3.10  
**9**



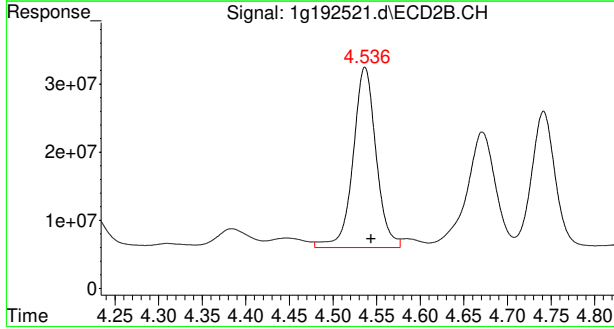
#35 Chlordane {B}  
 R.T.: 3.249 min  
 Delta R.T.: -0.001 min  
 Response: 189280092  
 Conc: 555.23 PPB



#35 Chlordane {B}  
 R.T.: 3.727 min  
 Delta R.T.: -0.006 min  
 Response: 128492574  
 Conc: 496.48 PPB

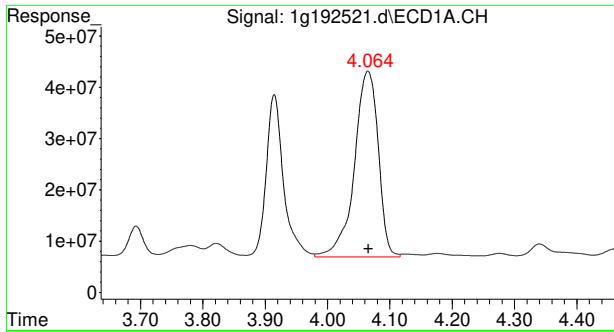


#36 Chlordane {C}  
 R.T.: 3.915 min  
 Delta R.T.: -0.002 min  
 Response: 613414269  
 Conc: 486.93 PPB

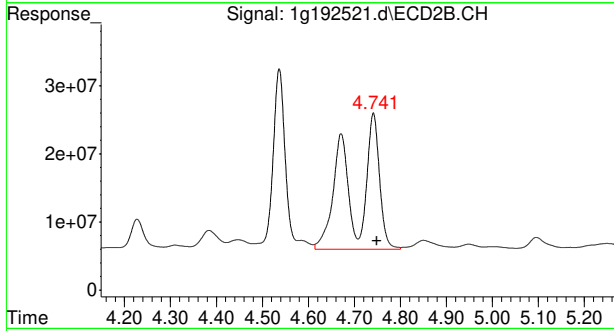


#36 Chlordane {C}  
 R.T.: 4.537 min  
 Delta R.T.: -0.007 min  
 Response: 486042452  
 Conc: 484.16 PPB

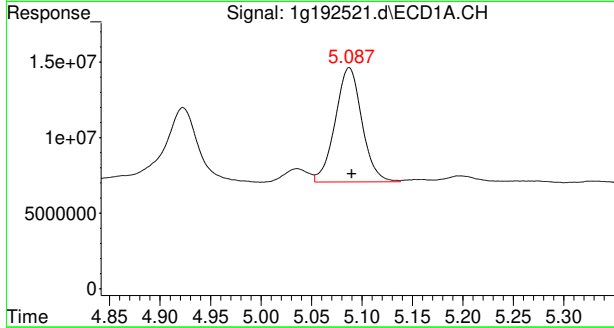




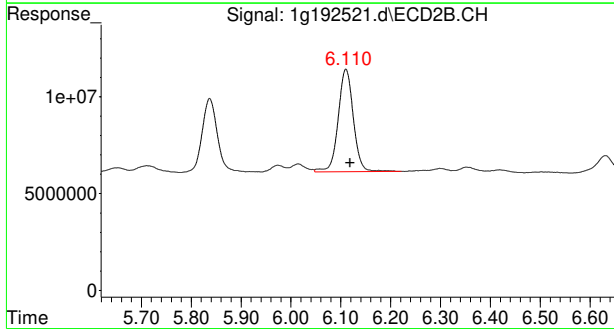
#37 Chlordane {D}  
 R.T.: 4.065 min  
 Delta R.T.: 0.000 min  
 Response: 967669106  
 Conc: 486.19 PPB



#37 Chlordane {D}  
 R.T.: 4.741 min  
 Delta R.T.: -0.007 min  
 Response: 768931431  
 Conc: 468.56 PPB m



#38 Chlordane {E}  
 R.T.: 5.087 min  
 Delta R.T.: -0.002 min  
 Response: 139111937  
 Conc: 468.97 PPB



#38 Chlordane {E}  
 R.T.: 6.110 min  
 Delta R.T.: -0.008 min  
 Response: 112125062  
 Conc: 471.85 PPB

9.3.10  
**9**

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\1G6859\  
 Data File : 1g192522.d  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 29 Jan 2024 8:28 am  
 Operator : rebeccak  
 Sample : ic6859-500 (Toxaphene)  
 Misc : op51957,g1g6859,250,,,2,1  
 ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Jan 29 09:41:07 2024  
 Quant Method : C:\msdchem\1\methods\1PST6859.M  
 Quant Title : PEST/PCB  
 QLast Update : Mon Jan 29 09:04:20 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column  
 Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
 Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.300	1.257	491.9E6	377.1E6	50.000	50.000
27) I 1-bromo-2...	1.300	1.257	491.9E6	377.1E6	50.000	50.000
33) I 1-bromo-2...	1.300	1.257	491.9E6	377.1E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	1.767	1.875	460.9E6	292.3E6	47.797	64.156 #
Spiked Amount	40.000	Range 30 - 150	Recovery =	119.49%	160.39%#	
26) SA Decachlor...	8.839	10.249	470.5E6	380.2E6	52.946	43.539
Spiked Amount	40.000		Recovery =	132.37%	108.85%	
Target Compounds						
28) L8 Toxaphene{A}	4.053	5.380	31090748	23654973	558.299	536.109
29) L8 Toxaphene{B}	4.680	6.183	43153741	103.0E6	550.621m	541.222
30) L8 Toxaphene{C}	5.352	6.497	84200725	45975306	520.260m	545.176
31) L8 Toxaphene{D}	5.687	6.629	86923322	83913342	517.664m	537.110m
32) L8 Toxaphene{E}	6.339	7.507	112.3E6	72108738	522.357m	486.979m
Sum Toxaphene			357.7E6	328.7E6	2669.200	2646.595
Average Toxaphene					533.840	529.319

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

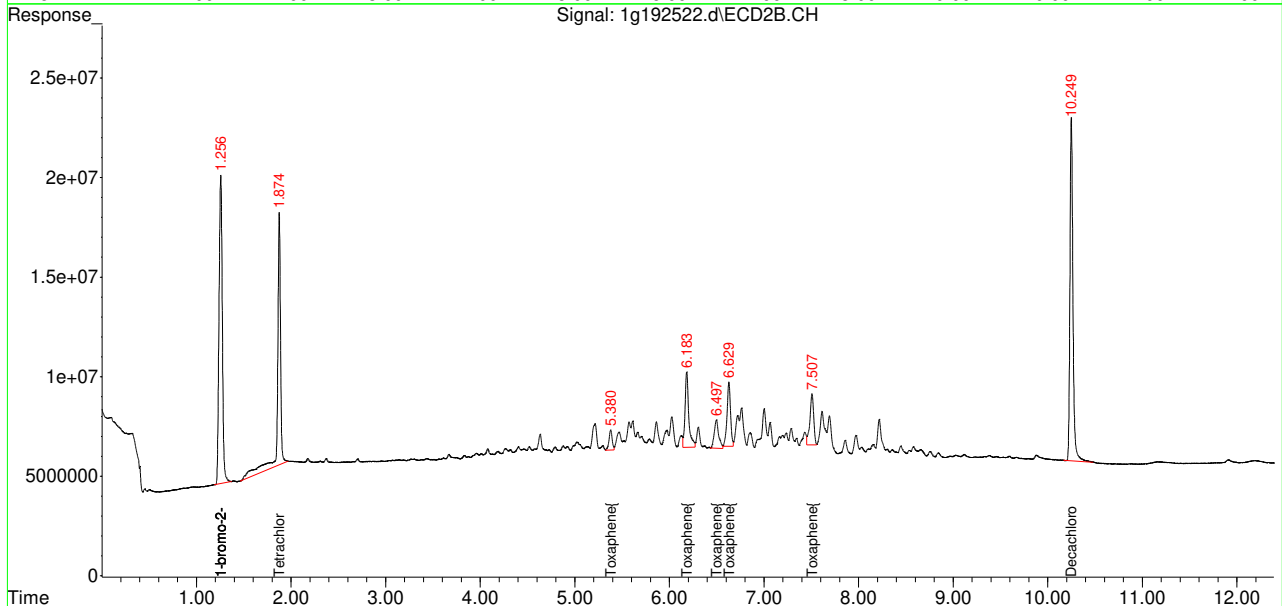
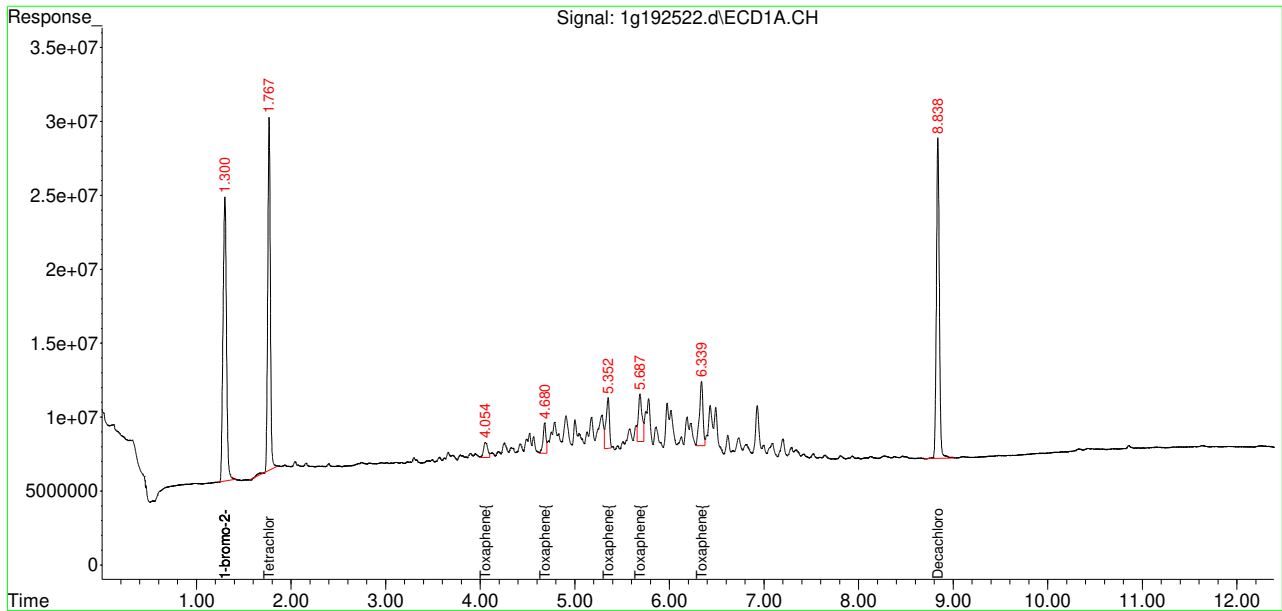
9.3.11  
 9

Quantitation Report (QT Reviewed)

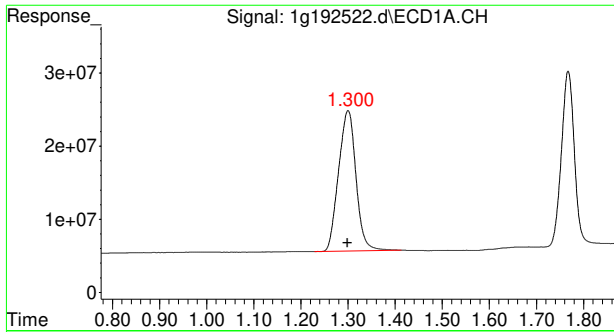
Data Path : C:\msdchem\1\data\1G6859\  
 Data File : 1g192522.d  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 29 Jan 2024 8:28 am  
 Operator : rebeccak  
 Sample : ic6859-500 (Toxaphene)  
 Misc : op51957,g1g6859,250,,,2,1  
 ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Jan 29 09:41:07 2024  
 Quant Method : C:\msdchem\1\methods\1PST6859.M  
 Quant Title : PEST/PCB  
 QLast Update : Mon Jan 29 09:04:20 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

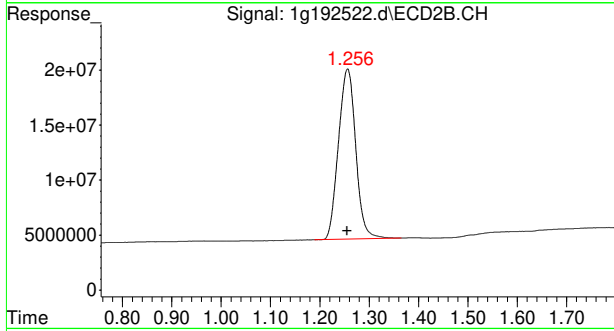
Volume Inj. : 1ul/column  
 Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
 Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



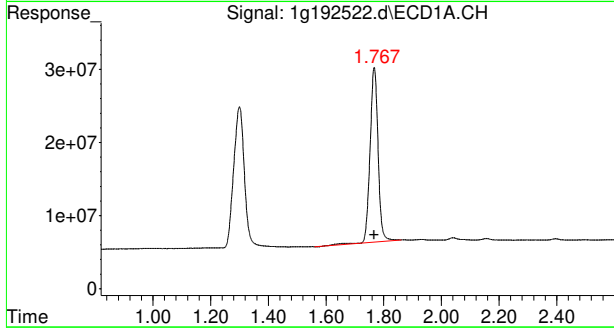
9.3.11  
9



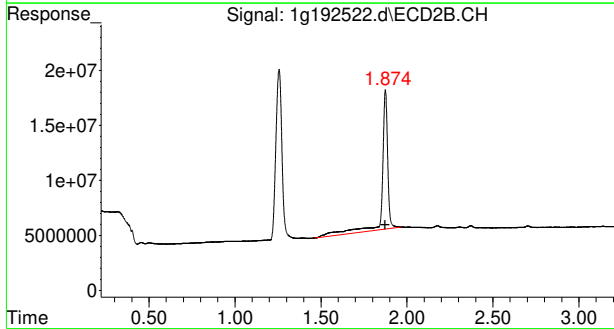
#1 1-bromo-2-nitrobenzene  
 R.T.: 1.300 min  
 Delta R.T.: 0.001 min  
 Response: 491922790  
 Conc: 50.00 PPB



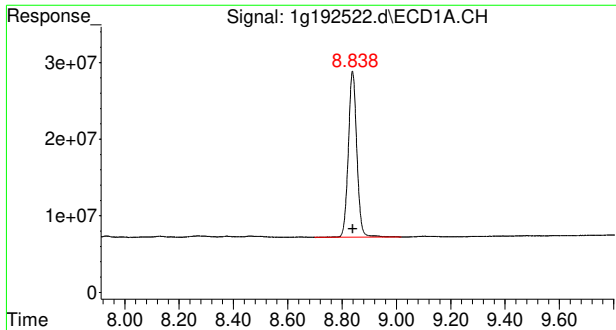
#1 1-bromo-2-nitrobenzene  
 R.T.: 1.257 min  
 Delta R.T.: 0.001 min  
 Response: 377132966  
 Conc: 50.00 PPB



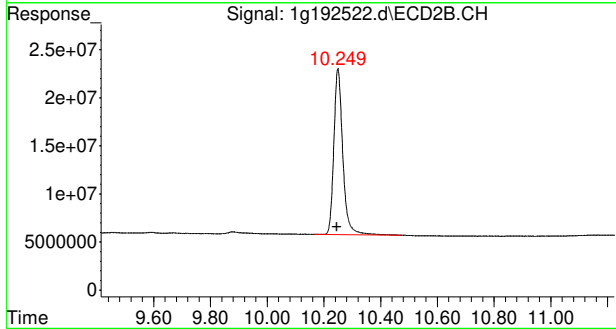
#2 Tetrachloro-m-xylene  
 R.T.: 1.767 min  
 Delta R.T.: 0.000 min  
 Response: 460924633  
 Conc: 47.80 PPB



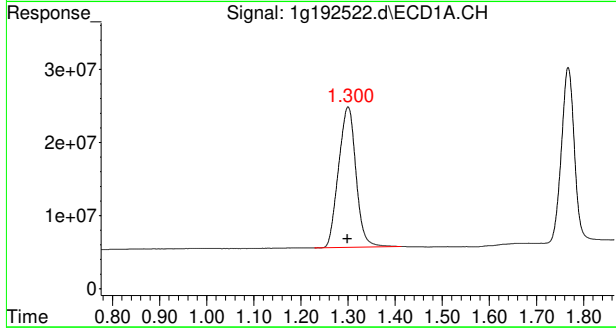
#2 Tetrachloro-m-xylene  
 R.T.: 1.875 min  
 Delta R.T.: 0.002 min  
 Response: 292309434  
 Conc: 64.16 PPB



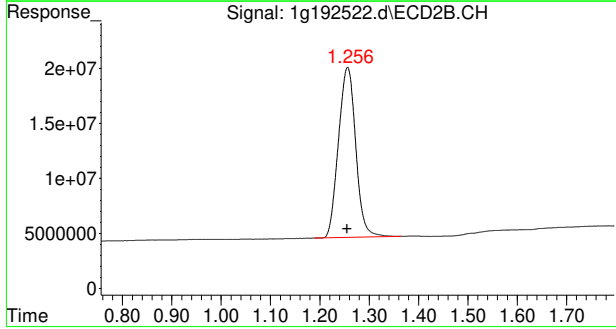
#26 Decachlorobiphenyl  
 R.T.: 8.839 min  
 Delta R.T.: 0.000 min  
 Response: 470549007  
 Conc: 52.95 PPB



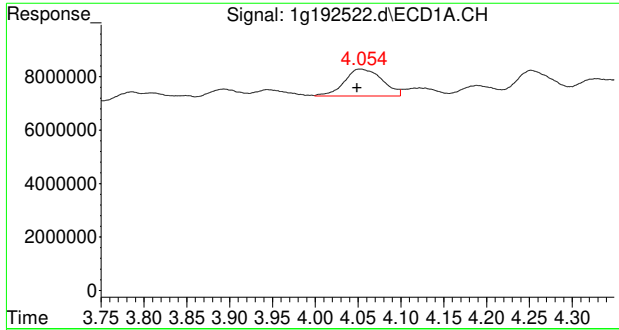
#26 Decachlorobiphenyl  
 R.T.: 10.249 min  
 Delta R.T.: 0.004 min  
 Response: 380168528  
 Conc: 43.54 PPB



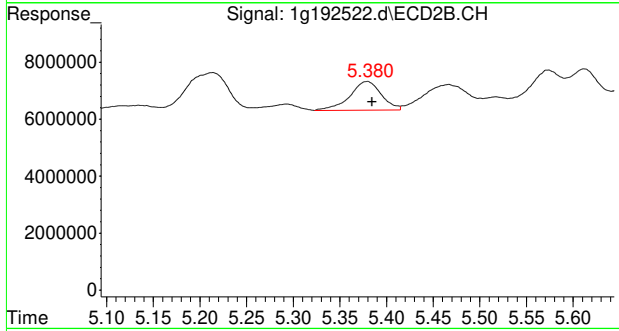
#27 1-bromo-2-nitrobenzeneA  
 R.T.: 1.300 min  
 Delta R.T.: 0.001 min  
 Response: 491922790  
 Conc: 50.00 PPB



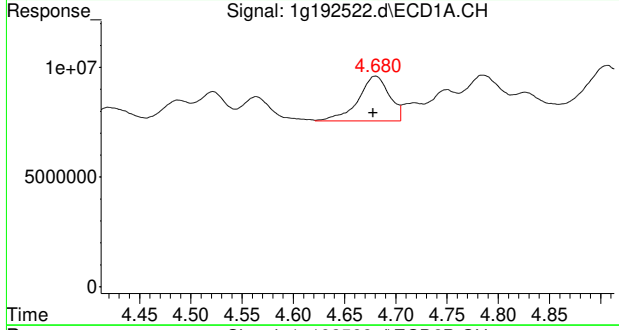
#27 1-bromo-2-nitrobenzeneA  
 R.T.: 1.257 min  
 Delta R.T.: 0.001 min  
 Response: 377132966  
 Conc: 50.00 PPB



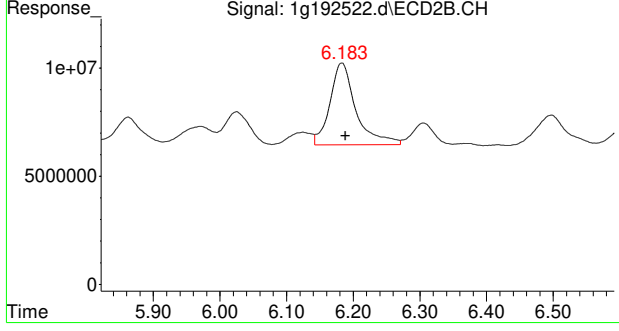
#28 Toxaphene {A}  
 R.T.: 4.053 min  
 Delta R.T.: 0.004 min  
 Response: 31090748  
 Conc: 558.30 PPB



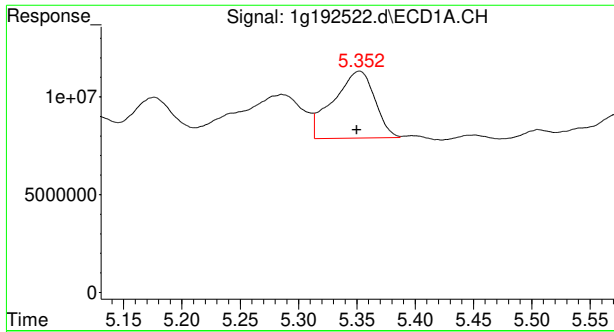
#28 Toxaphene {A}  
 R.T.: 5.380 min  
 Delta R.T.: -0.004 min  
 Response: 23654973  
 Conc: 536.11 PPB



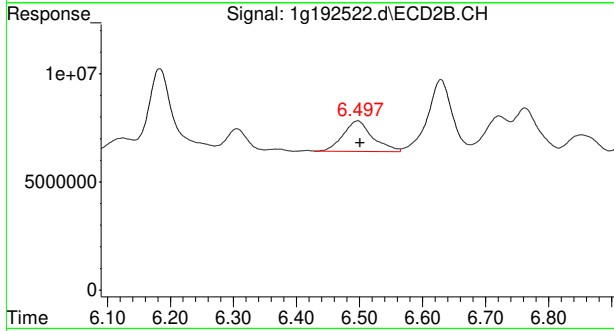
#29 Toxaphene {B}  
 R.T.: 4.680 min  
 Delta R.T.: 0.002 min  
 Response: 43153741  
 Conc: 550.62 PPB m



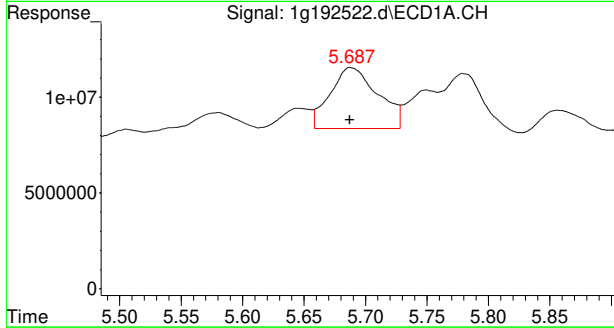
#29 Toxaphene {B}  
 R.T.: 6.183 min  
 Delta R.T.: -0.005 min  
 Response: 103000178  
 Conc: 541.22 PPB



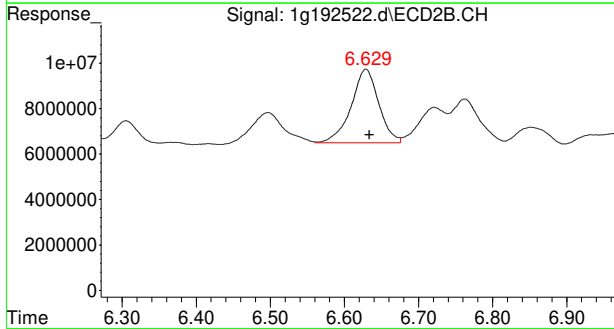
#30 Toxaphene{C}  
 R.T.: 5.352 min  
 Delta R.T.: 0.002 min  
 Response: 84200725  
 Conc: 520.26 PPB m



#30 Toxaphene{C}  
 R.T.: 6.497 min  
 Delta R.T.: -0.004 min  
 Response: 45975306  
 Conc: 545.18 PPB

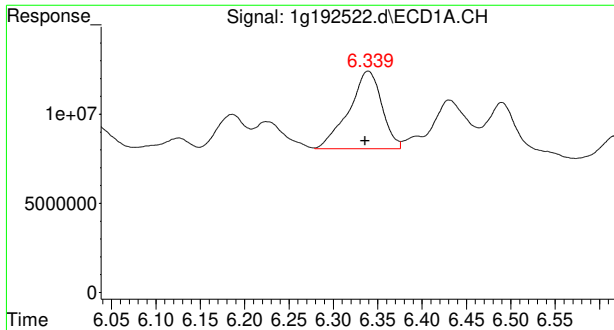


#31 Toxaphene{D}  
 R.T.: 5.687 min  
 Delta R.T.: 0.000 min  
 Response: 86923322  
 Conc: 517.66 PPB m

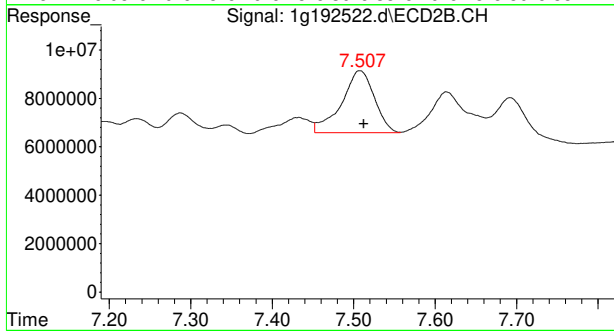


#31 Toxaphene{D}  
 R.T.: 6.629 min  
 Delta R.T.: -0.005 min  
 Response: 83913342  
 Conc: 537.11 PPB m

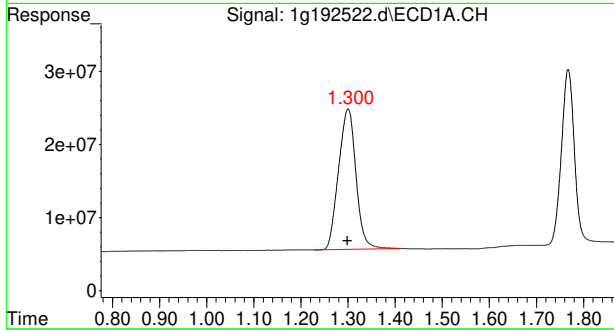
9.3.11  
9



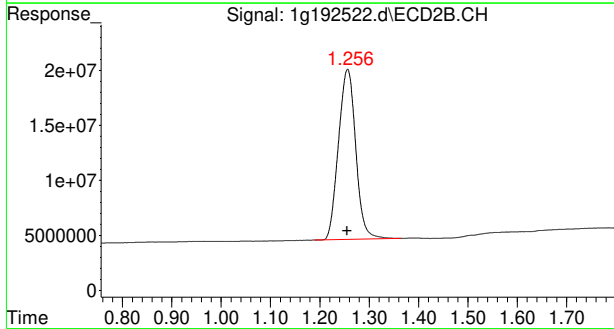
#32 Toxaphene{E}  
 R.T.: 6.339 min  
 Delta R.T.: 0.003 min  
 Response: 112325331  
 Conc: 522.36 PPB m



#32 Toxaphene{E}  
 R.T.: 7.507 min  
 Delta R.T.: -0.005 min  
 Response: 72108738  
 Conc: 486.98 PPB m



#33 1-bromo-2-nitrobenzeneB  
 R.T.: 1.300 min  
 Delta R.T.: 0.001 min  
 Response: 491922790  
 Conc: 50.00 PPB



#33 1-bromo-2-nitrobenzeneB  
 R.T.: 1.257 min  
 Delta R.T.: 0.001 min  
 Response: 377132966  
 Conc: 50.00 PPB



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G8G2430\  
 Data File : 8g55359.d  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 3 Apr 2024 7:03 am  
 Operator : rebeccak  
 Sample : icc2430-2.5 (pest mix)  
 Misc : op53462,g8g2430,5.0,,,10,1  
 ALS Vial : 35 Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Apr 03 09:30:16 2024  
 Quant Method : C:\msdchem\1\METHODS\8PSTLVI2430a.M  
 Quant Title : PEST/PCB  
 QLast Update : Wed Apr 03 09:26:12 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1ul/column  
 Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
 Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
-----						
Internal Standards						
1) I 1-bromo-2...	4.461	4.925	645.3E6	935.4E6	5.000	5.000
27) I 1-bromo-2...	4.461	4.925	645.3E6	935.4E6	5.000	5.000
33) I 1-bromo-2...	4.461	4.925	645.3E6	935.4E6	5.000	5.000
System Monitoring Compounds						
2) SAB Tetrachlo...	5.074	5.755	317.4E6	662.2E6	2.381	2.493
Spiked Amount	40.000	Range	30 - 150	Recovery	=	5.95%# 6.23%#
26) SA Decachlor...	12.067	14.244	354.4E6	317.1E6	2.584m	2.514
Spiked Amount	40.000		Recovery	=	6.46%	6.28%
Target Compounds						
3) hexachlor...	5.394	6.253	519.4E6	708.0E6	2.524	2.579
4) A alpha-BHC	5.528	6.403	422.9E6	959.6E6	2.079	2.621 #
5) MA gamma-BHC	5.806	6.818	450.5E6	849.3E6	2.581	2.584
6) MA Heptachlor	6.269	7.375	433.5E6	727.5E6	2.628	2.560
7) B beta-BHC	5.892	6.911	207.7E6	388.2E6	2.545	2.542
8) B delta-BHC	6.061	7.291	390.8E6	698.0E6	2.313	2.365
9) MB Aldrin	6.578	7.813	397.8E6	786.1E6	2.550	2.626
10) alachlor	6.727	7.636	60123994	114.9E6	2.823	2.686
11) B Heptachlo...	7.245	8.618	349.2E6	722.3E6	2.501	2.594
12) B gamma-Chl...	7.399	8.898	409.2E6	738.1E6	2.647	2.707
13) B alpha-Chl...	7.558	9.118	375.8E6	668.7E6	2.533	2.541
14) A Endosulfan I	7.721	9.209	365.5E6	650.7E6	2.678	2.487
15) B 4,4'-DDE	7.672	9.383	363.5E6	690.0E6	2.578	2.659
16) MA Dieldrin	8.027	9.635	390.7E6	731.5E6	2.612	2.656
17) MA Endrin	8.327	10.130	352.8E6	584.5E6	2.793	2.665
18) A 4,4'-DDD	8.455	10.316	277.7E6	581.9E6	2.387	2.642
19) B Endosulfa...	8.634	10.476	338.4E6	609.9E6	2.535	2.638
20) MA 4,4'-DDT	8.850	10.842	299.8E6	430.5E6	3.200	3.217
21) B Endrin Al...	9.227	11.038	269.0E6	434.0E6	2.484	2.595
22) B Endosulfa...	9.879	11.503	308.0E6	542.2E6	2.518	2.678
23) A Methoxychlor	9.613	12.069	172.1E6	198.1E6	2.755	2.651
24) Mirex	9.734	12.380	290.5E6	423.6E6	2.571	2.592
25) B Endrin Ke...	10.299	12.449	367.8E6	585.3E6	2.586	2.647

SemiQuant Compounds - Not Calibrated on this Instrument

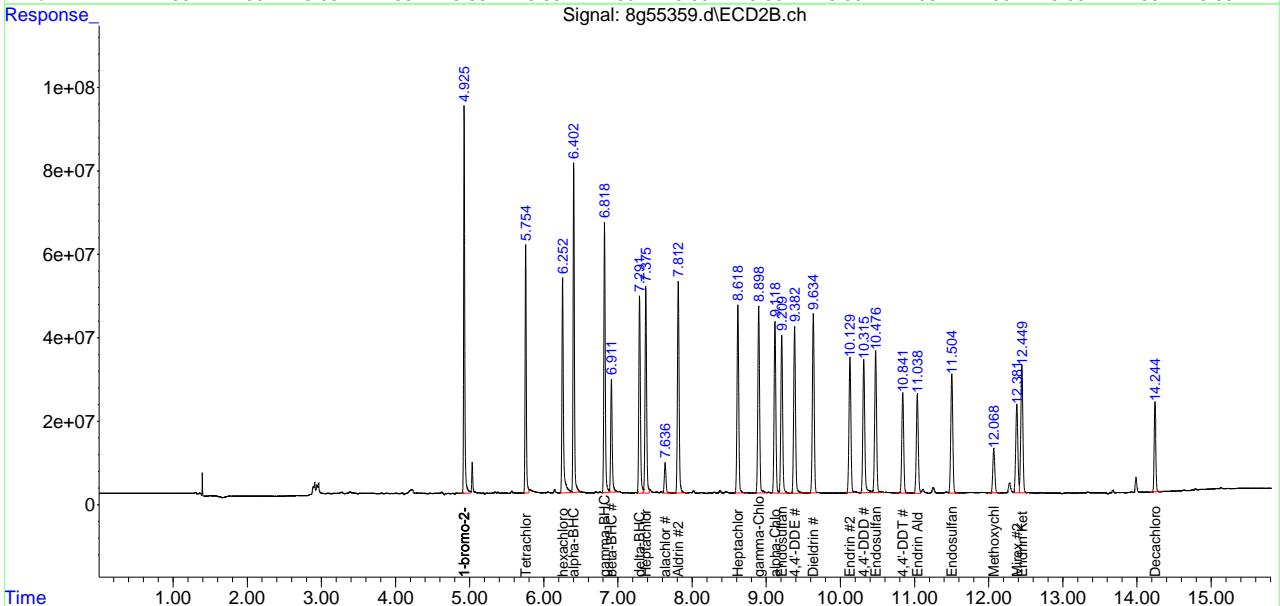
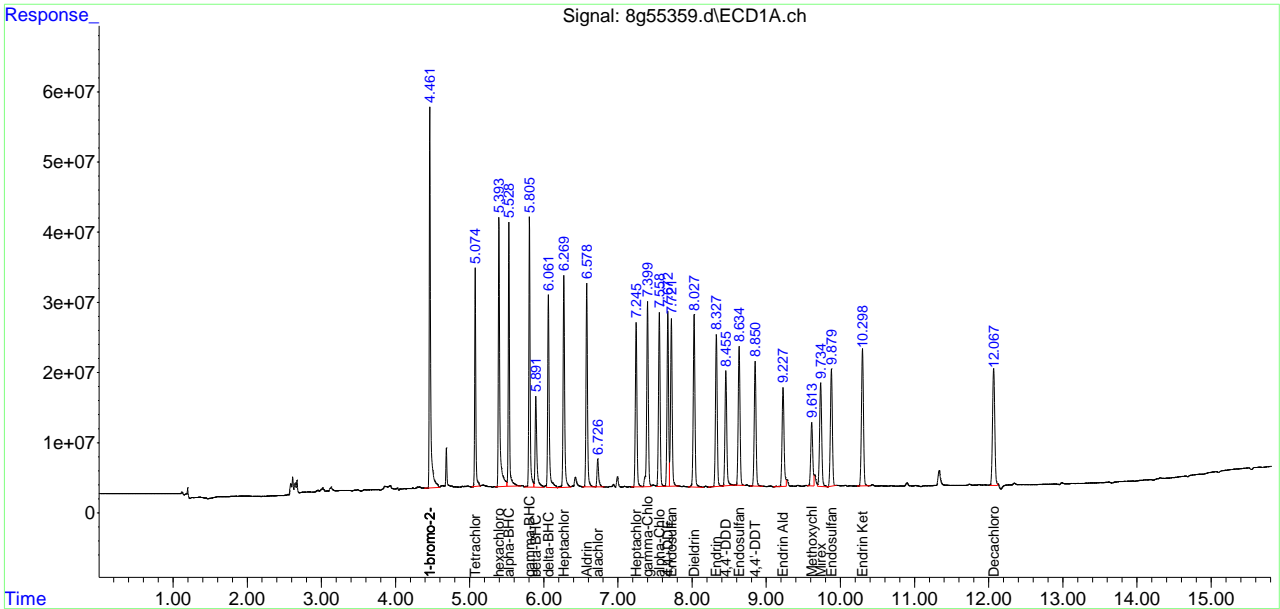
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

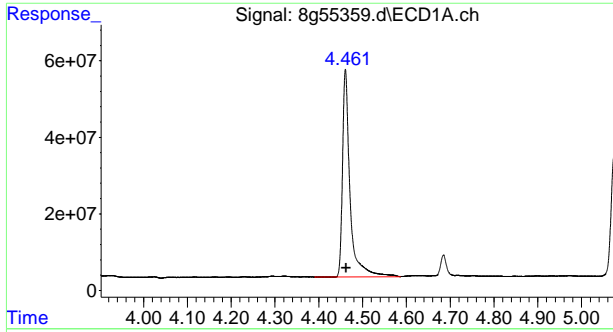
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G8G2430\  
 Data File : 8g55359.d  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 3 Apr 2024 7:03 am  
 Operator : rebeccak  
 Sample : icc2430-2.5 (pest mix)  
 Misc : op53462,g8g2430,5.0,,,10,1  
 ALS Vial : 35 Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Apr 03 09:30:16 2024  
 Quant Method : C:\msdchem\1\METHODS\8PSTLVI2430a.M  
 Quant Title : PEST/PCB  
 QLast Update : Wed Apr 03 09:26:12 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

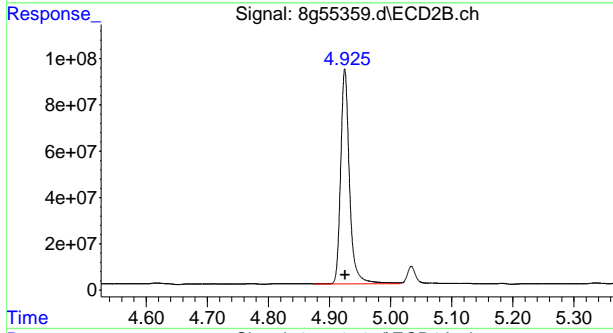
Volume Inj. : 1ul/column  
 Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
 Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





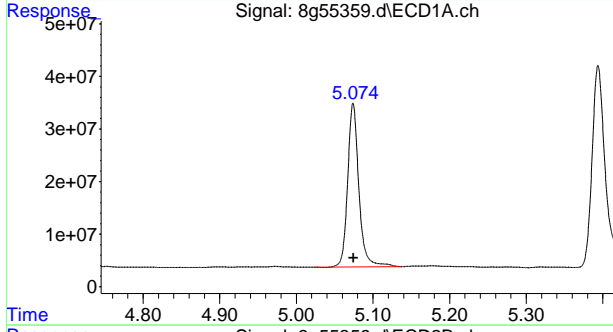
#1 1-bromo-2-nitrobenzene

R.T.: 4.461 min  
 Delta R.T.: 0.000 min  
 Response: 645262413  
 Conc: 5.00 PPB



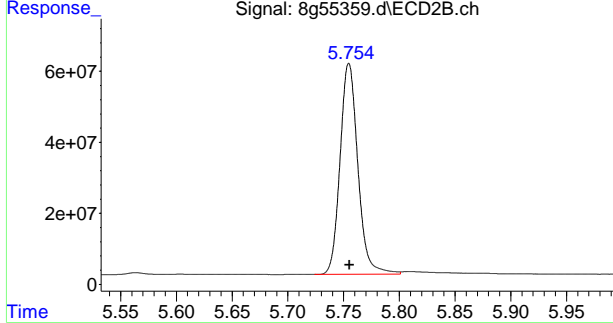
#1 1-bromo-2-nitrobenzene

R.T.: 4.925 min  
 Delta R.T.: 0.000 min  
 Response: 935418264  
 Conc: 5.00 PPB



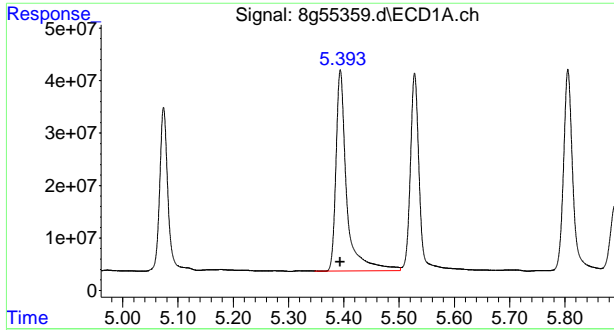
#2 Tetrachloro-m-xylene

R.T.: 5.074 min  
 Delta R.T.: 0.000 min  
 Response: 317449965  
 Conc: 2.38 PPB

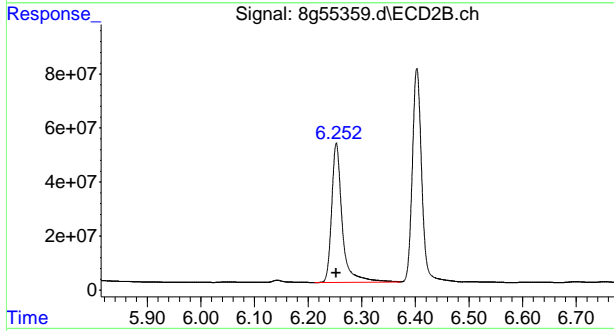


#2 Tetrachloro-m-xylene

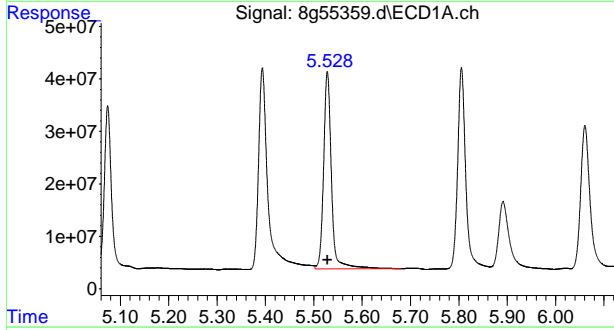
R.T.: 5.755 min  
 Delta R.T.: 0.000 min  
 Response: 662211313  
 Conc: 2.49 PPB



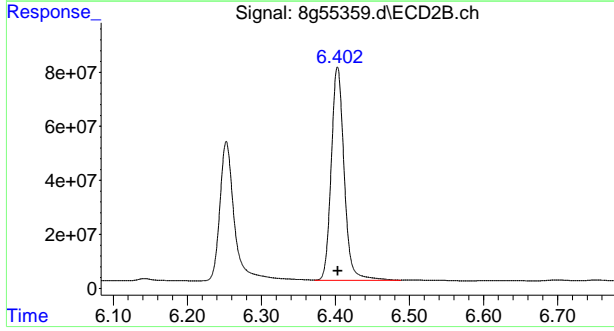
#3 hexachlorobenzene  
 R.T.: 5.394 min  
 Delta R.T.: 0.000 min  
 Response: 519406871  
 Conc: 2.52 PPB



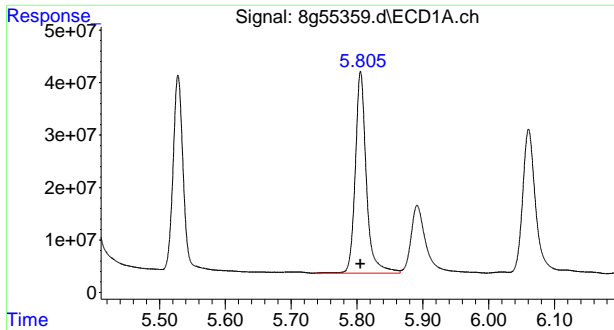
#3 hexachlorobenzene  
 R.T.: 6.253 min  
 Delta R.T.: 0.000 min  
 Response: 707980873  
 Conc: 2.58 PPB



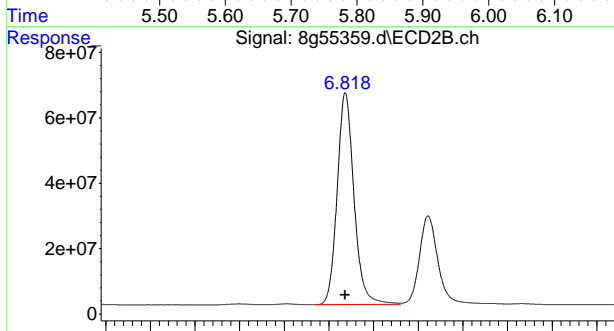
#4 alpha-BHC  
 R.T.: 5.528 min  
 Delta R.T.: 0.000 min  
 Response: 422862977  
 Conc: 2.08 PPB



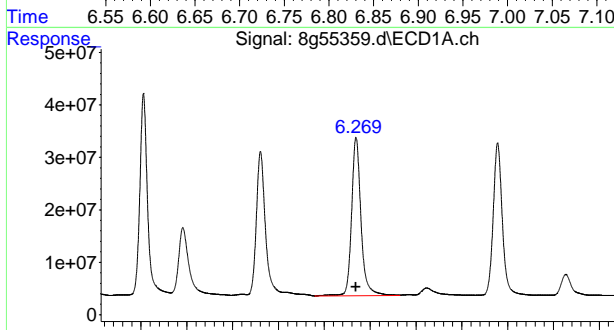
#4 alpha-BHC  
 R.T.: 6.403 min  
 Delta R.T.: 0.000 min  
 Response: 959602278  
 Conc: 2.62 PPB



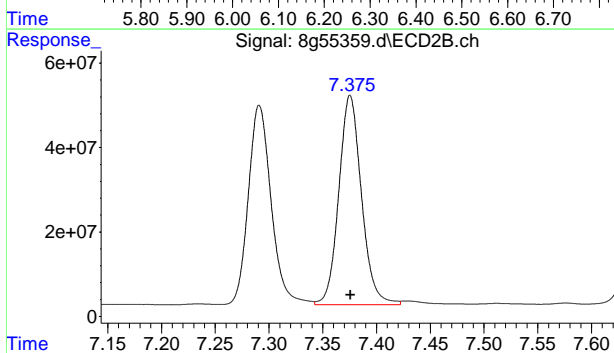
#5 gamma-BHC  
 R.T.: 5.806 min  
 Delta R.T.: 0.000 min  
 Response: 450470307  
 Conc: 2.58 PPB



#5 gamma-BHC  
 R.T.: 6.818 min  
 Delta R.T.: 0.000 min  
 Response: 849300871  
 Conc: 2.58 PPB

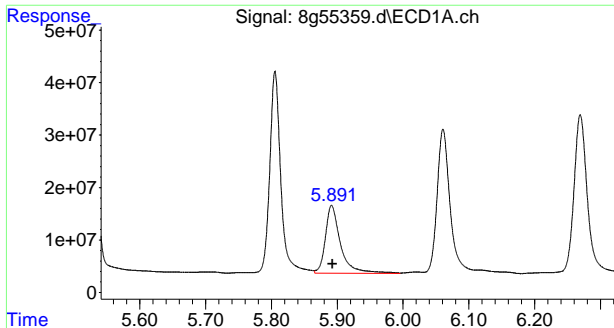


#6 Heptachlor  
 R.T.: 6.269 min  
 Delta R.T.: 0.000 min  
 Response: 433498119  
 Conc: 2.63 PPB

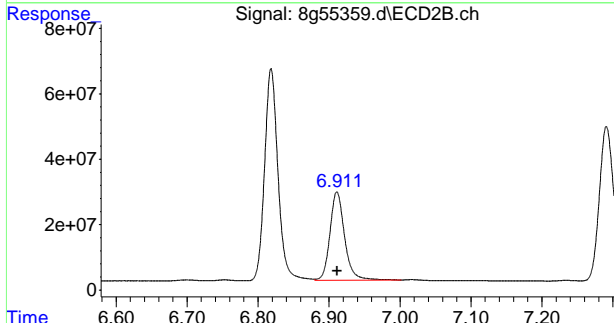


#6 Heptachlor  
 R.T.: 7.375 min  
 Delta R.T.: 0.000 min  
 Response: 727537414  
 Conc: 2.56 PPB

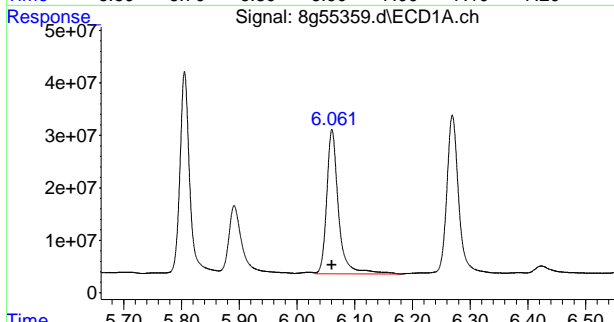
9.3.12  
**9**



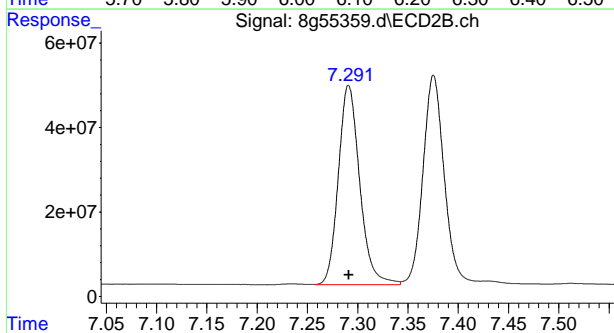
#7 beta-BHC  
 R.T.: 5.892 min  
 Delta R.T.: -0.001 min  
 Response: 207664498  
 Conc: 2.55 PPB



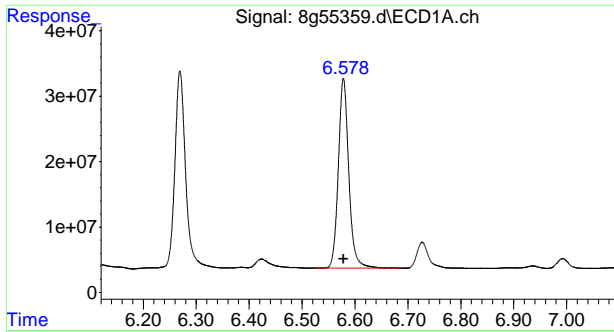
#7 beta-BHC  
 R.T.: 6.911 min  
 Delta R.T.: 0.000 min  
 Response: 388222649  
 Conc: 2.54 PPB



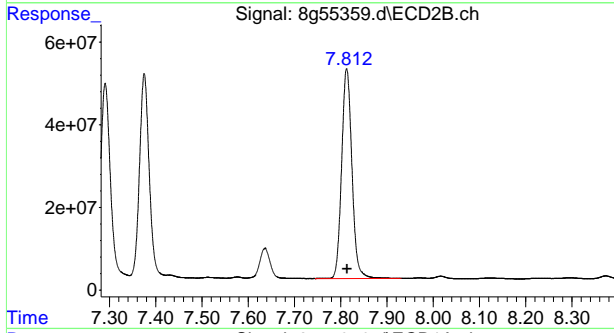
#8 delta-BHC  
 R.T.: 6.061 min  
 Delta R.T.: 0.000 min  
 Response: 390809180  
 Conc: 2.31 PPB



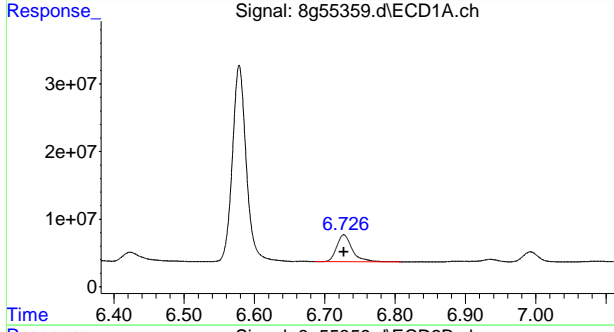
#8 delta-BHC  
 R.T.: 7.291 min  
 Delta R.T.: 0.000 min  
 Response: 698025891  
 Conc: 2.37 PPB



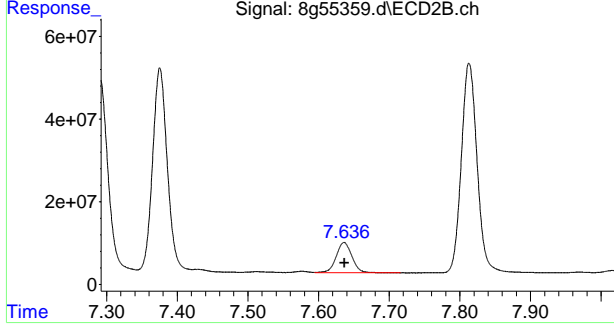
#9 Aldrin  
 R.T.: 6.578 min  
 Delta R.T.: 0.000 min  
 Response: 397812631  
 Conc: 2.55 PPB



#9 Aldrin  
 R.T.: 7.813 min  
 Delta R.T.: -0.001 min  
 Response: 786051711  
 Conc: 2.63 PPB

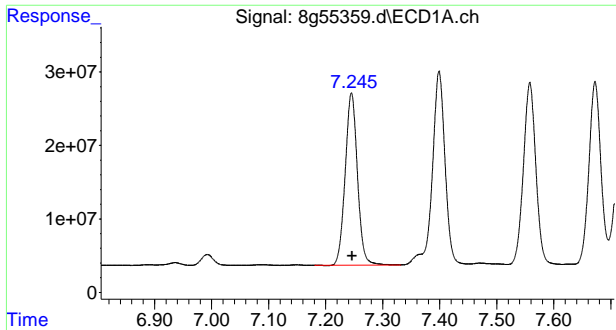


#10alachlor  
 R.T.: 6.727 min  
 Delta R.T.: 0.000 min  
 Response: 60123994  
 Conc: 2.82 PPB

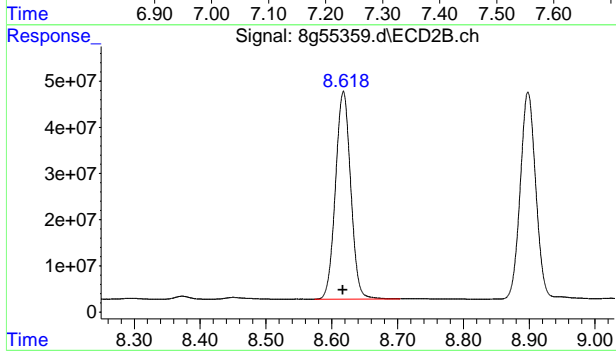


#10alachlor  
 R.T.: 7.636 min  
 Delta R.T.: 0.000 min  
 Response: 114879751  
 Conc: 2.69 PPB

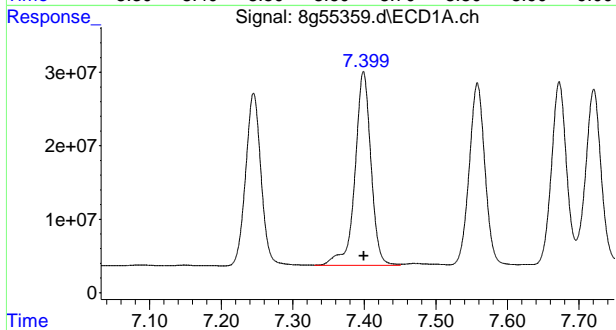
9.3.12  
**9**



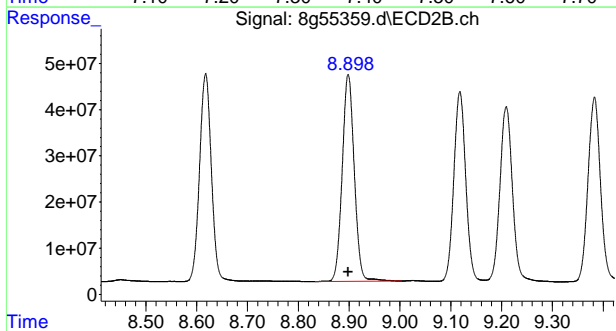
#11 Heptachlor Epoxide  
 R.T.: 7.245 min  
 Delta R.T.: 0.000 min  
 Response: 349198009  
 Conc: 2.50 PPB



#11 Heptachlor Epoxide  
 R.T.: 8.618 min  
 Delta R.T.: 0.001 min  
 Response: 722264755  
 Conc: 2.59 PPB

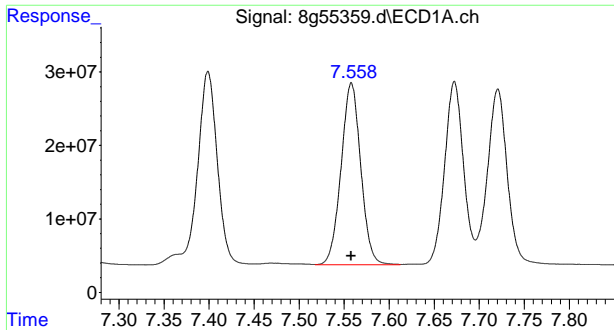


#12 gamma-Chlordane  
 R.T.: 7.399 min  
 Delta R.T.: 0.000 min  
 Response: 409176064  
 Conc: 2.65 PPB

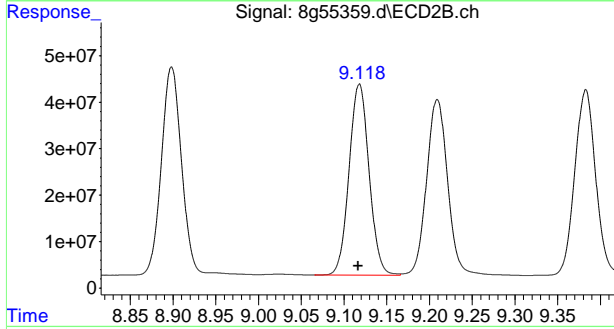


#12 gamma-Chlordane  
 R.T.: 8.898 min  
 Delta R.T.: 0.000 min  
 Response: 738061819  
 Conc: 2.71 PPB

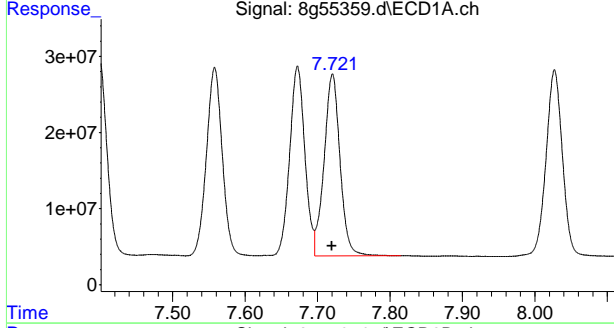




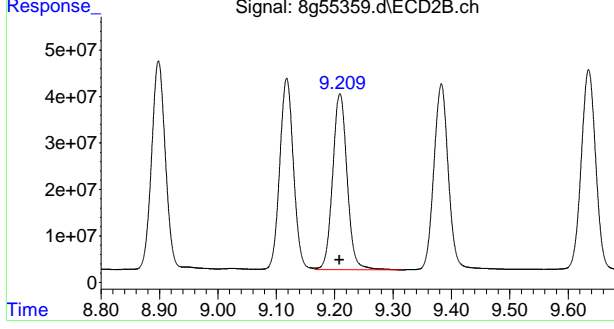
#13 alpha-Chlordane  
 R.T.: 7.558 min  
 Delta R.T.: 0.000 min  
 Response: 375827377  
 Conc: 2.53 PPB



#13 alpha-Chlordane  
 R.T.: 9.118 min  
 Delta R.T.: 0.002 min  
 Response: 668736101  
 Conc: 2.54 PPB

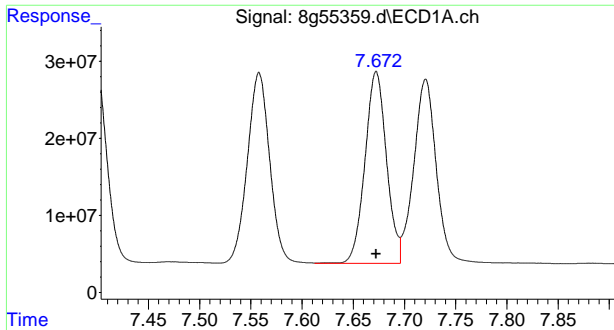


#14 Endosulfan I  
 R.T.: 7.721 min  
 Delta R.T.: 0.001 min  
 Response: 365549841  
 Conc: 2.68 PPB

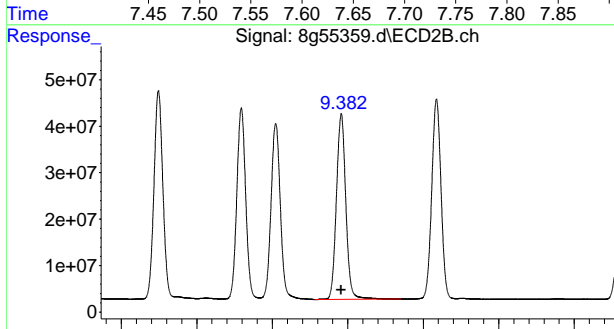


#14 Endosulfan I  
 R.T.: 9.209 min  
 Delta R.T.: 0.001 min  
 Response: 650726254  
 Conc: 2.49 PPB

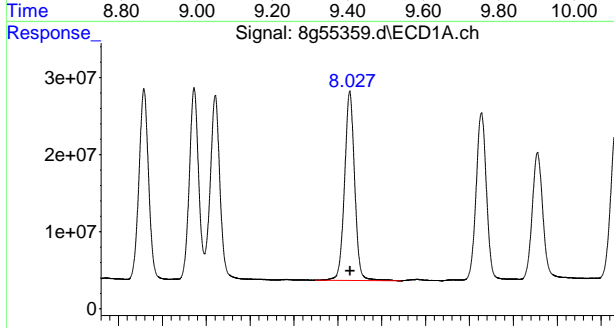
9.3.12  
**9**



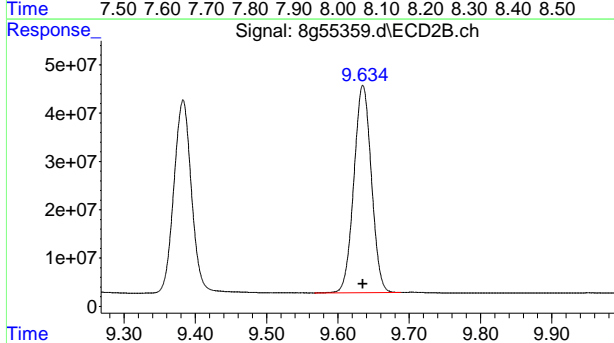
#15 4,4'-DDE  
 R.T.: 7.672 min  
 Delta R.T.: 0.000 min  
 Response: 363538461  
 Conc: 2.58 PPB



#15 4,4'-DDE  
 R.T.: 9.383 min  
 Delta R.T.: 0.001 min  
 Response: 689971110  
 Conc: 2.66 PPB

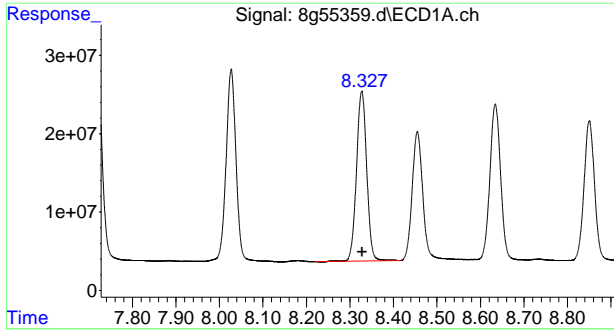


#16 Dieldrin  
 R.T.: 8.027 min  
 Delta R.T.: 0.000 min  
 Response: 390732653  
 Conc: 2.61 PPB

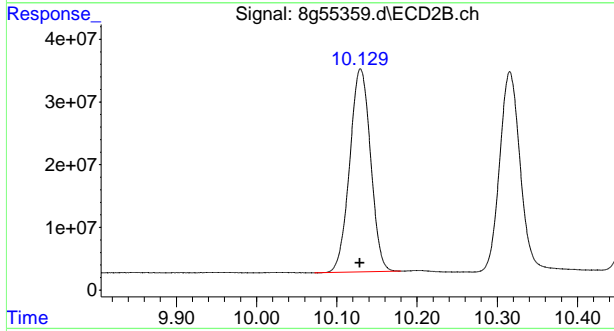


#16 Dieldrin  
 R.T.: 9.635 min  
 Delta R.T.: 0.000 min  
 Response: 731517702  
 Conc: 2.66 PPB

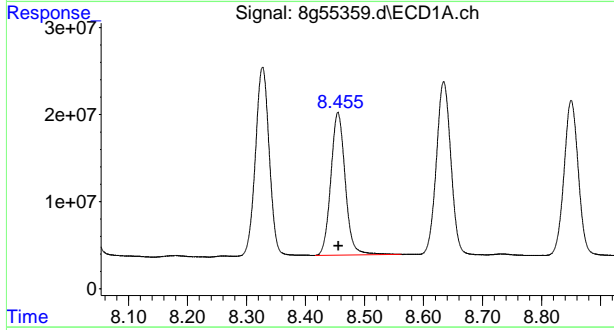
9.3.12  
9



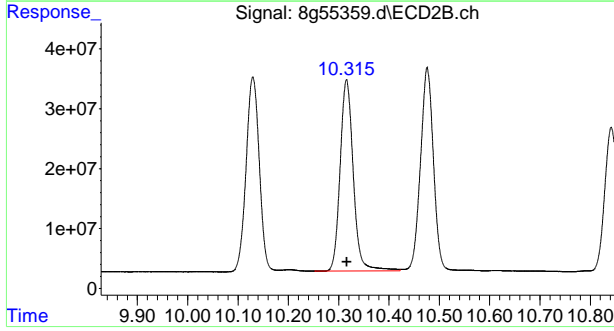
#17 Endrin  
 R.T.: 8.327 min  
 Delta R.T.: 0.000 min  
 Response: 352801016  
 Conc: 2.79 PPB



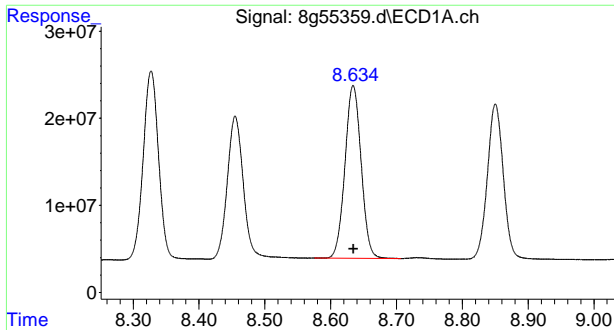
#17 Endrin  
 R.T.: 10.130 min  
 Delta R.T.: 0.001 min  
 Response: 584453426  
 Conc: 2.67 PPB



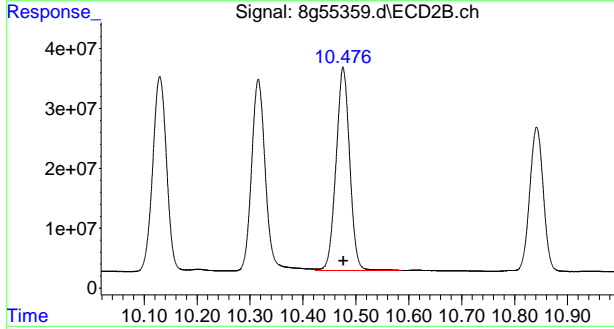
#18 4,4'-DDD  
 R.T.: 8.455 min  
 Delta R.T.: 0.000 min  
 Response: 277728960  
 Conc: 2.39 PPB



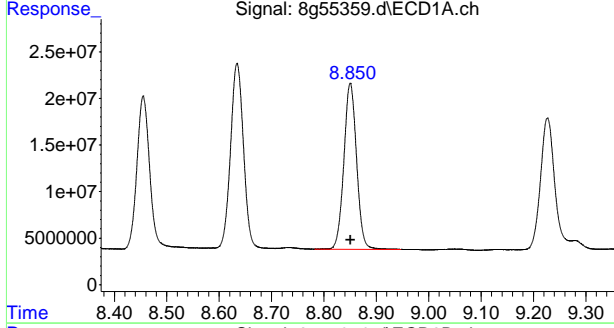
#18 4,4'-DDD  
 R.T.: 10.316 min  
 Delta R.T.: 0.000 min  
 Response: 581916471  
 Conc: 2.64 PPB



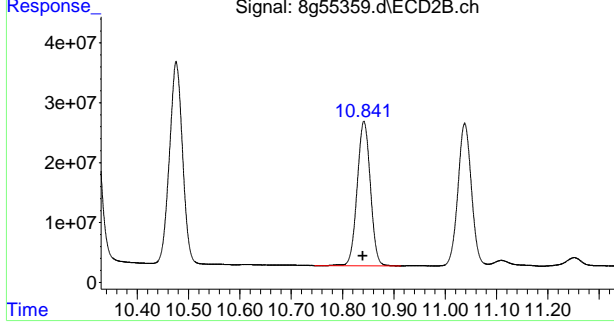
#19 Endosulfan II  
 R.T.: 8.634 min  
 Delta R.T.: 0.000 min  
 Response: 338368836  
 Conc: 2.54 PPB



#19 Endosulfan II  
 R.T.: 10.476 min  
 Delta R.T.: 0.000 min  
 Response: 609889467  
 Conc: 2.64 PPB

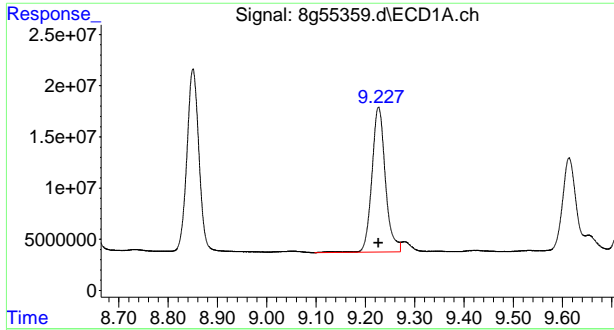


#20 4,4'-DDT  
 R.T.: 8.850 min  
 Delta R.T.: 0.000 min  
 Response: 299790154  
 Conc: 3.20 PPB

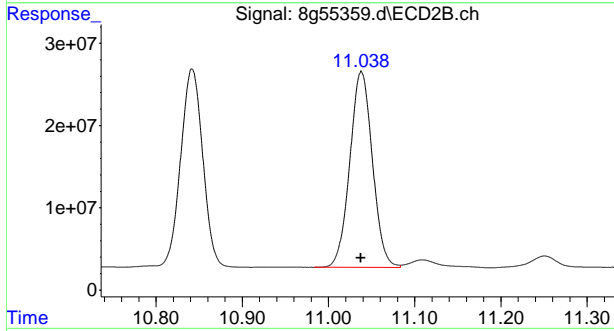


#20 4,4'-DDT  
 R.T.: 10.842 min  
 Delta R.T.: 0.002 min  
 Response: 430476756  
 Conc: 3.22 PPB

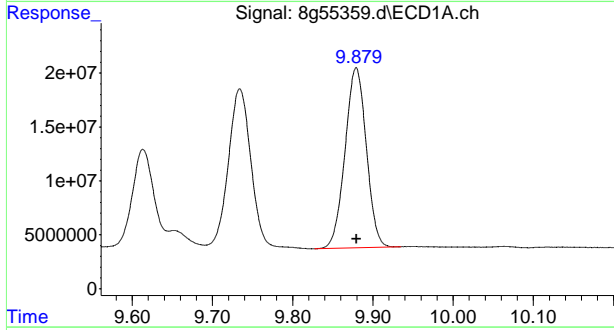
9.3.12  
**9**



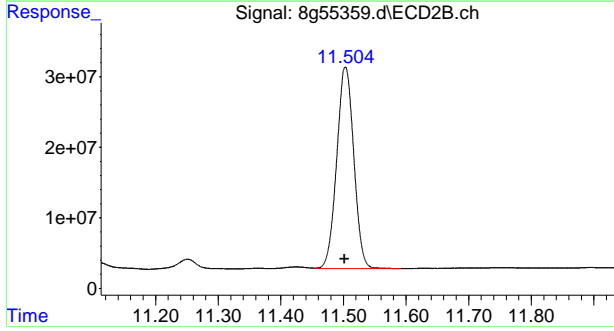
#21 Endrin Aldehyde  
 R.T.: 9.227 min  
 Delta R.T.: 0.000 min  
 Response: 268987178  
 Conc: 2.48 PPB



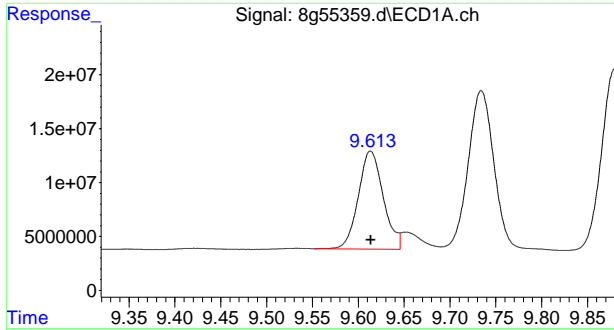
#21 Endrin Aldehyde  
 R.T.: 11.038 min  
 Delta R.T.: 0.000 min  
 Response: 434018574  
 Conc: 2.60 PPB



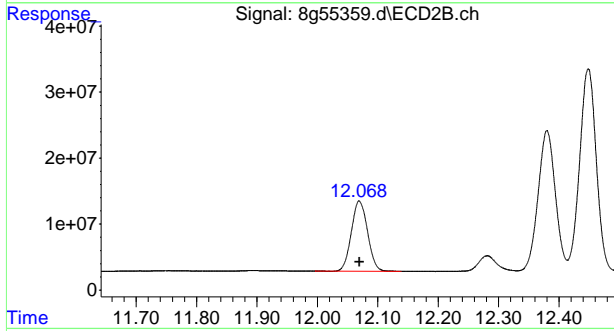
#22 Endosulfan Sulfate  
 R.T.: 9.879 min  
 Delta R.T.: 0.000 min  
 Response: 307997529  
 Conc: 2.52 PPB



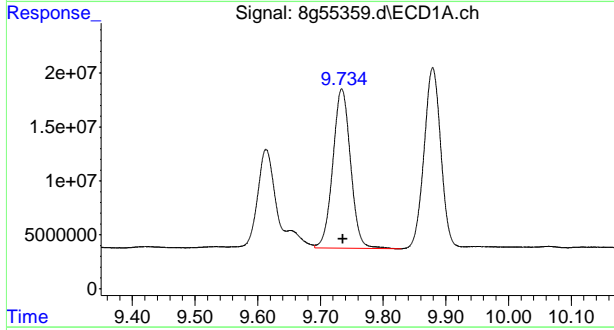
#22 Endosulfan Sulfate  
 R.T.: 11.503 min  
 Delta R.T.: 0.002 min  
 Response: 542241062  
 Conc: 2.68 PPB



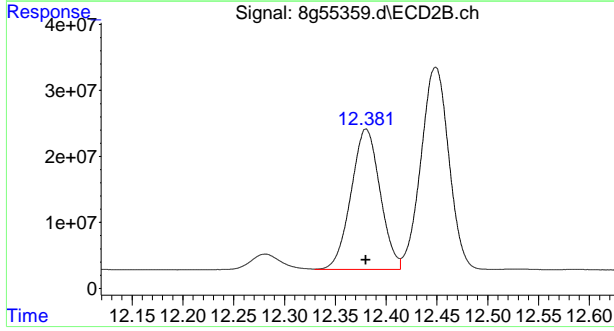
#23 Methoxychlor  
 R.T.: 9.613 min  
 Delta R.T.: 0.000 min  
 Response: 172081915  
 Conc: 2.75 PPB



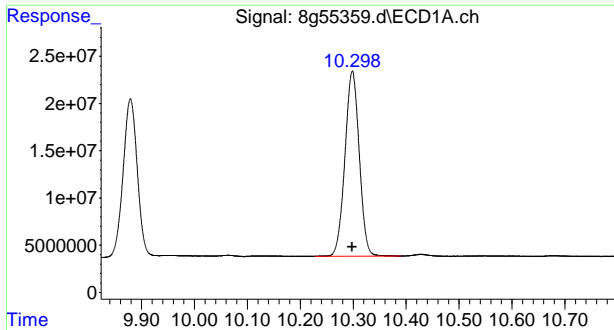
#23 Methoxychlor  
 R.T.: 12.069 min  
 Delta R.T.: 0.000 min  
 Response: 198117006  
 Conc: 2.65 PPB



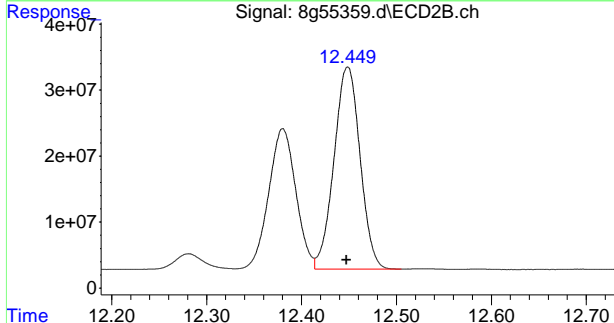
#24 Mirex  
 R.T.: 9.734 min  
 Delta R.T.: -0.002 min  
 Response: 290496212  
 Conc: 2.57 PPB



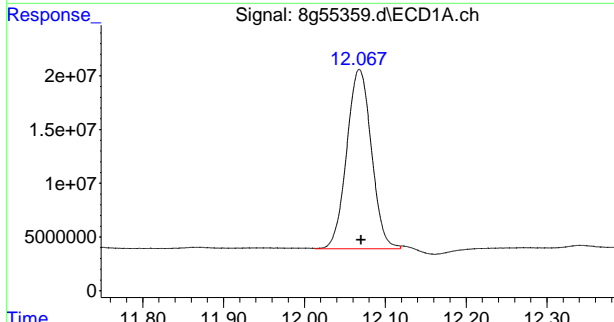
#24 Mirex  
 R.T.: 12.380 min  
 Delta R.T.: 0.000 min  
 Response: 423572929  
 Conc: 2.59 PPB



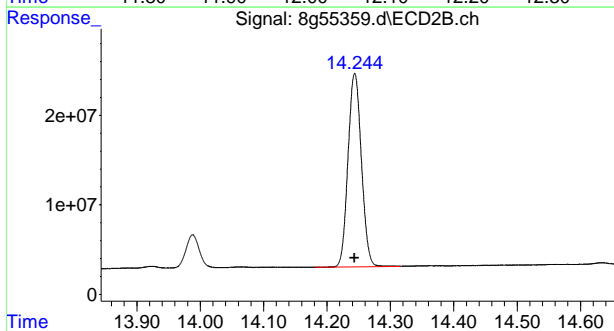
#25 Endrin Ketone  
 R.T.: 10.299 min  
 Delta R.T.: 0.000 min  
 Response: 367780463  
 Conc: 2.59 PPB



#25 Endrin Ketone  
 R.T.: 12.449 min  
 Delta R.T.: 0.001 min  
 Response: 585348244  
 Conc: 2.65 PPB

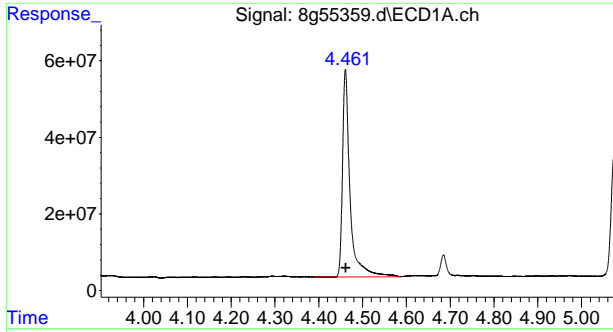


#26 Decachlorobiphenyl  
 R.T.: 12.067 min  
 Delta R.T.: -0.003 min  
 Response: 354387701  
 Conc: 2.58 PPB m



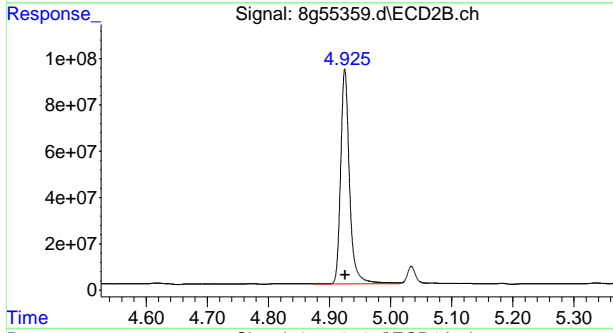
#26 Decachlorobiphenyl  
 R.T.: 14.244 min  
 Delta R.T.: 0.000 min  
 Response: 317057878  
 Conc: 2.51 PPB

9.3.12  
**9**



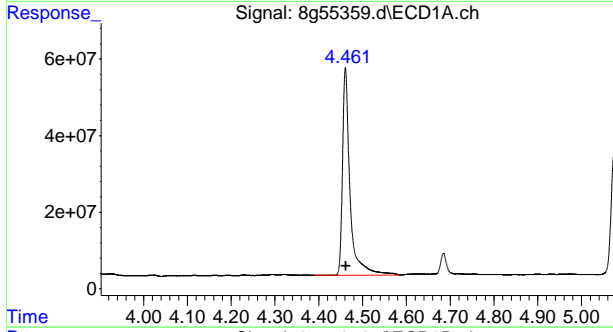
#27 1-bromo-2-nitrobenzeneA

R.T.: 4.461 min  
 Delta R.T.: 0.000 min  
 Response: 645262413  
 Conc: 5.00 PPB



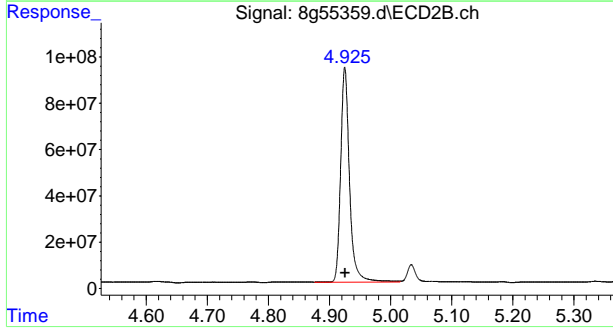
#27 1-bromo-2-nitrobenzeneA

R.T.: 4.925 min  
 Delta R.T.: 0.000 min  
 Response: 935418264  
 Conc: 5.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 4.461 min  
 Delta R.T.: 0.000 min  
 Response: 645262413  
 Conc: 5.00 PPB



#33 1-bromo-2-nitrobenzeneB

R.T.: 4.925 min  
 Delta R.T.: 0.000 min  
 Response: 935418264  
 Conc: 5.00 PPB



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G8G2430\  
 Data File : 8g55363.d  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 3 Apr 2024 8:30 am  
 Operator : rebeccak  
 Sample : ic2430-50 (chlordanane)  
 Misc : op53462,g8g2430,5.0,,,10,1  
 ALS Vial : 39 Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Apr 03 09:26:45 2024  
 Quant Method : C:\msdchem\1\METHODS\8PSTLVI2430a.M  
 Quant Title : PEST/PCB  
 QLast Update : Wed Apr 03 09:26:12 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1ul/column  
 Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
 Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
-----						
Internal Standards						
1) I 1-bromo-2...	4.462	4.925	734.4E6	1001.4E6	5.000	5.000
27) I 1-bromo-2...	4.462	4.925	734.4E6	1001.4E6	5.000	5.000
33) I 1-bromo-2...	4.462	4.925	734.4E6	1001.4E6	5.000	5.000
System Monitoring Compounds						
2) SAB Tetrachlo...	5.074	5.755	733.9E6	1392.8E6	4.838	4.898
Spiked Amount	40.000	Range 30 - 150	Recovery =	12.10%#	12.24%#	
26) SA Decachlor...	12.070	14.243	755.6E6	702.3E6	4.840	5.201
Spiked Amount	40.000		Recovery =	12.10%	13.00%	
Target Compounds						
34) Chlordane...	6.270	7.376	493.5E6	895.1E6	47.249	51.501
35) Chlordane...	6.719	8.010	329.2E6	549.4E6	50.400	55.525
36) Chlordane...	7.403	8.900	1079.3E6	1848.0E6	48.752	52.973
37) Chlordane...	7.554	9.120	1692.0E6	3022.8E6	49.451m	53.579m
38) Chlordane...	8.544	10.557	241.4E6	416.8E6	50.390	56.359

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

9.3.13  
 9

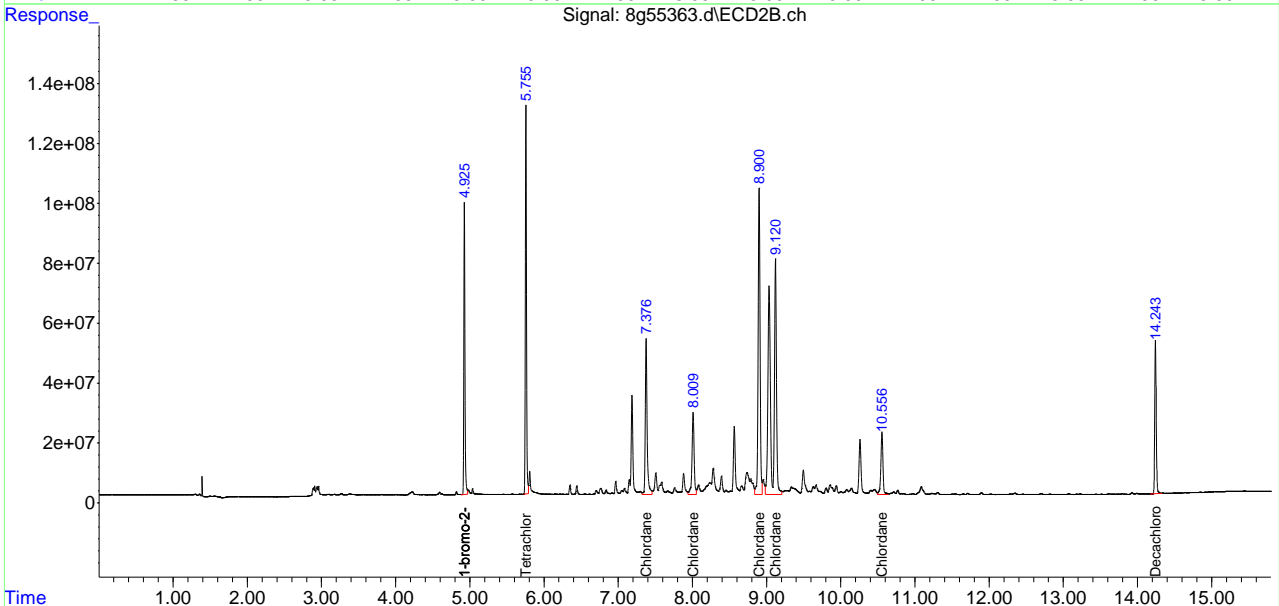
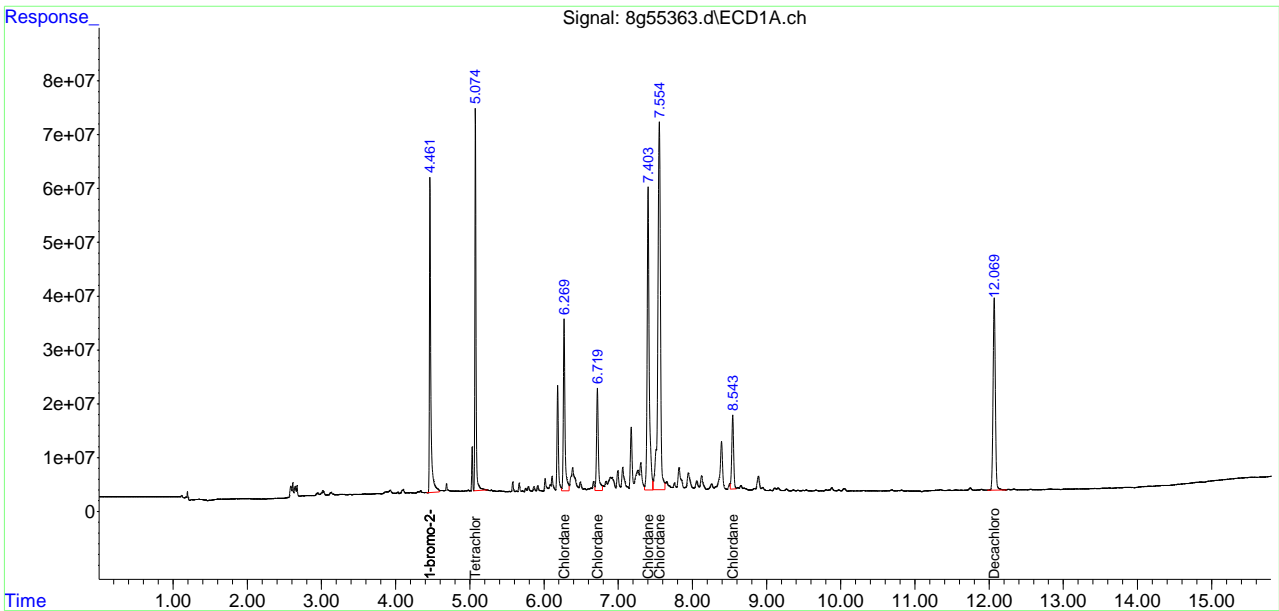


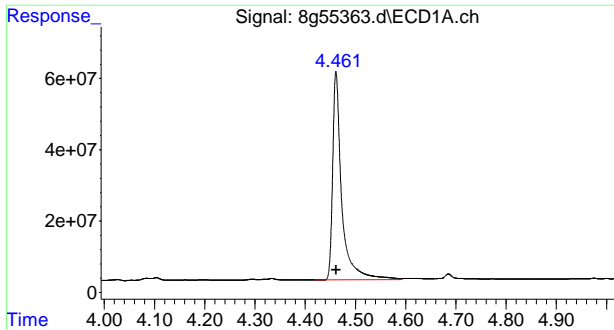
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G8G2430\  
Data File : 8g55363.d  
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
Acq On : 3 Apr 2024 8:30 am  
Operator : rebeccak  
Sample : ic2430-50 (chlordane)  
Misc : op53462,g8g2430,5.0,,,10,1  
ALS Vial : 39 Sample Multiplier: 1

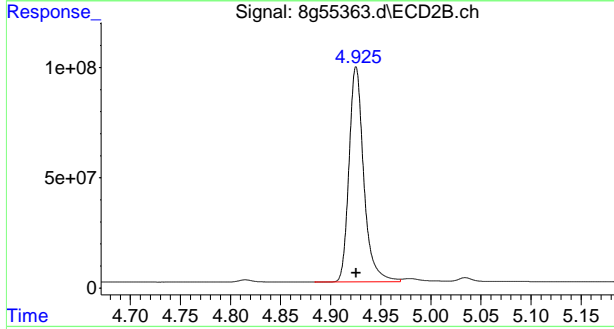
Integration File signal 1: autoint1.e  
Integration File signal 2: autoint2.e  
Quant Time: Apr 03 09:26:45 2024  
Quant Method : C:\msdchem\1\METHODS\8PSTLVI2430a.M  
Quant Title : PEST/PCB  
QLast Update : Wed Apr 03 09:26:12 2024  
Response via : Initial Calibration  
Integrator: ChemStation

Volume Inj. : 1ul/column  
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

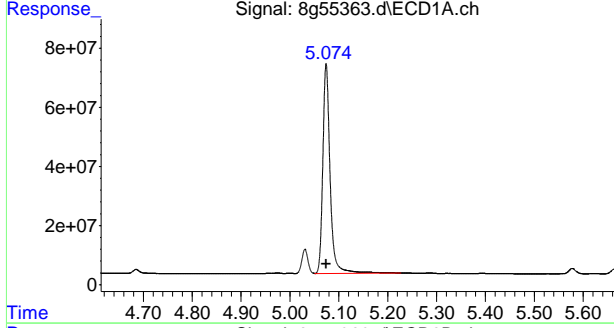




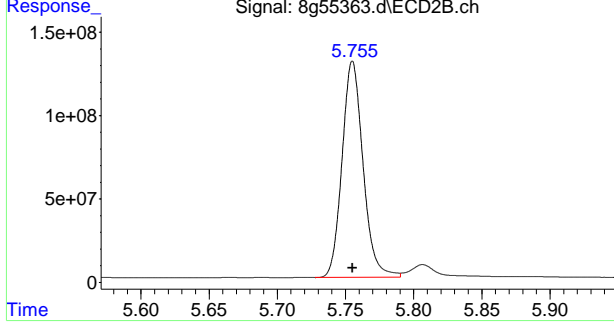
#1 1-bromo-2-nitrobenzene  
 R.T.: 4.462 min  
 Delta R.T.: 0.000 min  
 Response: 734416683  
 Conc: 5.00 PPB



#1 1-bromo-2-nitrobenzene  
 R.T.: 4.925 min  
 Delta R.T.: 0.000 min  
 Response: 1001437108  
 Conc: 5.00 PPB

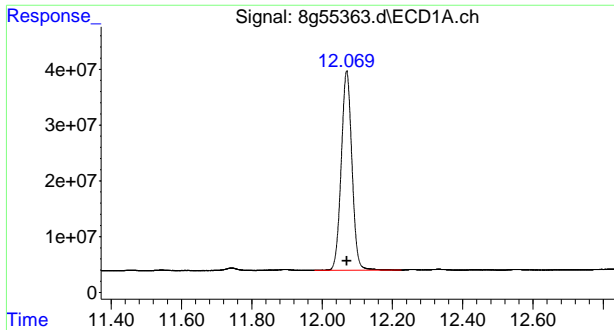


#2 Tetrachloro-m-xylene  
 R.T.: 5.074 min  
 Delta R.T.: 0.000 min  
 Response: 733939425  
 Conc: 4.84 PPB

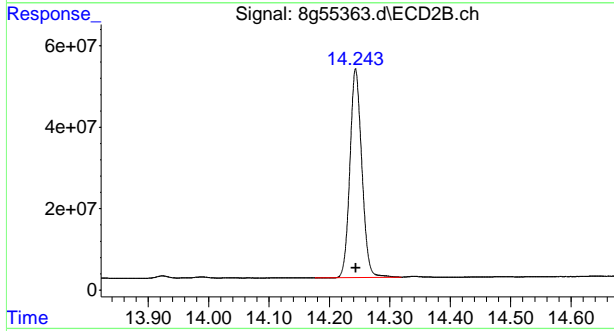


#2 Tetrachloro-m-xylene  
 R.T.: 5.755 min  
 Delta R.T.: 0.000 min  
 Response: 1392849093  
 Conc: 4.90 PPB

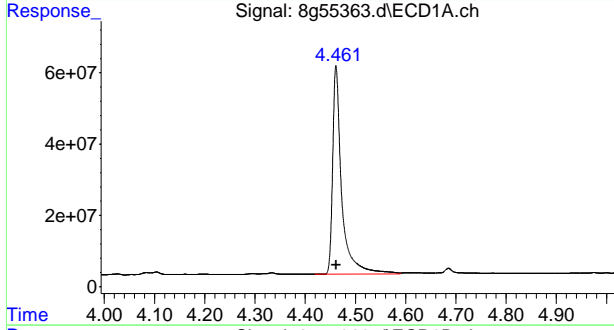
9.3.13  
**9**



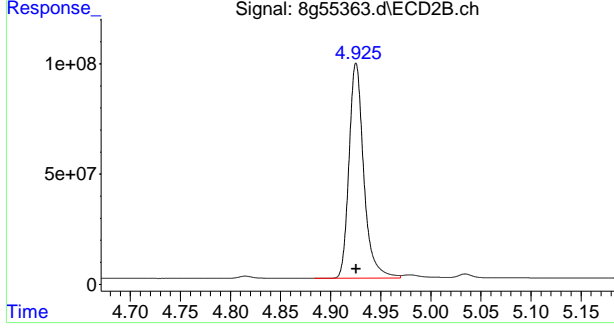
#26 Decachlorobiphenyl  
 R.T.: 12.070 min  
 Delta R.T.: 0.000 min  
 Response: 755568988  
 Conc: 4.84 PPB



#26 Decachlorobiphenyl  
 R.T.: 14.243 min  
 Delta R.T.: 0.000 min  
 Response: 702282197  
 Conc: 5.20 PPB

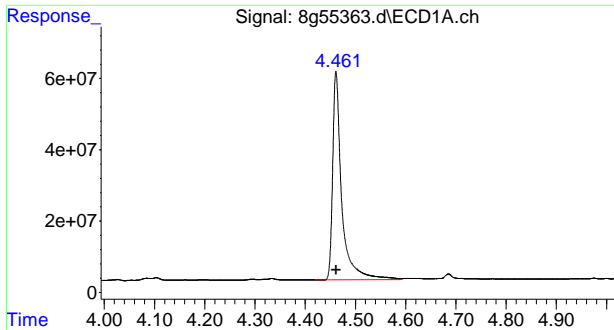


#27 1-bromo-2-nitrobenzeneA  
 R.T.: 4.462 min  
 Delta R.T.: 0.000 min  
 Response: 734416683  
 Conc: 5.00 PPB

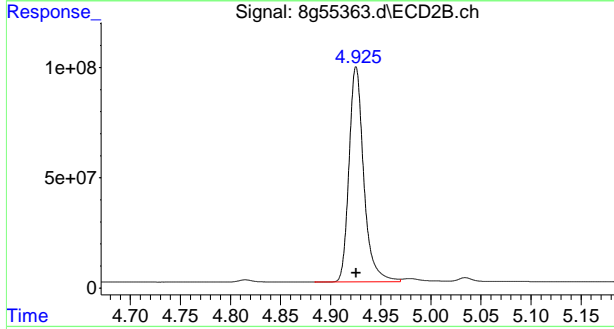


#27 1-bromo-2-nitrobenzeneA  
 R.T.: 4.925 min  
 Delta R.T.: 0.000 min  
 Response: 1001437108  
 Conc: 5.00 PPB

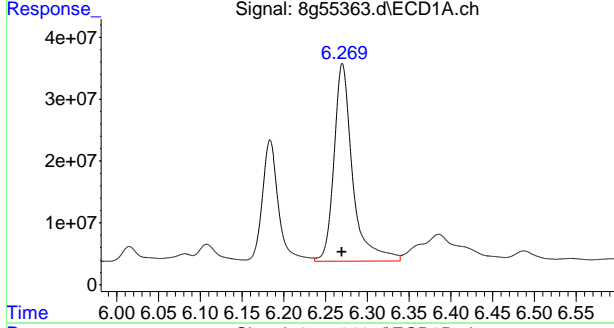
9.3.13  
**9**



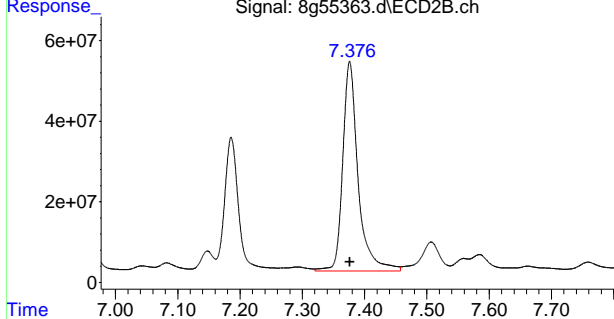
#33 1-bromo-2-nitrobenzeneB  
 R.T.: 4.462 min  
 Delta R.T.: 0.000 min  
 Response: 734416683  
 Conc: 5.00 PPB



#33 1-bromo-2-nitrobenzeneB  
 R.T.: 4.925 min  
 Delta R.T.: 0.000 min  
 Response: 1001437108  
 Conc: 5.00 PPB

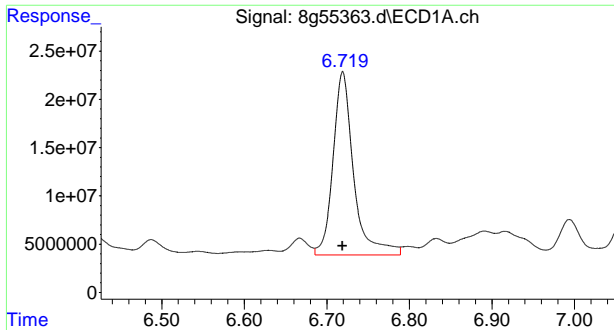


#34 Chlordane {A}  
 R.T.: 6.270 min  
 Delta R.T.: 0.000 min  
 Response: 493475577  
 Conc: 47.25 PPB

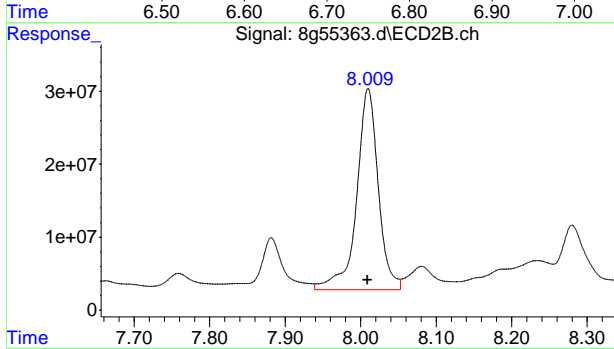


#34 Chlordane {A}  
 R.T.: 7.376 min  
 Delta R.T.: 0.000 min  
 Response: 895100679  
 Conc: 51.50 PPB

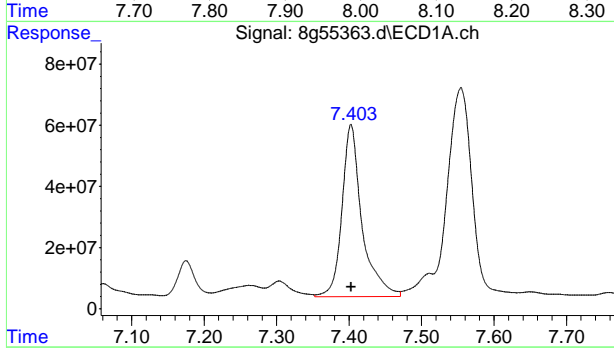
9.3.13  
**9**



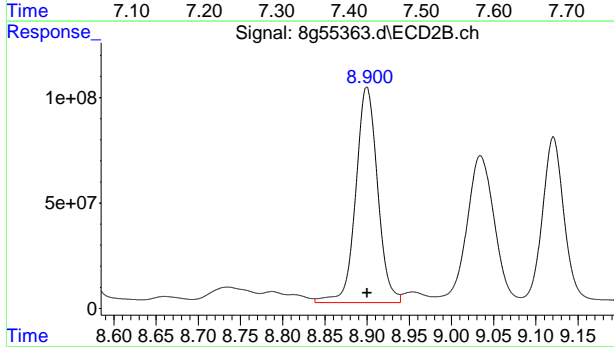
#35 Chlordane {B}  
 R.T.: 6.719 min  
 Delta R.T.: 0.000 min  
 Response: 329216660  
 Conc: 50.40 PPB



#35 Chlordane {B}  
 R.T.: 8.010 min  
 Delta R.T.: 0.000 min  
 Response: 549392410  
 Conc: 55.52 PPB

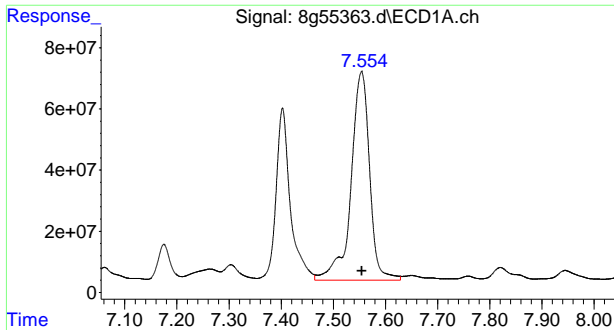


#36 Chlordane {C}  
 R.T.: 7.403 min  
 Delta R.T.: 0.000 min  
 Response: 1079331238  
 Conc: 48.75 PPB

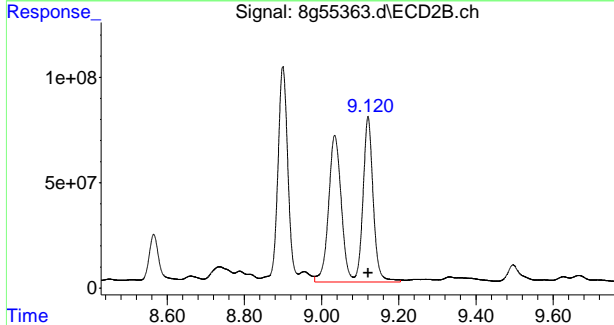


#36 Chlordane {C}  
 R.T.: 8.900 min  
 Delta R.T.: 0.000 min  
 Response: 1848001930  
 Conc: 52.97 PPB

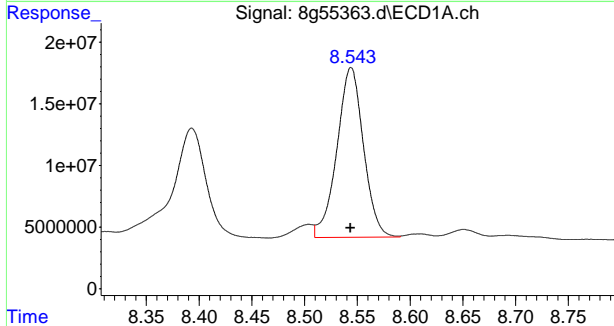
9.3.13  
**9**



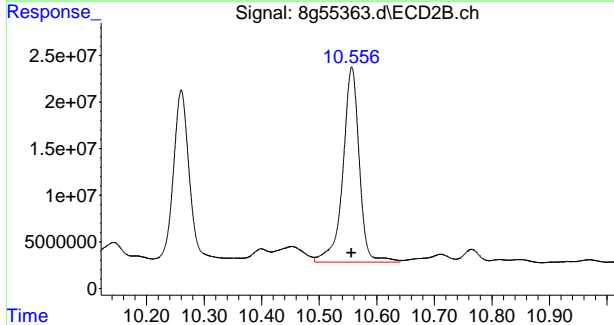
#37 Chlordane {D}  
 R.T.: 7.554 min  
 Delta R.T.: 0.000 min  
 Response: 1691985310  
 Conc: 49.45 PPB m



#37 Chlordane {D}  
 R.T.: 9.120 min  
 Delta R.T.: 0.000 min  
 Response: 3022776776  
 Conc: 53.58 PPB m



#38 Chlordane {E}  
 R.T.: 8.544 min  
 Delta R.T.: 0.000 min  
 Response: 241353732  
 Conc: 50.39 PPB



#38 Chlordane {E}  
 R.T.: 10.557 min  
 Delta R.T.: 0.001 min  
 Response: 416759003  
 Conc: 56.36 PPB

9.3.13  
**9**

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G8G2430\  
 Data File : 8g55364.d  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 3 Apr 2024 8:52 am  
 Operator : rebeccak  
 Sample : ic2430-50 (toxaphene)  
 Misc : op53462,g8g2430,5.0,,,10,1  
 ALS Vial : 40 Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Apr 03 10:34:07 2024  
 Quant Method : C:\msdchem\1\METHODS\8PSTLVI2430a.M  
 Quant Title : PEST/PCB  
 QLast Update : Wed Apr 03 10:21:12 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1ul/column  
 Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
 Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
-----							
Internal Standards							
1)	I 1-bromo-2...	4.462	4.925	702.2E6	983.2E6	5.000	5.000
27)	I 1-bromo-2...	4.462	4.925	702.2E6	983.2E6	5.000	5.000
33)	I 1-bromo-2...	4.462	4.925	702.2E6	983.2E6	5.000	5.000
System Monitoring Compounds							
2)	SAB Tetrachlo...	5.074	5.755	650.4E6	1331.2E6	4.444	4.601
	Spiked Amount	40.000	Range 30 - 150	Recovery =		11.11%#	11.50%#
26)	SA Decachlor...	12.070	14.245	692.3E6	633.1E6	4.384	4.621
	Spiked Amount	40.000		Recovery =		10.96%	11.55%
Target Compounds							
28)	L8 Toxaphene{A}	7.528	9.780	42085498	83609147	95.956m	94.215m
29)	L8 Toxaphene{B}	8.149	10.611	73526040	312.1E6	33.959	290.515m#
30)	L8 Toxaphene{C}	9.112	10.742	80193993	83315164	59.246m	59.297m
31)	L8 Toxaphene{D}	9.424	11.044	84049338	230.1E6	75.559m	79.118m
32)	L8 Toxaphene{E}	9.726	11.935	180.1E6	244.3E6	51.020m	80.845m#

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

9.3.14  
**9**

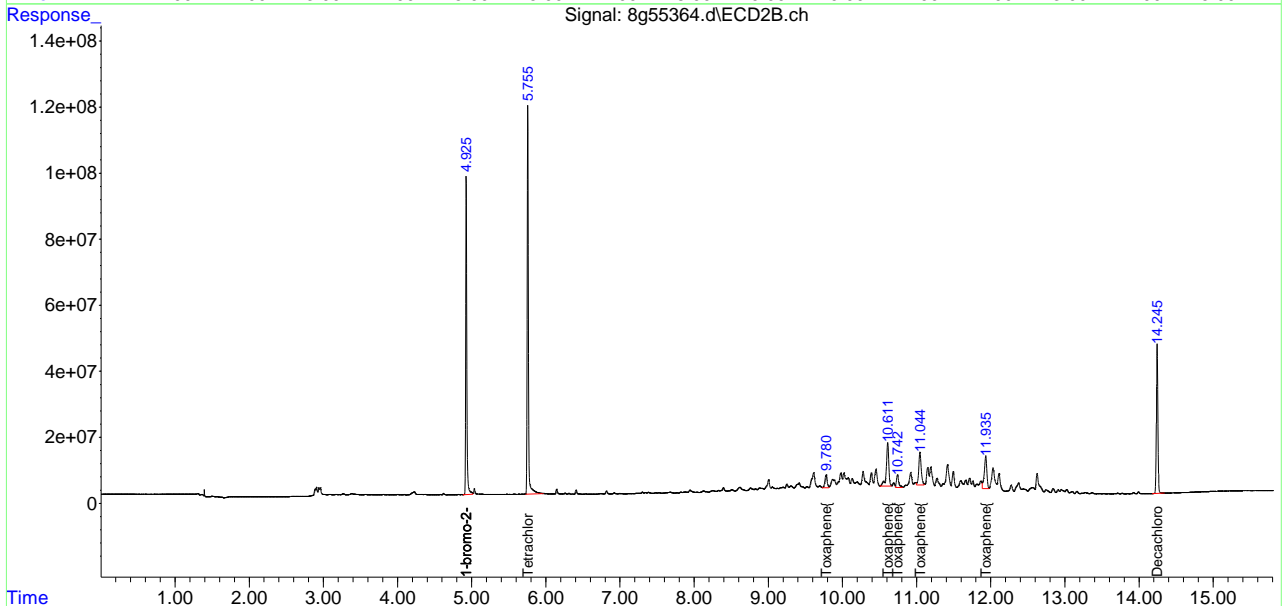
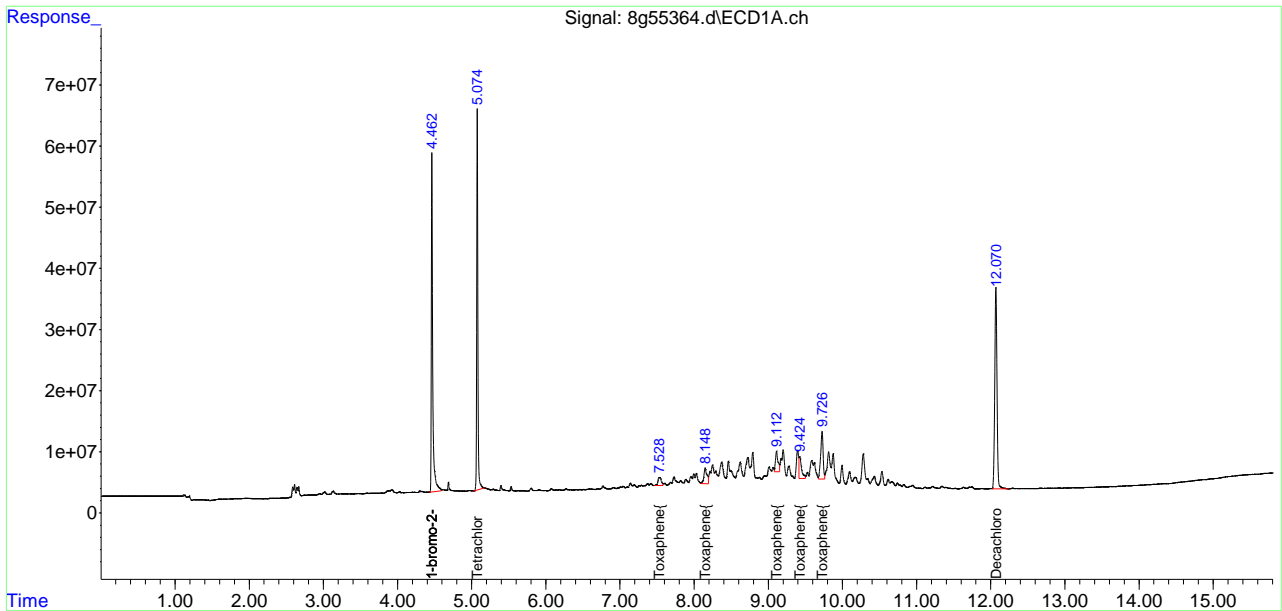


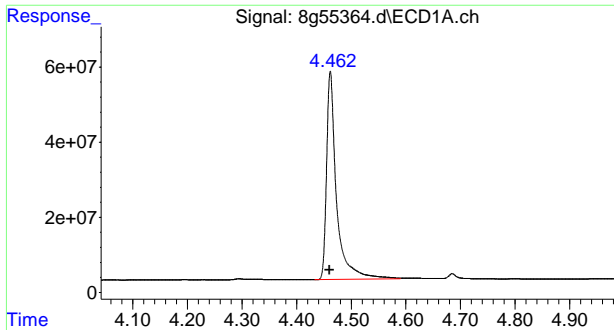
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\G8G2430\  
Data File : 8g55364.d  
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
Acq On : 3 Apr 2024 8:52 am  
Operator : rebeccak  
Sample : ic2430-50 (toxaphene)  
Misc : op53462,g8g2430,5.0,,,10,1  
ALS Vial : 40 Sample Multiplier: 1

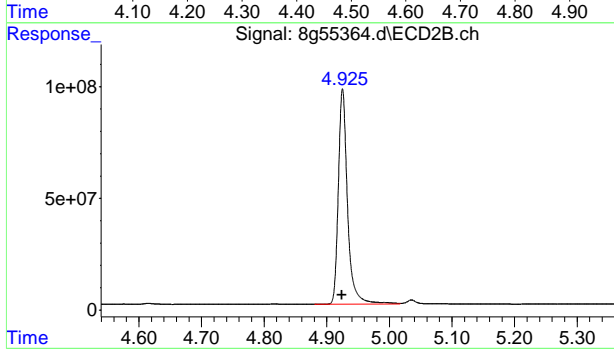
Integration File signal 1: autoint1.e  
Integration File signal 2: autoint2.e  
Quant Time: Apr 03 10:34:07 2024  
Quant Method : C:\msdchem\1\METHODS\8PSTLVI2430a.M  
Quant Title : PEST/PCB  
QLast Update : Wed Apr 03 10:21:12 2024  
Response via : Initial Calibration  
Integrator: ChemStation

Volume Inj. : 1ul/column  
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II  
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um

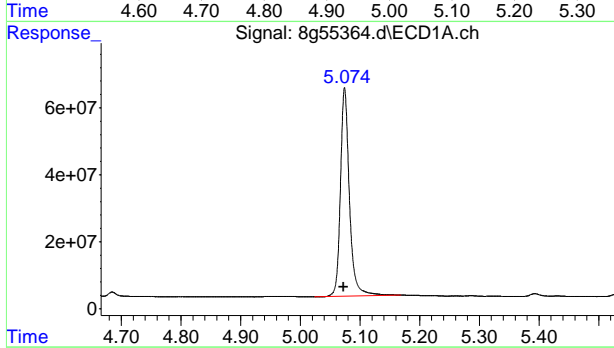




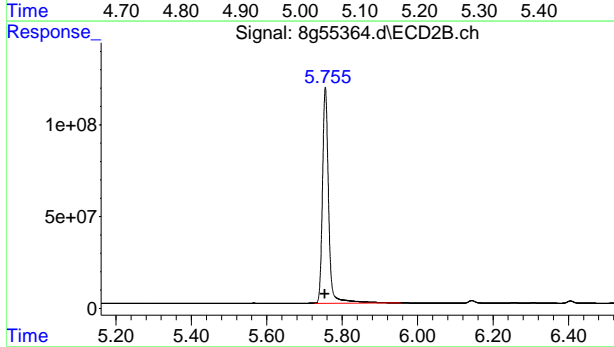
#1 1-bromo-2-nitrobenzene  
 R.T.: 4.462 min  
 Delta R.T.: 0.002 min  
 Response: 702235089  
 Conc: 5.00 PPB



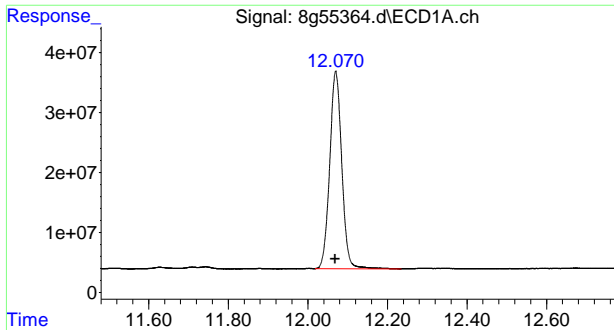
#1 1-bromo-2-nitrobenzene  
 R.T.: 4.925 min  
 Delta R.T.: 0.001 min  
 Response: 983174882  
 Conc: 5.00 PPB



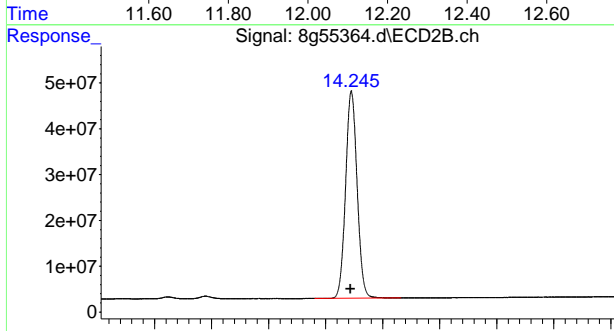
#2 Tetrachloro-m-xylene  
 R.T.: 5.074 min  
 Delta R.T.: 0.002 min  
 Response: 650398419  
 Conc: 4.44 PPB



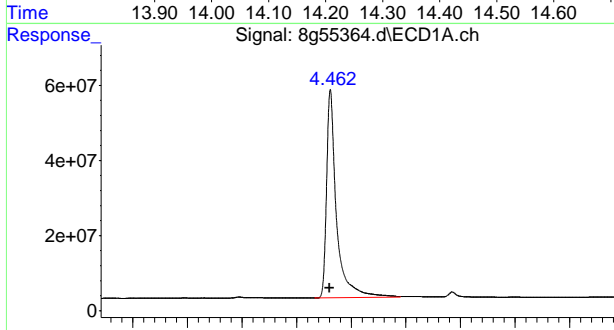
#2 Tetrachloro-m-xylene  
 R.T.: 5.755 min  
 Delta R.T.: 0.001 min  
 Response: 1331238973  
 Conc: 4.60 PPB



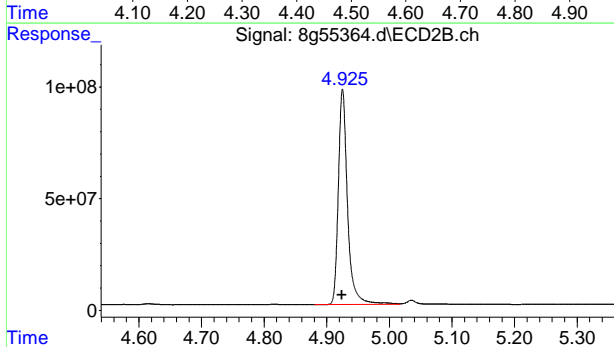
#26 Decachlorobiphenyl  
 R.T.: 12.070 min  
 Delta R.T.: 0.002 min  
 Response: 692283692  
 Conc: 4.38 PPB



#26 Decachlorobiphenyl  
 R.T.: 14.245 min  
 Delta R.T.: 0.002 min  
 Response: 633138882  
 Conc: 4.62 PPB

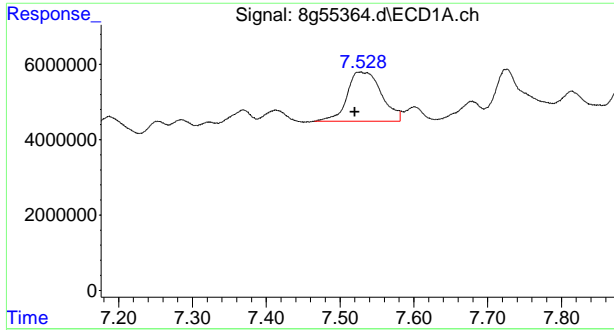


#27 1-bromo-2-nitrobenzeneA  
 R.T.: 4.462 min  
 Delta R.T.: 0.002 min  
 Response: 702235089  
 Conc: 5.00 PPB

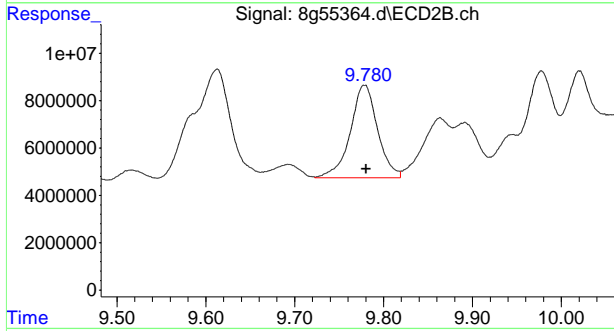


#27 1-bromo-2-nitrobenzeneA  
 R.T.: 4.925 min  
 Delta R.T.: 0.001 min  
 Response: 983174882  
 Conc: 5.00 PPB

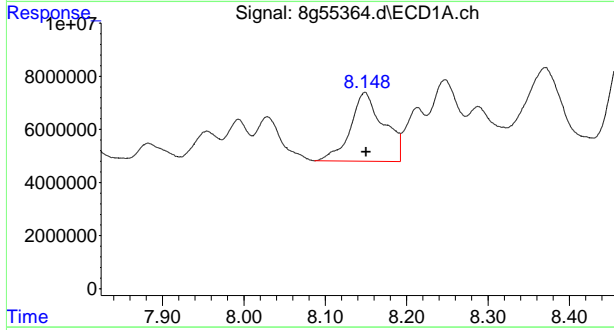
9.3.14  
**9**



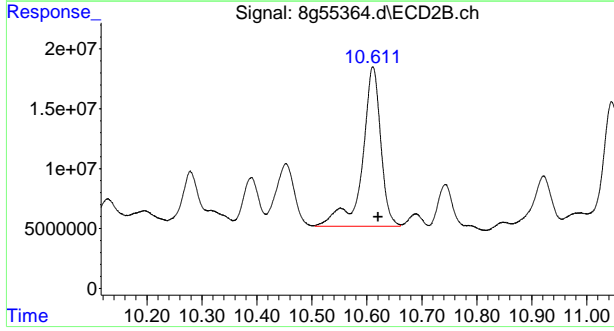
#28 Toxaphene{A}  
 R.T.: 7.528 min  
 Delta R.T.: 0.008 min  
 Response: 42085498  
 Conc: 95.96 PPB m



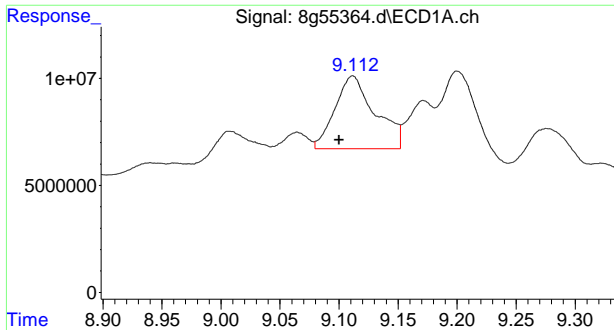
#28 Toxaphene{A}  
 R.T.: 9.780 min  
 Delta R.T.: 0.000 min  
 Response: 83609147  
 Conc: 94.21 PPB m



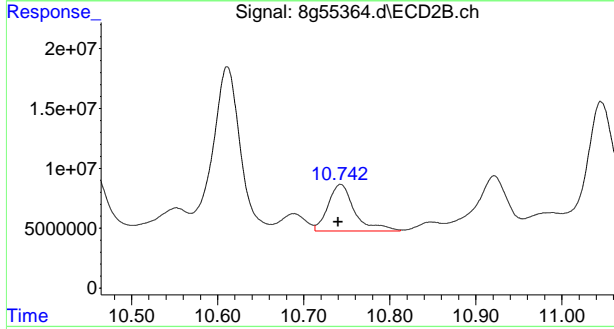
#29 Toxaphene{B}  
 R.T.: 8.149 min  
 Delta R.T.: -0.001 min  
 Response: 73526040  
 Conc: 33.96 PPB



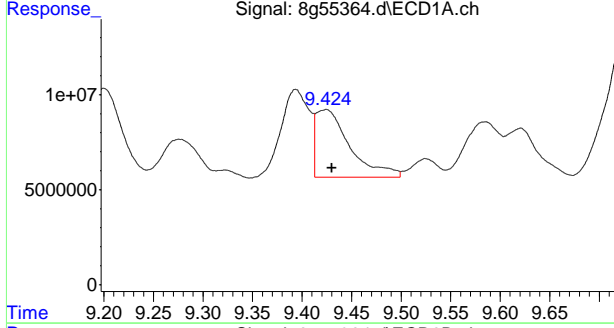
#29 Toxaphene{B}  
 R.T.: 10.611 min  
 Delta R.T.: -0.009 min  
 Response: 312065913  
 Conc: 290.52 PPB m



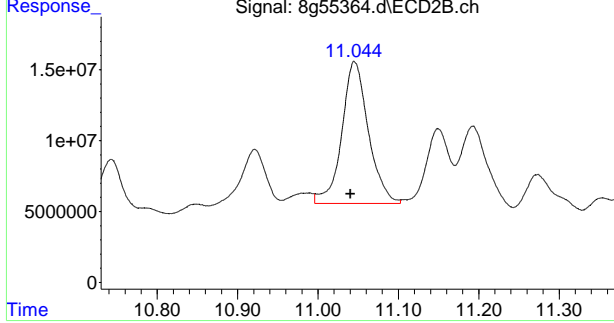
#30 Toxaphene{C}  
 R.T.: 9.112 min  
 Delta R.T.: 0.012 min  
 Response: 80193993  
 Conc: 59.25 PPB m



#30 Toxaphene{C}  
 R.T.: 10.742 min  
 Delta R.T.: 0.002 min  
 Response: 83315164  
 Conc: 59.30 PPB m

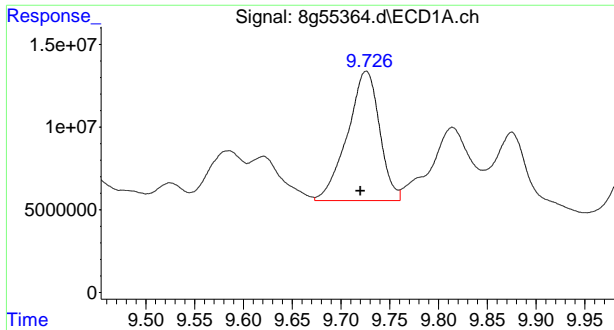


#31 Toxaphene{D}  
 R.T.: 9.424 min  
 Delta R.T.: -0.006 min  
 Response: 84049338  
 Conc: 75.56 PPB m

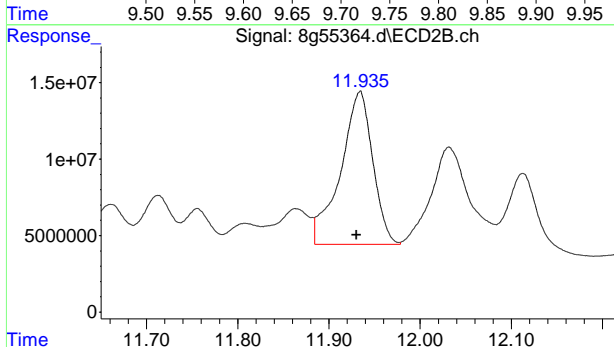


#31 Toxaphene{D}  
 R.T.: 11.044 min  
 Delta R.T.: 0.004 min  
 Response: 230063056  
 Conc: 79.12 PPB m

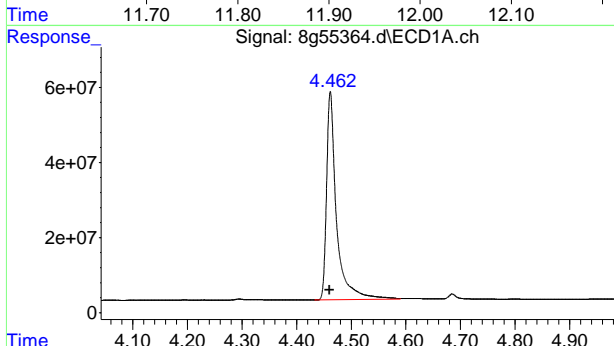
9.3.14  
9



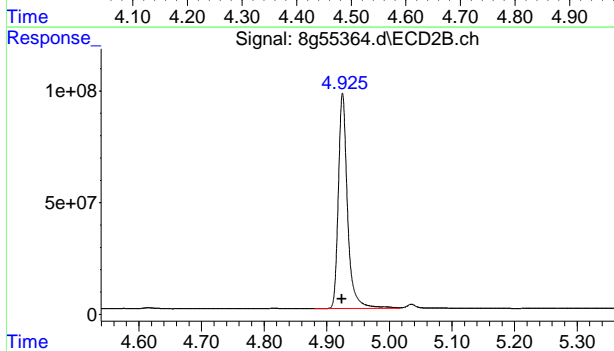
#32 Toxaphene{E}  
 R.T.: 9.726 min  
 Delta R.T.: 0.006 min  
 Response: 180091894  
 Conc: 51.02 PPB m



#32 Toxaphene{E}  
 R.T.: 11.935 min  
 Delta R.T.: 0.005 min  
 Response: 244293906  
 Conc: 80.84 PPB m



#33 1-bromo-2-nitrobenzeneB  
 R.T.: 4.462 min  
 Delta R.T.: 0.002 min  
 Response: 702235089  
 Conc: 5.00 PPB



#33 1-bromo-2-nitrobenzeneB  
 R.T.: 4.925 min  
 Delta R.T.: 0.001 min  
 Response: 983174882  
 Conc: 5.00 PPB

9.3.14  
**9**

Manual Integrations  
**APPROVED**  
 (compounds with "m" flag)  
**Gwendolyn Burns**  
 05/02/24 15:53

Data Path : C:\msdchem\1\DATA\2G6081\  
 Data File : 2G231556.d  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 29 Apr 2024 5:31 am  
 Operator : christp  
 Sample : ic6081-100  
 Misc : op53681,G2G6081,5.0,,,10,1  
 ALS Vial : 0 (Sig #1); 10 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Apr 29 07:01:35 2024  
 Quant Method : C:\msdchem\1\METHODS\2PCBLVI6081.M  
 Quant Title :  
 QLast Update : Mon Apr 29 05:43:30 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
 Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
-----						
System Monitoring Compounds						
1) S Tetrachlo...	4.683	5.175	1829.4E6	2421.5E6	6.305	4.517 #
Spiked Amount	40.000		Recovery	=	15.76%	11.29%
51) S Decachlor...	11.309	12.425	1619.7E6	1499.1E6	7.577	5.168m#
Spiked Amount	40.000		Recovery	=	18.94%	12.92%
Target Compounds						
31) AR1016-A	4.975	5.628	756.1E6	908.8E6	137.843	120.169
32) AR1016-B	5.248	6.013	1503.0E6	1926.8E6	151.065	102.909 #
33) AR1016-C	5.616	6.513	3259.5E6	4775.3E6	151.379	138.194m
34) AR1016-D	5.744	6.677	1287.7E6	1772.2E6	159.920	110.656 #
35) AR1016-E	6.092	7.322	1426.5E6	1466.4E6	152.643	107.568 #
36) AR1260-A	8.532	10.413	4023.0E6	4882.5E6	188.614	124.225m#
37) AR1260-B	8.774	10.512	2852.8E6	3347.4E6	226.887	119.915 #
38) AR1260-C	9.244	10.846	2433.8E6	2893.4E6	185.256	131.716 #
39) AR1260-D	9.741	11.091	6996.7E6	7402.5E6	233.358	148.082 #
40) AR1260-E	10.124	11.450	6404.4E6	6211.6E6	214.785m	127.136m#
-----						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

