

July 31, 2014

Geotechnical  
Environmental  
Water Resources  
Ecological

Mr. Steve Mullin  
Lead Analyst  
89 East Avenue  
Rochester, New York 14649

**Subject:** **Phase I Off-Site Property Investigation Summary**  
RG&E West Station Plant Area Former Manufactured Gas Plant (MGP) Site  
Site No. V00593-8  
Index No. B-0535-98-07

Dear Mr. Mullin:

This letter report summarizes the investigation activities and analytical results of the Phase I investigation performed at the adjacent off-site property (aka 96 Falls Street) north of the Rochester Gas and Electric (RG&E) West Station Plant Area Former Manufactured Gas Plant (MGP) Site. The investigation was conducted at the request of the New York State Department of Environmental Conservation (NYSDEC or Department) in e-mail correspondence to RG&E dated January 11, 2013. The investigation was conducted in accordance with a NYSDEC-approved Scope of Work dated April 1, 2013.

## 1.0 BACKGROUND

NYSDEC requested an investigation of the adjacent property based on the field observations by Department staff that noted an overburden groundwater seep exhibiting a “coal tar-like” odor originating from a joint in the concrete retaining wall on the river side of the adjacent property approximately 53 feet north of the RG&E property boundary. At the request of RG&E, GEI Consultants, Inc. P.C (GEI) prepared a Scope of Work for the adjacent property investigation. The Scope of Work included site background information (i.e., described historical industrial property usage, summarized documented evidence of historical petroleum bulk storage and petroleum solvent usage) and described a phased investigative approach of the adjacent property. After Department approval of the work scope, an agreement for access to the adjacent property was prepared in May 2013 and executed by involved parties in January 2014. In agreement with the NYSDEC, Phase I investigation activities described in the Scope of Work were scheduled after winter snow melt and spring precipitation events which would allow river levels to fall sufficiently for safe access to the river-side soils along river’s edge near the seep area.

## 2.0 PHASE I INVESTIGATION FIELD ACTIVITIES

The investigation was performed by GEI on May 27, 2014. Phase I investigation activities included characterization of the quality of seep water discharging from the base of the

retaining wall and quality of soil immediately below the seep at the location shown on Figure 1. The rate of seepage was estimated to be 250 mL per minute. A water sample was collected from the seep immediately adjacent to the concrete retaining wall on the River side of the adjacent property. Sample bottles were direct-filled with seep water and the water quality was noted to be clear. A slight naphthalene-type odor in the general area of the seep was noted during sampling. No NAPL or sheens were noted on water samples collected from the seep.

In accordance with the work plan, a groundwater sample was collected from monitoring well GMX-MW-26S located on RG&E West Station property closest to the seep location for water quality comparison to the seep water. The groundwater sample was collected using low flow sampling methods described in the NYSDEC- approved Remedial Investigation Work Plan (RIWP, 2008). Field measured parameters including: pH, conductivity, oxidation-reduction potential (ORP), temperature, dissolved oxygen and turbidity were recorded on the field sampling form during purging and sampling. A NAPL assessment was performed on GMX-MW-26S prior to purging using a weighted tape. No NAPL was found to be present at the base of GMX-MW-26S. Purge water associated with sampling was found to be clear and absent of sheens. Purge water and disposable sampling equipment was containerized in appropriately labeled containers and stored on-Site for proper disposal by RG&E.

The seep and groundwater samples were submitted for laboratory analysis for:

- TCL VOCs (EPA Method 8260)
- TCL SVOCs (EPA Method 8270)
- TAL Metals (EPA Method 6010)
- Total Cyanide (EPA Method 9012A)
- Total Alkalinity (EPA Method 310.2)
- Sulfate (EPA Method 9038)
- Chloride (EPA Method 9251)
- Total Dissolved Solids (EPA Method SM2540-C)
- Nitrate (EPA Method 353.2)

A surface and subsurface soil sample was collected from the seep area near the foot of the retaining wall on the adjacent property. The surface soil sample was collected from the upper three-inches (0 - 3") of soil directly below the seep origin and a second soil sample was collected from a depth of 12-14" below ground surface. The samples were collected using dedicated stainless steel sampling equipment and an Encore® sampler for samples requiring VOC analysis. The soil samples were collected in accordance with procedures described in the RIWP (2008). The samples were analyzed for the following:

- VOCs (EPA Method 5035A)
- SVOCs (EPA Method 8270)
- TAL Metals (EPA Method 6010)
- Total Cyanide (EPA Method 9012A)
- PCBs (EPA Method 8082)

The water and soil samples were delivered on the same day (May 27, 2014) to Test America,

Inc. located in Amherst, New York under chain of custody procedures.

In addition to the above-described analyses, a representative volume from each groundwater and soil sample was provided for chemical analysis to Acutest Laboratories in Watertown, Massachusetts and forensic data interpretation by Meta Environmental, Inc. (META). The forensic analyses included the following:

- MAH/PAH compounds (EPA Method 8100)
- Extended PAH profiles (EPA Method 8270 Mod)

### **3.0 PHASE I INVESTIGATION RESULTS**

The laboratory analytical data package provided by Test America for soil, site groundwater (GMX-MW-26S), and seep water samples is included in Attachment A. A data usability review of the laboratory data was performed and described in Attachment B. Data were found to be usable as qualified by the laboratory. A discussion of analytical results for samples submitted to Test America is provided below.

#### **Seep-Area Soil Analytical Results**

A summary of analytical data for surface and subsurface soils is provided in Table 1 and described below.

#### **VOCs**

TCL VOCs were not detected in the surface or subsurface soil sample collected from the seep area.

#### **SVOCs**

While several individual polycyclic aromatic hydrocarbon compounds (PAHs) were detected at low concentrations (part per billion levels), TCL SVOCs were not detected above constituent concentrations listed in 6NYCRR Part 375 Soil SCOs for Unrestricted Use. Estimated laboratory reported concentration levels in the surface and subsurface soil sample were similar.

#### **PCBs**

PCBs were not detected in the soil samples.

#### **Inorganic Constituents**

Laboratory reported concentrations for detected inorganic compounds for the surface and subsurface soil sample analyzed were similar. The following inorganic constituents were detected at concentrations above 6NYCRR Part 375 Soil SCOs for Unrestricted Use.

- Lead in samples SEEP-1(0-3) at 103 mg/kg and SEEP-1(12-14) at 124 mg/kg as compared to an unrestricted SCO of 63 mg/kg.
- Zinc in sample SEEP-1(0-3) at 121 mg/kg compared to an unrestricted SCO of 109 mg/kg.

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Constituent concentrations are typical of urban environments and well below 6NYCRR Part 375 Soil SCOs for Commercial Use (shown on Table 1) and Residential Use (Lead – 400 mg/kg and Zinc – 2200 mg/kg).

### **Seep Water and Shallow Groundwater Analytical Results**

A summary of analytical data for site groundwater (GMX-MW-26S) and seep water (SEEP-1) is provided in Table 2 and described below.

#### **VOCs**

TCL VOCs were not detected in the site groundwater sample GMX-MW-26S at concentrations above standards and guidance values in TOGS 1.1.1. Benzene (5.2 ug/L) and total xylenes (11 ug/L) were detected in SEEP-1 at concentrations above TOGS 1.1.1.

#### **SVOCs**

Low concentrations (part per billion levels) of several PAHs were detected in SEEP-1. Naphthalene (17 ug/L) was the only constituent detected above values listed in TOGS 1.1.1. No constituents were detected above levels in TOGS 1.1.1 in the groundwater sample collected from well MW-26S.

#### **Inorganic Constituents**

Inorganic constituents detected at concentrations above levels in TOGS 1.1.1 include the following:

- iron
- manganese
- sodium
- chloride
- sulfate
- total dissolved solids (TDS)

The constituents detected were present at similar concentrations in both the seep and groundwater sample. The detected concentrations are consistent with groundwater occurring in soil fill and reflect impact from road salt application (i.e., elevated sodium, chloride and TDS levels). Toxic metals (RCRA 8 metals) were either not detected or detected at low concentrations (below TOGS 1.1.1).

## **4.0 FORENSIC DATA INTERPRETATION**

Environmental forensic data interpretation was prepared by META. The META report is provided in Attachment C. The forensic report concluded the following:

**Groundwater and Seep Water** – The groundwater sample collected from on-site well GMX-MW-26S contained no detectable PAHs or GC/FID chromatogram pattern known to be associated with MGP sites. The SEEP-1 water sample contained very low concentrations of o-xylene, benzo(b)thiophene, acenaphthene, C2-benzenes, C3-benzenes, and C4-benzenes. No detectable pattern was evident on the GC/FID chromatogram. The concentrations were too low to generate interpretable patterns.

**Seep Area Soil** – Both soil samples (surface and subsurface) contained a mixture of low concentration PAHs derived from pyrogenic, petrogenic, and decaying vegetative material. The fluoranthene/pyrene (Fl/Py) ratios in SEEP-1(0-3) and SEEP-1(12-14) were 1.06 and 1.12, respectively. These ratios are low compared to coal tar impacted soil collected from the West Station site which typically produced Fl/Py ratios greater than 1.4 (see Appendix I of the Remedial Investigation Report for the West Station Plant Area Site). The META forensic report concluded that the PAHs present in both the surface and subsurface seep area soil samples were typical of urban background.

## 5.0 CONCLUSION

The Phase I investigation sampling results indicate water seeping from the joint in the concrete retaining wall on the river side of the adjacent property contained very low concentrations of organic and inorganic constituents. Soils immediately below the seep area contained low concentrations of PAHs consistent with urban background. As shown in the historic photographs depicting site conditions during the 1940s and 1950s included in the Scope of Work dated April 1, 2013, historic activities at the garbage reduction facility extended beyond the retaining wall likely affecting the analytical detections. No evidence of impact from the West Station site was inferred from the seep water and soil samples. Based upon these findings, GEI recommends no further investigation of the adjacent property.

We thank you for the opportunity to provide these services to RG&E. If you have questions, please contact me at (716) 204-7156.

Sincerely yours,  
GEI CONSULTANTS, INC., P.C.



Richard H. Frappa, P.G.  
Senior Consultant

### Attachments:

- Figure 1 – Sampling Location Map
- Table 1 – Seep Area Surface and Subsurface Soil Analytical Summary
- Table 2 – Seep Water and Site Groundwater Analytical Summary
- Attachment A – Test America Laboratory Data Package (Level 2 package included)
- Attachment B – Data Usability Report
- Attachment C – META Environmental Forensic Report

## **Tables**

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**Table 1**  
**Surface and Subsurface Soil Analytical Summary**  
**Former West Station Plant Area MGP Site - Adjacent Property Investigation**  
**Rochester, New York**

Sample ID and Depth: Sample Date:	Part 375 Soil Cleanup Objectives			SEEP-1 0-3"	SEEP-1 12-14"
	Commercial	Industrial	Unrestricted		
<b>Volatile Organic Compound (mg/kg)</b>					
1,1,1-Trichloroethane	500	1000	0.68	<0.0061 U	<0.008 U
1,1,2,2-Tetrachloroethane	NA	NA	NA	<0.0061 U	<0.008 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	NA	NA	NA	<0.0061 U	<0.008 U
1,1,2-Trichloroethane	NA	NA	NA	<0.0061 U	<0.008 U
1,1-Dichloroethane	240	480	0.27	<0.0061 U	<0.008 U
1,1-Dichloroethene	500	1000	0.33	<0.0061 U	<0.008 U
1,2,4-Trichlorobenzene	NA	NA	NA	<0.0061 U	<0.008 U
1,2-Dibromo-3-Chloropropane	NA	NA	NA	<0.0061 U	<0.008 U
1,2-Dibromoethane (Ethylene Dibromide)	NA	NA	NA	<0.0061 U	<0.008 U
1,2-Dichlorobenzene	NA	NA	1.1	<0.0061 U	<0.008 U
1,2-Dichloroethane	30	60	0.02	<0.0061 U	<0.008 U
1,2-Dichloropropane	NA	NA	NA	<0.0061 U	<0.008 U
1,3-Dichlorobenzene	NA	NA	2.4	<0.0061 U	<0.008 U
1,4-Dichlorobenzene	NA	NA	1.8	<0.0061 U	<0.008 U
2-Hexanone	NA	NA	NA	<0.03 U	<0.04 U
Acetone	500	1000	0.05	<0.03 U	<0.04 U
Benzene	44	89	0.06	<0.0061 U	<0.008 U
Bromodichloromethane	NA	NA	NA	<0.0061 U	<0.008 U
Bromoform	NA	NA	NA	<0.0061 U	<0.008 U
Bromomethane	NA	NA	NA	<0.0061 U	<0.008 U
Carbon Disulfide	NA	NA	NA	<0.0061 U	<0.008 U
Carbon Tetrachloride	22	44	0.76	<0.0061 U	<0.008 U
Chlorobenzene	500	1000	1.1	<0.0061 U	<0.008 U
Chloroethane	NA	NA	NA	<0.0061 U	<0.008 U
Chloroform	350	700	0.37	<0.0061 U	<0.008 U
Chloromethane	NA	NA	NA	<0.0061 U	<0.008 U
Cis-1,2-Dichloroethylene	NA	NA	0.25	<0.0061 U	<0.008 U
Cis-1,3-Dichloropropene	NA	NA	NA	<0.0061 U	<0.008 U
Cyclohexane	NA	NA	NA	<0.0061 U	<0.008 U
Dibromochloromethane	NA	NA	NA	<0.0061 U	<0.008 U
Dichlorodifluoromethane	NA	NA	NA	<0.0061 U	<0.008 U
Ethylbenzene	390	780	1	<0.0061 U	<0.008 U
Isopropylbenzene (Cumene)	NA	NA	NA	<0.0061 U	<0.008 U
Methyl Acetate	NA	NA	NA	<0.0061 U	<0.008 U
Methyl Ethyl Ketone (2-Butanone)	500	1000	0.12	<0.03 U	<0.04 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NA	NA	NA	<0.03 U	<0.04 U
Methylcyclohexane	NA	NA	NA	<0.0061 U	<0.008 U
Methylene Chloride	500	1000	0.05	<0.0061 U	<0.008 U
Styrene	NA	NA	NA	<0.0061 U	<0.008 U
Tert-Butyl Methyl Ether	NA	NA	NA	<0.0061 U	<0.008 U
Tetrachloroethylene (PCE)	150	300	1.3	<0.0061 U	<0.008 U
Toluene	500	1000	0.7	<0.0061 U	<0.008 U
Trans-1,2-Dichloroethene	500	1000	0.19	<0.0061 U	<0.008 U
Trans-1,3-Dichloropropene	NA	NA	NA	<0.0061 U	<0.008 U
Trichloroethylene (TCE)	200	400	0.47	<0.0061 U	<0.008 U
Trichlorofluoromethane	NA	NA	NA	<0.0061 U	<0.008 U
Vinyl Chloride	13	27	0.02	<0.0061 U	<0.008 U
Xylenes, Total	500	1000	0.26	<0.012 U	<0.016 U

Notes:

**BOLD** = detection

mg/kg = milligrams per kilogram, which is equivalent to ppm or parts per million

J = estimated value

U = not detected at or above the stated reporting limit

Detects reported to method detection limit; Non-detects reported to reporting limit.

(<sup>1</sup>) Guidance Values from NYSDEC 6NYCRR Part 375-6 Remedial Program Soil Cleanup Objectives (SCOs): Unrestricted, Commercial, and Industrial Use, December 2006.

NA = guidance value does not exist

= exceeds Part 375 Soil Cleanup Objectives, Commercial Use

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**Table 1**  
**Surface and Subsurface Soil Analytical Summary**  
**Former West Station Plant Area MGP Site - Adjacent Property Investigation**  
**Rochester, New York**

Sample ID and Depth: Sample Date:	Part 375 Soil Cleanup Objectives			SEEP-1 0-3"	SEEP-1 12-14"
	Commercial	Industrial	Unrestricted	05/27/2014	05/27/2014
<b>Semi-Volatile Organic Compound (mg/kg)</b>					
2,4,5-Trichlorophenol	NA	NA	NA	<1.1 U	<1.3 U
2,4,6-Trichlorophenol	NA	NA	NA	<1.1 U	<1.3 U
2,4-Dichlorophenol	NA	NA	NA	<1.1 U	<1.3 U
2,4-Dimethylphenol	NA	NA	NA	<1.1 U	<1.3 U
2,4-Dinitrophenol	NA	NA	NA	<2 U	<2.4 U
2,4-Dinitrotoluene	NA	NA	NA	<1.1 U	<1.3 U
2,6-Dinitrotoluene	NA	NA	NA	<1.1 U	<1.3 U
2-Chloronaphthalene	NA	NA	NA	<1.1 U	<1.3 U
2-Chlorophenol	NA	NA	NA	<1.1 U	<1.3 U
2-Methylnaphthalene	NA	NA	NA	<1.1 U	<1.3 U
2-Methylphenol (O-Cresol)	500	1000	0.33	<1.1 U	<1.3 U
2-Nitroaniline	NA	NA	NA	<2 U	<2.4 U
2-Nitrophenol	NA	NA	NA	<1.1 U	<1.3 U
3,3'-Dichlorobenzidine	NA	NA	NA	<1.1 U	<1.3 U
3-Nitroaniline	NA	NA	NA	<2 U	<2.4 U
4,6-Dinitro-2-Methylphenol	NA	NA	NA	<2 U	<2.4 U
4-Bromophenyl Phenyl Ether	NA	NA	NA	<1.1 U	<1.3 U
4-Chloro-3-Methylphenol	NA	NA	NA	<1.1 U	<1.3 U
4-Chloroaniline	NA	NA	NA	<1.1 U	<1.3 U
4-Chlorophenyl Phenyl Ether	NA	NA	NA	<1.1 U	<1.3 U
4-Methylphenol (P-Cresol)	500	1000	0.33	<2 U	<2.4 U
4-Nitroaniline	NA	NA	NA	<2 U	<2.4 U
4-Nitrophenol	NA	NA	NA	<2 U	<2.4 U
Acenaphthene	500	1000	20	<1.1 U	<1.3 U
Acenaphthylene	500	1000	100	<1.1 U	<1.3 U
Acetophenone	NA	NA	NA	<1.1 U	<1.3 U
Anthracene	500	1000	100	<1.1 U	<1.3 U
Atrazine	NA	NA	NA	<1.1 U	<1.3 U
Benzaldehyde	NA	NA	NA	<1.1 U	<1.3 U
Benzo(a)Anthracene	5.6	11	1	<b>0.160 J</b>	<b>0.370 J</b>
Benzo(a)Pyrene	1	1.1	1	<b>0.140 J</b>	<b>0.440 J</b>
Benzo(b)Fluoranthene	5.6	11	1	<b>0.190 J</b>	<b>0.510 J</b>
Benzo(g,h,i)Perylene	500	1000	100	<b>0.160 J</b>	<b>0.330 J</b>
Benzo(k)Fluoranthene	56	110	0.8	<b>0.130 J</b>	<b>0.270 J</b>
Benzyl Butyl Phthalate	NA	NA	NA	<1.1 U	<b>0.620 J</b>
Biphenyl (Diphenyl)	NA	NA	NA	<1.1 U	<1.3 U
Bis(2-Chloroethoxy) Methane	NA	NA	NA	<1.1 U	<1.3 U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	NA	NA	NA	<1.1 U	<1.3 U
Bis(2-Chloroisopropyl) Ether	NA	NA	NA	<1.1 U	<1.3 U
Bis(2-Ethylhexyl) Phthalate	NA	NA	NA	<1.1 U	<1.3 U
Caprolactam	NA	NA	NA	<1.1 U	<1.3 U
Carbazole	NA	NA	NA	<1.1 U	<1.3 U
Chrysene	56	110	1	<b>0.140 J</b>	<b>0.440 J</b>
Dibenz(A,H)Anthracene	0.56	1.1	0.33	<1.1 U	<b>0.095 J</b>
Dibenzofuran	NA	NA	7	<1.1 U	<1.3 U
Diethyl Phthalate	NA	NA	NA	<1.1 U	<1.3 U
Dimethyl Phthalate	NA	NA	NA	<1.1 U	<1.3 U
Di-n-Butyl Phthalate	NA	NA	NA	<1.1 U	<1.3 U
Di-n-Octylphthalate	NA	NA	NA	<1.1 U	<1.3 U
Fluoranthene	500	1000	100	<b>0.220 J</b>	<b>0.530 J</b>
Fluorene	500	1000	30	<1.1 U	<1.3 U
Hexachlorobenzene	NA	NA	NA	<1.1 U	<1.3 U

Notes:

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**Rochester, New York**

Sample ID and Depth:	Part 375 Soil Cleanup Objectives			SEEP-1 0-3"	SEEP-1 12-14"
	Commercial	Industrial	Unrestricted		
<b>Semi-Volatile Organic Compound (mg/kg) continued</b>					
Hexachlorobutadiene	NA	NA	NA	<1.1 U	<1.3
Hexachlorocyclopentadiene	NA	NA	NA	<1.1 U	<1.3
Hexachloroethane	NA	NA	NA	<1.1 U	<1.3
Indeno(1,2,3-C,D)Pyrene	11	11	0.5	<b>0.110 J</b>	<b>0.270 J</b>
Isophorone	NA	NA	NA	<1.1 U	<1.3
Naphthalene	500	1000	12	<1.1 U	<1.3
Nitrobenzene	NA	NA	NA	<1.1 U	<1.3
N-Nitrosodi-N-Propylamine	NA	NA	NA	<1.1 U	<1.3
N-Nitrosodiphenylamine	NA	NA	NA	<1.1 U	<1.3
Pentachlorophenol	6.7	55	0.8	<2 U	<2.4
Phenanthrene	500	1000	100	<b>0.089 J</b>	<b>0.200 J</b>
Phenol	500	1000	0.33	<1.1 U	<1.3
Pyrene	500	1000	100	<b>0.210 J</b>	<b>0.450 J</b>
<b>Total Metals (mg/kg)</b>					
Aluminum	NA	NA	NA	<b>4040</b>	<b>3960</b>
Antimony	NA	NA	NA	<18 U	<22.1 U
Arsenic	16	16	13	<b>9.3</b>	<b>6.8</b>
Barium	400	10000	350	<b>84.8</b>	<b>56.2</b>
Beryllium	590	2700	7.2	<b>0.21 J</b>	<b>0.22 J</b>
Cadmium	9.3	60	2.5	<b>0.58</b>	<b>0.5</b>
Calcium	NA	NA	NA	<b>30500 B</b>	<b>31200 B</b>
Chromium, Total	1500	6800	30	<b>8.4</b>	<b>8</b>
Cobalt	NA	NA	NA	<b>5.2</b>	<b>4.8</b>
Copper	270	10000	50	<b>32.7</b>	<b>28.3</b>
Iron	NA	NA	NA	<b>22700</b>	<b>19300</b>
Lead	1000	3900	63	<b>103</b>	<b>124</b>
Magnesium	NA	NA	NA	<b>5780</b>	<b>4290</b>
Manganese	10000	10000	1600	<b>854</b>	<b>582</b>
Mercury	2.8	5.7	0.18	<b>0.059</b>	<b>0.066</b>
Nickel	310	10000	30	<b>14.6</b>	<b>30.2</b>
Potassium	NA	NA	NA	<b>462</b>	<b>511</b>
Selenium	1500	6800	3.9	<4.8 U	<5.9 U
Silver	1500	6800	2	<b>0.47 J</b>	<b>0.35 J</b>
Sodium	NA	NA	NA	<b>623</b>	<b>596</b>
Thallium	NA	NA	NA	<7.2 U	<8.8 U
Vanadium	NA	NA	NA	<b>12.1</b>	<b>10.9</b>
Zinc	10000	10000	109	<b>121</b>	<b>108</b>
<b>Total Cyanide (mg/kg)</b>					
Cyanide	27	1000	27	<b>1.4</b>	<b>2.8</b>
<b>Polychlorinated Biphenyl (mg/kg)</b>					
PCB-1016 (Aroclor 1016)	NA	NA	NA	<0.23 U	<0.3 U
PCB-1221 (Aroclor 1221)	NA	NA	NA	<0.23 U	<0.3 U
PCB-1232 (Aroclor 1232)	NA	NA	NA	<0.23 U	<0.3 U
PCB-1242 (Aroclor 1242)	NA	NA	NA	<0.23 U	<0.3 U
PCB-1248 (Aroclor 1248)	NA	NA	NA	<0.23 U	<0.3 U
PCB-1254 (Aroclor 1254)	NA	NA	NA	<0.23 U	<0.3 U
PCB-1260 (Aroclor 1260)	NA	NA	NA	<0.23 U	<0.3 U

Notes:

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**Table 2**  
**Seep Water and On-Site Groundwater Analytical Summary**  
**Former West Station Plant Area MGP Site - Adjacent Property Investigation**  
**Rochester, New York**

Sample ID and Depth:	TOGS 1.1.1 *	SEEP-1	GMX-MW-26S
Sample Date:		05/27/2014	05/27/2014
<b>Volatile Organic Compound (µg/L)</b>			
1,1,1-Trichloroethane	5	<4 U	<4 U
1,1,2,2-Tetrachloroethane	5	<4 U	<4 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	NA	<4 U	<4 U
1,1,2-Trichloroethane	1	<4 U	<4 U
1,1-Dichloroethane	5	<4 U	<4 U
1,1-Dichloroethene	5	<4 U	<4 U
1,2,4-Trichlorobenzene	5	<4 U	<4 U
1,2-Dibromo-3-Chloropropane	0.04	<4 U	<4 U
1,2-Dibromoethane (Ethylene Dibromide)	5	<4 U	<4 U
1,2-Dichlorobenzene	3	<4 U	<4 U
1,2-Dichloroethane	0.6	<4 U	<4 U
1,2-Dichloropropane	1	<4 U	<4 U
1,3-Dichlorobenzene	3	<4 U	<4 U
1,4-Dichlorobenzene	3	<4 U	<4 U
2-Hexanone	50	<20 U	<20 U
Acetone	50	<40 U	<40 U
Benzene	1	<b>5.2</b>	<4 U
Bromodichloromethane	50	<4 U	<4 U
Bromoform	50	<4 U	<4 U
Bromomethane	5	<4 U	<4 U
Carbon Disulfide	60	<4 U	<b>10</b>
Carbon Tetrachloride	5	<4 U	<4 U
Chlorobenzene	5	<4 U	<4 U
Chloroethane	5	<4 U	<4 U
Chloroform	7	<4 U	<4 U
Chloromethane	NA	<4 U	<4 U
Cis-1,2-Dichloroethylene	5	<4 U	<4 U
Cis-1,3-Dichloropropene	0.4	<4 U	<4 U
Cyclohexane	NA	<4 U	<4 U
Dibromochloromethane	5	<4 U	<4 U
Dichlorodifluoromethane	5	<4 U	<4 U
Ethylbenzene	5	<4 U	<4 U
Isopropylbenzene (Cumene)	5	<4 U	<4 U
Methyl Acetate	NA	<10 U	<10 U
Methyl Ethyl Ketone (2-Butanone)	50	<40 U	<40 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	NA	<20 U	<20 U
Methylcyclohexane	NA	<4 U	<4 U
Methylene Chloride	5	<4 U	<4 U
Styrene	5	<4 U	<4 U
Tert-Butyl Methyl Ether	NA	<4 U	<4 U
Tetrachloroethylene(PCE)	5	<4 U	<4 U
Toluene	5	<4 U	<4 U
Trans-1,2-Dichloroethene	5	<4 U	<4 U
Trans-1,3-Dichloropropene	0.4	<4 U	<4 U
Trichloroethylene (TCE)	5	<4 U	<4 U
Trichlorofluoromethane	5	<4 U	<4 U
Vinyl Chloride	2	<4 U	<4 U
Xylenes, Total	5	<b>11</b>	<8 U

Notes:

**BOLD** = detection

µg/L = micrograms per liter, which is equivalent to ppb or parts per billion

J = estimated value

B = analyte was detected in the sample and the laboratory method blank.

U = not detected at or above the stated reporting limit

Detected reported to method detection limit; Non detects reported to reporting limit.

NA = guidance value does not exist

\* Guidance values from 6NYCRR Part 703: Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations, for Class GA Waters presented in TOGS 1.1.1 June 1998.

= exceeds TOGS Guidance Criteria

**Table 2**  
**Seep Water and On-Site Groundwater Analytical Summary**  
**Former West Station Plant Area MGP Site - Adjacent Property Investigation**  
**Rochester, New York**

Sample ID and Depth:	TOGS 1.1.1 *	SEEP-1	GMX-MW-26S
Sample Date:		05/27/2014	05/27/2014
<b>Semi-Volatile Organic Compound (µg/L)</b>			
2,4,5-Trichlorophenol	1	<4.6 U	<4.7 U
2,4,6-Trichlorophenol	1	<4.6 U	<4.7 U
2,4-Dichlorophenol	1	<4.6 U	<4.7 U
2,4-Dimethylphenol	1	<4.6 U	<4.7 U
2,4-Dinitrophenol	1	<9.2 U	<9.5 U
2,4-Dinitrotoluene	5	<4.6 U	<4.7 U
2,6-Dinitrotoluene	5	<4.6 U	<4.7 U
2-Chloronaphthalene	10	<4.6 U	<4.7 U
2-Chlorophenol	NA	<4.6 U	<4.7 U
2-Methylnaphthalene	NA	<b>5</b>	<4.7 U
2-Methylphenol (O-Cresol)	NA	<4.6 U	<4.7 U
2-Nitroaniline	5	<9.2 U	<9.5 U
2-Nitrophenol	NA	<4.6 U	<4.7 U
3,3'-Dichlorobenzidine	5	<4.6 U	<4.7 U
3-Nitroaniline	5	<9.2 U	<9.5 U
4,6-Dinitro-2-Methylphenol	NA	<9.2 U	<9.5 U
4-Bromophenyl Phenyl Ether	NA	<4.6 U	<4.7 U
4-Chloro-3-Methylphenol	NA	<4.6 U	<4.7 U
4-Chloroaniline	5	<4.6 U	<4.7 U
4-Chlorophenyl Phenyl Ether	NA	<4.6 U	<4.7 U
4-Methylphenol (P-Cresol)	NA	<9.2 U	<9.5 U
4-Nitroaniline	5	<9.2 U	<9.5 U
4-Nitrophenol	NA	<9.2 U	<9.5 U
Acenaphthene	20	<b>3.5 J</b>	<b>0.91 J</b>
Acenaphthylene	NA	<b>1.3 J</b>	<4.7 U
Acetophenone	NA	<4.6 U	<4.7 U
Anthracene	50	<4.6 U	<4.7 U
Atrazine	7.5	<4.6 U	<4.7 U
Benzaldehyde	NA	<4.6 U	<4.7 U
Benzo(a)Anthracene	0.002	<4.6 U	<4.7 U
Benzo(a)Pyrene	0.002	<4.6 U	<4.7 U
Benzo(b)Fluoranthene	0.002	<4.6 U	<4.7 U
Benzo(g,h,i)Perylene	NA	<4.6 U	<4.7 U
Benzo(k)Fluoranthene	0.002	<4.6 U	<4.7 U
Benzyl Butyl Phthalate	NA	<4.6 U	<4.7 U
Biphenyl (Diphenyl)	5	<4.6 U	<4.7 U
Bis(2-Chloroethoxy) Methane	5	<4.6 U	<4.7 U
Bis(2-Chloroethyl) Ether (2-Chloroethyl Ether)	1	<4.6 U	<4.7 U
Bis(2-Chloroisopropyl) Ether	NA	<4.6 U	<4.7 U
Bis(2-Ethylhexyl) Phthalate	5	<4.6 U	<4.7 U
Caprolactam	NA	<4.6 U	<b>2.2 J</b>
Carbazole	NA	<b>1.3 J</b>	<4.7 U
Chrysene	0.002	<4.6 U	<4.7 U
Dibenz(a,h)Anthracene	NA	<4.6 U	<4.7 U
Dibenzofuran	NA	<b>0.69 J</b>	<9.5 U
Diethyl Phthalate	50	<4.6 U	<4.7 U
Dimethyl Phthalate	50	<4.6 U	<4.7 U
Di-N-Butyl Phthalate	50	<4.6 U	<4.7 U

Notes:

**BOLD** = detection

µg/L = micrograms per liter, which is equivalent to ppb or parts per billion

J = estimated value

B = analyte was detected in the sample and the laboratory method blank.

U = not detected at or above the stated reporting limit

Detects reported to method detection limit; Non detects reported to reporting limit.

NA = guidance value does not exist

\* Guidance values from 6NYCRR Part 703: Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations, for Class GA Waters presented in TOGS 1.1.1 June 1998.

= exceeds TOGS Guidance Criteria

**Table 2**  
**Seep Water and On-Site Groundwater Analytical Summary**  
**Former West Station Plant Area MGP Site - Adjacent Property Investigation**  
**Rochester, New York**

Sample ID and Depth:	TOGS 1.1.1 *	SEEP-1	GMX-MW-26S
Sample Date:		05/27/2014	05/27/2014
<b>Semi-Volatile Organic Compound (µg/L) continued</b>			
Di-N-Octylphthalate	50	<4.6 U	<4.7 U
Fluoranthene	50	<4.6 U	<4.7 U
Fluorene	50	<4.6 U	<4.7 U
Hexachlorobenzene	0.04	<4.6 U	<4.7 U
Hexachlorobutadiene	0.5	<4.6 U	<4.7 U
Hexachlorocyclopentadiene	5	<4.6 U	<4.7 U
Hexachloroethane	5	<4.6 U	<4.7 U
Indeno(1,2,3-C,D)Pyrene	0.002	<4.6 U	<4.7 U
Isophorone	50	<4.6 U	<4.7 U
Naphthalene	10	<b>17</b>	<4.7 U
Nitrobenzene	0.4	<4.6 U	<4.7 U
N-Nitrosodi-N-Propylamine	NA	<4.6 U	<4.7 U
N-Nitrosodiphenylamine	50	<4.6 U	<4.7 U
Pentachlorophenol	1	<9.2 U	<9.5 U
Phenanthrene	50	<4.6 U	<4.7 U
Phenol	1	<4.6 U	<4.7 U
Pyrene	50	<4.6 U	<4.7 U
<b>Total Metal (mg/L)</b>			
Aluminum	NA	<0.2 U	<b>0.074 J</b>
Antimony	0.003	<0.02 U	<0.02 U
Arsenic	0.025	<0.015 U	<b>0.0083 J</b>
Barium	1	<b>0.086</b>	<b>0.18</b>
Beryllium	NA	<0.002 U	<0.002 U
Cadmium	0.005	<0.002 U	<0.002 U
Calcium	NA	<b>318</b>	<b>263</b>
Chromium, Total	0.05	<0.004 U	<b>0.0019 J</b>
Cobalt	NA	<0.004 U	<b>0.00065 J</b>
Copper	0.2	<b>0.0022 J</b>	<0.01 U
Iron	0.3	<b>1.4</b>	<b>7.8</b>
Lead	0.025	<0.01 U	<0.01 U
Magnesium	NA	<b>82.8</b>	<b>93.9</b>
Manganese	0.3	<b>0.74</b>	<b>1.4</b>
Mercury	0.0007	<0.0002 U	<0.0002 U
Nickel	0.1	<b>0.0025 J</b>	<b>0.0026 J</b>
Potassium	NA	<b>10 B</b>	<b>14.5 B</b>
Selenium	0.01	<0.025 U	<b>0.0093 J</b>
Silver	0.05	<0.006 U	<0.006 U
Sodium	20	<b>642</b>	<b>780</b>
Thallium	NA	<0.02 U	<0.02 U
Vanadium	NA	<0.005 U	<0.005 U
Zinc	NA	<b>0.0061 J</b>	<b>0.01</b>
<b>Total Cyanide (mg/L)</b>			
Cyanide	0.2	<b>0.02</b>	<b>0.047</b>
<b>Water Quality Parameters (mg/L)</b>			
Alkalinity, Total (As CaCO <sub>3</sub> )	NA	<b>403</b>	<b>495 B</b>
Chloride (As Cl)	250	<b>1100</b>	<b>1270</b>
Nitrogen, Nitrate (As N)	10	<b>0.054</b>	<b>0.22</b>
Sulfate (As SO <sub>4</sub> )	250	<b>599</b>	<b>568</b>
Total Dissolved Solids	500	<b>3140</b>	<b>3440</b>

Notes:

**BOLD** = detection

µg/L = micrograms per liter, which is equivalent to ppb or parts per billion

J = estimated value

B = analyte was detected in the sample and the laboratory method blank.

U = not detected at or above the stated reporting limit

Detects reported to method detection limit; Non detects reported to reporting limit.

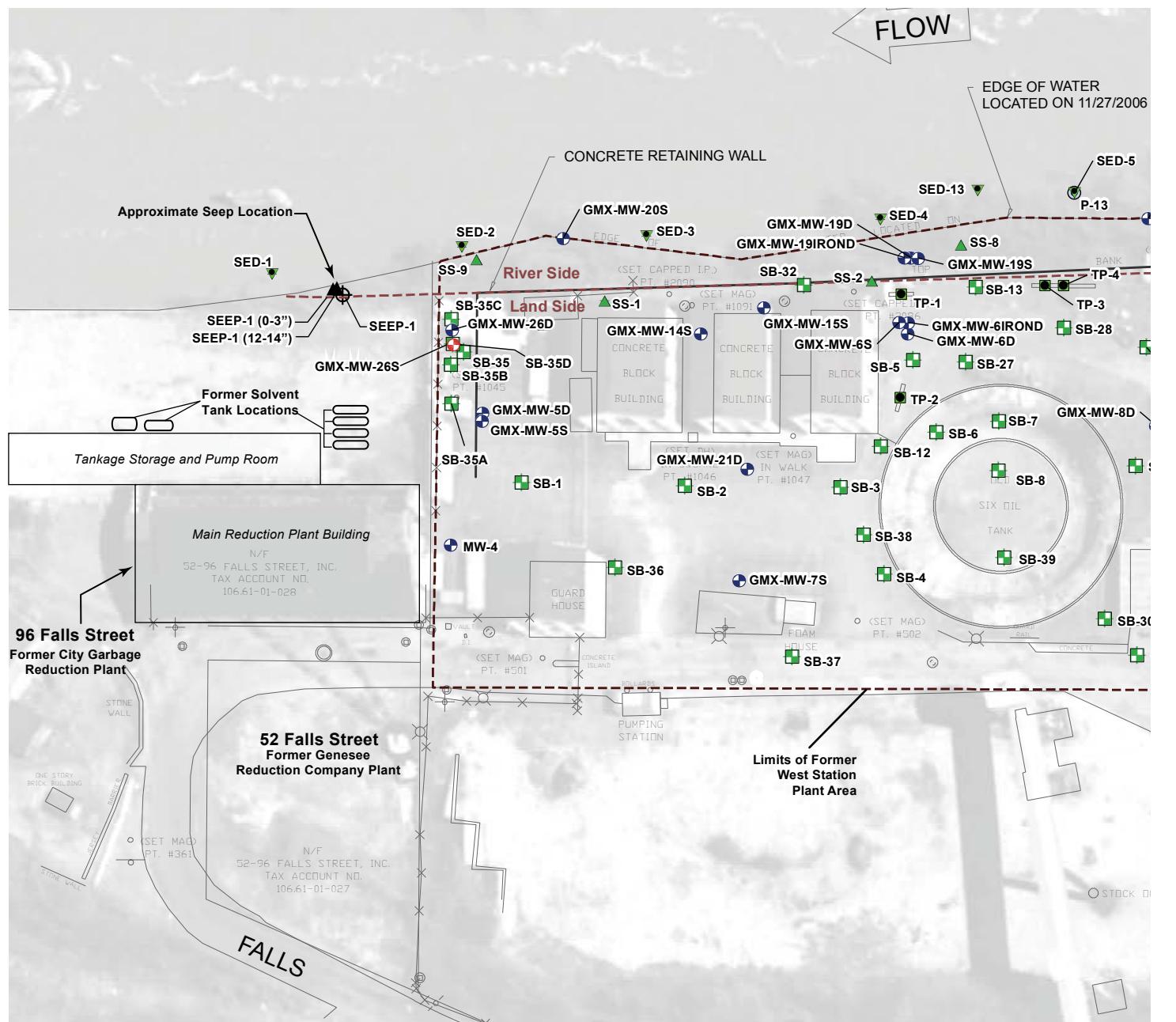
NA = guidance value does not exist

\* Guidance values from 6NYCRR Part 703: Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations, for Class GA Waters presented in TOGS 1.1.1 June 1998.

= exceeds TOGS Guidance Criteria

## **Figures**

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## EXPLANATION

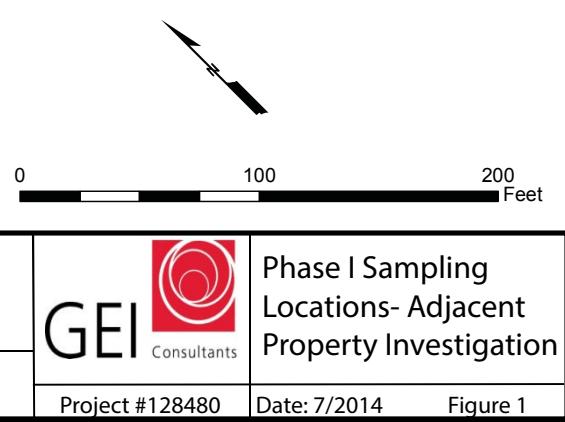
### 96 Falls Street Investigation

#### Phase I Investigation

- SEEP-1 (0-3") ▲ Soil Sample Location
- SEEP-1 ⊕ Seep Sample Location
- GMX-MW-26S ● Groundwater Sample Location

### West Station MGP Plant Area Investigation

- Monitoring Well
- ⊕ Pore Water
- ▼ Sediment Sample
- Soil Boring
- ▲ Surface Soil
- Test Pit



## **Attachment A**

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**Test America Laboratory Data Package (Level 2 package included)**

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-60592-1

Client Project/Site: RG&E - West Station Former MGP Site

For:

GEI Consultants, Inc.

90B John Muir Drive

Suite 104

Amherst, New York 14228

Attn: Michael Cummings

*Melissa Deyo*

Authorized for release by:

7/1/2014 7:41:26 PM

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### LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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# Definitions/Glossary

Client: GEI Consultants, Inc.

Project/Site: RG&E - West Station Former MGP Site

TestAmerica Job ID: 480-60592-1

## Qualifiers

### GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits
*	LCS or LCSD exceeds the control limits
E	Result exceeded calibration range.

### Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.

### General Chemistry

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

## Case Narrative

Client: GEI Consultants, Inc.  
Project/Site: RG&E - West Station Former MGP Site

TestAmerica Job ID: 480-60592-1

### Job ID: 480-60592-1

#### Laboratory: TestAmerica Buffalo

##### Narrative

##### Job Narrative 480-60592-1

##### Receipt

The samples were received on 5/27/2014 6:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.5° C.

Except:

No collection time listed on the COC for the following samples: SEEP-1-0-3" (480-60592-1), SEEP-1-12-14" (480-60592-2). The collection time was taken from the sample labels.

##### GC/MS VOA

Method(s) 8260C: The method blank for batch 184378 contained Methylene chloride above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 8260C: The following volatiles sample(s) was diluted due to foaming at the time of purging during the original sample analysis: MW-26S (480-60592-4), SEEP-1 (480-60592-3). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

##### GC/MS Semi VOA

Method(s) 8270D: The following samples were diluted due to the nature of the sample matrix: SEEP-1-0-3" (480-60592-1), SEEP-1-12-14" (480-60592-2). Elevated reporting limits (RLs) are provided.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 185840 recovered above the upper control limit for 2,4-Dinitrophenol and 2,4-Dinitrotoluene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: (CCVIS 480-185840/3).

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 185840 recovered above the upper control limit for Benzaldehyde. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: (CCV 480-185840/4).

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 185382 recovered above the upper control limit for multiple analytes. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: (CCV 480-185382/4), (CCVIS 480-185382/3).

Method(s) 8270D: The continuing calibration verification (CCV) analyzed in batch 190710 was outside the method criteria for the following analyte: Pentachlorophenol. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 190710 recovered above the upper control limit for Atrazine and 3,3'-Dichlorobenzidine. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: (CCV 480-190710/5).

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 190112 recovered above the upper control limit for Atrazine and 3,3'-Dichlorobenzidine. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: (CCV 480-190112/12), (CCV 480-190112/13).

Method(s) 8270D: The laboratory control sample (LCS) for batch 184424 recovered outside control limits for 4-Methylphenol. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8270D: The method blank for batch 184424 contained Benzaldehyde above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

## Case Narrative

Client: GEI Consultants, Inc.  
Project/Site: RG&E - West Station Former MGP Site

TestAmerica Job ID: 480-60592-1

### Job ID: 480-60592-1 (Continued)

#### Laboratory: TestAmerica Buffalo (Continued)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### GC Semi VOA

Method(s) 8082A: The surrogate percent difference in the associated continuing calibration verifications (CCV) for Decachlorobiphenyl exceeded 20%, indicating a high bias. (CCV 480-184798/15), (CCV 480-184798/33)

Method(s) 8082A: All primary data is reported from the ZB-5 column.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### Metals

Method(s) 6010C: The method blank for batch 480-184578 contained calcium above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 6010C: The method blank for batch 480-184445 contained potassium above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) 6010C: The continuing calibration blank (CCB) for analytical batch 480-185085 contained aluminum, beryllium, calcium, iron, and sodium above the reporting limit (RL). All reported samples associated with this CCB were either less than the reporting limit for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples (MB 480-184445/1-A), MW-26S (480-60592-4) was not performed.

Method(s) 6010C: The low level continuing calibration verification (CCVL 480-185085/40) recovered above the upper control limit for beryllium and iron. The sample(s) associated with this CCVL were either less than the reporting limit (RL) for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCVL; therefore, re-analysis of samples MW-26S (480-60592-4) was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### General Chemistry

Method(s) SM 2540C: Due to the matrix, the initial volume(s) used for the following sample(s) deviated from the standard procedure: MW-26S (480-60592-4). The reporting limits (RLs) have been adjusted proportionately.

Method(s) SM 2540C: Due to the matrix, the initial volume(s) used for the following sample(s) deviated from the standard procedure: SEEP-1 (480-60592-3). The reporting limits (RLs) have been adjusted proportionately.

Method(s) 310.2: The method blank for batch 185480 contained alkalinity above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed. MW-26S (480-60592-4)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

#### Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: GEI Consultants, Inc.

Project/Site: RG&E - West Station Former MGP Site

TestAmerica Job ID: 480-60592-1

**Client Sample ID: SEEP-1-0-3"**

**Lab Sample ID: 480-60592-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	160	J	1100	18	ug/Kg	5	⊗	8270D	Total/NA
Benzo[a]pyrene	140	J	1100	25	ug/Kg	5	⊗	8270D	Total/NA
Benzo[b]fluoranthene	190	J	1100	20	ug/Kg	5	⊗	8270D	Total/NA
Benzo[g,h,i]perylene	160	J	1100	13	ug/Kg	5	⊗	8270D	Total/NA
Benzo[k]fluoranthene	130	J	1100	12	ug/Kg	5	⊗	8270D	Total/NA
Chrysene	140	J	1100	10	ug/Kg	5	⊗	8270D	Total/NA
Fluoranthene	220	J	1100	15	ug/Kg	5	⊗	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	110	J	1100	29	ug/Kg	5	⊗	8270D	Total/NA
Phenanthrene	89	J	1100	22	ug/Kg	5	⊗	8270D	Total/NA
Pyrene	210	J	1100	6.8	ug/Kg	5	⊗	8270D	Total/NA
Aluminum	4040		12.0	5.3	mg/Kg	1	⊗	6010C	Total/NA
Arsenic	9.3		2.4	0.48	mg/Kg	1	⊗	6010C	Total/NA
Barium	84.8		0.60	0.13	mg/Kg	1	⊗	6010C	Total/NA
Beryllium	0.21	J	0.24	0.034	mg/Kg	1	⊗	6010C	Total/NA
Cadmium	0.58		0.24	0.036	mg/Kg	1	⊗	6010C	Total/NA
Calcium	30500	B	60.1	4.0	mg/Kg	1	⊗	6010C	Total/NA
Chromium	8.4		0.60	0.24	mg/Kg	1	⊗	6010C	Total/NA
Cobalt	5.2		0.60	0.060	mg/Kg	1	⊗	6010C	Total/NA
Copper	32.7		1.2	0.25	mg/Kg	1	⊗	6010C	Total/NA
Iron	22700		12.0	1.3	mg/Kg	1	⊗	6010C	Total/NA
Lead	103		1.2	0.29	mg/Kg	1	⊗	6010C	Total/NA
Magnesium	5780		24.0	1.1	mg/Kg	1	⊗	6010C	Total/NA
Manganese	854		0.24	0.038	mg/Kg	1	⊗	6010C	Total/NA
Nickel	14.6		6.0	0.28	mg/Kg	1	⊗	6010C	Total/NA
Potassium	462		36.1	24.0	mg/Kg	1	⊗	6010C	Total/NA
Silver	0.47	J	0.72	0.24	mg/Kg	1	⊗	6010C	Total/NA
Sodium	623		168	15.6	mg/Kg	1	⊗	6010C	Total/NA
Vanadium	12.1		0.60	0.13	mg/Kg	1	⊗	6010C	Total/NA
Zinc	121		2.4	0.18	mg/Kg	1	⊗	6010C	Total/NA
Mercury	0.059		0.023	0.0092	mg/Kg	1	⊗	7471B	Total/NA
Cyanide, Total	1.4		1.2	0.58	mg/Kg	1	⊗	9012B	Total/NA

**Client Sample ID: SEEP-1-12-14"**

**Lab Sample ID: 480-60592-2**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	370	J	1300	22	ug/Kg	5	⊗	8270D	Total/NA
Benzo[a]pyrene	440	J	1300	30	ug/Kg	5	⊗	8270D	Total/NA
Benzo[b]fluoranthene	510	J	1300	24	ug/Kg	5	⊗	8270D	Total/NA
Benzo[g,h,i]perylene	330	J	1300	15	ug/Kg	5	⊗	8270D	Total/NA
Benzo[k]fluoranthene	270	J	1300	14	ug/Kg	5	⊗	8270D	Total/NA
Butyl benzyl phthalate	620	J	1300	340	ug/Kg	5	⊗	8270D	Total/NA
Chrysene	440	J	1300	13	ug/Kg	5	⊗	8270D	Total/NA
Dibenz(a,h)anthracene	95	J	1300	15	ug/Kg	5	⊗	8270D	Total/NA
Fluoranthene	530	J	1300	18	ug/Kg	5	⊗	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	270	J	1300	35	ug/Kg	5	⊗	8270D	Total/NA
Phenanthrene	200	J	1300	26	ug/Kg	5	⊗	8270D	Total/NA
Pyrene	450	J	1300	8.1	ug/Kg	5	⊗	8270D	Total/NA
Aluminum	3960		14.7	6.5	mg/Kg	1	⊗	6010C	Total/NA
Arsenic	6.8		2.9	0.59	mg/Kg	1	⊗	6010C	Total/NA
Barium	56.2		0.74	0.16	mg/Kg	1	⊗	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

# Detection Summary

Client: GEI Consultants, Inc.

Project/Site: RG&E - West Station Former MGP Site

TestAmerica Job ID: 480-60592-1

## Client Sample ID: SEEP-1-12-14" (Continued)

## Lab Sample ID: 480-60592-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Beryllium	0.22	J	0.29	0.041	mg/Kg	1	⊗	6010C	Total/NA
Cadmium	0.50		0.29	0.044	mg/Kg	1	⊗	6010C	Total/NA
Calcium	31200	B	73.7	4.9	mg/Kg	1	⊗	6010C	Total/NA
Chromium	8.0		0.74	0.29	mg/Kg	1	⊗	6010C	Total/NA
Cobalt	4.8		0.74	0.074	mg/Kg	1	⊗	6010C	Total/NA
Copper	28.3		1.5	0.31	mg/Kg	1	⊗	6010C	Total/NA
Iron	19300		14.7	1.6	mg/Kg	1	⊗	6010C	Total/NA
Lead	124		1.5	0.35	mg/Kg	1	⊗	6010C	Total/NA
Magnesium	4290		29.5	1.4	mg/Kg	1	⊗	6010C	Total/NA
Manganese	582		0.29	0.047	mg/Kg	1	⊗	6010C	Total/NA
Nickel	30.2		7.4	0.34	mg/Kg	1	⊗	6010C	Total/NA
Potassium	511		44.2	29.5	mg/Kg	1	⊗	6010C	Total/NA
Silver	0.35	J	0.88	0.29	mg/Kg	1	⊗	6010C	Total/NA
Sodium	596		206	19.2	mg/Kg	1	⊗	6010C	Total/NA
Vanadium	10.9		0.74	0.16	mg/Kg	1	⊗	6010C	Total/NA
Zinc	108		2.9	0.23	mg/Kg	1	⊗	6010C	Total/NA
Mercury	0.066		0.029	0.012	mg/Kg	1	⊗	7471B	Total/NA
Cyanide, Total	2.8		1.5	0.70	mg/Kg	1	⊗	9012B	Total/NA

## Client Sample ID: SEEP-1

## Lab Sample ID: 480-60592-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	5.2		4.0	1.6	ug/L	4		8260C	Total/NA
Xylenes, Total	11		8.0	2.6	ug/L	4		8260C	Total/NA
2-Methylnaphthalene	5.0		4.6	0.55	ug/L	1		8270D	Total/NA
Acenaphthene	3.5	J	4.6	0.38	ug/L	1		8270D	Total/NA
Acenaphthylene	1.3	J	4.6	0.35	ug/L	1		8270D	Total/NA
Carbazole	1.3	J	4.6	0.28	ug/L	1		8270D	Total/NA
Dibenzofuran	0.69	J	9.2	0.47	ug/L	1		8270D	Total/NA
Naphthalene	17		4.6	0.70	ug/L	1		8270D	Total/NA
Barium	0.086		0.0020	0.00070	mg/L	1		6010C	Total/NA
Calcium	318		0.50	0.10	mg/L	1		6010C	Total/NA
Copper	0.0022	J	0.010	0.0016	mg/L	1		6010C	Total/NA
Iron	1.4		0.050	0.019	mg/L	1		6010C	Total/NA
Magnesium	82.8		0.20	0.043	mg/L	1		6010C	Total/NA
Manganese	0.74		0.0030	0.00040	mg/L	1		6010C	Total/NA
Nickel	0.0025	J	0.010	0.0013	mg/L	1		6010C	Total/NA
Potassium	10	B	0.50	0.10	mg/L	1		6010C	Total/NA
Sodium	642		1.0	0.32	mg/L	1		6010C	Total/NA
Zinc	0.0061	J	0.010	0.0015	mg/L	1		6010C	Total/NA
Alkalinity, Total	403		100	40.0	mg/L	10		310.2	Total/NA
Nitrate as N	0.054		0.050	0.020	mg/L	1		353.2	Total/NA
Cyanide, Total	0.020		0.010	0.0050	mg/L	1		9012B	Total/NA
Sulfate	599		150	45.0	mg/L	30		9038	Total/NA
Chloride	1100		50.0	17.0	mg/L	50		9251	Total/NA
Total Dissolved Solids	3140		40.0	16.0	mg/L	1		SM 2540C	Total/NA

## Client Sample ID: MW-26S

## Lab Sample ID: 480-60592-4

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

## Detection Summary

Client: GEI Consultants, Inc.

Project/Site: RG&E - West Station Former MGP Site

TestAmerica Job ID: 480-60592-1

### Client Sample ID: MW-26S (Continued)

### Lab Sample ID: 480-60592-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	10		4.0	0.76	ug/L	4		8260C	Total/NA
Acenaphthene	0.91	J	4.7	0.39	ug/L	1		8270D	Total/NA
Caprolactam	2.2	J	4.7	2.1	ug/L	1		8270D	Total/NA
Aluminum	0.074	J ^	0.20	0.060	mg/L	1		6010C	Total/NA
Arsenic	0.0083	J	0.015	0.0056	mg/L	1		6010C	Total/NA
Barium	0.18		0.0020	0.00070	mg/L	1		6010C	Total/NA
Calcium	263	^	0.50	0.10	mg/L	1		6010C	Total/NA
Chromium	0.0019	J	0.0040	0.0010	mg/L	1		6010C	Total/NA
Cobalt	0.00065	J	0.0040	0.00063	mg/L	1		6010C	Total/NA
Iron	7.8	^	0.050	0.019	mg/L	1		6010C	Total/NA
Magnesium	93.9		0.20	0.043	mg/L	1		6010C	Total/NA
Manganese	1.4		0.0030	0.00040	mg/L	1		6010C	Total/NA
Nickel	0.0026	J	0.010	0.0013	mg/L	1		6010C	Total/NA
Potassium	14.5	B	0.50	0.10	mg/L	1		6010C	Total/NA
Selenium	0.0093	J	0.025	0.0087	mg/L	1		6010C	Total/NA
Sodium	780	^	1.0	0.32	mg/L	1		6010C	Total/NA
Zinc	0.010		0.010	0.0015	mg/L	1		6010C	Total/NA
Alkalinity, Total	495	B	100	40.0	mg/L	10		310.2	Total/NA
Nitrate as N	0.22		0.050	0.020	mg/L	1		353.2	Total/NA
Cyanide, Total	0.047		0.010	0.0050	mg/L	1		9012B	Total/NA
Sulfate	568		150	45.0	mg/L	30		9038	Total/NA
Chloride	1270		50.0	17.0	mg/L	50		9251	Total/NA
Total Dissolved Solids	3440		40.0	16.0	mg/L	1		SM 2540C	Total/NA

### Client Sample ID: Trip Blank

### Lab Sample ID: 480-60592-5

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

# Client Sample Results

Client: GEI Consultants, Inc.

TestAmerica Job ID: 480-60592-1

Project/Site: RG&E - West Station Former MGP Site

**Client Sample ID: SEEP-1-0-3"**

**Lab Sample ID: 480-60592-1**

Date Collected: 05/27/14 11:30

Matrix: Solid

Date Received: 05/27/14 18:00

Percent Solids: 80.0

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		6.1	0.44	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
1,1,2,2-Tetrachloroethane	ND		6.1	0.99	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
1,1,2-Trichloroethane	ND		6.1	0.79	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.1	1.4	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
1,1-Dichloroethane	ND		6.1	0.74	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
1,1-Dichloroethene	ND		6.1	0.75	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
1,2,4-Trichlorobenzene	ND		6.1	0.37	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
1,2-Dibromo-3-Chloropropane	ND		6.1	3.0	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
1,2-Dichlorobenzene	ND		6.1	0.48	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
1,2-Dichloroethane	ND		6.1	0.31	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
1,2-Dichloropropane	ND		6.1	3.0	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
1,3-Dichlorobenzene	ND		6.1	0.31	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
1,4-Dichlorobenzene	ND		6.1	0.85	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
2-Butanone (MEK)	ND		30	2.2	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
2-Hexanone	ND		30	3.0	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
4-Methyl-2-pentanone (MIBK)	ND		30	2.0	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
Acetone	ND		30	5.1	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
Benzene	ND		6.1	0.30	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
Bromodichloromethane	ND		6.1	0.82	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
Bromoform	ND		6.1	3.0	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
Bromomethane	ND		6.1	0.55	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
Carbon disulfide	ND		6.1	3.0	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
Carbon tetrachloride	ND		6.1	0.59	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
Chlorobenzene	ND		6.1	0.80	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
Dibromochloromethane	ND		6.1	0.78	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
Chloroethane	ND		6.1	1.4	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
Chloroform	ND		6.1	0.38	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
Chloromethane	ND		6.1	0.37	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
cis-1,2-Dichloroethene	ND		6.1	0.78	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
cis-1,3-Dichloropropene	ND		6.1	0.88	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
Cyclohexane	ND		6.1	0.85	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
Dichlorodifluoromethane	ND		6.1	0.50	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
Ethylbenzene	ND		6.1	0.42	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
1,2-Dibromoethane	ND		6.1	0.78	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
Isopropylbenzene	ND		6.1	0.92	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
Methyl acetate	ND		6.1	3.7	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
Methyl tert-butyl ether	ND		6.1	0.60	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
Methylcyclohexane	ND		6.1	0.93	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
Methylene Chloride	ND		6.1	2.8	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
Styrene	ND		6.1	0.30	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
Tetrachloroethene	ND		6.1	0.82	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
Toluene	ND		6.1	0.46	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
trans-1,2-Dichloroethene	ND		6.1	0.63	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
trans-1,3-Dichloropropene	ND		6.1	2.7	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
Trichloroethene	ND		6.1	1.3	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
Trichlorofluoromethane	ND		6.1	0.58	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
Vinyl chloride	ND		6.1	0.74	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1
Xylenes, Total	ND		12	1.0	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:09	1

TestAmerica Buffalo

# Client Sample Results

Client: GEI Consultants, Inc.