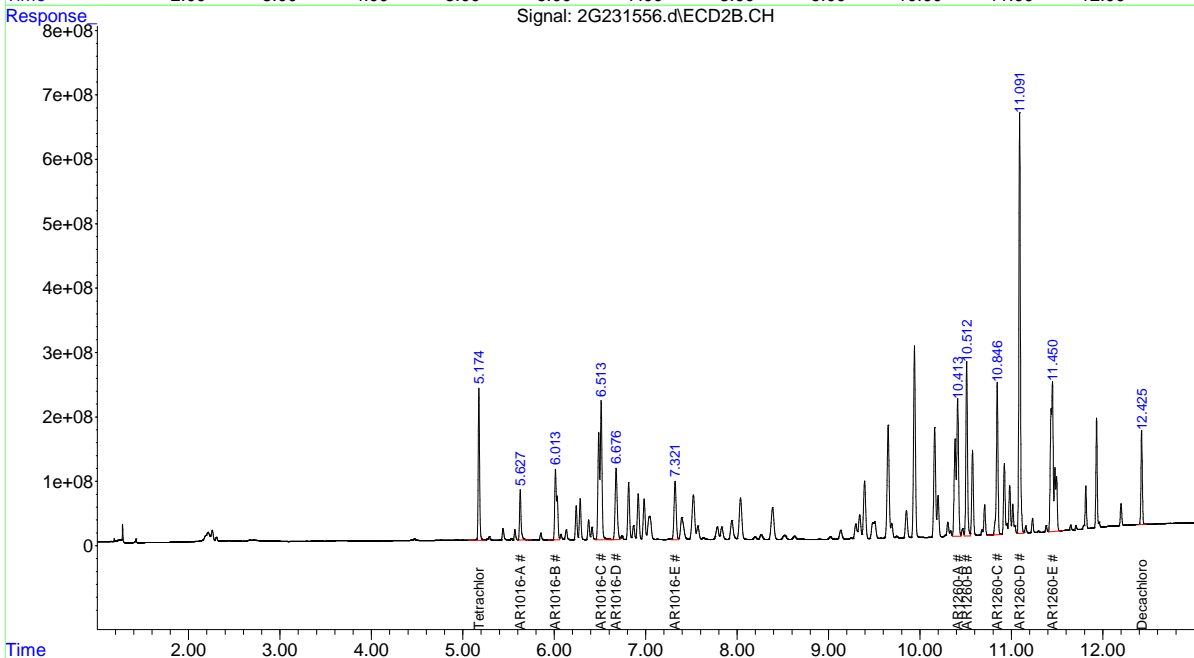
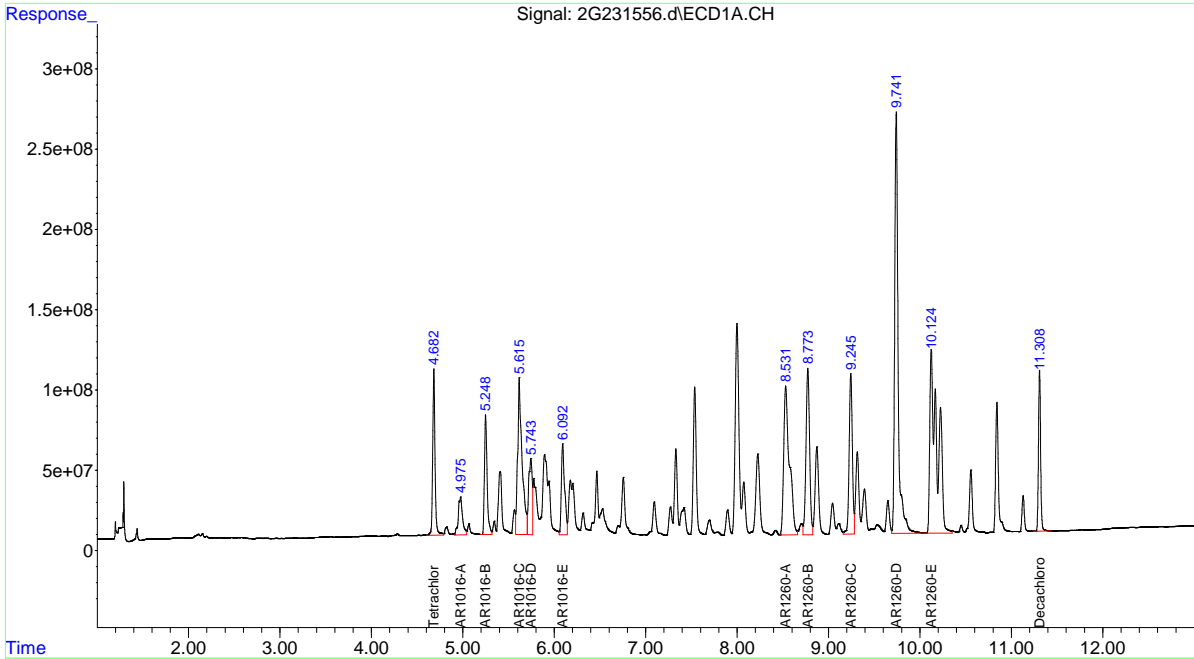
9.3.15  
**9**



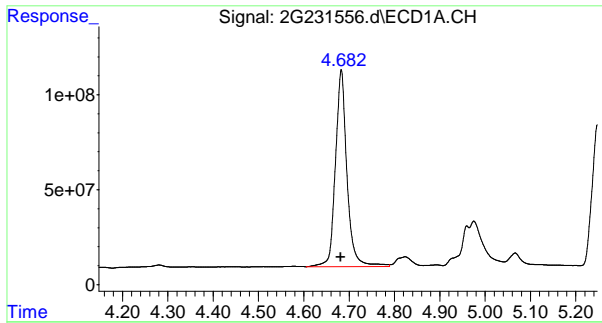
Data Path : C:\msdchem\1\DATA\2G6081\  
Data File : 2G231556.d  
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
Acq On : 29 Apr 2024 5:31 am  
Operator : christp  
Sample : ic6081-100  
Misc : op53681,G2G6081,5.0,,,10,1  
ALS Vial : 0 (Sig #1); 10 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
Integration File signal 2: autoint2.e  
Quant Time: Apr 29 07:01:35 2024  
Quant Method : C:\msdchem\1\METHODS\2PCBLVI6081.M  
Quant Title :  
QLast Update : Mon Apr 29 05:43:30 2024  
Response via : Initial Calibration  
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

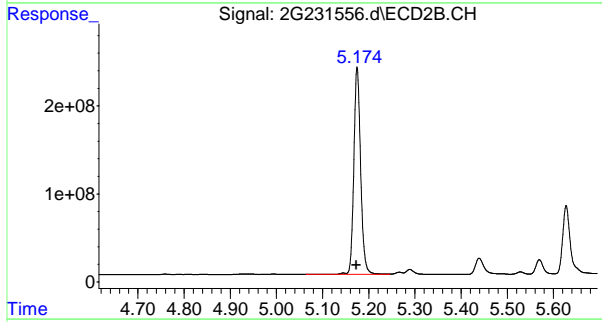
Volume Inj. : 1ul  
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2  
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



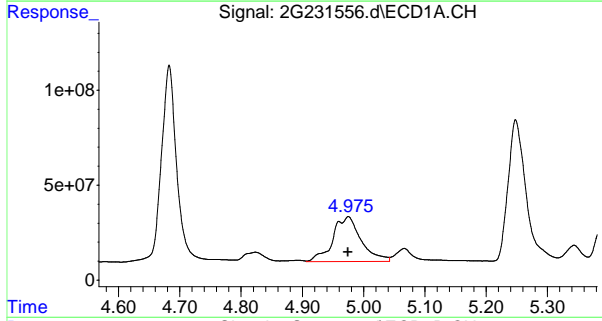




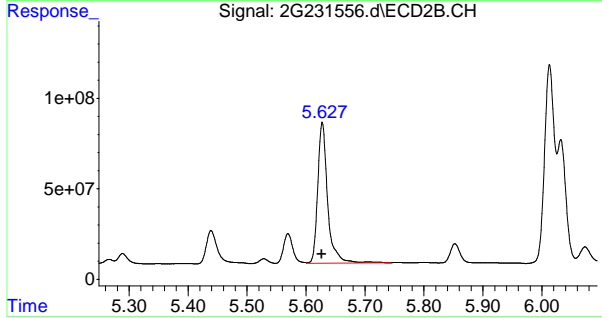
#1 Tetrachloro-m-xylene  
 R.T.: 4.683 min  
 Delta R.T.: 0.002 min  
 Response: 1829391817  
 Conc: 6.30 ppb



#1 Tetrachloro-m-xylene  
 R.T.: 5.175 min  
 Delta R.T.: 0.002 min  
 Response: 2421530567  
 Conc: 4.52 ppb

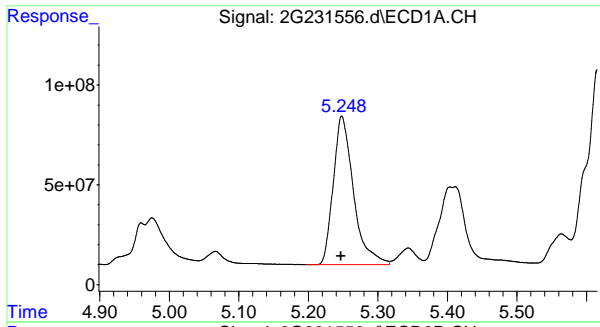


#31 AR1016-A  
 R.T.: 4.975 min  
 Delta R.T.: 0.001 min  
 Response: 756069791  
 Conc: 137.84 PPB

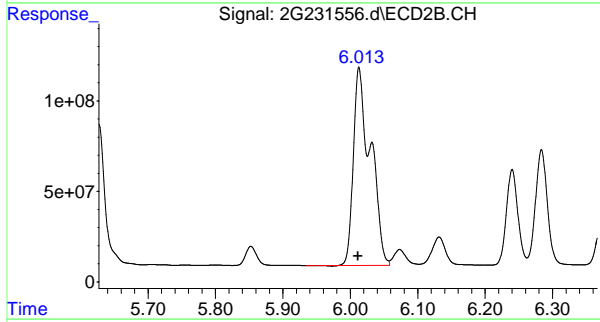


#31 AR1016-A  
 R.T.: 5.628 min  
 Delta R.T.: 0.001 min  
 Response: 908838401  
 Conc: 120.17 PPB

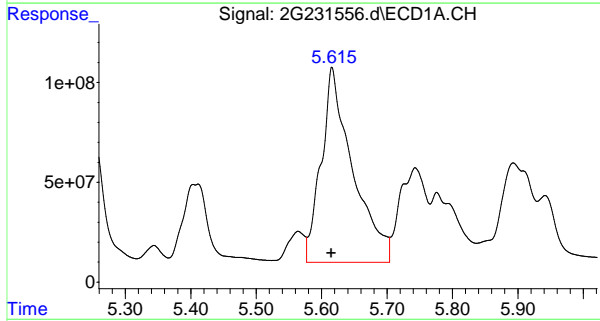
9.3.15  
**9**



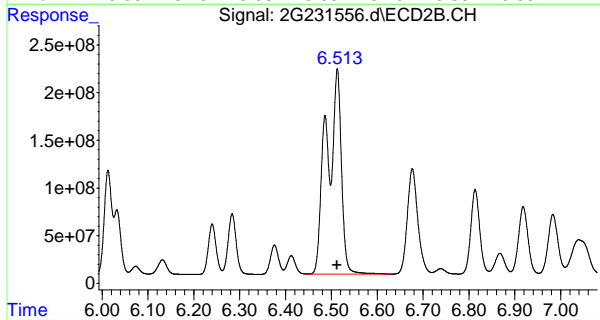
#32 AR1016-B  
 R.T.: 5.248 min  
 Delta R.T.: 0.002 min  
 Response: 1502954717  
 Conc: 151.06 PPB



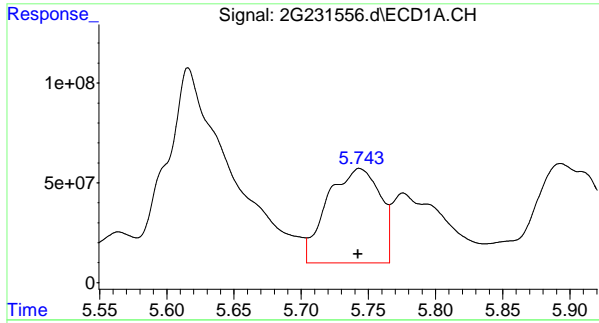
#32 AR1016-B  
 R.T.: 6.013 min  
 Delta R.T.: 0.002 min  
 Response: 1926797395  
 Conc: 102.91 PPB



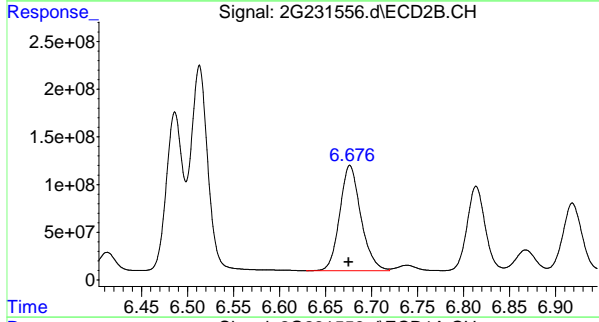
#33 AR1016-C  
 R.T.: 5.616 min  
 Delta R.T.: 0.001 min  
 Response: 3259512691  
 Conc: 151.38 PPB



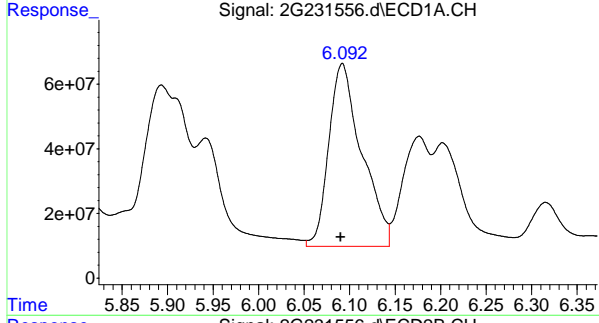
#33 AR1016-C  
 R.T.: 6.513 min  
 Delta R.T.: 0.000 min  
 Response: 4775342147  
 Conc: 138.19 PPB m



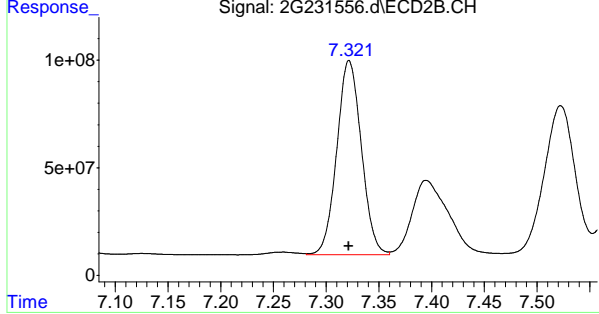
#34 AR1016-D  
 R.T.: 5.744 min  
 Delta R.T.: 0.001 min  
 Response: 1287701294  
 Conc: 159.92 PPB



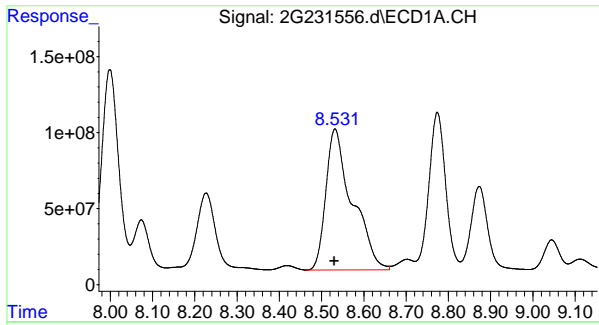
#34 AR1016-D  
 R.T.: 6.677 min  
 Delta R.T.: 0.001 min  
 Response: 1772168138  
 Conc: 110.66 PPB



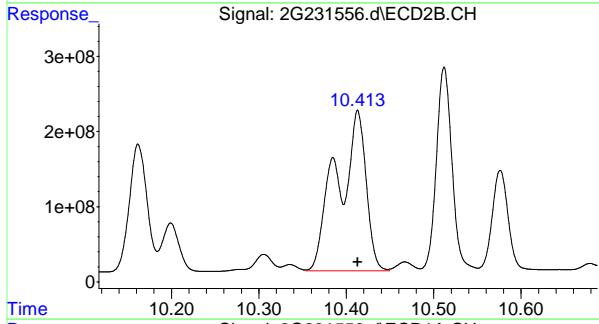
#35 AR1016-E  
 R.T.: 6.092 min  
 Delta R.T.: 0.002 min  
 Response: 1426479582  
 Conc: 152.64 PPB



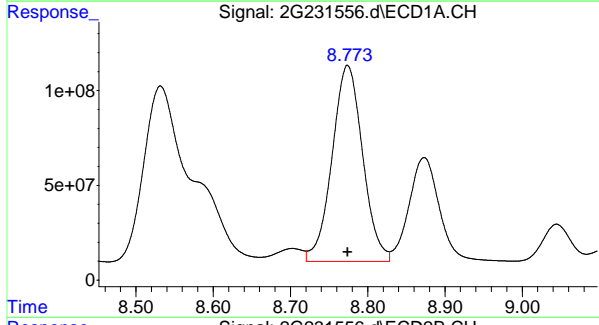
#35 AR1016-E  
 R.T.: 7.322 min  
 Delta R.T.: 0.000 min  
 Response: 1466393037  
 Conc: 107.57 PPB



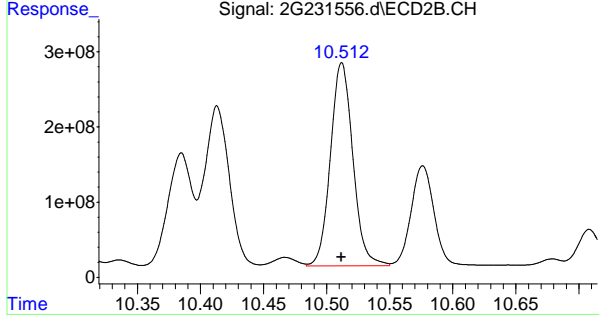
#36 AR1260-A  
 R.T.: 8.532 min  
 Delta R.T.: 0.002 min  
 Response: 4022959873  
 Conc: 188.61 PPB



#36 AR1260-A  
 R.T.: 10.413 min  
 Delta R.T.: 0.000 min  
 Response: 4882520709  
 Conc: 124.22 PPB m

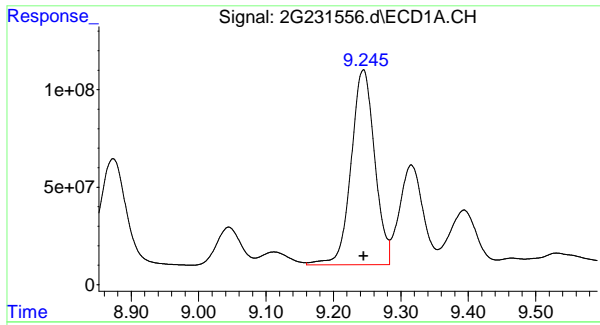


#37 AR1260-B  
 R.T.: 8.774 min  
 Delta R.T.: 0.000 min  
 Response: 2852823115  
 Conc: 226.89 PPB



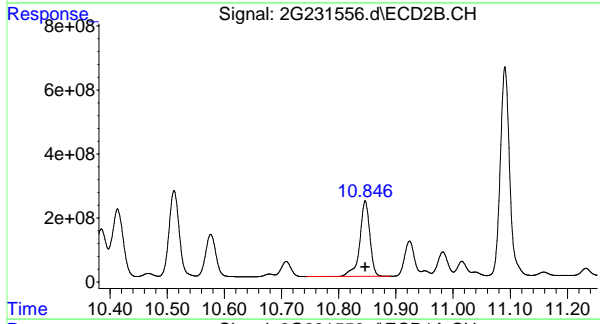
#37 AR1260-B  
 R.T.: 10.512 min  
 Delta R.T.: 0.000 min  
 Response: 3347422647  
 Conc: 119.92 PPB

9.3.15  
**9**



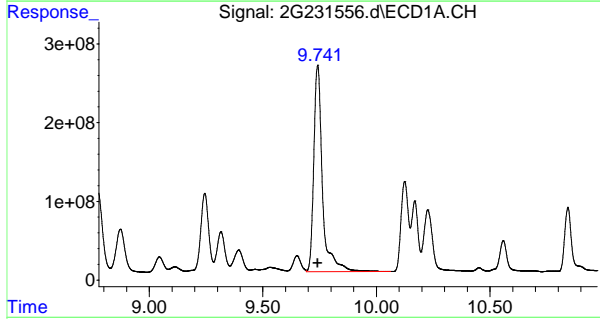
#38 AR1260-C

R.T.: 9.244 min  
 Delta R.T.: 0.000 min  
 Response: 2433764091  
 Conc: 185.26 PPB



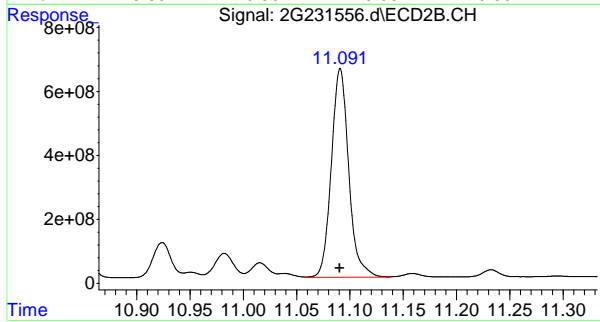
#38 AR1260-C

R.T.: 10.846 min  
 Delta R.T.: 0.000 min  
 Response: 2893420806  
 Conc: 131.72 PPB



#39 AR1260-D

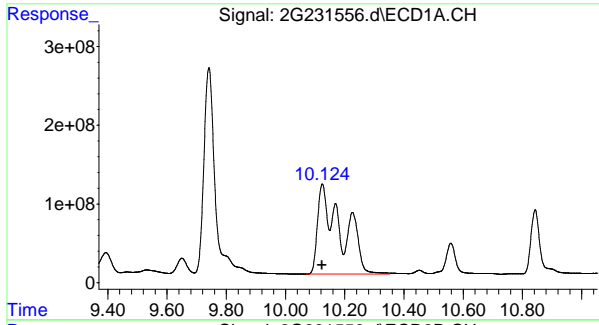
R.T.: 9.741 min  
 Delta R.T.: 0.001 min  
 Response: 6996704264  
 Conc: 233.36 PPB



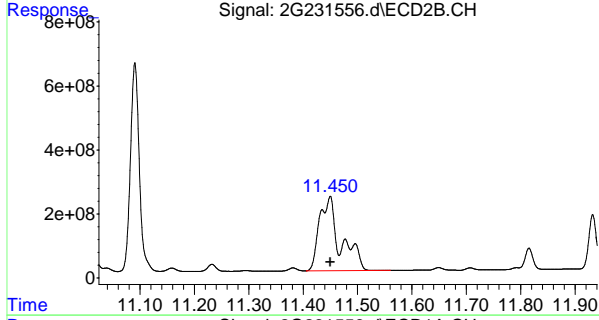
#39 AR1260-D

R.T.: 11.091 min  
 Delta R.T.: 0.000 min  
 Response: 7402547782  
 Conc: 148.08 PPB

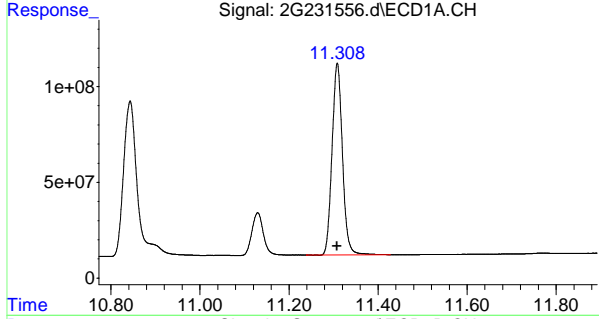
9.3.15  
**9**



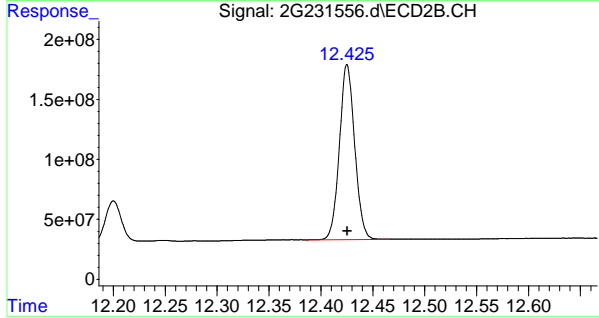
#40 AR1260-E  
 R.T.: 10.124 min  
 Delta R.T.: 0.000 min  
 Response: 6404405650  
 Conc: 214.79 PPB m



#40 AR1260-E  
 R.T.: 11.450 min  
 Delta R.T.: 0.000 min  
 Response: 6211623038  
 Conc: 127.14 PPB m



#51 Decachlorobiphenyl  
 R.T.: 11.309 min  
 Delta R.T.: 0.000 min  
 Response: 1619665188  
 Conc: 7.58 ppb



#51 Decachlorobiphenyl  
 R.T.: 12.425 min  
 Delta R.T.: 0.000 min  
 Response: 1499091023  
 Conc: 5.17 ppb m

Manual Integrations  
**APPROVED**  
 (compounds with "m" flag)  
**Gwendolyn Burns**  
 05/02/24 15:53

Data Path : C:\msdchem\1\DATA\2G6081\  
 Data File : 2G231563.d  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 29 Apr 2024 8:27 am  
 Operator : christp  
 Sample : ic6081-100  
 Misc : op53681,G2G6081,5.0,,,10,1  
 ALS Vial : 0 (Sig #1); 17 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Apr 29 17:49:01 2024  
 Quant Method : C:\msdchem\1\METHODS\2PCBLVI6081.M  
 Quant Title :  
 QLast Update : Mon Apr 29 17:48:07 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
 Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
-----						
System Monitoring Compounds						
1) S Tetrachlo...	4.680	5.173	1932.2E6	2470.2E6	6.659	4.608 #
Spiked Amount	40.000		Recovery	=	16.65%	11.52%
51) S Decachlor...	11.308	12.430	1731.4E6	1612.9E6	8.099	5.560 #
Spiked Amount	40.000		Recovery	=	20.25%	13.90%
Target Compounds						
2) AR1221-A	4.256	4.758	263.7E6	283.8E6	120.631	127.799
3) AR1221-B	4.822	5.438	455.8E6	639.0E6	173.796	126.636 #
4) AR1221-C	4.974	5.627	1450.2E6	1526.8E6	174.109	126.889 #
5) AR1221-D	5.247	6.072	203.5E6	469.1E6	148.028m	102.749m#
6) AR1221-E	5.613	6.512	330.3E6	348.2E6	153.872	134.893
-----						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

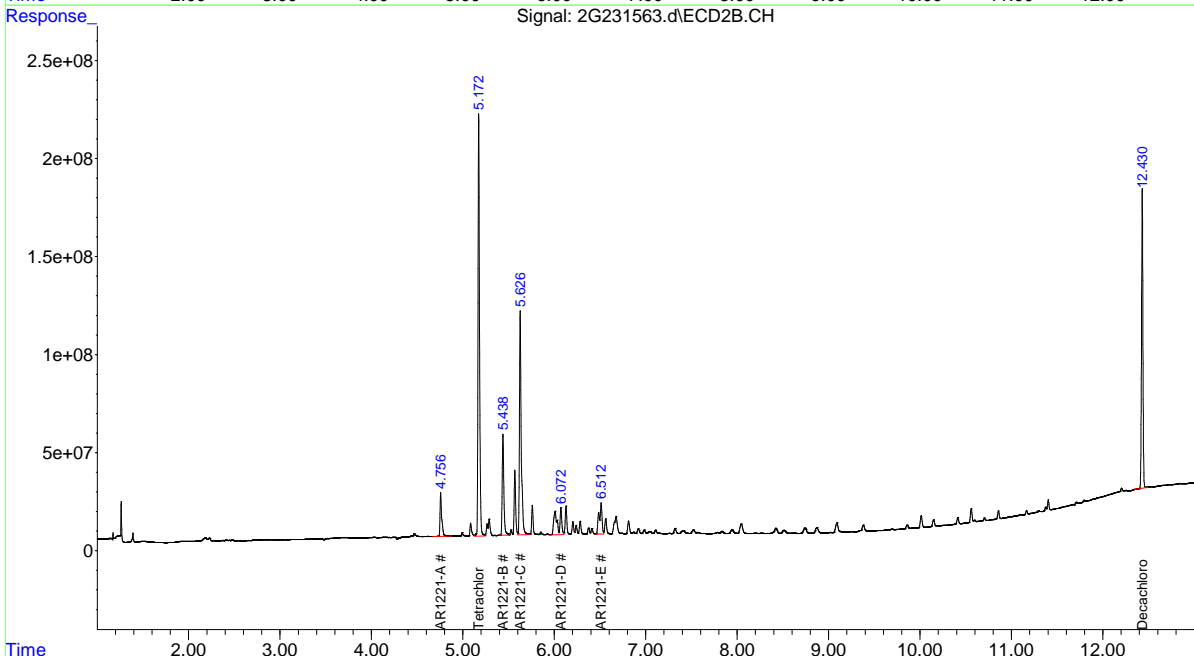
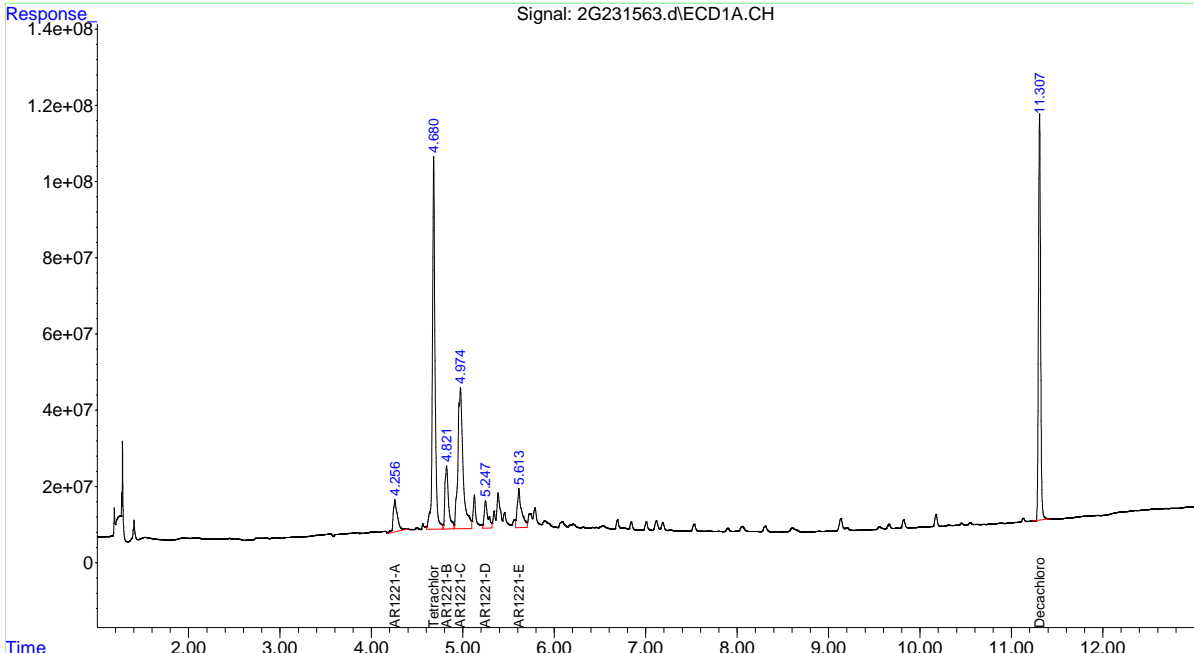
9.3.16  
**9**



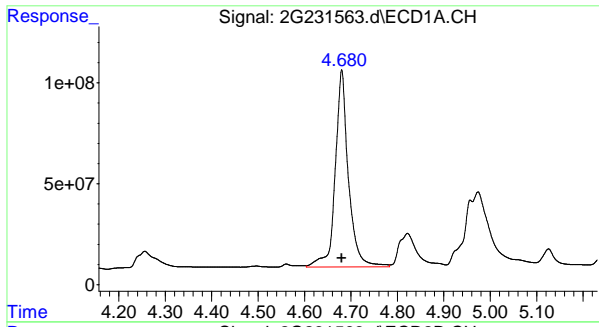
Data Path : C:\msdchem\1\DATA\2G6081\  
Data File : 2G231563.d  
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
Acq On : 29 Apr 2024 8:27 am  
Operator : christp  
Sample : ic6081-100  
Misc : op53681,G2G6081,5.0,,,10,1  
ALS Vial : 0 (Sig #1); 17 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
Integration File signal 2: autoint2.e  
Quant Time: Apr 29 17:49:01 2024  
Quant Method : C:\msdchem\1\METHODS\2PCBLVI6081.M  
Quant Title :  
QLast Update : Mon Apr 29 17:48:07 2024  
Response via : Initial Calibration  
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

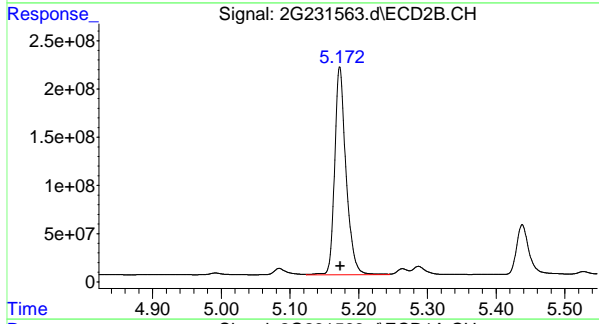
Volume Inj. : 1ul  
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2  
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



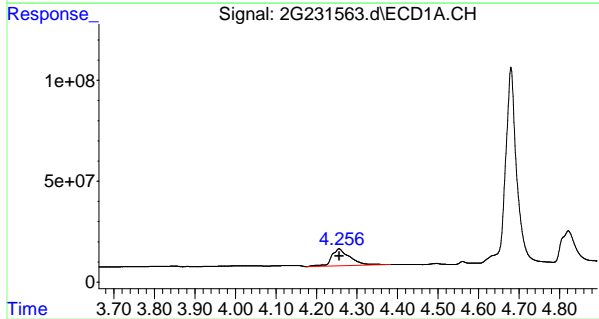




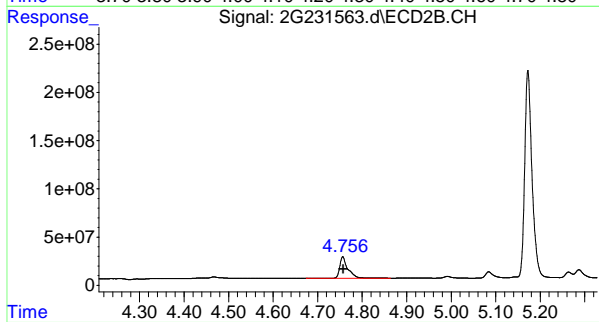
#1 Tetrachloro-m-xylene  
 R.T.: 4.680 min  
 Delta R.T.: 0.000 min  
 Response: 1932175326  
 Conc: 6.66 ppb



#1 Tetrachloro-m-xylene  
 R.T.: 5.173 min  
 Delta R.T.: 0.000 min  
 Response: 2470169171  
 Conc: 4.61 ppb

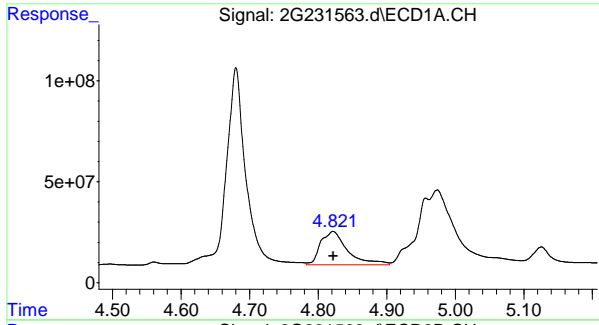


#2 AR1221-A  
 R.T.: 4.256 min  
 Delta R.T.: 0.000 min  
 Response: 263705647  
 Conc: 120.63 PPB



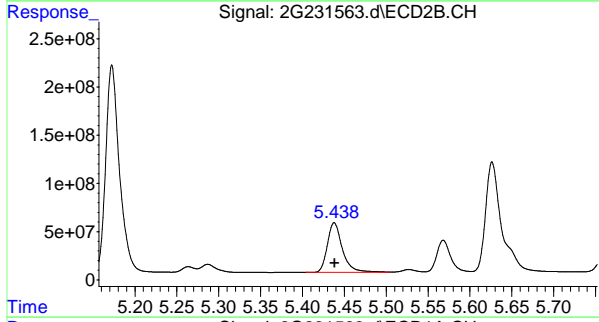
#2 AR1221-A  
 R.T.: 4.758 min  
 Delta R.T.: 0.000 min  
 Response: 283781480  
 Conc: 127.80 PPB

9.3.16  
**9**



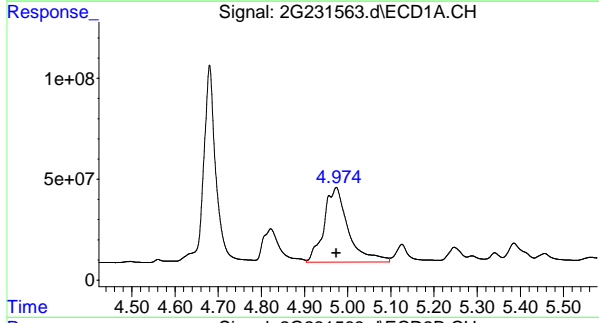
#3 AR1221-B

R.T.: 4.822 min  
 Delta R.T.: 0.000 min  
 Response: 455776195  
 Conc: 173.80 PPB



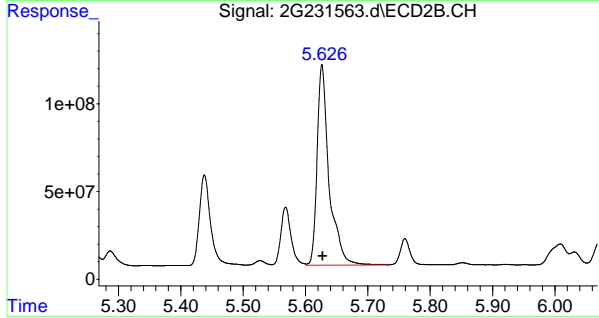
#3 AR1221-B

R.T.: 5.438 min  
 Delta R.T.: 0.000 min  
 Response: 639048258  
 Conc: 126.64 PPB



#4 AR1221-C

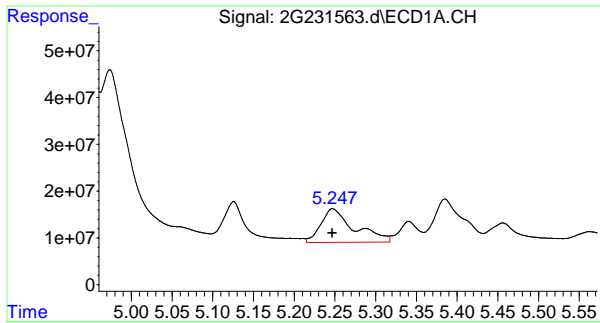
R.T.: 4.974 min  
 Delta R.T.: 0.000 min  
 Response: 1450202652  
 Conc: 174.11 PPB



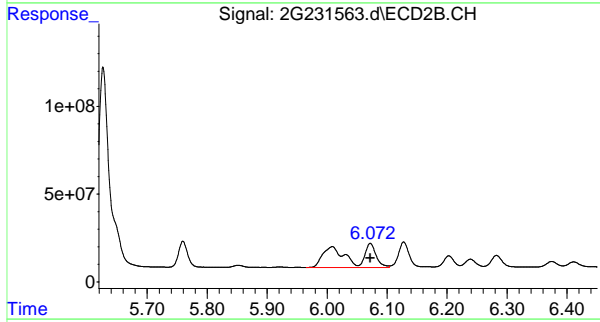
#4 AR1221-C

R.T.: 5.627 min  
 Delta R.T.: 0.000 min  
 Response: 1526765722  
 Conc: 126.89 PPB

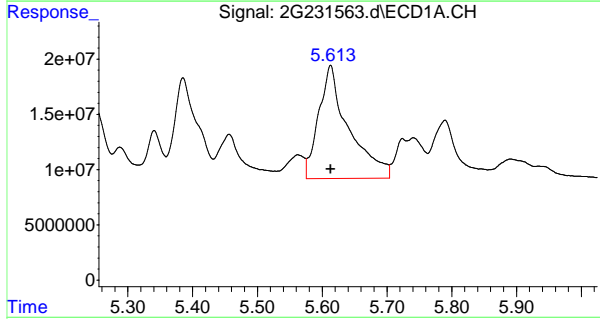
9.3.16  
**9**



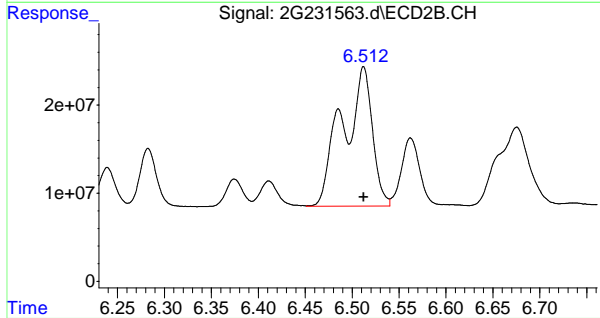
#5 AR1221-D  
 R.T.: 5.247 min  
 Delta R.T.: 0.000 min  
 Response: 203537576  
 Conc: 148.03 PPB m



#5 AR1221-D  
 R.T.: 6.072 min  
 Delta R.T.: 0.000 min  
 Response: 469149333  
 Conc: 102.75 PPB m

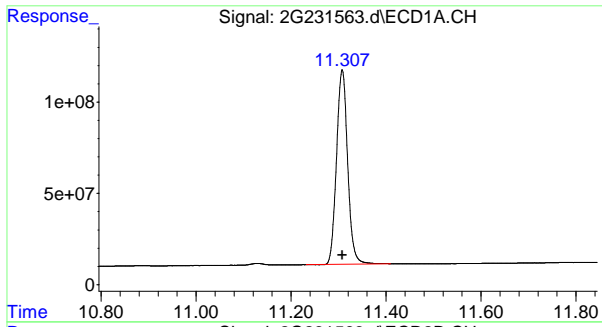


#6 AR1221-E  
 R.T.: 5.613 min  
 Delta R.T.: 0.000 min  
 Response: 330296850  
 Conc: 153.87 PPB



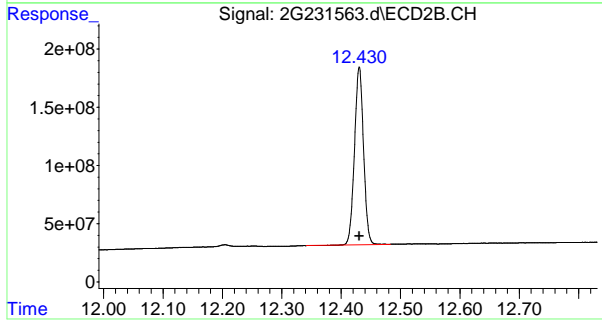
#6 AR1221-E  
 R.T.: 6.512 min  
 Delta R.T.: 0.000 min  
 Response: 348199384  
 Conc: 134.89 PPB

9.3.16  
**9**



#51 Decachlorobiphenyl

R.T.: 11.308 min  
 Delta R.T.: 0.000 min  
 Response: 1731442736  
 Conc: 8.10 ppb



#51 Decachlorobiphenyl

R.T.: 12.430 min  
 Delta R.T.: 0.000 min  
 Response: 1612859793  
 Conc: 5.56 ppb

9.3.16  
**9**

Manual Integrations  
**APPROVED**  
 (compounds with "m" flag)  
**Gwendolyn Burns**  
**05/02/24 15:53**

Data Path : C:\msdchem\1\DATA\2G6081\  
 Data File : 2G231565.d  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 29 Apr 2024 9:17 am  
 Operator : christp  
 Sample : ic6081-100  
 Misc : op53681,G2G6081,5.0,,,10,1  
 ALS Vial : 0 (Sig #1); 19 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Apr 29 17:54:46 2024  
 Quant Method : C:\msdchem\1\METHODS\2PCBLVI6081.M  
 Quant Title :  
 QLast Update : Mon Apr 29 17:53:11 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
 Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
-----						
System Monitoring Compounds						
1) S Tetrachlo...	4.682	5.175	1806.8E6	2336.5E6	6.227	4.358 #
Spiked Amount	40.000		Recovery	=	15.57%	10.90%
51) S Decachlor...	11.309	12.428	1653.0E6	1530.7E6	7.732	5.277 #
Spiked Amount	40.000		Recovery	=	19.33%	13.19%
Target Compounds						
7) AR1232-A	4.975	5.628	997.4E6	1098.0E6	201.645	141.022 #
8) AR1232-B	5.248	6.013	728.4E6	911.9E6	201.412	140.248 #
9) AR1232-C	5.617	6.513	1419.8E6	2029.7E6	219.855	145.645m#
10) AR1232-D	5.745	6.676	555.4E6	755.7E6	229.896	147.714m#
11) AR1232-E	6.092	7.323	569.7E6	561.0E6	218.294	144.752m#
-----						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

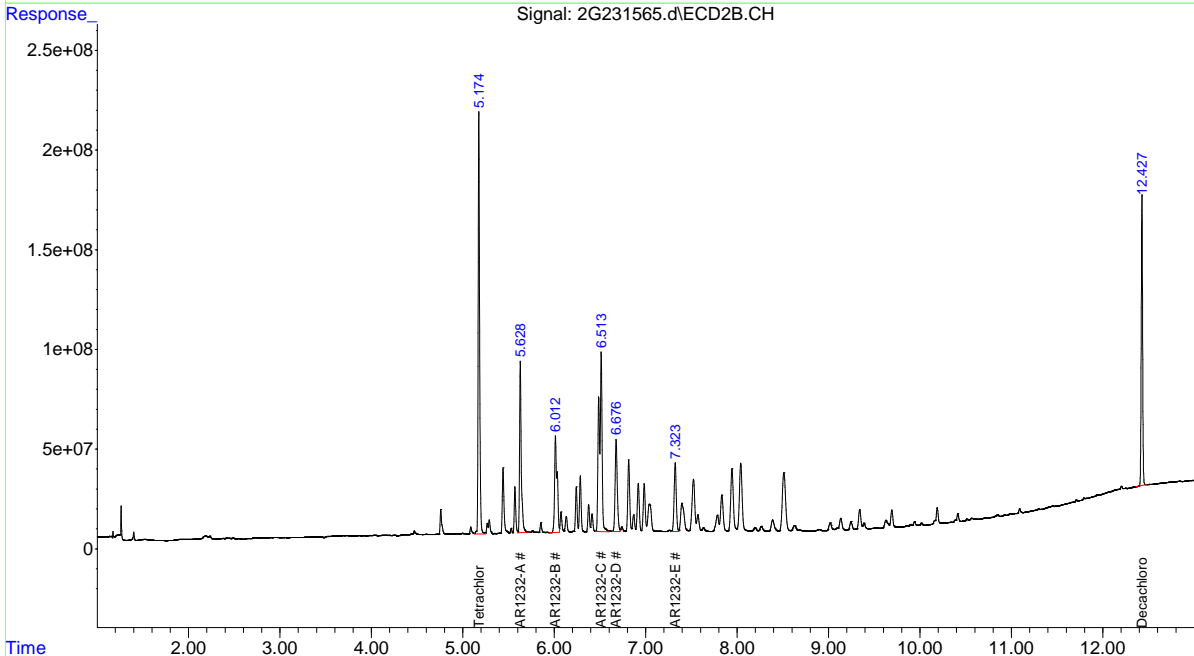
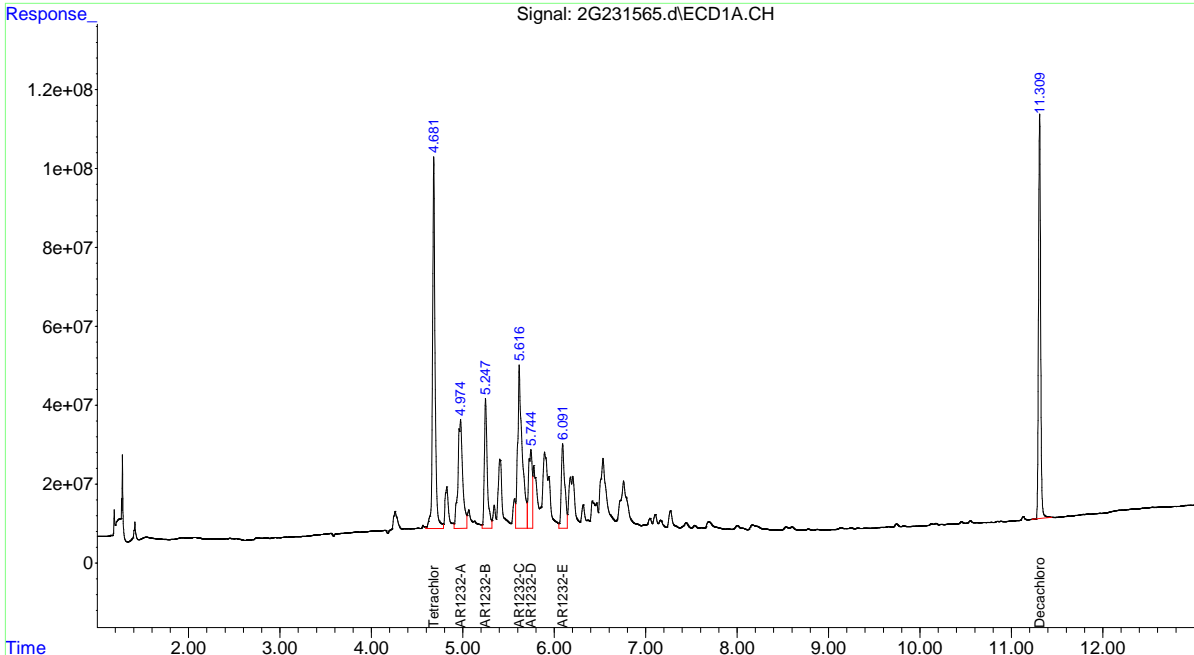
9.3.17  
**9**

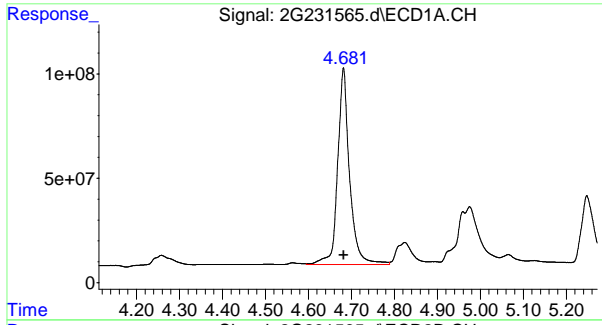


Data Path : C:\msdchem\1\DATA\2G6081\  
Data File : 2G231565.d  
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
Acq On : 29 Apr 2024 9:17 am  
Operator : christp  
Sample : ic6081-100  
Misc : op53681,G2G6081,5.0,,,10,1  
ALS Vial : 0 (Sig #1); 19 (Sig #2) Sample Multiplier: 1

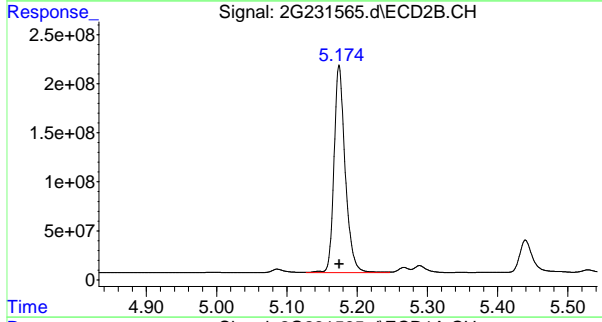
Integration File signal 1: autoint1.e  
Integration File signal 2: autoint2.e  
Quant Time: Apr 29 17:54:46 2024  
Quant Method : C:\msdchem\1\METHODS\2PCBLVI6081.M  
Quant Title :  
QLast Update : Mon Apr 29 17:53:11 2024  
Response via : Initial Calibration  
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2  
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

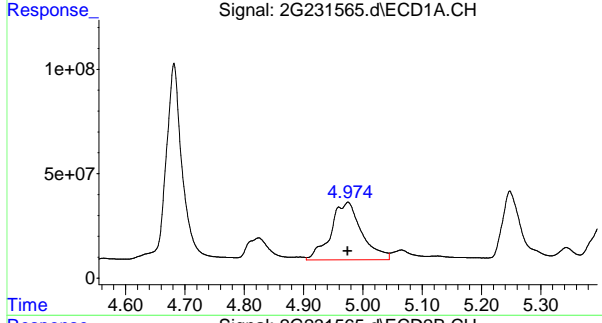




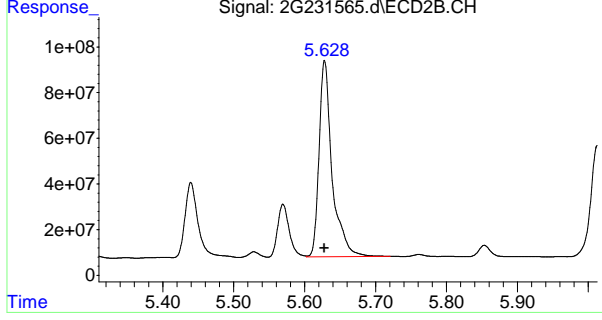
#1 Tetrachloro-m-xylene  
 R.T.: 4.682 min  
 Delta R.T.: 0.000 min  
 Response: 1806774887  
 Conc: 6.23 ppb



#1 Tetrachloro-m-xylene  
 R.T.: 5.175 min  
 Delta R.T.: 0.000 min  
 Response: 2336536234  
 Conc: 4.36 ppb

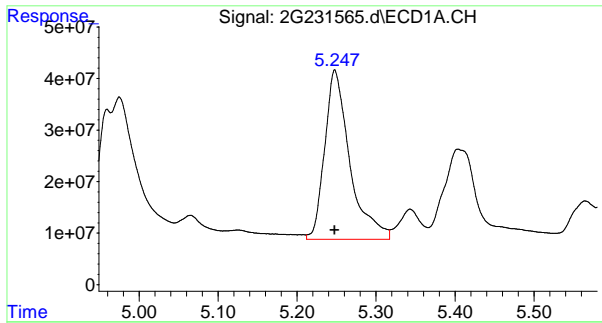


#7 AR1232-A  
 R.T.: 4.975 min  
 Delta R.T.: 0.000 min  
 Response: 997385436  
 Conc: 201.64 PPB

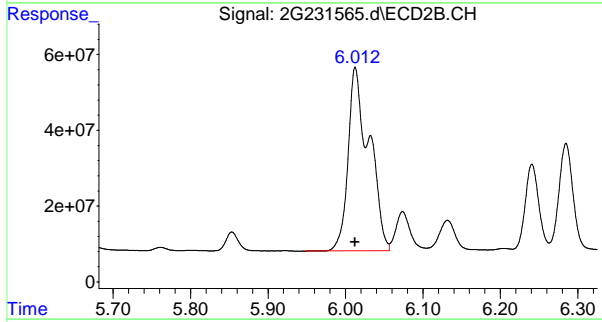


#7 AR1232-A  
 R.T.: 5.628 min  
 Delta R.T.: 0.000 min  
 Response: 1098047617  
 Conc: 141.02 PPB

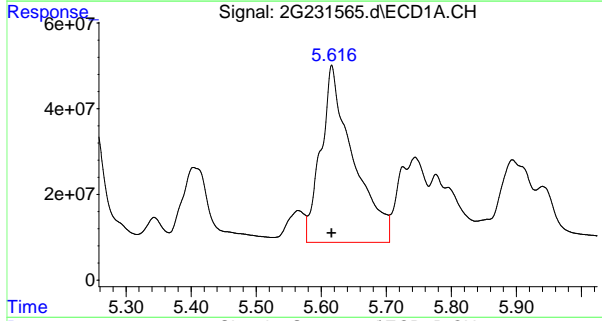
9.3.17  
**9**



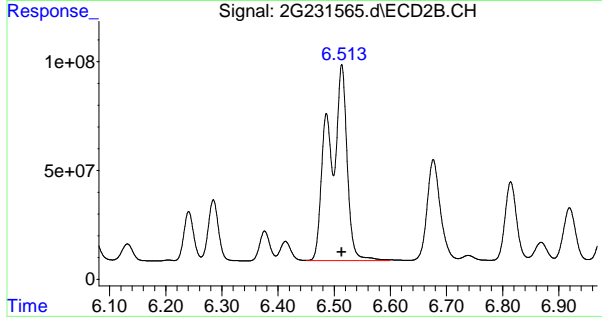
#8 AR1232-B  
 R.T.: 5.248 min  
 Delta R.T.: 0.000 min  
 Response: 728371540  
 Conc: 201.41 PPB



#8 AR1232-B  
 R.T.: 6.013 min  
 Delta R.T.: 0.000 min  
 Response: 911927917  
 Conc: 140.25 PPB



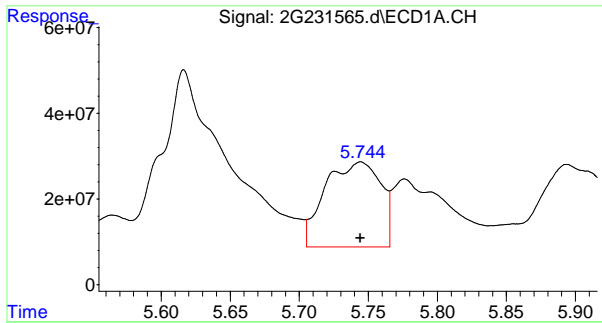
#9 AR1232-C  
 R.T.: 5.617 min  
 Delta R.T.: 0.000 min  
 Response: 1419831028  
 Conc: 219.86 PPB



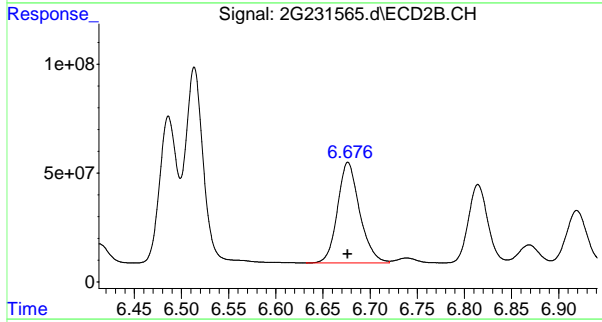
#9 AR1232-C  
 R.T.: 6.513 min  
 Delta R.T.: 0.000 min  
 Response: 2029676937  
 Conc: 145.64 PPB m

9.3.17  
**9**

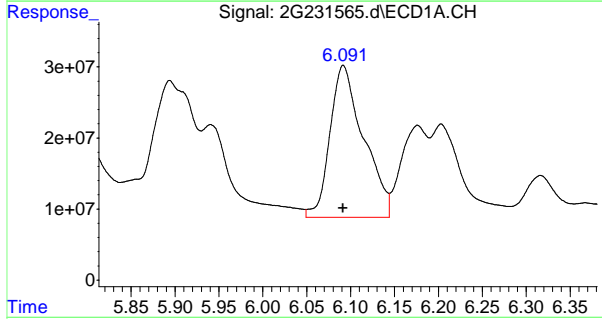




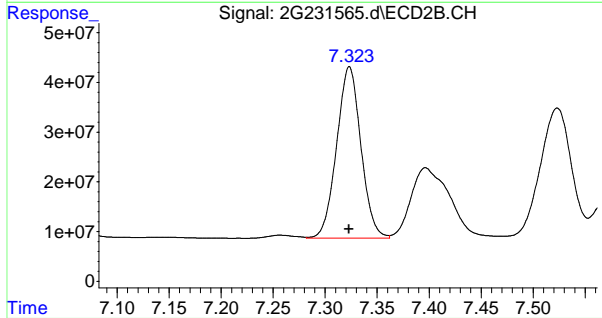
#10 AR1232-D  
 R.T.: 5.745 min  
 Delta R.T.: 0.000 min  
 Response: 555363959  
 Conc: 229.90 PPB



#10 AR1232-D  
 R.T.: 6.676 min  
 Delta R.T.: 0.000 min  
 Response: 755682463  
 Conc: 147.71 PPB m

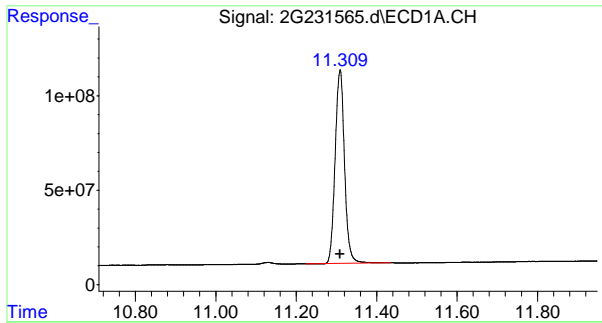


#11 AR1232-E  
 R.T.: 6.092 min  
 Delta R.T.: 0.000 min  
 Response: 569674709  
 Conc: 218.29 PPB

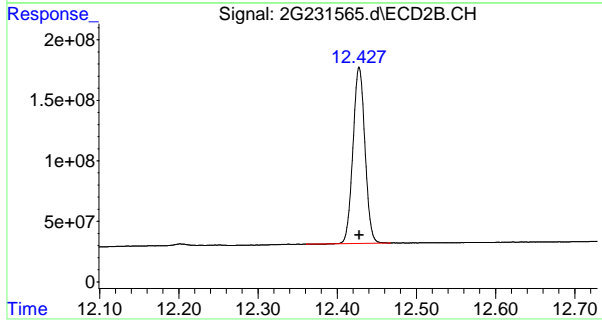


#11 AR1232-E  
 R.T.: 7.323 min  
 Delta R.T.: 0.000 min  
 Response: 561042689  
 Conc: 144.75 PPB m

9.3.17  
**9**



#51 Decachlorobiphenyl  
 R.T.: 11.309 min  
 Delta R.T.: 0.000 min  
 Response: 1652984436  
 Conc: 7.73 ppb



#51 Decachlorobiphenyl  
 R.T.: 12.428 min  
 Delta R.T.: 0.000 min  
 Response: 1530731012  
 Conc: 5.28 ppb

9.3.17  
**9**

Manual Integrations  
**APPROVED**  
 (compounds with "m" flag)  
**Gwendolyn Burns**  
 05/02/24 15:53

Data Path : C:\msdchem\1\DATA\2G6081\  
 Data File : 2G231566.d  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 29 Apr 2024 9:42 am  
 Operator : christp  
 Sample : ic6081-100  
 Misc : op53681,G2G6081,5.0,,,10,1  
 ALS Vial : 0 (Sig #1); 20 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Apr 29 17:58:30 2024  
 Quant Method : C:\msdchem\1\METHODS\2PCBLVI6081.M  
 Quant Title :  
 QLast Update : Mon Apr 29 17:57:06 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
 Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
-----						
System Monitoring Compounds						
1) S Tetrachlo...	4.683	5.176	1765.0E6	2285.3E6	6.083	4.263 #
Spiked Amount	40.000		Recovery	=	15.21%	10.66%
51) S Decachlor...	11.310	12.429	1638.2E6	1522.8E6	7.663	5.250 #
Spiked Amount	40.000		Recovery	=	19.16%	13.13%
Target Compounds						
41) AR1262-A	7.999	9.941	2625.2E6	3214.6E6	249.569	117.715 #
42) AR1262-B	8.777	10.512	4181.2E6	4890.0E6	272.172	179.066 #
43) AR1262-C	9.245	10.847	3096.2E6	3545.9E6	223.910	99.199 #
44) AR1262-D	9.741	11.091	7889.9E6	8270.6E6	276.587	149.990 #
45) AR1262-E	10.171	11.435	8341.3E6	8098.1E6	265.912m	148.492m#
-----						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

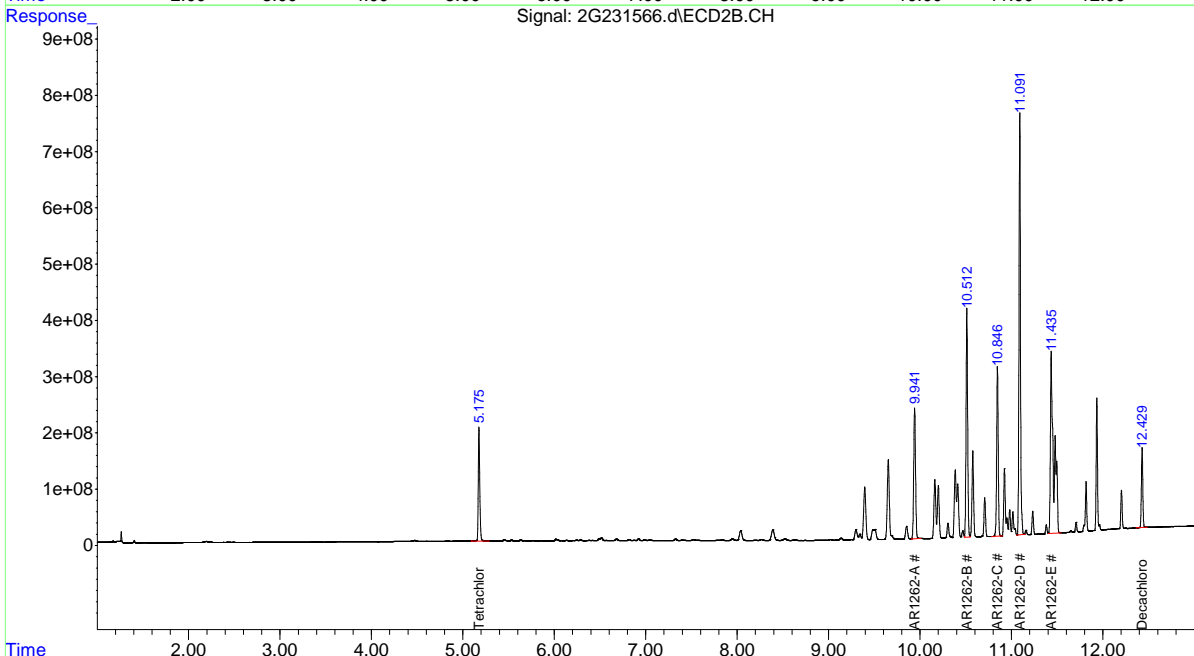
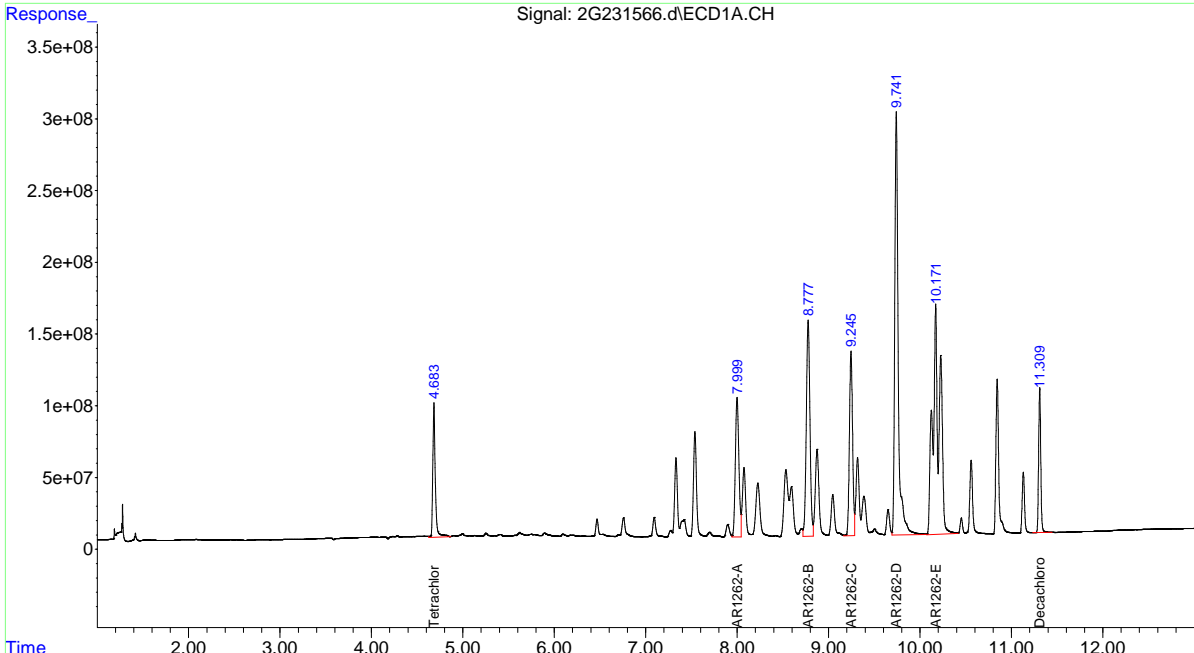
9.3.18  
**9**

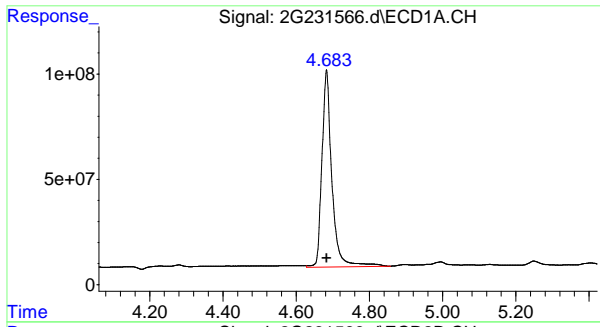


Data Path : C:\msdchem\1\DATA\2G6081\  
Data File : 2G231566.d  
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
Acq On : 29 Apr 2024 9:42 am  
Operator : christp  
Sample : ic6081-100  
Misc : op53681,G2G6081,5.0,,,10,1  
ALS Vial : 0 (Sig #1); 20 (Sig #2) Sample Multiplier: 1

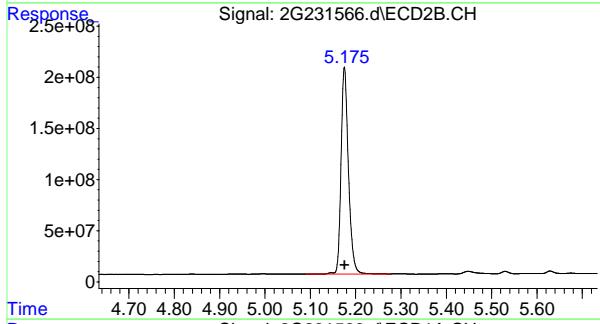
Integration File signal 1: autoint1.e  
Integration File signal 2: autoint2.e  
Quant Time: Apr 29 17:58:30 2024  
Quant Method : C:\msdchem\1\METHODS\2PCBLVI6081.M  
Quant Title :  
QLast Update : Mon Apr 29 17:57:06 2024  
Response via : Initial Calibration  
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2  
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

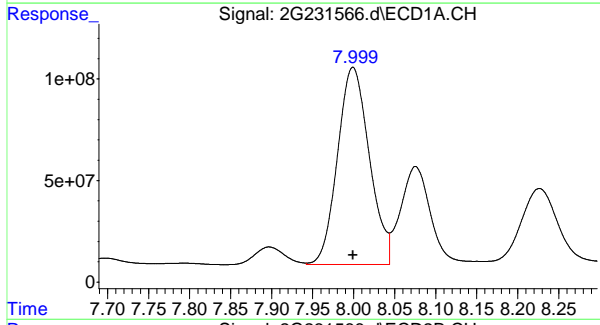




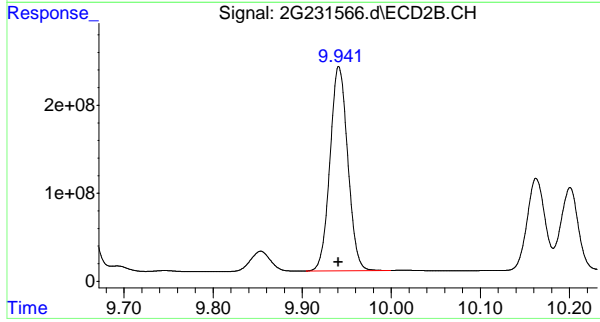
#1 Tetrachloro-m-xylene  
 R.T.: 4.683 min  
 Delta R.T.: 0.000 min  
 Response: 1765049564  
 Conc: 6.08 ppb



#1 Tetrachloro-m-xylene  
 R.T.: 5.176 min  
 Delta R.T.: 0.000 min  
 Response: 2285316380  
 Conc: 4.26 ppb



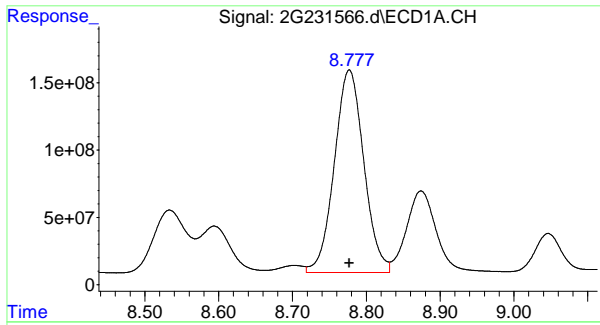
#41 AR1262-A  
 R.T.: 7.999 min  
 Delta R.T.: 0.000 min  
 Response: 2625162995  
 Conc: 249.57 PPB



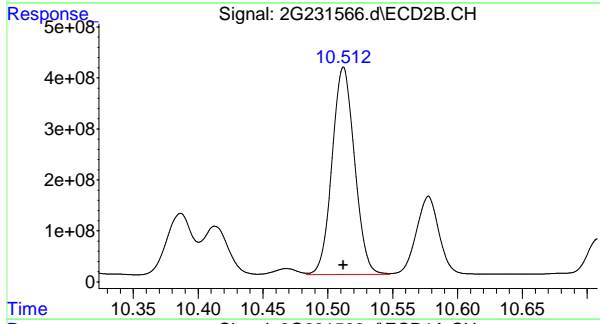
#41 AR1262-A  
 R.T.: 9.941 min  
 Delta R.T.: 0.000 min  
 Response: 3214615401  
 Conc: 117.72 PPB

9.3.18  
**9**

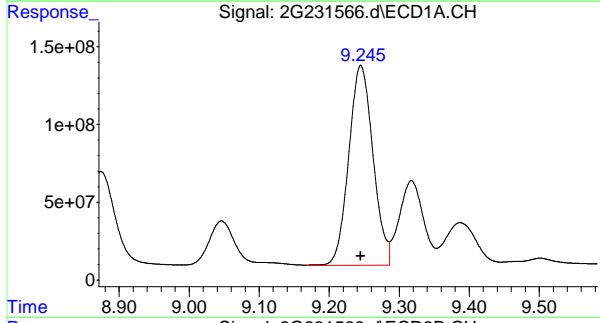




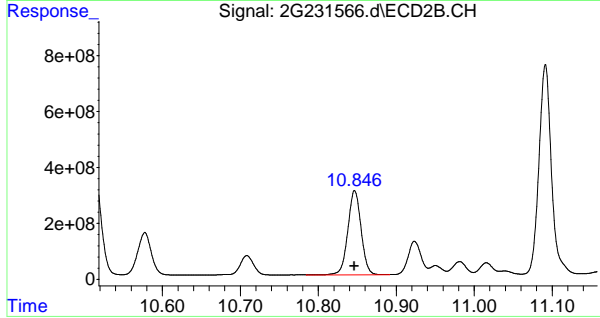
#42 AR1262-B  
 R.T.: 8.777 min  
 Delta R.T.: 0.000 min  
 Response: 4181222055  
 Conc: 272.17 PPB



#42 AR1262-B  
 R.T.: 10.512 min  
 Delta R.T.: 0.000 min  
 Response: 4890000247  
 Conc: 179.07 PPB

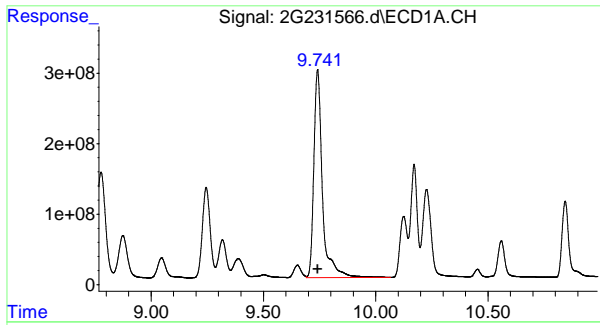


#43 AR1262-C  
 R.T.: 9.245 min  
 Delta R.T.: 0.000 min  
 Response: 3096184740  
 Conc: 223.91 PPB



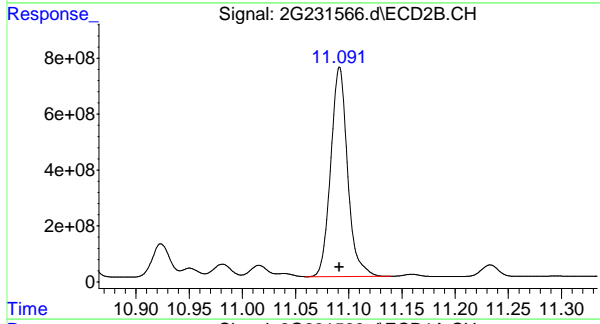
#43 AR1262-C  
 R.T.: 10.847 min  
 Delta R.T.: 0.000 min  
 Response: 3545903204  
 Conc: 99.20 PPB

9.3.18  
**9**



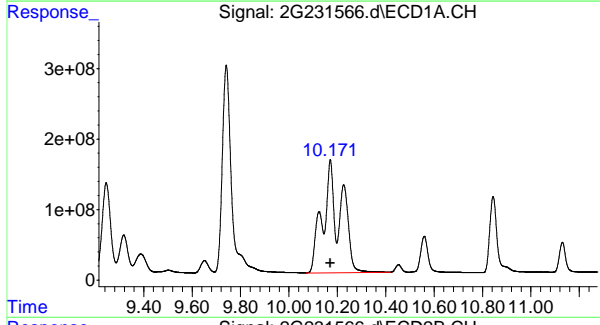
#44 AR1262-D

R.T.: 9.741 min  
 Delta R.T.: 0.000 min  
 Response: 7889940089  
 Conc: 276.59 PPB



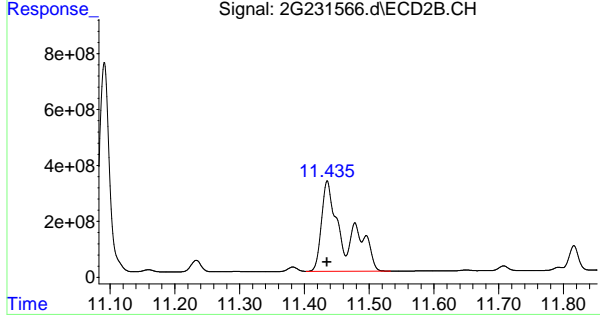
#44 AR1262-D

R.T.: 11.091 min  
 Delta R.T.: 0.000 min  
 Response: 8270642806  
 Conc: 149.99 PPB



#45 AR1262-E

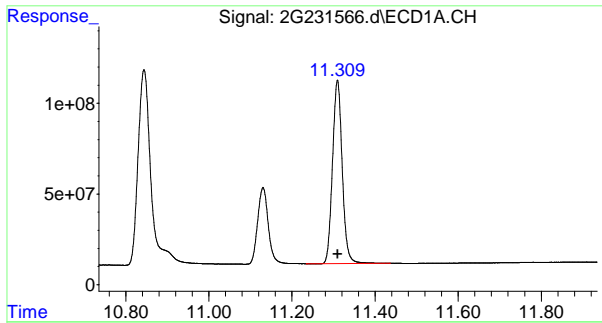
R.T.: 10.171 min  
 Delta R.T.: 0.000 min  
 Response: 8341331519  
 Conc: 265.91 PPB m



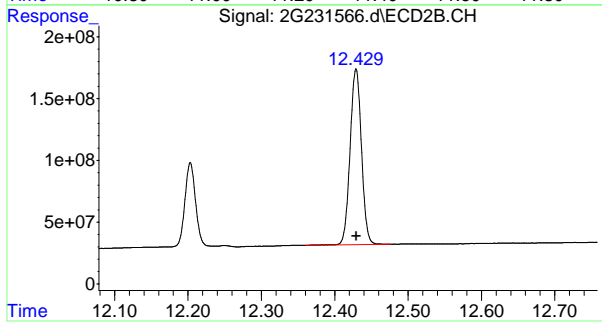
#45 AR1262-E

R.T.: 11.435 min  
 Delta R.T.: 0.000 min  
 Response: 8098076977  
 Conc: 148.49 PPB m

9.3.18  
 9



#51 Decachlorobiphenyl  
 R.T.: 11.310 min  
 Delta R.T.: 0.000 min  
 Response: 1638198588  
 Conc: 7.66 ppb



#51 Decachlorobiphenyl  
 R.T.: 12.429 min  
 Delta R.T.: 0.000 min  
 Response: 1522814794  
 Conc: 5.25 ppb

9.3.18  
**9**



Data Path : C:\msdchem\1\DATA\2G6081\  
 Data File : 2G231568.d  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 29 Apr 2024 10:32 am  
 Operator : christp  
 Sample : ic6081-100  
 Misc : op53681,G2G6081,5.0,,,10,1  
 ALS Vial : 0 (Sig #1); 22 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Apr 29 18:05:56 2024  
 Quant Method : C:\msdchem\1\METHODS\2PCBLVI6081.M  
 Quant Title :  
 QLast Update : Mon Apr 29 18:05:38 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
 Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
-----						
System Monitoring Compounds						
1) S Tetrachlo...	4.682	5.174	2091.8E6	2617.0E6	7.209	4.881 #
Spiked Amount	40.000		Recovery	=	18.02%	12.20%
51) S Decachlor...	11.308	12.427	5442.2E6	5238.4E6	25.458	18.059 #
Spiked Amount	40.000		Recovery	=	63.64%	45.15%
Target Compounds						
46) AR1268-A	10.170	11.433	8874.6E6	9681.2E6	267.927	153.457 #
47) AR1268-B	10.220	11.476	8403.5E6	8173.5E6	225.896	145.074 #
48) AR1268-C	10.452	11.707	7161.4E6	7080.0E6	249.071	149.925 #
49) AR1268-D	10.843	11.933	2634.6E6	2751.5E6	239.829	151.760 #
50) AR1268-E	11.130	12.203	17679.5E6	18776.9E6	217.521	145.921 #
-----						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

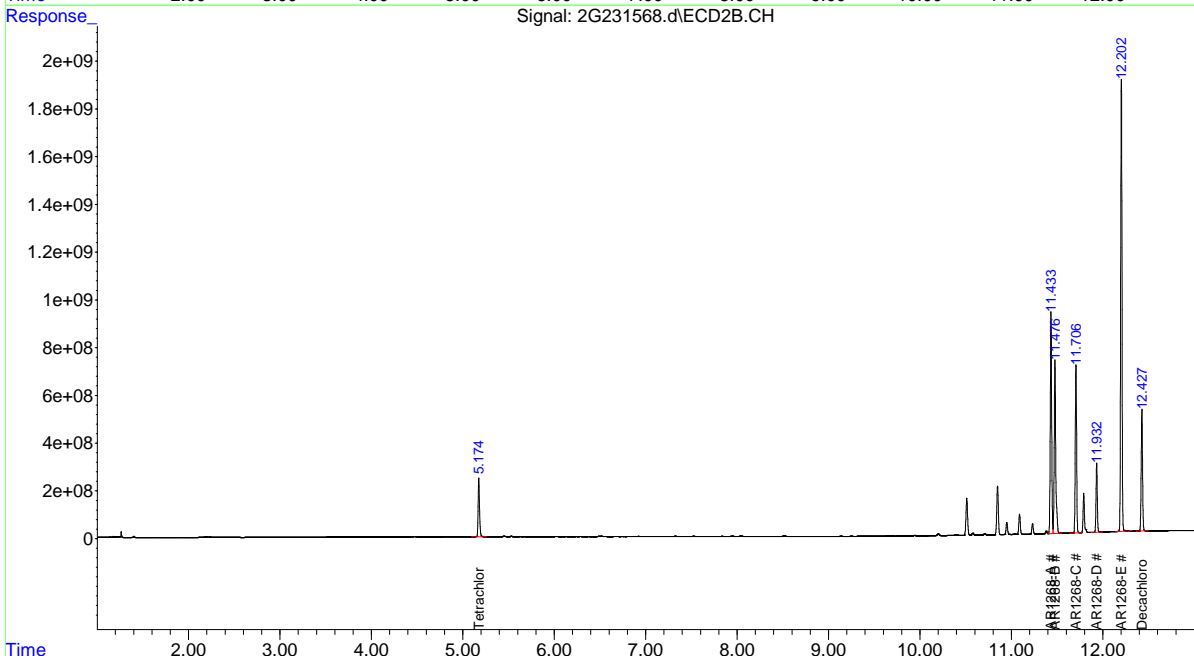
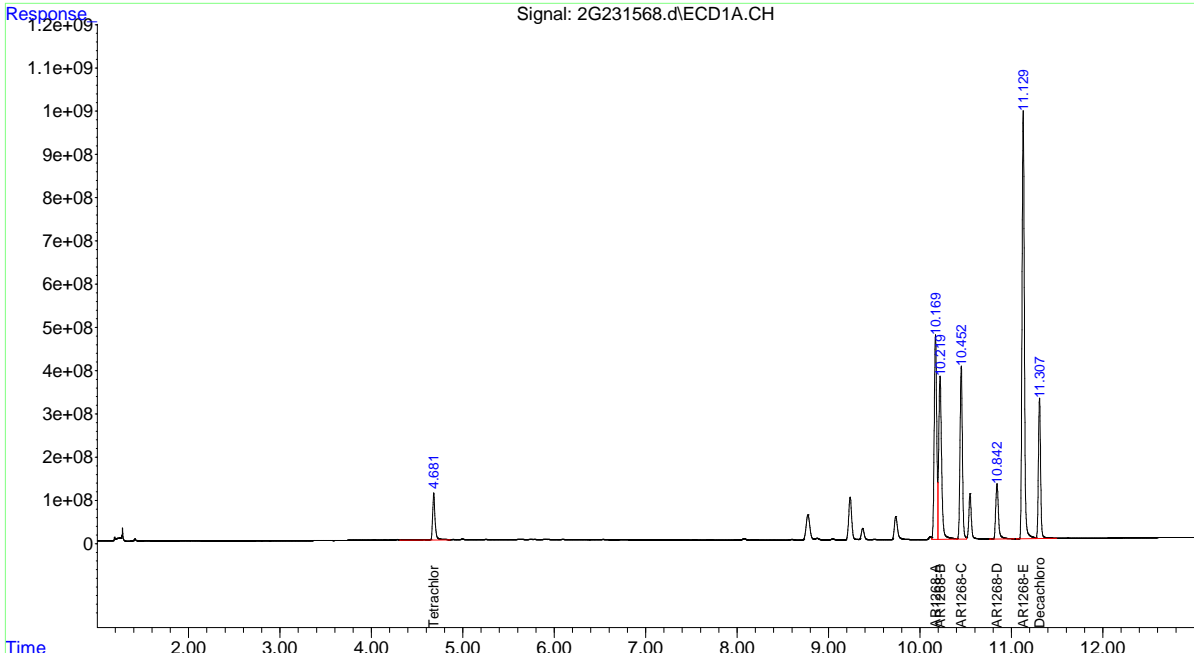
9.3.19  
9

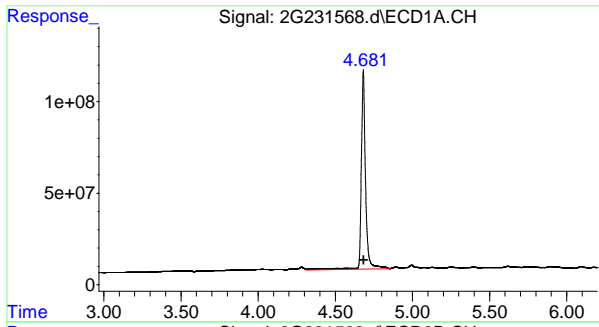


Data Path : C:\msdchem\1\DATA\2G6081\  
Data File : 2G231568.d  
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
Acq On : 29 Apr 2024 10:32 am  
Operator : christp  
Sample : ic6081-100  
Misc : op53681,G2G6081,5.0,,,10,1  
ALS Vial : 0 (Sig #1); 22 (Sig #2) Sample Multiplier: 1

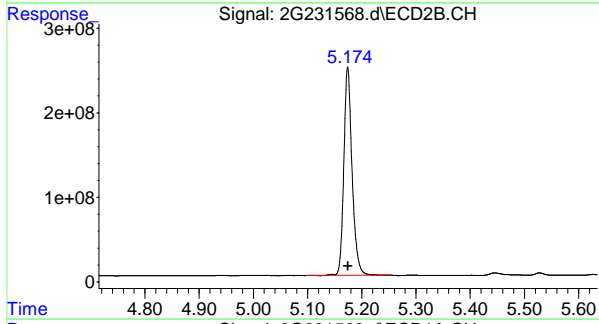
Integration File signal 1: autoint1.e  
Integration File signal 2: autoint2.e  
Quant Time: Apr 29 18:05:56 2024  
Quant Method : C:\msdchem\1\METHODS\2PCBLVI6081.M  
Quant Title :  
QLast Update : Mon Apr 29 18:05:38 2024  
Response via : Initial Calibration  
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2  
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

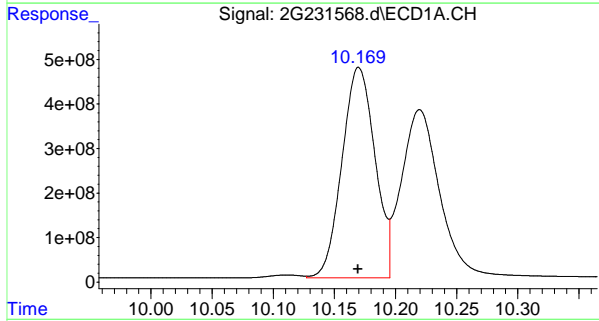




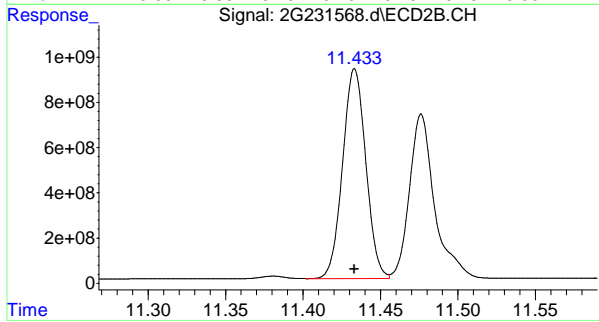
#1 Tetrachloro-m-xylene  
 R.T.: 4.682 min  
 Delta R.T.: 0.000 min  
 Response: 2091800574  
 Conc: 7.21 ppb



#1 Tetrachloro-m-xylene  
 R.T.: 5.174 min  
 Delta R.T.: 0.000 min  
 Response: 2617040921  
 Conc: 4.88 ppb

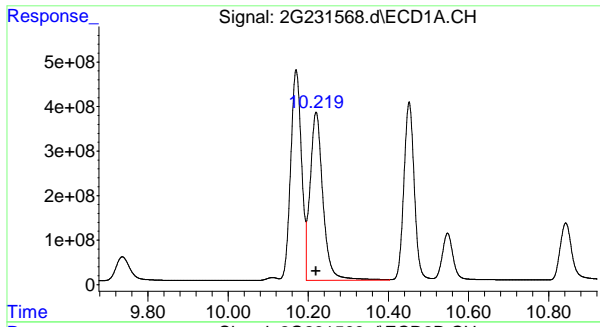


#46 AR1268-A  
 R.T.: 10.170 min  
 Delta R.T.: 0.000 min  
 Response: 8874595473  
 Conc: 267.93 PPB

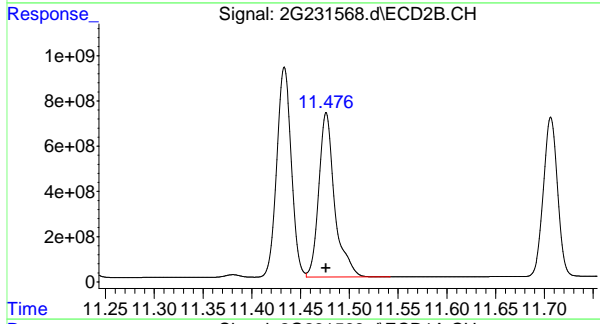


#46 AR1268-A  
 R.T.: 11.433 min  
 Delta R.T.: 0.000 min  
 Response: 9681227138  
 Conc: 153.46 PPB

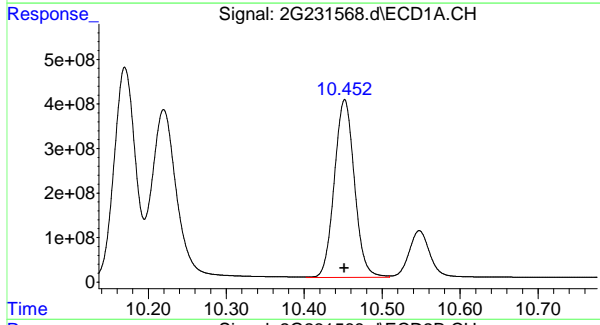
9.3.19  
**9**



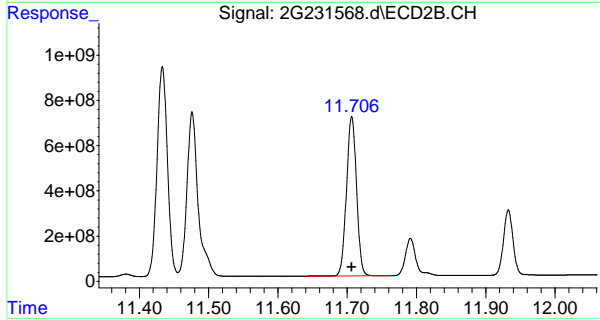
#47 AR1268-B  
 R.T.: 10.220 min  
 Delta R.T.: 0.000 min  
 Response: 8403510422  
 Conc: 225.90 PPB



#47 AR1268-B  
 R.T.: 11.476 min  
 Delta R.T.: 0.000 min  
 Response: 8173478648  
 Conc: 145.07 PPB

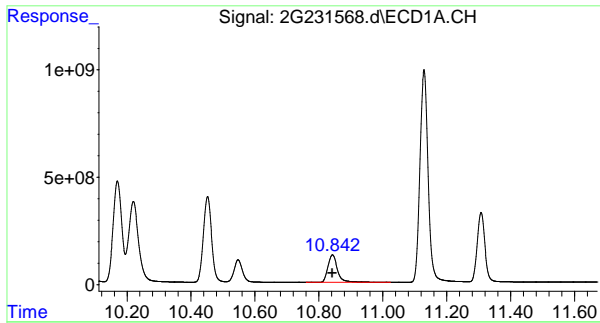


#48 AR1268-C  
 R.T.: 10.452 min  
 Delta R.T.: 0.000 min  
 Response: 7161387336  
 Conc: 249.07 PPB

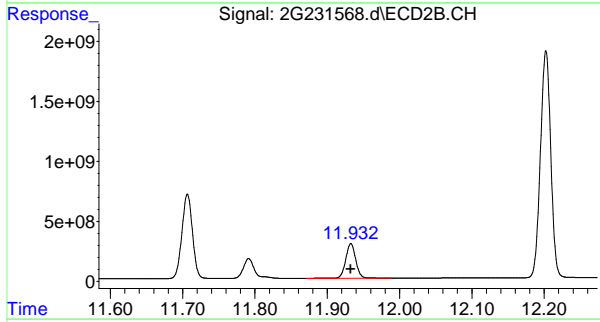


#48 AR1268-C  
 R.T.: 11.707 min  
 Delta R.T.: 0.000 min  
 Response: 7080023935  
 Conc: 149.93 PPB

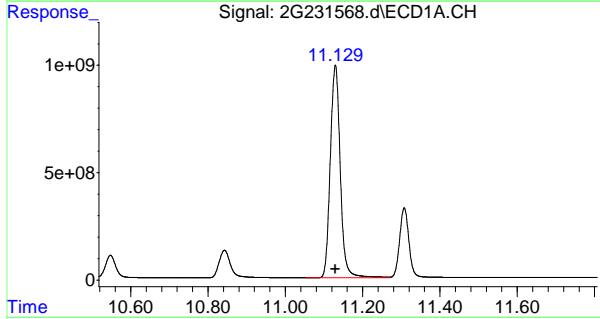
9.3.19  
**9**



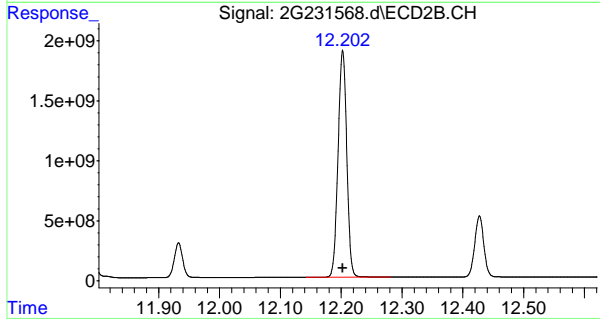
#49 AR1268-D  
 R.T.: 10.843 min  
 Delta R.T.: 0.000 min  
 Response: 2634648446  
 Conc: 239.83 PPB



#49 AR1268-D  
 R.T.: 11.933 min  
 Delta R.T.: 0.000 min  
 Response: 2751545858  
 Conc: 151.76 PPB

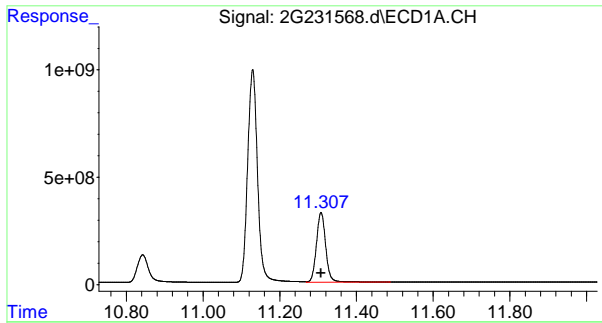


#50 AR1268-E  
 R.T.: 11.130 min  
 Delta R.T.: 0.000 min  
 Response: 17679474136  
 Conc: 217.52 PPB

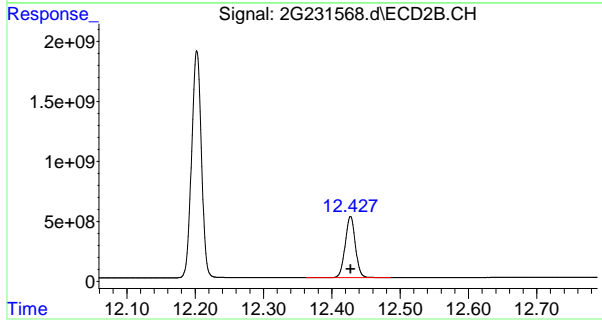


#50 AR1268-E  
 R.T.: 12.203 min  
 Delta R.T.: 0.000 min  
 Response: 18776868596  
 Conc: 145.92 PPB

9.3.19  
**9**



#51 Decachlorobiphenyl  
 R.T.: 11.308 min  
 Delta R.T.: 0.000 min  
 Response: 5442238378  
 Conc: 25.46 ppb



#51 Decachlorobiphenyl  
 R.T.: 12.427 min  
 Delta R.T.: 0.000 min  
 Response: 5238432794  
 Conc: 18.06 ppb

Manual Integrations  
**APPROVED**  
 (compounds with "m" flag)  
**Gwendolyn Burns**  
 05/02/24 15:53

Data Path : C:\msdchem\1\DATA\2G6081\  
 Data File : 2G231590.d  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 01 May 2024 11:27 am  
 Operator : rebeccak  
 Sample : ic6081-2000 (ar1242)  
 Misc : op53681,G2G6081,5.0,,,10,1  
 ALS Vial : 0 (Sig #1); 45 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 02 06:24:29 2024  
 Quant Method : C:\msdchem\1\METHODS\2PCBLVI6081.M  
 Quant Title :  
 QLast Update : Wed May 01 05:40:30 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
 Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
-----						
System Monitoring Compounds						
Target Compounds						
12)	AR1242-A	5.247	6.011	17802.2E6	22642.2E6	1452.190 1434.566m
13)	AR1242-B	5.615	6.509	38704.0E6	56006.9E6	1533.731 1477.700m
14)	AR1242-C	5.743	6.676	27412.8E6	21686.3E6	2693.016m 1557.958 #
15)	AR1242-D	6.090	7.322	18165.6E6	18451.1E6	1593.820 1625.371
16)	AR1242-E	6.530	8.039	28664.7E6	24518.4E6	2108.552 1669.297
-----						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

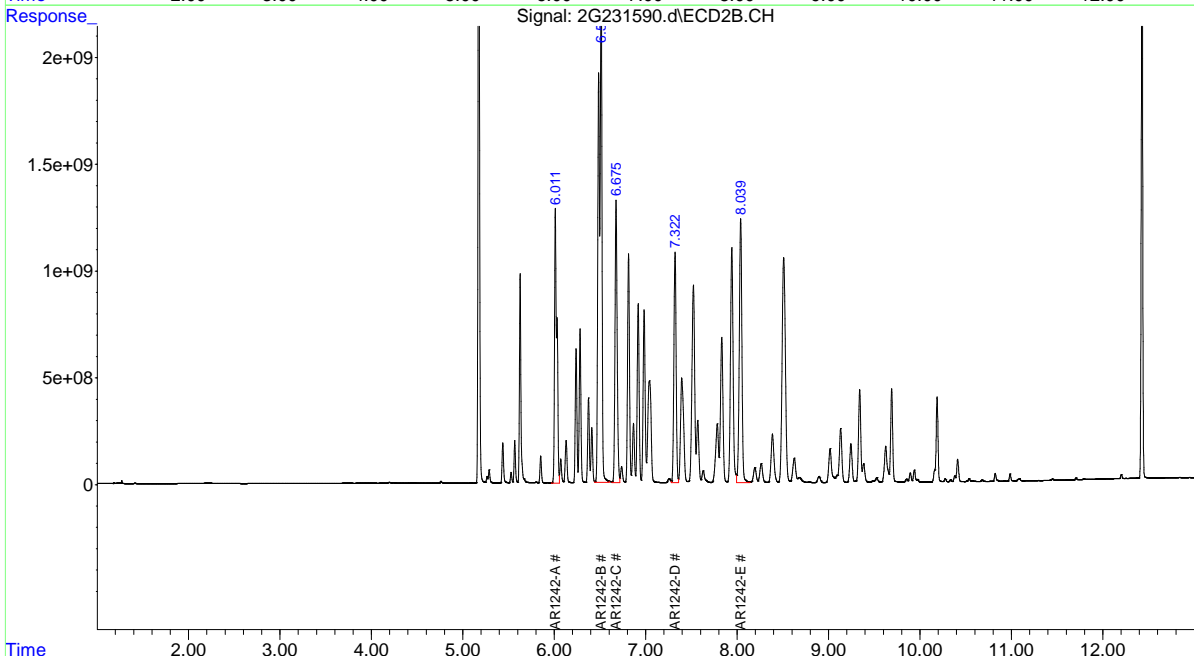
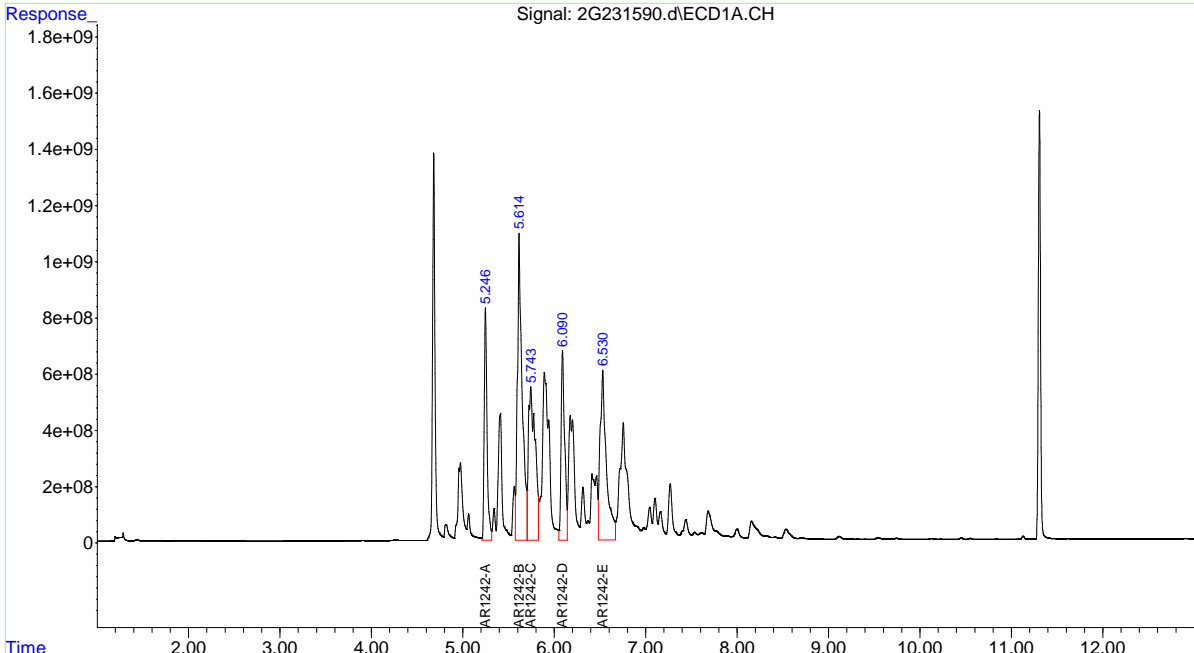
9.3.20  
**9**



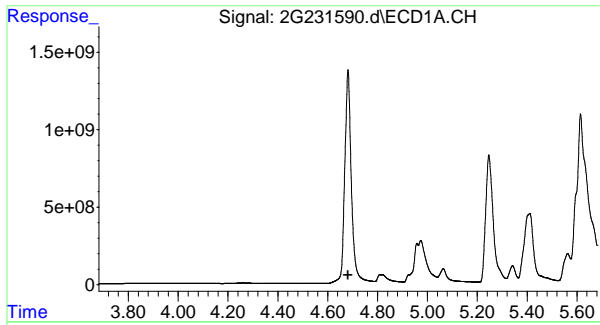
Data Path : C:\msdchem\1\DATA\2G6081\  
Data File : 2G231590.d  
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
Acq On : 01 May 2024 11:27 am  
Operator : rebeccak  
Sample : ic6081-2000 (ar1242)  
Misc : op53681,G2G6081,5.0,,,10,1  
ALS Vial : 0 (Sig #1); 45 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
Integration File signal 2: autoint2.e  
Quant Time: May 02 06:24:29 2024  
Quant Method : C:\msdchem\1\METHODS\2PCBLVI6081.M  
Quant Title :  
QLast Update : Wed May 01 05:40:30 2024  
Response via : Initial Calibration  
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

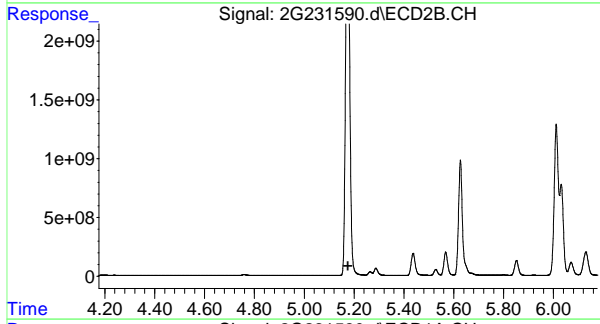
Volume Inj. : 1ul  
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2  
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



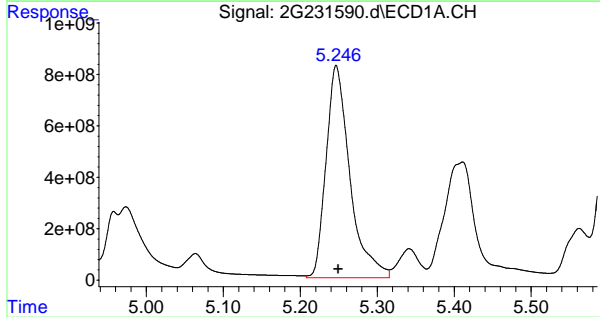




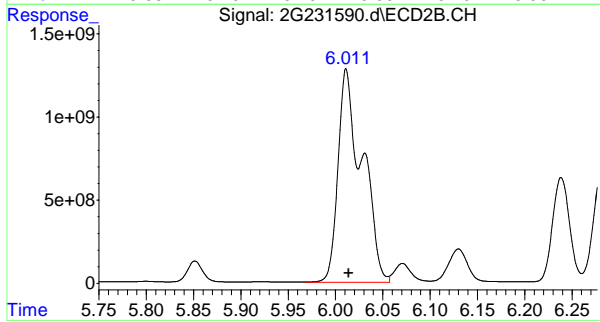
#1 Tetrachloro-m-xylene  
 R.T.: 0.000 min  
 Exp R.T.: 4.681 min  
 Response: 0  
 Conc: N.D.



#1 Tetrachloro-m-xylene  
 R.T.: 0.000 min  
 Exp R.T.: 5.175 min  
 Response: 0  
 Conc: N.D.

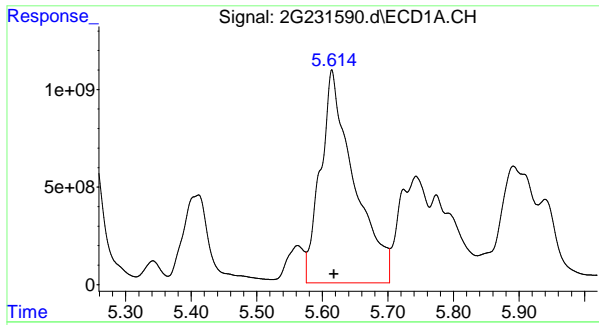


#12 AR1242-A  
 R.T.: 5.247 min  
 Delta R.T.: -0.002 min  
 Response: 17802230092  
 Conc: 1452.19 PPB



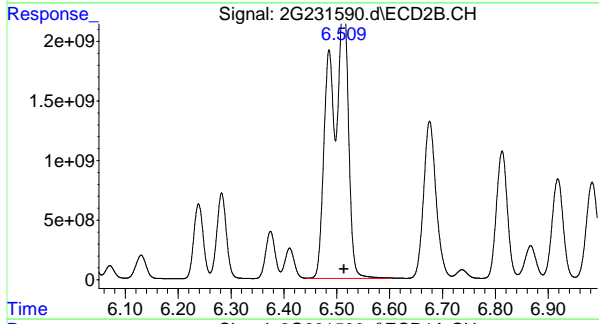
#12 AR1242-A  
 R.T.: 6.011 min  
 Delta R.T.: -0.003 min  
 Response: 22642158749  
 Conc: 1434.57 PPB m

9.3.20  
**9**



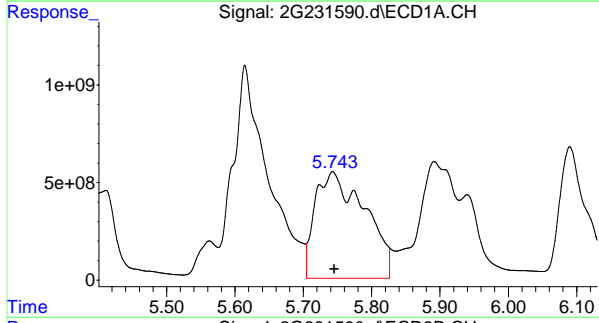
#13 AR1242-B

R.T.: 5.615 min  
 Delta R.T.: -0.003 min  
 Response: 38704044614  
 Conc: 1533.73 PPB



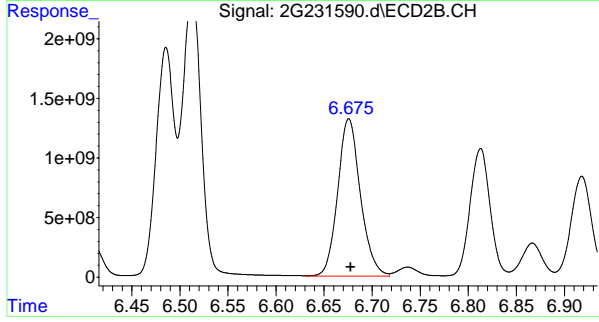
#13 AR1242-B

R.T.: 6.509 min  
 Delta R.T.: -0.005 min  
 Response: 56006900411  
 Conc: 1477.70 PPB m



#14 AR1242-C

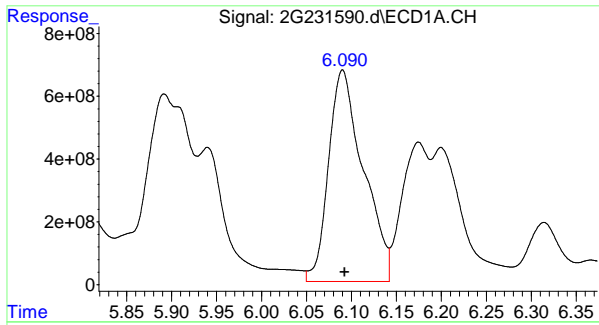
R.T.: 5.743 min  
 Delta R.T.: -0.003 min  
 Response: 27412765095  
 Conc: 2693.02 PPB m



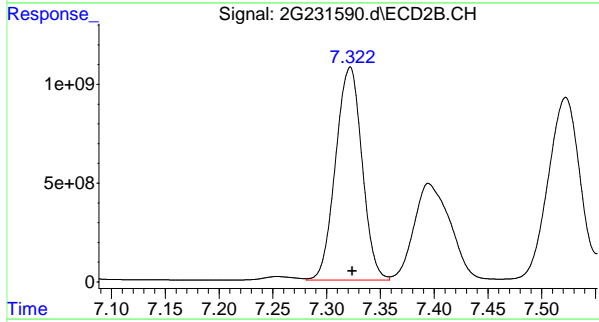
#14 AR1242-C

R.T.: 6.676 min  
 Delta R.T.: -0.002 min  
 Response: 21686262167  
 Conc: 1557.96 PPB

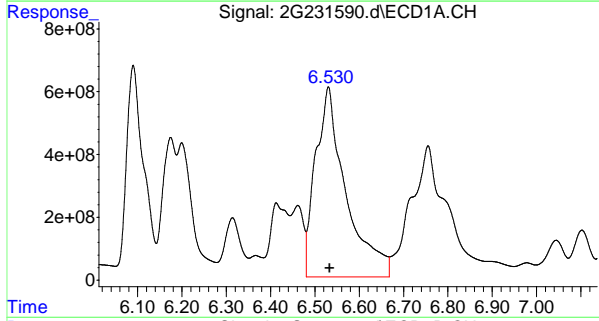
9.3.20  
**9**



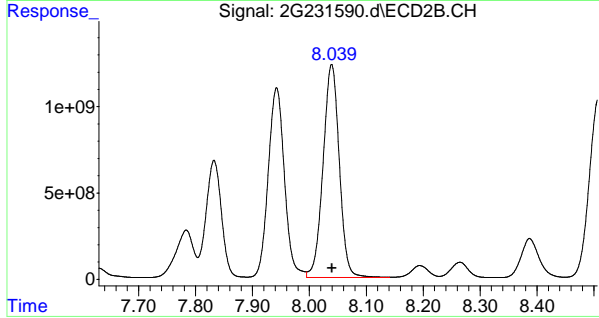
#15 AR1242-D  
 R.T.: 6.090 min  
 Delta R.T.: -0.002 min  
 Response: 18165557575  
 Conc: 1593.82 PPB



#15 AR1242-D  
 R.T.: 7.322 min  
 Delta R.T.: -0.002 min  
 Response: 18451085476  
 Conc: 1625.37 PPB

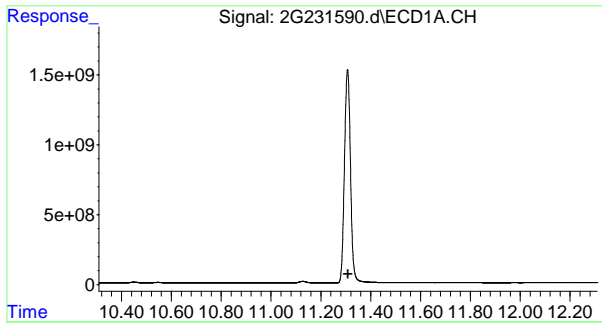


#16 AR1242-E  
 R.T.: 6.530 min  
 Delta R.T.: -0.003 min  
 Response: 28664703508  
 Conc: 2108.55 PPB

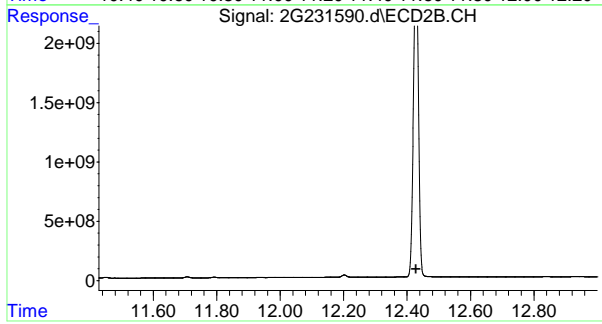


#16 AR1242-E  
 R.T.: 8.039 min  
 Delta R.T.: 0.000 min  
 Response: 24518379697  
 Conc: 1669.30 PPB

9.3.20  
**9**



#51 Decachlorobiphenyl  
 R.T.: 0.000 min  
 Exp R.T.: 11.309 min  
 Response: 0  
 Conc: N.D.



#51 Decachlorobiphenyl  
 R.T.: 0.000 min  
 Exp R.T.: 12.428 min  
 Response: 0  
 Conc: N.D.

9.3.20  
**9**

Manual Integrations  
**APPROVED**  
 (compounds with "m" flag)  
**Gwendolyn Burns**  
 05/02/24 15:53

Data Path : C:\msdchem\1\DATA\2G6081\  
 Data File : 2G231601.d  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 01 May 2024 16:07 pm  
 Operator : rebeccak  
 Sample : ic6081-2000 (ar1248)  
 Misc : op53681,G2G6081,5.0,,,10,1  
 ALS Vial : 0 (Sig #1); 56 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 02 06:45:45 2024  
 Quant Method : C:\msdchem\1\METHODS\2PCBLVI6081.M  
 Quant Title :  
 QLast Update : Wed May 01 05:40:30 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
 Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
-----						
System Monitoring Compounds						
Target Compounds						
17)	AR1248-A	5.246	6.012	8999.0E6	11392.0E6	1600.722 1511.491
18)	AR1248-B	5.615	6.485	26718.3E6	38803.5E6	1646.996 1666.052m
19)	AR1248-C	5.890	6.918	44258.6E6	23099.4E6	2210.967m 1655.973 #
20)	AR1248-D	6.090	7.322	27680.1E6	30286.1E6	1607.318 1634.425
21)	AR1248-E	6.174	7.523	28321.1E6	31592.2E6	3071.445m 1735.853 #
22)	AR1248-F	6.530	8.039	49069.9E6	44650.7E6	1685.851 1707.246
23)	AR1248-G	6.756	8.512	47667.2E6	46537.0E6	1754.494 1773.081
-----						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

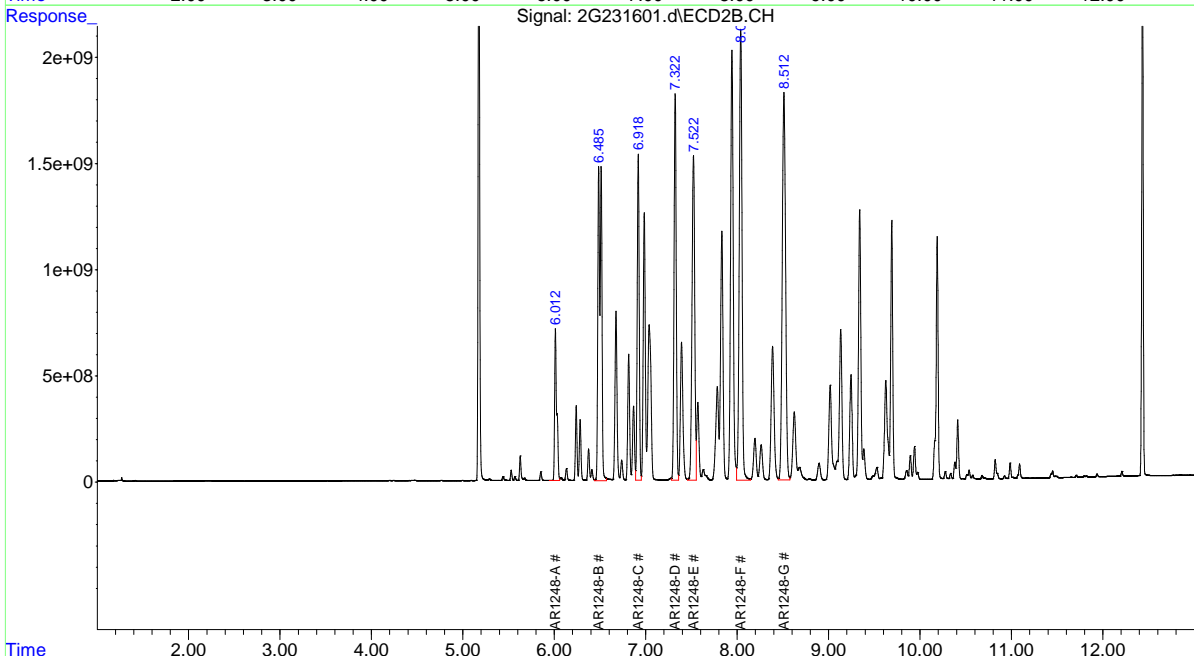
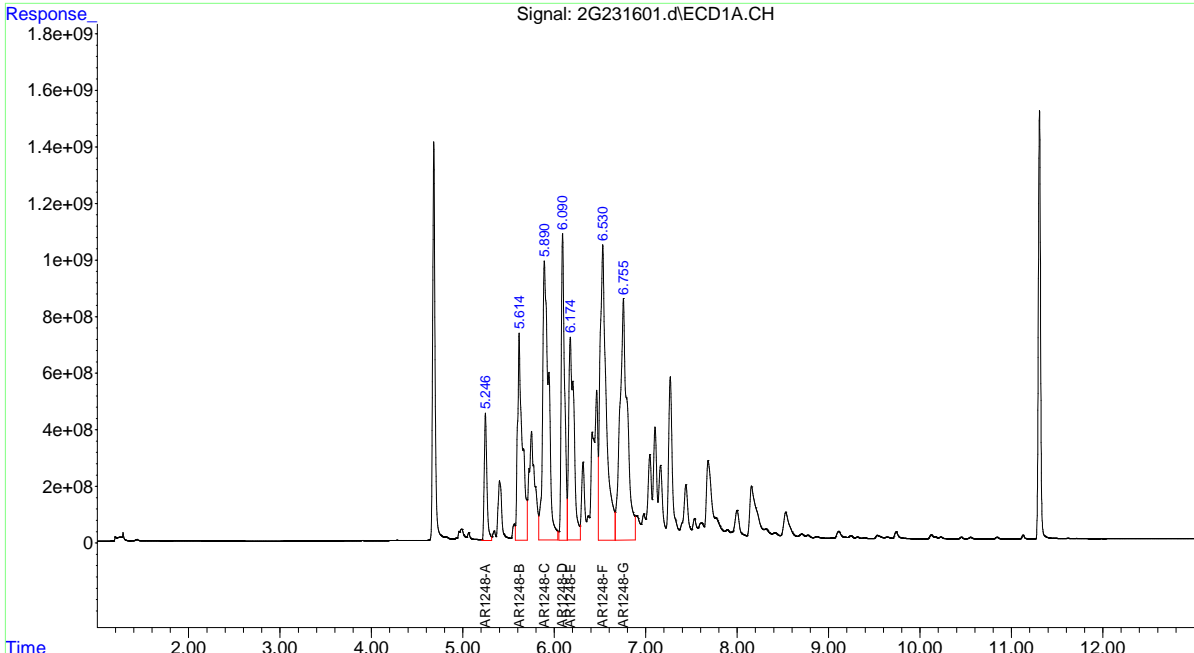
9.3.21  
**9**

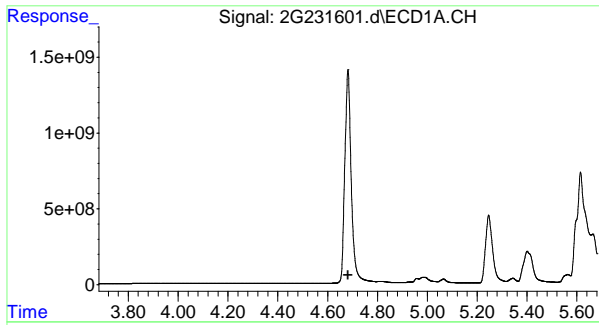


Data Path : C:\msdchem\1\DATA\2G6081\  
Data File : 2G231601.d  
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
Acq On : 01 May 2024 16:07 pm  
Operator : rebeccak  
Sample : ic6081-2000 (ar1248)  
Misc : op53681,G2G6081,5.0,,,10,1  
ALS Vial : 0 (Sig #1); 56 (Sig #2) Sample Multiplier: 1

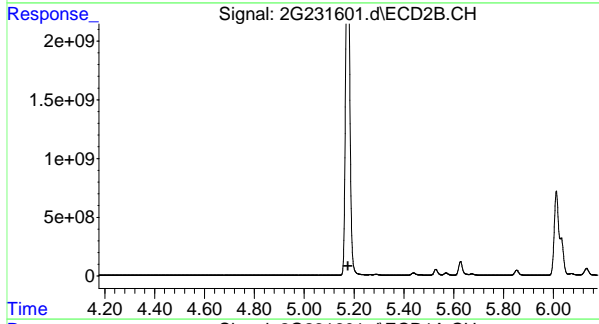
Integration File signal 1: autoint1.e  
Integration File signal 2: autoint2.e  
Quant Time: May 02 06:45:45 2024  
Quant Method : C:\msdchem\1\METHODS\2PCBLVI6081.M  
Quant Title :  
QLast Update : Wed May 01 05:40:30 2024  
Response via : Initial Calibration  
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2  
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

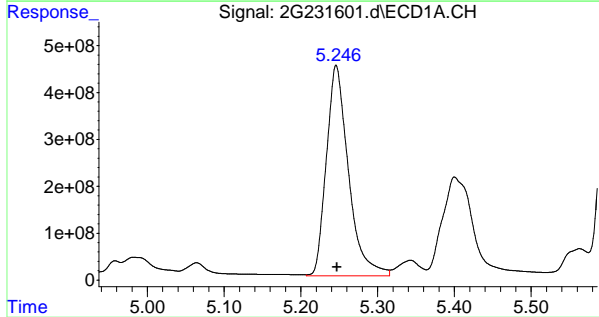




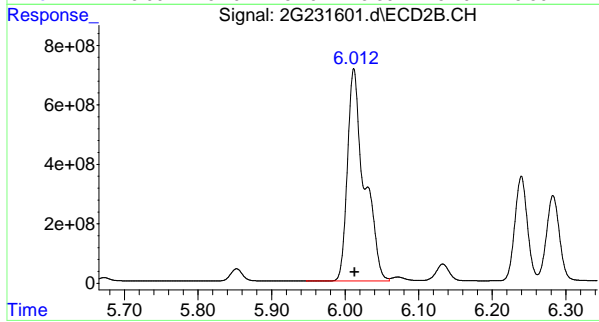
#1 Tetrachloro-m-xylene  
 R.T.: 0.000 min  
 Exp R.T.: 4.681 min  
 Response: 0  
 Conc: N.D.



#1 Tetrachloro-m-xylene  
 R.T.: 0.000 min  
 Exp R.T.: 5.175 min  
 Response: 0  
 Conc: N.D.