Project/Site: RG&E - West Station Former MGP Site

TestAmerica Job ID: 480-60592-1

## Client Sample ID: SEEP-1-0-3"

Date Collected: 05/27/14 11:30

Date Received: 05/27/14 18:00

## Lab Sample ID: 480-60592-1

Matrix: Solid

Percent Solids: 80.0

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		71 - 125	05/28/14 12:57	05/28/14 17:09	1
1,2-Dichloroethane-d4 (Surr)	100		64 - 126	05/28/14 12:57	05/28/14 17:09	1
4-Bromofluorobenzene (Surr)	100		72 - 126	05/28/14 12:57	05/28/14 17:09	1
Dibromofluoromethane (Surr)	99		60 - 140	05/28/14 12:57	05/28/14 17:09	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		1100	65	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
bis (2-chloroisopropyl) ether	ND		1100	110	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
2,4,5-Trichlorophenol	ND		1100	230	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
2,4,6-Trichlorophenol	ND		1100	69	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
2,4-Dichlorophenol	ND		1100	55	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
2,4-Dimethylphenol	ND		1100	280	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
2,4-Dinitrophenol	ND		2000	370	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
2,4-Dinitrotoluene	ND		1100	160	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
2,6-Dinitrotoluene	ND		1100	260	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
2-Chloronaphthalene	ND		1100	70	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
2-Chlorophenol	ND		1100	53	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
2-Methylphenol	ND		1100	32	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
2-Methylnaphthalene	ND		1100	13	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
2-Nitroaniline	ND		2000	340	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
2-Nitrophenol	ND		1100	48	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
3,3'-Dichlorobenzidine	ND		1100	920	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
3-Nitroaniline	ND		2000	240	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
4,6-Dinitro-2-methylphenol	ND		2000	360	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
4-Bromophenyl phenyl ether	ND		1100	330	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
4-Chloro-3-methylphenol	ND		1100	43	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
4-Chloroaniline	ND		1100	310	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
4-Chlorophenyl phenyl ether	ND		1100	22	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
4-Methylphenol	ND		2000	58	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
4-Nitroaniline	ND		2000	120	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
4-Nitrophenol	ND		2000	250	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
Acenaphthene	ND		1100	12	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
Acenaphthylene	ND		1100	8.6	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
Acetophenone	ND		1100	54	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
Anthracene	ND		1100	27	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
Atrazine	ND		1100	47	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
Benzaldehyde	ND		1100	110	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
<b>Benzo[a]anthracene</b>	<b>160 J</b>		1100	18	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
<b>Benzo[a]pyrene</b>	<b>140 J</b>		1100	25	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
<b>Benzo[b]fluoranthene</b>	<b>190 J</b>		1100	20	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
<b>Benzo[g,h,i]perylene</b>	<b>160 J</b>		1100	13	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
<b>Benzo[k]fluoranthene</b>	<b>130 J</b>		1100	12	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
Bis(2-chloroethoxy)methane	ND		1100	57	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
Bis(2-chloroethyl)ether	ND		1100	90	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
Bis(2-ethylhexyl) phthalate	ND		1100	340	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
Butyl benzyl phthalate	ND		1100	280	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
Caprolactam	ND		1100	450	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
Carbazole	ND		1100	12	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
<b>Chrysene</b>	<b>140 J</b>		1100	10	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5

TestAmerica Buffalo

# Client Sample Results

Client: GEI Consultants, Inc.

TestAmerica Job ID: 480-60592-1

Project/Site: RG&E - West Station Former MGP Site

**Client Sample ID: SEEP-1-0-3"**

**Lab Sample ID: 480-60592-1**

Date Collected: 05/27/14 11:30

Matrix: Solid

Date Received: 05/27/14 18:00

Percent Solids: 80.0

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	ND		1100	12	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
Di-n-butyl phthalate	ND		1100	360	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
Di-n-octyl phthalate	ND		1100	24	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
Dibenzofuran	ND		1100	11	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
Diethyl phthalate	ND		1100	32	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
Dimethyl phthalate	ND		1100	27	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
<b>Fluoranthene</b>	<b>220 J</b>		1100	15	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
Fluorene	ND		1100	24	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
Hexachlorobenzene	ND		1100	52	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
Hexachlorobutadiene	ND		1100	54	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
Hexachlorocyclopentadiene	ND		1100	320	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
Hexachloroethane	ND		1100	81	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
<b>Indeno[1,2,3-cd]pyrene</b>	<b>110 J</b>		1100	29	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
Isophorone	ND		1100	52	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
N-Nitrosodi-n-propylamine	ND		1100	83	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
N-Nitrosodiphenylamine	ND		1100	57	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
Naphthalene	ND		1100	17	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
Nitrobenzene	ND		1100	46	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
Pentachlorophenol	ND		2000	360	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
<b>Phenanthrene</b>	<b>89 J</b>		1100	22	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
Phenol	ND		1100	110	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
<b>Pyrene</b>	<b>210 J</b>		1100	6.8	ug/Kg	⊗	05/29/14 07:50	06/05/14 14:44	5
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>			<b>Limits</b>				
Nitrobenzene-d5 (Surr)	81				34 - 132				
Phenol-d5 (Surr)	85				11 - 120				
p-Terphenyl-d14 (Surr)	87				65 - 153				
2,4,6-Tribromophenol (Surr)	79				39 - 146				
2-Fluorobiphenyl	90				37 - 120				
2-Fluorophenol (Surr)	79				18 - 120				

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.23	0.044	mg/Kg	⊗	05/29/14 15:03	05/30/14 16:33	1
PCB-1221	ND		0.23	0.044	mg/Kg	⊗	05/29/14 15:03	05/30/14 16:33	1
PCB-1232	ND		0.23	0.044	mg/Kg	⊗	05/29/14 15:03	05/30/14 16:33	1
PCB-1242	ND		0.23	0.044	mg/Kg	⊗	05/29/14 15:03	05/30/14 16:33	1
PCB-1248	ND		0.23	0.044	mg/Kg	⊗	05/29/14 15:03	05/30/14 16:33	1
PCB-1254	ND		0.23	0.11	mg/Kg	⊗	05/29/14 15:03	05/30/14 16:33	1
PCB-1260	ND		0.23	0.11	mg/Kg	⊗	05/29/14 15:03	05/30/14 16:33	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>			<b>Limits</b>				
Tetrachloro-m-xylene	104				46 - 175				
DCB Decachlorobiphenyl	128				47 - 176				

## Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Aluminum</b>	<b>4040</b>		12.0	5.3	mg/Kg	⊗	05/29/14 11:00	05/30/14 23:24	1
Antimony	ND		18.0	0.48	mg/Kg	⊗	05/29/14 11:00	05/30/14 23:24	1
<b>Arsenic</b>	<b>9.3</b>		2.4	0.48	mg/Kg	⊗	05/29/14 11:00	05/30/14 23:24	1

TestAmerica Buffalo

# Client Sample Results

Client: GEI Consultants, Inc.

Project/Site: RG&E - West Station Former MGP Site

TestAmerica Job ID: 480-60592-1

## Client Sample ID: SEEP-1-0-3"

Date Collected: 05/27/14 11:30

Date Received: 05/27/14 18:00

## Lab Sample ID: 480-60592-1

Matrix: Solid

Percent Solids: 80.0

### Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	84.8		0.60	0.13	mg/Kg	⊗	05/29/14 11:00	05/30/14 23:24	1
Beryllium	0.21	J	0.24	0.034	mg/Kg	⊗	05/29/14 11:00	05/30/14 23:24	1
Cadmium	0.58		0.24	0.036	mg/Kg	⊗	05/29/14 11:00	05/30/14 23:24	1
Calcium	30500	B	60.1	4.0	mg/Kg	⊗	05/29/14 11:00	05/30/14 23:24	1
Chromium	8.4		0.60	0.24	mg/Kg	⊗	05/29/14 11:00	05/30/14 23:24	1
Cobalt	5.2		0.60	0.060	mg/Kg	⊗	05/29/14 11:00	05/30/14 23:24	1
Copper	32.7		1.2	0.25	mg/Kg	⊗	05/29/14 11:00	05/30/14 23:24	1
Iron	22700		12.0	1.3	mg/Kg	⊗	05/29/14 11:00	05/30/14 23:24	1
Lead	103		1.2	0.29	mg/Kg	⊗	05/29/14 11:00	05/30/14 23:24	1
Magnesium	5780		24.0	1.1	mg/Kg	⊗	05/29/14 11:00	05/30/14 23:24	1
Manganese	854		0.24	0.038	mg/Kg	⊗	05/29/14 11:00	05/30/14 23:24	1
Nickel	14.6		6.0	0.28	mg/Kg	⊗	05/29/14 11:00	05/30/14 23:24	1
Potassium	462		36.1	24.0	mg/Kg	⊗	05/29/14 11:00	05/30/14 23:24	1
Selenium	ND		4.8	0.48	mg/Kg	⊗	05/29/14 11:00	05/30/14 23:24	1
Silver	0.47	J	0.72	0.24	mg/Kg	⊗	05/29/14 11:00	05/30/14 23:24	1
Sodium	623		168	15.6	mg/Kg	⊗	05/29/14 11:00	05/30/14 23:24	1
Thallium	ND		7.2	0.36	mg/Kg	⊗	05/29/14 11:00	05/30/14 23:24	1
Vanadium	12.1		0.60	0.13	mg/Kg	⊗	05/29/14 11:00	05/30/14 23:24	1
Zinc	121		2.4	0.18	mg/Kg	⊗	05/29/14 11:00	05/30/14 23:24	1

### Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.059		0.023	0.0092	mg/Kg	⊗	05/30/14 10:00	05/31/14 10:44	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	1.4		1.2	0.58	mg/Kg	⊗	06/04/14 21:41	06/05/14 10:18	1

## Client Sample ID: SEEP-1-12-14"

Date Collected: 05/27/14 12:00

Date Received: 05/27/14 18:00

## Lab Sample ID: 480-60592-2

Matrix: Solid

Percent Solids: 66.5

### Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		8.0	0.58	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
1,1,2,2-Tetrachloroethane	ND		8.0	1.3	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
1,1,2-Trichloroethane	ND		8.0	1.0	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.0	1.8	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
1,1-Dichloroethane	ND		8.0	0.98	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
1,1-Dichloroethene	ND		8.0	0.98	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
1,2,4-Trichlorobenzene	ND		8.0	0.49	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
1,2-Dibromo-3-Chloropropane	ND		8.0	4.0	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
1,2-Dichlorobenzene	ND		8.0	0.63	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
1,2-Dichloroethane	ND		8.0	0.40	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
1,2-Dichloropropene	ND		8.0	4.0	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
1,3-Dichlorobenzene	ND		8.0	0.41	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
1,4-Dichlorobenzene	ND		8.0	1.1	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
2-Butanone (MEK)	ND		40	2.9	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
2-Hexanone	ND		40	4.0	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
4-Methyl-2-pentanone (MIBK)	ND		40	2.6	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1

TestAmerica Buffalo

# Client Sample Results

Client: GEI Consultants, Inc.

Project/Site: RG&E - West Station Former MGP Site

TestAmerica Job ID: 480-60592-1

**Client Sample ID: SEEP-1-12-14"**

**Lab Sample ID: 480-60592-2**

Date Collected: 05/27/14 12:00

Matrix: Solid

Date Received: 05/27/14 18:00

Percent Solids: 66.5

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		40	6.8	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
Benzene	ND		8.0	0.39	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
Bromodichloromethane	ND		8.0	1.1	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
Bromoform	ND		8.0	4.0	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
Bromomethane	ND		8.0	0.72	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
Carbon disulfide	ND		8.0	4.0	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
Carbon tetrachloride	ND		8.0	0.78	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
Chlorobenzene	ND		8.0	1.1	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
Dibromochloromethane	ND		8.0	1.0	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
Chloroethane	ND		8.0	1.8	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
Chloroform	ND		8.0	0.50	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
Chloromethane	ND		8.0	0.48	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
cis-1,2-Dichloroethene	ND		8.0	1.0	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
cis-1,3-Dichloropropene	ND		8.0	1.2	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
Cyclohexane	ND		8.0	1.1	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
Dichlorodifluoromethane	ND		8.0	0.66	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
Ethylbenzene	ND		8.0	0.55	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
1,2-Dibromoethane	ND		8.0	1.0	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
Isopropylbenzene	ND		8.0	1.2	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
Methyl acetate	ND		8.0	4.8	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
Methyl tert-butyl ether	ND		8.0	0.79	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
Methylcyclohexane	ND		8.0	1.2	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
Methylene Chloride	ND		8.0	3.7	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
Styrene	ND		8.0	0.40	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
Tetrachloroethene	ND		8.0	1.1	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
Toluene	ND		8.0	0.61	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
trans-1,2-Dichloroethene	ND		8.0	0.83	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
trans-1,3-Dichloropropene	ND		8.0	3.5	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
Trichloroethene	ND		8.0	1.8	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
Trichlorofluoromethane	ND		8.0	0.76	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
Vinyl chloride	ND		8.0	0.98	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1
Xylenes, Total	ND		16	1.3	ug/Kg	⊗	05/28/14 12:57	05/28/14 17:34	1

## Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	103		71 - 125	05/28/14 12:57	05/28/14 17:34	1
1,2-Dichloroethane-d4 (Surr)	100		64 - 126	05/28/14 12:57	05/28/14 17:34	1
4-Bromofluorobenzene (Surr)	99		72 - 126	05/28/14 12:57	05/28/14 17:34	1
Dibromofluoromethane (Surr)	102		60 - 140	05/28/14 12:57	05/28/14 17:34	1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		1300	78	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
bis (2-chloroisopropyl) ether	ND		1300	130	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
2,4,5-Trichlorophenol	ND		1300	270	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
2,4,6-Trichlorophenol	ND		1300	83	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
2,4-Dichlorophenol	ND		1300	66	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
2,4-Dimethylphenol	ND		1300	340	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
2,4-Dinitrophenol	ND		2400	440	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
2,4-Dinitrotoluene	ND		1300	190	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
2,6-Dinitrotoluene	ND		1300	310	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5

TestAmerica Buffalo

# Client Sample Results

Client: GEI Consultants, Inc.

TestAmerica Job ID: 480-60592-1

Project/Site: RG&E - West Station Former MGP Site

**Client Sample ID: SEEP-1-12-14"**

**Lab Sample ID: 480-60592-2**

**Date Collected: 05/27/14 12:00**

**Matrix: Solid**

**Date Received: 05/27/14 18:00**

**Percent Solids: 66.5**

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloronaphthalene	ND		1300	84	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
2-Chlorophenol	ND		1300	64	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
2-Methylphenol	ND		1300	38	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
2-Methylnaphthalene	ND		1300	15	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
2-Nitroaniline	ND		2400	400	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
2-Nitrophenol	ND		1300	57	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
3,3'-Dichlorobenzidine	ND		1300	1100	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
3-Nitroaniline	ND		2400	290	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
4,6-Dinitro-2-methylphenol	ND		2400	430	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
4-Bromophenyl phenyl ether	ND		1300	400	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
4-Chloro-3-methylphenol	ND		1300	51	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
4-Chloroaniline	ND		1300	370	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
4-Chlorophenyl phenyl ether	ND		1300	27	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
4-Methylphenol	ND		2400	70	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
4-Nitroaniline	ND		2400	140	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
4-Nitrophenol	ND		2400	300	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
Acenaphthene	ND		1300	15	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
Acenaphthylene	ND		1300	10	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
Acetophenone	ND		1300	64	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
Anthracene	ND		1300	32	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
Atrazine	ND		1300	56	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
Benzaldehyde	ND		1300	140	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
<b>Benzo[a]anthracene</b>	<b>370 J</b>		1300	22	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
<b>Benzo[a]pyrene</b>	<b>440 J</b>		1300	30	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
<b>Benzo[b]fluoranthene</b>	<b>510 J</b>		1300	24	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
<b>Benzo[g,h,i]perylene</b>	<b>330 J</b>		1300	15	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
<b>Benzo[k]fluoranthene</b>	<b>270 J</b>		1300	14	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
Bis(2-chloroethoxy)methane	ND		1300	68	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
Bis(2-chloroethyl)ether	ND		1300	110	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
Bis(2-ethylhexyl) phthalate	ND		1300	400	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
<b>Butyl benzyl phthalate</b>	<b>620 J</b>		1300	340	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
Caprolactam	ND		1300	540	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
Carbazole	ND		1300	14	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
<b>Chrysene</b>	<b>440 J</b>		1300	13	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
<b>Dibenz(a,h)anthracene</b>	<b>95 J</b>		1300	15	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
Di-n-butyl phthalate	ND		1300	430	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
Di-n-octyl phthalate	ND		1300	29	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
Dibenzofuran	ND		1300	13	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
Diethyl phthalate	ND		1300	38	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
Dimethyl phthalate	ND		1300	33	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
<b>Fluoranthene</b>	<b>530 J</b>		1300	18	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
Fluorene	ND		1300	29	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
Hexachlorobenzene	ND		1300	62	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
Hexachlorobutadiene	ND		1300	64	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
Hexachlorocyclopentadiene	ND		1300	380	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
Hexachloroethane	ND		1300	97	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
<b>Indeno[1,2,3-cd]pyrene</b>	<b>270 J</b>		1300	35	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
Isophorone	ND		1300	63	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5
N-Nitrosodi-n-propylamine	ND		1300	99	ug/Kg	⊗	05/29/14 07:50	06/05/14 15:09	5

TestAmerica Buffalo

# Client Sample Results

Client: GEI Consultants, Inc.

Project/Site: RG&E - West Station Former MGP Site

TestAmerica Job ID: 480-60592-1

**Client Sample ID: SEEP-1-12-14"**

**Lab Sample ID: 480-60592-2**

Date Collected: 05/27/14 12:00

Matrix: Solid

Date Received: 05/27/14 18:00

Percent Solids: 66.5

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodiphenylamine	ND		1300	68	ug/Kg	☀	05/29/14 07:50	06/05/14 15:09	5
Naphthalene	ND		1300	21	ug/Kg	☀	05/29/14 07:50	06/05/14 15:09	5
Nitrobenzene	ND		1300	55	ug/Kg	☀	05/29/14 07:50	06/05/14 15:09	5
Pentachlorophenol	ND		2400	430	ug/Kg	☀	05/29/14 07:50	06/05/14 15:09	5
<b>Phenanthrene</b>	<b>200</b>	<b>J</b>	1300	26	ug/Kg	☀	05/29/14 07:50	06/05/14 15:09	5
Phenol	ND		1300	130	ug/Kg	☀	05/29/14 07:50	06/05/14 15:09	5
<b>Pyrene</b>	<b>450</b>	<b>J</b>	1300	8.1	ug/Kg	☀	05/29/14 07:50	06/05/14 15:09	5
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>Nitrobenzene-d5 (Sur)</i>	69		34 - 132				05/29/14 07:50	06/05/14 15:09	5
<i>Phenol-d5 (Sur)</i>	78		11 - 120				05/29/14 07:50	06/05/14 15:09	5
<i>p-Terphenyl-d14 (Sur)</i>	71		65 - 153				05/29/14 07:50	06/05/14 15:09	5
<i>2,4,6-Tribromophenol (Sur)</i>	76		39 - 146				05/29/14 07:50	06/05/14 15:09	5
<i>2-Fluorobiphenyl</i>	75		37 - 120				05/29/14 07:50	06/05/14 15:09	5
<i>2-Fluorophenol (Sur)</i>	73		18 - 120				05/29/14 07:50	06/05/14 15:09	5

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.30	0.059	mg/Kg	☀	05/29/14 15:03	05/30/14 16:48	1
PCB-1221	ND		0.30	0.059	mg/Kg	☀	05/29/14 15:03	05/30/14 16:48	1
PCB-1232	ND		0.30	0.059	mg/Kg	☀	05/29/14 15:03	05/30/14 16:48	1
PCB-1242	ND		0.30	0.059	mg/Kg	☀	05/29/14 15:03	05/30/14 16:48	1
PCB-1248	ND		0.30	0.059	mg/Kg	☀	05/29/14 15:03	05/30/14 16:48	1
PCB-1254	ND		0.30	0.14	mg/Kg	☀	05/29/14 15:03	05/30/14 16:48	1
PCB-1260	ND		0.30	0.14	mg/Kg	☀	05/29/14 15:03	05/30/14 16:48	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>Tetrachloro-m-xylene</i>	133		46 - 175				05/29/14 15:03	05/30/14 16:48	1
<i>DCB Decachlorobiphenyl</i>	145		47 - 176				05/29/14 15:03	05/30/14 16:48	1

## Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Aluminum</b>	<b>3960</b>		14.7	6.5	mg/Kg	☀	05/29/14 11:00	05/30/14 23:27	1
Antimony	ND		22.1	0.59	mg/Kg	☀	05/29/14 11:00	05/30/14 23:27	1
<b>Arsenic</b>	<b>6.8</b>		2.9	0.59	mg/Kg	☀	05/29/14 11:00	05/30/14 23:27	1
<b>Barium</b>	<b>56.2</b>		0.74	0.16	mg/Kg	☀	05/29/14 11:00	05/30/14 23:27	1
<b>Beryllium</b>	<b>0.22</b>	<b>J</b>	0.29	0.041	mg/Kg	☀	05/29/14 11:00	05/30/14 23:27	1
<b>Cadmium</b>	<b>0.50</b>		0.29	0.044	mg/Kg	☀	05/29/14 11:00	05/30/14 23:27	1
<b>Calcium</b>	<b>31200</b>	<b>B</b>	73.7	4.9	mg/Kg	☀	05/29/14 11:00	05/30/14 23:27	1
<b>Chromium</b>	<b>8.0</b>		0.74	0.29	mg/Kg	☀	05/29/14 11:00	05/30/14 23:27	1
<b>Cobalt</b>	<b>4.8</b>		0.74	0.074	mg/Kg	☀	05/29/14 11:00	05/30/14 23:27	1
<b>Copper</b>	<b>28.3</b>		1.5	0.31	mg/Kg	☀	05/29/14 11:00	05/30/14 23:27	1
<b>Iron</b>	<b>19300</b>		14.7	1.6	mg/Kg	☀	05/29/14 11:00	05/30/14 23:27	1
<b>Lead</b>	<b>124</b>		1.5	0.35	mg/Kg	☀	05/29/14 11:00	05/30/14 23:27	1
<b>Magnesium</b>	<b>4290</b>		29.5	1.4	mg/Kg	☀	05/29/14 11:00	05/30/14 23:27	1
<b>Manganese</b>	<b>582</b>		0.29	0.047	mg/Kg	☀	05/29/14 11:00	05/30/14 23:27	1
<b>Nickel</b>	<b>30.2</b>		7.4	0.34	mg/Kg	☀	05/29/14 11:00	05/30/14 23:27	1
<b>Potassium</b>	<b>511</b>		44.2	29.5	mg/Kg	☀	05/29/14 11:00	05/30/14 23:27	1
Selenium	ND		5.9	0.59	mg/Kg	☀	05/29/14 11:00	05/30/14 23:27	1
<b>Silver</b>	<b>0.35</b>	<b>J</b>	0.88	0.29	mg/Kg	☀	05/29/14 11:00	05/30/14 23:27	1

TestAmerica Buffalo

# Client Sample Results

Client: GEI Consultants, Inc.

TestAmerica Job ID: 480-60592-1

Project/Site: RG&E - West Station Former MGP Site

**Client Sample ID: SEEP-1-12-14"**

**Lab Sample ID: 480-60592-2**

Date Collected: 05/27/14 12:00

Matrix: Solid

Date Received: 05/27/14 18:00

Percent Solids: 66.5

**Method: 6010C - Metals (ICP) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	596		206	19.2	mg/Kg	☀	05/29/14 11:00	05/30/14 23:27	1
Thallium	ND		8.8	0.44	mg/Kg	☀	05/29/14 11:00	05/30/14 23:27	1
Vanadium	10.9		0.74	0.16	mg/Kg	☀	05/29/14 11:00	05/30/14 23:27	1
Zinc	108		2.9	0.23	mg/Kg	☀	05/29/14 11:00	05/30/14 23:27	1

**Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.066		0.029	0.012	mg/Kg	☀	05/30/14 10:00	05/31/14 10:45	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	2.8		1.5	0.70	mg/Kg	☀	06/04/14 21:41	06/05/14 10:19	1

**Client Sample ID: SEEP-1**

**Lab Sample ID: 480-60592-3**

Date Collected: 05/27/14 12:00

Matrix: Water

Date Received: 05/27/14 18:00

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.0	3.3	ug/L			06/03/14 12:01	4
1,1,2,2-Tetrachloroethane	ND		4.0	0.84	ug/L			06/03/14 12:01	4
1,1,2-Trichloroethane	ND		4.0	0.92	ug/L			06/03/14 12:01	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.2	ug/L			06/03/14 12:01	4
1,1-Dichloroethane	ND		4.0	1.5	ug/L			06/03/14 12:01	4
1,1-Dichloroethene	ND		4.0	1.2	ug/L			06/03/14 12:01	4
1,2,4-Trichlorobenzene	ND		4.0	1.6	ug/L			06/03/14 12:01	4
1,2-Dibromo-3-Chloropropane	ND		4.0	1.6	ug/L			06/03/14 12:01	4
1,2-Dibromoethane	ND		4.0	2.9	ug/L			06/03/14 12:01	4
1,2-Dichlorobenzene	ND		4.0	3.2	ug/L			06/03/14 12:01	4
1,2-Dichloroethane	ND		4.0	0.84	ug/L			06/03/14 12:01	4
1,2-Dichloropropane	ND		4.0	2.9	ug/L			06/03/14 12:01	4
1,3-Dichlorobenzene	ND		4.0	3.1	ug/L			06/03/14 12:01	4
1,4-Dichlorobenzene	ND		4.0	3.4	ug/L			06/03/14 12:01	4
2-Hexanone	ND		20	5.0	ug/L			06/03/14 12:01	4
2-Butanone (MEK)	ND		40	5.3	ug/L			06/03/14 12:01	4
4-Methyl-2-pentanone (MIBK)	ND		20	8.4	ug/L			06/03/14 12:01	4
Acetone	ND		40	12	ug/L			06/03/14 12:01	4
<b>Benzene</b>	<b>5.2</b>		4.0	1.6	ug/L			06/03/14 12:01	4
Bromodichloromethane	ND		4.0	1.6	ug/L			06/03/14 12:01	4
Bromoform	ND		4.0	1.0	ug/L			06/03/14 12:01	4
Bromomethane	ND		4.0	2.8	ug/L			06/03/14 12:01	4
Carbon disulfide	ND		4.0	0.76	ug/L			06/03/14 12:01	4
Carbon tetrachloride	ND		4.0	1.1	ug/L			06/03/14 12:01	4
Chlorobenzene	ND		4.0	3.0	ug/L			06/03/14 12:01	4
Dibromochloromethane	ND		4.0	1.3	ug/L			06/03/14 12:01	4
Chloroethane	ND		4.0	1.3	ug/L			06/03/14 12:01	4
Chloroform	ND		4.0	1.4	ug/L			06/03/14 12:01	4
Chloromethane	ND		4.0	1.4	ug/L			06/03/14 12:01	4
cis-1,2-Dichloroethene	ND		4.0	3.2	ug/L			06/03/14 12:01	4
cis-1,3-Dichloropropene	ND		4.0	1.4	ug/L			06/03/14 12:01	4

TestAmerica Buffalo

# Client Sample Results

Client: GEI Consultants, Inc.

Project/Site: RG&E - West Station Former MGP Site

TestAmerica Job ID: 480-60592-1

**Client Sample ID: SEEP-1**

**Lab Sample ID: 480-60592-3**

Date Collected: 05/27/14 12:00

Matrix: Water

Date Received: 05/27/14 18:00

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	ND		4.0	0.72	ug/L			06/03/14 12:01	4
Dichlorodifluoromethane	ND		4.0	2.7	ug/L			06/03/14 12:01	4
Ethylbenzene	ND		4.0	3.0	ug/L			06/03/14 12:01	4
Isopropylbenzene	ND		4.0	3.2	ug/L			06/03/14 12:01	4
Methyl acetate	ND		10	2.0	ug/L			06/03/14 12:01	4
Methyl tert-butyl ether	ND		4.0	0.64	ug/L			06/03/14 12:01	4
Methylcyclohexane	ND		4.0	0.64	ug/L			06/03/14 12:01	4
Methylene Chloride	ND		4.0	1.8	ug/L			06/03/14 12:01	4
Styrene	ND		4.0	2.9	ug/L			06/03/14 12:01	4
Tetrachloroethene	ND		4.0	1.4	ug/L			06/03/14 12:01	4
Toluene	ND		4.0	2.0	ug/L			06/03/14 12:01	4
trans-1,2-Dichloroethene	ND		4.0	3.6	ug/L			06/03/14 12:01	4
trans-1,3-Dichloropropene	ND		4.0	1.5	ug/L			06/03/14 12:01	4
Trichloroethene	ND		4.0	1.8	ug/L			06/03/14 12:01	4
Trichlorofluoromethane	ND		4.0	3.5	ug/L			06/03/14 12:01	4
Vinyl chloride	ND		4.0	3.6	ug/L			06/03/14 12:01	4
<b>Xylenes, Total</b>	<b>11</b>		8.0	2.6	ug/L			06/03/14 12:01	4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	120		66 - 137		06/03/14 12:01	4
Toluene-d8 (Surr)	104		71 - 126		06/03/14 12:01	4
4-Bromofluorobenzene (Surr)	99		73 - 120		06/03/14 12:01	4
Dibromofluoromethane (Surr)	120		60 - 140		06/03/14 12:01	4

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		4.6	0.60	ug/L		05/28/14 14:19	07/01/14 15:15	1
bis (2-chloroisopropyl) ether	ND		4.6	0.48	ug/L		05/28/14 14:19	07/01/14 15:15	1
2,4,5-Trichlorophenol	ND		4.6	0.44	ug/L		05/28/14 14:19	07/01/14 15:15	1
2,4,6-Trichlorophenol	ND		4.6	0.56	ug/L		05/28/14 14:19	07/01/14 15:15	1
2,4-Dichlorophenol	ND		4.6	0.47	ug/L		05/28/14 14:19	07/01/14 15:15	1
2,4-Dimethylphenol	ND		4.6	0.46	ug/L		05/28/14 14:19	07/01/14 15:15	1
2,4-Dinitrophenol	ND		9.2	2.0	ug/L		05/28/14 14:19	07/01/14 15:15	1
2,4-Dinitrotoluene	ND		4.6	0.41	ug/L		05/28/14 14:19	07/01/14 15:15	1
2,6-Dinitrotoluene	ND		4.6	0.37	ug/L		05/28/14 14:19	07/01/14 15:15	1
2-Chloronaphthalene	ND		4.6	0.42	ug/L		05/28/14 14:19	07/01/14 15:15	1
2-Chlorophenol	ND		4.6	0.49	ug/L		05/28/14 14:19	07/01/14 15:15	1
<b>2-Methylnaphthalene</b>	<b>5.0</b>		4.6	0.55	ug/L		05/28/14 14:19	07/01/14 15:15	1
2-Methylphenol	ND		4.6	0.37	ug/L		05/28/14 14:19	07/01/14 15:15	1
2-Nitroaniline	ND		9.2	0.39	ug/L		05/28/14 14:19	07/01/14 15:15	1
2-Nitrophenol	ND		4.6	0.44	ug/L		05/28/14 14:19	07/01/14 15:15	1
3,3'-Dichlorobenzidine	ND		4.6	0.37	ug/L		05/28/14 14:19	07/01/14 15:15	1
3-Nitroaniline	ND		9.2	0.44	ug/L		05/28/14 14:19	07/01/14 15:15	1
4,6-Dinitro-2-methylphenol	ND		9.2	2.0	ug/L		05/28/14 14:19	07/01/14 15:15	1
4-Bromophenyl phenyl ether	ND		4.6	0.41	ug/L		05/28/14 14:19	07/01/14 15:15	1
4-Chloro-3-methylphenol	ND		4.6	0.41	ug/L		05/28/14 14:19	07/01/14 15:15	1
4-Chloroaniline	ND		4.6	0.54	ug/L		05/28/14 14:19	07/01/14 15:15	1
4-Chlorophenyl phenyl ether	ND		4.6	0.32	ug/L		05/28/14 14:19	07/01/14 15:15	1
4-Methylphenol	ND *		9.2	0.33	ug/L		05/28/14 14:19	07/01/14 15:15	1
4-Nitroaniline	ND		9.2	0.23	ug/L		05/28/14 14:19	07/01/14 15:15	1

TestAmerica Buffalo

# Client Sample Results

Client: GEI Consultants, Inc.

Project/Site: RG&E - West Station Former MGP Site

TestAmerica Job ID: 480-60592-1

**Client Sample ID: SEEP-1**

**Date Collected: 05/27/14 12:00**

**Date Received: 05/27/14 18:00**

**Lab Sample ID: 480-60592-3**

**Matrix: Water**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	ND		9.2	1.4	ug/L	05/28/14 14:19	07/01/14 15:15		1
<b>Acenaphthene</b>	<b>3.5 J</b>		4.6	0.38	ug/L	05/28/14 14:19	07/01/14 15:15		1
<b>Acenaphthylene</b>	<b>1.3 J</b>		4.6	0.35	ug/L	05/28/14 14:19	07/01/14 15:15		1
Acetophenone	ND		4.6	0.50	ug/L	05/28/14 14:19	07/01/14 15:15		1
Anthracene	ND		4.6	0.26	ug/L	05/28/14 14:19	07/01/14 15:15		1
Atrazine	ND		4.6	0.42	ug/L	05/28/14 14:19	07/01/14 15:15		1
Benzaldehyde	ND		4.6	0.25	ug/L	05/28/14 14:19	07/01/14 15:15		1
Benzo(a)anthracene	ND		4.6	0.33	ug/L	05/28/14 14:19	07/01/14 15:15		1
Benzo(a)pyrene	ND		4.6	0.43	ug/L	05/28/14 14:19	07/01/14 15:15		1
Benzo(b)fluoranthene	ND		4.6	0.31	ug/L	05/28/14 14:19	07/01/14 15:15		1
Benzo(g,h,i)perylene	ND		4.6	0.32	ug/L	05/28/14 14:19	07/01/14 15:15		1
Benzo(k)fluoranthene	ND		4.6	0.67	ug/L	05/28/14 14:19	07/01/14 15:15		1
Bis(2-chloroethoxy)methane	ND		4.6	0.32	ug/L	05/28/14 14:19	07/01/14 15:15		1
Bis(2-chloroethyl)ether	ND		4.6	0.37	ug/L	05/28/14 14:19	07/01/14 15:15		1
Bis(2-ethylhexyl) phthalate	ND		4.6	1.7	ug/L	05/28/14 14:19	07/01/14 15:15		1
Butyl benzyl phthalate	ND		4.6	0.39	ug/L	05/28/14 14:19	07/01/14 15:15		1
Caprolactam	ND		4.6	2.0	ug/L	05/28/14 14:19	07/01/14 15:15		1
<b>Carbazole</b>	<b>1.3 J</b>		4.6	0.28	ug/L	05/28/14 14:19	07/01/14 15:15		1
Chrysene	ND		4.6	0.30	ug/L	05/28/14 14:19	07/01/14 15:15		1
Di-n-butyl phthalate	ND		4.6	0.29	ug/L	05/28/14 14:19	07/01/14 15:15		1
Di-n-octyl phthalate	ND		4.6	0.43	ug/L	05/28/14 14:19	07/01/14 15:15		1
Dibenz(a,h)anthracene	ND		4.6	0.39	ug/L	05/28/14 14:19	07/01/14 15:15		1
<b>Dibenzofuran</b>	<b>0.69 J</b>		9.2	0.47	ug/L	05/28/14 14:19	07/01/14 15:15		1
Diethyl phthalate	ND		4.6	0.20	ug/L	05/28/14 14:19	07/01/14 15:15		1
Dimethyl phthalate	ND		4.6	0.33	ug/L	05/28/14 14:19	07/01/14 15:15		1
Fluoranthene	ND		4.6	0.37	ug/L	05/28/14 14:19	07/01/14 15:15		1
Fluorene	ND		4.6	0.33	ug/L	05/28/14 14:19	07/01/14 15:15		1
Hexachlorobenzene	ND		4.6	0.47	ug/L	05/28/14 14:19	07/01/14 15:15		1
Hexachlorobutadiene	ND		4.6	0.63	ug/L	05/28/14 14:19	07/01/14 15:15		1
Hexachlorocyclopentadiene	ND		4.6	0.54	ug/L	05/28/14 14:19	07/01/14 15:15		1
Hexachloroethane	ND		4.6	0.54	ug/L	05/28/14 14:19	07/01/14 15:15		1
Indeno(1,2,3-cd)pyrene	ND		4.6	0.43	ug/L	05/28/14 14:19	07/01/14 15:15		1
Isophorone	ND		4.6	0.40	ug/L	05/28/14 14:19	07/01/14 15:15		1
N-Nitrosodi-n-propylamine	ND		4.6	0.50	ug/L	05/28/14 14:19	07/01/14 15:15		1
N-Nitrosodiphenylamine	ND		4.6	0.47	ug/L	05/28/14 14:19	07/01/14 15:15		1
<b>Naphthalene</b>	<b>17</b>		4.6	0.70	ug/L	05/28/14 14:19	07/01/14 15:15		1
Nitrobenzene	ND		4.6	0.27	ug/L	05/28/14 14:19	07/01/14 15:15		1
Pentachlorophenol	ND		9.2	2.0	ug/L	05/28/14 14:19	07/01/14 15:15		1
Phenanthrene	ND		4.6	0.41	ug/L	05/28/14 14:19	07/01/14 15:15		1
Phenol	ND		4.6	0.36	ug/L	05/28/14 14:19	07/01/14 15:15		1
Pyrene	ND		4.6	0.31	ug/L	05/28/14 14:19	07/01/14 15:15		1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2,4,6-Tribromophenol	132			52 - 132			05/28/14 14:19	07/01/14 15:15	1
2-Fluorobiphenyl	123	X		48 - 120			05/28/14 14:19	07/01/14 15:15	1
2-Fluorophenol	83			20 - 120			05/28/14 14:19	07/01/14 15:15	1
Nitrobenzene-d5	124	X		46 - 120			05/28/14 14:19	07/01/14 15:15	1
p-Terphenyl-d14	105			67 - 150			05/28/14 14:19	07/01/14 15:15	1
Phenol-d5	58			16 - 120			05/28/14 14:19	07/01/14 15:15	1

TestAmerica Buffalo

# Client Sample Results

Client: GEI Consultants, Inc.

Project/Site: RG&E - West Station Former MGP Site

TestAmerica Job ID: 480-60592-1

**Client Sample ID: SEEP-1**

**Lab Sample ID: 480-60592-3**

Date Collected: 05/27/14 12:00

Matrix: Water

Date Received: 05/27/14 18:00

**Method: 6010C - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		05/29/14 09:00	06/02/14 14:35	1
Antimony	ND		0.020	0.0068	mg/L		05/29/14 09:00	06/02/14 14:35	1
Arsenic	ND		0.015	0.0056	mg/L		05/29/14 09:00	06/02/14 14:35	1
<b>Barium</b>	<b>0.086</b>		0.0020	0.00070	mg/L		05/29/14 09:00	06/02/14 14:35	1
Beryllium	ND		0.0020	0.00030	mg/L		05/29/14 09:00	06/02/14 14:35	1
Cadmium	ND		0.0020	0.00050	mg/L		05/29/14 09:00	06/02/14 14:35	1
<b>Calcium</b>	<b>318</b>		0.50	0.10	mg/L		05/29/14 09:00	06/02/14 14:35	1
Chromium	ND		0.0040	0.0010	mg/L		05/29/14 09:00	06/02/14 14:35	1
Cobalt	ND		0.0040	0.00063	mg/L		05/29/14 09:00	06/02/14 14:35	1
<b>Copper</b>	<b>0.0022 J</b>		0.010	0.0016	mg/L		05/29/14 09:00	06/02/14 14:35	1
<b>Iron</b>	<b>1.4</b>		0.050	0.019	mg/L		05/29/14 09:00	06/02/14 14:35	1
Lead	ND		0.010	0.0030	mg/L		05/29/14 09:00	06/02/14 14:35	1
<b>Magnesium</b>	<b>82.8</b>		0.20	0.043	mg/L		05/29/14 09:00	06/02/14 14:35	1
<b>Manganese</b>	<b>0.74</b>		0.0030	0.00040	mg/L		05/29/14 09:00	06/02/14 14:35	1
<b>Nickel</b>	<b>0.0025 J</b>		0.010	0.0013	mg/L		05/29/14 09:00	06/02/14 14:35	1
<b>Potassium</b>	<b>10 B</b>		0.50	0.10	mg/L		05/29/14 09:00	06/02/14 14:35	1
Selenium	ND		0.025	0.0087	mg/L		05/29/14 09:00	06/02/14 14:35	1
Silver	ND		0.0060	0.0017	mg/L		05/29/14 09:00	06/02/14 14:35	1
<b>Sodium</b>	<b>642</b>		1.0	0.32	mg/L		05/29/14 09:00	06/02/14 14:35	1
Thallium	ND		0.020	0.010	mg/L		05/29/14 09:00	06/02/14 14:35	1
Vanadium	ND		0.0050	0.0015	mg/L		05/29/14 09:00	06/02/14 14:35	1
<b>Zinc</b>	<b>0.0061 J</b>		0.010	0.0015	mg/L		05/29/14 09:00	06/02/14 14:35	1

**Method: 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		05/29/14 09:30	05/29/14 14:45	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Alkalinity, Total</b>	<b>403</b>		100	40.0	mg/L			06/03/14 08:50	10
<b>Nitrate as N</b>	<b>0.054</b>		0.050	0.020	mg/L			05/28/14 19:12	1
<b>Cyanide, Total</b>	<b>0.020</b>		0.010	0.0050	mg/L		05/30/14 20:55	06/02/14 11:19	1
<b>Sulfate</b>	<b>599</b>		150	45.0	mg/L			06/03/14 09:53	30
<b>Chloride</b>	<b>1100</b>		50.0	17.0	mg/L			06/03/14 09:20	50
<b>Total Dissolved Solids</b>	<b>3140</b>		40.0	16.0	mg/L			05/29/14 23:37	1

**Client Sample ID: MW-26S**

**Lab Sample ID: 480-60592-4**

Date Collected: 05/27/14 14:00

Matrix: Water

Date Received: 05/27/14 18:00

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.0	3.3	ug/L			06/03/14 12:27	4
1,1,2,2-Tetrachloroethane	ND		4.0	0.84	ug/L			06/03/14 12:27	4
1,1,2-Trichloroethane	ND		4.0	0.92	ug/L			06/03/14 12:27	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.2	ug/L			06/03/14 12:27	4
1,1-Dichloroethane	ND		4.0	1.5	ug/L			06/03/14 12:27	4
1,1-Dichloroethene	ND		4.0	1.2	ug/L			06/03/14 12:27	4
1,2,4-Trichlorobenzene	ND		4.0	1.6	ug/L			06/03/14 12:27	4
1,2-Dibromo-3-Chloropropane	ND		4.0	1.6	ug/L			06/03/14 12:27	4

TestAmerica Buffalo

# Client Sample Results

Client: GEI Consultants, Inc.

Project/Site: RG&E - West Station Former MGP Site

TestAmerica Job ID: 480-60592-1

**Client Sample ID: MW-26S**

**Lab Sample ID: 480-60592-4**

Date Collected: 05/27/14 14:00

Matrix: Water

Date Received: 05/27/14 18:00

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		4.0	2.9	ug/L			06/03/14 12:27	4
1,2-Dichlorobenzene	ND		4.0	3.2	ug/L			06/03/14 12:27	4
1,2-Dichloroethane	ND		4.0	0.84	ug/L			06/03/14 12:27	4
1,2-Dichloropropane	ND		4.0	2.9	ug/L			06/03/14 12:27	4
1,3-Dichlorobenzene	ND		4.0	3.1	ug/L			06/03/14 12:27	4
1,4-Dichlorobenzene	ND		4.0	3.4	ug/L			06/03/14 12:27	4
2-Hexanone	ND		20	5.0	ug/L			06/03/14 12:27	4
2-Butanone (MEK)	ND		40	5.3	ug/L			06/03/14 12:27	4
4-Methyl-2-pentanone (MIBK)	ND		20	8.4	ug/L			06/03/14 12:27	4
Acetone	ND		40	12	ug/L			06/03/14 12:27	4
Benzene	ND		4.0	1.6	ug/L			06/03/14 12:27	4
Bromodichloromethane	ND		4.0	1.6	ug/L			06/03/14 12:27	4
Bromoform	ND		4.0	1.0	ug/L			06/03/14 12:27	4
Bromomethane	ND		4.0	2.8	ug/L			06/03/14 12:27	4
<b>Carbon disulfide</b>	<b>10</b>		4.0	0.76	ug/L			06/03/14 12:27	4
Carbon tetrachloride	ND		4.0	1.1	ug/L			06/03/14 12:27	4
Chlorobenzene	ND		4.0	3.0	ug/L			06/03/14 12:27	4
Dibromochloromethane	ND		4.0	1.3	ug/L			06/03/14 12:27	4
Chloroethane	ND		4.0	1.3	ug/L			06/03/14 12:27	4
Chloroform	ND		4.0	1.4	ug/L			06/03/14 12:27	4
Chloromethane	ND		4.0	1.4	ug/L			06/03/14 12:27	4
cis-1,2-Dichloroethene	ND		4.0	3.2	ug/L			06/03/14 12:27	4
cis-1,3-Dichloropropene	ND		4.0	1.4	ug/L			06/03/14 12:27	4
Cyclohexane	ND		4.0	0.72	ug/L			06/03/14 12:27	4
Dichlorodifluoromethane	ND		4.0	2.7	ug/L			06/03/14 12:27	4
Ethylbenzene	ND		4.0	3.0	ug/L			06/03/14 12:27	4
Isopropylbenzene	ND		4.0	3.2	ug/L			06/03/14 12:27	4
Methyl acetate	ND		10	2.0	ug/L			06/03/14 12:27	4
Methyl tert-butyl ether	ND		4.0	0.64	ug/L			06/03/14 12:27	4
Methylcyclohexane	ND		4.0	0.64	ug/L			06/03/14 12:27	4
Methylene Chloride	ND		4.0	1.8	ug/L			06/03/14 12:27	4
Styrene	ND		4.0	2.9	ug/L			06/03/14 12:27	4
Tetrachloroethene	ND		4.0	1.4	ug/L			06/03/14 12:27	4
Toluene	ND		4.0	2.0	ug/L			06/03/14 12:27	4
trans-1,2-Dichloroethene	ND		4.0	3.6	ug/L			06/03/14 12:27	4
trans-1,3-Dichloropropene	ND		4.0	1.5	ug/L			06/03/14 12:27	4
Trichloroethene	ND		4.0	1.8	ug/L			06/03/14 12:27	4
Trichlorofluoromethane	ND		4.0	3.5	ug/L			06/03/14 12:27	4
Vinyl chloride	ND		4.0	3.6	ug/L			06/03/14 12:27	4
Xylenes, Total	ND		8.0	2.6	ug/L			06/03/14 12:27	4
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)	118			66 - 137				06/03/14 12:27	4
Toluene-d8 (Surr)	103			71 - 126				06/03/14 12:27	4
4-Bromofluorobenzene (Surr)	97			73 - 120				06/03/14 12:27	4
Dibromofluoromethane (Surr)	117			60 - 140				06/03/14 12:27	4

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		4.7	0.62	ug/L		05/28/14 14:19	07/01/14 15:39	1

TestAmerica Buffalo

# Client Sample Results

Client: GEI Consultants, Inc.

Project/Site: RG&E - West Station Former MGP Site

TestAmerica Job ID: 480-60592-1

**Client Sample ID: MW-26S**

**Date Collected: 05/27/14 14:00**

**Date Received: 05/27/14 18:00**

**Lab Sample ID: 480-60592-4**

**Matrix: Water**

**Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
bis (2-chloroisopropyl) ether	ND		4.7	0.49	ug/L	05/28/14 14:19	07/01/14 15:39		1
2,4,5-Trichlorophenol	ND		4.7	0.46	ug/L	05/28/14 14:19	07/01/14 15:39		1
2,4,6-Trichlorophenol	ND		4.7	0.58	ug/L	05/28/14 14:19	07/01/14 15:39		1
2,4-Dichlorophenol	ND		4.7	0.48	ug/L	05/28/14 14:19	07/01/14 15:39		1
2,4-Dimethylphenol	ND		4.7	0.47	ug/L	05/28/14 14:19	07/01/14 15:39		1
2,4-Dinitrophenol	ND		9.5	2.1	ug/L	05/28/14 14:19	07/01/14 15:39		1
2,4-Dinitrotoluene	ND		4.7	0.42	ug/L	05/28/14 14:19	07/01/14 15:39		1
2,6-Dinitrotoluene	ND		4.7	0.38	ug/L	05/28/14 14:19	07/01/14 15:39		1
2-Chloronaphthalene	ND		4.7	0.44	ug/L	05/28/14 14:19	07/01/14 15:39		1
2-Chlorophenol	ND		4.7	0.50	ug/L	05/28/14 14:19	07/01/14 15:39		1
2-Methylnaphthalene	ND		4.7	0.57	ug/L	05/28/14 14:19	07/01/14 15:39		1
2-Methylphenol	ND		4.7	0.38	ug/L	05/28/14 14:19	07/01/14 15:39		1
2-Nitroaniline	ND		9.5	0.40	ug/L	05/28/14 14:19	07/01/14 15:39		1
2-Nitrophenol	ND		4.7	0.46	ug/L	05/28/14 14:19	07/01/14 15:39		1
3,3'-Dichlorobenzidine	ND		4.7	0.38	ug/L	05/28/14 14:19	07/01/14 15:39		1
3-Nitroaniline	ND		9.5	0.46	ug/L	05/28/14 14:19	07/01/14 15:39		1
4,6-Dinitro-2-methylphenol	ND		9.5	2.1	ug/L	05/28/14 14:19	07/01/14 15:39		1
4-Bromophenyl phenyl ether	ND		4.7	0.43	ug/L	05/28/14 14:19	07/01/14 15:39		1
4-Chloro-3-methylphenol	ND		4.7	0.43	ug/L	05/28/14 14:19	07/01/14 15:39		1
4-Chloroaniline	ND		4.7	0.56	ug/L	05/28/14 14:19	07/01/14 15:39		1
4-Chlorophenyl phenyl ether	ND		4.7	0.33	ug/L	05/28/14 14:19	07/01/14 15:39		1
4-Methylphenol	ND *		9.5	0.34	ug/L	05/28/14 14:19	07/01/14 15:39		1
4-Nitroaniline	ND		9.5	0.24	ug/L	05/28/14 14:19	07/01/14 15:39		1
4-Nitrophenol	ND		9.5	1.4	ug/L	05/28/14 14:19	07/01/14 15:39		1
<b>Acenaphthene</b>	<b>0.91 J</b>		4.7	0.39	ug/L	05/28/14 14:19	07/01/14 15:39		1
Acenaphthylene	ND		4.7	0.36	ug/L	05/28/14 14:19	07/01/14 15:39		1
Acetophenone	ND		4.7	0.51	ug/L	05/28/14 14:19	07/01/14 15:39		1
Anthracene	ND		4.7	0.27	ug/L	05/28/14 14:19	07/01/14 15:39		1
Atrazine	ND		4.7	0.44	ug/L	05/28/14 14:19	07/01/14 15:39		1
Benzaldehyde	ND		4.7	0.25	ug/L	05/28/14 14:19	07/01/14 15:39		1
Benzo(a)anthracene	ND		4.7	0.34	ug/L	05/28/14 14:19	07/01/14 15:39		1
Benzo(a)pyrene	ND		4.7	0.45	ug/L	05/28/14 14:19	07/01/14 15:39		1
Benzo(b)fluoranthene	ND		4.7	0.32	ug/L	05/28/14 14:19	07/01/14 15:39		1
Benzo(g,h,i)perylene	ND		4.7	0.33	ug/L	05/28/14 14:19	07/01/14 15:39		1
Benzo(k)fluoranthene	ND		4.7	0.69	ug/L	05/28/14 14:19	07/01/14 15:39		1
Bis(2-chloroethoxy)methane	ND		4.7	0.33	ug/L	05/28/14 14:19	07/01/14 15:39		1
Bis(2-chloroethyl)ether	ND		4.7	0.38	ug/L	05/28/14 14:19	07/01/14 15:39		1
Bis(2-ethylhexyl) phthalate	ND		4.7	1.7	ug/L	05/28/14 14:19	07/01/14 15:39		1
Butyl benzyl phthalate	ND		4.7	0.40	ug/L	05/28/14 14:19	07/01/14 15:39		1
<b>Caprolactam</b>	<b>2.2 J</b>		4.7	2.1	ug/L	05/28/14 14:19	07/01/14 15:39		1
Carbazole	ND		4.7	0.28	ug/L	05/28/14 14:19	07/01/14 15:39		1
Chrysene	ND		4.7	0.31	ug/L	05/28/14 14:19	07/01/14 15:39		1
Di-n-butyl phthalate	ND		4.7	0.29	ug/L	05/28/14 14:19	07/01/14 15:39		1
Di-n-octyl phthalate	ND		4.7	0.45	ug/L	05/28/14 14:19	07/01/14 15:39		1
Dibenz(a,h)anthracene	ND		4.7	0.40	ug/L	05/28/14 14:19	07/01/14 15:39		1
Dibenzofuran	ND		9.5	0.48	ug/L	05/28/14 14:19	07/01/14 15:39		1
Diethyl phthalate	ND		4.7	0.21	ug/L	05/28/14 14:19	07/01/14 15:39		1
Dimethyl phthalate	ND		4.7	0.34	ug/L	05/28/14 14:19	07/01/14 15:39		1
Fluoranthene	ND		4.7	0.38	ug/L	05/28/14 14:19	07/01/14 15:39		1

TestAmerica Buffalo

# Client Sample Results

Client: GEI Consultants, Inc.

Project/Site: RG&E - West Station Former MGP Site

TestAmerica Job ID: 480-60592-1

**Client Sample ID: MW-26S**

Date Collected: 05/27/14 14:00

Date Received: 05/27/14 18:00

**Lab Sample ID: 480-60592-4**

Matrix: Water

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	ND		4.7	0.34	ug/L		05/28/14 14:19	07/01/14 15:39	1
Hexachlorobenzene	ND		4.7	0.48	ug/L		05/28/14 14:19	07/01/14 15:39	1
Hexachlorobutadiene	ND		4.7	0.65	ug/L		05/28/14 14:19	07/01/14 15:39	1
Hexachlorocyclopentadiene	ND		4.7	0.56	ug/L		05/28/14 14:19	07/01/14 15:39	1
Hexachloroethane	ND		4.7	0.56	ug/L		05/28/14 14:19	07/01/14 15:39	1
Indeno(1,2,3-cd)pyrene	ND		4.7	0.45	ug/L		05/28/14 14:19	07/01/14 15:39	1
Isophorone	ND		4.7	0.41	ug/L		05/28/14 14:19	07/01/14 15:39	1
N-Nitrosodi-n-propylamine	ND		4.7	0.51	ug/L		05/28/14 14:19	07/01/14 15:39	1
N-Nitrosodiphenylamine	ND		4.7	0.48	ug/L		05/28/14 14:19	07/01/14 15:39	1
Naphthalene	ND		4.7	0.72	ug/L		05/28/14 14:19	07/01/14 15:39	1
Nitrobenzene	ND		4.7	0.28	ug/L		05/28/14 14:19	07/01/14 15:39	1
Pentachlorophenol	ND		9.5	2.1	ug/L		05/28/14 14:19	07/01/14 15:39	1
Phenanthrene	ND		4.7	0.42	ug/L		05/28/14 14:19	07/01/14 15:39	1
Phenol	ND		4.7	0.37	ug/L		05/28/14 14:19	07/01/14 15:39	1
Pyrene	ND		4.7	0.32	ug/L		05/28/14 14:19	07/01/14 15:39	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2,4,6-Tribromophenol	131			52 - 132			05/28/14 14:19	07/01/14 15:39	1
2-Fluorobiphenyl	124	X		48 - 120			05/28/14 14:19	07/01/14 15:39	1
2-Fluorophenol	86			20 - 120			05/28/14 14:19	07/01/14 15:39	1
Nitrobenzene-d5	118			46 - 120			05/28/14 14:19	07/01/14 15:39	1
p-Terphenyl-d14	109			67 - 150			05/28/14 14:19	07/01/14 15:39	1
Phenol-d5	59			16 - 120			05/28/14 14:19	07/01/14 15:39	1

## Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Aluminum</b>	<b>0.074</b>	<b>J ^</b>		0.20	mg/L		05/29/14 09:00	05/30/14 17:13	1
Antimony	ND		0.020	0.0068	mg/L		05/29/14 09:00	05/30/14 17:13	1
<b>Arsenic</b>	<b>0.0083</b>	<b>J</b>		0.015	0.0056 mg/L		05/29/14 09:00	05/30/14 17:13	1
<b>Barium</b>	<b>0.18</b>		0.0020	0.00070	mg/L		05/29/14 09:00	05/30/14 17:13	1
Beryllium	ND ^		0.0020	0.00030	mg/L		05/29/14 09:00	05/30/14 17:13	1
Cadmium	ND		0.0020	0.00050	mg/L		05/29/14 09:00	05/30/14 17:13	1
<b>Calcium</b>	<b>263</b>	<b>^</b>	0.50	0.10	mg/L		05/29/14 09:00	05/30/14 17:13	1
<b>Chromium</b>	<b>0.0019</b>	<b>J</b>		0.0040	0.0010 mg/L		05/29/14 09:00	05/30/14 17:13	1
<b>Cobalt</b>	<b>0.00065</b>	<b>J</b>		0.0040	0.00063 mg/L		05/29/14 09:00	05/30/14 17:13	1
Copper	ND		0.010	0.0016	mg/L		05/29/14 09:00	05/30/14 17:13	1
<b>Iron</b>	<b>7.8</b>	<b>^</b>	0.050	0.019	mg/L		05/29/14 09:00	05/30/14 17:13	1
Lead	ND		0.010	0.0030	mg/L		05/29/14 09:00	05/30/14 17:13	1
<b>Magnesium</b>	<b>93.9</b>		0.20	0.043	mg/L		05/29/14 09:00	05/30/14 17:13	1
<b>Manganese</b>	<b>1.4</b>		0.0030	0.00040	mg/L		05/29/14 09:00	05/30/14 17:13	1
<b>Nickel</b>	<b>0.0026</b>	<b>J</b>		0.010	0.0013 mg/L		05/29/14 09:00	05/30/14 17:13	1
<b>Potassium</b>	<b>14.5</b>	<b>B</b>	0.50	0.10	mg/L		05/29/14 09:00	05/30/14 17:13	1
<b>Selenium</b>	<b>0.0093</b>	<b>J</b>		0.025	0.0087 mg/L		05/29/14 09:00	05/30/14 17:13	1
Silver	ND		0.0060	0.0017	mg/L		05/29/14 09:00	05/30/14 17:13	1
<b>Sodium</b>	<b>780</b>	<b>^</b>	1.0	0.32	mg/L		05/29/14 09:00	05/30/14 17:13	1
Thallium	ND		0.020	0.010	mg/L		05/29/14 09:00	05/30/14 17:13	1
Vanadium	ND		0.0050	0.0015	mg/L		05/29/14 09:00	05/30/14 17:13	1
<b>Zinc</b>	<b>0.010</b>		0.010	0.0015	mg/L		05/29/14 09:00	05/30/14 17:13	1

TestAmerica Buffalo

# Client Sample Results

Client: GEI Consultants, Inc.

TestAmerica Job ID: 480-60592-1

Project/Site: RG&E - West Station Former MGP Site

## Client Sample ID: MW-26S

Lab Sample ID: 480-60592-4

Date Collected: 05/27/14 14:00

Matrix: Water

Date Received: 05/27/14 18:00

### Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		05/29/14 09:30	05/29/14 14:47	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	495	B	100	40.0	mg/L			06/03/14 09:55	10
Nitrate as N	0.22		0.050	0.020	mg/L			05/28/14 19:13	1
Cyanide, Total	0.047		0.010	0.0050	mg/L		06/04/14 19:04	06/05/14 09:51	1
Sulfate	568		150	45.0	mg/L			06/03/14 09:53	30
Chloride	1270		50.0	17.0	mg/L			06/03/14 10:34	50
Total Dissolved Solids	3440		40.0	16.0	mg/L			05/28/14 21:07	1

## Client Sample ID: Trip Blank

Lab Sample ID: 480-60592-5

Date Collected: 05/27/14 00:00

Matrix: Water

Date Received: 05/27/14 18:00

### Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			06/03/14 12:52	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			06/03/14 12:52	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			06/03/14 12:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			06/03/14 12:52	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			06/03/14 12:52	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			06/03/14 12:52	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			06/03/14 12:52	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			06/03/14 12:52	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			06/03/14 12:52	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			06/03/14 12:52	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			06/03/14 12:52	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			06/03/14 12:52	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			06/03/14 12:52	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			06/03/14 12:52	1
2-Hexanone	ND		5.0	1.2	ug/L			06/03/14 12:52	1
2-Butanone (MEK)	ND		10	1.3	ug/L			06/03/14 12:52	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			06/03/14 12:52	1
Acetone	ND		10	3.0	ug/L			06/03/14 12:52	1
Benzene	ND		1.0	0.41	ug/L			06/03/14 12:52	1
Bromodichloromethane	ND		1.0	0.39	ug/L			06/03/14 12:52	1
Bromoform	ND		1.0	0.26	ug/L			06/03/14 12:52	1
Bromomethane	ND		1.0	0.69	ug/L			06/03/14 12:52	1
Carbon disulfide	ND		1.0	0.19	ug/L			06/03/14 12:52	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			06/03/14 12:52	1
Chlorobenzene	ND		1.0	0.75	ug/L			06/03/14 12:52	1
Dibromochloromethane	ND		1.0	0.32	ug/L			06/03/14 12:52	1
Chloroethane	ND		1.0	0.32	ug/L			06/03/14 12:52	1
Chloroform	ND		1.0	0.34	ug/L			06/03/14 12:52	1
Chloromethane	ND		1.0	0.35	ug/L			06/03/14 12:52	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			06/03/14 12:52	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			06/03/14 12:52	1
Cyclohexane	ND		1.0	0.18	ug/L			06/03/14 12:52	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			06/03/14 12:52	1

TestAmerica Buffalo

# Client Sample Results

Client: GEI Consultants, Inc.

Project/Site: RG&E - West Station Former MGP Site

TestAmerica Job ID: 480-60592-1

## Client Sample ID: Trip Blank

Date Collected: 05/27/14 00:00

Date Received: 05/27/14 18:00

**Lab Sample ID: 480-60592-5**

Matrix: Water

### Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		1.0	0.74	ug/L		06/03/14 12:52		1
Isopropylbenzene	ND		1.0	0.79	ug/L		06/03/14 12:52		1
Methyl acetate	ND		2.5	0.50	ug/L		06/03/14 12:52		1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L		06/03/14 12:52		1
Methylcyclohexane	ND		1.0	0.16	ug/L		06/03/14 12:52		1
Methylene Chloride	ND		1.0	0.44	ug/L		06/03/14 12:52		1
Styrene	ND		1.0	0.73	ug/L		06/03/14 12:52		1
Tetrachloroethene	ND		1.0	0.36	ug/L		06/03/14 12:52		1
Toluene	ND		1.0	0.51	ug/L		06/03/14 12:52		1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L		06/03/14 12:52		1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L		06/03/14 12:52		1
Trichloroethene	ND		1.0	0.46	ug/L		06/03/14 12:52		1
Trichlorofluoromethane	ND		1.0	0.88	ug/L		06/03/14 12:52		1
Vinyl chloride	ND		1.0	0.90	ug/L		06/03/14 12:52		1
Xylenes, Total	ND		2.0	0.66	ug/L		06/03/14 12:52		1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1,2-Dichloroethane-d4 (Surr)		119		66 - 137			06/03/14 12:52		1
Toluene-d8 (Surr)		102		71 - 126			06/03/14 12:52		1
4-Bromofluorobenzene (Surr)		95		73 - 120			06/03/14 12:52		1
Dibromofluoromethane (Surr)		118		60 - 140			06/03/14 12:52		1

TestAmerica Buffalo

## Surrogate Summary

Client: GEI Consultants, Inc.

TestAmerica Job ID: 480-60592-1

Project/Site: RG&E - West Station Former MGP Site

### Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		TOL (71-125)	12DCE (64-126)	BFB (72-126)	DBFM (60-140)
480-60592-1	SEEP-1-0-3"	101	100	100	99
480-60592-2	SEEP-1-12-14"	103	100	99	102
LCS 480-184378/6	Lab Control Sample	102	91	101	100
MB 480-184378/7	Method Blank	99	93	97	97

**Surrogate Legend**

TOL = Toluene-d8 (Surr)  
 12DCE = 1,2-Dichloroethane-d4 (Surr)  
 BFB = 4-Bromofluorobenzene (Surr)  
 DBFM = Dibromofluoromethane (Surr)

### Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		12DCE (66-137)	TOL (71-126)	BFB (73-120)	DBFM (60-140)
480-60592-3	SEEP-1	120	104	99	120
480-60592-4	MW-26S	118	103	97	117
480-60592-5	Trip Blank	119	102	95	118
LCS 480-185304/5	Lab Control Sample	113	104	102	116
MB 480-185304/6	Method Blank	115	105	101	115

**Surrogate Legend**

12DCE = 1,2-Dichloroethane-d4 (Surr)  
 TOL = Toluene-d8 (Surr)  
 BFB = 4-Bromofluorobenzene (Surr)  
 DBFM = Dibromofluoromethane (Surr)

### Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		NBZ (34-132)	PHL (11-120)	TPH (65-153)	TBP (39-146)	FBP (37-120)	2FP (18-120)
480-60592-1	SEEP-1-0-3"	81	85	87	79	90	79
480-60592-2	SEEP-1-12-14"	69	78	71	76	75	73
LCS 480-184529/2-A	Lab Control Sample	83	83	93	99	85	80
MB 480-184529/1-A	Method Blank	88	87	91	94	89	83

**Surrogate Legend**

NBZ = Nitrobenzene-d5 (Surr)  
 PHL = Phenol-d5 (Surr)  
 TPH = p-Terphenyl-d14 (Surr)  
 TBP = 2,4,6-Tribromophenol (Surr)  
 FBP = 2-Fluorobiphenyl  
 2FP = 2-Fluorophenol (Surr)

TestAmerica Buffalo

## Surrogate Summary

Client: GEI Consultants, Inc.

Project/Site: RG&E - West Station Former MGP Site

TestAmerica Job ID: 480-60592-1

### Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (52-132)	FBP (48-120)	2FP (20-120)	NBZ (46-120)	TPH (67-150)	PHL (16-120)
480-60592-3	SEEP-1	132	123 X	83	124 X	105	58
480-60592-4	MW-26S	131	124 X	86	118	109	59
LCS 480-184424/2-A	Lab Control Sample	95	86	78	91	97	65
MB 480-184424/1-A	Method Blank	131	131 X	93	132 X	144	64

**Surrogate Legend**

TBP = 2,4,6-Tribromophenol

FBP = 2-Fluorobiphenyl

2FP = 2-Fluorophenol

NBZ = Nitrobenzene-d5

TPH = p-Terphenyl-d14

PHL = Phenol-d5

### Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		TCX1 (46-175)	DCB1 (47-176)
480-60592-1	SEEP-1-0-3"	104	128
480-60592-2	SEEP-1-12-14"	133	145
LCS 480-184665/2-A	Lab Control Sample	121	151
MB 480-184665/1-A	Method Blank	119	131

**Surrogate Legend**

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

TestAmerica Buffalo

# QC Sample Results

Client: GEI Consultants, Inc.

Project/Site: RG&E - West Station Former MGP Site

TestAmerica Job ID: 480-60592-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Lab Sample ID: MB 480-184378/7**

**Matrix: Solid**

**Analysis Batch: 184378**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg			05/28/14 14:22	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg			05/28/14 14:22	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg			05/28/14 14:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg			05/28/14 14:22	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg			05/28/14 14:22	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg			05/28/14 14:22	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg			05/28/14 14:22	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg			05/28/14 14:22	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg			05/28/14 14:22	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg			05/28/14 14:22	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg			05/28/14 14:22	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg			05/28/14 14:22	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg			05/28/14 14:22	1
2-Hexanone	ND		25	2.5	ug/Kg			05/28/14 14:22	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg			05/28/14 14:22	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg			05/28/14 14:22	1
Acetone	ND		25	4.2	ug/Kg			05/28/14 14:22	1
Benzene	ND		5.0	0.25	ug/Kg			05/28/14 14:22	1
Bromodichlormethane	ND		5.0	0.67	ug/Kg			05/28/14 14:22	1
Bromoform	ND		5.0	2.5	ug/Kg			05/28/14 14:22	1
Bromomethane	ND		5.0	0.45	ug/Kg			05/28/14 14:22	1
Carbon disulfide	ND		5.0	2.5	ug/Kg			05/28/14 14:22	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg			05/28/14 14:22	1
Chlorobenzene	ND		5.0	0.66	ug/Kg			05/28/14 14:22	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg			05/28/14 14:22	1
Chloroethane	ND		5.0	1.1	ug/Kg			05/28/14 14:22	1
Chloroform	ND		5.0	0.31	ug/Kg			05/28/14 14:22	1
Chloromethane	ND		5.0	0.30	ug/Kg			05/28/14 14:22	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg			05/28/14 14:22	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg			05/28/14 14:22	1
Cyclohexane	ND		5.0	0.70	ug/Kg			05/28/14 14:22	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg			05/28/14 14:22	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg			05/28/14 14:22	1
Ethylbenzene	ND		5.0	0.35	ug/Kg			05/28/14 14:22	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg			05/28/14 14:22	1
Methyl acetate	ND		5.0	3.0	ug/Kg			05/28/14 14:22	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg			05/28/14 14:22	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg			05/28/14 14:22	1
Methylene Chloride	ND		5.0	2.3	ug/Kg			05/28/14 14:22	1
Styrene	ND		5.0	0.25	ug/Kg			05/28/14 14:22	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg			05/28/14 14:22	1
Toluene	ND		5.0	0.38	ug/Kg			05/28/14 14:22	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg			05/28/14 14:22	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg			05/28/14 14:22	1
Trichloroethene	ND		5.0	1.1	ug/Kg			05/28/14 14:22	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg			05/28/14 14:22	1
Vinyl chloride	ND		5.0	0.61	ug/Kg			05/28/14 14:22	1
Xylenes, Total			10	0.84	ug/Kg			05/28/14 14:22	1

TestAmerica Buffalo

# QC Sample Results

Client: GEI Consultants, Inc.

Project/Site: RG&E - West Station Former MGP Site

TestAmerica Job ID: 480-60592-1

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: MB 480-184378/7**

**Matrix: Solid**

**Analysis Batch: 184378**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier						
1,2-Dichloroethane-d4 (Surr)	93		64 - 126				05/28/14 14:22	1
Toluene-d8 (Surr)	99		71 - 125				05/28/14 14:22	1
4-Bromofluorobenzene (Surr)	97		72 - 126				05/28/14 14:22	1
Dibromofluoromethane (Surr)	97		60 - 140				05/28/14 14:22	1

**Lab Sample ID: LCS 480-184378/6**

**Matrix: Solid**

**Analysis Batch: 184378**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	MB	MB	Spike	LCS	LCS	%Rec.			
	%Recovery	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
1,1-Dichloroethane			50.0	46.0		ug/Kg		92	73 - 126
1,1-Dichloroethene			50.0	47.4		ug/Kg		95	59 - 125
1,2-Dichlorobenzene			50.0	51.0		ug/Kg		102	75 - 120
1,2-Dichloroethane			50.0	45.3		ug/Kg		91	77 - 122
Benzene			50.0	48.2		ug/Kg		96	79 - 127
Chlorobenzene			50.0	51.5		ug/Kg		103	76 - 124
cis-1,2-Dichloroethene			50.0	49.3		ug/Kg		99	81 - 117
Ethylbenzene			50.0	51.1		ug/Kg		102	80 - 120
Methyl tert-butyl ether			50.0	48.3		ug/Kg		97	63 - 125
Tetrachloroethylene			50.0	50.9		ug/Kg		102	74 - 122
Toluene			50.0	50.9		ug/Kg		102	74 - 128
trans-1,2-Dichloroethene			50.0	48.7		ug/Kg		97	78 - 126
Trichloroethylene			50.0	47.4		ug/Kg		95	77 - 129

Surrogate	MB	MB	LCS	LCS	Limits
	%Recovery	Qualifier	Added	Result	
1,2-Dichloroethane-d4 (Surr)	91			64 - 126	
Toluene-d8 (Surr)	102			71 - 125	
4-Bromofluorobenzene (Surr)	101			72 - 126	
Dibromofluoromethane (Surr)	100			60 - 140	

**Lab Sample ID: MB 480-185304/6**

**Matrix: Water**

**Analysis Batch: 185304**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier	Result	Qualifier	RL	MDL	Unit				
1,1,1-Trichloroethane			ND		1.0	0.82	ug/L			06/03/14 04:22	1
1,1,2,2-Tetrachloroethane			ND		1.0	0.21	ug/L			06/03/14 04:22	1
1,1,2-Trichloroethane			ND		1.0	0.23	ug/L			06/03/14 04:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane			ND		1.0	0.31	ug/L			06/03/14 04:22	1
1,1-Dichloroethane			ND		1.0	0.38	ug/L			06/03/14 04:22	1
1,1-Dichloroethene			ND		1.0	0.29	ug/L			06/03/14 04:22	1
1,2,4-Trichlorobenzene			ND		1.0	0.41	ug/L			06/03/14 04:22	1
1,2-Dibromo-3-Chloropropane			ND		1.0	0.39	ug/L			06/03/14 04:22	1
1,2-Dichlorobenzene			ND		1.0	0.79	ug/L			06/03/14 04:22	1
1,2-Dichloroethane			ND		1.0	0.21	ug/L			06/03/14 04:22	1
1,2-Dichloropropene			ND		1.0	0.72	ug/L			06/03/14 04:22	1
1,3-Dichlorobenzene			ND		1.0	0.78	ug/L			06/03/14 04:22	1
1,4-Dichlorobenzene			ND		1.0	0.84	ug/L			06/03/14 04:22	1

TestAmerica Buffalo

# QC Sample Results

Client: GEI Consultants, Inc.

TestAmerica Job ID: 480-60592-1

Project/Site: RG&E - West Station Former MGP Site

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: MB 480-185304/6**

**Matrix: Water**

**Analysis Batch: 185304**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
2-Hexanone	ND				5.0	1.2	ug/L			06/03/14 04:22	1
2-Butanone (MEK)	ND				10	1.3	ug/L			06/03/14 04:22	1
4-Methyl-2-pentanone (MIBK)	ND				5.0	2.1	ug/L			06/03/14 04:22	1
Acetone	ND				10	3.0	ug/L			06/03/14 04:22	1
Benzene	ND				1.0	0.41	ug/L			06/03/14 04:22	1
Bromodichloromethane	ND				1.0	0.39	ug/L			06/03/14 04:22	1
Bromoform	ND				1.0	0.26	ug/L			06/03/14 04:22	1
Bromomethane	ND				1.0	0.69	ug/L			06/03/14 04:22	1
Carbon disulfide	ND				1.0	0.19	ug/L			06/03/14 04:22	1
Carbon tetrachloride	ND				1.0	0.27	ug/L			06/03/14 04:22	1
Chlorobenzene	ND				1.0	0.75	ug/L			06/03/14 04:22	1
Dibromochloromethane	ND				1.0	0.32	ug/L			06/03/14 04:22	1
Chloroethane	ND				1.0	0.32	ug/L			06/03/14 04:22	1
Chloroform	ND				1.0	0.34	ug/L			06/03/14 04:22	1
Chloromethane	ND				1.0	0.35	ug/L			06/03/14 04:22	1
cis-1,2-Dichloroethene	ND				1.0	0.81	ug/L			06/03/14 04:22	1
cis-1,3-Dichloropropene	ND				1.0	0.36	ug/L			06/03/14 04:22	1
Cyclohexane	ND				1.0	0.18	ug/L			06/03/14 04:22	1
Dichlorodifluoromethane	ND				1.0	0.68	ug/L			06/03/14 04:22	1
1,2-Dibromoethane	ND				1.0	0.73	ug/L			06/03/14 04:22	1
Ethylbenzene	ND				1.0	0.74	ug/L			06/03/14 04:22	1
Isopropylbenzene	ND				1.0	0.79	ug/L			06/03/14 04:22	1
Methyl acetate	ND				2.5	0.50	ug/L			06/03/14 04:22	1
Methyl tert-butyl ether	ND				1.0	0.16	ug/L			06/03/14 04:22	1
Methylcyclohexane	ND				1.0	0.16	ug/L			06/03/14 04:22	1
Methylene Chloride	ND				1.0	0.44	ug/L			06/03/14 04:22	1
Styrene	ND				1.0	0.73	ug/L			06/03/14 04:22	1
Tetrachloroethene	ND				1.0	0.36	ug/L			06/03/14 04:22	1
Toluene	ND				1.0	0.51	ug/L			06/03/14 04:22	1
trans-1,2-Dichloroethene	ND				1.0	0.90	ug/L			06/03/14 04:22	1
trans-1,3-Dichloropropene	ND				1.0	0.37	ug/L			06/03/14 04:22	1
Trichloroethene	ND				1.0	0.46	ug/L			06/03/14 04:22	1
Trichlorofluoromethane	ND				1.0	0.88	ug/L			06/03/14 04:22	1
Vinyl chloride	ND				1.0	0.90	ug/L			06/03/14 04:22	1
Xylenes, Total	ND				2.0	0.66	ug/L			06/03/14 04:22	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
1,2-Dichloroethane-d4 (Surr)	115		115		66 - 137			1
Toluene-d8 (Surr)	105				71 - 126			1
4-Bromofluorobenzene (Surr)	101				73 - 120			1
Dibromofluoromethane (Surr)	115				60 - 140			1

**Lab Sample ID: LCS 480-185304/5**

**Matrix: Water**

**Analysis Batch: 185304**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
	Added						
1,1-Dichloroethane	25.0	25.2		ug/L	101		71 - 129

TestAmerica Buffalo

# QC Sample Results

Client: GEI Consultants, Inc.

TestAmerica Job ID: 480-60592-1

Project/Site: RG&E - West Station Former MGP Site

## Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

**Lab Sample ID: LCS 480-185304/5**

**Matrix: Water**

**Analysis Batch: 185304**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS			Unit	D	%Rec	Limits
		Result	Qualifier	LCS				
1,1-Dichloroethene	25.0	24.6		ug/L		98	58 - 121	
1,2-Dichlorobenzene	25.0	21.8		ug/L		87	80 - 124	
1,2-Dichloroethane	25.0	24.5		ug/L		98	75 - 127	
Benzene	25.0	24.7		ug/L		99	71 - 124	
Chlorobenzene	25.0	22.6		ug/L		90	72 - 120	
cis-1,2-Dichloroethene	25.0	25.2		ug/L		101	74 - 124	
Ethylbenzene	25.0	23.1		ug/L		92	77 - 123	
Methyl tert-butyl ether	25.0	25.3		ug/L		101	64 - 127	
Tetrachloroethene	25.0	22.6		ug/L		91	74 - 122	
Toluene	25.0	23.2		ug/L		93	80 - 122	
trans-1,2-Dichloroethene	25.0	25.0		ug/L		100	73 - 127	
Trichloroethene	25.0	25.1		ug/L		100	74 - 123	
<b>Surrogate</b>		<b>LCS</b>	<b>LCS</b>					
		<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			
1,2-Dichloroethane-d4 (Surr)	113			66 - 137				
Toluene-d8 (Surr)	104			71 - 126				
4-Bromofluorobenzene (Surr)	102			73 - 120				
Dibromofluoromethane (Surr)	116			60 - 140				

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 480-184424/1-A**

**Client Sample ID: Method Blank**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 190710**

**Prep Batch: 184424**

Analyte	Result	MB Qualifier	RL	MDL	Unit	D	<b>Prepared</b>	<b>Analyzed</b>	Dil Fac
							05/28/14 14:19	07/01/14 14:51	
Biphenyl	ND		5.0	0.65	ug/L				1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L				1
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L				1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L				1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L				1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L				1
2,4-Dinitrophenol	ND		10	2.2	ug/L				1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L				1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L				1
2-Chloronaphthalene	ND		5.0	0.46	ug/L				1
2-Chlorophenol	ND		5.0	0.53	ug/L				1
2-Methylnaphthalene	ND		5.0	0.60	ug/L				1
2-Methylphenol	ND		5.0	0.40	ug/L				1
2-Nitroaniline	ND		10	0.42	ug/L				1
2-Nitrophenol	ND		5.0	0.48	ug/L				1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L				1
3-Nitroaniline	ND		10	0.48	ug/L				1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L				1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L				1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L				1
4-Chloroaniline	ND		5.0	0.59	ug/L				1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L				1

TestAmerica Buffalo

# QC Sample Results

Client: GEI Consultants, Inc.

TestAmerica Job ID: 480-60592-1

Project/Site: RG&E - West Station Former MGP Site

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 480-184424/1-A**

**Client Sample ID: Method Blank**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 190710**

**Prep Batch: 184424**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	MB	MB									
4-Methylphenol	ND				10	0.36	ug/L		05/28/14 14:19	07/01/14 14:51	1
4-Nitroaniline	ND				10	0.25	ug/L		05/28/14 14:19	07/01/14 14:51	1
4-Nitrophenol	ND				10	1.5	ug/L		05/28/14 14:19	07/01/14 14:51	1
Acenaphthene	ND				5.0	0.41	ug/L		05/28/14 14:19	07/01/14 14:51	1
Acenaphthylene	ND				5.0	0.38	ug/L		05/28/14 14:19	07/01/14 14:51	1
Acetophenone	ND				5.0	0.54	ug/L		05/28/14 14:19	07/01/14 14:51	1
Anthracene	ND				5.0	0.28	ug/L		05/28/14 14:19	07/01/14 14:51	1
Atrazine	ND				5.0	0.46	ug/L		05/28/14 14:19	07/01/14 14:51	1
Benzaldehyde	0.615	J			5.0	0.27	ug/L		05/28/14 14:19	07/01/14 14:51	1
Benzo(a)anthracene	ND				5.0	0.36	ug/L		05/28/14 14:19	07/01/14 14:51	1
Benzo(a)pyrene	ND				5.0	0.47	ug/L		05/28/14 14:19	07/01/14 14:51	1
Benzo(b)fluoranthene	ND				5.0	0.34	ug/L		05/28/14 14:19	07/01/14 14:51	1
Benzo(g,h,i)perylene	ND				5.0	0.35	ug/L		05/28/14 14:19	07/01/14 14:51	1
Benzo(k)fluoranthene	ND				5.0	0.73	ug/L		05/28/14 14:19	07/01/14 14:51	1
Bis(2-chloroethoxy)methane	ND				5.0	0.35	ug/L		05/28/14 14:19	07/01/14 14:51	1
Bis(2-chloroethyl)ether	ND				5.0	0.40	ug/L		05/28/14 14:19	07/01/14 14:51	1
Bis(2-ethylhexyl) phthalate	ND				5.0	1.8	ug/L		05/28/14 14:19	07/01/14 14:51	1
Butyl benzyl phthalate	ND				5.0	0.42	ug/L		05/28/14 14:19	07/01/14 14:51	1
Caprolactam	ND				5.0	2.2	ug/L		05/28/14 14:19	07/01/14 14:51	1
Carbazole	ND				5.0	0.30	ug/L		05/28/14 14:19	07/01/14 14:51	1
Chrysene	ND				5.0	0.33	ug/L		05/28/14 14:19	07/01/14 14:51	1
Di-n-butyl phthalate	ND				5.0	0.31	ug/L		05/28/14 14:19	07/01/14 14:51	1
Dibenz(a,h)anthracene	ND				5.0	0.42	ug/L		05/28/14 14:19	07/01/14 14:51	1
Di-n-octyl phthalate	ND				5.0	0.47	ug/L		05/28/14 14:19	07/01/14 14:51	1
Dibenzofuran	ND				10	0.51	ug/L		05/28/14 14:19	07/01/14 14:51	1
Diethyl phthalate	ND				5.0	0.22	ug/L		05/28/14 14:19	07/01/14 14:51	1
Dimethyl phthalate	ND				5.0	0.36	ug/L		05/28/14 14:19	07/01/14 14:51	1
Fluoranthene	ND				5.0	0.40	ug/L		05/28/14 14:19	07/01/14 14:51	1
Fluorene	ND				5.0	0.36	ug/L		05/28/14 14:19	07/01/14 14:51	1
Hexachlorobenzene	ND				5.0	0.51	ug/L		05/28/14 14:19	07/01/14 14:51	1
Hexachlorobutadiene	ND				5.0	0.68	ug/L		05/28/14 14:19	07/01/14 14:51	1
Hexachlorocyclopentadiene	ND				5.0	0.59	ug/L		05/28/14 14:19	07/01/14 14:51	1
Hexachloroethane	ND				5.0	0.59	ug/L		05/28/14 14:19	07/01/14 14:51	1
Indeno(1,2,3-cd)pyrene	ND				5.0	0.47	ug/L		05/28/14 14:19	07/01/14 14:51	1
Isophorone	ND				5.0	0.43	ug/L		05/28/14 14:19	07/01/14 14:51	1
N-Nitrosodi-n-propylamine	ND				5.0	0.54	ug/L		05/28/14 14:19	07/01/14 14:51	1
N-Nitrosodiphenylamine	ND				5.0	0.51	ug/L		05/28/14 14:19	07/01/14 14:51	1
Naphthalene	ND				5.0	0.76	ug/L		05/28/14 14:19	07/01/14 14:51	1
Nitrobenzene	ND				5.0	0.29	ug/L		05/28/14 14:19	07/01/14 14:51	1
Pentachlorophenol	ND				10	2.2	ug/L		05/28/14 14:19	07/01/14 14:51	1
Phenanthrene	ND				5.0	0.44	ug/L		05/28/14 14:19	07/01/14 14:51	1
Phenol	ND				5.0	0.39	ug/L		05/28/14 14:19	07/01/14 14:51	1
Pyrene	ND				5.0	0.34	ug/L		05/28/14 14:19	07/01/14 14:51	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac	
	MB	MB							
2,4,6-Tribromophenol	131				52 - 132		05/28/14 14:19	07/01/14 14:51	1
Nitrobenzene-d5	132	X			46 - 120		05/28/14 14:19	07/01/14 14:51	1
2-Fluorobiphenyl	131	X			48 - 120		05/28/14 14:19	07/01/14 14:51	1

TestAmerica Buffalo

# QC Sample Results

Client: GEI Consultants, Inc.

TestAmerica Job ID: 480-60592-1

Project/Site: RG&E - West Station Former MGP Site

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 480-184424/1-A**

**Matrix: Water**

**Analysis Batch: 190710**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 184424**

Surrogate	MB	MB	%Recovery	Qualifier	Limits
	Surrogate	MB			
p-Terphenyl-d14			144		67 - 150
2-Fluorophenol			93		20 - 120
Phenol-d5			64		16 - 120

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 184424**

**Lab Sample ID: LCS 480-184424/2-A**

**Matrix: Water**

**Analysis Batch: 190112**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits	%Rec.
	Added	Result	Qualifier					
2,4-Dinitrotoluene	32.0	25.1		ug/L	79	65 - 154		
2-Chlorophenol	32.0	24.0		ug/L	75	48 - 120		
4-Chloro-3-methylphenol	32.0	25.4		ug/L	80	64 - 120		
4-Nitrophenol	64.0	38.6		ug/L	60	16 - 120		
Acenaphthene	32.0	23.3		ug/L	73	60 - 120		
Atrazine	64.0	66.3	E	ug/L	104	56 - 179		
Bis(2-ethylhexyl) phthalate	32.0	26.7		ug/L	84	53 - 158		
Fluorene	32.0	22.6		ug/L	70	55 - 143		
Hexachloroethane	32.0	19.5		ug/L	61	14 - 101		
N-Nitrosodi-n-propylamine	32.0	24.5		ug/L	77	56 - 120		
Pentachlorophenol	64.0	45.1		ug/L	71	39 - 136		
Phenol	32.0	16.7		ug/L	52	17 - 120		
Pyrene	32.0	24.2		ug/L	76	58 - 136		

Surrogate	LCS	LCS	%Recovery	Qualifier	Limits
	Surrogate	MB			
2,4,6-Tribromophenol			95		52 - 132
Nitrobenzene-d5			91		46 - 120
2-Fluorobiphenyl			86		48 - 120
p-Terphenyl-d14			97		67 - 150
2-Fluorophenol			78		20 - 120
Phenol-d5			65		16 - 120

**Lab Sample ID: MB 480-184529/1-A**

**Matrix: Solid**

**Analysis Batch: 185382**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 184529**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Biphenyl			ND		170	10	ug/Kg		05/29/14 07:50	06/03/14 15:40	1
bis (2-chloroisopropyl) ether			ND		170	18	ug/Kg		05/29/14 07:50	06/03/14 15:40	1
2,4,5-Trichlorophenol			ND		170	37	ug/Kg		05/29/14 07:50	06/03/14 15:40	1
2,4,6-Trichlorophenol			ND		170	11	ug/Kg		05/29/14 07:50	06/03/14 15:40	1
2,4-Dichlorophenol			ND		170	8.8	ug/Kg		05/29/14 07:50	06/03/14 15:40	1
2,4-Dimethylphenol			ND		170	45	ug/Kg		05/29/14 07:50	06/03/14 15:40	1
2,4-Dinitrophenol			ND		330	59	ug/Kg		05/29/14 07:50	06/03/14 15:40	1
2,4-Dinitrotoluene			ND		170	26	ug/Kg		05/29/14 07:50	06/03/14 15:40	1
2,6-Dinitrotoluene			ND		170	41	ug/Kg		05/29/14 07:50	06/03/14 15:40	1
2-Chloronaphthalene			ND		170	11	ug/Kg		05/29/14 07:50	06/03/14 15:40	1
2-Chlorophenol			ND		170	8.6	ug/Kg		05/29/14 07:50	06/03/14 15:40	1
2-Methylnaphthalene			ND		170	2.0	ug/Kg		05/29/14 07:50	06/03/14 15:40	1

TestAmerica Buffalo

# QC Sample Results

Client: GEI Consultants, Inc.

Project/Site: RG&E - West Station Former MGP Site

TestAmerica Job ID: 480-60592-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 480-184529/1-A**

**Matrix: Solid**

**Analysis Batch: 185382**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 184529**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylphenol	ND		170	5.2	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
2-Nitroaniline	ND		330	54	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
2-Nitrophenol	ND		170	7.7	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
3,3'-Dichlorobenzidine	ND		170	150	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
3-Nitroaniline	ND		330	39	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
4,6-Dinitro-2-methylphenol	ND		330	58	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
4-Bromophenyl phenyl ether	ND		170	54	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
4-Chloro-3-methylphenol	ND		170	6.9	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
4-Chloroaniline	ND		170	49	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
4-Chlorophenyl phenyl ether	ND		170	3.6	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
4-Methylphenol	ND		330	9.4	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
4-Nitroaniline	ND		330	19	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
4-Nitrophenol	ND		330	41	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
Acenaphthene	ND		170	2.0	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
Acenaphthylene	ND		170	1.4	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
Acetophenone	ND		170	8.6	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
Anthracene	ND		170	4.3	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
Atrazine	ND		170	7.5	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
Benzaldehyde	ND		170	18	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
Benzo[a]anthracene	ND		170	2.9	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
Benzo[a]pyrene	ND		170	4.1	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
Benzo[b]fluoranthene	ND		170	3.3	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
Benzo[g,h,i]perylene	ND		170	2.0	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
Benzo[k]fluoranthene	ND		170	1.9	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
Bis(2-chloroethoxy)methane	ND		170	9.2	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
Bis(2-chloroethyl)ether	ND		170	15	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
Bis(2-ethylhexyl) phthalate	ND		170	54	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
Butyl benzyl phthalate	ND		170	45	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
Caprolactam	ND		170	73	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
Carbazole	ND		170	1.9	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
Chrysene	ND		170	1.7	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
Di-n-butyl phthalate	ND		170	58	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
Dibenz(a,h)anthracene	ND		170	2.0	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
Di-n-octyl phthalate	ND		170	3.9	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
Dibenzofuran	ND		170	1.8	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
Diethyl phthalate	ND		170	5.1	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
Dimethyl phthalate	ND		170	4.4	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
Fluoranthene	ND		170	2.4	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
Fluorene	ND		170	3.9	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
Hexachlorobenzene	ND		170	8.4	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
Hexachlorobutadiene	ND		170	8.6	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
Hexachlorocyclopentadiene	ND		170	51	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
Hexachloroethane	ND		170	13	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
Indeno[1,2,3-cd]pyrene	ND		170	4.7	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
Isophorone	ND		170	8.4	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
N-Nitrosodi-n-propylamine	ND		170	13	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
N-Nitrosodiphenylamine	ND		170	9.2	ug/Kg	05/29/14 07:50	06/03/14 15:40		1
Naphthalene	ND		170	2.8	ug/Kg	05/29/14 07:50	06/03/14 15:40		1

TestAmerica Buffalo

# QC Sample Results

Client: GEI Consultants, Inc.

TestAmerica Job ID: 480-60592-1

Project/Site: RG&E - West Station Former MGP Site

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: MB 480-184529/1-A**

**Matrix: Solid**

**Analysis Batch: 185382**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 184529**

Analyte	MB		RL	MDL	Unit	D	Prepared		Dil Fac
	Result	Qualifier					Prepared	Analyzed	
Nitrobenzene	ND		170	7.5	ug/Kg	05/29/14 07:50	06/03/14 15:40	1	
Pentachlorophenol	ND		330	58	ug/Kg	05/29/14 07:50	06/03/14 15:40	1	
Phenanthrene	ND		170	3.5	ug/Kg	05/29/14 07:50	06/03/14 15:40	1	
Phenol	ND		170	18	ug/Kg	05/29/14 07:50	06/03/14 15:40	1	
Pyrene	ND		170	1.1	ug/Kg	05/29/14 07:50	06/03/14 15:40	1	

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2,4,6-Tribromophenol (Surr)	94		39 - 146	05/29/14 07:50	06/03/14 15:40	1
Nitrobenzene-d5 (Surr)	88		34 - 132	05/29/14 07:50	06/03/14 15:40	1
2-Fluorobiphenyl	89		37 - 120	05/29/14 07:50	06/03/14 15:40	1
p-Terphenyl-d14 (Surr)	91		65 - 153	05/29/14 07:50	06/03/14 15:40	1
2-Fluorophenol (Surr)	83		18 - 120	05/29/14 07:50	06/03/14 15:40	1
Phenol-d5 (Surr)	87		11 - 120	05/29/14 07:50	06/03/14 15:40	1

**Lab Sample ID: LCS 480-184529/2-A**

**Matrix: Solid**

**Analysis Batch: 185382**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 184529**

Analyte	Spike		Result	Qualifier	Unit	D	%Rec	Limits
	Added							
2,4-Dinitrotoluene	1630		1780		ug/Kg	109	55 - 125	
2-Chlorophenol	1630		1330		ug/Kg	82	38 - 120	
4-Chloro-3-methylphenol	1630		1550		ug/Kg	95	49 - 125	
4-Nitrophenol	3260		3340		ug/Kg	103	43 - 137	
Acenaphthene	1630		1490		ug/Kg	91	53 - 120	
Atrazine	3260		3340		ug/Kg	103	60 - 164	
Bis(2-ethylhexyl) phthalate	1630		1520		ug/Kg	93	61 - 133	
Fluorene	1630		1500		ug/Kg	92	63 - 126	
Hexachloroethane	1630		1260		ug/Kg	77	41 - 120	
N-Nitrosodi-n-propylamine	1630		1360		ug/Kg	84	46 - 120	
Pentachlorophenol	3260		3220		ug/Kg	99	33 - 136	
Phenol	1630		1390		ug/Kg	85	36 - 120	
Pyrene	1630		1490		ug/Kg	91	51 - 133	

Surrogate	LCS		Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol (Surr)	99		39 - 146
Nitrobenzene-d5 (Surr)	83		34 - 132
2-Fluorobiphenyl	85		37 - 120
p-Terphenyl-d14 (Surr)	93		65 - 153
2-Fluorophenol (Surr)	80		18 - 120
Phenol-d5 (Surr)	83		11 - 120

TestAmerica Buffalo

# QC Sample Results

Client: GEI Consultants, Inc.

TestAmerica Job ID: 480-60592-1

Project/Site: RG&E - West Station Former MGP Site

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

**Lab Sample ID: MB 480-184665/1-A**

**Matrix: Solid**

**Analysis Batch: 184798**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 184665**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
PCB-1016	ND		0.23		0.045	mg/Kg		05/29/14 15:03	05/30/14 10:46		1
PCB-1221	ND		0.23		0.045	mg/Kg		05/29/14 15:03	05/30/14 10:46		1
PCB-1232	ND		0.23		0.045	mg/Kg		05/29/14 15:03	05/30/14 10:46		1
PCB-1242	ND		0.23		0.045	mg/Kg		05/29/14 15:03	05/30/14 10:46		1
PCB-1248	ND		0.23		0.045	mg/Kg		05/29/14 15:03	05/30/14 10:46		1
PCB-1254	ND		0.23		0.11	mg/Kg		05/29/14 15:03	05/30/14 10:46		1
PCB-1260	ND		0.23		0.11	mg/Kg		05/29/14 15:03	05/30/14 10:46		1
<hr/>											
Surrogate		MB	MB	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene		119				46 - 175			05/29/14 15:03	05/30/14 10:46	
DCB Decachlorobiphenyl		131				47 - 176			05/29/14 15:03	05/30/14 10:46	

**Lab Sample ID: LCS 480-184665/2-A**

**Matrix: Solid**

**Analysis Batch: 184798**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 184665**

Analyte	MB	MB	Spike Added	Result	LCS Qualifier	Unit	D	%Rec	Limits	%Rec.
	Result	Qualifier								
PCB-1016			1.98	2.04		mg/Kg		103	51 - 185	
PCB-1260			1.98	2.51		mg/Kg		127	61 - 184	
<hr/>										
Surrogate		MB	MB	%Recovery	Qualifier	Limits				
Tetrachloro-m-xylene		121				46 - 175				
DCB Decachlorobiphenyl		151				47 - 176				

## Method: 6010C - Metals (ICP)

**Lab Sample ID: MB 480-184445/1-A**

**Matrix: Water**

**Analysis Batch: 185085**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 184445**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Aluminum	ND		0.20		0.060	mg/L		05/29/14 09:00	05/30/14 16:37		1
Antimony	ND		0.020		0.0068	mg/L		05/29/14 09:00	05/30/14 16:37		1
Arsenic	ND		0.015		0.0056	mg/L		05/29/14 09:00	05/30/14 16:37		1
Barium	ND		0.0020		0.00070	mg/L		05/29/14 09:00	05/30/14 16:37		1
Beryllium	ND		0.0020		0.00030	mg/L		05/29/14 09:00	05/30/14 16:37		1
Cadmium	ND		0.0020		0.00050	mg/L		05/29/14 09:00	05/30/14 16:37		1
Calcium	ND		0.50		0.10	mg/L		05/29/14 09:00	05/30/14 16:37		1
Chromium	ND		0.0040		0.0010	mg/L		05/29/14 09:00	05/30/14 16:37		1
Cobalt	ND		0.0040		0.00063	mg/L		05/29/14 09:00	05/30/14 16:37		1
Copper	ND		0.010		0.0016	mg/L		05/29/14 09:00	05/30/14 16:37		1
Iron	ND		0.050		0.019	mg/L		05/29/14 09:00	05/30/14 16:37		1
Lead	ND		0.010		0.0030	mg/L		05/29/14 09:00	05/30/14 16:37		1
Magnesium	ND		0.20		0.043	mg/L		05/29/14 09:00	05/30/14 16:37		1
Manganese	ND		0.0030		0.00040	mg/L		05/29/14 09:00	05/30/14 16:37		1
Nickel	ND		0.010		0.0013	mg/L		05/29/14 09:00	05/30/14 16:37		1
Potassium	0.109	J			0.50	0.10	mg/L		05/29/14 09:00	05/30/14 16:37	

TestAmerica Buffalo

# QC Sample Results

Client: GEI Consultants, Inc.

TestAmerica Job ID: 480-60592-1

Project/Site: RG&E - West Station Former MGP Site

## Method: 6010C - Metals (ICP) (Continued)

**Lab Sample ID: MB 480-184445/1-A**

**Matrix: Water**

**Analysis Batch: 185085**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 184445**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Selenium	ND				0.025	0.0087	mg/L		05/29/14 09:00	05/30/14 16:37	1
Silver	ND				0.0060	0.0017	mg/L		05/29/14 09:00	05/30/14 16:37	1
Sodium	ND				1.0	0.32	mg/L		05/29/14 09:00	05/30/14 16:37	1
Thallium	ND				0.020	0.010	mg/L		05/29/14 09:00	05/30/14 16:37	1
Vanadium	ND				0.0050	0.0015	mg/L		05/29/14 09:00	05/30/14 16:37	1
Zinc	ND				0.010	0.0015	mg/L		05/29/14 09:00	05/30/14 16:37	1

**Lab Sample ID: LCS 480-184445/2-A**

**Matrix: Water**

**Analysis Batch: 185357**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 184445**

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	Limits
		Result	Qualifier				
Aluminum	10.0	10.95		mg/L		109	80 - 120
Antimony	0.200	0.208		mg/L		104	80 - 120
Arsenic	0.200	0.207		mg/L		103	80 - 120
Barium	0.200	0.214		mg/L		107	80 - 120
Beryllium	0.200	0.214		mg/L		107	80 - 120
Cadmium	0.200	0.209		mg/L		105	80 - 120
Calcium	10.0	10.61		mg/L		106	80 - 120
Chromium	0.200	0.221		mg/L		110	80 - 120
Cobalt	0.200	0.208		mg/L		104	80 - 120
Copper	0.200	0.214		mg/L		107	80 - 120
Iron	10.0	10.72		mg/L		107	80 - 120
Lead	0.200	0.206		mg/L		103	80 - 120
Magnesium	10.0	11.21		mg/L		112	80 - 120
Manganese	0.200	0.216		mg/L		108	80 - 120
Nickel	0.200	0.203		mg/L		102	80 - 120
Potassium	10.0	10.57		mg/L		106	80 - 120
Selenium	0.200	0.205		mg/L		102	80 - 120
Silver	0.0500	0.0540		mg/L		108	80 - 120
Sodium	10.0	10.37		mg/L		104	80 - 120
Thallium	0.200	0.215		mg/L		107	80 - 120
Vanadium	0.200	0.224		mg/L		112	80 - 120
Zinc	0.200	0.223		mg/L		111	80 - 120

**Lab Sample ID: MB 480-184578/1-A**

**Matrix: Solid**

**Analysis Batch: 185177**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 184578**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Aluminum	ND				9.2	4.1	mg/Kg		05/29/14 11:00	05/30/14 22:28	1
Antimony	ND				13.8	0.37	mg/Kg		05/29/14 11:00	05/30/14 22:28	1
Arsenic	ND				1.8	0.37	mg/Kg		05/29/14 11:00	05/30/14 22:28	1
Barium	ND				0.46	0.10	mg/Kg		05/29/14 11:00	05/30/14 22:28	1
Beryllium	ND				0.18	0.026	mg/Kg		05/29/14 11:00	05/30/14 22:28	1
Cadmium	ND				0.18	0.028	mg/Kg		05/29/14 11:00	05/30/14 22:28	1
Calcium	3.53	J			46.1	3.0	mg/Kg		05/29/14 11:00	05/30/14 22:28	1
Chromium	ND				0.46	0.18	mg/Kg		05/29/14 11:00	05/30/14 22:28	1
Cobalt	ND				0.46	0.046	mg/Kg		05/29/14 11:00	05/30/14 22:28	1

TestAmerica Buffalo

# QC Sample Results

Client: GEI Consultants, Inc.

TestAmerica Job ID: 480-60592-1

Project/Site: RG&E - West Station Former MGP Site

## Method: 6010C - Metals (ICP) (Continued)

**Lab Sample ID: MB 480-184578/1-A**

**Matrix: Solid**

**Analysis Batch: 185177**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 184578**

**MB MB**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		0.92	0.19	mg/Kg		05/29/14 11:00	05/30/14 22:28	1
Iron	ND		9.2	1.0	mg/Kg		05/29/14 11:00	05/30/14 22:28	1
Lead	ND		0.92	0.22	mg/Kg		05/29/14 11:00	05/30/14 22:28	1
Magnesium	ND		18.4	0.86	mg/Kg		05/29/14 11:00	05/30/14 22:28	1
Manganese	ND		0.18	0.030	mg/Kg		05/29/14 11:00	05/30/14 22:28	1
Nickel	ND		4.6	0.21	mg/Kg		05/29/14 11:00	05/30/14 22:28	1
Potassium	ND		27.7	18.4	mg/Kg		05/29/14 11:00	05/30/14 22:28	1
Selenium	ND		3.7	0.37	mg/Kg		05/29/14 11:00	05/30/14 22:28	1
Silver	ND		0.55	0.18	mg/Kg		05/29/14 11:00	05/30/14 22:28	1
Sodium	ND		129	12.0	mg/Kg		05/29/14 11:00	05/30/14 22:28	1
Thallium	ND		5.5	0.28	mg/Kg		05/29/14 11:00	05/30/14 22:28	1
Vanadium	ND		0.46	0.10	mg/Kg		05/29/14 11:00	05/30/14 22:28	1
Zinc	ND		1.8	0.14	mg/Kg		05/29/14 11:00	05/30/14 22:28	1

**Lab Sample ID: LCSSRM 480-184578/2-A**

**Matrix: Solid**

**Analysis Batch: 185177**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 184578**

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	Limits
Aluminum	9410	6583		mg/Kg		70.0	43.5 - 156. 5
Antimony	129	96.76		mg/Kg		74.9	22.4 - 249. 6
Arsenic	88.5	83.54		mg/Kg		94.4	69.0 - 131. 2
Barium	210	188.3		mg/Kg		89.5	73.3 - 126. 7
Beryllium	55.9	51.85		mg/Kg		92.8	73.1 - 127. 1
Cadmium	143	131.2		mg/Kg		91.6	72.7 - 127. 3
Calcium	7540	6624		mg/Kg		87.8	74.6 - 125. 4
Chromium	86.9	75.09		mg/Kg		86.4	69.1 - 131. 3
Cobalt	199	189.0		mg/Kg		94.8	74.4 - 125. 6
Copper	268	253.3		mg/Kg		94.4	76.1 - 123. 9
Iron	12800	9513		mg/Kg		74.2	31.6 - 168. 0
Lead	98.1	92.02		mg/Kg		93.8	70.8 - 128. 7
Magnesium	2850	2304		mg/Kg		80.7	65.3 - 134. 7
Manganese	426	370.6		mg/Kg		87.1	76.2 - 123. 5
Nickel	236	221.4		mg/Kg		93.6	74.2 - 128. 0
Potassium	2570	2045		mg/Kg		79.5	61.1 - 138. 9
Selenium	127	121.7		mg/Kg		95.7	66.6 - 133. 9

TestAmerica Buffalo

# QC Sample Results

Client: GEI Consultants, Inc.

TestAmerica Job ID: 480-60592-1

Project/Site: RG&E - West Station Former MGP Site

## Method: 6010C - Metals (ICP) (Continued)

**Lab Sample ID: LCSSRM 480-184578/2-A**

**Matrix: Solid**

**Analysis Batch: 185177**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 184578**

Analyte	Spike	LCSSRM	LCSSRM	Unit	D	%Rec.	Limits
	Added	Result	Qualifier				
Silver	66.3	63.59		mg/Kg		95.9	67.1 - 132.
Sodium	1040	937.5		mg/Kg		90.0	60.4 - 139.
Thallium	140	132.2		mg/Kg		94.2	68.3 - 132.
Vanadium	157	138.2		mg/Kg		87.9	71.3 - 128.
Zinc	130	109.1		mg/Kg		83.8	66.9 - 133.

## Method: 7470A - Mercury (CVAA)

**Lab Sample ID: MB 480-184563/1-A**

**Client Sample ID: Method Blank**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 184861**

**Prep Batch: 184563**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Mercury	ND		0.00020		0.00012	mg/L			05/29/14 09:30	05/30/14 09:12	1

**Lab Sample ID: LCS 480-184563/2-A**

**Client Sample ID: Lab Control Sample**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 184861**

**Prep Batch: 184563**

Analyte	Spike	LCSSRM	LCSSRM	Unit	D	%Rec.	Limits
	Added	Result	Qualifier				
Mercury	0.00667	0.00693		mg/L		104	80 - 120

## Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

**Lab Sample ID: MB 480-184620/1-A**

**Client Sample ID: Method Blank**

**Matrix: Solid**

**Prep Type: Total/NA**

**Analysis Batch: 185183**

**Prep Batch: 184620**

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Mercury	ND		0.019		0.0078	mg/Kg			05/30/14 10:00	05/31/14 09:57	1

**Lab Sample ID: LCSSRM 480-184620/2-A**

**Client Sample ID: Lab Control Sample**

**Matrix: Solid**

**Prep Type: Total/NA**

**Analysis Batch: 185183**

**Prep Batch: 184620**

Analyte	Spike	LCSSRM	LCSSRM	Unit	D	%Rec.	Limits
	Added	Result	Qualifier				
Mercury	3.98	3.65		mg/Kg		91.6	51.0 - 149.

TestAmerica Buffalo

# QC Sample Results

Client: GEI Consultants, Inc.

TestAmerica Job ID: 480-60592-1

Project/Site: RG&E - West Station Former MGP Site

## Method: 310.2 - Alkalinity

**Lab Sample ID:** MB 480-185480/117

**Client Sample ID:** Method Blank

**Matrix:** Water

**Prep Type:** Total/NA

**Analysis Batch:** 185480

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Alkalinity, Total	6.28	J	10.0	4.0	mg/L			06/03/14 15:24	1

**Lab Sample ID:** MB 480-185480/35

**Client Sample ID:** Method Blank

**Matrix:** Water

**Prep Type:** Total/NA

**Analysis Batch:** 185480

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Alkalinity, Total	4.86	J	10.0	4.0	mg/L			06/03/14 09:43	1

**Lab Sample ID:** MB 480-185480/7

**Client Sample ID:** Method Blank

**Matrix:** Water

**Prep Type:** Total/NA

**Analysis Batch:** 185480

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Alkalinity, Total	ND		10.0	4.0	mg/L			06/03/14 08:33	1

**Lab Sample ID:** LCS 480-185480/116

**Client Sample ID:** Lab Control Sample

**Matrix:** Water

**Prep Type:** Total/NA

**Analysis Batch:** 185480

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Alkalinity, Total	50.0	53.27		mg/L		107	90 - 110

**Lab Sample ID:** LCS 480-185480/34

**Client Sample ID:** Lab Control Sample

**Matrix:** Water

**Prep Type:** Total/NA

**Analysis Batch:** 185480

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Alkalinity, Total	50.0	53.39		mg/L		107	90 - 110

**Lab Sample ID:** LCS 480-185480/6

**Client Sample ID:** Lab Control Sample

**Matrix:** Water

**Prep Type:** Total/NA

**Analysis Batch:** 185480

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits
	Added	Result	Qualifier				
Alkalinity, Total	50.0	45.14		mg/L		90	90 - 110

**Lab Sample ID:** 480-60592-3 MS

**Client Sample ID:** SEEP-1

**Matrix:** Water

**Prep Type:** Total/NA

**Analysis Batch:** 185480

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
Alkalinity, Total	403		20.0	433.1	4	mg/L		152	42 - 116

**Lab Sample ID:** 480-60592-3 MSD

**Client Sample ID:** SEEP-1

**Matrix:** Water

**Prep Type:** Total/NA

**Analysis Batch:** 185480

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Alkalinity, Total	403		20.0	398.5	4	mg/L		-21	42 - 116	8	20

TestAmerica Buffalo

# QC Sample Results

Client: GEI Consultants, Inc.

TestAmerica Job ID: 480-60592-1

Project/Site: RG&E - West Station Former MGP Site

## Method: 9012B - Cyanide, Total andor Amenable

**Lab Sample ID:** MB 480-184994/1-A

**Matrix:** Water

**Analysis Batch:** 185198

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 184994

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.010	0.0050	mg/L		05/30/14 20:55	06/02/14 10:49	1

**Lab Sample ID:** LCS 480-184994/2-A

**Matrix:** Water

**Analysis Batch:** 185198

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 184994

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Cyanide, Total	0.250	0.260		mg/L		104	90 - 110

**Lab Sample ID:** 480-60592-3 MS

**Matrix:** Water

**Analysis Batch:** 185198

**Client Sample ID:** SEEP-1

**Prep Type:** Total/NA

**Prep Batch:** 184994

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limits
Cyanide, Total	0.020		0.100	0.124		mg/L		104	90 - 110

**Lab Sample ID:** MB 480-185746/1-A

**Matrix:** Water

**Analysis Batch:** 185872

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 185746

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.010	0.0050	mg/L		06/04/14 19:04	06/05/14 09:41	1

**Lab Sample ID:** LCS 480-185746/2-A

**Matrix:** Water

**Analysis Batch:** 185872

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 185746

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Cyanide, Total	0.400	0.374		mg/L		94	90 - 110

**Lab Sample ID:** 480-60592-4 MS

**Matrix:** Water

**Analysis Batch:** 185872

**Client Sample ID:** MW-26S

**Prep Type:** Total/NA

**Prep Batch:** 185746

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limits
Cyanide, Total	0.047		0.100	0.135	F1	mg/L		88	90 - 110

**Lab Sample ID:** 480-60592-4 DU

**Matrix:** Water

**Analysis Batch:** 185872

**Client Sample ID:** MW-26S

**Prep Type:** Total/NA

**Prep Batch:** 185746

Analyte	Sample Result	Sample Qualifier	DU	DU	RPD
			Result	Qualifier	Limit
Cyanide, Total	0.047		0.0486		3 / 15

TestAmerica Buffalo

# QC Sample Results

Client: GEI Consultants, Inc.

TestAmerica Job ID: 480-60592-1

Project/Site: RG&E - West Station Former MGP Site

## Method: 9012B - Cyanide, Total andor Amenable (Continued)

**Lab Sample ID:** MB 480-185747/1-A

**Matrix:** Solid

**Analysis Batch:** 185872

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 185747

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.93	0.45	mg/Kg		06/04/14 21:41	06/05/14 10:11	1

**Lab Sample ID:** LCS 480-185747/2-A ^5

**Matrix:** Solid

**Analysis Batch:** 185872

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 185747

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Cyanide, Total	101	109.2		mg/Kg		108	29 - 122

## Method: 9038 - Sulfate, Turbidimetric

**Lab Sample ID:** MB 480-185413/12

**Matrix:** Water

**Analysis Batch:** 185413

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		5.0	1.5	mg/L			06/03/14 09:30	1

**Lab Sample ID:** LCS 480-185413/11

**Matrix:** Water

**Analysis Batch:** 185413

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Sulfate	30.0	28.87		mg/L		96	90 - 110

## Method: 9251 - Chloride

**Lab Sample ID:** MB 480-185479/49

**Matrix:** Water

**Analysis Batch:** 185479

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.34	mg/L			06/03/14 10:15	1

**Lab Sample ID:** MB 480-185479/7

**Matrix:** Water

**Analysis Batch:** 185479

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	ND		1.0	0.34	mg/L			06/03/14 08:30	1

**Lab Sample ID:** LCS 480-185479/48

**Matrix:** Water

**Analysis Batch:** 185479

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	Limits
Chloride	25.0	24.68		mg/L		99	90 - 110

TestAmerica Buffalo

# QC Sample Results

Client: GEI Consultants, Inc.

TestAmerica Job ID: 480-60592-1

Project/Site: RG&E - West Station Former MGP Site

## Method: 9251 - Chloride (Continued)

**Lab Sample ID: LCS 480-185479/6**

**Matrix: Water**

**Analysis Batch: 185479**

Analyte		Spike	LCS	LCS	Unit	D	%Rec	%Rec.
		Added	Result	Qualifier				
Chloride		25.0	24.78		mg/L	99	90 - 110	

**Lab Sample ID: 480-60592-3 MS**

**Matrix: Water**

**Analysis Batch: 185479**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
Chloride	1100		20.0	1090	4	mg/L	-66	74 - 131	

**Lab Sample ID: 480-60592-3 MSD**

**Matrix: Water**

**Analysis Batch: 185479**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
Chloride	1100		20.0	1081	4	mg/L	-111	74 - 131	

## Method: SM 2540C - Solids, Total Dissolved (TDS)

**Lab Sample ID: MB 480-184472/1**

**Matrix: Water**

**Analysis Batch: 184472**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Dissolved Solids	ND		10.0	4.0	mg/L			05/28/14 20:51	1

**Lab Sample ID: LCS 480-184472/2**

**Matrix: Water**

**Analysis Batch: 184472**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
Total Dissolved Solids	503	465.0		mg/L	92	85 - 115	

**Lab Sample ID: MB 480-184730/1**

**Matrix: Water**

**Analysis Batch: 184730**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Total Dissolved Solids	ND		10.0	4.0	mg/L			05/29/14 23:35	1

**Lab Sample ID: LCS 480-184730/2**

**Matrix: Water**

**Analysis Batch: 184730**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
Total Dissolved Solids	502	462.0		mg/L	92	85 - 115	

TestAmerica Buffalo

# QC Association Summary

Client: GEI Consultants, Inc.

TestAmerica Job ID: 480-60592-1

Project/Site: RG&E - West Station Former MGP Site

## GC/MS VOA

### Analysis Batch: 184378

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-60592-1	SEEP-1-0-3"	Total/NA	Solid	8260C	184396
480-60592-2	SEEP-1-12-14"	Total/NA	Solid	8260C	184396
LCS 480-184378/6	Lab Control Sample	Total/NA	Solid	8260C	
MB 480-184378/7	Method Blank	Total/NA	Solid	8260C	

### Prep Batch: 184396

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-60592-1	SEEP-1-0-3"	Total/NA	Solid	5035A	
480-60592-2	SEEP-1-12-14"	Total/NA	Solid	5035A	

### Analysis Batch: 185304

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-60592-3	SEEP-1	Total/NA	Water	8260C	
480-60592-4	MW-26S	Total/NA	Water	8260C	
480-60592-5	Trip Blank	Total/NA	Water	8260C	
LCS 480-185304/5	Lab Control Sample	Total/NA	Water	8260C	
MB 480-185304/6	Method Blank	Total/NA	Water	8260C	

## GC/MS Semi VOA

### Prep Batch: 184424

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-60592-3	SEEP-1	Total/NA	Water	3510C	
480-60592-4	MW-26S	Total/NA	Water	3510C	
LCS 480-184424/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 480-184424/1-A	Method Blank	Total/NA	Water	3510C	

### Prep Batch: 184529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-60592-1	SEEP-1-0-3"	Total/NA	Solid	3550C	
480-60592-2	SEEP-1-12-14"	Total/NA	Solid	3550C	
LCS 480-184529/2-A	Lab Control Sample	Total/NA	Solid	3550C	
MB 480-184529/1-A	Method Blank	Total/NA	Solid	3550C	

### Analysis Batch: 185382

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-184529/2-A	Lab Control Sample	Total/NA	Solid	8270D	184529
MB 480-184529/1-A	Method Blank	Total/NA	Solid	8270D	184529

### Analysis Batch: 185840

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-60592-1	SEEP-1-0-3"	Total/NA	Solid	8270D	184529
480-60592-2	SEEP-1-12-14"	Total/NA	Solid	8270D	184529

### Analysis Batch: 190112

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-184424/2-A	Lab Control Sample	Total/NA	Water	8270D	184424

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TestAmerica Buffalo

# QC Association Summary

Client: GEI Consultants, Inc.