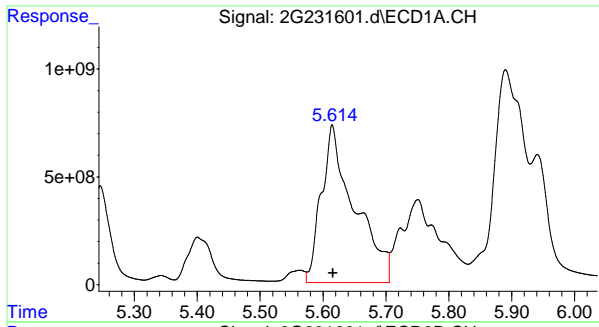


#17 AR1248-A  
 R.T.: 5.246 min  
 Delta R.T.: 0.000 min  
 Response: 8998992543  
 Conc: 1600.72 PPB



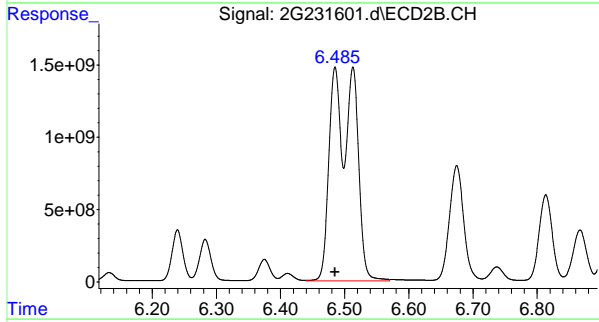
#17 AR1248-A  
 R.T.: 6.012 min  
 Delta R.T.: 0.000 min  
 Response: 11392012171  
 Conc: 1511.49 PPB

9.3.21  
**9**



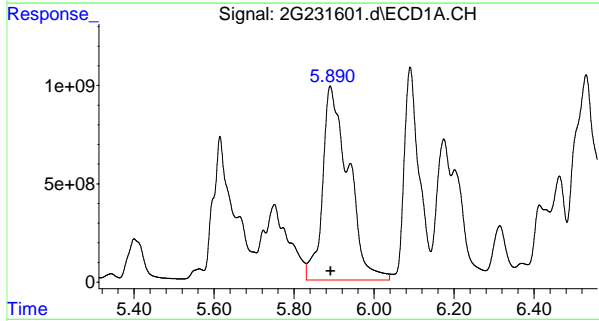
#18 AR1248-B

R.T.: 5.615 min  
 Delta R.T.: -0.001 min  
 Response: 26718299066  
 Conc: 1647.00 PPB



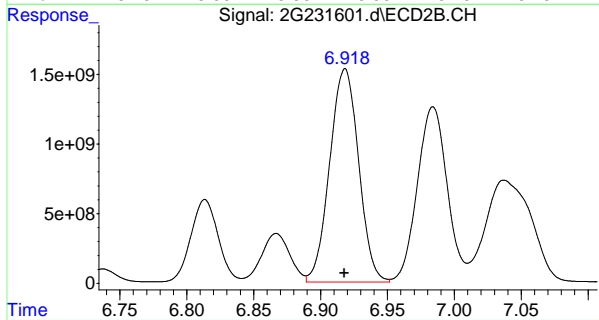
#18 AR1248-B

R.T.: 6.485 min  
 Delta R.T.: 0.000 min  
 Response: 38803536058  
 Conc: 1666.05 PPB m



#19 AR1248-C

R.T.: 5.890 min  
 Delta R.T.: -0.001 min  
 Response: 44258564388  
 Conc: 2210.97 PPB m

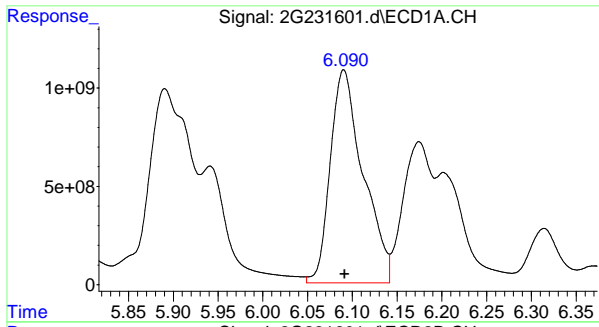


#19 AR1248-C

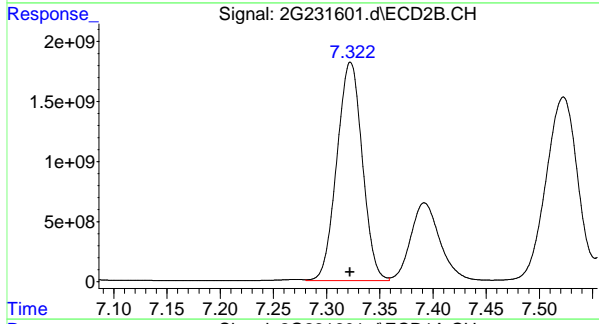
R.T.: 6.918 min  
 Delta R.T.: 0.000 min  
 Response: 23099433933  
 Conc: 1655.97 PPB

9.3.21  
**9**

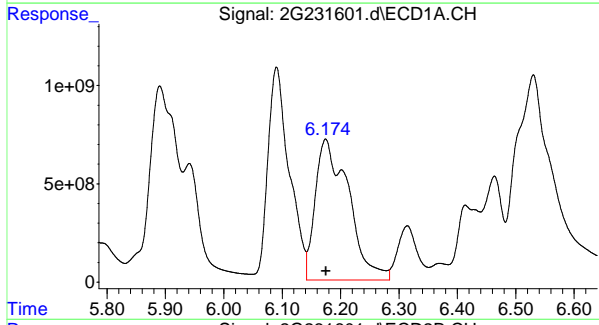




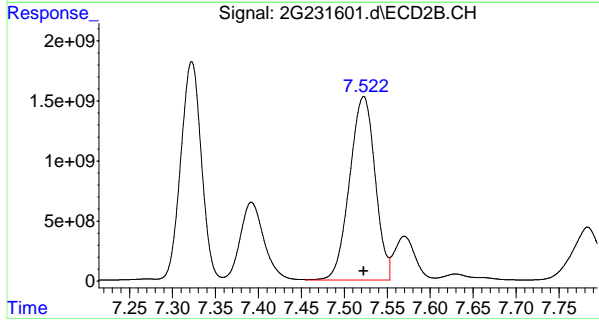
#20 AR1248-D  
 R.T.: 6.090 min  
 Delta R.T.: -0.001 min  
 Response: 27680143547  
 Conc: 1607.32 PPB



#20 AR1248-D  
 R.T.: 7.322 min  
 Delta R.T.: 0.000 min  
 Response: 30286104998  
 Conc: 1634.42 PPB

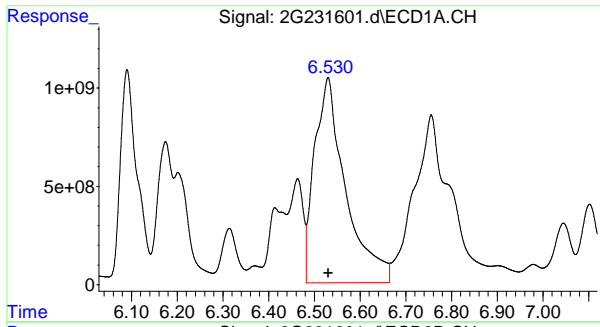


#21 AR1248-E  
 R.T.: 6.174 min  
 Delta R.T.: -0.001 min  
 Response: 28321069746  
 Conc: 3071.45 PPB m



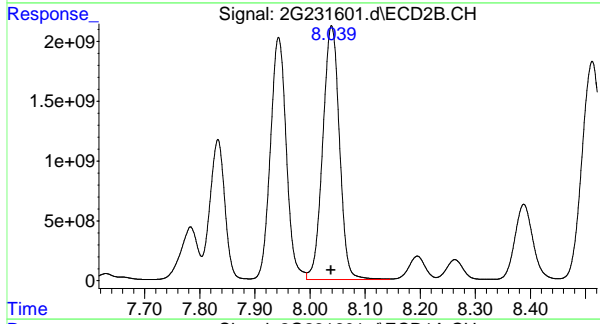
#21 AR1248-E  
 R.T.: 7.523 min  
 Delta R.T.: 0.000 min  
 Response: 31592178727  
 Conc: 1735.85 PPB

9.3.21  
**9**



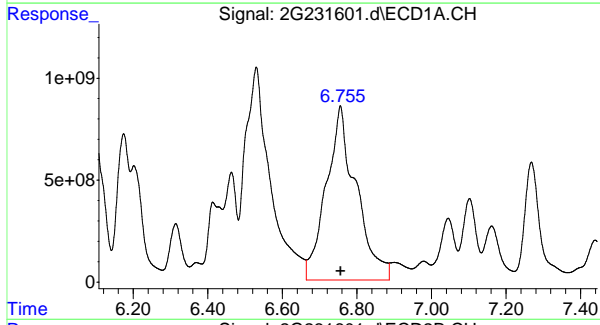
#22 AR1248-F

R.T.: 6.530 min  
 Delta R.T.: 0.000 min  
 Response: 49069926987  
 Conc: 1685.85 PPB



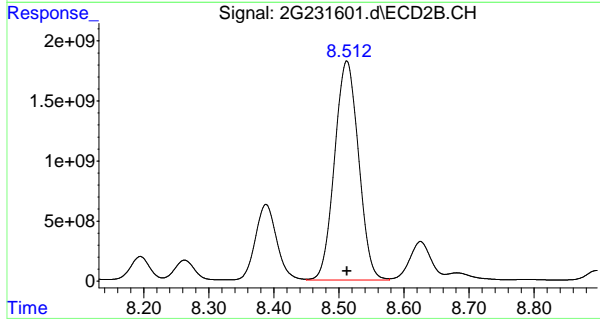
#22 AR1248-F

R.T.: 8.039 min  
 Delta R.T.: 0.001 min  
 Response: 44650653270  
 Conc: 1707.25 PPB



#23 AR1248-G

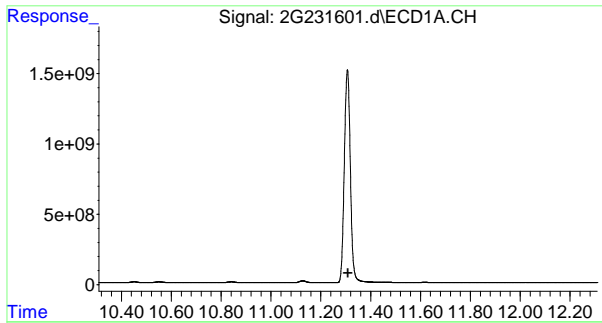
R.T.: 6.756 min  
 Delta R.T.: 0.000 min  
 Response: 47667202531  
 Conc: 1754.49



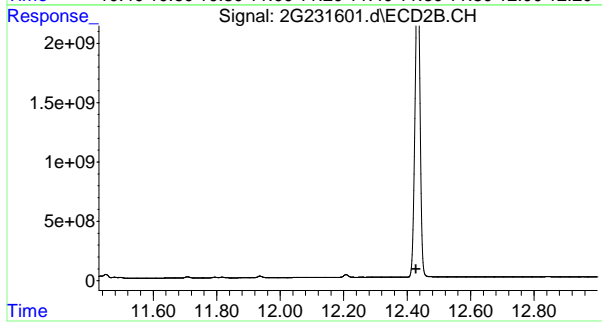
#23 AR1248-G

R.T.: 8.512 min  
 Delta R.T.: 0.000 min  
 Response: 46537030160  
 Conc: 1773.08

9.3.21  
**9**



#51 Decachlorobiphenyl  
 R.T.: 0.000 min  
 Exp R.T.: 11.309 min  
 Response: 0  
 Conc: N.D.



#51 Decachlorobiphenyl  
 R.T.: 0.000 min  
 Exp R.T.: 12.428 min  
 Response: 0  
 Conc: N.D.

9.3.21  
 9

Manual Integrations  
**APPROVED**  
 (compounds with "m" flag)  
**Gwendolyn Burns**  
 05/02/24 15:53

Data Path : C:\msdchem\1\DATA\2G6081\  
 Data File : 2G231612.d  
 Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
 Acq On : 01 May 2024 20:42 pm  
 Operator : rebeccak  
 Sample : ic6081-2000 (ar1254)  
 Misc : op53681,G2G6081,5.0,,,10,1  
 ALS Vial : 0 (Sig #1); 67 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: May 02 06:59:54 2024  
 Quant Method : C:\msdchem\1\METHODS\2PCBLVI6081.M  
 Quant Title :  
 QLast Update : Wed May 01 05:40:30 2024  
 Response via : Initial Calibration  
 Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
 Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2  
 Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
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System Monitoring Compounds

Target Compounds

24)	AR1254-A	6.465	8.036	22617.3E6	36961.7E6	1486.284	1634.046
25)	AR1254-B	6.751	8.386	43480.8E6	45464.8E6	1540.400m	1650.889
26)	AR1254-C	7.100	9.131	25026.7E6	36843.0E6	1638.737	1749.304
27)	AR1254-D	7.268	9.343	46825.8E6	53107.5E6	1802.454m	1310.108 #
28)	AR1254-E	7.686	9.693	40580.0E6	44414.0E6	1743.589	1385.888
29)	AR1254-F	7.995	10.187	38798.9E6	57386.4E6	1673.758	1833.722m
30)	AR1254-G	8.528	10.403	52846.9E6	56807.4E6	1653.769	1867.314m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

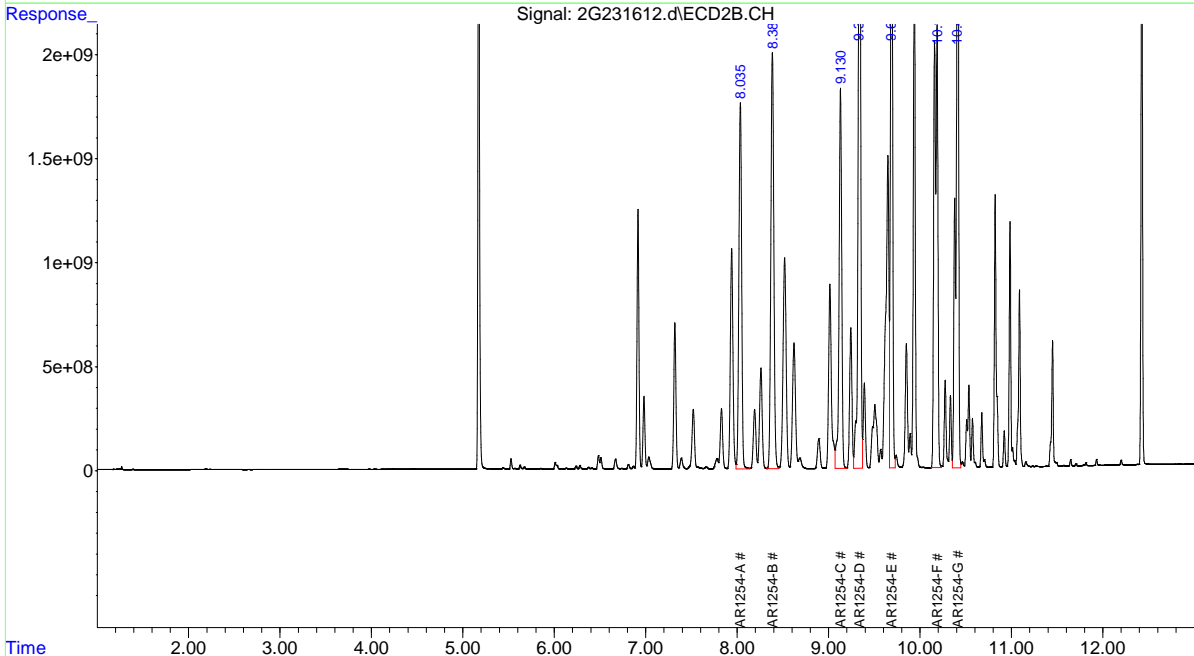
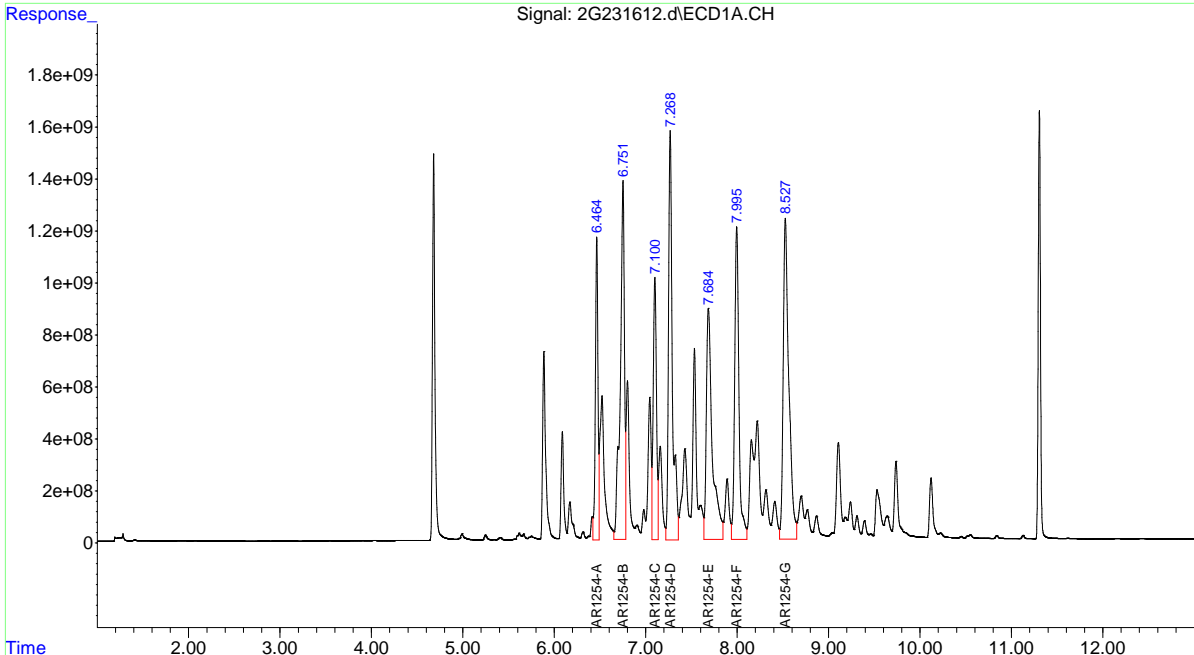
9.3.22  
**9**

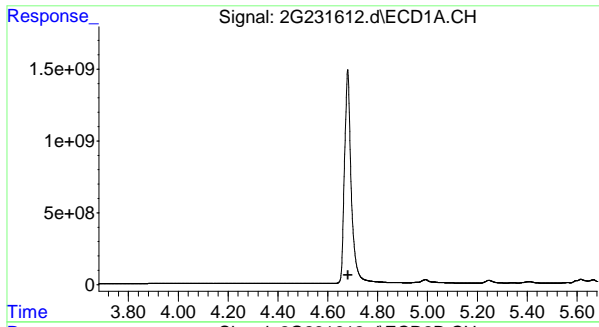


Data Path : C:\msdchem\1\DATA\2G6081\  
Data File : 2G231612.d  
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH  
Acq On : 01 May 2024 20:42 pm  
Operator : rebeccak  
Sample : ic6081-2000 (ar1254)  
Misc : op53681,G2G6081,5.0,,,10,1  
ALS Vial : 0 (Sig #1); 67 (Sig #2) Sample Multiplier: 1

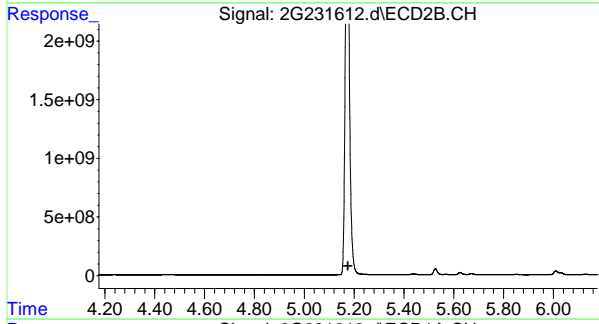
Integration File signal 1: autoint1.e  
Integration File signal 2: autoint2.e  
Quant Time: May 02 06:59:54 2024  
Quant Method : C:\msdchem\1\METHODS\2PCBLVI6081.M  
Quant Title :  
QLast Update : Wed May 01 05:40:30 2024  
Response via : Initial Calibration  
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul  
Signal #1 Phase : ZBCLP-1 Signal #2 Phase: ZBCLP-2  
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

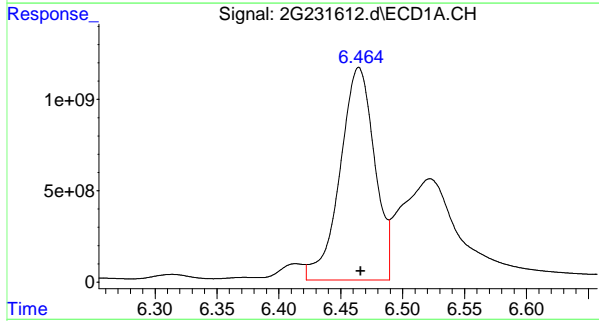




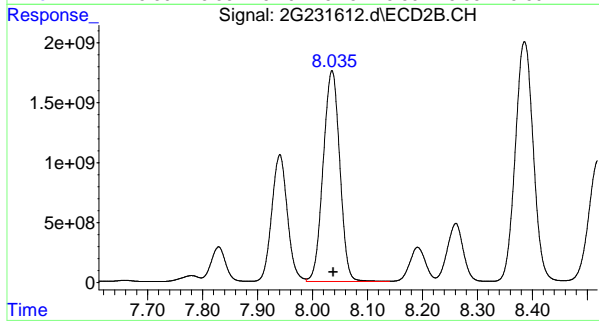
#1 Tetrachloro-m-xylene  
 R.T.: 0.000 min  
 Exp R.T.: 4.681 min  
 Response: 0  
 Conc: N.D.



#1 Tetrachloro-m-xylene  
 R.T.: 0.000 min  
 Exp R.T.: 5.175 min  
 Response: 0  
 Conc: N.D.

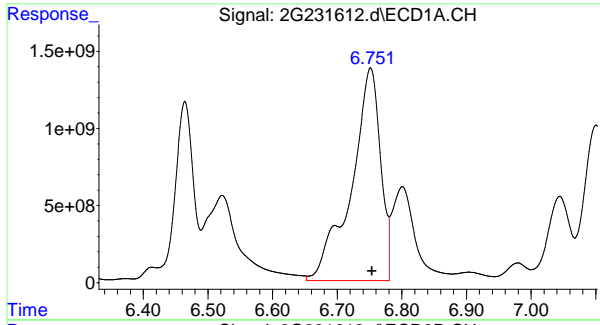


#24 AR1254-A  
 R.T.: 6.465 min  
 Delta R.T.: -0.001 min  
 Response: 22617319660  
 Conc: 1486.28

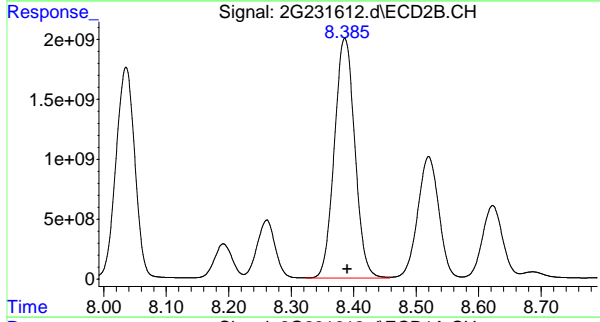


#24 AR1254-A  
 R.T.: 8.036 min  
 Delta R.T.: -0.002 min  
 Response: 36961684655  
 Conc: 1634.05

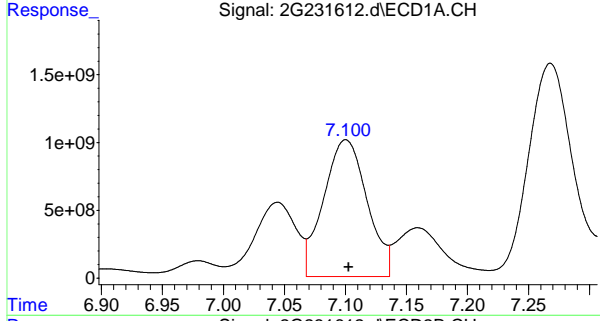
9.3.22  
**9**



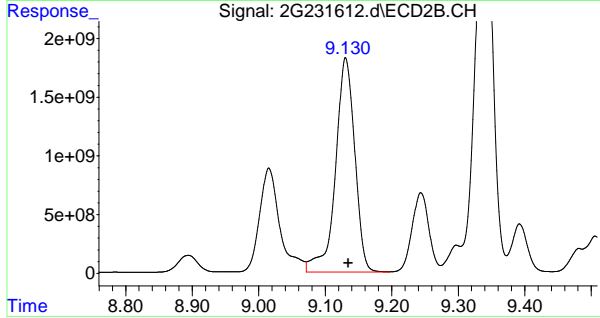
#25 AR1254-B  
 R.T.: 6.751 min  
 Delta R.T.: -0.003 min  
 Response: 43480788972  
 Conc: 1540.40 PPB m



#25 AR1254-B  
 R.T.: 8.386 min  
 Delta R.T.: -0.004 min  
 Response: 45464788134  
 Conc: 1650.89 PPB

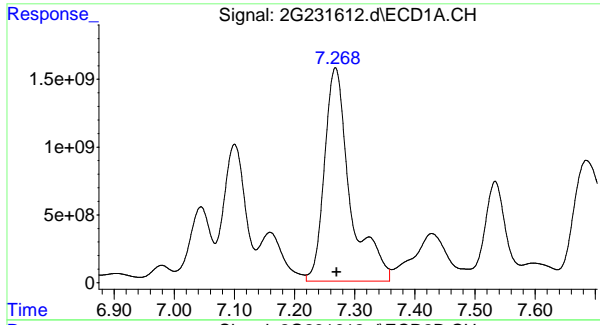


#26 AR1254-C  
 R.T.: 7.100 min  
 Delta R.T.: -0.002 min  
 Response: 25026650940  
 Conc: 1638.74 PPB

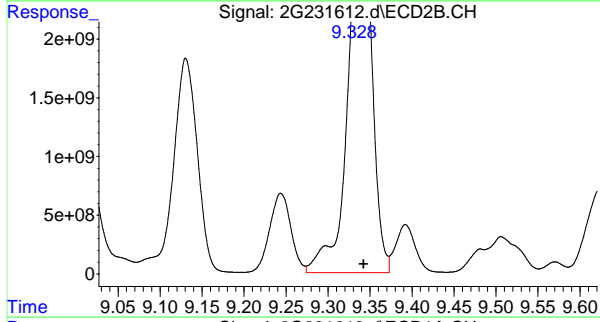


#26 AR1254-C  
 R.T.: 9.131 min  
 Delta R.T.: -0.004 min  
 Response: 36842970638  
 Conc: 1749.30 PPB

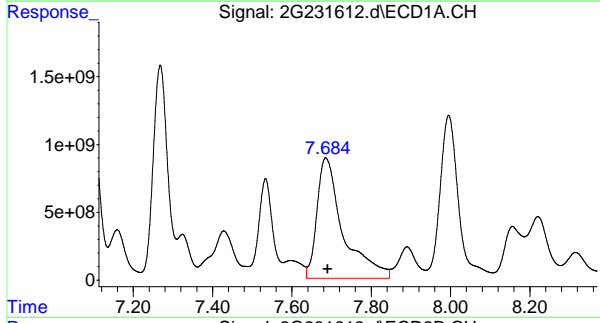
9.3.22  
**9**



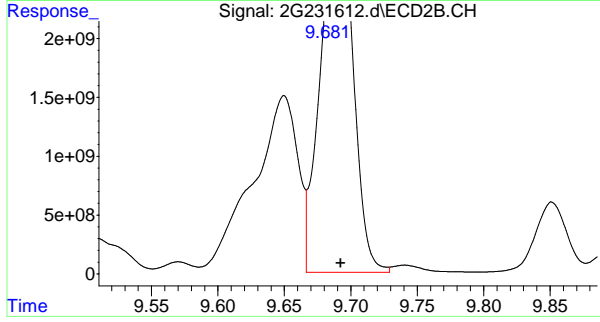
#27 AR1254-D  
 R.T.: 7.268 min  
 Delta R.T.: -0.002 min  
 Response: 46825755738  
 Conc: 1802.45 PPB m



#27 AR1254-D  
 R.T.: 9.343 min  
 Delta R.T.: 0.000 min  
 Response: 53107474358  
 Conc: 1310.11 PPB



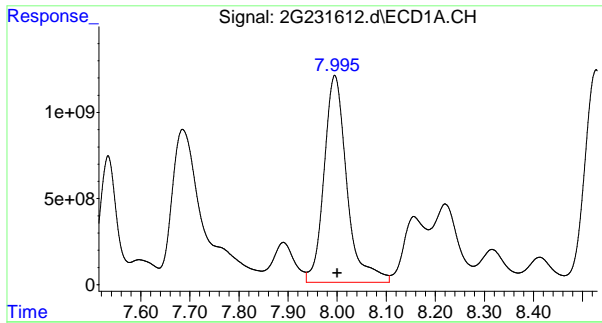
#28 AR1254-E  
 R.T.: 7.686 min  
 Delta R.T.: -0.004 min  
 Response: 40579964575  
 Conc: 1743.59 PPB



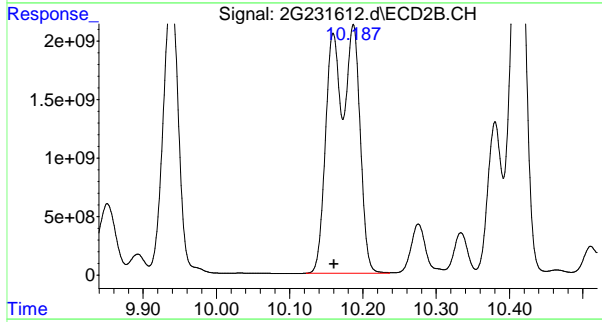
#28 AR1254-E  
 R.T.: 9.693 min  
 Delta R.T.: 0.000 min  
 Response: 44413988773  
 Conc: 1385.89 PPB

9.3.22  
 9

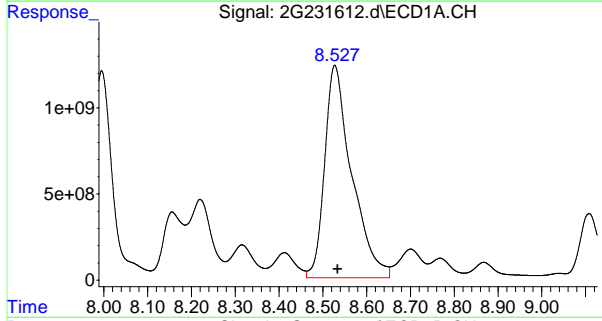




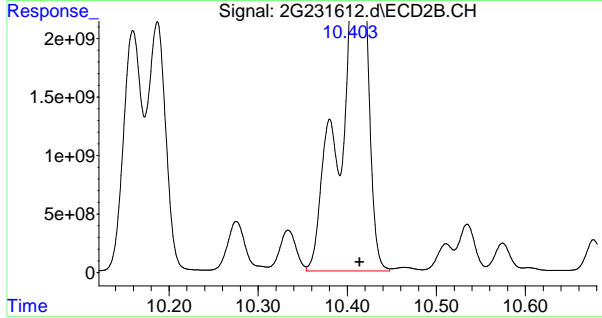
#29 AR1254-F  
 R.T.: 7.995 min  
 Delta R.T.: -0.005 min  
 Response: 38798902919  
 Conc: 1673.76 PPB



#29 AR1254-F  
 R.T.: 10.187 min  
 Delta R.T.: 0.026 min  
 Response: 57386438175  
 Conc: 1833.72 PPB m

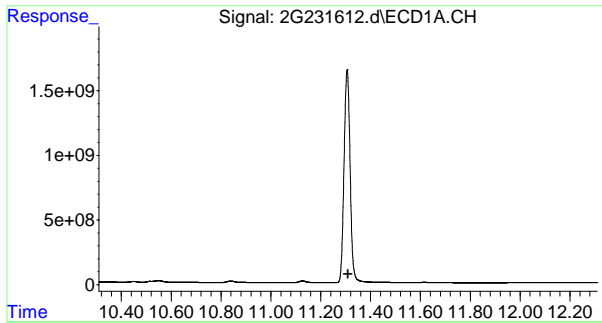


#30 AR1254-G  
 R.T.: 8.528 min  
 Delta R.T.: -0.006 min  
 Response: 52846855450  
 Conc: 1653.77 PPB

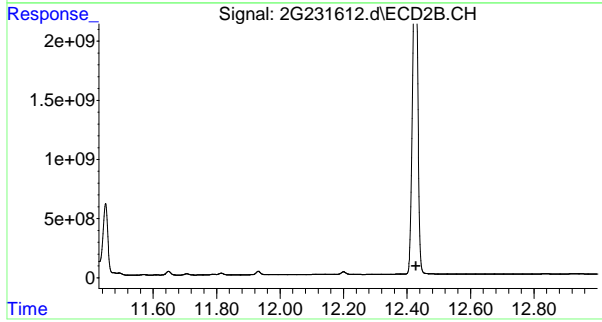


#30 AR1254-G  
 R.T.: 10.403 min  
 Delta R.T.: -0.011 min  
 Response: 56807433721  
 Conc: 1867.31 PPB m

9.3.22  
**9**



#51 Decachlorobiphenyl  
 R.T.: 0.000 min  
 Exp R.T.: 11.309 min  
 Response: 0  
 Conc: N.D.



#51 Decachlorobiphenyl  
 R.T.: 0.000 min  
 Exp R.T.: 12.428 min  
 Response: 0  
 Conc: N.D.

9.3.22  
**9**

## Metals Analysis

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### QC Data Summaries

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Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H8050824W1.CSV      Date Analyzed: 05/08/24      Methods: SW846 7470A  
Analyst: MK      Run ID: MA56021  
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
11:01	MA56021-STD1	1		b=2.1334e-004,c=-6.2782e-002,rho=0.9997560
11:03	MA56021-STD2	1		STDB
11:04	MA56021-STD3	1		STDC
11:06	MA56021-STD4	1		STDD
11:07	MA56021-STD5	1		STDE
11:09	MA56021-STD6	1		STDF
11:12	ZZZZZ	1		
11:13	MA56021-ICV1	1		
11:15	MA56021-ICB1	1		
11:17	MA56021-CCV1	1		
11:18	MA56021-CCB1	1		
11:20	MA56021-CRI1	1		
11:21	MP46472-MB1	1		
11:23	MP46472-B1	1		
11:24	ZZZZZ	1		
11:26	MA56021-CCV2	1		
11:28	MA56021-CCB2	1		
11:31	MP46472-MB1	1		
11:32	MP46472-B1	1		
11:34	ZZZZZ	1		
11:35	MA56021-CCV3	1		
11:37	MA56021-CCB3	1		
11:43	MP46448-MB1	1		
11:45	MP46448-B1	1		
11:46	MP46448-B2	1		
11:48	MP46448-S1	1		
11:50	MP46448-S2	1		
11:52	JD87813-1F	1		(sample used for QC only; not part of login JD87833)
11:53	ZZZZZ	1		
11:55	ZZZZZ	1		
11:56	MA56021-CCV4	1		
11:58	MA56021-CCB4	1		
12:00	ZZZZZ	1		

10.1  
10

SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H8050824W1.CSV Date Analyzed: 05/08/24 Methods: SW846 7470A  
Analyst: MK Run ID: MA56021  
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:01	ZZZZZZ	1		
12:03	ZZZZZZ	1		
12:04	ZZZZZZ	1		
12:06	ZZZZZZ	1		
12:07	ZZZZZZ	1		
12:08	ZZZZZZ	1		
12:10	ZZZZZZ	1		
12:11	MA56021-CCV5	1		
12:13	MA56021-CCB5	1		
12:15	ZZZZZZ	1		
12:16	JD87833-17	1		
12:18	ZZZZZZ	1		
12:19	MP46473-MB1	1		
12:19	MP46473-MB1	1		
12:20	MP46473-LB1	1		
12:20	MP46473-LB1	1		
12:22	MP46473-B1	1		
12:22	MP46473-B1	1		
12:23	MP46473-LS1	1		
12:23	MP46473-LS1	1		
12:25	MP46473-S1	1		
12:25	MP46473-S1	1		
12:27	MA56021-CCV6	1		
12:29	MA56021-CCB6	1		
12:31	MP46473-S2	1		
12:31	MP46473-S2	1		
12:32	JD87093-1AT	1		(sample used for QC only; not part of login JD87833)
12:34	ZZZZZZ	1		
12:35	ZZZZZZ	1		
12:36	ZZZZZZ	1		
12:38	MP46474-MB1	1		
12:39	MP46474-LB1	1		
12:48	MP46474-B1	1		

10.1  
10

SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H8050824W1.CSV Date Analyzed: 05/08/24 Methods: SW846 7470A  
Analyst: MK Run ID: MA56021  
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:49	MA56021-CCV7	1		
12:53	MA56021-CCB7	1		
12:56	MP46474-LS1	1		
12:57	MP46474-S1	1		
12:59	MP46474-S2	1		
13:00	JD87474-1	1		(sample used for QC only; not part of login JD87833)
13:02	ZZZZZ	1		
13:04	ZZZZZ	1		
13:05	MA56021-CCV8	1		
13:06	MA56021-CCB8	1		
13:08	MP46475-MB1	1		
13:10	MP46475-LB1	1		
13:11	MP46475-B1	1		
13:12	MP46475-B1	1		
13:14	MP46475-LS1	1		
13:15	MP46475-S1	1		
13:17	MP46475-S2	1		
13:19	JD87563-1	1		(sample used for QC only; not part of login JD87833)
13:21	ZZZZZ	1		
13:22	MA56021-CCV9	1		
13:24	MA56021-CCB9	1		
13:25	ZZZZZ	1		
13:27	ZZZZZ	1		
13:28	ZZZZZ	1		
13:30	ZZZZZ	1		
13:31	ZZZZZ	1		
13:32	ZZZZZ	1		
13:34	ZZZZZ	1		
13:35	ZZZZZ	1		
13:37	MA56021-CCV10	1		
13:38	MA56021-CCB10	1		
13:40	ZZZZZ	1		
13:41	ZZZZZ	1		

10.1  
10

SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H8050824W1.CSV Date Analyzed: 05/08/24 Methods: SW846 7470A  
Analyst: MK Run ID: MA56021  
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:43	ZZZZZZ	1		
13:44	ZZZZZZ	1		
13:46	ZZZZZZ	1		
13:47	ZZZZZZ	1		
13:48	ZZZZZZ	1		
13:50	ZZZZZZ	1		
13:51	MA56021-CCV11	1		
13:53	MA56021-CCB11	1		
13:54	ZZZZZZ	1		
13:56	ZZZZZZ	1		
13:57	MP46476-MB1	1		
13:59	MP46476-LB1	1		
14:00	MP46476-B1	1		
14:01	MP46476-LS1	1		
14:21	MP46474-LS1	1		
14:22	MA56021-CCV12	1		
14:24	MA56021-CCB12	1		
14:27	MP46476-S1	1		
14:28	MP46476-S2	1		
14:30	JD87563-21	1		(sample used for QC only; not part of login JD87833)
14:32	ZZZZZZ	1		
14:33	ZZZZZZ	1		
14:35	ZZZZZZ	1		
14:36	ZZZZZZ	1		
14:38	ZZZZZZ	1		
14:39	MA56021-CCV13	1		
14:40	MA56021-CCB13	1		
14:42	ZZZZZZ	1		
14:44	ZZZZZZ	1		
14:45	ZZZZZZ	1		
14:47	ZZZZZZ	1		
14:48	ZZZZZZ	1		
14:49	MA56021-CCV14	1		

10.1  
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SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H8050824W1.CSV      Date Analyzed: 05/08/24      Methods: SW846 7470A  
Analyst: MK      Run ID: MA56021  
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
14:51	MA56021-CCB14	1		
14:53	MP46477-MB1	1		
14:54	MP46477-LB1	1		
14:55	MP46477-B1	1		
14:57	MP46477-LS1	1		
14:59	MP46477-S1	1		
15:01	MP46477-S2	1		
15:02	MA56021-CCV15	1		
15:04	MA56021-CCB15	1		
15:06	JD87485-1	1		(sample used for QC only; not part of login JD87833)
15:07	MP46448-MB1	1		
----->	Last reportable sample/prep for job JD87833			
15:09	MP46473-MB1	1		
15:09	MP46473-MB1	1		
15:10	MP46474-MB1	1		
15:12	MA56021-CCV16	1		
15:14	MA56021-CCV17	1		
15:17	MA56021-CCB16	1		
----->	Last reportable CCB for job JD87833			
15:18	ZZZZZZ	1		
15:19	ZZZZZZ	1		
15:21	ZZZZZZ	1		
15:23	ZZZZZZ	1		
15:25	ZZZZZZ	1		
15:27	ZZZZZZ	1		

Refer to raw data for calibration curve and standards.

10.1  
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REPORTED ELEMENTS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H8050824W1.CSV Date Analyzed: 05/08/24 Methods: SW846 7470A  
 Analyst: MK Run ID: MA56021  
 Parameters: Hg

Time	Sample Description	Element:	H
		Dilution	g
11:12	ZZZZZZ	1	
11:13	MA56021-ICV1	1	X
11:15	MA56021-ICB1	1	X
11:17	MA56021-CCV1	1	X
11:18	MA56021-CCB1	1	X
11:20	MA56021-CRI1	1	X
11:21	MP46472-MB1	1	
11:23	MP46472-B1	1	
11:24	ZZZZZZ	1	
11:26	MA56021-CCV2	1	X
11:28	MA56021-CCB2	1	X
11:31	MP46472-MB1	1	X
11:32	MP46472-B1	1	X
11:34	ZZZZZZ	1	
11:35	MA56021-CCV3	1	X
11:37	MA56021-CCB3	1	X
11:43	MP46448-MB1	1	
11:45	MP46448-B1	1	X
11:46	MP46448-B2	1	X
11:48	MP46448-S1	1	X
11:50	MP46448-S2	1	X
11:52	JD87813-1F	1	X (a)
11:53	ZZZZZZ	1	
11:55	ZZZZZZ	1	
11:56	MA56021-CCV4	1	X
11:58	MA56021-CCB4	1	X
12:00	ZZZZZZ	1	
12:01	ZZZZZZ	1	
12:03	ZZZZZZ	1	
12:04	ZZZZZZ	1	
12:06	ZZZZZZ	1	
12:07	ZZZZZZ	1	
12:08	ZZZZZZ	1	

Element: H  
g

10.1.1  
10

REPORTED ELEMENTS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H8050824W1.CSV Date Analyzed: 05/08/24 Methods: SW846 7470A  
 Analyst: MK Run ID: MA56021  
 Parameters: Hg

Time	Sample Description	Element:	H
		Dilution	g
12:10	ZZZZZZ	1	
12:11	MA56021-CCV5	1	X
12:13	MA56021-CCB5	1	X
12:15	ZZZZZZ	1	
12:16	JD87833-17	1	X
12:18	ZZZZZZ	1	
12:19	MP46473-MB1	1	
12:19	MP46473-MB1	1	
12:20	MP46473-LB1	1	
12:20	MP46473-LB1	1	
12:22	MP46473-B1	1	
12:22	MP46473-B1	1	X
12:23	MP46473-LS1	1	
12:23	MP46473-LS1	1	X
12:25	MP46473-S1	1	
12:25	MP46473-S1	1	X
12:27	MA56021-CCV6	1	X
12:29	MA56021-CCB6	1	X
12:31	MP46473-S2	1	
12:31	MP46473-S2	1	X
12:32	JD87093-1AT	1	X (a)
12:34	ZZZZZZ	1	
12:35	ZZZZZZ	1	
12:36	ZZZZZZ	1	
12:38	MP46474-MB1	1	
12:39	MP46474-LB1	1	
12:48	MP46474-B1	1	X
12:49	MA56021-CCV7	1	X
12:53	MA56021-CCB7	1	X
12:56	MP46474-LS1	1	
12:57	MP46474-S1	1	X
12:59	MP46474-S2	1	X
13:00	JD87474-1	1	X (a)
		Element:	H
			g

10.1.1  
10

REPORTED ELEMENTS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H8050824W1.CSV Date Analyzed: 05/08/24 Methods: SW846 7470A  
 Analyst: MK Run ID: MA56021  
 Parameters: Hg

Time	Sample Description	Element:	H
		Dilution	g
13:02	ZZZZZZ	1	
13:04	ZZZZZZ	1	
13:05	MA56021-CCV8	1	X
13:06	MA56021-CCB8	1	X
13:08	MP46475-MB1	1	X
13:10	MP46475-LB1	1	
13:11	MP46475-B1	1	
13:12	MP46475-B1	1	X
13:14	MP46475-LS1	1	X
13:15	MP46475-S1	1	X
13:17	MP46475-S2	1	X
13:19	JD87563-1	1	X (a)
13:21	ZZZZZZ	1	
13:22	MA56021-CCV9	1	X
13:24	MA56021-CCB9	1	X
13:25	ZZZZZZ	1	
13:27	ZZZZZZ	1	
13:28	ZZZZZZ	1	
13:30	ZZZZZZ	1	
13:31	ZZZZZZ	1	
13:32	ZZZZZZ	1	
13:34	ZZZZZZ	1	
13:35	ZZZZZZ	1	
13:37	MA56021-CCV10	1	X
13:38	MA56021-CCB10	1	X
13:40	ZZZZZZ	1	
13:41	ZZZZZZ	1	
13:43	ZZZZZZ	1	
13:44	ZZZZZZ	1	
13:46	ZZZZZZ	1	
13:47	ZZZZZZ	1	
13:48	ZZZZZZ	1	
13:50	ZZZZZZ	1	

Element: H  
g

10.1.1  
10

REPORTED ELEMENTS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H8050824W1.CSV Date Analyzed: 05/08/24 Methods: SW846 7470A  
 Analyst: MK Run ID: MA56021  
 Parameters: Hg

Time	Sample Description	Element:	Dilution	Hg
13:51	MA56021-CCV11	1		X
13:53	MA56021-CCB11	1		X
13:54	ZZZZZZ	1		
13:56	ZZZZZZ	1		
13:57	MP46476-MB1	1		X
13:59	MP46476-LB1	1		
14:00	MP46476-B1	1		X
14:01	MP46476-LS1	1		X
14:21	MP46474-LS1	1		X
14:22	MA56021-CCV12	1		X
14:24	MA56021-CCB12	1		X
14:27	MP46476-S1	1		X
14:28	MP46476-S2	1		X
14:30	JD87563-21	1		X (a)
14:32	ZZZZZZ	1		
14:33	ZZZZZZ	1		
14:35	ZZZZZZ	1		
14:36	ZZZZZZ	1		
14:38	ZZZZZZ	1		
14:39	MA56021-CCV13	1		X
14:40	MA56021-CCB13	1		X
14:42	ZZZZZZ	1		
14:44	ZZZZZZ	1		
14:45	ZZZZZZ	1		
14:47	ZZZZZZ	1		
14:48	ZZZZZZ	1		
14:49	MA56021-CCV14	1		X
14:51	MA56021-CCB14	1		X
14:53	MP46477-MB1	1		X
14:54	MP46477-LB1	1		
14:55	MP46477-B1	1		X
14:57	MP46477-LS1	1		X
14:59	MP46477-S1	1		X
		Element:		Hg

10.1.1  
10

REPORTED ELEMENTS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H8050824W1.CSV Date Analyzed: 05/08/24 Methods: SW846 7470A  
 Analyst: MK Run ID: MA56021  
 Parameters: Hg

Time	Sample Description	Element:	H Dilution	g
15:01	MP46477-S2	1	X	
15:02	MA56021-CCV15	1	X	
15:04	MA56021-CCB15	1	X	
15:06	JD87485-1	1	X (a)	
15:07	MP46448-MB1	1	X	
15:09	MP46473-MB1	1	X	
15:09	MP46473-MB1	1	X	
15:10	MP46474-MB1	1	X	
15:12	MA56021-CCV16	1	X	
15:14	MA56021-CCV17	1	X	
15:17	MA56021-CCB16	1	X	
15:18	ZZZZZZ	1		
15:19	ZZZZZZ	1		
15:21	ZZZZZZ	1		
15:23	ZZZZZZ	1		
15:25	ZZZZZZ	1		
15:27	ZZZZZZ	1		

(a) Sample used for QC only; not part of login JD87833.

Element: H  
g

10.1.1  
10

BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H8050824W1.CSV      Date Analyzed: 05/08/24      Methods: SW846 7470A  
 QC Limits: result < RL      Run ID: MA56021      Units: ug/l

	Time:		11:15		11:18		11:28		11:37	
	Sample ID:		ICB1		CCB1		CCB2		CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Mercury	0.20	.013	-0.0320	<0.20	-0.0134	<0.20	-0.0188	<0.20	-0.0126	<0.20

(\*) Outside of QC limits  
 (anr) Analyte not requested

10.1.2  
 10

BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H8050824W1.CSV Date Analyzed: 05/08/24 Methods: SW846 7470A  
 QC Limits: result < RL Run ID: MA56021 Units: ug/l

	Time:		11:58		12:13		12:29		12:53	
	Sample ID:		CCB4		CCB5		CCB6		CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Mercury	0.20	.013	-0.0166	<0.20	-0.00300	<0.20	-0.0284	<0.20	-0.0226	<0.20

(\*) Outside of QC limits  
 (anr) Analyte not requested

10.1.2  
 10

BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H8050824W1.CSV      Date Analyzed: 05/08/24      Methods: SW846 7470A  
 QC Limits: result < RL      Run ID: MA56021      Units: ug/l

	Time:		13:06		13:24		13:38		13:53	
	Sample ID:		CCB8		CCB9		CCB10		CCB11	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Mercury	0.20	.013	-0.0147	<0.20	-0.0158	<0.20	-0.0160	<0.20	-0.00680	<0.20

(\*) Outside of QC limits  
 (anr) Analyte not requested

10.1.2  
 10



BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H8050824W1.CSV Date Analyzed: 05/08/24 Methods: SW846 7470A  
 QC Limits: result < RL Run ID: MA56021 Units: ug/l

	Time:		14:24		14:40		14:51		15:04	
	Sample ID:		CCB12		CCB13		CCB14		CCB15	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Mercury	0.20	.013	-0.0503	<0.20	-0.00790	<0.20	-0.00830	<0.20	-0.0175	<0.20

(\*) Outside of QC limits  
 (anr) Analyte not requested

10.1.2  
 10

BLANK RESULTS SUMMARY  
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H8050824W1.CSV      Date Analyzed: 05/08/24      Methods: SW846 7470A  
QC Limits: result < RL      Run ID: MA56021      Units: ug/l

Time:			15:17	
Sample ID:			CCB16	
Metal	RL	IDL	raw	final

Mercury      0.20      .013      -0.0808      <0.20

(\*) Outside of QC limits  
(anr) Analyte not requested

10.1.2  
10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H8050824W1.CSV      Date Analyzed: 05/08/24      Methods: SW846 7470A  
QC Limits: 90 to 110 % Recovery      Run ID: MA56021      Units: ug/l

	Time:		11:13		11:17		11:26		
Sample ID:	ICV	ICV1	ICV1	CCV	CCV1	CCV	CCV2	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	3	3.20	106.7	2.5	2.44	97.6	2.5	2.44	97.6

(\*) Outside of QC limits  
(anr) Analyte not requested

10.1.3  
10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H8050824W1.CSV      Date Analyzed: 05/08/24      Methods: SW846 7470A  
QC Limits: 90 to 110 % Recovery      Run ID: MA56021      Units: ug/l

	Time:	11:35		11:56		12:11			
Sample ID:	CCV	CCV3		CCV4		CCV5			
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	2.5	2.46	98.4	2.5	2.43	97.2	2.5	2.42	96.8

(\*) Outside of QC limits  
(anr) Analyte not requested

10.1.3  
10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H8050824W1.CSV      Date Analyzed: 05/08/24      Methods: SW846 7470A  
QC Limits: 90 to 110 % Recovery      Run ID: MA56021      Units: ug/l

	Time:	12:27		12:49		13:05			
Sample ID:	CCV	CCV6	CCV	CCV7	CCV	CCV8			
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	2.5	2.37	94.8	2.5	2.39	95.6	2.5	2.51	100.4

(\*) Outside of QC limits  
(anr) Analyte not requested

10.1.3  
10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H8050824W1.CSV      Date Analyzed: 05/08/24      Methods: SW846 7470A  
QC Limits: 90 to 110 % Recovery      Run ID: MA56021      Units: ug/l

	Time:	13:22		13:37		13:51			
Sample ID:	CCV	CCV9	CCV	CCV10	CCV	CCV11			
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	2.5	2.53	101.2	2.5	2.57	102.8	2.5	2.53	101.2

(\*) Outside of QC limits  
(anr) Analyte not requested

10.1.3  
10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H8050824W1.CSV      Date Analyzed: 05/08/24      Methods: SW846 7470A  
QC Limits: 90 to 110 % Recovery      Run ID: MA56021      Units: ug/l

	Time:	14:22		14:39		14:49			
Sample ID:	CCV	CCV12	CCV	CCV13	CCV	CCV14			
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	2.5	2.52	100.8	2.5	2.57	102.8	2.5	2.53	101.2

(\*) Outside of QC limits  
(anr) Analyte not requested

10.1.3  
10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H8050824W1.CSV      Date Analyzed: 05/08/24      Methods: SW846 7470A  
QC Limits: 90 to 110 % Recovery      Run ID: MA56021      Units: ug/l

	Time:	15:02		15:14		
Sample ID:	CCV	CCV15		CCV	CCV17	
Metal	True	Results	% Rec	True	Results	% Rec
Mercury	2.5	2.47	98.8	2.5	2.63	105.2

(\*) Outside of QC limits  
(anr) Analyte not requested

10.1.3  
10



LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H8050824W1.CSV      Date Analyzed: 05/08/24      Methods: SW846 7470A  
QC Limits: 70 to 130 % Recovery      Run ID: MA56021      Units: ug/l

Time:			11:20	
Sample ID:	CRI	CRIA	CRI1	
Metal	True	True	Results	% Rec

Mercury      0.20      0.202      101.0

(\*) Outside of QC limits  
(anr) Analyte not requested

10.1.4  
10

SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP Date Analyzed: 05/07/24 Methods: EPA 200.7, SW846 6010D  
Analyst: MM Run ID: MA56025  
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
10:01	MA56025-STD1	1		STDA
10:06	MA56025-STD2	1		STDB
10:12	MA56025-ICV1	1		
10:17	MA56025-ICB1	1		
10:23	MA56025-ICCV1	1		
10:29	MA56025-CCB1	1		
10:34	MA56025-CRI1	1		
10:39	MA56025-CRID1	1		
10:44	MA56025-ICSA1	1		
10:49	MA56025-ICSAB1	1		
10:55	MA56025-HSTD1	1		
11:01	MA56025-HSTD2	1		
11:11	ZZZZZZ	1		
11:16	ZZZZZZ	1		
11:21	ZZZZZZ	1		
11:26	ZZZZZZ	1		
11:32	MA56025-CCV1	1		
11:36	MA56025-CCB2	1		
11:41	ZZZZZZ	1		
11:46	ZZZZZZ	1		
11:51	ZZZZZZ	1		
11:56	MP46387-MB1	1		
12:01	MP46387-B1	1		
12:06	MP46387-LC1	1		Batch to redigest, LC failed
12:11	MP46387-LC2	1		
12:16	MP46387-S1	1		
12:21	MP46387-S2	1		
12:26	JD87487-3	1		(sample used for QC only; not part of login JD87833)
12:32	MA56025-CCV2	1		
12:36	MA56025-CCB3	1		
12:41	MP46387-SD1	5		
12:46	MP46387-PS1	1		
12:52	ZZZZZZ	1		

10.2  
10

SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP Date Analyzed: 05/07/24 Methods: EPA 200.7, SW846 6010D  
Analyst: MM Run ID: MA56025  
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:57	ZZZZZZ	1		
13:02	ZZZZZZ	1		
13:07	ZZZZZZ	1		
13:12	ZZZZZZ	1		
13:17	ZZZZZZ	1		
13:22	ZZZZZZ	1		
13:26	ZZZZZZ	1		
13:31	MA56025-CCV3	1		
13:36	MA56025-CCB4	1		
13:41	ZZZZZZ	1		
13:46	ZZZZZZ	1		
13:51	ZZZZZZ	1		
13:56	ZZZZZZ	1		
14:01	ZZZZZZ	1		
14:06	ZZZZZZ	1		
14:11	ZZZZZZ	1		
14:16	ZZZZZZ	1		
14:21	ZZZZZZ	1		
14:26	ZZZZZZ	1		
14:31	MA56025-CCV4	1		
14:35	MA56025-CCB5	1		
14:40	ZZZZZZ	1		
14:46	MP46388-B1	1		
14:51	MP46388-MB1	1		
14:56	MP46388-S1	1		
15:00	MP46388-S2	1		
15:05	JD87562-5	1		(sample used for QC only; not part of login JD87833)
15:10	MP46388-SD1	5		
15:15	MP46388-PS1	1		
15:20	ZZZZZZ	1		
15:25	ZZZZZZ	1		
15:30	MA56025-CCV5	1		
15:34	MA56025-CCB6	1		

10.2  
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SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP Date Analyzed: 05/07/24 Methods: EPA 200.7, SW846 6010D  
Analyst: MM Run ID: MA56025  
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:39	ZZZZZZ	1		
15:44	ZZZZZZ	1		
15:49	ZZZZZZ	1		
15:54	ZZZZZZ	1		
15:59	ZZZZZZ	1		
16:04	ZZZZZZ	1		
16:09	ZZZZZZ	1		
16:14	ZZZZZZ	1		
16:19	ZZZZZZ	1		
16:23	ZZZZZZ	1		
16:28	MA56025-CCV6	1		
16:33	MA56025-CCB7	1		
16:38	ZZZZZZ	1		
16:43	ZZZZZZ	1		
16:48	ZZZZZZ	1		
16:53	ZZZZZZ	1		
16:58	ZZZZZZ	1		
17:03	ZZZZZZ	1		
17:08	ZZZZZZ	1		
17:12	MP46389-B1	1		
17:17	MP46389-MB1	1		
17:22	MP46389-S1	1		FE, MN high
17:27	MA56025-CCV7	1		
17:32	MA56025-CCB8	1		
17:37	MP46389-S2	1		FE, MN high
17:43	JD87473-2	1		(sample used for QC only; not part of login JD87833)
17:48	MP46389-SD1	5		FE, MN high
17:53	MP46389-PS1	1		
17:58	ZZZZZZ	1		
18:03	ZZZZZZ	1		
18:08	ZZZZZZ	1		
18:13	ZZZZZZ	1		
18:19	ZZZZZZ	1		

10.2  
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SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP Date Analyzed: 05/07/24 Methods: EPA 200.7, SW846 6010D  
Analyst: MM Run ID: MA56025  
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
18:24	ZZZZZZ	1		
18:29	MA56025-CCV8	1		
18:34	MA56025-CCB9	1		
18:39	ZZZZZZ	1		
18:44	ZZZZZZ	1		
18:49	ZZZZZZ	1		
18:54	ZZZZZZ	1		
18:59	ZZZZZZ	1		
19:04	ZZZZZZ	1		
19:09	ZZZZZZ	1		
19:14	ZZZZZZ	1		
19:19	ZZZZZZ	1		
19:24	ZZZZZZ	1		
19:29	MA56025-CCV9	1		
19:34	MA56025-CCB10	1		
19:39	ZZZZZZ	1		
19:44	ZZZZZZ	1		
19:48	ZZZZZZ	1		
19:54	MP46431-MB1	1		
19:59	MP46431-B1	1		
20:03	JD87831-1	1		(sample used for QC only; not part of login JD87833)
20:08	ZZZZZZ	1		
20:13	ZZZZZZ	1		
20:19	MA56025-CCV10	1		
20:23	MA56025-CCB11	1		
20:28	MP46415-MB1	1		
20:33	MP46415-B1	1		
20:38	MP46415-S1	1		
20:43	MP46415-S2	1		
20:48	JD87760-5	1		(sample used for QC only; not part of login JD87833)
20:53	MP46415-SD1	5		
20:58	MP46415-PS1	1		
21:03	ZZZZZZ	1		

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SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP Date Analyzed: 05/07/24 Methods: EPA 200.7, SW846 6010D  
Analyst: MM Run ID: MA56025  
Parameters: Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, Tl, V, Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
21:08	ZZZZZZ	1		
21:13	MA56025-CCV11	1		
21:18	MA56025-CCB12	1		
21:23	ZZZZZZ	1		
21:28	ZZZZZZ	1		
21:33	ZZZZZZ	1		
21:38	ZZZZZZ	1		
21:43	ZZZZZZ	1		
21:48	ZZZZZZ	1		
21:53	ZZZZZZ	1		
21:58	ZZZZZZ	1		
22:03	ZZZZZZ	1		
22:07	MA56025-CCV12	1		
22:12	MA56025-CCB13	1		
22:17	ZZZZZZ	1		
22:22	ZZZZZZ	1		
22:27	ZZZZZZ	1		
22:32	ZZZZZZ	1		
22:37	ZZZZZZ	1		
22:42	MP46390-B1	1		
22:47	MP46390-MB1	1		
22:52	MA56025-CCV13	1		
22:57	MA56025-CCB14	1		
23:02	MP46390-S1	50		Needs post spike for Al and AG at 1:50
23:07	MP46390-S2	50		
23:12	JD87597-1	50		(sample used for QC only; not part of login JD87833)
23:17	MP46390-SD1	250		
23:22	ZZZZZZ	1		
23:27	ZZZZZZ	1		
23:32	ZZZZZZ	10		
23:37	ZZZZZZ	1		
23:43	ZZZZZZ	10		
23:48	ZZZZZZ	1		

10.2  
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SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP Date Analyzed: 05/07/24 Methods: EPA 200.7, SW846 6010D  
Analyst: MM Run ID: MA56025  
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
23:53	MA56025-CCV14	1		
23:58	MA56025-CCB15	1		
00:03	ZZZZZZ	10		
00:07	ZZZZZZ	1		
00:13	ZZZZZZ	10		
00:18	ZZZZZZ	1		
00:23	ZZZZZZ	1		
00:28	ZZZZZZ	1		
00:34	ZZZZZZ	1		
00:40	ZZZZZZ	1		
00:46	ZZZZZZ	1		
00:51	ZZZZZZ	1		
00:57	MA56025-CCV15	1		
01:02	MA56025-CCB16	1		
01:07	ZZZZZZ	1		
01:12	ZZZZZZ	1		
01:17	ZZZZZZ	10		
01:22	ZZZZZZ	10		
01:27	ZZZZZZ	10		
01:32	ZZZZZZ	10		
01:37	ZZZZZZ	10		
01:42	ZZZZZZ	10		
01:46	ZZZZZZ	1		
01:51	MP46430-LB1	1		
01:56	MA56025-CCV16	1		
02:01	MA56025-CCB17	1		
02:06	MP46430-LS1	1		
02:11	MP46430-S1	1		
02:17	MP46430-S2	1		
02:22	JD87474-1	1		(sample used for QC only; not part of login JD87833)
02:27	MP46430-SD1	5		
02:32	ZZZZZZ	1		
02:38	ZZZZZZ	1		

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SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP Date Analyzed: 05/07/24 Methods: EPA 200.7, SW846 6010D  
Analyst: MM Run ID: MA56025  
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
02:43	ZZZZZZ	2		
02:48	MP46387-S1	5		
02:53	MP46387-S2	5		
02:57	MA56025-CCV17	1		
03:02	MA56025-CCB18	1		
03:07	MP46431-S1	1		to redigest -s1, s2, they dont match the sample
03:12	MP46431-S2	1		to redigest -s1, s2, they dont match the sample
03:17	MP46431-SD1	5		
03:22	ZZZZZZ	1		
03:27	ZZZZZZ	1		
03:32	ZZZZZZ	1		
03:37	ZZZZZZ	1		
03:42	ZZZZZZ	1		
03:47	ZZZZZZ	1		
03:52	ZZZZZZ	1		
03:57	MA56025-CCV18	1		
04:02	MA56025-CCB19	1		
04:07	ZZZZZZ	1		
04:12	ZZZZZZ	1		
04:17	ZZZZZZ	1		
04:22	JD87833-17	1		
----->	Last reportable sample/prep for job JD87833			
04:27	ZZZZZZ	1		
04:32	ZZZZZZ	1		
04:37	ZZZZZZ	1		
04:42	ZZZZZZ	1		
04:47	ZZZZZZ	1		
04:52	ZZZZZZ	1		
04:57	MA56025-CCV19	1		
05:02	MA56025-CCB20	1		
----->	Last reportable CCB for job JD87833			
07:22	ZZZZZZ	5		
07:28	MP46354-SD1	5		
07:38	MA56025-CCV20	1		
07:43	MA56025-CCB21	1		

Refer to raw data for calibration curve and standards.

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REPORTED ELEMENTS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP Date Analyzed: 05/07/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: MM Run ID: MA56025  
 Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Element: Dilution	A	S	A	B	B	C	C	C	C	F	P	M	M	N	K	S	A	N	T	V	Z			
			l	b	s	a	e	d	a	r	o	u	e	b	g	n	i	e	g	a	l	n				
10:12	MA56025-ICV1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
10:17	MA56025-ICB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
10:23	MA56025-ICCV1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
10:29	MA56025-CCB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
10:34	MA56025-CRI1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
10:39	MA56025-CRID1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
10:44	MA56025-ICSA1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
10:49	MA56025-ICSAB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
10:55	MA56025-HSTD1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
11:01	MA56025-HSTD2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
11:11	ZZZZZ	1																								
11:16	ZZZZZ	1																								
11:21	ZZZZZ	1																								
11:26	ZZZZZ	1																								
11:32	MA56025-CCV1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
11:36	MA56025-CCB2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
11:41	ZZZZZ	1																								
11:46	ZZZZZ	1																								
11:51	ZZZZZ	1																								
11:56	MP46387-MB1	1																								
12:01	MP46387-B1	1																								
12:06	MP46387-LC1	1	Batch to redigest, LC failed																							
12:11	MP46387-LC2	1																								
12:16	MP46387-S1	1																								
12:21	MP46387-S2	1																								
12:26	JD87487-3	1																								
12:32	MA56025-CCV2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
12:36	MA56025-CCB3	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
12:41	MP46387-SD1	5																								
12:46	MP46387-PS1	1																								
12:52	ZZZZZ	1																								
12:57	ZZZZZ	1																								
13:02	ZZZZZ	1																								

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REPORTED ELEMENTS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP Date Analyzed: 05/07/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: MM Run ID: MA56025  
 Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Element: Dilution	A l	S b	A s	B a	B e	C d	C a	C r	C o	C u	F e	P b	M g	M n	N i	K	S e	A g	N a	T l	V	Z n	
13:07	ZZZZZ	1																							
13:12	ZZZZZ	1																							
13:17	ZZZZZ	1																							
13:22	ZZZZZ	1																							
13:26	ZZZZZ	1																							
13:31	MA56025-CCV3	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
13:36	MA56025-CCB4	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
13:41	ZZZZZ	1																							
13:46	ZZZZZ	1																							
13:51	ZZZZZ	1																							
13:56	ZZZZZ	1																							
14:01	ZZZZZ	1																							
14:06	ZZZZZ	1																							
14:11	ZZZZZ	1																							
14:16	ZZZZZ	1																							
14:21	ZZZZZ	1																							
14:26	ZZZZZ	1																							
14:31	MA56025-CCV4	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
14:35	MA56025-CCB5	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
14:40	ZZZZZ	1																							
14:46	MP46388-B1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
14:51	MP46388-MB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
14:56	MP46388-S1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
15:00	MP46388-S2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
15:05	JD87562-5	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	(a)
15:10	MP46388-SD1	5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
15:15	MP46388-PS1	1	X																						
15:20	ZZZZZ	1																							
15:25	ZZZZZ	1																							
15:30	MA56025-CCV5	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
15:34	MA56025-CCB6	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
15:39	ZZZZZ	1																							
15:44	ZZZZZ	1																							

10.2.1  
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REPORTED ELEMENTS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP Date Analyzed: 05/07/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: MM Run ID: MA56025  
 Parameters: Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, Tl, V, Zn

Time	Sample Description	Element Dilution	A	S	A	B	B	C	C	C	C	F	P	M	M	N	K	S	A	N	T	V	Z	
			l	b	s	a	e	d	a	r	o	u	e	b	g	n	i	e	g	a	l	n		
15:49	ZZZZZZ	1																						
15:54	ZZZZZZ	1																						
15:59	ZZZZZZ	1																						
16:04	ZZZZZZ	1																						
16:09	ZZZZZZ	1																						
16:14	ZZZZZZ	1																						
16:19	ZZZZZZ	1																						
16:23	ZZZZZZ	1																						
16:28	MA56025-CCV6	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
16:33	MA56025-CCB7	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
16:38	ZZZZZZ	1																						
16:43	ZZZZZZ	1																						
16:48	ZZZZZZ	1																						
16:53	ZZZZZZ	1																						
16:58	ZZZZZZ	1																						
17:03	ZZZZZZ	1																						
17:08	ZZZZZZ	1																						
17:12	MP46389-B1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
17:17	MP46389-MB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
17:22	MP46389-S1	1	X	X	X	X	X	X	X	X		X	X		X	X		X	X	X	X	X	X	X
17:27	MA56025-CCV7	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
17:32	MA56025-CCB8	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
17:37	MP46389-S2	1	X	X	X	X	X	X	X	X		X	X		X	X		X	X	X	X	X	X	X
17:43	JD87473-2	1			X	X		X				X							X					(a)
17:48	MP46389-SD1	5	X	X	X	X	X	X	X	X		X	X		X	X		X	X	X	X	X	X	X
17:53	MP46389-PS1	1		X		X																		
17:58	ZZZZZZ	1																						
18:03	ZZZZZZ	1																						
18:08	ZZZZZZ	1																						
18:13	ZZZZZZ	1																						
18:19	ZZZZZZ	1																						
18:24	ZZZZZZ	1																						
18:29	MA56025-CCV8	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

10.2.1  
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REPORTED ELEMENTS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP Date Analyzed: 05/07/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: MM Run ID: MA56025  
 Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Element: Dilution	A	S	A	B	B	C	C	C	C	F	P	M	M	N	K	S	A	N	T	V	Z
			l	b	s	a	e	d	a	r	o	u	e	b	g	n	i	e	g	a	l	n	
18:34	MA56025-CCB9	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
18:39	ZZZZZ	1																					
18:44	ZZZZZ	1																					
18:49	ZZZZZ	1																					
18:54	ZZZZZ	1																					
18:59	ZZZZZ	1																					
19:04	ZZZZZ	1																					
19:09	ZZZZZ	1																					
19:14	ZZZZZ	1																					
19:19	ZZZZZ	1																					
19:24	ZZZZZ	1																					
19:29	MA56025-CCV9	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
19:34	MA56025-CCB10	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
19:39	ZZZZZ	1																					
19:44	ZZZZZ	1																					
19:48	ZZZZZ	1																					
19:54	MP46431-MB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
19:59	MP46431-B1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
20:03	JD87831-1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X (a)
20:08	ZZZZZ	1																					
20:13	ZZZZZ	1																					
20:19	MA56025-CCV10	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
20:23	MA56025-CCB11	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
20:28	MP46415-MB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
20:33	MP46415-B1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
20:38	MP46415-S1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
20:43	MP46415-S2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
20:48	JD87760-5	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X (a)
20:53	MP46415-SD1	5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
20:58	MP46415-PS1	1		X																			
21:03	ZZZZZ	1																					
21:08	ZZZZZ	1																					
21:13	MA56025-CCV11	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Element: A S A B B C C C C F P M M N K S A N T V Z  
 l b s a e d a r o u e b g n i e g a l n

10.2.1  
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REPORTED ELEMENTS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP Date Analyzed: 05/07/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: MM Run ID: MA56025  
 Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Element: Dilution	A	S	A	B	B	C	C	C	C	F	P	M	M	N	K	S	A	N	T	V	Z
			l	b	s	a	e	d	a	r	o	u	e	b	g	n	i	e	g	a	l	n	
21:18	MA56025-CCB12	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
21:23	ZZZZZZ	1																					
21:28	ZZZZZZ	1																					
21:33	ZZZZZZ	1																					
21:38	ZZZZZZ	1																					
21:43	ZZZZZZ	1																					
21:48	ZZZZZZ	1																					
21:53	ZZZZZZ	1																					
21:58	ZZZZZZ	1																					
22:03	ZZZZZZ	1																					
22:07	MA56025-CCV12	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
22:12	MA56025-CCB13	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
22:17	ZZZZZZ	1																					
22:22	ZZZZZZ	1																					
22:27	ZZZZZZ	1																					
22:32	ZZZZZZ	1																					
22:37	ZZZZZZ	1																					
22:42	MP46390-B1	1											X	X									
22:47	MP46390-MB1	1											X	X									
22:52	MA56025-CCV13	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
22:57	MA56025-CCB14	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
23:02	MP46390-S1	50	X	X	X	X	X	X	X			X	X	X	X			X	X	X	X	X	X
23:07	MP46390-S2	50	X	X	X	X	X	X	X			X	X	X	X			X	X	X	X	X	X
23:12	JD87597-1	50	X		X			X				X	X	X			X			X			(a)
23:17	MP46390-SD1	250	X	X	X	X	X	X	X			X	X	X	X			X	X	X	X	X	X
23:22	ZZZZZZ	1																					
23:27	ZZZZZZ	1																					
23:32	ZZZZZZ	10																					
23:37	ZZZZZZ	1																					
23:43	ZZZZZZ	10																					
23:48	ZZZZZZ	1																					
23:53	MA56025-CCV14	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
23:58	MA56025-CCB15	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

10.2.1  
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REPORTED ELEMENTS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP Date Analyzed: 05/07/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: MM Run ID: MA56025  
 Parameters: Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, Tl, V, Zn

Time	Sample Description	Element Dilution	A	S	A	B	B	C	C	C	C	F	P	M	M	N	K	S	A	N	T	V	Z	
			l	b	s	a	e	d	a	r	o	u	e	b	g	n	i	e	g	a	l	n		
00:03	ZZZZZZ	10																						
00:07	ZZZZZZ	1																						
00:13	ZZZZZZ	10																						
00:18	ZZZZZZ	1																						
00:23	ZZZZZZ	1																						
00:28	ZZZZZZ	1																						
00:34	ZZZZZZ	1																						
00:40	ZZZZZZ	1																						
00:46	ZZZZZZ	1																						
00:51	ZZZZZZ	1																						
00:57	MA56025-CCV15	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
01:02	MA56025-CCB16	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
01:07	ZZZZZZ	1																						
01:12	ZZZZZZ	1																						
01:17	ZZZZZZ	10																						
01:22	ZZZZZZ	10																						
01:27	ZZZZZZ	10																						
01:32	ZZZZZZ	10																						
01:37	ZZZZZZ	10																						
01:42	ZZZZZZ	10																						
01:46	ZZZZZZ	1																						
01:51	MP46430-LB1	1																						
01:56	MA56025-CCV16	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
02:01	MA56025-CCB17	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
02:06	MP46430-LS1	1			X	X		X		X		X				X		X	X				X	
02:11	MP46430-S1	1			X	X		X		X		X				X		X	X				X	
02:17	MP46430-S2	1			X	X		X		X		X				X		X	X				X	
02:22	JD87474-1	1			X	X		X		X		X				X		X	X				X (a)	
02:27	MP46430-SD1	5			X	X		X		X		X				X		X	X				X	
02:32	ZZZZZZ	1																						
02:38	ZZZZZZ	1																						
02:43	ZZZZZZ	2																						
02:48	MP46387-S1	5																						

10.2.1  
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REPORTED ELEMENTS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP Date Analyzed: 05/07/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: MM Run ID: MA56025  
 Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution	Element	A	S	A	B	B	C	C	C	C	F	P	M	M	N	K	S	A	N	T	V	Z		
			Dilution	l	b	s	a	e	d	a	r	o	u	e	b	g	n	i	e	g	a	l	n			
02:53	MP46387-S2	5																								
02:57	MA56025-CCV17	1		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
03:02	MA56025-CCB18	1		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
03:07	MP46431-S1	1		to redigest -s1, s2, they dont match the sample																						
03:12	MP46431-S2	1		to redigest -s1, s2, they dont match the sample																						
03:17	MP46431-SD1	5		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
03:22	ZZZZZ	1																								
03:27	ZZZZZ	1																								
03:32	ZZZZZ	1																								
03:37	ZZZZZ	1																								
03:42	ZZZZZ	1																								
03:47	ZZZZZ	1																								
03:52	ZZZZZ	1																								
03:57	MA56025-CCV18	1		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
04:02	MA56025-CCB19	1		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
04:07	ZZZZZ	1																								
04:12	ZZZZZ	1																								
04:17	ZZZZZ	1																								
04:22	JD87833-17	1		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
04:27	ZZZZZ	1																								
04:32	ZZZZZ	1																								
04:37	ZZZZZ	1																								
04:42	ZZZZZ	1																								
04:47	ZZZZZ	1																								
04:52	ZZZZZ	1																								
04:57	MA56025-CCV19	1		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
05:02	MA56025-CCB20	1		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
07:22	ZZZZZ	5																								
07:28	MP46354-SD1	5																						X		
07:38	MA56025-CCV20	1		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
07:43	MA56025-CCB21	1		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		

(a) Sample used for QC only; not part of login JD87833.

Element: A S A B B C C C C F P M M N K S A N T V Z  
 l b s a e d a r o u e b g n i e g a l n

10.2.1  
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INTERNAL STANDARD SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP Date Analyzed: 05/07/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: MM Run ID: MA56025  
 Parameters: Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, Tl, V, Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
10:01	MA56025-STD1	7440 R	149850 R	18582 R	12376 R
10:06	MA56025-STD2	7002	138440	18361	10847
10:12	MA56025-ICV1	7077	140510	18150	11140
10:17	MA56025-ICB1	7302	146790	18168	12208
10:23	MA56025-ICCV1	7076	140060	18020	11157
10:29	MA56025-CCB1	7312	147050	18115	12253
10:34	MA56025-CRI1	7217	145540	18142	11981
10:39	MA56025-CRID1	7275	146630	18002	12184
10:44	MA56025-ICSA1	6569	128920	17447	10091
10:49	MA56025-ICSAB1	6559	129300	17540	10083
10:55	MA56025-HSTD1	7265	144360	18085	11915
11:01	MA56025-HSTD2	6674	132230	17658	10211
11:11	ZZZZZ	7587	140950	19017	11187
11:16	ZZZZZ	6739	135110	17624	10687
11:21	ZZZZZ	7192	144030	18125	12202
11:26	ZZZZZ	7257	146110	17928	12158
11:32	MA56025-CCV1	7045	140140	17735	11151
11:36	MA56025-CCB2	7240	146480	17900	12174
11:41	ZZZZZ	6962	138650	17149	12054
11:46	ZZZZZ	6895	138190	17015	11949
11:51	ZZZZZ	6902	138320	17023	11956
11:56	MP46387-MB1	No results reported for the elements associated with this internal standard.			
12:01	MP46387-B1	No results reported for the elements associated with this internal standard.			
12:06	MP46387-LC1	No results reported for the elements associated with this internal standard.			
12:11	MP46387-LC2	No results reported for the elements associated with this internal standard.			
12:16	MP46387-S1	No results reported for the elements associated with this internal standard.			
12:21	MP46387-S2	No results reported for the elements associated with this internal standard.			
12:26	JD87487-3	No results reported for the elements associated with this internal standard.			
12:32	MA56025-CCV2	7008	139650	17855	11094
12:36	MA56025-CCB3	7229	146840	17984	12158
12:41	MP46387-SD1	No results reported for the elements associated with this internal standard.			
12:46	MP46387-PS1	No results reported for the elements associated with this internal standard.			
12:52	ZZZZZ	No results reported for the elements associated with this internal standard.			



INTERNAL STANDARD SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP Date Analyzed: 05/07/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: MM Run ID: MA56025  
 Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
12:57	ZZZZZ	No results reported for the elements associated with this internal standard.			
13:02	ZZZZZ	No results reported for the elements associated with this internal standard.			
13:07	ZZZZZ	No results reported for the elements associated with this internal standard.			
13:12	ZZZZZ	No results reported for the elements associated with this internal standard.			
13:17	ZZZZZ	No results reported for the elements associated with this internal standard.			
13:22	ZZZZZ	No results reported for the elements associated with this internal standard.			
13:26	ZZZZZ	No results reported for the elements associated with this internal standard.			
13:31	MA56025-CCV3	7005	140610	17761	11103
13:36	MA56025-CCB4	7209	146980	18006	12136
13:41	ZZZZZ	No results reported for the elements associated with this internal standard.			
13:46	ZZZZZ	No results reported for the elements associated with this internal standard.			
13:51	ZZZZZ	No results reported for the elements associated with this internal standard.			
13:56	ZZZZZ	No results reported for the elements associated with this internal standard.			
14:01	ZZZZZ	No results reported for the elements associated with this internal standard.			
14:06	ZZZZZ	No results reported for the elements associated with this internal standard.			
14:11	ZZZZZ	No results reported for the elements associated with this internal standard.			
14:16	ZZZZZ	No results reported for the elements associated with this internal standard.			
14:21	ZZZZZ	No results reported for the elements associated with this internal standard.			
14:26	ZZZZZ	No results reported for the elements associated with this internal standard.			
14:31	MA56025-CCV4	7018	141230	17714	11181
14:35	MA56025-CCB5	7251	147550	17764	12262
14:40	ZZZZZ	No results reported for the elements associated with this internal standard.			
14:46	MP46388-B1	7122	143850	18059	11540
14:51	MP46388-MB1	7249	147740	18085	12329
14:56	MP46388-S1	7110	143620	18205	11423
15:00	MP46388-S2	7197	145270	18323	11534
15:05	JD87562-5	7335	148220	18272	12162
15:10	MP46388-SD1	7288	149150	18069	12228
15:15	MP46388-PS1	7065	143780	17984	11416
15:20	ZZZZZ	7297	147560	18343	12067
15:25	ZZZZZ	7312	149130	18425	12146
15:30	MA56025-CCV5	7014	141740	17928	11198
15:34	MA56025-CCB6	7214	147950	18001	12237

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INTERNAL STANDARD SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP Date Analyzed: 05/07/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: MM Run ID: MA56025  
 Parameters: Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, Tl, V, Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
15:39	ZZZZZZ	7365	150200	18494	12212
15:44	ZZZZZZ	7396	147870	18550	11991
15:49	ZZZZZZ	7352	149480	18421	12136
15:54	ZZZZZZ	7357	146980	18486	11933
15:59	ZZZZZZ	7389	148040	18568	11980
16:04	ZZZZZZ	7317	149210	18355	12086
16:09	ZZZZZZ	7296	149640	18432	12122
16:14	ZZZZZZ	7457	149200	18823	12030
16:19	ZZZZZZ	7367	148100	18600	11885
16:23	ZZZZZZ	7382	151080	18595	12118
16:28	MA56025-CCV6	7005	141780	17939	11201
16:33	MA56025-CCB7	7215	148250	17934	12260
16:38	ZZZZZZ	7439	147540	18654	11895
16:43	ZZZZZZ	7239	147040	18395	11930
16:48	ZZZZZZ	7364	150190	18525	12134
16:53	ZZZZZZ	7338	148350	18461	12062
16:58	ZZZZZZ	7310	148130	18472	12119
17:03	ZZZZZZ	7429	146490	18529	11863
17:08	ZZZZZZ	7316	147180	18649	11550
17:12	MP46389-B1	7122	145050	18146	11545
17:17	MP46389-MB1	7265	149630	18319	12354
17:22	MP46389-S1	7661	153180	19796	11195
17:27	MA56025-CCV7	7025	142310	17771	11231
17:32	MA56025-CCB8	7199	148450	17901	12241
17:37	MP46389-S2	7504	149500	19366	11162
17:43	JD87473-2	7733	155010	20013	11350
17:48	MP46389-SD1	7428	149180	18182	11921
17:53	MP46389-PS1	7545	151240	19745	11138
17:58	ZZZZZZ	7716	153210	19610	11524
18:03	ZZZZZZ	7351	145700	18782	11677
18:08	ZZZZZZ	7249	147890	18772	11216
18:13	ZZZZZZ	7308	148590	19082	11247
18:19	ZZZZZZ	7631	154840	19887	11608

10.2.2  
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INTERNAL STANDARD SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP Date Analyzed: 05/07/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: MM Run ID: MA56025  
 Parameters: Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, Tl, V, Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
18:24	ZZZZZ	7262	149540	19148	11255
18:29	MA56025-CCV8	7010	142930	17870	11189
18:34	MA56025-CCB9	7207	148610	17846	12234
18:39	ZZZZZ	7275	147540	18949	11124
18:44	ZZZZZ	7274	148350	18855	11257
18:49	ZZZZZ	7003	143980	17987	11722
18:54	ZZZZZ	6881	143600	17973	11374
18:59	ZZZZZ	7043	143930	17499	11588
19:04	ZZZZZ	6966	144740	17711	11441
19:09	ZZZZZ	7579	151330	19034	11810
19:14	ZZZZZ	7550	151620	19203	11869
19:19	ZZZZZ	7701	153590	19631	11813
19:24	ZZZZZ	7552	151560	19400	11804
19:29	MA56025-CCV9	6997	142460	17843	11163
19:34	MA56025-CCB10	7207	147840	17979	12212
19:39	ZZZZZ	7638	151790	19174	11719
19:44	ZZZZZ	7700	153270	19346	11769
19:48	ZZZZZ	7386	146910	18636	11740
19:54	MP46431-MB1	7187	148430	17920	12199
19:59	MP46431-B1	7070	143660	17765	11449
20:03	JD87831-1	7147	143800	18026	11291
20:08	ZZZZZ	7406	148570	18872	10981
20:13	ZZZZZ	7802	157750	20501	10691
20:19	MA56025-CCV10	7056	143070	17938	11255
20:23	MA56025-CCB11	7272	148710	18128	12282
20:28	MP46415-MB1	7198	150680	18397	12241
20:33	MP46415-B1	7070	143620	17988	11424
20:38	MP46415-S1	7314	147820	18842	11208
20:43	MP46415-S2	7247	147480	18828	11117
20:48	JD87760-5	7480	151030	18943	11745
20:53	MP46415-SD1	7294	148350	18116	11976
20:58	MP46415-PS1	7290	144690	18814	11364
21:03	ZZZZZ	7175	147140	18856	11111

10.2.2  
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INTERNAL STANDARD SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP Date Analyzed: 05/07/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: MM Run ID: MA56025  
 Parameters: Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, Tl, V, Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
21:08	ZZZZZZ	7028	143810	18557	10904
21:13	MA56025-CCV11	6971	141150	17591	11171
21:18	MA56025-CCB12	7217	148140	17790	12260
21:23	ZZZZZZ	7507	148550	18792	11902
21:28	ZZZZZZ	7484	149920	18638	11996
21:33	ZZZZZZ	7375	146590	18670	11748
21:38	ZZZZZZ	7544	148800	19169	11801
21:43	ZZZZZZ	7784	156780	19791	12040
21:48	ZZZZZZ	7389	146770	18694	11767
21:53	ZZZZZZ	7467	150800	19236	11610
21:58	ZZZZZZ	7496	151960	19258	11864
22:03	ZZZZZZ	7468	147750	18729	11818
22:07	MA56025-CCV12	6959	141700	17601	11117
22:12	MA56025-CCB13	7174	147660	17717	12178
22:17	ZZZZZZ	7458	149420	18690	11903
22:22	ZZZZZZ	7381	149340	18608	11988
22:27	ZZZZZZ	7488	149820	18855	11874
22:32	ZZZZZZ	7563	151260	18904	11888
22:37	ZZZZZZ	7356	999999 !a	18515	11903
22:42	MP46390-B1	7016	141930	17207	11480
22:47	MP46390-MB1	7213	145490	17612	12457
22:52	MA56025-CCV13	7000	141940	17382	11210
22:57	MA56025-CCB14	7254	148030	17567	12315
23:02	MP46390-S1	7248	147020	17849	11761
23:07	MP46390-S2	7277	147490	17753	11783
23:12	JD87597-1	7308	147560	17943	11851
23:17	MP46390-SD1	7254	148730	17762	12123
23:22	ZZZZZZ	6722	137460	17380	10663
23:27	ZZZZZZ	6022	123780	16734	9331
23:32	ZZZZZZ	6895	140330	17364	11115
23:37	ZZZZZZ	5849	999999 !a	16648	9051
23:43	ZZZZZZ	6912	142420	17934	11066
23:48	ZZZZZZ	6286	124380	16932	9593

10.2.2  
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INTERNAL STANDARD SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP Date Analyzed: 05/07/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: MM Run ID: MA56025  
 Parameters: Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, Tl, V, Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
23:53	MA56025-CCV14	7139	144730	17932	11328
23:58	MA56025-CCB15	7276	149070	17833	12267
00:03	ZZZZZZ	7026	142570	17698	11320
00:07	ZZZZZZ	6584	134430	17392	10446
00:13	ZZZZZZ	7166	145730	17712	11835
00:18	ZZZZZZ	7271	148150	17857	12354
00:23	ZZZZZZ	6668	132320	17762	9843
00:28	ZZZZZZ	6546	134310	17684	10446
00:34	ZZZZZZ	6508	131770	17682	9709
00:40	ZZZZZZ	6627	133700	17718	9820
00:46	ZZZZZZ	6736	133580	17873	10008
00:51	ZZZZZZ	6495	131990	17671	11029
00:57	MA56025-CCV15	7116	144000	17527	11361
01:02	MA56025-CCB16	7317	150770	17679	12432
01:07	ZZZZZZ	7954	159500	19878	11555
01:12	ZZZZZZ	7741	155490	19578	11878
01:17	ZZZZZZ	7121	145150	17719	11364
01:22	ZZZZZZ	7131	144420	17564	11545
01:27	ZZZZZZ	7112	144520	17645	11326
01:32	ZZZZZZ	7116	144260	17801	11356
01:37	ZZZZZZ	7115	144700	17822	11339
01:42	ZZZZZZ	7071	144730	17704	11510
01:46	ZZZZZZ	7296	148820	17901	12350
01:51	MP46430-LB1	6365	127160	17453	9774
01:56	MA56025-CCV16	7052	143390	17484	11256
02:01	MA56025-CCB17	7276	150310	17681	12311
02:06	MP46430-LS1	6458	129520	17433	9676
02:11	MP46430-S1	6213	127910	17073	9300
02:17	MP46430-S2	6230	126470	17213	9318
02:22	JD87474-1	6185	125550	17277	9331
02:27	MP46430-SD1	6806	138570	17635	10678
02:32	ZZZZZZ	6041	123210	16954	9198
02:38	ZZZZZZ	6006	121600	16932	9148

10.2.2  
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INTERNAL STANDARD SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP Date Analyzed: 05/07/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: MM Run ID: MA56025  
 Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
02:43	ZZZZZ	7336	150830	18375	11663
02:48	MP46387-S1	No results reported for the elements associated with this internal standard.			
02:53	MP46387-S2	No results reported for the elements associated with this internal standard.			
02:57	MA56025-CCV17	7062	143370	17439	11300
03:02	MA56025-CCB18	7271	150370	17639	12365
03:07	MP46431-S1	No results reported for the elements associated with this internal standard.			
03:12	MP46431-S2	No results reported for the elements associated with this internal standard.			
03:17	MP46431-SD1	7259	148680	17750	12008
03:22	ZZZZZ	6799	138710	17456	10675
03:27	ZZZZZ	7021	143240	17697	11332
03:32	ZZZZZ	9103	186820	22612	11562
03:37	ZZZZZ	6968	144790	17580	11483
03:42	ZZZZZ	7267	151540	17494	12385
03:47	ZZZZZ	7279	151350	17786	12232
03:52	ZZZZZ	7359	152710	17862	12324
03:57	MA56025-CCV18	7088	145430	17486	11364
04:02	MA56025-CCB19	7295	151530	17712	12410
04:07	ZZZZZ	7382	152360	17809	12531
04:12	ZZZZZ	7307	152030	17816	12411
04:17	ZZZZZ	7290	150590	18185	12403
04:22	JD87833-17	7277	151370	17894	12370
04:27	ZZZZZ	7257	151640	17886	12367
04:32	ZZZZZ	7285	151320	17795	12375
04:37	ZZZZZ	7284	151830	17872	12443
04:42	ZZZZZ	7293	150910	17711	12369
04:47	ZZZZZ	7283	151450	17892	12391
04:52	ZZZZZ	7338	151910	17803	12474
04:57	MA56025-CCV19	7045	144420	17606	11268
05:02	MA56025-CCB20	7278	150370	17705	12343
07:22	ZZZZZ	7215	147100	17926	11549
07:28	MP46354-SD1	7140	146610	17815	11468
07:38	MA56025-CCV20	7020	144270	17615	11231
07:43	MA56025-CCB21	7190	149850	17673	12239

R = Reference for ISTD limits. ! = Outside limits.

INTERNAL STANDARD SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP Date Analyzed: 05/07/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: MM Run ID: MA56025  
 Parameters: Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, Tl, V, Zn

Sample					
Time	Description	Istd#1	Istd#2	Istd#3	Istd#4

LEGEND:

<u>Istd#</u>	<u>Parameter</u>	<u>Limits</u>
Istd#1	Yttrium (2243)	70-130 %
Istd#2	Yttrium (3600)	70-130 %
Istd#3	Yttrium (3710)	70-130 %
Istd#4	Indium	70-130 %

(a) No samples reported for the elements associated with this internal standard.

BLANK RESULTS SUMMARY  
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP Date Analyzed: 05/07/24 Methods: EPA 200.7, SW846 6010D  
QC Limits: result < RL Run ID: MA56025 Units: ug/l

Time: Sample ID:	10:17 ICB1	10:29 CCB1	11:36 CCB2	12:36 CCB3	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	17	10.4	<200	15.2	<200	10.3	<200	5.30	<200				
Antimony	6.0	1.7	1.80	<6.0	0.200	<6.0	0.900	<6.0	0.00	<6.0				
Arsenic	3.0	2.1	0.400	<3.0	0.00	<3.0	0.600	<3.0	0.400	<3.0				
Barium	200	.8	0.00	<200	0.00	<200	0.100	<200	0.100	<200				
Beryllium	1.0	.3	0.00	<1.0	0.00	<1.0	0.00	<1.0	0.00	<1.0				
Bismuth	20	2.3												
Boron	100	2.3	anr											
Cadmium	3.0	.3	0.300	<3.0	0.100	<3.0	0.100	<3.0	0.100	<3.0				
Calcium	5000	6.6	-0.900	<5000	-1.00	<5000	-0.800	<5000	-0.200	<5000				
Cerium	100													
Chromium	10	.3	0.00	<10	-0.100	<10	0.100	<10	0.00	<10				
Cobalt	50	.4	0.00	<50	0.00	<50	0.100	<50	0.00	<50				
Copper	10	.8	-0.700	<10	-0.700	<10	-0.700	<10	-1.70	<10				
Iron	100	5.3	-0.500	<100	-0.300	<100	-0.400	<100	-0.900	<100				
Lead	3.0	1.1	0.100	<3.0	0.400	<3.0	0.100	<3.0	0.500	<3.0				
Lithium	50	4.8												
Magnesium	5000	32	9.10	<5000	20.8	<5000	10.1	<5000	0.900	<5000				
Manganese	15	.1	0.00	<15	0.00	<15	0.00	<15	0.00	<15				
Molybdenum	20	.6	anr											
Nickel	10	.4	0.100	<10	0.100	<10	0.100	<10	-0.100	<10				
Phosphorus	50	1.2												
Potassium	10000	77	34.5	<10000	28.4	<10000	30.9	<10000	34.6	<10000				
Selenium	10	3.2	-1.80	<10	0.200	<10	-1.30	<10	-0.600	<10				
Silicon	200	1.7	anr											
Silver	10	1	-0.500	<10	0.200	<10	0.00	<10	0.00	<10				
Sodium	10000	34	-5.50	<10000	-13.9	<10000	-9.90	<10000	-18.3	<10000				
Strontium	10	.3	anr											
Sulfur	50	3												
Thallium	10	1.8	0.400	<10	-0.400	<10	0.600	<10	-0.300	<10				
Tin	10	.8												
Titanium	10	.5												
Tungsten	50	2.6												
Vanadium	50	.6	-0.500	<50	-0.200	<50	-0.100	<50	0.00	<50				

10.2.3  
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BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP Date Analyzed: 05/07/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: result < RL Run ID: MA56025 Units: ug/l

Time:			10:17		10:29		11:36		12:36	
Sample ID:	RL	IDL	ICB1	final	CCB1	final	CCB2	final	CCB3	final
Metal			raw		raw		raw		raw	

Zinc	20	.1	-0.500	<20	-0.400	<20	-0.500	<20	-0.400	<20
Zirconium	10	.3								

(\* ) Outside of QC limits  
 (anr) Analyte not requested

10.2.3  
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BLANK RESULTS SUMMARY  
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP Date Analyzed: 05/07/24 Methods: EPA 200.7, SW846 6010D  
QC Limits: result < RL Run ID: MA56025 Units: ug/l

Time: Sample ID:	13:36 CCB4	14:35 CCB5	15:34 CCB6	16:33 CCB7	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	17	12.4	<200	7.20	<200	10.1	<200	15.2	<200				
Antimony	6.0	1.7	1.40	<6.0	1.40	<6.0	0.700	<6.0	0.800	<6.0				
Arsenic	3.0	2.1	0.800	<3.0	1.00	<3.0	1.10	<3.0	-0.900	<3.0				
Barium	200	.8	0.00	<200	0.200	<200	0.00	<200	0.00	<200				
Beryllium	1.0	.3	0.00	<1.0	0.00	<1.0	0.00	<1.0	0.00	<1.0				
Bismuth	20	2.3												
Boron	100	2.3	anr											
Cadmium	3.0	.3	0.100	<3.0	0.100	<3.0	0.200	<3.0	0.200	<3.0				
Calcium	5000	6.6	-0.200	<5000	-1.20	<5000	-2.00	<5000	-3.50	<5000				
Cerium	100													
Chromium	10	.3	0.00	<10	0.100	<10	0.100	<10	0.00	<10				
Cobalt	50	.4	0.00	<50	-0.100	<50	0.100	<50	0.200	<50				
Copper	10	.8	-2.60	<10	-2.40	<10	-2.90	<10	-2.80	<10				
Iron	100	5.3	-0.100	<100	0.800	<100	-2.20	<100	0.700	<100				
Lead	3.0	1.1	0.200	<3.0	1.00	<3.0	0.600	<3.0	-0.200	<3.0				
Lithium	50	4.8												
Magnesium	5000	32	6.40	<5000	11.5	<5000	14.8	<5000	3.80	<5000				
Manganese	15	.1	0.00	<15	0.00	<15	0.00	<15	0.00	<15				
Molybdenum	20	.6	anr											
Nickel	10	.4	0.100	<10	0.00	<10	0.00	<10	0.00	<10				
Phosphorus	50	1.2												
Potassium	10000	77	-8.10	<10000	27.5	<10000	-31.4	<10000	20.5	<10000				
Selenium	10	3.2	-2.30	<10	-1.40	<10	-1.10	<10	-1.30	<10				
Silicon	200	1.7	anr											
Silver	10	1	0.00	<10	0.700	<10	0.700	<10	0.900	<10				
Sodium	10000	34	-29.6	<10000	-14.4	<10000	-27.6	<10000	-39.0	<10000				
Strontium	10	.3	anr											
Sulfur	50	3												
Thallium	10	1.8	0.100	<10	1.00	<10	0.700	<10	0.100	<10				
Tin	10	.8												
Titanium	10	.5												
Tungsten	50	2.6												
Vanadium	50	.6	0.200	<50	0.00	<50	0.400	<50	0.00	<50				

10.2.3  
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BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP Date Analyzed: 05/07/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: result < RL Run ID: MA56025 Units: ug/l

Metal	Time: Sample ID:	RL	IDL	13:36	14:35	15:34	16:33				
				CCB4	CCB5	CCB6	CCB7	raw	final		
Zinc		20	.1	-0.400	<20	-0.400	<20	-0.400	<20	-0.500	<20
Zirconium		10	.3								

(\* ) Outside of QC limits  
 (anr) Analyte not requested

10.2.3  
 10

BLANK RESULTS SUMMARY  
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP Date Analyzed: 05/07/24 Methods: EPA 200.7, SW846 6010D  
QC Limits: result < RL Run ID: MA56025 Units: ug/l

Metal	Time:		17:32		18:34		19:34		20:23	
	Sample ID:	RL	IDL	CCB8	CCB9	CCB10	CCB11	raw	final	raw
Aluminum	200	17	14.4	<200	-0.300	<200	11.5	<200	9.70	<200
Antimony	6.0	1.7	0.500	<6.0	-0.500	<6.0	1.20	<6.0	-0.700	<6.0
Arsenic	3.0	2.1	0.600	<3.0	0.400	<3.0	0.100	<3.0	0.100	<3.0
Barium	200	.8	0.100	<200	0.100	<200	0.00	<200	0.00	<200
Beryllium	1.0	.3	0.00	<1.0	0.00	<1.0	0.00	<1.0	0.00	<1.0
Bismuth	20	2.3								
Boron	100	2.3	anr							
Cadmium	3.0	.3	0.100	<3.0	0.100	<3.0	0.200	<3.0	0.200	<3.0
Calcium	5000	6.6	-2.70	<5000	-3.40	<5000	-1.70	<5000	-4.10	<5000
Cerium	100									
Chromium	10	.3	0.00	<10	0.00	<10	0.100	<10	0.100	<10
Cobalt	50	.4	0.100	<50	0.00	<50	0.100	<50	0.00	<50
Copper	10	.8	-3.00	<10	-3.70	<10	-3.40	<10	-2.80	<10
Iron	100	5.3	0.00	<100	0.600	<100	-0.800	<100	0.400	<100
Lead	3.0	1.1	0.300	<3.0	0.500	<3.0	-0.800	<3.0	0.200	<3.0
Lithium	50	4.8								
Magnesium	5000	32	-3.50	<5000	-0.400	<5000	17.9	<5000	13.0	<5000
Manganese	15	.1	0.00	<15	0.00	<15	0.00	<15	0.00	<15
Molybdenum	20	.6	anr							
Nickel	10	.4	0.00	<10	0.00	<10	0.00	<10	0.100	<10
Phosphorus	50	1.2								
Potassium	10000	77	2.30	<10000	6.90	<10000	33.2	<10000	-26.3	<10000
Selenium	10	3.2	-1.60	<10	-1.00	<10	-0.800	<10	-0.600	<10
Silicon	200	1.7	anr							
Silver	10	1	0.900	<10	0.700	<10	0.600	<10	0.600	<10
Sodium	10000	34	-37.5	<10000	-35.9	<10000	-43.6	<10000	-31.9	<10000
Strontium	10	.3	anr							
Sulfur	50	3								
Thallium	10	1.8	0.00	<10	0.900	<10	-0.100	<10	0.00	<10
Tin	10	.8								
Titanium	10	.5								
Tungsten	50	2.6								
Vanadium	50	.6	-0.200	<50	0.100	<50	-0.400	<50	-0.100	<50

10.2.3  
10

BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP Date Analyzed: 05/07/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: result < RL Run ID: MA56025 Units: ug/l

Metal	Time: Sample ID:	RL	IDL	17:32	18:34	19:34	20:23				
				CCB8	CCB9	CCB10	CCB11	raw	final		
Zinc		20	.1	-0.500	<20	-0.500	<20	-0.600	<20	-0.500	<20
Zirconium		10	.3								

(\* ) Outside of QC limits  
 (anr) Analyte not requested

10.2.3  
 10

BLANK RESULTS SUMMARY  
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP Date Analyzed: 05/07/24 Methods: EPA 200.7, SW846 6010D  
QC Limits: result < RL Run ID: MA56025 Units: ug/l

Metal	Time:		21:18		22:12		22:57		23:58	
	Sample ID:	RL	IDL	CCB12	CCB13	CCB14	CCB15	raw	final	raw
Aluminum	200	17	10.1	<200	8.30	<200	9.00	<200	7.50	<200
Antimony	6.0	1.7	0.200	<6.0	0.800	<6.0	0.100	<6.0	1.10	<6.0
Arsenic	3.0	2.1	0.800	<3.0	0.700	<3.0	0.400	<3.0	0.100	<3.0
Barium	200	.8	0.100	<200	0.100	<200	0.100	<200	0.100	<200
Beryllium	1.0	.3	0.00	<1.0	0.00	<1.0	0.00	<1.0	0.00	<1.0
Bismuth	20	2.3								
Boron	100	2.3	anr							
Cadmium	3.0	.3	0.200	<3.0	0.100	<3.0	0.100	<3.0	0.100	<3.0
Calcium	5000	6.6	-3.00	<5000	-2.60	<5000	-2.30	<5000	-1.90	<5000
Cerium	100									
Chromium	10	.3	0.100	<10	-0.100	<10	0.00	<10	0.100	<10
Cobalt	50	.4	0.00	<50	-0.100	<50	0.100	<50	0.100	<50
Copper	10	.8	-2.10	<10	-2.80	<10	-2.60	<10	-3.20	<10
Iron	100	5.3	1.30	<100	-1.00	<100	-1.20	<100	0.500	<100
Lead	3.0	1.1	0.100	<3.0	0.00	<3.0	0.300	<3.0	0.200	<3.0
Lithium	50	4.8								
Magnesium	5000	32	15.4	<5000	10.7	<5000	8.90	<5000	-0.700	<5000
Manganese	15	.1	0.00	<15	0.00	<15	0.100	<15	0.00	<15
Molybdenum	20	.6	anr							
Nickel	10	.4	0.100	<10	0.100	<10	0.100	<10	0.200	<10
Phosphorus	50	1.2								
Potassium	10000	77	13.1	<10000	12.4	<10000	-1.10	<10000	40.9	<10000
Selenium	10	3.2	-0.300	<10	-0.200	<10	-1.40	<10	0.200	<10
Silicon	200	1.7	anr							
Silver	10	1	0.900	<10	0.700	<10	1.40	<10	0.600	<10
Sodium	10000	34	-32.0	<10000	-41.2	<10000	-34.3	<10000	82.8	<10000
Strontium	10	.3	anr							
Sulfur	50	3								
Thallium	10	1.8	0.00	<10	0.900	<10	0.200	<10	0.00	<10
Tin	10	.8								
Titanium	10	.5								
Tungsten	50	2.6								
Vanadium	50	.6	0.300	<50	0.100	<50	-0.200	<50	0.100	<50

10.2.3  
10

BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP Date Analyzed: 05/07/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: result < RL Run ID: MA56025 Units: ug/l

Metal	Time: Sample ID:	RL	IDL	21:18	22:12	22:57	23:58		
				CCB12	CCB13	CCB14	CCB15	raw	final

Zinc	20	.1		-0.400	<20	-0.400	<20	-0.400	<20	-0.500	<20
Zirconium	10	.3									

(\* ) Outside of QC limits  
 (anr) Analyte not requested

10.2.3  
 10

BLANK RESULTS SUMMARY  
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP Date Analyzed: 05/07/24 Methods: EPA 200.7, SW846 6010D  
QC Limits: result < RL Run ID: MA56025 Units: ug/l

Time: Sample ID:			01:02 CCB16		02:01 CCB17		03:02 CCB18		04:02 CCB19	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	17	6.50	<200	8.30	<200	8.50	<200	8.80	<200
Antimony	6.0	1.7	1.40	<6.0	-0.100	<6.0	0.200	<6.0	1.20	<6.0
Arsenic	3.0	2.1	0.500	<3.0	0.200	<3.0	-0.200	<3.0	-0.100	<3.0
Barium	200	.8	0.100	<200	-0.100	<200	0.200	<200	0.100	<200
Beryllium	1.0	.3	0.00	<1.0	0.00	<1.0	0.100	<1.0	0.00	<1.0
Bismuth	20	2.3								
Boron	100	2.3	anr							
Cadmium	3.0	.3	0.200	<3.0	0.200	<3.0	0.100	<3.0	0.100	<3.0
Calcium	5000	6.6	-4.30	<5000	-1.70	<5000	-4.00	<5000	-5.70	<5000
Cerium	100									
Chromium	10	.3	0.00	<10	0.00	<10	-0.100	<10	0.00	<10
Cobalt	50	.4	0.100	<50	0.00	<50	0.00	<50	0.00	<50
Copper	10	.8	-3.00	<10	-3.50	<10	-3.40	<10	-3.90	<10
Iron	100	5.3	1.70	<100	-1.70	<100	-1.10	<100	-0.100	<100
Lead	3.0	1.1	0.400	<3.0	0.500	<3.0	0.200	<3.0	0.700	<3.0
Lithium	50	4.8								
Magnesium	5000	32	4.60	<5000	5.50	<5000	20.4	<5000	15.4	<5000
Manganese	15	.1	0.00	<15	0.00	<15	0.00	<15	0.00	<15
Molybdenum	20	.6	anr							
Nickel	10	.4	0.00	<10	0.00	<10	0.100	<10	-0.100	<10
Phosphorus	50	1.2								
Potassium	10000	77	18.4	<10000	17.0	<10000	38.8	<10000	-11.0	<10000
Selenium	10	3.2	-1.90	<10	-0.500	<10	-2.20	<10	-2.60	<10
Silicon	200	1.7	anr							
Silver	10	1	1.00	<10	0.800	<10	1.10	<10	1.30	<10
Sodium	10000	34	-2.00	<10000	60.1	<10000	94.8	<10000	14.7	<10000
Strontium	10	.3	anr							
Sulfur	50	3								
Thallium	10	1.8	0.400	<10	0.700	<10	0.600	<10	0.600	<10
Tin	10	.8								
Titanium	10	.5								
Tungsten	50	2.6								
Vanadium	50	.6	-0.400	<50	-0.100	<50	-0.100	<50	-0.100	<50

10.2.3  
10



BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP Date Analyzed: 05/07/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: result < RL Run ID: MA56025 Units: ug/l

Time:			01:02		02:01		03:02		04:02	
Sample ID:	RL	IDL	CCB16	final	CCB17	final	CCB18	final	CCB19	final
Metal			raw		raw		raw		raw	

Zinc	20	.1	-0.500	<20	-0.300	<20	-0.400	<20	-0.400	<20
Zirconium	10	.3								

(\* ) Outside of QC limits  
 (anr) Analyte not requested

10.2.3  
 10

BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP Date Analyzed: 05/07/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: result < RL Run ID: MA56025 Units: ug/l

Metal	RL	IDL	05:02 CCB20 raw	final
Aluminum	200	17	12.7	<200
Antimony	6.0	1.7	1.70	<6.0
Arsenic	3.0	2.1	0.700	<3.0
Barium	200	.8	0.200	<200
Beryllium	1.0	.3	0.00	<1.0
Bismuth	20	2.3		
Boron	100	2.3	anr	
Cadmium	3.0	.3	0.200	<3.0
Calcium	5000	6.6	-2.70	<5000
Cerium	100			
Chromium	10	.3	0.00	<10
Cobalt	50	.4	0.00	<50
Copper	10	.8	-3.70	<10
Iron	100	5.3	-1.20	<100
Lead	3.0	1.1	0.700	<3.0
Lithium	50	4.8		
Magnesium	5000	32	16.8	<5000
Manganese	15	.1	0.00	<15
Molybdenum	20	.6	anr	
Nickel	10	.4	-0.100	<10
Phosphorus	50	1.2		
Potassium	10000	77	1.00	<10000
Selenium	10	3.2	-0.900	<10
Silicon	200	1.7	anr	
Silver	10	1	0.700	<10
Sodium	10000	34	-19.3	<10000
Strontium	10	.3	anr	
Sulfur	50	3		
Thallium	10	1.8	0.300	<10
Tin	10	.8		
Titanium	10	.5		
Tungsten	50	2.6		
Vanadium	50	.6	-0.100	<50

10.2.3  
10

BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP Date Analyzed: 05/07/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: result < RL Run ID: MA56025 Units: ug/l

Time:	05:02			
Sample ID:	CCB20			
Metal	RL	IDL	raw	final

Zinc	20	.1	-0.400	<20
Zirconium	10	.3		

(\* ) Outside of QC limits  
 (anr) Analyte not requested

10.2.3  
 10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial Continuing Calibration Check

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP      Date Analyzed: 05/07/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: to % Recovery      Run ID: MA56025      Units: ug/l

Time:	Sample ID:	ICCV	10:23 ICCV1	Results	% Rec
Metal	True				
Aluminum	40000		40100		100.3
Antimony	2000		2000		100.0
Arsenic	2000		1990		99.5
Barium	2000		2020		101.0
Beryllium					
Bismuth					
Boron	anr				
Cadmium	2000		2040		102.0
Calcium	40000		40700		101.8
Cerium					
Chromium	2000		2030		101.5
Cobalt	2000		2030		101.5
Copper	2000		1990		99.5
Iron	40000		40700		101.8
Lead	2000		2010		100.5
Lithium					
Magnesium	40000		40800		102.0
Manganese	2000		2060		103.0
Molybdenum	anr				
Nickel	2000		2020		101.0
Phosphorus					
Potassium	40000		39900		99.8
Selenium	2000		2000		100.0
Silicon	anr				
Silver	250		247		98.8
Sodium	40000		40400		101.0
Strontium	anr				
Sulfur					
Thallium	2000		2070		103.5
Tin					
Titanium					
Tungsten					
Vanadium	2000		2020		101.0

10.2.4 10

CALIBRATION CHECK STANDARDS SUMMARY  
 Initial Continuing Calibration Check

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP Date Analyzed: 05/07/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: to % Recovery Run ID: MA56025 Units: ug/l

Time:	10:23
Sample ID: ICCV	ICCV1
Metal	True
Results	% Rec

Zinc 2000 2050 102.5

Zirconium

(\* ) Outside of QC limits  
 (anr) Analyte not requested

10.2.4  
 10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP      Date Analyzed: 05/07/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56025      Units: ug/l

Metal	Time:	10:12			11:32			12:32		
	Sample ID:	ICV	ICV1	CCV	CCV1	CCV	CCV2	Results	% Rec	
	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec	
Aluminum	40000	39400	98.5	40000	40400	101.0	40000	40300	100.8	
Antimony	2000	2010	100.5	2000	2000	100.0	2000	2010	100.5	
Arsenic	2000	1950	97.5	2000	1980	99.0	2000	1990	99.5	
Barium	2000	1970	98.5	2000	2020	101.0	2000	2030	101.5	
Beryllium	2000	2050	102.5	2000	2050	102.5	2000	2060	103.0	
Bismuth										
Boron	anr									
Cadmium	2000	2030	101.5	2000	2040	102.0	2000	2050	102.5	
Calcium	40000	40300	100.8	40000	41000	102.5	40000	40900	102.3	
Cerium										
Chromium	2000	2010	100.5	2000	2020	101.0	2000	2030	101.5	
Cobalt	2000	2050	102.5	2000	2040	102.0	2000	2050	102.5	
Copper	2000	2060	103.0	2000	1990	99.5	2000	2000	100.0	
Iron	40000	40800	102.0	40000	40800	102.0	40000	40800	102.0	
Lead	2000	1990	99.5	2000	2010	100.5	2000	2020	101.0	
Lithium										
Magnesium	40000	41200	103.0	40000	40900	102.3	40000	40900	102.3	
Manganese	2000	2020	101.0	2000	2060	103.0	2000	2040	102.0	
Molybdenum	anr									
Nickel	2000	1990	99.5	2000	2010	100.5	2000	2020	101.0	
Phosphorus										
Potassium	40000	39300	98.3	40000	40000	100.0	40000	40000	100.0	
Selenium	2000	1940	97.0	2000	2000	100.0	2000	2010	100.5	
Silicon	anr									
Silver	250	255	102.0	250	246	98.4	250	248	99.2	
Sodium	40000	39600	99.0	40000	40600	101.5	40000	40600	101.5	
Strontium	anr									
Sulfur										
Thallium	2000	2030	101.5	2000	2040	102.0	2000	2050	102.5	
Tin										
Titanium										
Tungsten										
Vanadium	2000	1960	98.0	2000	2010	100.5	2000	2020	101.0	

10.2.5 10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP      Date Analyzed: 05/07/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56025      Units: ug/l

	Time:		10:12		11:32		12:32		
Sample ID:	ICV	ICV1	CCV	CCV1	CCV	CCV2	Results	% Rec	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec

Zinc	2000	2040	102.0	2000	2060	103.0	2000	2060	103.0
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Zirconium

(\*) Outside of QC limits  
(anr) Analyte not requested

10.2.5  
10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP      Date Analyzed: 05/07/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56025      Units: ug/l

Metal	Time:	13:31			14:31			15:30		
	Sample ID:	CCV	CCV3	% Rec	CCV	CCV4	% Rec	CCV	CCV5	% Rec
Aluminum	40000	40300	100.8	40000	40600	101.5	40000	40600	101.5	
Antimony	2000	2010	100.5	2000	2010	100.5	2000	2020	101.0	
Arsenic	2000	1990	99.5	2000	1970	98.5	2000	1970	98.5	
Barium	2000	2020	101.0	2000	2040	102.0	2000	2030	101.5	
Beryllium	2000	2070	103.5	2000	2050	102.5	2000	2050	102.5	
Bismuth										
Boron	anr									
Cadmium	2000	2050	102.5	2000	2040	102.0	2000	2050	102.5	
Calcium	40000	40700	101.8	40000	41200	103.0	40000	41000	102.5	
Cerium										
Chromium	2000	2030	101.5	2000	2010	100.5	2000	2000	100.0	
Cobalt	2000	2050	102.5	2000	2060	103.0	2000	2070	103.5	
Copper	2000	2010	100.5	2000	1990	99.5	2000	1990	99.5	
Iron	40000	41000	102.5	40000	40800	102.0	40000	40800	102.0	
Lead	2000	2020	101.0	2000	2010	100.5	2000	2010	100.5	
Lithium										
Magnesium	40000	41200	103.0	40000	41000	102.5	40000	40900	102.3	
Manganese	2000	2050	102.5	2000	2070	103.5	2000	2080	104.0	
Molybdenum	anr									
Nickel	2000	2030	101.5	2000	2010	100.5	2000	2010	100.5	
Phosphorus										
Potassium	40000	40000	100.0	40000	39800	99.5	40000	39800	99.5	
Selenium	2000	2020	101.0	2000	2010	100.5	2000	2020	101.0	
Silicon	anr									
Silver	250	248	99.2	250	245	98.0	250	245	98.0	
Sodium	40000	40600	101.5	40000	40700	101.8	40000	40700	101.8	
Strontium	anr									
Sulfur										
Thallium	2000	2070	103.5	2000	2060	103.0	2000	2080	104.0	
Tin										
Titanium										
Tungsten										
Vanadium	2000	2010	100.5	2000	2000	100.0	2000	2000	100.0	

10.2.5 10



CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP      Date Analyzed: 05/07/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56025      Units: ug/l

	Time:									
Sample ID:	CCV	13:31 CCV3		CCV	14:31 CCV4		CCV	15:30 CCV5		
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec	

Zinc	2000	2060	103.0	2000	2060	103.0	2000	2060	103.0	
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Zirconium

(\*) Outside of QC limits  
(anr) Analyte not requested

10.2.5 10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP      Date Analyzed: 05/07/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56025      Units: ug/l

Metal	Time:	16:28			17:27			18:29		
	Sample ID:	CCV	CCV6	% Rec	CCV	CCV7	% Rec	CCV	CCV8	% Rec
Aluminum	40000	40800	102.0	40000	40800	102.0	40000	40500	101.3	
Antimony	2000	2020	101.0	2000	2010	100.5	2000	2020	101.0	
Arsenic	2000	1970	98.5	2000	1960	98.0	2000	1960	98.0	
Barium	2000	2050	102.5	2000	2040	102.0	2000	2030	101.5	
Beryllium	2000	2050	102.5	2000	2040	102.0	2000	2040	102.0	
Bismuth										
Boron	anr									
Cadmium	2000	2050	102.5	2000	2040	102.0	2000	2050	102.5	
Calcium	40000	41200	103.0	40000	41200	103.0	40000	40700	101.8	
Cerium										
Chromium	2000	2000	100.0	2000	2000	100.0	2000	2000	100.0	
Cobalt	2000	2070	103.5	2000	2070	103.5	2000	2070	103.5	
Copper	2000	1990	99.5	2000	1990	99.5	2000	2000	100.0	
Iron	40000	40800	102.0	40000	40700	101.8	40000	40600	101.5	
Lead	2000	2020	101.0	2000	2010	100.5	2000	2010	100.5	
Lithium										
Magnesium	40000	40800	102.0	40000	40800	102.0	40000	40800	102.0	
Manganese	2000	2090	104.5	2000	2090	104.5	2000	2060	103.0	
Molybdenum	anr									
Nickel	2000	2000	100.0	2000	2000	100.0	2000	2010	100.5	
Phosphorus										
Potassium	40000	39800	99.5	40000	39800	99.5	40000	39800	99.5	
Selenium	2000	2020	101.0	2000	2020	101.0	2000	2030	101.5	
Silicon	anr									
Silver	250	245	98.0	250	244	97.6	250	245	98.0	
Sodium	40000	40800	102.0	40000	40800	102.0	40000	40700	101.8	
Strontium	anr									
Sulfur										
Thallium	2000	2090	104.5	2000	2090	104.5	2000	2110	105.5	
Tin										
Titanium										
Tungsten										
Vanadium	2000	2000	100.0	2000	2000	100.0	2000	2000	100.0	

10.2.5 10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP      Date Analyzed: 05/07/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56025      Units: ug/l

	Time:									
Sample ID:	CCV	16:28 CCV6		CCV	17:27 CCV7		CCV	18:29 CCV8		
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec	

Zinc	2000	2060	103.0	2000	2060	103.0	2000	2070	103.5	
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Zirconium

(\*) Outside of QC limits  
(anr) Analyte not requested

10.2.5 10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP      Date Analyzed: 05/07/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56025      Units: ug/l

Metal	Time: Sample ID: CCV	19:29			20:19			21:13		
		True	CCV9 Results	% Rec	True	CCV10 Results	% Rec	True	CCV11 Results	% Rec
Aluminum	40000	40700	101.8	40000	41000	102.5	40000	41500	103.8	
Antimony	2000	2030	101.5	2000	2030	101.5	2000	2030	101.5	
Arsenic	2000	1970	98.5	2000	1980	99.0	2000	1980	99.0	
Barium	2000	2040	102.0	2000	2060	103.0	2000	2080	104.0	
Beryllium	2000	2040	102.0	2000	2030	101.5	2000	2050	102.5	
Bismuth										
Boron	anr									
Cadmium	2000	2060	103.0	2000	2050	102.5	2000	2060	103.0	
Calcium	40000	40900	102.3	40000	41400	103.5	40000	41700	104.3	
Cerium										
Chromium	2000	2010	100.5	2000	2010	100.5	2000	2010	100.5	
Cobalt	2000	2070	103.5	2000	2080	104.0	2000	2090	104.5	
Copper	2000	2010	100.5	2000	2000	100.0	2000	2000	100.0	
Iron	40000	40500	101.3	40000	40500	101.3	40000	40700	101.8	
Lead	2000	2020	101.0	2000	2020	101.0	2000	2030	101.5	
Lithium										
Magnesium	40000	40600	101.5	40000	40500	101.3	40000	40800	102.0	
Manganese	2000	2070	103.5	2000	2080	104.0	2000	2130	106.5	
Molybdenum	anr									
Nickel	2000	2020	101.0	2000	2010	100.5	2000	2010	100.5	
Phosphorus										
Potassium	40000	39800	99.5	40000	39800	99.5	40000	39900	99.8	
Selenium	2000	2030	101.5	2000	2030	101.5	2000	2030	101.5	
Silicon	anr									
Silver	250	246	98.4	250	246	98.4	250	247	98.8	
Sodium	40000	40700	101.8	40000	40900	102.3	40000	41300	103.3	
Strontium	anr									
Sulfur										
Thallium	2000	2100	105.0	2000	2090	104.5	2000	2110	105.5	
Tin										
Titanium										
Tungsten										
Vanadium	2000	2000	100.0	2000	2010	100.5	2000	2020	101.0	

10.2.5 10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP      Date Analyzed: 05/07/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56025      Units: ug/l

	Time:		19:29		20:19		21:13		
Sample ID:	CCV	CCV9	CCV	CCV10	CCV	CCV11	CCV	CCV11	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec

Zinc	2000	2070	103.5	2000	2070	103.5	2000	2080	104.0
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Zirconium

(\* ) Outside of QC limits  
(anr) Analyte not requested

10.2.5 10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP      Date Analyzed: 05/07/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56025      Units: ug/l

Metal	Sample ID: CCV True	Time: 22:07	% Rec	CCV True	Time: 22:52	% Rec	CCV True	Time: 23:53	% Rec
		CCV12 Results			CCV13 Results			CCV14 Results	
Aluminum	40000	41100	102.8	40000	41100	102.8	40000	40200	100.5
Antimony	2000	2050	102.5	2000	2020	101.0	2000	2010	100.5
Arsenic	2000	1990	99.5	2000	1960	98.0	2000	1960	98.0
Barium	2000	2070	103.5	2000	2060	103.0	2000	2030	101.5
Beryllium	2000	2060	103.0	2000	2020	101.0	2000	2010	100.5
Bismuth									
Boron	anr								
Cadmium	2000	2070	103.5	2000	2040	102.0	2000	2020	101.0
Calcium	40000	41200	103.0	40000	41400	103.5	40000	40200	100.5
Cerium									
Chromium	2000	2020	101.0	2000	2000	100.0	2000	1980	99.0
Cobalt	2000	2090	104.5	2000	2070	103.5	2000	2050	102.5
Copper	2000	2020	101.0	2000	1980	99.0	2000	1970	98.5
Iron	40000	40700	101.8	40000	40300	100.8	40000	39700	99.3
Lead	2000	2030	101.5	2000	2010	100.5	2000	2000	100.0
Lithium									
Magnesium	40000	40900	102.3	40000	40400	101.0	40000	39900	99.8
Manganese	2000	2090	104.5	2000	2110	105.5	2000	2040	102.0
Molybdenum	anr								
Nickel	2000	2030	101.5	2000	2000	100.0	2000	2000	100.0
Phosphorus									
Potassium	40000	40000	100.0	40000	39600	99.0	40000	39400	98.5
Selenium	2000	2050	102.5	2000	2020	101.0	2000	2020	101.0
Silicon	anr								
Silver	250	247	98.8	250	244	97.6	250	243	97.2
Sodium	40000	41100	102.8	40000	40900	102.3	40000	40300	100.8
Strontium	anr								
Sulfur									
Thallium	2000	2130	106.5	2000	2110	105.5	2000	2100	105.0
Tin									
Titanium									
Tungsten									
Vanadium	2000	2020	101.0	2000	2000	100.0	2000	1980	99.0

10.2.5 10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP      Date Analyzed: 05/07/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56025      Units: ug/l

	Time:								
Sample ID:	CCV	22:07 CCV12		CCV	22:52 CCV13		CCV	23:53 CCV14	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec

Zinc	2000	2080	104.0	2000	2070	103.5	2000	2050	102.5
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Zirconium

(\*) Outside of QC limits  
(anr) Analyte not requested

10.2.5 10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP      Date Analyzed: 05/07/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56025      Units: ug/l

Metal	Sample ID: CCV True	00:57 CCV15		CCV True	01:56 CCV16		CCV True	02:57 CCV17	
		Results	% Rec		Results	% Rec		Results	% Rec
Aluminum	40000	41100	102.8	40000	41100	102.8	40000	41000	102.5
Antimony	2000	2010	100.5	2000	2030	101.5	2000	2010	100.5
Arsenic	2000	1960	98.0	2000	1980	99.0	2000	1940	97.0
Barium	2000	2060	103.0	2000	2060	103.0	2000	2060	103.0
Beryllium	2000	2010	100.5	2000	2030	101.5	2000	1990	99.5
Bismuth									
Boron	anr								
Cadmium	2000	2030	101.5	2000	2050	102.5	2000	2030	101.5
Calcium	40000	41300	103.3	40000	41000	102.5	40000	40700	101.8
Cerium									
Chromium	2000	1990	99.5	2000	2010	100.5	2000	1980	99.0
Cobalt	2000	2070	103.5	2000	2080	104.0	2000	2070	103.5
Copper	2000	1960	98.0	2000	1990	99.5	2000	1970	98.5
Iron	40000	39700	99.3	40000	40000	100.0	40000	39000	97.5
Lead	2000	2020	101.0	2000	2020	101.0	2000	2000	100.0
Lithium									
Magnesium	40000	40000	100.0	40000	40500	101.3	40000	39500	98.8
Manganese	2000	2100	105.0	2000	2080	104.0	2000	2090	104.5
Molybdenum	anr								
Nickel	2000	2000	100.0	2000	2020	101.0	2000	1990	99.5
Phosphorus									
Potassium	40000	39500	98.8	40000	40000	100.0	40000	39600	99.0
Selenium	2000	2020	101.0	2000	2040	102.0	2000	2010	100.5
Silicon	anr								
Silver	250	242	96.8	250	245	98.0	250	243	97.2
Sodium	40000	40800	102.0	40000	41100	102.8	40000	41000	102.5
Strontium	anr								
Sulfur									
Thallium	2000	2110	105.5	2000	2110	105.5	2000	2100	105.0
Tin									
Titanium									
Tungsten									
Vanadium	2000	1990	99.5	2000	2000	100.0	2000	1990	99.5

10.2.5 10



CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP      Date Analyzed: 05/07/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56025      Units: ug/l

	Time:		00:57		01:56		02:57		
Sample ID:	CCV	CCV15	CCV	CCV16	CCV	CCV17			
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec

Zinc	2000	2070	103.5	2000	2080	104.0	2000	2050	102.5
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Zirconium

(\*) Outside of QC limits  
(anr) Analyte not requested

10.2.5 10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP      Date Analyzed: 05/07/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56025      Units: ug/l

Metal	Time:	03:57			04:57		
	Sample ID:	CCV	CCV18	% Rec	CCV	CCV19	% Rec
	True	Results		True	Results		
Aluminum	40000	40900	102.3	40000	40700	101.8	
Antimony	2000	2010	100.5	2000	2020	101.0	
Arsenic	2000	1940	97.0	2000	1950	97.5	
Barium	2000	2060	103.0	2000	2050	102.5	
Beryllium	2000	1990	99.5	2000	1990	99.5	
Bismuth							
Boron	anr						
Cadmium	2000	2030	101.5	2000	2040	102.0	
Calcium	40000	40600	101.5	40000	40200	100.5	
Cerium							
Chromium	2000	1970	98.5	2000	1980	99.0	
Cobalt	2000	2080	104.0	2000	2070	103.5	
Copper	2000	1970	98.5	2000	1980	99.0	
Iron	40000	38800	97.0	40000	38600	96.5	
Lead	2000	2010	100.5	2000	2010	100.5	
Lithium							
Magnesium	40000	39400	98.5	40000	39200	98.0	
Manganese	2000	2050	102.5	2000	2070	103.5	
Molybdenum	anr						
Nickel	2000	1990	99.5	2000	2000	100.0	
Phosphorus							
Potassium	40000	39800	99.5	40000	39800	99.5	
Selenium	2000	2020	101.0	2000	2020	101.0	
Silicon	anr						
Silver	250	241	96.4	250	243	97.2	
Sodium	40000	41000	102.5	40000	40900	102.3	
Strontium	anr						
Sulfur							
Thallium	2000	2090	104.5	2000	2100	105.0	
Tin							
Titanium							
Tungsten							
Vanadium	2000	1980	99.0	2000	1980	99.0	

10.2.5 10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP      Date Analyzed: 05/07/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56025      Units: ug/l

	Time:		03:57		04:57	
Sample ID:	CCV	CCV18		CCV	CCV19	
Metal	True	Results	% Rec	True	Results	% Rec

Zinc	2000	2060	103.0	2000	2060	103.0
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Zirconium

(\*) Outside of QC limits  
(anr) Analyte not requested

10.2.5  
10

HIGH STANDARD CHECK SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP Date Analyzed: 05/07/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: 90 to 110 % Recovery Run ID: MA56025 Units: ug/l

Time:	10:55			11:01		
Sample ID:	HSTD	HSTD1		HSTD	HSTD2	
Metal	True	Results	% Rec	True	Results	% Rec
Aluminum				300000	304000	101.3
Antimony	8000	7830	97.9			
Arsenic	8000	7690	96.1			
Barium	8000	7850	98.1			
Beryllium	8000	8220	102.8			
Bismuth						
Boron	anr					
Cadmium	8000	7550	94.4			
Calcium				200000	195000	97.5
Cerium						
Chromium	8000	8140	101.8			
Cobalt	8000	7990	99.9			
Copper	8000	7830	97.9			
Iron				200000	192000	96.0
Lead	8000	8040	100.5			
Lithium						
Magnesium				300000	298000	99.3
Manganese	8000	8100	101.3			
Molybdenum	anr					
Nickel	8000	7890	98.6			
Phosphorus						
Potassium				200000	198000	99.0
Selenium	8000	7760	97.0			
Silicon	anr					
Silver	625	631	101.0			
Sodium				200000	201000	100.5
Strontium	anr					
Sulfur						
Thallium	8000	8020	100.3			
Tin						
Titanium						
Tungsten						
Vanadium	8000	8030	100.4			

10.2.6  
10

HIGH STANDARD CHECK SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP Date Analyzed: 05/07/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: 90 to 110 % Recovery Run ID: MA56025 Units: ug/l

	Time:	10:55		11:01		
Sample ID:	HSTD	HSTD1		HSTD	HSTD2	
Metal	True	Results	% Rec	True	Results	% Rec

Zinc 8000 8190 102.4

Zirconium

(\* ) Outside of QC limits  
 (anr) Analyte not requested

10.2.6  
**10**

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP Date Analyzed: 05/07/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: CRI 80-120% CRIA 80-120% Run ID: MA56025 Units: ug/l

Time:	10:34	10:39					
Sample ID:	CRI	CRIA	CRID	CRI1	CRID1		
Metal	True	True	True	Results	% Rec	Results	% Rec
Aluminum	200	500	100	218	109.0	111	111.0
Antimony	6.0	20	3.0	6.60	110.0		
Arsenic	8.0	20	3.0	8.10	101.3	3.10	103.3
Barium	200		4.0	197	98.5	3.90	97.5
Beryllium	2.0		1.0	2.00	100.0	1.00	100.0
Bismuth	20						
Boron	100		10	anr			
Cadmium	3.0		1.0	3.20	106.7	1.20	120.0
Calcium	5000	2000	1000	5150	103.0	1040	104.0
Cerium							
Chromium	10		2.0	10.3	103.0	1.80	90.0
Cobalt	50		3.0	49.9	99.8	3.10	103.3
Copper	10		2.0	8.30	83.0		
Iron	100	500		104	104.0		
Lead	3.0	20	2.5	2.80	93.3		
Lithium	50						
Magnesium	5000	2000	100	5240	104.8		
Manganese	15		3.0	15.4	102.7	3.10	103.3
Molybdenum	20			anr			
Nickel	10		4.0	9.80	98.0	3.70	92.5
Phosphorus	50						
Potassium	5000		2000	4940	98.8	2000	100.0
Selenium	10	20	5.0	8.10	81.0		
Silicon	200			anr			
Silver	5.0		2.0	5.10	102.0		
Sodium	5000		1000	5050	101.0	986	98.6
Strontium	10			anr			
Sulfur	50						
Thallium	10		2.0	10.7	107.0		
Tin	10						
Titanium	10						
Tungsten	50						
Vanadium	50		2.0	49.6	99.2		

10.2.7  
10

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP Date Analyzed: 05/07/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: CRI 80-120% CRIA 80-120% Run ID: MA56025 Units: ug/l

Time:				10:34			10:39
Sample ID:	CRI	CRIA	CRID	CRI1		CRID1	
Metal	True	True	True	Results	% Rec	Results	% Rec

Zinc	20		10	21.0	105.0	10.1	101.0
Zirconium	10						

(\* ) Outside of QC limits  
 (anr) Analyte not requested

10.2.7  
 10

INTERFERING ELEMENT CHECK STANDARDS SUMMARY  
Part 1 - ICSA and ICSAB Standards

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP Date Analyzed: 05/07/24 Methods: EPA 200.7, SW846 6010D  
QC Limits: 80 to 120 % Recovery Run ID: MA56025 Units: ug/l

Time:			10:44			10:49
Sample ID:	ICSA	ICSAB	ICSAL	% Rec	ICSAB1	% Rec
Metal	True	True	Results		Results	
Aluminum	500000	500000	509000	101.8	500000	100.0
Antimony		1000	0.500		992	99.2
Arsenic		1000	1.60		956	95.6
Barium		500	6.30		513	102.6
Beryllium		500	0.00		503	100.6
Bismuth		500	8.10		511	102.2
Boron		500	-0.400		486	97.2
Cadmium		1000	0.500		1070	107.0
Calcium	400000	400000	383000	95.8	381000	95.3
Cerium			22.1		23.6	
Chromium		500	0.00		483	96.6
Cobalt		500	1.00		497	99.4
Copper		500	-1.60		518	103.6
Iron	200000	200000	190000	95.0	189000	94.5
Lead		1000	1.40		951	95.1
Lithium		500	2.30		522	104.4
Magnesium	500000	500000	500000	100.0	497000	99.4
Manganese		500	1.30		523	104.6
Molybdenum		500	3.10		470	94.0
Nickel		1000	-2.00		938	93.8
Phosphorus		500	-19.8		429	85.8
Potassium			-62.4		-0.900	
Selenium		1000	-3.30		931	93.1
Silicon		500	10.8		569	113.8
Silver		1000	-0.400		1070	107.0
Sodium			173		237	
Strontium		500	-3.00		493	98.6
Sulfur		500	-12.6		473	94.6
Thallium		1000	-1.50		915	91.5
Tin		500	-0.400		467	93.4
Titanium		500	-1.40		475	95.0
Tungsten		500	-0.500		447	89.4
Vanadium		500	1.70		503	100.6

10.2.8  
10



INTERFERING ELEMENT CHECK STANDARDS SUMMARY  
 Part 1 - ICSA and ICSAB Standards

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050724M1.ICP Date Analyzed: 05/07/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: 80 to 120 % Recovery Run ID: MA56025 Units: ug/l

Time:	10:44	10:49
Sample ID:	ICSAB	ICSAB1
Metal	True	True
	Results	% Rec

Zinc	1000	1.30	965	96.5
Zirconium	500	1.00	468	93.6

(\*) Outside of QC limits  
 (anr) Analyte not requested

10.2.8  
 10

SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9050924S1.CSV Date Analyzed: 05/09/24 Methods: SW846 7471B  
Analyst: CB Run ID: MA56033  
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:03	MA56033-STD1	1		b=1.2529e-004 c=-1.1768e-001 rho=0.9998039
15:04	MA56033-STD2	1		STDB
15:06	MA56033-STD3	1		STDC
15:08	MA56033-STD4	1		STDD
15:09	MA56033-STD5	1		STDE
15:11	MA56033-STD6	1		STDF
15:16	ZZZZZ	1		
15:18	MA56033-ICV1	1		
15:19	MA56033-ICB1	1		
15:21	MA56033-CCV1	1		
15:23	MA56033-CCB1	1		
15:25	MA56033-CRI1	1		
15:28	ZZZZZ	1		
15:29	MA56033-CCV2	1		
15:30	MA56033-CCB2	1		
15:32	ZZZZZ	1		
15:34	ZZZZZ	1		
15:35	ZZZZZ	1		
15:37	ZZZZZ	1		
15:38	ZZZZZ	1		
15:40	ZZZZZ	1		
15:41	ZZZZZ	1		
15:43	ZZZZZ	1		
15:44	ZZZZZ	1		
15:46	ZZZZZ	1		
15:47	MA56033-CCV3	1		
15:49	MA56033-CCB3	1		
15:53	ZZZZZ	1		
15:54	MP46495-MB1	1		
15:56	MP46495-B1	1		
15:57	MP46495-S1	1		
15:59	MP46495-S2	1		
16:01	JD87786-19	1		(sample used for QC only; not part of login JD87833)

10.3  
10

SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9050924S1.CSV      Date Analyzed: 05/09/24      Methods: SW846 7471B  
Analyst: CB      Run ID: MA56033  
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
16:03	ZZZZZZ	1		
16:04	ZZZZZZ	1		
16:06	ZZZZZZ	1		
16:08	MA56033-CCV4	1		
16:09	MA56033-CCB4	1		
16:11	ZZZZZZ	1		
16:13	ZZZZZZ	1		
16:14	ZZZZZZ	1		
16:16	ZZZZZZ	1		
16:17	ZZZZZZ	1		
16:19	ZZZZZZ	1		
16:20	ZZZZZZ	1		
16:22	ZZZZZZ	1		
16:23	MA56033-CCV5	1		
16:25	MA56033-CCB5	1		
16:27	ZZZZZZ	1		
16:28	ZZZZZZ	1		
16:30	ZZZZZZ	1		
16:32	ZZZZZZ	1		
16:33	ZZZZZZ	1		
16:35	ZZZZZZ	1		
16:36	ZZZZZZ	1		
16:38	ZZZZZZ	1		
16:39	MA56033-CCV6	1		
16:41	MA56033-CCB6	1		
16:43	MP46496-MB1	1		
16:44	MP46496-B1	1		
16:46	MP46496-S1	1		
16:48	MP46496-S2	1		
16:50	MP46496-LC1	50		
16:52	MP46496-LC2	50		
16:53	JD87808-19	1		(sample used for QC only; not part of login JD87833)
16:55	ZZZZZZ	1		

10.3  
10

SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9050924S1.CSV      Date Analyzed: 05/09/24      Methods: SW846 7471B  
Analyst: CB      Run ID: MA56033  
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
16:57	MA56033-CCV7	1		
16:58	MA56033-CCB7	1		
17:00	ZZZZZZ	1		
17:02	ZZZZZZ	1		
17:04	ZZZZZZ	1		
17:05	JD87833-1	1		
17:07	JD87833-2	1		
17:08	JD87833-3	1		
17:10	JD87833-4	1		
17:12	JD87833-5	1		
17:13	MA56033-CCV8	1		
17:15	MA56033-CCB8	1		
17:17	JD87833-6	1		
17:18	JD87833-7	1		
17:20	JD87833-8	1		
17:22	JD87833-9	1		
17:23	JD87833-10	1		
17:25	JD87833-11	1		
17:27	JD87833-12	1		
17:28	JD87833-13	1		
17:30	MA56033-CCV9	1		
17:32	MA56033-CCB9	1		
17:34	ZZZZZZ	1		
17:35	ZZZZZZ	1		
17:36	ZZZZZZ	1		
17:38	ZZZZZZ	1		
17:39	ZZZZZZ	1		
17:41	ZZZZZZ	1		
17:42	ZZZZZZ	1		
17:43	ZZZZZZ	1		
17:47	JD87833-13	1		
17:48	MA56033-CCV10	1		
17:50	MA56033-CCB10	1		

10.3  
10

SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9050924S1.CSV      Date Analyzed: 05/09/24      Methods: SW846 7471B  
Analyst: CB      Run ID: MA56033  
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
17:52	JD87833-14	1		
17:53	JD87833-15	1		
17:55	MP46497-MB1	1		
17:57	MP46497-B1	1		
17:58	MP46497-S1	1		
18:00	MP46497-S2	1		
18:02	JD87833-16	1		
----->	Last reportable sample/prep for job JD87833			
18:04	ZZZZZ	1		
18:06	MA56033-CCV11	1		
18:08	MA56033-CCB11	1		
----->	Last reportable CCB for job JD87833			
18:10	ZZZZZ	1		
18:12	ZZZZZ	1		
18:14	ZZZZZ	1		
18:16	ZZZZZ	1		
18:18	ZZZZZ	1		
18:20	ZZZZZ	1		
18:22	ZZZZZ	1		
18:25	ZZZZZ	1		
18:27	MA56033-CCV12	1		
18:29	MA56033-CCB12	1		
18:31	ZZZZZ	1		
18:32	ZZZZZ	1		
18:34	ZZZZZ	1		
18:36	ZZZZZ	1		
18:38	ZZZZZ	1		
18:40	ZZZZZ	1		
18:42	ZZZZZ	1		
18:43	ZZZZZ	1		
18:45	MA56033-CCV13	1		
18:47	MA56033-CCB13	1		
18:49	ZZZZZ	1		
18:50	ZZZZZ	1		
18:52	MP46498-MB1	1		

10.3  
10

SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9050924S1.CSV      Date Analyzed: 05/09/24      Methods: SW846 7471B  
Analyst: CB      Run ID: MA56033  
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
18:53	MP46498-B1	1		
18:55	MP46498-S1	1		
18:57	MP46498-S2	1		
18:59	JD87824-2	1		(sample used for QC only; not part of login JD87833)
19:01	ZZZZZZ	1		
19:02	MA56033-CCV14	1		
19:04	MA56033-CCB14	1		
19:06	ZZZZZZ	1		
19:07	ZZZZZZ	1		
19:09	ZZZZZZ	1		
19:11	ZZZZZZ	1		
19:12	ZZZZZZ	1		
19:14	ZZZZZZ	1		
19:16	ZZZZZZ	1		
19:17	ZZZZZZ	1		
19:19	MA56033-CCV15	1		
19:21	MA56033-CCB15	1		
19:23	ZZZZZZ	1		
19:25	ZZZZZZ	1		
19:26	ZZZZZZ	1		
19:28	ZZZZZZ	1		
19:30	ZZZZZZ	1		
19:32	ZZZZZZ	1		
19:33	ZZZZZZ	1		
19:35	MA56033-CCV16	1		
19:37	MA56033-CCB16	1		
19:39	ZZZZZZ	2		
19:40	ZZZZZZ	2		
19:42	ZZZZZZ	2		
19:44	ZZZZZZ	2		
19:46	ZZZZZZ	2		
19:48	ZZZZZZ	2		
19:50	MA56033-CCV17	1		

10.3  
10

SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9050924S1.CSV      Date Analyzed: 05/09/24      Methods: SW846 7471B  
Analyst: CB      Run ID: MA56033  
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
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19:52 MA56033-CCB17 1

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9050924S1.CSV Date Analyzed: 05/09/24 Methods: SW846 7471B  
 Analyst: CB Run ID: MA56033  
 Parameters: Hg

Time	Sample Description	Element:	H Dilution	g
15:16	ZZZZZZ		1	
15:18	MA56033-ICV1		1	X
15:19	MA56033-ICB1		1	X
15:21	MA56033-CCV1		1	X
15:23	MA56033-CCB1		1	X
15:25	MA56033-CRI1		1	X
15:28	ZZZZZZ		1	
15:29	MA56033-CCV2		1	X
15:30	MA56033-CCB2		1	X
15:32	ZZZZZZ		1	
15:34	ZZZZZZ		1	
15:35	ZZZZZZ		1	
15:37	ZZZZZZ		1	
15:38	ZZZZZZ		1	
15:40	ZZZZZZ		1	
15:41	ZZZZZZ		1	
15:43	ZZZZZZ		1	
15:44	ZZZZZZ		1	
15:46	ZZZZZZ		1	
15:47	MA56033-CCV3		1	X
15:49	MA56033-CCB3		1	X
15:53	ZZZZZZ		1	
15:54	MP46495-MB1		1	X
15:56	MP46495-B1		1	X
15:57	MP46495-S1		1	X
15:59	MP46495-S2		1	X
16:01	JD87786-19		1	X (a)
16:03	ZZZZZZ		1	
16:04	ZZZZZZ		1	
16:06	ZZZZZZ		1	
16:08	MA56033-CCV4		1	X
16:09	MA56033-CCB4		1	X
16:11	ZZZZZZ		1	
		Element:	H	
			g	

10.3.1  
10



REPORTED ELEMENTS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9050924S1.CSV Date Analyzed: 05/09/24 Methods: SW846 7471B  
 Analyst: CB Run ID: MA56033  
 Parameters: Hg

Time	Sample Description	Element:	H
		Dilution	g
16:13	ZZZZZZ	1	
16:14	ZZZZZZ	1	
16:16	ZZZZZZ	1	
16:17	ZZZZZZ	1	
16:19	ZZZZZZ	1	
16:20	ZZZZZZ	1	
16:22	ZZZZZZ	1	
16:23	MA56033-CCV5	1	X
16:25	MA56033-CCB5	1	X
16:27	ZZZZZZ	1	
16:28	ZZZZZZ	1	
16:30	ZZZZZZ	1	
16:32	ZZZZZZ	1	
16:33	ZZZZZZ	1	
16:35	ZZZZZZ	1	
16:36	ZZZZZZ	1	
16:38	ZZZZZZ	1	
16:39	MA56033-CCV6	1	X
16:41	MA56033-CCB6	1	X
16:43	MP46496-MB1	1	X
16:44	MP46496-B1	1	X
16:46	MP46496-S1	1	X
16:48	MP46496-S2	1	X
16:50	MP46496-LC1	50	X
16:52	MP46496-LC2	50	X
16:53	JD87808-19	1	X (a)
16:55	ZZZZZZ	1	
16:57	MA56033-CCV7	1	X
16:58	MA56033-CCB7	1	X
17:00	ZZZZZZ	1	
17:02	ZZZZZZ	1	
17:04	ZZZZZZ	1	
17:05	JD87833-1	1	X
		Element:	H
			g

10.3.1  
10

REPORTED ELEMENTS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9050924S1.CSV Date Analyzed: 05/09/24 Methods: SW846 7471B  
 Analyst: CB Run ID: MA56033  
 Parameters: Hg

Time	Sample Description	Element:	H Dilution	g
17:07	JD87833-2	1	X	
17:08	JD87833-3	1	X	
17:10	JD87833-4	1	X	
17:12	JD87833-5	1	X	
17:13	MA56033-CCV8	1	X	
17:15	MA56033-CCB8	1	X	
17:17	JD87833-6	1	X	
17:18	JD87833-7	1	X	
17:20	JD87833-8	1	X	
17:22	JD87833-9	1	X	
17:23	JD87833-10	1	X	
17:25	JD87833-11	1	X	
17:27	JD87833-12	1	X	
17:28	JD87833-13	1	X	
17:30	MA56033-CCV9	1	X	
17:32	MA56033-CCB9	1	X	
17:34	ZZZZZZ	1		
17:35	ZZZZZZ	1		
17:36	ZZZZZZ	1		
17:38	ZZZZZZ	1		
17:39	ZZZZZZ	1		
17:41	ZZZZZZ	1		
17:42	ZZZZZZ	1		
17:43	ZZZZZZ	1		
17:47	JD87833-13	1	X	
17:48	MA56033-CCV10	1	X	
17:50	MA56033-CCB10	1	X	
17:52	JD87833-14	1	X	
17:53	JD87833-15	1	X	
17:55	MP46497-MB1	1	X	
17:57	MP46497-B1	1	X	
17:58	MP46497-S1	1	X	
18:00	MP46497-S2	1	X	
		Element:	H	
			g	

10.3.1  
10

REPORTED ELEMENTS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9050924S1.CSV Date Analyzed: 05/09/24 Methods: SW846 7471B  
 Analyst: CB Run ID: MA56033  
 Parameters: Hg

Time	Sample Description	Element:	H Dilution	g
18:02	JD87833-16	1	X	
18:04	ZZZZZZ	1		
18:06	MA56033-CCV11	1	X	
18:08	MA56033-CCB11	1	X	
18:10	ZZZZZZ	1		
18:12	ZZZZZZ	1		
18:14	ZZZZZZ	1		
18:16	ZZZZZZ	1		
18:18	ZZZZZZ	1		
18:20	ZZZZZZ	1		
18:22	ZZZZZZ	1		
18:25	ZZZZZZ	1		
18:27	MA56033-CCV12	1	X	
18:29	MA56033-CCB12	1	X	
18:31	ZZZZZZ	1		
18:32	ZZZZZZ	1		
18:34	ZZZZZZ	1		
18:36	ZZZZZZ	1		
18:38	ZZZZZZ	1		
18:40	ZZZZZZ	1		
18:42	ZZZZZZ	1		
18:43	ZZZZZZ	1		
18:45	MA56033-CCV13	1	X	
18:47	MA56033-CCB13	1	X	
18:49	ZZZZZZ	1		
18:50	ZZZZZZ	1		
18:52	MP46498-MB1	1	X	
18:53	MP46498-B1	1	X	
18:55	MP46498-S1	1	X	
18:57	MP46498-S2	1	X	
18:59	JD87824-2	1	X (a)	
19:01	ZZZZZZ	1		
19:02	MA56033-CCV14	1	X	
		Element:	H	
			g	

10.3.1  
10

REPORTED ELEMENTS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9050924S1.CSV Date Analyzed: 05/09/24 Methods: SW846 7471B  
 Analyst: CB Run ID: MA56033  
 Parameters: Hg

Time	Sample Description	Element: Hg	Dilution	g
19:04	MA56033-CCB14	1		X
19:06	ZZZZZZ	1		
19:07	ZZZZZZ	1		
19:09	ZZZZZZ	1		
19:11	ZZZZZZ	1		
19:12	ZZZZZZ	1		
19:14	ZZZZZZ	1		
19:16	ZZZZZZ	1		
19:17	ZZZZZZ	1		
19:19	MA56033-CCV15	1		X
19:21	MA56033-CCB15	1		X
19:23	ZZZZZZ	1		
19:25	ZZZZZZ	1		
19:26	ZZZZZZ	1		
19:28	ZZZZZZ	1		
19:30	ZZZZZZ	1		
19:32	ZZZZZZ	1		
19:33	ZZZZZZ	1		
19:35	MA56033-CCV16	1		X
19:37	MA56033-CCB16	1		X
19:39	ZZZZZZ	2		
19:40	ZZZZZZ	2		
19:42	ZZZZZZ	2		
19:44	ZZZZZZ	2		
19:46	ZZZZZZ	2		
19:48	ZZZZZZ	2		
19:50	MA56033-CCV17	1		X
19:52	MA56033-CCB17	1		X

(a) Sample used for QC only; not part of login JD87833.