Project/Site: RG&E - West Station Former MGP Site

TestAmerica Job ID: 480-60592-1

## GC/MS Semi VOA (Continued)

### Analysis Batch: 190710

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-60592-3	SEEP-1	Total/NA	Water	8270D	184424
480-60592-4	MW-26S	Total/NA	Water	8270D	184424
MB 480-184424/1-A	Method Blank	Total/NA	Water	8270D	184424

## GC Semi VOA

### Prep Batch: 184665

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-60592-1	SEEP-1-0-3"	Total/NA	Solid	3550C	9
480-60592-2	SEEP-1-12-14"	Total/NA	Solid	3550C	10
LCS 480-184665/2-A	Lab Control Sample	Total/NA	Solid	3550C	11
MB 480-184665/1-A	Method Blank	Total/NA	Solid	3550C	12

### Analysis Batch: 184798

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-60592-1	SEEP-1-0-3"	Total/NA	Solid	8082A	184665
480-60592-2	SEEP-1-12-14"	Total/NA	Solid	8082A	184665
LCS 480-184665/2-A	Lab Control Sample	Total/NA	Solid	8082A	184665
MB 480-184665/1-A	Method Blank	Total/NA	Solid	8082A	184665

## Metals

### Prep Batch: 184445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-60592-3	SEEP-1	Total/NA	Water	3005A	13
480-60592-4	MW-26S	Total/NA	Water	3005A	14
LCS 480-184445/2-A	Lab Control Sample	Total/NA	Water	3005A	15
MB 480-184445/1-A	Method Blank	Total/NA	Water	3005A	

### Prep Batch: 184563

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-60592-3	SEEP-1	Total/NA	Water	7470A	1
480-60592-4	MW-26S	Total/NA	Water	7470A	2
LCS 480-184563/2-A	Lab Control Sample	Total/NA	Water	7470A	3
MB 480-184563/1-A	Method Blank	Total/NA	Water	7470A	4

### Prep Batch: 184578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-60592-1	SEEP-1-0-3"	Total/NA	Solid	3050B	1
480-60592-2	SEEP-1-12-14"	Total/NA	Solid	3050B	2
LCSSRM 480-184578/2-A	Lab Control Sample	Total/NA	Solid	3050B	3
MB 480-184578/1-A	Method Blank	Total/NA	Solid	3050B	4

### Prep Batch: 184620

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-60592-1	SEEP-1-0-3"	Total/NA	Solid	7471B	1
480-60592-2	SEEP-1-12-14"	Total/NA	Solid	7471B	2
LCSSRM 480-184620/2-A	Lab Control Sample	Total/NA	Solid	7471B	3
MB 480-184620/1-A	Method Blank	Total/NA	Solid	7471B	4

TestAmerica Buffalo

# QC Association Summary

Client: GEI Consultants, Inc.

TestAmerica Job ID: 480-60592-1

Project/Site: RG&E - West Station Former MGP Site

## Metals (Continued)

### Analysis Batch: 184861

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-60592-3	SEEP-1	Total/NA	Water	7470A	184563
480-60592-4	MW-26S	Total/NA	Water	7470A	184563
LCS 480-184563/2-A	Lab Control Sample	Total/NA	Water	7470A	184563
MB 480-184563/1-A	Method Blank	Total/NA	Water	7470A	184563

### Analysis Batch: 185085

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-60592-4	MW-26S	Total/NA	Water	6010C	184445
MB 480-184445/1-A	Method Blank	Total/NA	Water	6010C	184445

### Analysis Batch: 185177

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-60592-1	SEEP-1-0-3"	Total/NA	Solid	6010C	184578
480-60592-2	SEEP-1-12-14"	Total/NA	Solid	6010C	184578
LCSSRM 480-184578/2-A	Lab Control Sample	Total/NA	Solid	6010C	184578
MB 480-184578/1-A	Method Blank	Total/NA	Solid	6010C	184578

### Analysis Batch: 185183

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-60592-1	SEEP-1-0-3"	Total/NA	Solid	7471B	184620
480-60592-2	SEEP-1-12-14"	Total/NA	Solid	7471B	184620
LCSSRM 480-184620/2-A	Lab Control Sample	Total/NA	Solid	7471B	184620
MB 480-184620/1-A	Method Blank	Total/NA	Solid	7471B	184620

### Analysis Batch: 185357

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-60592-3	SEEP-1	Total/NA	Water	6010C	184445
LCS 480-184445/2-A	Lab Control Sample	Total/NA	Water	6010C	184445

## General Chemistry

### Analysis Batch: 184472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-60592-4	MW-26S	Total/NA	Water	SM 2540C	
LCS 480-184472/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 480-184472/1	Method Blank	Total/NA	Water	SM 2540C	

### Analysis Batch: 184474

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-60592-1	SEEP-1-0-3"	Total/NA	Solid	Moisture	
480-60592-2	SEEP-1-12-14"	Total/NA	Solid	Moisture	

### Analysis Batch: 184495

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-60592-3	SEEP-1	Total/NA	Water	353.2	
480-60592-4	MW-26S	Total/NA	Water	353.2	

### Analysis Batch: 184730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-60592-3	SEEP-1	Total/NA	Water	SM 2540C	

TestAmerica Buffalo

# QC Association Summary

Client: GEI Consultants, Inc.

TestAmerica Job ID: 480-60592-1

Project/Site: RG&E - West Station Former MGP Site

## General Chemistry (Continued)

### Analysis Batch: 184730 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-184730/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 480-184730/1	Method Blank	Total/NA	Water	SM 2540C	

### Prep Batch: 184994

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-60592-3	SEEP-1	Total/NA	Water	9012B	
480-60592-3 MS	SEEP-1	Total/NA	Water	9012B	
LCS 480-184994/2-A	Lab Control Sample	Total/NA	Water	9012B	
MB 480-184994/1-A	Method Blank	Total/NA	Water	9012B	

### Analysis Batch: 185198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-60592-3	SEEP-1	Total/NA	Water	9012B	184994
480-60592-3 MS	SEEP-1	Total/NA	Water	9012B	184994
LCS 480-184994/2-A	Lab Control Sample	Total/NA	Water	9012B	184994
MB 480-184994/1-A	Method Blank	Total/NA	Water	9012B	184994

### Analysis Batch: 185413

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-60592-3	SEEP-1	Total/NA	Water	9038	
480-60592-4	MW-26S	Total/NA	Water	9038	
LCS 480-185413/11	Lab Control Sample	Total/NA	Water	9038	
MB 480-185413/12	Method Blank	Total/NA	Water	9038	

### Analysis Batch: 185479

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-60592-3	SEEP-1	Total/NA	Water	9251	
480-60592-3 MS	SEEP-1	Total/NA	Water	9251	
480-60592-3 MSD	SEEP-1	Total/NA	Water	9251	
480-60592-4	MW-26S	Total/NA	Water	9251	
LCS 480-185479/48	Lab Control Sample	Total/NA	Water	9251	
LCS 480-185479/6	Lab Control Sample	Total/NA	Water	9251	
MB 480-185479/49	Method Blank	Total/NA	Water	9251	
MB 480-185479/7	Method Blank	Total/NA	Water	9251	

### Analysis Batch: 185480

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-60592-3	SEEP-1	Total/NA	Water	310.2	
480-60592-3 MS	SEEP-1	Total/NA	Water	310.2	
480-60592-3 MSD	SEEP-1	Total/NA	Water	310.2	
480-60592-4	MW-26S	Total/NA	Water	310.2	
LCS 480-185480/116	Lab Control Sample	Total/NA	Water	310.2	
LCS 480-185480/34	Lab Control Sample	Total/NA	Water	310.2	
LCS 480-185480/6	Lab Control Sample	Total/NA	Water	310.2	
MB 480-185480/117	Method Blank	Total/NA	Water	310.2	
MB 480-185480/35	Method Blank	Total/NA	Water	310.2	
MB 480-185480/7	Method Blank	Total/NA	Water	310.2	

### Prep Batch: 185746

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-60592-4	MW-26S	Total/NA	Water	9012B	

TestAmerica Buffalo

# QC Association Summary

Client: GEI Consultants, Inc.

Project/Site: RG&E - West Station Former MGP Site

TestAmerica Job ID: 480-60592-1

## General Chemistry (Continued)

### Prep Batch: 185746 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-60592-4 DU	MW-26S	Total/NA	Water	9012B	
480-60592-4 MS	MW-26S	Total/NA	Water	9012B	
LCS 480-185746/2-A	Lab Control Sample	Total/NA	Water	9012B	
MB 480-185746/1-A	Method Blank	Total/NA	Water	9012B	

### Prep Batch: 185747

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-60592-1	SEEP-1-0-3"	Total/NA	Solid	9012B	
480-60592-2	SEEP-1-12-14"	Total/NA	Solid	9012B	
LCS 480-185747/2-A ^5	Lab Control Sample	Total/NA	Solid	9012B	
MB 480-185747/1-A	Method Blank	Total/NA	Solid	9012B	

### Analysis Batch: 185872

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-60592-1	SEEP-1-0-3"	Total/NA	Solid	9012B	185747
480-60592-2	SEEP-1-12-14"	Total/NA	Solid	9012B	185747
480-60592-4	MW-26S	Total/NA	Water	9012B	185746
480-60592-4 DU	MW-26S	Total/NA	Water	9012B	185746
480-60592-4 MS	MW-26S	Total/NA	Water	9012B	185746
LCS 480-185746/2-A	Lab Control Sample	Total/NA	Water	9012B	185746
LCS 480-185747/2-A ^5	Lab Control Sample	Total/NA	Solid	9012B	185747
MB 480-185746/1-A	Method Blank	Total/NA	Water	9012B	185746
MB 480-185747/1-A	Method Blank	Total/NA	Solid	9012B	185747

## Lab Chronicle

Client: GEI Consultants, Inc.

TestAmerica Job ID: 480-60592-1

Project/Site: RG&E - West Station Former MGP Site

**Client Sample ID: SEEP-1-0-3"**

**Lab Sample ID: 480-60592-1**

**Date Collected: 05/27/14 11:30**

**Matrix: Solid**

**Date Received: 05/27/14 18:00**

**Percent Solids: 80.0**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			184396	05/28/14 12:57	PJQ	TAL BUF
Total/NA	Analysis	8260C		1	184378	05/28/14 17:09	CDC	TAL BUF
Total/NA	Prep	3550C			184529	05/29/14 07:50	TRG	TAL BUF
Total/NA	Analysis	8270D		5	185840	06/05/14 14:44	AR1	TAL BUF
Total/NA	Prep	3550C			184665	05/29/14 15:03	AJM	TAL BUF
Total/NA	Analysis	8082A		1	184798	05/30/14 16:33	JMM	TAL BUF
Total/NA	Prep	3050B			184578	05/29/14 11:00	EHD	TAL BUF
Total/NA	Analysis	6010C		1	185177	05/30/14 23:24	MTM2	TAL BUF
Total/NA	Prep	7471B			184620	05/30/14 10:00	EHD	TAL BUF
Total/NA	Analysis	7471B		1	185183	05/31/14 10:44	LRK	TAL BUF
Total/NA	Prep	9012B			185747	06/04/14 21:41	JMB	TAL BUF
Total/NA	Analysis	9012B		1	185872	06/05/14 10:18	JTS	TAL BUF
Total/NA	Analysis	Moisture		1	184474	05/28/14 20:31	CW	TAL BUF

**Client Sample ID: SEEP-1-12-14"**

**Lab Sample ID: 480-60592-2**

**Date Collected: 05/27/14 12:00**

**Matrix: Solid**

**Date Received: 05/27/14 18:00**

**Percent Solids: 66.5**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			184396	05/28/14 12:57	PJQ	TAL BUF
Total/NA	Analysis	8260C		1	184378	05/28/14 17:34	CDC	TAL BUF
Total/NA	Prep	3550C			184529	05/29/14 07:50	TRG	TAL BUF
Total/NA	Analysis	8270D		5	185840	06/05/14 15:09	AR1	TAL BUF
Total/NA	Prep	3550C			184665	05/29/14 15:03	AJM	TAL BUF
Total/NA	Analysis	8082A		1	184798	05/30/14 16:48	JMM	TAL BUF
Total/NA	Prep	3050B			184578	05/29/14 11:00	EHD	TAL BUF
Total/NA	Analysis	6010C		1	185177	05/30/14 23:27	MTM2	TAL BUF
Total/NA	Prep	7471B			184620	05/30/14 10:00	EHD	TAL BUF
Total/NA	Analysis	7471B		1	185183	05/31/14 10:45	LRK	TAL BUF
Total/NA	Prep	9012B			185747	06/04/14 21:41	JMB	TAL BUF
Total/NA	Analysis	9012B		1	185872	06/05/14 10:19	JTS	TAL BUF
Total/NA	Analysis	Moisture		1	184474	05/28/14 20:31	CW	TAL BUF

**Client Sample ID: SEEP-1**

**Lab Sample ID: 480-60592-3**

**Date Collected: 05/27/14 12:00**

**Matrix: Water**

**Date Received: 05/27/14 18:00**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	185304	06/03/14 12:01	CDC	TAL BUF
Total/NA	Prep	3510C			184424	05/28/14 14:19	AJM	TAL BUF
Total/NA	Analysis	8270D		1	190710	07/01/14 15:15	PJQ	TAL BUF
Total/NA	Prep	3005A			184445	05/29/14 09:00	EHD	TAL BUF
Total/NA	Analysis	6010C		1	185357	06/02/14 14:35	MTM2	TAL BUF

TestAmerica Buffalo

## Lab Chronicle

Client: GEI Consultants, Inc.

TestAmerica Job ID: 480-60592-1

Project/Site: RG&E - West Station Former MGP Site

**Client Sample ID: SEEP-1**

**Lab Sample ID: 480-60592-3**

Matrix: Water

Date Collected: 05/27/14 12:00

Date Received: 05/27/14 18:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			184563	05/29/14 09:30	SS1	TAL BUF
Total/NA	Analysis	7470A		1	184861	05/29/14 14:45	SS1	TAL BUF
Total/NA	Analysis	310.2		10	185480	06/03/14 08:50	NCH	TAL BUF
Total/NA	Analysis	353.2		1	184495	05/28/14 19:12	RS	TAL BUF
Total/NA	Prep	9012B			184994	05/30/14 20:55	JMB	TAL BUF
Total/NA	Analysis	9012B		1	185198	06/02/14 11:19	JTS	TAL BUF
Total/NA	Analysis	9038		30	185413	06/03/14 09:53	NCH	TAL BUF
Total/NA	Analysis	9251		50	185479	06/03/14 09:20	NCH	TAL BUF
Total/NA	Analysis	SM 2540C		1	184730	05/29/14 23:37	KS	TAL BUF

**Client Sample ID: MW-26S**

**Lab Sample ID: 480-60592-4**

Matrix: Water

Date Collected: 05/27/14 14:00

Date Received: 05/27/14 18:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	185304	06/03/14 12:27	CDC	TAL BUF
Total/NA	Prep	3510C			184424	05/28/14 14:19	AJM	TAL BUF
Total/NA	Analysis	8270D		1	190710	07/01/14 15:39	PJQ	TAL BUF
Total/NA	Prep	3005A			184445	05/29/14 09:00	EHD	TAL BUF
Total/NA	Analysis	6010C		1	185085	05/30/14 17:13	MTM2	TAL BUF
Total/NA	Prep	7470A			184563	05/29/14 09:30	SS1	TAL BUF
Total/NA	Analysis	7470A		1	184861	05/29/14 14:47	SS1	TAL BUF
Total/NA	Analysis	310.2		10	185480	06/03/14 09:55	NCH	TAL BUF
Total/NA	Analysis	353.2		1	184495	05/28/14 19:13	RS	TAL BUF
Total/NA	Prep	9012B			185746	06/04/14 19:04	JMB	TAL BUF
Total/NA	Analysis	9012B		1	185872	06/05/14 09:51	JTS	TAL BUF
Total/NA	Analysis	9038		30	185413	06/03/14 09:53	NCH	TAL BUF
Total/NA	Analysis	9251		50	185479	06/03/14 10:34	NCH	TAL BUF
Total/NA	Analysis	SM 2540C		1	184472	05/28/14 21:07	KS	TAL BUF

**Client Sample ID: Trip Blank**

**Lab Sample ID: 480-60592-5**

Matrix: Water

Date Collected: 05/27/14 00:00

Date Received: 05/27/14 18:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	185304	06/03/14 12:52	CDC	TAL BUF

### Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TestAmerica Buffalo

## Certification Summary

Client: GEI Consultants, Inc.

TestAmerica Job ID: 480-60592-1

Project/Site: RG&E - West Station Former MGP Site

### Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-15

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
353.2		Water	Nitrate as N
9038		Water	Sulfate
9251		Water	Chloride
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

## Method Summary

Client: GEI Consultants, Inc.

TestAmerica Job ID: 480-60592-1

Project/Site: RG&E - West Station Former MGP Site

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
7470A	Mercury (CVAA)	SW846	TAL BUF
7471B	Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	SW846	TAL BUF
310.2	Alkalinity	MCAWW	TAL BUF
353.2	Nitrate	EPA	TAL BUF
9012B	Cyanide, Total andor Amenable	SW846	TAL BUF
9038	Sulfate, Turbidimetric	SW846	TAL BUF
9251	Chloride	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL BUF

### Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

### Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

## Sample Summary

Client: GEI Consultants, Inc.

Project/Site: RG&E - West Station Former MGP Site

TestAmerica Job ID: 480-60592-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-60592-1	SEEP-1-0-3"	Solid	05/27/14 11:30	05/27/14 18:00
480-60592-2	SEEP-1-12-14"	Solid	05/27/14 12:00	05/27/14 18:00
480-60592-3	SEEP-1	Water	05/27/14 12:00	05/27/14 18:00
480-60592-4	MW-26S	Water	05/27/14 14:00	05/27/14 18:00
480-60592-5	Trip Blank	Water	05/27/14 00:00	05/27/14 18:00



## Login Sample Receipt Checklist

Client: GEI Consultants, Inc.

Job Number: 480-60592-1

**Login Number: 60592**

**List Source: TestAmerica Buffalo**

**List Number: 1**

**Creator: Wienke, Robert K**

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	False	COC is not relinquished by the client.
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	False	No sample times listed on the COC for soil samples. Taken from bottles.
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	False	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

## **Attachment B**

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### **Data Usability Report**

# 1. Usability Review

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General quality assurance and quality control (QA/QC) measures were taken to ensure the reliability of data generated during the sampling event. A trip blanks was provided for VOC analysis. Equipment blanks were not required since dedicated sampling equipment was used. Duplicates were not collected due to the small number of samples submitted. The analytical results (Level 4 data package) provided by TestAmerica are presented in Attachment A and the Electronic Data Deliverable (EDD) was uploaded to the NYSDEC web in appropriate format on July 18, 2014. The specific methodologies employed in obtaining the analytical results refer to the following USEPA references.

- “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods” (SW-846), Third Edition, September 1994, USEPA Office of Solid Waste.
- 40CFR Part 136 “Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act”, October 26, 1984 USEPA.

Data were evaluated consistent with the guidelines provided in New York State Department of Environmental Conservation (NYSDEC) DER-10, technical Guidance for Site Investigation and Remediation Appendix 2B – Guidance for Data Deliverables and Development of Data Usability Summary Reports, May 2010. Qualifiers added to the data and the conditions for addition of the qualifiers are those specified in EPA guidance documents "National Functional Guidelines for Organic Data Review", dated October 1999, EPA-540/R-99/008, "National Functional Guidelines for Inorganic Data Review", dated February, 1994, EPA-540/R-94-013.

## 1.1 Sample Management

Analytical data for two water and two soil samples were collected by GEI staff on May 27, 2014 and delivered the same day to Test America – Buffalo for analyses. The water samples were analyzed for:

- TCL VOCs (EPA Method 8260)
- TCL SVOCs (EPA Method 8270)
- TAL Metals (EPA Method 6010)
- Total Cyanide (EPA Method 9012A)
- Total Alkalinity (EPA Method 310.2)
- Sulfate (EPA Method 9038)
- Chloride (EPA Method 9251)
- Total Dissolved Solids (EPA Method SM2540-C)
- Nitrate (EPA Method 353.2)

The soil samples were analyzed for the following:

- VOCs (EPA Method 5035A)
- SVOCs (EPA Method 8270)
- TAL Metals (EPA Method 6010)
- Total Cyanide (EPA Method 9012A)
- PCBs (EPA Method 8082)

The sample collection times were missing from the COC. The laboratory used sample collection times on sample bottles for sample login. No other anomalies were observed regarding sample management. The samples in the SDG were received at the laboratory within the temperature limits of  $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$  and in good condition.

## 1.2 Laboratory Analysis

The Level II data package was complete and compliant with EPA protocols.

### 1.2.1 *Organic Data*

Holding Times: The preserved VOC water samples were analyzed within 14 days of sample collection. SVOC water samples were extracted within 7 days and analyzed within 40 days. Soil samples were extracted and analyzed within appropriate hold times.

Sample Trip Blank was the trip blank identified for the samples in this SDG. The trip blank had no detects reported above the MDL.

#### **VOCs**

- Method(s) 8260C: The method blank for batch 184378 contained Methylene chloride above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.
- Method(s) 8260C: The following volatiles sample(s) was diluted due to foaming at the time of purging during the original sample analysis: MW-26S (480-60592-4), SEEP-1 (480-60592-3). Elevated reporting limits (RLs) are provided.

#### **SVOCs**

- Method(s) 8270D: The following samples were diluted due to the nature of the sample matrix: SEEP-1-0-3" (480-60592-1), SEEP-1-12-14" (480-60592-2). Elevated reporting limits (RLs) are provided.
- Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 185840 recovered above the upper control limit for 2,4-Dinitrophenol and 2,4-Dinitrotoluene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.
- Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 185840 recovered above the upper control limit for Benzaldehyde. The samples

associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

- Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 185382 recovered above the upper control limit for multiple analytes. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.
- Method(s) 8270D: The continuing calibration verification (CCV) analyzed in batch 190710 was outside the method criteria for the following analyte: Pentachlorophenol, Atrazine, 3,3'-Dichlorobenzidine, and 4-Methylphenol. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

### **PCBs**

- Method(s) 8082A: The surrogate percent difference in the associated continuing calibration verifications (CCV) for Decachlorobiphenyl exceeded 20%, indicating a high bias. The reporting limits were supported by the laboratory MDLs.

### ***1.2.2 Inorganic Data***

Data packages were complete. Compliance assessments showed that laboratory control standards for all analytes were within acceptance limits. All EPA recommended holding times were met for the original analysis.

### **Conventional Chemistry Data**

- Method(s) SM 2540C: Due to the matrix, the initial volume(s) used for the following sample(s) deviated from the standard procedure: MW-26S (480-60592-4) and SEEP-1 (480-60592-3). The reporting limits (RLs) have been adjusted proportionately.
- Method(s) 310.2: The method blank for batch 185480 contained alkalinity above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

### **Metals**

- Method(s) 6010C: The method blank for batch 480-184578 contained calcium above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.
- Method(s) 6010C: The method blank for batch 480-184445 contained potassium above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

- Method(s) 6010C: The continuing calibration blank (CCB) for analytical batch 480-185085 contained aluminum, beryllium, calcium, iron, and sodium above the reporting limit (RL). All reported samples associated with this CCB were either less than the reporting limit for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples (MB480-184445/1-A), MW-26S (480-60592-4) was not performed.

Metals data were usable as reported without additional qualification.

### **1.3 Data Usability**

Based on a review of laboratory and field QC data, the analytical results reported by the laboratory are usable as qualified in the laboratory reports.

## **Attachment C**

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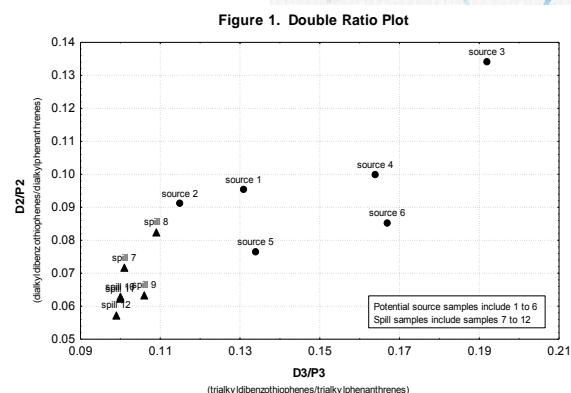
### **META Environmental Forensic Report**

# Environmental Forensic Report

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## West Station Off-Site Seep

SDG: MC30898



### Report To:

**GEI Consultants, Inc.**  
**90B John Muir Drive**  
**Suite 104**  
**Amherst, NY 14228**

### Report By:

**META Environmental, Inc.**  
**115 Dean Avenue**  
**Suite 300**  
**Franklin MA 02038**

**July 9, 2014**

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***Identifying and allocating sources of pollutants in complex environments.***

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## Certification

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This certifies that this package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed herein. The results included in this data report relate only to the samples as received and analyzed by the laboratory.

This report shall not be reproduced except in full, without the written approval of META Environmental, Inc.

Release of the data contained in this hardcopy or electronic copy data package has been authorized by the following signature(s).



David M. Mauro  
President, Senior Scientist

July 9, 2014

Date

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Franklin MA 02038  
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E-Mail [dmauro@metaenv.com](mailto:dmauro@metaenv.com)

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## Sample Delivery Group

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Project: West Station Off-Site Seep  
 Client GEI Consultants, Inc.  
           90B John Muir Drive  
           Suite 104  
           Amherst, NY 14228  
 Report Contact: Richard Frappa  
 Dates of Receipt: 5/28/2014  
 Sample Summary: The samples received for this project are summarized in the attached sample login forms in Appendix A.  
 META Project Number: G04048  
 SDG No.: MC30898

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## Chain of Custody

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Chain of custody documentation is provided in the Accutest Laboratory report (Appendix D).

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## Methods

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The water samples were prepared by solvent extraction (EPA 3511) using dichloromethane (DCM).

The soil samples were prepared by solvent extraction (EPA 3570) using DCM.

The extracts were spiked with internal standard and analyzed by GC/FID (EPA 8100M) for fingerprinting and by GC/MS/SIM (EPA 8270M) for mono- and polycyclic aromatic hydrocarbons (MAHs and PAHs), alkyl PAH homologues and other selected compounds.

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## Results

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Sample results are presented in several appendices which follow this narrative.

Appendix A: GC/FID Fingerprints

Appendix B: Bar Graphs

Appendix C: Extracted Ion Current Profiles (EICPs)

Appendix D: Accutest Laboratories Report – MC30898

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## Quality Control

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Quality control measures and results are provided in the Accutest Laboratory report (Appendix D).

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## Interpretation

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### **Introduction**

Two samples of water and two samples of soil were received by Accutest Laboratories of New England for META Environmental, Inc. (META) from the West Station former MGP site on May 28, 2014. The samples were analyzed for hydrocarbon fingerprint and an expanded list of MAHs and PAHs.

This report summarizes the findings and compares the samples.

### **Sample-Specific Observations**

#### Seep-1

Water sample Seep-1 contained very low concentrations of o-xylene, benzo(b)thiophene, acenaphthene, C2-benzenes, C3-benzenes, and C4-benzenes. No detectable pattern was evident on the GC/FID chromatogram. The concentrations were too low to generate interpretable patterns.

#### MW-26S

Water sample MW-26S contained no detectable PAHs or GC/FID pattern.

#### Seep-1-0-3”

Soil sample Seep-1-0-3” contained a mixture of pyrogenic and petrogenic PAHs (see definitions). The pyrogenic material was indicated by a wide range distribution of MAHs and PAHs with the parent compounds at higher relative amounts than their alkylated homologs. Fluoranthene and pyrene were detected at the highest concentrations; 273 ug/kg and 253 ug/kg, respectively (see Appendix B).

The concentration of total priority pollutant PAHs was 1,710 ug/kg. The fluoranthene/pyrene ratio was 1.06.

Sample Seep-1-0-3” also contained petroleum biomarker compounds (see Appendix C) indicative of low relative amounts of middle and high boiling petroleum-derived matter.

The sample also contained an odd-carbon high molecular weight alkane pattern and elevated perylene (relative to other HPAHs) indicative of natural organic matter.

These characteristics are consistent with urban background-sources of PAHs.

#### Seep-1-12-14”

Soil sample Seep-1-12-14” contained a mixture of pyrogenic and petrogenic substances very similar to Seep-1-0-3”.

The concentration of total priority pollutant PAHs was 2,090 ug/kg; and the fluoranthene/pyrene ratio was 1.12.

These characteristics also are consistent with urban background.

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## Definitions

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Pyrogenic substances are complex mixtures of primarily hydrocarbons produced from organic matter subjected to high temperatures but with insufficient oxygen for complete combustion. Pyrogenic materials are produced by fires, internal combustion engines, and furnaces. They also are formed when coke or gas are produced from coal or oil. Coal-tar based products, such as roofing, pavement sealers, waterproofing, pesticides, and some shampoos contain pyrogenic materials.

Petrogenic substances include crude oil and crude oil derivatives such as gasoline, heating oil, and asphalt.

Pitch is the semi-solid or solid material consisting of high molecular weight hydrocarbons that remain following coal tar distillation.

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## References

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“Chemical Fingerprinting of Hydrocarbons,” in: Introduction to Environmental Forensics. B.L. Murphy and R.D. Morrison editors, Academic Press, San Diego, CA 2002.

Mauro, D.M., “Chemical Source Attribution at former MGP Sites,” EPRI Report 1000728, December 2000.

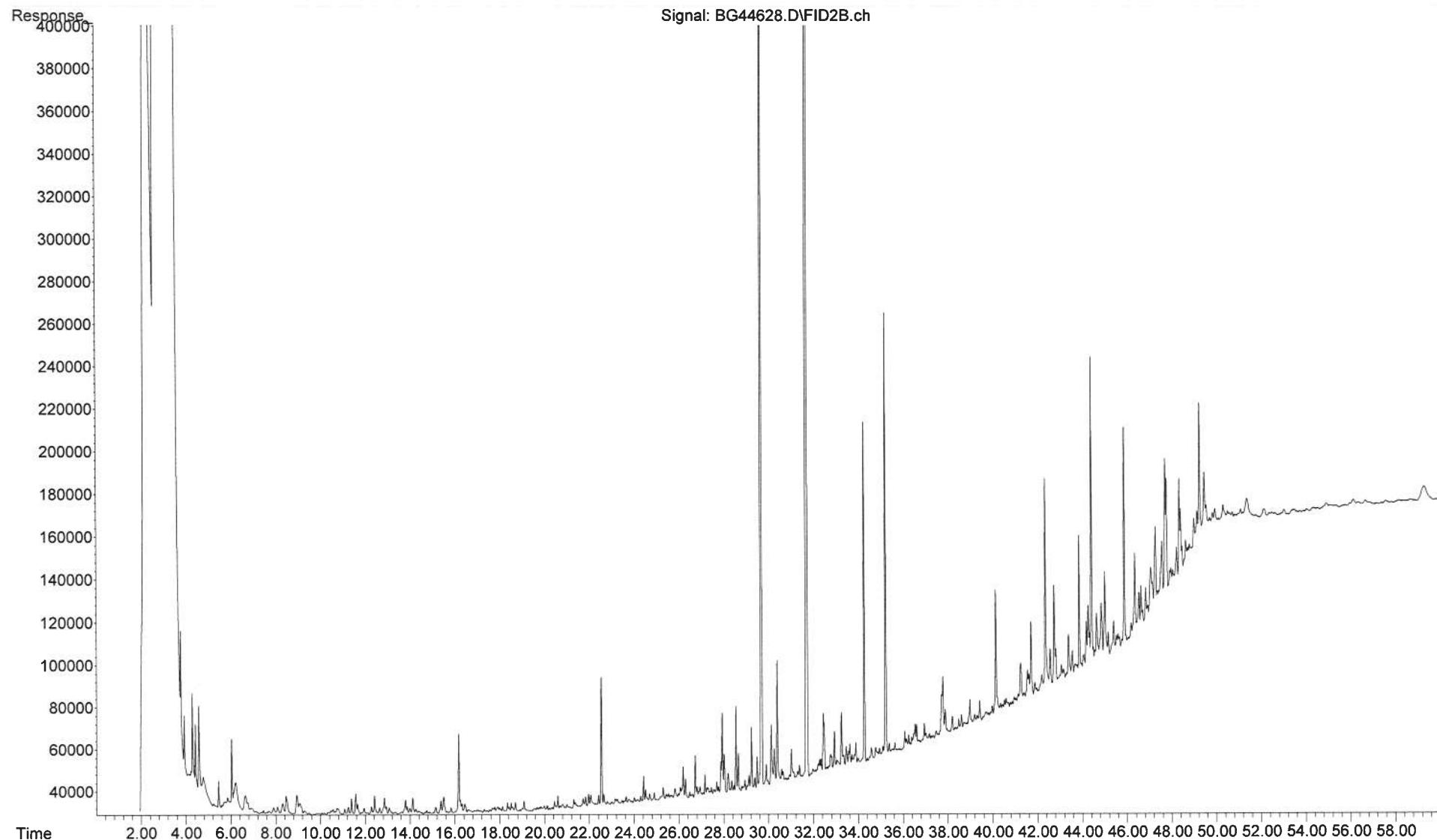
Mauro, D.M., “Examination of the Sources of Polycyclic Aromatic Hydrocarbons (PAH) in Urban Background Soil,” EPRI Technical Update Report 1015558, December 2008.

## **Appendix A**

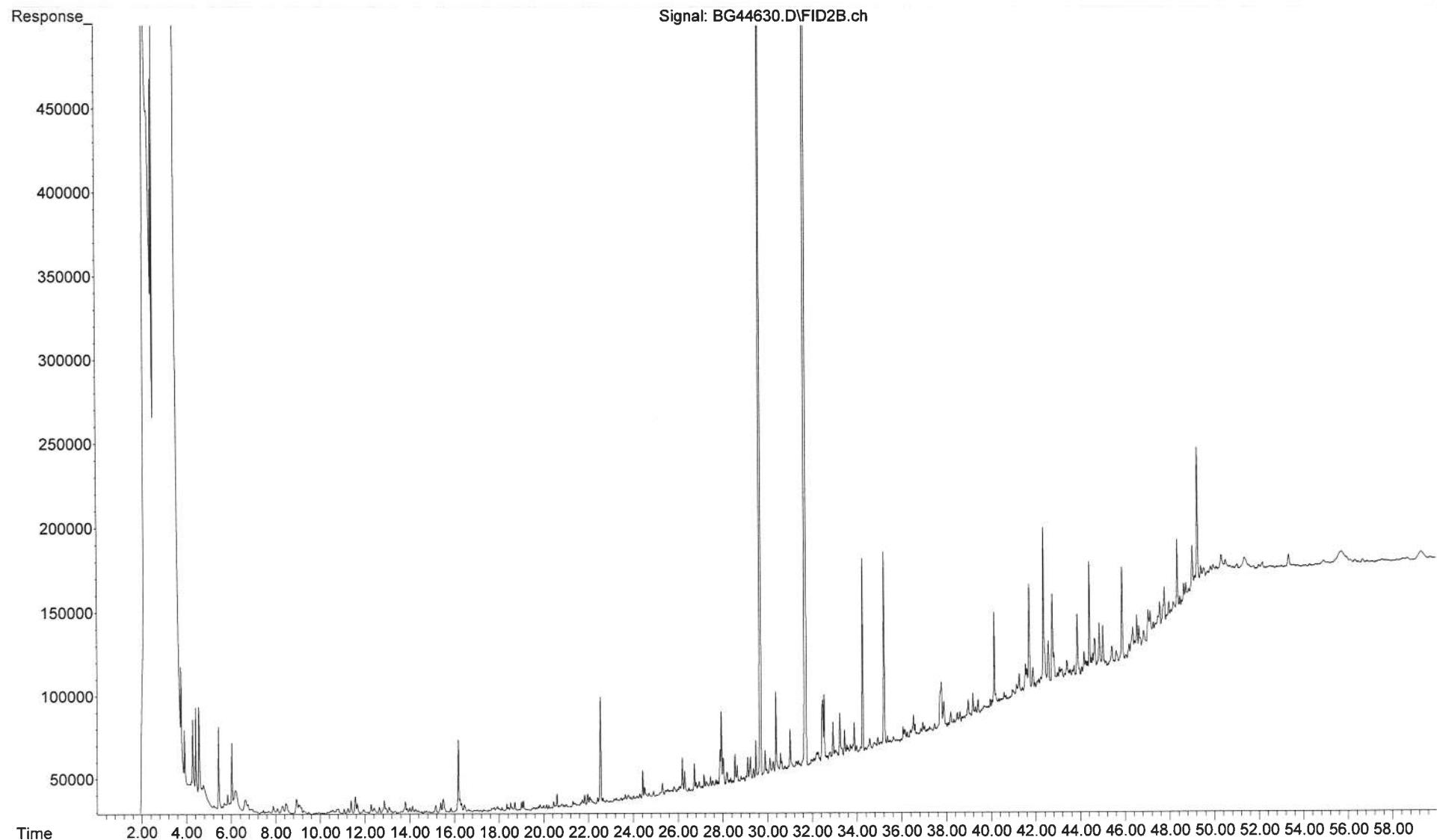
## **GC/FID Fingerprints**

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Instrument : GCBG  
Acquired : 5 Jun 2014 9:33 pm using AcqMethod FORENSICDUAL.M  
Sample Name: MC30898-2  
Misc Info : OP38365,GBG1703,5.91,,,2,1

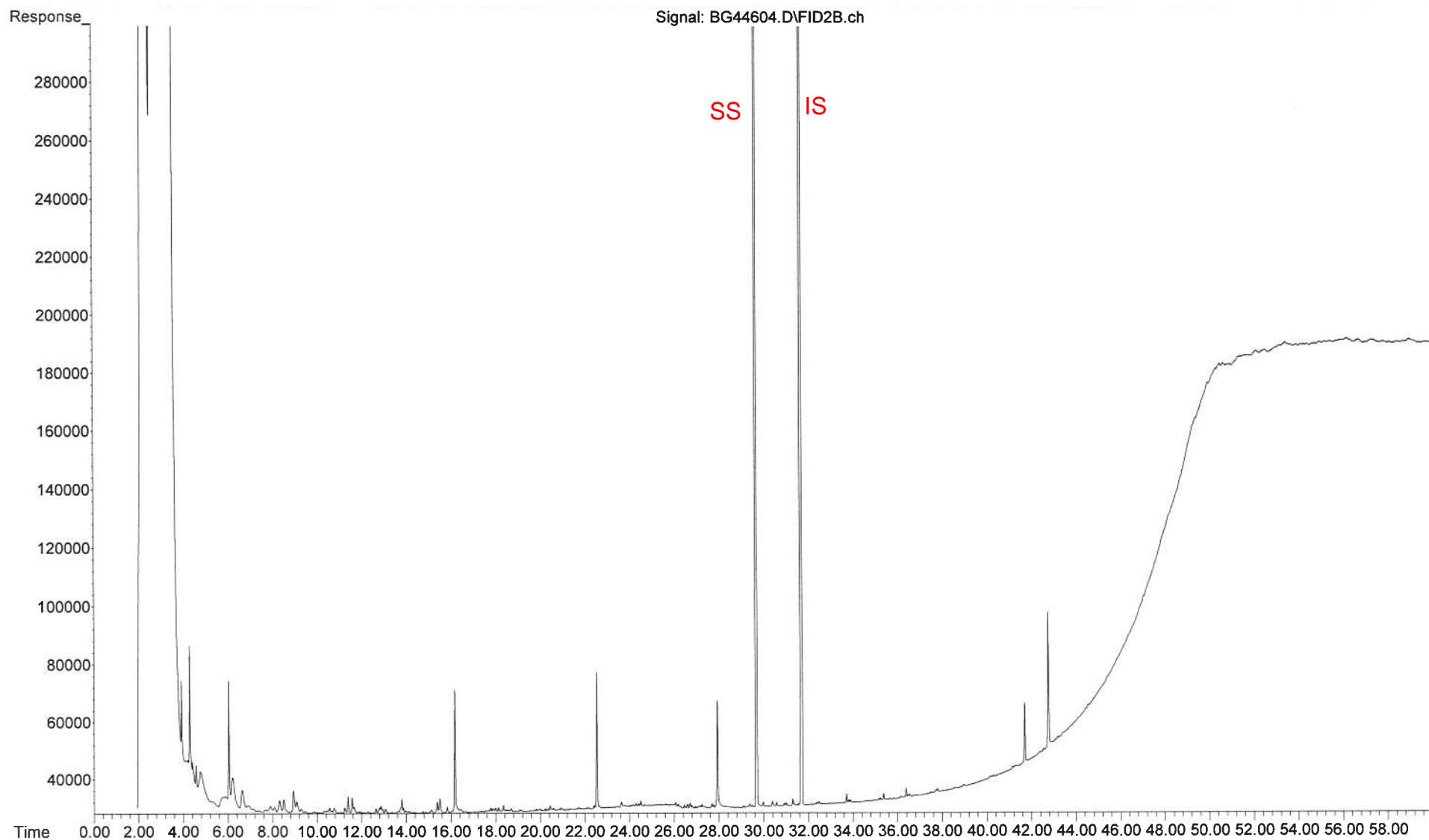


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Sample Name: MC30898-3  
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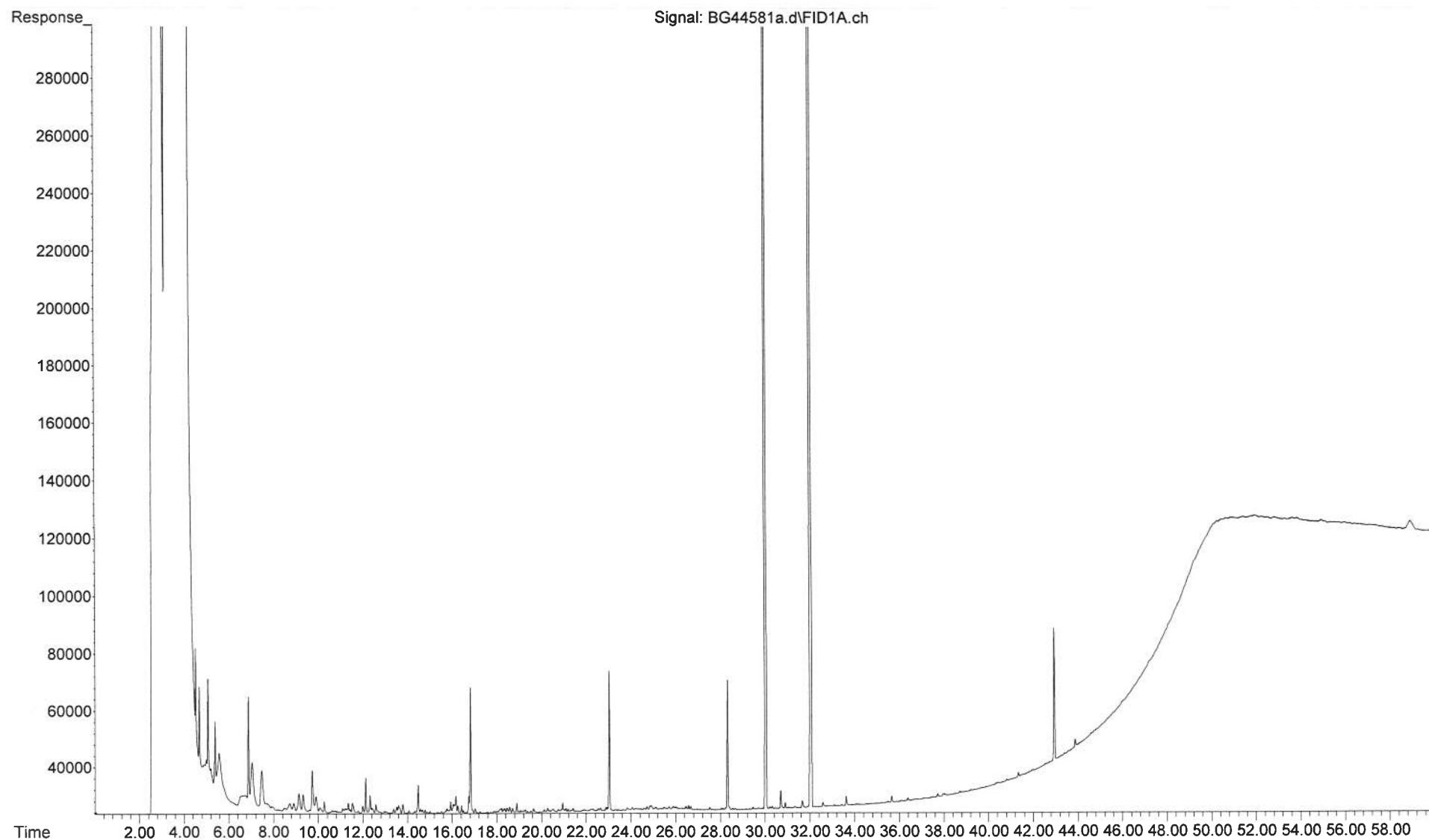
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Instrument : GCBG  
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Misc Info : OP38384,GBG1703,35,,,2,1

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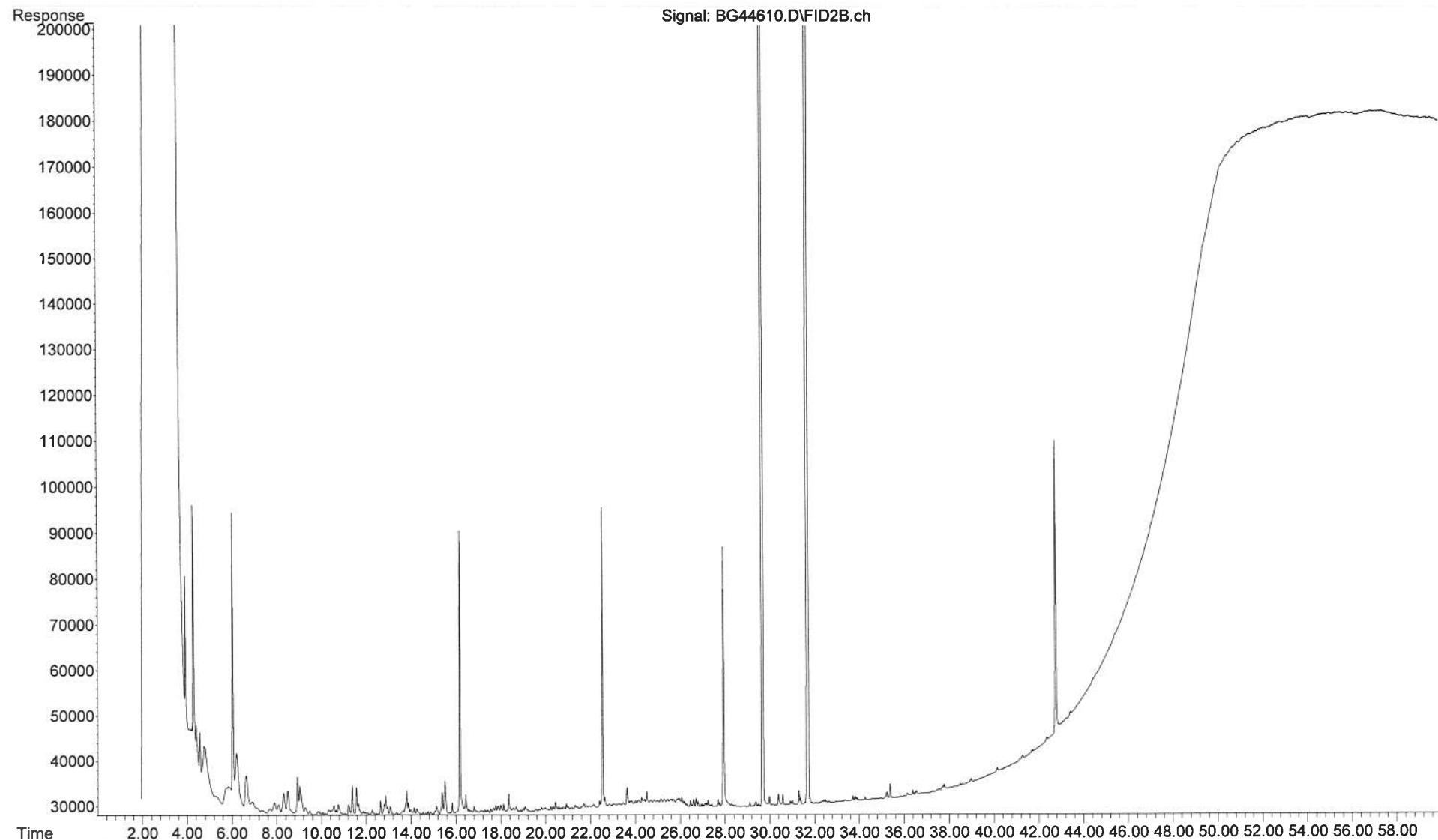


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Instrument : GCBG  
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Sample Name: OP38365-MB  
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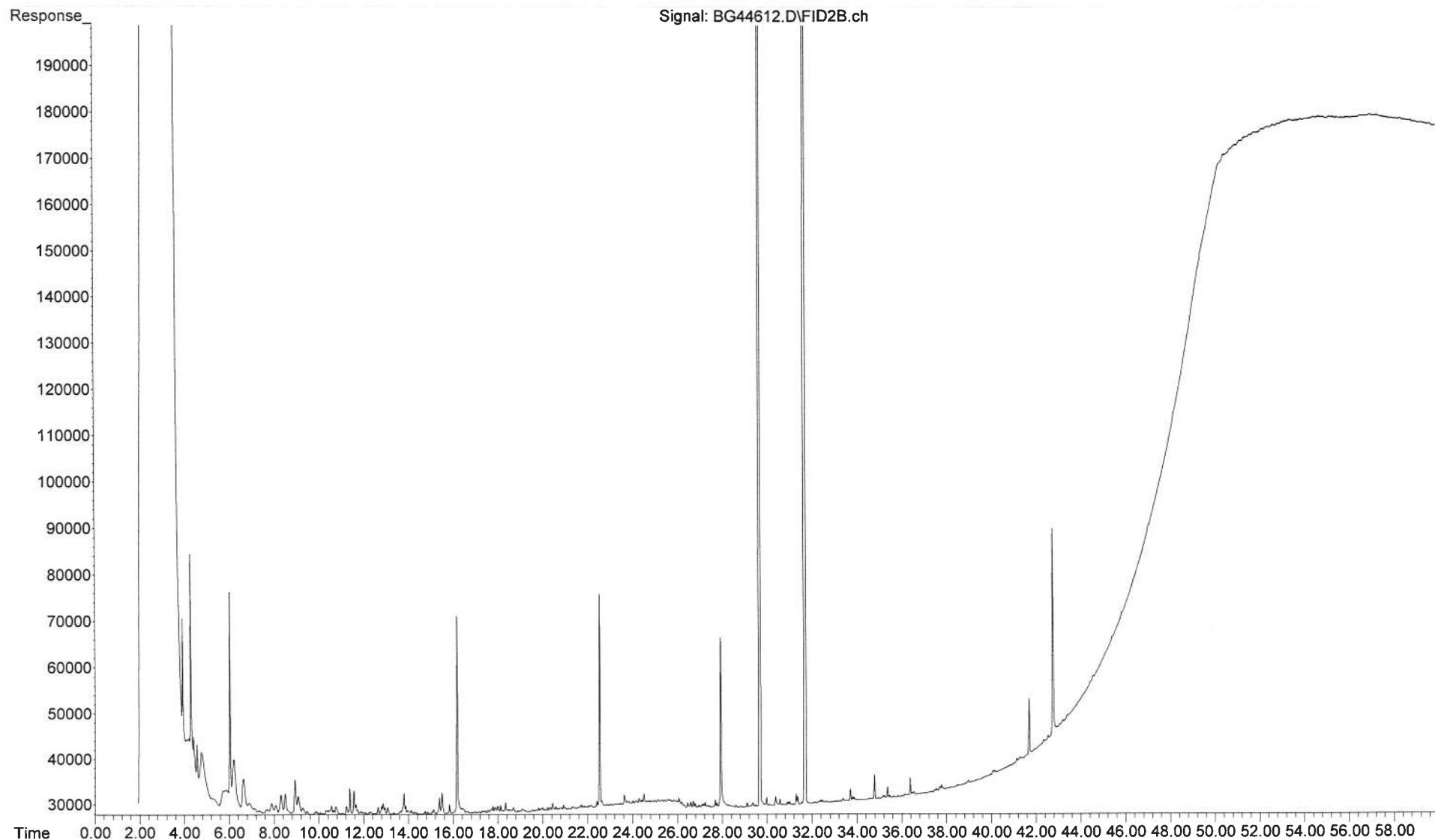
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Operator : RubenP  
Instrument : GCBG  
Acquired : 5 Jun 2014 11:17 am using AcqMethod FORENSICDUAL.M  
Sample Name: MC30898-1  
Misc Info : OP38384,GBG1703,35,,,2,1



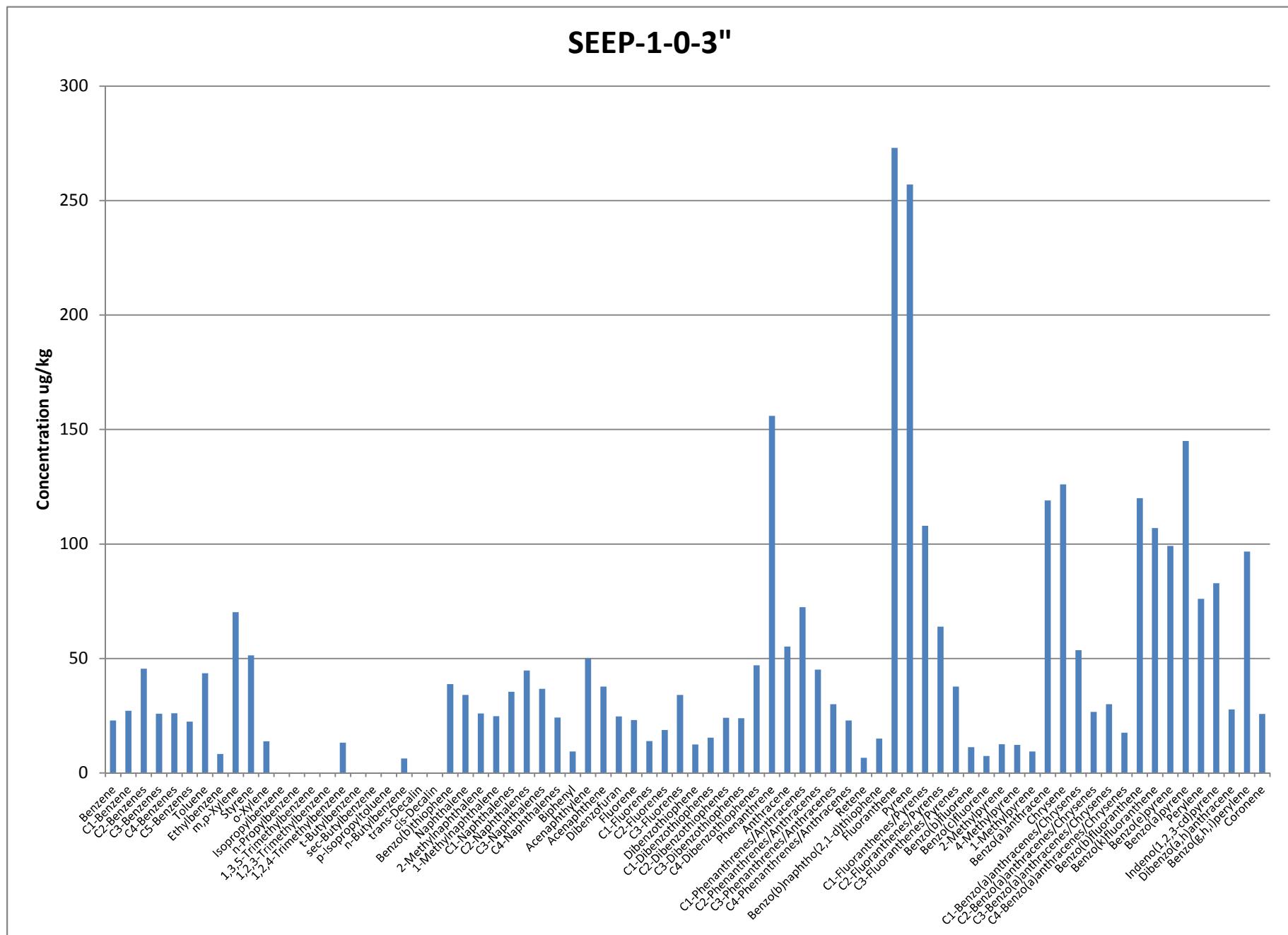
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...  
G44612.D  
Operator : RubenP  
Instrument : GCBG  
Acquired : 5 Jun 2014 12:27 pm using AcqMethod FORENSICDUAL.M  
Sample Name: MC30898-4  
Misc Info : OP38384,GBG1703,35,,,2,1

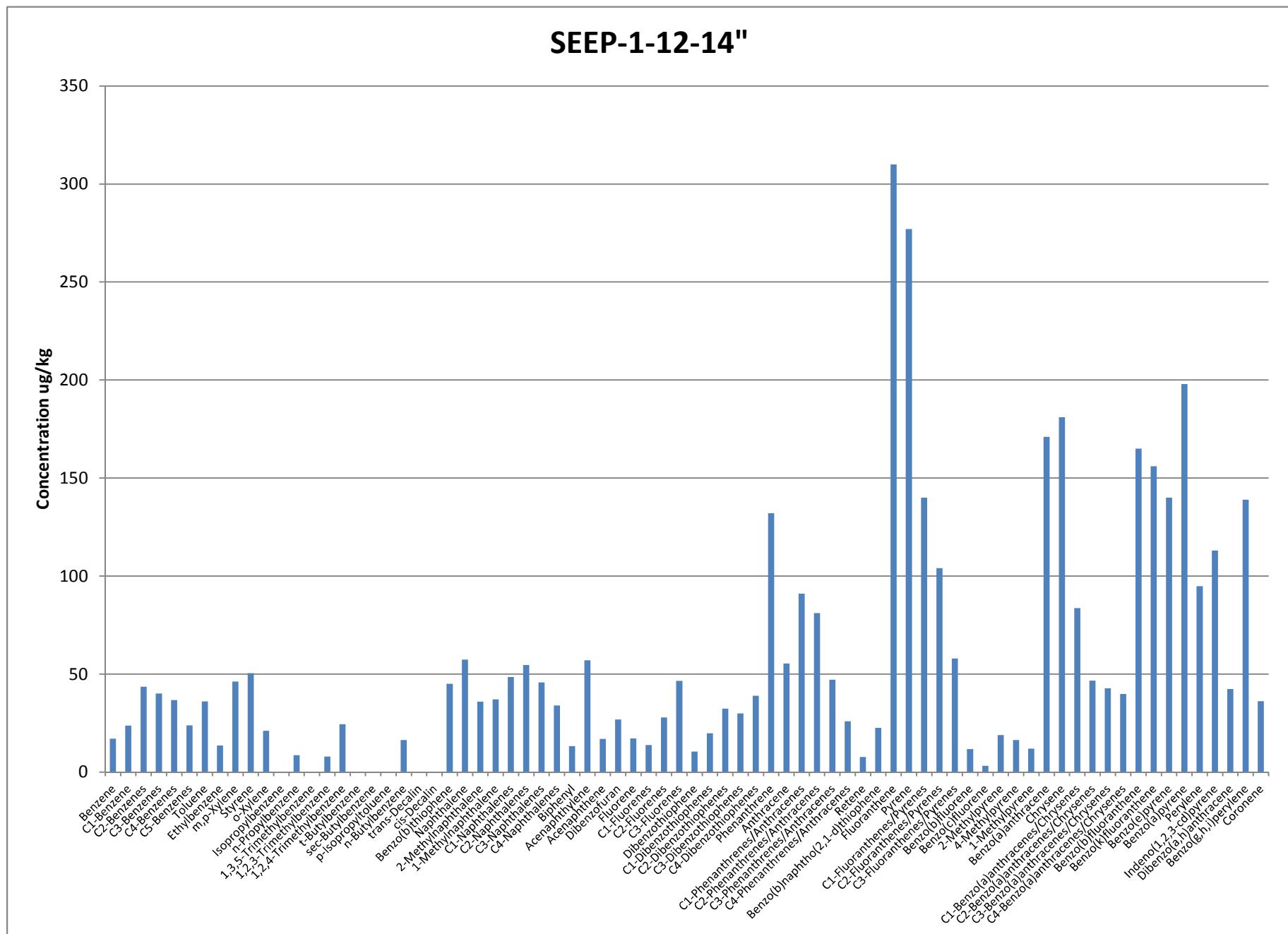


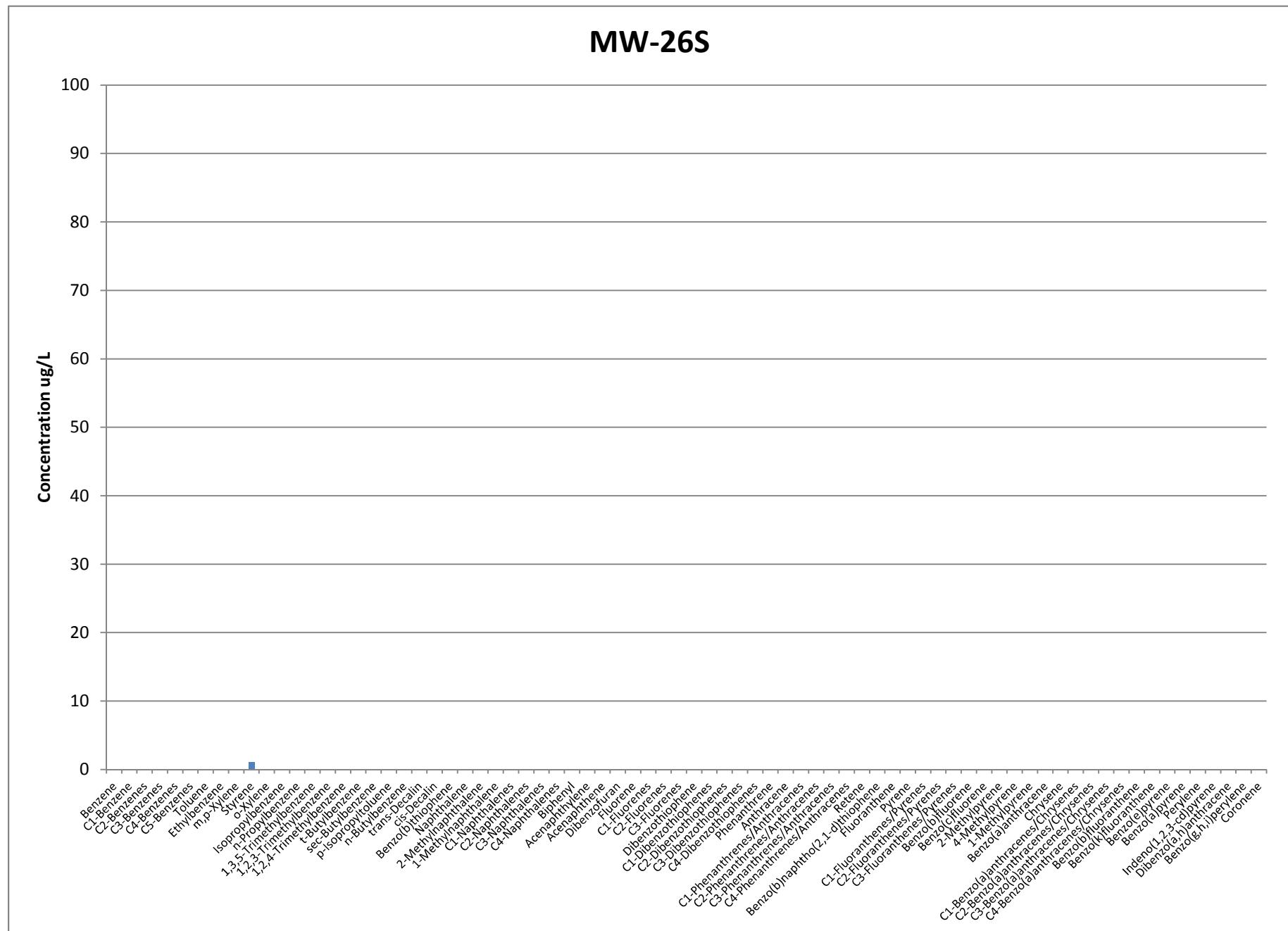
## **Appendix B**

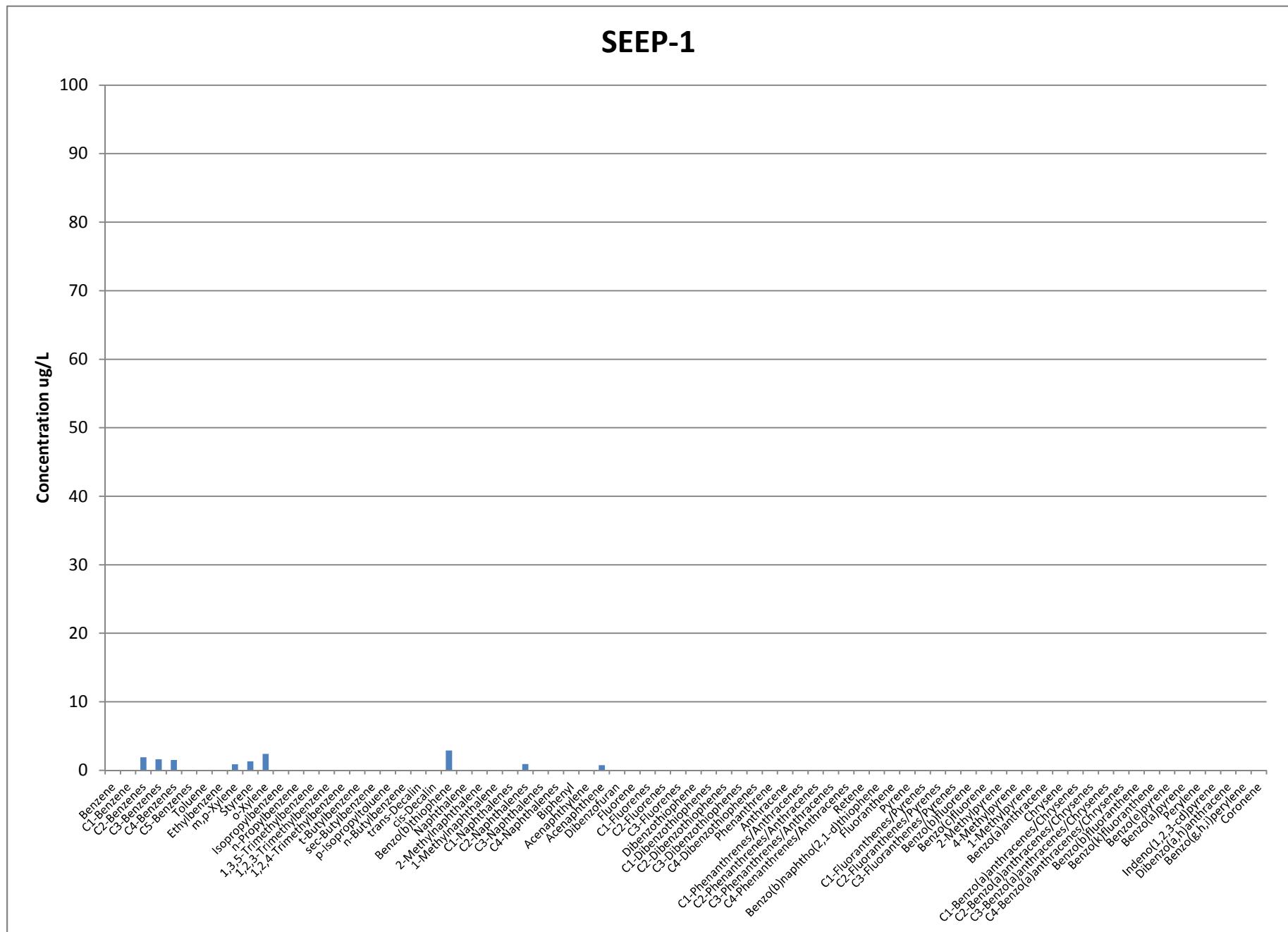
## **Bar Graphs**

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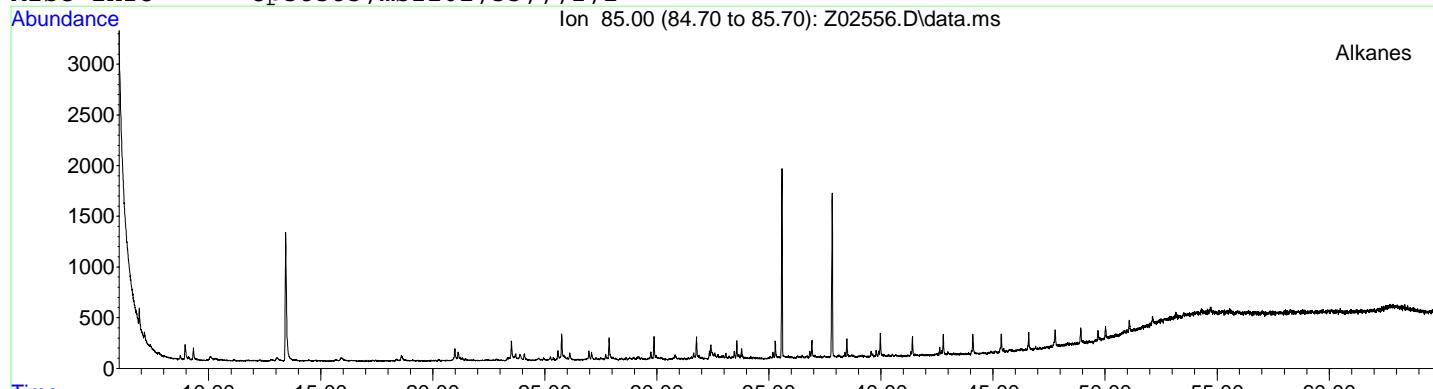


## **Appendix C**

# **Extracted Ion Current Profiles - EICPs**

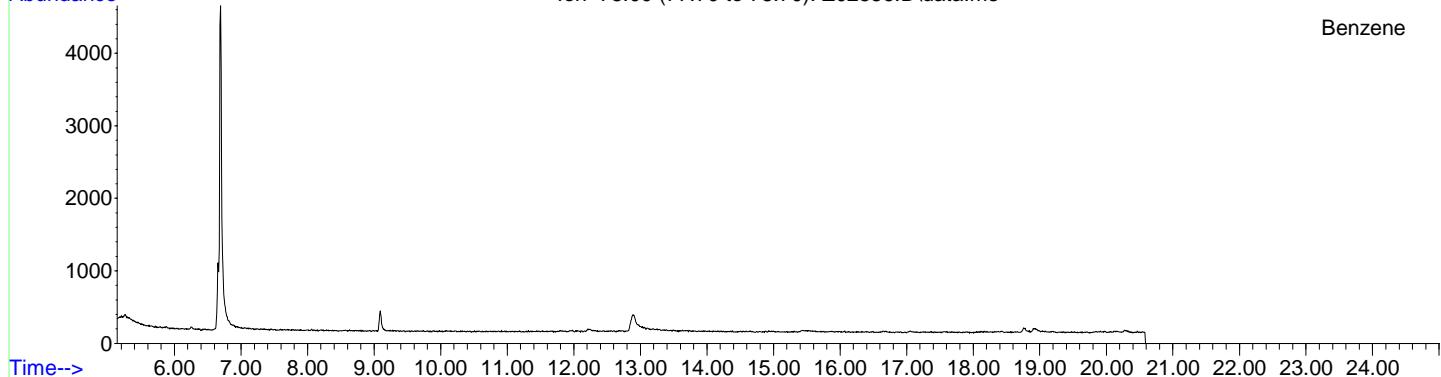
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Misc Info: op38385,msz101,35,,,2,1

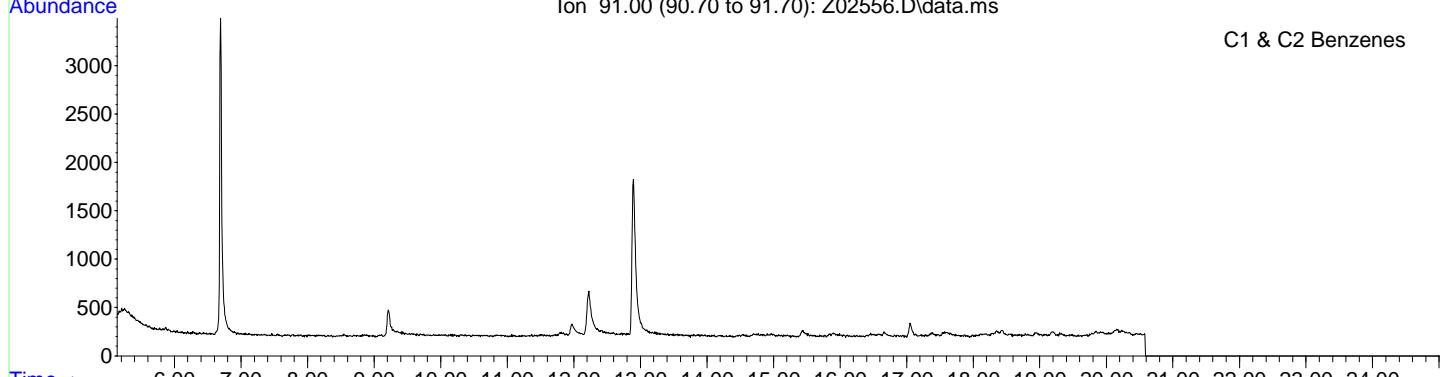


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Sample Name: mc30898-1  
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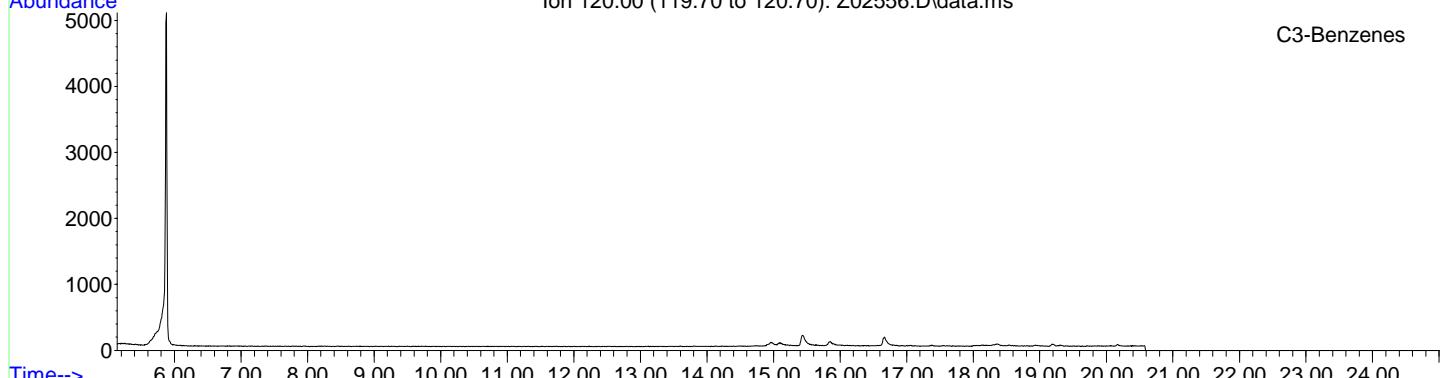
Abundance Ion 78.00 (77.70 to 78.70): Z02556.D\data.ms



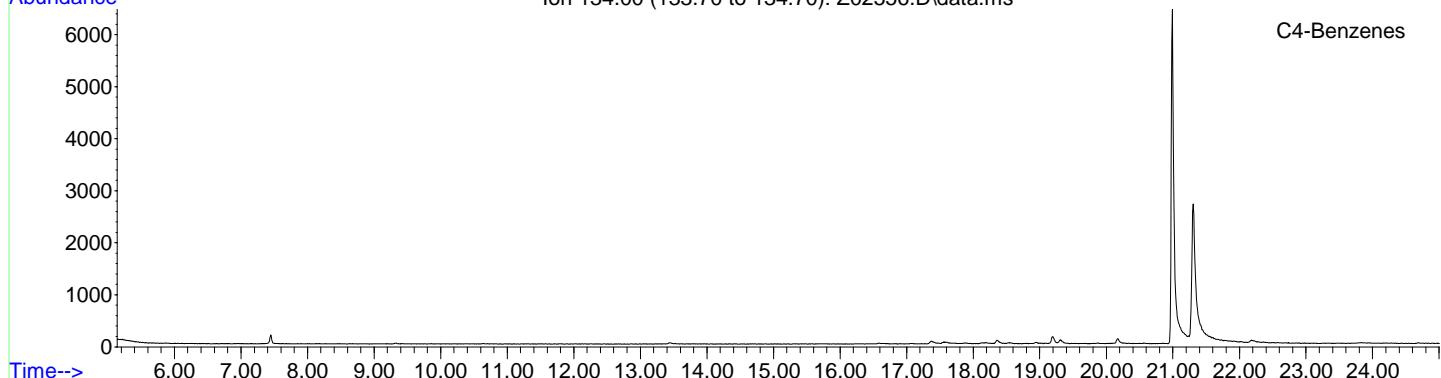
Time--> Abundance Ion 91.00 (90.70 to 91.70): Z02556.D\data.ms



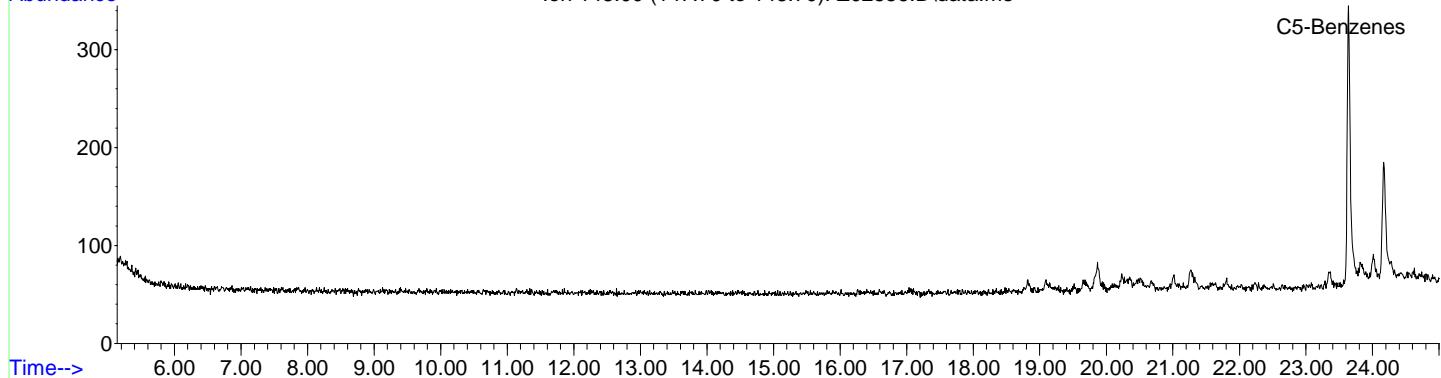
Time--> Abundance Ion 120.00 (119.70 to 120.70): Z02556.D\data.ms



Time--> Abundance Ion 134.00 (133.70 to 134.70): Z02556.D\data.ms



Time--> Abundance Ion 148.00 (147.70 to 148.70): Z02556.D\data.ms



File: Z:\2\data\Z140605\Z02556.D

Date Acquired: 6 Jun 2014 8:32 pm

Sample Name: mc30898-1

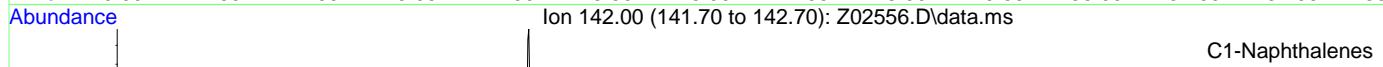
Misc Info: op38385,msz101,35,,,2,1

Ion 128.00 (127.70 to 128.70): Z02556.D\data.ms



Naphthalene

Time--&gt; 20.00 21.00 22.00 23.00 24.00 25.00 26.00 27.00 28.00 29.00 30.00 31.00 32.00 33.00



C1-Naphthalenes

Ion 142.00 (141.70 to 142.70): Z02556.D\data.ms



C2-Naphthalenes

Ion 156.00 (155.70 to 156.70): Z02556.D\data.ms



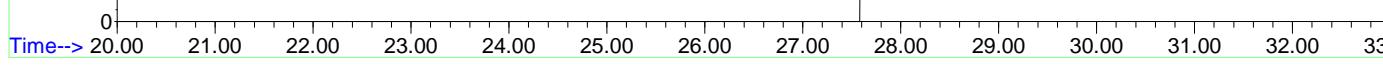
C3-Naphthalenes

Ion 170.00 (169.70 to 170.70): Z02556.D\data.ms



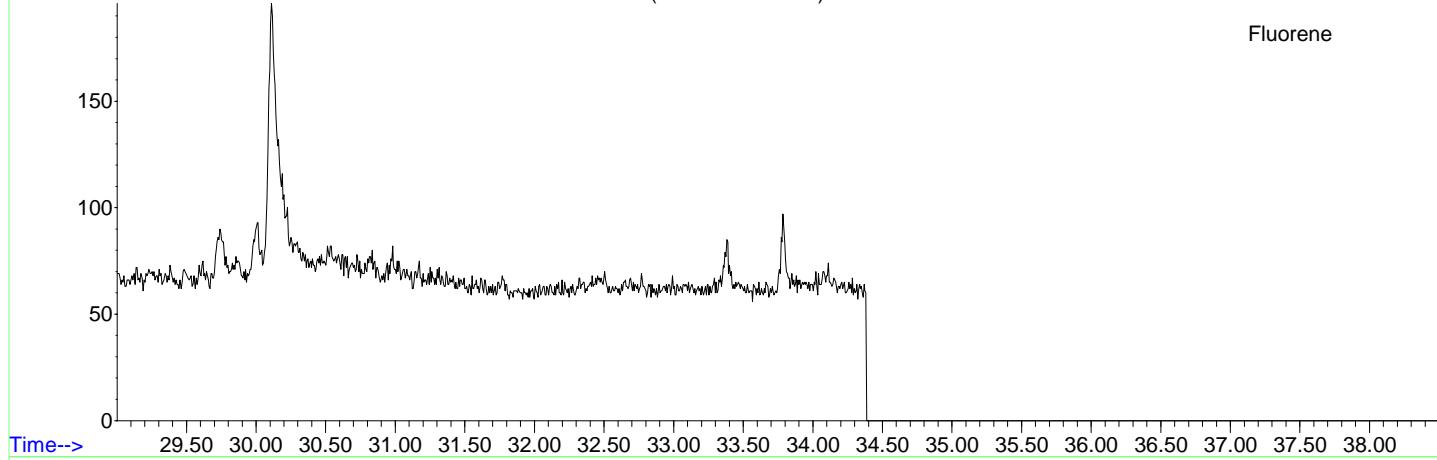
C4-Naphthalenes

Ion 184.00 (183.70 to 184.70): Z02556.D\data.ms

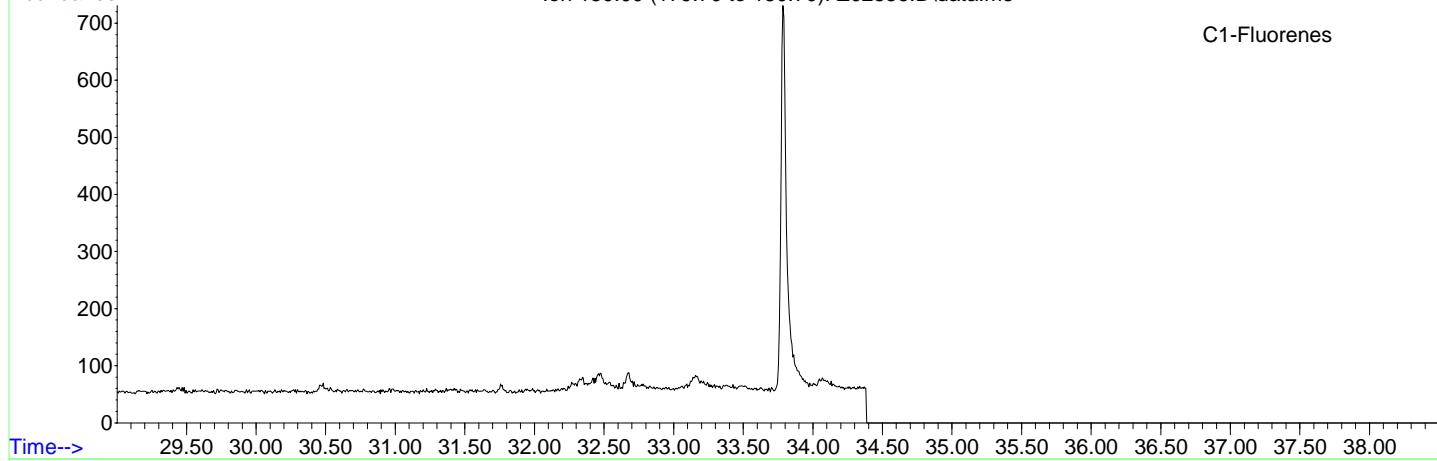


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Sample Name: mc30898-1  
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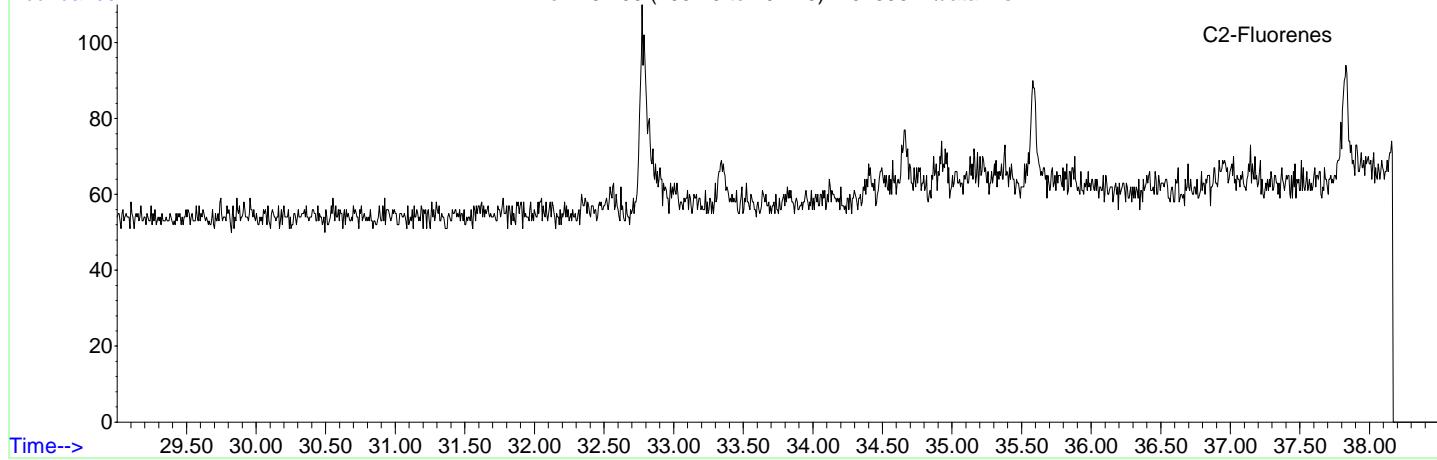
Abundance Ion 166.00 (165.70 to 166.70): Z02556.D\data.ms



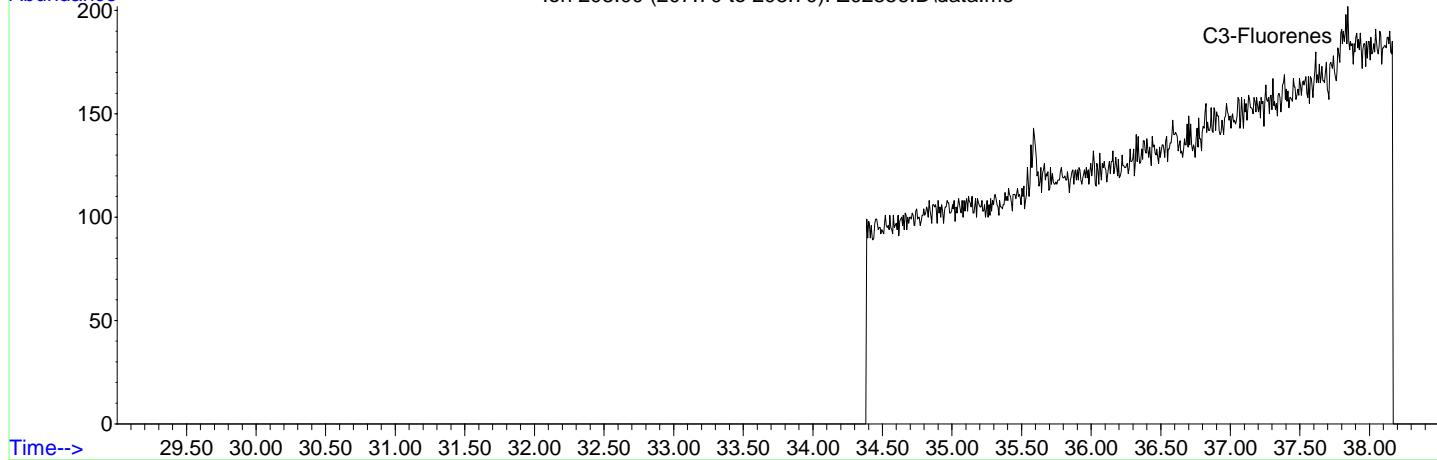
Time--> Abundance Ion 180.00 (179.70 to 180.70): Z02556.D\data.ms



Time--> Abundance Ion 194.00 (193.70 to 194.70): Z02556.D\data.ms



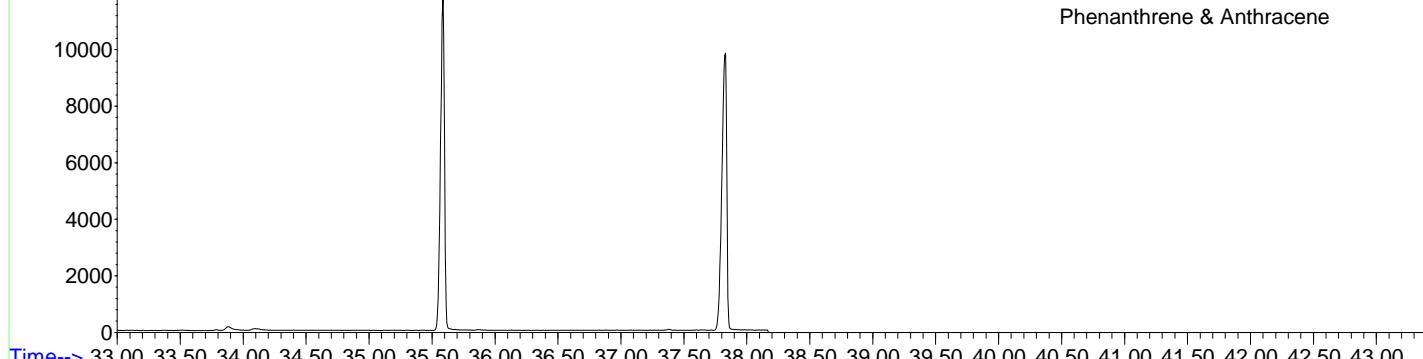
Time--> Abundance Ion 208.00 (207.70 to 208.70): Z02556.D\data.ms



File: Z:\2\data\Z140605\Z02556.D  
Date Acquired: 6 Jun 2014 8:32 pm  
Sample Name: mc30898-1  
Misc Info: op38385,msz101,35,,,2,1

Abundance Ion 178.00 (177.70 to 178.70): Z02556.D\data.ms

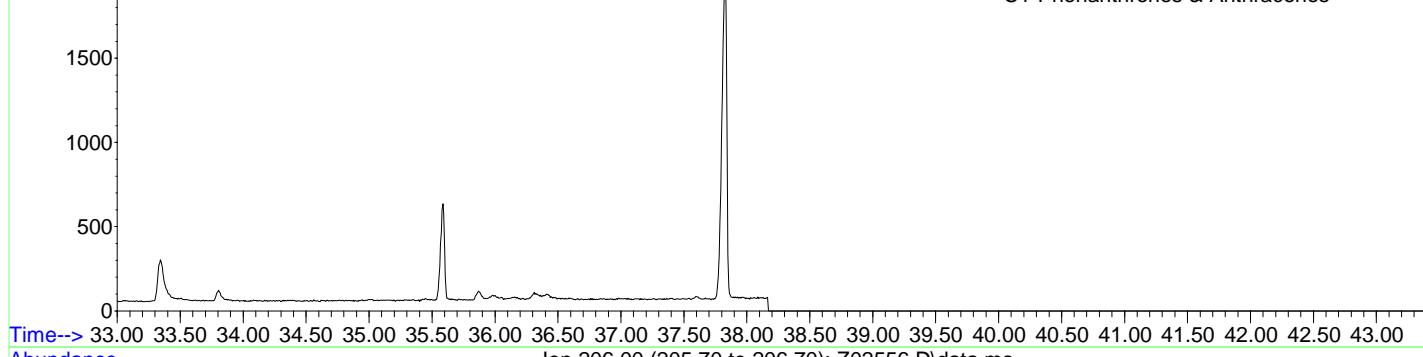
Phenanthrene & Anthracene



Time--> 33.00 33.50 34.00 34.50 35.00 35.50 36.00 36.50 37.00 37.50 38.00 38.50 39.00 39.50 40.00 40.50 41.00 41.50 42.00 42.50 43.00

Abundance Ion 192.00 (191.70 to 192.70): Z02556.D\data.ms

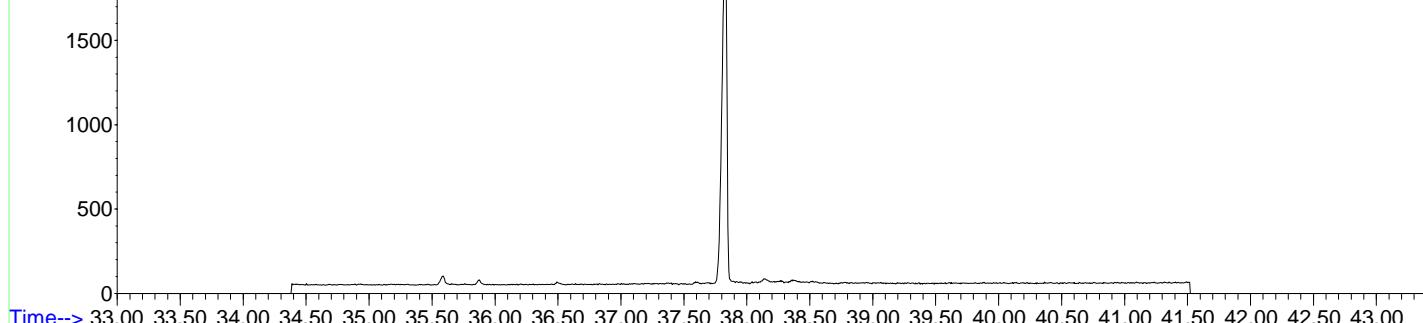
C1-Phenanthrenes & Anthracenes



Time--> 33.00 33.50 34.00 34.50 35.00 35.50 36.00 36.50 37.00 37.50 38.00 38.50 39.00 39.50 40.00 40.50 41.00 41.50 42.00 42.50 43.00

Abundance Ion 206.00 (205.70 to 206.70): Z02556.D\data.ms

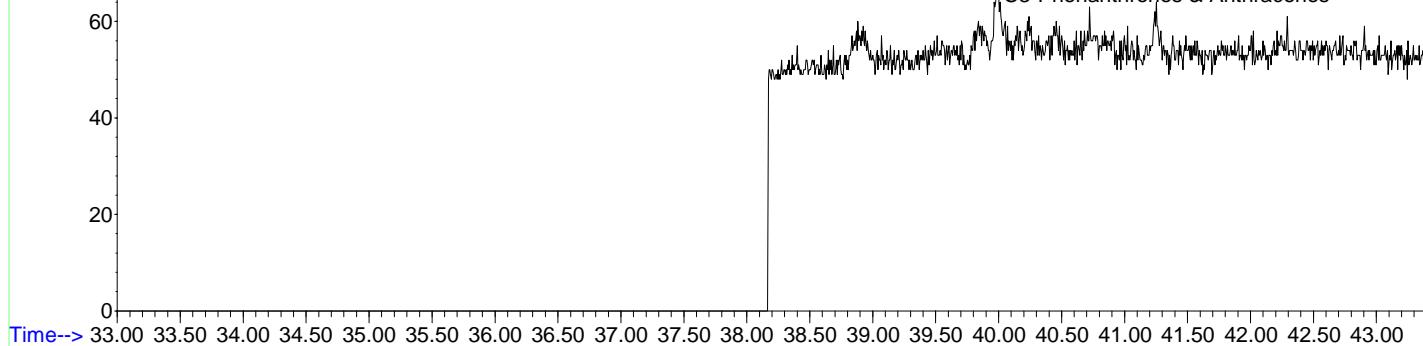
C2-Phenanthrenes & Anthracenes



Time--> 33.00 33.50 34.00 34.50 35.00 35.50 36.00 36.50 37.00 37.50 38.00 38.50 39.00 39.50 40.00 40.50 41.00 41.50 42.00 42.50 43.00

Abundance Ion 220.00 (219.70 to 220.70): Z02556.D\data.ms

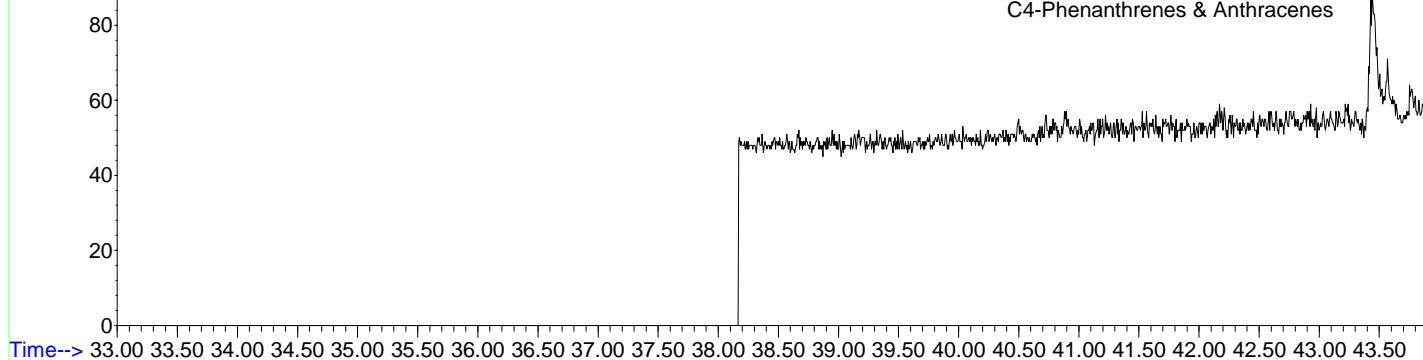
C3-Phenanthrenes & Anthracenes



Time--> 33.00 33.50 34.00 34.50 35.00 35.50 36.00 36.50 37.00 37.50 38.00 38.50 39.00 39.50 40.00 40.50 41.00 41.50 42.00 42.50 43.00

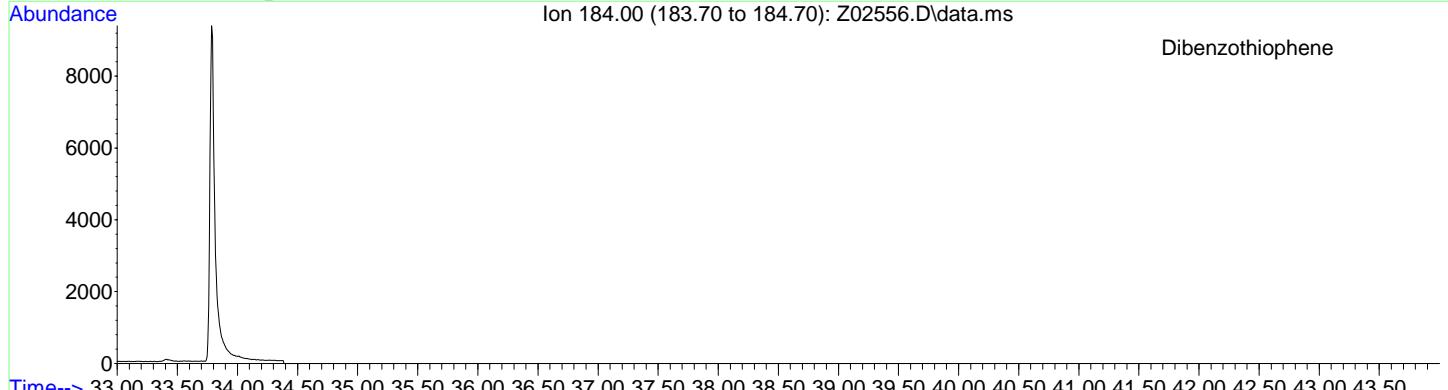
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C4-Phenanthrenes & Anthracenes



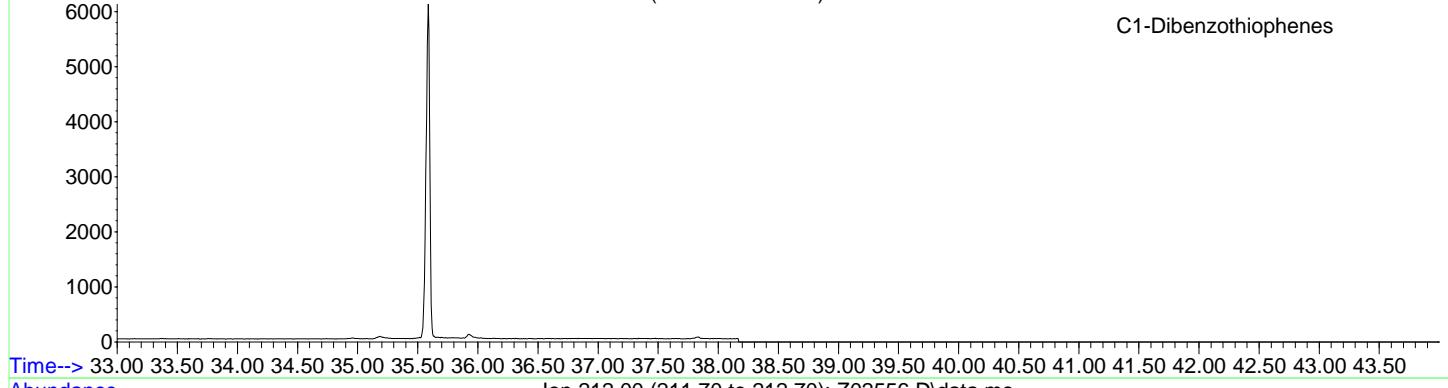
Time--> 33.00 33.50 34.00 34.50 35.00 35.50 36.00 36.50 37.00 37.50 38.00 38.50 39.00 39.50 40.00 40.50 41.00 41.50 42.00 42.50 43.00 43.50

File: Z:\2\data\Z140605\Z02556.D  
Date Acquired: 6 Jun 2014 8:32 pm  
Sample Name: mc30898-1  
Misc Info: op38385,msz101,35,,,2,1  
Ion 184.00 (183.70 to 184.70): Z02556.D\data.ms



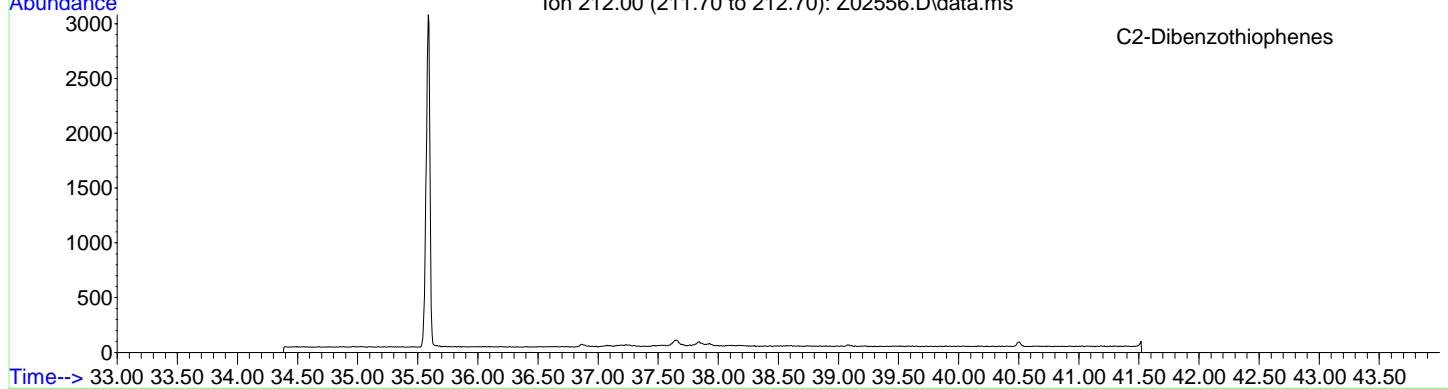
Abundance

Ion 198.00 (197.70 to 198.70): Z02556.D\data.ms



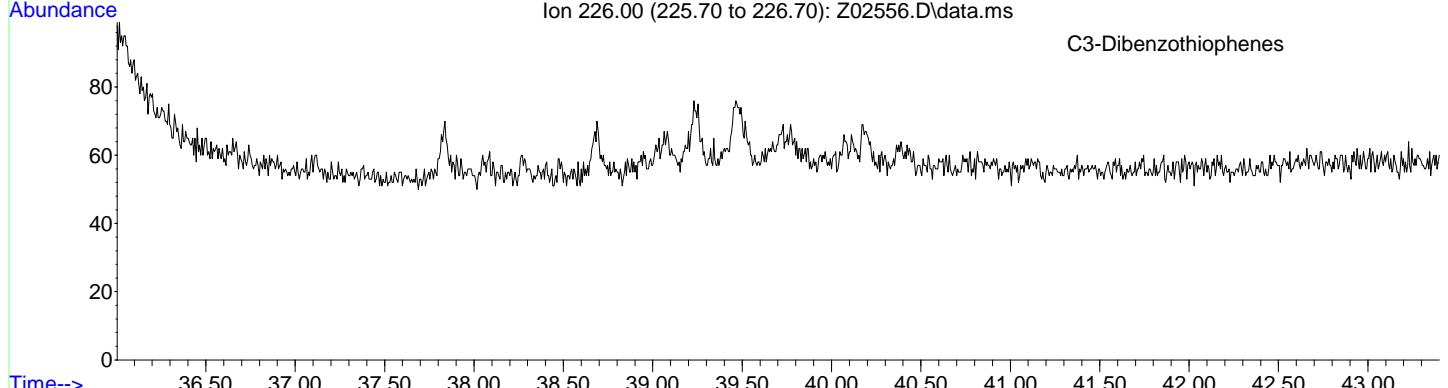
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Ion 212.00 (211.70 to 212.70): Z02556.D\data.ms



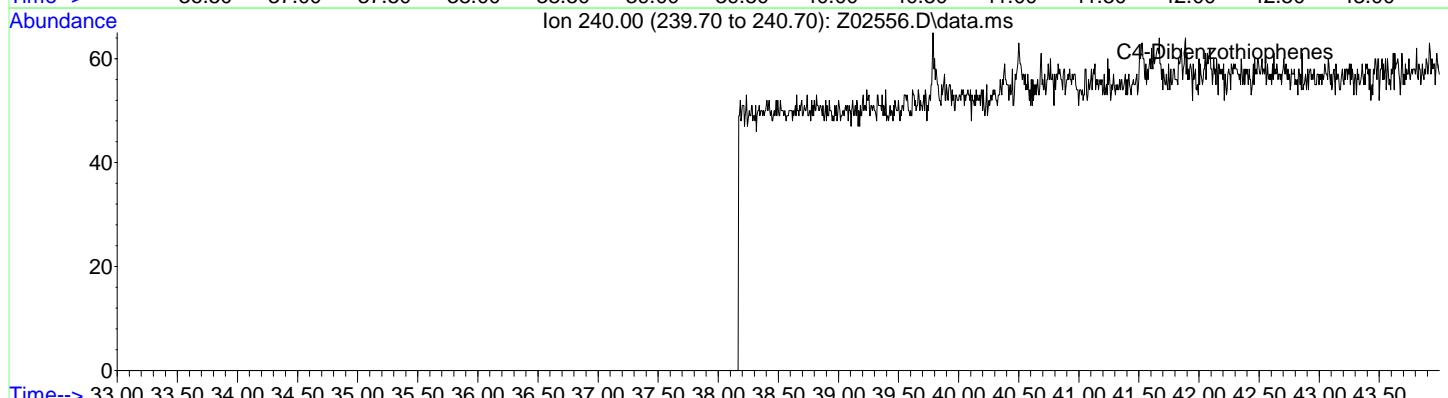
Abundance

Ion 226.00 (225.70 to 226.70): Z02556.D\data.ms

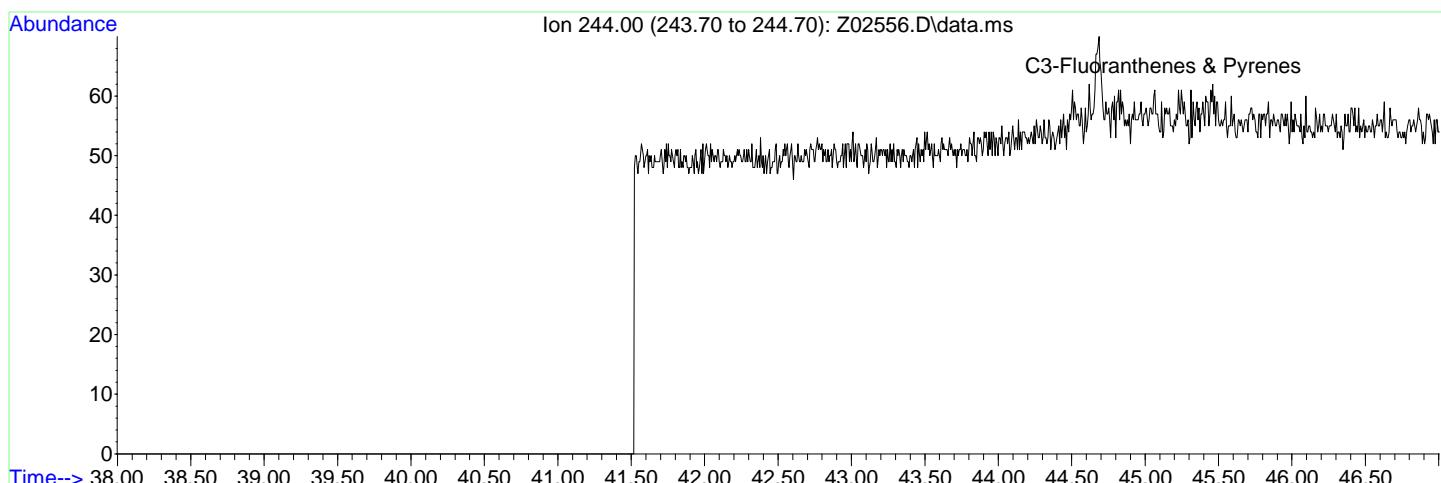
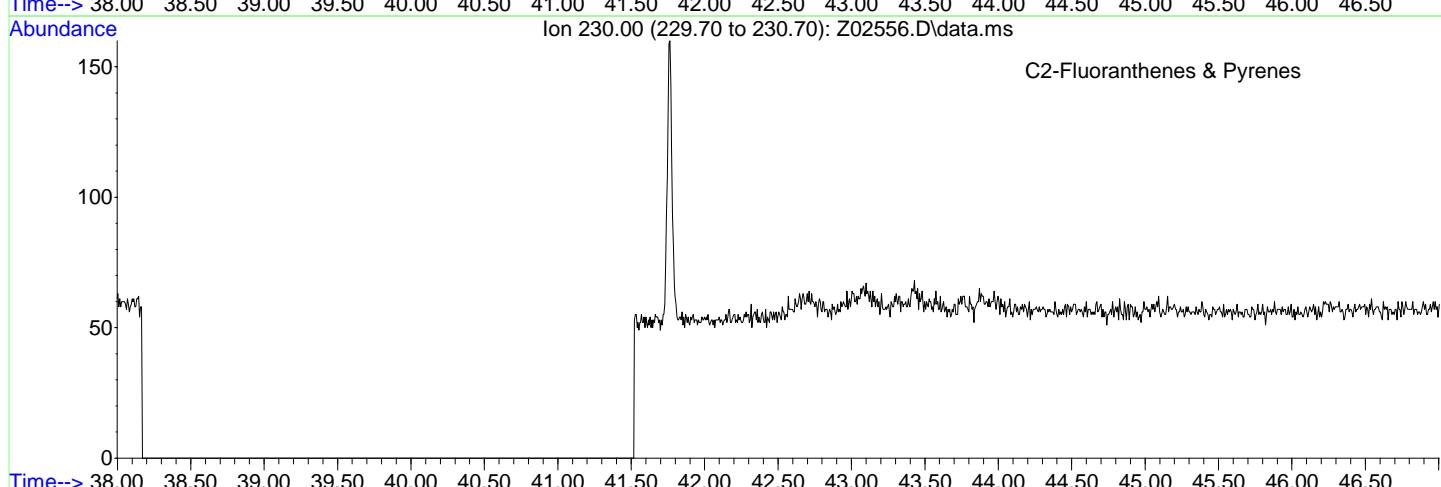
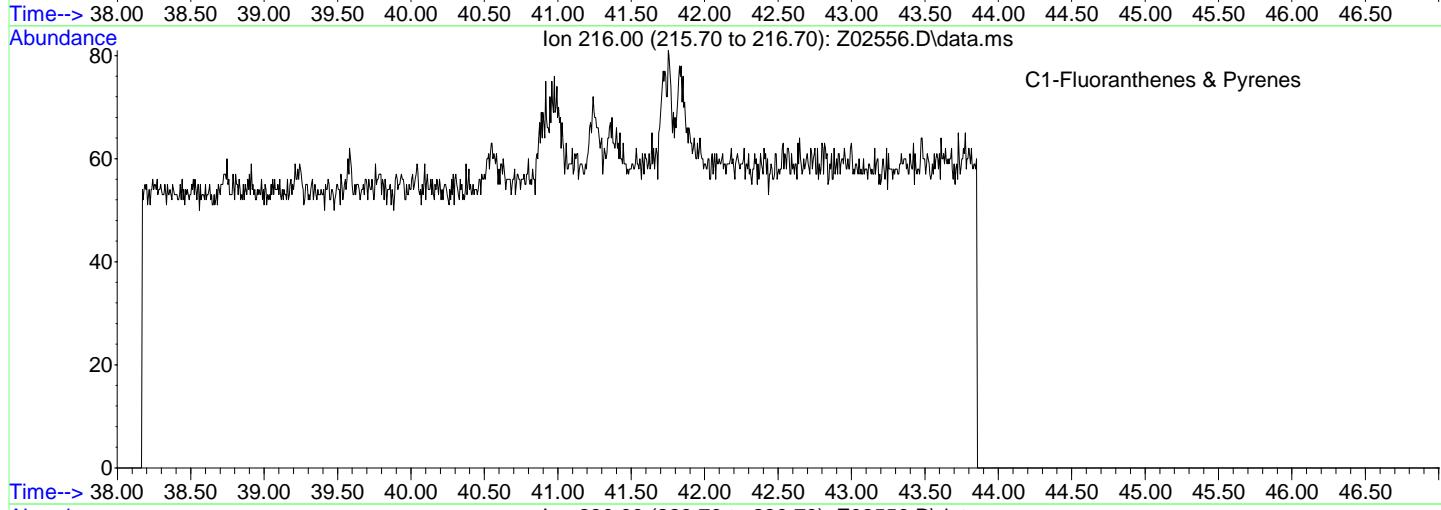
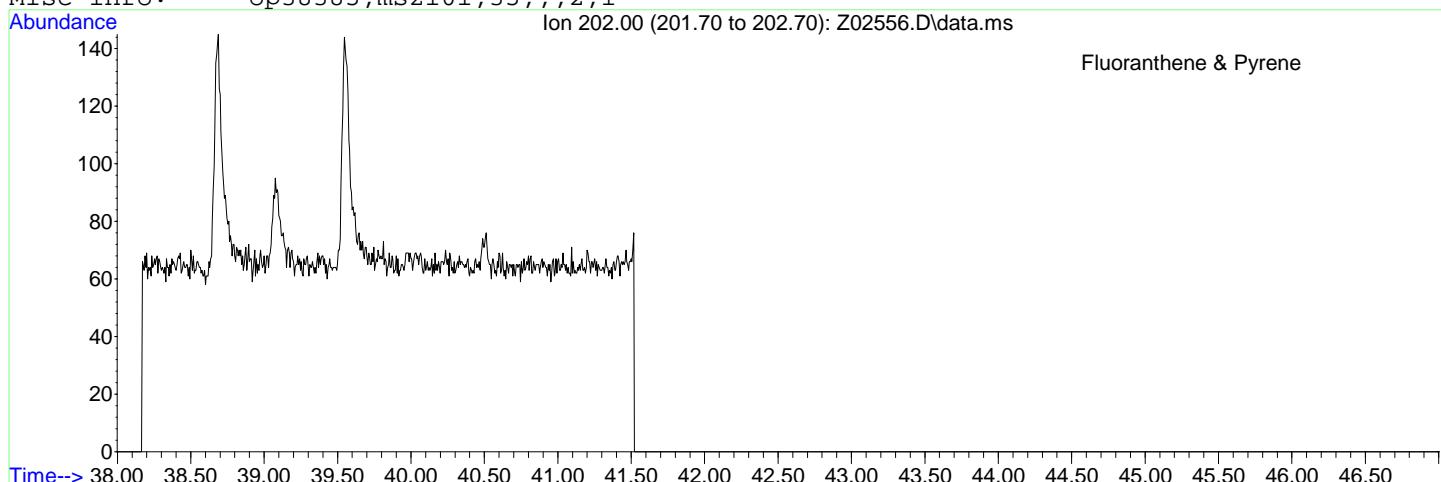


Abundance

Ion 240.00 (239.70 to 240.70): Z02556.D\data.ms



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Method File: ZAPAHSIM-MTBE.M  
Sample Name: mc30898-1  
Misc Info: op38385,msz101,35,,2,1