Element: Hg

10.3.1  
10

BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9050924S1.CSV Date Analyzed: 05/09/24 Methods: SW846 7471B  
 QC Limits: result < RL Run ID: MA56033 Units: ug/l

	Time:		15:19		15:23		15:30		15:49	
Sample ID:	RL	IDL	ICB1	final	CCB1	final	CCB2	final	CCB3	final
Metal			raw	final	raw	final	raw	final	raw	final
Mercury	0.20	.04	-0.0124	<0.20	-0.0216	<0.20	-0.0283	<0.20	-0.0148	<0.20

(\*) Outside of QC limits  
 (anr) Analyte not requested

10.3.2  
 10

BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9050924S1.CSV Date Analyzed: 05/09/24 Methods: SW846 7471B  
 QC Limits: result < RL Run ID: MA56033 Units: ug/l

	Time:		16:09		16:25		16:41		16:58	
	Sample ID:		CCB4		CCB5		CCB6		CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Mercury	0.20	.04	-0.0320	<0.20	-0.0131	<0.20	-0.0200	<0.20	-0.0364	<0.20

(\*) Outside of QC limits  
 (anr) Analyte not requested

10.3.2  
 10

BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9050924S1.CSV Date Analyzed: 05/09/24 Methods: SW846 7471B  
 QC Limits: result < RL Run ID: MA56033 Units: ug/l

	Time:		17:15		17:32		17:50		18:08	
	Sample ID:		CCB8		CCB9		CCB10		CCB11	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Mercury	0.20	.04	-0.0178	<0.20	-0.190	<0.20	-0.0133	<0.20	-0.0301	<0.20

(\*) Outside of QC limits  
 (anr) Analyte not requested

10.3.2  
 10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9050924S1.CSV      Date Analyzed: 05/09/24      Methods: SW846 7471B  
QC Limits: 90 to 110 % Recovery      Run ID: MA56033      Units: ug/l

	Time:		15:18		15:21		15:29		
Sample ID:	ICV		ICV1	CCV	CCV1	CCV	CCV2		
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	3	3.23	107.7	2.5	2.60	104.0	2.5	2.61	104.4

(\*) Outside of QC limits  
(anr) Analyte not requested

10.3.3  
10



CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9050924S1.CSV      Date Analyzed: 05/09/24      Methods: SW846 7471B  
QC Limits: 90 to 110 % Recovery      Run ID: MA56033      Units: ug/l

	Time:	15:47		16:08		16:23			
Sample ID:	CCV	CCV3	CCV	CCV4	CCV	CCV5			
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	2.5	2.51	100.4	2.5	2.47	98.8	2.5	2.52	100.8

(\*) Outside of QC limits  
(anr) Analyte not requested

10.3.3  
10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9050924S1.CSV      Date Analyzed: 05/09/24      Methods: SW846 7471B  
QC Limits: 90 to 110 % Recovery      Run ID: MA56033      Units: ug/l

	Time:	16:39		16:57		17:13			
Sample ID:	CCV	CCV6		CCV7		CCV8			
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	2.5	2.45	98.0	2.5	2.45	98.0	2.5	2.50	100.0

(\*) Outside of QC limits  
(anr) Analyte not requested

10.3.3  
10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9050924S1.CSV      Date Analyzed: 05/09/24      Methods: SW846 7471B  
QC Limits: 90 to 110 % Recovery      Run ID: MA56033      Units: ug/l

	Time:	17:30		17:48		18:06			
Sample ID:	CCV	CCV9	CCV	CCV10	CCV	CCV11			
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	2.5	2.58	103.2	2.5	2.61	104.4	2.5	2.50	100.0

(\*) Outside of QC limits  
(anr) Analyte not requested

10.3.3  
10

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9050924S1.CSV      Date Analyzed: 05/09/24      Methods: SW846 7471B  
QC Limits: 70 to 130 % Recovery      Run ID: MA56033      Units: ug/l

Time:			15:25	
Sample ID:	CRI	CRIA	CRI1	
Metal	True	True	Results	% Rec

Mercury      0.20      0.148      74.0

(\*) Outside of QC limits  
(anr) Analyte not requested

10.3.4  
10

SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050824M2.ICP Date Analyzed: 05/08/24 Methods: EPA 200.7, SW846 6010D  
Analyst: MM Run ID: MA56037  
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:43	MA56037-STD1	1		STDA
15:50	MA56037-STD2	1		STDB
15:56	MA56037-ICV1	1		
16:01	MA56037-ICB1	1		
16:08	MA56037-ICCV1	1		
16:15	MA56037-CCB1	1		
16:20	MA56037-CCV1	1		
16:25	MA56037-CRI1	1		
16:30	MA56037-CRID1	1		
16:35	MA56037-ICSA1	1		
16:40	MA56037-ICSAB1	1		
16:45	MA56037-HSTD1	1		
16:51	MA56037-HSTD2	1		
16:56	MA56037-CCV2	1		
17:01	MA56037-CCB2	1		
17:06	ZZZZZ	1		
17:11	MP46413-S1	1		ISTD out
17:16	MP46413-S2	1		ISTD out
17:21	JD87650-5	1		(sample used for QC only; not part of login JD87833)
17:26	MP46413-SD1	5		Data not match
17:31	MP46413-PS1	1		
17:36	ZZZZZ	1		
17:41	ZZZZZ	1		
17:46	ZZZZZ	1		
17:51	ZZZZZ	1		
17:56	MA56037-CCV3	1		
18:01	MA56037-CCB3	1		
18:06	ZZZZZ	1		
18:11	ZZZZZ	1		
18:16	ZZZZZ	1		
18:21	ZZZZZ	1		
18:26	ZZZZZ	1		
18:31	ZZZZZ	1		

10.4  
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SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050824M2.ICP Date Analyzed: 05/08/24 Methods: EPA 200.7, SW846 6010D  
Analyst: MM Run ID: MA56037  
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
18:36	ZZZZZZ	1		
18:41	ZZZZZZ	1		
18:46	MA56037-CCV4	1		Cu out
18:51	MA56037-CCB4	1		
18:56	ZZZZZZ	1		
19:01	ZZZZZZ	1		
19:06	ZZZZZZ	1		
19:11	ZZZZZZ	1		
19:16	MP46431-S1	1		CCV out; Need PS
19:21	MP46431-S2	1		CCV out
----->	Last reportable sample/prep for job JD87833			
19:26	ZZZZZZ	1		
19:31	ZZZZZZ	1		
19:36	ZZZZZZ	1		
19:41	ZZZZZZ	1		
19:46	MA56037-CCV5	1		Cu out
19:51	MA56037-CCB5	1		
----->	Last reportable CCB for job JD87833			
19:56	ZZZZZZ	1		
20:01	ZZZZZZ	1		
20:06	ZZZZZZ	1		
20:11	ZZZZZZ	1		
20:16	MP46454-MB1	1		ISTD out
20:21	MP46454-LB1	1		
20:26	MP46454-B1	1		
20:31	MP46454-LS1	1		
20:35	MP46454-S1	1		
20:40	MP46454-S2	1		
20:45	MA56037-CCV6	1		Cu out
20:50	MA56037-CCB6	1		
20:55	JD87485-1	1		(sample used for QC only; not part of login JD87833)
21:00	MP46454-SD1	5		
21:05	ZZZZZZ	1		
21:10	ZZZZZZ	5		
21:15	ZZZZZZ	5		

10.4  
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SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050824M2.ICP Date Analyzed: 05/08/24 Methods: EPA 200.7, SW846 6010D  
Analyst: MM Run ID: MA56037  
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
21:20	ZZZZZZ	1		
21:25	MP46425-S1	2		
21:30	MP46425-S2	2		
21:35	JD87761-2	2		(sample used for QC only; not part of login JD87833)
21:40	MP46425-SD1	10		
21:45	MA56037-CCV7	1		Cu out
21:49	MA56037-CCB7	1		Cu out
21:54	ZZZZZZ	2		
22:00	ZZZZZZ	1		
22:05	ZZZZZZ	1		
22:10	ZZZZZZ	1		
22:15	ZZZZZZ	1		
22:20	MA56037-CCV8	1		
22:25	MA56037-CCB8	1		

Refer to raw data for calibration curve and standards.

10.4  
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REPORTED ELEMENTS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050824M2.ICP Date Analyzed: 05/08/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: MM Run ID: MA56037  
 Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Element: Dilution	A	S	A	B	B	C	C	C	F	P	M	N	K	S	A	N	T	V	Z	
			l	b	s	a	e	d	a	r	o	e	b	g	n	i	e	g	a	l	n	
15:56	MA56037-ICV1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
16:01	MA56037-ICB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
16:08	MA56037-ICCV1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
16:15	MA56037-CCB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
16:20	MA56037-CCV1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
16:25	MA56037-CRI1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
16:30	MA56037-CRID1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
16:35	MA56037-ICSA1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
16:40	MA56037-ICSAB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
16:45	MA56037-HSTD1	1		X	X	X	X		X	X		X	X		X	X		X	X		X	X
16:51	MA56037-HSTD2	1	X					X			X		X		X		X		X		X	
16:56	MA56037-CCV2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
17:01	MA56037-CCB2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
17:06	ZZZZZ	1																				
17:11	MP46413-S1	1																				
17:16	MP46413-S2	1																				
17:21	JD87650-5	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X (a)
17:26	MP46413-SD1	5																				
17:31	MP46413-PS1	1																				
17:36	ZZZZZ	1																				
17:41	ZZZZZ	1																				
17:46	ZZZZZ	1																				
17:51	ZZZZZ	1																				
17:56	MA56037-CCV3	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
18:01	MA56037-CCB3	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
18:06	ZZZZZ	1																				
18:11	ZZZZZ	1																				
18:16	ZZZZZ	1																				
18:21	ZZZZZ	1																				
18:26	ZZZZZ	1																				
18:31	ZZZZZ	1																				
18:36	ZZZZZ	1																				
18:41	ZZZZZ	1																				

Element: A S A B B C C C F P M N K S A N T V Z  
 l b s a e d a r o e b g n i e g a l n



REPORTED ELEMENTS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050824M2.ICP Date Analyzed: 05/08/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: MM Run ID: MA56037  
 Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Element: Dilution	A l	S b	A s	B a	B e	C d	C a	C r	C o	F e	P b	M g	M n	N i	K	S e	A g	N a	T l	V	Z n
18:46	MA56037-CCV4	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
18:51	MA56037-CCB4	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
18:56	ZZZZZZ	1																					
19:01	ZZZZZZ	1																					
19:06	ZZZZZZ	1																					
19:11	ZZZZZZ	1																					
19:16	MP46431-S1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
19:21	MP46431-S2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
19:26	ZZZZZZ	1																					
19:31	ZZZZZZ	1																					
19:36	ZZZZZZ	1																					
19:41	ZZZZZZ	1																					
19:46	MA56037-CCV5	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
19:51	MA56037-CCB5	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
19:56	ZZZZZZ	1																					
20:01	ZZZZZZ	1																					
20:06	ZZZZZZ	1																					
20:11	ZZZZZZ	1																					
20:16	MP46454-MB1	1			X	X		X		X			X						X	X			
20:21	MP46454-LB1	1																					
20:26	MP46454-B1	1			X	X		X		X									X	X			
20:31	MP46454-LS1	1			X	X		X		X									X	X			
20:35	MP46454-S1	1			X	X		X		X									X	X			
20:40	MP46454-S2	1			X	X		X		X									X	X			
20:45	MA56037-CCV6	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
20:50	MA56037-CCB6	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
20:55	JD87485-1	1			X	X		X		X									X	X			(a)
21:00	MP46454-SD1	5			X	X		X		X									X	X			
21:05	ZZZZZZ	1																					
21:10	ZZZZZZ	5																					
21:15	ZZZZZZ	5																					
21:20	ZZZZZZ	1																					
21:25	MP46425-S1	2									X												

10.4.1  
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REPORTED ELEMENTS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050824M2.ICP Date Analyzed: 05/08/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: MM Run ID: MA56037  
 Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution	Element	A	S	A	B	B	C	C	C	F	P	M	N	K	S	A	N	T	V	Z		
			Dilution	l	b	s	a	e	d	a	r	o	e	b	g	n	i	e	g	a	l	n		
21:30	MP46425-S2	2										X												
21:35	JD87761-2	2										X												(a)
21:40	MP46425-SD1	10										X												
21:45	MA56037-CCV7	1		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
21:49	MA56037-CCB7	1		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
21:54	ZZZZZZ	2																						
22:00	ZZZZZZ	1																						
22:05	ZZZZZZ	1																						
22:10	ZZZZZZ	1																						
22:15	ZZZZZZ	1																						
22:20	MA56037-CCV8	1		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
22:25	MA56037-CCB8	1		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

(a) Sample used for QC only; not part of login JD87833.

Element: A S A B B C C C F P M N K S A N T V Z  
 l b s a e d a r o e b g n i e g a l n

INTERNAL STANDARD SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050824M2.ICP Date Analyzed: 05/08/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: MM Run ID: MA56037  
 Parameters: Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, Tl, V, Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
15:43	MA56037-STD1	6630 R	124170 R	13585 R	11728 R
15:50	MA56037-STD2	6357	115640	13267	10270
15:56	MA56037-ICV1	6481	118710	13386	10658
16:01	MA56037-ICB1	6604	123590	13318	11694
16:08	MA56037-ICCV1	6490	118060	13376	10662
16:15	MA56037-CCB1	6592	122680	13351	11671
16:20	MA56037-CCV1	6465	118080	13268	10630
16:25	MA56037-CRI1	6520	121180	13257	11411
16:30	MA56037-CRID1	6562	121910	13311	11576
16:35	MA56037-ICSA1	6013	107810	13049	9547
16:40	MA56037-ICSAB1	6037	107870	13013	9580
16:45	MA56037-HSTD1	6674	120290	13297	11371
16:51	MA56037-HSTD2	6069	110060	13061	9625
16:56	MA56037-CCV2	6552	119890	13521	10754
17:01	MA56037-CCB2	6616	123430	13491	11697
17:06	ZZZZZ	No results reported for the elements associated with this internal standard.			
17:11	MP46413-S1	38076 !a	635800 !a	61496 !a	61364 !a
17:16	MP46413-S2	38204 !a	633070 !a	61246 !a	61497 !a
17:21	JD87650-5	6689	121340	14071	10683
17:26	MP46413-SD1	6645	122100	42548 !a	11295
17:31	MP46413-PS1	6643	121280	14337	10464
17:36	ZZZZZ	6684	126160	14110	11858
17:41	ZZZZZ	7024	128040	14968	11254
17:46	ZZZZZ	6953	127050	14946	11268
17:51	ZZZZZ	7111	130250	15258	11247
17:56	MA56037-CCV3	6611	122360	14148	10853
18:01	MA56037-CCB3	6741	128650	14322	11919
18:06	ZZZZZ	38779 !a	665490 !a	65506 !a	62362 !a
18:11	ZZZZZ	38796 !a	663600 !a	65749 !a	62445 !a
18:16	ZZZZZ	6908	130500	15036	11643
18:21	ZZZZZ	38935 !a	669260 !a	67089 !a	62631 !a
18:26	ZZZZZ	6781	130150	14981	11367
18:31	ZZZZZ	7046	132730	15663	11292

10.4.2  
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INTERNAL STANDARD SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050824M2.ICP Date Analyzed: 05/08/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: MM Run ID: MA56037  
 Parameters: Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, Tl, V, Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
18:36	ZZZZZ	6339	121800	15353	9302
18:41	ZZZZZ	7148	134300	16152	11310
18:46	MA56037-CCV4	6688	126830	14811	10987
18:51	MA56037-CCB4	6842	133260	14926	12099
18:56	ZZZZZ	7140	135590	16093	11430
19:01	ZZZZZ	7220	136370	16273	11475
19:06	ZZZZZ	6893	132680	15902	10996
19:11	ZZZZZ	7011	135070	16072	11325
19:16	MP46431-S1	6705	128610	15522	10766
19:21	MP46431-S2	6726	129130	15566	10771
19:26	ZZZZZ	39339 !a	702580 !a	69853 !a	63357 !a
19:31	ZZZZZ	39163 !a	702910 !a	69508 !a	63147 !a
19:36	ZZZZZ	6752	133360	15367	11570
19:41	ZZZZZ	6782	135040	15610	11449
19:46	MA56037-CCV5	6813	133610	15729	11205
19:51	MA56037-CCB5	6962	139580	15803	12307
19:56	ZZZZZ	6882	137510	15807	11799
20:01	ZZZZZ	39350 !a	715750 !a	71141 !a	63300 !a
20:06	ZZZZZ	6893	138600	15763	11878
20:11	ZZZZZ	No results reported for the elements associated with this internal standard.			
20:16	MP46454-MB1	39422 !a	719180 !a	71822 !a	63456 !a
20:21	MP46454-LB1	6950	142180	15978	12268
20:26	MP46454-B1	6907	138230	16238	11521
20:31	MP46454-LS1	6934	138430	16117	11534
20:35	MP46454-S1	6900	136060	16348	11247
20:40	MP46454-S2	6887	135190	16467	11223
20:45	MA56037-CCV6	6886	138200	16279	11299
20:50	MA56037-CCB6	7051	144240	16255	12432
20:55	JD87485-1	6873	141490	16503	11629
21:00	MP46454-SD1	7018	143340	16480	12191
21:05	ZZZZZ	No results reported for the elements associated with this internal standard.			
21:10	ZZZZZ	7138	144430	16626	11806
21:15	ZZZZZ	7212	146520	17237	11684

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INTERNAL STANDARD SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050824M2.ICP Date Analyzed: 05/08/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: MM Run ID: MA56037  
 Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
21:20	ZZZZZ	No results reported for the elements associated with this internal standard.			
21:25	MP46425-S1	6669	135980	16309	10920
21:30	MP46425-S2	6655	135910	16245	10890
21:35	JD87761-2	6638	136320	16235	11031
21:40	MP46425-SD1	6913	141410	16461	11843
21:45	MA56037-CCV7	6895	139200	16327	11297
21:49	MA56037-CCB7	7045	145320	16494	12399
21:54	ZZZZZ	6398	129800	16077	10373
22:00	ZZZZZ	No results reported for the elements associated with this internal standard.			
22:05	ZZZZZ	No results reported for the elements associated with this internal standard.			
22:10	ZZZZZ	No results reported for the elements associated with this internal standard.			
22:15	ZZZZZ	No results reported for the elements associated with this internal standard.			
22:20	MA56037-CCV8	6923	140230	16500	11329
22:25	MA56037-CCB8	7079	145690	16430	12437

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	70-130 %
Istd#2	Yttrium (3600)	70-130 %
Istd#3	Yttrium (3710)	70-130 %
Istd#4	Indium	70-130 %

(a) No samples reported for the elements associated with this internal standard.

10.4.2 10

BLANK RESULTS SUMMARY  
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050824M2.ICP Date Analyzed: 05/08/24 Methods: EPA 200.7, SW846 6010D  
QC Limits: result < RL Run ID: MA56037 Units: ug/l

Metal	Time:		16:01		16:15		17:01		18:01	
	Sample ID:	RL	IDL	ICB1	final	CCB1	final	CCB2	final	CCB3
Aluminum	200	17	3.00	<200	7.70	<200	9.10	<200	-3.80	<200
Antimony	6.0	1.7	0.900	<6.0	0.200	<6.0	-0.200	<6.0	0.700	<6.0
Arsenic	3.0	2.1	0.800	<3.0	1.10	<3.0	1.50	<3.0	0.800	<3.0
Barium	200	.8	0.300	<200	0.300	<200	0.100	<200	0.00	<200
Beryllium	1.0	.3	-0.100	<1.0	0.100	<1.0	-0.100	<1.0	-0.100	<1.0
Bismuth	20	2.3								
Boron	100	2.3								
Cadmium	3.0	.3	-0.100	<3.0	0.100	<3.0	-0.100	<3.0	0.00	<3.0
Calcium	5000	6.6	-0.200	<5000	1.80	<5000	-2.10	<5000	1.20	<5000
Cerium	100									
Chromium	10	.3	0.00	<10	0.300	<10	-0.200	<10	0.100	<10
Cobalt	50	.4	-0.300	<50	0.100	<50	0.00	<50	0.00	<50
Copper	10	.8	anr							
Iron	100	5.3	-1.10	<100	1.20	<100	-1.80	<100	0.800	<100
Lead	3.0	1.1	-0.300	<3.0	0.600	<3.0	0.300	<3.0	0.300	<3.0
Lithium	50	4.8								
Magnesium	5000	32	10.6	<5000	11.9	<5000	10.8	<5000	15.8	<5000
Manganese	15	.1	0.00	<15	0.300	<15	0.00	<15	0.100	<15
Molybdenum	20	.6								
Nickel	10	.4	0.00	<10	0.600	<10	0.400	<10	0.400	<10
Phosphorus	50	1.2								
Potassium	10000	77	-33.7	<10000	-35.6	<10000	-34.1	<10000	1.80	<10000
Selenium	10	3.2	0.100	<10	0.400	<10	0.800	<10	-1.10	<10
Silicon	200	1.7								
Silver	10	1	-0.300	<10	-0.200	<10	-0.400	<10	-0.200	<10
Sodium	10000	34	1.30	<10000	13.8	<10000	23.1	<10000	4.30	<10000
Strontium	10	.3								
Sulfur	50	3								
Thallium	10	1.8	-0.700	<10	0.800	<10	0.600	<10	0.700	<10
Tin	10	.8								
Titanium	10	.5								
Tungsten	50	2.6								
Vanadium	50	.6	0.00	<50	0.100	<50	-0.100	<50	0.200	<50

10.4.3  
10

BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050824M2.ICP Date Analyzed: 05/08/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: result < RL Run ID: MA56037 Units: ug/l

Time:			16:01		16:15		17:01		18:01	
Sample ID:	RL	IDL	ICB1	final	CCB1	final	CCB2	final	CCB3	final
Metal			raw		raw		raw		raw	

Zinc	20	.1	-0.600	<20	-0.500	<20	-0.700	<20	-0.300	<20
Zirconium	10	.3								

(\* ) Outside of QC limits  
 (anr) Analyte not requested

10.4.3  
 10

BLANK RESULTS SUMMARY  
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050824M2.ICP Date Analyzed: 05/08/24 Methods: EPA 200.7, SW846 6010D  
QC Limits: result < RL Run ID: MA56037 Units: ug/l

Metal	Time:		18:51		19:51	
	Sample ID:	RL	IDL	CCB4	CCB5	final
Aluminum	200	17	8.60	<200	2.70	<200
Antimony	6.0	1.7	0.200	<6.0	0.300	<6.0
Arsenic	3.0	2.1	-0.200	<3.0	-0.400	<3.0
Barium	200	.8	-0.100	<200	-0.200	<200
Beryllium	1.0	.3	0.00	<1.0	-0.100	<1.0
Bismuth	20	2.3				
Boron	100	2.3				
Cadmium	3.0	.3	-0.100	<3.0	0.00	<3.0
Calcium	5000	6.6	4.60	<5000	7.40	<5000
Cerium	100					
Chromium	10	.3	-0.100	<10	0.00	<10
Cobalt	50	.4	0.00	<50	0.00	<50
Copper	10	.8	anr			
Iron	100	5.3	0.200	<100	0.300	<100
Lead	3.0	1.1	-0.200	<3.0	0.400	<3.0
Lithium	50	4.8				
Magnesium	5000	32	-15.7	<5000	0.900	<5000
Manganese	15	.1	0.00	<15	0.100	<15
Molybdenum	20	.6				
Nickel	10	.4	-0.300	<10	0.600	<10
Phosphorus	50	1.2				
Potassium	10000	77	-12.9	<10000	19.0	<10000
Selenium	10	3.2	0.300	<10	0.300	<10
Silicon	200	1.7				
Silver	10	1	-0.500	<10	-0.700	<10
Sodium	10000	34	8.00	<10000	6.90	<10000
Strontium	10	.3				
Sulfur	50	3				
Thallium	10	1.8	0.300	<10	-0.500	<10
Tin	10	.8				
Titanium	10	.5				
Tungsten	50	2.6				
Vanadium	50	.6	0.100	<50	-0.200	<50

10.4.3  
10



BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050824M2.ICP Date Analyzed: 05/08/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: result < RL Run ID: MA56037 Units: ug/l

Time:			18:51		19:51	
Sample ID:			CCB4		CCB5	
Metal	RL	IDL	raw	final	raw	final

Zinc	20	.1	-0.100	<20	-0.100	<20
Zirconium	10	.3				
(*) Outside of QC limits						
(anr) Analyte not requested						

10.4.3  
 10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial Continuing Calibration Check

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050824M2.ICP      Date Analyzed: 05/08/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: to % Recovery      Run ID: MA56037      Units: ug/l

Time:	Sample ID:	ICCV	16:08 ICCV1	Results	% Rec
Metal	True				
Aluminum	40000		39300		98.3
Antimony	2000		2020		101.0
Arsenic	2000		2020		101.0
Barium	2000		1980		99.0
Beryllium	2000		2040		102.0
Bismuth					
Boron					
Cadmium	2000		2050		102.5
Calcium	40000		40000		100.0
Cerium					
Chromium	2000		2030		101.5
Cobalt	2000		2030		101.5
Copper	anr				
Iron	40000		40400		101.0
Lead	2000		2020		101.0
Lithium					
Magnesium	40000		40000		100.0
Manganese	2000		2040		102.0
Molybdenum					
Nickel	2000		2030		101.5
Phosphorus					
Potassium	40000		39400		98.5
Selenium	2000		2040		102.0
Silicon					
Silver	250		241		96.4
Sodium	40000		40100		100.3
Strontium					
Sulfur					
Thallium	2000		2020		101.0
Tin					
Titanium					
Tungsten					
Vanadium	2000		2010		100.5

10.4.4  
10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial Continuing Calibration Check

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050824M2.ICP Date Analyzed: 05/08/24 Methods: EPA 200.7, SW846 6010D  
QC Limits: to % Recovery Run ID: MA56037 Units: ug/l

Time:	16:08
Sample ID: ICCV	ICCV1
Metal	True
Results	% Rec

Zinc 2000 2060 103.0

Zirconium

(\* ) Outside of QC limits  
(anr) Analyte not requested

10.4.4  
10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050824M2.ICP      Date Analyzed: 05/08/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56037      Units: ug/l

Metal	Time:	15:56			16:20			16:56		
	Sample ID:	ICV	ICV1	CCV	CCV1	CCV	CCV2	CCV	CCV2	% Rec
	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec	
Aluminum	40000	39300	98.3	40000	39400	98.5	40000	39800	99.5	
Antimony	2000	2020	101.0	2000	2010	100.5	2000	2010	100.5	
Arsenic	2000	1970	98.5	2000	2020	101.0	2000	2000	100.0	
Barium	2000	1960	98.0	2000	1980	99.0	2000	2000	100.0	
Beryllium	2000	2030	101.5	2000	2040	102.0	2000	2020	101.0	
Bismuth										
Boron										
Cadmium	2000	2030	101.5	2000	2050	102.5	2000	2040	102.0	
Calcium	40000	40200	100.5	40000	40100	100.3	40000	40300	100.8	
Cerium										
Chromium	2000	2000	100.0	2000	2030	101.5	2000	2020	101.0	
Cobalt	2000	2050	102.5	2000	2030	101.5	2000	2020	101.0	
Copper	anr									
Iron	40000	40400	101.0	40000	40400	101.0	40000	39900	99.8	
Lead	2000	1990	99.5	2000	2020	101.0	2000	2020	101.0	
Lithium										
Magnesium	40000	40200	100.5	40000	40000	100.0	40000	39700	99.3	
Manganese	2000	2030	101.5	2000	2030	101.5	2000	2060	103.0	
Molybdenum										
Nickel	2000	1990	99.5	2000	2030	101.5	2000	2020	101.0	
Phosphorus										
Potassium	40000	38900	97.3	40000	39400	98.5	40000	39400	98.5	
Selenium	2000	1960	98.0	2000	2030	101.5	2000	2020	101.0	
Silicon										
Silver	250	249	99.6	250	239	95.6	250	242	96.8	
Sodium	40000	39500	98.8	40000	40100	100.3	40000	39800	99.5	
Strontium										
Sulfur										
Thallium	2000	1970	98.5	2000	2060	103.0	2000	2070	103.5	
Tin										
Titanium										
Tungsten										
Vanadium	2000	1950	97.5	2000	2000	100.0	2000	2020	101.0	

10.4.5 10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050824M2.ICP      Date Analyzed: 05/08/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56037      Units: ug/l

	Time:		15:56		16:20		16:56		
Sample ID:	ICV	ICV1	CCV	CCV1	CCV	CCV2	Results	% Rec	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec

Zinc	2000	2040	102.0	2000	2060	103.0	2000	2060	103.0
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Zirconium

(\* ) Outside of QC limits  
(anr) Analyte not requested

10.4.5  
10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050824M2.ICP      Date Analyzed: 05/08/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56037      Units: ug/l

Metal	Time:	17:56			18:46			19:46		
	Sample ID:	CCV	CCV3	% Rec	CCV	CCV4	% Rec	CCV	CCV5	% Rec
Aluminum	40000	41300	103.3	40000	41900	104.8	40000	43000	107.5	
Antimony	2000	2060	103.0	2000	2080	104.0	2000	2110	105.5	
Arsenic	2000	1990	99.5	2000	1970	98.5	2000	1930	96.5	
Barium	2000	2090	104.5	2000	2130	106.5	2000	2160	108.0	
Beryllium	2000	2020	101.0	2000	2000	100.0	2000	1990	99.5	
Bismuth										
Boron										
Cadmium	2000	2040	102.0	2000	2030	101.5	2000	2010	100.5	
Calcium	40000	41000	102.5	40000	40600	101.5	40000	40100	100.3	
Cerium										
Chromium	2000	2020	101.0	2000	2020	101.0	2000	2010	100.5	
Cobalt	2000	2020	101.0	2000	2020	101.0	2000	2010	100.5	
Copper	anr									
Iron	40000	39300	98.3	40000	38900	97.3	40000	38300	95.8	
Lead	2000	2020	101.0	2000	2020	101.0	2000	2020	101.0	
Lithium										
Magnesium	40000	39200	98.0	40000	39000	97.5	40000	38700	96.8	
Manganese	2000	2120	106.0	2000	2100	105.0	2000	2070	103.5	
Molybdenum										
Nickel	2000	2020	101.0	2000	2010	100.5	2000	1990	99.5	
Phosphorus										
Potassium	40000	40200	100.5	40000	40800	102.0	40000	41600	104.0	
Selenium	2000	2020	101.0	2000	2010	100.5	2000	1990	99.5	
Silicon										
Silver	250	252	100.8	250	259	103.6	250	267	106.8	
Sodium	40000	39500	98.8	40000	38900	97.3	40000	37900	94.8	
Strontium										
Sulfur										
Thallium	2000	2000	100.0	2000	1970	98.5	2000	1930	96.5	
Tin										
Titanium										
Tungsten										
Vanadium	2000	2090	104.5	2000	2130	106.5	2000	2160	108.0	

10.4.5 10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050824M2.ICP      Date Analyzed: 05/08/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56037      Units: ug/l

	Time:									
Sample ID:	CCV	17:56 CCV3		CCV	18:46 CCV4		CCV	19:46 CCV5		
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec	

Zinc	2000	2040	102.0	2000	2040	102.0	2000	2040	102.0	
------	------	------	-------	------	------	-------	------	------	-------	--

Zirconium

(\*) Outside of QC limits  
(anr) Analyte not requested

10.4.5  
10

HIGH STANDARD CHECK SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050824M2.ICP Date Analyzed: 05/08/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: 90 to 110 % Recovery Run ID: MA56037 Units: ug/l

Time:	16:45			16:51		
Sample ID:	HSTD	HSTD1		HSTD	HSTD2	
Metal	True	Results	% Rec	True	Results	% Rec
Aluminum				300000	304000	101.3
Antimony	8000	7900	98.8			
Arsenic	8000	7780	97.3			
Barium	8000	7960	99.5			
Beryllium	8000	7970	99.6			
Bismuth						
Boron						
Cadmium	8000	7560	94.5			
Calcium				200000	195000	97.5
Cerium						
Chromium	8000	8120	101.5			
Cobalt	8000	7890	98.6			
Copper	anr					
Iron				200000	191000	95.5
Lead	8000	8040	100.5			
Lithium						
Magnesium				300000	299000	99.7
Manganese	8000	8150	101.9			
Molybdenum						
Nickel	8000	7920	99.0			
Phosphorus						
Potassium				200000	198000	99.0
Selenium	8000	7850	98.1			
Silicon						
Silver	625	610	97.6			
Sodium				200000	195000	97.5
Strontium						
Sulfur						
Thallium	8000	8000	100.0			
Tin						
Titanium						
Tungsten						
Vanadium	8000	8090	101.1			

10.4.6  
10



HIGH STANDARD CHECK SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050824M2.ICP Date Analyzed: 05/08/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: 90 to 110 % Recovery Run ID: MA56037 Units: ug/l

	Time:	16:45		16:51	
Sample ID:	HSTD	HSTD1	HSTD	HSTD2	
Metal	True	Results	% Rec	True	Results

Zinc 8000 8180 102.3

Zirconium

(\* ) Outside of QC limits  
 (anr) Analyte not requested

10.4.6  
**10**

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050824M2.ICP Date Analyzed: 05/08/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: CRI 80-120% CRIA 80-120% Run ID: MA56037 Units: ug/l

Time:				16:25			16:30		
Sample ID:	CRI	CRIA	CRID	CRID1	% Rec	CRID1	% Rec		
Metal	True	True	True	Results	% Rec	Results	% Rec		
Aluminum	200	500	100	201	100.5	95.8	95.8		
Antimony	6.0	20	3.0	5.50	91.7				
Arsenic	8.0	20	3.0	9.20	115.0	3.40	113.3		
Barium	200		4.0	190	95.0	4.00	100.0		
Beryllium	2.0		1.0	1.80	90.0	1.00	100.0		
Bismuth	20								
Boron	100		10						
Cadmium	3.0		1.0	3.20	106.7	1.00	100.0		
Calcium	5000	2000	1000	5010	100.2	1010	101.0		
Cerium									
Chromium	10		2.0	10.0	100.0	2.00	100.0		
Cobalt	50		3.0	49.1	98.2	2.90	96.7		
Copper	10		2.0	anr					
Iron	100	500		97.3	97.3				
Lead	3.0	20	2.5	2.40	80.0				
Lithium	50								
Magnesium	5000	2000	100	5120	102.4	95.8	95.8		
Manganese	15		3.0	15.4	102.7	3.20	106.7		
Molybdenum	20								
Nickel	10		4.0	9.60	96.0	4.40	110.0		
Phosphorus	50								
Potassium	5000		2000	4710	94.2	1860	93.0		
Selenium	10	20	5.0	10.8	108.0				
Silicon	200								
Silver	5.0		2.0	4.10	82.0				
Sodium	5000		1000	4940	98.8	987	98.7		
Strontium	10								
Sulfur	50								
Thallium	10		2.0	11.5	115.0	2.20	110.0		
Tin	10								
Titanium	10								
Tungsten	50								
Vanadium	50		2.0	48.5	97.0				

10.4.7  
10

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050824M2.ICP Date Analyzed: 05/08/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: CRI 80-120% CRIA 80-120% Run ID: MA56037 Units: ug/l

Time:				16:25		16:30	
Sample ID:	CRI	CRIA	CRID	CR11	% Rec	CRID1	% Rec

Metal	True	True	True	Results	% Rec	Results	% Rec
Zinc	20		10	21.0	105.0	10.9	109.0
Zirconium	10						

(\* ) Outside of QC limits  
 (anr) Analyte not requested

10.4.7  
**10**

INTERFERING ELEMENT CHECK STANDARDS SUMMARY  
Part 1 - ICSA and ICSAB Standards

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050824M2.ICP Date Analyzed: 05/08/24 Methods: EPA 200.7, SW846 6010D  
QC Limits: 80 to 120 % Recovery Run ID: MA56037 Units: ug/l

Metal	Time:		16:35		16:40	
	Sample ID:	ICSAB	ICSAB	% Rec	ICSAB1	% Rec
Aluminum	500000	500000	488000	97.6	497000	99.4
Antimony		1000	1.10		1000	100.0
Arsenic		1000	2.60		963	96.3
Barium		500	6.30		503	100.6
Beryllium		500	0.00		491	98.2
Bismuth		500	-7.20		491	98.2
Boron		500	0.500		485	97.0
Cadmium		1000	-1.00		1060	106.0
Calcium	400000	400000	374000	93.5	380000	95.0
Cerium			60.6		61.3	
Chromium		500	1.30		476	95.2
Cobalt		500	1.40		491	98.2
Copper		500	8.90		504	100.8
Iron	200000	200000	187000	93.5	187000	93.5
Lead		1000	1.70		950	95.0
Lithium		500	3.80		523	104.6
Magnesium	500000	500000	499000	99.8	496000	99.2
Manganese		500	1.60		522	104.4
Molybdenum		500	2.30		466	93.2
Nickel		1000	-4.20		937	93.7
Phosphorus		500	-19.1		439	87.8
Potassium			-402		-351	
Selenium		1000	1.00		946	94.6
Silicon		500	10.5		573	114.6
Silver		1000	-0.600		1100	110.0
Sodium			106		118	
Strontium		500	-2.80		496	99.2
Sulfur		500	-7.20		477	95.4
Thallium		1000	-2.60		895	89.5
Tin		500	-2.00		462	92.4
Titanium		500	-1.60		469	93.8
Tungsten		500	3.70		440	88.0
Vanadium		500	14.5		510	102.0

10.4.8  
10

INTERFERING ELEMENT CHECK STANDARDS SUMMARY  
 Part 1 - ICSA and ICSAB Standards

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SC050824M2.ICP Date Analyzed: 05/08/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: 80 to 120 % Recovery Run ID: MA56037 Units: ug/l

Time:			16:35		16:40	
Sample ID:	ICSA	ICSAB	ICSAL	% Rec	ICSAB1	% Rec
Metal	True	True	Results		Results	

Zinc		1000	2.60		956	95.6
Zirconium		500	-0.100		468	93.6

(\*) Outside of QC limits  
 (anr) Analyte not requested

10.4.8  
 10

SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
Analyst: KP Run ID: MA56048  
Parameters: Cu

Time	Sample Description	Dilution Factor	PS Recov	Comments
16:36	MA56048-STD1	1		STDA
16:41	MA56048-STD2	1		STDB
16:47	MA56048-ICV1	1		
16:53	MA56048-ICB1	1		
16:59	MA56048-ICCV1	1		
17:08	MA56048-CCB1	1		
17:13	MA56048-CRI1	1		
17:18	MA56048-CRID1	1		
17:23	MA56048-ICSA1	1		
17:28	MA56048-ICSAB1	1		
17:34	MA56048-HSTD1	1		
17:40	MA56048-HSTD2	1		
17:45	ZZZZZZ	1		
17:50	MA56048-CRID2	1		
17:55	ZZZZZZ	1		
18:00	ZZZZZZ	1		
18:05	MA56048-CCV1	1		
18:11	MA56048-CCB2	1		
18:16	ZZZZZZ	1		
18:21	ZZZZZZ	1		
18:26	MP46413-S2	1		Ca high
18:32	JD87650-5	1		(sample used for QC only; not part of login JD87833)
18:37	MP46413-SD1	5		bad dilution
18:42	MP46413-PS1	1		
18:48	ZZZZZZ	1		
18:52	ZZZZZZ	1		
18:57	ZZZZZZ	1		
19:02	ZZZZZZ	1		
19:07	MA56048-CCV2	1		
19:13	MA56048-CCB3	1		
19:18	ZZZZZZ	1		
19:23	ZZZZZZ	1		
19:28	ZZZZZZ	1		

10.5  
10

SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP      Date Analyzed: 05/09/24      Methods: EPA 200.7, SW846 6010D  
Analyst: KP      Run ID: MA56048  
Parameters: Cu

Time	Sample Description	Dilution Factor	PS Recov	Comments
19:33	ZZZZZZ	1		
19:38	ZZZZZZ	1		
19:43	MP46425-S1	2		
19:48	MP46425-S2	2		
19:53	JD87761-2	2		(sample used for QC only; not part of login JD87833)
19:58	MP46425-SD1	10		
20:03	ZZZZZZ	1		
20:08	MA56048-CCV3	1		
20:14	MA56048-CCB4	1		
20:19	ZZZZZZ	1		
20:24	ZZZZZZ	5		
20:29	ZZZZZZ	1		
20:34	ZZZZZZ	1		
20:39	ZZZZZZ	1		
20:44	ZZZZZZ	1		
20:49	ZZZZZZ	1		
20:54	ZZZZZZ	1		
20:59	ZZZZZZ	1		
21:04	ZZZZZZ	5		
21:09	MA56048-CCV4	1		
21:14	MA56048-CCB5	1		
21:19	ZZZZZZ	1		
21:24	ZZZZZZ	1		
21:30	ZZZZZZ	1		
21:35	ZZZZZZ	1		
21:40	ZZZZZZ	1		
21:45	ZZZZZZ	2		
21:50	ZZZZZZ	1		
21:55	ZZZZZZ	1		
22:00	ZZZZZZ	1		
22:05	ZZZZZZ	1		
22:10	MA56048-CCV5	1		
22:15	MA56048-CCB6	1		

10.5  
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SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
Analyst: KP Run ID: MA56048  
Parameters: Cu

Time	Sample Description	Dilution Factor	PS Recov	Comments
22:20	ZZZZZZ	1		
22:25	ZZZZZZ	1		
22:30	MP46460-MB1	1		
22:35	MP46460-B1	1		fe high
22:40	MP46460-S1	1		
22:46	MP46460-S2	1		
22:51	JD87754-1	1		(sample used for QC only; not part of login JD87833)
22:56	MP46460-SD1	5		
23:01	ZZZZZZ	1		
23:07	ZZZZZZ	1		
23:12	MA56048-CCV6	1		
23:17	MA56048-CCB7	1		
23:22	ZZZZZZ	1		
23:27	ZZZZZZ	1		
23:32	ZZZZZZ	1		
23:37	ZZZZZZ	1		
23:42	ZZZZZZ	1		
23:47	ZZZZZZ	1		
23:52	ZZZZZZ	1		
23:57	ZZZZZZ	2		
00:02	ZZZZZZ	1		
00:07	ZZZZZZ	1		
00:12	MA56048-CCV7	1		
00:18	MA56048-CCB8	1		
00:23	MP46461-S1	1		FE high
00:29	MP46461-S2	1		FE high
00:34	MP46461-LC1	1		
00:40	MP46461-LC2	1		
00:45	JD87766-1	1		(sample used for QC only; not part of login JD87833)
00:51	MP46461-SD1	5		FE high
00:56	MP46461-PS1	1		
01:01	ZZZZZZ	1		
01:07	ZZZZZZ	1		

10.5  
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SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
Analyst: KP Run ID: MA56048  
Parameters: Cu

Time	Sample Description	Dilution Factor	PS Recov	Comments
01:12	ZZZZZZ	1		
01:17	MA56048-CCV8	1		
01:22	MA56048-CCB9	1		
01:27	ZZZZZZ	1		
01:32	ZZZZZZ	1		
01:37	ZZZZZZ	1		
01:42	ZZZZZZ	1		
01:47	ZZZZZZ	1		
01:52	ZZZZZZ	1		
01:58	ZZZZZZ	1		
02:03	ZZZZZZ	1		
02:08	ZZZZZZ	1		
02:13	ZZZZZZ	1		
02:18	MA56048-CCV9	1		
02:24	MA56048-CCB10	1		
02:29	ZZZZZZ	1		
02:34	ZZZZZZ	1		
02:39	ZZZZZZ	1		
02:44	ZZZZZZ	1		
02:49	ZZZZZZ	1		
02:54	ZZZZZZ	1		
02:59	MP46462-MB1	1		
03:04	MP46462-B1	1		
03:09	MP46462-S1	1		FE high
03:15	MP46462-S2	1		FE high
03:20	MA56048-CCV10	1		
03:26	MA56048-CCB11	1		
03:31	JD87757-3	1		(sample used for QC only; not part of login JD87833)
03:36	MP46462-SD1	5		FE high
03:41	MP46462-PS1	1		
03:47	ZZZZZZ	1		
03:52	ZZZZZZ	1		
03:57	ZZZZZZ	1		

10.5  
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SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
Analyst: KP Run ID: MA56048  
Parameters: Cu

Time	Sample Description	Dilution Factor	PS Recov	Comments
04:02	ZZZZZZ	1		
04:07	ZZZZZZ	1		
04:12	ZZZZZZ	1		
04:17	ZZZZZZ	1		
04:22	MA56048-CCV11	1		
04:27	MA56048-CCB12	1		
04:32	ZZZZZZ	1		
04:37	ZZZZZZ	1		
04:42	ZZZZZZ	1		
04:47	ZZZZZZ	1		
04:52	ZZZZZZ	1		
04:57	ZZZZZZ	1		
05:03	MP46463-MB1	1		
05:08	MP46463-B1	1		
05:13	MP46463-S1	1		
05:18	MP46463-S2	1		FE high
05:24	MA56048-CCV12	1		
05:29	MA56048-CCB13	1		
05:34	JD87808-18	1		(sample used for QC only; not part of login JD87833)
05:39	MP46463-SD1	5		
05:44	MP46463-PS1	1		
05:49	ZZZZZZ	1		
05:54	ZZZZZZ	1		
05:59	ZZZZZZ	1		
06:04	ZZZZZZ	1		
06:09	ZZZZZZ	1		
06:14	ZZZZZZ	1		
06:19	ZZZZZZ	1		
06:23	MA56048-CCV13	1		
06:29	MA56048-CCB14	1		
06:34	ZZZZZZ	1		
06:39	ZZZZZZ	1		
06:44	ZZZZZZ	1		

10.5  
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SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
Analyst: KP Run ID: MA56048  
Parameters: Cu

Time	Sample Description	Dilution Factor	PS Recov	Comments
06:48	ZZZZZZ	1		
06:53	ZZZZZZ	1		
06:58	ZZZZZZ	1		
07:03	ZZZZZZ	1		
07:08	ZZZZZZ	1		
07:13	ZZZZZZ	1		
07:18	ZZZZZZ	1		
07:23	MA56048-CCV14	1		
07:28	MA56048-CCB15	1		
07:33	ZZZZZZ	1		
07:38	ZZZZZZ	1		
07:43	MP46431-S1	1		
07:48	MP46431-S2	1		
----->	Last reportable sample/prep for job JD87833			
07:54	ZZZZZZ	1		
07:59	ZZZZZZ	1		
08:04	ZZZZZZ	1		
08:10	ZZZZZZ	2.5		
08:15	ZZZZZZ	1		
08:20	MA56048-CCV15	1		
08:25	MA56048-CCB16	1		
----->	Last reportable CCB for job JD87833			
08:30	ZZZZZZ	1		
08:35	ZZZZZZ	1		
08:40	ZZZZZZ	1		
08:45	ZZZZZZ	1		
08:51	ZZZZZZ	5		
08:55	ZZZZZZ	5		
09:01	ZZZZZZ	1		
09:06	ZZZZZZ	1		
09:11	MA56048-CCV16	1		
09:27	MA56048-CCB17	1		
09:32	ZZZZZZ	10		
09:37	MP46481-S1	1		
09:42	MP46481-S2	1		

10.5  
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SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP      Date Analyzed: 05/09/24      Methods: EPA 200.7, SW846 6010D  
Analyst: KP      Run ID: MA56048  
Parameters: Cu

Time	Sample Description	Dilution Factor	PS Recov	Comments
09:47	ZZZZZZ	1		
09:52	ZZZZZZ	5		
09:57	ZZZZZZ	5		
10:02	MP46481-PS1	1		
10:07	ZZZZZZ	1		
10:12	ZZZZZZ	1		
10:17	ZZZZZZ	1		
10:22	MA56048-CCV17	1		
10:28	MA56048-CCB18	1		
10:33	ZZZZZZ	1		
11:21	JD87937-7	1		(sample used for QC only; not part of login JD87833)
11:26	MP46481-SD1	5		
11:31	MA56048-CCV18	1		
11:36	MA56048-CCV19	1		
11:43	MA56048-CCB19	1		

Refer to raw data for calibration curve and standards.

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REPORTED ELEMENTS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: KP Run ID: MA56048  
 Parameters: Cu

Time	Sample Description	Dilution	Element: C u
16:47	MA56048-ICV1	1	X
16:53	MA56048-ICB1	1	X
16:59	MA56048-ICCV1	1	X
17:08	MA56048-CCB1	1	X
17:13	MA56048-CRI1	1	X
17:18	MA56048-CRID1	1	X
17:23	MA56048-ICSA1	1	X
17:28	MA56048-ICSAB1	1	X
17:34	MA56048-HSTD1	1	X
17:40	MA56048-HSTD2	1	X
17:45	ZZZZZZ	1	
17:50	MA56048-CRID2	1	X
17:55	ZZZZZZ	1	
18:00	ZZZZZZ	1	
18:05	MA56048-CCV1	1	X
18:11	MA56048-CCB2	1	X
18:16	ZZZZZZ	1	
18:21	ZZZZZZ	1	
18:26	MP46413-S2	1	X
18:32	JD87650-5	1	
18:37	MP46413-SD1	5	bad dilution
18:42	MP46413-PS1	1	
18:48	ZZZZZZ	1	
18:52	ZZZZZZ	1	
18:57	ZZZZZZ	1	
19:02	ZZZZZZ	1	
19:07	MA56048-CCV2	1	X
19:13	MA56048-CCB3	1	X
19:18	ZZZZZZ	1	
19:23	ZZZZZZ	1	
19:28	ZZZZZZ	1	
19:33	ZZZZZZ	1	
19:38	ZZZZZZ	1	

10.5.1  
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REPORTED ELEMENTS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: KP Run ID: MA56048  
 Parameters: Cu

Time	Sample Description	Element: C Dilution u
19:43	MP46425-S1	2
19:48	MP46425-S2	2
19:53	JD87761-2	2 (a)
19:58	MP46425-SD1	10
20:03	ZZZZZZ	1
20:08	MA56048-CCV3	1 X
20:14	MA56048-CCB4	1 X
20:19	ZZZZZZ	1
20:24	ZZZZZZ	5
20:29	ZZZZZZ	1
20:34	ZZZZZZ	1
20:39	ZZZZZZ	1
20:44	ZZZZZZ	1
20:49	ZZZZZZ	1
20:54	ZZZZZZ	1
20:59	ZZZZZZ	1
21:04	ZZZZZZ	5
21:09	MA56048-CCV4	1 X
21:14	MA56048-CCB5	1 X
21:19	ZZZZZZ	1
21:24	ZZZZZZ	1
21:30	ZZZZZZ	1
21:35	ZZZZZZ	1
21:40	ZZZZZZ	1
21:45	ZZZZZZ	2
21:50	ZZZZZZ	1
21:55	ZZZZZZ	1
22:00	ZZZZZZ	1
22:05	ZZZZZZ	1
22:10	MA56048-CCV5	1 X
22:15	MA56048-CCB6	1 X
22:20	ZZZZZZ	1
22:25	ZZZZZZ	1

Element: C  
u

10.5.1  
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REPORTED ELEMENTS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: KP Run ID: MA56048  
 Parameters: Cu

Time	Sample Description	Element: C Dilution	u
22:30	MP46460-MB1	1	X
22:35	MP46460-B1	1	X
22:40	MP46460-S1	1	X
22:46	MP46460-S2	1	X
22:51	JD87754-1	1	X (a)
22:56	MP46460-SD1	5	X
23:01	ZZZZZ	1	
23:07	ZZZZZ	1	
23:12	MA56048-CCV6	1	X
23:17	MA56048-CCB7	1	X
23:22	ZZZZZ	1	
23:27	ZZZZZ	1	
23:32	ZZZZZ	1	
23:37	ZZZZZ	1	
23:42	ZZZZZ	1	
23:47	ZZZZZ	1	
23:52	ZZZZZ	1	
23:57	ZZZZZ	2	
00:02	ZZZZZ	1	
00:07	ZZZZZ	1	
00:12	MA56048-CCV7	1	X
00:18	MA56048-CCB8	1	X
00:23	MP46461-S1	1	X
00:29	MP46461-S2	1	X
00:34	MP46461-LC1	1	
00:40	MP46461-LC2	1	X
00:45	JD87766-1	1	(a)
00:51	MP46461-SD1	5	X
00:56	MP46461-PS1	1	
01:01	ZZZZZ	1	
01:07	ZZZZZ	1	
01:12	ZZZZZ	1	
01:17	MA56048-CCV8	1	X
		Element: C	u

10.5.1  
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REPORTED ELEMENTS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: KP Run ID: MA56048  
 Parameters: Cu

Time	Sample Description	Element: C Dilution u	
01:22	MA56048-CCB9	1	X
01:27	ZZZZZZ	1	
01:32	ZZZZZZ	1	
01:37	ZZZZZZ	1	
01:42	ZZZZZZ	1	
01:47	ZZZZZZ	1	
01:52	ZZZZZZ	1	
01:58	ZZZZZZ	1	
02:03	ZZZZZZ	1	
02:08	ZZZZZZ	1	
02:13	ZZZZZZ	1	
02:18	MA56048-CCV9	1	X
02:24	MA56048-CCB10	1	X
02:29	ZZZZZZ	1	
02:34	ZZZZZZ	1	
02:39	ZZZZZZ	1	
02:44	ZZZZZZ	1	
02:49	ZZZZZZ	1	
02:54	ZZZZZZ	1	
02:59	MP46462-MB1	1	X
03:04	MP46462-B1	1	X
03:09	MP46462-S1	1	X
03:15	MP46462-S2	1	X
03:20	MA56048-CCV10	1	X
03:26	MA56048-CCB11	1	X
03:31	JD87757-3	1	X (a)
03:36	MP46462-SD1	5	X
03:41	MP46462-PS1	1	
03:47	ZZZZZZ	1	
03:52	ZZZZZZ	1	
03:57	ZZZZZZ	1	
04:02	ZZZZZZ	1	
04:07	ZZZZZZ	1	

Element: C  
u

10.5.1  
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REPORTED ELEMENTS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: KP Run ID: MA56048  
 Parameters: Cu

Time	Sample Description	Element: C Dilution u	
04:12	ZZZZZZ	1	
04:17	ZZZZZZ	1	
04:22	MA56048-CCV11	1	X
04:27	MA56048-CCB12	1	X
04:32	ZZZZZZ	1	
04:37	ZZZZZZ	1	
04:42	ZZZZZZ	1	
04:47	ZZZZZZ	1	
04:52	ZZZZZZ	1	
04:57	ZZZZZZ	1	
05:03	MP46463-MB1	1	X
05:08	MP46463-B1	1	X
05:13	MP46463-S1	1	X
05:18	MP46463-S2	1	X
05:24	MA56048-CCV12	1	X
05:29	MA56048-CCB13	1	X
05:34	JD87808-18	1	X (a)
05:39	MP46463-SD1	5	X
05:44	MP46463-PS1	1	
05:49	ZZZZZZ	1	
05:54	ZZZZZZ	1	
05:59	ZZZZZZ	1	
06:04	ZZZZZZ	1	
06:09	ZZZZZZ	1	
06:14	ZZZZZZ	1	
06:19	ZZZZZZ	1	
06:23	MA56048-CCV13	1	X
06:29	MA56048-CCB14	1	X
06:34	ZZZZZZ	1	
06:39	ZZZZZZ	1	
06:44	ZZZZZZ	1	
06:48	ZZZZZZ	1	
06:53	ZZZZZZ	1	

Element: C  
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10.5.1  
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REPORTED ELEMENTS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: KP Run ID: MA56048  
 Parameters: Cu

Time	Sample Description	Dilution	Element: C
06:58	ZZZZZZ	1	
07:03	ZZZZZZ	1	
07:08	ZZZZZZ	1	
07:13	ZZZZZZ	1	
07:18	ZZZZZZ	1	
07:23	MA56048-CCV14	1	X
07:28	MA56048-CCB15	1	X
07:33	ZZZZZZ	1	
07:38	ZZZZZZ	1	
07:43	MP46431-S1	1	X
07:48	MP46431-S2	1	X
07:54	ZZZZZZ	1	
07:59	ZZZZZZ	1	
08:04	ZZZZZZ	1	
08:10	ZZZZZZ	2.5	
08:15	ZZZZZZ	1	
08:20	MA56048-CCV15	1	X
08:25	MA56048-CCB16	1	X
08:30	ZZZZZZ	1	
08:35	ZZZZZZ	1	
08:40	ZZZZZZ	1	
08:45	ZZZZZZ	1	
08:51	ZZZZZZ	5	
08:55	ZZZZZZ	5	
09:01	ZZZZZZ	1	
09:06	ZZZZZZ	1	
09:11	MA56048-CCV16	1	X
09:27	MA56048-CCB17	1	X
09:32	ZZZZZZ	10	
09:37	MP46481-S1	1	
09:42	MP46481-S2	1	
09:47	ZZZZZZ	1	
09:52	ZZZZZZ	5	

Element: C  
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10.5.1  
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REPORTED ELEMENTS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: KP Run ID: MA56048  
 Parameters: Cu

Time	Sample Description	Element: C Dilution u	
09:57	ZZZZZZ	5	
10:02	MP46481-PS1	1	
10:07	ZZZZZZ	1	
10:12	ZZZZZZ	1	
10:17	ZZZZZZ	1	
10:22	MA56048-CCV17	1	X
10:28	MA56048-CCB18	1	X
10:33	ZZZZZZ	1	
11:21	JD87937-7	1	(a)
11:26	MP46481-SD1	5	
11:31	MA56048-CCV18	1	
11:36	MA56048-CCV19	1	X
11:43	MA56048-CCB19	1	X

(a) Sample used for QC only; not part of login JD87833.

Element: C  
u

10.5.1  
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INTERNAL STANDARD SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: KP Run ID: MA56048  
 Parameters: Cu

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
16:36	MA56048-STD1	9371 R	250780 R	21267 R	19475 R
16:41	MA56048-STD2	8540	227640	20476	16296
16:47	MA56048-ICV1	8825	235820	20878	16954
16:53	MA56048-ICB1	9402	276980	21726	19490
16:59	MA56048-ICCV1	8885	236280	21046	17033
17:08	MA56048-CCB1	9409	251650	21568	19508
17:13	MA56048-CRI1	9185	243460	21164	18680
17:18	MA56048-CRID1	No results reported for the elements associated with this internal standard.			
17:23	MA56048-ICSA1	8015	208460	19967	14853
17:28	MA56048-ICSAB1	7958	209720	19649	14805
17:34	MA56048-HSTD1	8981	242870	21056	18259
17:40	MA56048-HSTD2	8071	209550	19587	14858
17:45	ZZZZZ	9141	242280	20759	19011
17:50	MA56048-CRID2	9351	249090	20999	19222
17:55	ZZZZZ	9464	230850	21435	16882
18:00	ZZZZZ	8370	221850	20072	16165
18:05	MA56048-CCV1	8887	235370	20662	16990
18:11	MA56048-CCB2	9408	251160	21130	19426
18:16	ZZZZZ	9526	256050	21662	19791
18:21	ZZZZZ	8983	238120	21577	16306
18:26	MP46413-S2	8925	236840	21597	16200
18:32	JD87650-5	No results reported for the elements associated with this internal standard.			
18:37	MP46413-SD1	No results reported for the elements associated with this internal standard.			
18:42	MP46413-PS1	9122	250290	22435	16782
18:48	ZZZZZ	9458	250470	21897	18648
18:52	ZZZZZ	9709	257150	22707	18689
18:57	ZZZZZ	9690	258090	22551	18956
19:02	ZZZZZ	9377	253500	22458	18154
19:07	MA56048-CCV2	8925	235540	20924	17057
19:13	MA56048-CCB3	9555	253290	21548	19728
19:18	ZZZZZ	9496	254810	22659	18467
19:23	ZZZZZ	9816	259040	23427	18248
19:28	ZZZZZ	9382	249520	22870	17320

10.5.2  
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INTERNAL STANDARD SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: KP Run ID: MA56048  
 Parameters: Cu

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
19:33	ZZZZZZ	9590	257680	23138	17948
19:38	ZZZZZZ	9830	249960	22758	20574
19:43	MP46425-S1	8964	238820	21743	17060
19:48	MP46425-S2	8957	239460	21826	17035
19:53	JD87761-2	8996	239100	21924	17321
19:58	MP46425-SD1	9284	245170	21614	18579
20:03	ZZZZZZ	9591	255290	22014	19851
20:08	MA56048-CCV3	8963	236750	21031	17197
20:14	MA56048-CCB4	9544	252670	21555	19762
20:19	ZZZZZZ	9537	247560	22366	18126
20:24	ZZZZZZ	9555	253060	21833	18996
20:29	ZZZZZZ	9425	249610	21332	19499
20:34	ZZZZZZ	9197	243320	21314	18598
20:39	ZZZZZZ	9027	242320	21241	18220
20:44	ZZZZZZ	9159	241680	21240	18553
20:49	ZZZZZZ	9700	259400	22388	20171
20:54	ZZZZZZ	9472	249180	22953	17331
20:59	ZZZZZZ	8984	234450	21877	16119
21:04	ZZZZZZ	9294	244590	21601	17897
21:09	MA56048-CCV4	8979	235150	20939	17256
21:14	MA56048-CCB5	9553	253170	21457	19781
21:19	ZZZZZZ	9835	258130	22608	19224
21:24	ZZZZZZ	10095	262860	23795	18475
21:30	ZZZZZZ	9902	260310	23307	19014
21:35	ZZZZZZ	10192	264800	24185	18363
21:40	ZZZZZZ	9626	252500	22602	18255
21:45	ZZZZZZ	9554	250850	22173	18545
21:50	ZZZZZZ	9793	255680	22958	18278
21:55	ZZZZZZ	9606	250480	22590	18300
22:00	ZZZZZZ	9771	253820	22884	18268
22:05	ZZZZZZ	9631	250070	22595	18499
22:10	MA56048-CCV5	8964	234330	20921	17184
22:15	MA56048-CCB6	9577	250830	21634	19811

10.5.2  
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INTERNAL STANDARD SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: KP Run ID: MA56048  
 Parameters: Cu

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
22:20	ZZZZZZ	9635	250300	22425	18413
22:25	ZZZZZZ	9847	257150	23055	18581
22:30	MP46460-MB1	9753	255890	22383	20200
22:35	MP46460-B1	8954	234080	21009	17393
22:40	MP46460-S1	9399	245370	22223	17257
22:46	MP46460-S2	9391	244110	22224	17212
22:51	JD87754-1	9940	257590	23258	18532
22:56	MP46460-SD1	9728	254160	21845	19235
23:01	ZZZZZZ	9547	248850	22749	17652
23:07	ZZZZZZ	9634	251420	22263	18613
23:12	MA56048-CCV6	9065	234050	20793	17262
23:17	MA56048-CCB7	9637	251240	21491	19876
23:22	ZZZZZZ	9771	252990	23084	18408
23:27	ZZZZZZ	9770	254150	23287	18278
23:32	ZZZZZZ	9056	234770	22291	16079
23:37	ZZZZZZ	9639	252600	22567	18671
23:42	ZZZZZZ	9742	254910	22919	18763
23:47	ZZZZZZ	9706	253620	22714	18799
23:52	ZZZZZZ	9761	254680	22784	19076
23:57	ZZZZZZ	9364	244030	22209	17892
00:02	ZZZZZZ	9735	256760	22489	20139
00:07	ZZZZZZ	9308	245970	21720	18132
00:12	MA56048-CCV7	8976	233340	21038	17186
00:18	MA56048-CCB8	9610	250180	21743	19834
00:23	MP46461-S1	9145	239190	22773	16222
00:29	MP46461-S2	8824	232530	22358	15121
00:34	MP46461-LC1	9895	255590	23257	18305
00:40	MP46461-LC2	9787	252840	23164	18126
00:45	JD87766-1	9149	237390	22791	16035
00:51	MP46461-SD1	9336	241470	21829	17851
00:56	MP46461-PS1	9066	235440	22908	15929
01:01	ZZZZZZ	9633	243970	23321	17847
01:07	ZZZZZZ	9836	248330	22775	18258

10.5.2  
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INTERNAL STANDARD SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: KP Run ID: MA56048  
 Parameters: Cu

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
01:12	ZZZZZZ	10117	255960	23516	18407
01:17	MA56048-CCV8	9099	235000	21183	17301
01:22	MA56048-CCB9	9654	252340	21940	19913
01:27	ZZZZZZ	9999	242440	23672	18729
01:32	ZZZZZZ	9056	239270	21673	18300
01:37	ZZZZZZ	10434	244160	24273	18254
01:42	ZZZZZZ	10715	269190	24795	18662
01:47	ZZZZZZ	10532	271580	24742	18403
01:52	ZZZZZZ	9077	238270	22493	16107
01:58	ZZZZZZ	9909	256600	23558	18362
02:03	ZZZZZZ	9567	251170	23434	18238
02:08	ZZZZZZ	9851	251140	22617	18350
02:13	ZZZZZZ	10158	255760	23651	19530
02:18	MA56048-CCV9	9121	236140	21213	17298
02:24	MA56048-CCB10	9744	253200	21815	19959
02:29	ZZZZZZ	9230	269120	22522	17444
02:34	ZZZZZZ	9531	254500	22716	18339
02:39	ZZZZZZ	9604	252190	23213	17921
02:44	ZZZZZZ	9882	256560	22795	19268
02:49	ZZZZZZ	9947	260540	22726	19693
02:54	ZZZZZZ	10017	244830	23406	18962
02:59	MP46462-MB1	9932	257620	22638	20479
03:04	MP46462-B1	9320	240990	21573	18059
03:09	MP46462-S1	9158	238600	22339	16650
03:15	MP46462-S2	9647	250170	23442	17087
03:20	MA56048-CCV10	9172	233370	20909	17391
03:26	MA56048-CCB11	9781	252330	21830	20020
03:31	JD87757-3	9272	242200	22594	17717
03:36	MP46462-SD1	9596	237920	21898	18909
03:41	MP46462-PS1	9063	259780	22323	17221
03:47	ZZZZZZ	9318	239310	22052	17794
03:52	ZZZZZZ	9921	276570	23299	18375
03:57	ZZZZZZ	9802	286130	23080	18227

10.5.2  
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INTERNAL STANDARD SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: KP Run ID: MA56048  
 Parameters: Cu

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
04:02	ZZZZZZ	9777	253100	23262	18045
04:07	ZZZZZZ	9972	255290	23240	18602
04:12	ZZZZZZ	10029	243390	23163	19020
04:17	ZZZZZZ	9749	252080	22874	18272
04:22	MA56048-CCV11	9185	234670	20948	17373
04:27	MA56048-CCB12	9886	251340	21553	20222
04:32	ZZZZZZ	9826	269420	22730	18408
04:37	ZZZZZZ	9804	254010	23007	18278
04:42	ZZZZZZ	10412	253990	23917	18466
04:47	ZZZZZZ	10131	240680	22899	19173
04:52	ZZZZZZ	9764	252670	23118	17720
04:57	ZZZZZZ	9446	238760	22495	16689
05:03	MP46463-MB1	10317	261550	22604	21179
05:08	MP46463-B1	9580	242450	21767	18471
05:13	MP46463-S1	9853	245830	22511	17856
05:18	MP46463-S2	9678	247410	22617	17593
05:24	MA56048-CCV12	9239	240620	20958	17224
05:29	MA56048-CCB13	9910	260340	21409	19989
05:34	JD87808-18	10277	256040	22205	19245
05:39	MP46463-SD1	9972	249620	22179	19703
05:44	MP46463-PS1	9871	246850	22847	18356
05:49	ZZZZZZ	10361	258570	23314	19500
05:54	ZZZZZZ	10816	274940	25123	18939
05:59	ZZZZZZ	10376	262920	23459	20262
06:04	ZZZZZZ	10200	253490	23063	19438
06:09	ZZZZZZ	10188	260640	23306	18966
06:14	ZZZZZZ	10091	259840	22813	19362
06:19	ZZZZZZ	10310	268530	23227	19158
06:23	MA56048-CCV13	9211	234450	21021	17554
06:29	MA56048-CCB14	9835	250780	21778	20269
06:34	ZZZZZZ	10172	254420	23110	19443
06:39	ZZZZZZ	10203	253220	22981	19496
06:44	ZZZZZZ	10171	252380	23150	19129

10.5.2  
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INTERNAL STANDARD SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: KP Run ID: MA56048  
 Parameters: Cu

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
06:48	ZZZZZZ	10171	254420	22847	20074
06:53	ZZZZZZ	10147	253680	23361	19176
06:58	ZZZZZZ	10225	260600	23807	18908
07:03	ZZZZZZ	10102	259400	23173	18647
07:08	ZZZZZZ	10010	304700	22423	19435
07:13	ZZZZZZ	10112	250960	23102	18898
07:18	ZZZZZZ	10146	257960	23145	20299
07:23	MA56048-CCV14	9197	231900	21230	17593
07:28	MA56048-CCB15	9863	250330	21901	20330
07:33	ZZZZZZ	10257	252890	23459	19082
07:38	ZZZZZZ	10352	261390	23740	19596
07:43	MP46431-S1	8963	232030	21424	16658
07:48	MP46431-S2	8987	237340	21205	16578
07:54	ZZZZZZ	9115	238560	21395	16877
07:59	ZZZZZZ	9725	249080	21791	20117
08:04	ZZZZZZ	8368	207660	20258	15398
08:10	ZZZZZZ	9538	241610	21682	18703
08:15	ZZZZZZ	9843	248050	21877	20315
08:20	MA56048-CCV15	9245	232090	21204	17679
08:25	MA56048-CCB16	9883	249480	21751	20348
08:30	ZZZZZZ	9837	245620	21808	20190
08:35	ZZZZZZ	9751	248910	21501	20048
08:40	ZZZZZZ	9646	252120	21510	19601
08:45	ZZZZZZ	9802	255140	21861	19846
08:51	ZZZZZZ	9701	255860	21873	19369
08:55	ZZZZZZ	8811	224040	21486	16473
09:01	ZZZZZZ	9773	248130	23737	17597
09:06	ZZZZZZ	9737	242760	22231	20121
09:11	MA56048-CCV16	9242	232630	21356	17650
09:27	MA56048-CCB17	9797	250770	21999	20121
09:32	ZZZZZZ	9689	256100	21965	19070
09:37	MP46481-S1	9764	257790	22964	18302
09:42	MP46481-S2	9729	247920	22787	18304

10.5.2  
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INTERNAL STANDARD SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: KP Run ID: MA56048  
 Parameters: Cu

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
09:47	ZZZZZZ	9881	250570	23167	18618
09:52	ZZZZZZ	9874	249260	22164	19397
09:57	ZZZZZZ	9622	242870	22078	18727
10:02	MP46481-PS1	9547	244260	22906	18115
10:07	ZZZZZZ	10192	255340	23155	19436
10:12	ZZZZZZ	10011	265260	23163	19809
10:17	ZZZZZZ	9955	252520	23046	18749
10:22	MA56048-CCV17	9233	233070	21229	17518
10:28	MA56048-CCB18	9822	251080	21914	20153
10:33	ZZZZZZ	9776	255300	22141	19891
11:21	JD87937-7	10691	274480	24248	20535
11:26	MP46481-SD1	10556	267320	23192	20919
11:31	MA56048-CCV18	No results reported for the elements associated with this internal standard.			
11:36	MA56048-CCV19	9756	245970	22242	18557
11:43	MA56048-CCB19	10471	266210	23027	21432

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	70-130 %
Istd#2	Yttrium (3600)	70-130 %
Istd#3	Yttrium (3710)	70-130 %
Istd#4	Indium	70-130 %

10.5.2  
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BLANK RESULTS SUMMARY  
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
QC Limits: result < RL Run ID: MA56048 Units: ug/l

Metal	RL	IDL	16:53	17:08		18:11		19:13						
			ICB1	raw	final	CCB1	raw	final	CCB2	raw	final	CCB3	raw	final
Aluminum	200	27	anr											
Antimony	6.0	2.2	anr											
Arsenic	3.0	1.3	anr											
Barium	200	1	anr											
Beryllium	1.0	.2	anr											
Bismuth	20	2.1												
Boron	100	1												
Cadmium	3.0	.2	anr											
Calcium	5000	7.7	anr											
Cerium	100													
Chromium	10	.5	anr											
Cobalt	50	.4	anr											
Copper	10	6.8	-1.50	<10	-0.300	<10	0.500	<10	-0.400	<10				
Iron	100	15	anr											
Lead	3.0	1.6	anr											
Lithium	50	3.7												
Magnesium	5000	54	anr											
Manganese	15	.1	anr											
Molybdenum	20	.5												
Nickel	10	.3	anr											
Phosphorus	50	1.8												
Potassium	10000	77	anr											
Selenium	10	2	anr											
Silicon	200	1.3												
Silver	10	.9	anr											
Sodium	10000	23	anr											
Strontium	10	.4												
Sulfur	50	4.1	anr											
Thallium	10	1.6	anr											
Tin	10	.9												
Titanium	10	.9												
Tungsten	50	2												
Vanadium	50	.8	anr											

10.5.3  
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BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: result < RL Run ID: MA56048 Units: ug/l

Metal	Time: Sample ID:	RL	IDL	16:53	17:08	18:11	19:13		
				ICB1	CCB1	CCB2	CCB3	raw	final
Zinc		20	.2	raw	final	raw	final	raw	final
Zirconium		10	.5						

(\* ) Outside of QC limits  
 (anr) Analyte not requested

10.5.3  
 10

BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: result < RL Run ID: MA56048 Units: ug/l

Metal	RL	IDL	20:14 CCB4		21:14 CCB5		22:15 CCB6		23:17 CCB7	
			raw	final	raw	final	raw	final	raw	final
Aluminum	200	27	anr							
Antimony	6.0	2.2	anr							
Arsenic	3.0	1.3	anr							
Barium	200	1	anr							
Beryllium	1.0	.2	anr							
Bismuth	20	2.1								
Boron	100	1								
Cadmium	3.0	.2	anr							
Calcium	5000	7.7	anr							
Cerium	100									
Chromium	10	.5	anr							
Cobalt	50	.4	anr							
Copper	10	6.8	-0.500	<10	-0.400	<10	-0.500	<10	-1.50	<10
Iron	100	15	anr							
Lead	3.0	1.6	anr							
Lithium	50	3.7								
Magnesium	5000	54	anr							
Manganese	15	.1	anr							
Molybdenum	20	.5								
Nickel	10	.3	anr							
Phosphorus	50	1.8								
Potassium	10000	77	anr							
Selenium	10	2	anr							
Silicon	200	1.3								
Silver	10	.9	anr							
Sodium	10000	23	anr							
Strontium	10	.4								
Sulfur	50	4.1	anr							
Thallium	10	1.6	anr							
Tin	10	.9								
Titanium	10	.9								
Tungsten	50	2								
Vanadium	50	.8	anr							

10.5.3  
10

BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: result < RL Run ID: MA56048 Units: ug/l

Metal	Time: Sample ID:	RL	IDL	20:14	21:14	22:15	23:17		
				CCB4	CCB5	CCB6	CCB7	raw	final
Zinc		20	.2	raw	final	raw	final	raw	final
Zirconium		10	.5						

(\* ) Outside of QC limits  
 (anr) Analyte not requested

10.5.3  
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BLANK RESULTS SUMMARY  
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
QC Limits: result < RL Run ID: MA56048 Units: ug/l

Metal	RL	IDL	00:18	01:22		02:24		03:26		
			CCB8	raw	final	raw	final	raw	final	raw
Aluminum	200	27	anr							
Antimony	6.0	2.2	anr							
Arsenic	3.0	1.3	anr							
Barium	200	1	anr							
Beryllium	1.0	.2	anr							
Bismuth	20	2.1								
Boron	100	1								
Cadmium	3.0	.2	anr							
Calcium	5000	7.7	anr							
Cerium	100									
Chromium	10	.5	anr							
Cobalt	50	.4	anr							
Copper	10	6.8	-1.30	<10	-1.00	<10	-1.00	<10	-1.40	<10
Iron	100	15	anr							
Lead	3.0	1.6	anr							
Lithium	50	3.7								
Magnesium	5000	54	anr							
Manganese	15	.1	anr							
Molybdenum	20	.5								
Nickel	10	.3	anr							
Phosphorus	50	1.8								
Potassium	10000	77	anr							
Selenium	10	2	anr							
Silicon	200	1.3								
Silver	10	.9	anr							
Sodium	10000	23	anr							
Strontium	10	.4								
Sulfur	50	4.1	anr							
Thallium	10	1.6	anr							
Tin	10	.9								
Titanium	10	.9								
Tungsten	50	2								
Vanadium	50	.8	anr							

10.5.3  
10

BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP      Date Analyzed: 05/09/24      Methods: EPA 200.7, SW846 6010D  
 QC Limits: result < RL      Run ID: MA56048      Units: ug/l

Metal	RL	IDL	00:18	01:22	02:24	03:26
			CCB8	CCB9	CCB10	CCB11
Zinc	20	.2	raw	final	raw	final
Zirconium	10	.5	raw	final	raw	final

(\* ) Outside of QC limits  
 (anr) Analyte not requested

10.5.3  
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BLANK RESULTS SUMMARY  
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
QC Limits: result < RL Run ID: MA56048 Units: ug/l

Metal	RL	IDL	04:27 CCB12		05:29 CCB13		06:29 CCB14		07:28 CCB15	
			raw	final	raw	final	raw	final	raw	final
Aluminum	200	27	anr							
Antimony	6.0	2.2	anr							
Arsenic	3.0	1.3	anr							
Barium	200	1	anr							
Beryllium	1.0	.2	anr							
Bismuth	20	2.1								
Boron	100	1								
Cadmium	3.0	.2	anr							
Calcium	5000	7.7	anr							
Cerium	100									
Chromium	10	.5	anr							
Cobalt	50	.4	anr							
Copper	10	6.8	-1.80	<10	0.500	<10	-1.70	<10	-2.20	<10
Iron	100	15	anr							
Lead	3.0	1.6	anr							
Lithium	50	3.7								
Magnesium	5000	54	anr							
Manganese	15	.1	anr							
Molybdenum	20	.5								
Nickel	10	.3	anr							
Phosphorus	50	1.8								
Potassium	10000	77	anr							
Selenium	10	2	anr							
Silicon	200	1.3								
Silver	10	.9	anr							
Sodium	10000	23	anr							
Strontium	10	.4								
Sulfur	50	4.1	anr							
Thallium	10	1.6	anr							
Tin	10	.9								
Titanium	10	.9								
Tungsten	50	2								
Vanadium	50	.8	anr							

10.5.3  
10

BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: result < RL Run ID: MA56048 Units: ug/l

Metal	RL	IDL	04:27	05:29	06:29	07:28		
			CCB12	CCB13	CCB14	CCB15		
			raw	final	raw	final	raw	final
Zinc	20	.2	anr					
Zirconium	10	.5						

(\* ) Outside of QC limits  
 (anr) Analyte not requested

10.5.3  
 10

BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: result < RL Run ID: MA56048 Units: ug/l

Metal	RL	IDL	08:25 CCB16 raw	final
Aluminum	200	27	anr	
Antimony	6.0	2.2	anr	
Arsenic	3.0	1.3	anr	
Barium	200	1	anr	
Beryllium	1.0	.2	anr	
Bismuth	20	2.1		
Boron	100	1		
Cadmium	3.0	.2	anr	
Calcium	5000	7.7	anr	
Cerium	100			
Chromium	10	.5	anr	
Cobalt	50	.4	anr	
Copper	10	6.8	-2.20	<10
Iron	100	15	anr	
Lead	3.0	1.6	anr	
Lithium	50	3.7		
Magnesium	5000	54	anr	
Manganese	15	.1	anr	
Molybdenum	20	.5		
Nickel	10	.3	anr	
Phosphorus	50	1.8		
Potassium	10000	77	anr	
Selenium	10	2	anr	
Silicon	200	1.3		
Silver	10	.9	anr	
Sodium	10000	23	anr	
Strontium	10	.4		
Sulfur	50	4.1	anr	
Thallium	10	1.6	anr	
Tin	10	.9		
Titanium	10	.9		
Tungsten	50	2		
Vanadium	50	.8	anr	

10.5.3  
10

BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP      Date Analyzed: 05/09/24      Methods: EPA 200.7, SW846 6010D  
 QC Limits: result < RL      Run ID: MA56048      Units: ug/l

Time:				08:25	
Sample ID:				CCB16	
Metal	RL	IDL	raw	final	

Zinc            20        .2        anr

Zirconium     10        .5

(\* ) Outside of QC limits  
 (anr) Analyte not requested

10.5.3  
 10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial Continuing Calibration Check

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP      Date Analyzed: 05/09/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: to % Recovery      Run ID: MA56048      Units: ug/l

Time:	16:59		
Sample ID:	ICCV	ICCV1	
Metal	True	Results	% Rec

Aluminum	anr		
Antimony	anr		
Arsenic	anr		
Barium	anr		
Beryllium	anr		
Bismuth			
Boron			
Cadmium	anr		
Calcium	anr		
Cerium			
Chromium	anr		
Cobalt	anr		
Copper	2000	2040	102.0
Iron	anr		
Lead	anr		
Lithium			
Magnesium	anr		
Manganese	anr		
Molybdenum			
Nickel	anr		
Phosphorus			
Potassium	anr		
Selenium	anr		
Silicon			
Silver	anr		
Sodium	anr		
Strontium			
Sulfur	anr		
Thallium	anr		
Tin			
Titanium			
Tungsten			
Vanadium	anr		

10.5.4  
10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial Continuing Calibration Check

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP      Date Analyzed: 05/09/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: to % Recovery      Run ID: MA56048      Units: ug/l

Time:	16:59		
Sample ID: ICCV	ICCV1		
Metal	True	Results	% Rec

Zinc            anr

Zirconium

(\*) Outside of QC limits  
(anr) Analyte not requested

10.5.4  
10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP      Date Analyzed: 05/09/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56048      Units: ug/l

Metal	Sample ID: ICV True	16:47		CCV True	18:05		CCV True	19:07	
		ICV1	Results % Rec		CCV1	Results % Rec		CCV2	Results % Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Bismuth									
Boron									
Cadmium	anr								
Calcium	anr								
Cerium									
Chromium	anr								
Cobalt	anr								
Copper	2000	2140	107.0*(a	2000	2050	102.5	2000	2070	103.5
Iron	anr								
Lead	anr								
Lithium									
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Phosphorus									
Potassium	anr								
Selenium	anr								
Silicon									
Silver	anr								
Sodium	anr								
Strontium									
Sulfur	anr								
Thallium	anr								
Tin									
Titanium									
Tungsten									
Vanadium	anr								

10.5.5  
10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP      Date Analyzed: 05/09/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56048      Units: ug/l

	Time:		16:47		18:05		19:07		
Sample ID:	ICV	ICV1	CCV	CCV1	CCV	CCV2			
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec

Zinc                    anr

Zirconium

- (\*) Outside of QC limits
- (anr) Analyte not requested
- (a) Within 90 to 110 percent limits required for SW846 6010. No EPA 200.7 samples reported for this element in the area bracketed by this QC.

10.5.5  
10



CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP      Date Analyzed: 05/09/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56048      Units: ug/l

Metal	Sample ID: CCV	20:08		CCV	21:09		CCV	22:10	
		CCV3	Results % Rec		CCV4	Results % Rec		CCV5	Results % Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Bismuth									
Boron									
Cadmium	anr								
Calcium	anr								
Cerium									
Chromium	anr								
Cobalt	anr								
Copper	2000	2080	104.0	2000	2100	105.0	2000	2110	105.5
Iron	anr								
Lead	anr								
Lithium									
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Phosphorus									
Potassium	anr								
Selenium	anr								
Silicon									
Silver	anr								
Sodium	anr								
Strontium									
Sulfur	anr								
Thallium	anr								
Tin									
Titanium									
Tungsten									
Vanadium	anr								

10.5.5  
10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP      Date Analyzed: 05/09/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56048      Units: ug/l

	Time:		20:08		21:09		22:10		
Sample ID:	CCV	CCV3	CCV	CCV4	CCV	CCV5			
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec

Zinc                      anr

Zirconium

(\* ) Outside of QC limits  
(anr) Analyte not requested

10.5.5  
10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP      Date Analyzed: 05/09/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56048      Units: ug/l

Metal	Sample ID:	Time: 23:12		Time: 00:12		Time: 01:17			
		CCV	CCV6	CCV	CCV7	CCV	CCV8		
	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Bismuth									
Boron									
Cadmium	anr								
Calcium	anr								
Cerium									
Chromium	anr								
Cobalt	anr								
Copper	2000	2080	104.0	2000	2110	105.5	2000	2110	105.5
Iron	anr								
Lead	anr								
Lithium									
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Phosphorus									
Potassium	anr								
Selenium	anr								
Silicon									
Silver	anr								
Sodium	anr								
Strontium									
Sulfur	anr								
Thallium	anr								
Tin									
Titanium									
Tungsten									
Vanadium	anr								

10.5.5  
10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP      Date Analyzed: 05/09/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56048      Units: ug/l

	Time:								
Sample ID:	CCV	23:12	CCV6	CCV	00:12	CCV7	CCV	01:17	CCV8
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec

Zinc                      anr

Zirconium

(\* ) Outside of QC limits  
(anr) Analyte not requested

10.5.5  
10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP      Date Analyzed: 05/09/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56048      Units: ug/l

Metal	Sample ID: CCV	02:18		CCV	03:20		CCV	04:22	
		CCV9	Results % Rec		CCV10	Results % Rec		CCV11	Results % Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Bismuth									
Boron									
Cadmium	anr								
Calcium	anr								
Cerium									
Chromium	anr								
Cobalt	anr								
Copper	2000	2100	105.0	2000	2100	105.0	2000	2090	104.5
Iron	anr								
Lead	anr								
Lithium									
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Phosphorus									
Potassium	anr								
Selenium	anr								
Silicon									
Silver	anr								
Sodium	anr								
Strontium									
Sulfur	anr								
Thallium	anr								
Tin									
Titanium									
Tungsten									
Vanadium	anr								

10.5.5  
10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP      Date Analyzed: 05/09/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56048      Units: ug/l

	Time:								
Sample ID:	CCV	02:18	CCV9	CCV	03:20	CCV10	CCV	04:22	CCV11
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec

Zinc                      anr

Zirconium

(\* ) Outside of QC limits  
(anr) Analyte not requested

10.5.5  
10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP      Date Analyzed: 05/09/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56048      Units: ug/l

Metal	Sample ID: CCV	05:24		CCV	06:23		CCV	07:23	
		True	CCV12		True	CCV13		True	CCV14
		Results	% Rec		Results	% Rec		Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Bismuth									
Boron									
Cadmium	anr								
Calcium	anr								
Cerium									
Chromium	anr								
Cobalt	anr								
Copper	2000	1980	99.0	2000	2120	106.0	2000	2170	108.5
Iron	anr								
Lead	anr								
Lithium									
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Phosphorus									
Potassium	anr								
Selenium	anr								
Silicon									
Silver	anr								
Sodium	anr								
Strontium									
Sulfur	anr								
Thallium	anr								
Tin									
Titanium									
Tungsten									
Vanadium	anr								

10.5.5  
10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP      Date Analyzed: 05/09/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56048      Units: ug/l

	Time:		05:24		06:23		07:23		
Sample ID:	CCV	CCV12	CCV	CCV13	CCV	CCV14			
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec

Zinc                      anr

Zirconium

(\* ) Outside of QC limits  
(anr) Analyte not requested

10.5.5  
10



CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP      Date Analyzed: 05/09/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56048      Units: ug/l

Metal	Sample ID: CCV	True	Results	% Rec
Aluminum		anr		
Antimony		anr		
Arsenic		anr		
Barium		anr		
Beryllium		anr		
Bismuth				
Boron				
Cadmium		anr		
Calcium		anr		
Cerium				
Chromium		anr		
Cobalt		anr		
Copper	2000		2160	108.0
Iron		anr		
Lead		anr		
Lithium				
Magnesium		anr		
Manganese		anr		
Molybdenum				
Nickel		anr		
Phosphorus				
Potassium		anr		
Selenium		anr		
Silicon				
Silver		anr		
Sodium		anr		
Strontium				
Sulfur		anr		
Thallium		anr		
Tin				
Titanium				
Tungsten				
Vanadium		anr		

10.5.5  
10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP      Date Analyzed: 05/09/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56048      Units: ug/l

Time:	08:20		
Sample ID:	CCV	CCV15	
Metal	True	Results	% Rec

Zinc                    anr

Zirconium

(\*) Outside of QC limits  
(anr) Analyte not requested

10.5.5  
10

HIGH STANDARD CHECK SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: 90 to 110 % Recovery Run ID: MA56048 Units: ug/l

	Time:	17:34		17:40		
Sample ID:	HSTD	HSTD1		HSTD	HSTD2	
Metal	True	Results	% Rec	True	Results	% Rec
Aluminum						
Antimony	anr					
Arsenic	anr					
Barium	anr					
Beryllium	anr					
Bismuth						
Boron						
Cadmium	anr					
Calcium						
Cerium						
Chromium	anr					
Cobalt	anr					
Copper	8000	8290	103.6			
Iron						
Lead	anr					
Lithium						
Magnesium						
Manganese	anr					
Molybdenum						
Nickel	anr					
Phosphorus						
Potassium						
Selenium	anr					
Silicon						
Silver	anr					
Sodium						
Strontium						
Sulfur	anr					
Thallium	anr					
Tin						
Titanium						
Tungsten						
Vanadium	anr					

10.5.6  
10

HIGH STANDARD CHECK SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: 90 to 110 % Recovery Run ID: MA56048 Units: ug/l

	Time:	17:34		17:40	
Sample ID:	HSTD	HSTD1	HSTD	HSTD2	
Metal	True	Results	% Rec	True	Results

Zinc anr

Zirconium

(\*) Outside of QC limits  
 (anr) Analyte not requested

10.5.6  
 10

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: CRI 80-120% CRIA 80-120% Run ID: MA56048 Units: ug/l

Time:				17:13		17:50	
Sample ID:	CRI	CRIA	CRID	CRID1	% Rec	CRID2	% Rec
Metal	True	True	True	Results		Results	% Rec
Aluminum	200	500	100	anr			
Antimony	6.0	20	3.0	anr			
Arsenic	8.0	20	3.0	anr			
Barium	200		4.0	anr			
Beryllium	2.0		1.0	anr			
Bismuth	20						
Boron	100		10				
Cadmium	3.0		1.0	anr			
Calcium	5000	2000	1000	anr			
Cerium							
Chromium	10		2.0	anr			
Cobalt	50		3.0	anr			
Copper	10		2.0	9.50	95.0		
Iron	100	500		anr			
Lead	3.0	20	2.5	anr			
Lithium	50						
Magnesium	5000	2000	100	anr			
Manganese	15		3.0	anr			
Molybdenum	20						
Nickel	10		4.0	anr			
Phosphorus	50						
Potassium	5000		2000	anr			
Selenium	10	20	5.0	anr			
Silicon	200						
Silver	5.0		2.0	anr			
Sodium	5000		1000	anr			
Strontium	10						
Sulfur	50			anr			
Thallium	10		2.0	anr			
Tin	10						
Titanium	10						
Tungsten	50						
Vanadium	50		2.0	anr			

10.5.7  
10

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: CRI 80-120% CRIA 80-120% Run ID: MA56048 Units: ug/l

Time:				17:13				17:50
Sample ID:	CRI	CRIA	CRID	CR11			CRID2	
Metal	True	True	True	Results	% Rec	Results	% Rec	

Zinc	20		10	anr			
Zirconium	10						

(\* ) Outside of QC limits  
 (anr) Analyte not requested

10.5.7  
 10

INTERFERING ELEMENT CHECK STANDARDS SUMMARY  
Part 1 - ICSA and ICSAB Standards

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
QC Limits: 80 to 120 % Recovery Run ID: MA56048 Units: ug/l

Metal	Time:		17:23		17:28	
	Sample ID:	ICSAB	ICSAB	% Rec	ICSAB1	% Rec
Aluminum	500000	500000	505000	101.0	510000	102.0
Antimony		1000	1.50		1010	101.0
Arsenic		1000	-2.30		987	98.7
Barium		500	-2.20		503	100.6
Beryllium		500	0.800		504	100.8
Bismuth		500	4.40		510	102.0
Boron		500	-0.500		462	92.4
Cadmium		1000	-0.400		1070	107.0
Calcium	400000	400000	380000	95.0	388000	97.0
Cerium			12.7		11.1	
Chromium		500	-1.00		479	95.8
Cobalt		500	1.40		472	94.4
Copper		500	-4.90		527	105.4
Iron	200000	200000	191000	95.5	192000	96.0
Lead		1000	0.00		938	93.8
Lithium		500	9.20		585	117.0
Magnesium	500000	500000	500000	100.0	507000	101.4
Manganese		500	-1.00		523	104.6
Molybdenum		500	2.00		474	94.8
Nickel		1000	-4.80		937	93.7
Phosphorus		500	-6.60		470	94.0
Potassium			14.8		35.9	
Selenium		1000	-4.90		971	97.1
Silicon		500	1.80		494	98.8
Silver		1000	-0.100		1100	110.0
Sodium			14.8		4.70	
Strontium		500	0.700		531	106.2
Sulfur		500	-24.7		460	92.0
Thallium		1000	0.00		919	91.9
Tin		500	-1.30		476	95.2
Titanium		500	-0.600		490	98.0
Tungsten		500	1.10		488	97.6
Vanadium		500	-0.600		495	99.0

10.5.8  
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INTERFERING ELEMENT CHECK STANDARDS SUMMARY  
 Part 1 - ICSA and ICSAB Standards

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: 80 to 120 % Recovery Run ID: MA56048 Units: ug/l

Time:	17:23	17:28
Sample ID:	ICSAB	ICSAB1
Metal	True	True
	Results	% Rec

Zinc	1000	-8.30	958	95.8
Zirconium	500	0.400	483	96.6

(\*) Outside of QC limits  
 (anr) Analyte not requested

10.5.8  
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SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SF050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
Analyst: MM Run ID: MA56049  
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
17:13	MA56049-STD1	1		STDA
17:19	MA56049-STD2	1		STDB
17:24	MA56049-ICV1	1		
17:28	MA56049-ICB1	1		
17:39	MA56049-ICCV1	1		
17:45	MA56049-CCB1	1		
17:51	MA56049-CRI1	1		
17:56	MA56049-CRID1	1		
18:01	MA56049-ICSA1	1		
18:06	MA56049-ICSAB1	1		
18:11	MA56049-HSTD1	1		
18:17	MA56049-HSTD2	1		
18:25	ZZZZZZ	1		
18:30	MA56049-CCV1	1		
18:35	MA56049-CCB2	1		
18:40	MA56049-CRI2	1		
18:45	MP46464-MB1	1		ZN RL raised 2X for the batch
18:50	MP46464-B1	1		
18:55	MP46464-S1	1		
19:00	MP46464-S2	1		
19:05	JD87833-14	1		
19:10	MP46464-SD1	5		
19:15	ZZZZZZ	1		
19:20	ZZZZZZ	1		
19:25	JD87833-1	1		
19:30	MA56049-CCV2	1		
19:35	MA56049-CCB3	1		
19:40	JD87833-2	1		
19:45	JD87833-3	1		
19:50	JD87833-4	1		
19:55	JD87833-5	1		
20:00	JD87833-6	1		
20:05	JD87833-7	1		

10.6  
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SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SF050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
Analyst: MM Run ID: MA56049  
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
20:10	JD87833-8	1		
20:15	JD87833-9	1		
20:20	JD87833-10	1		
20:25	JD87833-11	1		
20:30	MA56049-CCV3	1		
20:34	MA56049-CCB4	1		
20:39	JD87833-12	1		
20:45	JD87833-13	1		
20:50	JD87833-15	1		
20:54	JD87833-16	1		
20:59	ZZZZZZ	1		
21:05	ZZZZZZ	1		
21:10	MP46465-MB1	1		
21:15	MP46465-B1	1		
21:19	MP46465-S1	1		FE high
21:25	MP46465-S2	1		FE high
21:30	MA56049-CCV4	1		
21:34	MA56049-CCB5	1		
21:40	JD87394-1	1		(sample used for QC only; not part of login JD87833)
21:45	MP46465-SD1	5		FE high
21:50	MP46465-PS1	1		FE high
21:55	ZZZZZZ	1		
22:01	ZZZZZZ	1		
22:06	ZZZZZZ	1		
22:11	ZZZZZZ	1		
22:16	ZZZZZZ	1		
22:21	ZZZZZZ	1		
22:26	ZZZZZZ	1		
22:31	MA56049-CCV5	1		
22:36	MA56049-CCB6	1		
22:41	ZZZZZZ	1		
22:46	ZZZZZZ	1		
22:51	ZZZZZZ	1		

10.6  
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SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SF050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
Analyst: MM Run ID: MA56049  
Parameters: Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, Tl, V, Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
22:56	ZZZZZZ	1		
23:01	ZZZZZZ	1		
23:06	ZZZZZZ	1		
23:11	ZZZZZZ	1		
23:16	ZZZZZZ	1		
23:21	ZZZZZZ	1		
23:26	ZZZZZZ	1		
23:31	MA56049-CCV6	1		
23:36	MA56049-CCB7	1		
23:41	ZZZZZZ	1		
23:46	ZZZZZZ	1		
23:51	MP46453-MB1	1		
23:57	MP46453-B1	1		
00:01	MP46453-S1	1		Ca, Na, S high. Y saturation
00:06	MP46453-S2	1		Ca, Na, S high. Y saturation
00:12	JD87864-1	1		(sample used for QC only; not part of login JD87833)
00:17	MP46453-SD1	5		Ca, Na, S high. Y saturation
00:22	ZZZZZZ	1		
00:27	ZZZZZZ	1		
00:32	MA56049-CCV7	1		
00:37	MA56049-CCB8	1		
00:42	ZZZZZZ	1		
00:48	ZZZZZZ	1		
00:53	ZZZZZZ	1		
00:58	MP46464-PS1	1		
----->	Last reportable sample/prep for job JD87833			
01:03	MP46387-S1	5		
01:08	MP46387-S2	5		
01:13	ZZZZZZ	5		
01:18	ZZZZZZ	5		
01:23	ZZZZZZ	5		
01:28	MA56049-CCV8	1		
01:32	MA56049-CCB9	1		
----->	Last reportable CCB for job JD87833			
01:37	ZZZZZZ	1		

10.6  
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SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SF050924M2.ICP      Date Analyzed: 05/09/24      Methods: EPA 200.7, SW846 6010D  
Analyst: MM      Run ID: MA56049  
Parameters: Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, Tl, V, Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
01:42	ZZZZZZ	1		
01:47	ZZZZZZ	1		
01:52	MA56049-CCV9	1		
01:56	MA56049-CCB10	1		
02:02	ZZZZZZ	1		
02:07	ZZZZZZ	1		
02:12	ZZZZZZ	1		
02:17	ZZZZZZ	1		
02:22	ZZZZZZ	1		
02:28	ZZZZZZ	1		
02:33	ZZZZZZ	1		
02:38	ZZZZZZ	1		
02:43	ZZZZZZ	1		
02:48	ZZZZZZ	1		

Refer to raw data for calibration curve and standards.

10.6  
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REPORTED ELEMENTS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SF050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: MM Run ID: MA56049  
 Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Element Dilution	A	S	A	B	B	C	C	C	C	F	P	M	M	N	K	S	A	N	T	V	Z
			l	b	s	a	e	d	a	r	o	u	e	b	g	n	i	e	g	a	l	n	
17:24	MA56049-ICV1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
17:28	MA56049-ICB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
17:39	MA56049-ICCV1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
17:45	MA56049-CCB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
17:51	MA56049-CRI1	1																					
17:56	MA56049-CRID1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
18:01	MA56049-ICSA1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
18:06	MA56049-ICSAB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
18:11	MA56049-HSTD1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
18:17	MA56049-HSTD2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
18:25	ZZZZZ	1																					
18:30	MA56049-CCV1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
18:35	MA56049-CCB2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
18:40	MA56049-CRI2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
18:45	MP46464-MB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
18:50	MP46464-B1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
18:55	MP46464-S1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
19:00	MP46464-S2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
19:05	JD87833-14	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
19:10	MP46464-SD1	5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
19:15	ZZZZZ	1																					
19:20	ZZZZZ	1																					
19:25	JD87833-1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
19:30	MA56049-CCV2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
19:35	MA56049-CCB3	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
19:40	JD87833-2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
19:45	JD87833-3	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
19:50	JD87833-4	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
19:55	JD87833-5	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
20:00	JD87833-6	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
20:05	JD87833-7	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
20:10	JD87833-8	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
20:15	JD87833-9	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Element: A S A B B C C C C F P M M N K S A N T V Z  
 l b s a e d a r o u e b g n i e g a l n

10.6.1  
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REPORTED ELEMENTS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SF050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: MM Run ID: MA56049  
 Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Element Dilution	A	S	A	B	B	C	C	C	C	F	P	M	M	N	K	S	A	N	T	V	Z
			l	b	s	a	e	d	a	r	o	u	e	b	g	n	i	e	g	a	l	n	
20:20	JD87833-10	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
20:25	JD87833-11	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
20:30	MA56049-CCV3	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
20:34	MA56049-CCB4	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
20:39	JD87833-12	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
20:45	JD87833-13	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
20:50	JD87833-15	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
20:54	JD87833-16	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
20:59	ZZZZZZ	1																					
21:05	ZZZZZZ	1																					
21:10	MP46465-MB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
21:15	MP46465-B1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
21:19	MP46465-S1	1	X		X	X				X				X	X	X				X		X	
21:25	MP46465-S2	1	X		X	X				X				X	X	X				X		X	
21:30	MA56049-CCV4	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
21:34	MA56049-CCB5	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
21:40	JD87394-1	1	X		X					X				X	X	X				X		X	(a)
21:45	MP46465-SD1	5	X		X	X				X				X	X	X				X		X	
21:50	MP46465-PS1	1								X						X							
21:55	ZZZZZZ	1																					
22:01	ZZZZZZ	1																					
22:06	ZZZZZZ	1																					
22:11	ZZZZZZ	1																					
22:16	ZZZZZZ	1																					
22:21	ZZZZZZ	1																					
22:26	ZZZZZZ	1																					
22:31	MA56049-CCV5	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
22:36	MA56049-CCB6	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
22:41	ZZZZZZ	1																					
22:46	ZZZZZZ	1																					
22:51	ZZZZZZ	1																					
22:56	ZZZZZZ	1																					
23:01	ZZZZZZ	1																					

Element: A S A B B C C C C F P M M N K S A N T V Z  
 l b s a e d a r o u e b g n i e g a l n

10.6.1  
 10

REPORTED ELEMENTS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SF050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: MM Run ID: MA56049  
 Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Element Dilution	A	S	A	B	B	C	C	C	C	F	P	M	M	N	K	S	A	N	T	V	Z
			l	b	s	a	e	d	a	r	o	u	e	b	g	n	i	e	g	a	l	n	
23:06	ZZZZZZ	1																					
23:11	ZZZZZZ	1																					
23:16	ZZZZZZ	1																					
23:21	ZZZZZZ	1																					
23:26	ZZZZZZ	1																					
23:31	MA56049-CCV6	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
23:36	MA56049-CCB7	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
23:41	ZZZZZZ	1																					
23:46	ZZZZZZ	1																					
23:51	MP46453-MB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
23:57	MP46453-B1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
00:01	MP46453-S1	1	X	X	X	X	X			X	X	X		X	X	X		X	X		X	X	
00:06	MP46453-S2	1	X	X	X	X	X			X	X	X		X	X	X		X	X		X	X	
00:12	JD87864-1	1	X	X	X	X	X			X	X	X		X	X	X		X	X		X	X	(a)
00:17	MP46453-SD1	5	X	X	X	X	X			X	X	X		X	X	X		X	X		X	X	
00:22	ZZZZZZ	1																					
00:27	ZZZZZZ	1																					
00:32	MA56049-CCV7	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
00:37	MA56049-CCB8	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
00:42	ZZZZZZ	1																					
00:48	ZZZZZZ	1																					
00:53	ZZZZZZ	1																					
00:58	MP46464-PS1	1		X											X								
01:03	MP46387-S1	5						X				X											
01:08	MP46387-S2	5						X				X											
01:13	ZZZZZZ	5																					
01:18	ZZZZZZ	5																					
01:23	ZZZZZZ	5																					
01:28	MA56049-CCV8	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
01:32	MA56049-CCB9	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
01:37	ZZZZZZ	1																					
01:42	ZZZZZZ	1																					
01:47	ZZZZZZ	1																					

10.6.1  
10

REPORTED ELEMENTS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SF050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: MM Run ID: MA56049  
 Parameters: Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, Tl, V, Zn

Time	Sample Description	Element Dilution	A	S	A	B	B	C	C	C	C	F	P	M	M	N	K	S	A	N	T	V	Z
			l	b	s	a	e	d	a	r	o	u	e	b	g	n	i	e	g	a	l	n	
01:52	MA56049-CCV9	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
01:56	MA56049-CCB10	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
02:02	ZZZZZZ	1																					
02:07	ZZZZZZ	1																					
02:12	ZZZZZZ	1																					
02:17	ZZZZZZ	1																					
02:22	ZZZZZZ	1																					
02:28	ZZZZZZ	1																					
02:33	ZZZZZZ	1																					
02:38	ZZZZZZ	1																					
02:43	ZZZZZZ	1																					
02:48	ZZZZZZ	1																					

(a) Sample used for QC only; not part of login JD87833.

Element: A S A B B C C C C F P M M N K S A N T V Z  
 l b s a e d a r o u e b g n i e g a l n

10.6.1  
10



INTERNAL STANDARD SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SF050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: MM Run ID: MA56049  
 Parameters: Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, Tl, V, Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
17:13	MA56049-STD1	2531 R	94545 R	15090 R	7286 R
17:19	MA56049-STD2	2382	91590	14599	6260
17:24	MA56049-ICV1	2453	92577	14843	6564
17:28	MA56049-ICB1	2529	94237	15080	7278
17:39	MA56049-ICCV1	2469	93072	14859	6585
17:45	MA56049-CCB1	2532	94426	15105	7287
17:51	MA56049-CRI1	No results reported for the elements associated with this internal standard.			
17:56	MA56049-CRID1	2531	94491	15134	7262
18:01	MA56049-ICSA1	2244	87437	14490	5735
18:06	MA56049-ICSAB1	2273	87624	14505	5775
18:11	MA56049-HSTD1	2497	94165	15143	7022
18:17	MA56049-HSTD2	2280	88150	14441	5800
18:25	ZZZZZ	2509	94269	14976	7135
18:30	MA56049-CCV1	2463	92255	14810	6575
18:35	MA56049-CCB2	2530	93921	15055	7286
18:40	MA56049-CRI2	2513	93698	15029	7140
18:45	MP46464-MB1	2563	95271	15357	7403
18:50	MP46464-B1	2496	93064	14969	6813
18:55	MP46464-S1	2569	95893	15751	6654
19:00	MP46464-S2	2553	95815	15779	6612
19:05	JD87833-14	2645	97746	15961	6997
19:10	MP46464-SD1	2568	94277	15274	7183
19:15	ZZZZZ	2604	98548	16072	6733
19:20	ZZZZZ	2645	99529	16196	6847
19:25	JD87833-1	2614	97330	15792	7009
19:30	MA56049-CCV2	2455	91320	14654	6578
19:35	MA56049-CCB3	2535	93965	14969	7311
19:40	JD87833-2	2636	97244	15801	7100
19:45	JD87833-3	2665	98124	15899	7106
19:50	JD87833-4	2636	97176	15816	7057
19:55	JD87833-5	2652	97956	15832	7056
20:00	JD87833-6	2635	97591	15853	7025
20:05	JD87833-7	2644	97315	15792	7028

10.6.2  
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INTERNAL STANDARD SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SF050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: MM Run ID: MA56049  
 Parameters: Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, Tl, V, Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
20:10	JD87833-8	2646	97747	15849	7069
20:15	JD87833-9	2660	98042	15916	7021
20:20	JD87833-10	2708	98876	16009	7014
20:25	JD87833-11	2652	98087	15899	7032
20:30	MA56049-CCV3	2471	92081	14585	6606
20:34	MA56049-CCB4	2553	93836	14914	7346
20:39	JD87833-12	2748	99694	16186	7022
20:45	JD87833-13	2664	96268	15672	6926
20:50	JD87833-15	2651	97010	15597	7117
20:54	JD87833-16	2658	97837	15677	7041
20:59	ZZZZZ	2468	93233	15471	6157
21:05	ZZZZZ	2568	96903	15763	6562
21:10	MP46465-MB1	2562	94703	15091	7407
21:15	MP46465-B1	2498	93230	14840	6812
21:19	MP46465-S1	2162	87246	13954	6583
21:25	MP46465-S2	2162	87066	13909	6626
21:30	MA56049-CCV4	2494	92391	14498	6642
21:34	MA56049-CCB5	2555	94894	14804	7347
21:40	JD87394-1	2171	87695	14055	6687
21:45	MP46465-SD1	2418	92486	14646	6904
21:50	MP46465-PS1	2165	87397	14072	6595
21:55	ZZZZZ	2488	95118	15381	6060
22:01	ZZZZZ	2482	93969	15319	6233
22:06	ZZZZZ	2536	94872	15372	6695
22:11	ZZZZZ	2534	96939	15563	6218
22:16	ZZZZZ	2700	99145	16006	6895
22:21	ZZZZZ	2637	96704	15209	7296
22:26	ZZZZZ	2686	99794	15878	6898
22:31	MA56049-CCV5	2482	92221	14416	6599
22:36	MA56049-CCB6	2565	94368	14758	7350
22:41	ZZZZZ	2623	96156	15223	7230
22:46	ZZZZZ	2694	99504	15748	6820
22:51	ZZZZZ	2638	98421	15551	7012

10.6.2  
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INTERNAL STANDARD SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SF050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: MM Run ID: MA56049  
 Parameters: Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, Tl, V, Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
22:56	ZZZZZZ	2697	100490	15860	6868
23:01	ZZZZZZ	2669	97862	15406	7313
23:06	ZZZZZZ	2634	97183	15247	7167
23:11	ZZZZZZ	2576	94633	15027	7045
23:16	ZZZZZZ	2688	99117	15794	6996
23:21	ZZZZZZ	2414	91487	14679	6009
23:26	ZZZZZZ	2731	100510	15872	6849
23:31	MA56049-CCV6	2497	92335	14340	6621
23:36	MA56049-CCB7	2578	94030	14742	7356
23:41	ZZZZZZ	2608	96559	15411	7104
23:46	ZZZZZZ	2685	99701	16004	6812
23:51	MP46453-MB1	2647	96961	15251	7630
23:57	MP46453-B1	2654	95579	15114	7168
00:01	MP46453-S1	2202	80899	14369	5494
00:06	MP46453-S2	2233	999999 !a	14226	5555
00:12	JD87864-1	2222	999999 !a	14085	5583
00:17	MP46453-SD1	2361	91060	14237	6244
00:22	ZZZZZZ	2497	93789	14877	6902
00:27	ZZZZZZ	2516	999999 !a	15239	6956
00:32	MA56049-CCV7	2486	91080	14325	6605
00:37	MA56049-CCB8	2561	93634	14558	7331
00:42	ZZZZZZ	2310	91211	14208	5972
00:48	ZZZZZZ	2272	999999 !a	14193	5651
00:53	ZZZZZZ	2416	91319	14852	6363
00:58	MP46464-PS1	2586	95993	15230	6712
01:03	MP46387-S1	2553	93342	14837	6855
01:08	MP46387-S2	2553	93946	14664	6867
01:13	ZZZZZZ	2563	94077	14756	7010
01:18	ZZZZZZ	2566	93871	14859	6964
01:23	ZZZZZZ	2485	92544	14423	6798
01:28	MA56049-CCV8	2488	91694	14308	6601
01:32	MA56049-CCB9	2564	94056	14672	7316
01:37	ZZZZZZ	2479	91866	14352	6512

10.6.2  
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INTERNAL STANDARD SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SF050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: MM Run ID: MA56049  
 Parameters: Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, Tl, V, Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
01:42	ZZZZZZ	2482	91841	14338	6481
01:47	ZZZZZZ	2456	91107	14391	6386
01:52	MA56049-CCV9	2496	92475	14306	6607
01:56	MA56049-CCB10	2572	93976	14569	7324
02:02	ZZZZZZ	2516	93058	14450	7224
02:07	ZZZZZZ	2664	91586	14922	6556
02:12	ZZZZZZ	2348	91622	13995	6303
02:17	ZZZZZZ	2571	94170	14515	7303
02:22	ZZZZZZ	2584	94464	14518	7328
02:28	ZZZZZZ	2580	94571	14584	7304
02:33	ZZZZZZ	2547	94352	14492	7258
02:38	ZZZZZZ	2578	94622	14509	7348
02:43	ZZZZZZ	2569	94173	14436	7338
02:48	ZZZZZZ	2569	94688	14505	7301

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	70-130 %
Istd#2	Yttrium (3600)	70-130 %
Istd#3	Yttrium (3710)	70-130 %
Istd#4	Indium	70-130 %

(a) No samples reported for the elements associated with this internal standard.