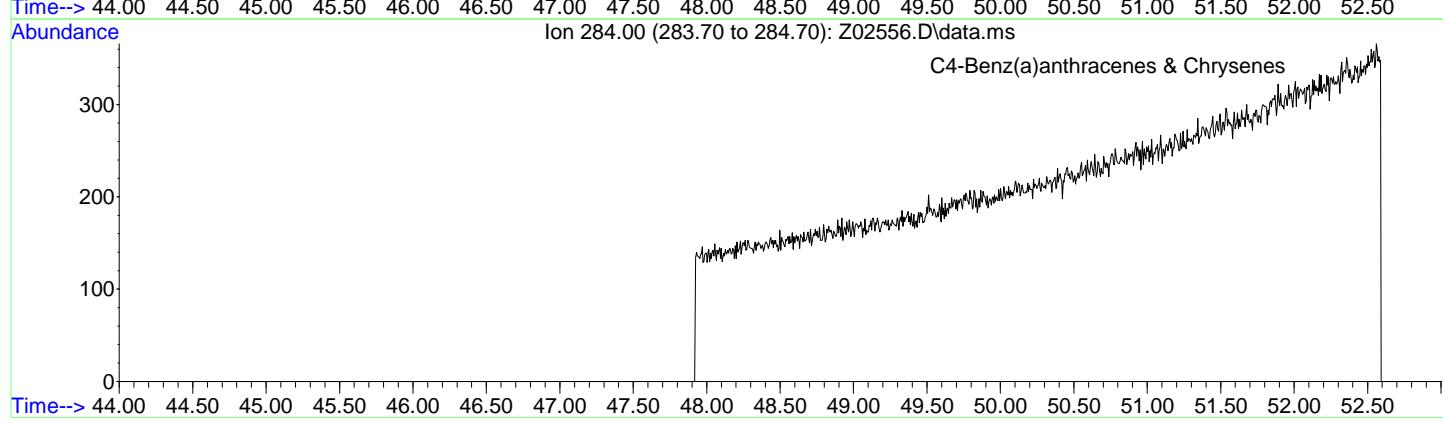
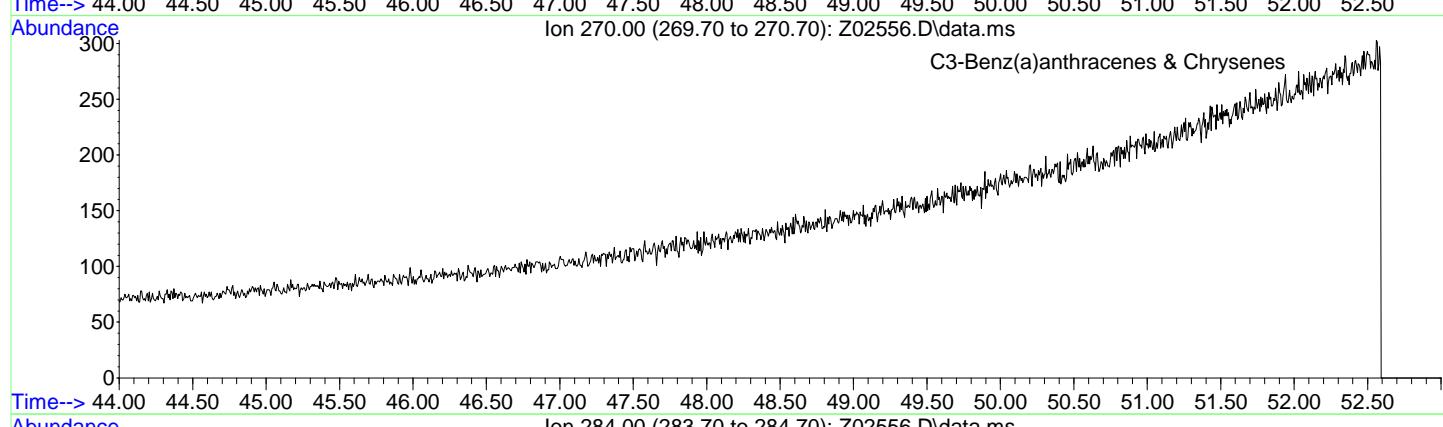
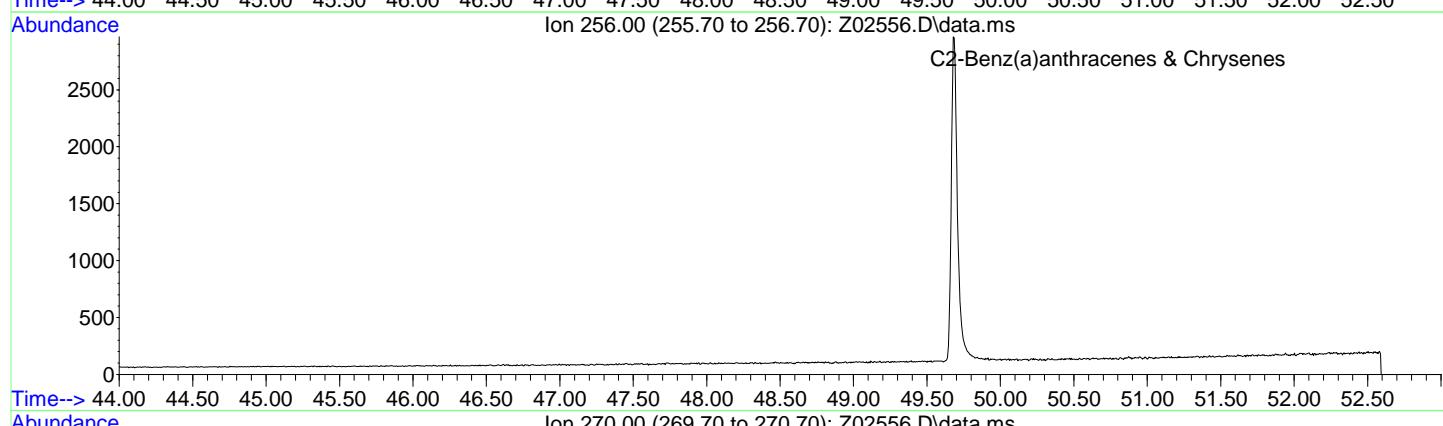
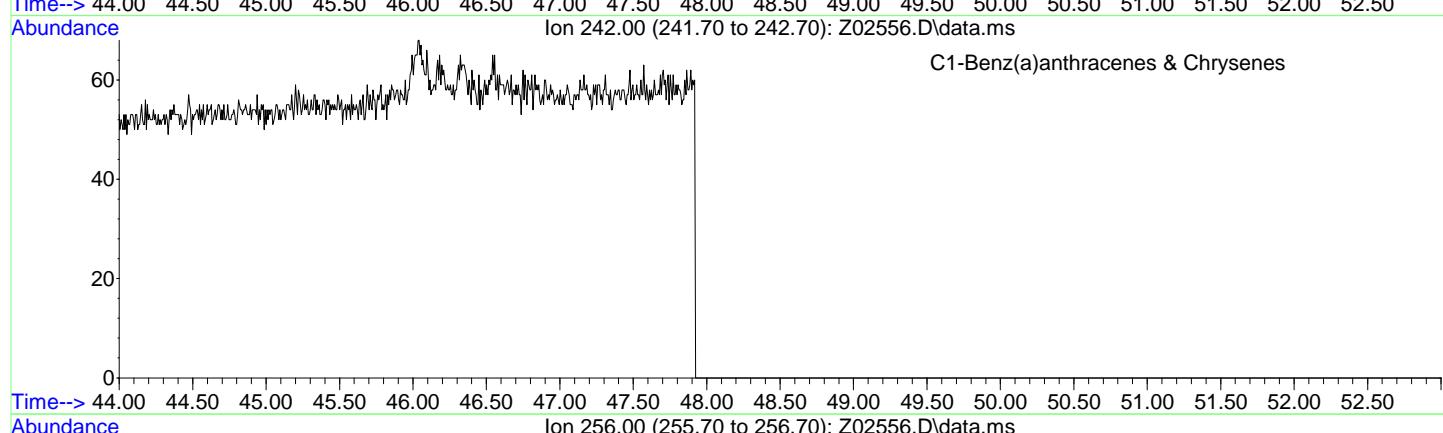
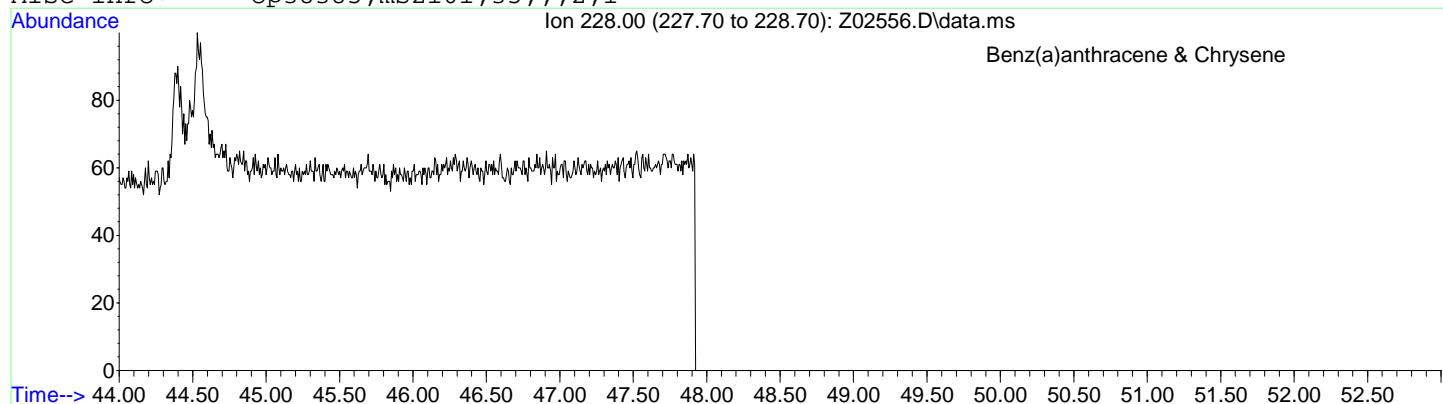
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Date Acquired: 6 Jun 2014 8:32 pm

Sample Name: mc30898-1

Misc Info: op38385,msz101,35,,2,1

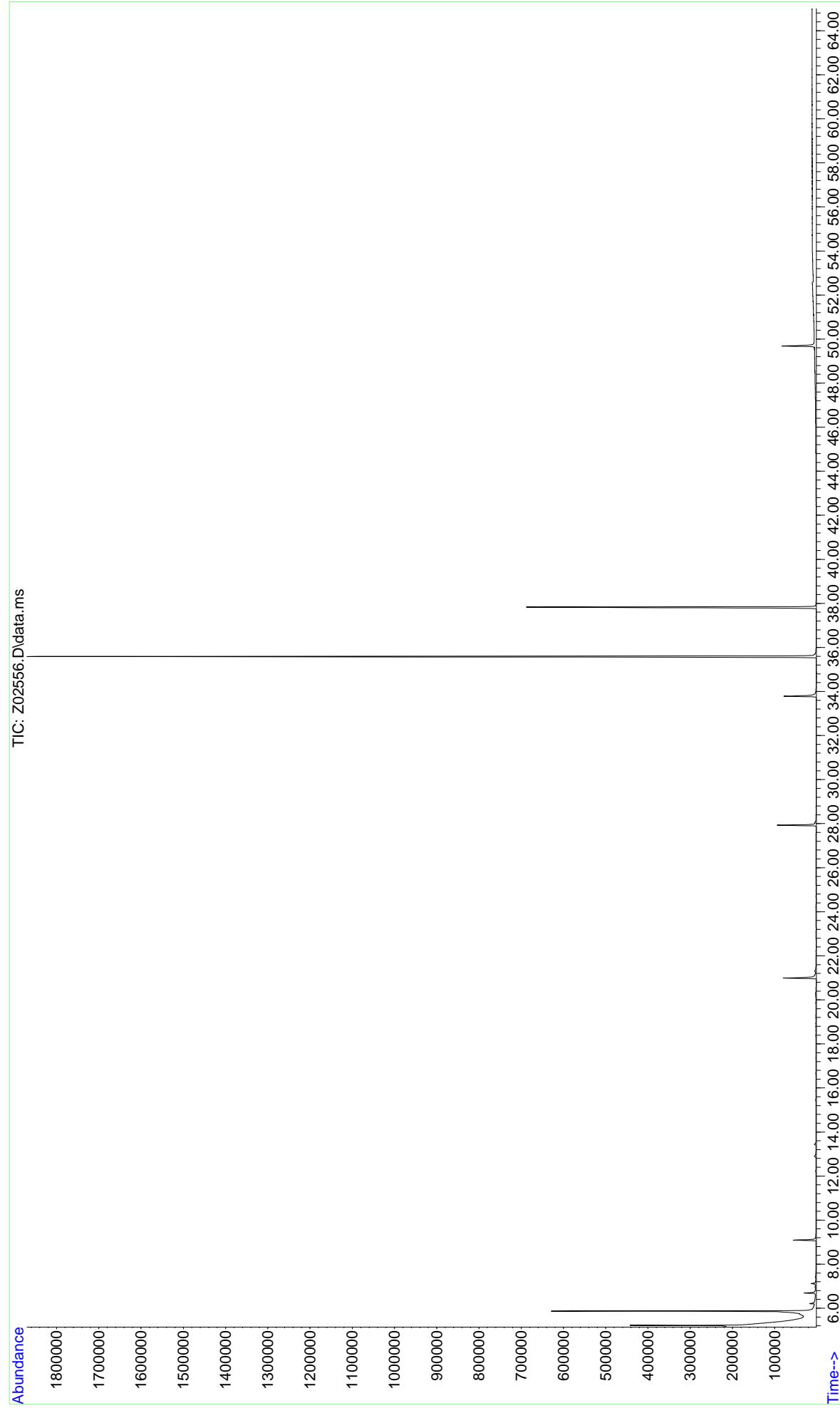
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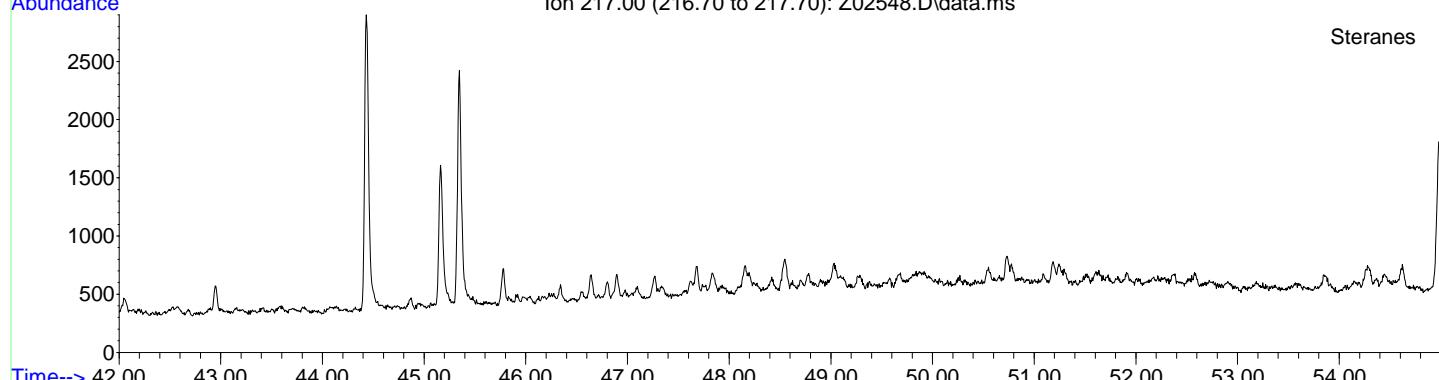
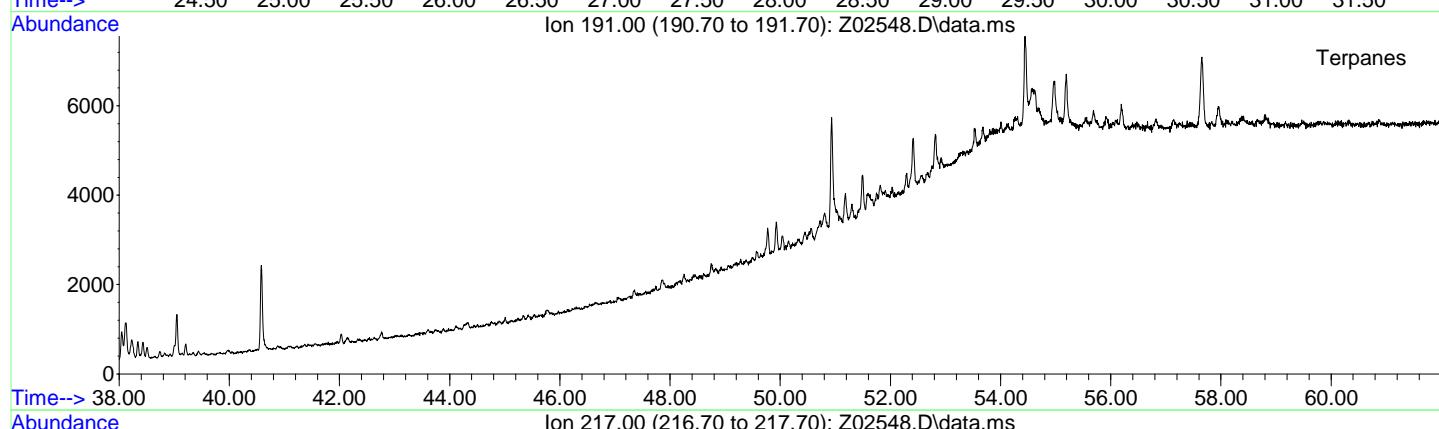
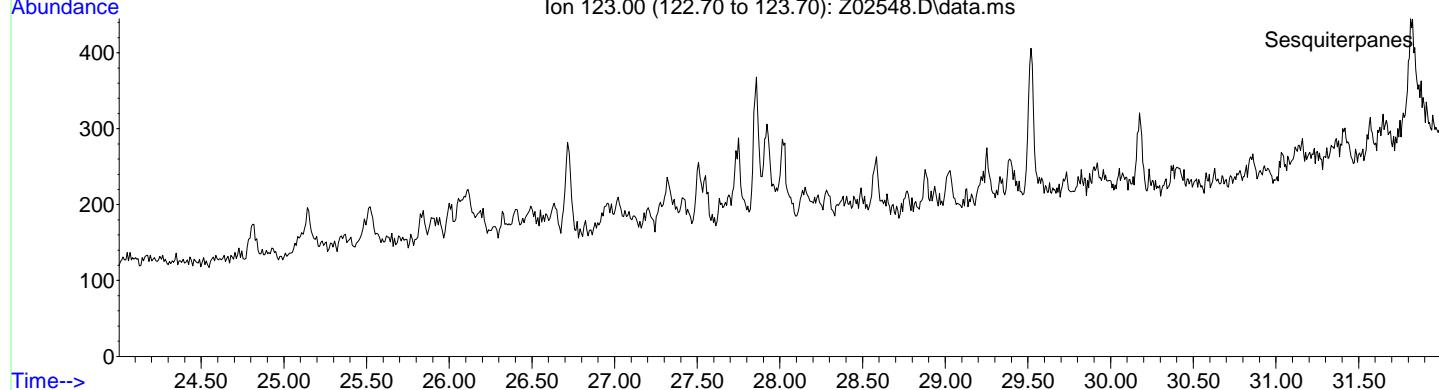
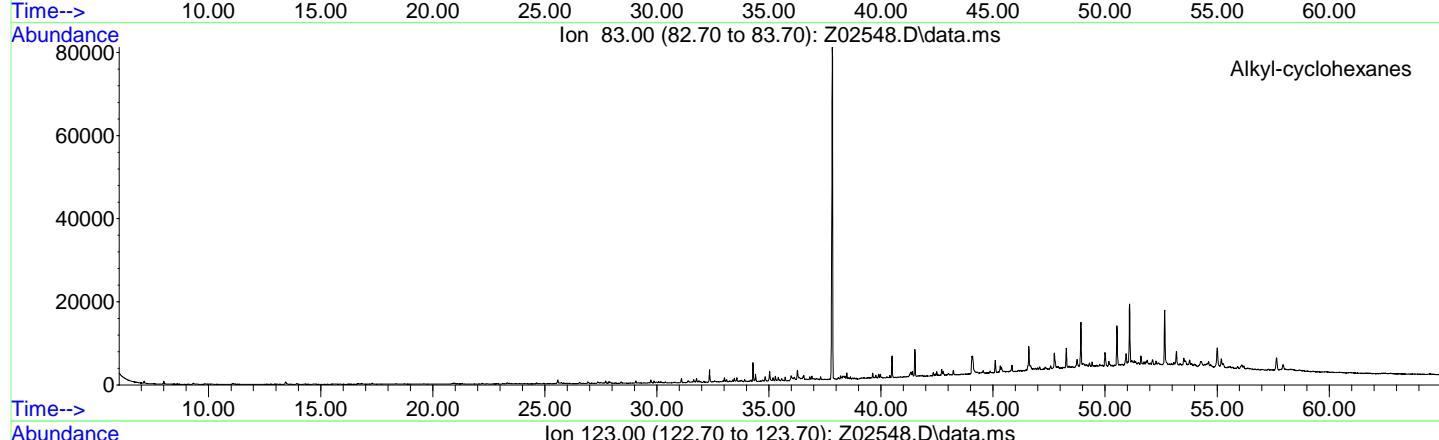
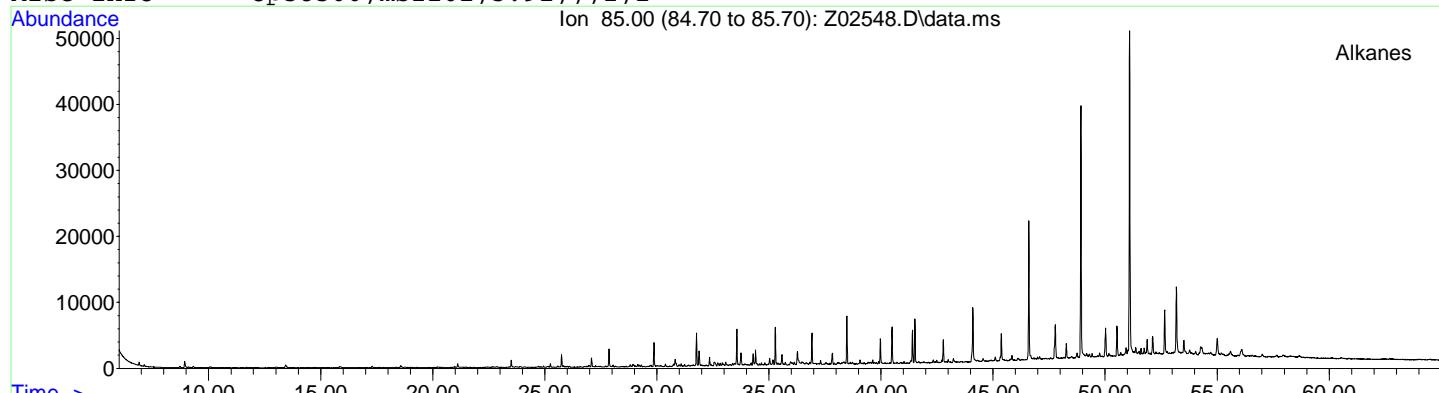
## ACCUTEST

## GC/MS TOTAL ION CHROMATOGRAM

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Date Acquired: 6 Jun 2014 8:32 pm  
Method File: ZAPAHSIM-MTBE.M  
Sample Name: mc30898-1  
Misc Info: op38385,msz101,35,,2,1



File: Z:\2\data\Z140605\Z02548.D  
Date Acquired: 6 Jun 2014 10:09 am  
Sample Name: mc30898-2  
Misc Info: op38366,msz101,5.91,,,2,1



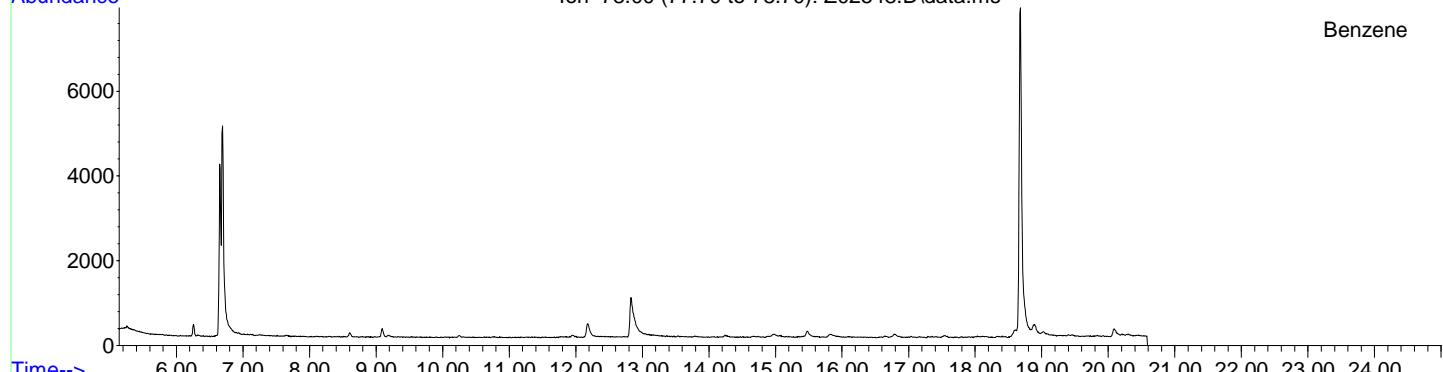
File: Z:\2\data\Z140605\Z02548.D

Date Acquired: 6 Jun 2014 10:09 am

Sample Name: mc30898-2

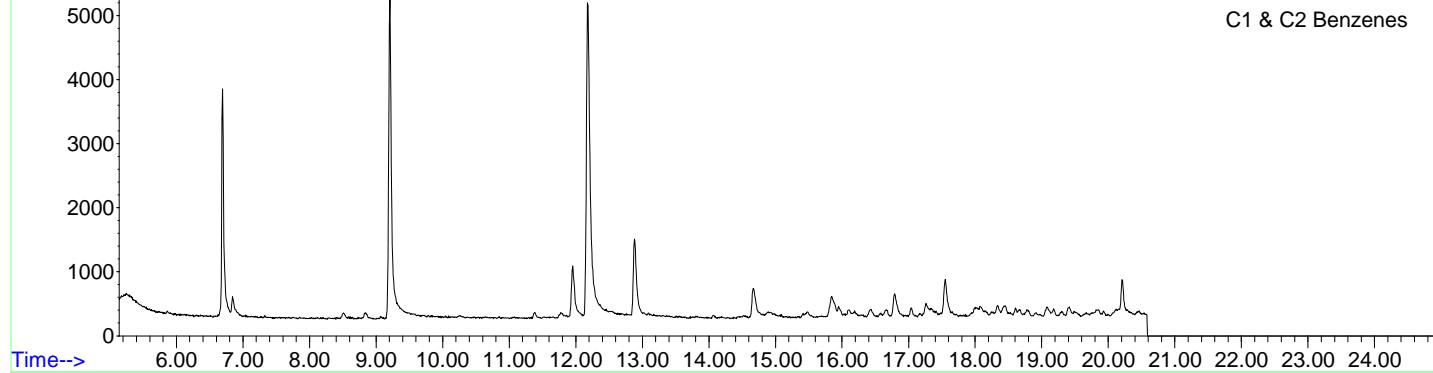
Misc Info: op38366,msz101,5.91,,,2,1

Abundance Ion 78.00 (77.70 to 78.70): Z02548.D\data.ms



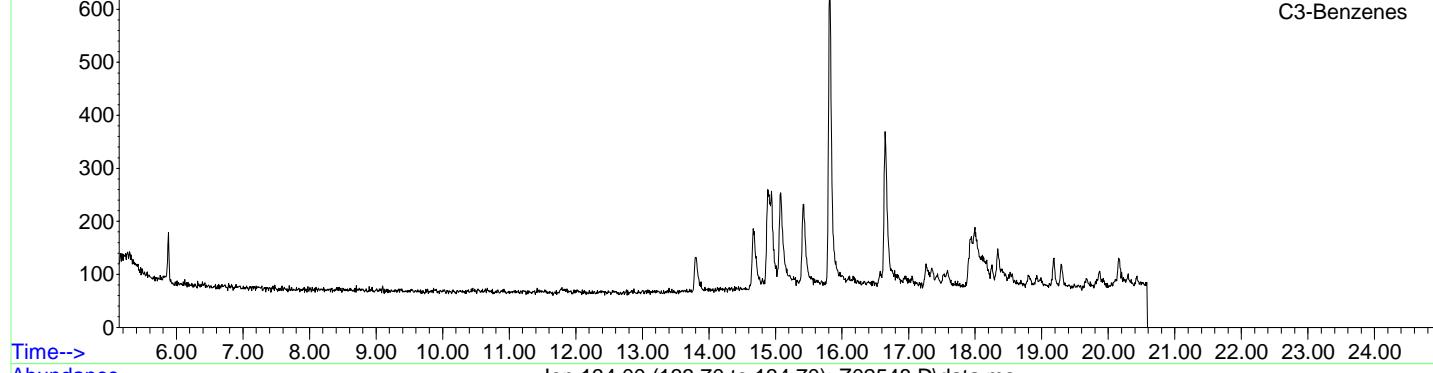
Time--> 6.00 7.00 8.00 9.00 10.00 11.00 12.00 13.00 14.00 15.00 16.00 17.00 18.00 19.00 20.00 21.00 22.00 23.00 24.00

Abundance Ion 91.00 (90.70 to 91.70): Z02548.D\data.ms



Time--> 6.00 7.00 8.00 9.00 10.00 11.00 12.00 13.00 14.00 15.00 16.00 17.00 18.00 19.00 20.00 21.00 22.00 23.00 24.00

Abundance Ion 120.00 (119.70 to 120.70): Z02548.D\data.ms



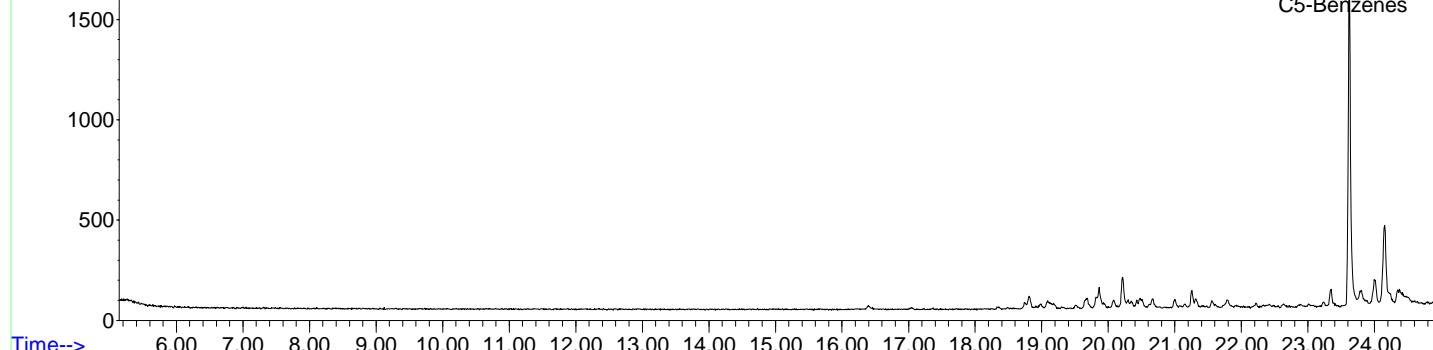
Time--> 6.00 7.00 8.00 9.00 10.00 11.00 12.00 13.00 14.00 15.00 16.00 17.00 18.00 19.00 20.00 21.00 22.00 23.00 24.00

Abundance Ion 134.00 (133.70 to 134.70): Z02548.D\data.ms



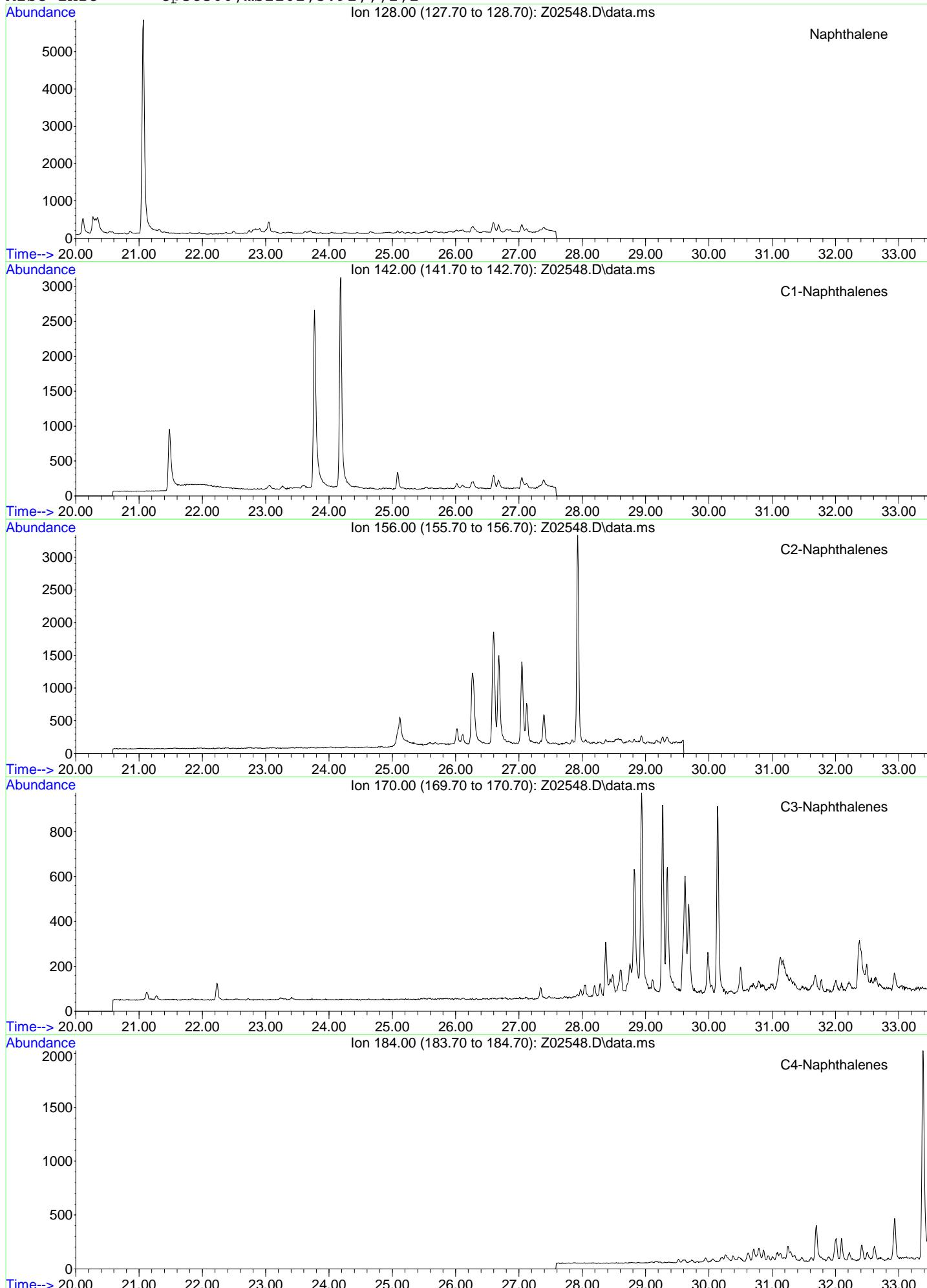
Time--> 6.00 7.00 8.00 9.00 10.00 11.00 12.00 13.00 14.00 15.00 16.00 17.00 18.00 19.00 20.00 21.00 22.00 23.00 24.00

Abundance Ion 148.00 (147.70 to 148.70): Z02548.D\data.ms

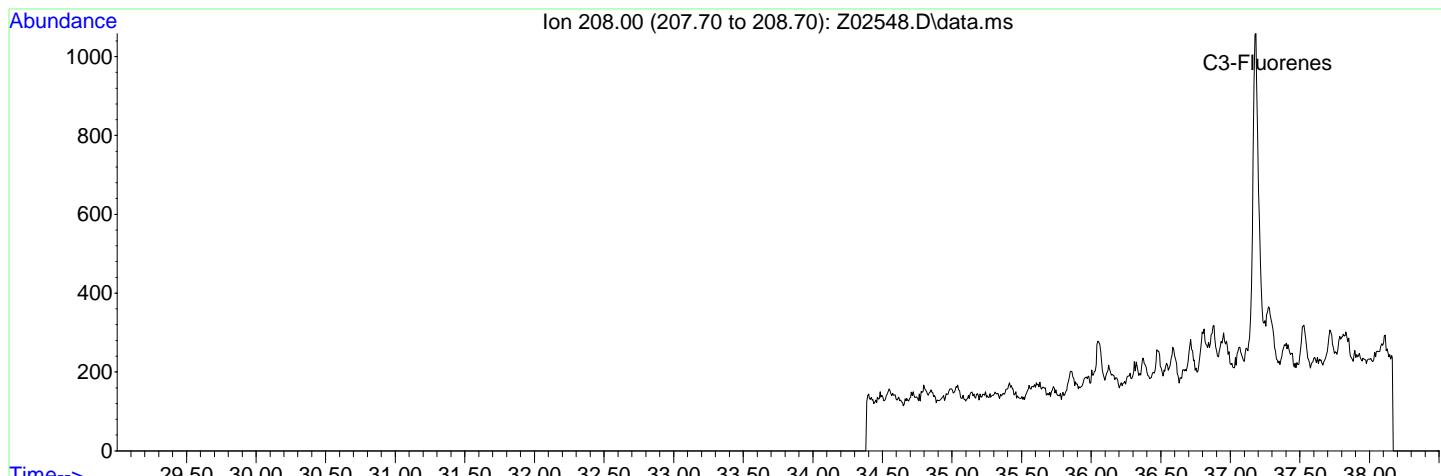
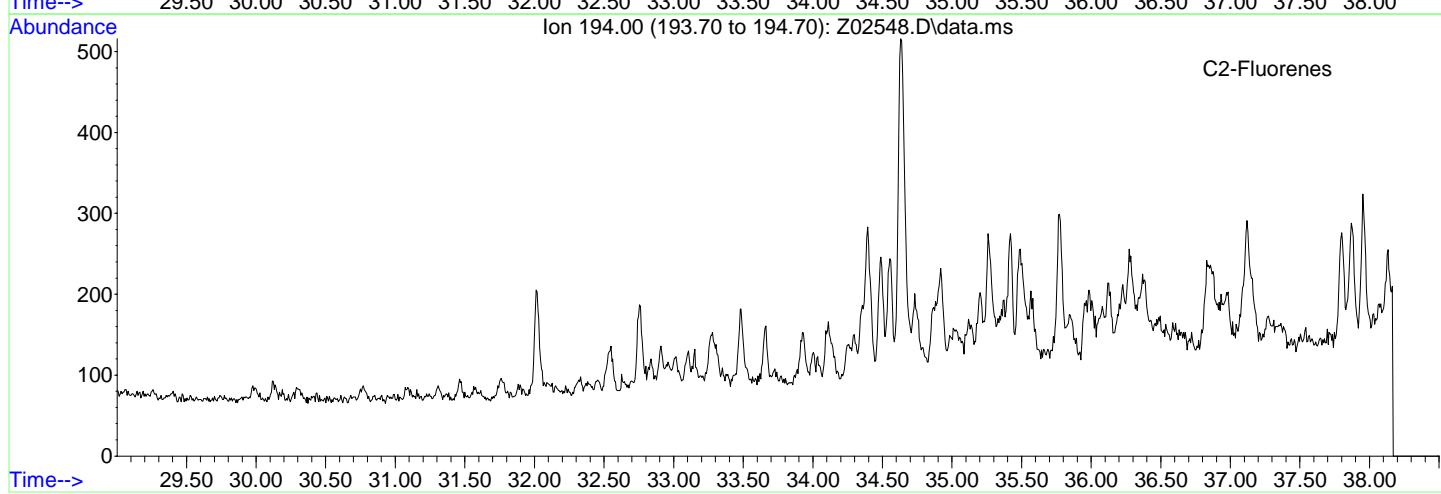
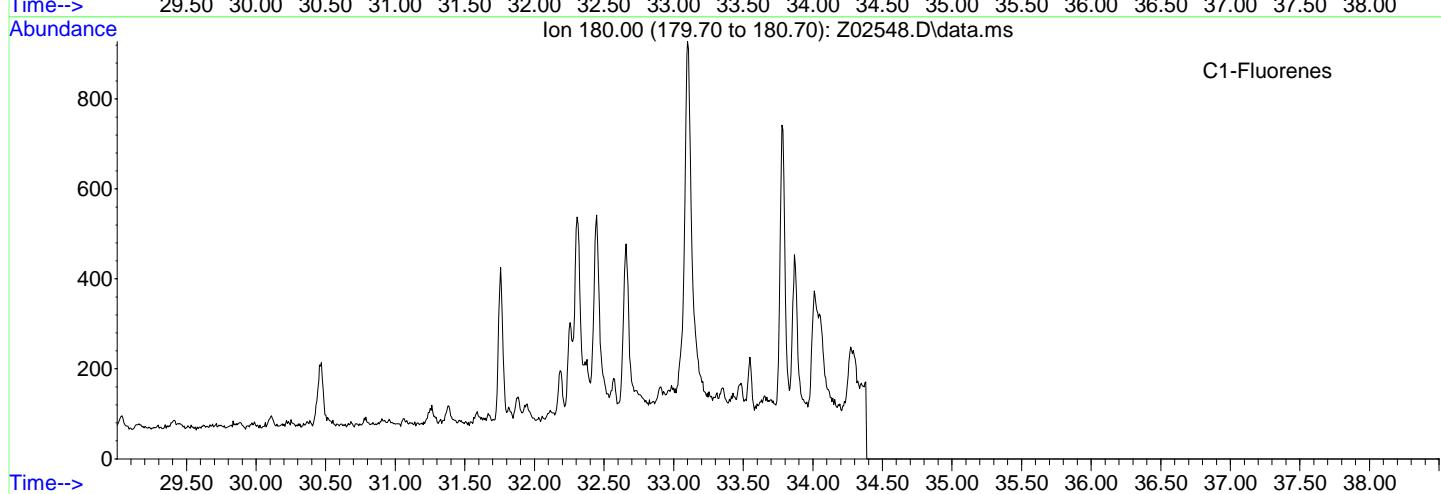
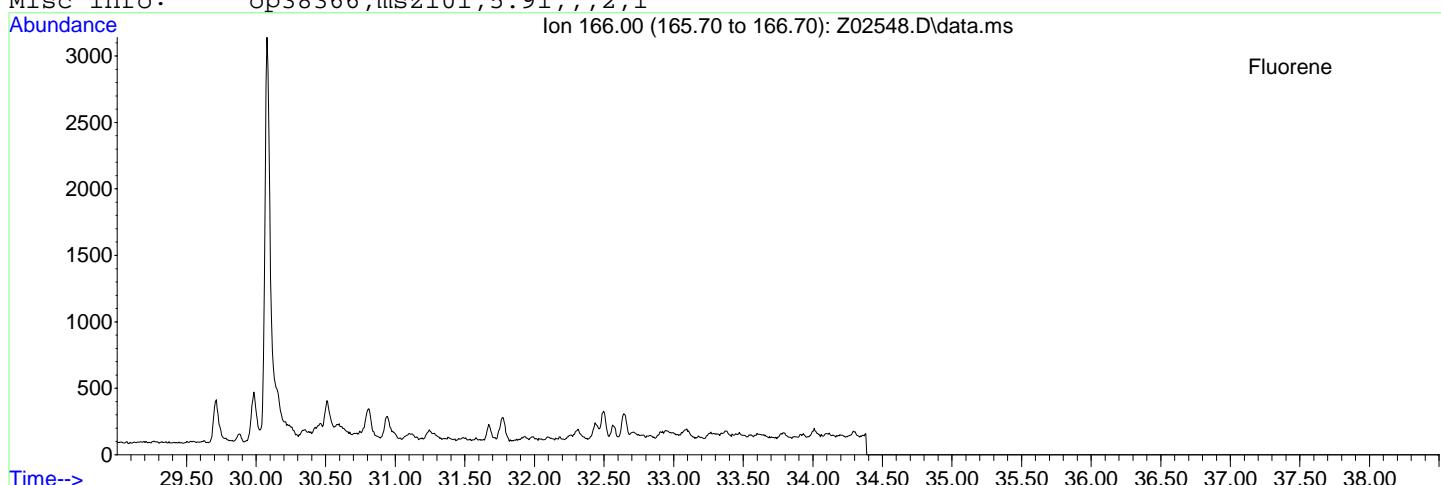


Time--> 6.00 7.00 8.00 9.00 10.00 11.00 12.00 13.00 14.00 15.00 16.00 17.00 18.00 19.00 20.00 21.00 22.00 23.00 24.00

File: Z:\2\data\Z140605\Z02548.D  
Date Acquired: 6 Jun 2014 10:09 am  
Sample Name: mc30898-2  
Misc Info: op38366,msz101,5.91,,,2,1



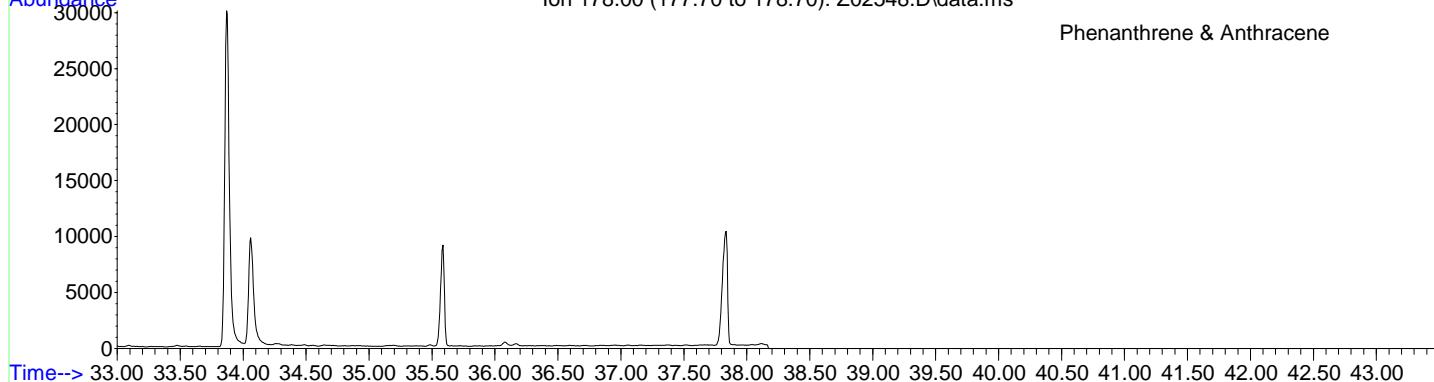
File: Z:\2\data\Z140605\Z02548.D  
Date Acquired: 6 Jun 2014 10:09 am  
Method File: ZAPAHSIM-MTBE.M  
Sample Name: mc30898-2  
Misc Info: op38366,msz101,5.91,,,2,1



File: Z:\2\data\Z140605\Z02548.D  
Date Acquired: 6 Jun 2014 10:09 am  
Sample Name: mc30898-2  
Misc Info: op38366,msz101,5.91,,,2,1

Abundance Ion 178.00 (177.70 to 178.70): Z02548.D\data.ms

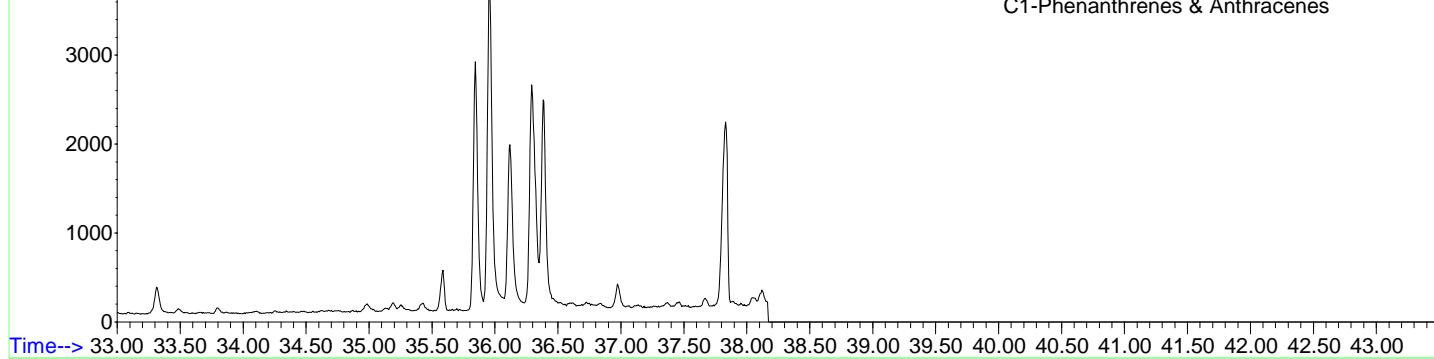
Phenanthrene & Anthracene



Time--> 33.00 33.50 34.00 34.50 35.00 35.50 36.00 36.50 37.00 37.50 38.00 38.50 39.00 39.50 40.00 40.50 41.00 41.50 42.00 42.50 43.00

Abundance Ion 192.00 (191.70 to 192.70): Z02548.D\data.ms

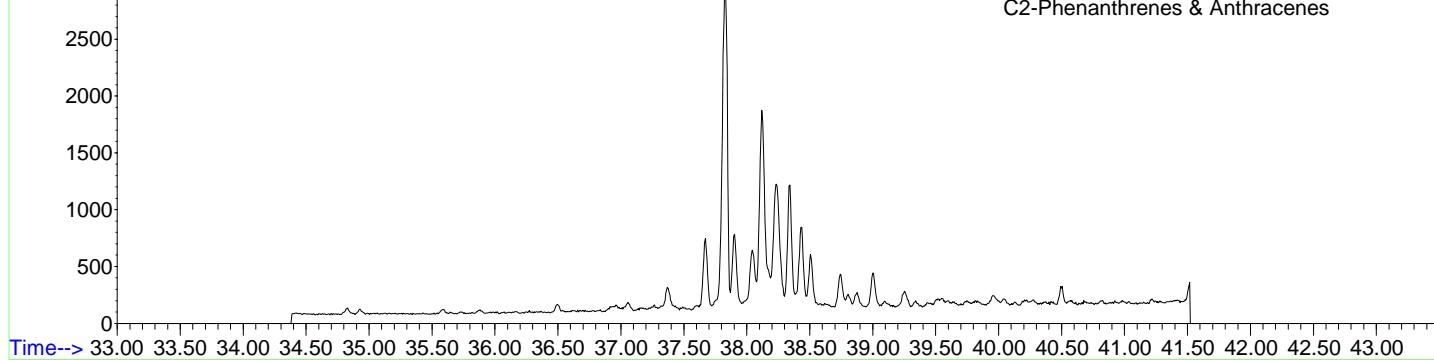
C1-Phenanthrenes & Anthracenes



Time--> 33.00 33.50 34.00 34.50 35.00 35.50 36.00 36.50 37.00 37.50 38.00 38.50 39.00 39.50 40.00 40.50 41.00 41.50 42.00 42.50 43.00

Abundance Ion 206.00 (205.70 to 206.70): Z02548.D\data.ms

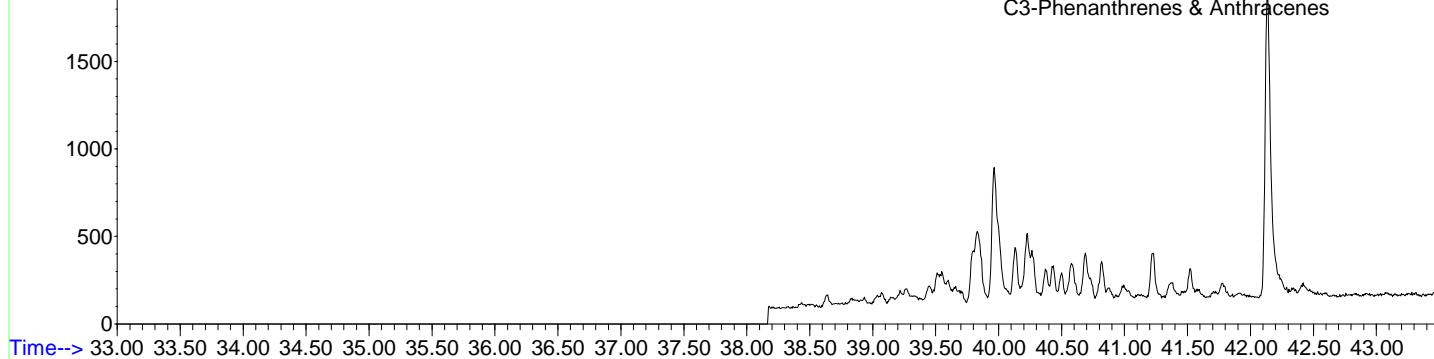
C2-Phenanthrenes & Anthracenes



Time--> 33.00 33.50 34.00 34.50 35.00 35.50 36.00 36.50 37.00 37.50 38.00 38.50 39.00 39.50 40.00 40.50 41.00 41.50 42.00 42.50 43.00

Abundance Ion 220.00 (219.70 to 220.70): Z02548.D\data.ms

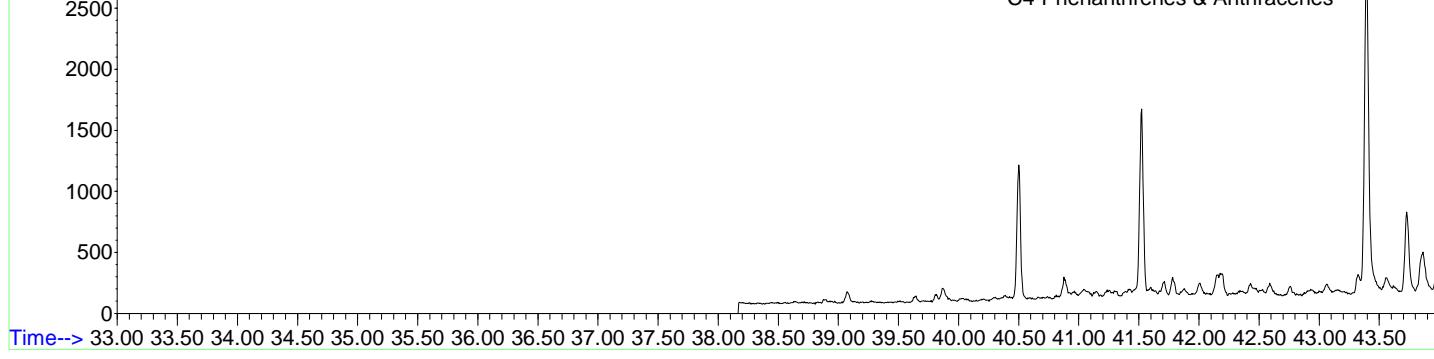
C3-Phenanthrenes & Anthracenes



Time--> 33.00 33.50 34.00 34.50 35.00 35.50 36.00 36.50 37.00 37.50 38.00 38.50 39.00 39.50 40.00 40.50 41.00 41.50 42.00 42.50 43.00

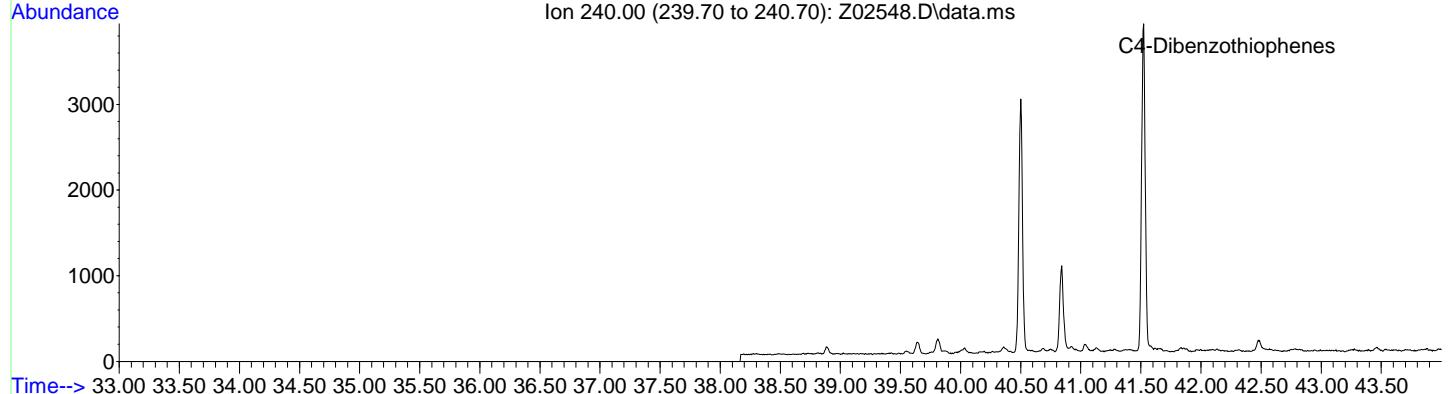
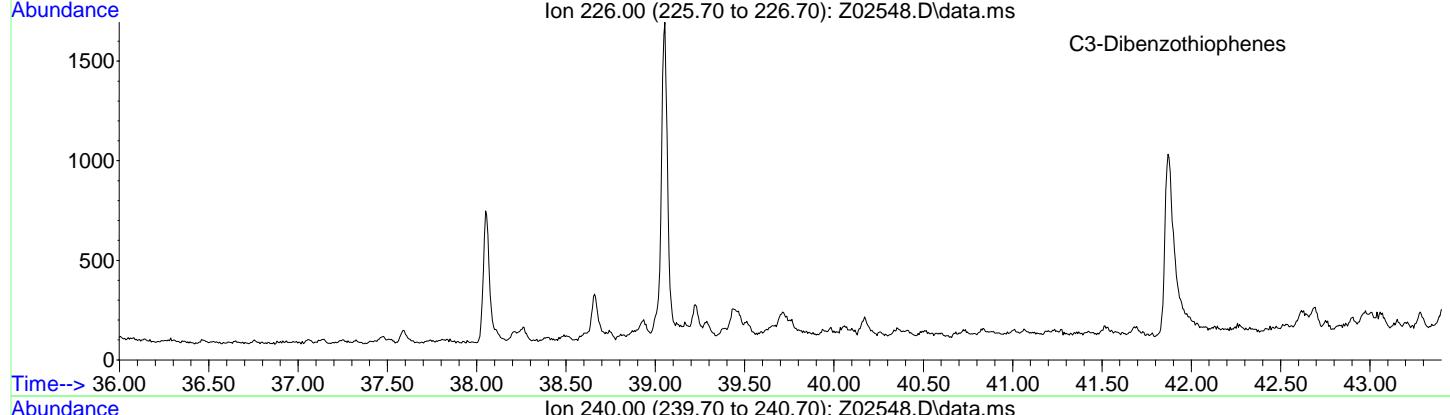
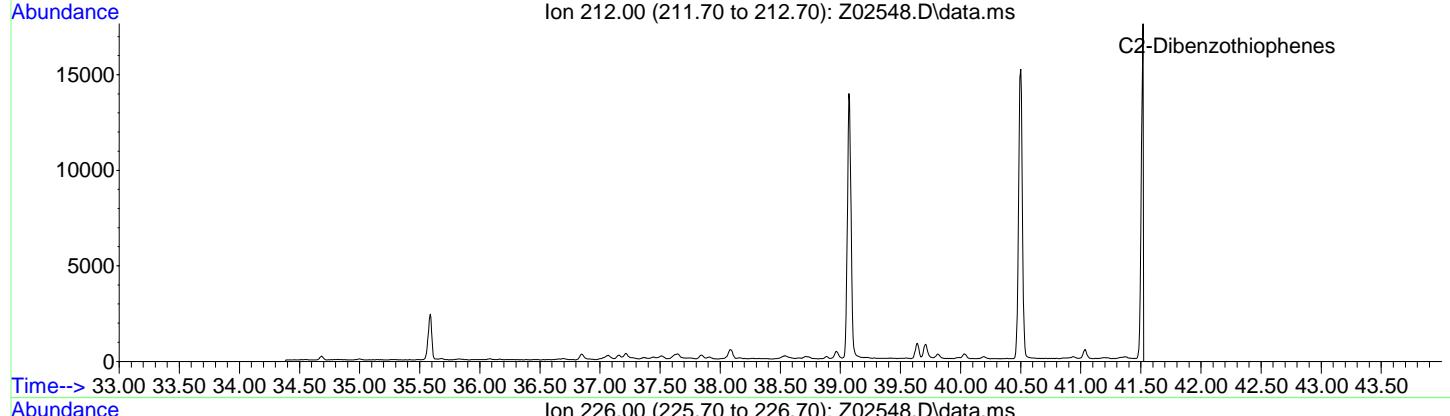
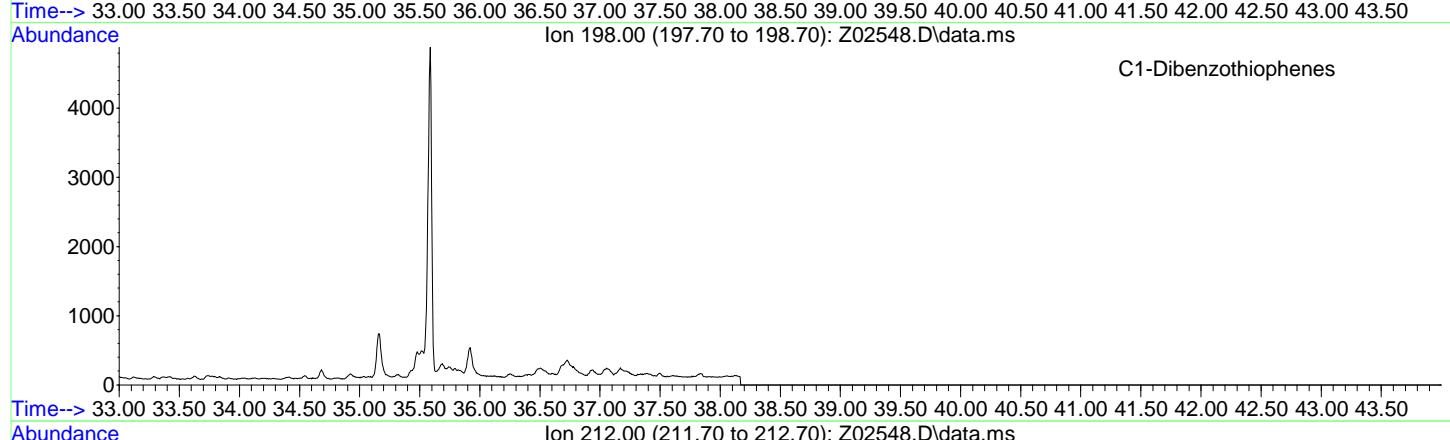
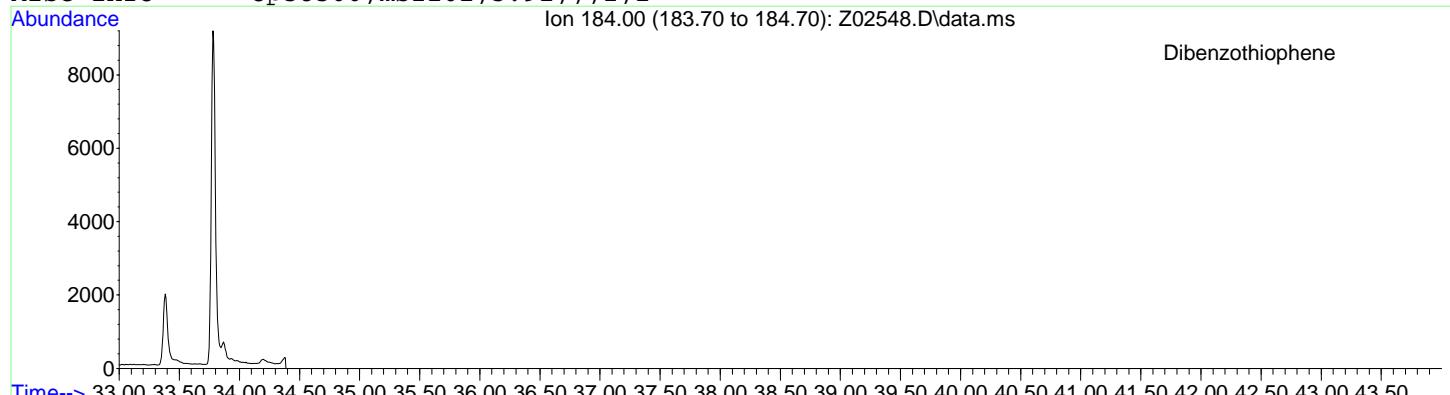
Abundance Ion 234.00 (233.70 to 234.70): Z02548.D\data.ms