10.6.2  
10

BLANK RESULTS SUMMARY  
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SF050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
QC Limits: result < RL Run ID: MA56049 Units: ug/l

Metal	Time:		17:28		17:45		18:35		19:35		
	Sample ID:	RL	IDL	ICB1	final	CCB1	final	CCB2	final	CCB3	final
Aluminum	200	9.2		-4.90	<200	-7.40	<200	5.50	<200	-6.10	<200
Antimony	6.0	2.8		-0.500	<6.0	0.100	<6.0	-0.700	<6.0	-0.600	<6.0
Arsenic	3.0	2.6		0.500	<3.0	0.200	<3.0	0.400	<3.0	0.400	<3.0
Barium	200	.2		0.200	<200	0.00	<200	0.100	<200	0.300	<200
Beryllium	1.0	.2		0.00	<1.0	0.00	<1.0	0.00	<1.0	0.00	<1.0
Bismuth	20	2.5									
Boron	100	1.8									
Cadmium	3.0	.4		-0.100	<3.0	-0.100	<3.0	-0.100	<3.0	0.00	<3.0
Calcium	5000	13		-7.10	<5000	-5.60	<5000	-6.60	<5000	-6.70	<5000
Cerium	100										
Chromium	10	.7		0.00	<10	0.200	<10	0.200	<10	0.200	<10
Cobalt	50	.6		0.200	<50	0.00	<50	0.200	<50	0.00	<50
Copper	10	.7		-2.40	<10	-2.40	<10	-1.20	<10	-1.10	<10
Iron	100	3.3		-0.500	<100	0.100	<100	-0.600	<100	-1.10	<100
Lead	3.0	2		0.400	<3.0	-0.400	<3.0	-0.100	<3.0	0.00	<3.0
Lithium	50	1.5									
Magnesium	5000	25		0.600	<5000	7.90	<5000	12.3	<5000	-9.10	<5000
Manganese	15	.1		0.00	<15	-0.100	<15	0.00	<15	0.00	<15
Molybdenum	20	.6		anr							
Nickel	10	.8		0.200	<10	-0.200	<10	-0.200	<10	-0.400	<10
Phosphorus	50	7									
Potassium	10000	35		17.3	<10000	6.80	<10000	22.9	<10000	25.2	<10000
Selenium	10	3.6		-1.60	<10	1.50	<10	1.20	<10	-0.700	<10
Silicon	200	2.2									
Silver	10	.6		-0.400	<10	-0.300	<10	-0.500	<10	-0.200	<10
Sodium	10000	14		6.40	<10000	4.00	<10000	24.8	<10000	-2.00	<10000
Strontium	10	.1									
Sulfur	50	3.7									
Thallium	10	5.2		1.80	<10	1.80	<10	1.50	<10	1.40	<10
Tin	10	1.4		anr							
Titanium	10	.8									
Tungsten	50	1.3									
Vanadium	50	.5		-0.100	<50	-1.00	<50	-0.200	<50	-0.800	<50

10.6.3  
10

BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SF050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: result < RL Run ID: MA56049 Units: ug/l

Time:			17:28		17:45		18:35		19:35	
Sample ID:	RL	IDL	ICB1	final	CCB1	final	CCB2	final	CCB3	final
Metal			raw		raw		raw		raw	

Zinc	20	.3	-1.10	<20	-0.900	<20	-1.00	<20	-1.10	<20
Zirconium	10	.5								

(\* ) Outside of QC limits  
 (anr) Analyte not requested

10.6.3  
 10

BLANK RESULTS SUMMARY  
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SF050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
QC Limits: result < RL Run ID: MA56049 Units: ug/l

Metal	Time:		20:34		21:34		22:36		23:36	
	Sample ID:	RL	IDL	CCB4	final	CCB5	final	CCB6	final	CCB7
Aluminum	200	9.2	-3.70	<200	-10.3	<200	-5.10	<200	-0.600	<200
Antimony	6.0	2.8	0.300	<6.0	-0.100	<6.0	-0.700	<6.0	0.00	<6.0
Arsenic	3.0	2.6	-2.30	<3.0	-0.900	<3.0	-0.200	<3.0	0.100	<3.0
Barium	200	.2	0.200	<200	0.300	<200	0.300	<200	0.400	<200
Beryllium	1.0	.2	0.00	<1.0	0.100	<1.0	0.100	<1.0	0.00	<1.0
Bismuth	20	2.5								
Boron	100	1.8								
Cadmium	3.0	.4	0.00	<3.0	0.00	<3.0	0.00	<3.0	-0.100	<3.0
Calcium	5000	13	-5.00	<5000	-6.30	<5000	-7.20	<5000	-8.10	<5000
Cerium	100									
Chromium	10	.7	-0.100	<10	0.200	<10	0.00	<10	0.100	<10
Cobalt	50	.6	0.300	<50	0.100	<50	0.00	<50	0.200	<50
Copper	10	.7	0.100	<10	-1.00	<10	-0.300	<10	1.10	<10
Iron	100	3.3	-0.900	<100	-1.90	<100	1.00	<100	-0.500	<100
Lead	3.0	2	-0.900	<3.0	0.300	<3.0	1.00	<3.0	0.200	<3.0
Lithium	50	1.5								
Magnesium	5000	25	3.90	<5000	8.60	<5000	4.40	<5000	7.70	<5000
Manganese	15	.1	0.00	<15	0.00	<15	0.00	<15	0.00	<15
Molybdenum	20	.6	anr							
Nickel	10	.8	-0.300	<10	0.00	<10	-0.100	<10	0.00	<10
Phosphorus	50	7								
Potassium	10000	35	7.60	<10000	23.3	<10000	-3.40	<10000	17.6	<10000
Selenium	10	3.6	-0.200	<10	-2.20	<10	-0.600	<10	-1.70	<10
Silicon	200	2.2								
Silver	10	.6	-0.300	<10	-0.400	<10	-1.00	<10	-0.900	<10
Sodium	10000	14	-9.40	<10000	-6.90	<10000	-17.1	<10000	-11.2	<10000
Strontium	10	.1								
Sulfur	50	3.7								
Thallium	10	5.2	1.10	<10	1.60	<10	1.70	<10	0.600	<10
Tin	10	1.4	anr							
Titanium	10	.8								
Tungsten	50	1.3								
Vanadium	50	.5	0.00	<50	-0.800	<50	0.00	<50	-0.600	<50

10.6.3  
10

BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SF050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: result < RL Run ID: MA56049 Units: ug/l

Metal	Time: Sample ID:	RL	IDL	20:34 CCB4		21:34 CCB5		22:36 CCB6		23:36 CCB7	
				raw	final	raw	final	raw	final	raw	final

Zinc	20	.3		-0.900	<20	-0.900	<20	-1.10	<20	-0.800	<20
Zirconium	10	.5									

(\* ) Outside of QC limits  
 (anr) Analyte not requested

10.6.3  
 10



BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SF050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: result < RL Run ID: MA56049 Units: ug/l

Metal	RL	IDL	00:37 CCB8		01:32 CCB9	
			raw	final	raw	final
Aluminum	200	9.2	-9.40	<200	-2.80	<200
Antimony	6.0	2.8	-0.700	<6.0	-0.100	<6.0
Arsenic	3.0	2.6	-0.400	<3.0	-0.200	<3.0
Barium	200	.2	0.300	<200	0.200	<200
Beryllium	1.0	.2	0.100	<1.0	0.100	<1.0
Bismuth	20	2.5				
Boron	100	1.8				
Cadmium	3.0	.4	-0.100	<3.0	0.00	<3.0
Calcium	5000	13	-6.70	<5000	-8.00	<5000
Cerium	100					
Chromium	10	.7	0.200	<10	0.300	<10
Cobalt	50	.6	0.300	<50	-0.100	<50
Copper	10	.7	1.60	<10	1.00	<10
Iron	100	3.3	1.00	<100	-0.800	<100
Lead	3.0	2	-0.400	<3.0	0.100	<3.0
Lithium	50	1.5				
Magnesium	5000	25	10.1	<5000	2.10	<5000
Manganese	15	.1	0.100	<15	0.00	<15
Molybdenum	20	.6	anr			
Nickel	10	.8	0.100	<10	-0.100	<10
Phosphorus	50	7				
Potassium	10000	35	49.9	<10000	31.3	<10000
Selenium	10	3.6	-1.10	<10	-0.700	<10
Silicon	200	2.2				
Silver	10	.6	-1.00	<10	-0.900	<10
Sodium	10000	14	125	<10000	72.8	<10000
Strontium	10	.1				
Sulfur	50	3.7				
Thallium	10	5.2	1.30	<10	0.200	<10
Tin	10	1.4	anr			
Titanium	10	.8				
Tungsten	50	1.3				
Vanadium	50	.5	0.00	<50	0.200	<50

10.6.3  
10

BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SF050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: result < RL Run ID: MA56049 Units: ug/l

Time:			00:37		01:32	
Sample ID:			CCB8		CCB9	
Metal	RL	IDL	raw	final	raw	final

Zinc	20	.3	-1.00	<20	-1.00	<20
Zirconium	10	.5				
(*) Outside of QC limits						
(anr) Analyte not requested						

10.6.3  
 10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial Continuing Calibration Check

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SF050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
QC Limits: to % Recovery Run ID: MA56049 Units: ug/l

Metal	Time: Sample ID: ICCV True	17:39 ICCV1 Results	% Rec
Aluminum	40000	40000	100.0
Antimony	2000	2010	100.5
Arsenic	2000	2010	100.5
Barium	2000	2020	101.0
Beryllium	2000	2050	102.5
Bismuth			
Boron			
Cadmium	2000	2020	101.0
Calcium	40000	40600	101.5
Cerium			
Chromium	2000	2060	103.0
Cobalt	2000	2020	101.0
Copper	2000	1990	99.5
Iron	40000	40700	101.8
Lead	2000	2050	102.5
Lithium			
Magnesium	40000	40400	101.0
Manganese	2000	2080	104.0
Molybdenum	anr		
Nickel	2000	2040	102.0
Phosphorus			
Potassium	40000	39800	99.5
Selenium	2000	2020	101.0
Silicon			
Silver	250	246	98.4
Sodium	40000	40200	100.5
Strontium			
Sulfur			
Thallium	2000	2080	104.0
Tin	anr		
Titanium			
Tungsten			
Vanadium	2000	2040	102.0

10.6.4  
10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial Continuing Calibration Check

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SF050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
QC Limits: to % Recovery Run ID: MA56049 Units: ug/l

Time:	17:39
Sample ID: ICCV	ICCV1
Metal	True
Results	% Rec

Zinc 2000 2070 103.5

Zirconium

(\* ) Outside of QC limits  
(anr) Analyte not requested

10.6.4  
10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SF050924M2.ICP      Date Analyzed: 05/09/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56049      Units: ug/l

Metal	Time:	17:24			18:30			19:30		
	Sample ID:	ICV	ICV1	CCV	CCV1	CCV	CCV2	Results	% Rec	
	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec	
Aluminum	40000	39900	99.8	40000	40000	100.0	40000	40200	100.5	
Antimony	2000	2030	101.5	2000	2030	101.5	2000	2040	102.0	
Arsenic	2000	1970	98.5	2000	2020	101.0	2000	2030	101.5	
Barium	2000	2000	100.0	2000	2010	100.5	2000	2020	101.0	
Beryllium	2000	2050	102.5	2000	2050	102.5	2000	2070	103.5	
Bismuth										
Boron										
Cadmium	2000	2020	101.0	2000	2030	101.5	2000	2040	102.0	
Calcium	40000	40900	102.3	40000	40500	101.3	40000	40900	102.3	
Cerium										
Chromium	2000	2050	102.5	2000	2080	104.0	2000	2100	105.0	
Cobalt	2000	2050	102.5	2000	2020	101.0	2000	2020	101.0	
Copper	2000	2040	102.0	2000	2000	100.0	2000	2000	100.0	
Iron	40000	41000	102.5	40000	40300	100.8	40000	40200	100.5	
Lead	2000	2030	101.5	2000	2060	103.0	2000	2060	103.0	
Lithium										
Magnesium	40000	40800	102.0	40000	40300	100.8	40000	40600	101.5	
Manganese	2000	2090	104.5	2000	2110	105.5	2000	2140	107.0	
Molybdenum	anr									
Nickel	2000	2010	100.5	2000	2040	102.0	2000	2040	102.0	
Phosphorus										
Potassium	40000	39400	98.5	40000	39700	99.3	40000	39800	99.5	
Selenium	2000	1960	98.0	2000	2020	101.0	2000	2030	101.5	
Silicon										
Silver	250	260	104.0	250	247	98.8	250	249	99.6	
Sodium	40000	39800	99.5	40000	40300	100.8	40000	40500	101.3	
Strontium										
Sulfur										
Thallium	2000	2040	102.0	2000	2090	104.5	2000	2090	104.5	
Tin	anr									
Titanium										
Tungsten										
Vanadium	2000	2000	100.0	2000	2060	103.0	2000	2080	104.0	

10.6.5 10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SF050924M2.ICP      Date Analyzed: 05/09/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56049      Units: ug/l

Time:	17:24			18:30			19:30				
Sample ID:	ICV	ICV1	CCV	CCV1	CCV	CCV2	Results	% Rec	Results	% Rec	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec	Results	% Rec

Zinc	2000	2060	103.0	2000	2070	103.5	2000	2080	104.0
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Zirconium

(\*) Outside of QC limits  
(anr) Analyte not requested

10.6.5  
10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SF050924M2.ICP      Date Analyzed: 05/09/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56049      Units: ug/l

Metal	Time:	20:30			21:30			22:31		
	Sample ID:	CCV	CCV3	% Rec	CCV	CCV4	% Rec	CCV	CCV5	% Rec
Aluminum		40000	40100	100.3	40000	40100	100.3	40000	40000	100.0
Antimony		2000	2030	101.5	2000	2010	100.5	2000	1990	99.5
Arsenic		2000	2020	101.0	2000	2010	100.5	2000	2000	100.0
Barium		2000	2020	101.0	2000	2030	101.5	2000	2000	100.0
Beryllium		2000	2070	103.5	2000	2060	103.0	2000	2030	101.5
Bismuth										
Boron										
Cadmium		2000	2030	101.5	2000	2020	101.0	2000	2020	101.0
Calcium		40000	41200	103.0	40000	41100	102.8	40000	40200	100.5
Cerium										
Chromium		2000	2080	104.0	2000	2090	104.5	2000	2090	104.5
Cobalt		2000	2020	101.0	2000	2020	101.0	2000	2020	101.0
Copper		2000	1980	99.0	2000	1980	99.0	2000	2010	100.5
Iron		40000	40400	101.0	40000	40800	102.0	40000	40600	101.5
Lead		2000	2060	103.0	2000	2070	103.5	2000	2060	103.0
Lithium										
Magnesium		40000	40800	102.0	40000	41200	103.0	40000	40600	101.5
Manganese		2000	2120	106.0	2000	2120	106.0	2000	2090	104.5
Molybdenum		anr								
Nickel		2000	2050	102.5	2000	2050	102.5	2000	2020	101.0
Phosphorus										
Potassium		40000	39900	99.8	40000	40100	100.3	40000	39700	99.3
Selenium		2000	2020	101.0	2000	2010	100.5	2000	1990	99.5
Silicon										
Silver		250	248	99.2	250	248	99.2	250	244	97.6
Sodium		40000	40300	100.8	40000	40300	100.8	40000	40200	100.5
Strontium										
Sulfur										
Thallium		2000	2090	104.5	2000	2090	104.5	2000	2090	104.5
Tin		anr								
Titanium										
Tungsten										
Vanadium		2000	2070	103.5	2000	2070	103.5	2000	2040	102.0

10.6.5 10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SF050924M2.ICP      Date Analyzed: 05/09/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56049      Units: ug/l

	Time:									
Sample ID:	CCV	20:30 CCV3		CCV	21:30 CCV4		CCV	22:31 CCV5		
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec	

Zinc	2000	2090	104.5	2000	2100	105.0	2000	2080	104.0	
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Zirconium

(\*) Outside of QC limits  
(anr) Analyte not requested

10.6.5  
10



CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SF050924M2.ICP      Date Analyzed: 05/09/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56049      Units: ug/l

Metal	Time:	23:31			00:32			01:28		
	Sample ID:	CCV	CCV6	% Rec	CCV	CCV7	% Rec	CCV	CCV8	% Rec
Aluminum	40000	40000	100.0	40000	40100	100.3	40000	40100	100.3	
Antimony	2000	1980	99.0	2000	1990	99.5	2000	1990	99.5	
Arsenic	2000	1990	99.5	2000	2000	100.0	2000	1990	99.5	
Barium	2000	1980	99.0	2000	2000	100.0	2000	1980	99.0	
Beryllium	2000	2030	101.5	2000	2040	102.0	2000	2030	101.5	
Bismuth										
Boron										
Cadmium	2000	2020	101.0	2000	2020	101.0	2000	2020	101.0	
Calcium	40000	40100	100.3	40000	40400	101.0	40000	40100	100.3	
Cerium										
Chromium	2000	2100	105.0	2000	2110	105.5	2000	2110	105.5	
Cobalt	2000	2020	101.0	2000	2030	101.5	2000	2030	101.5	
Copper	2000	2010	100.5	2000	2000	100.0	2000	2020	101.0	
Iron	40000	40300	100.8	40000	40300	100.8	40000	40300	100.8	
Lead	2000	2060	103.0	2000	2070	103.5	2000	2080	104.0	
Lithium										
Magnesium	40000	40600	101.5	40000	40500	101.3	40000	40600	101.5	
Manganese	2000	2100	105.0	2000	2120	106.0	2000	2110	105.5	
Molybdenum	anr									
Nickel	2000	2020	101.0	2000	2030	101.5	2000	2030	101.5	
Phosphorus										
Potassium	40000	39500	98.8	40000	39500	98.8	40000	39400	98.5	
Selenium	2000	1980	99.0	2000	1990	99.5	2000	1980	99.0	
Silicon										
Silver	250	243	97.2	250	246	98.4	250	244	97.6	
Sodium	40000	40200	100.5	40000	40000	100.0	40000	40000	100.0	
Strontium										
Sulfur										
Thallium	2000	2090	104.5	2000	2100	105.0	2000	2110	105.5	
Tin	anr									
Titanium										
Tungsten										
Vanadium	2000	2040	102.0	2000	2070	103.5	2000	2050	102.5	

10.6.5 10

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SF050924M2.ICP      Date Analyzed: 05/09/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56049      Units: ug/l

	Time:									
Sample ID:	CCV	23:31 CCV6		CCV	00:32 CCV7		CCV	01:28 CCV8		
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec	

Zinc	2000	2090	104.5	2000	2100	105.0	2000	2090	104.5	
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Zirconium

(\* ) Outside of QC limits  
(anr) Analyte not requested

10.6.5  
10

HIGH STANDARD CHECK SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SF050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: 90 to 110 % Recovery Run ID: MA56049 Units: ug/l

Time:	18:11			18:17		
Sample ID:	HSTD	HSTD1		HSTD	HSTD2	
Metal	True	Results	% Rec	True	Results	% Rec
Aluminum				300000	304000	101.3
Antimony	8000	8060	100.8			
Arsenic	8000	7920	99.0			
Barium	8000	7860	98.3			
Beryllium	8000	8010	100.1			
Bismuth						
Boron						
Cadmium	8000	7900	98.8			
Calcium				200000	193000	96.5
Cerium						
Chromium	8000	8310	103.9			
Cobalt	8000	8010	100.1			
Copper	8000	7930	99.1			
Iron				200000	190000	95.0
Lead	8000	8120	101.5			
Lithium						
Magnesium				300000	297000	99.0
Manganese	8000	8040	100.5			
Molybdenum	anr					
Nickel	8000	7960	99.5			
Phosphorus						
Potassium				200000	199000	99.5
Selenium	8000	8020	100.3			
Silicon						
Silver	625	611	97.8			
Sodium				200000	197000	98.5
Strontium						
Sulfur						
Thallium	8000	8310	103.9			
Tin	anr					
Titanium						
Tungsten						
Vanadium	8000	8180	102.3			

10.6.6  
10

HIGH STANDARD CHECK SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SF050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: 90 to 110 % Recovery Run ID: MA56049 Units: ug/l

Time:		18:11		18:17		
Sample ID:	HSTD	HSTD1		HSTD	HSTD2	
Metal	True	Results	% Rec	True	Results	% Rec

Zinc 8000 8220 102.8

Zirconium

(\* ) Outside of QC limits  
 (anr) Analyte not requested

10.6.6  
 10

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SF050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: CRI 80-120% CRIA 80-120% Run ID: MA56049 Units: ug/l

Time:				17:56			18:40		
Sample ID:	CRI	CRIA	CRID	CRID1			CRID2		
Metal	True	True	True	Results	% Rec		Results	% Rec	
Aluminum	200	500	100	95.5	95.5		201	100.5	
Antimony	6.0	20	3.0				5.40	90.0	
Arsenic	8.0	20	3.0	2.60	86.7		7.00	87.5	
Barium	200		4.0	3.50	87.5		193	96.5	
Beryllium	2.0		1.0	1.00	100.0		2.00	100.0	
Bismuth	20								
Boron	100		10						
Cadmium	3.0		1.0				2.70	90.0	
Calcium	5000	2000	1000	1010	101.0		5080	101.6	
Cerium									
Chromium	10		2.0	2.20	110.0		10.3	103.0	
Cobalt	50		3.0	3.00	100.0		48.6	97.2	
Copper	10		2.0				8.10	81.0	
Iron	100	500					102	102.0	
Lead	3.0	20	2.5				3.40	113.3	
Lithium	50								
Magnesium	5000	2000	100	110	110.0		5040	100.8	
Manganese	15		3.0	3.10	103.3		15.7	104.7	
Molybdenum	20								
Nickel	10		4.0	4.00	100.0		9.70	97.0	
Phosphorus	50								
Potassium	5000		2000	1920	96.0		4790	95.8	
Selenium	10	20	5.0	4.00	80.0		9.60	96.0	
Silicon	200								
Silver	5.0		2.0				4.30	86.0	
Sodium	5000		1000	976	97.6		4930	98.6	
Strontium	10								
Sulfur	50								
Thallium	10		2.0				11.6	116.0	
Tin	10								
Titanium	10								
Tungsten	50								
Vanadium	50		2.0	1.70	85.0		49.9	99.8	

10.6.7  
10

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SF050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: CRI 80-120% CRIA 80-120% Run ID: MA56049 Units: ug/l

Time:				17:56			18:40
Sample ID:	CRI	CRIA	CRID	CRID1		CRI2	
Metal	True	True	True	Results	% Rec	Results	% Rec

Zinc	20		10			23.7	118.5
Zirconium	10						

(\* ) Outside of QC limits  
 (anr) Analyte not requested

10.6.7  
**10**

INTERFERING ELEMENT CHECK STANDARDS SUMMARY  
Part 1 - ICSA and ICSAB Standards

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SF050924M2.ICP      Date Analyzed: 05/09/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 80 to 120 % Recovery      Run ID: MA56049      Units: ug/l

Metal	Time:		18:01		18:06	
	Sample ID:	ICSA	ICSAB	ICSAL	ICSAB1	ICSAB1
	True	True	Results	% Rec	Results	% Rec
Aluminum	500000	500000	511000	102.2	499000	99.8
Antimony		1000	5.20		982	98.2
Arsenic		1000	2.30		965	96.5
Barium		500	3.40		504	100.8
Beryllium		500	0.00		504	100.8
Bismuth		500	-0.400		489	97.8
Boron		500	1.40		478	95.6
Cadmium		1000	0.100		1060	106.0
Calcium	400000	400000	416000	104.0	373000	93.3
Cerium			40.1		31.9	
Chromium		500	-0.900		494	98.8
Cobalt		500	0.600		491	98.2
Copper		500	-0.400		541	108.2
Iron	200000	200000	230000	115.0	185000	92.5
Lead		1000	1.70		967	96.7
Lithium		500	-0.800		507	101.4
Magnesium	500000	500000	585000	117.0	489000	97.8
Manganese		500	2.00		526	105.2
Molybdenum		500	0.800		466	93.2
Nickel		1000	5.60		954	95.4
Phosphorus		500	29.3		485	97.0
Potassium			-29.5		-14.6	
Selenium		1000	4.30		943	94.3
Silicon		500	-9.00		556	111.2
Silver		1000	-0.800		1120	112.0
Sodium			37.4		61.3	
Strontium		500	-0.500		498	99.6
Sulfur		500	-5.90		481	96.2
Thallium		1000	-1.20		909	90.9
Tin		500	2.30		457	91.4
Titanium		500	2.00		496	99.2
Tungsten		500	4.00		462	92.4
Vanadium		500	3.70		517	103.4

10.6.8  
10

INTERFERING ELEMENT CHECK STANDARDS SUMMARY  
 Part 1 - ICSA and ICSAB Standards

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SF050924M2.ICP Date Analyzed: 05/09/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: 80 to 120 % Recovery Run ID: MA56049 Units: ug/l

Time:		18:01		18:06	
Sample ID:	ICSA	ICSAB	ICSAL	ICSAB1	
Metal	True	True	Results	% Rec	Results % Rec

Zinc		1000	-5.90		951 95.1
Zirconium		500	1.00		469 93.8

(\*) Outside of QC limits  
 (anr) Analyte not requested

10.6.8  
 10



BLANK RESULTS SUMMARY  
Part 2 - Method Blanks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46431  
Matrix Type: AQUEOUS

Methods: SW846 6010D  
Units: ug/l

Prep Date: 05/07/24

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	17	150	12.0	<200
Antimony	6.0	1.7	4.7	1.7	<6.0
Arsenic	3.0	2.1	2.8	0.0	<3.0
Barium	200	.8	13	0.20	<200
Beryllium	1.0	.3	.5	0.0	<1.0
Bismuth	20	2.3	8.6		
Boron	100	2.3	10		
Cadmium	3.0	.3	1	0.10	<3.0
Calcium	5000	6.6	99	9.9	<5000
Cerium	100				
Chromium	10	.3	2	-0.10	<10
Cobalt	50	.4	2.6	0.0	<50
Copper	10	.8	5.9	-2.3	<10
Iron	100	5.3	32	1.7	<100
Lead	3.0	1.1	1.8	0.40	<3.0
Lithium	50	4.8	7.3		
Magnesium	5000	32	140	0.60	<5000
Manganese	15	.1	1.4	0.10	<15
Molybdenum	20	.6	3.6		
Nickel	10	.4	1.7	-0.10	<10
Phosphorus	50	1.2	18		
Potassium	10000	77	200	14.7	<10000
Selenium	10	3.2	4.9	-2.1	<10
Silicon	200	1.7	32		
Silver	10	1	6.1	0.80	<10
Sodium	10000	34	570	-41	<10000
Strontium	10	.3	2.7		
Sulfur	50	3	45		
Thallium	10	1.8	1.8	0.10	<10
Tin	10	.8	3.7		
Titanium	10	.5	2.5		
Tungsten	50	2.6	40		
Vanadium	50	.6	1.8	-0.20	<50

BLANK RESULTS SUMMARY  
Part 2 - Method Blanks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46431  
Matrix Type: AQUEOUS

Methods: SW846 6010D  
Units: ug/l

Prep Date: 05/07/24

Metal	RL	IDL	MDL	MB raw	final
-------	----	-----	-----	-----------	-------

Zinc	20	.1	6.9	0.10	<20
Zirconium	10	.3	4.1		

Associated samples MP46431: JD87833-17

Results < IDL are shown as zero for calculation purposes  
(\* ) Outside of QC limits  
(anr) Analyte not requested

10.7.1  
10

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46431  
 Matrix Type: AQUEOUS

Methods: SW846 6010D  
 Units: ug/l

Prep Date: 05/07/24

Metal	JD87831-1 Original MS	SpikeLot MPSPK2	% Rec	QC Limits	
Aluminum	18200	42800	25000	98.4	75-125
Antimony	1.8	1940	2000	96.9	75-125
Arsenic	0.0	2190	2000	109.5	75-125
Barium	227	2280	2000	102.7	75-125
Beryllium	0.60	2080	2000	104.0	75-125
Bismuth					
Boron					
Cadmium	0.40	2040	2000	102.0	75-125
Calcium	38500	66800	25000	113.2	75-125
Cerium					
Chromium	117	2260	2000	107.2	75-125
Cobalt	25.3	1910	2000	94.2	75-125
Copper	38.3	2080	2000	102.1	75-125
Iron	24500	57600	25000	132.4N(a)	75-125
Lead	15.5	1890	2000	93.7	75-125
Lithium					
Magnesium	23200	55400	25000	128.8N(a)	75-125
Manganese	415	2400	2000	99.3	75-125
Molybdenum					
Nickel	84.9	2150	2000	103.3	75-125
Phosphorus					
Potassium	15600	44600	25000	116.0	75-125
Selenium	0.0	2010	2000	100.5	75-125
Silver	0.0	250	250	100.0	75-125
Sodium	94500	125000	25000	122.0	75-125
Strontium					
Sulfur					
Thallium	0.0	2080	2000	104.0	75-125
Tin					
Titanium					
Tungsten					
Vanadium	43.8	2050	2000	100.3	75-125
Zinc	87.8	2150	2000	103.1	75-125

10.7.2  
10

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46431  
Matrix Type: AQUEOUS

Methods: SW846 6010D  
Units: ug/l

Prep Date: 05/07/24

Metal	JD87831-1 Original MS	SpikeLot MPSPK2	% Rec	QC Limits
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Zirconium

Associated samples MP46431: JD87833-17

Results < IDL are shown as zero for calculation purposes  
(\* ) Outside of QC limits  
(N) Matrix Spike Rec. outside of QC limits  
(anr) Analyte not requested  
(a) Spike recovery indicates possible matrix interference.

10.7.2  
10

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46431  
 Matrix Type: AQUEOUS

Methods: SW846 6010D  
 Units: ug/l

Prep Date: 05/07/24

Metal	JD87831-1 Original MSD	Spikelot MPSPK2	% Rec	MSD RPD	QC Limit	
Aluminum	18200	45600	25000	109.6	6.3	20
Antimony	1.8	1980	2000	98.9	2.0	20
Arsenic	0.0	2240	2000	112.0	2.3	20
Barium	227	2360	2000	106.7	3.4	20
Beryllium	0.60	2140	2000	107.0	2.8	20
Bismuth						
Boron						
Cadmium	0.40	2090	2000	104.5	2.4	20
Calcium	38500	70400	25000	127.6N(a)	5.2	20
Cerium						
Chromium	117	2340	2000	111.2	3.5	20
Cobalt	25.3	1960	2000	96.7	2.6	20
Copper	38.3	2050	2000	100.6	1.5	20
Iron	24500	61300	25000	147.2N(a)	6.2	20
Lead	15.5	1930	2000	95.7	2.1	20
Lithium						
Magnesium	23200	58500	25000	141.2N(a)	5.4	20
Manganese	415	2490	2000	103.8	3.7	20
Molybdenum						
Nickel	84.9	2220	2000	106.8	3.2	20
Phosphorus						
Potassium	15600	46700	25000	124.4	4.6	20
Selenium	0.0	2050	2000	102.5	2.0	20
Silver	0.0	256	250	102.4	2.4	20
Sodium	94500	129000	25000	138.0N(a)	3.1	20
Strontium						
Sulfur						
Thallium	0.0	2130	2000	106.5	2.4	20
Tin						
Titanium						
Tungsten						
Vanadium	43.8	2110	2000	103.3	2.9	20
Zinc	87.8	2210	2000	106.1	2.8	20

10.7.2  
10

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46431  
 Matrix Type: AQUEOUS

Methods: SW846 6010D  
 Units: ug/l

Prep Date: 05/07/24

Metal	JD87831-1 Original MSD	SpikeLot MPSPK2	% Rec	MSD RPD	QC Limit
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Zirconium

Associated samples MP46431: JD87833-17

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (N) Matrix Spike Rec. outside of QC limits  
 (anr) Analyte not requested  
 (a) Spike recovery indicates possible matrix interference.

10.7.2  
 10

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46431  
 Matrix Type: AQUEOUS

Methods: SW846 6010D  
 Units: ug/l

Prep Date: 05/07/24

Metal	BSP Result	Spikelot MPSPK2	% Rec	QC Limits
Aluminum	25300	25000	101.2	80-120
Antimony	1900	2000	95.0	80-120
Arsenic	1840	2000	92.0	80-120
Barium	1950	2000	97.5	80-120
Beryllium	1940	2000	97.0	80-120
Bismuth				
Boron				
Cadmium	1930	2000	96.5	80-120
Calcium	25600	25000	102.4	80-120
Cerium				
Chromium	1910	2000	95.5	80-120
Cobalt	1960	2000	98.0	80-120
Copper	1890	2000	94.5	80-120
Iron	24900	25000	99.6	80-120
Lead	1910	2000	95.5	80-120
Lithium				
Magnesium	25000	25000	100.0	80-120
Manganese	1990	2000	99.5	80-120
Molybdenum				
Nickel	1890	2000	94.5	80-120
Phosphorus				
Potassium	24200	25000	96.8	80-120
Selenium	1900	2000	95.0	80-120
Silicon				
Silver	228	250	91.2	80-120
Sodium	25100	25000	100.4	80-120
Strontium				
Sulfur				
Thallium	2000	2000	100.0	80-120
Tin				
Titanium				
Tungsten				
Vanadium	1910	2000	95.5	80-120

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46431  
Matrix Type: AQUEOUS

Methods: SW846 6010D  
Units: ug/l

Prep Date: 05/07/24

Metal	BSP Result	Spikelot MPSPK2	% Rec	QC Limits
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Zinc 1970 2000 98.5 80-120

Zirconium

Associated samples MP46431: JD87833-17

Results < IDL are shown as zero for calculation purposes  
(\* ) Outside of QC limits  
(anr) Analyte not requested

10.7.3  
10



SERIAL DILUTION RESULTS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46431  
 Matrix Type: AQUEOUS

Methods: SW846 6010D  
 Units: ug/l

Prep Date: 05/07/24

Metal	JD87831-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum	18200	18700	3.0	0-10
Antimony	1.80	0.00	100.0(a)	0-10
Arsenic	0.00	0.00	NC	0-10
Barium	227	234	3.2	0-10
Beryllium	0.600	0.00	100.0(a)	0-10
Bismuth				
Boron				
Cadmium	0.400	0.00	100.0(a)	0-10
Calcium	38500	38800	1.0	0-10
Cerium				
Chromium	117	119	1.9	0-10
Cobalt	25.3	25.5	0.8	0-10
Copper	38.3	25.9	32.4 (a)	0-10
Iron	24500	24100	1.5	0-10
Lead	15.5	15.1	2.6	0-10
Lithium				
Magnesium	23200	23500	1.2	0-10
Manganese	415	422	1.6	0-10
Molybdenum				
Nickel	84.9	85.6	0.8	0-10
Phosphorus				
Potassium	15600	15800	1.5	0-10
Selenium	0.00	0.00	NC	0-10
Silicon				
Silver	0.00	0.00	NC	0-10
Sodium	94500	97300	3.1	0-10
Strontium				
Sulfur				
Thallium	0.00	0.00	NC	0-10
Tin				
Titanium				
Tungsten				
Vanadium	43.8	43.4	0.9	0-10

10.7.4  
10

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46431  
Matrix Type: AQUEOUS

Methods: SW846 6010D  
Units: ug/l

Prep Date: 05/07/24

Metal	JD87831-1	QC	
	Original SDL 1:5	%DIF	Limits

Zinc 87.8 115 31.0\*(b) 0-10

Zirconium

Associated samples MP46431: JD87833-17

Results < IDL are shown as zero for calculation purposes

(\*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

(b) Serial dilution indicates possible matrix interference.

10.7.4  
10

BLANK RESULTS SUMMARY  
Part 2 - Method Blanks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46448  
Matrix Type: AQUEOUS

Methods: SW846 7470A  
Units: ug/l

Prep Date: 05/07/24

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.013	.095	0.099	<0.20

Associated samples MP46448: JD87833-17

Results < IDL are shown as zero for calculation purposes  
(\* ) Outside of QC limits  
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46448  
 Matrix Type: AQUEOUS

Methods: SW846 7470A  
 Units: ug/l

Prep Date: 05/07/24

Metal	JD87813-1F Original MS	Spikelot HGPW3	% Rec	QC Limits
Mercury	0.11    2.1	2	99.5	75-125

Associated samples MP46448: JD87833-17

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (N) Matrix Spike Rec. outside of QC limits  
 (anr) Analyte not requested

10.8.2  
 10

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46448  
 Matrix Type: AQUEOUS

Methods: SW846 7470A  
 Units: ug/l

Prep Date: 05/07/24

Metal	JD87813-1F Original MSD	SpikeLot HGPW3	% Rec	MSD RPD	QC Limit
Mercury	0.11	2.0	2	94.5	4.9 20

Associated samples MP46448: JD87833-17

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (N) Matrix Spike Rec. outside of QC limits  
 (anr) Analyte not requested

10.8.2  
 10

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46448 Methods: SW846 7470A  
 Matrix Type: AQUEOUS Units: ug/l

Prep Date: 05/07/24 05/07/24

Metal	BSP Result	Spikelot HGPW3	% Rec	QC Limits	BSD Result	Spikelot HGPW3	% Rec	BSD RPD	QC Limit
Mercury	2.1	2	105.0	80-120	2.0	2	100.0	4.9	

Associated samples MP46448: JD87833-17

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (anr) Analyte not requested

10.8.3  
10

BLANK RESULTS SUMMARY  
Part 2 - Method Blanks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46464  
Matrix Type: SOLID

Methods: SW846 6010D  
Units: mg/kg

Prep Date: 05/08/24

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	.92	8.1	0.27	<50
Antimony	2.0	.28	.41	-0.070	<2.0
Arsenic	2.0	.26	.28	0.090	<2.0
Barium	20	.02	1.9	0.020	<20
Beryllium	0.20	.02	.08	0.0	<0.20
Bismuth	2.0	.25	.52		
Boron	10	.18	3.7		
Cadmium	0.50	.04	.07	-0.020	<0.50
Calcium	500	1.3	21	5.9	<500
Chromium	1.0	.07	.37	0.050	<1.0
Cobalt	5.0	.06	.28	0.010	<5.0
Copper	2.5	.07	.84	-0.20	<2.5
Iron	50	.33	19	0.53	<50
Lead	2.0	.2	.41	0.030	<2.0
Lithium	5.0	.15	.92		
Magnesium	500	2.5	14	3.0	<500
Manganese	1.5	.01	.41	0.010	<1.5
Molybdenum	2.0	.06	.32		
Nickel	4.0	.08	.35	0.020	<4.0
Phosphorus	20	.7	3.3		
Potassium	1000	3.5	32	3.3	<1000
Selenium	2.0	.36	.65	0.010	<2.0
Silicon	20	.22	11		
Silver	0.50	.06	.17	-0.040	<0.50
Sodium	1000	1.4	78	5.2	<1000
Strontium	5.0	.01	.18		
Sulfur	10	.37	3.9		
Thallium	1.0	.52	.58	0.080	<1.0
Tin	20	.14	3.8		
Titanium	1.0	.08	.34		
Tungsten	5.0	.13	1.8		
Vanadium	5.0	.05	.19	-0.030	<5.0
Zinc	10	.03	2.3	3.8	<10

BLANK RESULTS SUMMARY  
Part 2 - Method Blanks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46464  
Matrix Type: SOLID

Methods: SW846 6010D  
Units: mg/kg

Prep Date: 05/08/24

Metal	RL	IDL	MDL	MB	
				raw	final

Zirconium 2.0 .05 .54

Associated samples MP46464: JD87833-1, JD87833-2, JD87833-3, JD87833-4, JD87833-5, JD87833-6, JD87833-7, JD87833-8, JD87833-9, JD87833-10, JD87833-11, JD87833-12, JD87833-13, JD87833-14, JD87833-15, JD87833-16

Results < IDL are shown as zero for calculation purposes  
(\* ) Outside of QC limits  
(anr) Analyte not requested

10.9.1  
10



MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46464  
 Matrix Type: SOLID

Methods: SW846 6010D  
 Units: mg/kg

Prep Date: 05/08/24

Metal	JD87833-14 Original MS	Spikelot MPSPK2	% Rec	QC Limits
Aluminum	7700	12600	2630	186.7N(a) 75-125
Antimony	0.0	117	210	55.7N(a) 75-125
Arsenic	3.8	189	210	88.2 75-125
Barium	33.0	227	210	92.4 75-125
Beryllium	0.29	191	210	90.8 75-125
Bismuth				
Boron				
Cadmium	0.054	191	210	90.9 75-125
Calcium	1770	4160	2630	91.0 75-125
Chromium	10.2	205	210	92.8 75-125
Cobalt	3.9	196	210	91.5 75-125
Copper	10.9	199	210	89.6 75-125
Iron	11200	14400	2630	121.9 75-125
Lead	26.5	224	210	94.0 75-125
Lithium				
Magnesium	1640	4290	2630	100.9 75-125
Manganese	225	507	210	134.3N(a) 75-125
Molybdenum				
Nickel	8.1	202	210	92.3 75-125
Phosphorus				
Potassium	543	3300	2630	105.0 75-125
Selenium	0.0	188	210	89.5 75-125
Silicon				
Silver	0.075	24.5	26.3	93.0 75-125
Sodium	128	2540	2630	91.9 75-125
Strontium				
Sulfur				
Thallium	0.0	198	210	94.3 75-125
Tin				
Titanium				
Tungsten				
Vanadium	17.8	209	210	91.0 75-125
Zinc	42.3	227	210	87.9 75-125

10.9.2  
10

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46464  
 Matrix Type: SOLID

Methods: SW846 6010D  
 Units: mg/kg

Prep Date: 05/08/24

Metal	JD87833-14 Original MS	Spikelet MPSPK2	% Rec	QC Limits
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Zirconium

Associated samples MP46464: JD87833-1, JD87833-2, JD87833-3, JD87833-4, JD87833-5, JD87833-6, JD87833-7, JD87833-8, JD87833-9, JD87833-10, JD87833-11, JD87833-12, JD87833-13, JD87833-14, JD87833-15, JD87833-16

Results < IDL are shown as zero for calculation purposes

(\*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

10.9.2  
10

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46464  
 Matrix Type: SOLID

Methods: SW846 6010D  
 Units: mg/kg

Prep Date: 05/08/24

Metal	JD87833-14 Original MSD	Spikelot MPSPK2	% Rec	MSD RPD	QC Limit	
Aluminum	7700	12600	2700	181.3N(a)	0.0	20
Antimony	0.0	124	216	57.4N(a)	5.8	20
Arsenic	3.8	197	216	89.4	4.1	20
Barium	33.0	236	216	93.9	3.9	20
Beryllium	0.29	198	216	91.5	3.6	20
Bismuth						
Boron						
Cadmium	0.054	198	216	91.6	3.6	20
Calcium	1770	5040	2700	121.0	19.1	20
Chromium	10.2	210	216	92.4	2.4	20
Cobalt	3.9	203	216	92.1	3.5	20
Copper	10.9	220	216	96.7	10.0	20
Iron	11200	14700	2700	129.5(b)	2.1	20
Lead	26.5	226	216	92.3	0.9	20
Lithium						
Magnesium	1640	4620	2700	110.3	7.4	20
Manganese	225	429	216	94.4	16.7	20
Molybdenum						
Nickel	8.1	210	216	93.4	3.9	20
Phosphorus						
Potassium	543	3540	2700	110.9	7.0	20
Selenium	0.0	195	216	90.2	3.7	20
Silicon						
Silver	0.075	25.5	27	94.1	4.0	20
Sodium	128	2770	2700	97.8	8.7	20
Strontium						
Sulfur						
Thallium	0.0	203	216	93.9	2.5	20
Tin						
Titanium						
Tungsten						
Vanadium	17.8	219	216	93.1	4.7	20
Zinc	42.3	232	216	87.7	2.2	20

10.9.2  
10

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46464  
 Matrix Type: SOLID

Methods: SW846 6010D  
 Units: mg/kg

Prep Date: 05/08/24

Metal	JD87833-14 Original MSD	SpikeLot MPSPK2	% Rec	MSD RPD	QC Limit
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Zirconium

Associated samples MP46464: JD87833-1, JD87833-2, JD87833-3, JD87833-4, JD87833-5, JD87833-6, JD87833-7, JD87833-8, JD87833-9, JD87833-10, JD87833-11, JD87833-12, JD87833-13, JD87833-14, JD87833-15, JD87833-16

Results < IDL are shown as zero for calculation purposes

(\*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

(b) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

10.9.2  
10

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46464  
 Matrix Type: SOLID

Methods: SW846 6010D  
 Units: mg/kg

Prep Date: 05/08/24

Metal	BSP Result	Spikelot MPSPK2	% Rec	QC Limits
Aluminum	2280	2500	91.2	80-120
Antimony	180	200	90.0	80-120
Arsenic	179	200	89.5	80-120
Barium	178	200	89.0	80-120
Beryllium	183	200	91.5	80-120
Bismuth				
Boron				
Cadmium	181	200	90.5	80-120
Calcium	2320	2500	92.8	80-120
Chromium	185	200	92.5	80-120
Cobalt	178	200	89.0	80-120
Copper	174	200	87.0	80-120
Iron	2280	2500	91.2	80-120
Lead	183	200	91.5	80-120
Lithium				
Magnesium	2280	2500	91.2	80-120
Manganese	188	200	94.0	80-120
Molybdenum				
Nickel	181	200	90.5	80-120
Phosphorus				
Potassium	2240	2500	89.6	80-120
Selenium	181	200	90.5	80-120
Silicon				
Silver	22.7	25	90.8	80-120
Sodium	2280	2500	91.2	80-120
Strontium				
Sulfur				
Thallium	189	200	94.5	80-120
Tin				
Titanium				
Tungsten				
Vanadium	180	200	90.0	80-120
Zinc	185	200	92.5	80-120

10.9.3  
10

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46464  
Matrix Type: SOLID

Methods: SW846 6010D  
Units: mg/kg

Prep Date: 05/08/24

Metal	BSP Result	Spikelot MPSPK2	QC % Rec	QC Limits
-------	---------------	--------------------	-------------	--------------

Zirconium

Associated samples MP46464: JD87833-1, JD87833-2, JD87833-3, JD87833-4, JD87833-5, JD87833-6, JD87833-7, JD87833-8, JD87833-9, JD87833-10, JD87833-11, JD87833-12, JD87833-13, JD87833-14, JD87833-15, JD87833-16

Results < IDL are shown as zero for calculation purposes  
(\* ) Outside of QC limits  
(anr) Analyte not requested

10.9.3  
10

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46464  
 Matrix Type: SOLID

Methods: SW846 6010D  
 Units: ug/l

Prep Date: 05/08/24

Metal	JD87833-14 Original SDL 1:5		%DIF	QC Limits
Aluminum	71900	75500	5.0	0-10
Antimony	0.00	0.00	NC	0-10
Arsenic	35.3	33.7	4.5	0-10
Barium	308	319	3.4	0-10
Beryllium	2.70	2.40	11.1 (a)	0-10
Bismuth				
Boron				
Cadmium	0.500	0.00	100.0(a)	0-10
Calcium	16500	17700	7.0	0-10
Chromium	95.5	102	6.3	0-10
Cobalt	36.6	38.3	4.6	0-10
Copper	102	105	3.4	0-10
Iron	105000	111000	6.3	0-10
Lead	248	253	2.1	0-10
Lithium				
Magnesium	15400	16300	6.2	0-10
Manganese	2100	2260	7.5	0-10
Molybdenum				
Nickel	75.9	76.0	0.1	0-10
Phosphorus				
Potassium	5070	5310	4.7	0-10
Selenium	0.00	0.00	NC	0-10
Silicon				
Silver	0.700	0.00	100.0(a)	0-10
Sodium	1200	1260	4.8	0-10
Strontium				
Sulfur				
Thallium	0.00	0.00	NC	0-10
Tin				
Titanium				
Tungsten				
Vanadium	166	176	5.8	0-10
Zinc	396	427	7.8	0-10

10.9.4  
10

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46464  
Matrix Type: SOLID

Methods: SW846 6010D  
Units: ug/l

Prep Date: 05/08/24

	JD87833-14		QC
Metal	Original SDL 1:5	%DIF	Limits

Zirconium

Associated samples MP46464: JD87833-1, JD87833-2, JD87833-3, JD87833-4, JD87833-5, JD87833-6, JD87833-7, JD87833-8, JD87833-9, JD87833-10, JD87833-11, JD87833-12, JD87833-13, JD87833-14, JD87833-15, JD87833-16

Results < IDL are shown as zero for calculation purposes

(\*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).



POST DIGESTATE SPIKE SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46464  
 Matrix Type: SOLID

Methods: SW846 6010D  
 Units: ug/l

Prep Date:

05/08/24

Metal	Sample ml	Final ml	JD87833-14 Raw	PS Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony	19.25	20			1866	0.2	200	2000	93.3	80-120
Arsenic										
Barium										
Beryllium										
Bismuth										
Boron										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron										
Lead										
Lithium										
Magnesium										
Manganese	19.25	20	2098	2019.325	3879	0.2	200	2000	93.0	80-120
Molybdenum										
Nickel										
Phosphorus										
Potassium										
Selenium										
Silicon										
Silver										
Sodium										
Strontium										
Sulfur										
Thallium										
Tin										
Titanium										
Tungsten										
Vanadium										
Zinc										

10.9.5  
10

POST DIGESTATE SPIKE SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46464  
 Matrix Type: SOLID

Methods: SW846 6010D  
 Units: ug/l

Prep Date:

05/08/24

Metal	Sample ml	Final ml	JD87833-14 Raw	PS Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
-------	--------------	-------------	-------------------	---------------	------------	-------------	----------------	---------------	-------	--------------

Zirconium

Associated samples MP46464: JD87833-1, JD87833-2, JD87833-3, JD87833-4, JD87833-5, JD87833-6, JD87833-7, JD87833-8, JD87833-9, JD87833-10, JD87833-11, JD87833-12, JD87833-13, JD87833-14, JD87833-15, JD87833-16

Results < IDL are shown as zero for calculation purposes

(\*) Outside of QC limits

(\*\*) Corr. sample result = Raw \* (sample volume / final volume)

(anr) Analyte not requested

10.9.5  
10

BLANK RESULTS SUMMARY  
Part 2 - Method Blanks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46496  
Matrix Type: SOLID

Methods: SW846 7471B  
Units: mg/kg

Prep Date: 05/08/24

Metal	RL	IDL	MDL	MB	
				raw	final
Mercury	0.033	.0066	.015	-0.014	<0.033

Associated samples MP46496: JD87833-1, JD87833-2, JD87833-3, JD87833-4, JD87833-5, JD87833-6, JD87833-7, JD87833-8, JD87833-9, JD87833-10, JD87833-11, JD87833-12, JD87833-13, JD87833-14, JD87833-15

Results < IDL are shown as zero for calculation purposes  
(\* ) Outside of QC limits  
(anr) Analyte not requested

10.10.1  
10

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46496  
 Matrix Type: SOLID

Methods: SW846 7471B  
 Units: mg/kg

Prep Date: 05/08/24

Metal	JD87808-19 Original MS	Spike lot	HGPWS1 % Rec	QC Limits
-------	---------------------------	--------------	-----------------	--------------

Mercury 0.0 0.39 0.353 110.6 80-120

Associated samples MP46496: JD87833-1, JD87833-2, JD87833-3, JD87833-4, JD87833-5, JD87833-6, JD87833-7, JD87833-8, JD87833-9, JD87833-10, JD87833-11, JD87833-12, JD87833-13, JD87833-14, JD87833-15

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (N) Matrix Spike Rec. outside of QC limits  
 (anr) Analyte not requested

10.10.2  
 10

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46496  
 Matrix Type: SOLID

Methods: SW846 7471B  
 Units: mg/kg

Prep Date: 05/08/24

Metal	JD87808-19 Original MSD	Spike HGPWS1	lot % Rec	MSD RPD	QC Limit
Mercury	0.0	0.38	0.353	107.7	2.6 20

Associated samples MP46496: JD87833-1, JD87833-2, JD87833-3, JD87833-4, JD87833-5, JD87833-6, JD87833-7, JD87833-8, JD87833-9, JD87833-10, JD87833-11, JD87833-12, JD87833-13, JD87833-14, JD87833-15

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (N) Matrix Spike Rec. outside of QC limits  
 (anr) Analyte not requested

10.10.2  
 10

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46496  
 Matrix Type: SOLID

Methods: SW846 7471B  
 Units: mg/kg

Prep Date: 05/08/24 05/08/24

Metal	BSP Result	Spikelot HGPWS1	% Rec	QC Limits	LCS Result	Spikelot HGLC540112%	QC Limits
Mercury	0.35	0.333	105.0	80-120	9.1	11	82.7 64-118

Associated samples MP46496: JD87833-1, JD87833-2, JD87833-3, JD87833-4, JD87833-5, JD87833-6, JD87833-7, JD87833-8, JD87833-9, JD87833-10, JD87833-11, JD87833-12, JD87833-13, JD87833-14, JD87833-15

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (anr) Analyte not requested

10.10.3  
 10

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46496  
 Matrix Type: SOLID

Methods: SW846 7471B  
 Units: mg/kg

Prep Date: 05/08/24

Metal	LCS Result	Spikelot HGLC540112% Rec	QC Limits
-------	------------	--------------------------	-----------

Mercury 8.9 11 80.9 64-118

Associated samples MP46496: JD87833-1, JD87833-2, JD87833-3, JD87833-4, JD87833-5, JD87833-6, JD87833-7, JD87833-8, JD87833-9, JD87833-10, JD87833-11, JD87833-12, JD87833-13, JD87833-14, JD87833-15

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (anr) Analyte not requested

10.10.3  
 10

BLANK RESULTS SUMMARY  
Part 2 - Method Blanks

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46497  
Matrix Type: SOLID

Methods: SW846 7471B  
Units: mg/kg

Prep Date: 05/08/24

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.033	.0066	.015	-0.0086	<0.033

Associated samples MP46497: JD87833-16

Results < IDL are shown as zero for calculation purposes  
(\* ) Outside of QC limits  
(anr) Analyte not requested

10.11.1  
10



MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD87833  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46497  
Matrix Type: SOLID

Methods: SW846 7471B  
Units: mg/kg

Prep Date: 05/08/24

Metal	JD87833-16 Original MS	SpikeLot HGPWS1	% Rec	QC Limits
-------	---------------------------	--------------------	-------	--------------

Mercury 0.15 0.53 0.329 115.7 80-120

Associated samples MP46497: JD87833-16

Results < IDL are shown as zero for calculation purposes  
(\* ) Outside of QC limits  
(N) Matrix Spike Rec. outside of QC limits  
(anr) Analyte not requested

10.11.2  
10

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD87833  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46497  
 Matrix Type: SOLID

Methods: SW846 7471B  
 Units: mg/kg

Prep Date: 05/08/24

Metal	JD87833-16 Original MSD	Spike lot HGPWS1	% Rec	MSD RPD	QC Limit	
Mercury	0.15	0.46	0.329	94.4	14.1	20

Associated samples MP46497: JD87833-16

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (N) Matrix Spike Rec. outside of QC limits  
 (anr) Analyte not requested

10.11.2  
 10

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD87833

Account: MTXFPNJ - Matrix New World Engineering, Inc.

Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46497

Methods: SW846 7471B

Matrix Type: SOLID

Units: mg/kg

Prep Date: 05/08/24

Metal	BSP Result	Spikelot HGPWS1	% Rec	QC Limits
Mercury	0.36	0.333	108.0	80-120

Associated samples MP46497: JD87833-16

Results < IDL are shown as zero for calculation purposes

(\*) Outside of QC limits

(anr) Analyte not requested

10.11.3  
10

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Percent Solids Raw Data Summary



# Percent Solids Raw Data Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

---

**Sample:** JD87833-1      **Analyzed:** 06-MAY-24 by SC      **Method:** SM2540 G 18TH ED MOD  
**ClientID:** SB-1

Wet Weight (Total)	37.19	g
Tare Weight	30.83	g
Dry Weight (Total)	35.37	g
Solids, Percent	71.4	%

---

**Sample:** JD87833-2      **Analyzed:** 06-MAY-24 by SC      **Method:** SM2540 G 18TH ED MOD  
**ClientID:** SB-2

Wet Weight (Total)	28.01	g
Tare Weight	20.96	g
Dry Weight (Total)	27.24	g
Solids, Percent	89.1	%

---

**Sample:** JD87833-3      **Analyzed:** 06-MAY-24 by SC      **Method:** SM2540 G 18TH ED MOD  
**ClientID:** SB-3

Wet Weight (Total)	42.38	g
Tare Weight	34.11	g
Dry Weight (Total)	41.43	g
Solids, Percent	88.5	%

---

**Sample:** JD87833-4      **Analyzed:** 06-MAY-24 by SC      **Method:** SM2540 G 18TH ED MOD  
**ClientID:** SB-4

Wet Weight (Total)	40.7	g
Tare Weight	31.64	g
Dry Weight (Total)	39.58	g
Solids, Percent	87.6	%

---

**Sample:** JD87833-5      **Analyzed:** 06-MAY-24 by SC      **Method:** SM2540 G 18TH ED MOD  
**ClientID:** SB-5

Wet Weight (Total)	31.41	g
Tare Weight	23.14	g
Dry Weight (Total)	30.56	g
Solids, Percent	89.7	%

---

**Sample:** JD87833-6      **Analyzed:** 06-MAY-24 by SC      **Method:** SM2540 G 18TH ED MOD  
**ClientID:** SB-6

Wet Weight (Total)	35.93	g
Tare Weight	26.81	g
Dry Weight (Total)	34.91	g
Solids, Percent	88.8	%

---

11.1  
11

# Percent Solids Raw Data Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

---

**Sample:** JD87833-7      **Analyzed:** 06-MAY-24 by SC      **Method:** SM2540 G 18TH ED MOD  
**ClientID:** SB-7

Wet Weight (Total)	32.57	g
Tare Weight	25.27	g
Dry Weight (Total)	31.93	g
Solids, Percent	91.2	%

---

**Sample:** JD87833-8      **Analyzed:** 06-MAY-24 by SC      **Method:** SM2540 G 18TH ED MOD  
**ClientID:** SB-8

Wet Weight (Total)	38.25	g
Tare Weight	28.83	g
Dry Weight (Total)	37.41	g
Solids, Percent	91.1	%

---

**Sample:** JD87833-9      **Analyzed:** 06-MAY-24 by SC      **Method:** SM2540 G 18TH ED MOD  
**ClientID:** SB-9

Wet Weight (Total)	29.15	g
Tare Weight	21.16	g
Dry Weight (Total)	27.67	g
Solids, Percent	81.5	%

---

**Sample:** JD87833-10      **Analyzed:** 06-MAY-24 by SC      **Method:** SM2540 G 18TH ED MOD  
**ClientID:** SB-10

Wet Weight (Total)	40.02	g
Tare Weight	32.67	g
Dry Weight (Total)	38.86	g
Solids, Percent	84.2	%

---

**Sample:** JD87833-11      **Analyzed:** 06-MAY-24 by SC      **Method:** SM2540 G 18TH ED MOD  
**ClientID:** SB-11

Wet Weight (Total)	37.64	g
Tare Weight	28.26	g
Dry Weight (Total)	36.49	g
Solids, Percent	87.7	%

---

**Sample:** JD87833-12      **Analyzed:** 06-MAY-24 by SC      **Method:** SM2540 G 18TH ED MOD  
**ClientID:** SB-12

Wet Weight (Total)	25.29	g
Tare Weight	19.35	g
Dry Weight (Total)	24.44	g
Solids, Percent	85.7	%

---

11.1  
11

# Percent Solids Raw Data Summary

**Job Number:** JD87833  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

---

**Sample:** JD87833-13      **Analyzed:** 06-MAY-24 by SC      **Method:** SM2540 G 18TH ED MOD  
**ClientID:** SB-13

Wet Weight (Total)	35.36	g
Tare Weight	28.21	g
Dry Weight (Total)	34.34	g
Solids, Percent	85.7	%

---

**Sample:** JD87833-14      **Analyzed:** 06-MAY-24 by SC      **Method:** SM2540 G 18TH ED MOD  
**ClientID:** SB-14

Wet Weight (Total)	36	g
Tare Weight	29.22	g
Dry Weight (Total)	35.37	g
Solids, Percent	90.7	%

---

**Sample:** JD87833-15      **Analyzed:** 06-MAY-24 by SC      **Method:** SM2540 G 18TH ED MOD  
**ClientID:** DUPE 1

Wet Weight (Total)	35.07	g
Tare Weight	26.31	g
Dry Weight (Total)	34.27	g
Solids, Percent	90.9	%

---

**Sample:** JD87833-16      **Analyzed:** 06-MAY-24 by SC      **Method:** SM2540 G 18TH ED MOD  
**ClientID:** DUPE 2

Wet Weight (Total)	36.45	g
Tare Weight	26.6	g
Dry Weight (Total)	35.64	g
Solids, Percent	91.8	%

---

11.1  
11

The results set forth herein are provided by SGS North America Inc.

*e-Hardcopy 2.0*  
*Automated Report*

## Technical Report for

Matrix New World Engineering, Inc.

Ridgewood Berm Sampling, Ridgewood, NJ

23-1429

SGS Job Number: JD87833R

Sampling Date: 05/03/24

Report to:

Matrix New World Engineering, Inc.  
26 Columbia Turnpike  
Florham Park, NJ 07932  
mclelland@mnwe.com

ATTN: Melissa Clelland

Total number of pages in report: **226**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable unless noted in the narrative, comments or footnotes.

A handwritten signature in blue ink, appearing to read 'D. Chastain'.

David Chastain  
General Manager

Client Service contact: Tammy McCloskey 732-329-0200

Certifications: NJ(12129),NY(10983),CA,CO,CT,FL,HI,IL,IN,KY,LA (120428),MA,MD,ME,MN,NC,NH,NV,AK (UST-103),AZ (AZ0786),PA(68-00408),RI,SC,TX (T104704234),UT,VA,WA,WV

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Test results relate only to samples analyzed.



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## Sample Summary

Matrix New World Engineering, Inc.

**Job No:** JD87833R

Ridgewood Berm Sampling, Ridgewood, NJ

Project No: 23-1429

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
JD87833-1R	05/03/24	08:30 KM	05/03/24	SO	Soil	SB-1
JD87833-4R	05/03/24	09:00 KM	05/03/24	SO	Soil	SB-4
JD87833-5R	05/03/24	09:05 KM	05/03/24	SO	Soil	SB-5
JD87833-6R	05/03/24	09:10 KM	05/03/24	SO	Soil	SB-6
JD87833-7R	05/03/24	09:20 KM	05/03/24	SO	Soil	SB-7
JD87833-9R	05/03/24	09:35 KM	05/03/24	SO	Soil	SB-9
JD87833-11R	05/03/24	10:00 KM	05/03/24	SO	Soil	SB-11
JD87833-14R	05/03/24	10:35 KM	05/03/24	SO	Soil	SB-14

---

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

## CASE NARRATIVE / CONFORMANCE SUMMARY

**Client:** Matrix New World Engineering, Inc.

**Job No:** JD87833R

**Site:** Ridgewood Berm Sampling, Ridgewood, NJ

**Report Date** 6/10/2024 9:30:56 AM

On 05/03/2024, 7 sample(s), 0 Trip Blank(s), 0 Equip. Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. (SGS) at a temperature of 2.6 °C. The samples were intact and properly preserved, unless noted below. An SGS Job Number of JD87833R was assigned to the project. The lab sample ID, client sample ID, and date of sample collection are detailed in the report's Results Summary.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

### MS Semi-volatiles By Method SW846 8270E BY SIM

<b>Matrix:</b> LEACHATE	<b>Batch ID:</b> OP54962A
-------------------------	---------------------------

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- JD87833-6R: Rx due to BS/BSD outside QC control limits bias low. Confirmation run.
- JD87833-4R: Rx due to BS/BSD outside QC control limits bias low. Confirmation run.
- JD87833-4R for 2-Fluorobiphenyl: Outside of in house control limits.
- OP54962A-BS12 for Benzo(a)anthracene: Outside control limits.

<b>Matrix:</b> LEACHATE	<b>Batch ID:</b> OP55107A
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- All method blanks for this batch meet method specific criteria.
- OP55107A-BSD12: Blank spike outside control limits due to analytical error. Since Blank spike duplicate recovery within control limits, data are qualified and reported.
- JD87833-6R: Sample extracted outside the holding time. Sample reextracted due to QC recovery for targets and surrogates were outside control limits.
- JD87833-4R: Sample extracted outside the holding time. Sample reextracted due to QC recovery for targets and surrogates were outside control limits.
- OP55107A-BSD12 for Benzo(a)anthracene: Analytical precision exceeds in-house control limits.
- OP55107A-BS12 for Benzo(a)anthracene: Outside of in house control limits.
- OP55107A-BS12 for Terphenyl-d14: Outside of in house control limits.

### Metals Analysis By Method SW846 6010D

<b>Matrix:</b> LEACHATE	<b>Batch ID:</b> MP46890
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- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD87833-1RMSD, JD87833-1RMS, JD87833-1RSDL were used as the QC samples for the metals analysis.
- The serial dilution RPD(s) for Lead are outside control limits for sample MP46890-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

### Metals Analysis By Method SW846 7470A

**Matrix:** LEACHATE                      **Batch ID:** MP46853

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD87671-8BMS, JD87671-8BMSD were used as the QC samples for the metals analysis.

**Matrix:** LEACHATE                      **Batch ID:** MP46896

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD87833-14RMS, JD87833-14RMSD were used as the QC samples for the metals analysis.

### General Chemistry By Method SW846 1312

**Matrix:** ALL                                      **Batch ID:** GN55279

- The data for SW846 1312 meets quality control requirements.

**Matrix:** ALL                                      **Batch ID:** GN55284

- The data for SW846 1312 meets quality control requirements.

SGS certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting SGS's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. This report is authorized by SGS indicated via signature on the report cover.

# Summary of Hits

**Job Number:** JD87833R  
**Account:** Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Collected:** 05/03/24



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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**JD87833-1R SB-1**

pH, SPLP Leachate	9.38				su	SW846 1312
Volume, SPLP Leachate	2.013				l	SW846 1312
Weight, SPLP Leachate	0.1006				kg	SW846 1312
Dry Weight, SPLP Leachate	0.07185				kg	SW846 1312

**JD87833-4R SB-4**

pH, SPLP Leachate	9.49				su	SW846 1312
Volume, SPLP Leachate	2.002				l	SW846 1312
Weight, SPLP Leachate	0.1001				kg	SW846 1312
Dry Weight, SPLP Leachate	0.08771				kg	SW846 1312
Benzo(a)anthracene <sup>a</sup>	0.0785 J	0.10		0.046	ug/l	SW846 8270E BY SIM

**JD87833-5R SB-5**

pH, SPLP Leachate	8.91				su	SW846 1312
Volume, SPLP Leachate	3.005				l	SW846 1312
Weight, SPLP Leachate	0.1002				kg	SW846 1312
Dry Weight, SPLP Leachate	0.08991				kg	SW846 1312
Benzo(a)anthracene	0.0483 J	0.10		0.046	ug/l	SW846 8270E BY SIM

**JD87833-6R SB-6**

pH, SPLP Leachate	9.53				su	SW846 1312
Volume, SPLP Leachate	2.016				l	SW846 1312
Weight, SPLP Leachate	0.1008				kg	SW846 1312
Dry Weight, SPLP Leachate	0.08951				kg	SW846 1312
Benzo(a)anthracene <sup>a</sup>	0.104	0.10		0.046	ug/l	SW846 8270E BY SIM

**JD87833-9R SB-9**

pH, SPLP Leachate	10.02				su	SW846 1312
Volume, SPLP Leachate	2.002				l	SW846 1312
Weight, SPLP Leachate	0.1001				kg	SW846 1312
Dry Weight, SPLP Leachate	0.08158				kg	SW846 1312

**JD87833-11R SB-11**

pH, SPLP Leachate	9.65				su	SW846 1312
Volume, SPLP Leachate	2.000				l	SW846 1312
Weight, SPLP Leachate	0.1000				kg	SW846 1312
Dry Weight, SPLP Leachate	0.08770				kg	SW846 1312

## Summary of Hits

**Job Number:** JD87833R  
**Account:** Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Collected:** 05/03/24

Lab Sample ID	Client Sample ID	Result/ Analyte	RL	MDL	Units	Method
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**JD87833-14R SB-14**

pH, SPLP Leachate	6.80	su	SW846 1312
Volume, SPLP Leachate	2.006	l	SW846 1312
Weight, SPLP Leachate	0.1003	kg	SW846 1312
Dry Weight, SPLP Leachate	0.09097	kg	SW846 1312

(a) Sample extracted outside the holding time. Sample reextracted due to QC recovery for targets and surrogates were outside control limits.

Sample Results

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Report of Analysis

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## Report of Analysis

<b>Client Sample ID:</b> SB-1	<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-1R	<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> 71.4
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ	

### Metals Analysis, SPLP Leachate SW846 1312

Analyte	Result	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	< 50	50		ug/l	1	05/24/24	05/30/24 KP	SW846 6010D <sup>2</sup>	SW846 3010A <sup>4</sup>
Mercury	< 0.00020	0.00020		mg/l	1	05/23/24	05/24/24 CB	SW846 7470A <sup>1</sup>	SW846 7470A <sup>3</sup>

- (1) Instrument QC Batch: MA56148
- (2) Instrument QC Batch: MA56184
- (3) Prep QC Batch: MP46853
- (4) Prep QC Batch: MP46890

RL = Reporting Limit  
MCL = Maximum Contamination Level (not available)

4.1  
4



## Report of Analysis

<b>Client Sample ID:</b> SB-1	<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-1R	<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> 71.4
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ	

### General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
<b>SPLP Ratio for Extractables and Metals</b>							
pH, SPLP Leachate	9.38		su	1	05/23/24 12:03	IA	SW846 1312
Volume, SPLP Leachate	2.013		l	1	05/23/24 12:03	IA	SW846 1312
Weight, SPLP Leachate	0.1006		kg	1	05/23/24 12:03	IA	SW846 1312
Dry Weight, SPLP Leachate	0.07185		kg	1	05/23/24 12:03	IA	SW846 1312

RL = Reporting Limit

4.1  
4

SGS North America Inc.

### Report of Analysis

Page 1 of 1

<b>Client Sample ID:</b> SB-4		
<b>Lab Sample ID:</b> JD87833-4R		<b>Date Sampled:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Date Received:</b> 05/03/24
<b>Method:</b> SW846 8270E BY SIM SW846 3510C		<b>Percent Solids:</b> 87.6
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	3H1183.D	1	06/01/24 07:47	RS	05/31/24 10:30	OP55107A	E3H82
Run #2 <sup>b</sup>	4M124151.D	1	05/28/24 11:51	KM	05/27/24 11:30	OP54962A	E4M5826

Run #	Initial Volume	Final Volume
Run #1	500 ml	1.0 ml
Run #2	500 ml	1.0 ml

**SPLP Leachate method SW846 1312**

CAS No.	Compound	Result	MCL	RL	MDL	Units	Q
56-55-3	Benzo(a)anthracene	0.0785		0.10	0.046	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	89%	11% <sup>c</sup>	18-119%
321-60-8	2-Fluorobiphenyl	67%	16% <sup>c</sup>	18-104%
1718-51-0	Terphenyl-d14	73%	14%	13-109%

- (a) Sample extracted outside the holding time. Sample reextracted due to QC recovery for targets and surrogates were outside control limits.
- (b) Rx due to BS/BSD outside QC control limits bias low. Confirmation run.
- (c) Outside of in house control limits.

ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
MCL = Maximum Contamination Level (not available)      B = Indicates analyte found in associated method blank  
E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

4.2  
4

## Report of Analysis

<b>Client Sample ID:</b> SB-4	<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-4R	<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> 87.6
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ	

### General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
<b>SPLP Ratio for Extractables and Metals</b>							
pH, SPLP Leachate	9.49		su	1	05/23/24 12:03	IA	SW846 1312
Volume, SPLP Leachate	2.002		l	1	05/23/24 12:03	IA	SW846 1312
Weight, SPLP Leachate	0.1001		kg	1	05/23/24 12:03	IA	SW846 1312
Dry Weight, SPLP Leachate	0.08771		kg	1	05/23/24 12:03	IA	SW846 1312

RL = Reporting Limit

4.2  
4

SGS North America Inc.

## Report of Analysis

Page 1 of 1

<b>Client Sample ID:</b> SB-5		
<b>Lab Sample ID:</b> JD87833-5R		<b>Date Sampled:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Date Received:</b> 05/03/24
<b>Method:</b> SW846 8270E BY SIM SW846 3510C		<b>Percent Solids:</b> 89.7
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M124152.D	1	05/28/24 12:14	KM	05/27/24 11:30	OP54962A	E4M5826
Run #2							

	Initial Volume	Final Volume
Run #1	500 ml	1.0 ml
Run #2		

## SPLP Leachate method SW846 1312

CAS No.	Compound	Result	MCL	RL	MDL	Units	Q
56-55-3	Benzo(a)anthracene	0.0483		0.10	0.046	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	44%		18-119%
321-60-8	2-Fluorobiphenyl	37%		18-104%
1718-51-0	Terphenyl-d14	33%		13-109%

ND = Not detected      MDL = Method Detection Limit  
MCL = Maximum Contamination Level (not available)  
E = Indicates value exceeds calibration range

J = Indicates an estimated value  
B = Indicates analyte found in associated method blank  
N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> SB-5	<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-5R	<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> 89.7
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ	

### General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
<b>SPLP Ratio for Extractables and Metals</b>							
pH, SPLP Leachate	8.91		su	1	05/23/24 12:03	IA	SW846 1312
Volume, SPLP Leachate	3.005		l	1	05/23/24 12:03	IA	SW846 1312
Weight, SPLP Leachate	0.1002		kg	1	05/23/24 12:03	IA	SW846 1312
Dry Weight, SPLP Leachate	0.08991		kg	1	05/23/24 12:03	IA	SW846 1312

RL = Reporting Limit

SGS North America Inc.

## Report of Analysis

Page 1 of 1

<b>Client Sample ID:</b> SB-6		
<b>Lab Sample ID:</b> JD87833-6R		<b>Date Sampled:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Date Received:</b> 05/03/24
<b>Method:</b> SW846 8270E BY SIM SW846 3510C		<b>Percent Solids:</b> 88.8
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	3H1184.D	1	06/01/24 08:12	RS	05/31/24 10:30	OP55107A	E3H82
Run #2 <sup>b</sup>	4M124153.D	1	05/28/24 12:36	KM	05/27/24 11:30	OP54962A	E4M5826

Run #	Initial Volume	Final Volume
Run #1	500 ml	1.0 ml
Run #2	500 ml	1.0 ml

### SPLP Leachate method SW846 1312

CAS No.	Compound	Result	MCL	RL	MDL	Units	Q
56-55-3	Benzo(a)anthracene	0.104		0.10	0.046	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	107%	43%	18-119%
321-60-8	2-Fluorobiphenyl	81%	41%	18-104%
1718-51-0	Terphenyl-d14	74%	22%	13-109%

- (a) Sample extracted outside the holding time. Sample reextracted due to QC recovery for targets and surrogates were outside control limits.
- (b) Rx due to BS/BSD outside QC control limits bias low. Confirmation run.

ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 MCL = Maximum Contamination Level (not available)      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

## Report of Analysis

<b>Client Sample ID:</b> SB-6	<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-6R	<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> 88.8
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ	

### General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
<b>SPLP Ratio for Extractables and Metals</b>							
pH, SPLP Leachate	9.53		su	1	05/23/24 12:03	IA	SW846 1312
Volume, SPLP Leachate	2.016		l	1	05/23/24 12:03	IA	SW846 1312
Weight, SPLP Leachate	0.1008		kg	1	05/23/24 12:03	IA	SW846 1312
Dry Weight, SPLP Leachate	0.08951		kg	1	05/23/24 12:03	IA	SW846 1312

RL = Reporting Limit

4.4  
4

## Report of Analysis

<b>Client Sample ID:</b> SB-9	<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-9R	<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> 81.5
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ	

### Metals Analysis, SPLP Leachate SW846 1312

Analyte	Result	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	< 50	50		ug/l	1	05/24/24	05/30/24 KP	SW846 6010D <sup>2</sup>	SW846 3010A <sup>4</sup>
Mercury	< 0.00020	0.00020		mg/l	1	05/23/24	05/24/24 CB	SW846 7470A <sup>1</sup>	SW846 7470A <sup>3</sup>

- (1) Instrument QC Batch: MA56148
- (2) Instrument QC Batch: MA56184
- (3) Prep QC Batch: MP46853
- (4) Prep QC Batch: MP46890

RL = Reporting Limit  
MCL = Maximum Contamination Level (not available)



## Report of Analysis

<b>Client Sample ID:</b> SB-9	<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-9R	<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> 81.5
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ	

### General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
<b>SPLP Ratio for Extractables and Metals</b>							
pH, SPLP Leachate	10.02		su	1	05/23/24 12:03	IA	SW846 1312
Volume, SPLP Leachate	2.002		l	1	05/23/24 12:03	IA	SW846 1312
Weight, SPLP Leachate	0.1001		kg	1	05/23/24 12:03	IA	SW846 1312
Dry Weight, SPLP Leachate	0.08158		kg	1	05/23/24 12:03	IA	SW846 1312

RL = Reporting Limit

## Report of Analysis

<b>Client Sample ID:</b> SB-11 <b>Lab Sample ID:</b> JD87833-11R <b>Matrix:</b> SO - Soil <b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ	<b>Date Sampled:</b> 05/03/24 <b>Date Received:</b> 05/03/24 <b>Percent Solids:</b> 87.7
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**Metals Analysis, SPLP Leachate SW846 1312**

Analyte	Result	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	< 50		50	ug/l	1	05/24/24	05/30/24 KP	SW846 6010D <sup>1</sup>	SW846 3010A <sup>2</sup>

(1) Instrument QC Batch: MA56184

(2) Prep QC Batch: MP46890

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RL = Reporting Limit  
 MCL = Maximum Contamination Level (not available)

## Report of Analysis

<b>Client Sample ID:</b> SB-11	<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-11R	<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> 87.7
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ	

### General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
<b>SPLP Ratio for Extractables and Metals</b>							
pH, SPLP Leachate	9.65		su	1	05/23/24 12:03	IA	SW846 1312
Volume, SPLP Leachate	2.000		l	1	05/23/24 12:03	IA	SW846 1312
Weight, SPLP Leachate	0.1000		kg	1	05/23/24 12:03	IA	SW846 1312
Dry Weight, SPLP Leachate	0.08770		kg	1	05/23/24 12:03	IA	SW846 1312

RL = Reporting Limit

## Report of Analysis

<b>Client Sample ID:</b> SB-14	<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-14R	<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> 90.7
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ	

### Metals Analysis, SPLP Leachate SW846 1312

Analyte	Result	MCL	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Mercury	< 0.20		0.20	ug/l	1	05/28/24	05/28/24 MK	SW846 7470A <sup>1</sup>	SW846 7470A <sup>2</sup>

(1) Instrument QC Batch: MA56163

(2) Prep QC Batch: MP46896

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RL = Reporting Limit  
MCL = Maximum Contamination Level (not available)

4.7  
4

## Report of Analysis

<b>Client Sample ID:</b> SB-14	<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-14R	<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> 90.7
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ	

### General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
<b>SPLP Ratio for Extractables and Metals</b>							
pH, SPLP Leachate	6.80		su	1	05/24/24 21:38	IA	SW846 1312
Volume, SPLP Leachate	2.006		l	1	05/24/24 21:38	IA	SW846 1312
Weight, SPLP Leachate	0.1003		kg	1	05/24/24 21:38	IA	SW846 1312
Dry Weight, SPLP Leachate	0.09097		kg	1	05/24/24 21:38	IA	SW846 1312

RL = Reporting Limit

4.7  
4

Misc. Forms

Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody





### CHAIN OF CUSTODY

SGS North America Inc. - Dayton  
2235 Route 130, Dayton, NJ 08810  
TEL. 732-329-0200  
www.sgs.com/ehsusa

Client / Reporting Information		Project Information										FED-EX Tracking #	Bottle Order Control #									
Company Name: <b>Matrix New World</b>		Project Name: <b>Ridgewood Berm Sampling</b>										SGS Quote #	SGS Job #									
Street Address: <b>26 Columbia Tpk</b>		Street:		Billing Information (if different from Report to):								Matrix Codes DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB - Field Blank EB - Equipment Blank RB - Rinse Blank TB - Trip Blank										
City: <b>Flyham Park NJ</b>		City: <b>Ridgewood NJ</b>		Company Name:																		
Project Contact: <b>mfeury@mnw.com</b>		Project #: <b>23-1429</b>		Street Address:																		
Phone #: <b>201-657-2638</b>		Client Purchase Order #:		City: State: Zip:																		
Sampler(s) Name(s): <b>K. Murphy</b>		Project Manager: <b>Melissa Feury</b>		Attention:								pH Check (Lab Use Only)										
SGS Sample #	Field ID / Point of Collection	MEQ/MDI Val #	Date	Time	Collection		Number of Bottles										LAB USE ONLY					
					Sampled by	Source (Cont Comp)	# of bottles	NO	NO2	NO3	H-SO4	NONE	D/Water	MEDH	ENCORE							
13	SB-13		5/3/24	1030	KM	G N S	1											X				
14	SB-14			1035	KM	G N S	1											X	X			
15	Dupe 1				KM	G N S	1											X	X	X	X	
16	Dupe 2				KM	G N S	1											X	X	X	X	
17	Field Blank			1100	KM	N W S	1	4										X	X	X	X	
Turn Around Time (Business Days)		Deliverable										Comments / Special Instructions										
<input checked="" type="checkbox"/> 10 Business Days <input type="checkbox"/> 5 Business Days <input type="checkbox"/> 3 Business Days* <input type="checkbox"/> 2 Business Days* <input type="checkbox"/> 1 Business Day* <input type="checkbox"/> Other		<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input checked="" type="checkbox"/> NJ Reduced (Level 3) <input type="checkbox"/> Full Tier 1 (Level 4) <input type="checkbox"/> Commercial "C" <input type="checkbox"/> NJ DKQP										<input type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category B <input type="checkbox"/> MA MCP Criteria <input type="checkbox"/> CT RCP Criteria <input type="checkbox"/> State Forms <input type="checkbox"/> EDD Format		* 2x300mL AMMBGR  <a href="http://www.sgs.com/en/terms-and-conditions">http://www.sgs.com/en/terms-and-conditions</a>								
Approved By (SGS PM) / Date: _____ * Approval needed for 1-3 BD TAT		Commercial "A" = Results only, Commercial "B" = Results + QC Summary Commercial "C" = Results + QC Summary + Partial Raw data																				
Sample Custody must be documented below each time samples change possession, including courier delivery.																						
1	Relinquished By: <i>[Signature]</i>	Date / Time: 5/3/24 1530	Received By: <i>[Signature]</i>	Date / Time: 5/3/24 1530	Relinquished By: <i>[Signature]</i>	Date / Time: 5/3/24 17:08	Received By: 2						Date / Time:	Received By:								
3	Relinquished By:	Date / Time:	Received By: 3	Date / Time:	Relinquished By: 4	Date / Time:	Received By: 4						Date / Time:	Received By:								
5	Relinquished By:	Date / Time:	Received By: 5	Date / Time:	Custody Seal #	<input type="checkbox"/> Intact <input type="checkbox"/> Not intact <input type="checkbox"/> Absent		Therm ID:		On Ice		Cooler Temp. °C										

EHSA-QAC-0023-05 Rev. Date 8/5/22

2 containers / TR 50 21 x 21 / SGS Courier

JD87833R: Chain of Custody

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## SGS Sample Receipt Summary

**Job Number:** JD87833

**Client:** MATRIX NEW WORLD ENGINEERING, IN

**Project:** RIDGEWOOD BERM SAMPLING, RIDGE

**Date / Time Received:** 5/3/2024 5:08:00 PM

**Delivery Method:** SGS COURIER

**Airbill #s:** \_\_\_\_\_

**Cooler Temps (Raw Measured) °C:** Cooler 1: (2.1); Cooler 2: (2.2);

**Cooler Temps (Corrected) °C:** Cooler 1: (2.5); Cooler 2: (2.6);

**Cooler Security**

Y or N

Y or N

- |                           |                                     |                          |                       |                                     |                          |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. COC Present:       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Custody Seals Intact:  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. Smpl Dates/Time OK | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

**Cooler Temperature**

Y or N

- |                              |                                     |                          |
|------------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved:   | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Cooler temp verification: | IR-50                               |                          |
| 3. Cooler media:             | Ice (Bag)                           |                          |
| 4. No. Coolers:              | 2                                   |                          |

**Quality Control Preservation**

Y or N

N/A

- |                                 |                                     |                                     |                                     |
|---------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Trip Blank present / cooler: | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 2. Trip Blank listed on COC:    | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 3. Samples preserved properly:  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |                                     |
| 4. VOCs headspace free:         | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

**Sample Integrity - Documentation**

Y or N

- |                                        |                                     |                          |
|----------------------------------------|-------------------------------------|--------------------------|
| 1. Sample labels present on bottles:   | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Container labeling complete:        | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

**Sample Integrity - Condition**

Y or N

- |                                  |                                     |                          |
|----------------------------------|-------------------------------------|--------------------------|
| 1. Sample recvd within HT:       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Condition of sample:          | Intact                              |                          |

**Sample Integrity - Instructions**

Y or N

N/A

- |                                           |                                     |                                     |                                     |
|-------------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear:           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |                                     |
| 2. Bottles received for unspecified tests | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |                                     |
| 3. Sufficient volume recvd for analysis:  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |                                     |
| 4. Compositing instructions clear:        | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear:          | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

Test Strip Lot #s:	pH 1-12: 231619	pH 12+: 203117A	Other: (Specify) _____
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Comments

SM089-03  
Rev. Date 12/7/17

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Job Change Order: JD87833

Requested Date: 5/17/2024 Received Date: 5/3/2024  
Account Name: Matrix New World Engineering, In Due Date: 5/17/2024  
Project Description: Ridgewood Berm Sampling, Ridgewood, NJ REDT2  
C/O Initiated By: KELLY\_RAM PM: TM TAT (Days): 7

=====  
Sample #: JD87833-1, -9 Dept:   
Client ID: TAT: 7  
Change: Please relog for EHG, SPLPE, SPLPRATIO, EPB

=====  
Sample #: JD87833-4 Dept:   
Client ID: SB-4 TAT:   
Change: Please relog for B8270SPLPSIMBANTH, SPLPE, SPLPRATIO,

=====  
Sample #: JD87833-5, -6 Dept:   
Client ID: TAT:   
Change: Please relog for B8270SPLPSIMBANTH, BSIM+BAPYRN, SPLPE, SPLPRATIO,

=====  
Sample #: JD87833-7 Dept:   
Client ID: SB-7 TAT:   
Change: Please relog for B8270SPLPSIMBAPYRN, SPLPE, SPLPRATIO,

Above Changes Per: Melissa Feury Date/Time: 5/20/2024

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Job Change Order: JD87833

**Requested Date:** 5/17/2024 **Received Date:** 5/3/2024  
**Account Name:** Matrix New World Engineering, In **Due Date:** 5/17/2024  
**Project Description:** Ridgewood Berm Sampling, Ridgewood, NJ **Deliverable:** REDT2  
**C/O Initiated By:** KELLY\_RAM **PM:** TM **TAT (Days):** 7

=====  
**Sample #:** JD87833-11 **Dept:**  
**Client ID:** SB-11 **TAT:**  
**Change:** Please relog for SPLPE, SPLPRATIO, EPB

=====  
**Sample #:** JD87833-14 **Dept:**  
**Client ID:** SB-14 **TAT:**  
**Change:** Please relog for EHG, SPLPE, SPLPRATIO,

JD87833R: Chain of Custody  
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**Above Changes Per:** Melissa Feury **Date/Time:** 5/20/2024

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Job Change Order: JD87833

Requested Date: 5/28/2024 Received Date: 5/3/2024  
Account Name: Matrix New World Engineering, In Due Date: 5/28/2024  
Project Description: Ridgewood Berm Sampling, Ridgewood, NJ REDT2  
C/O Initiated By: SARAH\_YE PM: TM TAT (Days): 6

=====  
Sample #: JD87833-15 Dept:  
Client ID: DUPE 1 TAT: 6  
Change: Relog for B8270SPLPSIMBANTH, SPLPE, SPLPRATIO

=====  
Sample #: JD87833--5R--6R Dept:  
Client ID: TAT: 6  
Change: NO OUT data for BSIM+BAPYRN

=====  
Sample #: JD87833--7R Dept:  
Client ID: TAT: 6  
Change: NO OUT data for B8270SPLPSIMBAPYRN, SPLPE, SPLPRATIO

JD87833R: Chain of Custody  
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Above Changes Per: Melissa Feury Date/Time: 5/28/2024  
To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

## Internal Sample Tracking Chronicle

Matrix New World Engineering, Inc.

**Job No:** JD87833R

Ridgewood Berm Sampling, Ridgewood, NJ

Project No: 23-1429

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD87833-1R Collected: 03-MAY-24 08:30 By: KM Received: 03-MAY-24 By: AR SB-1						
JD87833-1RSW846	1312	23-MAY-24 12:03	IA			SPLPRATIO
JD87833-1RSW846	7470A	24-MAY-24 13:22	CB	23-MAY-24 MK		EHG
JD87833-1RSW846	6010D	30-MAY-24 02:57	KP	24-MAY-24 SS		EPB
JD87833-4R Collected: 03-MAY-24 09:00 By: KM Received: 03-MAY-24 By: AR SB-4						
JD87833-4RSW846	1312	23-MAY-24 12:03	IA			SPLPRATIO
JD87833-4RSW846	8270E BY SIM	28-MAY-24 11:51	KM	27-MAY-24		
JD87833-4RSW846	8270E BY SIM	01-JUN-24 07:47	RS	31-MAY-24 DS		B8270SPLPSIMBANTH
JD87833-5R Collected: 03-MAY-24 09:05 By: KM Received: 03-MAY-24 By: AR SB-5						
JD87833-5RSW846	1312	23-MAY-24 12:03	IA			SPLPRATIO
JD87833-5RSW846	8270E BY SIM	28-MAY-24 12:14	KM	27-MAY-24 SK		B8270SPLPSIMBANTH
JD87833-6R Collected: 03-MAY-24 09:10 By: KM Received: 03-MAY-24 By: AR SB-6						
JD87833-6RSW846	1312	23-MAY-24 12:03	IA			SPLPRATIO
JD87833-6RSW846	8270E BY SIM	28-MAY-24 12:36	KM	27-MAY-24		
JD87833-6RSW846	8270E BY SIM	01-JUN-24 08:12	RS	31-MAY-24 DS		B8270SPLPSIMBANTH
JD87833-9R Collected: 03-MAY-24 09:35 By: KM Received: 03-MAY-24 By: AR SB-9						
JD87833-9RSW846	1312	23-MAY-24 12:03	IA			SPLPRATIO
JD87833-9RSW846	7470A	24-MAY-24 13:24	CB	23-MAY-24 MK		EHG
JD87833-9RSW846	6010D	30-MAY-24 03:33	KP	24-MAY-24 SS		EPB
JD87833-11R Collected: 03-MAY-24 10:00 By: KM Received: 03-MAY-24 By: AR SB-11						
JD87833-11RSW846	1312	23-MAY-24 12:03	IA			SPLPRATIO
JD87833-11RSW846	6010D	30-MAY-24 03:38	KP	24-MAY-24 SS		EPB

### Internal Sample Tracking Chronicle

Matrix New World Engineering, Inc.

Job No: JD87833R

Ridgewood Berm Sampling, Ridgewood, NJ

Project No: 23-1429

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
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JD87833-14R Collected: 03-MAY-24 10:35 By: KM Received: 03-MAY-24 By: AR  
SB-14

JD87833-14R	SW846 1312	24-MAY-24 21:38	IA			SPLPRATIO
JD87833-14R	SW846 7470A	28-MAY-24 13:05	MK	28-MAY-24 MK		EHG

# SGS Internal Chain of Custody

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Received:** 05/03/24

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD87833-1.1	Haleigh Rosado	Secured Storage	05/04/24 17:02	Return to Storage
JD87833-1.1	Secured Storage	Todd Shoemaker	05/06/24 14:42	Retrieve from Storage
JD87833-1.1	Todd Shoemaker	Secured Staging Area	05/06/24 14:43	Return to Storage
JD87833-1.1	Secured Staging Area	Saloni Chauhan	05/06/24 15:32	Retrieve from Storage
JD87833-1.1	Saloni Chauhan	Secured Storage	05/06/24 22:47	Return to Storage
JD87833-1.1	Secured Storage	Aleandi Rodriguez	05/07/24 22:26	Retrieve from Storage
JD87833-1.1	Aleandi Rodriguez	Secured Staging Area	05/07/24 22:26	Return to Storage
JD87833-1.1	Secured Staging Area	Lauren Halloran	05/08/24 07:57	Retrieve from Storage
JD87833-1.1	Secured Storage	Brianna Perez	05/08/24 12:30	Retrieve from Storage
Analyst chain of custody update error.				
JD87833-1.1	Brianna Perez	Secured Storage	05/08/24 15:25	Return to Storage
JD87833-1.1	Secured Storage	Ellen Dondeo	05/08/24 16:10	Retrieve from Storage
JD87833-1.1	Ellen Dondeo	Secured Storage	05/08/24 19:05	Return to Storage
JD87833-1.1	Secured Storage	Joshua Reitan	05/08/24 23:47	Retrieve from Storage
JD87833-1.1	Joshua Reitan	Secured Staging Area	05/08/24 23:47	Return to Storage
JD87833-1.1	Secured Staging Area	Lauren Halloran	05/09/24 07:48	Retrieve from Storage
JD87833-1.1	Lauren Halloran	Secured Storage	05/09/24 16:50	Return to Storage
JD87833-1.1	Secured Storage	Dave Hunkele	05/22/24 10:46	Retrieve from Storage
JD87833-1.1	Dave Hunkele	Secured Staging Area	05/22/24 10:46	Return to Storage
JD87833-1.1	Secured Staging Area	Joseph Dye	05/22/24 13:27	Retrieve from Storage
JD87833-1.1	Joseph Dye	Secured Storage	05/22/24 21:01	Return to Storage
JD87833-1.1.1	Brianna Perez	Metals Digestion	05/08/24 12:31	Digestate from JD87833-1.1
JD87833-1.1.1	Metals Digestion	Brianna Perez	05/08/24 12:32	Digestate from JD87833-1.1
JD87833-1.1.1	Brianna Perez	Metals Digestate Storage	05/08/24 12:32	Return to Storage
JD87833-1.1.2	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-1.1
JD87833-1.1.2	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-1.1.2	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-1.1
JD87833-1.1.2	Extract Storage	Christine Phillips	05/09/24 01:52	Retrieve from Storage
JD87833-1.1.2	Christine Phillips	GC8G	05/09/24 01:52	Load on Instrument
JD87833-1.1.3	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-1.1
JD87833-1.1.3	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-1.1
JD87833-1.1.3	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-1.1.3	Extract Storage	Christine Phillips	05/09/24 04:52	Retrieve from Storage
JD87833-1.1.3	Christine Phillips	GC2G	05/09/24 04:52	Load on Instrument
JD87833-1.1.4	Lauren Halloran	Organics Prep	05/09/24 08:10	Extract from JD87833-1.1
JD87833-1.1.4	Organics Prep	Erin Burke	05/09/24 15:00	Extract from JD87833-1.1
JD87833-1.1.4	Erin Burke	Extract Storage	05/09/24 15:00	Return to Storage
JD87833-1.1.5	Joseph Dye	TCLP	05/22/24 13:27	Leachate from JD87833-1.1
JD87833-1.1.5	TCLP	Joseph Dye	05/22/24 19:57	Leachate from JD87833-1.1

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# SGS Internal Chain of Custody

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Received:** 05/03/24

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD87833-1.1.5	Joseph Dye	Secured Storage	05/22/24 19:57	Return to Storage
JD87833-4.1	Haleigh Rosado	Secured Storage	05/04/24 17:02	Return to Storage
JD87833-4.1	Secured Storage	Todd Shoemaker	05/06/24 14:42	Retrieve from Storage
JD87833-4.1	Todd Shoemaker	Secured Staging Area	05/06/24 14:43	Return to Storage
JD87833-4.1	Secured Staging Area	Saloni Chauhan	05/06/24 15:32	Retrieve from Storage
JD87833-4.1	Saloni Chauhan	Secured Storage	05/06/24 22:47	Return to Storage
JD87833-4.1	Secured Storage	Aleandi Rodriguez	05/07/24 22:26	Retrieve from Storage
JD87833-4.1	Aleandi Rodriguez	Secured Staging Area	05/07/24 22:26	Return to Storage
JD87833-4.1	Secured Staging Area	Lauren Halloran	05/08/24 07:57	Retrieve from Storage
JD87833-4.1	Secured Storage	Brianna Perez	05/08/24 12:30	Retrieve from Storage
Analyst chain of custody update error.				
JD87833-4.1	Brianna Perez	Secured Storage	05/08/24 15:25	Return to Storage
JD87833-4.1	Secured Storage	Ellen Dondeo	05/08/24 16:10	Retrieve from Storage
JD87833-4.1	Ellen Dondeo	Secured Storage	05/08/24 19:05	Return to Storage
JD87833-4.1	Secured Storage	Joshua Reitan	05/08/24 23:47	Retrieve from Storage
JD87833-4.1	Joshua Reitan	Secured Staging Area	05/08/24 23:47	Return to Storage
JD87833-4.1	Secured Staging Area	Lauren Halloran	05/09/24 07:48	Retrieve from Storage
JD87833-4.1	Lauren Halloran	Secured Storage	05/09/24 16:50	Return to Storage
JD87833-4.1	Secured Storage	Dave Hunkele	05/22/24 10:46	Retrieve from Storage
JD87833-4.1	Dave Hunkele	Secured Staging Area	05/22/24 10:46	Return to Storage
JD87833-4.1	Secured Staging Area	Joseph Dye	05/22/24 13:27	Retrieve from Storage
JD87833-4.1	Joseph Dye	Secured Storage	05/22/24 21:01	Return to Storage
JD87833-4.1	Secured Storage	Dave Hunkele	05/29/24 12:55	Retrieve from Storage
JD87833-4.1	Dave Hunkele	Secured Staging Area	05/29/24 12:56	Return to Storage
JD87833-4.1	Secured Staging Area	Joseph Dye	05/29/24 20:08	Retrieve from Storage
JD87833-4.1	Joseph Dye	Secured Storage	05/29/24 22:00	Return to Storage
JD87833-4.1.1	Brianna Perez	Metals Digestion	05/08/24 12:31	Digestate from JD87833-4.1
JD87833-4.1.1	Metals Digestion	Brianna Perez	05/08/24 12:32	Digestate from JD87833-4.1
JD87833-4.1.1	Brianna Perez	Metals Digestate Storage	05/08/24 12:32	Return to Storage
JD87833-4.1.2	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-4.1
JD87833-4.1.2	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-4.1
JD87833-4.1.2	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-4.1.2	Extract Storage	Christine Phillips	05/09/24 01:52	Retrieve from Storage
JD87833-4.1.2	Christine Phillips	GC8G	05/09/24 01:52	Load on Instrument
JD87833-4.1.3	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-4.1
JD87833-4.1.3	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-4.1
JD87833-4.1.3	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-4.1.3	Extract Storage	Christine Phillips	05/09/24 04:52	Retrieve from Storage
JD87833-4.1.3	Christine Phillips	GC2G	05/09/24 04:52	Load on Instrument

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# SGS Internal Chain of Custody

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Received:** 05/03/24

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD87833-4.1.4	Lauren Halloran	Organics Prep	05/09/24 08:10	Extract from JD87833-4.1
JD87833-4.1.4	Organics Prep	Erin Burke	05/09/24 15:00	Extract from JD87833-4.1
JD87833-4.1.4	Erin Burke	Extract Storage	05/09/24 15:00	Return to Storage
JD87833-4.1.5	Joseph Dye	TCLP	05/22/24 13:27	Leachate from JD87833-4.1
JD87833-4.1.5	TCLP	Joseph Dye	05/22/24 19:57	Leachate from JD87833-4.1
JD87833-4.1.5	Joseph Dye	Secured Storage	05/22/24 19:57	Return to Storage
JD87833-4.1.5	Secured Storage	Sarim Khan	05/27/24 10:56	Retrieve from Storage
JD87833-4.1.6	Sarim Khan	Organics Prep	05/27/24 10:56	Extract from JD87833-4.1.5
JD87833-4.1.6	Organics Prep	Sarim Khan	05/27/24 16:56	Extract from JD87833-4.1.5
JD87833-4.1.6	Sarim Khan	Extract Storage	05/27/24 16:56	Return to Storage
JD87833-4.1.7	Joseph Dye	TCLP	05/29/24 20:08	Leachate from JD87833-4.1
JD87833-4.1.7	TCLP	Joseph Dye	05/29/24 20:09	Leachate from JD87833-4.1
JD87833-4.1.7	Joseph Dye	Secured Storage	05/29/24 20:10	Return to Storage
JD87833-4.1.7	Secured Storage	Doaa Salem	05/31/24 10:15	Retrieve from Storage
JD87833-4.1.7	Doaa Salem	Secured Storage	06/04/24 09:05	Return to Storage
JD87833-4.1.8	Doaa Salem	Organics Prep	05/31/24 10:15	Extract from JD87833-4.1.7
JD87833-4.1.8	Organics Prep	Doaa Salem	05/31/24 18:38	Extract from JD87833-4.1.7
JD87833-4.1.8	Doaa Salem	Extract Storage	05/31/24 18:38	Return to Storage
JD87833-5.1	Haleigh Rosado	Secured Storage	05/04/24 17:02	Return to Storage
JD87833-5.1	Secured Storage	Todd Shoemaker	05/06/24 14:42	Retrieve from Storage
JD87833-5.1	Todd Shoemaker	Secured Staging Area	05/06/24 14:43	Return to Storage
JD87833-5.1	Secured Staging Area	Saloni Chauhan	05/06/24 15:32	Retrieve from Storage
JD87833-5.1	Saloni Chauhan	Secured Storage	05/06/24 22:47	Return to Storage
JD87833-5.1	Secured Storage	Aleandi Rodriguez	05/07/24 22:26	Retrieve from Storage
JD87833-5.1	Aleandi Rodriguez	Secured Staging Area	05/07/24 22:26	Return to Storage
JD87833-5.1	Secured Staging Area	Lauren Halloran	05/08/24 07:57	Retrieve from Storage
JD87833-5.1	Secured Storage	Brianna Perez	05/08/24 12:30	Retrieve from Storage
Analyst chain of custody update error.				
JD87833-5.1	Brianna Perez	Secured Storage	05/08/24 15:25	Return to Storage
JD87833-5.1	Secured Storage	Ellen Dondeo	05/08/24 16:10	Retrieve from Storage
JD87833-5.1	Ellen Dondeo	Secured Storage	05/08/24 19:05	Return to Storage
JD87833-5.1	Secured Storage	Joshua Reitan	05/08/24 23:47	Retrieve from Storage
JD87833-5.1	Joshua Reitan	Secured Staging Area	05/08/24 23:47	Return to Storage
JD87833-5.1	Secured Staging Area	Lauren Halloran	05/09/24 07:48	Retrieve from Storage
JD87833-5.1	Lauren Halloran	Secured Storage	05/09/24 16:50	Return to Storage
JD87833-5.1	Secured Storage	Dave Hunkele	05/22/24 10:46	Retrieve from Storage
JD87833-5.1	Dave Hunkele	Secured Staging Area	05/22/24 10:46	Return to Storage
JD87833-5.1	Secured Staging Area	Joseph Dye	05/22/24 13:27	Retrieve from Storage
JD87833-5.1	Joseph Dye	Secured Storage	05/22/24 21:01	Return to Storage

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# SGS Internal Chain of Custody

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Received:** 05/03/24

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD87833-5.1.1	Brianna Perez	Metals Digestion	05/08/24 12:31	Digestate from JD87833-5.1
JD87833-5.1.1	Metals Digestion	Brianna Perez	05/08/24 12:32	Digestate from JD87833-5.1
JD87833-5.1.1	Brianna Perez	Metals Digestate Storage	05/08/24 12:32	Return to Storage
JD87833-5.1.2	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-5.1
JD87833-5.1.2	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-5.1
JD87833-5.1.2	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-5.1.2	Extract Storage	Christine Phillips	05/09/24 01:52	Retrieve from Storage
JD87833-5.1.2	Christine Phillips	GC8G	05/09/24 01:52	Load on Instrument
JD87833-5.1.3	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-5.1
JD87833-5.1.3	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-5.1
JD87833-5.1.3	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-5.1.3	Extract Storage	Christine Phillips	05/09/24 04:52	Retrieve from Storage
JD87833-5.1.3	Christine Phillips	GC2G	05/09/24 04:52	Load on Instrument
JD87833-5.1.4	Lauren Halloran	Organics Prep	05/09/24 08:10	Extract from JD87833-5.1
JD87833-5.1.4	Organics Prep	Erin Burke	05/09/24 15:00	Extract from JD87833-5.1
JD87833-5.1.4	Erin Burke	Extract Storage	05/09/24 15:00	Return to Storage
JD87833-5.1.5	Joseph Dye	TCLP	05/22/24 13:27	Leachate from JD87833-5.1
JD87833-5.1.5	TCLP	Joseph Dye	05/22/24 19:57	Leachate from JD87833-5.1
JD87833-5.1.5	Joseph Dye	Secured Storage	05/22/24 19:57	Return to Storage
JD87833-5.1.5	Secured Storage	Sarim Khan	05/27/24 10:56	Retrieve from Storage
JD87833-5.1.6	Sarim Khan	Organics Prep	05/27/24 10:56	Extract from JD87833-5.1.5
JD87833-5.1.6	Organics Prep	Sarim Khan	05/27/24 16:56	Extract from JD87833-5.1.5
JD87833-5.1.6	Sarim Khan	Extract Storage	05/27/24 16:56	Return to Storage
JD87833-6.1	Haleigh Rosado	Secured Storage	05/04/24 17:02	Return to Storage
JD87833-6.1	Secured Storage	Todd Shoemaker	05/06/24 14:42	Retrieve from Storage
JD87833-6.1	Todd Shoemaker	Secured Staging Area	05/06/24 14:43	Return to Storage
JD87833-6.1	Secured Staging Area	Saloni Chauhan	05/06/24 15:32	Retrieve from Storage
JD87833-6.1	Saloni Chauhan	Secured Storage	05/06/24 22:47	Return to Storage
JD87833-6.1	Secured Storage	Aleandi Rodriguez	05/07/24 22:26	Retrieve from Storage
JD87833-6.1	Aleandi Rodriguez	Secured Staging Area	05/07/24 22:26	Return to Storage
JD87833-6.1	Secured Staging Area	Lauren Halloran	05/08/24 07:57	Retrieve from Storage
JD87833-6.1	Secured Storage	Brianna Perez	05/08/24 12:30	Retrieve from Storage
Analyst chain of custody update error.				
JD87833-6.1	Brianna Perez	Secured Storage	05/08/24 15:25	Return to Storage
JD87833-6.1	Secured Storage	Ellen Dondeo	05/08/24 16:10	Retrieve from Storage
JD87833-6.1	Ellen Dondeo	Secured Storage	05/08/24 19:05	Return to Storage
JD87833-6.1	Secured Storage	Joshua Reitan	05/08/24 23:47	Retrieve from Storage

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# SGS Internal Chain of Custody

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Received:** 05/03/24

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD87833-6.1	Joshua Reitan	Secured Staging Area	05/08/24 23:47	Return to Storage
JD87833-6.1	Secured Staging Area	Lauren Halloran	05/09/24 07:48	Retrieve from Storage
JD87833-6.1	Lauren Halloran	Secured Storage	05/09/24 16:50	Return to Storage
JD87833-6.1	Secured Storage	Dave Hunkele	05/22/24 10:46	Retrieve from Storage
JD87833-6.1	Dave Hunkele	Secured Staging Area	05/22/24 10:46	Return to Storage
JD87833-6.1	Secured Staging Area	Joseph Dye	05/22/24 13:27	Retrieve from Storage
JD87833-6.1	Joseph Dye	Secured Storage	05/22/24 21:01	Return to Storage
JD87833-6.1	Secured Storage	Dave Hunkele	05/29/24 12:55	Retrieve from Storage
JD87833-6.1	Dave Hunkele	Secured Staging Area	05/29/24 12:56	Return to Storage
JD87833-6.1	Secured Staging Area	Joseph Dye	05/29/24 20:08	Retrieve from Storage
JD87833-6.1	Joseph Dye	Secured Storage	05/29/24 22:00	Return to Storage
JD87833-6.1.1	Brianna Perez	Metals Digestion	05/08/24 12:31	Digestate from JD87833-6.1
JD87833-6.1.1	Metals Digestion	Brianna Perez	05/08/24 12:32	Digestate from JD87833-6.1
JD87833-6.1.1	Brianna Perez	Metals Digestate Storage	05/08/24 12:32	Return to Storage
JD87833-6.1.2	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-6.1
JD87833-6.1.2	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-6.1.2	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-6.1
JD87833-6.1.2	Extract Storage	Christine Phillips	05/09/24 01:52	Retrieve from Storage
JD87833-6.1.2	Christine Phillips	GC8G	05/09/24 01:52	Load on Instrument
JD87833-6.1.3	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-6.1
JD87833-6.1.3	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-6.1
JD87833-6.1.3	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-6.1.4	Lauren Halloran	Organics Prep	05/09/24 08:10	Extract from JD87833-6.1
JD87833-6.1.4	Organics Prep	Erin Burke	05/09/24 15:00	Extract from JD87833-6.1
JD87833-6.1.4	Erin Burke	Extract Storage	05/09/24 15:00	Return to Storage
JD87833-6.1.5	Joseph Dye	TCLP	05/22/24 13:27	Leachate from JD87833-6.1
JD87833-6.1.5	TCLP	Joseph Dye	05/22/24 19:57	Leachate from JD87833-6.1
JD87833-6.1.5	Joseph Dye	Secured Storage	05/22/24 19:57	Return to Storage
JD87833-6.1.5	Secured Storage	Sarim Khan	05/27/24 10:56	Retrieve from Storage
JD87833-6.1.6	Sarim Khan	Organics Prep	05/27/24 10:56	Extract from JD87833-6.1.5
JD87833-6.1.6	Organics Prep	Sarim Khan	05/27/24 16:56	Extract from JD87833-6.1.5
JD87833-6.1.6	Sarim Khan	Extract Storage	05/27/24 16:56	Return to Storage
JD87833-6.1.7	Joseph Dye	TCLP	05/29/24 20:08	Leachate from JD87833-6.1
JD87833-6.1.7	TCLP	Joseph Dye	05/29/24 20:09	Leachate from JD87833-6.1
JD87833-6.1.7	Joseph Dye	Secured Storage	05/29/24 20:10	Return to Storage
JD87833-6.1.7	Secured Storage	Doaa Salem	05/31/24 10:15	Retrieve from Storage
JD87833-6.1.7	Doaa Salem	Secured Storage	06/04/24 09:05	Return to Storage

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# SGS Internal Chain of Custody

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Received:** 05/03/24

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD87833-6.1.8	Doaa Salem	Organics Prep	05/31/24 10:15	Extract from JD87833-6.1.7
JD87833-6.1.8	Organics Prep	Doaa Salem	05/31/24 18:38	Extract from JD87833-6.1.7
JD87833-6.1.8	Doaa Salem	Extract Storage	05/31/24 18:38	Return to Storage
JD87833-7.1	Haleigh Rosado	Secured Storage	05/04/24 17:02	Return to Storage
JD87833-7.1	Secured Storage	Todd Shoemaker	05/06/24 14:42	Retrieve from Storage
JD87833-7.1	Todd Shoemaker	Secured Staging Area	05/06/24 14:43	Return to Storage
JD87833-7.1	Secured Staging Area	Saloni Chauhan	05/06/24 15:32	Retrieve from Storage
JD87833-7.1	Saloni Chauhan	Secured Storage	05/06/24 22:47	Return to Storage
JD87833-7.1	Secured Storage	Aleandi Rodriguez	05/07/24 22:26	Retrieve from Storage
JD87833-7.1	Aleandi Rodriguez	Secured Staging Area	05/07/24 22:26	Return to Storage
JD87833-7.1	Secured Staging Area	Lauren Halloran	05/08/24 07:57	Retrieve from Storage
JD87833-7.1	Secured Storage	Brianna Perez	05/08/24 12:30	Retrieve from Storage
Analyst chain of custody update error.				
JD87833-7.1	Brianna Perez	Secured Storage	05/08/24 15:25	Return to Storage
JD87833-7.1	Secured Storage	Ellen Dondeo	05/08/24 16:10	Retrieve from Storage
JD87833-7.1	Ellen Dondeo	Secured Storage	05/08/24 19:05	Return to Storage
JD87833-7.1	Secured Storage	Joshua Reitan	05/08/24 23:47	Retrieve from Storage
JD87833-7.1	Joshua Reitan	Secured Staging Area	05/08/24 23:47	Return to Storage
JD87833-7.1	Secured Staging Area	Lauren Halloran	05/09/24 07:48	Retrieve from Storage
JD87833-7.1	Lauren Halloran	Secured Storage	05/09/24 16:50	Return to Storage
JD87833-7.1	Secured Storage	Dave Hunkele	05/22/24 10:46	Retrieve from Storage
JD87833-7.1	Dave Hunkele	Secured Staging Area	05/22/24 10:46	Return to Storage
JD87833-7.1	Secured Staging Area	Joseph Dye	05/22/24 13:27	Retrieve from Storage
JD87833-7.1	Joseph Dye	Secured Storage	05/22/24 21:01	Return to Storage
JD87833-7.1	Secured Storage	Joseph Dye	05/29/24 20:08	Retrieve from Storage
JD87833-7.1	Joseph Dye	Secured Storage	05/29/24 22:00	Return to Storage
JD87833-7.1.1	Brianna Perez	Metals Digestion	05/08/24 12:31	Digestate from JD87833-7.1
JD87833-7.1.1	Metals Digestion	Brianna Perez	05/08/24 12:32	Digestate from JD87833-7.1
JD87833-7.1.1	Brianna Perez	Metals Digestate Storage	05/08/24 12:32	Return to Storage
JD87833-7.1.2	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-7.1
JD87833-7.1.2	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-7.1
JD87833-7.1.2	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-7.1.2	Extract Storage	Christine Phillips	05/09/24 01:52	Retrieve from Storage
JD87833-7.1.2	Christine Phillips	GC8G	05/09/24 01:52	Load on Instrument
JD87833-7.1.3	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-7.1
JD87833-7.1.3	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-7.1
JD87833-7.1.3	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-7.1.3	Extract Storage	Christine Phillips	05/09/24 04:52	Retrieve from Storage
JD87833-7.1.3	Christine Phillips	GC2G	05/09/24 04:52	Load on Instrument

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# SGS Internal Chain of Custody

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Received:** 05/03/24

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD87833-7.1.4	Lauren Halloran	Organics Prep	05/09/24 08:10	Extract from JD87833-7.1
JD87833-7.1.4	Organics Prep	Erin Burke	05/09/24 15:00	Extract from JD87833-7.1
JD87833-7.1.4	Erin Burke	Extract Storage	05/09/24 15:00	Return to Storage
JD87833-7.1.5	Joseph Dye	TCLP	05/22/24 13:27	Leachate from JD87833-7.1
JD87833-7.1.5	TCLP	Joseph Dye	05/22/24 19:57	Leachate from JD87833-7.1
JD87833-7.1.5	Joseph Dye	Secured Storage	05/22/24 19:57	Return to Storage
JD87833-7.1.5	Secured Storage	Sarim Khan	05/27/24 10:56	Retrieve from Storage
JD87833-7.1.6	Sarim Khan	Organics Prep	05/27/24 10:56	Extract from JD87833-7.1.5
JD87833-7.1.6	Organics Prep	Sarim Khan	05/27/24 16:56	Extract from JD87833-7.1.5
JD87833-7.1.6	Sarim Khan	Extract Storage	05/27/24 16:56	Return to Storage
JD87833-7.1.7	Joseph Dye	TCLP	05/29/24 20:08	Leachate from JD87833-7.1
JD87833-7.1.7	TCLP	Joseph Dye	05/29/24 20:09	Leachate from JD87833-7.1
JD87833-7.1.7	Joseph Dye	Secured Storage	05/29/24 20:10	Return to Storage
JD87833-7.1.7	Secured Storage	Doaa Salem	05/31/24 10:15	Retrieve from Storage
JD87833-7.1.7	Doaa Salem	Secured Storage	06/04/24 09:05	Return to Storage
JD87833-7.1.8	Doaa Salem	Organics Prep	05/31/24 10:15	Extract from JD87833-7.1.7
JD87833-7.1.8	Organics Prep	Doaa Salem	05/31/24 18:38	Extract from JD87833-7.1.7
JD87833-7.1.8	Doaa Salem	Extract Storage	05/31/24 18:38	Return to Storage
JD87833-9.1	Haleigh Rosado	Secured Storage	05/04/24 17:02	Return to Storage
JD87833-9.1	Secured Storage	Todd Shoemaker	05/06/24 14:42	Retrieve from Storage
JD87833-9.1	Todd Shoemaker	Secured Staging Area	05/06/24 14:43	Return to Storage
JD87833-9.1	Secured Staging Area	Saloni Chauhan	05/06/24 15:32	Retrieve from Storage
JD87833-9.1	Saloni Chauhan	Secured Storage	05/06/24 22:47	Return to Storage
JD87833-9.1	Secured Storage	Aleandi Rodriguez	05/07/24 22:26	Retrieve from Storage
JD87833-9.1	Aleandi Rodriguez	Secured Staging Area	05/07/24 22:26	Return to Storage
JD87833-9.1	Secured Staging Area	Lauren Halloran	05/08/24 07:57	Retrieve from Storage
JD87833-9.1	Secured Storage	Brianna Perez	05/08/24 12:30	Retrieve from Storage
Analyst chain of custody update error.				
JD87833-9.1	Brianna Perez	Secured Storage	05/08/24 15:25	Return to Storage
JD87833-9.1	Secured Storage	Ellen Dondeo	05/08/24 16:10	Retrieve from Storage
JD87833-9.1	Ellen Dondeo	Secured Storage	05/08/24 19:05	Return to Storage
JD87833-9.1	Secured Storage	Joshua Reitan	05/08/24 23:47	Retrieve from Storage
JD87833-9.1	Joshua Reitan	Secured Staging Area	05/08/24 23:47	Return to Storage
JD87833-9.1	Secured Staging Area	Lauren Halloran	05/09/24 07:48	Retrieve from Storage
JD87833-9.1	Lauren Halloran	Secured Storage	05/09/24 16:50	Return to Storage
JD87833-9.1	Secured Storage	Dave Hunkele	05/22/24 10:46	Retrieve from Storage
JD87833-9.1	Dave Hunkele	Secured Staging Area	05/22/24 10:46	Return to Storage
JD87833-9.1	Secured Staging Area	Joseph Dye	05/22/24 13:27	Retrieve from Storage

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# SGS Internal Chain of Custody

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Received:** 05/03/24

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD87833-9.1	Joseph Dye	Secured Storage	05/22/24 21:01	Return to Storage
JD87833-9.1	Secured Storage	Dave Hunkele	05/23/24 05:54	Retrieve from Storage
JD87833-9.1	Dave Hunkele	Secured Staging Area	05/23/24 05:54	Return to Storage
JD87833-9.1	Secured Staging Area	Brianna Perez	05/23/24 06:44	Retrieve from Storage
JD87833-9.1	Brianna Perez	Secured Storage	05/23/24 16:24	Return to Storage
JD87833-9.1.1	Brianna Perez	Metals Digestion	05/08/24 12:31	Digestate from JD87833-9.1
JD87833-9.1.1	Metals Digestion	Brianna Perez	05/08/24 12:32	Digestate from JD87833-9.1
JD87833-9.1.1	Brianna Perez	Metals Digestate Storage	05/08/24 12:32	Return to Storage
JD87833-9.1.2	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-9.1
JD87833-9.1.2	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-9.1
JD87833-9.1.2	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-9.1.2	Extract Storage	Christine Phillips	05/09/24 01:52	Retrieve from Storage
JD87833-9.1.2	Christine Phillips	GC8G	05/09/24 01:52	Load on Instrument
JD87833-9.1.3	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-9.1
JD87833-9.1.3	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-9.1
JD87833-9.1.3	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-9.1.4	Lauren Halloran	Organics Prep	05/09/24 08:10	Extract from JD87833-9.1
JD87833-9.1.4	Organics Prep	Erin Burke	05/09/24 15:00	Extract from JD87833-9.1
JD87833-9.1.4	Erin Burke	Extract Storage	05/09/24 15:00	Return to Storage
JD87833-9.1.5	Joseph Dye	TCLP	05/22/24 13:27	Leachate from JD87833-9.1
JD87833-9.1.5	TCLP	Joseph Dye	05/22/24 19:57	Leachate from JD87833-9.1
JD87833-9.1.5	Joseph Dye	Secured Storage	05/22/24 19:57	Return to Storage
JD87833-11.1	Haleigh Rosado	Secured Storage	05/04/24 17:02	Return to Storage
JD87833-11.1	Secured Storage	Todd Shoemaker	05/06/24 14:42	Retrieve from Storage
JD87833-11.1	Todd Shoemaker	Secured Staging Area	05/06/24 14:43	Return to Storage
JD87833-11.1	Secured Staging Area	Saloni Chauhan	05/06/24 15:32	Retrieve from Storage
JD87833-11.1	Saloni Chauhan	Secured Storage	05/06/24 22:47	Return to Storage
JD87833-11.1	Secured Storage	Aleandi Rodriguez	05/07/24 22:26	Retrieve from Storage
JD87833-11.1	Aleandi Rodriguez	Secured Staging Area	05/07/24 22:26	Return to Storage
JD87833-11.1	Secured Staging Area	Lauren Halloran	05/08/24 07:57	Retrieve from Storage
JD87833-11.1	Secured Storage	Brianna Perez	05/08/24 12:30	Retrieve from Storage
Analyst chain of custody update error.				
JD87833-11.1	Brianna Perez	Secured Storage	05/08/24 15:25	Return to Storage
JD87833-11.1	Secured Storage	Ellen Dondeo	05/08/24 16:10	Retrieve from Storage
JD87833-11.1	Ellen Dondeo	Secured Storage	05/08/24 19:05	Return to Storage
JD87833-11.1	Secured Storage	Joshua Reitan	05/08/24 23:47	Retrieve from Storage
JD87833-11.1	Joshua Reitan	Secured Staging Area	05/08/24 23:47	Return to Storage
JD87833-11.1	Secured Staging Area	Lauren Halloran	05/09/24 07:48	Retrieve from Storage

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# SGS Internal Chain of Custody

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Received:** 05/03/24

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD87833-11.1	Lauren Halloran	Secured Storage	05/09/24 16:50	Return to Storage
JD87833-11.1	Secured Storage	Dave Hunkele	05/22/24 10:46	Retrieve from Storage
JD87833-11.1	Dave Hunkele	Secured Staging Area	05/22/24 10:46	Return to Storage
JD87833-11.1	Secured Staging Area	Joseph Dye	05/22/24 13:27	Retrieve from Storage
JD87833-11.1	Joseph Dye	Secured Storage	05/22/24 21:01	Return to Storage
JD87833-11.1.1	Brianna Perez	Metals Digestion	05/08/24 12:31	Digestate from JD87833-11.1
JD87833-11.1.1	Metals Digestion	Brianna Perez	05/08/24 12:32	Digestate from JD87833-11.1
JD87833-11.1.1	Brianna Perez	Metals Digestate Storage	05/08/24 12:32	Return to Storage
JD87833-11.1.2	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-11.1
JD87833-11.1.2	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-11.1.2	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-11.1
JD87833-11.1.2	Extract Storage	Christine Phillips	05/09/24 01:52	Retrieve from Storage
JD87833-11.1.2	Christine Phillips	GC8G	05/09/24 01:52	Load on Instrument
JD87833-11.1.3	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-11.1
JD87833-11.1.3	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-11.1
JD87833-11.1.3	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-11.1.3	Extract Storage	Christine Phillips	05/09/24 04:52	Retrieve from Storage
JD87833-11.1.3	Christine Phillips	GC2G	05/09/24 04:52	Load on Instrument
JD87833-11.1.4	Lauren Halloran	Organics Prep	05/09/24 08:10	Extract from JD87833-11.1
JD87833-11.1.4	Organics Prep	Erin Burke	05/09/24 15:00	Extract from JD87833-11.1
JD87833-11.1.4	Erin Burke	Extract Storage	05/09/24 15:00	Return to Storage
JD87833-11.1.5	Joseph Dye	TCLP	05/22/24 13:27	Leachate from JD87833-11.1
JD87833-11.1.5	TCLP	Joseph Dye	05/22/24 19:57	Leachate from JD87833-11.1
JD87833-11.1.5	Joseph Dye	Secured Storage	05/22/24 19:57	Return to Storage
JD87833-14.1	Haleigh Rosado	Secured Storage	05/04/24 17:02	Return to Storage
JD87833-14.1	Secured Storage	Todd Shoemaker	05/06/24 14:42	Retrieve from Storage
JD87833-14.1	Todd Shoemaker	Secured Staging Area	05/06/24 14:43	Return to Storage
JD87833-14.1	Secured Staging Area	Saloni Chauhan	05/06/24 15:32	Retrieve from Storage
JD87833-14.1	Saloni Chauhan	Secured Storage	05/06/24 22:47	Return to Storage
JD87833-14.1	Secured Storage	Aleandi Rodriguez	05/07/24 22:26	Retrieve from Storage
JD87833-14.1	Aleandi Rodriguez	Secured Staging Area	05/07/24 22:26	Return to Storage
JD87833-14.1	Secured Staging Area	Lauren Halloran	05/08/24 07:57	Retrieve from Storage
JD87833-14.1	Secured Storage	Brianna Perez	05/08/24 12:30	Retrieve from Storage
Analyst chain of custody update error.				
JD87833-14.1	Brianna Perez	Secured Storage	05/08/24 15:25	Return to Storage
JD87833-14.1	Secured Storage	Ellen Dondeo	05/08/24 16:10	Retrieve from Storage
JD87833-14.1	Ellen Dondeo	Secured Storage	05/08/24 19:05	Return to Storage
JD87833-14.1	Secured Storage	Joshua Reitan	05/08/24 23:47	Retrieve from Storage

5.3  
5

# SGS Internal Chain of Custody

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Received:** 05/03/24

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD87833-14.1	Joshua Reitan	Secured Staging Area	05/08/24 23:47	Return to Storage
JD87833-14.1	Secured Staging Area	Lauren Halloran	05/09/24 07:48	Retrieve from Storage
JD87833-14.1	Lauren Halloran	Secured Storage	05/09/24 16:50	Return to Storage
JD87833-14.1	Secured Storage	Dave Hunkele	05/22/24 10:46	Retrieve from Storage
JD87833-14.1	Dave Hunkele	Secured Staging Area	05/22/24 10:46	Return to Storage
JD87833-14.1	Secured Staging Area	Joseph Dye	05/22/24 13:27	Retrieve from Storage
JD87833-14.1	Joseph Dye	Secured Storage	05/22/24 21:01	Return to Storage
JD87833-14.1	Secured Storage	Dave Hunkele	05/23/24 09:36	Retrieve from Storage
JD87833-14.1	Dave Hunkele	Secured Staging Area	05/23/24 09:36	Return to Storage
JD87833-14.1	Secured Staging Area	Joseph Dye	05/23/24 14:10	Retrieve from Storage
JD87833-14.1	Joseph Dye	Secured Storage	05/23/24 22:49	Return to Storage
JD87833-14.1.1	Brianna Perez	Metals Digestion	05/08/24 12:31	Digestate from JD87833-14.1
JD87833-14.1.1	Metals Digestion	Brianna Perez	05/08/24 12:32	Digestate from JD87833-14.1
JD87833-14.1.1	Brianna Perez	Metals Digestate Storage	05/08/24 12:32	Return to Storage
JD87833-14.1.2	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-14.1
JD87833-14.1.2	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-14.1
JD87833-14.1.2	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-14.1.2	Extract Storage	Christine Phillips	05/09/24 01:52	Retrieve from Storage
JD87833-14.1.2	Christine Phillips	GC8G	05/09/24 01:52	Load on Instrument
JD87833-14.1.3	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-14.1
JD87833-14.1.3	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-14.1
JD87833-14.1.3	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-14.1.3	Extract Storage	Christine Phillips	05/09/24 04:52	Retrieve from Storage
JD87833-14.1.3	Christine Phillips	GC2G	05/09/24 04:52	Load on Instrument
JD87833-14.1.4	Lauren Halloran	Organics Prep	05/09/24 08:10	Extract from JD87833-14.1
JD87833-14.1.4	Organics Prep	Erin Burke	05/09/24 15:00	Extract from JD87833-14.1
JD87833-14.1.4	Erin Burke	Extract Storage	05/09/24 15:00	Return to Storage
JD87833-14.1.5	Joseph Dye	TCLP	05/22/24 13:27	Leachate from JD87833-14.1
JD87833-14.1.5	TCLP	Joseph Dye	05/23/24 22:44	Leachate from JD87833-14.1
JD87833-14.1.5	Joseph Dye	Secured Storage	05/23/24 22:45	Return to Storage
JD87833-14.1.6	Joseph Dye	TCLP	05/23/24 14:10	Leachate from JD87833-14.1

5.3  
5



## MS Semi-volatiles

### QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

**Method Blank Summary****Job Number:** JD87833R**Account:** MTXFPNJ Matrix New World Engineering, Inc.**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54962A-MB1	4M124147.D	1	05/28/24	KM	05/27/24	OP54962A	E4M5826

**The QC reported here applies to the following samples:****Method:** SW846 8270E BY SIM

JD87833-5R

CAS No.	Compound	Result	RL	MDL	Units	Q
56-55-3	Benzo(a)anthracene	ND	0.10	0.046	ug/l	

CAS No.	Surrogate Recoveries	Limits	
367-12-4	2-Fluorophenol	4% * a	12-75%
4165-62-2	Phenol-d5	2% * a	14-59%
118-79-6	2,4,6-Tribromophenol	58%	19-157%
4165-60-0	Nitrobenzene-d5	34%	18-119%
321-60-8	2-Fluorobiphenyl	32%	18-104%
1718-51-0	Terphenyl-d14	22%	13-109%

(a) Outside of in house control limits.

**Method Blank Summary**

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP55107A-MB1	3H1177.D	1	06/01/24	RS	05/31/24	OP55107A	E3H82

The QC reported here applies to the following samples:

Method: SW846 8270E BY SIM

JD87833-4R, JD87833-6R

CAS No.	Compound	Result	RL	MDL	Units	Q
56-55-3	Benzo(a)anthracene	ND	0.10	0.046	ug/l	

CAS No.	Surrogate Recoveries	Limits	
367-12-4	2-Fluorophenol	68%	12-75%
4165-62-2	Phenol-d5	55%	14-59%
118-79-6	2,4,6-Tribromophenol	157%	19-157%
4165-60-0	Nitrobenzene-d5	109%	18-119%
321-60-8	2-Fluorobiphenyl	73%	18-104%
1718-51-0	Terphenyl-d14	103%	13-109%

# Leachate Blank Summary

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54962A-LB45	4M124148.D	1	05/28/24	KM	05/27/24	OP54962A	E4M5826

The QC reported here applies to the following samples:

Method: SW846 8270E BY SIM

JD87833-5R

CAS No.	Compound	Result	RL	MDL	Units	Q
56-55-3	Benzo(a)anthracene	ND	0.10	0.046	ug/l	

CAS No.	Surrogate Recoveries	Limits	
367-12-4	2-Fluorophenol	0% * a	12-75%
4165-62-2	Phenol-d5	1% * a	14-59%
118-79-6	2,4,6-Tribromophenol	17% * a	19-157%
4165-60-0	Nitrobenzene-d5	40%	18-119%
321-60-8	2-Fluorobiphenyl	33%	18-104%
1718-51-0	Terphenyl-d14	25%	13-109%

(a) Outside of in house control limits.

# Leachate Blank Summary

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP55107A-LB51	3H1180.D	1	06/01/24	RS	05/31/24	OP55107A	E3H82

The QC reported here applies to the following samples:

Method: SW846 8270E BY SIM

JD87833-4R, JD87833-6R

CAS No.	Compound	Result	RL	MDL	Units	Q
56-55-3	Benzo(a)anthracene	ND	0.10	0.046	ug/l	

CAS No.	Surrogate Recoveries	Limits	
367-12-4	2-Fluorophenol	65%	12-75%
4165-62-2	Phenol-d5	54%	14-59%
118-79-6	2,4,6-Tribromophenol	152%	19-157%
4165-60-0	Nitrobenzene-d5	99%	18-119%
321-60-8	2-Fluorobiphenyl	69%	18-104%
1718-51-0	Terphenyl-d14	99%	13-109%

6.2.2  
6

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54962A-BS12	4M124149.D	1	05/28/24	KM	05/27/24	OP54962A	E4M5826
OP54962A-BSD12	4M124150.D	1	05/28/24	KM	05/27/24	OP54962A	E4M5826

The QC reported here applies to the following samples:

Method: SW846 8270E BY SIM

JD87833-5R

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
56-55-3	Benzo(a)anthracene	2	0.575	29* a	0.545	27* a	5	33-130/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	1% * a	8% * a	12-75%
4165-62-2	Phenol-d5	0% * a	8% * a	14-59%
118-79-6	2,4,6-Tribromophenol	54%	52%	19-157%
4165-60-0	Nitrobenzene-d5	39%	40%	18-119%
321-60-8	2-Fluorobiphenyl	36%	36%	18-104%
1718-51-0	Terphenyl-d14	16%	14%	13-109%

(a) Outside control limits.

\* = Outside of Control Limits.

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP55107A-BS12	3H1178.D	1	06/01/24	RS	05/31/24	OP55107A	E3H82
OP55107A-BSD12	3H1179.D	1	06/01/24	RS	05/31/24	OP55107A	E3H82

The QC reported here applies to the following samples:

Method: SW846 8270E BY SIM

JD87833-4R, JD87833-6R

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
56-55-3	Benzo(a)anthracene	2	0.454	23* b	1.69	85	115* c	33-130/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	53%	55%	12-75%
4165-62-2	Phenol-d5	37%	46%	14-59%
118-79-6	2,4,6-Tribromophenol	151%	151%	19-157%
4165-60-0	Nitrobenzene-d5	86%	85%	18-119%
321-60-8	2-Fluorobiphenyl	62%	58%	18-104%
1718-51-0	Terphenyl-d14	156%* b	92%	13-109%

- (a) Blank spike outside control limits due to analytical error. Since Blank spike duplicate recovery within control limits, data are qualified and reported.
- (b) Outside of in house control limits.
- (c) Analytical precision exceeds in-house control limits.

\* = Outside of Control Limits.

6.3.2  
6

# Instrument Performance Check (DFTPP)

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Sample:</b> E3H73-DFTPP	<b>Injection Date:</b> 05/18/24
<b>Lab File ID:</b> 3H1013A.D	<b>Injection Time:</b> 01:16
<b>Instrument ID:</b> GCMS3H	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	17023	43.7	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) <sup>a</sup>	Pass
69	Mass 69 relative abundance	17054	43.8	Pass
70	Less than 2.0% of mass 69	0	0.00 (0.00) <sup>a</sup>	Pass
127	40.0 - 60.0% of mass 198	20696	53.2	Pass
197	Less than 1.0% of mass 198	50	0.13	Pass
198	Base peak, 100% relative abundance	38911	100.0	Pass
199	5.0 - 9.0% of mass 198	2601	6.68	Pass
275	10.0 - 31.0% of mass 198	9310	23.9	Pass
365	1.0 - 100.0% of mass 198	1205	3.10	Pass
441	Present, but less than mass 443	5588	14.4 (92.3) <sup>b</sup>	Pass
442	40.0 - 100.0% of mass 198	31533	81.0	Pass
443	17.0 - 23.0% of mass 442	6057	15.6 (19.2) <sup>c</sup>	Pass

- (a) Value is % of mass 69
- (b) Value is % of mass 443
- (c) Value is % of mass 442

**This check applies to the following Samples, MS, MSD, Blanks, and Standards:**

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E3H73-ICC73	3H1014.D	05/18/24	01:40	00:24	Initial cal 1
E3H73-IC73	3H1015.D	05/18/24	02:04	00:48	Initial cal 0.01
E3H73-IC73	3H1016.D	05/18/24	02:29	01:13	Initial cal 0.02
E3H73-IC73	3H1017.D	05/18/24	02:54	01:38	Initial cal 0.05
E3H73-IC73	3H1018.D	05/18/24	03:19	02:03	Initial cal 0.1
E3H73-IC73	3H1019.D	05/18/24	03:43	02:27	Initial cal 0.2
E3H73-IC73	3H1020.D	05/18/24	04:08	02:52	Initial cal 0.5
E3H73-IC73	3H1021.D	05/18/24	04:32	03:16	Initial cal 2.5
E3H73-IC73	3H1022.D	05/18/24	04:57	03:41	Initial cal 5
E3H73-ICV73	3H1023.D	05/18/24	05:22	04:06	Initial cal verification 1
E3H73-ICV73	3H1024.D	05/18/24	05:46	04:30	Initial cal verification 1
E3H73-ICV73	3H1025.D	05/18/24	06:11	04:55	Initial cal verification 5

6.4.1  
6



# Instrument Performance Check (DFTPP)

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Sample:</b> E3H82-DFTPP	<b>Injection Date:</b> 06/01/24
<b>Lab File ID:</b> 3H1170.D	<b>Injection Time:</b> 01:52
<b>Instrument ID:</b> GCMS3H	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	15916	40.0	Pass
68	Less than 2.0% of mass 69	158	0.40 (0.96) <sup>a</sup>	Pass
69	Mass 69 relative abundance	16396	41.2	Pass
70	Less than 2.0% of mass 69	0	0.00 (0.00) <sup>a</sup>	Pass
127	40.0 - 60.0% of mass 198	20197	50.7	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	39801	100.0	Pass
199	5.0 - 9.0% of mass 198	2647	6.65	Pass
275	10.0 - 30.0% of mass 198	9841	24.7	Pass
365	1.0 - 100.0% of mass 198	1327	3.33	Pass
441	Present, but less than mass 443	6100	15.3 (87.3) <sup>b</sup>	Pass
442	40.0 - 100.0% of mass 198	36048	90.6	Pass
443	17.0 - 23.0% of mass 442	6986	17.6 (19.4) <sup>c</sup>	Pass

- (a) Value is % of mass 69
- (b) Value is % of mass 443
- (c) Value is % of mass 442

**This check applies to the following Samples, MS, MSD, Blanks, and Standards:**

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E3H82-CC73	3H1171.D	06/01/24	02:04	00:12	Continuing cal 1
OP54985A-MB2	3H1173.D	06/01/24	03:43	01:51	Method Blank
ZZZZZZ	3H1174.D	06/01/24	04:08	02:16	(unrelated sample)
OP55022A-MB2	3H1175.D	06/01/24	04:32	02:40	Method Blank
OP55022A-BS122	3H1176.D	06/01/24	04:56	03:04	Blank Spike
OP55107A-MB1	3H1177.D	06/01/24	05:21	03:29	Method Blank
OP55107A-BS12	3H1178.D	06/01/24	05:45	03:53	Blank Spike
OP55107A-BSD12	3H1179.D	06/01/24	06:10	04:18	Blank Spike Duplicate
OP55107A-LB51	3H1180.D	06/01/24	06:34	04:42	Leachate Blank
OP55022A-MSA	3H1181.D	06/01/24	06:58	05:06	Matrix Spike
OP55022A-MSDA	3H1182.D	06/01/24	07:23	05:31	Matrix Spike Duplicate
JD87833-4R	3H1183.D	06/01/24	07:47	05:55	SB-4
JD87833-6R	3H1184.D	06/01/24	08:12	06:20	SB-6
ZZZZZZ	3H1186.D	06/01/24	09:01	07:09	(unrelated sample)
ZZZZZZ	3H1187.D	06/01/24	09:25	07:33	(unrelated sample)
ZZZZZZ	3H1188.D	06/01/24	09:49	07:57	(unrelated sample)
ZZZZZZ	3H1189.D	06/01/24	10:14	08:22	(unrelated sample)

6.4.2  
6

# Instrument Performance Check (DFTPP)

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Sample:</b> E4M5801-DFTPP	<b>Injection Date:</b> 05/02/24
<b>Lab File ID:</b> 4M123522.D	<b>Injection Time:</b> 18:42
<b>Instrument ID:</b> GCMS4M	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	87352	43.7	Pass
68	Less than 2.0% of mass 69	1508	0.75 (1.68) <sup>a</sup>	Pass
69	Mass 69 relative abundance	89669	44.9	Pass
70	Less than 2.0% of mass 69	443	0.22 (0.49) <sup>a</sup>	Pass
127	40.0 - 60.0% of mass 198	100811	50.4	Pass
197	Less than 1.0% of mass 198	538	0.27	Pass
198	Base peak, 100% relative abundance	199928	100.0	Pass
199	5.0 - 9.0% of mass 198	13325	6.66	Pass
275	10.0 - 30.0% of mass 198	40869	20.4	Pass
365	1.0 - 100.0% of mass 198	4511	2.26	Pass
441	Present, but less than mass 443	20429	10.2 (78.7) <sup>b</sup>	Pass
442	40.0 - 100.0% of mass 198	132779	66.4	Pass
443	17.0 - 23.0% of mass 442	25945	13.0 (19.5) <sup>c</sup>	Pass

- (a) Value is % of mass 69
- (b) Value is % of mass 443
- (c) Value is % of mass 442

**This check applies to the following Samples, MS, MSD, Blanks, and Standards:**

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4M5801-ICC5801	4M123523.D	05/02/24	18:57	00:15	Initial cal 1
E4M5801-IC5801	4M123525.D	05/02/24	19:43	01:01	Initial cal 0.02
E4M5801-IC5801	4M123526.D	05/02/24	20:06	01:24	Initial cal 0.05
E4M5801-IC5801	4M123528.D	05/02/24	20:52	02:10	Initial cal 0.2
E4M5801-IC5801	4M123529.D	05/02/24	21:15	02:33	Initial cal 0.5
E4M5801-IC5801	4M123530.D	05/02/24	21:42	03:00	Initial cal 0.01
E4M5801-IC5801	4M123531.D	05/02/24	22:04	03:22	Initial cal 2.5
E4M5801-IC5801	4M123532.D	05/02/24	22:27	03:45	Initial cal 0.1
E4M5801-IC5801	4M123533.D	05/02/24	22:50	04:08	Initial cal 5
E4M5801-ICV5801	4M123534.D	05/02/24	23:19	04:37	Initial cal verification 1
E4M5801-ICV5801	4M123535.D	05/02/24	23:42	05:00	Initial cal verification 1
E4M5801-ICV5801	4M123536.D	05/03/24	00:04	05:22	Initial cal verification 5
OP54175A-MB1	4M123537.D	05/03/24	00:27	05:45	Method Blank
OP54175A-BS12	4M123538.D	05/03/24	00:50	06:08	Blank Spike
OP54175A-BSD12	4M123539.D	05/03/24	01:12	06:30	Blank Spike Duplicate
ZZZZZZ	4M123540.D	05/03/24	01:35	06:53	(unrelated sample)
ZZZZZZ	4M123541.D	05/03/24	01:58	07:16	(unrelated sample)
ZZZZZZ	4M123542.D	05/03/24	02:21	07:39	(unrelated sample)
ZZZZZZ	4M123543.D	05/03/24	02:43	08:01	(unrelated sample)

6.4.3  
6

# Instrument Performance Check (DFTPP)

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Sample:</b> E4M5801-DFTPP	<b>Injection Date:</b> 05/02/24
<b>Lab File ID:</b> 4M123522.D	<b>Injection Time:</b> 18:42
<b>Instrument ID:</b> GCMS4M	

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	4M123544.D	05/03/24	03:06	08:24	(unrelated sample)

6.4.3

6

# Instrument Performance Check (DFTPP)

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Sample:</b> E4M5802-DFTPP	<b>Injection Date:</b> 05/03/24
<b>Lab File ID:</b> 4M123545.D	<b>Injection Time:</b> 11:31
<b>Instrument ID:</b> GCMS4M	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	36746	45.6	Pass
68	Less than 2.0% of mass 69	681	0.85 (1.79) <sup>a</sup>	Pass
69	Mass 69 relative abundance	38067	47.2	Pass
70	Less than 2.0% of mass 69	82	0.10 (0.22) <sup>a</sup>	Pass
127	40.0 - 60.0% of mass 198	43312	53.8	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	80576	100.0	Pass
199	5.0 - 9.0% of mass 198	5327	6.61	Pass
275	10.0 - 30.0% of mass 198	16440	20.4	Pass
365	1.0 - 100.0% of mass 198	1708	2.12	Pass
441	Present, but less than mass 443	7766	9.64 (82.8) <sup>b</sup>	Pass
442	40.0 - 100.0% of mass 198	46375	57.6	Pass
443	17.0 - 23.0% of mass 442	9382	11.6 (20.2) <sup>c</sup>	Pass

- (a) Value is % of mass 69
- (b) Value is % of mass 443
- (c) Value is % of mass 442

**This check applies to the following Samples, MS, MSD, Blanks, and Standards:**

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4M5802-ICV5801	4M123547.D	05/03/24	12:24	00:53	Initial cal verification 5
E4M5802-CC5801	4M123548.D	05/03/24	13:04	01:33	Continuing cal 1
OP54242A-MB1	4M123552.D	05/03/24	14:46	03:15	Method Blank
ZZZZZZ	4M123553.D	05/03/24	15:09	03:38	(unrelated sample)
ZZZZZZ	4M123554.D	05/03/24	15:32	04:01	(unrelated sample)
ZZZZZZ	4M123555.D	05/03/24	15:54	04:23	(unrelated sample)
OP54242A-BS12	4M123560.D	05/03/24	16:17	04:46	Blank Spike
ZZZZZZ	4M123556.D	05/03/24	17:02	05:31	(unrelated sample)
ZZZZZZ	4M123557.D	05/03/24	17:25	05:54	(unrelated sample)
JD87379-5	4M123558.D	05/03/24	17:47	06:16	(used for QC only; not part of job JD87833R)
ZZZZZZ	4M123559.D	05/03/24	18:10	06:39	(unrelated sample)
ZZZZZZ	4M123571.D	05/03/24	18:32	07:01	(unrelated sample)
OP54242A-MSA	4M123562.D	05/03/24	18:54	07:23	Matrix Spike
OP54242A-MSDA	4M123563.D	05/03/24	19:17	07:46	Matrix Spike Duplicate

# Internal Standard Area Summary

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> E3H82-CC73	<b>Injection Date:</b> 06/01/24
<b>Lab File ID:</b> 3H1171.D	<b>Injection Time:</b> 02:04
<b>Instrument ID:</b> GCMS3H	<b>Method:</b> SW846 8270E BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	11055	6.17	12645	7.50	23380	10.20	20665	14.35
Upper Limit <sup>a</sup>	22110	6.67	25290	8.00	46760	10.70	41330	14.85
Lower Limit <sup>b</sup>	5528	5.67	6323	7.00	11690	9.70	10333	13.85

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP54985A-MB2	10003	6.16	11587	7.49	22044	10.19	19132	14.33
ZZZZZZ	9592	6.16	11220	7.49	21329	10.19	18470	14.33
OP55022A-MB2	9790	6.16	11414	7.49	21686	10.19	18974	14.33
OP55022A-BS122	8172	6.16	9457	7.49	17722	10.19	15468	14.33
OP55107A-MB1	9159	6.16	10718	7.49	20097	10.19	17528	14.33
OP55107A-BS12	9269	6.16	9529	7.48	7186*	10.18	13*	14.33
OP55107A-BSD129457	9457	6.16	10941	7.48	20599	10.18	17708	14.33
OP55107A-LB51	8365	6.16	9738	7.49	18348	10.19	15583	14.33
OP55022A-MSA	9419	6.16	10814	7.49	20275	10.19	17211	14.33
OP55022A-MSDA9577	9577	6.16	11022	7.49	20562	10.19	17323	14.33
JD87833-4R <sup>d</sup>	8173	6.16	9493	7.49	17709	10.19	15327	14.33
JD87833-6R <sup>d</sup>	9346	6.16	10857	7.49	20111	10.19	17172	14.33
ZZZZZZ	8256	6.16	9524	7.49	17816	10.19	15318	14.33
ZZZZZZ	8736	6.16	10302	7.48	19339	10.18	16283	14.33
ZZZZZZ	8456	6.16	10071	7.48	19149	10.18	16028	14.33
ZZZZZZ	9235	6.16	10801	7.49	20067	10.19	17087	14.33

**IS 1** = 1-Methylnaphthalene-d10  
**IS 2** = Fluorene-d10  
**IS 3** = Fluoranthene-d10  
**IS 4** = Benzo(a)pyrene-d12

- (a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
- (b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
- (c) Blank spike outside control limits due to analytical error. Since Blank spike duplicate recovery within control limits, data are qualified and reported.
- (d) Sample extracted outside the holding time. Sample reextracted due to QC recovery for targets and surrogates were outside control limits.

# Internal Standard Area Summary

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> E4M5826-CC5801	<b>Injection Date:</b> 05/28/24
<b>Lab File ID:</b> 4M124144.D	<b>Injection Time:</b> 08:55
<b>Instrument ID:</b> GCMS4M	<b>Method:</b> SW846 8270E BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	39944	7.10	45051	8.58	79122	10.70	60309	13.40
Upper Limit <sup>a</sup>	79888	7.60	90102	9.08	158244	11.20	120618	13.90
Lower Limit <sup>b</sup>	19972	6.60	22526	8.08	39561	10.20	30155	12.90

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP54962A-MB1	28630	7.10	33550	8.58	61139	10.70	47063	13.40
OP54962A-LB45	32106	7.10	36598	8.58	63742	10.70	50495	13.40
OP54962A-BS12	33656	7.10	38104	8.58	64812	10.70	47649	13.39
OP54962A-BSD12	33141	7.10	38613	8.58	66037	10.70	46614	13.39
JD87833-4R <sup>c</sup>	29249	7.10	34198	8.58	61629	10.70	48051	13.40
JD87833-5R	30679	7.10	35840	8.58	65142	10.70	50810	13.39
JD87833-6R <sup>c</sup>	30394	7.10	35477	8.58	60220	10.70	16375 <sup>d</sup>	13.40
OP54838A-MB1	33749	7.10	36339	8.58	56708	10.70	35120	13.40
ZZZZZZ	30020	7.10	36082	8.58	62664	10.70	47927	13.40
ZZZZZZ	26291	7.11	31103	8.58	54136	10.70	41228	13.40
ZZZZZZ	31267	7.10	37305	8.58	68163	10.70	54395	13.39
ZZZZZZ	33167	7.10	40137	8.58	76157	10.70	58654	13.39
ZZZZZZ	31344	7.10	38871	8.58	73154	10.70	54853	13.40
ZZZZZZ	29937	7.10	36507	8.58	65551	10.70	51714	13.40
ZZZZZZ	30411	7.10	36195	8.58	68217	10.70	50233	13.40
ZZZZZZ	31695	7.10	38863	8.58	70876	10.70	51991	13.40
ZZZZZZ	30073	7.10	36129	8.58	66671	10.70	51225	13.40
ZZZZZZ	28633	7.10	34540	8.58	64055	10.70	46829	13.40
ZZZZZZ	29516	7.10	34306	8.58	63335	10.70	50783	13.39
ZZZZZZ	28620	7.10	34643	8.58	63423	10.70	49008	13.39
ZZZZZZ	31024	7.10	36240	8.58	65913	10.70	54716	13.39
ZZZZZZ	35937	7.10	43071	8.58	80108	10.70	62607	13.39
ZZZZZZ	32089	7.10	38691	8.58	70512	10.70	55132	13.39
ZZZZZZ	31938	7.10	37933	8.58	69349	10.70	54862	13.39
ZZZZZZ	32149	7.10	37400	8.58	70360	10.70	54648	13.39
ZZZZZZ	31340	7.10	35847	8.58	63788	10.70	49373	13.39
ZZZZZZ	31616	7.10	36739	8.58	68837	10.70	52854	13.39
ZZZZZZ	25879	7.10	29801	8.58	54036	10.70	44102	13.39
ZZZZZZ	30266	7.10	34253	8.58	64773	10.70	51149	13.39
ZZZZZZ	29172	7.10	33495	8.58	60335	10.70	49664	13.39

- IS 1** = 1-Methylnaphthalene-d10
- IS 2** = Fluorene-d10
- IS 3** = Fluoranthene-d10
- IS 4** = Benzo(a)pyrene-d12

6.5.2  
6

# Internal Standard Area Summary

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> E4M5826-CC5801	<b>Injection Date:</b> 05/28/24
<b>Lab File ID:</b> 4M124144.D	<b>Injection Time:</b> 08:55
<b>Instrument ID:</b> GCMS4M	<b>Method:</b> SW846 8270E BY SIM

Lab	IS 1		IS 2		IS 3		IS 4	
Sample ID	AREA	RT	AREA	RT	AREA	RT	AREA	RT

- (a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
- (b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
- (c) Rx due to BS/BSD outside QC control limits bias low. Confirmation run.
- (d) Outside control limits.

6.5.2  
6

# Surrogate Recovery Summary

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Method:</b> SW846 8270E BY SIM	<b>Matrix:</b> LEACHATE
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3
JD87833-4R	3H1183.D	89	67	73
JD87833-4R	4M124151.D	11* a	16* a	14
JD87833-5R	4M124152.D	44	37	33
JD87833-6R	3H1184.D	107	81	74
JD87833-6R	4M124153.D	43	41	22
OP54962A-BS12	4M124149.D	39	36	16
OP54962A-BSD124M124150.D		40	36	14
OP54962A-LB45	4M124148.D	40	33	25
OP54962A-MB1	4M124147.D	34	32	22
OP55107A-BS12	3H1178.D	86	62	156* a
OP55107A-BSD123H1179.D		85	58	92
OP55107A-LB51	3H1180.D	99	69	99
OP55107A-MB1	3H1177.D	109	73	103

Surrogate Compounds	Recovery Limits
S1 = Nitrobenzene-d5	18-119%
S2 = 2-Fluorobiphenyl	18-104%
S3 = Terphenyl-d14	13-109%

(a) Outside of in house control limits.

6.6.1  
6



# Initial Calibration Summary

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** E3H73-ICC73  
**Lab FileID:** 3H1014.D

Response Factor Report GCMS3H

Method : C:\msdchem\1\METHODS\M3H73SIM.M (RTE Integrator)  
 Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um  
 Last Update : Wed May 29 16:40:24 2024  
 Response via : Initial Calibration

Calibration Files

0.05=3H1017.D .2 =3H1019.D 2.5 =3H1021.D .02 =3H1016.D  
 .1 =3H1018.D 1 =3H1014.D .01 =3H1015.D .5 =3H1020.D  
 5 =3H1022.D = = =

Compound	0.05	.2	2.5	.02	.1	1	.01	.5	5	Avg	%RSD	
1) I 1-Methylnaphthalene-d	-----ISTD-----											
2) 2-Fluorophenol	0.407	0.406	0.426	0.409	0.408	0.417	0.460	0.407	0.468	0.423	5.67	
3) Phenol-d5	0.432	0.444	0.498	0.432	0.441	0.470	0.485	0.466	0.572	0.471	9.42	
4) Phenol	0.493	0.511	0.528	0.488	0.498	0.533	0.558	0.541	0.593	0.527	6.50	
5) bis(2-Chloroethyl)ether											0.000#	-1.00
6) Nitrobenzene-d5	0.327	0.331	0.410	0.333	0.329	0.389	0.378	0.356	0.477	0.370	13.57	
7) Naphthalene	1.424	1.435	1.393	1.429	1.488	1.399	1.610	1.465	1.498	1.460	4.58	
8) Hexachlorobutadiene	0.272	0.277	0.269	0.305	0.278	0.282	0.296	0.282	0.284	0.283	4.00	
9) 2-Methylnaphthalene	1.029	1.025	1.007	1.060	1.033	1.023	1.150	1.043	1.065	1.048	4.02	
11) 2-Fluorobiphenyl	1.205	1.186	1.283	1.209	1.190	1.245	1.352	1.246	1.419	1.259	6.32	
12) I Fluorene-d10	-----ISTD-----											
13) Acenaphthylene	1.420	1.381	1.405	1.444	1.394	1.401	1.565	1.422	1.468	1.433	3.91	
14) Acenaphthene	0.991	0.986	0.990	1.014	0.977	0.984	1.114	1.000	1.029	1.010	4.18	
15) Dibenzofuran											0.000#	-1.00
16) Fluorene	1.095	1.112	1.083	1.168	1.060	1.092	1.264	1.099	1.119	1.121	5.45	
17) 2,4,6-Tribromophenol	0.083	0.084	0.124	0.087	0.081	0.115	0.090	0.095		0.095	16.83	
18) Hexachlorobenzene	0.343	0.334	0.329	0.353	0.343	0.346	0.391	0.342	0.340	0.347	5.20	
19) Pentachlorophenol	0.077	0.085	0.128		0.078	0.125		0.097	0.154	0.106	27.83	
	---- Quadratic regression ---- Coefficient = 0.9987											
	Response Ratio = -0.00306 + 0.10725 *A + 0.00746 *A^2											
20) Phenanthrene	1.548	1.474	1.462	1.537	1.418	1.498	1.836	1.488	1.513	1.530	7.91	
21) Anthracene	1.346	1.370	1.443	1.383	1.335	1.446	1.505	1.411	1.521	1.418	4.67	

6.7.1  
6

# Initial Calibration Summary

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** E3H73-ICC73  
**Lab FileID:** 3H1014.D

22) I	Fluoranthene-d10	-----ISTD-----											
23)	Fluoranthene		0.904	0.861	0.905	0.907	0.878	0.909	1.031	0.899	0.952	0.916	5.43
24)	Pyrene		0.918	0.875	0.910	0.898	0.894	0.917	0.998	0.908	0.958	0.920	4.02
25)	Terphenyl-d14		0.655	0.673	0.804	0.651	0.656	0.755	0.687	0.731	0.901	0.724	11.70
26)	Benzo[a]anthracene		0.691	0.682	0.763	0.691	0.672	0.845	0.812	0.706	0.819	0.742	9.16
27)	Chrysene		0.719	0.735	0.832	0.725	0.712	0.853	0.778	0.772	0.875	0.778	7.92
28) I	Benzo(a)pyrene-d12	-----ISTD-----											
29)	Benzo[b]fluoranthene		0.904	0.854	0.987	0.895	0.876	0.981	0.974	0.885	1.009	0.930	6.20
30)	Benzo[k]fluoranthene		0.847	0.867	0.970	0.823	0.823	0.964	0.974	0.915	1.085	0.919	9.55
31)	Benzo[a]pyrene		0.967	0.971	1.010	0.990	0.969	0.985	1.136	0.985	1.063	1.008	5.58
32)	Indeno[1,2,3-cd]pyrene		0.928	0.894	1.055	1.002	0.908	1.025	1.205	0.937	1.155	1.012	10.90
33)	Dibenz[a,h]anthracene		0.550	0.601	0.740	0.609	0.577	0.722	0.765	0.646	0.823	0.670	14.18
34)	Benzo[g,h,i]perylene		0.775	0.797	0.908	0.776	0.786	0.880	0.858	0.837	0.986	0.845	8.45
35) I	1-Methylnaphthalene-d	-----ISTD-----											
36)	1,4-Dioxane		0.162	0.171	0.167	0.161	0.171	0.169		0.178	0.173	0.169	3.35
37)	1-Methylnaphthalene		0.997	0.972	0.965	0.995	0.986	0.967	1.117	0.995	1.003	1.000	4.62
38) I	Fluorene-d10a	-----ISTD-----											
39)	4,6-dinitro-2-methylphenol		0.030	0.043		0.023	0.041		0.033	0.052		0.037#	28.47
			---- Quadratic regression ---- Coefficient = 0.9994										
			Response Ratio = -0.00175 + 0.03617 *A + 0.00257 *A^2										

(#) = Out of Range ### Number of calibration levels exceeded format ###

M3H73SIM.M Wed May 29 16:51:54 2024

6.7.1  
6

# Initial Calibration Verification

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** E3H73-ICV73  
**Lab FileID:** 3H1023.D

## Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e3h73\3H1023.D Vial: 11  
 Acq On : 18 May 2024 5:22 am Operator: rocquans  
 Sample : icv73-1 Inst : GCMS3H  
 Misc : op54679a,e3h73,1000,,,1,1 Multiplr: 1.00  
 MS Integration Params: lscint.p

Method : C:\msdchem\1\METHODS\M3H73SIM.M (RTE Integrator)  
 Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um  
 Last Update : Wed May 29 16:40:24 2024  
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	1-Methylnaphthalene-d10	1.000	1.000	0.0	88	0.00	6.17
7 t	Naphthalene	1.460	1.662	-13.8	104	0.00	5.61
8 t	Hexachlorobutadiene	0.283	0.314	-11.0	98	0.00	5.70
9 t	2-Methylnaphthalene	1.048	1.120	-6.9	96	0.00	6.12
12 I	Fluorene-d10	1.000	1.000	0.0	88	0.00	7.49
13 t	Acenaphthylene	1.433	1.513	-5.6	95	0.00	6.86
14 t	Acenaphthene	1.010	1.042	-3.2	93	0.00	7.02
16 t	Fluorene	1.121	1.130	-0.8	91	0.00	7.52
18 t	Hexachlorobenzene	0.347	0.363	-4.6	92	0.00	8.12
	----- AvgRF CCRF % Dev -----						
20 t	Phenanthrene	1.530	1.520	0.7	89	0.00	8.61
21 t	Anthracene	1.418	1.464	-3.2	89	0.00	8.67
22 I	Fluoranthene-d10	1.000	1.000	0.0	81	0.00	10.19
23 t	Fluoranthene	0.916	0.944	-3.1	84	0.00	10.22
24 t	Pyrene	0.920	0.934	-1.5	82	0.00	10.53
26 t	Benzo[a]anthracene	0.742	0.729	1.8	70	0.00	12.35
27 t	Chrysene	0.778	0.792	-1.8	75	0.00	12.41
28 I	Benzo(a)pyrene-d12	1.000	1.000	0.0	72	0.00	14.33
29 t	Benzo[b]fluoranthene	0.930	0.967	-4.0	71	0.00	13.92
30 t	Benzo[k]fluoranthene	0.919	1.090	-18.6	81	0.00	13.97
31 t	Benzo[a]pyrene	1.008	1.013	-0.5	74	0.00	14.36
32 t	Indeno[1,2,3-cd]pyrene	1.012	1.083	-7.0	76	0.00	15.79
33 t	Dibenz[a,h]anthracene	0.670	0.739	-10.3	73	0.00	15.84
34 t	Benzo[g,h,i]perylene	0.845	0.941	-11.4	77	0.00	16.14
35 I	1-Methylnaphthalene-d10a	1.000	1.000	0.0	88	0.00	6.17
37 t	1-Methylnaphthalene	1.000	1.060	-6.0	96	0.00	6.20



# Initial Calibration Verification

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** E3H73-ICV73  
**Lab FileID:** 3H1024.D

## Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e3h73\3H1024.D Vial: 12  
Acq On : 18 May 2024 5:46 am Operator: rocquans  
Sample : icv73-1 Inst : GCMS3H  
Misc : op54679a,e3h73,1000,,,1,1 Multiplr: 1.00  
MS Integration Params: lscint.p

Method : C:\msdchem\1\METHODS\M3H73SIM.M (RTE Integrator)  
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um  
Last Update : Wed May 29 16:40:24 2024  
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 30% Max. Rel. Area : 200%

Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
35 I 1-Methylnaphthalene-d10a	1.000	1.000	0.0	81	0.00	6.17
36 t 1,4-Dioxane	0.169	0.188	-11.2	90	0.00	2.78

(#) = Out of Range SPCC's out = 0 CCC's out = 0  
3H1014.D M3H73SIM.M Wed May 29 16:49:49 2024

# Initial Calibration Verification

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** E3H73-ICV73  
**Lab FileID:** 3H1025.D

## Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e3h73\3H1025.D Vial: 13  
 Acq On : 18 May 2024 6:11 am Operator: rocquans  
 Sample : icv73-5 Inst : GCMS3H  
 Misc : op54679a,e3h73,1000,,,1,1 Multiplr: 1.00  
 MS Integration Params: lscint.p

Method : C:\msdchem\1\METHODS\M3H73SIM.M (RTE Integrator)  
 Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um  
 Last Update : Wed May 29 16:40:24 2024  
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	1-Methylnaphthalene-d10	1.000	1.000	0.0	81	0.00	6.17
4 t	Phenol	0.527	0.580	-10.1	88	0.00	4.46
12 I	Fluorene-d10	1.000	1.000	0.0	79	0.00	7.49
	----- True	Calc.	% Drift	-----			
19 t	Pentachlorophenol	5.000	5.120	-2.4	74	0.00	8.35
38 I	Fluorene-d10a	1.000	1.000	0.0	79	0.00	7.49
	----- True	Calc.	% Drift	-----			
39 t	4,6-dinitro-2-methylpheno	5.000	6.011	-20.2	91	0.00	7.57

(#) = Out of Range SPCC's out = 0 CCC's out = 0  
 3H1014.D M3H73SIM.M Wed May 29 16:51:36 2024

6.7.4  
 6

# Continuing Calibration Summary

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** E3H82-CC73  
**Lab FileID:** 3H1171.D

## Evaluate Continuing Calibration Report

Data File : X:\Dayton SVOA GCMS\altheam\e3h82\3H1171.d Vial: 2  
 Acq On : 1 Jun 2024 2:04 am Operator: rocquans  
 Sample : cc73-1 Inst : GCMS3H  
 Misc : op53776a,e3h82,1000,,,1,1 Multiplr: 1.00  
 MS Integration Params: lscint.p

Method : X:\Dayton SVOA G...ethod\M3H73SIM.M (RTE Integrator)  
 Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um  
 Last Update : Mon Jun 03 07:13:29 2024  
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	1-Methylnaphthalene-d10	1.000	1.000	0.0	86	0.00	6.17
2 S	2-Fluorophenol	0.423	0.432	-2.1	89	0.00	3.85
3 S	Phenol-d5	0.471	0.518	-10.0	95	0.00	4.46
4 t	Phenol	0.527	0.555	-5.3	89	0.00	4.47
6 S	Nitrobenzene-d5	0.370	0.452	-22.2#	100	0.00	5.10
7 t	Naphthalene	1.460	1.399	4.2	86	0.00	5.61
8 t	Hexachlorobutadiene	0.283	0.281	0.7	85	0.00	5.70
9 t	2-Methylnaphthalene	1.048	1.007	3.9	84	0.00	6.12
11 S	2-Fluorobiphenyl	1.259	1.234	2.0	85	0.00	6.41
12 I	Fluorene-d10	1.000	1.000	0.0	92	0.00	7.50
13 t	Acenaphthylene	1.433	1.338	6.6	88	0.00	6.86
14 t	Acenaphthene	1.010	0.942	6.7	88	0.00	7.02
16 t	Fluorene	1.121	1.051	6.2	88	0.00	7.53
17 S	2,4,6-Tribromophenol	0.095	0.174	-83.2#	139	0.00	7.78
18 t	Hexachlorobenzene	0.347	0.365	-5.2	97	0.00	8.12
----- True Calc. % Drift -----							
19 t	Pentachlorophenol	5.000	8.147	-62.9#	145	0.00	8.36
----- AvgRF CCRF % Dev -----							
20 t	Phenanthrene	1.530	1.504	1.7	92	0.00	8.62
21 t	Anthracene	1.418	1.500	-5.8	95	0.00	8.68
22 I	Fluoranthene-d10	1.000	1.000	0.0	94	0.00	10.20
23 t	Fluoranthene	0.916	0.913	0.3	94	0.00	10.23
24 t	Pyrene	0.920	0.950	-3.3	97	0.00	10.54
25 S	Terphenyl-d14	0.724	0.771	-6.5	96	0.00	10.84
26 t	Benzo[a]anthracene	0.742	0.875	-17.9	97	0.00	12.37
27 t	Chrysene	0.778	0.874	-12.3	96	0.00	12.42
28 I	Benzo(a)pyrene-d12	1.000	1.000	0.0	107	0.00	14.35
29 t	Benzo[b]fluoranthene	0.930	1.021	-9.8	112	0.00	13.94
30 t	Benzo[k]fluoranthene	0.919	0.957	-4.1	107	0.00	13.98
31 t	Benzo[a]pyrene	1.008	0.994	1.4	108	0.00	14.38
32 t	Indeno[1,2,3-cd]pyrene	1.012	1.254	-23.9#	131	0.00	15.81
33 t	Dibenz[a,h]anthracene	0.670	0.893	-33.3#	133	0.00	15.85
34 t	Benzo[g,h,i]perylene	0.845	0.986	-16.7	120	0.00	16.16
35 I	1-Methylnaphthalene-d10a	1.000	1.000	0.0	86	0.00	6.17
36 t	1,4-Dioxane	0.169	0.166	1.8	84	0.00	2.77
37 t	1-Methylnaphthalene	1.000	0.960	4.0	85	0.00	6.20





# Initial Calibration Summary

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** E4M5801-ICC5801  
**Lab FileID:** 4M123523.D

Response Factor Report GCMS4M

Method : C:\msdchem\1\methods\M4M5801SIM.M (RTE Integrator)  
 Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um  
 Last Update : Fri May 03 09:14:28 2024  
 Response via : Initial Calibration

Calibration Files

0.05=4m123526.D .2 =4m123528.D 2.5 =4m123531.D .02 =4m123525.D  
 .1 =4m123532.D 1 =4m123523.D .01 =4m123530.D .5 =4m123529.D  
 5 =4m123533.D = = =

Compound	0.05	.2	2.5	.02	.1	1	.01	.5	5	Avg	%RSD
1) I 1-Methylnaphthalene-d	-----ISTD-----										
2) 1,4-Dioxane	0.205	0.199	0.228	0.190	0.231	0.212		0.220	0.221	0.213	6.83
3) 2-Fluorophenol	0.530	0.531	0.502	0.539	0.556	0.513	0.680	0.548	0.501	0.544	9.98
4) Phenol-d5	0.677	0.656	0.615	0.675	0.696	0.642	0.863	0.664	0.607	0.677	11.16
5) Phenol	0.753	0.749	0.696	0.762	0.805	0.718	1.008	0.750	0.696	0.771	12.36
6) bis(2-Chloroethyl)ether										0.000#	-1.00
7) Nitrobenzene-d5	0.501	0.509	0.549	0.490	0.543	0.529	0.624	0.550	0.560	0.539	7.41
8) Naphthalene	1.918	1.896	1.919	1.955	1.946	1.858	2.500	1.929	1.940	1.985	9.85
9) Hexachlorobutadiene	0.331	0.322	0.318	0.344	0.335	0.320	0.451	0.329	0.338	0.343	12.07
10) 2-Methylnaphthalene	1.254	1.225	1.197	1.303	1.224	1.199	1.598	1.204	1.219	1.269	10.06
11) 1-Methylnaphthalene	1.152	1.129	1.080	1.126	1.122	1.096	1.469	1.104	1.107	1.154	10.40
12) Hexachlorocyclopentadiene										0.000#	-1.00
13) 2-Fluorobiphenyl	1.302	1.273	1.066	1.332	1.309	1.140		1.241	1.017	1.210	9.92
14) I Fluorene-d10	-----ISTD-----										
15) Acenaphthylene	1.458	1.384	1.418	1.507	1.438	1.425	1.849	1.420	1.457	1.484	9.51
16) Acenaphthene	1.022	0.996	0.973	1.066	1.005	0.998	1.265	0.992	1.067	1.043	8.59
17) Dibenzofuran										0.000#	-1.00
18) Fluorene	1.119	1.087	1.066	1.090	1.045	1.144	1.382	1.079	1.094	1.123	9.01
19) 2,4,6-Tribromophenol	0.072	0.116		0.078	0.093		0.081	0.141		0.097	27.45
	---- Quadratic regression ---- Coefficient = 0.9995										
	Response Ratio = -0.00976 + 0.08530 *A + 0.00226 *A^2										
20) Hexachlorobenzene	0.330	0.305	0.306	0.318	0.338	0.307	0.418	0.307	0.309	0.327	11.14
21) Pentachlorophenol	0.075	0.077	0.121		0.086	0.088		0.092	0.147	0.098	26.82

# Initial Calibration Summary

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** E4M5801-ICC5801  
**Lab FileID:** 4M123523.D

---- Quadratic regression ---- Coefficient = 0.9989  
 Response Ratio = -0.00084 + 0.08502 \*A + 0.01004 \*A^2

22)	Phenanthrene	1.653 1.549 1.570 1.716 1.620 1.647	1.597 1.582	1.617	3.34
23)	Anthracene	1.632 1.579 1.598 1.607 1.587 1.674 2.112 1.589 1.626		1.667	10.16
24) I	Fluoranthene-d10	-----ISTD-----			
25)	Fluoranthene	1.113 1.069 1.058 1.174 1.127 1.069 1.449 1.093 1.074		1.136	10.82
26)	Pyrene	1.146 1.063 1.088 1.199 1.081 1.101	1.110 1.122	1.114	3.85
27)	Terphenyl-d14	0.600 0.584 0.486 0.610 0.589 0.540 0.762 0.571 0.469		0.579	14.65
28)	Benzo[a]anthracene	0.920 0.881 0.907 0.965 0.873 0.957 1.207 0.915 0.949		0.953	10.56
29)	Chrysene	0.917 0.906 0.925 0.960 0.883 0.950 1.161 0.909 0.946		0.951	8.70
30) I	Benzo(a)pyrene-d12	-----ISTD-----			
31)	Benzo[b]fluoranthene	1.205 1.128 1.115 1.228 1.053 1.167 1.465 1.141 1.162		1.185	9.86
32)	Benzo[k]fluoranthene	1.129 1.127 1.139 1.143 1.164 1.205 1.498 1.154 1.172		1.192	9.82
33)	Benzo[a]pyrene	1.203 1.159 1.121 1.306 1.185 1.153 1.539 1.169 1.155		1.221	10.66
34)	Indeno[1,2,3-cd]pyrene	1.267 1.220 1.224 1.322 1.215 1.271 1.572 1.230 1.264		1.287	8.71
35)	Dibenz[a,h]anthracene	0.986 0.951 0.984 0.921 0.932 1.019 1.202 0.972 1.002		0.997	8.35
36)	Benzo[g,h,i]perylene	1.048 0.996 0.973 1.131 0.987 1.027 1.416 0.978 1.016		1.063	13.24
37) I	Fluorene-d10a	-----ISTD-----			
38)	4,6-dinitro-2-methylphenol	0.031 0.031 0.047	0.033 0.032	0.035 0.063	0.039# 31.50
		---- Quadratic regression ---- Coefficient = 0.9993			
		Response Ratio = 0.00026 + 0.02832 *A + 0.00565 *A^2			

-----  
 (#) = Out of Range ### Number of calibration levels exceeded format ###

M4M5801SIM.M Fri May 03 09:17:37 2024

# Initial Calibration Verification

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** E4M5801-ICV5801  
**Lab FileID:** 4M123534.D

## Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\E4M5801\4m123534.D Vial: 11  
 Acq On : 2 May 2024 11:19 pm Operator: rocquans  
 Sample : icv5801-1 Inst : GCMS4M  
 Misc : op53071a,e4m5801,250,,,1,1 Multiplr: 1.00  
 MS Integration Params: lscint.p

Method : C:\msdchem\1\methods\M4M5801SIM.M (RTE Integrator)  
 Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um  
 Last Update : Fri May 03 08:59:32 2024  
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	1-Methylnaphthalene-d10	1.000	1.000	0.0	86	0.00	7.14
8 t	Naphthalene	1.985	2.136	-7.6	99	0.00	6.40
9 t	Hexachlorobutadiene	0.343	0.364	-6.1	97	0.00	6.54
10 t	2-Methylnaphthalene	1.269	1.289	-1.6	92	0.00	7.08
11 t	1-Methylnaphthalene	1.154	1.170	-1.4	92	0.00	7.18
14 I	Fluorene-d10	1.000	1.000	0.0	87	0.00	8.62
15 t	Acenaphthylene	1.484	1.556	-4.9	95	0.00	7.96
16 t	Acenaphthene	1.043	1.057	-1.3	92	0.00	8.13
18 t	Fluorene	1.123	1.136	-1.2	86	0.00	8.64
20 t	Hexachlorobenzene	0.327	0.352	-7.6	99	0.00	9.18
		AvgRF	CCRF	% Dev			
22 t	Phenanthrene	1.617	1.700	-5.1	90	0.00	9.58
23 t	Anthracene	1.667	1.715	-2.9	89	0.00	9.63
24 I	Fluoranthene-d10	1.000	1.000	0.0	86	0.00	10.74
25 t	Fluoranthene	1.136	1.131	0.4	91	0.00	10.76
26 t	Pyrene	1.114	1.128	-1.3	89	0.00	10.98
28 t	Benzo[a]anthracene	0.953	0.883	7.3	80	0.00	12.16
29 t	Chrysene	0.951	0.957	-0.6	87	0.00	12.20
30 I	Benzo(a)pyrene-d12	1.000	1.000	0.0	82	0.00	13.44
31 t	Benzo[b]fluoranthene	1.185	1.182	0.3	83	0.00	13.16
32 t	Benzo[k]fluoranthene	1.192	1.302	-9.2	89	0.00	13.19
33 t	Benzo[a]pyrene	1.221	1.192	2.4	85	0.00	13.46
34 t	Indeno[1,2,3-cd]pyrene	1.287	1.302	-1.2	84	-0.01	14.65
35 t	Dibenz[a,h]anthracene	0.997	1.038	-4.1	84	-0.01	14.68
36 t	Benzo[g,h,i]perylene	1.063	1.055	0.8	85	0.00	14.98
37 I	Fluorene-d10a	1.000	1.000	0.0	87	0.00	8.62

6.7.7  
6

# Initial Calibration Verification

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** E4M5801-ICV5801  
**Lab FileID:** 4M123534.D

(#) = Out of Range  
4m123523.D M4M5801SIM.M

SPCC's out = 0 CCC's out = 0  
Fri May 03 09:07:22 2024

# Initial Calibration Verification

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** E4M5801-ICV5801  
**Lab FileID:** 4M123535.D

## Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\E4M5801\4m123535.D Vial: 12  
Acq On : 2 May 2024 11:42 pm Operator: rocquans  
Sample : icv5801-1 Inst : GCMS4M  
Misc : op53071a,e4m5801,250,,,1,1 Multiplr: 1.00  
MS Integration Params: lscint.p

Method : C:\msdchem\1\methods\M4M5801SIM.M (RTE Integrator)  
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um  
Last Update : Fri May 03 08:59:32 2024  
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 30% Max. Rel. Area : 200%

Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I 1-Methylnaphthalene-d10	1.000	1.000	0.0	82	0.00	7.14
2 t 1,4-Dioxane	0.213	0.226	-6.1	88	0.00	2.67

(#) = Out of Range SPCC's out = 0 CCC's out = 0  
4m123523.D M4M5801SIM.M Fri May 03 09:09:53 2024

# Initial Calibration Verification

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** E4M5801-ICV5801  
**Lab FileID:** 4M123536.D

## Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\E4M5801\4m123536.D Vial: 13  
Acq On : 3 May 2024 12:04 am Operator: rocquans  
Sample : icv5801-5 Inst : GCMS4M  
Misc : op53071a,e4m5801,250,,,1,1 Multiplr: 1.00  
MS Integration Params: lscint.p

Method : C:\msdchem\1\methods\M4M5801SIM.M (RTE Integrator)  
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um  
Last Update : Fri May 03 09:20:07 2024  
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	1-Methylnaphthalene-d10	1.000	1.000	0.0	79	0.00	7.14
5 t	Phenol	0.771	0.879	-14.0	97	0.00	4.85
14 I	Fluorene-d10	1.000	1.000	0.0	80	0.00	8.61
	----- True Calc. % Drift -----						
21 t	Pentachlorophenol	5.000	6.387	-27.7	117	0.00	9.37

(#) = Out of Range  
4m123523.D M4M5801SIM.M

SPCC's out = 0 CCC's out = 0  
Fri May 03 09:21:59 2024

6.7.9

6

# Initial Calibration Verification

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** E4M5802-ICV5801  
**Lab FileID:** 4M123547.D

## Evaluate Continuing Calibration Report

Data File : X:\Dayton\MSSEMI\Com...rM\4M5802\4m123547.d Vial: 3  
Acq On : 3 May 2024 12:24 pm Operator: ninap  
Sample : icv5801-5 Inst : GCMS4M  
Misc : op54175a,e4m5802,1000,,,1,1 Multiplr: 1.00  
MS Integration Params: lscint.p

Method : X:\Dayton\MSSEMI...ods\M4M5801SIM.M (RTE Integrator)  
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um  
Last Update : Fri May 03 10:21:27 2024  
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 30% Max. Rel. Area : 200%

Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
37 I Fluorene-d10a	1.000	1.000	0.0	103	0.00	8.62
	True	Calc.	% Drift			
38 t 4,6-dinitro-2-methylpheno	5.000	5.734	-14.7	134	0.00	8.69

(#) = Out of Range SPCC's out = 0 CCC's out = 0  
4m123523.D M4M5801SIM.M Wed May 15 09:24:45 2024

# Continuing Calibration Summary

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** E4M5826-CC5801  
**Lab FileID:** 4M124144.D

## Evaluate Continuing Calibration Report

Data File : X:\Dayton SVOA GCMS\...as\4m5826\4m124144.d Vial: 2  
 Acq On : 28 May 2024 8:55 am Operator: karimam  
 Sample : cc5801-1 Inst : GCMS4M  
 Misc : op54175a,e4m5826,1000,,,1,1 Multiplr: 1.00  
 MS Integration Params: lscint.p

Method : X:\Dayton SVOA G...ODS\M4M5801SIM.M (RTE Integrator)  
 Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um  
 Last Update : Fri May 24 17:12:56 2024  
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	1-Methylnaphthalene-d10	1.000	1.000	0.0	116	-0.04	7.10
2 t	1,4-Dioxane	0.213	0.209	1.9	114	-0.11	2.55
3 S	2-Fluorophenol	0.544	0.492	9.6	111	-0.05	3.97
4 S	Phenol-d5	0.677	0.557	17.7	101	-0.01	4.82
5 t	Phenol	0.771	0.624	19.1	101	-0.01	4.84
7 S	Nitrobenzene-d5	0.539	0.540	-0.2	118	-0.04	5.66
8 t	Naphthalene	1.985	1.665	16.1	104	-0.04	6.36
9 t	Hexachlorobutadiene	0.343	0.330	3.8	120	-0.04	6.49
10 t	2-Methylnaphthalene	1.269	1.159	8.7	112	-0.04	7.04
11 t	1-Methylnaphthalene	1.154	1.103	4.4	117	-0.03	7.14
13 S	2-Fluorobiphenyl	1.210	1.082	10.6	110	-0.04	7.41
14 I	Fluorene-d10	1.000	1.000	0.0	105	-0.04	8.58
15 t	Acenaphthylene	1.484	1.553	-4.6	114	-0.03	7.93
16 t	Acenaphthene	1.043	1.060	-1.6	111	-0.04	8.10
18 t	Fluorene	1.123	1.159	-3.2	106	-0.03	8.61
19 S	2,4,6-Tribromophenol	20.000	35.601	-78.0#	209	-0.03	8.85
20 t	Hexachlorobenzene	0.327	0.368	-12.5	125	-0.03	9.15
21 t	Pentachlorophenol	5.000	7.852	-57.0#	194	-0.02	9.35
22 t	Phenanthrene	1.617	1.586	1.9	101	-0.04	9.54
23 t	Anthracene	1.667	1.791	-7.4	112	-0.04	9.59
24 I	Fluoranthene-d10	1.000	1.000	0.0	108	-0.04	10.70
25 t	Fluoranthene	1.136	1.080	4.9	109	-0.04	10.72
26 t	Pyrene	1.114	1.176	-5.6	116	-0.04	10.94
27 S	Terphenyl-d14	0.579	0.510	11.9	102	-0.05	11.11
28 t	Benzo[a]anthracene	0.953	0.965	-1.3	109	-0.04	12.12
29 t	Chrysene	0.951	1.049	-10.3	119	-0.04	12.16
30 I	Benzo(a)pyrene-d12	1.000	1.000	0.0	116	-0.05	13.40
31 t	Benzo[b]fluoranthene	1.185	1.241	-4.7	124	-0.05	13.12

6.7.11  
6



# Continuing Calibration Summary

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** E4M5826-CC5801  
**Lab FileID:** 4M124144.D

32	t	Benzo[k]fluoranthene	1.192	1.268	-6.4	122	-0.04	13.15
33	t	Benzo[a]pyrene	1.221	1.204	1.4	121	-0.05	13.42
34	t	Indeno[1,2,3-cd]pyrene	1.287	1.438	-11.7	132	-0.07	14.59
35	t	Dibenz[a,h]anthracene	0.997	1.197	-20.1#	137	-0.07	14.61
36	t	Benzo[g,h,i]perylene	1.063	1.160	-9.1	131	-0.07	14.91
37	I	Fluorene-d10a	1.000	1.000	0.0	105	-0.04	8.58
		----- True	Calc.	% Drift	-----			
38	t	4,6-dinitro-2-methylpheno	5.000	6.619	-32.4#	162	-0.02	8.67
-----								

(#) = Out of Range                      SPCC's out = 0    CCC's out = 0  
 4m123523.D M4M5801SIM.M            Tue May 28 18:29:47 2024

6.7.11

6

# Run Sequence Report

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Run ID:</b> E3H73	<b>Method:</b> SW846 8270E BY SIM	<b>Instrument ID:</b> GCMS3H
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Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E3H73-DFTPP	3H1013A.D	05/18/24 01:16	n/a	DFTPP Tune
E3H73-ICC73	3H1014.D	05/18/24 01:40	n/a	Initial cal 1
E3H73-IC73	3H1015.D	05/18/24 02:04	n/a	Initial cal 0.01
E3H73-IC73	3H1016.D	05/18/24 02:29	n/a	Initial cal 0.02
E3H73-IC73	3H1017.D	05/18/24 02:54	n/a	Initial cal 0.05
E3H73-IC73	3H1018.D	05/18/24 03:19	n/a	Initial cal 0.1
E3H73-IC73	3H1019.D	05/18/24 03:43	n/a	Initial cal 0.2
E3H73-IC73	3H1020.D	05/18/24 04:08	n/a	Initial cal 0.5
E3H73-IC73	3H1021.D	05/18/24 04:32	n/a	Initial cal 2.5
E3H73-IC73	3H1022.D	05/18/24 04:57	n/a	Initial cal 5
E3H73-ICV73	3H1023.D	05/18/24 05:22	n/a	Initial cal verification 1
E3H73-ICV73	3H1024.D	05/18/24 05:46	n/a	Initial cal verification 1
E3H73-ICV73	3H1025.D	05/18/24 06:11	n/a	Initial cal verification 5

6.8.1  
6

# Run Sequence Report

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Run ID:** E3H82                      **Method:** SW846 8270E BY SIM    **Instrument ID:** GCMS3H

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E3H82-DFTPP	3H1170.D	06/01/24 01:52	n/a	DFTPP Tune
E3H82-CC73	3H1171.D	06/01/24 02:04	n/a	Continuing cal 1
OP54985A-MB2	3H1173.D	06/01/24 03:43	OP54985A	Method Blank
ZZZZZZ	3H1174.D	06/01/24 04:08	OP54985A	(unrelated sample)
OP55022A-MB2	3H1175.D	06/01/24 04:32	OP55022A	Method Blank
OP55022A-BS122	3H1176.D	06/01/24 04:56	OP55022A	Blank Spike
OP55107A-MB1	3H1177.D	06/01/24 05:21	OP55107A	Method Blank
OP55107A-BS12	3H1178.D	06/01/24 05:45	OP55107A	Blank Spike
OP55107A-BSD12	3H1179.D	06/01/24 06:10	OP55107A	Blank Spike Duplicate
OP55107A-LB51	3H1180.D	06/01/24 06:34	OP55107A	Leachate Blank
OP55022A-MSA	3H1181.D	06/01/24 06:58	OP55022A	Matrix Spike
OP55022A-MSDA	3H1182.D	06/01/24 07:23	OP55022A	Matrix Spike Duplicate
JD87833-4R	3H1183.D	06/01/24 07:47	OP55107A	SB-4
JD87833-6R	3H1184.D	06/01/24 08:12	OP55107A	SB-6
ZZZZZZ	3H1186.D	06/01/24 09:01	OP55107A	(unrelated sample)
ZZZZZZ	3H1187.D	06/01/24 09:25	OP55107A	(unrelated sample)
ZZZZZZ	3H1188.D	06/01/24 09:49	OP55107A	(unrelated sample)
ZZZZZZ	3H1189.D	06/01/24 10:14	OP55107A	(unrelated sample)

6.8.2  
6

# Run Sequence Report

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Run ID:** E4M5801                      **Method:** SW846 8270E BY SIM   **Instrument ID:** GCMS4M

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E4M5801-DFTPP	4M123522.D	05/02/24 18:42	n/a	DFTPP Tune
E4M5801-ICC5801	4M123523.D	05/02/24 18:57	n/a	Initial cal 1
E4M5801-IC5801	4M123525.D	05/02/24 19:43	n/a	Initial cal 0.02
E4M5801-IC5801	4M123526.D	05/02/24 20:06	n/a	Initial cal 0.05
E4M5801-IC5801	4M123528.D	05/02/24 20:52	n/a	Initial cal 0.2
E4M5801-IC5801	4M123529.D	05/02/24 21:15	n/a	Initial cal 0.5
E4M5801-IC5801	4M123530.D	05/02/24 21:42	n/a	Initial cal 0.01
E4M5801-IC5801	4M123531.D	05/02/24 22:04	n/a	Initial cal 2.5
E4M5801-IC5801	4M123532.D	05/02/24 22:27	n/a	Initial cal 0.1
E4M5801-IC5801	4M123533.D	05/02/24 22:50	n/a	Initial cal 5
E4M5801-ICV5801	4M123534.D	05/02/24 23:19	n/a	Initial cal verification 1
E4M5801-ICV5801	4M123535.D	05/02/24 23:42	n/a	Initial cal verification 1
E4M5801-ICV5801	4M123536.D	05/03/24 00:04	n/a	Initial cal verification 5
OP54175A-MB1	4M123537.D	05/03/24 00:27	OP54175A	Method Blank
OP54175A-BS12	4M123538.D	05/03/24 00:50	OP54175A	Blank Spike
OP54175A-BSD12	4M123539.D	05/03/24 01:12	OP54175A	Blank Spike Duplicate
ZZZZZZ	4M123540.D	05/03/24 01:35	OP54175A	(unrelated sample)
ZZZZZZ	4M123541.D	05/03/24 01:58	OP54175A	(unrelated sample)
ZZZZZZ	4M123542.D	05/03/24 02:21	OP54175A	(unrelated sample)
ZZZZZZ	4M123543.D	05/03/24 02:43	OP54175A	(unrelated sample)
ZZZZZZ	4M123544.D	05/03/24 03:06	OP54175A	(unrelated sample)

6.8.3  
6

# Run Sequence Report

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Run ID:** E4M5802                      **Method:** SW846 8270E BY SIM   **Instrument ID:** GCMS4M

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E4M5802-DFTPP	4M123545.D	05/03/24 11:31	n/a	DFTPP Tune
E4M5802-ICV5801	4M123547.D	05/03/24 12:24	n/a	Initial cal verification 5
E4M5802-CC5801	4M123548.D	05/03/24 13:04	n/a	Continuing cal 1
OP54242A-MB1	4M123552.D	05/03/24 14:46	OP54242A	Method Blank
ZZZZZZ	4M123553.D	05/03/24 15:09	OP54265A	(unrelated sample)
ZZZZZZ	4M123554.D	05/03/24 15:32	OP54242A	(unrelated sample)
ZZZZZZ	4M123555.D	05/03/24 15:54	OP54242A	(unrelated sample)
OP54242A-BS12	4M123560.D	05/03/24 16:17	OP54242A	Blank Spike
ZZZZZZ	4M123556.D	05/03/24 17:02	OP54242A	(unrelated sample)
ZZZZZZ	4M123557.D	05/03/24 17:25	OP54242A	(unrelated sample)
JD87379-5	4M123558.D	05/03/24 17:47	OP54242A	(used for QC only; not part of job JD87833R)
ZZZZZZ	4M123559.D	05/03/24 18:10	OP54242A	(unrelated sample)
ZZZZZZ	4M123571.D	05/03/24 18:32	OP54265A	(unrelated sample)
OP54242A-MSA	4M123562.D	05/03/24 18:54	OP54242A	Matrix Spike
OP54242A-MSDA	4M123563.D	05/03/24 19:17	OP54242A	Matrix Spike Duplicate

6.8.4  
6

# Run Sequence Report

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Run ID:** E4M5826                      **Method:** SW846 8270E BY SIM    **Instrument ID:** GCMS4M

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E4M5826-CC5801	4M124144.D	05/28/24 08:55	n/a	Continuing cal 1
OP54962A-MB1	4M124147.D	05/28/24 10:22	OP54962A	Method Blank
OP54962A-LB45	4M124148.D	05/28/24 10:44	OP54962A	Leachate Blank
OP54962A-BS12	4M124149.D	05/28/24 11:06	OP54962A	Blank Spike
OP54962A-BSD12	4M124150.D	05/28/24 11:29	OP54962A	Blank Spike Duplicate
JD87833-4R	4M124151.D	05/28/24 11:51	OP54962A	SB-4
JD87833-5R	4M124152.D	05/28/24 12:14	OP54962A	SB-5
JD87833-6R	4M124153.D	05/28/24 12:36	OP54962A	SB-6
OP54838A-MB1	4M124154.D	05/28/24 12:58	OP54838A	Method Blank
ZZZZZZ	4M124155.D	05/28/24 13:20	OP54828A	(unrelated sample)
ZZZZZZ	4M124156.D	05/28/24 13:43	OP54828A	(unrelated sample)
ZZZZZZ	4M124158.D	05/28/24 14:27	OP54838A	(unrelated sample)
ZZZZZZ	4M124159.D	05/28/24 14:49	OP54894A	(unrelated sample)
ZZZZZZ	4M124160.D	05/28/24 15:12	OP54894A	(unrelated sample)
ZZZZZZ	4M124161.D	05/28/24 15:34	OP54896A	(unrelated sample)
ZZZZZZ	4M124162.D	05/28/24 15:56	OP54896A	(unrelated sample)
ZZZZZZ	4M124163.D	05/28/24 16:19	OP54896A	(unrelated sample)
ZZZZZZ	4M124164.D	05/28/24 16:41	OP54896A	(unrelated sample)
ZZZZZZ	4M124165.D	05/28/24 17:04	OP54896A	(unrelated sample)
ZZZZZZ	4M124166.D	05/28/24 17:26	OP54838A	(unrelated sample)
ZZZZZZ	4M124168.D	05/28/24 18:10	OP54838A	(unrelated sample)
ZZZZZZ	4M124169.D	05/28/24 18:32	OP54894A	(unrelated sample)
ZZZZZZ	4M124170.D	05/28/24 18:54	OP54894A	(unrelated sample)
ZZZZZZ	4M124171.D	05/28/24 19:17	OP54894A	(unrelated sample)
ZZZZZZ	4M124172.D	05/28/24 19:39	OP54894A	(unrelated sample)
ZZZZZZ	4M124173.D	05/28/24 20:01	OP54894A	(unrelated sample)
ZZZZZZ	4M124174.D	05/28/24 20:24	OP54894A	(unrelated sample)
ZZZZZZ	4M124175.D	05/28/24 20:46	OP54894A	(unrelated sample)
ZZZZZZ	4M124176.D	05/28/24 21:08	OP54894A	(unrelated sample)
ZZZZZZ	4M124177.D	05/28/24 21:31	OP54894A	(unrelated sample)
ZZZZZZ	4M124178.D	05/28/24 21:53	OP54894A	(unrelated sample)

6.8.5  
6

MS Semi-volatiles

Raw Data

7

Quantitation Report (QT Reviewed)

Data Path : X:\Dayton SVOA GCMS\altheam\3h82\  
 Data File : 3H1183.d  
 Acq On : 1 Jun 2024 7:47 am  
 Operator : rocquans  
 Sample : jd87833-4r Inst : GCMS3H  
 Misc : op55107a,e3h82,500,,,1,1  
 ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 03 07:53:03 2024  
 Quant Method : X:\Dayton SVOA GCMS\altheam\method\M3H73SIM.M  
 Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um  
 QLast Update : Mon Jun 03 07:13:29 2024  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) 1-Methylnaphthalene-d10	6.163	152	8173	4.00	ppm	0.00
12) Fluorene-d10	7.486	176	9493	4.00	ppm	-0.01
22) Fluoranthene-d10	10.185	212	17709	4.00	ppm	-0.01
28) Benzo(a)pyrene-d12	14.327	264	15327	4.00	ppm	-0.02
35) 1-Methylnaphthalene-d10a	6.163	152	8173	4.00	ppm	0.00
38) Fluorene-d10a	7.486	176	9493	4.00	ppm	-0.01
System Monitoring Compounds						
2) 2-Fluorophenol	3.847	112	22903	26.49	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery =	52.98%		
3) Phenol-d5	4.462	99	20642	21.45	ppm	0.00
Spiked Amount 50.000			Recovery =	42.90%		
6) Nitrobenzene-d5	5.094	82	33470	44.28	ppm	0.00
Spiked Amount 50.000			Recovery =	88.56%		
11) 2-Fluorobiphenyl	6.412	172	86478	33.60	ppm	0.00
Spiked Amount 50.000			Recovery =	67.20%		
17) 2,4,6-Tribromophenol	7.772	330	16325	72.63	ppm	-0.01
Spiked Amount 50.000			Recovery =	145.26%		
25) Terphenyl-d14	10.819	244	117512	36.68	ppm	-0.02
Spiked Amount 50.000			Recovery =	73.36%		
Target Compounds						
						Qvalue
7) Naphthalene	5.611	128	255	0.0855	ppm	94
9) 2-Methylnaphthalene	6.115	142	320	0.1494	ppm	81
14) Acenaphthene	7.016	153	506	0.2112	ppm	97
16) Fluorene	7.517	166	526	0.1976	ppm	100
18) Hexachlorobenzene	8.113	284	18	0.0219	ppm	86
20) Phenanthrene	8.608	178	1427	0.3929	ppm	99
21) Anthracene	8.669	178	215	0.0639	ppm	94
23) Fluoranthene	10.206	202	536	0.1321	ppm	95
24) Pyrene	10.533	202	407	0.1000	ppm	95
26) Benzo[a]anthracene	12.350	228	129	0.0393	ppm	99
27) Chrysene	12.403	228	143	0.0415	ppm	95
29) Benzo[b]fluoranthene	13.922	252	201	0.0564	ppm	97
30) Benzo[k]fluoranthene	13.960	252	92	0.0261	ppm	95
31) Benzo[a]pyrene	14.358	252	142	0.0368	ppm	100
37) 1-Methylnaphthalene	6.188	142	196	0.0960	ppm	88

(#) = qualifier out of range (m) = manual integration (+) = signals summed

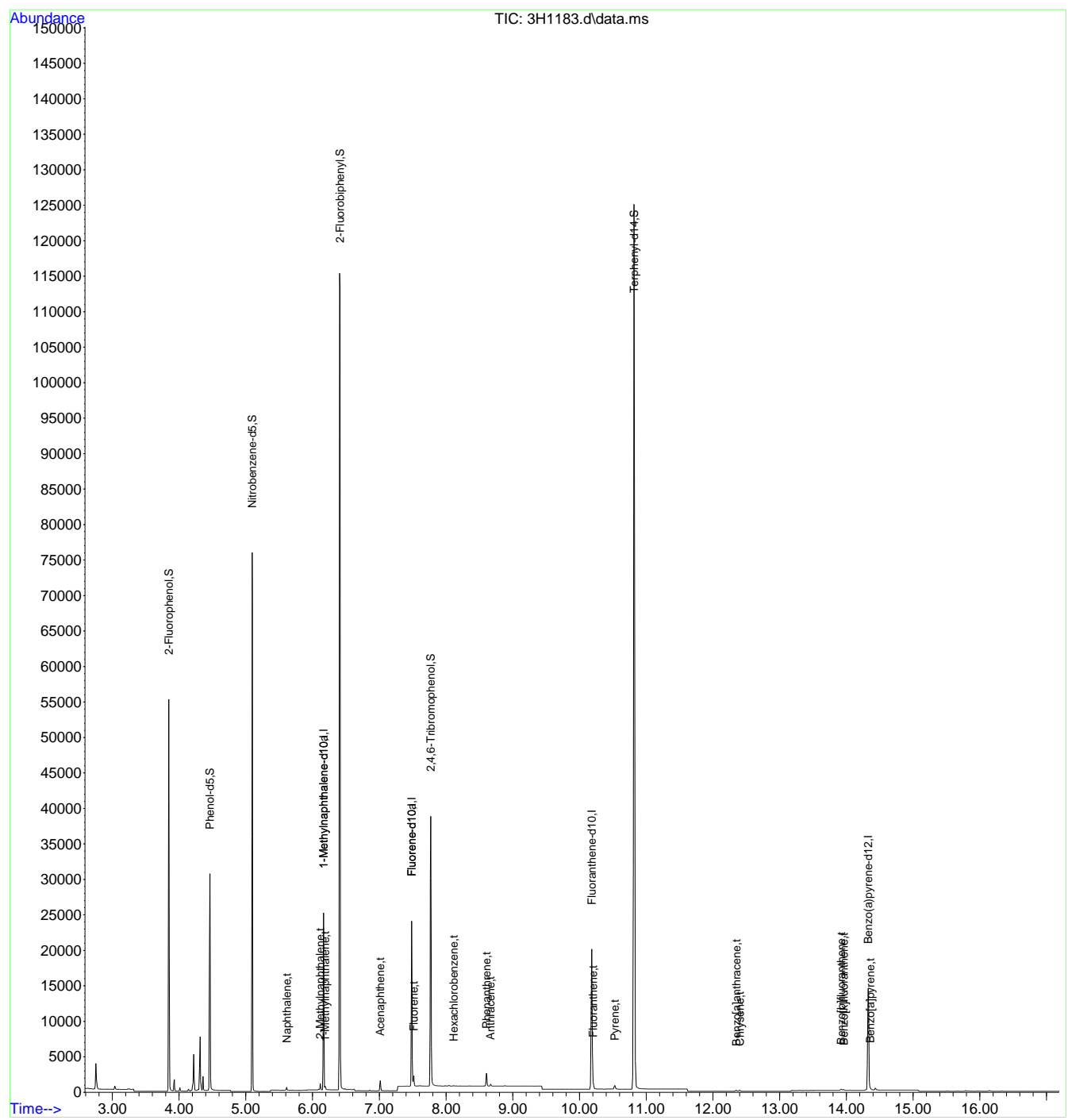
7.11  
7

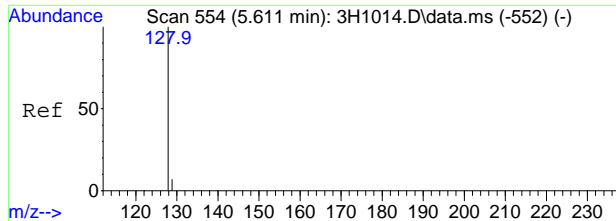


Quantitation Report (QT Reviewed)

Data Path : X:\Dayton SVOA GCMS\altheam\e3h82\  
Data File : 3H1183.d  
Acq On : 1 Jun 2024 7:47 am  
Operator : rocquans  
Sample : jd87833-4r Inst : GCMS3H  
Misc : op55107a,e3h82,500,,,1,1  
ALS Vial : 14 Sample Multiplier: 1

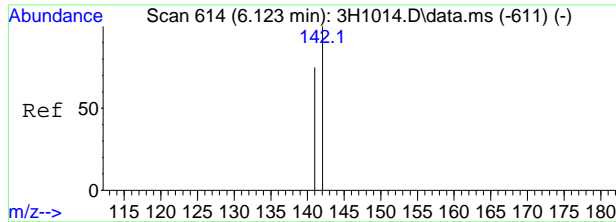
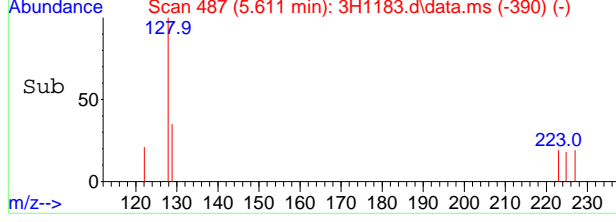
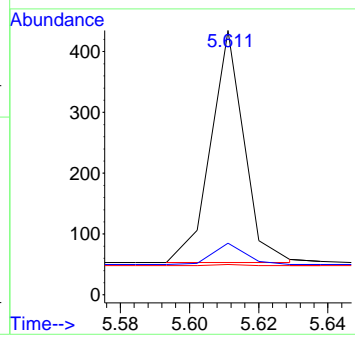
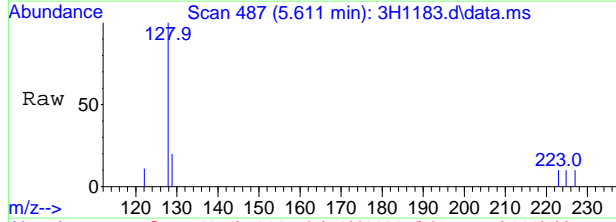
Quant Time: Jun 03 07:53:03 2024  
Quant Method : X:\Dayton SVOA GCMS\altheam\method\M3H73SIM.M  
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um  
QLast Update : Mon Jun 03 07:13:29 2024  
Response via : Initial Calibration





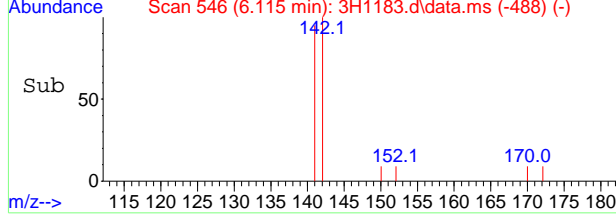
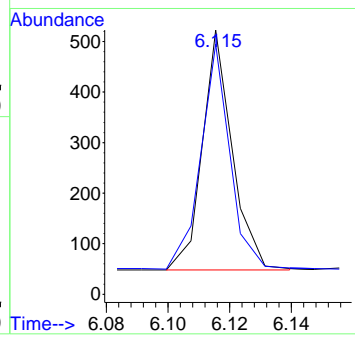
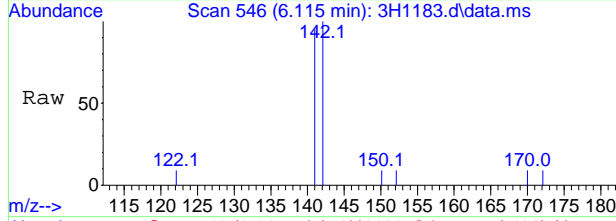
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 Naphthalene  
 Concen: 0.0855 ppm  
 RT: 5.611 min Scan# 487  
 Delta R.T. -0.000 min  
 Lab File: 3H1183.d  
 Acq: 1 Jun 2024 7:47 am

Tgt Ion	Ratio	Lower	Upper
128	100		
129	9.2	0.0	37.0
122	0.5	0.0	30.3



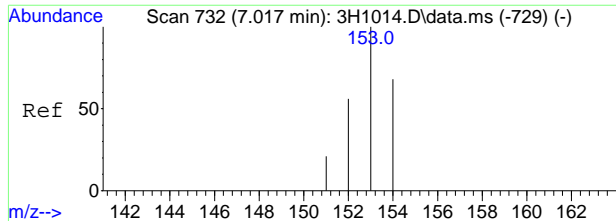
#9  
 2-Methylnaphthalene  
 Concen: 0.1494 ppm  
 RT: 6.115 min Scan# 546  
 Delta R.T. -0.008 min  
 Lab File: 3H1183.d  
 Acq: 1 Jun 2024 7:47 am

Tgt Ion	Ratio	Lower	Upper
142	100		
141	93.8	47.6	107.6



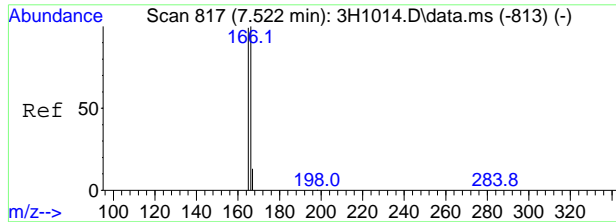
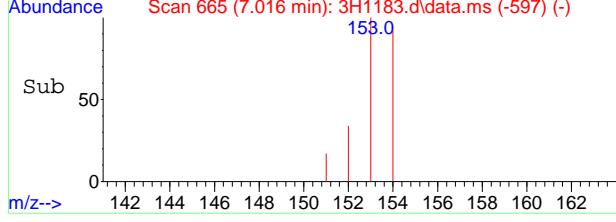
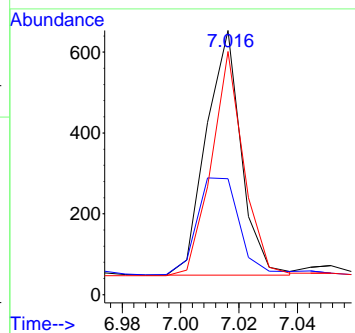
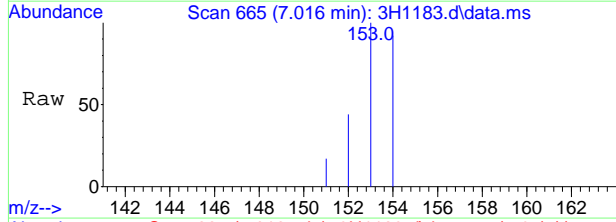
7.1.1  
7





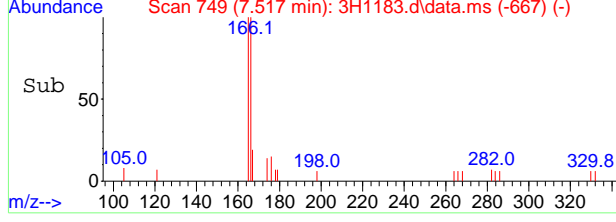
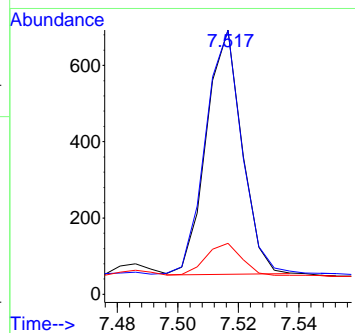
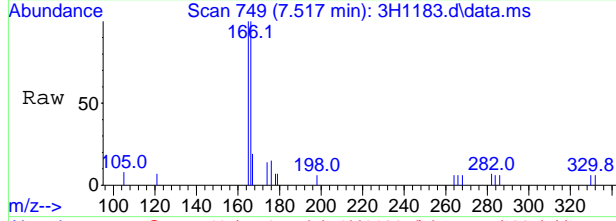
#14  
 Acenaphthene  
 Concen: 0.2112 ppm  
 RT: 7.016 min Scan# 665  
 Delta R.T. -0.007 min  
 Lab File: 3H1183.d  
 Acq: 1 Jun 2024 7:47 am

Tgt Ion	Ratio	Lower	Upper
153	100		
152	38.8	9.3	69.3
154	91.8	58.4	118.4

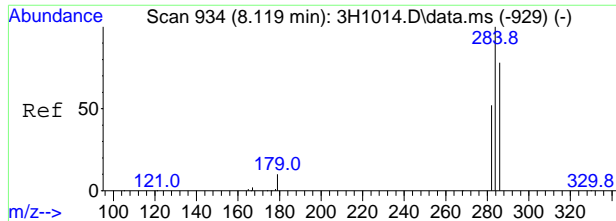


#16  
 Fluorene  
 Concen: 0.1976 ppm  
 RT: 7.517 min Scan# 749  
 Delta R.T. -0.010 min  
 Lab File: 3H1183.d  
 Acq: 1 Jun 2024 7:47 am

Tgt Ion	Ratio	Lower	Upper
166	100		
165	99.4	69.5	129.5
167	13.1	0.0	43.0

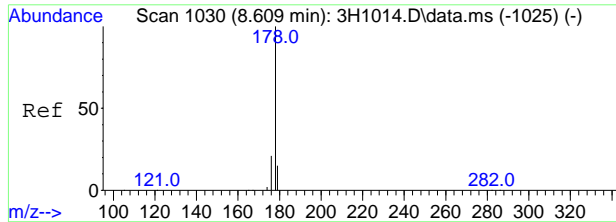
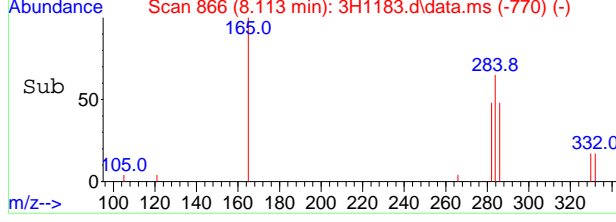
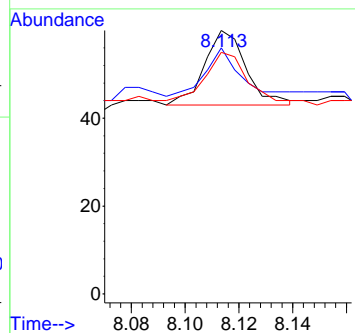
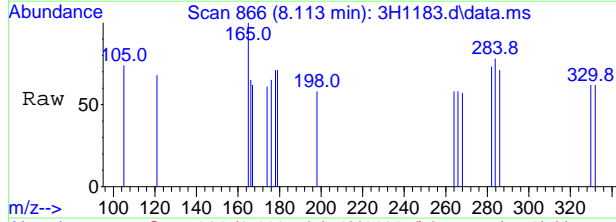


7.1.1  
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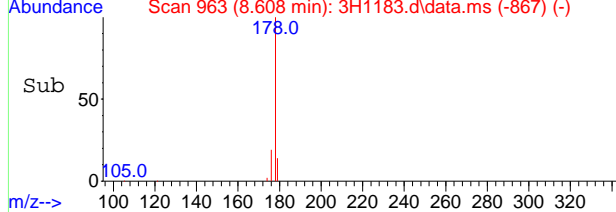
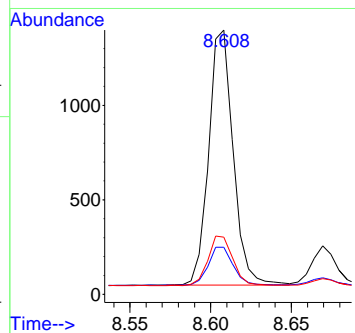
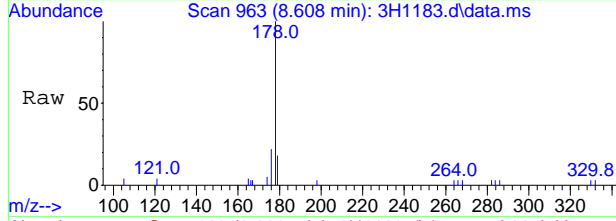
#18  
 Hexachlorobenzene  
 Concen: 0.0219 ppm  
 RT: 8.113 min Scan# 866  
 Delta R.T. -0.010 min  
 Lab File: 3H1183.d  
 Acq: 1 Jun 2024 7:47 am

Tgt Ion	Ratio	Lower	Upper
284	100		
282	63.6	20.7	80.7
286	66.7	46.3	106.3



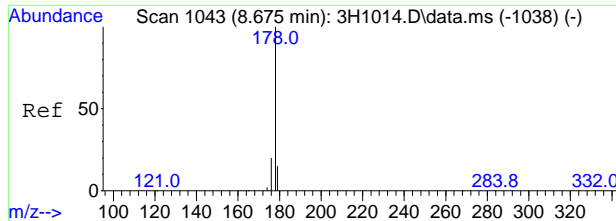
#20  
 Phenanthrene  
 Concen: 0.3929 ppm  
 RT: 8.608 min Scan# 963  
 Delta R.T. -0.010 min  
 Lab File: 3H1183.d  
 Acq: 1 Jun 2024 7:47 am

Tgt Ion	Ratio	Lower	Upper
178	100		
179	14.9	0.0	45.1
176	18.9	0.0	49.7



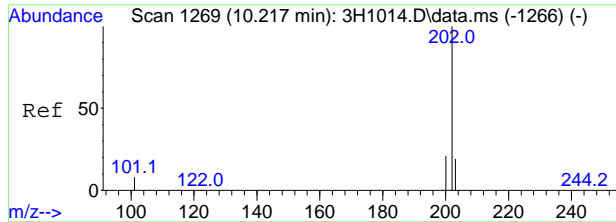
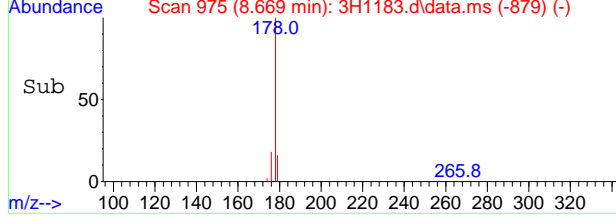
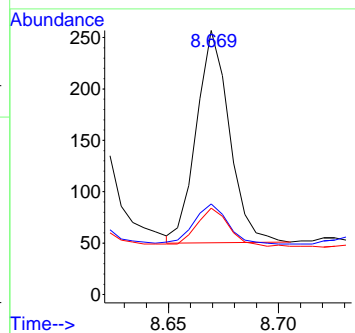
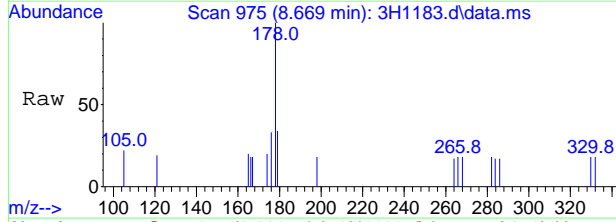
7.1.1  
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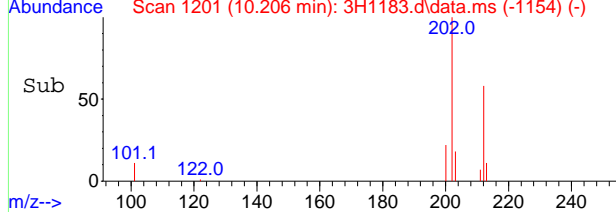
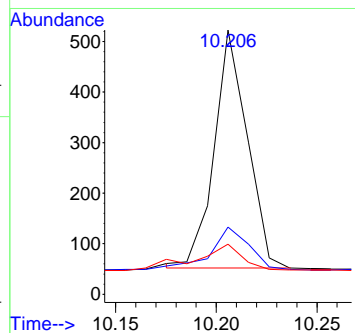
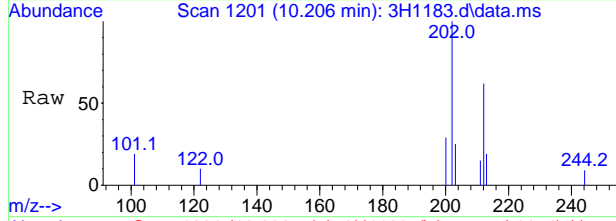
#21  
 Anthracene  
 Concen: 0.0639 ppm  
 RT: 8.669 min Scan# 975  
 Delta R.T. -0.010 min  
 Lab File: 3H1183.d  
 Acq: 1 Jun 2024 7:47 am

Tgt Ion	Ratio	Lower	Upper
178	100		
179	18.7	0.0	45.1
176	17.7	0.0	49.4

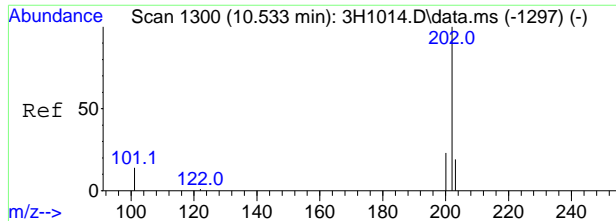


#23  
 Fluoranthene  
 Concen: 0.1321 ppm  
 RT: 10.206 min Scan# 1201  
 Delta R.T. -0.021 min  
 Lab File: 3H1183.d  
 Acq: 1 Jun 2024 7:47 am

Tgt Ion	Ratio	Lower	Upper
202	100		
203	17.3	0.0	49.6
101	8.7	0.0	37.0

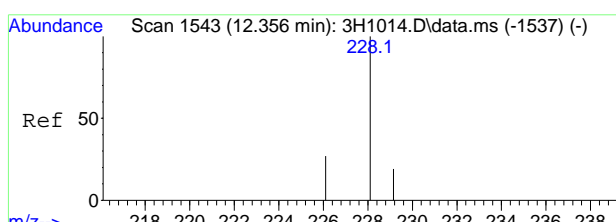
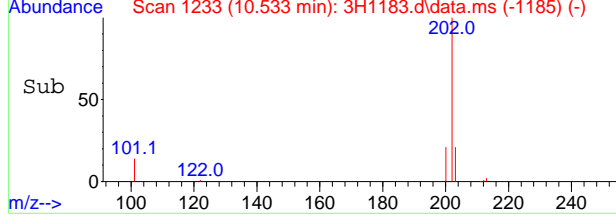
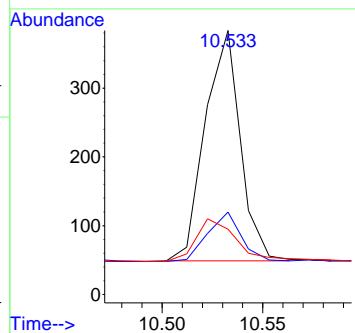
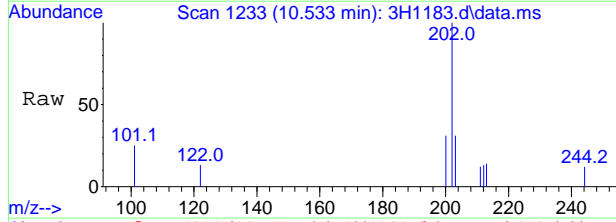


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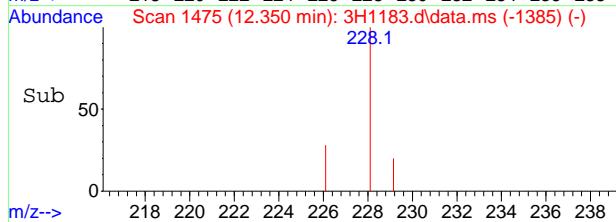
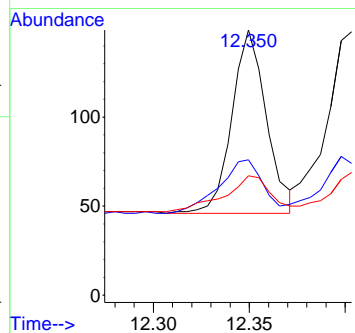
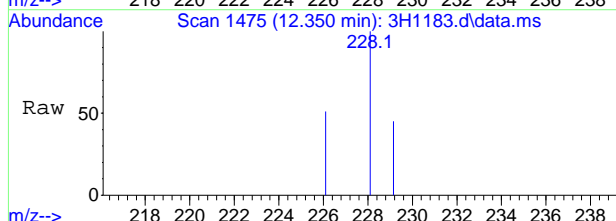
#24  
 Pyrene  
 Concen: 0.1000 ppm  
 RT: 10.533 min Scan# 1233  
 Delta R.T. -0.010 min  
 Lab File: 3H1183.d  
 Acq: 1 Jun 2024 7:47 am

Tgt Ion	Ratio	Lower	Upper
202	100		
203	21.4	0.0	48.5
101	13.5	0.0	42.6



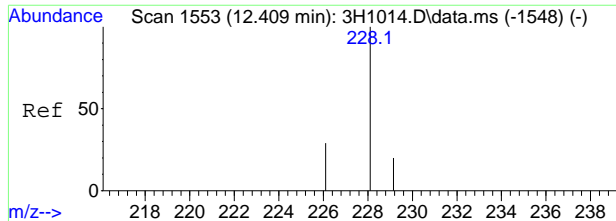
#26  
 Benzo[a]anthracene  
 Concen: 0.0393 ppm  
 RT: 12.350 min Scan# 1475  
 Delta R.T. -0.016 min  
 Lab File: 3H1183.d  
 Acq: 1 Jun 2024 7:47 am

Tgt Ion	Ratio	Lower	Upper
228	100		
226	28.5	0.0	58.0
229	19.2	0.0	48.7



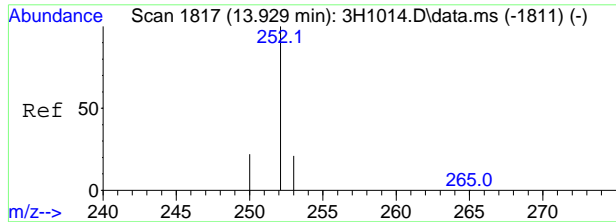
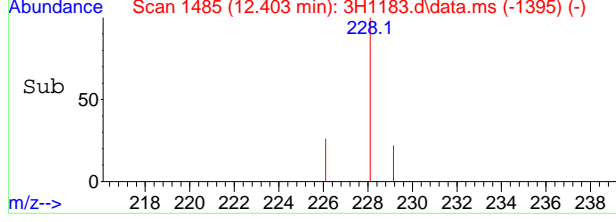
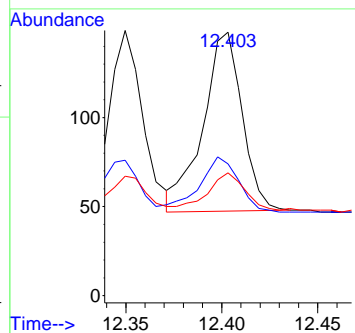
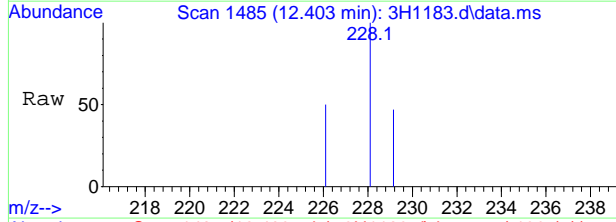
7.1.1  
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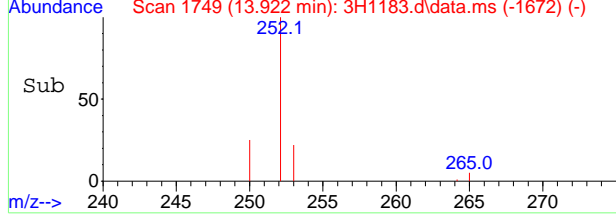
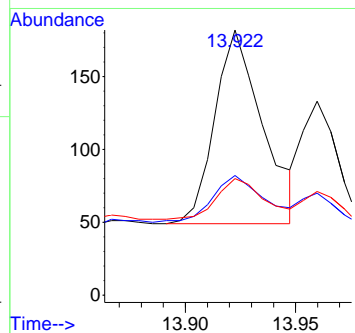
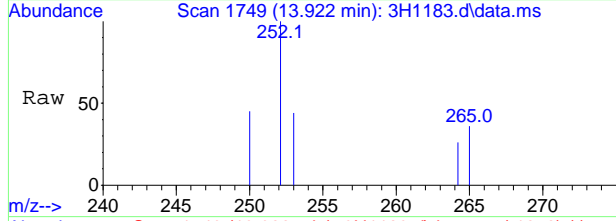
#27  
 Chrysene  
 Concen: 0.0415 ppm  
 RT: 12.403 min Scan# 1485  
 Delta R.T. -0.016 min  
 Lab File: 3H1183.d  
 Acq: 1 Jun 2024 7:47 am

Tgt Ion	Ratio	Lower	Upper
228	100		
226	26.5	0.1	60.1
229	20.6	0.0	39.4



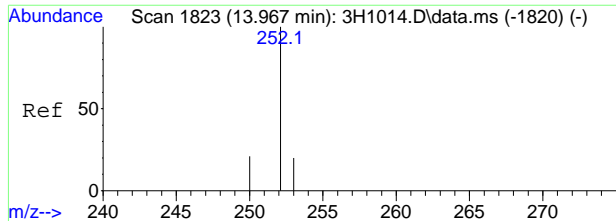
#29  
 Benzo[b]fluoranthene  
 Concen: 0.0564 ppm  
 RT: 13.922 min Scan# 1749  
 Delta R.T. -0.019 min  
 Lab File: 3H1183.d  
 Acq: 1 Jun 2024 7:47 am

Tgt Ion	Ratio	Lower	Upper
252	100		
250	23.1	0.0	51.1
253	21.4	0.0	51.0

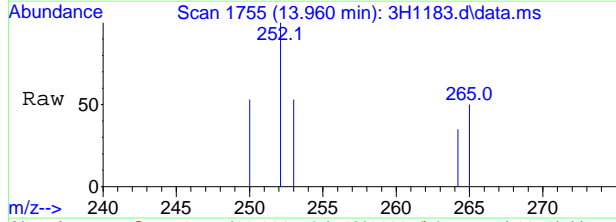


7.1.1  
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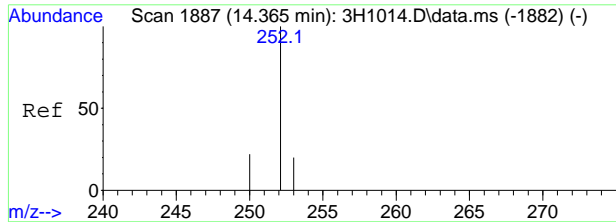
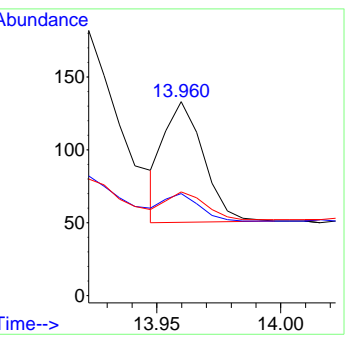
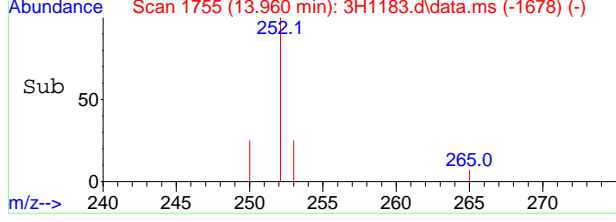


#30  
 Benzo[k]fluoranthene  
 Concen: 0.0261 ppm  
 RT: 13.960 min Scan# 1755  
 Delta R.T. -0.019 min  
 Lab File: 3H1183.d  
 Acq: 1 Jun 2024 7:47 am

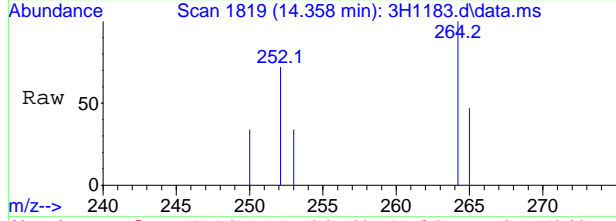


Tgt Ion:252 Resp: 92

Ion	Ratio	Lower	Upper
252	100		
250	22.5	0.0	51.0
253	24.0	0.0	51.0

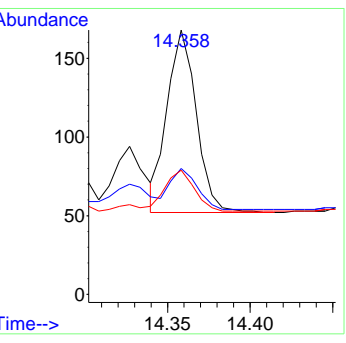
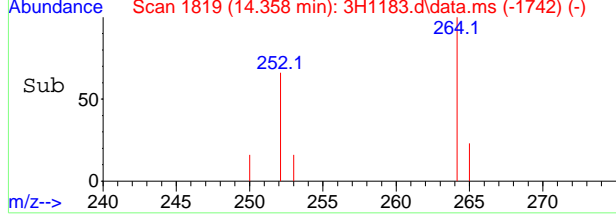


#31  
 Benzo[a]pyrene  
 Concen: 0.0368 ppm  
 RT: 14.358 min Scan# 1819  
 Delta R.T. -0.019 min  
 Lab File: 3H1183.d  
 Acq: 1 Jun 2024 7:47 am



Tgt Ion:252 Resp: 142

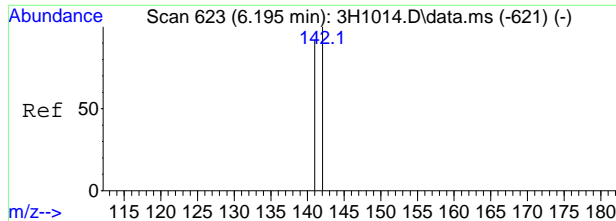
Ion	Ratio	Lower	Upper
252	100		
253	20.7	0.0	50.5
250	23.0	0.0	52.8



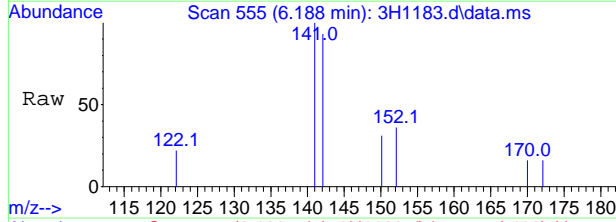
7.1.1  
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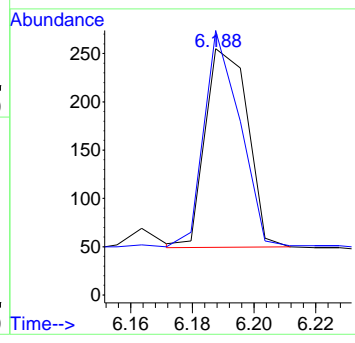
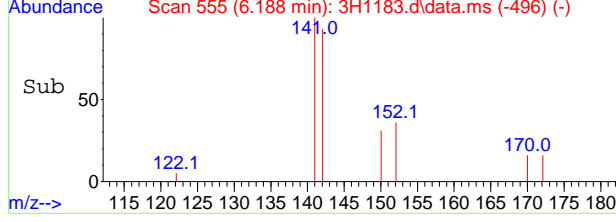


#37  
 1-Methylnaphthalene  
 Concen: 0.0960 ppm  
 RT: 6.188 min Scan# 555  
 Delta R.T. -0.008 min  
 Lab File: 3H1183.d  
 Acq: 1 Jun 2024 7:47 am



Tgt Ion: 142 Resp: 196

Ion	Ratio	Lower	Upper
142	100		
141	109.8	77.9	117.9



7.1.1  
7



## Quantitation Report (QT Reviewed)

Data Path : X:\Dayton SVOA GCMS\danielas\e4m5826\  
 Data File : 4m124151.d  
 Acq On : 28 May 2024 11:51 am  
 Operator : karimam  
 Sample : jd87833-4r Inst : GCMS4M  
 Misc : op54962a,e4m5826,500,,,1,1  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 28 20:12:19 2024  
 Quant Method : X:\Dayton SVOA GCMS\danielas\METHODS\M4M5801SIM.M  
 Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um  
 QLast Update : Tue May 28 18:33:01 2024  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) 1-Methylnaphthalene-d10	7.104	152	29249	4.00	ppm	0.00
14) Fluorene-d10	8.578	176	34198	4.00	ppm	0.00
24) Fluoranthene-d10	10.697	212	61629	4.00	ppm	0.00
30) Benzo(a)pyrene-d12	13.398	264	48051	4.00	ppm	0.00
37) Fluorene-d10a	8.578	176	34198	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.979	112	917	0.23	ppm	0.00
Spiked Amount	50.000	Range	11 - 58	Recovery	=	0.46%#
4) Phenol-d5	4.830	99	550	0.11	ppm	0.00
Spiked Amount	50.000			Recovery	=	0.22%
7) Nitrobenzene-d5	5.663	82	21628	5.48	ppm	0.00
Spiked Amount	50.000			Recovery	=	10.96%
13) 2-Fluorobiphenyl	7.411	172	69823	7.89	ppm	0.00
Spiked Amount	50.000			Recovery	=	15.78%
19) 2,4,6-Tribromophenol	8.852	330	3345	4.89	ppm	0.00
Spiked Amount	50.000			Recovery	=	9.78%
27) Terphenyl-d14	11.109	244	60935	6.83	ppm	0.00
Spiked Amount	50.000			Recovery	=	13.66%

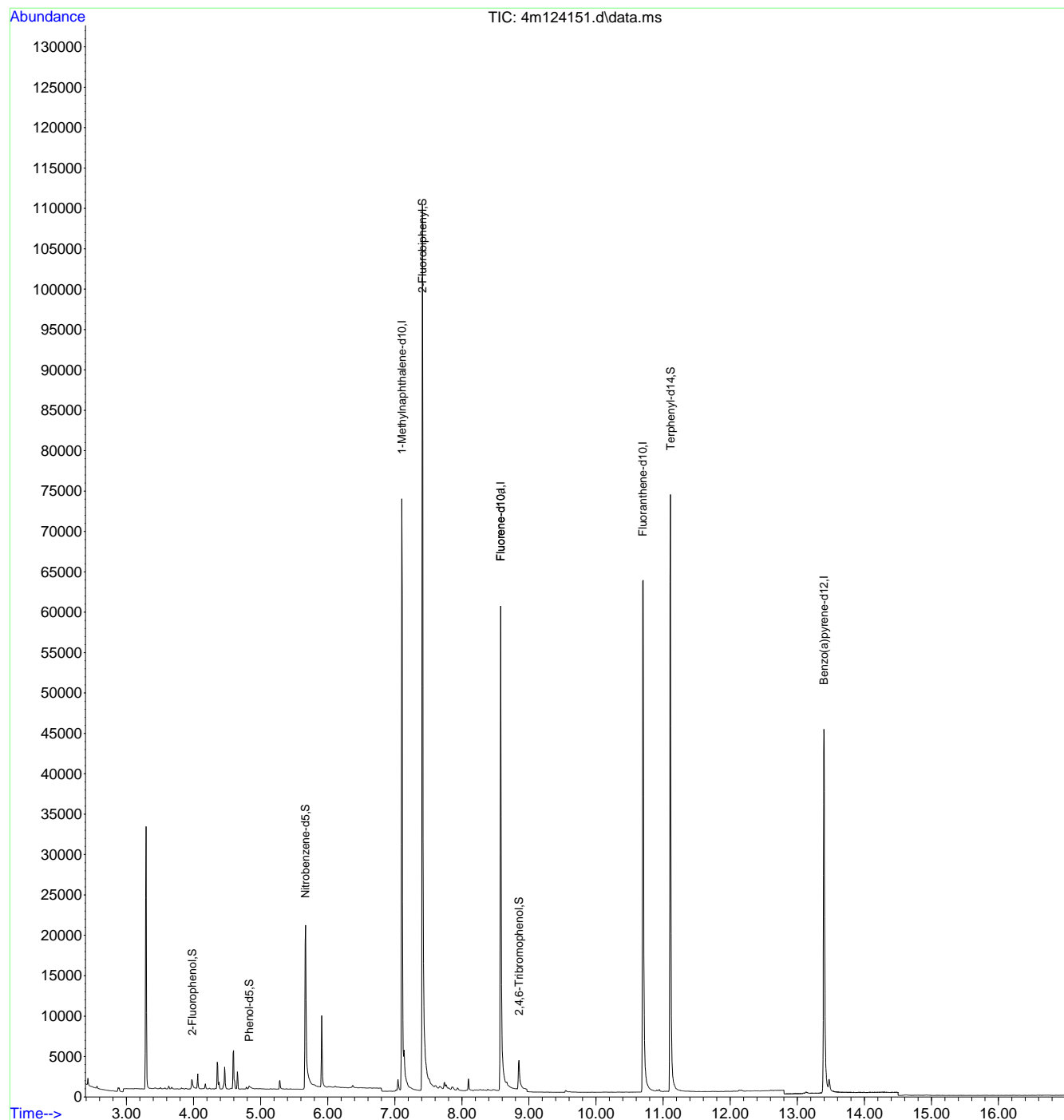
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

## Quantitation Report (QT Reviewed)

Data Path : X:\Dayton SVOA GCMS\danielas\e4m5826\  
Data File : 4m124151.d  
Acq On : 28 May 2024 11:51 am  
Operator : karimam  
Sample : jd87833-4r Inst : GCMS4M  
Misc : op54962a,e4m5826,500,,,1,1  
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 28 20:12:19 2024  
Quant Method : X:\Dayton SVOA GCMS\danielas\METHODS\M4M5801SIM.M  
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um  
QLast Update : Tue May 28 18:33:01 2024  
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : X:\Dayton SVOA GCMS\danielas\4m5826\  
 Data File : 4m124152.d  
 Acq On : 28 May 2024 12:14 pm  
 Operator : karimam  
 Sample : jd87833-5r Inst : GCMS4M  
 Misc : op54962a,e4m5826,500,,,1,1  
 ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 28 18:50:04 2024  
 Quant Method : X:\Dayton SVOA GCMS\danielas\METHODS\M4M5801SIM.M  
 Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um  
 QLast Update : Tue May 28 18:33:01 2024  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) 1-Methylnaphthalene-d10	7.103	152	30679	4.00	ppm	0.00
14) Fluorene-d10	8.578	176	35840	4.00	ppm	0.00
24) Fluoranthene-d10	10.702	212	65142	4.00	ppm	0.00
30) Benzo(a)pyrene-d12	13.393	264	50810	4.00	ppm	0.00
37) Fluorene-d10a	8.578	176	35840	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.979	112	2623	0.63	ppm	0.00
Spiked Amount	50.000	Range 11 - 58	Recovery	=	1.26%#	
4) Phenol-d5	4.830	99	3510	0.68	ppm	0.00
Spiked Amount	50.000		Recovery	=	1.36%	
7) Nitrobenzene-d5	5.663	82	91065	22.01	ppm	0.00
Spiked Amount	50.000		Recovery	=	44.02%	
13) 2-Fluorobiphenyl	7.411	172	171300	18.46	ppm	0.00
Spiked Amount	50.000		Recovery	=	36.92%	
19) 2,4,6-Tribromophenol	8.846	330	17486	20.55	ppm	0.00
Spiked Amount	50.000		Recovery	=	41.10%	
27) Terphenyl-d14	11.108	244	157717	16.73	ppm	0.00
Spiked Amount	50.000		Recovery	=	33.46%	
Target Compounds						
28) Benzo[a]anthracene	12.134	228	375	0.0242	ppm	90
33) Benzol[a]pyrene	13.417	252	395	0.0255	ppm	96
-----						

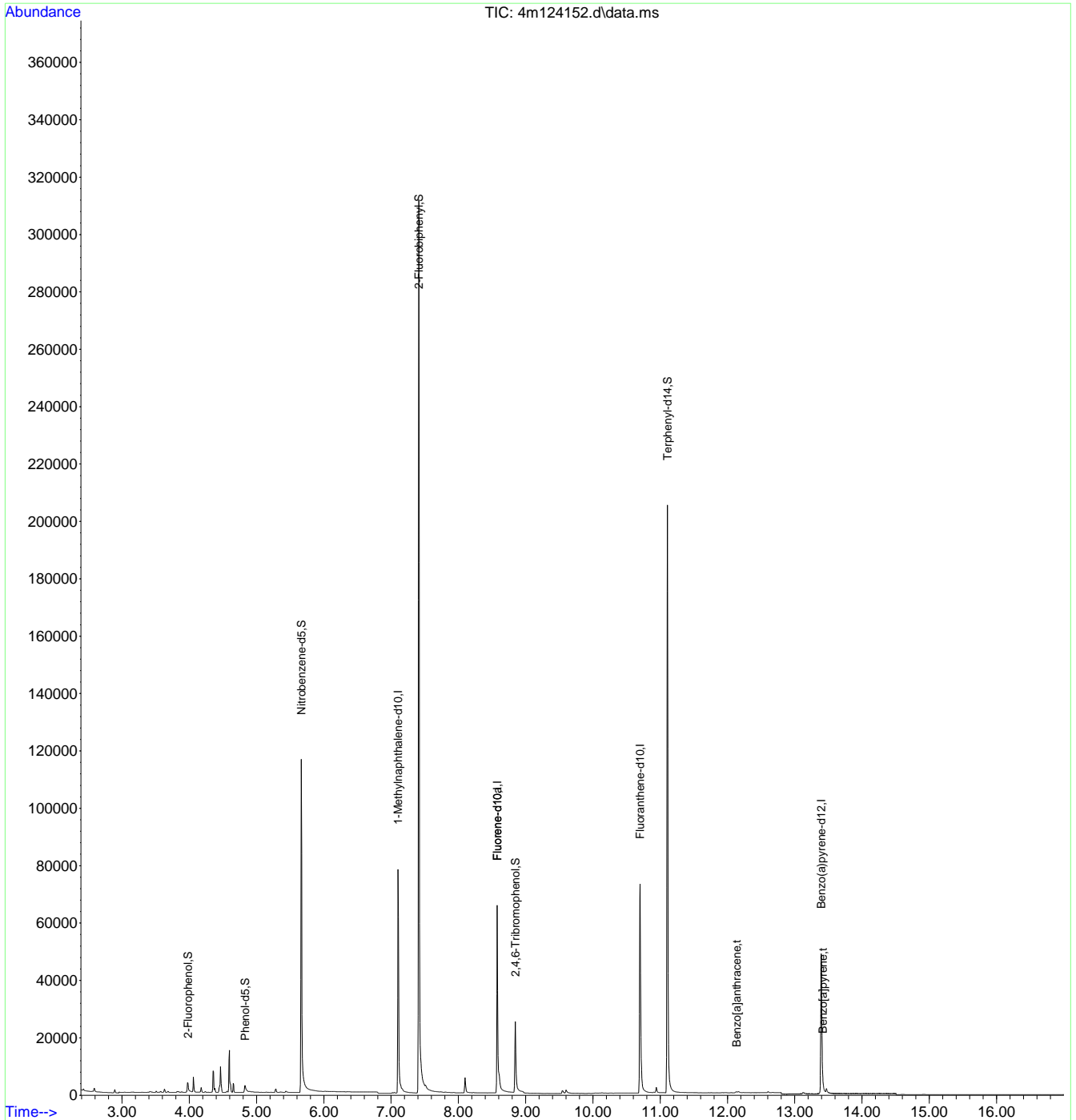
(#) = qualifier out of range (m) = manual integration (+) = signals summed

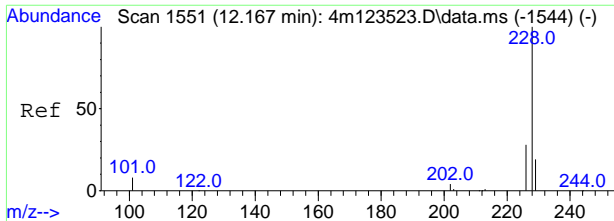
7.1.3  
7

Quantitation Report (QT Reviewed)

Data Path : X:\Dayton SVOA GCMS\danielas\e4m5826\  
 Data File : 4m124152.d  
 Acq On : 28 May 2024 12:14 pm  
 Operator : karimam  
 Sample : jd87833-5r Inst : GCMS4M  
 Misc : op54962a,e4m5826,500,,,1,1  
 ALS Vial : 9 Sample Multiplier: 1

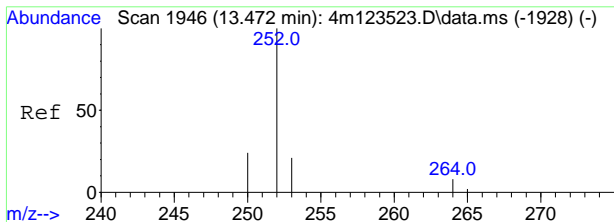
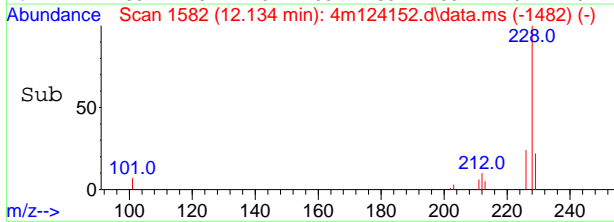
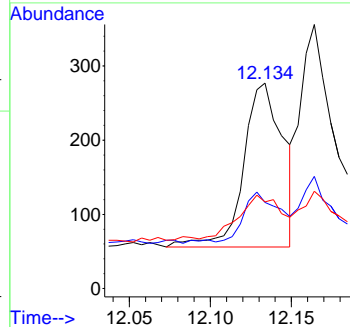
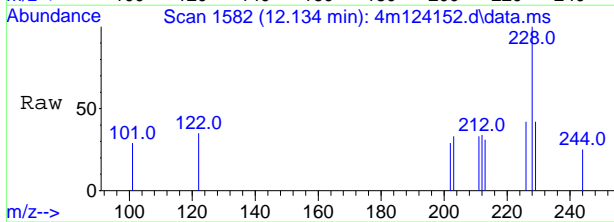
Quant Time: May 28 18:50:04 2024  
 Quant Method : X:\Dayton SVOA GCMS\danielas\METHODS\M4M5801SIM.M  
 Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um  
 QLast Update : Tue May 28 18:33:01 2024  
 Response via : Initial Calibration





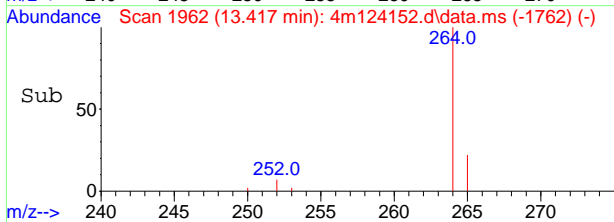
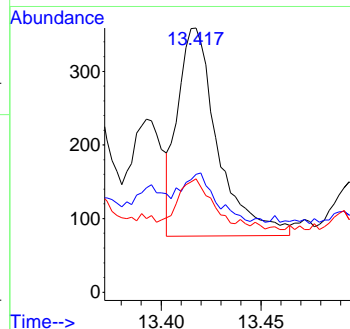
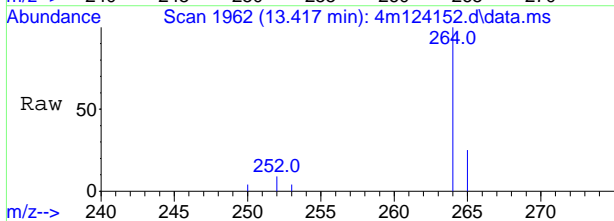
#28  
 Benzo[a]anthracene  
 Concen: 0.0242 ppm  
 RT: 12.134 min Scan# 1582  
 Delta R.T. 0.010 min  
 Lab File: 4m124152.d  
 Acq: 28 May 2024 12:14 pm

Tgt Ion	Ratio	Lower	Upper
228	100		
226	23.0	0.0	58.0
229	24.0	0.0	48.8



#33  
 Benzo[a]pyrene  
 Concen: 0.0255 ppm  
 RT: 13.417 min Scan# 1962  
 Delta R.T. -0.005 min  
 Lab File: 4m124152.d  
 Acq: 28 May 2024 12:14 pm

Tgt Ion	Ratio	Lower	Upper
252	100		
253	20.5	0.0	51.5
250	26.5	0.0	53.9



7.1.3  
7

Quantitation Report (QT Reviewed)

Data Path : X:\Dayton SVOA GCMS\altheam\3h82\  
 Data File : 3H1184.d  
 Acq On : 1 Jun 2024 8:12 am  
 Operator : rocquans  
 Sample : jd87833-6r Inst : GCMS3H  
 Misc : op55107a,e3h82,500,,,1,1  
 ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 03 07:37:10 2024  
 Quant Method : X:\Dayton SVOA GCMS\altheam\method\M3H73SIM.M  
 Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um  
 QLast Update : Mon Jun 03 07:13:29 2024  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) 1-Methylnaphthalene-d10	6.164	152	9346	4.00	ppm	0.00
12) Fluorene-d10	7.486	176	10857	4.00	ppm	-0.01
22) Fluoranthene-d10	10.185	212	20111	4.00	ppm	-0.01
28) Benzo(a)pyrene-d12	14.327	264	17172	4.00	ppm	-0.02
35) 1-Methylnaphthalene-d10a	6.164	152	9346	4.00	ppm	0.00
38) Fluorene-d10a	7.486	176	10857	4.00	ppm	-0.01
System Monitoring Compounds						
2) 2-Fluorophenol	3.847	112	33535	33.92	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery =	67.84%	#	
3) Phenol-d5	4.462	99	30276	27.51	ppm	0.00
Spiked Amount 50.000			Recovery =	55.02%		
6) Nitrobenzene-d5	5.094	82	46084	53.32	ppm	0.00
Spiked Amount 50.000			Recovery =	106.64%		
11) 2-Fluorobiphenyl	6.412	172	118950	40.42	ppm	0.00
Spiked Amount 50.000			Recovery =	80.84%		
17) 2,4,6-Tribromophenol	7.772	330	20169	78.46	ppm	-0.01
Spiked Amount 50.000			Recovery =	156.92%		
25) Terphenyl-d14	10.819	244	135360	37.21	ppm	-0.02
Spiked Amount 50.000			Recovery =	74.42%		
Target Compounds						
						Qvalue
7) Naphthalene	5.611	128	26786	7.8517	ppm	91
9) 2-Methylnaphthalene	6.115	142	11967	4.8856	ppm	88
13) Acenaphthylene	6.854	152	712	0.1830	ppm	94
14) Acenaphthene	7.016	153	24782	9.0436	ppm	94
16) Fluorene	7.517	166	18118	5.9524	ppm	99
20) Phenanthrene	8.603	178	31809	7.6575	ppm	99
21) Anthracene	8.669	178	3288	0.8545	ppm	91
23) Fluoranthene	10.206	202	5121	1.1116	ppm	93
24) Pyrene	10.533	202	2748	0.5944	ppm	90
26) Benzo[a]anthracene	12.350	228	194	0.0520	ppm	97
27) Chrysene	12.403	228	198	0.0506	ppm	96
29) Benzo[b]fluoranthene	13.922	252	202	0.0506	ppm	96
30) Benzo[k]fluoranthene	13.960	252	81	0.0205	ppm	96
31) Benzo[a]pyrene	14.358	252	145	0.0335	ppm	99
37) 1-Methylnaphthalene	6.188	142	7612	3.2592	ppm	89

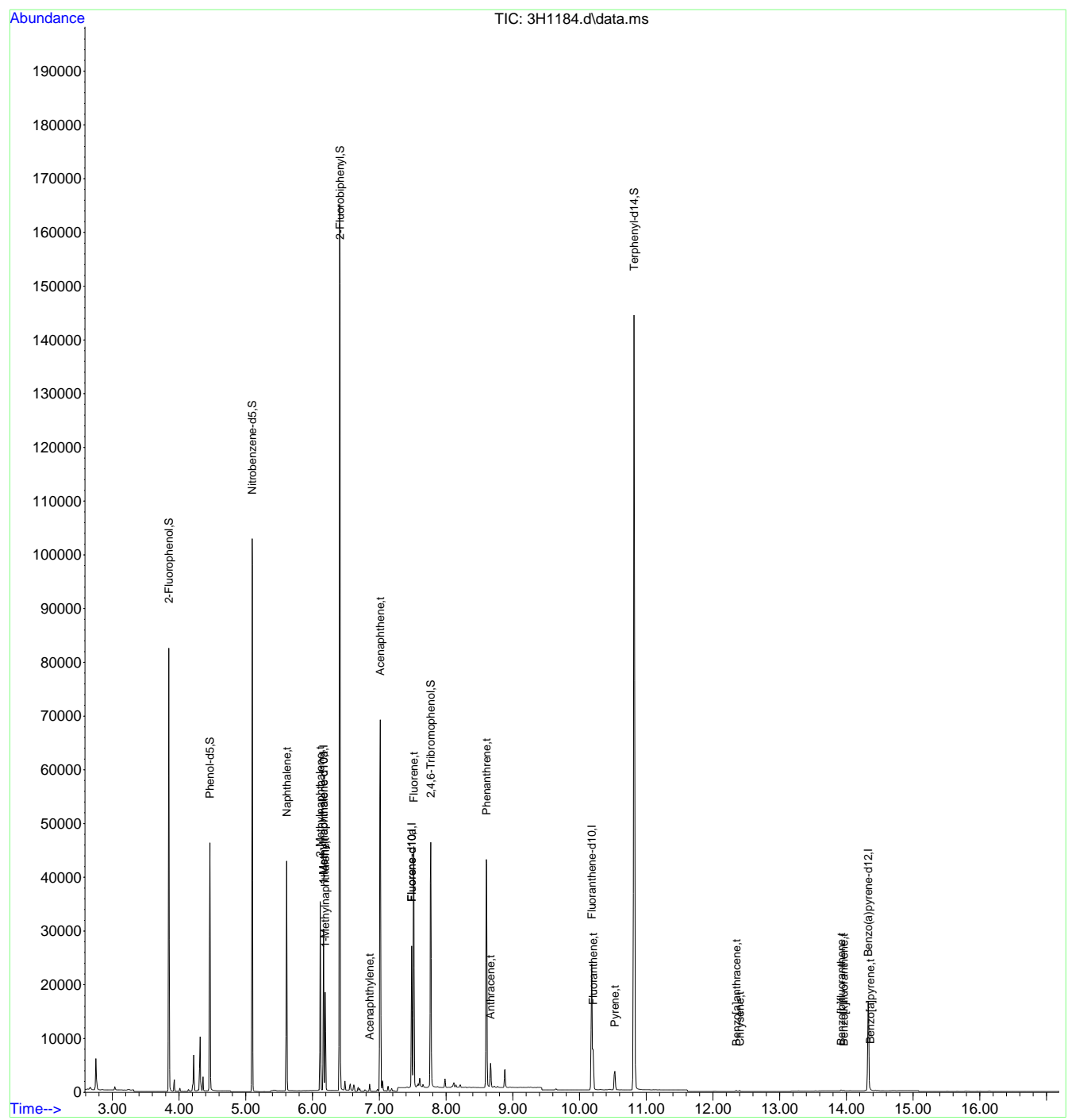
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.14  
7

Quantitation Report (QT Reviewed)

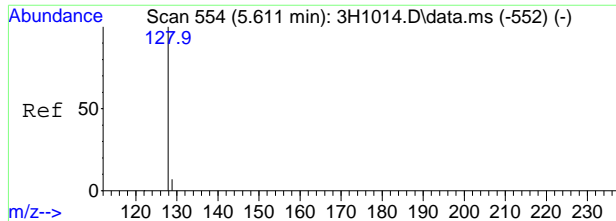
Data Path : X:\Dayton SVOA GCMS\altheam\3h82\  
Data File : 3H1184.d  
Acq On : 1 Jun 2024 8:12 am  
Operator : rocquans  
Sample : jd87833-6r Inst : GCMS3H  
Misc : op55107a,e3h82,500,,,1,1  
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 03 07:37:10 2024  
Quant Method : X:\Dayton SVOA GCMS\altheam\method\M3H73SIM.M  
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um  
QLast Update : Mon Jun 03 07:13:29 2024  
Response via : Initial Calibration



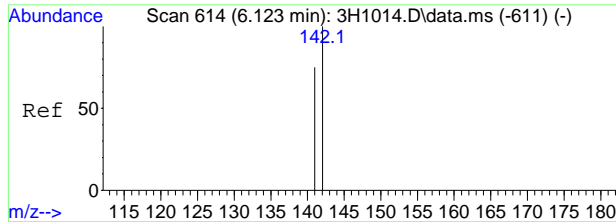
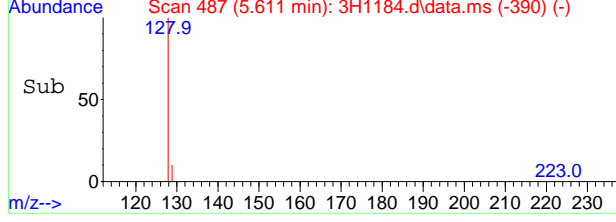
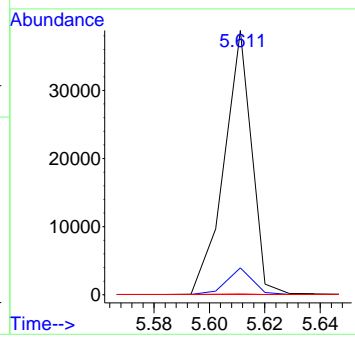
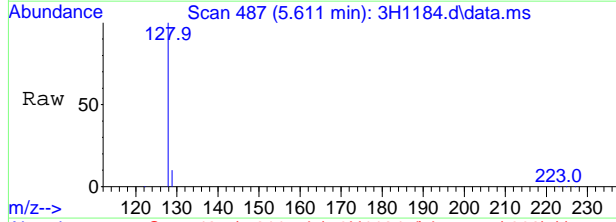
7.1.4  
7





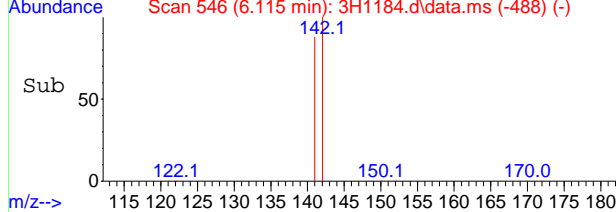
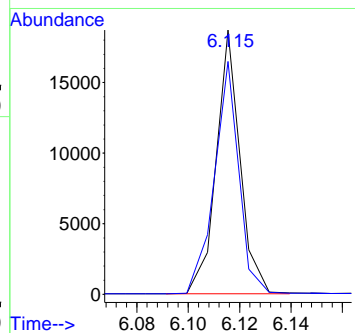
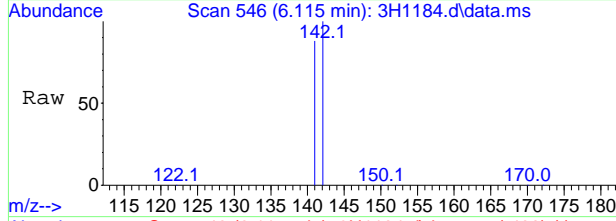
#7  
 Naphthalene  
 Concen: 7.8517 ppm  
 RT: 5.611 min Scan# 487  
 Delta R.T. -0.000 min  
 Lab File: 3H1184.d  
 Acq: 1 Jun 2024 8:12 am

Tgt Ion	Ratio	Lower	Upper
128	100		
129	10.1	0.0	37.0
122	0.2	0.0	30.3



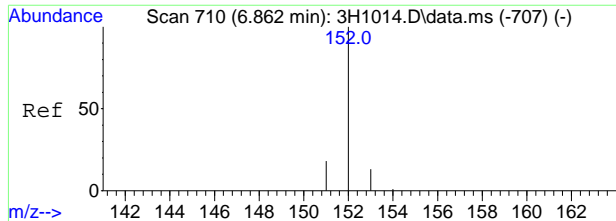
#9  
 2-Methylnaphthalene  
 Concen: 4.8856 ppm  
 RT: 6.115 min Scan# 546  
 Delta R.T. -0.008 min  
 Lab File: 3H1184.d  
 Acq: 1 Jun 2024 8:12 am

Tgt Ion	Ratio	Lower	Upper
142	100		
141	88.0	47.6	107.6



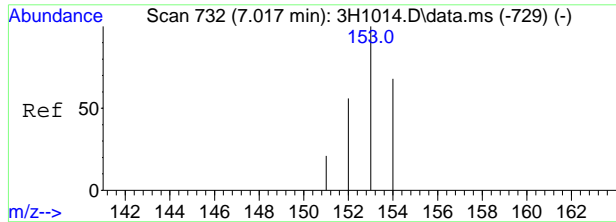
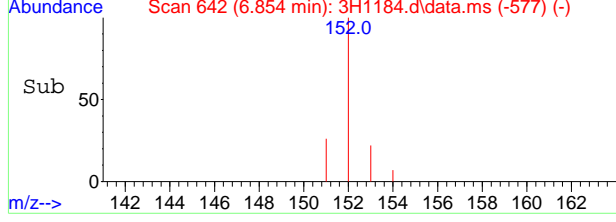
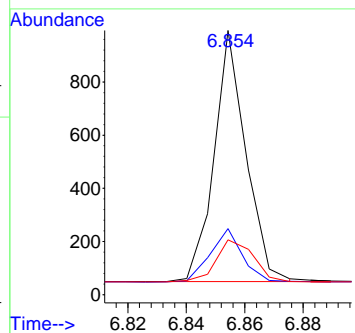
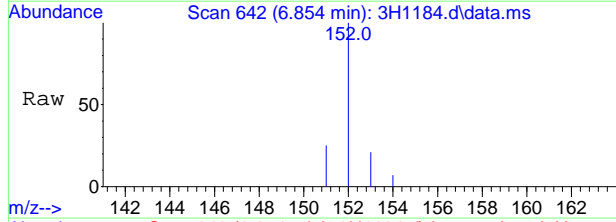
7.14  
7





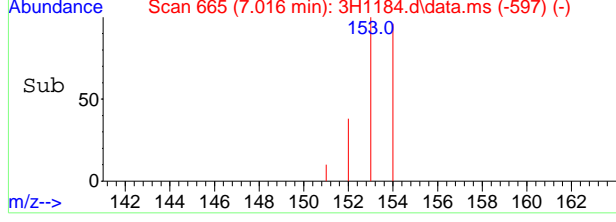
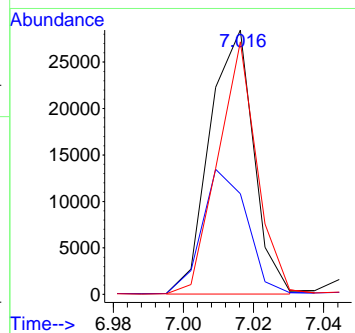
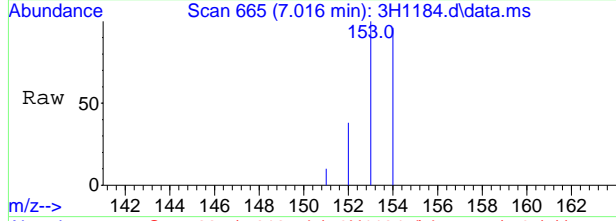
#13  
 Acenaphthylene  
 Concen: 0.1830 ppm  
 RT: 6.854 min Scan# 642  
 Delta R.T. -0.007 min  
 Lab File: 3H1184.d  
 Acq: 1 Jun 2024 8:12 am

Tgt Ion	Ratio	Lower	Upper
152	100		
151	21.2	0.0	52.0
153	16.8	0.0	41.5



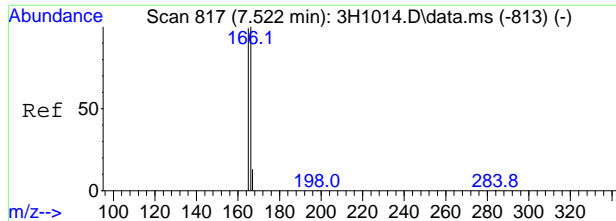
#14  
 Acenaphthene  
 Concen: 9.0436 ppm  
 RT: 7.016 min Scan# 665  
 Delta R.T. -0.007 min  
 Lab File: 3H1184.d  
 Acq: 1 Jun 2024 8:12 am

Tgt Ion	Ratio	Lower	Upper
153	100		
152	37.8	9.3	69.3
154	95.3	58.4	118.4



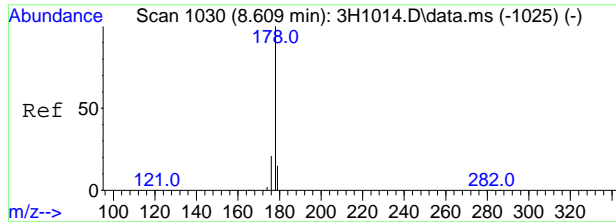
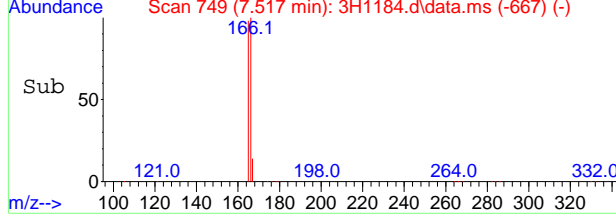
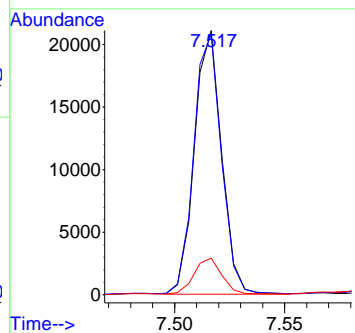
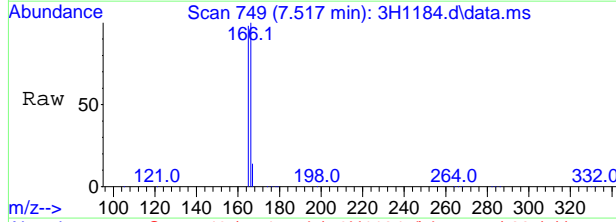
7.14  
7