C4-Phenanthrenes & Anthracenes

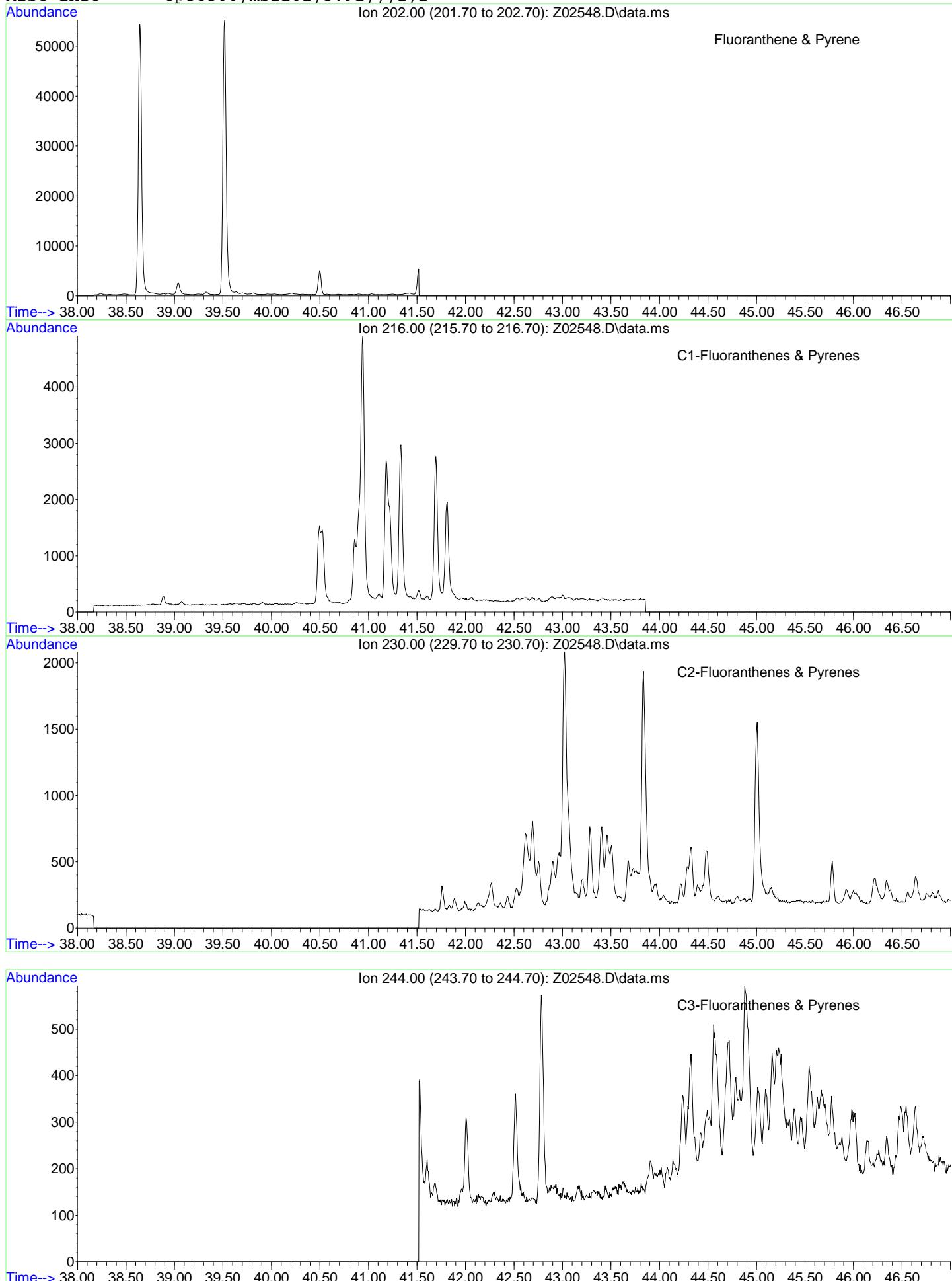


Time--> 33.00 33.50 34.00 34.50 35.00 35.50 36.00 36.50 37.00 37.50 38.00 38.50 39.00 39.50 40.00 40.50 41.00 41.50 42.00 42.50 43.00 43.50

File: Z:\2\data\Z140605\Z02548.D  
Date Acquired: 6 Jun 2014 10:09 am  
Sample Name: mc30898-2  
Misc Info: op38366,msz101,5.91,,,2,1



File: Z:\2\data\Z140605\Z02548.D  
Date Acquired: 6 Jun 2014 10:09 am  
Method File: ZAPAHSIM-MTBE.M  
Sample Name: mc30898-2  
Misc Info: op38366,msz101,5.91,,,2,1



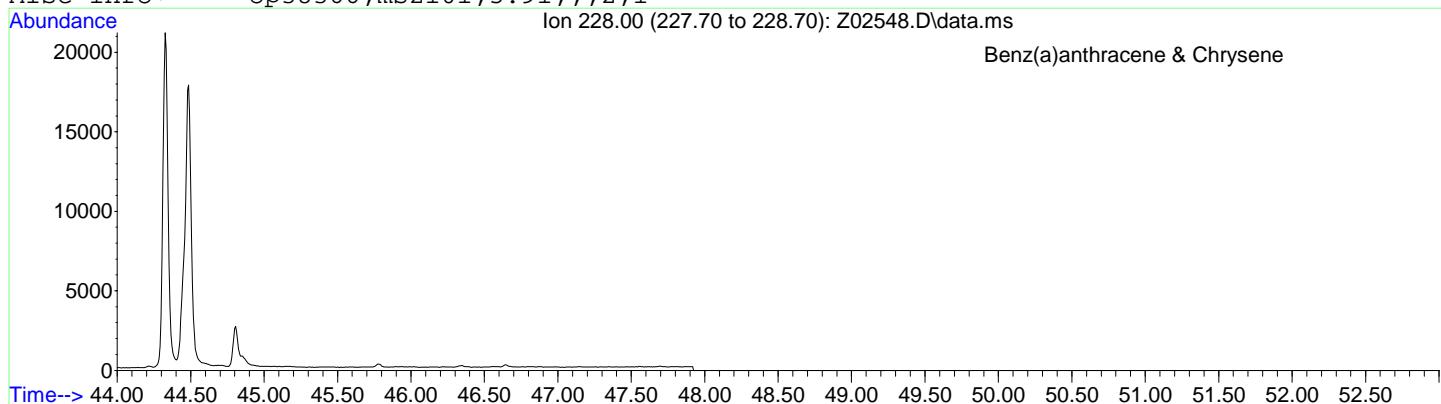
File: Z:\2\data\Z140605\Z02548.D

Date Acquired: 6 Jun 2014 10:09 am

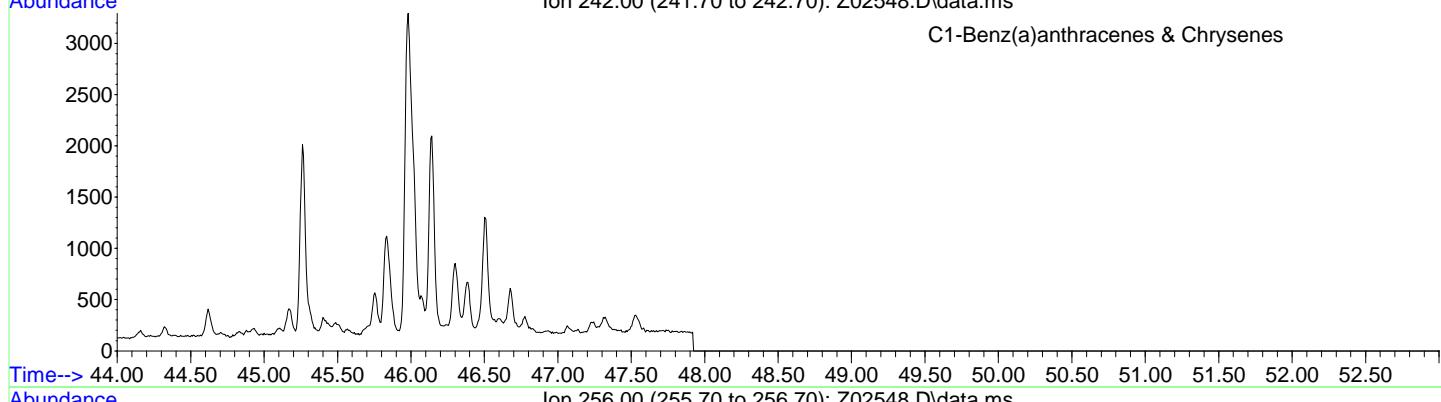
Sample Name: mc30898-2

Misc Info: op38366,msz101,5.91,,,2,1

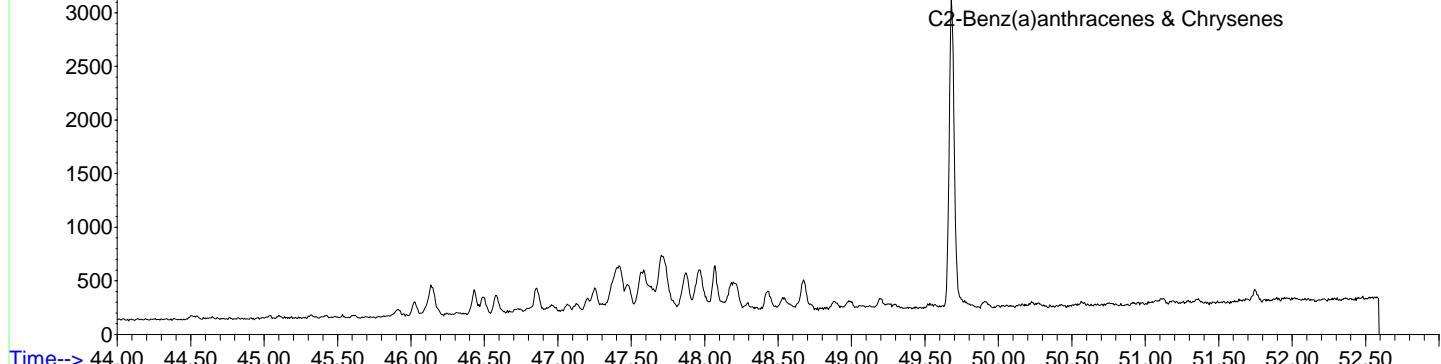
Ion 228.00 (227.70 to 228.70): Z02548.D\data.ms



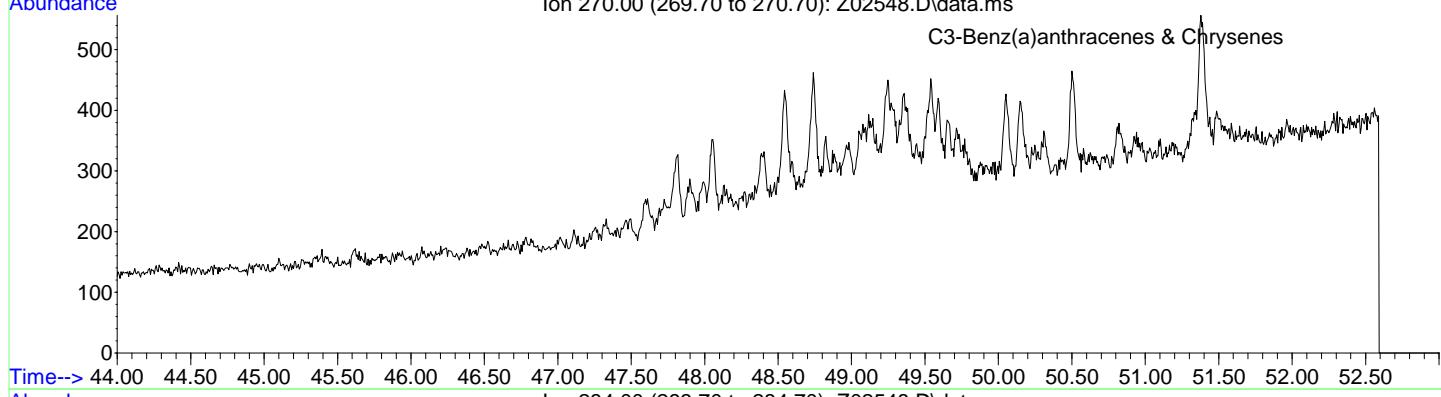
Ion 242.00 (241.70 to 242.70): Z02548.D\data.ms



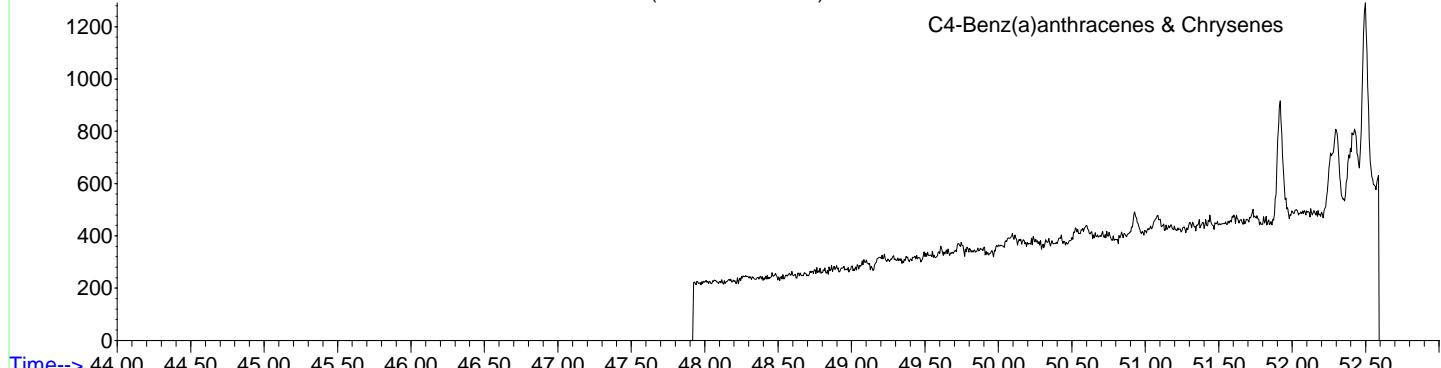
Ion 256.00 (255.70 to 256.70): Z02548.D\data.ms



Ion 270.00 (269.70 to 270.70): Z02548.D\data.ms



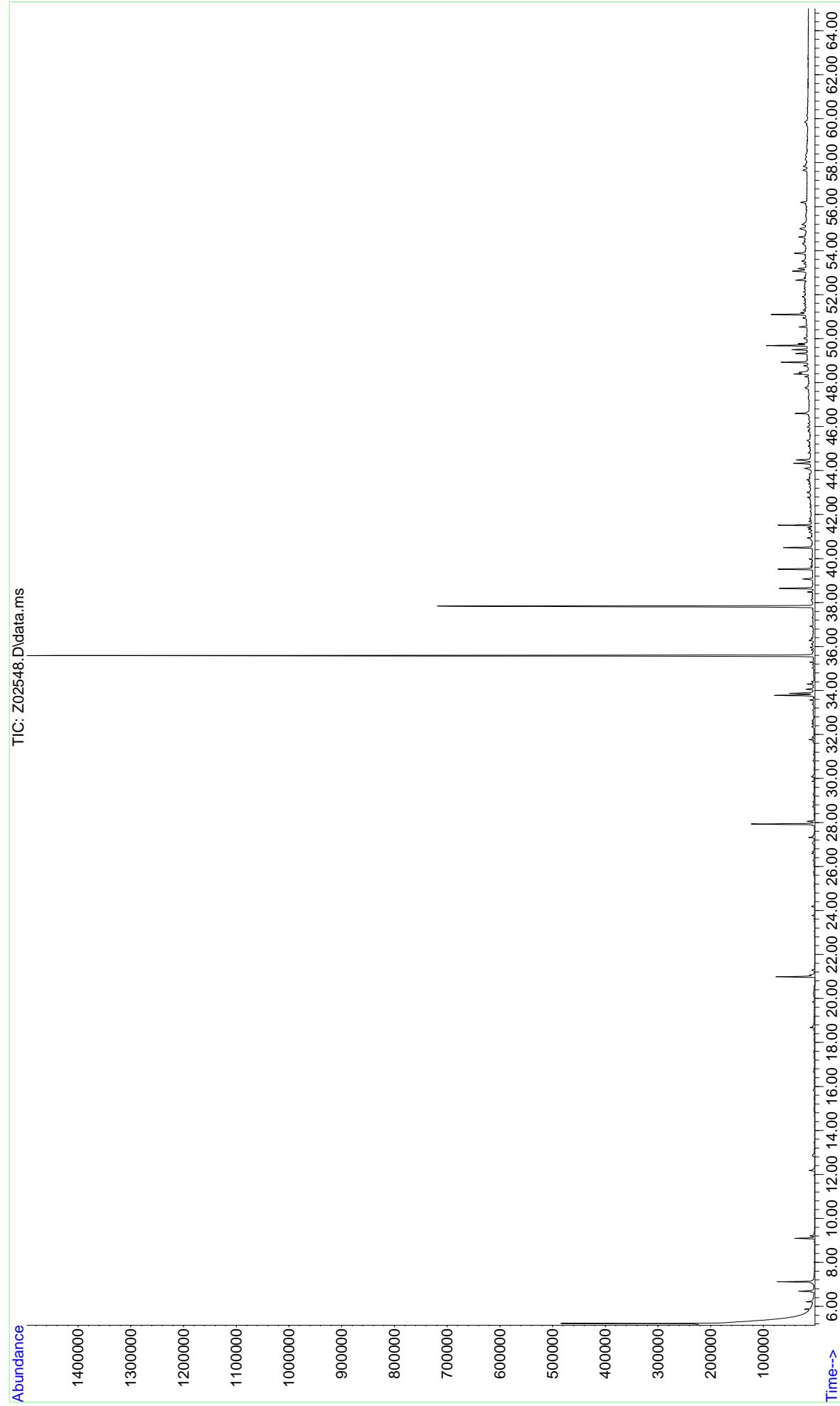
Ion 284.00 (283.70 to 284.70): Z02548.D\data.ms



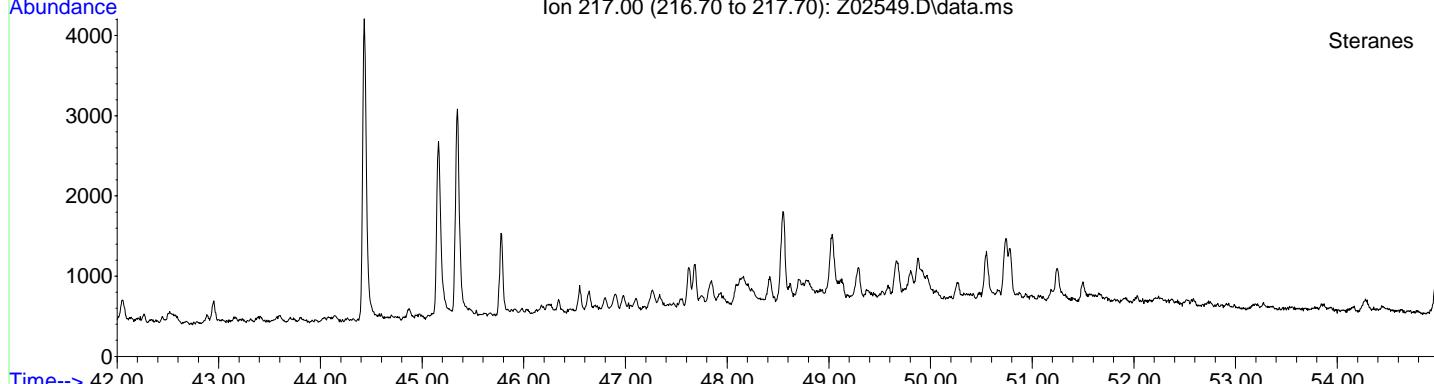
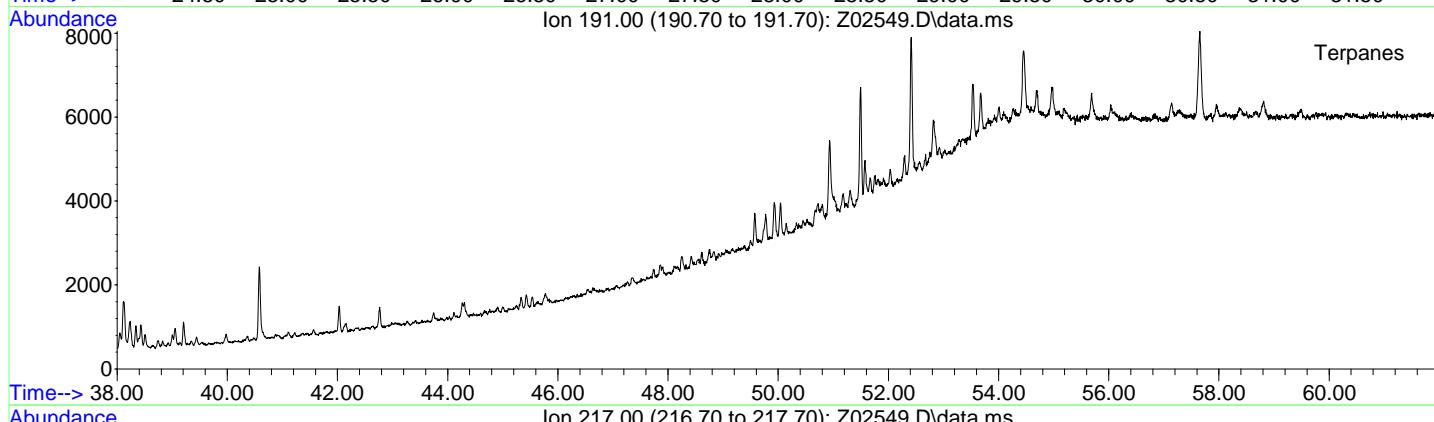
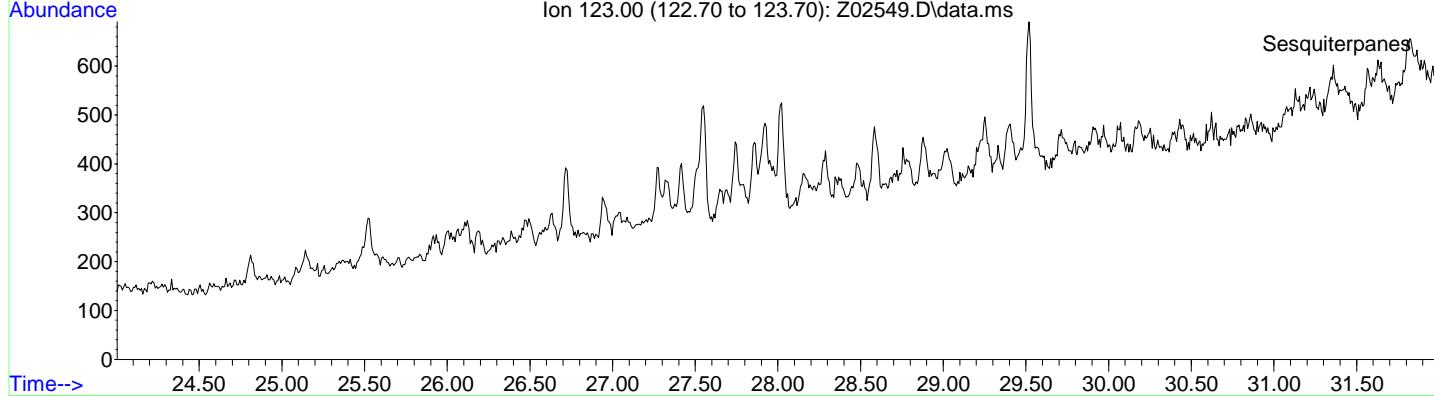
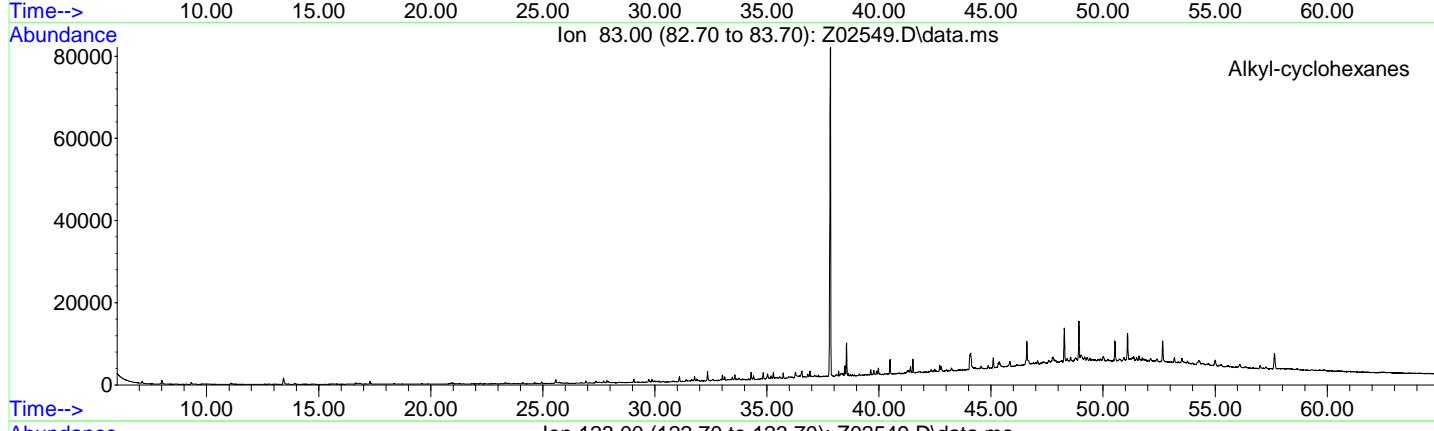
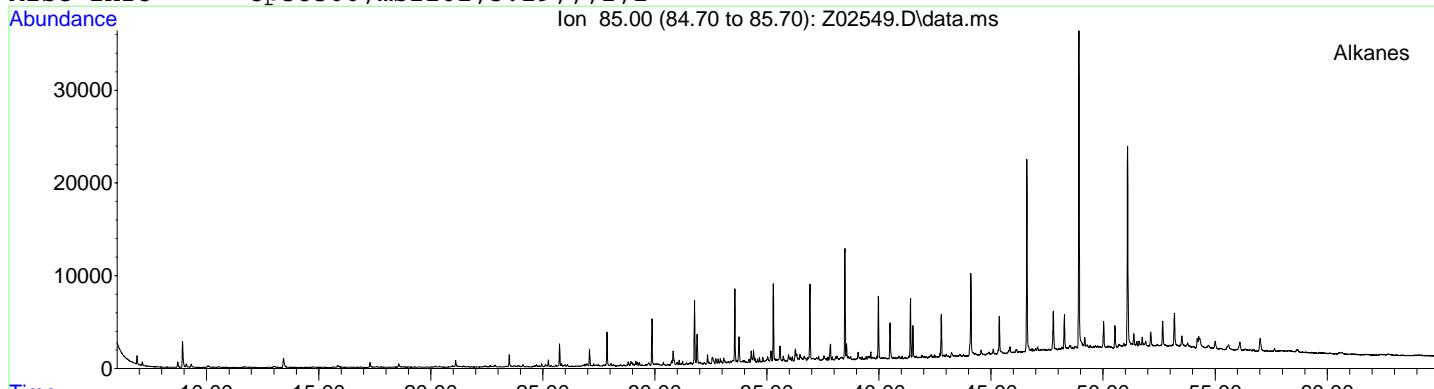
## ACCUTEST

## GC/MS TOTAL ION CHROMATOGRAM

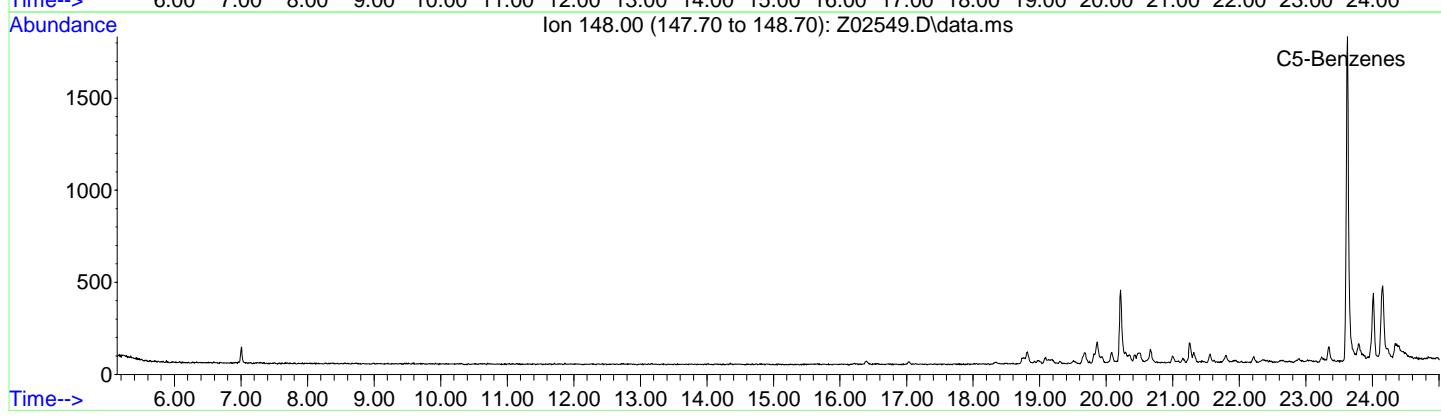
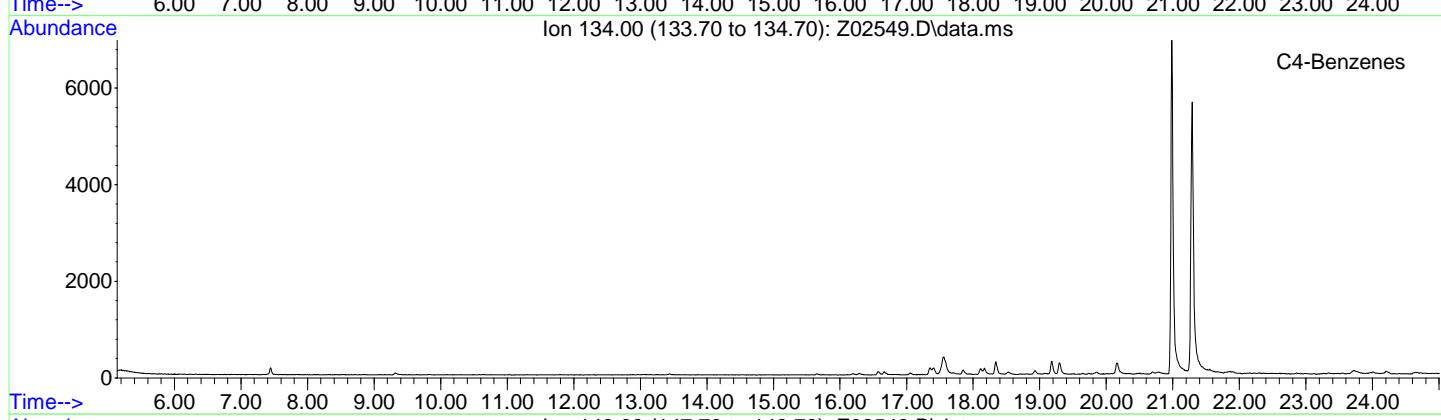
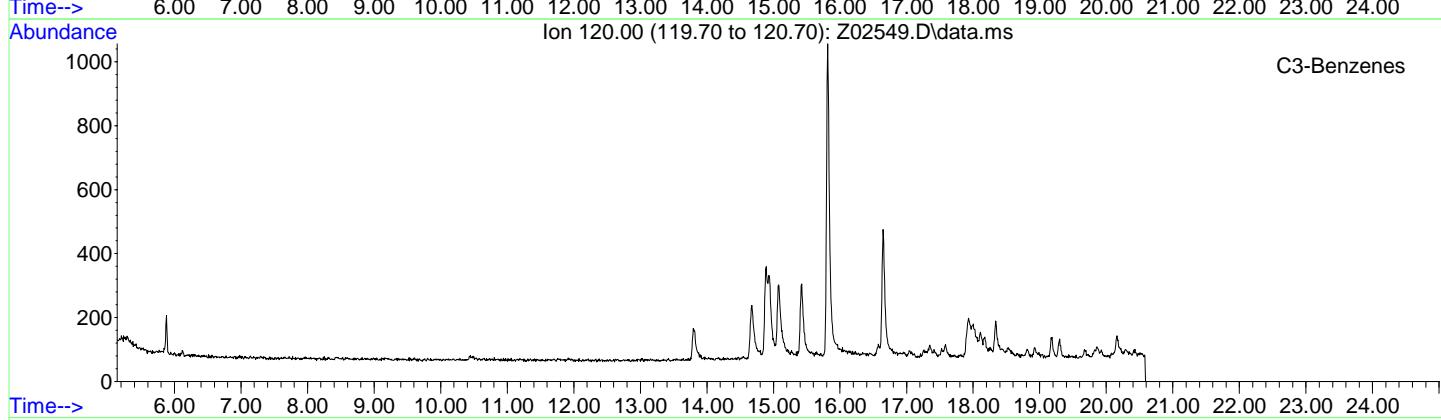
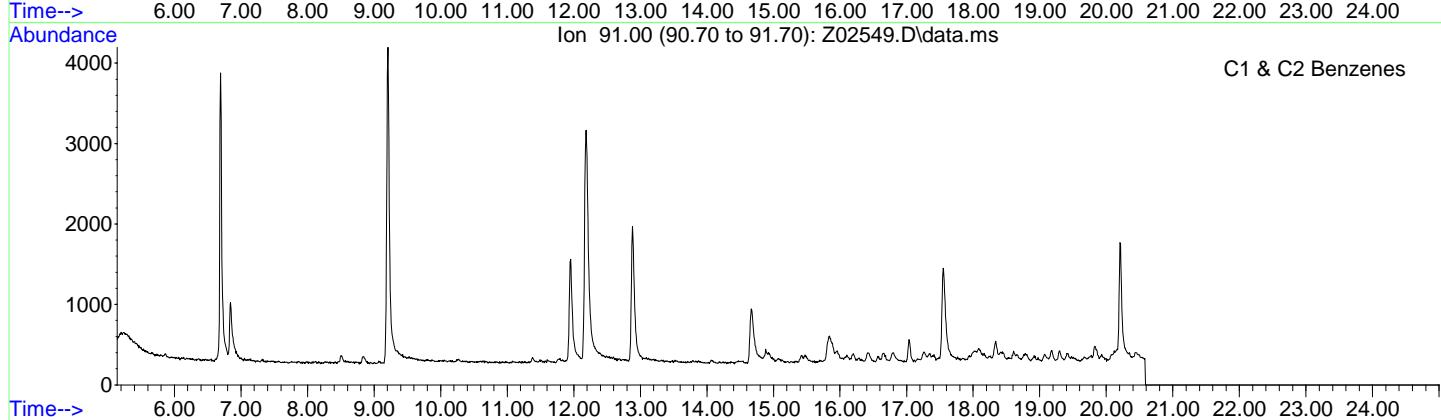
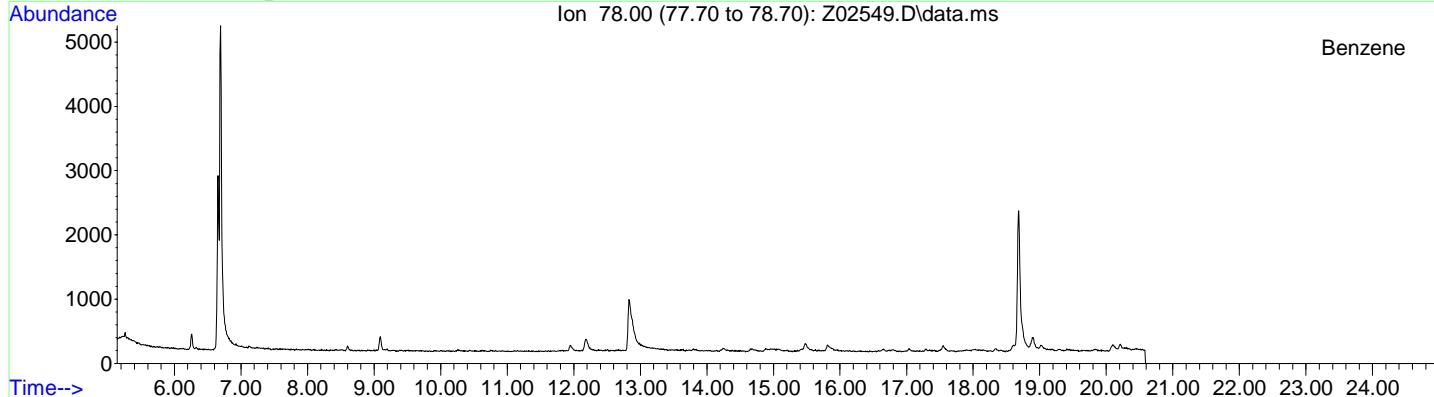
File: Z:\2\data\Z140605\Z02548.D  
Date Acquired: 6 Jun 2014 10:09 am  
Method File: ZAPAHSIM-MTBE.M  
Sample Name: mc30898-2  
Misc Info: op38366,msz101,5.91,,,2,1



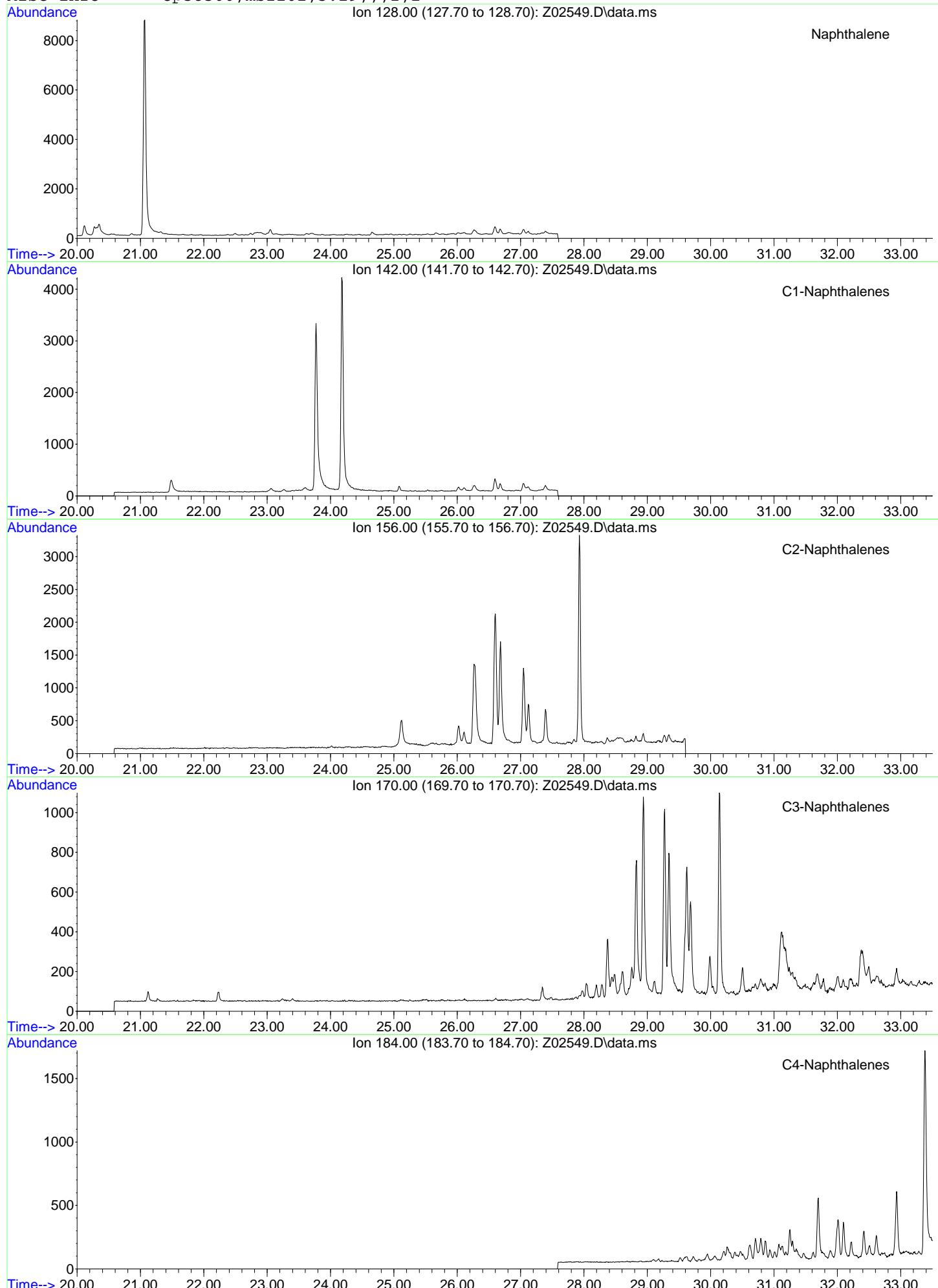
File: Z:\2\data\Z140605\Z02549.D  
Date Acquired: 6 Jun 2014 11:26 am  
Sample Name: mc30898-3  
Misc Info: op38366,msz101,5.19,,,2,1



File: Z:\2\data\Z140605\Z02549.D  
Date Acquired: 6 Jun 2014 11:26 am  
Sample Name: mc30898-3  
Misc Info: op38366,msz101,5.19,,,2,1

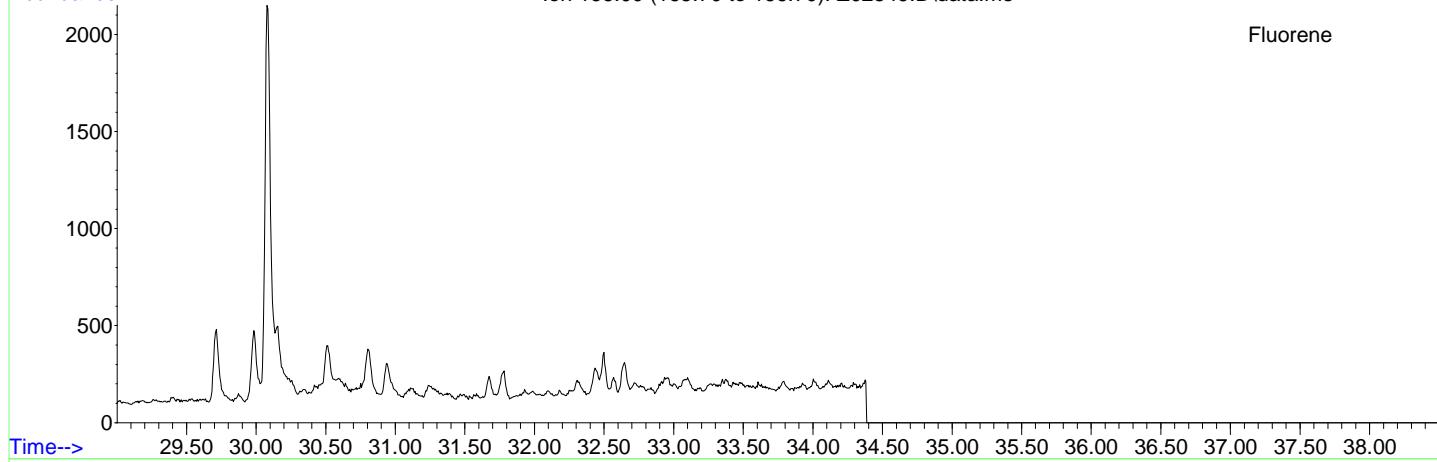


File: Z:\2\data\Z140605\Z02549.D  
Date Acquired: 6 Jun 2014 11:26 am  
Sample Name: mc30898-3  
Misc Info: op38366,msz101,5.19,,,2,1



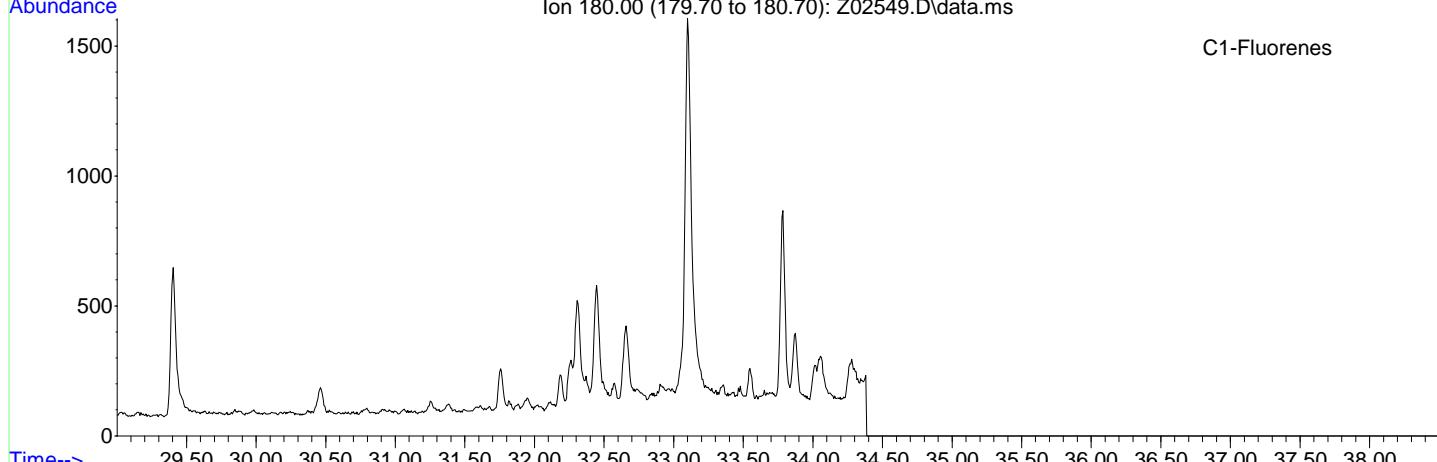
File: Z:\2\data\Z140605\Z02549.D  
Date Acquired: 6 Jun 2014 11:26 am  
Method File: ZAPAHSIM-MTBE.M  
Sample Name: mc30898-3  
Misc Info: op38366,msz101,5.19,,,2,1

Abundance Ion 166.00 (165.70 to 166.70): Z02549.D\data.ms



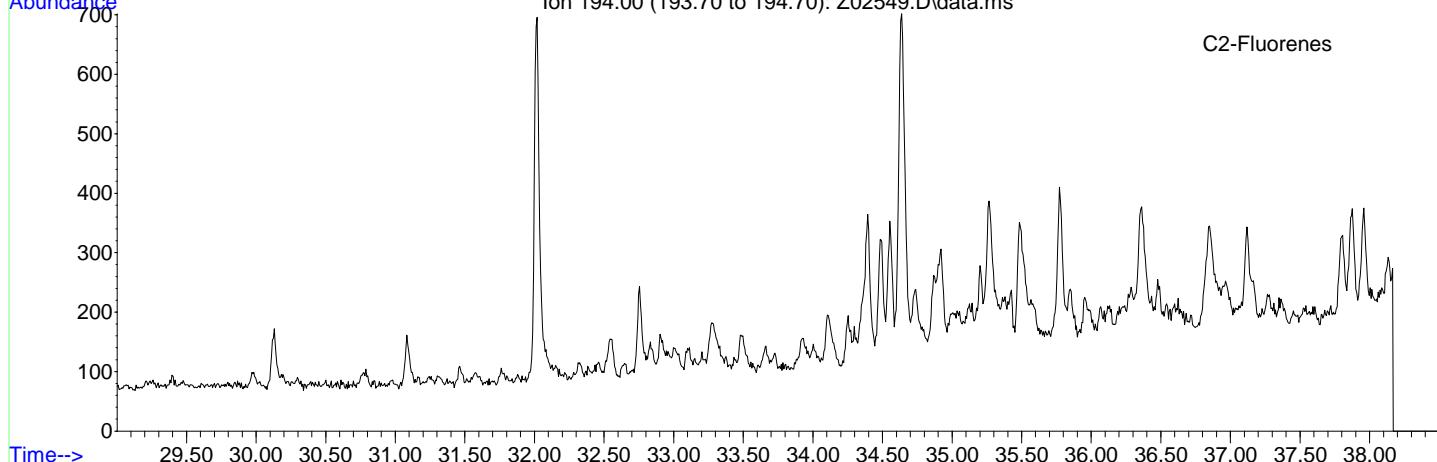
Fluorene

Time--> Abundance Ion 180.00 (179.70 to 180.70): Z02549.D\data.ms



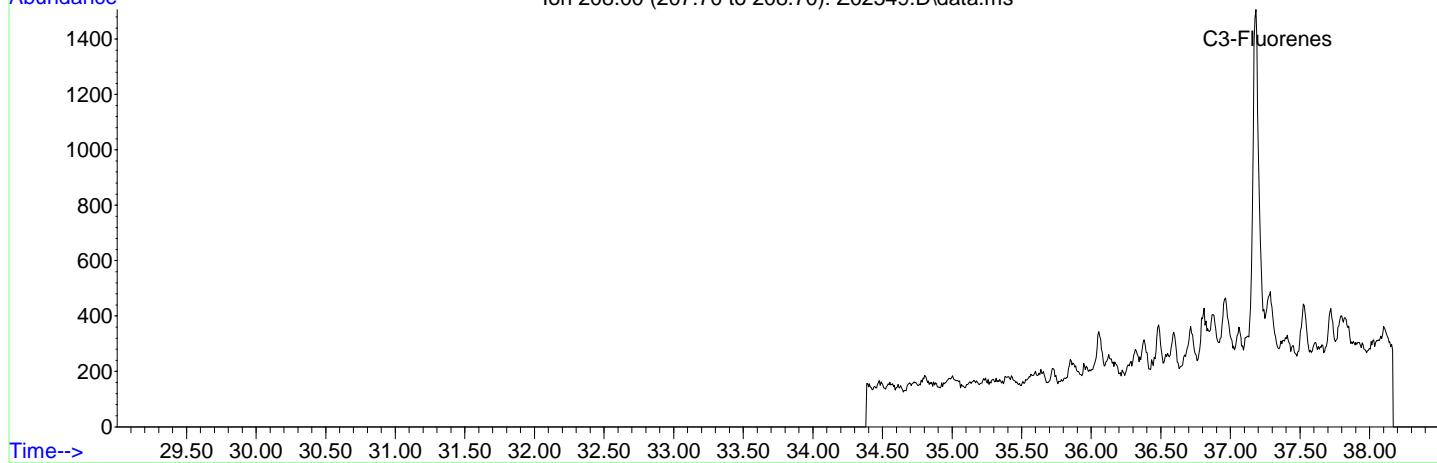
C1-Fluorenes

Time--> Abundance Ion 194.00 (193.70 to 194.70): Z02549.D\data.ms



C2-Fluorenes

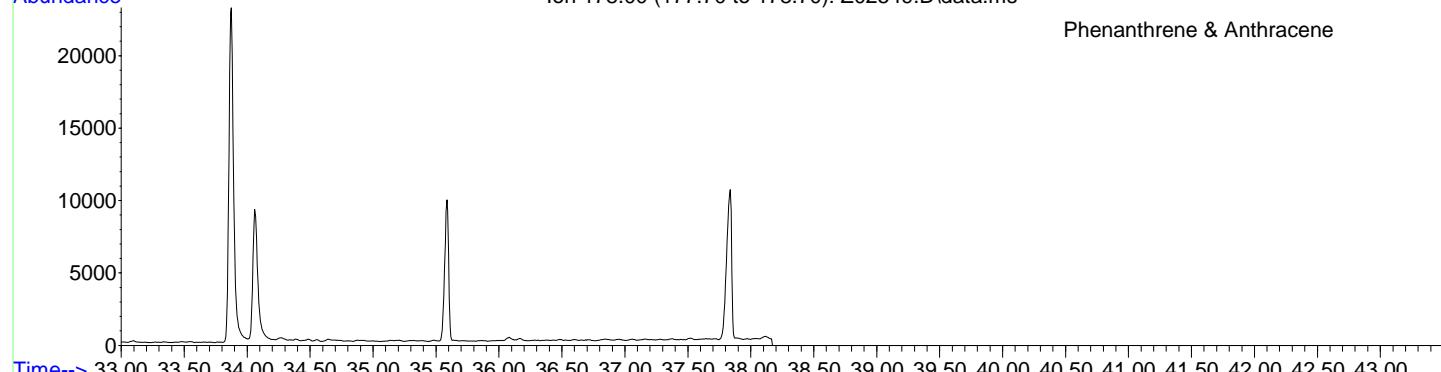
Time--> Abundance Ion 208.00 (207.70 to 208.70): Z02549.D\data.ms



C3-Fluorenes

File: Z:\2\data\Z140605\Z02549.D  
Date Acquired: 6 Jun 2014 11:26 am  
Sample Name: mc30898-3  
Misc Info: op38366,msz101,5.19,,,2,1

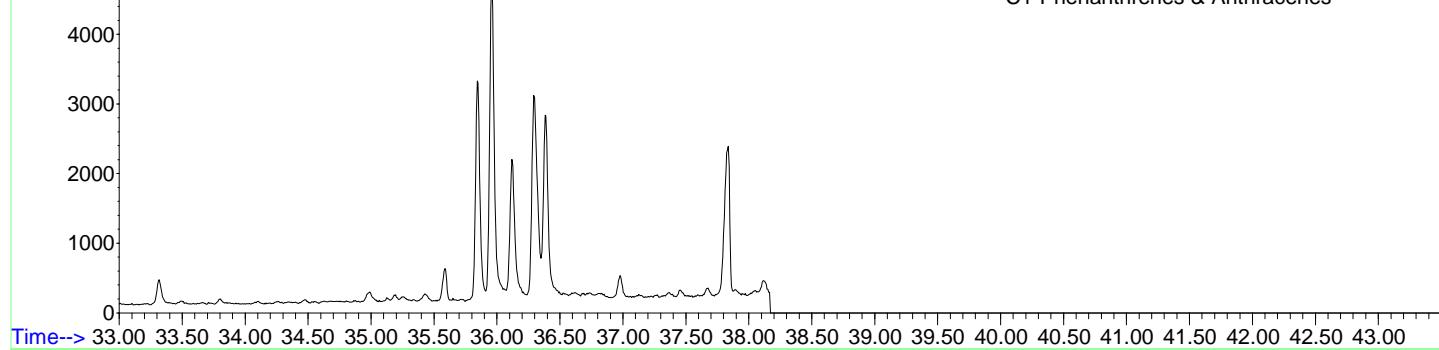
Abundance Ion 178.00 (177.70 to 178.70): Z02549.D\data.ms



Time--> 33.00 33.50 34.00 34.50 35.00 35.50 36.00 36.50 37.00 37.50 38.00 38.50 39.00 39.50 40.00 40.50 41.00 41.50 42.00 42.50 43.00

Abundance Ion 192.00 (191.70 to 192.70): Z02549.D\data.ms

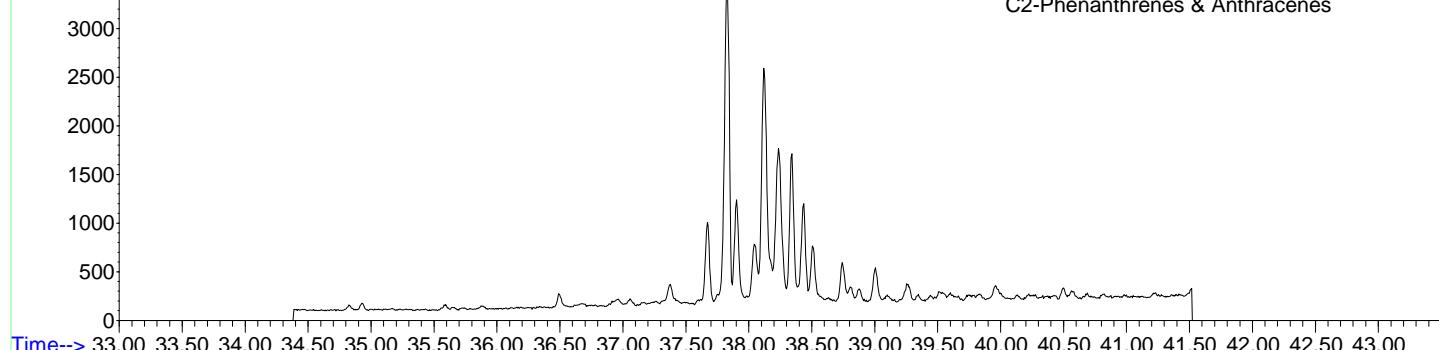
C1-Phenanthrenes & Anthracenes



Time--> 33.00 33.50 34.00 34.50 35.00 35.50 36.00 36.50 37.00 37.50 38.00 38.50 39.00 39.50 40.00 40.50 41.00 41.50 42.00 42.50 43.00

Abundance Ion 206.00 (205.70 to 206.70): Z02549.D\data.ms

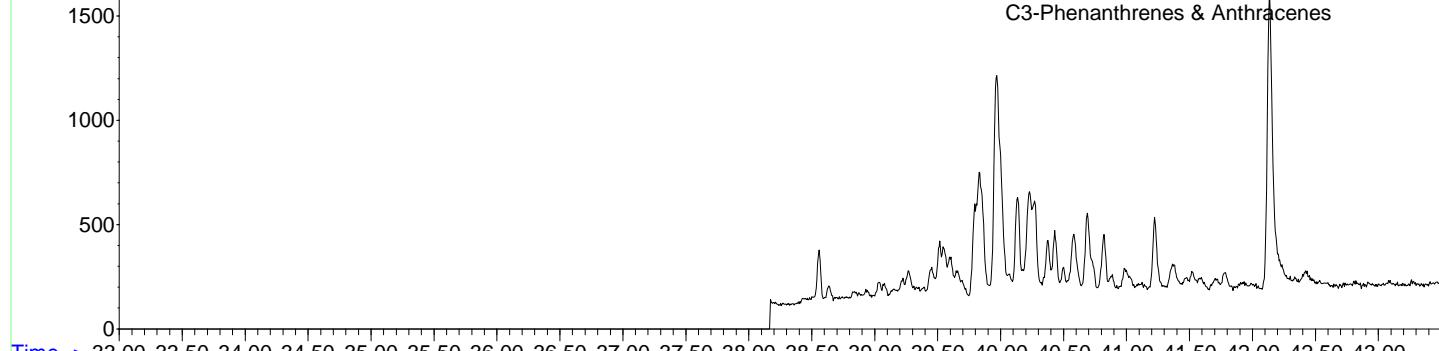
C2-Phenanthrenes & Anthracenes



Time--> 33.00 33.50 34.00 34.50 35.00 35.50 36.00 36.50 37.00 37.50 38.00 38.50 39.00 39.50 40.00 40.50 41.00 41.50 42.00 42.50 43.00