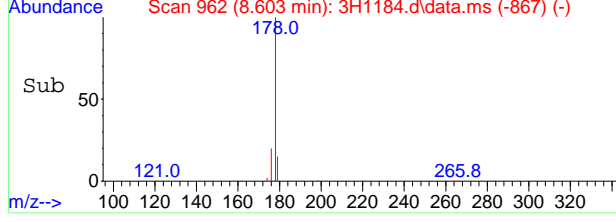
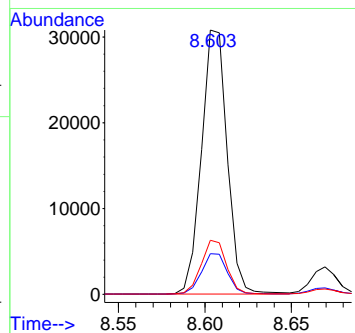
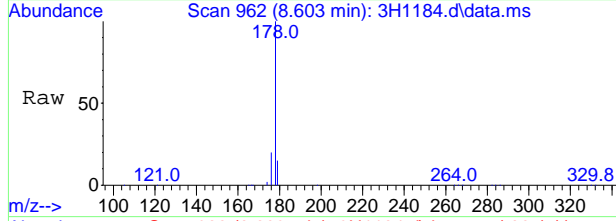
#16  
 Fluorene  
 Concen: 5.9524 ppm  
 RT: 7.517 min Scan# 749  
 Delta R.T. -0.010 min  
 Lab File: 3H1184.d  
 Acq: 1 Jun 2024 8:12 am

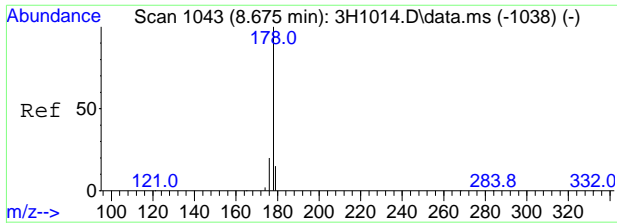
Tgt Ion	Ratio	Lower	Upper
166	100		
165	98.4	69.5	129.5
167	13.7	0.0	43.0



#20  
 Phenanthrene  
 Concen: 7.6575 ppm  
 RT: 8.603 min Scan# 962  
 Delta R.T. -0.015 min  
 Lab File: 3H1184.d  
 Acq: 1 Jun 2024 8:12 am

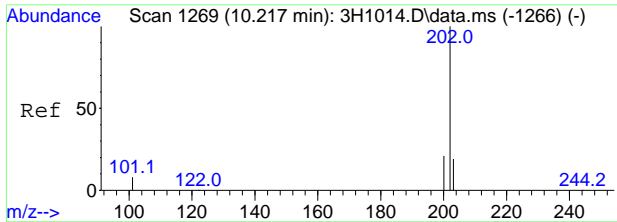
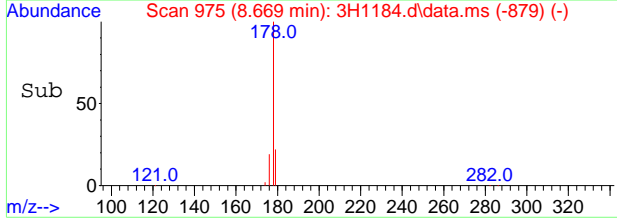
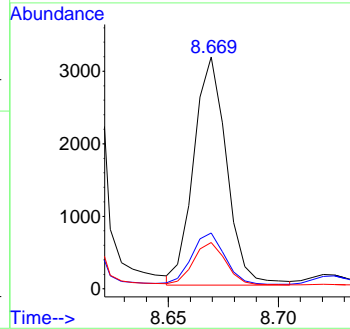
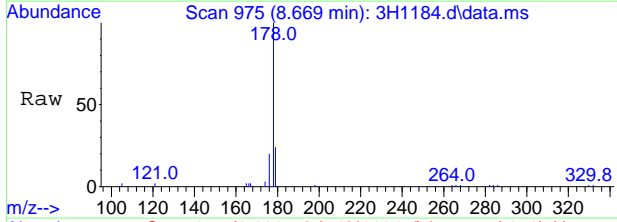
Tgt Ion	Ratio	Lower	Upper
178	100		
179	15.2	0.0	45.1
176	20.4	0.0	49.7





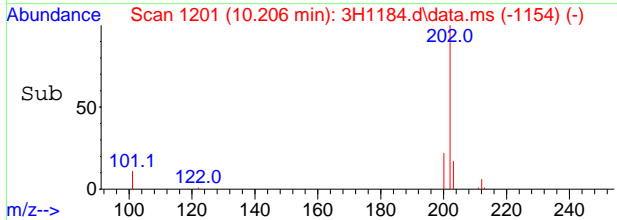
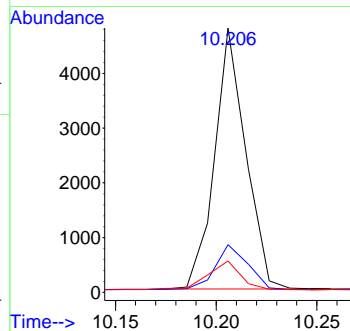
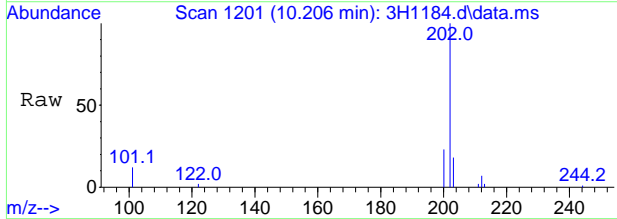
#21  
 Anthracene  
 Concen: 0.8545 ppm  
 RT: 8.669 min Scan# 975  
 Delta R.T. -0.010 min  
 Lab File: 3H1184.d  
 Acq: 1 Jun 2024 8:12 am

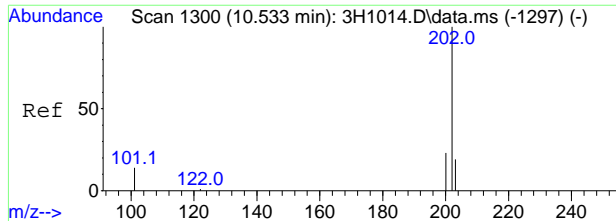
Tgt Ion	Ratio	Lower	Upper
178	100		
179	22.8	0.0	45.1
176	18.7	0.0	49.4



#23  
 Fluoranthene  
 Concen: 1.1116 ppm  
 RT: 10.206 min Scan# 1201  
 Delta R.T. -0.021 min  
 Lab File: 3H1184.d  
 Acq: 1 Jun 2024 8:12 am

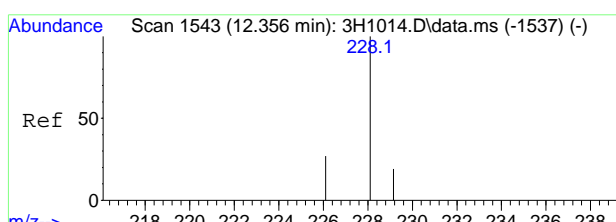
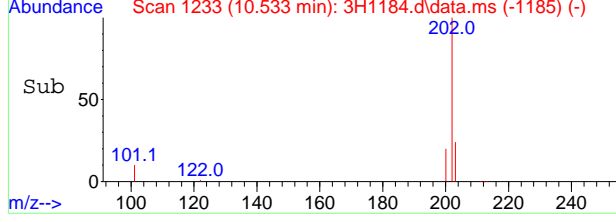
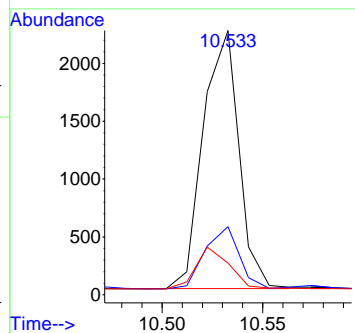
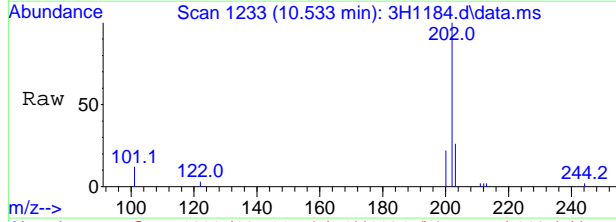
Tgt Ion	Ratio	Lower	Upper
202	100		
203	17.1	0.0	49.6
101	10.7	0.0	37.0





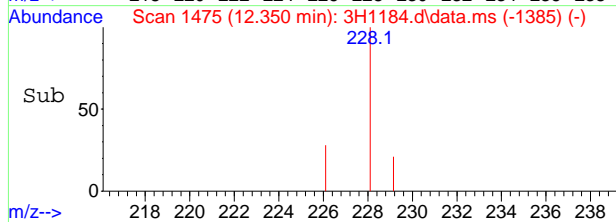
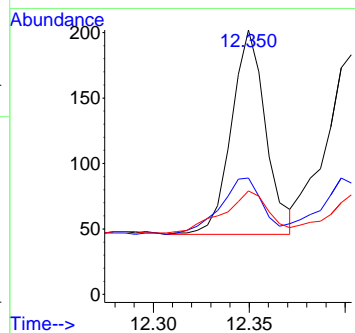
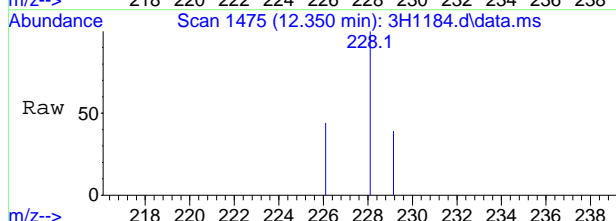
#24  
 Pyrene  
 Concen: 0.5944 ppm  
 RT: 10.533 min Scan# 1233  
 Delta R.T. -0.010 min  
 Lab File: 3H1184.d  
 Acq: 1 Jun 2024 8:12 am

Tgt Ion	Resp	Lower	Upper
202	2748		
203	23.9	0.0	48.5
101	9.9	0.0	42.6

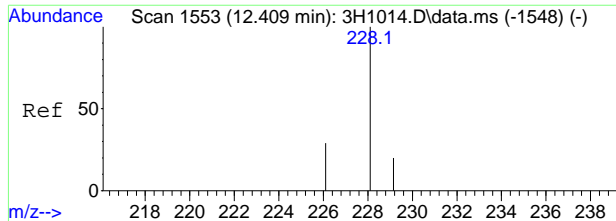


#26  
 Benzo[a]anthracene  
 Concen: 0.0520 ppm  
 RT: 12.350 min Scan# 1475  
 Delta R.T. -0.016 min  
 Lab File: 3H1184.d  
 Acq: 1 Jun 2024 8:12 am

Tgt Ion	Resp	Lower	Upper
228	194		
226	26.6	0.0	58.0
229	20.5	0.0	48.7

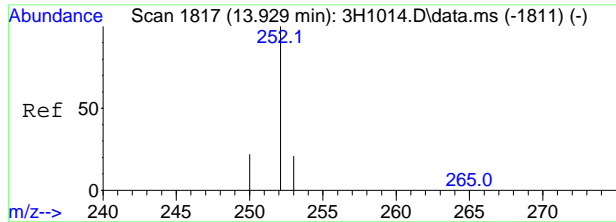
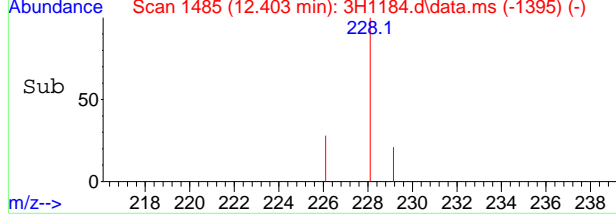
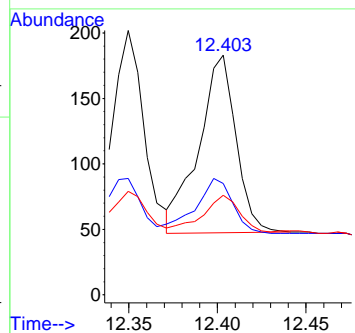
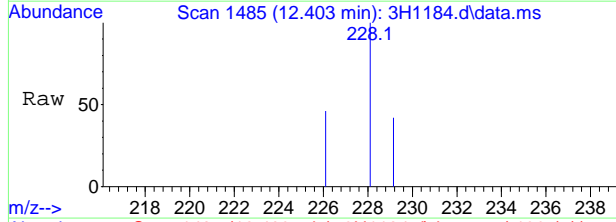


7.14  
7



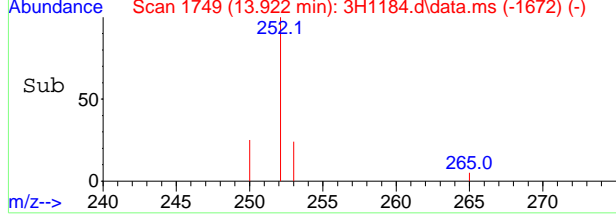
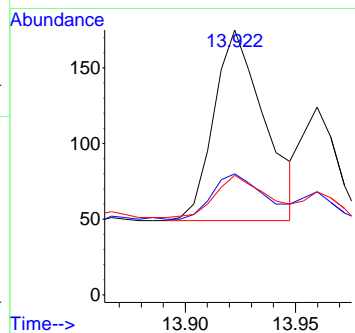
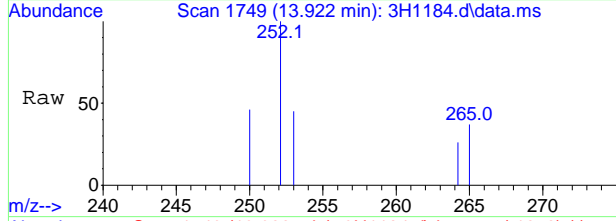
#27  
Chrysene  
Concen: 0.0506 ppm  
RT: 12.403 min Scan# 1485  
Delta R.T. -0.016 min  
Lab File: 3H1184.d  
Acq: 1 Jun 2024 8:12 am

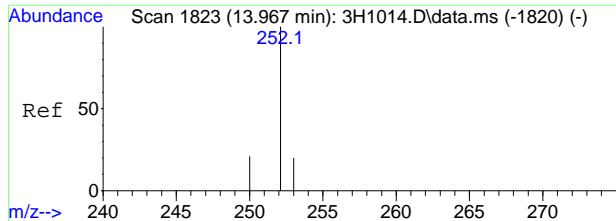
Tgt Ion	Ratio	Lower	Upper
228	100		
226	27.3	0.1	60.1
229	20.6	0.0	39.4



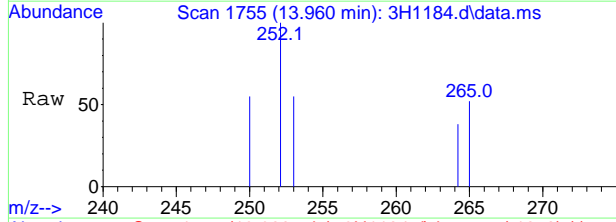
#29  
Benzo[b]fluoranthene  
Concen: 0.0506 ppm  
RT: 13.922 min Scan# 1749  
Delta R.T. -0.019 min  
Lab File: 3H1184.d  
Acq: 1 Jun 2024 8:12 am

Tgt Ion	Ratio	Lower	Upper
252	100		
250	23.5	0.0	51.1
253	22.1	0.0	51.0

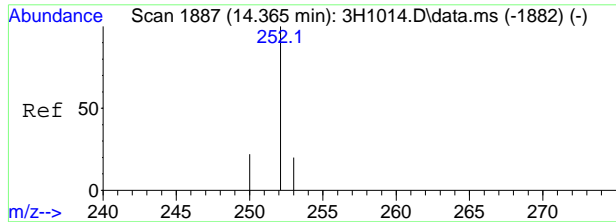
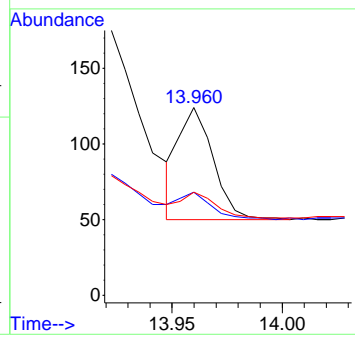
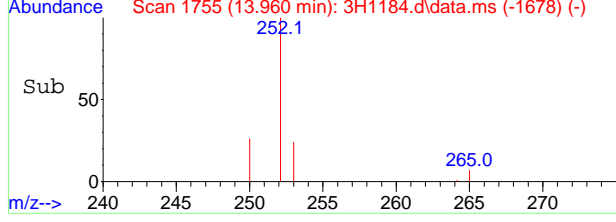




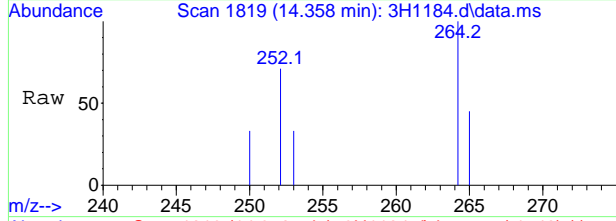
#30  
 Benzo[k]fluoranthene  
 Concen: 0.0205 ppm  
 RT: 13.960 min Scan# 1755  
 Delta R.T. -0.019 min  
 Lab File: 3H1184.d  
 Acq: 1 Jun 2024 8:12 am



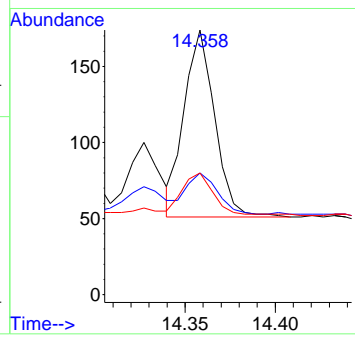
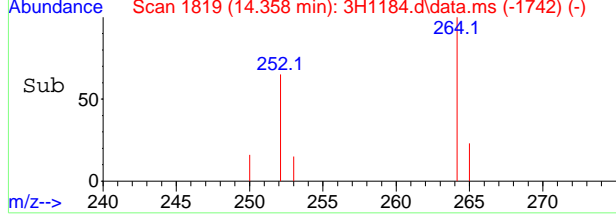
Tgt Ion	Ratio	Lower	Upper
252	100		
250	22.7	0.0	51.0
253	22.7	0.0	51.0



#31  
 Benzo[a]pyrene  
 Concen: 0.0335 ppm  
 RT: 14.358 min Scan# 1819  
 Delta R.T. -0.019 min  
 Lab File: 3H1184.d  
 Acq: 1 Jun 2024 8:12 am

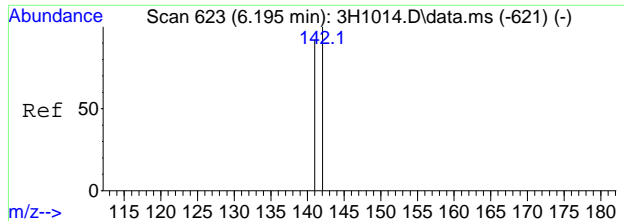


Tgt Ion	Ratio	Lower	Upper
252	100		
253	19.9	0.0	50.5
250	23.0	0.0	52.8

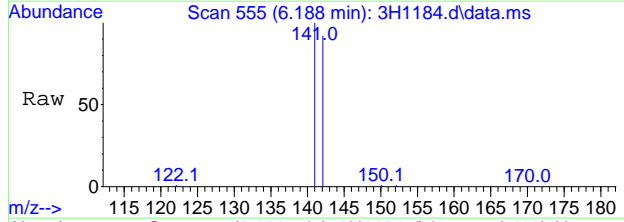


7.14  
7



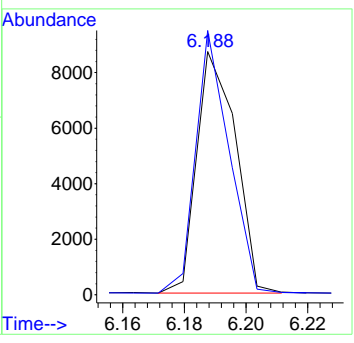
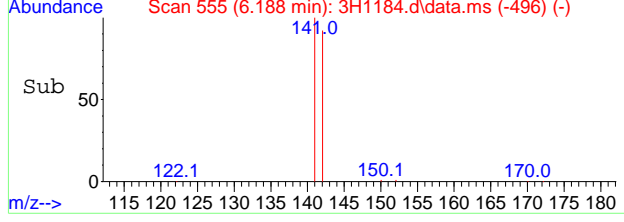


#37  
 1-Methylnaphthalene  
 Concen: 3.2592 ppm  
 RT: 6.188 min Scan# 555  
 Delta R.T. -0.008 min  
 Lab File: 3H1184.d  
 Acq: 1 Jun 2024 8:12 am



Tgt Ion:142 Resp: 7612

Ion	Ratio	Lower	Upper
142	100		
141	108.8	77.9	117.9



7.14  
7





## Quantitation Report (QT Reviewed)

Data Path : X:\Dayton SVOA GCMS\danielas\e4m5826\  
 Data File : 4m124153.d  
 Acq On : 28 May 2024 12:36 pm  
 Operator : karimam  
 Sample : jd87833-6r Inst : GCMS4M  
 Misc : op54962a,e4m5826,500,,,1,1  
 ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 28 18:51:21 2024  
 Quant Method : X:\Dayton SVOA GCMS\danielas\METHODS\M4M5801SIM.M  
 Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um  
 QLast Update : Tue May 28 18:33:01 2024  
 Response via : Initial Calibration

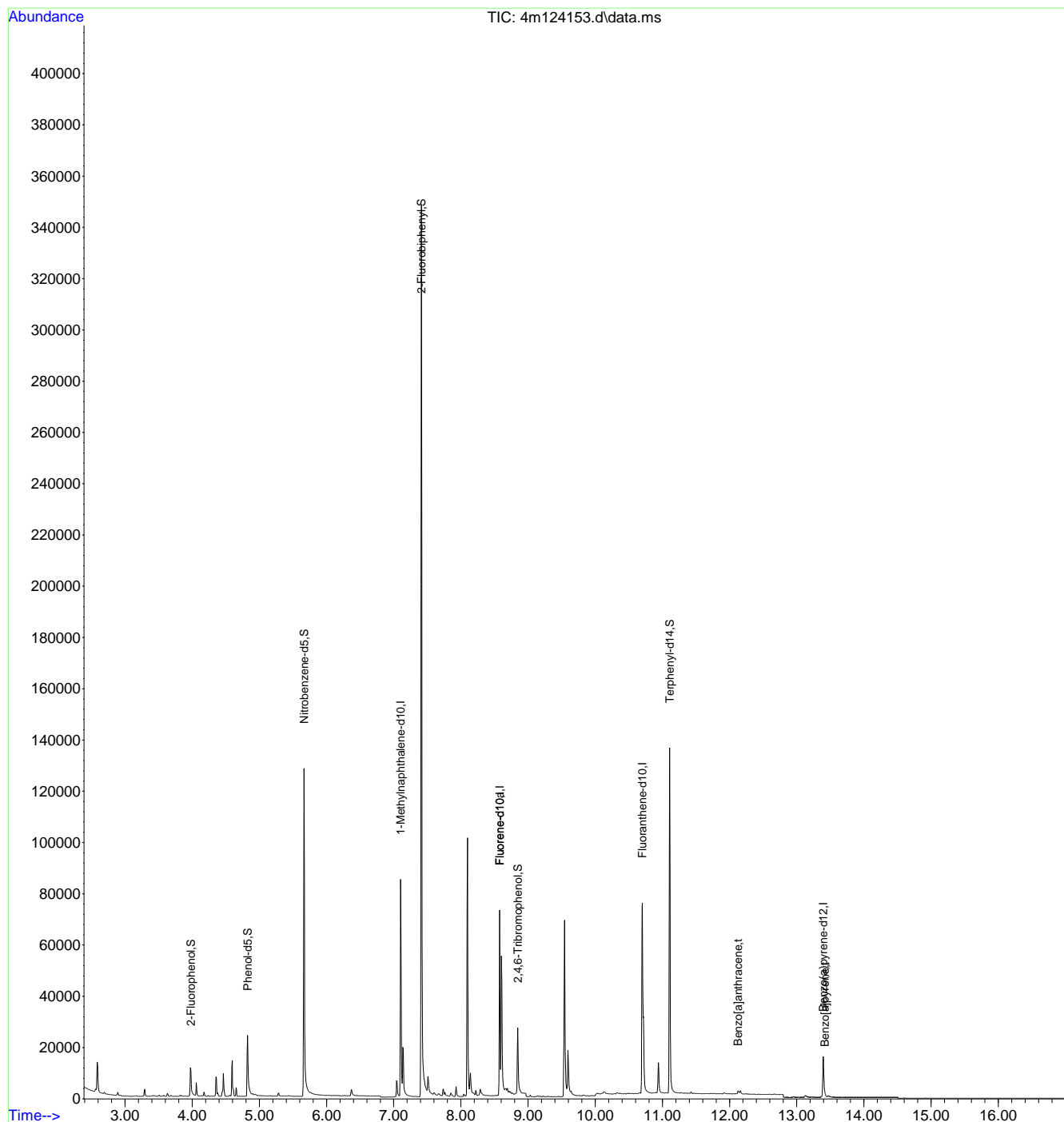
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) 1-Methylnaphthalene-d10	7.104	152	30394	4.00	ppm	0.00
14) Fluorene-d10	8.578	176	35477	4.00	ppm	0.00
24) Fluoranthene-d10	10.703	212	60220	4.00	ppm	0.00
30) Benzo(a)pyrene-d12	13.395	264	16375	4.00	ppm	0.00
37) Fluorene-d10a	8.578	176	35477	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.979	112	7391	1.79	ppm	0.00
Spiked Amount	50.000	Range 11 - 58	Recovery	=	3.58%#	
4) Phenol-d5	4.824	99	21491	4.18	ppm	0.00
Spiked Amount	50.000		Recovery	=	8.36%	
7) Nitrobenzene-d5	5.663	82	88306	21.55	ppm	0.00
Spiked Amount	50.000		Recovery	=	43.10%	
13) 2-Fluorobiphenyl	7.411	172	187939	20.44	ppm	0.00
Spiked Amount	50.000		Recovery	=	40.88%	
19) 2,4,6-Tribromophenol	8.846	330	16253	19.44	ppm	0.00
Spiked Amount	50.000		Recovery	=	38.88%	
27) Terphenyl-d14	11.109	244	97447	11.18	ppm	0.00
Spiked Amount	50.000		Recovery	=	22.36%	
Target Compounds						
28) Benzo[a]anthracene	12.124	228	1078	0.0752	ppm	98
33) Benzol[a]pyrene	13.418	252	409	0.0818	ppm	91
-----						

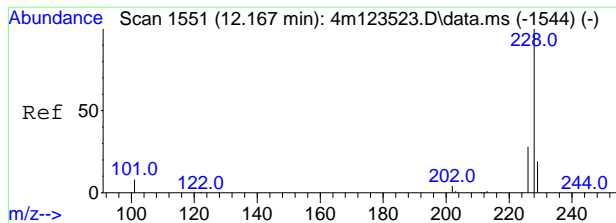
(#) = qualifier out of range (m) = manual integration (+) = signals summed

## Quantitation Report (QT Reviewed)

Data Path : X:\Dayton SVOA GCMS\danielas\e4m5826\  
Data File : 4m124153.d  
Acq On : 28 May 2024 12:36 pm  
Operator : karimam  
Sample : jd87833-6r Inst : GCMS4M  
Misc : op54962a,e4m5826,500,,,1,1  
ALS Vial : 10 Sample Multiplier: 1

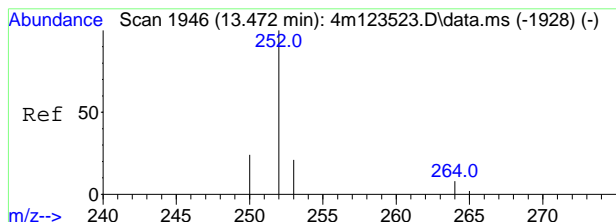
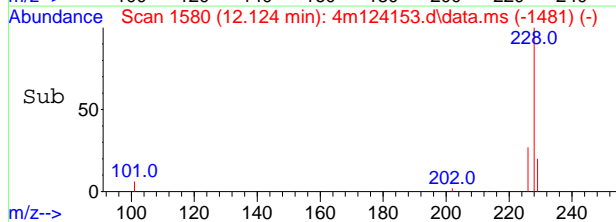
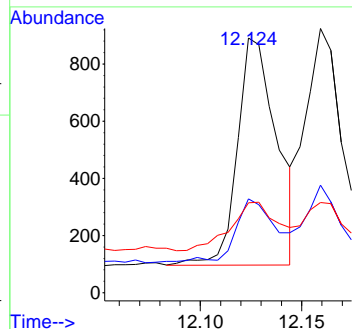
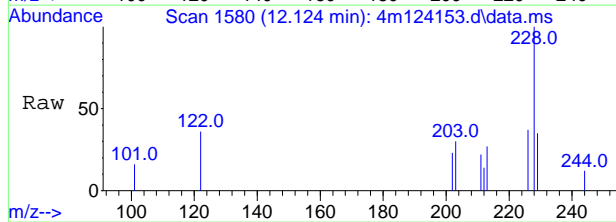
Quant Time: May 28 18:51:21 2024  
Quant Method : X:\Dayton SVOA GCMS\danielas\METHODS\M4M5801SIM.M  
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um  
QLast Update : Tue May 28 18:33:01 2024  
Response via : Initial Calibration





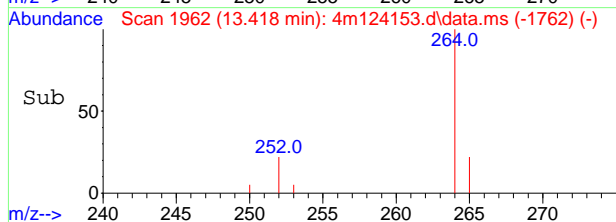
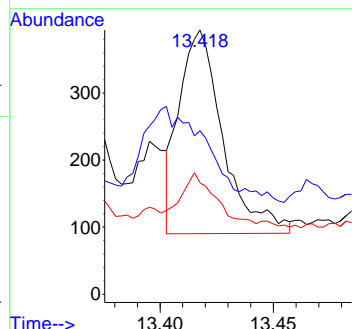
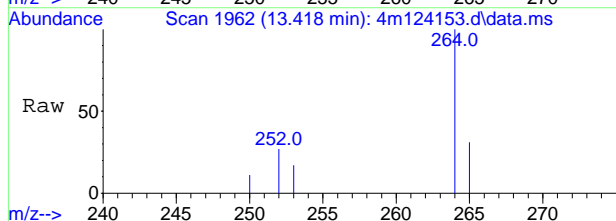
#28  
 Benzo[a]anthracene  
 Concen: 0.0752 ppm  
 RT: 12.124 min Scan# 1580  
 Delta R.T. 0.000 min  
 Lab File: 4m124153.d  
 Acq: 28 May 2024 12:36 pm

Tgt Ion	Ratio	Lower	Upper
228	100		
226	27.0	0.0	58.0
229	19.8	0.0	48.8



#33  
 Benzo[a]pyrene  
 Concen: 0.0818 ppm  
 RT: 13.418 min Scan# 1962  
 Delta R.T. -0.005 min  
 Lab File: 4m124153.d  
 Acq: 28 May 2024 12:36 pm

Tgt Ion	Ratio	Lower	Upper
252	100		
253	13.3	0.0	51.5
250	23.0	0.0	53.9



7.15  
7

Quantitation Report (QT Reviewed)

Data Path : X:\Dayton SVOA GCMS\altheam\3h82\  
 Data File : 3H1177.d  
 Acq On : 1 Jun 2024 5:21 am  
 Operator : rocquans  
 Sample : op55107a-mb1 Inst : GCMS3H  
 Misc : op55107a,e3h82,500,,,1,1  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 03 07:30:44 2024  
 Quant Method : X:\Dayton SVOA GCMS\altheam\method\M3H73SIM.M  
 Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um  
 QLast Update : Mon Jun 03 07:13:29 2024  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) 1-Methylnaphthalene-d10	6.164	152	9159	4.00	ppm	0.00
12) Fluorene-d10	7.486	176	10718	4.00	ppm	-0.01
22) Fluoranthene-d10	10.185	212	20097	4.00	ppm	-0.01
28) Benzo(a)pyrene-d12	14.327	264	17528	4.00	ppm	-0.02
35) 1-Methylnaphthalene-d10a	6.164	152	9159	4.00	ppm	0.00
38) Fluorene-d10a	7.486	176	10718	4.00	ppm	-0.01
System Monitoring Compounds						
2) 2-Fluorophenol	3.847	112	32880	33.94	ppm	0.00
Spiked Amount	50.000	Range 11 - 58	Recovery =	67.88%	#	
3) Phenol-d5	4.462	99	29816	27.65	ppm	0.00
Spiked Amount	50.000		Recovery =	55.30%		
6) Nitrobenzene-d5	5.094	82	46156	54.49	ppm	0.00
Spiked Amount	50.000		Recovery =	108.98%		
11) 2-Fluorobiphenyl	6.412	172	105316	36.52	ppm	0.00
Spiked Amount	50.000		Recovery =	73.04%		
17) 2,4,6-Tribromophenol	7.772	330	19950	78.61	ppm	-0.01
Spiked Amount	50.000		Recovery =	157.22%		
25) Terphenyl-d14	10.829	244	187593	51.60	ppm	-0.01
Spiked Amount	50.000		Recovery =	103.20%		
Target Compounds						
20) Phenanthrene	8.608	178	72	0.0176	ppm	97
21) Anthracene	8.669	178	23	0.0061	ppm	88
-----						

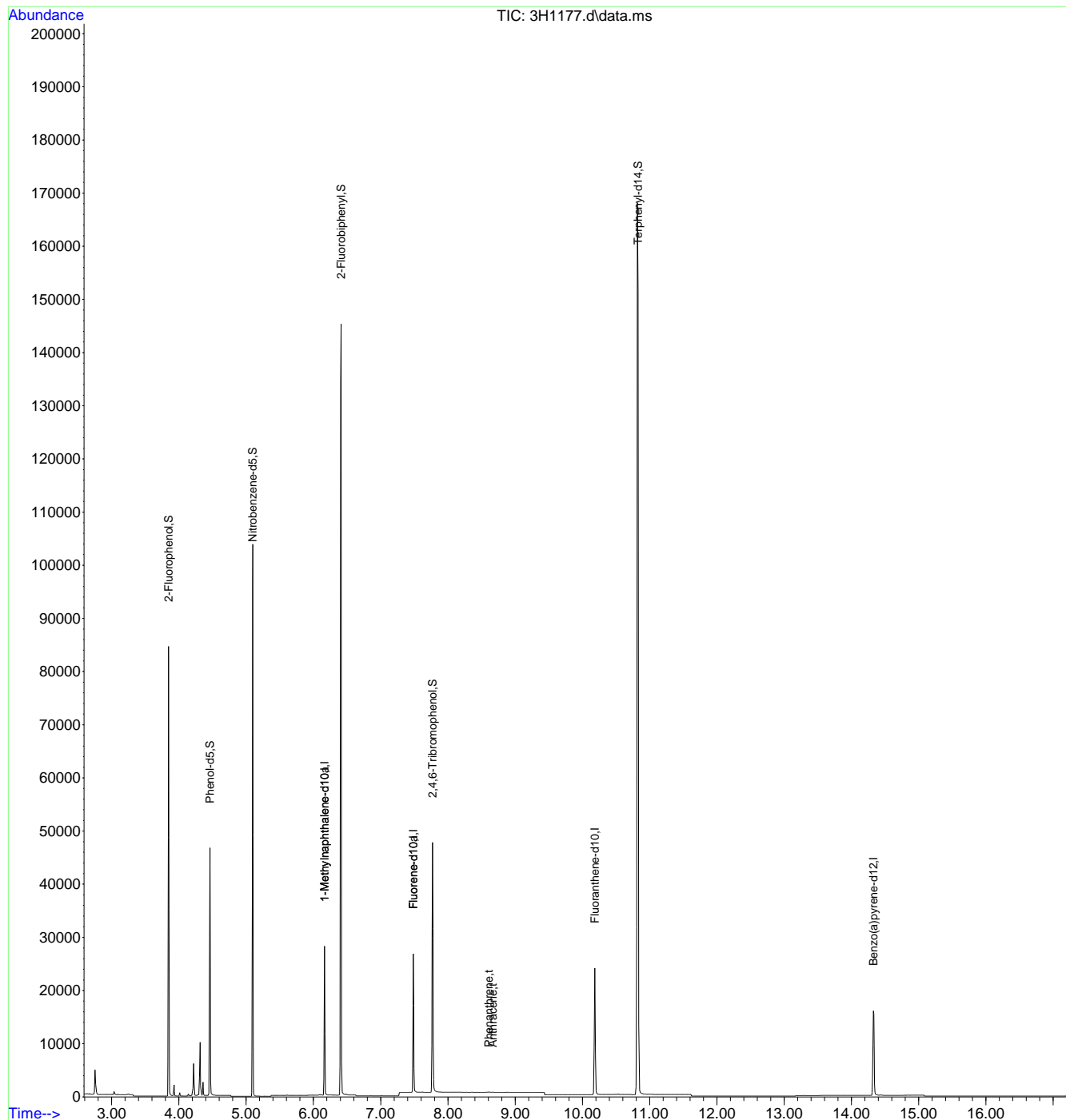
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.21  
7

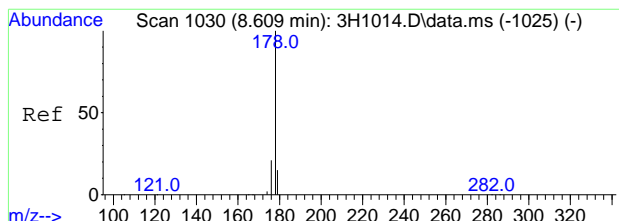
Quantitation Report (QT Reviewed)

Data Path : X:\Dayton SVOA GCMS\altheam\3h82\  
 Data File : 3H1177.d  
 Acq On : 1 Jun 2024 5:21 am  
 Operator : rocquans  
 Sample : op55107a-mb1 Inst : GCMS3H  
 Misc : op55107a,e3h82,500,,,1,1  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 03 07:30:44 2024  
 Quant Method : X:\Dayton SVOA GCMS\altheam\method\M3H73SIM.M  
 Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um  
 QLast Update : Mon Jun 03 07:13:29 2024  
 Response via : Initial Calibration

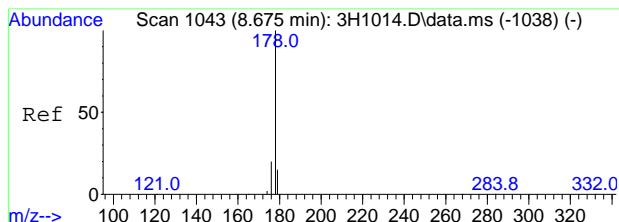
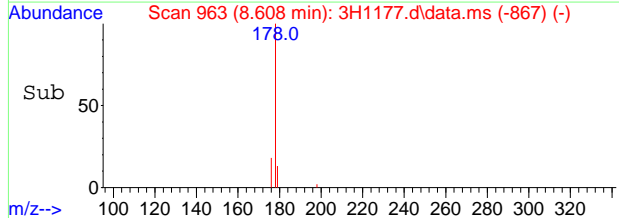
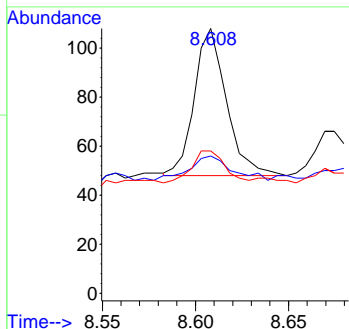
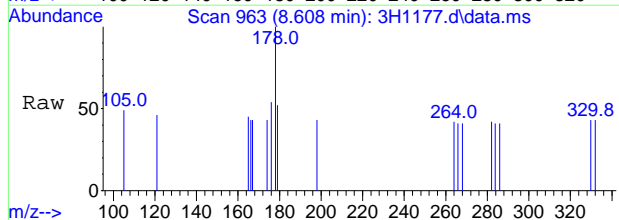


7.2.1  
7



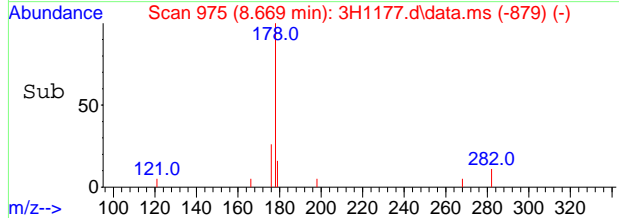
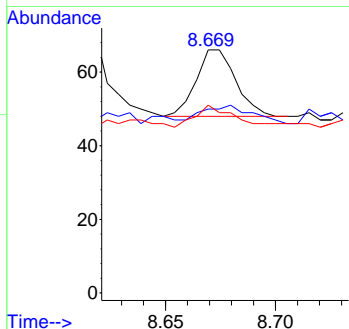
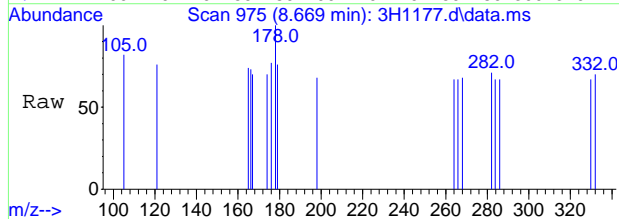
#20  
 Phenanthrene  
 Concen: 0.0176 ppm  
 RT: 8.608 min Scan# 963  
 Delta R.T. -0.010 min  
 Lab File: 3H1177.d  
 Acq: 1 Jun 2024 5:21 am

Tgt Ion	Ratio	Lower	Upper
178	100		
179	13.4	0.0	45.1
176	21.0	0.0	49.7



#21  
 Anthracene  
 Concen: 0.0061 ppm  
 RT: 8.669 min Scan# 975  
 Delta R.T. -0.010 min  
 Lab File: 3H1177.d  
 Acq: 1 Jun 2024 5:21 am

Tgt Ion	Ratio	Lower	Upper
178	100		
179	16.7	0.0	45.1
176	27.8	0.0	49.4



7.2.1  
7

Quantitation Report (QT Reviewed)

Data Path : X:\Dayton SVOA GCMS\danielas\4m5826\  
 Data File : 4m124147.d  
 Acq On : 28 May 2024 10:22 am  
 Operator : karimam  
 Sample : op54962a-mb1 Inst : GCMS4M  
 Misc : op54962a,e4m5826,500,,,1,1  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 28 18:36:10 2024  
 Quant Method : X:\Dayton SVOA GCMS\danielas\METHODS\M4M5801SIM.M  
 Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um  
 QLast Update : Tue May 28 18:33:01 2024  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) 1-Methylnaphthalene-d10	7.104	152	28630	4.00	ppm	0.00
14) Fluorene-d10	8.578	176	33550	4.00	ppm	0.00
24) Fluoranthene-d10	10.702	212	61139	4.00	ppm	0.00
30) Benzo(a)pyrene-d12	13.395	264	47063	4.00	ppm	0.00
37) Fluorene-d10a	8.578	176	33550	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	3.972	112	7664	1.97	ppm	0.00
Spiked Amount	50.000	Range	11 - 58	Recovery	=	3.94%#
4) Phenol-d5	4.824	99	5968	1.23	ppm	0.00
Spiked Amount	50.000			Recovery	=	2.46%
7) Nitrobenzene-d5	5.663	82	65110	16.87	ppm	0.00
Spiked Amount	50.000			Recovery	=	33.74%
13) 2-Fluorobiphenyl	7.411	172	137282	15.85	ppm	0.00
Spiked Amount	50.000			Recovery	=	31.70%
19) 2,4,6-Tribromophenol	8.846	330	24420	29.02	ppm	0.00
Spiked Amount	50.000			Recovery	=	58.04%
27) Terphenyl-d14	11.108	244	98925	11.18	ppm	0.00
Spiked Amount	50.000			Recovery	=	22.36%
Target Compounds						
28) Benzo[a]anthracene	12.129	228	91	0.0062	ppm	87
29) Chrysene	12.164	228	96	0.0066	ppm	77
31) Benzo[b]fluoranthene	13.123	252	114m	0.0082	ppm	
33) Benzo[a]pyrene	13.395	252	245	0.0171	ppm	83
-----						

(#) = qualifier out of range (m) = manual integration (+) = signals summed

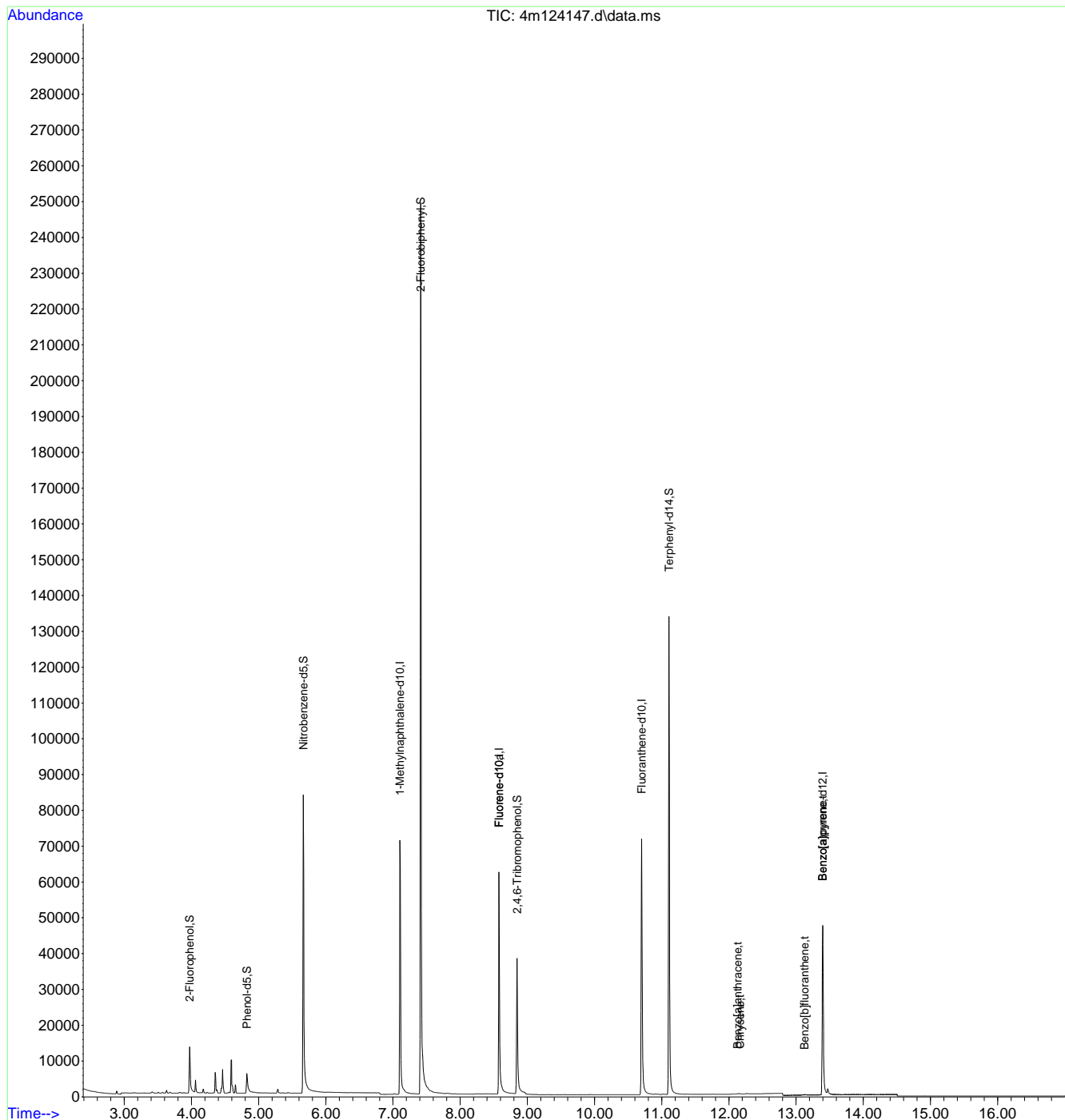
7.22  
7



Quantitation Report (QT Reviewed)

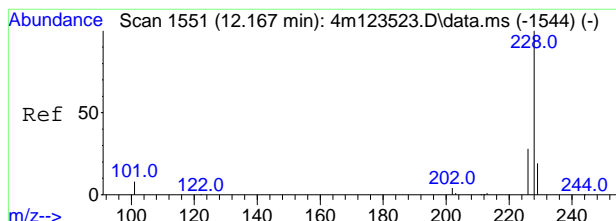
Data Path : X:\Dayton SVOA GCMS\danielas\e4m5826\  
 Data File : 4m124147.d  
 Acq On : 28 May 2024 10:22 am  
 Operator : karimam  
 Sample : op54962a-mb1 Inst : GCMS4M  
 Misc : op54962a,e4m5826,500,,,1,1  
 ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 28 18:36:10 2024  
 Quant Method : X:\Dayton SVOA GCMS\danielas\METHODS\M4M5801SIM.M  
 Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um  
 QLast Update : Tue May 28 18:33:01 2024  
 Response via : Initial Calibration



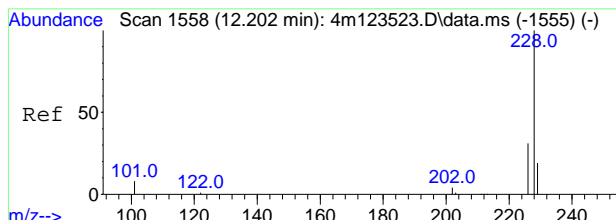
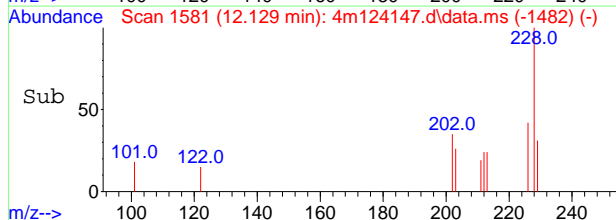
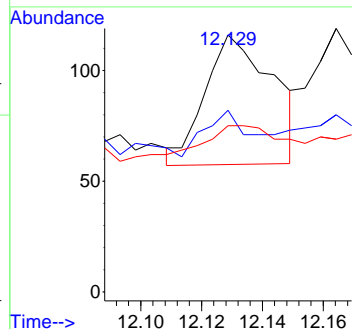
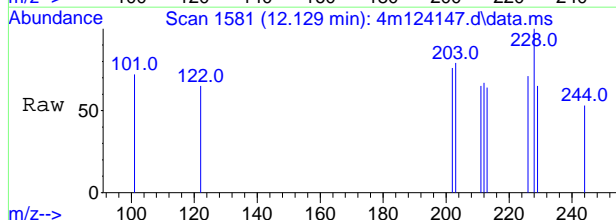
7.2.2  
7





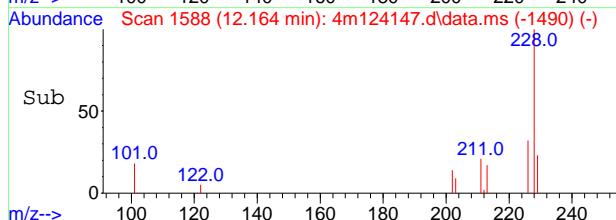
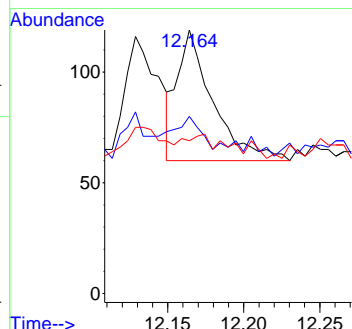
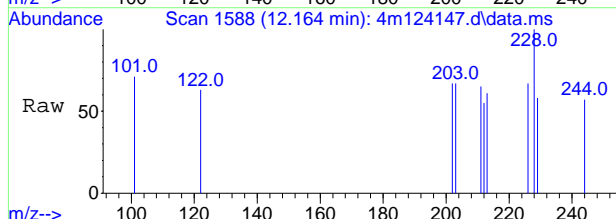
#28  
 Benzo[a]anthracene  
 Concen: 0.0062 ppm  
 RT: 12.129 min Scan# 1581  
 Delta R.T. 0.005 min  
 Lab File: 4m124147.d  
 Acq: 28 May 2024 10:22 am

Tgt Ion	Ratio	Lower	Upper
228	100		
226	34.2	0.0	58.0
229	25.0	0.0	48.8



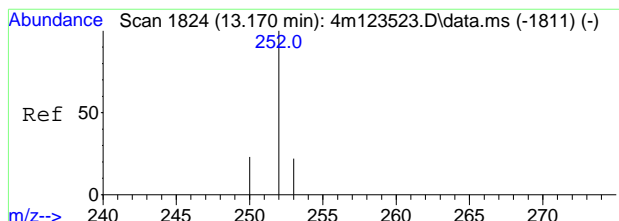
#29  
 Chrysene  
 Concen: 0.0066 ppm  
 RT: 12.164 min Scan# 1588  
 Delta R.T. -0.000 min  
 Lab File: 4m124147.d  
 Acq: 28 May 2024 10:22 am

Tgt Ion	Ratio	Lower	Upper
228	100		
226	21.8	0.0	58.6
229	2.3	0.0	39.6

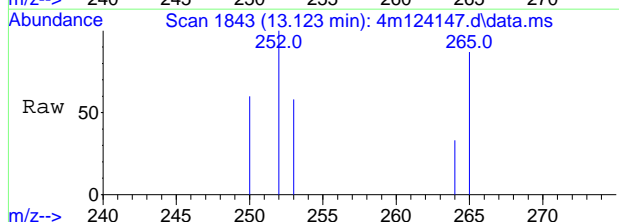


7.22  
7

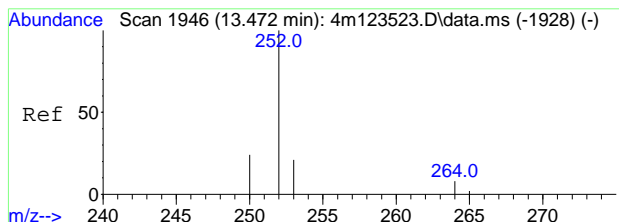
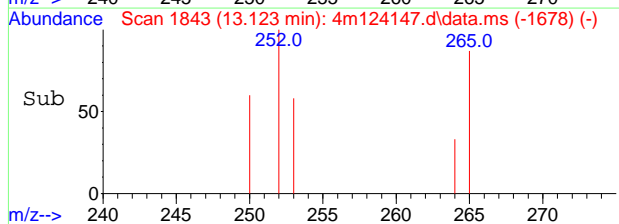
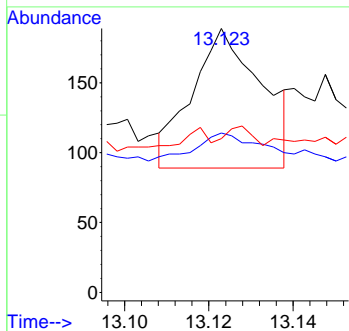




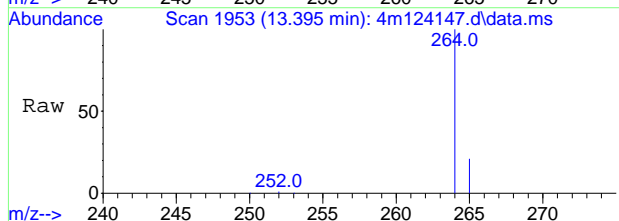
#31  
 Benzo[b]fluoranthene  
 Concen: 0.0082 ppm m  
 RT: 13.123 min Scan# 1843  
 Delta R.T. -0.000 min  
 Lab File: 4m124147.d  
 Acq: 28 May 2024 10:22 am



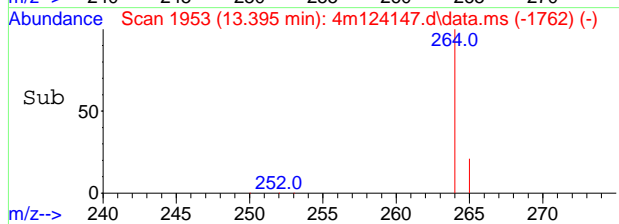
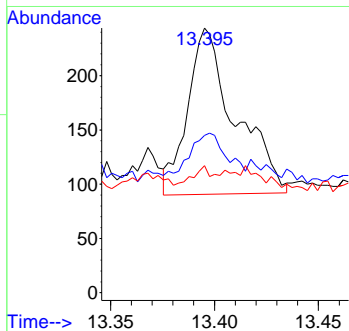
Tgt Ion	Ratio	Lower	Upper
252	100		
250	60.3	0.0	53.4#
253	58.2	0.0	51.4#



#33  
 Benzo[a]pyrene  
 Concen: 0.0171 ppm  
 RT: 13.395 min Scan# 1953  
 Delta R.T. -0.027 min  
 Lab File: 4m124147.d  
 Acq: 28 May 2024 10:22 am



Tgt Ion	Ratio	Lower	Upper
252	100		
253	24.9	0.0	51.5
250	11.0	0.0	53.9



7.22  
7

## Metals Analysis

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### QC Data Summaries

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Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9052424W1.CSV Date Analyzed: 05/24/24 Methods: SW846 7470A  
Analyst: CB Run ID: MA56148  
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
10:01	MA56148-STD1	1		b=2.6651e-004,c=2.5647e-002,rho=0.9990146
10:03	MA56148-STD2	1		STDB
10:04	MA56148-STD3	1		STDC
10:06	MA56148-STD4	1		STDD
10:08	MA56148-STD5	1		STDE
10:09	MA56148-STD6	1		STDF
10:16	ZZZZZ	1		
10:17	MA56148-ICV1	1		
10:19	MA56148-ICB1	1		
10:21	MA56148-CCV1	1		
10:22	MA56148-CCB1	1		
10:24	MA56148-CRI1	1		
10:26	MP46849-MB1	1		
10:27	MP46849-B1	1		
10:29	MP46849-S1	1		
10:31	MP46849-S2	1		
10:33	JD88735-3	1		(sample used for QC only; not part of login JD87833R)
10:35	ZZZZZ	1		
10:36	ZZZZZ	1		
10:38	ZZZZZ	1		
10:39	MA56148-CCV2	1		
10:41	MA56148-CCB2	1		
10:43	ZZZZZ	1		
10:44	ZZZZZ	1		
10:45	ZZZZZ	1		
10:47	ZZZZZ	1		
10:48	ZZZZZ	1		
10:50	ZZZZZ	1		
10:51	ZZZZZ	1		
10:53	ZZZZZ	1		
10:54	MA56148-CCV3	1		
10:58	MA56148-CCB3	1		
11:03	ZZZZZ	1		

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SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9052424W1.CSV      Date Analyzed: 05/24/24      Methods: SW846 7470A  
Analyst: CB      Run ID: MA56148  
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
11:04	ZZZZZZ	1		
11:06	ZZZZZZ	1		
11:08	ZZZZZZ	1		
11:09	ZZZZZZ	1		
11:11	ZZZZZZ	1		
11:12	ZZZZZZ	1		
11:14	MA56148-CCV4	1		
11:15	MA56148-CCB4	1		
11:17	MP46850-MB1	1		
11:19	MP46850-LB1	1		
11:20	MP46850-B1	1		
11:22	MP46850-LS1	1		
11:23	MP46850-S1	1		
11:25	MP46850-S2	1		
11:27	JD87424-5B	1		(sample used for QC only; not part of login JD87833R)
11:29	ZZZZZZ	1		
11:31	MA56148-CCV5	1		
11:35	MA56148-CCB5	1		
11:38	MP46851-MB1	1		
11:39	MP46851-LB1	1		
11:40	MP46851-B1	1		
11:42	MP46851-LS1	1		
11:44	MP46851-S1	1		
11:46	MP46851-S2	1		
11:48	JD88876-1A	1		(sample used for QC only; not part of login JD87833R)
11:50	ZZZZZZ	1		
11:51	MA56148-CCV6	1		
11:53	MA56148-CCB6	1		
11:55	ZZZZZZ	1		
11:56	ZZZZZZ	1		
11:57	ZZZZZZ	1		
11:59	ZZZZZZ	1		
12:00	ZZZZZZ	1		

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SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9052424W1.CSV      Date Analyzed: 05/24/24      Methods: SW846 7470A  
Analyst: CB      Run ID: MA56148  
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:02	ZZZZZZ	1		
12:03	ZZZZZZ	1		
12:05	ZZZZZZ	1		
12:06	MA56148-CCV7	1		
12:08	MA56148-CCB7	1		
12:10	ZZZZZZ	1		
12:11	ZZZZZZ	1		
12:13	ZZZZZZ	1		
12:14	ZZZZZZ	1		
12:16	ZZZZZZ	1		
12:17	ZZZZZZ	1		
12:19	ZZZZZZ	1		
12:20	ZZZZZZ	1		
12:22	MA56148-CCV8	1		
12:23	MA56148-CCB8	1		
12:25	ZZZZZZ	1		
12:27	ZZZZZZ	1		
12:28	MP46852-MB1	1		
12:30	MP46852-LB1	1		
12:31	MP46852-B1	1		
12:32	MP46852-LS1	1		
12:34	MP46852-S1	1		
12:36	MP46852-S2	1		
12:42	MA56148-CCV9	1		
12:46	MA56148-CCB9	1		
12:48	JD88876-21A	1		(sample used for QC only; not part of login JD87833R)
12:50	ZZZZZZ	1		
12:51	ZZZZZZ	1		
12:53	ZZZZZZ	1		
12:54	ZZZZZZ	1		
12:56	ZZZZZZ	1		
12:57	ZZZZZZ	1		
12:59	ZZZZZZ	1		

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SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9052424W1.CSV Date Analyzed: 05/24/24 Methods: SW846 7470A  
Analyst: CB Run ID: MA56148  
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:00	MA56148-CCV10	1		
13:02	MA56148-CCB10	1		
13:04	ZZZZZZ	1		
13:05	ZZZZZZ	1		
13:06	MP46853-MB1	1		
13:08	MP46853-LB1	1		
13:09	MP46853-B1	1		
13:11	MP46853-LS1	1		
13:13	MP46853-S1	1		
13:15	MP46853-S2	1		
13:17	MA56148-CCV11	1		
13:19	MA56148-CCB11	1		
13:21	JD87671-8B	1		(sample used for QC only; not part of login JD87833R)
13:22	JD87833-1R	1		
13:24	JD87833-9R	1		
13:25	ZZZZZZ	1		
13:27	ZZZZZZ	1		
13:28	ZZZZZZ	1		
13:30	MA56148-CCV12	1		
13:31	MA56148-CCB12	1		
13:33	MP46876-MB1	1		
13:35	MP46876-B1	1		
13:36	MP46876-S1	1		
13:38	MP46876-S2	1		
13:40	JD88509-3	1		(sample used for QC only; not part of login JD87833R)
13:42	ZZZZZZ	1		
13:44	MP46853-MB1	1		
----->	Last reportable sample/prep for job JD87833R			
13:45	MA56148-CCV13	1		
13:49	MA56148-CCB13	1		
----->	Last reportable CCB for job JD87833R			
	Refer to raw data for calibration curve and standards.			

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REPORTED ELEMENTS SUMMARY

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9052424W1.CSV Date Analyzed: 05/24/24 Methods: SW846 7470A  
 Analyst: CB Run ID: MA56148  
 Parameters: Hg

Time	Sample Description	Element: H Dilution g
10:16	ZZZZZZ	1
10:17	MA56148-ICV1	1 X
10:19	MA56148-ICB1	1 X
10:21	MA56148-CCV1	1 X
10:22	MA56148-CCB1	1 X
10:24	MA56148-CRI1	1 X
10:26	MP46849-MB1	1 X
10:27	MP46849-B1	1 X
10:29	MP46849-S1	1 X
10:31	MP46849-S2	1 X
10:33	JD88735-3	1 X (a)
10:35	ZZZZZZ	1
10:36	ZZZZZZ	1
10:38	ZZZZZZ	1
10:39	MA56148-CCV2	1 X
10:41	MA56148-CCB2	1 X
10:43	ZZZZZZ	1
10:44	ZZZZZZ	1
10:45	ZZZZZZ	1
10:47	ZZZZZZ	1
10:48	ZZZZZZ	1
10:50	ZZZZZZ	1
10:51	ZZZZZZ	1
10:53	ZZZZZZ	1
10:54	MA56148-CCV3	1 X
10:58	MA56148-CCB3	1 X
11:03	ZZZZZZ	1
11:04	ZZZZZZ	1
11:06	ZZZZZZ	1
11:08	ZZZZZZ	1
11:09	ZZZZZZ	1
11:11	ZZZZZZ	1
11:12	ZZZZZZ	1

Element: H  
g

8.1.1  
8



REPORTED ELEMENTS SUMMARY

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9052424W1.CSV Date Analyzed: 05/24/24 Methods: SW846 7470A  
 Analyst: CB Run ID: MA56148  
 Parameters: Hg

Time	Sample Description	Element:	H Dilution g
11:14	MA56148-CCV4	1	X
11:15	MA56148-CCB4	1	X
11:17	MP46850-MB1	1	X
11:19	MP46850-LB1	1	X
11:20	MP46850-B1	1	X
11:22	MP46850-LS1	1	X
11:23	MP46850-S1	1	X
11:25	MP46850-S2	1	X
11:27	JD87424-5B	1	X (a)
11:29	ZZZZZZ	1	
11:31	MA56148-CCV5	1	X
11:35	MA56148-CCB5	1	X
11:38	MP46851-MB1	1	X
11:39	MP46851-LB1	1	X
11:40	MP46851-B1	1	X
11:42	MP46851-LS1	1	X
11:44	MP46851-S1	1	X
11:46	MP46851-S2	1	X
11:48	JD88876-1A	1	X (a)
11:50	ZZZZZZ	1	
11:51	MA56148-CCV6	1	X
11:53	MA56148-CCB6	1	X
11:55	ZZZZZZ	1	
11:56	ZZZZZZ	1	
11:57	ZZZZZZ	1	
11:59	ZZZZZZ	1	
12:00	ZZZZZZ	1	
12:02	ZZZZZZ	1	
12:03	ZZZZZZ	1	
12:05	ZZZZZZ	1	
12:06	MA56148-CCV7	1	X
12:08	MA56148-CCB7	1	X
12:10	ZZZZZZ	1	
		Element:	H g

8.1.1  
8

REPORTED ELEMENTS SUMMARY

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9052424W1.CSV Date Analyzed: 05/24/24 Methods: SW846 7470A  
 Analyst: CB Run ID: MA56148  
 Parameters: Hg

Time	Sample Description	Element: H Dilution g
12:11	ZZZZZZ	1
12:13	ZZZZZZ	1
12:14	ZZZZZZ	1
12:16	ZZZZZZ	1
12:17	ZZZZZZ	1
12:19	ZZZZZZ	1
12:20	ZZZZZZ	1
12:22	MA56148-CCV8	1 X
12:23	MA56148-CCB8	1 X
12:25	ZZZZZZ	1
12:27	ZZZZZZ	1
12:28	MP46852-MB1	1 X
12:30	MP46852-LB1	1
12:31	MP46852-B1	1 X
12:32	MP46852-LS1	1 X
12:34	MP46852-S1	1 X
12:36	MP46852-S2	1 X
12:42	MA56148-CCV9	1 X
12:46	MA56148-CCB9	1 X
12:48	JD88876-21A	1 X (a)
12:50	ZZZZZZ	1
12:51	ZZZZZZ	1
12:53	ZZZZZZ	1
12:54	ZZZZZZ	1
12:56	ZZZZZZ	1
12:57	ZZZZZZ	1
12:59	ZZZZZZ	1
13:00	MA56148-CCV10	1 X
13:02	MA56148-CCB10	1 X
13:04	ZZZZZZ	1
13:05	ZZZZZZ	1
13:06	MP46853-MB1	1
13:08	MP46853-LB1	1

Element: H  
g

8.1.1  
8

REPORTED ELEMENTS SUMMARY

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9052424W1.CSV Date Analyzed: 05/24/24 Methods: SW846 7470A  
 Analyst: CB Run ID: MA56148  
 Parameters: Hg

Time	Sample Description	Element:	H Dilution g
13:09	MP46853-B1	1	X
13:11	MP46853-LS1	1	X
13:13	MP46853-S1	1	X
13:15	MP46853-S2	1	X
13:17	MA56148-CCV11	1	X
13:19	MA56148-CCB11	1	X
13:21	JD87671-8B	1	X (a)
13:22	JD87833-1R	1	X
13:24	JD87833-9R	1	X
13:25	ZZZZZ	1	
13:27	ZZZZZ	1	
13:28	ZZZZZ	1	
13:30	MA56148-CCV12	1	X
13:31	MA56148-CCB12	1	X
13:33	MP46876-MB1	1	X
13:35	MP46876-B1	1	X
13:36	MP46876-S1	1	X
13:38	MP46876-S2	1	X
13:40	JD88509-3	1	X (a)
13:42	ZZZZZ	1	
13:44	MP46853-MB1	1	X
13:45	MA56148-CCV13	1	X
13:49	MA56148-CCB13	1	X

(a) Sample used for QC only; not part of login JD87833R.

Element: H  
g

8.1.1  
8

BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9052424W1.CSV Date Analyzed: 05/24/24 Methods: SW846 7470A  
 QC Limits: result < RL Run ID: MA56148 Units: ug/l

Time:			10:19			10:22			10:41			10:58
Sample ID:	RL	IDL	ICB1	final	CCB1	final	CCB2	final	CCB3	final	CCB3	final
Metal			raw	final	raw	final	raw	final	raw	final	raw	final
Mercury	0.20	.04	-0.0874	<0.20	-0.118	<0.20	-0.138	<0.20	-0.0727	<0.20		

(\*) Outside of QC limits  
 (anr) Analyte not requested

8.1.2  
 8

BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9052424W1.CSV Date Analyzed: 05/24/24 Methods: SW846 7470A  
 QC Limits: result < RL Run ID: MA56148 Units: ug/l

	Time:			11:15		11:35		11:53		12:08	
	Sample ID:			CCB4		CCB5		CCB6		CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final	
Mercury	0.20	.04	-0.155	<0.20	-0.0554	<0.20	-0.144	<0.20	-0.189	<0.20	

(\*) Outside of QC limits  
 (anr) Analyte not requested

8.1.2  
 8

BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9052424W1.CSV      Date Analyzed: 05/24/24      Methods: SW846 7470A  
 QC Limits: result < RL      Run ID: MA56148      Units: ug/l

Time:			12:23			12:46			13:02			13:19
Sample ID:	RL	IDL	CCB8	final	CCB9	final	CCB10	final	CCB11	final	final	
Metal			raw		raw		raw		raw		raw	
Mercury	0.20	.04	-0.163	<0.20	-0.0890	<0.20	-0.185	<0.20	-0.130	<0.20		

(\*) Outside of QC limits  
 (anr) Analyte not requested

8.1.2  
 8

BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9052424W1.CSV Date Analyzed: 05/24/24 Methods: SW846 7470A  
 QC Limits: result < RL Run ID: MA56148 Units: ug/l

	Time:		13:31		13:49	
	Sample ID:		CCB12		CCB13	
Metal	RL	IDL	raw	final	raw	final
Mercury	0.20	.04	-0.155	<0.20	-0.0629	<0.20

(\*) Outside of QC limits  
 (anr) Analyte not requested

8.1.2  
 8

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9052424W1.CSV      Date Analyzed: 05/24/24      Methods: SW846 7470A  
QC Limits: 90 to 110 % Recovery      Run ID: MA56148      Units: ug/l

	Time:		10:17		10:21		10:39		
Sample ID:	ICV		ICV1	CCV	CCV1	CCV	CCV2		
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	3	3.05	101.7	2.5	2.50	100.0	2.5	2.39	95.6

(\*) Outside of QC limits  
(anr) Analyte not requested



CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9052424W1.CSV      Date Analyzed: 05/24/24      Methods: SW846 7470A  
QC Limits: 90 to 110 % Recovery      Run ID: MA56148      Units: ug/l

	Time:	10:54		11:14		11:31			
Sample ID:	CCV	CCV3		CCV4		CCV5			
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	2.5	2.37	94.8	2.5	2.32	92.8	2.5	2.36	94.4

(\*) Outside of QC limits  
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9052424W1.CSV      Date Analyzed: 05/24/24      Methods: SW846 7470A  
QC Limits: 90 to 110 % Recovery      Run ID: MA56148      Units: ug/l

	Time:									
Sample ID:	CCV	11:51 CCV6		CCV	12:06 CCV7		CCV	12:22 CCV8		
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec	
Mercury	2.5	2.29	91.6	2.5	2.42	96.8	2.5	2.31	92.4	

(\*) Outside of QC limits  
(anr) Analyte not requested

8.1.3  
8

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9052424W1.CSV      Date Analyzed: 05/24/24      Methods: SW846 7470A  
QC Limits: 90 to 110 % Recovery      Run ID: MA56148      Units: ug/l

	Time:	12:42		13:00		13:17			
Sample ID:	CCV	CCV9	CCV	CCV10	CCV	CCV11			
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	2.5	2.39	95.6	2.5	2.48	99.2	2.5	2.35	94.0

(\*) Outside of QC limits  
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9052424W1.CSV      Date Analyzed: 05/24/24      Methods: SW846 7470A  
QC Limits: 90 to 110 % Recovery      Run ID: MA56148      Units: ug/l

	Time:	13:30		13:45		
Sample ID:	CCV	CCV12		CCV	CCV13	
Metal	True	Results	% Rec	True	Results	% Rec
Mercury	2.5	2.40	96.0	2.5	2.48	99.2

(\*) Outside of QC limits  
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9052424W1.CSV      Date Analyzed: 05/24/24      Methods: SW846 7470A  
QC Limits: 70 to 130 % Recovery      Run ID: MA56148      Units: ug/l

Time:			10:24	
Sample ID:	CRI	CRIA	CRI1	
Metal	True	True	Results	% Rec

Mercury      0.20      0.197      98.5

(\*) Outside of QC limits  
(anr) Analyte not requested

SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9052824W1.CSV Date Analyzed: 05/28/24 Methods: SW846 7470A  
Analyst: MK Run ID: MA56163  
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
10:12	MA56163-STD1	1		b=2.0742e-004,c=-1.8744e-003,rho=0.9993059
10:13	MA56163-STD2	1		STDB
10:15	MA56163-STD3	1		STDC
10:16	MA56163-STD4	1		STDD
10:18	MA56163-STD5	1		STDE
10:20	MA56163-STD6	1		STDF
10:25	ZZZZZ	1		
10:27	MA56163-ICV1	1		
10:32	MA56163-ICB1	1		
10:34	MA56163-CCV1	1		
10:35	MA56163-CCB1	1		
10:37	MA56163-CRI1	1		
10:39	MP46892-MB1	1		
10:40	MP46892-B1	1		
10:41	MP46892-S1	1		
10:43	MP46892-S2	1		
10:45	JD89071-2	1		(sample used for QC only; not part of login JD87833R)
10:47	ZZZZZ	1		
10:48	ZZZZZ	1		
10:50	ZZZZZ	1		
10:51	MA56163-CCV2	1		
10:53	MA56163-CCB2	1		
10:55	ZZZZZ	1		
10:56	MP46893-MB1	1		
10:58	MP46893-LB1	1		
10:59	MP46893-B1	1		
11:01	MP46893-LS1	1		
11:03	MP46893-S1	1		
11:04	MP46893-S2	1		
11:06	MA56163-CCV3	1		
11:08	MA56163-CCB3	1		
11:10	JD88942-1A	1		(sample used for QC only; not part of login JD87833R)
11:12	ZZZZZ	1		

8.2  
8

SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9052824W1.CSV Date Analyzed: 05/28/24 Methods: SW846 7470A  
Analyst: MK Run ID: MA56163  
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
11:13	ZZZZZZ	1		
11:14	ZZZZZZ	1		
11:16	ZZZZZZ	1		
11:17	ZZZZZZ	1		
11:19	ZZZZZZ	1		
11:20	ZZZZZZ	1		
11:22	MA56163-CCV4	1		
11:23	MA56163-CCB4	1		
11:25	ZZZZZZ	1		
11:26	ZZZZZZ	1		
11:28	ZZZZZZ	1		
11:29	ZZZZZZ	1		
11:31	ZZZZZZ	1		
11:32	ZZZZZZ	1		
11:33	ZZZZZZ	1		
11:35	ZZZZZZ	1		
11:36	MA56163-CCV5	1		
11:38	MA56163-CCB5	1		
11:40	ZZZZZZ	1		
11:41	ZZZZZZ	1		
11:42	ZZZZZZ	1		
11:44	MP46894-MB1	1		
11:45	MP46894-LB1	1		
11:47	MP46894-B1	1		
11:48	MP46894-LS1	1		
11:50	MA56163-CCV6	1		
11:52	MA56163-CCB6	1		
11:54	MP46894-S1	1		
11:55	MP46894-S2	1		
11:57	JD88846-1	1		(sample used for QC only; not part of login JD87833R)
11:59	ZZZZZZ	1		
12:00	ZZZZZZ	1		
12:02	ZZZZZZ	1		

8.2  
8

SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9052824W1.CSV Date Analyzed: 05/28/24 Methods: SW846 7470A  
Analyst: MK Run ID: MA56163  
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:03	ZZZZZZ	1		
12:05	ZZZZZZ	1		
12:06	MA56163-CCV7	1		
12:08	MA56163-CCB7	1		
12:09	ZZZZZZ	1		
12:11	ZZZZZZ	1		
12:12	ZZZZZZ	1		
12:14	ZZZZZZ	1		
12:15	ZZZZZZ	1		
12:17	ZZZZZZ	1		
12:18	ZZZZZZ	1		
12:19	ZZZZZZ	1		
12:21	MA56163-CCV8	1		
12:22	MA56163-CCB8	1		
12:24	ZZZZZZ	1		
12:26	ZZZZZZ	1		
12:27	ZZZZZZ	1		
12:28	ZZZZZZ	1		
12:30	ZZZZZZ	1		
12:31	ZZZZZZ	1		
12:33	MA56163-CCV9	1		
12:34	MA56163-CCB9	1		
12:36	MP46895-MB1	1		
12:37	MP46895-LB1	1		
12:39	MP46895-B1	1		
12:40	MP46895-LS1	1		
12:42	MP46895-S1	1		
12:44	MP46895-S2	1		
12:46	JD88336-2	1		(sample used for QC only; not part of login JD87833R)
12:48	MA56163-CCV10	1		
12:50	MA56163-CCB10	1		
12:52	MP46896-MB1	1		
12:53	MP46896-LB1	1		

8.2  
8



SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9052824W1.CSV      Date Analyzed: 05/28/24      Methods: SW846 7470A  
Analyst: MK      Run ID: MA56163  
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:55	MP46896-B1	1		
12:56	MP46896-LS1	1		
12:58	MA56163-CCV11	1		
13:00	MA56163-CCB11	1		
13:02	MP46896-S1	1		
13:03	MP46896-S2	1		
13:05	JD87833-14R	1		
----->	Last reportable sample/prep for job JD87833R			
13:07	ZZZZZ	1		
13:09	ZZZZZ	1		
13:10	MA56163-CCV12	1		
13:12	MA56163-CCB12	1		
----->	Last reportable CCB for job JD87833R			
	Refer to raw data for calibration curve and standards.			

8.2  
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REPORTED ELEMENTS SUMMARY

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9052824W1.CSV Date Analyzed: 05/28/24 Methods: SW846 7470A  
 Analyst: MK Run ID: MA56163  
 Parameters: Hg

Time	Sample Description	Element:	H
		Dilution	g
10:25	ZZZZZZ	1	
10:27	MA56163-ICV1	1	X
10:32	MA56163-ICB1	1	X
10:34	MA56163-CCV1	1	X
10:35	MA56163-CCB1	1	X
10:37	MA56163-CRI1	1	X
10:39	MP46892-MB1	1	X
10:40	MP46892-B1	1	X
10:41	MP46892-S1	1	X
10:43	MP46892-S2	1	X
10:45	JD89071-2	1	X (a)
10:47	ZZZZZZ	1	
10:48	ZZZZZZ	1	
10:50	ZZZZZZ	1	
10:51	MA56163-CCV2	1	X
10:53	MA56163-CCB2	1	X
10:55	ZZZZZZ	1	
10:56	MP46893-MB1	1	X
10:58	MP46893-LB1	1	
10:59	MP46893-B1	1	X
11:01	MP46893-LS1	1	X
11:03	MP46893-S1	1	X
11:04	MP46893-S2	1	X
11:06	MA56163-CCV3	1	X
11:08	MA56163-CCB3	1	X
11:10	JD88942-1A	1	X (a)
11:12	ZZZZZZ	1	
11:13	ZZZZZZ	1	
11:14	ZZZZZZ	1	
11:16	ZZZZZZ	1	
11:17	ZZZZZZ	1	
11:19	ZZZZZZ	1	
11:20	ZZZZZZ	1	

Element: H  
g

REPORTED ELEMENTS SUMMARY

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9052824W1.CSV Date Analyzed: 05/28/24 Methods: SW846 7470A  
 Analyst: MK Run ID: MA56163  
 Parameters: Hg

Time	Sample Description	Element:	H Dilution g
11:22	MA56163-CCV4	1	X
11:23	MA56163-CCB4	1	X
11:25	ZZZZZZ	1	
11:26	ZZZZZZ	1	
11:28	ZZZZZZ	1	
11:29	ZZZZZZ	1	
11:31	ZZZZZZ	1	
11:32	ZZZZZZ	1	
11:33	ZZZZZZ	1	
11:35	ZZZZZZ	1	
11:36	MA56163-CCV5	1	X
11:38	MA56163-CCB5	1	X
11:40	ZZZZZZ	1	
11:41	ZZZZZZ	1	
11:42	ZZZZZZ	1	
11:44	MP46894-MB1	1	X
11:45	MP46894-LB1	1	
11:47	MP46894-B1	1	X
11:48	MP46894-LS1	1	X
11:50	MA56163-CCV6	1	X
11:52	MA56163-CCB6	1	X
11:54	MP46894-S1	1	X
11:55	MP46894-S2	1	X
11:57	JD88846-1	1	X (a)
11:59	ZZZZZZ	1	
12:00	ZZZZZZ	1	
12:02	ZZZZZZ	1	
12:03	ZZZZZZ	1	
12:05	ZZZZZZ	1	
12:06	MA56163-CCV7	1	X
12:08	MA56163-CCB7	1	X
12:09	ZZZZZZ	1	
12:11	ZZZZZZ	1	

Element: H  
g

REPORTED ELEMENTS SUMMARY

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9052824W1.CSV Date Analyzed: 05/28/24 Methods: SW846 7470A  
 Analyst: MK Run ID: MA56163  
 Parameters: Hg

Time	Sample Description	Element:	H
		Dilution	g
12:12	ZZZZZZ	1	
12:14	ZZZZZZ	1	
12:15	ZZZZZZ	1	
12:17	ZZZZZZ	1	
12:18	ZZZZZZ	1	
12:19	ZZZZZZ	1	
12:21	MA56163-CCV8	1	X
12:22	MA56163-CCB8	1	X
12:24	ZZZZZZ	1	
12:26	ZZZZZZ	1	
12:27	ZZZZZZ	1	
12:28	ZZZZZZ	1	
12:30	ZZZZZZ	1	
12:31	ZZZZZZ	1	
12:33	MA56163-CCV9	1	X
12:34	MA56163-CCB9	1	X
12:36	MP46895-MB1	1	X
12:37	MP46895-LB1	1	
12:39	MP46895-B1	1	X
12:40	MP46895-LS1	1	X
12:42	MP46895-S1	1	X
12:44	MP46895-S2	1	X
12:46	JD88336-2	1	X (a)
12:48	MA56163-CCV10	1	X
12:50	MA56163-CCB10	1	X
12:52	MP46896-MB1	1	X
12:53	MP46896-LB1	1	
12:55	MP46896-B1	1	X
12:56	MP46896-LS1	1	X
12:58	MA56163-CCV11	1	X
13:00	MA56163-CCB11	1	X
13:02	MP46896-S1	1	X
13:03	MP46896-S2	1	X
		Element:	H
			g

8.2.1  
8

REPORTED ELEMENTS SUMMARY

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9052824W1.CSV      Date Analyzed: 05/28/24      Methods: SW846 7470A  
Analyst: MK      Run ID: MA56163  
Parameters: Hg

Time	Sample Description	Element: H	Dilution g
------	--------------------	------------	------------

13:05	JD87833-14R	1	X
13:07	ZZZZZ	1	
13:09	ZZZZZ	1	
13:10	MA56163-CCV12	1	X
13:12	MA56163-CCB12	1	X

(a) Sample used for QC only; not part of login JD87833R.

Element: H  
g

BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9052824W1.CSV Date Analyzed: 05/28/24 Methods: SW846 7470A  
 QC Limits: result < RL Run ID: MA56163 Units: ug/l

Time:			10:32			10:35			10:53			11:08
Sample ID:	RL	IDL	ICB1	final	CCB1	final	CCB2	final	CCB3	final	CCB3	final
Metal			raw	final	raw	final	raw	final	raw	final	raw	final
Mercury	0.20	.04	-0.0284	<0.20	-0.132	<0.20	-0.130	<0.20	-0.126	<0.20		

(\*) Outside of QC limits  
 (anr) Analyte not requested

8.2.2  
 8

BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9052824W1.CSV Date Analyzed: 05/28/24 Methods: SW846 7470A  
 QC Limits: result < RL Run ID: MA56163 Units: ug/l

	Time:			11:23		11:38		11:52		12:08	
	Sample ID:			CCB4		CCB5		CCB6		CCB7	
Metal	RL	IDL		raw	final	raw	final	raw	final	raw	final
Mercury	0.20	.04		-0.167	<0.20	-0.151	<0.20	-0.131	<0.20	-0.146	<0.20

(\*) Outside of QC limits  
 (anr) Analyte not requested

8.2.2  
 8

BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9052824W1.CSV Date Analyzed: 05/28/24 Methods: SW846 7470A  
 QC Limits: result < RL Run ID: MA56163 Units: ug/l

Time:			12:22	12:34	12:50	13:00				
Sample ID:			CCB8	CCB9	CCB10	CCB11				
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Mercury	0.20	.04	-0.136	<0.20	-0.140	<0.20	-0.153	<0.20	-0.109	<0.20

(\*) Outside of QC limits  
 (anr) Analyte not requested

8.2.2  
 8



BLANK RESULTS SUMMARY  
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9052824W1.CSV      Date Analyzed: 05/28/24      Methods: SW846 7470A  
QC Limits: result < RL      Run ID: MA56163      Units: ug/l

Time:			13:12	
Sample ID:			CCB12	
Metal	RL	IDL	raw	final

Mercury      0.20      .04      -0.174      <0.20

(\*) Outside of QC limits  
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9052824W1.CSV      Date Analyzed: 05/28/24      Methods: SW846 7470A  
QC Limits: 90 to 110 % Recovery      Run ID: MA56163      Units: ug/l

	Time:		10:27		10:34		10:51		
Sample ID:	ICV		ICV1	CCV	CCV1	CCV	CCV2		
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	3	3.27	109.0	2.5	2.67	106.8	2.5	2.51	100.4

(\*) Outside of QC limits  
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9052824W1.CSV      Date Analyzed: 05/28/24      Methods: SW846 7470A  
QC Limits: 90 to 110 % Recovery      Run ID: MA56163      Units: ug/l

	Time:	11:06		11:22		11:36			
Sample ID:	CCV	CCV3		CCV4		CCV5			
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	2.5	2.49	99.6	2.5	2.54	101.6	2.5	2.49	99.6

(\*) Outside of QC limits  
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9052824W1.CSV      Date Analyzed: 05/28/24      Methods: SW846 7470A  
QC Limits: 90 to 110 % Recovery      Run ID: MA56163      Units: ug/l

	Time:	11:50		12:06		12:21			
Sample ID:	CCV	CCV6		CCV7		CCV8			
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	2.5	2.50	100.0	2.5	2.51	100.4	2.5	2.49	99.6

(\*) Outside of QC limits  
(anr) Analyte not requested

8.2.3  
8

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9052824W1.CSV      Date Analyzed: 05/28/24      Methods: SW846 7470A  
QC Limits: 90 to 110 % Recovery      Run ID: MA56163      Units: ug/l

	Time:	12:33		12:48		12:58			
Sample ID:	CCV	CCV9	CCV	CCV10	CCV	CCV11			
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	2.5	2.49	99.6	2.5	2.44	97.6	2.5	2.44	97.6

(\*) Outside of QC limits  
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9052824W1.CSV      Date Analyzed: 05/28/24      Methods: SW846 7470A  
QC Limits: 90 to 110 % Recovery      Run ID: MA56163      Units: ug/l

Time:		13:10	
Sample ID:	CCV	CCV12	
Metal	True	Results	% Rec

Mercury      2.5      2.46      98.4

(\*) Outside of QC limits  
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: H9052824W1.CSV      Date Analyzed: 05/28/24      Methods: SW846 7470A  
QC Limits: 70 to 130 % Recovery      Run ID: MA56163      Units: ug/l

Time:			10:37	
Sample ID:	CRI	CRIA	CRI1	
Metal	True	True	Results	% Rec

Mercury      0.20      0.151      75.5

(\*) Outside of QC limits  
(anr) Analyte not requested

SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP Date Analyzed: 05/29/24 Methods: EPA 200.7, SW846 6010D  
Analyst: KP Run ID: MA56184  
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
10:09	MA56184-STD1	1		STDA
10:14	MA56184-STD2	1		STDB
10:20	MA56184-ICV1	1		
10:26	MA56184-ICB1	1		
10:37	MA56184-ICCV1	1		
10:48	MA56184-CCB1	1		
10:53	MA56184-CRI1	1		
10:58	MA56184-CRID1	1		
11:03	MA56184-ICSA1	1		
11:09	MA56184-ICSAB1	1		
11:14	MA56184-HSTD1	1		
11:20	MA56184-HSTD2	1		
11:25	ZZZZZZ	1		
11:31	ZZZZZZ	1		
12:02	ZZZZZZ	1		
12:07	ZZZZZZ	1		
12:12	MA56184-CCV1	1		
12:17	MA56184-CCB2	1		
12:22	ZZZZZZ	1		
12:27	ZZZZZZ	1		
12:32	ZZZZZZ	1		
12:37	ZZZZZZ	1		
12:42	MP46879-MB1	1		
12:47	MP46879-B1	1		
12:52	MP46879-S1	1		
12:57	MP46879-S2	1		
13:03	MP46879-LC1	1		Ag high
13:08	MP46879-LC2	1		
13:13	MA56184-CCV2	1		
13:18	MA56184-CCB3	1		
13:23	JD88949-16	1		(sample used for QC only; not part of login JD87833R)
13:28	MP46879-SD1	5		
13:33	MP46879-PS1	1		





SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP Date Analyzed: 05/29/24 Methods: EPA 200.7, SW846 6010D  
Analyst: KP Run ID: MA56184  
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:38	ZZZZZZ	1		
13:43	ZZZZZZ	1		
13:48	ZZZZZZ	1		
13:53	ZZZZZZ	1		
13:58	ZZZZZZ	1		
14:03	ZZZZZZ	1		
14:08	ZZZZZZ	1		
14:13	MA56184-CCV3	1		
14:18	MA56184-CCB4	1		
14:23	MP46925-MB1	1		
14:28	MP46925-B1	1		
14:33	MP46925-S1	1		Ca high
14:38	MP46925-S2	1		Ca high
14:44	JD89298-1	1		(sample used for QC only; not part of login JD87833R)
14:49	MP46925-SD1	5		Ca high
14:54	MP46925-PS1	1		
15:00	ZZZZZZ	1		
15:05	ZZZZZZ	1		
15:10	ZZZZZZ	1		
15:15	MA56184-CCV4	1		
15:20	MA56184-CCB5	1		
15:25	ZZZZZZ	1		
15:30	ZZZZZZ	1		
15:35	ZZZZZZ	1		
15:40	ZZZZZZ	1		
15:45	ZZZZZZ	1		
15:50	ZZZZZZ	1		
15:55	ZZZZZZ	1		
16:01	ZZZZZZ	1		
16:06	ZZZZZZ	1		
16:11	ZZZZZZ	1		
16:16	MA56184-CCV5	1		
16:22	MA56184-CCB6	1		



SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP      Date Analyzed: 05/29/24      Methods: EPA 200.7, SW846 6010D  
Analyst: KP      Run ID: MA56184  
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
16:26	ZZZZZZ	1		
16:32	ZZZZZZ	1		
16:37	ZZZZZZ	1		
16:42	ZZZZZZ	1		
16:47	ZZZZZZ	1		
16:52	ZZZZZZ	1		
16:57	MP46926-MB1	1		
17:02	MP46926-B1	1		
17:07	MP46926-S1	1		
17:13	MP46926-S2	1		
17:19	MA56184-CCV6	1		
17:24	MA56184-CCB7	1		
17:29	JD89298-21	1		(sample used for QC only; not part of login JD87833R)
17:34	MP46926-SD1	5		
17:39	MP46926-PS1	1		
17:45	ZZZZZZ	1		
17:50	ZZZZZZ	1		
17:55	ZZZZZZ	1		
18:00	ZZZZZZ	1		
18:05	ZZZZZZ	1		
18:10	ZZZZZZ	1		
18:15	ZZZZZZ	1		
18:20	MA56184-CCV7	1		
18:25	MA56184-CCB8	1		
18:30	ZZZZZZ	1		
18:35	ZZZZZZ	1		
18:40	ZZZZZZ	1		
18:45	ZZZZZZ	1		
18:50	ZZZZZZ	1		
18:55	ZZZZZZ	1		
19:00	ZZZZZZ	1		
19:04	ZZZZZZ	1		
19:09	MA56184-CCV8	1		



SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP Date Analyzed: 05/29/24 Methods: EPA 200.7, SW846 6010D  
Analyst: KP Run ID: MA56184  
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
19:15	MA56184-CCB9	1		
19:20	MP46885-MB1	1		rerun for Al, PB and AS
19:25	MP46885-B1	1		
19:30	MP46885-B2	1		
19:35	MP46885-S1	1		rerun for As with the QC sample
19:40	MP46885-S2	1		
19:45	ZZZZZZ	1		
19:50	MP46885-SD1	5		wrong sample used
19:55	ZZZZZZ	1		
20:00	MA56184-CCV9	1		
20:05	MA56184-CCB10	1		
20:10	ZZZZZZ	1		
20:15	ZZZZZZ	1		
20:20	ZZZZZZ	1		
20:25	JD89053-5	1		(sample used for QC only; not part of login JD87833R)
20:30	ZZZZZZ	1		
20:35	ZZZZZZ	1		
20:40	ZZZZZZ	1		
20:45	ZZZZZZ	1		
20:50	ZZZZZZ	1		
20:55	ZZZZZZ	1		
21:00	MA56184-CCV10	1		
21:05	MA56184-CCB11	1		
21:10	ZZZZZZ	1		
21:15	MP46865-MB1	1		
21:20	MP46865-B1	1		Low recovery for Ag, rerun or redigest batch
21:25	MP46865-S1	1		
21:30	MP46865-S2	1		
21:35	JD87880-11R	1		(sample used for QC only; not part of login JD87833R)
21:40	MP46865-SD1	5		
21:45	MP46865-PS1	1		
21:50	ZZZZZZ	1		
21:56	MA56184-CCV11	1		

SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP Date Analyzed: 05/29/24 Methods: EPA 200.7, SW846 6010D  
Analyst: KP Run ID: MA56184  
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
22:01	MA56184-CCB12	1		
22:06	ZZZZZZ	1		
22:11	ZZZZZZ	1		
22:16	ZZZZZZ	1		
22:22	ZZZZZZ	1		
22:27	ZZZZZZ	1		
22:33	ZZZZZZ	1		
22:38	ZZZZZZ	1		
22:43	ZZZZZZ	1		
22:48	ZZZZZZ	1		
22:53	ZZZZZZ	1		
22:58	MA56184-CCV12	1		
23:03	MA56184-CCB13	1		
23:08	ZZZZZZ	1		
23:13	ZZZZZZ	1		
23:18	ZZZZZZ	1		
23:23	ZZZZZZ	1		
23:29	ZZZZZZ	1		
23:35	ZZZZZZ	1		
23:40	ZZZZZZ	1		
23:44	MP46878-MB1	1		
23:49	MP46878-B1	1		
23:54	MP46878-S1	1		
00:00	MA56184-CCV13	1		
00:05	MA56184-CCB14	1		
00:10	MP46878-S2	1		
00:15	ZZZZZZ	1		
00:15	JD88972-2	1		(sample used for QC only; not part of login JD87833R)
00:20	MP46878-SD1	5		rerun for Zn
00:25	MP46878-PS1	1		
00:30	ZZZZZZ	1		
00:34	ZZZZZZ	1		
00:39	ZZZZZZ	1		



SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP Date Analyzed: 05/29/24 Methods: EPA 200.7, SW846 6010D  
Analyst: KP Run ID: MA56184  
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
00:44	ZZZZZZ	1		
00:49	ZZZZZZ	1		
00:54	ZZZZZZ	1		
00:59	MA56184-CCV14	1		
01:04	MA56184-CCB15	1		
01:09	ZZZZZZ	1		
01:15	ZZZZZZ	1		
01:21	ZZZZZZ	1		
01:26	ZZZZZZ	1		
01:30	ZZZZZZ	1		
01:35	ZZZZZZ	1		
01:41	ZZZZZZ	1		
01:46	ZZZZZZ	1		
01:51	ZZZZZZ	1		
01:56	ZZZZZZ	1		
02:01	MA56184-CCV15	1		
02:07	MA56184-CCB16	1		
02:12	ZZZZZZ	1		
02:17	ZZZZZZ	1		
02:22	ZZZZZZ	1		
02:27	MP46890-MB1	1		
02:32	MP46890-LB1	1		
02:37	MP46890-B1	1		
02:42	MP46890-LS1	1		
02:47	MP46890-S1	1		needs post spike for AS
02:52	MP46890-S2	1		
02:57	JD87833-1R	1		
03:02	MA56184-CCV16	1		
03:07	MA56184-CCB17	1		
03:12	MP46890-SD1	5		
03:17	ZZZZZZ	1		
03:22	ZZZZZZ	1		
03:28	ZZZZZZ	1		



SGS Instrument Runlog  
Inorganics Analyses

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP      Date Analyzed: 05/29/24      Methods: EPA 200.7, SW846 6010D  
Analyst: KP      Run ID: MA56184  
Parameters: Pb

Time	Sample Description	Dilution Factor	PS Recov	Comments
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03:33 JD87833-9R      1
----->
03:38 JD87833-11R     1
Last reportable sample/prep for job JD87833R
03:43 ZZZZZZ          1

03:48 MA56184-CCV17   1

----->
03:53 MA56184-CCB18   1
Last reportable CCB for job JD87833R
03:58 ZZZZZZ          1

04:03 ZZZZZZ          1

04:08 ZZZZZZ          1

04:13 ZZZZZZ          1

04:18 ZZZZZZ          1

04:23 ZZZZZZ          1

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Refer to raw data for calibration curve and standards.



REPORTED ELEMENTS SUMMARY

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP Date Analyzed: 05/29/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: KP Run ID: MA56184  
 Parameters: Pb

Time	Sample Description	Element: P Dilution b
10:20	MA56184-ICV1	1 X
10:26	MA56184-ICB1	1 X
10:37	MA56184-ICCV1	1 X
10:48	MA56184-CCB1	1 X
10:53	MA56184-CRI1	1 X
10:58	MA56184-CRID1	1 X
11:03	MA56184-ICSA1	1 X
11:09	MA56184-ICSAB1	1 X
11:14	MA56184-HSTD1	1 X
11:20	MA56184-HSTD2	1 X
11:25	ZZZZZZ	1
11:31	ZZZZZZ	1
12:02	ZZZZZZ	1
12:07	ZZZZZZ	1
12:12	MA56184-CCV1	1 X
12:17	MA56184-CCB2	1 X
12:22	ZZZZZZ	1
12:27	ZZZZZZ	1
12:32	ZZZZZZ	1
12:37	ZZZZZZ	1
12:42	MP46879-MB1	1 X
12:47	MP46879-B1	1 X
12:52	MP46879-S1	1 X
12:57	MP46879-S2	1 X
13:03	MP46879-LC1	1 X
13:08	MP46879-LC2	1 X
13:13	MA56184-CCV2	1 X
13:18	MA56184-CCB3	1 X
13:23	JD88949-16	1 X (a)
13:28	MP46879-SD1	5 X
13:33	MP46879-PS1	1
13:38	ZZZZZZ	1
13:43	ZZZZZZ	1

Element: P  
b

REPORTED ELEMENTS SUMMARY

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP Date Analyzed: 05/29/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: KP Run ID: MA56184  
 Parameters: Pb

Time	Sample Description	Element: P Dilution b	
13:48	ZZZZZZ	1	
13:53	ZZZZZZ	1	
13:58	ZZZZZZ	1	
14:03	ZZZZZZ	1	
14:08	ZZZZZZ	1	
14:13	MA56184-CCV3	1	X
14:18	MA56184-CCB4	1	X
14:23	MP46925-MB1	1	X
14:28	MP46925-B1	1	X
14:33	MP46925-S1	1	X
14:38	MP46925-S2	1	X
14:44	JD89298-1	1	X (a)
14:49	MP46925-SD1	5	X
14:54	MP46925-PS1	1	
15:00	ZZZZZZ	1	
15:05	ZZZZZZ	1	
15:10	ZZZZZZ	1	
15:15	MA56184-CCV4	1	X
15:20	MA56184-CCB5	1	X
15:25	ZZZZZZ	1	
15:30	ZZZZZZ	1	
15:35	ZZZZZZ	1	
15:40	ZZZZZZ	1	
15:45	ZZZZZZ	1	
15:50	ZZZZZZ	1	
15:55	ZZZZZZ	1	
16:01	ZZZZZZ	1	
16:06	ZZZZZZ	1	
16:11	ZZZZZZ	1	
16:16	MA56184-CCV5	1	X
16:22	MA56184-CCB6	1	X
16:26	ZZZZZZ	1	
16:32	ZZZZZZ	1	

Element: P  
b

8.3.1  
8



REPORTED ELEMENTS SUMMARY

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP Date Analyzed: 05/29/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: KP Run ID: MA56184  
 Parameters: Pb

Time	Sample Description	Element: P Dilution b
16:37	ZZZZZZ	1
16:42	ZZZZZZ	1
16:47	ZZZZZZ	1
16:52	ZZZZZZ	1
16:57	MP46926-MB1	1 X
17:02	MP46926-B1	1 X
17:07	MP46926-S1	1 X
17:13	MP46926-S2	1 X
17:19	MA56184-CCV6	1 X
17:24	MA56184-CCB7	1 X
17:29	JD89298-21	1 X (a)
17:34	MP46926-SD1	5 X
17:39	MP46926-PS1	1
17:45	ZZZZZZ	1
17:50	ZZZZZZ	1
17:55	ZZZZZZ	1
18:00	ZZZZZZ	1
18:05	ZZZZZZ	1
18:10	ZZZZZZ	1
18:15	ZZZZZZ	1
18:20	MA56184-CCV7	1 X
18:25	MA56184-CCB8	1 X
18:30	ZZZZZZ	1
18:35	ZZZZZZ	1
18:40	ZZZZZZ	1
18:45	ZZZZZZ	1
18:50	ZZZZZZ	1
18:55	ZZZZZZ	1
19:00	ZZZZZZ	1
19:04	ZZZZZZ	1
19:09	MA56184-CCV8	1 X
19:15	MA56184-CCB9	1 X
19:20	MP46885-MB1	1
		Element: P b

8.3.1  
8

REPORTED ELEMENTS SUMMARY

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP Date Analyzed: 05/29/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: KP Run ID: MA56184  
 Parameters: Pb

Time	Sample Description	Element: P Dilution b
19:25	MP46885-B1	1 X
19:30	MP46885-B2	1 X
19:35	MP46885-S1	1 X
19:40	MP46885-S2	1 X
19:45	ZZZZZ	1
19:50	MP46885-SD1	5 wrong sample used
19:55	ZZZZZ	1
20:00	MA56184-CCV9	1 X
20:05	MA56184-CCB10	1 X
20:10	ZZZZZ	1
20:15	ZZZZZ	1
20:20	ZZZZZ	1
20:25	JD89053-5	1 X (a)
20:30	ZZZZZ	1
20:35	ZZZZZ	1
20:40	ZZZZZ	1
20:45	ZZZZZ	1
20:50	ZZZZZ	1
20:55	ZZZZZ	1
21:00	MA56184-CCV10	1 X
21:05	MA56184-CCB11	1 X
21:10	ZZZZZ	1
21:15	MP46865-MB1	1 X
21:20	MP46865-B1	1 X
21:25	MP46865-S1	1 X
21:30	MP46865-S2	1 X
21:35	JD87880-11R	1 X (a)
21:40	MP46865-SD1	5 X
21:45	MP46865-PS1	1
21:50	ZZZZZ	1
21:56	MA56184-CCV11	1 X
22:01	MA56184-CCB12	1 X
22:06	ZZZZZ	1

Element: P  
b

REPORTED ELEMENTS SUMMARY

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP Date Analyzed: 05/29/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: KP Run ID: MA56184  
 Parameters: Pb

Time	Sample Description	Element: P Dilution b
22:11	ZZZZZZ	1
22:16	ZZZZZZ	1
22:22	ZZZZZZ	1
22:27	ZZZZZZ	1
22:33	ZZZZZZ	1
22:38	ZZZZZZ	1
22:43	ZZZZZZ	1
22:48	ZZZZZZ	1
22:53	ZZZZZZ	1
22:58	MA56184-CCV12	1 X
23:03	MA56184-CCB13	1 X
23:08	ZZZZZZ	1
23:13	ZZZZZZ	1
23:18	ZZZZZZ	1
23:23	ZZZZZZ	1
23:29	ZZZZZZ	1
23:35	ZZZZZZ	1
23:40	ZZZZZZ	1
23:44	MP46878-MB1	1 X
23:49	MP46878-B1	1 X
23:54	MP46878-S1	1 X
00:00	MA56184-CCV13	1 X
00:05	MA56184-CCB14	1 X
00:10	MP46878-S2	1 X
00:15	ZZZZZZ	1
00:15	JD88972-2	1 X (a)
00:20	MP46878-SD1	5 X
00:25	MP46878-PS1	1
00:30	ZZZZZZ	1
00:34	ZZZZZZ	1
00:39	ZZZZZZ	1
00:44	ZZZZZZ	1
00:49	ZZZZZZ	1

Element: P  
b

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8

REPORTED ELEMENTS SUMMARY

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP Date Analyzed: 05/29/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: KP Run ID: MA56184  
 Parameters: Pb

Time	Sample Description	Element: P Dilution b
00:54	ZZZZZZ	1
00:59	MA56184-CCV14	1 X
01:04	MA56184-CCB15	1 X
01:09	ZZZZZZ	1
01:15	ZZZZZZ	1
01:21	ZZZZZZ	1
01:26	ZZZZZZ	1
01:30	ZZZZZZ	1
01:35	ZZZZZZ	1
01:41	ZZZZZZ	1
01:46	ZZZZZZ	1
01:51	ZZZZZZ	1
01:56	ZZZZZZ	1
02:01	MA56184-CCV15	1 X
02:07	MA56184-CCB16	1 X
02:12	ZZZZZZ	1
02:17	ZZZZZZ	1
02:22	ZZZZZZ	1
02:27	MP46890-MB1	1 X
02:32	MP46890-LB1	1
02:37	MP46890-B1	1 X
02:42	MP46890-LS1	1 X
02:47	MP46890-S1	1 X
02:52	MP46890-S2	1 X
02:57	JD87833-1R	1 X
03:02	MA56184-CCV16	1 X
03:07	MA56184-CCB17	1 X
03:12	MP46890-SD1	5 X
03:17	ZZZZZZ	1
03:22	ZZZZZZ	1
03:28	ZZZZZZ	1
03:33	JD87833-9R	1 X
03:38	JD87833-11R	1 X
	Element: P b	

8.3.1  
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REPORTED ELEMENTS SUMMARY

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP Date Analyzed: 05/29/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: KP Run ID: MA56184  
 Parameters: Pb

Time	Sample Description	Element: P Dilution b
03:43	ZZZZZZ	1
03:48	MA56184-CCV17	1 X
03:53	MA56184-CCB18	1 X
03:58	ZZZZZZ	1
04:03	ZZZZZZ	1
04:08	ZZZZZZ	1
04:13	ZZZZZZ	1
04:18	ZZZZZZ	1
04:23	ZZZZZZ	1

(a) Sample used for QC only; not part of login JD87833R.

Element: P  
b

8.3.1  
8

INTERNAL STANDARD SUMMARY

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP Date Analyzed: 05/29/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: KP Run ID: MA56184  
 Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
10:09	MA56184-STD1	6914 R	161090 R	23993 R	15363 R
10:14	MA56184-STD2	6487	148860	23159	13582
10:20	MA56184-ICV1	6741	155870	23641	14105
10:26	MA56184-ICB1	7074	165190	24219	15557
10:37	MA56184-ICCV1	6806	159940	24061	14095
10:48	MA56184-CCB1	6998	166170	24576	15411
10:53	MA56184-CRI1	6928	160670	24377	15184
10:58	MA56184-CRID1	6940	160670	24216	15306
11:03	MA56184-ICSA1	6299	139760	23073	12790
11:09	MA56184-ICSAB1	6286	140400	23082	12801
11:14	MA56184-HSTD1	6738	160240	24447	14981
11:20	MA56184-HSTD2	6375	141820	22943	12844
11:25	ZZZZZ	6931	161070	24031	15534
11:31	ZZZZZ	7149	151230	24040	14079
12:02	ZZZZZ	6926	161620	23616	15588
12:07	ZZZZZ	6905	159050	23951	15604
12:12	MA56184-CCV1	6659	151080	23285	13980
12:17	MA56184-CCB2	6934	160970	24008	15410
12:22	ZZZZZ	6433	147280	23069	13487
12:27	ZZZZZ	6904	161510	23667	15291
12:32	ZZZZZ	6889	158920	23495	15631
12:37	ZZZZZ	6833	157700	23136	15299
12:42	MP46879-MB1	6990	162670	24003	15546
12:47	MP46879-B1	6824	158250	23721	14572
12:52	MP46879-S1	6979	161120	24390	14498
12:57	MP46879-S2	7020	163980	24604	14500
13:03	MP46879-LC1	7185	167950	25275	14547
13:08	MP46879-LC2	7148	166530	24920	14556
13:13	MA56184-CCV2	6722	155010	23310	14147
13:18	MA56184-CCB3	6999	162180	23812	15547
13:23	JD88949-16	7165	161860	24880	15154
13:28	MP46879-SD1	7055	165470	24033	15277
13:33	MP46879-PS1	6964	160760	24586	14628

INTERNAL STANDARD SUMMARY

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP      Date Analyzed: 05/29/24      Methods: EPA 200.7, SW846 6010D  
 Analyst: KP      Run ID: MA56184  
 Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
13:38	ZZZZZZ	7186	165180	24494	15329
13:43	ZZZZZZ	7373	170520	25429	15588
13:48	ZZZZZZ	7344	168260	25196	15477
13:53	ZZZZZZ	7388	174660	25367	15435
13:58	ZZZZZZ	7259	171420	25019	15243
14:03	ZZZZZZ	7288	168160	25153	15437
14:08	ZZZZZZ	7281	167630	25533	15215
14:13	MA56184-CCV3	6787	154900	23619	14336
14:18	MA56184-CCB4	7052	164190	24112	15757
14:23	MP46925-MB1	7039	165010	24208	15794
14:28	MP46925-B1	6825	158670	23854	14723
14:33	MP46925-S1	6701	151620	24236	13410
14:38	MP46925-S2	6768	152700	24140	13598
14:44	JD89298-1	7060	158520	24736	14110
14:49	MP46925-SD1	7163	167440	24326	15107
14:54	MP46925-PS1	7015	161660	24855	13920
15:00	ZZZZZZ	6869	161260	24622	13555
15:05	ZZZZZZ	6830	156220	24331	13602
15:10	ZZZZZZ	7194	161660	25080	15002
15:15	MA56184-CCV4	6773	154370	23581	14359
15:20	MA56184-CCB5	7049	161290	23924	15804
15:25	ZZZZZZ	6801	153870	24138	13662
15:30	ZZZZZZ	7094	161840	24098	15310
15:35	ZZZZZZ	6839	154990	24372	13562
15:40	ZZZZZZ	7450	172700	25691	15360
15:45	ZZZZZZ	7067	163000	24774	14195
15:50	ZZZZZZ	7247	169970	24740	15190
15:55	ZZZZZZ	7247	165020	25057	14778
16:01	ZZZZZZ	7199	163070	25427	14417
16:06	ZZZZZZ	7493	169550	26194	15240
16:11	ZZZZZZ	7039	158200	24617	14184
16:16	MA56184-CCV5	6773	155460	23329	14415
16:22	MA56184-CCB6	7049	163370	23657	15830

8.3.2  
8

INTERNAL STANDARD SUMMARY

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP Date Analyzed: 05/29/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: KP Run ID: MA56184  
 Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
16:26	ZZZZZZ	7424	167290	24928	15224
16:32	ZZZZZZ	7447	168700	25384	15252
16:37	ZZZZZZ	7138	162360	25130	14177
16:42	ZZZZZZ	7049	164240	24732	13997
16:47	ZZZZZZ	7257	165560	25200	14885
16:52	ZZZZZZ	7399	166830	25604	15094
16:57	MP46926-MB1	7167	166090	24500	16064
17:02	MP46926-B1	6896	158240	23831	14907
17:07	MP46926-S1	7107	159640	25059	14396
17:13	MP46926-S2	7158	162070	25234	14512
17:19	MA56184-CCV6	6831	156770	23370	14544
17:24	MA56184-CCB7	7096	165130	23784	15945
17:29	JD89298-21	7290	164140	24981	14930
17:34	MP46926-SD1	7245	170260	24312	15537
17:39	MP46926-PS1	7199	168300	25277	14517
17:45	ZZZZZZ	7468	175610	25568	15213
17:50	ZZZZZZ	7124	162190	24864	14698
17:55	ZZZZZZ	7250	162240	24805	15137
18:00	ZZZZZZ	7190	164780	24738	15645
18:05	ZZZZZZ	7202	163760	24439	15622
18:10	ZZZZZZ	7197	165870	24400	15611
18:15	ZZZZZZ	7340	170130	25110	15688
18:20	MA56184-CCV7	6872	158160	23347	14662
18:25	MA56184-CCB8	7143	169750	23888	16007
18:30	ZZZZZZ	7283	170620	24651	15591
18:35	ZZZZZZ	7301	170120	25281	14513
18:40	ZZZZZZ	7368	166520	25004	15070
18:45	ZZZZZZ	7116	167040	24077	15639
18:50	ZZZZZZ	7122	166250	24209	15506
18:55	ZZZZZZ	7094	169260	24124	15473
19:00	ZZZZZZ	7173	167240	24300	15558
19:04	ZZZZZZ	7266	164520	24422	15348
19:09	MA56184-CCV8	6819	159780	23265	14600

8.3.2  
8



INTERNAL STANDARD SUMMARY

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP      Date Analyzed: 05/29/24      Methods: EPA 200.7, SW846 6010D  
 Analyst: KP      Run ID: MA56184  
 Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
19:15	MA56184-CCB9	7112	170420	23674	16030
19:20	MP46885-MB1	7091	163830	23869	15939
19:25	MP46885-B1	6830	161950	23444	14647
19:30	MP46885-B2	6843	162350	23457	14814
19:35	MP46885-S1	6702	156560	23143	14310
19:40	MP46885-S2	6733	155470	23319	14348
19:45	ZZZZZ	6754	157760	23379	14598
19:50	MP46885-SD1	No results reported for the elements associated with this internal standard.			
19:55	ZZZZZ	6660	152260	23156	13798
20:00	MA56184-CCV9	6767	156030	23005	14551
20:05	MA56184-CCB10	7067	166260	23728	16044
20:10	ZZZZZ	6618	149280	23246	13261
20:15	ZZZZZ	6606	149800	22966	13805
20:20	ZZZZZ	6532	147450	22846	13501
20:25	JD89053-5	6847	159560	23083	14925
20:30	ZZZZZ	6908	163640	23401	15165
20:35	ZZZZZ	7040	192520	23854	15170
20:40	ZZZZZ	7008	163300	23278	15374
20:45	ZZZZZ	7074	166630	23511	15750
20:50	ZZZZZ	6780	157740	23185	14683
20:55	ZZZZZ	6683	155940	23006	14559
21:00	MA56184-CCV10	6848	157930	23106	14802
21:05	MA56184-CCB11	7099	169640	23683	16215
21:10	ZZZZZ	6699	155570	23147	14571
21:15	MP46865-MB1	7123	168510	24049	16283
21:20	MP46865-B1	6885	162160	23464	15141
21:25	MP46865-S1	7119	163530	24747	15074
21:30	MP46865-S2	7162	166690	24767	15065
21:35	JD87880-11R	7445	168930	25005	15975
21:40	MP46865-SD1	7233	170880	24048	16020
21:45	MP46865-PS1	7071	164130	24770	15146
21:50	ZZZZZ	6686	156550	24229	14227
21:56	MA56184-CCV11	6837	158050	23393	14802

8.3.2  
8

INTERNAL STANDARD SUMMARY

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP Date Analyzed: 05/29/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: KP Run ID: MA56184  
 Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
22:01	MA56184-CCB12	7109	156460	23795	16234
22:06	ZZZZZ	7125	169850	24747	15708
22:11	ZZZZZ	7195	170180	25116	15643
22:16	ZZZZZ	6242	149380	23262	14458
22:22	ZZZZZ	6189	147190	23148	14388
22:27	ZZZZZ	7246	171200	24884	15957
22:33	ZZZZZ	7312	172660	24763	16066
22:38	ZZZZZ	6348	149340	23483	13837
22:43	ZZZZZ	7184	167010	24287	15828
22:48	ZZZZZ	7262	167700	24716	15983
22:53	ZZZZZ	7382	167080	24521	16071
22:58	MA56184-CCV12	6780	158610	23229	14715
23:03	MA56184-CCB13	7177	170570	23770	16370
23:08	ZZZZZ	7490	169710	25292	15737
23:13	ZZZZZ	7253	167630	24207	16017
23:18	ZZZZZ	7264	167480	24173	16008
23:23	ZZZZZ	6321	149110	23151	14563
23:29	ZZZZZ	6043	144380	22513	14350
23:35	ZZZZZ	7170	165430	24424	15186
23:40	ZZZZZ	7345	171800	24588	16113
23:44	MP46878-MB1	7230	171850	24038	16595
23:49	MP46878-B1	6984	162460	23576	15397
23:54	MP46878-S1	7033	162160	23538	15267
00:00	MA56184-CCV13	6852	159040	22950	14956
00:05	MA56184-CCB14	7167	168890	23519	16522
00:10	MP46878-S2	7040	160700	23499	15256
00:15	ZZZZZ	No results reported for the elements associated with this internal standard.			
00:15	JD88972-2	7238	169200	23883	16356
00:20	MP46878-SD1	7343	167960	23714	16678
00:25	MP46878-PS1	6942	162190	23585	15485
00:30	ZZZZZ	7299	169500	24349	16146
00:34	ZZZZZ	7290	170700	24376	16222
00:39	ZZZZZ	7333	171340	24443	16118

8.3.2  
8

INTERNAL STANDARD SUMMARY

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP Date Analyzed: 05/29/24 Methods: EPA 200.7, SW846 6010D  
 Analyst: KP Run ID: MA56184  
 Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
00:44	ZZZZZZ	7299	170550	24259	15998
00:49	ZZZZZZ	7257	170580	24186	16345
00:54	ZZZZZZ	7033	166810	24106	15603
00:59	MA56184-CCV14	6827	147710	22913	14947
01:04	MA56184-CCB15	7115	168330	23102	16468
01:09	ZZZZZZ	5935	136670	22067	13380
01:15	ZZZZZZ	6773	162710	23578	14677
01:21	ZZZZZZ	7272	176910	24407	15935
01:26	ZZZZZZ	7254	182880	24021	16239
01:30	ZZZZZZ	7199	168200	23736	16131
01:35	ZZZZZZ	7080	164090	24267	15354
01:41	ZZZZZZ	7293	169520	24118	16050
01:46	ZZZZZZ	6250	145900	22636	13522
01:51	ZZZZZZ	7284	171400	23952	16249
01:56	ZZZZZZ	7443	169460	24923	15584
02:01	MA56184-CCV15	6764	156350	22542	14869
02:07	MA56184-CCB16	7054	166010	22853	16337
02:12	ZZZZZZ	7451	170330	24991	15565
02:17	ZZZZZZ	7402	169470	24875	15604
02:22	ZZZZZZ	7661	173030	25669	15802
02:27	MP46890-MB1	7111	168020	22961	16431
02:32	MP46890-LB1	7059	166990	22844	16388
02:37	MP46890-B1	6822	157160	22641	15209
02:42	MP46890-LS1	6863	159370	22547	15260
02:47	MP46890-S1	6880	159570	22717	15271
02:52	MP46890-S2	6880	160540	22613	15275
02:57	JD87833-1R	7105	166100	22957	16070
03:02	MA56184-CCV16	6772	155090	22132	14880
03:07	MA56184-CCB17	7034	165690	22687	16321
03:12	MP46890-SD1	7017	163640	22512	16214
03:17	ZZZZZZ	6419	147220	21748	13873
03:22	ZZZZZZ	6464	149960	21782	13985
03:28	ZZZZZZ	6517	147820	21876	14098

8.3.2  
8

INTERNAL STANDARD SUMMARY

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP      Date Analyzed: 05/29/24      Methods: EPA 200.7, SW846 6010D  
 Analyst: KP      Run ID: MA56184  
 Parameters: Pb

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
03:33	JD87833-9R	7001	163820	22678	16073
03:38	JD87833-11R	7042	165730	22587	16081
03:43	ZZZZZZ	6500	149070	21943	14081
03:48	MA56184-CCV17	6746	155670	21988	14849
03:53	MA56184-CCB18	6987	166030	22561	16186
03:58	ZZZZZZ	7094	165820	22775	16491
04:03	ZZZZZZ	6903	165800	22627	16308
04:08	ZZZZZZ	7065	165390	22686	16440
04:13	ZZZZZZ	7186	169920	23171	16562
04:18	ZZZZZZ	7036	165830	22800	16310
04:23	ZZZZZZ	6991	163930	22632	16337

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	70-130 %
Istd#2	Yttrium (3600)	70-130 %
Istd#3	Yttrium (3710)	70-130 %
Istd#4	Indium	70-130 %

8.3.2  
8

BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP Date Analyzed: 05/29/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: result < RL Run ID: MA56184 Units: ug/l

Metal	Time:		10:26	10:48		12:17		13:18		
	Sample ID:	RL	ICB1	final	CCB1	final	CCB2	final	CCB3	final
Aluminum	200	27	anr							
Antimony	6.0	2.2	anr							
Arsenic	3.0	1.3	anr							
Barium	200	1	anr							
Beryllium	1.0	.2	anr							
Bismuth	20	2.1								
Boron	100	1								
Cadmium	3.0	.2	anr							
Calcium	5000	7.7	anr							
Cerium	100									
Chromium	10	.5	anr							
Cobalt	50	.4	anr							
Copper	10	6.8	anr							
Iron	100	15	anr							
Lead	3.0	1.6	1.30	<3.0	-0.100	<3.0	0.600	<3.0	-0.600	<3.0
Lithium	50	3.7								
Magnesium	5000	54	anr							
Manganese	15	.1	anr							
Molybdenum	20	.5								
Nickel	10	.3	anr							
Phosphorus	50	1.8								
Potassium	10000	77	anr							
Selenium	10	2	anr							
Silicon	200	1.3								
Silver	10	.9	anr							
Sodium	10000	23	anr							
Strontium	10	.4								
Sulfur	50	4.1								
Thallium	10	1.6	anr							
Tin	10	.9								
Titanium	10	.9								
Tungsten	50	2								
Vanadium	50	.8	anr							

8.3.3  
8

BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP Date Analyzed: 05/29/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: result < RL Run ID: MA56184 Units: ug/l

Time:			10:26		10:48		12:17		13:18	
Sample ID:	RL	IDL	ICB1	final	CCB1	final	CCB2	final	CCB3	final

Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Zinc	20	.2	anr							
Zirconium	10	.5								

(\*) Outside of QC limits  
 (anr) Analyte not requested

8.3.3  
 8

BLANK RESULTS SUMMARY  
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP Date Analyzed: 05/29/24 Methods: EPA 200.7, SW846 6010D  
QC Limits: result < RL Run ID: MA56184 Units: ug/l

Metal	Time:		14:18		15:20		16:22		17:24		
	Sample ID:	RL	IDL	CCB4	final	CCB5	final	CCB6	final	CCB7	final
Aluminum	200	27	anr								
Antimony	6.0	2.2	anr								
Arsenic	3.0	1.3	anr								
Barium	200	1	anr								
Beryllium	1.0	.2	anr								
Bismuth	20	2.1									
Boron	100	1									
Cadmium	3.0	.2	anr								
Calcium	5000	7.7	anr								
Cerium	100										
Chromium	10	.5	anr								
Cobalt	50	.4	anr								
Copper	10	6.8	anr								
Iron	100	15	anr								
Lead	3.0	1.6	-0.900	<3.0	-1.10	<3.0	-1.70	<3.0	-2.10	<3.0	
Lithium	50	3.7									
Magnesium	5000	54	anr								
Manganese	15	.1	anr								
Molybdenum	20	.5									
Nickel	10	.3	anr								
Phosphorus	50	1.8									
Potassium	10000	77	anr								
Selenium	10	2	anr								
Silicon	200	1.3									
Silver	10	.9	anr								
Sodium	10000	23	anr								
Strontium	10	.4									
Sulfur	50	4.1									
Thallium	10	1.6	anr								
Tin	10	.9									
Titanium	10	.9									
Tungsten	50	2									
Vanadium	50	.8	anr								

8.3.3  
8

BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP Date Analyzed: 05/29/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: result < RL Run ID: MA56184 Units: ug/l

Time:			14:18		15:20		16:22		17:24	
Sample ID:	RL	IDL	CCB4	final	CCB5	final	CCB6	final	CCB7	final
Metal			raw		raw		raw		raw	
Zinc	20	.2	anr							
Zirconium	10	.5								

(\* ) Outside of QC limits  
 (anr) Analyte not requested

8.3.3  
 8



BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP Date Analyzed: 05/29/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: result < RL Run ID: MA56184 Units: ug/l

Metal	RL	IDL	18:25	19:15		20:05		21:05		
			CCB8	raw	final	raw	final	raw	final	raw
Aluminum	200	27	anr							
Antimony	6.0	2.2	anr							
Arsenic	3.0	1.3	anr							
Barium	200	1	anr							
Beryllium	1.0	.2	anr							
Bismuth	20	2.1								
Boron	100	1								
Cadmium	3.0	.2	anr							
Calcium	5000	7.7	anr							
Cerium	100									
Chromium	10	.5	anr							
Cobalt	50	.4	anr							
Copper	10	6.8	anr							
Iron	100	15	anr							
Lead	3.0	1.6	-1.40	<3.0	-2.30	<3.0	-2.50	<3.0	-2.10	<3.0
Lithium	50	3.7								
Magnesium	5000	54	anr							
Manganese	15	.1	anr							
Molybdenum	20	.5								
Nickel	10	.3	anr							
Phosphorus	50	1.8								
Potassium	10000	77	anr							
Selenium	10	2	anr							
Silicon	200	1.3								
Silver	10	.9	anr							
Sodium	10000	23	anr							
Strontium	10	.4								
Sulfur	50	4.1								
Thallium	10	1.6	anr							
Tin	10	.9								
Titanium	10	.9								
Tungsten	50	2								
Vanadium	50	.8	anr							

8.3.3  
8

BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP Date Analyzed: 05/29/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: result < RL Run ID: MA56184 Units: ug/l

Metal	Time: Sample ID:	RL	IDL	18:25	19:15	20:05	21:05		
				CCB8	CCB9	CCB10	CCB11	raw	final
Zinc		20	.2	raw	final	raw	final	raw	final
Zirconium		10	.5						

(\* ) Outside of QC limits  
 (anr) Analyte not requested

8.3.3  
 8

BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP Date Analyzed: 05/29/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: result < RL Run ID: MA56184 Units: ug/l

Metal	RL	IDL	22:01		23:03		00:05		01:04	
			CCB12	final	CCB13	final	CCB14	final	CCB15	final
Aluminum	200	27	anr							
Antimony	6.0	2.2	anr							
Arsenic	3.0	1.3	anr							
Barium	200	1	anr							
Beryllium	1.0	.2	anr							
Bismuth	20	2.1								
Boron	100	1								
Cadmium	3.0	.2	anr							
Calcium	5000	7.7	anr							
Cerium	100									
Chromium	10	.5	anr							
Cobalt	50	.4	anr							
Copper	10	6.8	anr							
Iron	100	15	anr							
Lead	3.0	1.6	-1.50	<3.0	-2.00	<3.0	-2.10	<3.0	-2.10	<3.0
Lithium	50	3.7								
Magnesium	5000	54	anr							
Manganese	15	.1	anr							
Molybdenum	20	.5								
Nickel	10	.3	anr							
Phosphorus	50	1.8								
Potassium	10000	77	anr							
Selenium	10	2	anr							
Silicon	200	1.3								
Silver	10	.9	anr							
Sodium	10000	23	anr							
Strontium	10	.4								
Sulfur	50	4.1								
Thallium	10	1.6	anr							
Tin	10	.9								
Titanium	10	.9								
Tungsten	50	2								
Vanadium	50	.8	anr							

8.3.3  
8

BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP Date Analyzed: 05/29/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: result < RL Run ID: MA56184 Units: ug/l

Time:	22:01	23:03	00:05	01:04						
Sample ID:	CCB12	CCB13	CCB14	CCB15						
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Zinc	20	.2	anr							
Zirconium	10	.5								

(\* ) Outside of QC limits  
 (anr) Analyte not requested

8.3.3  
 8

BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP Date Analyzed: 05/29/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: result < RL Run ID: MA56184 Units: ug/l

Metal	RL	IDL	02:07 CCB16		03:07 CCB17		03:53 CCB18	
			raw	final	raw	final	raw	final
Aluminum	200	27	anr					
Antimony	6.0	2.2	anr					
Arsenic	3.0	1.3	anr					
Barium	200	1	anr					
Beryllium	1.0	.2	anr					
Bismuth	20	2.1						
Boron	100	1						
Cadmium	3.0	.2	anr					
Calcium	5000	7.7	anr					
Cerium	100							
Chromium	10	.5	anr					
Cobalt	50	.4	anr					
Copper	10	6.8	anr					
Iron	100	15	anr					
Lead	3.0	1.6	-2.60	<3.0	-1.90	<100	-1.80	<100
Lithium	50	3.7						
Magnesium	5000	54	anr					
Manganese	15	.1	anr					
Molybdenum	20	.5						
Nickel	10	.3	anr					
Phosphorus	50	1.8						
Potassium	10000	77	anr					
Selenium	10	2	anr					
Silicon	200	1.3						
Silver	10	.9	anr					
Sodium	10000	23	anr					
Strontium	10	.4						
Sulfur	50	4.1						
Thallium	10	1.6	anr					
Tin	10	.9						
Titanium	10	.9						
Tungsten	50	2						
Vanadium	50	.8	anr					

8.3.3  
8

BLANK RESULTS SUMMARY  
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP Date Analyzed: 05/29/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: result < RL Run ID: MA56184 Units: ug/l

Time:			02:07		03:07		03:53	
Sample ID:			CCB16		CCB17		CCB18	
Metal	RL	IDL	raw	final	raw	final	raw	final

Zinc 20 .2 anr  
 Zirconium 10 .5

(\*) Outside of QC limits  
 (anr) Analyte not requested

8.3.3  
 8

CALIBRATION CHECK STANDARDS SUMMARY  
Initial Continuing Calibration Check

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP      Date Analyzed: 05/29/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: to % Recovery      Run ID: MA56184      Units: ug/l

Metal	Sample ID: ICCV	True	Results	% Rec
Aluminum	anr			
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Bismuth				
Boron				
Cadmium	anr			
Calcium	anr			
Cerium				
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	2000	2040	102.0	
Lithium				
Magnesium	anr			
Manganese	anr			
Molybdenum				
Nickel	anr			
Phosphorus				
Potassium	anr			
Selenium	anr			
Silicon				
Silver	anr			
Sodium	anr			
Strontium				
Sulfur				
Thallium	anr			
Tin				
Titanium				
Tungsten				
Vanadium	anr			

8.3.4  
8

CALIBRATION CHECK STANDARDS SUMMARY  
Initial Continuing Calibration Check

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP      Date Analyzed: 05/29/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: to % Recovery      Run ID: MA56184      Units: ug/l

Time:	10:37		
Sample ID: ICCV	ICCV1		
Metal	True	Results	% Rec

Zinc            anr

Zirconium

(\* ) Outside of QC limits  
(anr) Analyte not requested



CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP      Date Analyzed: 05/29/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56184      Units: ug/l

Metal	Time:	10:20		CCV	12:12		CCV	13:13	
	Sample ID:	ICV	ICV1		CCV1	CCV2		Results	% Rec
	True		Results	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Bismuth									
Boron									
Cadmium	anr								
Calcium	anr								
Cerium									
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	2040	102.0	2000	2000	100.0	2000	1990	99.5
Lithium									
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Phosphorus									
Potassium	anr								
Selenium	anr								
Silicon									
Silver	anr								
Sodium	anr								
Strontium									
Sulfur									
Thallium	anr								
Tin									
Titanium									
Tungsten									
Vanadium	anr								

8.3.5  
8

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP      Date Analyzed: 05/29/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56184      Units: ug/l

	Time:	10:20		12:12		13:13	
Sample ID:	ICV	ICV1	CCV	CCV1	CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True

Zinc                      anr

Zirconium

(\* ) Outside of QC limits  
(anr) Analyte not requested

8.3.5  
8

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP      Date Analyzed: 05/29/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56184      Units: ug/l

Metal	Sample ID:	14:13		CCV	15:15		CCV	16:16	
		CCV3	Results		CCV4	Results		CCV5	Results
	True		% Rec	True		% Rec	True		% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Bismuth									
Boron									
Cadmium	anr								
Calcium	anr								
Cerium									
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	1980	99.0	2000	1970	98.5	2000	1970	98.5
Lithium									
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Phosphorus									
Potassium	anr								
Selenium	anr								
Silicon									
Silver	anr								
Sodium	anr								
Strontium									
Sulfur									
Thallium	anr								
Tin									
Titanium									
Tungsten									
Vanadium	anr								

8.3.5  
8

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP      Date Analyzed: 05/29/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56184      Units: ug/l

	Time:		14:13		15:15		16:16		
Sample ID:	CCV	CCV3	CCV	CCV4	CCV	CCV5			
Metal	True	Results	% Rec	True <td>Results</td> <td>% Rec</td> <th>True <td>Results</td> <td>% Rec</td> </th>	Results	% Rec	True <td>Results</td> <td>% Rec</td>	Results	% Rec

Zinc                      anr

Zirconium

(\* ) Outside of QC limits  
(anr) Analyte not requested

8.3.5  
8

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP      Date Analyzed: 05/29/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56184      Units: ug/l

Metal	Sample ID:	17:19		18:20		19:09			
		CCV	CCV6	CCV	CCV7	CCV	CCV8		
	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Bismuth									
Boron									
Cadmium	anr								
Calcium	anr								
Cerium									
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	1960	98.0	2000	1960	98.0	2000	1980	99.0
Lithium									
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Phosphorus									
Potassium	anr								
Selenium	anr								
Silicon									
Silver	anr								
Sodium	anr								
Strontium									
Sulfur									
Thallium	anr								
Tin									
Titanium									
Tungsten									
Vanadium	anr								

8.3.5  
8

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP      Date Analyzed: 05/29/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56184      Units: ug/l

	Time:		17:19		18:20		19:09		
Sample ID:	CCV	CCV6	CCV	CCV7	CCV	CCV8			
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec

Zinc                      anr

Zirconium

(\* ) Outside of QC limits  
(anr) Analyte not requested

8.3.5  
8

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP      Date Analyzed: 05/29/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56184      Units: ug/l

Metal	Sample ID:	20:00		CCV	21:00		CCV	21:56	
		CCV9	Results		CCV10	Results		CCV11	Results
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Bismuth									
Boron									
Cadmium	anr								
Calcium	anr								
Cerium									
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	1970	98.5	2000	1950	97.5	2000	1970	98.5
Lithium									
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Phosphorus									
Potassium	anr								
Selenium	anr								
Silicon									
Silver	anr								
Sodium	anr								
Strontium									
Sulfur									
Thallium	anr								
Tin									
Titanium									
Tungsten									
Vanadium	anr								

8.3.5  
8

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP      Date Analyzed: 05/29/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56184      Units: ug/l

	Time:				20:00			21:00		21:56	
Sample ID:	CCV	CCV9	CCV	CCV10	CCV	CCV11	CCV	CCV11	CCV	CCV11	CCV
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec	True	Results

Zinc                      anr

Zirconium

(\* ) Outside of QC limits  
(anr) Analyte not requested

8.3.5  
8



CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP      Date Analyzed: 05/29/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56184      Units: ug/l

Metal	Sample ID:	Time: 22:58		Time: 00:00		Time: 00:59			
		CCV	CCV12	CCV	CCV13	CCV	CCV14		
	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Bismuth									
Boron									
Cadmium	anr								
Calcium	anr								
Cerium									
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	1990	99.5	2000	1960	98.0	2000	1950	97.5
Lithium									
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Phosphorus									
Potassium	anr								
Selenium	anr								
Silicon									
Silver	anr								
Sodium	anr								
Strontium									
Sulfur									
Thallium	anr								
Tin									
Titanium									
Tungsten									
Vanadium	anr								

8.3.5  
8

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP      Date Analyzed: 05/29/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56184      Units: ug/l

	Time:	22:58		00:00		00:59	
Sample ID:	CCV	CCV12	CCV	CCV13	CCV	CCV14	
Metal	True	Results % Rec	True	Results % Rec	True	Results % Rec	

Zinc                    anr

Zirconium

(\* ) Outside of QC limits  
(anr) Analyte not requested

8.3.5  
8

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP      Date Analyzed: 05/29/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56184      Units: ug/l

Metal	Sample ID:	Time: 02:01		Time: 03:02		Time: 03:48			
		CCV	CCV15	CCV	CCV16	CCV	CCV17		
	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Bismuth									
Boron									
Cadmium	anr								
Calcium	anr								
Cerium									
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	2000	1950	97.5	2000	1950	97.5	2000	1950	97.5
Lithium									
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Phosphorus									
Potassium	anr								
Selenium	anr								
Silicon									
Silver	anr								
Sodium	anr								
Strontium									
Sulfur									
Thallium	anr								
Tin									
Titanium									
Tungsten									
Vanadium	anr								

8.3.5  
8

CALIBRATION CHECK STANDARDS SUMMARY  
Initial and Continuing Calibration Checks

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP      Date Analyzed: 05/29/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 95 to 105 % Recovery      Run ID: MA56184      Units: ug/l

	Time:	02:01		03:02		03:48	
Sample ID:	CCV	CCV15	CCV	CCV16	CCV	CCV17	
Metal	True	Results	% Rec	True	Results	% Rec	True
		Results	% Rec	Results	% Rec	Results	% Rec

Zinc                      anr

Zirconium

(\* ) Outside of QC limits  
(anr) Analyte not requested

8.3.5  
8

HIGH STANDARD CHECK SUMMARY

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP Date Analyzed: 05/29/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: 90 to 110 % Recovery Run ID: MA56184 Units: ug/l

	Time:		11:14		11:20	
Sample ID:	HSTD	HSTD1	HSTD	HSTD2	HSTD	HSTD2
Metal	True	Results	% Rec	True	Results	% Rec
Aluminum						
Antimony	anr					
Arsenic	anr					
Barium	anr					
Beryllium	anr					
Bismuth						
Boron						
Cadmium	anr					
Calcium						
Cerium						
Chromium	anr					
Cobalt	anr					
Copper	anr					
Iron						
Lead	8000	8420	105.3			
Lithium						
Magnesium						
Manganese	anr					
Molybdenum						
Nickel	anr					
Phosphorus						
Potassium						
Selenium	anr					
Silicon						
Silver	anr					
Sodium						
Strontium						
Sulfur						
Thallium	anr					
Tin						
Titanium						
Tungsten						
Vanadium	anr					

8.3.6  
8

HIGH STANDARD CHECK SUMMARY

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP Date Analyzed: 05/29/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: 90 to 110 % Recovery Run ID: MA56184 Units: ug/l

	Time:	11:14		11:20	
Sample ID:	HSTD	HSTD1	HSTD	HSTD2	
Metal	True	Results	% Rec	True	Results

Zinc anr

Zirconium

(\* ) Outside of QC limits  
 (anr) Analyte not requested

8.3.6  
 8

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP Date Analyzed: 05/29/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: CRI 80-120% CRIA 80-120% Run ID: MA56184 Units: ug/l

Time:				10:53		10:58	
Sample ID:	CRI	CRIA	CRID	CRID1	% Rec	CRID1	% Rec
Metal	True	True	True	Results		Results	% Rec
Aluminum	200	500	100	anr			
Antimony	6.0	20	3.0	anr			
Arsenic	8.0	20	3.0	anr			
Barium	200		4.0	anr			
Beryllium	2.0		1.0	anr			
Bismuth	20						
Boron	100		10				
Cadmium	3.0		1.0	anr			
Calcium	5000	2000	1000	anr			
Cerium							
Chromium	10		2.0	anr			
Cobalt	50		3.0	anr			
Copper	10		2.0	anr			
Iron	100	500		anr			
Lead	3.0	20	2.5	3.20	106.7		
Lithium	50						
Magnesium	5000	2000	100	anr			
Manganese	15		3.0	anr			
Molybdenum	20						
Nickel	10		4.0	anr			
Phosphorus	50						
Potassium	5000		2000	anr			
Selenium	10	20	5.0	anr			
Silicon	200						
Silver	5.0		2.0	anr			
Sodium	5000		1000	anr			
Strontium	10						
Sulfur	50						
Thallium	10		2.0	anr			
Tin	10						
Titanium	10						
Tungsten	50						
Vanadium	50		2.0	anr			

8.3.7  
8

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP Date Analyzed: 05/29/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: CRI 80-120% CRIA 80-120% Run ID: MA56184 Units: ug/l

Time:				10:53		10:58	
Sample ID:	CRI	CRIA	CRID	CRI1	% Rec	CRID1	% Rec

Metal	True	True	True	Results	% Rec	Results	% Rec
Zinc	20		10	anr			
Zirconium	10						

(\* ) Outside of QC limits  
 (anr) Analyte not requested

8.3.7  
 8



INTERFERING ELEMENT CHECK STANDARDS SUMMARY  
Part 1 - ICSA and ICSAB Standards

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP      Date Analyzed: 05/29/24      Methods: EPA 200.7, SW846 6010D  
QC Limits: 80 to 120 % Recovery      Run ID: MA56184      Units: ug/l

Time:			11:03			11:09
Sample ID:	ICSA	ICSAB	ICSAL	% Rec	ICSAB1	% Rec
Metal	True	True	Results		Results	
Aluminum	500000	500000	504000	100.8	502000	100.4
Antimony		1000	2.70		968	96.8
Arsenic		1000	-1.30		962	96.2
Barium		500	-1.90		506	101.2
Beryllium		500	-0.800		502	100.4
Bismuth		500	6.50		496	99.2
Boron		500	2.40		446	89.2
Cadmium		1000	0.800		1050	105.0
Calcium	400000	400000	388000	97.0	383000	95.8
Cerium			-19.1		-26.1	
Chromium		500	-2.80		479	95.8
Cobalt		500	-0.100		465	93.0
Copper		500	-2.00		532	106.4
Iron	200000	200000	192000	96.0	192000	96.0
Lead		1000	0.00		934	93.4
Lithium		500	-5.90		542	108.4
Magnesium	500000	500000	499000	99.8	495000	99.0
Manganese		500	-3.80		519	103.8
Molybdenum		500	1.50		467	93.4
Nickel		1000	0.300		937	93.7
Phosphorus		500	-3.20		463	92.6
Potassium			159		179	
Selenium		1000	0.00		958	95.8
Silicon		500	16.7		488	97.6
Silver		1000	-0.500		1090	109.0
Sodium			74.6		130	
Strontium		500	-1.20		523	104.6
Sulfur		500	-4.00		491	98.2
Thallium		1000	-1.80		957	95.7
Tin		500	4.20		473	94.6
Titanium		500	0.600		485	97.0
Tungsten		500	-1.50		479	95.8
Vanadium		500	-0.800		499	99.8

8.3.8  
8

INTERFERING ELEMENT CHECK STANDARDS SUMMARY  
 Part 1 - ICSA and ICSAB Standards

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

File ID: SD052924M1.ICP Date Analyzed: 05/29/24 Methods: EPA 200.7, SW846 6010D  
 QC Limits: 80 to 120 % Recovery Run ID: MA56184 Units: ug/l

Time:		11:03		11:09		
Sample ID:	ICSA	ICSAB	ICSAL	ICSAB1	ICSAB1	
Metal	True	True	Results	% Rec	Results	% Rec

Zinc		1000	-5.50		939	93.9
Zirconium		500	-0.700		459	91.8

(\* ) Outside of QC limits  
 (anr) Analyte not requested

8.3.8  
 8

BLANK RESULTS SUMMARY  
Part 2 - Method Blanks

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46853  
Matrix Type: LEACHATE

Methods: SW846 7470A  
Units: mg/l

Prep Date: 05/23/24

Metal	RL	IDL	MDL	MB raw	final
-------	----	-----	-----	-----------	-------

Mercury 0.00020 .00004 .000095 0.000027 <0.00020

Associated samples MP46853: JD87833-1R, JD87833-9R

Results < IDL are shown as zero for calculation purposes  
(\* ) Outside of QC limits  
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46853  
 Matrix Type: LEACHATE

Methods: SW846 7470A  
 Units: mg/l

Prep Date: 05/23/24

Metal	JD87671-8B Original MS	SpikeLot HGPW3	% Rec	QC Limits
-------	---------------------------	-------------------	-------	--------------

Mercury 0.0 0.0020 0.0020 100.0 75-125

Associated samples MP46853: JD87833-1R, JD87833-9R

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (N) Matrix Spike Rec. outside of QC limits  
 (anr) Analyte not requested

8.4.2  
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46853  
 Matrix Type: LEACHATE

Methods: SW846 7470A  
 Units: mg/l

Prep Date: 05/23/24

Metal	JD87671-8B Original MSD	Spike lot HGPW3	% Rec	MSD RPD	QC Limit	
Mercury	0.0	0.0019	0.0020	95.0	5.1	20

Associated samples MP46853: JD87833-1R, JD87833-9R

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (N) Matrix Spike Rec. outside of QC limits  
 (anr) Analyte not requested

8.4.2  
8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46853  
 Matrix Type: LEACHATE

Methods: SW846 7470A  
 Units: mg/l

Prep Date: 05/23/24 05/23/24

Metal	BSP Result	Spikelot HGPW3	% Rec	QC Limits	BSP Result	Spikelot HGPW3	% Rec	QC Limits
Mercury	0.0018	0.0020	90.0	80-120	0.0019	0.0020	95.0	80-120

Associated samples MP46853: JD87833-1R, JD87833-9R

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (anr) Analyte not requested

BLANK RESULTS SUMMARY  
Part 2 - Method Blanks

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46890  
Matrix Type: LEACHATE

Methods: SW846 6010D  
Units: ug/l

Prep Date: 05/24/24

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	27	46		
Antimony	100	2.2	4.7		
Arsenic	100	1.3	2.8		
Barium	200	1	13		
Beryllium	2.0	.2	.5		
Bismuth	20	2.1	4		
Boron	100	1	63		
Cadmium	4.0	.2	1		
Calcium	5000	7.7	99		
Chromium	10	.5	2		
Cobalt	50	.4	2.6		
Copper	10	6.8	5.9		
Iron	100	15	32		
Lead	100	1.6	1.8	-2.6	<100
Lithium	50	3.7	7.3		
Magnesium	5000	54	140		
Manganese	15	.1	1.4		
Molybdenum	20	.5	3.6		
Nickel	10	.3	1.7		
Phosphorus	50	1.8	18		
Potassium	10000	77	200		
Selenium	100	2	4.9		
Silicon	200	1.3	100		
Silver	10	.9	1.9		
Sodium	10000	23	570		
Strontium	10	.4	1		
Sulfur	50	4.1	45		
Thallium	100	1.6	1.8		
Tin	10	.9	3.7		
Titanium	10	.9	2.5		
Tungsten	50	2	40		
Vanadium	50	.8	1.8		
Zinc	20	.2	6.9		

8.5.1  
8

BLANK RESULTS SUMMARY  
Part 2 - Method Blanks

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46890  
Matrix Type: LEACHATE

Methods: SW846 6010D  
Units: ug/l

Prep Date: 05/24/24

Metal	RL	IDL	MDL	MB raw	final
-------	----	-----	-----	-----------	-------

Zirconium 10 .5 4.1

Associated samples MP46890: JD87833-1R, JD87833-9R, JD87833-11R

Results < IDL are shown as zero for calculation purposes  
(\* ) Outside of QC limits  
(anr) Analyte not requested

8.5.1

8



MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46890  
 Matrix Type: LEACHATE

Methods: SW846 6010D  
 Units: ug/l

Prep Date: 05/24/24

Metal	JD87833-1R Original MS	SpikeLot MPSPK2	% Rec	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Bismuth				
Boron				
Cadmium	anr			
Calcium	anr			
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	6.5	1510	2000	75.2 75-125
Lithium				
Magnesium	anr			
Manganese	anr			
Molybdenum				
Nickel	anr			
Phosphorus				
Potassium	anr			
Selenium	anr			
Silicon				
Silver	anr			
Sodium	anr			
Strontium				
Sulfur				
Thallium	anr			
Tin				
Titanium				
Tungsten				
Vanadium	anr			
Zinc	anr			

8.5.2  
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46890  
Matrix Type: LEACHATE

Methods: SW846 6010D  
Units: ug/l

Prep Date: 05/24/24

Metal	JD87833-1R Original MS	Spike lot MPSPK2	% Rec	QC Limits
-------	---------------------------	------------------------	-------	--------------

Zirconium

Associated samples MP46890: JD87833-1R, JD87833-9R, JD87833-11R

Results < IDL are shown as zero for calculation purposes  
(\* ) Outside of QC limits  
(N) Matrix Spike Rec. outside of QC limits  
(anr) Analyte not requested

8.5.2

8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46890  
 Matrix Type: LEACHATE

Methods: SW846 6010D  
 Units: ug/l

Prep Date: 05/24/24

Metal	JD87833-1R Original MSD	SpikeLot MPSPK2 % Rec		MSD RPD	QC Limit
Aluminum	anr				
Antimony	anr				
Arsenic	anr				
Barium	anr				
Beryllium	anr				
Bismuth					
Boron					
Cadmium	anr				
Calcium	anr				
Chromium	anr				
Cobalt	anr				
Copper	anr				
Iron	anr				
Lead	6.5	1540	2000 76.7	2.0	20
Lithium					
Magnesium	anr				
Manganese	anr				
Molybdenum					
Nickel	anr				
Phosphorus					
Potassium	anr				
Selenium	anr				
Silicon					
Silver	anr				
Sodium	anr				
Strontium					
Sulfur					
Thallium	anr				
Tin					
Titanium					
Tungsten					
Vanadium	anr				
Zinc	anr				

8.5.2  
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46890  
 Matrix Type: LEACHATE

Methods: SW846 6010D  
 Units: ug/l

Prep Date: 05/24/24

Metal	JD87833-1R Original MSD	Spike/lot MPSPK2 % Rec	MSD RPD	QC Limit
-------	----------------------------	---------------------------	------------	-------------

Zirconium

Associated samples MP46890: JD87833-1R, JD87833-9R, JD87833-11R

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (N) Matrix Spike Rec. outside of QC limits  
 (anr) Analyte not requested

8.5.2  
8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46890  
 Matrix Type: LEACHATE

Methods: SW846 6010D  
 Units: ug/l

Prep Date: 05/24/24 05/24/24

Metal	BSP Result	Spikelot MPSPK2	% Rec	QC Limits	BSP Result	Spikelot MPSPK2	% Rec	QC Limits
Aluminum	anr							
Antimony	anr							
Arsenic	anr							
Barium	anr							
Beryllium	anr							
Bismuth								
Boron								
Cadmium	anr							
Calcium	anr							
Chromium	anr							
Cobalt	anr							
Copper	anr							
Iron	anr							
Lead	1760	2000	88.0	80-120	1750	2000	87.5	80-120
Lithium								
Magnesium	anr							
Manganese	anr							
Molybdenum								
Nickel	anr							
Phosphorus								
Potassium	anr							
Selenium	anr							
Silicon								
Silver	anr							
Sodium	anr							
Strontium								
Sulfur								
Thallium	anr							
Tin								
Titanium								
Tungsten								
Vanadium	anr							
Zinc	anr							

8.5.3  
8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46890  
 Matrix Type: LEACHATE

Methods: SW846 6010D  
 Units: ug/l

Prep Date: 05/24/24 05/24/24

Metal	BSP Result	Spikelot MPSPK2	% Rec	QC Limits	BSP Result	Spikelot MPSPK2	% Rec	QC Limits
-------	---------------	--------------------	-------	--------------	---------------	--------------------	-------	--------------

Zirconium

Associated samples MP46890: JD878333-1R, JD878333-9R, JD878333-11R

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (anr) Analyte not requested

8.5.3  
 8

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46890  
 Matrix Type: LEACHATE

Methods: SW846 6010D  
 Units: ug/l

Prep Date: 05/24/24

Metal	JD87833-1R Original	SDL 1:5	%DIF	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Bismuth				
Boron				
Cadmium	anr			
Calcium	anr			
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	6.50	0.00	100.0(a)	0-10
Lithium				
Magnesium	anr			
Manganese	anr			
Molybdenum				
Nickel	anr			
Phosphorus				
Potassium	anr			
Selenium	anr			
Silicon				
Silver	anr			
Sodium	anr			
Strontium				
Sulfur				
Thallium	anr			
Tin				
Titanium				
Tungsten				
Vanadium	anr			
Zinc	anr			

8.5.4  
8

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46890  
Matrix Type: LEACHATE

Methods: SW846 6010D  
Units: ug/l

Prep Date: 05/24/24

Metal	JD87833-1R	QC
	Original SDL 1:5	%DIF Limits

Zirconium

Associated samples MP46890: JD87833-1R, JD87833-9R, JD87833-11R

Results < IDL are shown as zero for calculation purposes

(\*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

8.5.4

8



POST DIGESTATE SPIKE SUMMARY

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46890  
 Matrix Type: LEACHATE

Methods: SW846 6010D  
 Units: ug/l

Prep Date:

05/24/24

Metal	Sample ml	Final ml	JD87833-1R Raw	PS Corr.**	ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic										
Barium										
Beryllium										
Bismuth										
Boron										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron										
Lead										
Lithium										
Magnesium										
Manganese										
Molybdenum										
Nickel										
Phosphorus										
Potassium										
Selenium										
Silicon										
Silver										
Sodium										
Strontium										
Sulfur										
Thallium										
Tin										
Titanium										
Tungsten										
Vanadium										
Zinc										

8.5.5  
8

POST DIGESTATE SPIKE SUMMARY

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46890  
 Matrix Type: LEACHATE

Methods: SW846 6010D  
 Units: ug/l

Prep Date:

05/24/24

Metal	Sample ml	Final ml	JD87833-1R Raw	PS Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
-------	-----------	----------	----------------	------------	---------	----------	-------------	------------	-------	-----------

Zirconium

Associated samples MP46890: JD87833-1R, JD87833-9R, JD87833-11R

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (\*\*) Corr. sample result = Raw \* (sample volume / final volume)  
 (anr) Analyte not requested

8.5.5  
8

BLANK RESULTS SUMMARY  
Part 2 - Method Blanks

Login Number: JD87833R  
Account: MTXFPNJ - Matrix New World Engineering, Inc.  
Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46896  
Matrix Type: LEACHATE

Methods: SW846 7470A  
Units: ug/l

Prep Date: 05/28/24

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.04	.095	0.015	<0.20

Associated samples MP46896: JD87833-14R

Results < IDL are shown as zero for calculation purposes  
(\* ) Outside of QC limits  
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46896  
 Matrix Type: LEACHATE

Methods: SW846 7470A  
 Units: ug/l

Prep Date: 05/28/24

Metal	JD87833-14R Original MS	Spikelot HGPW3	% Rec	QC Limits
Mercury	0.0	2.3	2	115.0 75-125

Associated samples MP46896: JD87833-14R

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (N) Matrix Spike Rec. outside of QC limits  
 (anr) Analyte not requested

8.6.2  
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46896  
 Matrix Type: LEACHATE

Methods: SW846 7470A  
 Units: ug/l

Prep Date: 05/28/24

Metal	JD87833-14R Original MSD	Spikelot HGPW3	% Rec	MSD RPD	QC Limit
Mercury	0.0	2.2	2	110.0	4.4 20

Associated samples MP46896: JD87833-14R

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (N) Matrix Spike Rec. outside of QC limits  
 (anr) Analyte not requested

8.6.2  
8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD87833R  
 Account: MTXFPNJ - Matrix New World Engineering, Inc.  
 Project: Ridgewood Berm Sampling, Ridgewood, NJ

QC Batch ID: MP46896  
 Matrix Type: LEACHATE

Methods: SW846 7470A  
 Units: ug/l

Prep Date: 05/28/24 05/28/24

Metal	BSP Result	Spikelot HGPW3	% Rec	QC Limits	BSP Result	Spikelot HGPW3	% Rec	QC Limits
Mercury	2.1	2	105.0	80-120	2.1	2	105.0	80-120

Associated samples MP46896: JD87833-14R

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (anr) Analyte not requested

8.6.3  
8

General Chemistry

---

QC Data Summaries

---

Includes the following where applicable:

- Percent Solids Raw Data Summary

# Percent Solids Raw Data Summary

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

---

**Sample:** JD87833-1      **Analyzed:** 06-MAY-24 by SC      **Method:** SM2540 G 18TH ED MOD  
**ClientID:** SB-1

Wet Weight (Total)	37.19	g
Tare Weight	30.83	g
Dry Weight (Total)	35.37	g
Solids, Percent	71.4	%

---

**Sample:** JD87833-4      **Analyzed:** 06-MAY-24 by SC      **Method:** SM2540 G 18TH ED MOD  
**ClientID:** SB-4

Wet Weight (Total)	40.7	g
Tare Weight	31.64	g
Dry Weight (Total)	39.58	g
Solids, Percent	87.6	%

---

**Sample:** JD87833-5      **Analyzed:** 06-MAY-24 by SC      **Method:** SM2540 G 18TH ED MOD  
**ClientID:** SB-5

Wet Weight (Total)	31.41	g
Tare Weight	23.14	g
Dry Weight (Total)	30.56	g
Solids, Percent	89.7	%

---

**Sample:** JD87833-6      **Analyzed:** 06-MAY-24 by SC      **Method:** SM2540 G 18TH ED MOD  
**ClientID:** SB-6

Wet Weight (Total)	35.93	g
Tare Weight	26.81	g
Dry Weight (Total)	34.91	g
Solids, Percent	88.8	%

---

**Sample:** JD87833-7      **Analyzed:** 06-MAY-24 by SC      **Method:** SM2540 G 18TH ED MOD  
**ClientID:** SB-7

Wet Weight (Total)	32.57	g
Tare Weight	25.27	g
Dry Weight (Total)	31.93	g
Solids, Percent	91.2	%

---

**Sample:** JD87833-9      **Analyzed:** 06-MAY-24 by SC      **Method:** SM2540 G 18TH ED MOD  
**ClientID:** SB-9

Wet Weight (Total)	29.15	g
Tare Weight	21.16	g
Dry Weight (Total)	27.67	g
Solids, Percent	81.5	%

---

9.1  
9



# Percent Solids Raw Data Summary

**Job Number:** JD87833R  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

---

**Sample:** JD87833-11      **Analyzed:** 06-MAY-24 by SC      **Method:** SM2540 G 18TH ED MOD  
**ClientID:** SB-11

Wet Weight (Total)	37.64	g
Tare Weight	28.26	g
Dry Weight (Total)	36.49	g
Solids, Percent	87.7	%

---

**Sample:** JD87833-14      **Analyzed:** 06-MAY-24 by SC      **Method:** SM2540 G 18TH ED MOD  
**ClientID:** SB-14

Wet Weight (Total)	36	g
Tare Weight	29.22	g
Dry Weight (Total)	35.37	g
Solids, Percent	90.7	%

9.1  
9

The results set forth herein are provided by SGS North America Inc.

*e-Hardcopy 2.0*  
*Automated Report*

## Technical Report for

Matrix New World Engineering, Inc.

Ridgewood Berm Sampling, Ridgewood, NJ

23-1429

SGS Job Number: JD87833T

Sampling Date: 05/03/24

Report to:

Matrix New World Engineering, Inc.  
26 Columbia Turnpike  
Florham Park, NJ 07932  
mclelland@mnwe.com

ATTN: Melissa Clelland

Total number of pages in report: 52



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable unless noted in the narrative, comments or footnotes.

A blue ink signature of David Chastain.

David Chastain  
General Manager

Client Service contact: Tammy McCloskey 732-329-0200

Certifications: NJ(12129),NY(10983),CA,CO,CT,FL,HI,IL,IN,KY,LA (120428),MA,MD,ME,MN,NC,NH,NV,AK (UST-103),AZ (AZ0786),PA(68-00408),RI,SC,TX (T104704234),UT,VA,WA,WV

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Test results relate only to samples analyzed.

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## Sample Summary

Matrix New World Engineering, Inc.

**Job No:** JD87833T

Ridgewood Berm Sampling, Ridgewood, NJ  
Project No: 23-1429

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
JD87833-15T	05/03/24	00:00	KM	05/03/24	SO Soil	DUPE 1

---

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

## CASE NARRATIVE / CONFORMANCE SUMMARY

**Client:** Matrix New World Engineering, Inc.

**Job No:** JD87833T

**Site:** Ridgewood Berm Sampling, Ridgewood, NJ

**Report Date** 6/4/2024 4:18:02 AM

On 05/03/2024, 1 sample(s), 0 Trip Blank(s), 0 Equip. Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. (SGS) at a temperature of 2.6 °C. The samples were intact and properly preserved, unless noted below. An SGS Job Number of JD87833T was assigned to the project. The lab sample ID, client sample ID, and date of sample collection are detailed in the report's Results Summary.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

### MS Semi-volatiles By Method SW846 8270E BY SIM

<b>Matrix:</b> LEACHATE	<b>Batch ID:</b> OP55107A
-------------------------	---------------------------

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- The blank spike (BS) recovery(s) of Benzo(a)anthracene are outside control limits.
- OP55107A-BSD12: Blank spike outside control limits due to analytical error. Since Blank spike duplicate recovery within control limits, data are qualified and reported.
- OP55107A-BSD12 for Benzo(a)anthracene: Analytical precision exceeds in-house control limits.
- OP55107A-BS12 for Terphenyl-d14: Outside of in house control limits.
- OP55107A-BS12 for Benzo(a)anthracene: Outside of in house control limits.

### General Chemistry By Method SW846 1312

<b>Matrix:</b> ALL	<b>Batch ID:</b> GN55465
--------------------	--------------------------

- The data for SW846 1312 meets quality control requirements.

SGS certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting SGS's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. This report is authorized by SGS indicated via signature on the report cover.

## Summary of Hits

**Job Number:** JD87833T  
**Account:** Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Collected:** 05/03/24



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
---------------	------------------	-----------------	----	-----	-------	--------

**JD87833-15T DUPE 1**

pH, SPLP Leachate	8.15				su	SW846 1312
Volume, SPLP Leachate	2.002				l	SW846 1312
Weight, SPLP Leachate	0.1001				kg	SW846 1312
Dry Weight, SPLP Leachate	0.09099				kg	SW846 1312
Benzo(a)anthracene	0.153	0.10	0.046		ug/l	SW846 8270E BY SIM

Sample Results

---

Report of Analysis

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SGS North America Inc.

## Report of Analysis

Page 1 of 1

<b>Client Sample ID:</b> DUPE 1		
<b>Lab Sample ID:</b> JD87833-15T		<b>Date Sampled:</b> 05/03/24
<b>Matrix:</b> SO - Soil		<b>Date Received:</b> 05/03/24
<b>Method:</b> SW846 8270E BY SIM SW846 3510C		<b>Percent Solids:</b> 90.9
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3H1186.D	1	06/01/24 09:01	RS	05/31/24 10:30	OP55107A	E3H82
Run #2							

Run #	Initial Volume	Final Volume
Run #1	500 ml	1.0 ml
Run #2		

### SPLP Leachate method SW846 1312

CAS No.	Compound	Result	MCL	RL	MDL	Units	Q
56-55-3	Benzo(a)anthracene	0.153		0.10	0.046	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	95%		18-119%
321-60-8	2-Fluorobiphenyl	73%		18-104%
1718-51-0	Terphenyl-d14	75%		13-109%

ND = Not detected      MDL = Method Detection Limit      J = Indicates an estimated value  
 MCL = Maximum Contamination Level (not available)      B = Indicates analyte found in associated method blank  
 E = Indicates value exceeds calibration range      N = Indicates presumptive evidence of a compound

4.1  
4



## Report of Analysis

<b>Client Sample ID:</b> DUPE 1	<b>Date Sampled:</b> 05/03/24
<b>Lab Sample ID:</b> JD87833-15T	<b>Date Received:</b> 05/03/24
<b>Matrix:</b> SO - Soil	<b>Percent Solids:</b> 90.9
<b>Project:</b> Ridgewood Berm Sampling, Ridgewood, NJ	

### General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
<b>SPLP Ratio for Extractables and Metals</b>							
pH, SPLP Leachate	8.15		su	1	05/30/24 13:42	IA	SW846 1312
Volume, SPLP Leachate	2.002		l	1	05/30/24 13:42	IA	SW846 1312
Weight, SPLP Leachate	0.1001		kg	1	05/30/24 13:42	IA	SW846 1312
Dry Weight, SPLP Leachate	0.09099		kg	1	05/30/24 13:42	IA	SW846 1312

RL = Reporting Limit

4.1  
4

Misc. Forms

Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody





## SGS Sample Receipt Summary

**Job Number:** JD87833

**Client:** MATRIX NEW WORLD ENGINEERING, IN

**Project:** RIDGEWOOD BERM SAMPLING, RIDGE

**Date / Time Received:** 5/3/2024 5:08:00 PM

**Delivery Method:** SGS COURIER

**Airbill #s:** \_\_\_\_\_

**Cooler Temps (Raw Measured) °C:** Cooler 1: (2.1); Cooler 2: (2.2);

**Cooler Temps (Corrected) °C:** Cooler 1: (2.5); Cooler 2: (2.6);

**Cooler Security**

Y or N

Y or N

- |                           |                                     |                          |                       |                                     |                          |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. COC Present:       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Custody Seals Intact:  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. Smpl Dates/Time OK | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

**Cooler Temperature**

Y or N

- |                              |                                     |                          |
|------------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved:   | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Cooler temp verification: | IR-50                               |                          |
| 3. Cooler media:             | Ice (Bag)                           |                          |
| 4. No. Coolers:              | 2                                   |                          |

**Quality Control Preservation**

Y or N

N/A

- |                                 |                                     |                                     |                                     |
|---------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Trip Blank present / cooler: | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 2. Trip Blank listed on COC:    | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 3. Samples preserved properly:  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |                                     |
| 4. VOCs headspace free:         | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

**Sample Integrity - Documentation**

Y or N

- |                                        |                                     |                          |
|----------------------------------------|-------------------------------------|--------------------------|
| 1. Sample labels present on bottles:   | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Container labeling complete:        | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

**Sample Integrity - Condition**

Y or N

- |                                  |                                     |                          |
|----------------------------------|-------------------------------------|--------------------------|
| 1. Sample recvd within HT:       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Condition of sample:          | Intact                              |                          |

**Sample Integrity - Instructions**

Y or N

N/A

- |                                           |                                     |                                     |                                     |
|-------------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear:           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |                                     |
| 2. Bottles received for unspecified tests | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |                                     |
| 3. Sufficient volume recvd for analysis:  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |                                     |
| 4. Compositing instructions clear:        | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear:          | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

Test Strip Lot #s:	pH 1-12: 231619	pH 12+: 203117A	Other: (Specify) _____
--------------------	-----------------	-----------------	------------------------

Comments

SM089-03  
Rev. Date 12/7/17

**JD87833T: Chain of Custody**

Page 3 of 6

5.1  
5

Job Change Order: JD87833

Requested Date: 5/17/2024 Received Date: 5/3/2024  
Account Name: Matrix New World Engineering, In Due Date: 5/17/2024  
Project Description: Ridgewood Berm Sampling, Ridgewood, NJ REDT2  
C/O Initiated By: KELLY\_RAM PM: TM TAT (Days): 7

=====  
Sample #: JD87833-1, -9 Dept:   
Client ID: TAT: 7  
Change: Please relog for EHG, SPLPE, SPLPRATIO, EPB

=====  
Sample #: JD87833-4 Dept:   
Client ID: SB-4 TAT:   
Change: Please relog for B8270SPLPSIMBANTH, SPLPE, SPLPRATIO,

=====  
Sample #: JD87833-5, -6 Dept:   
Client ID: TAT:   
Change: Please relog for B8270SPLPSIMBANTH, BSIM+BAPYRN, SPLPE, SPLPRATIO,

=====  
Sample #: JD87833-7 Dept:   
Client ID: SB-7 TAT:   
Change: Please relog for B8270SPLPSIMBAPYRN, SPLPE, SPLPRATIO,

Above Changes Per: Melissa Feury Date/Time: 5/20/2024

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Job Change Order: JD87833

**Requested Date:** 5/17/2024 **Received Date:** 5/3/2024  
**Account Name:** Matrix New World Engineering, In **Due Date:** 5/17/2024  
**Project Description:** Ridgewood Berm Sampling, Ridgewood, NJ **Deliverable:** REDT2  
**C/O Initiated By:** KELLY\_RAM **PM:** TM **TAT (Days):** 7

=====  
**Sample #:** JD87833-11 **Dept:**  
**Client ID:** SB-11 **TAT:**  
**Change:** Please relog for SPLPE, SPLPRATIO, EPB

=====  
**Sample #:** JD87833-14 **Dept:**  
**Client ID:** SB-14 **TAT:**  
**Change:** Please relog for EHG, SPLPE, SPLPRATIO,

JD87833T: Chain of Custody  
Page 5 of 6

**Above Changes Per:** Melissa Feury **Date/Time:** 5/20/2024

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

Job Change Order: JD87833

Requested Date: 5/28/2024 Received Date: 5/3/2024  
Account Name: Matrix New World Engineering, In Due Date: 5/28/2024  
Project Description: Ridgewood Berm Sampling, Ridgewood, NJ REDT2  
C/O Initiated By: SARAH\_YE PM: TM TAT (Days): 6

=====  
Sample #: JD87833-15 Dept:  
Client ID: DUPE 1 TAT: 6  
Change: Relog for B8270SPLPSIMBANTH, SPLPE, SPLPRATIO

=====  
Sample #: JD87833--5R--6R Dept:  
Client ID: TAT: 6  
Change: NO OUT data for BSIM+BAPYRN

=====  
Sample #: JD87833--7R Dept:  
Client ID: TAT: 6  
Change: NO OUT data for B8270SPLPSIMBAPYRN, SPLPE, SPLPRATIO

Above Changes Per: Melissa Feury Date/Time: 5/28/2024

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.



### Internal Sample Tracking Chronicle

Matrix New World Engineering, Inc.

Job No: JD87833T

Ridgewood Berm Sampling, Ridgewood, NJ  
Project No: 23-1429

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD87833-15	Collected:	03-MAY-24 00:00	By: KM	Received:	03-MAY-24	By: AR
DUPE 1						

JD87833-15 SW846 1312 30-MAY-24 13:42 IA SPLPRATIO  
JD87833-15 SW846 8270E BY SIM 01-JUN-24 09:01 RS 31-MAY-24 DS B8270SPLPSIMBANTH

5.2  
5

# SGS Internal Chain of Custody

**Job Number:** JD87833T  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Received:** 05/03/24

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD87833-15.1	Haleigh Rosado	Secured Storage	05/04/24 17:02	Return to Storage
JD87833-15.1	Secured Storage	Todd Shoemaker	05/06/24 14:42	Retrieve from Storage
JD87833-15.1	Todd Shoemaker	Secured Staging Area	05/06/24 14:43	Return to Storage
JD87833-15.1	Secured Staging Area	Saloni Chauhan	05/06/24 15:32	Retrieve from Storage
JD87833-15.1	Saloni Chauhan	Secured Storage	05/06/24 22:47	Return to Storage
JD87833-15.1	Secured Storage	Aleandi Rodriguez	05/07/24 22:26	Retrieve from Storage
JD87833-15.1	Aleandi Rodriguez	Secured Staging Area	05/07/24 22:26	Return to Storage
JD87833-15.1	Secured Staging Area	Lauren Halloran	05/08/24 07:57	Retrieve from Storage
JD87833-15.1	Secured Storage	Brianna Perez	05/08/24 12:30	Retrieve from Storage
Analyst chain of custody update error.				
JD87833-15.1	Brianna Perez	Secured Storage	05/08/24 15:25	Return to Storage
JD87833-15.1	Secured Storage	Ellen Dondeo	05/08/24 16:10	Retrieve from Storage
JD87833-15.1	Ellen Dondeo	Secured Storage	05/08/24 19:05	Return to Storage
JD87833-15.1	Secured Storage	Joshua Reitan	05/08/24 23:47	Retrieve from Storage
JD87833-15.1	Joshua Reitan	Secured Staging Area	05/08/24 23:47	Return to Storage
JD87833-15.1	Secured Staging Area	Lauren Halloran	05/09/24 07:48	Retrieve from Storage
JD87833-15.1	Lauren Halloran	Secured Storage	05/09/24 16:50	Return to Storage
JD87833-15.1	Secured Storage	Dave Hunkele	05/29/24 09:36	Retrieve from Storage
JD87833-15.1	Dave Hunkele	Secured Staging Area	05/29/24 09:36	Return to Storage
JD87833-15.1	Secured Staging Area	Joseph Dye	05/29/24 13:12	Retrieve from Storage
JD87833-15.1	Joseph Dye	Secured Storage	05/29/24 22:00	Return to Storage
JD87833-15.1.1	Brianna Perez	Metals Digestion	05/08/24 12:31	Digestate from JD87833-15.1
JD87833-15.1.1	Metals Digestion	Brianna Perez	05/08/24 12:32	Digestate from JD87833-15.1
JD87833-15.1.1	Brianna Perez	Metals Digestate Storage	05/08/24 12:32	Return to Storage
JD87833-15.1.2	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-15.1
JD87833-15.1.2	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-15.1
JD87833-15.1.2	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-15.1.2	Extract Storage	Christine Phillips	05/09/24 01:52	Retrieve from Storage
JD87833-15.1.2	Christine Phillips	GC8G	05/09/24 01:52	Load on Instrument
JD87833-15.1.3	Ellen Dondeo	Organics Prep	05/08/24 16:12	Extract from JD87833-15.1
JD87833-15.1.3	Organics Prep	Ellen Dondeo	05/08/24 20:48	Extract from JD87833-15.1
JD87833-15.1.3	Ellen Dondeo	Extract Storage	05/08/24 20:48	Return to Storage
JD87833-15.1.3	Extract Storage	Christine Phillips	05/09/24 04:52	Retrieve from Storage
JD87833-15.1.3	Christine Phillips	GC2G	05/09/24 04:52	Load on Instrument
JD87833-15.1.4	Lauren Halloran	Organics Prep	05/09/24 08:10	Extract from JD87833-15.1
JD87833-15.1.4	Organics Prep	Erin Burke	05/09/24 15:00	Extract from JD87833-15.1
JD87833-15.1.4	Erin Burke	Extract Storage	05/09/24 15:00	Return to Storage
JD87833-15.1.5	Joseph Dye	TCLP	05/29/24 13:12	Leachate from JD87833-15.1
JD87833-15.1.5	TCLP	Joseph Dye	05/29/24 20:09	Leachate from JD87833-15.1

5.3  
5

# SGS Internal Chain of Custody

**Job Number:** JD87833T  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ  
**Received:** 05/03/24

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD87833-15.1.5	Joseph Dye	Secured Storage	05/29/24 20:10	Return to Storage
JD87833-15.1.5	Secured Storage	Doaa Salem	05/31/24 10:15	Retrieve from Storage
JD87833-15.1.6	Doaa Salem	Organics Prep	05/31/24 10:15	Extract from JD87833-15.1.5
JD87833-15.1.6	Organics Prep	Doaa Salem	05/31/24 18:38	Extract from JD87833-15.1.5
JD87833-15.1.6	Doaa Salem	Extract Storage	05/31/24 18:38	Return to Storage

5.3  
5

## MS Semi-volatiles

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### QC Data Summaries

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Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

**Method Blank Summary**

**Job Number:** JD87833T  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP55107A-MB1	3H1177.D	1	06/01/24	RS	05/31/24	OP55107A	E3H82

The QC reported here applies to the following samples:

Method: SW846 8270E BY SIM

JD87833-15T

CAS No.	Compound	Result	RL	MDL	Units	Q
56-55-3	Benzo(a)anthracene	ND	0.10	0.046	ug/l	

CAS No.	Surrogate Recoveries	Limits	
367-12-4	2-Fluorophenol	68%	12-75%
4165-62-2	Phenol-d5	55%	14-59%
118-79-6	2,4,6-Tribromophenol	157%	19-157%
4165-60-0	Nitrobenzene-d5	109%	18-119%
321-60-8	2-Fluorobiphenyl	73%	18-104%
1718-51-0	Terphenyl-d14	103%	13-109%

# Leachate Blank Summary

**Job Number:** JD87833T  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP55107A-LB51	3H1180.D	1	06/01/24	RS	05/31/24	OP55107A	E3H82

The QC reported here applies to the following samples:

Method: SW846 8270E BY SIM

JD87833-15T

CAS No.	Compound	Result	RL	MDL	Units	Q
56-55-3	Benzo(a)anthracene	ND	0.10	0.046	ug/l	

CAS No.	Surrogate Recoveries	Limits	
367-12-4	2-Fluorophenol	65%	12-75%
4165-62-2	Phenol-d5	54%	14-59%
118-79-6	2,4,6-Tribromophenol	152%	19-157%
4165-60-0	Nitrobenzene-d5	99%	18-119%
321-60-8	2-Fluorobiphenyl	69%	18-104%
1718-51-0	Terphenyl-d14	99%	13-109%

# Blank Spike/Blank Spike Duplicate Summary

**Job Number:** JD87833T  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP55107A-BS12	3H1178.D	1	06/01/24	RS	05/31/24	OP55107A	E3H82
OP55107A-BSD12	3H1179.D	1	06/01/24	RS	05/31/24	OP55107A	E3H82

The QC reported here applies to the following samples:

Method: SW846 8270E BY SIM

JD87833-15T

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
56-55-3	Benzo(a)anthracene	2	0.454	23* b	1.69	85	115* c	33-130/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	53%	55%	12-75%
4165-62-2	Phenol-d5	37%	46%	14-59%
118-79-6	2,4,6-Tribromophenol	151%	151%	19-157%
4165-60-0	Nitrobenzene-d5	86%	85%	18-119%
321-60-8	2-Fluorobiphenyl	62%	58%	18-104%
1718-51-0	Terphenyl-d14	156%* b	92%	13-109%

- (a) Blank spike outside control limits due to analytical error. Since Blank spike duplicate recovery within control limits, data are qualified and reported.
- (b) Outside of in house control limits.
- (c) Analytical precision exceeds in-house control limits.

\* = Outside of Control Limits.

# Instrument Performance Check (DFTPP)

**Job Number:** JD87833T  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Sample:</b> E3H73-DFTPP	<b>Injection Date:</b> 05/18/24
<b>Lab File ID:</b> 3H1013A.D	<b>Injection Time:</b> 01:16
<b>Instrument ID:</b> GCMS3H	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	17023	43.7	Pass
68	Less than 2.0% of mass 69	0	0.00 (0.00) <sup>a</sup>	Pass
69	Mass 69 relative abundance	17054	43.8	Pass
70	Less than 2.0% of mass 69	0	0.00 (0.00) <sup>a</sup>	Pass
127	40.0 - 60.0% of mass 198	20696	53.2	Pass
197	Less than 1.0% of mass 198	50	0.13	Pass
198	Base peak, 100% relative abundance	38911	100.0	Pass
199	5.0 - 9.0% of mass 198	2601	6.68	Pass
275	10.0 - 31.0% of mass 198	9310	23.9	Pass
365	1.0 - 100.0% of mass 198	1205	3.10	Pass
441	Present, but less than mass 443	5588	14.4 (92.3) <sup>b</sup>	Pass
442	40.0 - 100.0% of mass 198	31533	81.0	Pass
443	17.0 - 23.0% of mass 442	6057	15.6 (19.2) <sup>c</sup>	Pass

- (a) Value is % of mass 69
- (b) Value is % of mass 443
- (c) Value is % of mass 442

**This check applies to the following Samples, MS, MSD, Blanks, and Standards:**

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E3H73-ICC73	3H1014.D	05/18/24	01:40	00:24	Initial cal 1
E3H73-IC73	3H1015.D	05/18/24	02:04	00:48	Initial cal 0.01
E3H73-IC73	3H1016.D	05/18/24	02:29	01:13	Initial cal 0.02
E3H73-IC73	3H1017.D	05/18/24	02:54	01:38	Initial cal 0.05
E3H73-IC73	3H1018.D	05/18/24	03:19	02:03	Initial cal 0.1
E3H73-IC73	3H1019.D	05/18/24	03:43	02:27	Initial cal 0.2
E3H73-IC73	3H1020.D	05/18/24	04:08	02:52	Initial cal 0.5
E3H73-IC73	3H1021.D	05/18/24	04:32	03:16	Initial cal 2.5
E3H73-IC73	3H1022.D	05/18/24	04:57	03:41	Initial cal 5
E3H73-ICV73	3H1023.D	05/18/24	05:22	04:06	Initial cal verification 1
E3H73-ICV73	3H1024.D	05/18/24	05:46	04:30	Initial cal verification 1
E3H73-ICV73	3H1025.D	05/18/24	06:11	04:55	Initial cal verification 5



# Instrument Performance Check (DFTPP)

**Job Number:** JD87833T  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Sample:</b> E3H82-DFTPP	<b>Injection Date:</b> 06/01/24
<b>Lab File ID:</b> 3H1170.D	<b>Injection Time:</b> 01:52
<b>Instrument ID:</b> GCMS3H	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	15916	40.0	Pass
68	Less than 2.0% of mass 69	158	0.40 (0.96) <sup>a</sup>	Pass
69	Mass 69 relative abundance	16396	41.2	Pass
70	Less than 2.0% of mass 69	0	0.00 (0.00) <sup>a</sup>	Pass
127	40.0 - 60.0% of mass 198	20197	50.7	Pass
197	Less than 1.0% of mass 198	0	0.00	Pass
198	Base peak, 100% relative abundance	39801	100.0	Pass
199	5.0 - 9.0% of mass 198	2647	6.65	Pass
275	10.0 - 30.0% of mass 198	9841	24.7	Pass
365	1.0 - 100.0% of mass 198	1327	3.33	Pass
441	Present, but less than mass 443	6100	15.3 (87.3) <sup>b</sup>	Pass
442	40.0 - 100.0% of mass 198	36048	90.6	Pass
443	17.0 - 23.0% of mass 442	6986	17.6 (19.4) <sup>c</sup>	Pass

- (a) Value is % of mass 69
- (b) Value is % of mass 443
- (c) Value is % of mass 442

**This check applies to the following Samples, MS, MSD, Blanks, and Standards:**

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E3H82-CC73	3H1171.D	06/01/24	02:04	00:12	Continuing cal 1
OP54985A-MB2	3H1173.D	06/01/24	03:43	01:51	Method Blank
ZZZZZZ	3H1174.D	06/01/24	04:08	02:16	(unrelated sample)
OP55022A-MB2	3H1175.D	06/01/24	04:32	02:40	Method Blank
OP55022A-BS122	3H1176.D	06/01/24	04:56	03:04	Blank Spike
OP55107A-MB1	3H1177.D	06/01/24	05:21	03:29	Method Blank
OP55107A-BS12	3H1178.D	06/01/24	05:45	03:53	Blank Spike
OP55107A-BSD12	3H1179.D	06/01/24	06:10	04:18	Blank Spike Duplicate
OP55107A-LB51	3H1180.D	06/01/24	06:34	04:42	Leachate Blank
OP55022A-MSA	3H1181.D	06/01/24	06:58	05:06	Matrix Spike
OP55022A-MSDA	3H1182.D	06/01/24	07:23	05:31	Matrix Spike Duplicate
ZZZZZZ	3H1183.D	06/01/24	07:47	05:55	(unrelated sample)
ZZZZZZ	3H1184.D	06/01/24	08:12	06:20	(unrelated sample)
ZZZZZZ	3H1185.D	06/01/24	08:36	06:44	(unrelated sample)
JD87833-15T	3H1186.D	06/01/24	09:01	07:09	DUPE 1
ZZZZZZ	3H1187.D	06/01/24	09:25	07:33	(unrelated sample)
ZZZZZZ	3H1188.D	06/01/24	09:49	07:57	(unrelated sample)
ZZZZZZ	3H1189.D	06/01/24	10:14	08:22	(unrelated sample)

# Internal Standard Area Summary

**Job Number:** JD87833T  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

<b>Check Std:</b> E3H82-CC73	<b>Injection Date:</b> 06/01/24
<b>Lab File ID:</b> 3H1171.D	<b>Injection Time:</b> 02:04
<b>Instrument ID:</b> GCMS3H	<b>Method:</b> SW846 8270E BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	11055	6.17	12645	7.50	23380	10.20	20665	14.35
Upper Limit <sup>a</sup>	22110	6.67	25290	8.00	46760	10.70	41330	14.85
Lower Limit <sup>b</sup>	5528	5.67	6323	7.00	11690	9.70	10333	13.85

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP54985A-MB2	10003	6.16	11587	7.49	22044	10.19	19132	14.33
ZZZZZZ	9592	6.16	11220	7.49	21329	10.19	18470	14.33
OP55022A-MB2	9790	6.16	11414	7.49	21686	10.19	18974	14.33
OP55022A-BS122	8172	6.16	9457	7.49	17722	10.19	15468	14.33
OP55107A-MB1	9159	6.16	10718	7.49	20097	10.19	17528	14.33
OP55107A-BS12	9269	6.16	9529	7.48	7186*	10.18	13*	14.33
OP55107A-BSD12	9457	6.16	10941	7.48	20599	10.18	17708	14.33
OP55107A-LB51	8365	6.16	9738	7.49	18348	10.19	15583	14.33
OP55022A-MSA	9419	6.16	10814	7.49	20275	10.19	17211	14.33
OP55022A-MSDA	9577	6.16	11022	7.49	20562	10.19	17323	14.33
ZZZZZZ	8173	6.16	9493	7.49	17709	10.19	15327	14.33
ZZZZZZ	9346	6.16	10857	7.49	20111	10.19	17172	14.33
ZZZZZZ	8809	6.16	10198	7.49	19089	10.19	16280	14.33
JD87833-15T	8256	6.16	9524	7.49	17816	10.19	15318	14.33
ZZZZZZ	8736	6.16	10302	7.48	19339	10.18	16283	14.33
ZZZZZZ	8456	6.16	10071	7.48	19149	10.18	16028	14.33
ZZZZZZ	9235	6.16	10801	7.49	20067	10.19	17087	14.33

**IS 1** = 1-Methylnaphthalene-d10  
**IS 2** = Fluorene-d10  
**IS 3** = Fluoranthene-d10  
**IS 4** = Benzo(a)pyrene-d12

- (a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
- (b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
- (c) Blank spike outside control limits due to analytical error. Since Blank spike duplicate recovery within control limits, data are qualified and reported.

6.5.1  
6



# Initial Calibration Summary

**Job Number:** JD87833T  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** E3H73-ICC73  
**Lab FileID:** 3H1014.D

Response Factor Report GCMS3H

Method : C:\msdchem\1\METHODS\M3H73SIM.M (RTE Integrator)  
 Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um  
 Last Update : Wed May 29 16:40:24 2024  
 Response via : Initial Calibration

Calibration Files

0.05=3H1017.D .2 =3H1019.D 2.5 =3H1021.D .02 =3H1016.D  
 .1 =3H1018.D 1 =3H1014.D .01 =3H1015.D .5 =3H1020.D  
 5 =3H1022.D = = =

Compound

Compound	0.05	.2	2.5	.02	.1	1	.01	.5	5	Avg	%RSD	
1) I 1-Methylnaphthalene-d	-----ISTD-----											
2) 2-Fluorophenol	0.407	0.406	0.426	0.409	0.408	0.417	0.460	0.407	0.468	0.423	5.67	
3) Phenol-d5	0.432	0.444	0.498	0.432	0.441	0.470	0.485	0.466	0.572	0.471	9.42	
4) Phenol	0.493	0.511	0.528	0.488	0.498	0.533	0.558	0.541	0.593	0.527	6.50	
5) bis(2-Chloroethyl)ether											0.000#	-1.00
6) Nitrobenzene-d5	0.327	0.331	0.410	0.333	0.329	0.389	0.378	0.356	0.477	0.370	13.57	
7) Naphthalene	1.424	1.435	1.393	1.429	1.488	1.399	1.610	1.465	1.498	1.460	4.58	
8) Hexachlorobutadiene	0.272	0.277	0.269	0.305	0.278	0.282	0.296	0.282	0.284	0.283	4.00	
9) 2-Methylnaphthalene	1.029	1.025	1.007	1.060	1.033	1.023	1.150	1.043	1.065	1.048	4.02	
11) 2-Fluorobiphenyl	1.205	1.186	1.283	1.209	1.190	1.245	1.352	1.246	1.419	1.259	6.32	
12) I Fluorene-d10	-----ISTD-----											
13) Acenaphthylene	1.420	1.381	1.405	1.444	1.394	1.401	1.565	1.422	1.468	1.433	3.91	
14) Acenaphthene	0.991	0.986	0.990	1.014	0.977	0.984	1.114	1.000	1.029	1.010	4.18	
15) Dibenzofuran											0.000#	-1.00
16) Fluorene	1.095	1.112	1.083	1.168	1.060	1.092	1.264	1.099	1.119	1.121	5.45	
17) 2,4,6-Tribromophenol	0.083	0.084	0.124	0.087	0.081	0.115	0.090	0.095		0.095	16.83	
18) Hexachlorobenzene	0.343	0.334	0.329	0.353	0.343	0.346	0.391	0.342	0.340	0.347	5.20	
19) Pentachlorophenol	0.077	0.085	0.128		0.078	0.125		0.097	0.154	0.106	27.83	
	---- Quadratic regression ---- Coefficient = 0.9987											
	Response Ratio = -0.00306 + 0.10725 *A + 0.00746 *A^2											
20) Phenanthrene	1.548	1.474	1.462	1.537	1.418	1.498	1.836	1.488	1.513	1.530	7.91	
21) Anthracene	1.346	1.370	1.443	1.383	1.335	1.446	1.505	1.411	1.521	1.418	4.67	

6.7.1  
6

# Initial Calibration Summary

**Job Number:** JD87833T  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** E3H73-ICC73  
**Lab FileID:** 3H1014.D

22) I	Fluoranthene-d10	-----ISTD-----										
23)	Fluoranthene	0.904	0.861	0.905	0.907	0.878	0.909	1.031	0.899	0.952	0.916	5.43
24)	Pyrene	0.918	0.875	0.910	0.898	0.894	0.917	0.998	0.908	0.958	0.920	4.02
25)	Terphenyl-d14	0.655	0.673	0.804	0.651	0.656	0.755	0.687	0.731	0.901	0.724	11.70
26)	Benzo[a]anthracene	0.691	0.682	0.763	0.691	0.672	0.845	0.812	0.706	0.819	0.742	9.16
27)	Chrysene	0.719	0.735	0.832	0.725	0.712	0.853	0.778	0.772	0.875	0.778	7.92
28) I	Benzo(a)pyrene-d12	-----ISTD-----										
29)	Benzo[b]fluoranthene	0.904	0.854	0.987	0.895	0.876	0.981	0.974	0.885	1.009	0.930	6.20
30)	Benzo[k]fluoranthene	0.847	0.867	0.970	0.823	0.823	0.964	0.974	0.915	1.085	0.919	9.55
31)	Benzo[a]pyrene	0.967	0.971	1.010	0.990	0.969	0.985	1.136	0.985	1.063	1.008	5.58
32)	Indeno[1,2,3-cd]pyrene	0.928	0.894	1.055	1.002	0.908	1.025	1.205	0.937	1.155	1.012	10.90
33)	Dibenz[a,h]anthracene	0.550	0.601	0.740	0.609	0.577	0.722	0.765	0.646	0.823	0.670	14.18
34)	Benzo[g,h,i]perylene	0.775	0.797	0.908	0.776	0.786	0.880	0.858	0.837	0.986	0.845	8.45
35) I	1-Methylnaphthalene-d	-----ISTD-----										
36)	1,4-Dioxane	0.162	0.171	0.167	0.161	0.171	0.169		0.178	0.173	0.169	3.35
37)	1-Methylnaphthalene	0.997	0.972	0.965	0.995	0.986	0.967	1.117	0.995	1.003	1.000	4.62
38) I	Fluorene-d10a	-----ISTD-----										
39)	4,6-dinitro-2-methylphenol	0.030	0.043		0.023	0.041		0.033	0.052		0.037#	28.47
		---- Quadratic regression ---- Coefficient = 0.9994										
		Response Ratio = -0.00175 + 0.03617 *A + 0.00257 *A^2										

(#) = Out of Range ### Number of calibration levels exceeded format ###

M3H73SIM.M Wed May 29 16:51:54 2024

6.7.1  
6

# Initial Calibration Verification

**Job Number:** JD87833T  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** E3H73-ICV73  
**Lab FileID:** 3H1023.D

## Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e3h73\3H1023.D Vial: 11  
 Acq On : 18 May 2024 5:22 am Operator: rocquans  
 Sample : icv73-1 Inst : GCMS3H  
 Misc : op54679a,e3h73,1000,,,1,1 Multiplr: 1.00  
 MS Integration Params: lscint.p

Method : C:\msdchem\1\METHODS\M3H73SIM.M (RTE Integrator)  
 Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um  
 Last Update : Wed May 29 16:40:24 2024  
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	1-Methylnaphthalene-d10	1.000	1.000	0.0	88	0.00	6.17
7 t	Naphthalene	1.460	1.662	-13.8	104	0.00	5.61
8 t	Hexachlorobutadiene	0.283	0.314	-11.0	98	0.00	5.70
9 t	2-Methylnaphthalene	1.048	1.120	-6.9	96	0.00	6.12
12 I	Fluorene-d10	1.000	1.000	0.0	88	0.00	7.49
13 t	Acenaphthylene	1.433	1.513	-5.6	95	0.00	6.86
14 t	Acenaphthene	1.010	1.042	-3.2	93	0.00	7.02
16 t	Fluorene	1.121	1.130	-0.8	91	0.00	7.52
18 t	Hexachlorobenzene	0.347	0.363	-4.6	92	0.00	8.12
	----- AvgRF CCRF % Dev -----						
20 t	Phenanthrene	1.530	1.520	0.7	89	0.00	8.61
21 t	Anthracene	1.418	1.464	-3.2	89	0.00	8.67
22 I	Fluoranthene-d10	1.000	1.000	0.0	81	0.00	10.19
23 t	Fluoranthene	0.916	0.944	-3.1	84	0.00	10.22
24 t	Pyrene	0.920	0.934	-1.5	82	0.00	10.53
26 t	Benzo[a]anthracene	0.742	0.729	1.8	70	0.00	12.35
27 t	Chrysene	0.778	0.792	-1.8	75	0.00	12.41
28 I	Benzo(a)pyrene-d12	1.000	1.000	0.0	72	0.00	14.33
29 t	Benzo[b]fluoranthene	0.930	0.967	-4.0	71	0.00	13.92
30 t	Benzo[k]fluoranthene	0.919	1.090	-18.6	81	0.00	13.97
31 t	Benzo[a]pyrene	1.008	1.013	-0.5	74	0.00	14.36
32 t	Indeno[1,2,3-cd]pyrene	1.012	1.083	-7.0	76	0.00	15.79
33 t	Dibenz[a,h]anthracene	0.670	0.739	-10.3	73	0.00	15.84
34 t	Benzo[g,h,i]perylene	0.845	0.941	-11.4	77	0.00	16.14
35 I	1-Methylnaphthalene-d10a	1.000	1.000	0.0	88	0.00	6.17
37 t	1-Methylnaphthalene	1.000	1.060	-6.0	96	0.00	6.20



# Initial Calibration Verification

**Job Number:** JD87833T  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** E3H73-ICV73  
**Lab FileID:** 3H1024.D

## Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e3h73\3H1024.D Vial: 12  
Acq On : 18 May 2024 5:46 am Operator: rocquans  
Sample : icv73-1 Inst : GCMS3H  
Misc : op54679a,e3h73,1000,,,1,1 Multiplr: 1.00  
MS Integration Params: lscint.p

Method : C:\msdchem\1\METHODS\M3H73SIM.M (RTE Integrator)  
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um  
Last Update : Wed May 29 16:40:24 2024  
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
Max. RRF Dev : 30% Max. Rel. Area : 200%

Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
35 I 1-Methylnaphthalene-d10a	1.000	1.000	0.0	81	0.00	6.17
36 t 1,4-Dioxane	0.169	0.188	-11.2	90	0.00	2.78

(#) = Out of Range SPCC's out = 0 CCC's out = 0  
3H1014.D M3H73SIM.M Wed May 29 16:49:49 2024



# Initial Calibration Verification

**Job Number:** JD87833T  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** E3H73-ICV73  
**Lab FileID:** 3H1025.D

## Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e3h73\3H1025.D Vial: 13  
 Acq On : 18 May 2024 6:11 am Operator: rocquans  
 Sample : icv73-5 Inst : GCMS3H  
 Misc : op54679a,e3h73,1000,,,1,1 Multiplr: 1.00  
 MS Integration Params: lscint.p

Method : C:\msdchem\1\METHODS\M3H73SIM.M (RTE Integrator)  
 Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um  
 Last Update : Wed May 29 16:40:24 2024  
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	1-Methylnaphthalene-d10	1.000	1.000	0.0	81	0.00	6.17
4 t	Phenol	0.527	0.580	-10.1	88	0.00	4.46
12 I	Fluorene-d10	1.000	1.000	0.0	79	0.00	7.49
	----- True	Calc.	% Drift	-----			
19 t	Pentachlorophenol	5.000	5.120	-2.4	74	0.00	8.35
38 I	Fluorene-d10a	1.000	1.000	0.0	79	0.00	7.49
	----- True	Calc.	% Drift	-----			
39 t	4,6-dinitro-2-methylpheno	5.000	6.011	-20.2	91	0.00	7.57

(#) = Out of Range SPCC's out = 0 CCC's out = 0  
 3H1014.D M3H73SIM.M Wed May 29 16:51:36 2024

6.7.4  
6

# Continuing Calibration Summary

**Job Number:** JD87833T  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Sample:** E3H82-CC73  
**Lab FileID:** 3H1171.D

## Evaluate Continuing Calibration Report

Data File : X:\Dayton SVOA GCMS\altheam\e3h82\3H1171.d Vial: 2  
 Acq On : 1 Jun 2024 2:04 am Operator: rocquans  
 Sample : cc73-1 Inst : GCMS3H  
 Misc : op53776a,e3h82,1000,,,1,1 Multiplr: 1.00  
 MS Integration Params: lscint.p

Method : X:\Dayton SVOA G...ethod\M3H73SIM.M (RTE Integrator)  
 Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um  
 Last Update : Mon Jun 03 07:13:29 2024  
 Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	1-Methylnaphthalene-d10	1.000	1.000	0.0	86	0.00	6.17
2 S	2-Fluorophenol	0.423	0.432	-2.1	89	0.00	3.85
3 S	Phenol-d5	0.471	0.518	-10.0	95	0.00	4.46
4 t	Phenol	0.527	0.555	-5.3	89	0.00	4.47
6 S	Nitrobenzene-d5	0.370	0.452	-22.2#	100	0.00	5.10
7 t	Naphthalene	1.460	1.399	4.2	86	0.00	5.61
8 t	Hexachlorobutadiene	0.283	0.281	0.7	85	0.00	5.70
9 t	2-Methylnaphthalene	1.048	1.007	3.9	84	0.00	6.12
11 S	2-Fluorobiphenyl	1.259	1.234	2.0	85	0.00	6.41
12 I	Fluorene-d10	1.000	1.000	0.0	92	0.00	7.50
13 t	Acenaphthylene	1.433	1.338	6.6	88	0.00	6.86
14 t	Acenaphthene	1.010	0.942	6.7	88	0.00	7.02
16 t	Fluorene	1.121	1.051	6.2	88	0.00	7.53
17 S	2,4,6-Tribromophenol	0.095	0.174	-83.2#	139	0.00	7.78
18 t	Hexachlorobenzene	0.347	0.365	-5.2	97	0.00	8.12
----- True Calc. % Drift -----							
19 t	Pentachlorophenol	5.000	8.147	-62.9#	145	0.00	8.36
----- AvgRF CCRF % Dev -----							
20 t	Phenanthrene	1.530	1.504	1.7	92	0.00	8.62
21 t	Anthracene	1.418	1.500	-5.8	95	0.00	8.68
22 I	Fluoranthene-d10	1.000	1.000	0.0	94	0.00	10.20
23 t	Fluoranthene	0.916	0.913	0.3	94	0.00	10.23
24 t	Pyrene	0.920	0.950	-3.3	97	0.00	10.54
25 S	Terphenyl-d14	0.724	0.771	-6.5	96	0.00	10.84
26 t	Benzo[a]anthracene	0.742	0.875	-17.9	97	0.00	12.37
27 t	Chrysene	0.778	0.874	-12.3	96	0.00	12.42
28 I	Benzo(a)pyrene-d12	1.000	1.000	0.0	107	0.00	14.35
29 t	Benzo[b]fluoranthene	0.930	1.021	-9.8	112	0.00	13.94
30 t	Benzo[k]fluoranthene	0.919	0.957	-4.1	107	0.00	13.98
31 t	Benzo[a]pyrene	1.008	0.994	1.4	108	0.00	14.38
32 t	Indeno[1,2,3-cd]pyrene	1.012	1.254	-23.9#	131	0.00	15.81
33 t	Dibenz[a,h]anthracene	0.670	0.893	-33.3#	133	0.00	15.85
34 t	Benzo[g,h,i]perylene	0.845	0.986	-16.7	120	0.00	16.16
35 I	1-Methylnaphthalene-d10a	1.000	1.000	0.0	86	0.00	6.17
36 t	1,4-Dioxane	0.169	0.166	1.8	84	0.00	2.77
37 t	1-Methylnaphthalene	1.000	0.960	4.0	85	0.00	6.20



# Run Sequence Report

**Job Number:** JD87833T  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

**Run ID:** E3H73                      **Method:** SW846 8270E BY SIM   **Instrument ID:** GCMS3H

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
E3H73-DFTPP	3H1013A.D	05/18/24 01:16	n/a	DFTPP Tune
E3H73-ICC73	3H1014.D	05/18/24 01:40	n/a	Initial cal 1
E3H73-IC73	3H1015.D	05/18/24 02:04	n/a	Initial cal 0.01
E3H73-IC73	3H1016.D	05/18/24 02:29	n/a	Initial cal 0.02
E3H73-IC73	3H1017.D	05/18/24 02:54	n/a	Initial cal 0.05
E3H73-IC73	3H1018.D	05/18/24 03:19	n/a	Initial cal 0.1
E3H73-IC73	3H1019.D	05/18/24 03:43	n/a	Initial cal 0.2
E3H73-IC73	3H1020.D	05/18/24 04:08	n/a	Initial cal 0.5
E3H73-IC73	3H1021.D	05/18/24 04:32	n/a	Initial cal 2.5
E3H73-IC73	3H1022.D	05/18/24 04:57	n/a	Initial cal 5
E3H73-ICV73	3H1023.D	05/18/24 05:22	n/a	Initial cal verification 1
E3H73-ICV73	3H1024.D	05/18/24 05:46	n/a	Initial cal verification 1
E3H73-ICV73	3H1025.D	05/18/24 06:11	n/a	Initial cal verification 5

6.8.1

6



MS Semi-volatiles

Raw Data

7

Quantitation Report (QT Reviewed)

Data Path : X:\Dayton SVOA GCMS\altheam\3h82\  
 Data File : 3H1186.d  
 Acq On : 1 Jun 2024 9:01 am  
 Operator : rocquans  
 Sample : jd87833-15t Inst : GCMS3H  
 Misc : op55107a,e3h82,500,,,1,1  
 ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 03 07:40:06 2024  
 Quant Method : X:\Dayton SVOA GCMS\altheam\method\M3H73SIM.M  
 Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um  
 QLast Update : Mon Jun 03 07:13:29 2024  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	
<b>Internal Standards</b>							
1) 1-Methylnaphthalene-d10	6.163	152	8256	4.00	ppm	0.00	
12) Fluorene-d10	7.486	176	9524	4.00	ppm	-0.01	
22) Fluoranthene-d10	10.185	212	17816	4.00	ppm	-0.01	
28) Benzo(a)pyrene-d12	14.327	264	15318	4.00	ppm	-0.02	
35) 1-Methylnaphthalene-d10a	6.163	152	8256	4.00	ppm	0.00	
38) Fluorene-d10a	7.486	176	9524	4.00	ppm	-0.01	
<b>System Monitoring Compounds</b>							
2) 2-Fluorophenol	3.847	112	26606	30.47	ppm	0.00	
Spiked Amount	50.000	Range 11 - 58	Recovery =	60.94%	#		
3) Phenol-d5	4.462	99	24185	24.88	ppm	0.00	
Spiked Amount	50.000		Recovery =	49.76%			
6) Nitrobenzene-d5	5.094	82	36324	47.57	ppm	0.00	
Spiked Amount	50.000		Recovery =	95.14%			
11) 2-Fluorobiphenyl	6.404	172	95327	36.67	ppm	0.00	
Spiked Amount	50.000		Recovery =	73.34%			
17) 2,4,6-Tribromophenol	7.772	330	18158	80.52	ppm	-0.01	
Spiked Amount	50.000		Recovery =	161.04%			
25) Terphenyl-d14	10.819	244	120062	37.25	ppm	-0.02	
Spiked Amount	50.000		Recovery =	74.50%			
<b>Target Compounds</b>							
							Qvalue
9) 2-Methylnaphthalene	6.115	142	98	0.0453	ppm		89
14) Acenaphthene	7.016	153	1008	0.4193	ppm		95
16) Fluorene	7.516	166	446	0.1670	ppm		99
20) Phenanthrene	8.608	178	447	0.1227	ppm		98
21) Anthracene	8.669	178	218	0.0646	ppm		82
23) Fluoranthene	10.206	202	1896	0.4646	ppm		94
24) Pyrene	10.533	202	1176	0.2871	ppm		95
26) Benzo[a]anthracene	12.350	228	253	0.0765	ppm		99
27) Chrysene	12.403	228	266	0.0768	ppm		96
29) Benzo[b]fluoranthene	13.922	252	312	0.0876	ppm		98
30) Benzo[k]fluoranthene	13.960	252	120	0.0341	ppm		96
31) Benzo[a]pyrene	14.358	252	212	0.0549	ppm		98
32) Indeno[1,2,3-cd]pyrene	15.794	276	197m	0.0508	ppm		
34) Benzo[g,h,i]perylene	16.138	276	182	0.0563	ppm		100
37) 1-Methylnaphthalene	6.187	142	130m	0.0630	ppm		

(#) = qualifier out of range (m) = manual integration (+) = signals summed

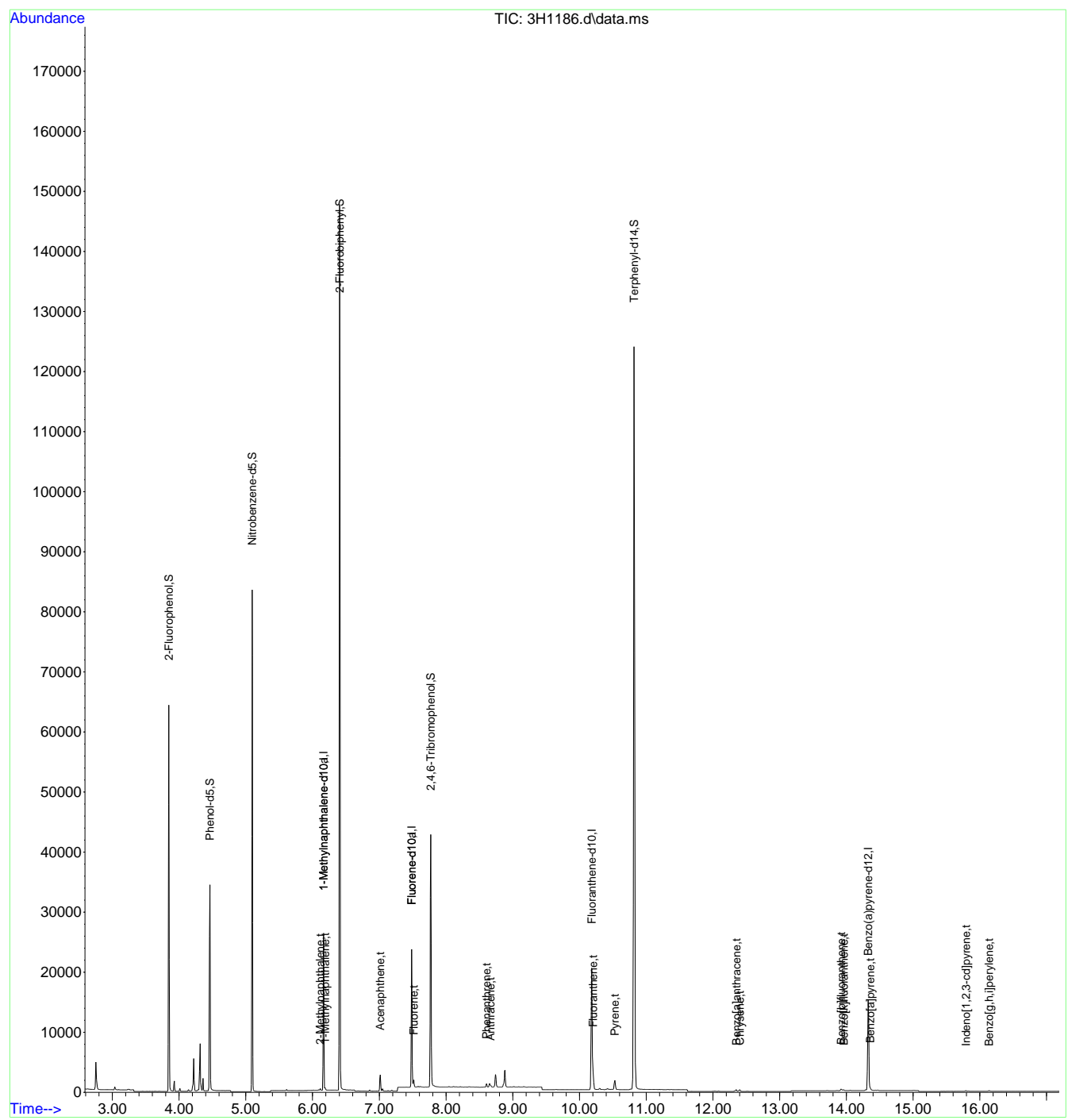
7.1.1  
7



Quantitation Report (QT Reviewed)

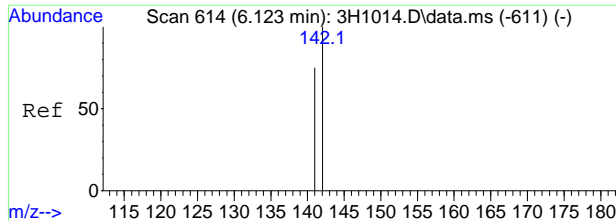
Data Path : X:\Dayton SVOA GCMS\altheam\3h82\  
Data File : 3H1186.d  
Acq On : 1 Jun 2024 9:01 am  
Operator : rocquans  
Sample : jd87833-15t Inst : GCMS3H  
Misc : op55107a,e3h82,500,,,1,1  
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jun 03 07:40:06 2024  
Quant Method : X:\Dayton SVOA GCMS\altheam\method\M3H73SIM.M  
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um  
QLast Update : Mon Jun 03 07:13:29 2024  
Response via : Initial Calibration



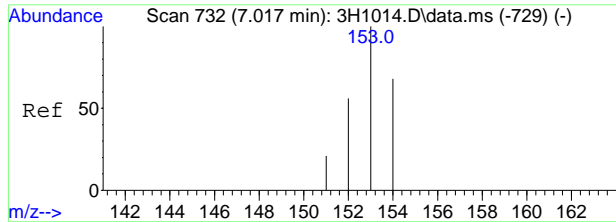
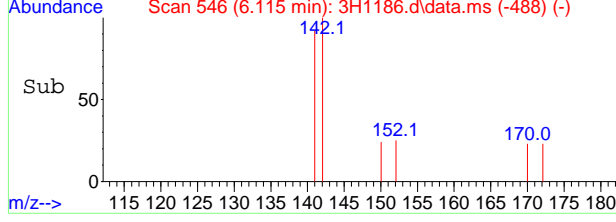
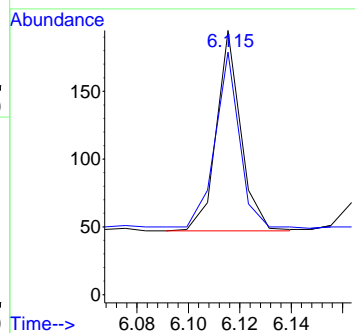
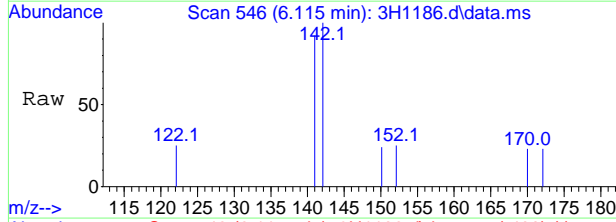
7.1.1





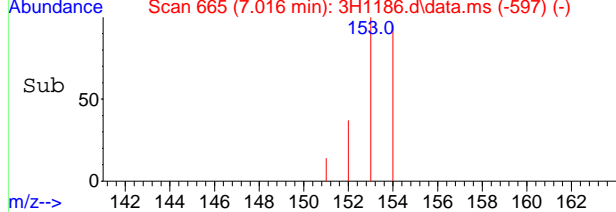
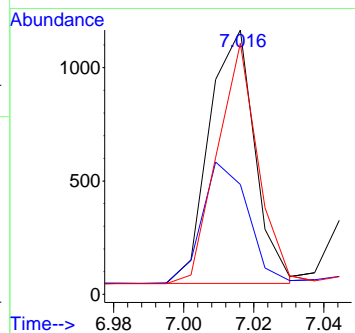
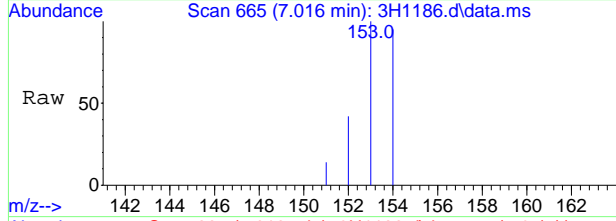
#9  
 2-Methylnaphthalene  
 Concen: 0.0453 ppm  
 RT: 6.115 min Scan# 546  
 Delta R.T. -0.008 min  
 Lab File: 3H1186.d  
 Acq: 1 Jun 2024 9:01 am

Tgt Ion	Ratio	Lower	Upper
142	100		
141	87.5	47.6	107.6



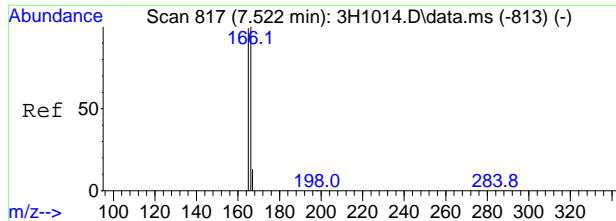
#14  
 Acenaphthene  
 Concen: 0.4193 ppm  
 RT: 7.016 min Scan# 665  
 Delta R.T. -0.007 min  
 Lab File: 3H1186.d  
 Acq: 1 Jun 2024 9:01 am

Tgt Ion	Ratio	Lower	Upper
153	100		
152	38.8	9.3	69.3
154	94.6	58.4	118.4



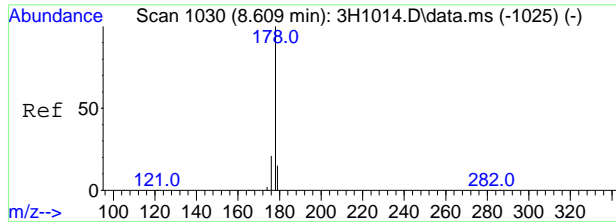
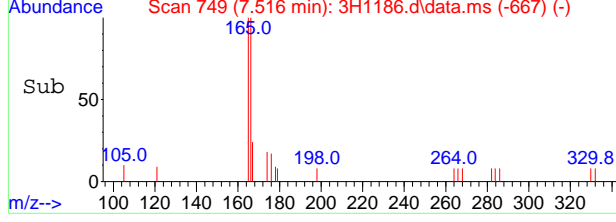
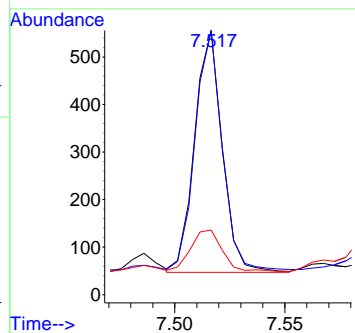
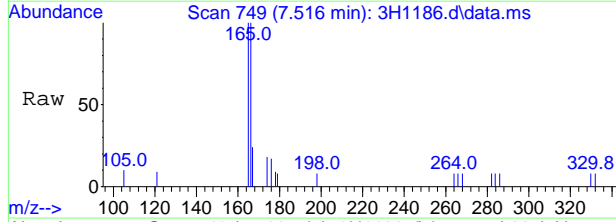
7.11  
 7





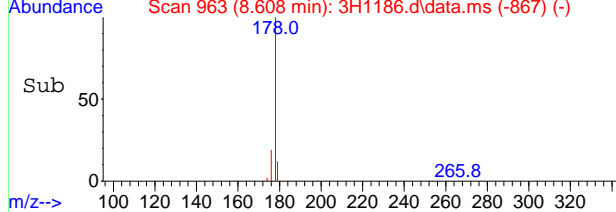
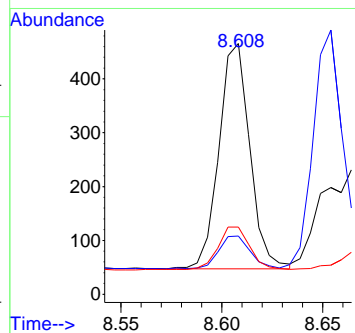
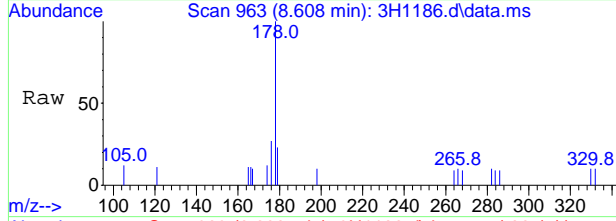
#16  
 Fluorene  
 Concen: 0.1670 ppm  
 RT: 7.516 min Scan# 749  
 Delta R.T. -0.010 min  
 Lab File: 3H1186.d  
 Acq: 1 Jun 2024 9:01 am

Tgt Ion	Resp	Lower	Upper
166	100		
165	99.7	69.5	129.5
167	17.0	0.0	43.0



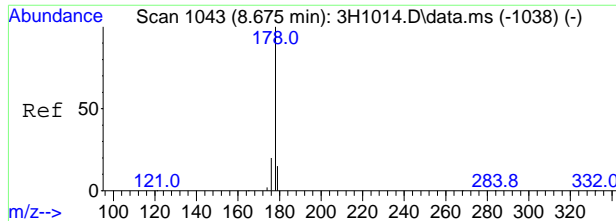
#20  
 Phenanthrene  
 Concen: 0.1227 ppm  
 RT: 8.608 min Scan# 963  
 Delta R.T. -0.010 min  
 Lab File: 3H1186.d  
 Acq: 1 Jun 2024 9:01 am

Tgt Ion	Resp	Lower	Upper
178	100		
179	13.8	0.0	45.1
176	19.1	0.0	49.7



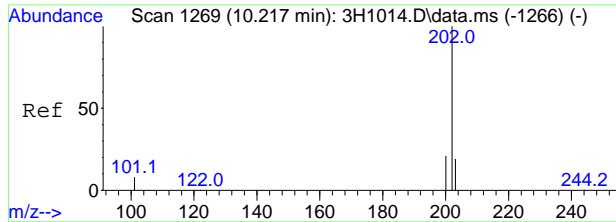
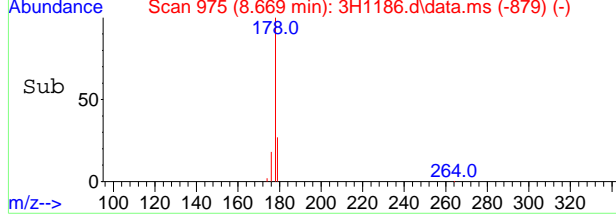
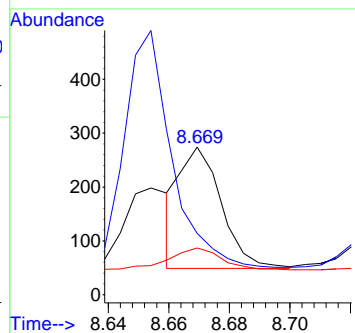
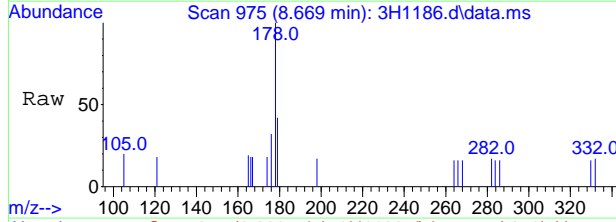
7.11  
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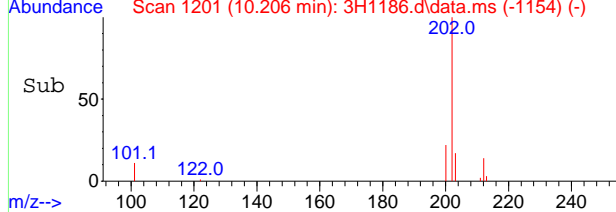
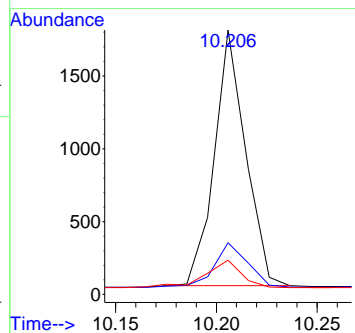
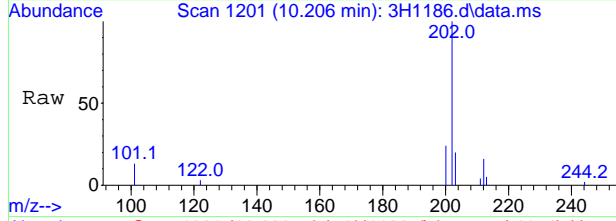
#21  
 Anthracene  
 Concen: 0.0646 ppm  
 RT: 8.669 min Scan# 975  
 Delta R.T. -0.010 min  
 Lab File: 3H1186.d  
 Acq: 1 Jun 2024 9:01 am

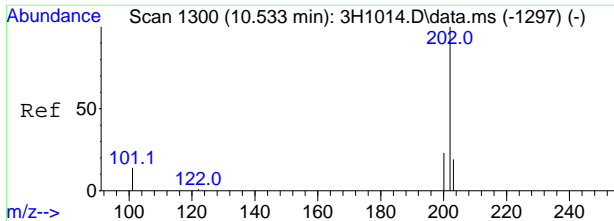
Tgt Ion	Ratio	Lower	Upper
178	100		
179	0.0	0.0	45.1
176	20.8	0.0	49.4



#23  
 Fluoranthene  
 Concen: 0.4646 ppm  
 RT: 10.206 min Scan# 1201  
 Delta R.T. -0.021 min  
 Lab File: 3H1186.d  
 Acq: 1 Jun 2024 9:01 am

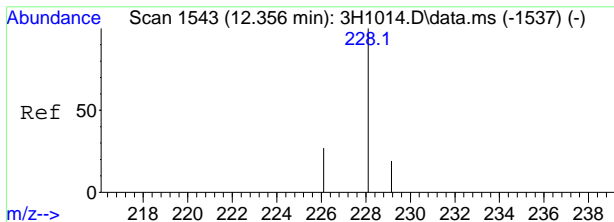
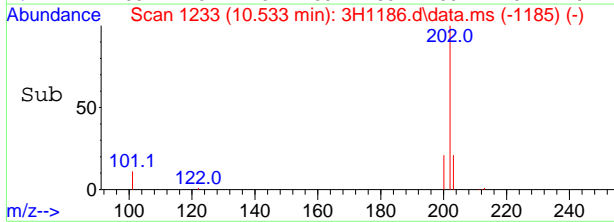
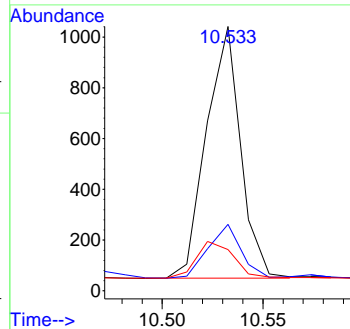
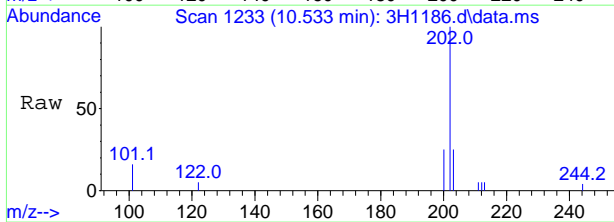
Tgt Ion	Ratio	Lower	Upper
202	100		
203	17.2	0.0	49.6
101	10.0	0.0	37.0





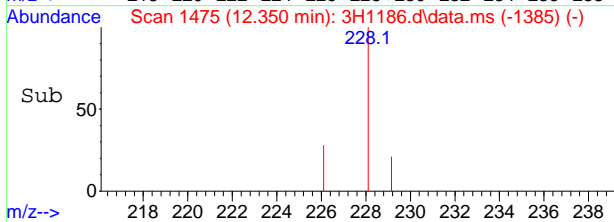
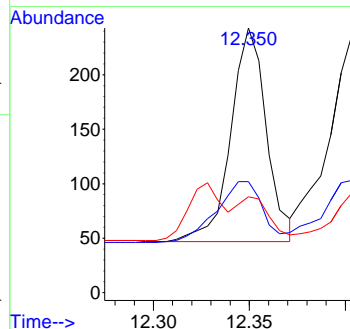
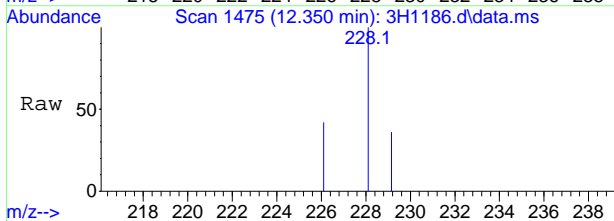
#24  
 Pyrene  
 Concen: 0.2871 ppm  
 RT: 10.533 min Scan# 1233  
 Delta R.T. -0.010 min  
 Lab File: 3H1186.d  
 Acq: 1 Jun 2024 9:01 am

Tgt Ion	Resp	Lower	Upper
202	1176		
203	21.1	0.0	48.5
101	11.3	0.0	42.6

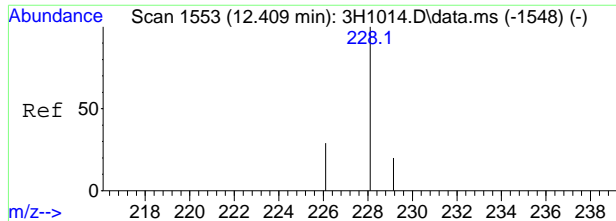


#26  
 Benzo[a]anthracene  
 Concen: 0.0765 ppm  
 RT: 12.350 min Scan# 1475  
 Delta R.T. -0.016 min  
 Lab File: 3H1186.d  
 Acq: 1 Jun 2024 9:01 am

Tgt Ion	Resp	Lower	Upper
228	253		
226	27.5	0.0	58.0
229	19.7	0.0	48.7

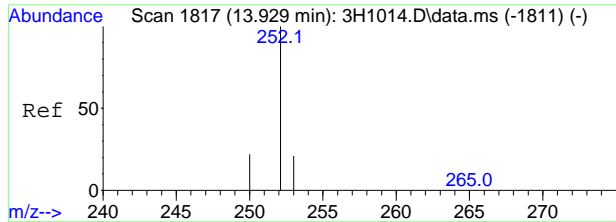
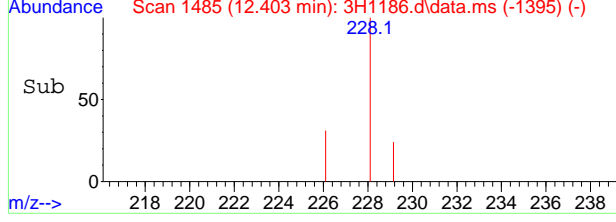
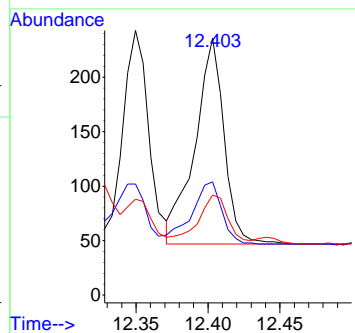
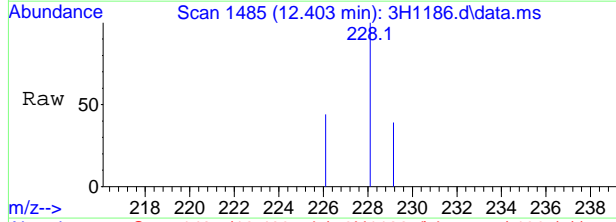


7.1.1  
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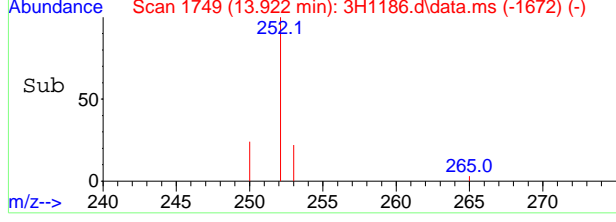
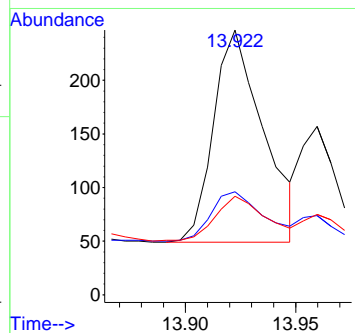
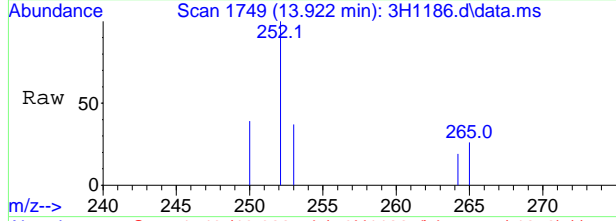
#27  
 Chrysene  
 Concen: 0.0768 ppm  
 RT: 12.403 min Scan# 1485  
 Delta R.T. -0.016 min  
 Lab File: 3H1186.d  
 Acq: 1 Jun 2024 9:01 am

Tgt Ion	Ratio	Lower	Upper
228	100		
226	29.7	0.1	60.1
229	23.2	0.0	39.4

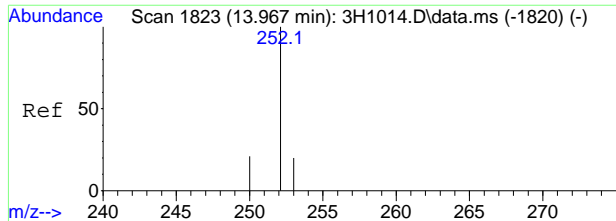


#29  
 Benzo[b]fluoranthene  
 Concen: 0.0876 ppm  
 RT: 13.922 min Scan# 1749  
 Delta R.T. -0.019 min  
 Lab File: 3H1186.d  
 Acq: 1 Jun 2024 9:01 am

Tgt Ion	Ratio	Lower	Upper
252	100		
250	22.9	0.0	51.1
253	20.9	0.0	51.0

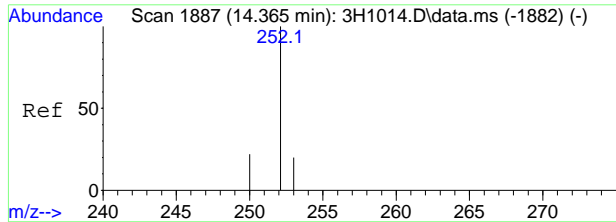
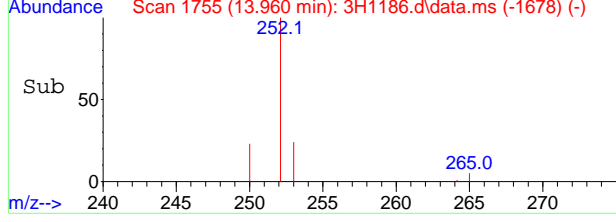
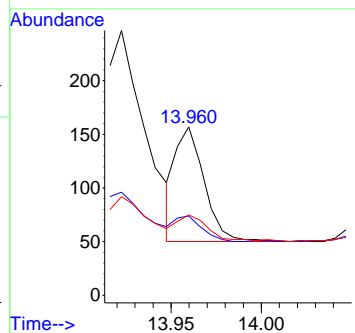
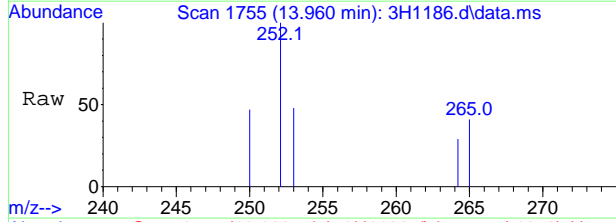


7.1.1  
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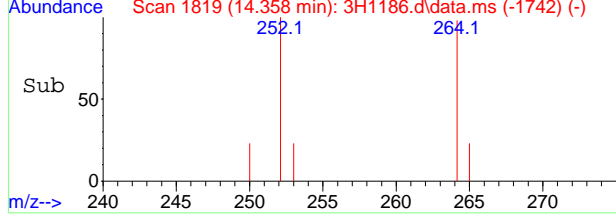
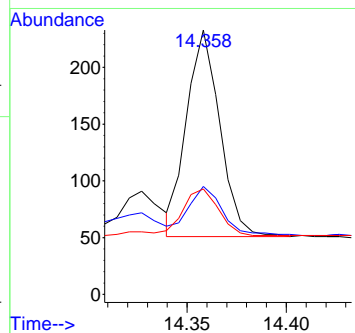
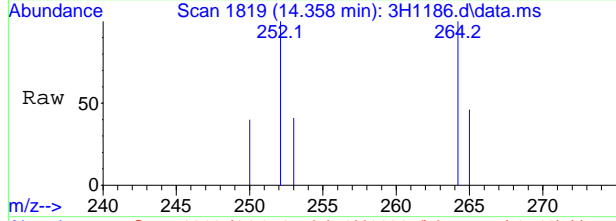
#30  
 Benzo[k]fluoranthene  
 Concen: 0.0341 ppm  
 RT: 13.960 min Scan# 1755  
 Delta R.T. -0.019 min  
 Lab File: 3H1186.d  
 Acq: 1 Jun 2024 9:01 am

Tgt Ion	Ratio	Lower	Upper
252	100		
250	21.4	0.0	51.0
253	23.9	0.0	51.0

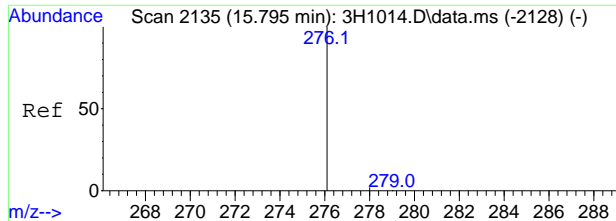


#31  
 Benzo[a]pyrene  
 Concen: 0.0549 ppm  
 RT: 14.358 min Scan# 1819  
 Delta R.T. -0.019 min  
 Lab File: 3H1186.d  
 Acq: 1 Jun 2024 9:01 am

Tgt Ion	Ratio	Lower	Upper
252	100		
253	22.4	0.0	50.5
250	22.7	0.0	52.8

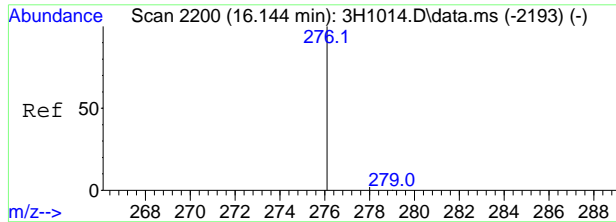
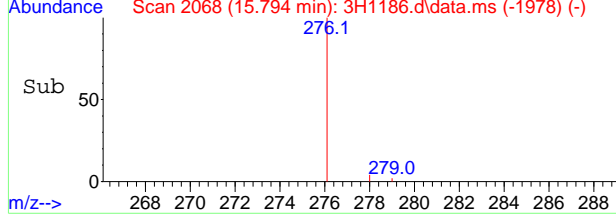
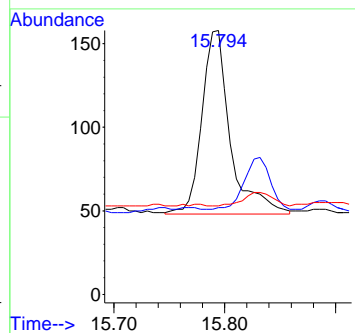
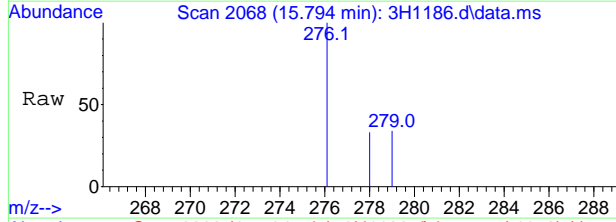


7.1.1  
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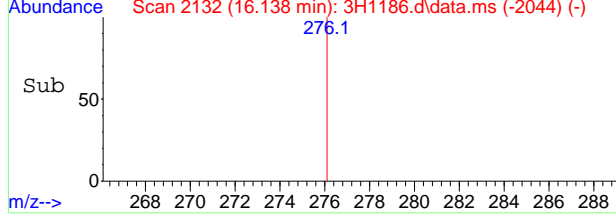
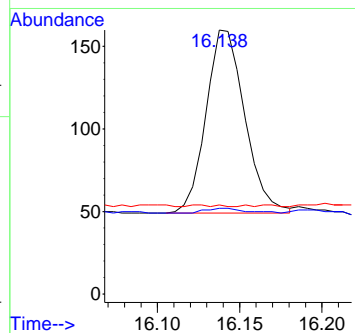
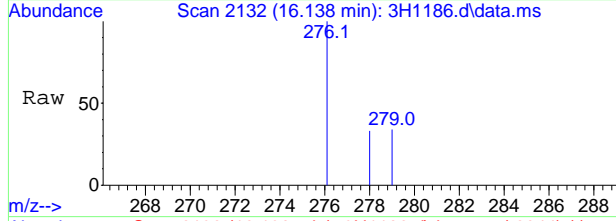
#32  
 Indeno[1,2,3-cd]pyrene  
 Concen: 0.0508 ppm m  
 RT: 15.794 min Scan# 2068  
 Delta R.T. -0.016 min  
 Lab File: 3H1186.d  
 Acq: 1 Jun 2024 9:01 am

Tgt Ion	Ratio	Lower	Upper
276	100		
278	32.9	0.0	33.8
279	33.5	0.0	31.8#



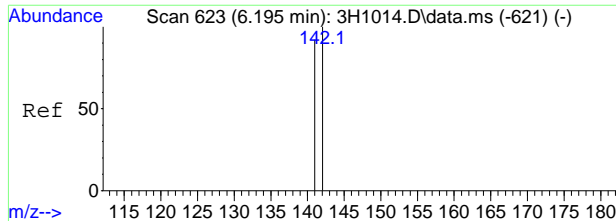
#34  
 Benzo[g,h,i]perylene  
 Concen: 0.0563 ppm  
 RT: 16.138 min Scan# 2132  
 Delta R.T. -0.027 min  
 Lab File: 3H1186.d  
 Acq: 1 Jun 2024 9:01 am

Tgt Ion	Ratio	Lower	Upper
276	100		
278	2.3	0.0	32.4
279	0.5	0.0	30.1

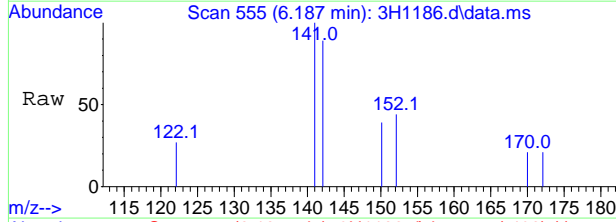


7.1.1  
7

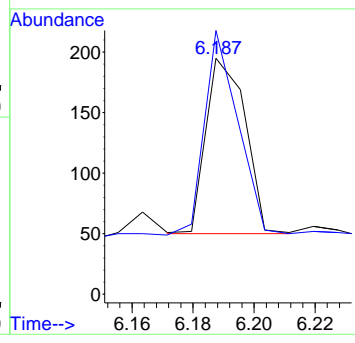
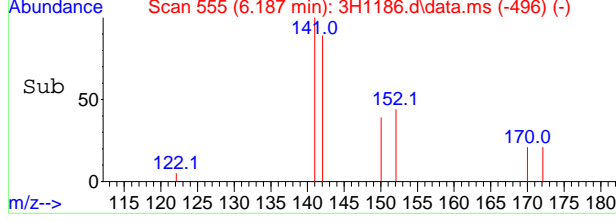




#37  
 1-Methylnaphthalene  
 Concen: 0.0630 ppm m  
 RT: 6.187 min Scan# 555  
 Delta R.T. -0.008 min  
 Lab File: 3H1186.d  
 Acq: 1 Jun 2024 9:01 am



Tgt Ion	Ratio	Lower	Upper
142	100		
141	111.8	77.9	117.9



7.1.1  
7



Quantitation Report (QT Reviewed)

Data Path : X:\Dayton SVOA GCMS\altheam\3h82\  
 Data File : 3H1177.d  
 Acq On : 1 Jun 2024 5:21 am  
 Operator : rocquans  
 Sample : op55107a-mb1 Inst : GCMS3H  
 Misc : op55107a,e3h82,500,,,1,1  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 03 07:30:44 2024  
 Quant Method : X:\Dayton SVOA GCMS\altheam\method\M3H73SIM.M  
 Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um  
 QLast Update : Mon Jun 03 07:13:29 2024  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
-----						
Internal Standards						
1) 1-Methylnaphthalene-d10	6.164	152	9159	4.00	ppm	0.00
12) Fluorene-d10	7.486	176	10718	4.00	ppm	-0.01
22) Fluoranthene-d10	10.185	212	20097	4.00	ppm	-0.01
28) Benzo(a)pyrene-d12	14.327	264	17528	4.00	ppm	-0.02
35) 1-Methylnaphthalene-d10a	6.164	152	9159	4.00	ppm	0.00
38) Fluorene-d10a	7.486	176	10718	4.00	ppm	-0.01
System Monitoring Compounds						
2) 2-Fluorophenol	3.847	112	32880	33.94	ppm	0.00
Spiked Amount	50.000	Range 11 - 58	Recovery =	67.88%	#	
3) Phenol-d5	4.462	99	29816	27.65	ppm	0.00
Spiked Amount	50.000		Recovery =	55.30%		
6) Nitrobenzene-d5	5.094	82	46156	54.49	ppm	0.00
Spiked Amount	50.000		Recovery =	108.98%		
11) 2-Fluorobiphenyl	6.412	172	105316	36.52	ppm	0.00
Spiked Amount	50.000		Recovery =	73.04%		
17) 2,4,6-Tribromophenol	7.772	330	19950	78.61	ppm	-0.01
Spiked Amount	50.000		Recovery =	157.22%		
25) Terphenyl-d14	10.829	244	187593	51.60	ppm	-0.01
Spiked Amount	50.000		Recovery =	103.20%		
Target Compounds						
20) Phenanthrene	8.608	178	72	0.0176	ppm	97
21) Anthracene	8.669	178	23	0.0061	ppm	88
-----						

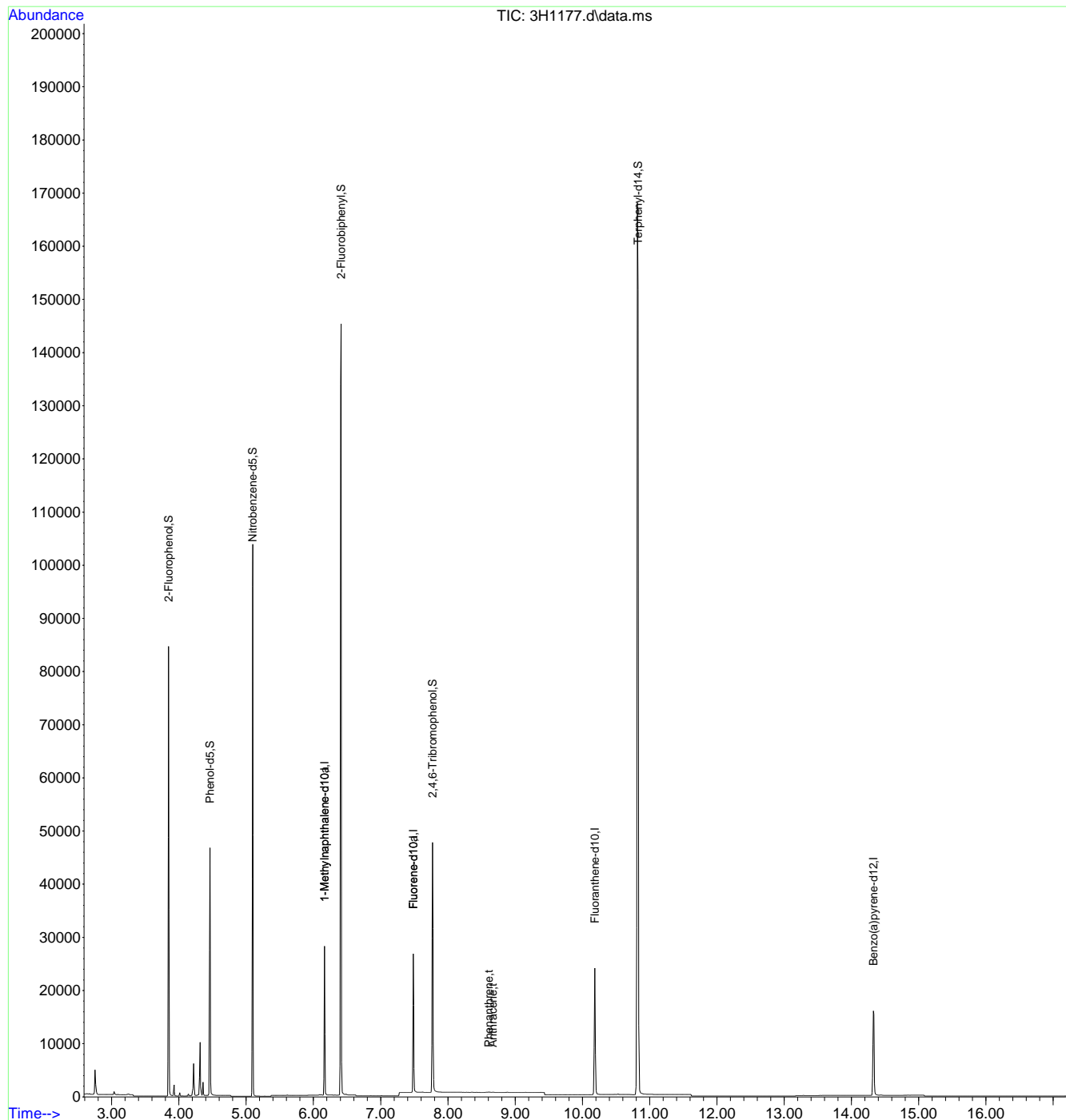
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.21  
7

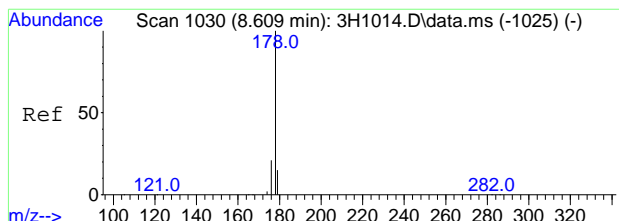
Quantitation Report (QT Reviewed)

Data Path : X:\Dayton SVOA GCMS\altheam\3h82\  
 Data File : 3H1177.d  
 Acq On : 1 Jun 2024 5:21 am  
 Operator : rocquans  
 Sample : op55107a-mb1 Inst : GCMS3H  
 Misc : op55107a,e3h82,500,,,1,1  
 ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 03 07:30:44 2024  
 Quant Method : X:\Dayton SVOA GCMS\altheam\method\M3H73SIM.M  
 Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um  
 QLast Update : Mon Jun 03 07:13:29 2024  
 Response via : Initial Calibration

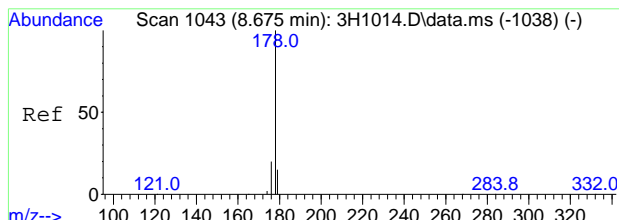
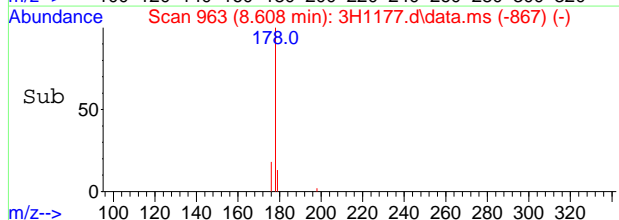
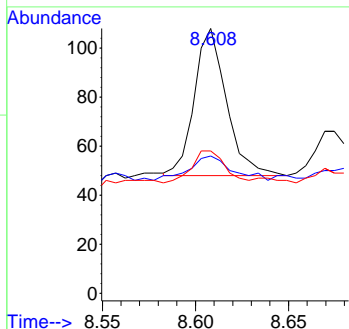
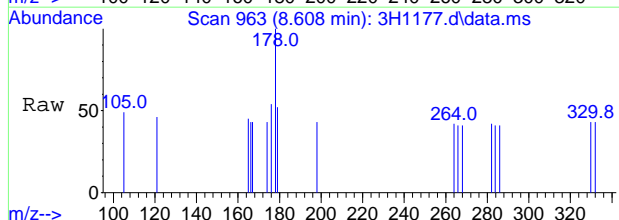


7.2.1  
7



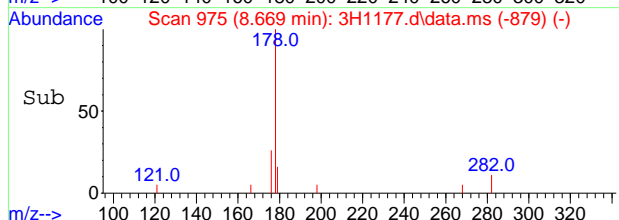
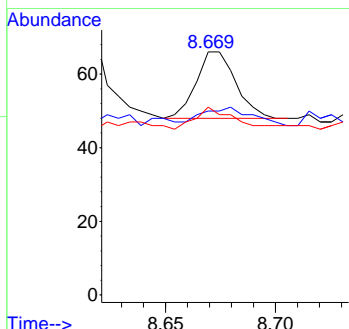
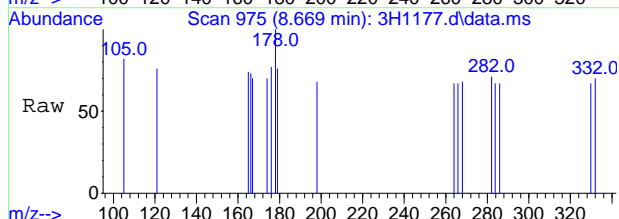
#20  
 Phenanthrene  
 Concen: 0.0176 ppm  
 RT: 8.608 min Scan# 963  
 Delta R.T. -0.010 min  
 Lab File: 3H1177.d  
 Acq: 1 Jun 2024 5:21 am

Tgt Ion	Ratio	Lower	Upper
178	100		
179	13.4	0.0	45.1
176	21.0	0.0	49.7



#21  
 Anthracene  
 Concen: 0.0061 ppm  
 RT: 8.669 min Scan# 975  
 Delta R.T. -0.010 min  
 Lab File: 3H1177.d  
 Acq: 1 Jun 2024 5:21 am

Tgt Ion	Ratio	Lower	Upper
178	100		
179	16.7	0.0	45.1
176	27.8	0.0	49.4



7.2.1  
7

## General Chemistry

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### QC Data Summaries

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Includes the following where applicable:

- Percent Solids Raw Data Summary

# Percent Solids Raw Data Summary

**Job Number:** JD87833T  
**Account:** MTXFPNJ Matrix New World Engineering, Inc.  
**Project:** Ridgewood Berm Sampling, Ridgewood, NJ

---

**Sample:** JD87833-15      **Analyzed:** 06-MAY-24 by SC      **Method:** SM2540 G 18TH ED MOD  
**ClientID:** DUPE 1

Wet Weight (Total)	35.07	g
Tare Weight	26.31	g
Dry Weight (Total)	34.27	g
Solids, Percent	90.9	%

---

**APPENDIX F**

**Soil and Soil Leachate Migration to Groundwater Exposure Pathway Calculator  
Sheets**

**NJDEP 2022 SPLP Spreadsheet**

Case name/area of concern:  
Case number:  
Sampling date:

Schedler Property - Berm
24-05-28-1117-27
5/3/2024

**CALCULATE SITE SPECIFIC MGW STANDARD**

Reset Spreadsheet

Instructions

Back to MGW Site-Specific Menu

Exit

Contaminant:

Benzo(a)anthracene (1,2-Benzanth

CAS No:

56-55-3

Water solubility (mg/L)

9.40E-03

Aqueous reporting limit (µg/L):

1.00E-01

Soil reporting limit (mg/kg):

1.70E-01

Ground Water Remediation Std (µg/L)

1.00E-01

DAF (20, or site-specific if approved):

20

Leachate Standard (µg/L):

2.00E+00

Henry's law constant (dimensionless):

4.91E-04

**NOTE:**

**USE ONE PAGE PER CONTAMINANT, do not leave empty rows between samples**  
**Do not enter samples with soil concentrations at or below the soil reporting limit**  
**SPLP leachate concentrations may be entered down to the detection limit, but see guidance**  
**Enter site-specific dilution-attenuation factor (DAF) if desired**

Data entry cells (do not skip rows)

Optional data entry

Calculated or locked cells

Indicates that Alternative Remediation Standard needs to be recalculated

Sample ID	Soil sample weight (kg)	Leachate Volume (L)	Total Soil Concentration (mg/kg)	SPLP Leachate Concentration (µg/L)	Final pH of Leachate (except VOCs)	Optional data				Kd (L/kg)	% Contaminant in Leachate	Field leachate concentration (µg/L)	Pass or fail?
						Sampling Depth (ft)	Soil Type	Organic Carbon (mg/kg)	Organic Carbon (%)				
SB-4	1.001	2.002	1.55	0.0785	9.49					19743.22	0.01	0.08	PASS
SB-6	1.008	2.016	1.58	0.104	9.53					15190.31	0.01	0.10	PASS
DUPE 1	1.001	2.002	1.82	0.143	8.15					12725.27	0.02	0.14	PASS
SB-5	1.002	3.005	1.85	0.0483	8.91					38299.28	0.01	0.05	PASS

**SPLP RESULTS for**

**OPTION 1a: All adjusted leachate concentrations are below the leachate criterion**

**REMEDIATION STANDARD = 1.85 mg/kg**

**OPTION 1b: Simple inspection of tabulated results to find highest acceptable standard**

EVERYTHING PASSED, OPTION 1b NOT VALID

**OPTION 2: Remediation standard using site-specific Kd value**

Kd ratio = 3.01, AVERAGING Kds OK

Kd USED FOR CALCULATING STANDARD = 21489.5204 L/kg

result before rounding = 42.9793 mg/kg

**REMEDIATION STANDARD = 1.8 mg/kg (controlled by maximum soil concentration)**

**OPTION 3: Remediation standard using linear regression**

Soil concentration midrange = 1.7

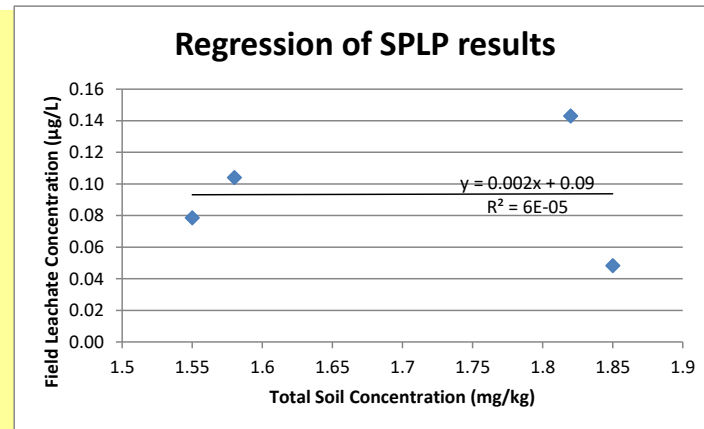
Number of points above midrange = 2

Enough points above midrange? YES

R-Square high enough? NO

Leachate criterion within range of leachate concentrations? NO

OPTION 3 NOT VALID



**NJDEP 2022 SPLP Spreadsheet**

Case name/area of concern: **Schedler Property - Berm**  
 Case number: **24-05-28-1117-27**  
 Sampling date: **5/3/2024**

**CALCULATE SITE SPECIFIC MGW STANDARD**

Reset Spreadsheet

Instructions

Back to MGW Site-Specific Menu

Exit

Contaminant: **Lead (total)**  
 CAS No: **7439-92-1**  
 Water solubility (mg/L): **NA**  
 Aqueous reporting limit (µg/L): **5.00E+00**  
 Soil reporting limit (mg/kg): **5.00E-01**  
 Ground Water Remediation Std (µg/L): **5.00E+00**  
 DAF (20, or site-specific if approved): **20**  
 Leachate Standard (µg/L): **1.00E+02**  
 Henry's law constant (dimensionless): **0.00E+00**

**NOTE:**

**USE ONE PAGE PER CONTAMINANT, do not leave empty rows between samples**  
**Do not enter samples with soil concentrations at or below the soil reporting limit**  
**SPLP leachate concentrations may be entered down to the detection limit, but see guidance**  
**Enter site-specific dilution-attenuation factor (DAF) if desired**

- Data entry cells (do not skip rows)
- Optional data entry
- Calculated or locked cells
- Indicates that Alternative Remediation Standard needs to be recalculated

CLICK HERE if chemical is not on drop-down list, or to enter alternate GWRS

Sample ID	Soil sample weight (kg)	Leachate Volume (L)	Total Soil Concentration (mg/kg)	SPLP Leachate Concentration (µg/L)	Final pH of Leachate (except VOCs)	Optional data				Kd (L/kg)	% Contaminant in Leachate	Field leachate concentration (µg/L)	Pass or fail?
						Sampling Depth (ft)	Soil Type	Organic Carbon (mg/kg)	Organic Carbon (%)				
SB-11	0.1	2	28.9	50	9.65					558	3.46	51.78	PASS
SB-9	1.001	2.002	71.1	50	10.02					1420	0.14	50.07	PASS
SB-1	1.006	2.013	169	50	9.38					3377.999	0.06	50.03	PASS

**SPLP RESULTS for**

**OPTION 1a: All adjusted leachate concentrations are below the leachate criterion**

**REMEDIATION STANDARD = 169 mg/kg**

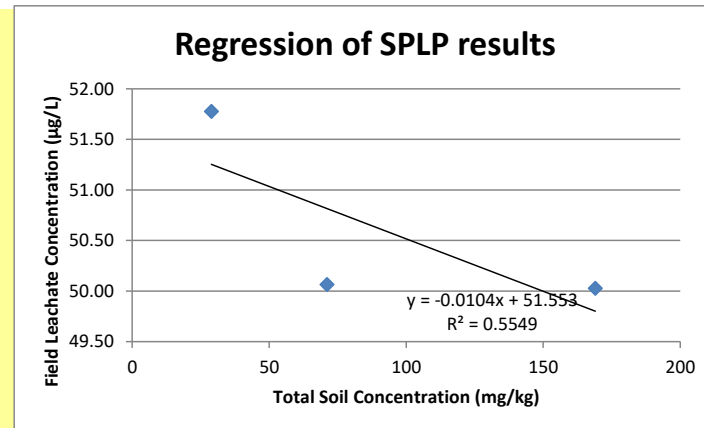
**OPTION 1b: Simple inspection of tabulated results to find highest acceptable standard**  
 EVERYTHING PASSED, OPTION 1b NOT VALID

**OPTION 2: Remediation standard using site-specific Kd value**

Kd ratio = 6.05, AVERAGING Kds OK  
 Kd USED FOR CALCULATING STANDARD = 1785.333 L/kg  
 result before rounding = 178.5486 mg/kg  
**REMEDIATION STANDARD = 170 mg/kg (controlled by maximum soil concentration)**

**OPTION 3: Remediation standard using linear regression**

Soil concentration midrange = 98.95  
 Number of points above midrange = 1  
 Enough points above midrange? NO  
 R-Square high enough? NO  
 Leachate criterion within range of leachate concentrations? NO  
**OPTION 3 NOT VALID**





**NJDEP 2022 SPLP Spreadsheet**

Case name/area of concern: **Schedler Property - Berm**  
 Case number: **24-05-28-1117-27**  
 Sampling date: **5/3/2024**

**CALCULATE SITE SPECIFIC MGW STANDARD**

Reset Spreadsheet

Instructions

Back to MGW Site-Specific Menu

Exit

Contaminant: **Mercury (total)**  
 CAS No: **7439-97-6**  
 Water solubility (mg/L): **NA**  
 Aqueous reporting limit (µg/L): **5.00E-02**  
 Soil reporting limit (mg/kg): **1.00E-01**  
 Ground Water Remediation Std (µg/L): **2.00E+00**  
 DAF (20, or site-specific if approved): **20**  
 Leachate Standard (µg/L): **4.00E+01**  
 Henry's law constant (dimensionless): **0.00E+00**

**NOTE:**  
**USE ONE PAGE PER CONTAMINANT, do not leave empty rows between samples**  
**Do not enter samples with soil concentrations at or below the soil reporting limit**  
**SPLP leachate concentrations may be entered down to the detection limit, but see guidance**  
**Enter site-specific dilution-attenuation factor (DAF) if desired**

Data entry cells (do not skip rows)  
 Optional data entry  
 Calculated or locked cells  
 Indicates that Alternative Remediation Standard needs to be recalculated

Sample ID	Soil sample weight (kg)	Leachate Volume (L)	Total Soil Concentration (mg/kg)	SPLP Leachate Concentration (µg/L)	Final pH of Leachate (except VOCs)	Optional data				Kd (L/kg)	% Contaminant in Leachate	Field leachate concentration (µg/L)	Pass or fail?
						Sampling Depth (ft)	Soil Type	Organic Carbon (mg/kg)	Organic Carbon (%)				
SB-14	0.1003	2.006	0.17	0.2	6.8					830	2.35	0.20	PASS
SB-9	0.1001	2.002	0.19	0.0002	10.02					949980	0.00	0.00	PASS
SB-1	0.1006	2.013	0.29	0.0002	9.38					1449980	0.00	0.00	PASS

**SPLP RESULTS for**

**OPTION 1a: All adjusted leachate concentrations are below the leachate criterion**

**REMEDIATION STANDARD = 0.29 mg/kg**

**OPTION 1b: Simple inspection of tabulated results to find highest acceptable standard**  
 EVERYTHING PASSED, OPTION 1b NOT VALID

**OPTION 2: Remediation standard using site-specific Kd value**

Kd ratio = 1746.96, USE MINIMUM Kd  
 Kd USED FOR CALCULATING STANDARD = 830. L/kg  
 result before rounding = 33.2061 mg/kg  
**REMEDIATION STANDARD = 0.29 mg/kg (controlled by maximum soil concentration)**

**OPTION 3: Remediation standard using linear regression**

Soil concentration midrange = .23  
 Number of points above midrange = 1  
 Enough points above midrange? NO  
 R-Square high enough? NO  
 Leachate criterion within range of leachate concentrations? NO  
 OPTION 3 NOT VALID