Abundance Ion 220.00 (219.70 to 220.70): Z02549.D\data.ms

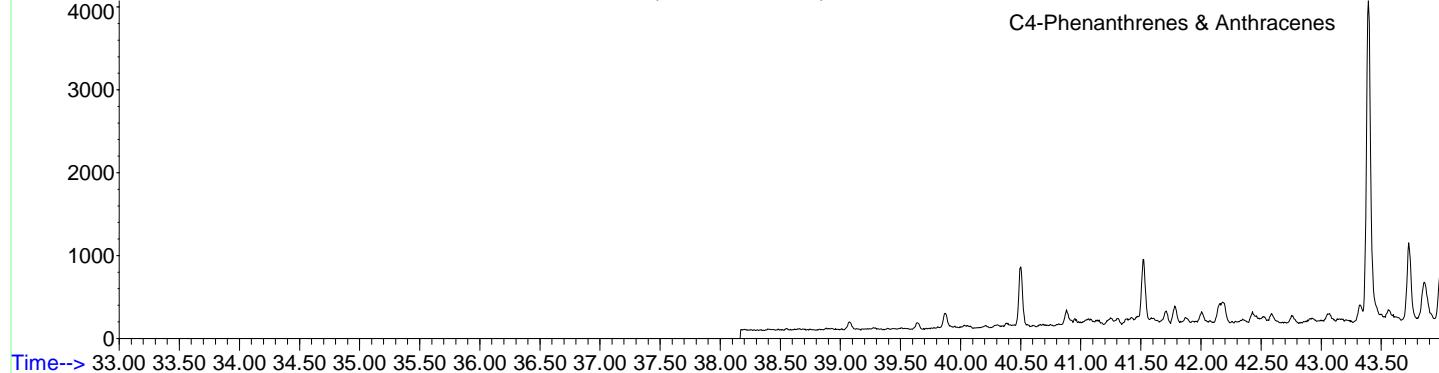
C3-Phenanthrenes & Anthracenes



Time--> 33.00 33.50 34.00 34.50 35.00 35.50 36.00 36.50 37.00 37.50 38.00 38.50 39.00 39.50 40.00 40.50 41.00 41.50 42.00 42.50 43.00

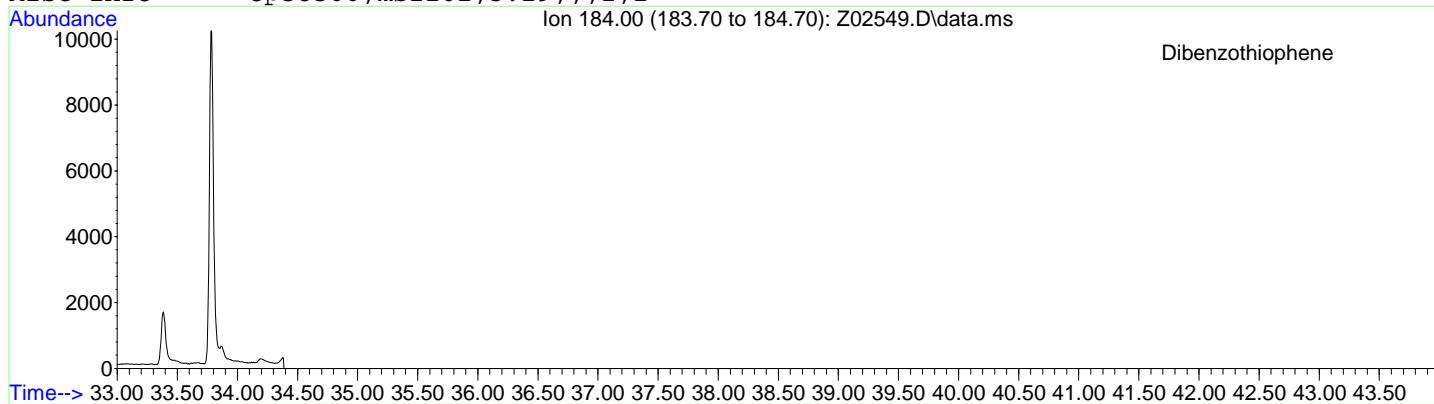
Abundance Ion 234.00 (233.70 to 234.70): Z02549.D\data.ms

C4-Phenanthrenes & Anthracenes



Time--> 33.00 33.50 34.00 34.50 35.00 35.50 36.00 36.50 37.00 37.50 38.00 38.50 39.00 39.50 40.00 40.50 41.00 41.50 42.00 42.50 43.00 43.50

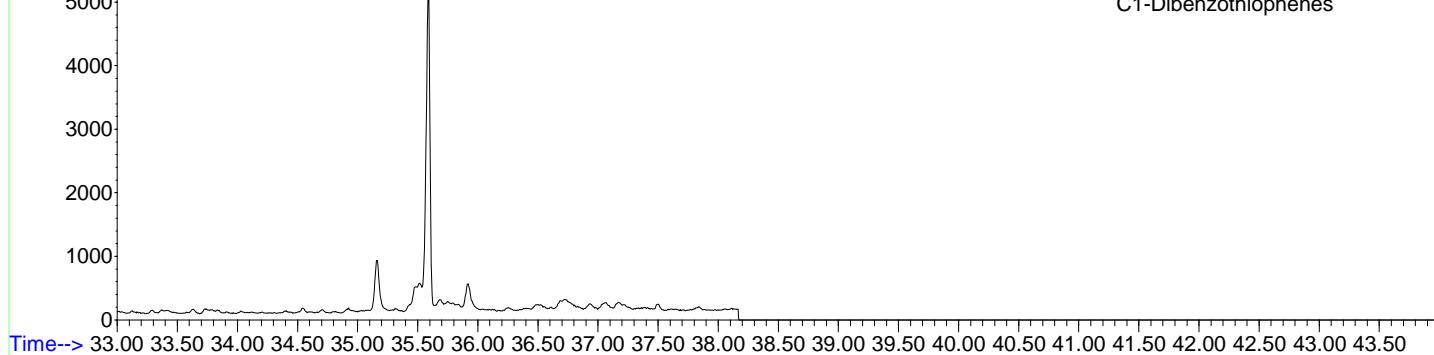
File: Z:\2\data\Z140605\Z02549.D  
Date Acquired: 6 Jun 2014 11:26 am  
Sample Name: mc30898-3  
Misc Info: op38366,msz101,5.19,,,2,1  
Ion 184.00 (183.70 to 184.70): Z02549.D\data.ms



Abundance

Ion 198.00 (197.70 to 198.70): Z02549.D\data.ms

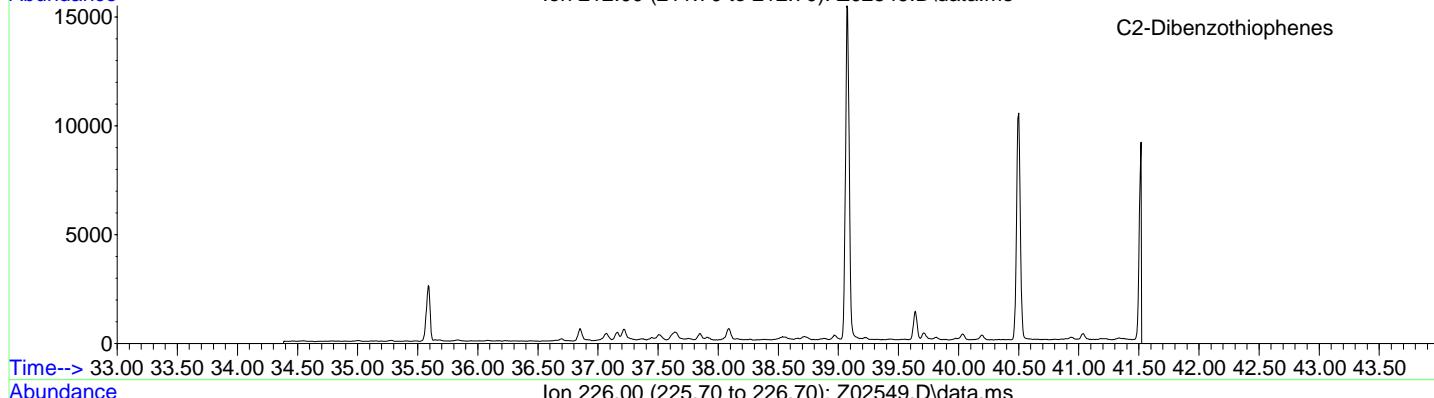
C1-Dibenzothiophenes



Abundance

Ion 212.00 (211.70 to 212.70): Z02549.D\data.ms

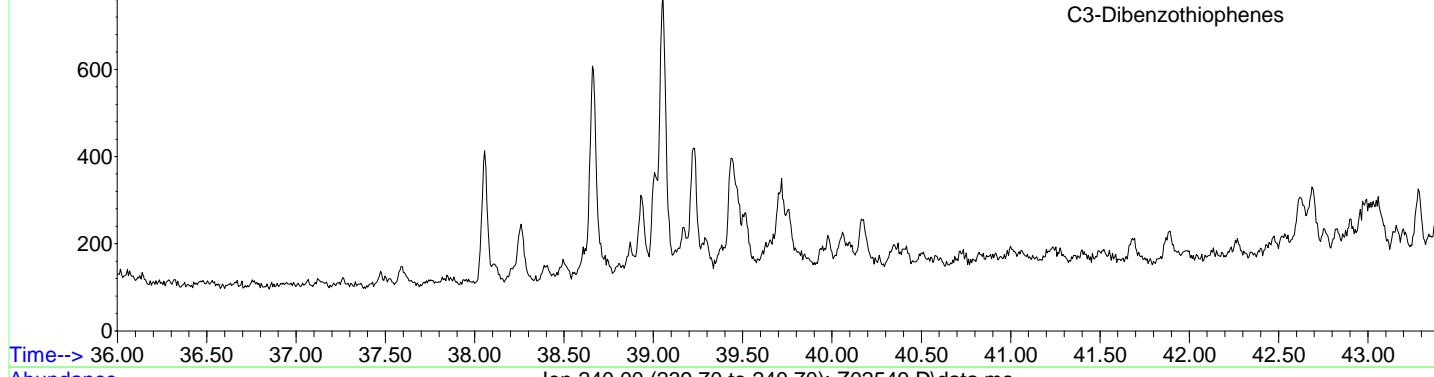
C2-Dibenzothiophenes



Abundance

Ion 226.00 (225.70 to 226.70): Z02549.D\data.ms

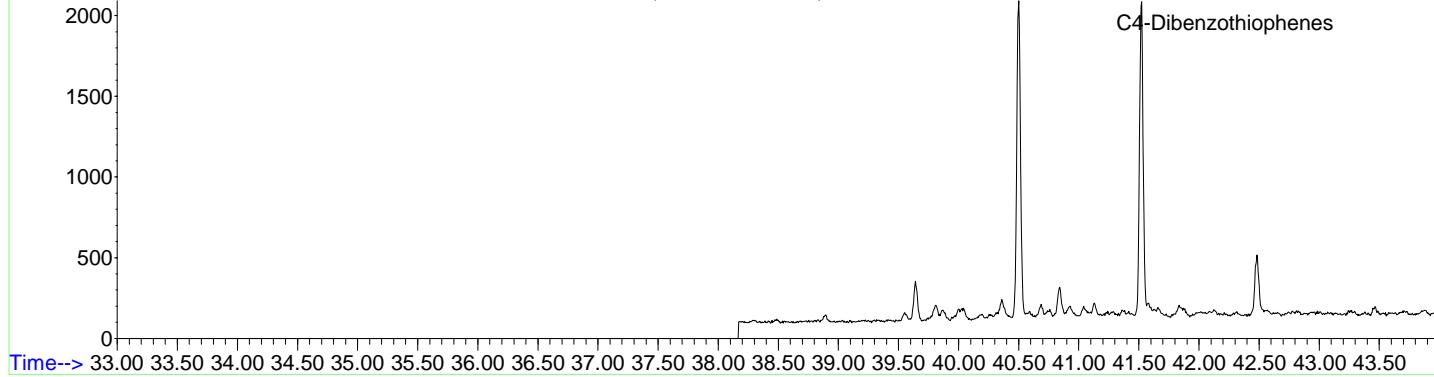
C3-Dibenzothiophenes



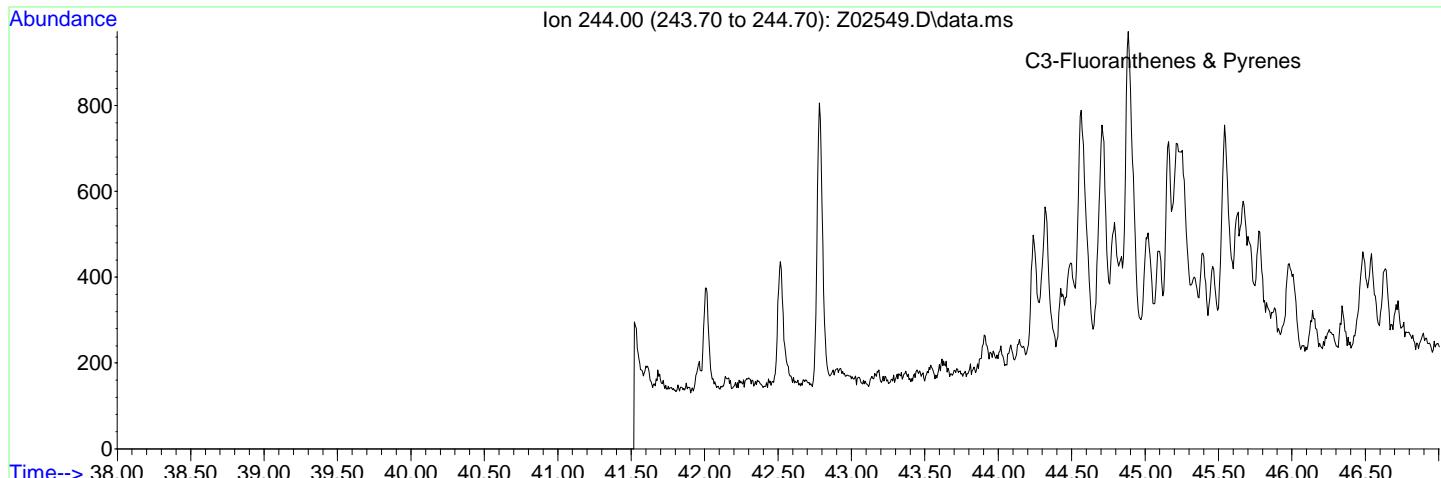
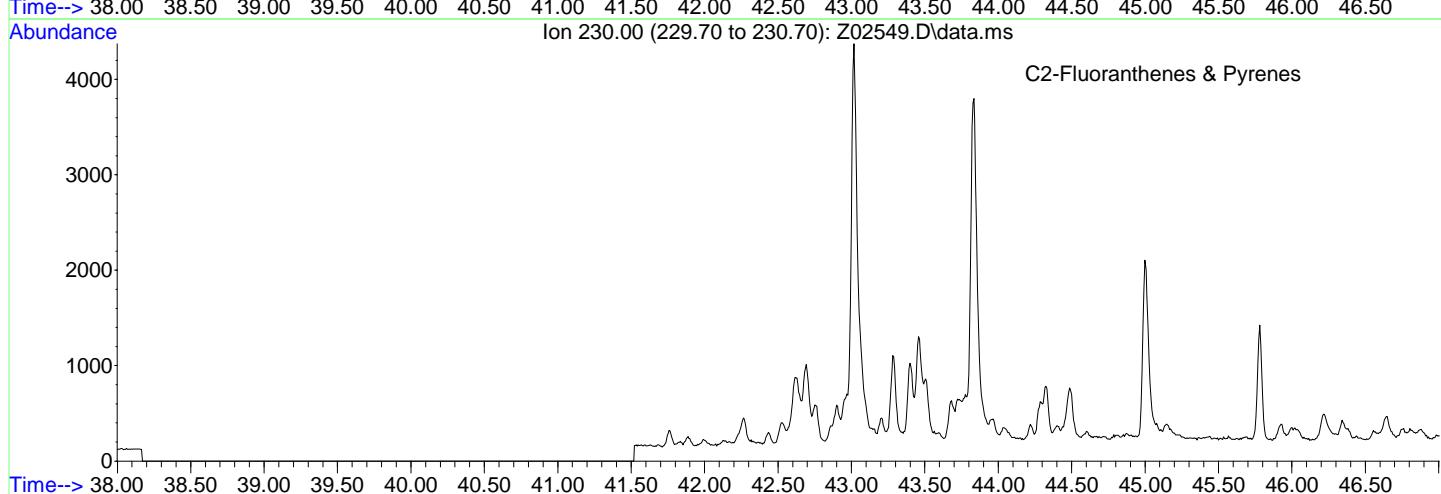
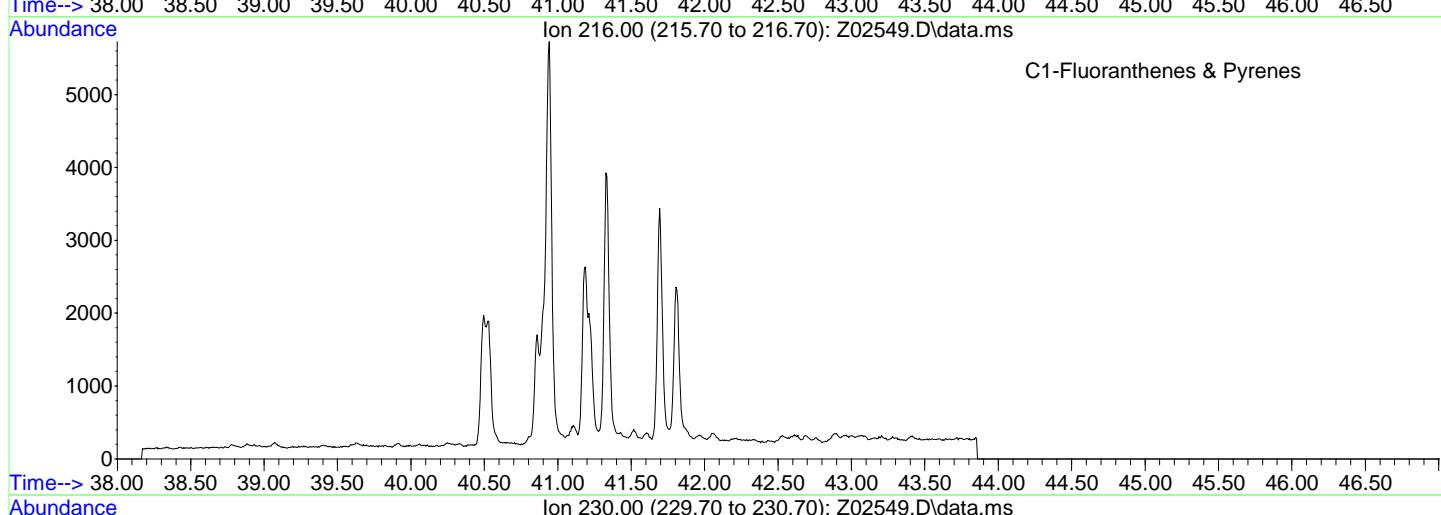
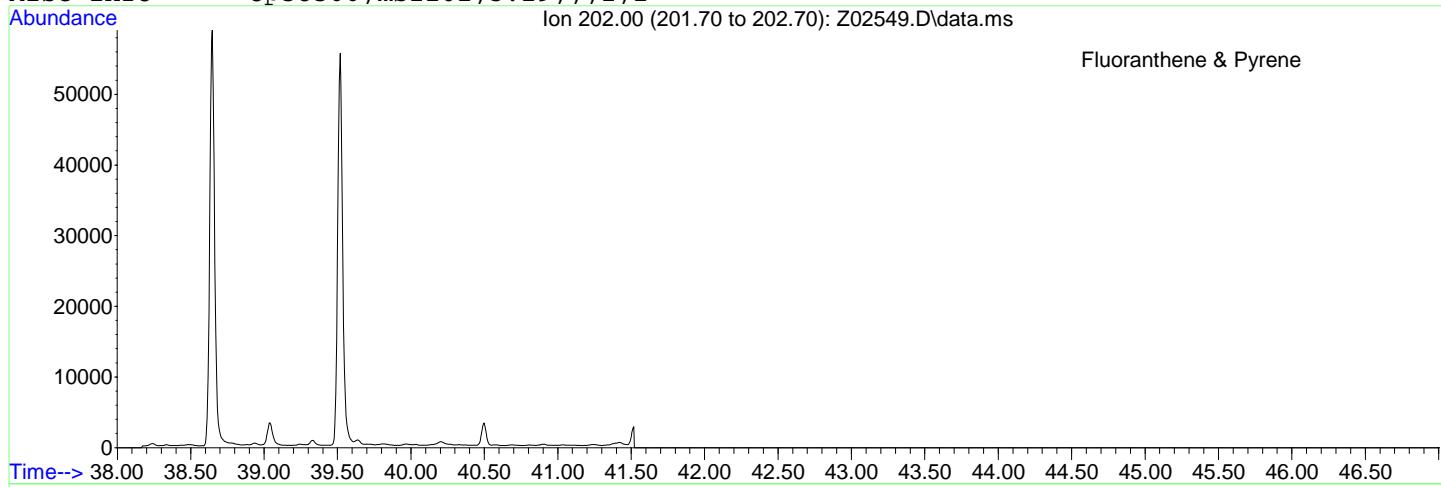
Abundance

Ion 240.00 (239.70 to 240.70): Z02549.D\data.ms

C4-Dibenzothiophenes



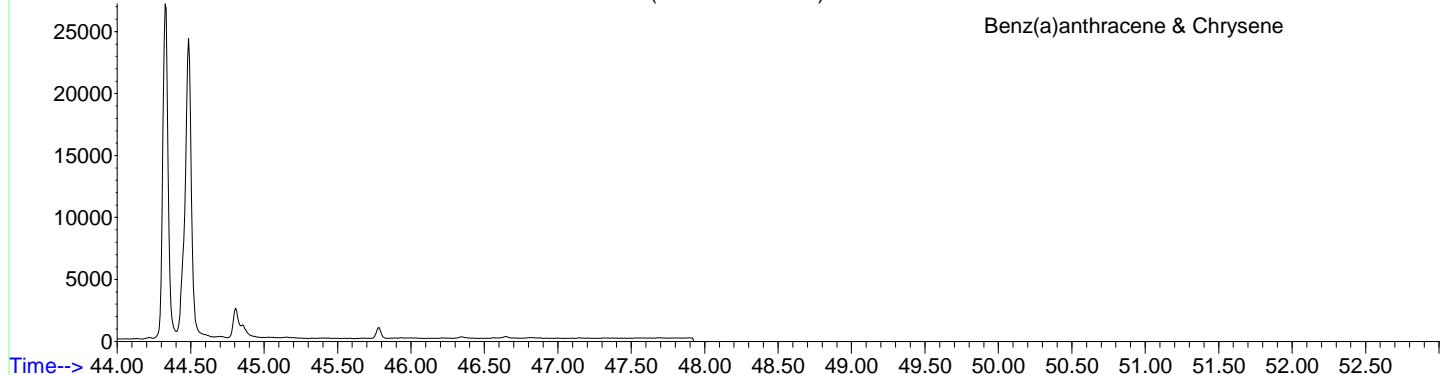
File: Z:\2\data\Z140605\Z02549.D  
Date Acquired: 6 Jun 2014 11:26 am  
Method File: ZAPAHSIM-MTBE.M  
Sample Name: mc30898-3  
Misc Info: op38366,msz101,5.19,,,2,1



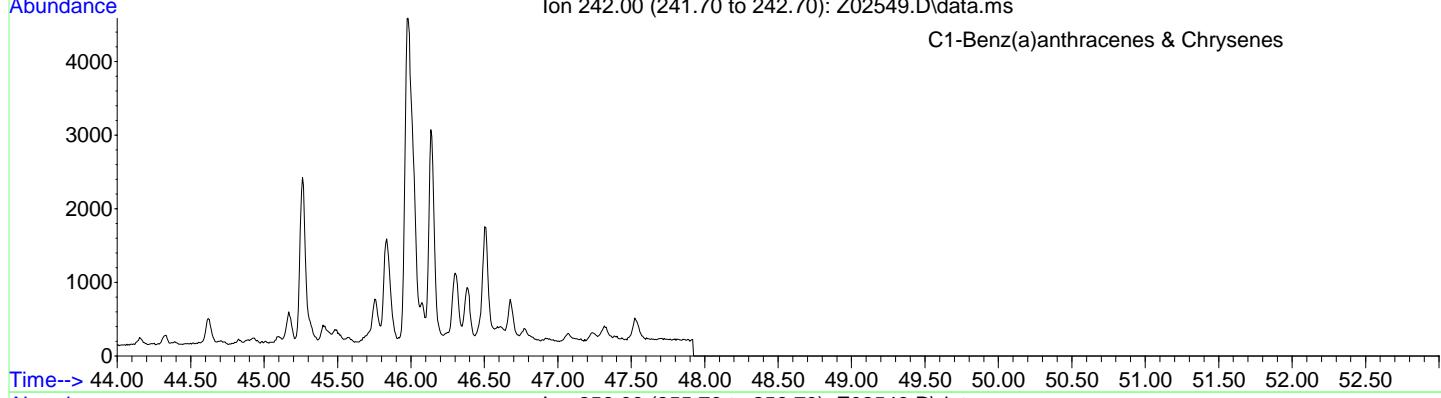
File: Z:\2\data\Z140605\Z02549.D  
Date Acquired: 6 Jun 2014 11:26 am  
Sample Name: mc30898-3  
Misc Info: op38366,msz101,5.19,,,2,1

Abundance Ion 228.00 (227.70 to 228.70): Z02549.D\data.ms

Benz(a)anthracene & Chrysene

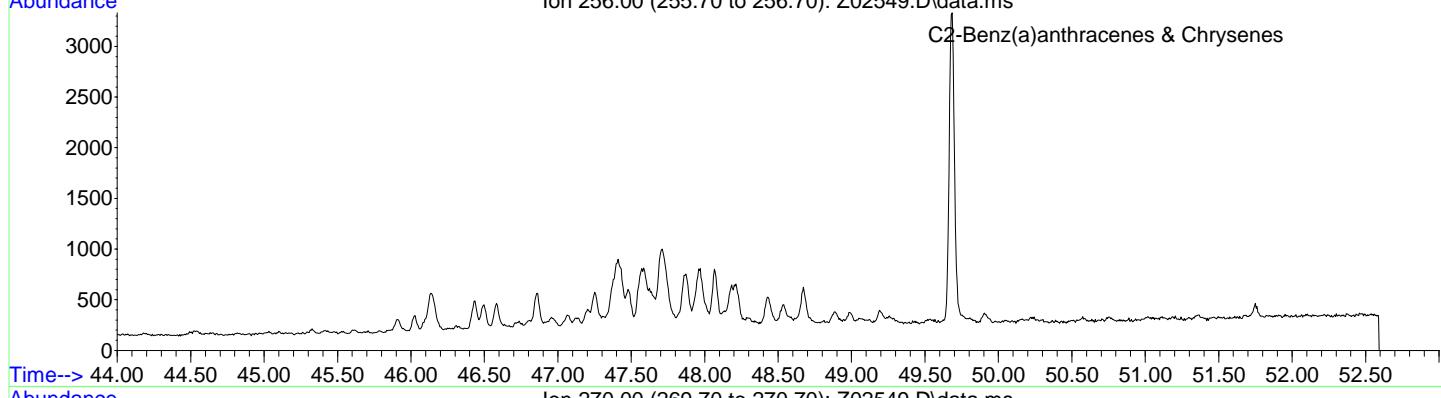


Time--> 44.00 44.50 45.00 45.50 46.00 46.50 47.00 47.50 48.00 48.50 49.00 49.50 50.00 50.50 51.00 51.50 52.00 52.50



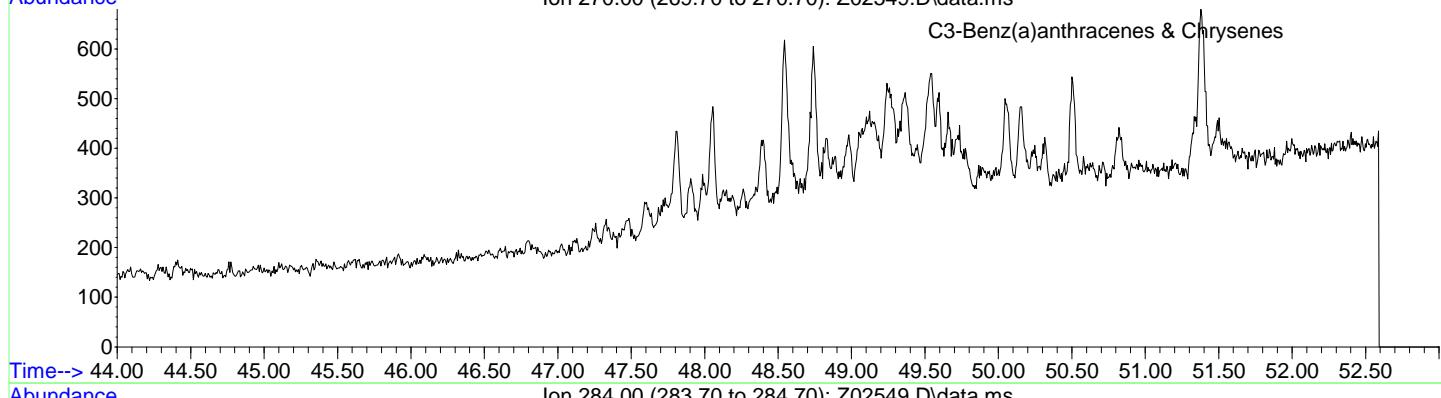
C1-Benz(a)anthracenes & Chrysenes

Time--> 44.00 44.50 45.00 45.50 46.00 46.50 47.00 47.50 48.00 48.50 49.00 49.50 50.00 50.50 51.00 51.50 52.00 52.50



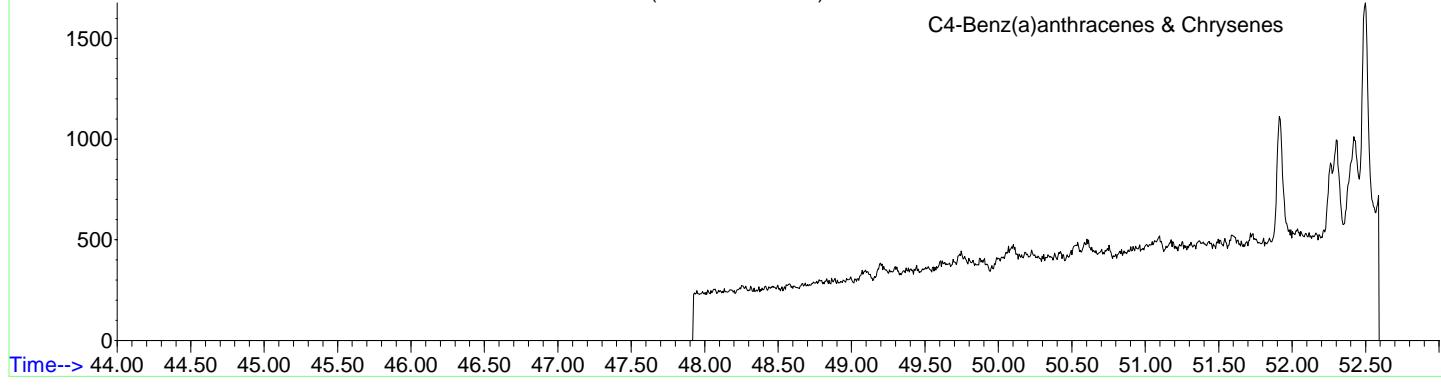
C2-Benz(a)anthracenes & Chrysenes

Time--> 44.00 44.50 45.00 45.50 46.00 46.50 47.00 47.50 48.00 48.50 49.00 49.50 50.00 50.50 51.00 51.50 52.00 52.50



C3-Benz(a)anthracenes & Chrysenes

Time--> 44.00 44.50 45.00 45.50 46.00 46.50 47.00 47.50 48.00 48.50 49.00 49.50 50.00 50.50 51.00 51.50 52.00 52.50



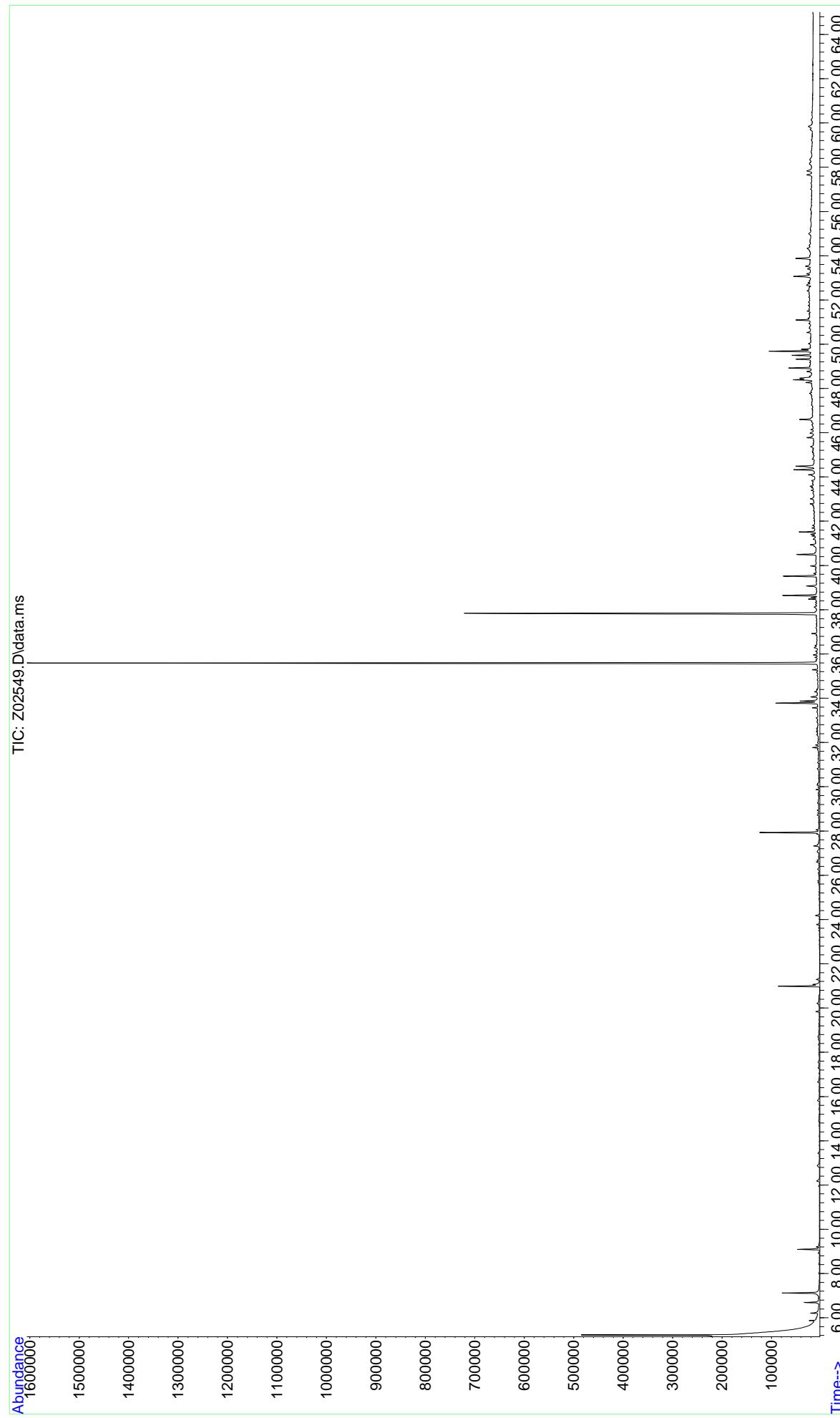
C4-Benz(a)anthracenes & Chrysenes

Time--> 44.00 44.50 45.00 45.50 46.00 46.50 47.00 47.50 48.00 48.50 49.00 49.50 50.00 50.50 51.00 51.50 52.00 52.50

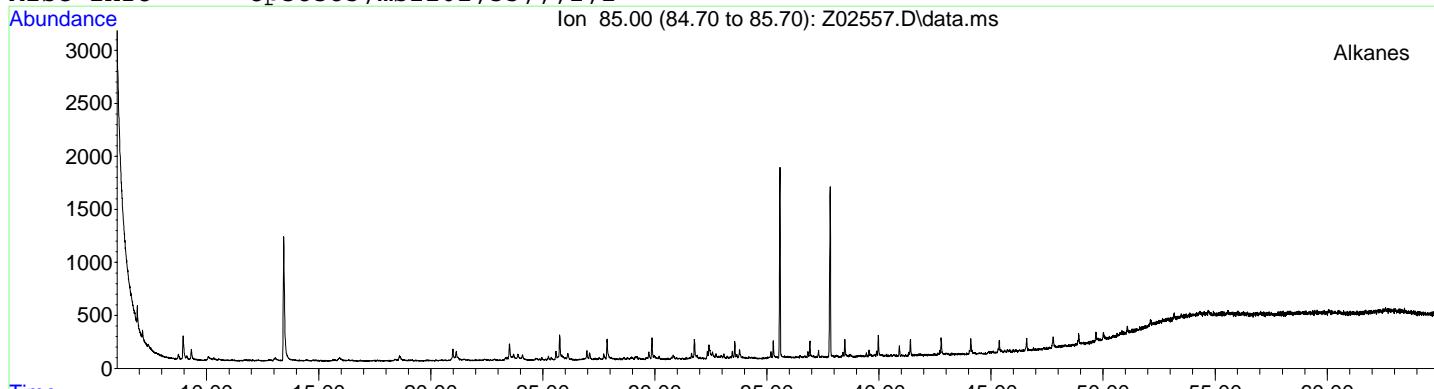
## ACCUTEST

## GC/MS TOTAL ION CHROMATOGRAM

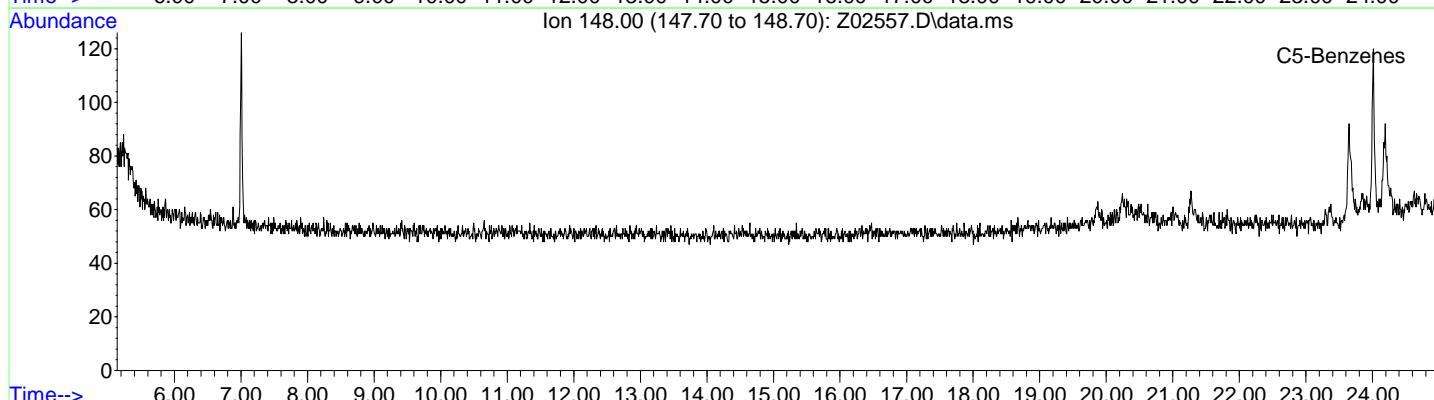
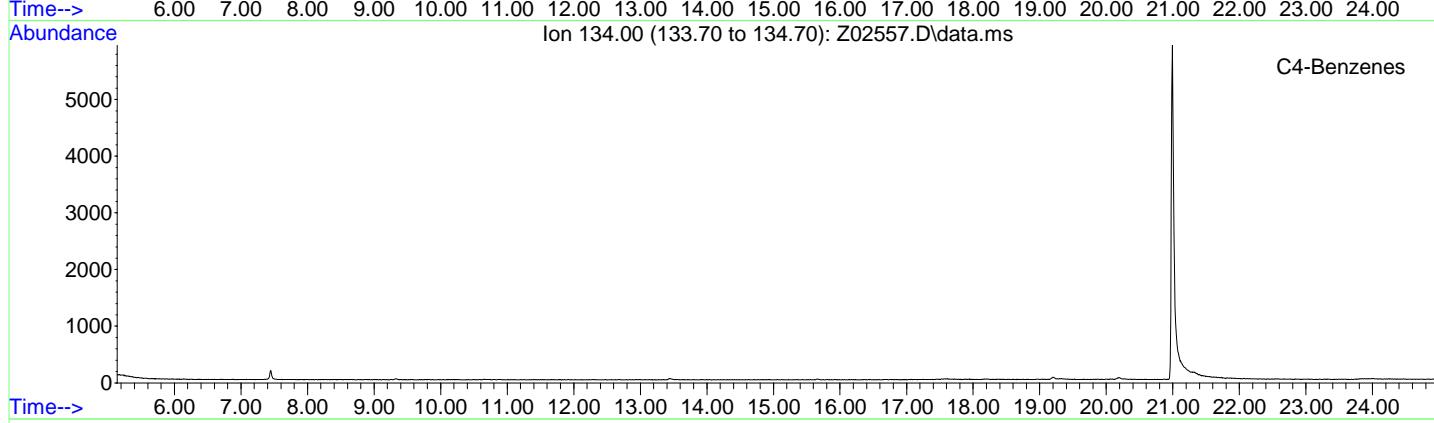
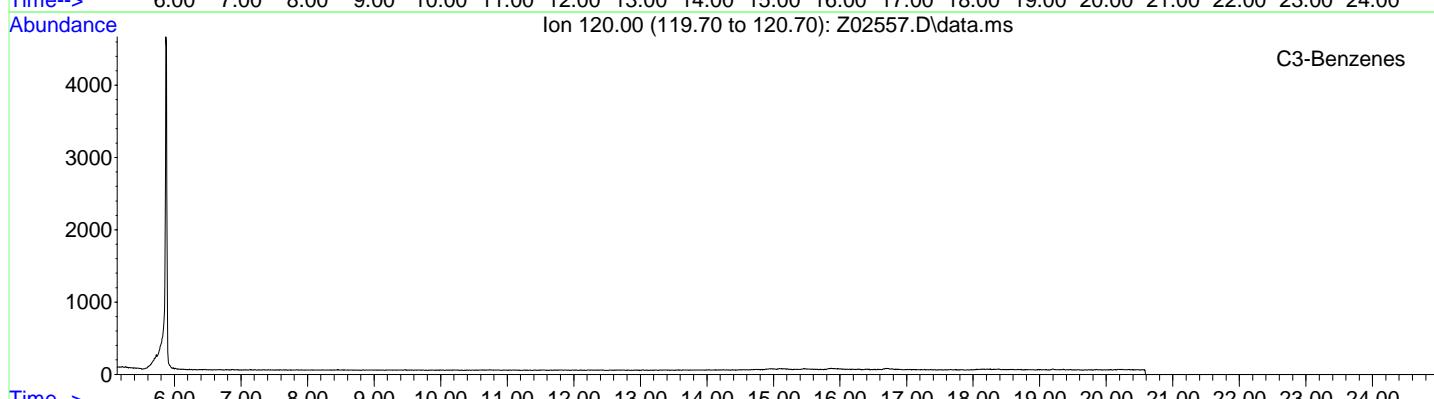
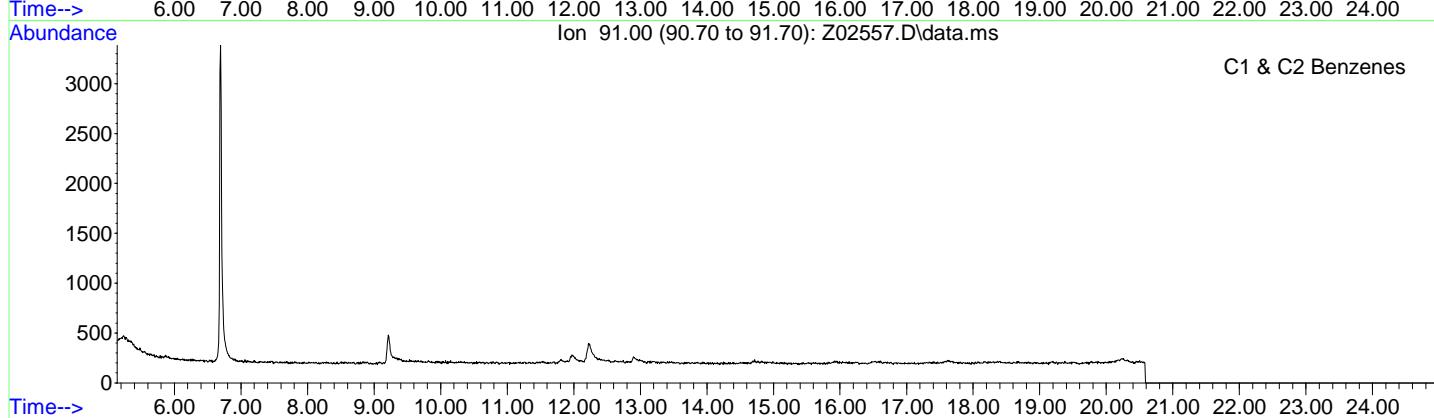
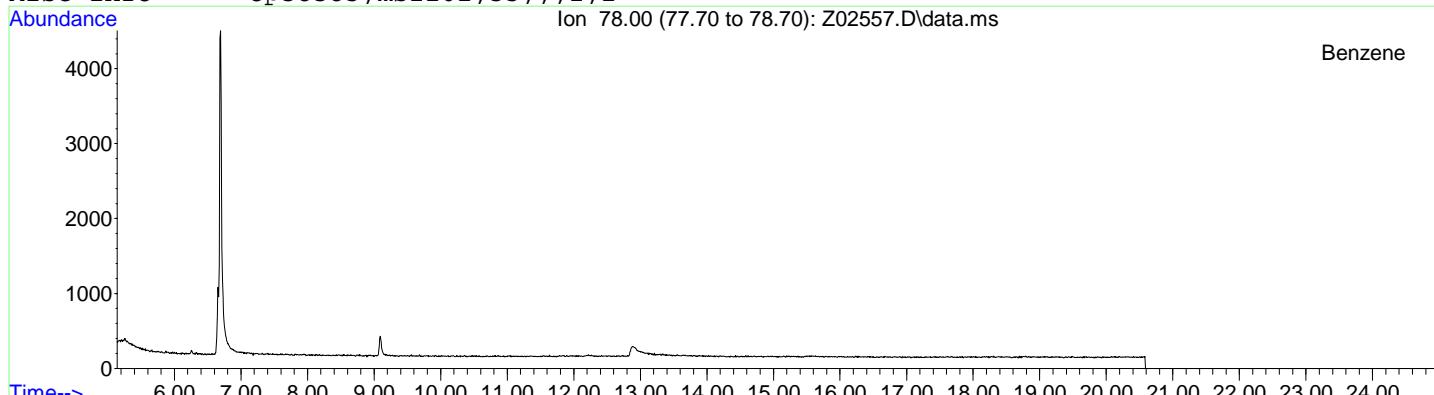
File: Z:\2\data\Z140605\Z02549.D  
 Date Acquired: 6 Jun 2014 11:26 am  
 Method File: ZAPAHSIM-MTBE.M  
 Sample Name: mc30898-3  
 Misc Info: op38366,msz101,5.19,,,2,1



File: Z:\2\data\Z140605\Z02557.D  
Date Acquired: 6 Jun 2014 9:51 pm  
Sample Name: mc30898-4  
Misc Info: op38385,msz101,35,,,2,1

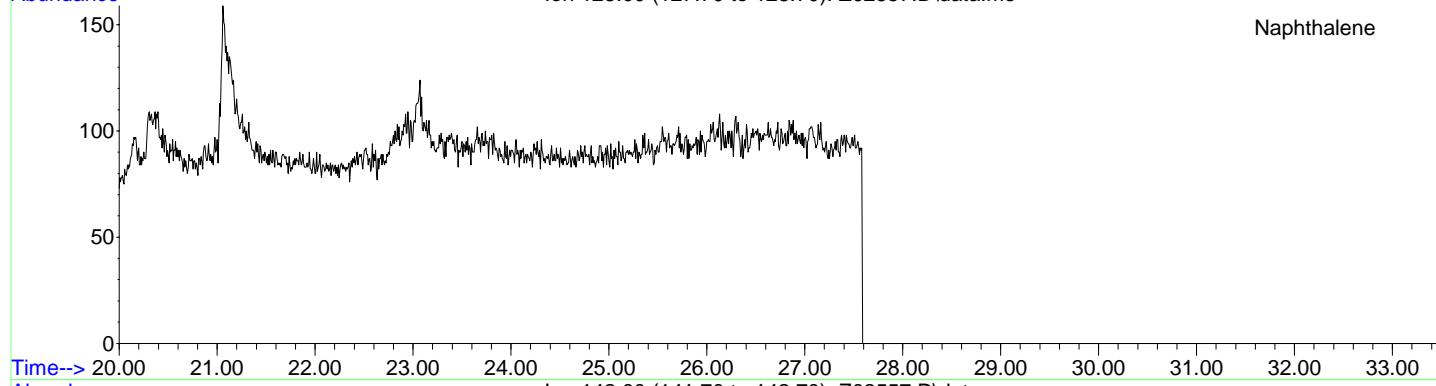


File: Z:\2\data\Z140605\Z02557.D  
Date Acquired: 6 Jun 2014 9:51 pm  
Sample Name: mc30898-4  
Misc Info: op38385,msz101,35,,,2,1



File: Z:\2\data\Z140605\Z02557.D  
Date Acquired: 6 Jun 2014 9:51 pm  
Sample Name: mc30898-4  
Misc Info: op38385,msz101,35,,2,1

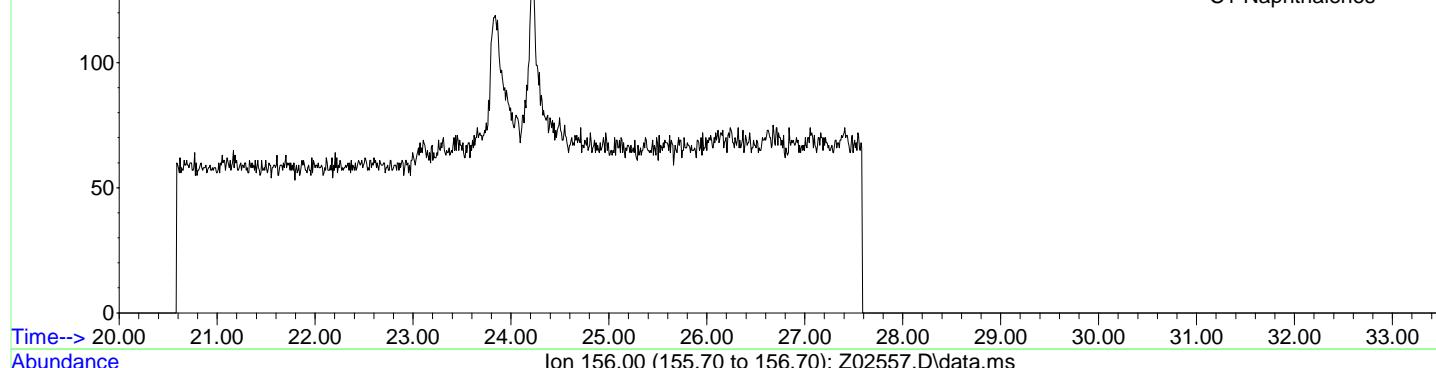
Abundance Ion 128.00 (127.70 to 128.70): Z02557.D\data.ms



Time--> 20.00 21.00 22.00 23.00 24.00 25.00 26.00 27.00 28.00 29.00 30.00 31.00 32.00 33.00

Abundance Ion 142.00 (141.70 to 142.70): Z02557.D\data.ms

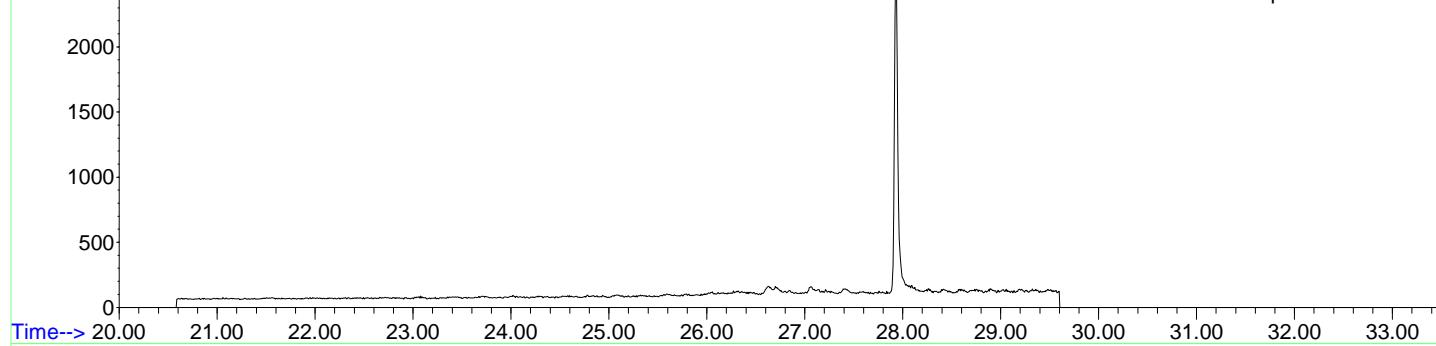
C1-Naphthalenes



Time--> 20.00 21.00 22.00 23.00 24.00 25.00 26.00 27.00 28.00 29.00 30.00 31.00 32.00 33.00

Abundance Ion 156.00 (155.70 to 156.70): Z02557.D\data.ms

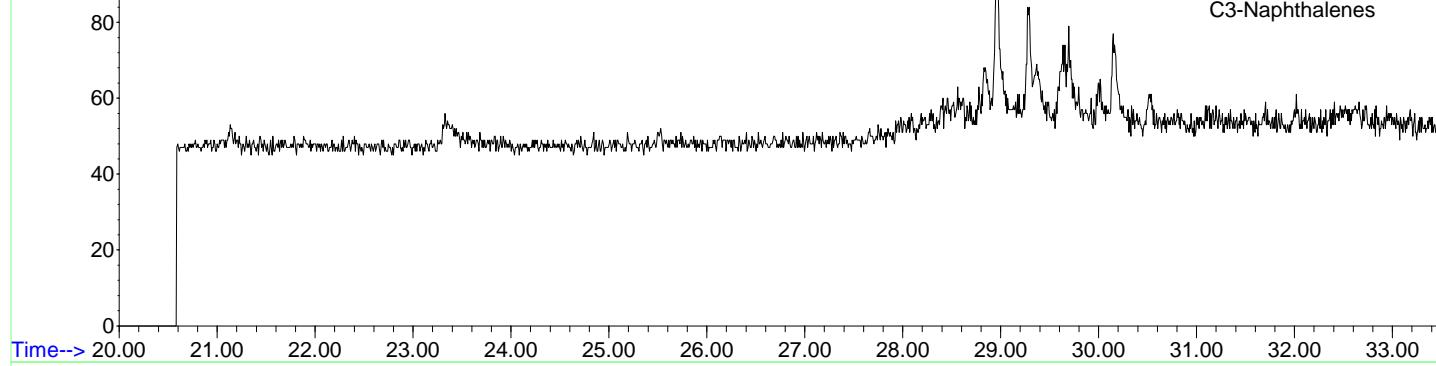
C2-Naphthalenes



Time--> 20.00 21.00 22.00 23.00 24.00 25.00 26.00 27.00 28.00 29.00 30.00 31.00 32.00 33.00

Abundance Ion 170.00 (169.70 to 170.70): Z02557.D\data.ms

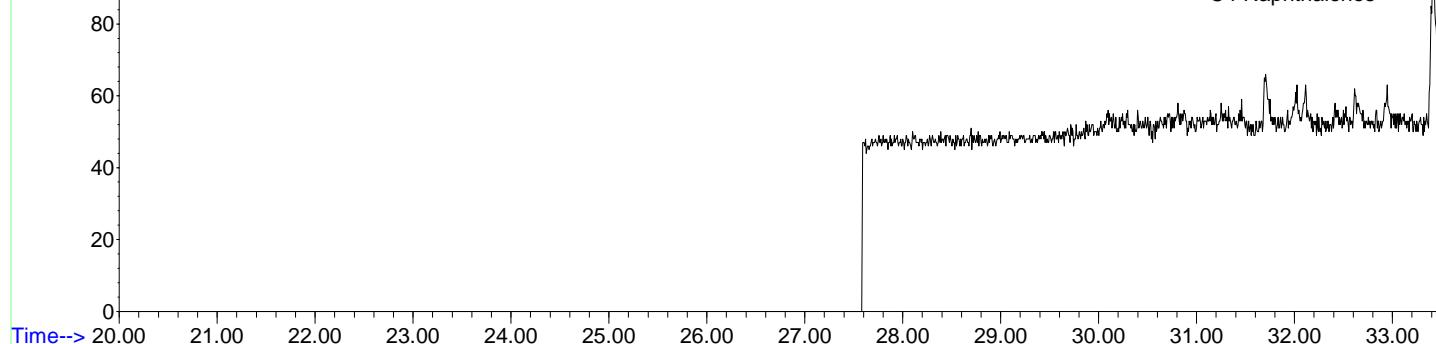
C3-Naphthalenes



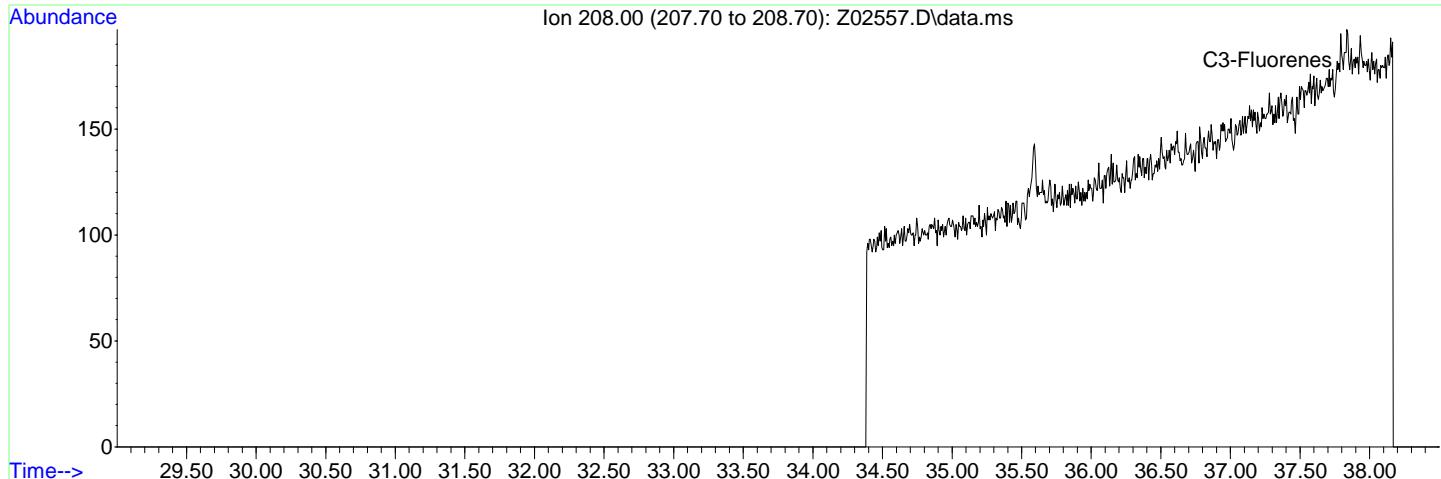
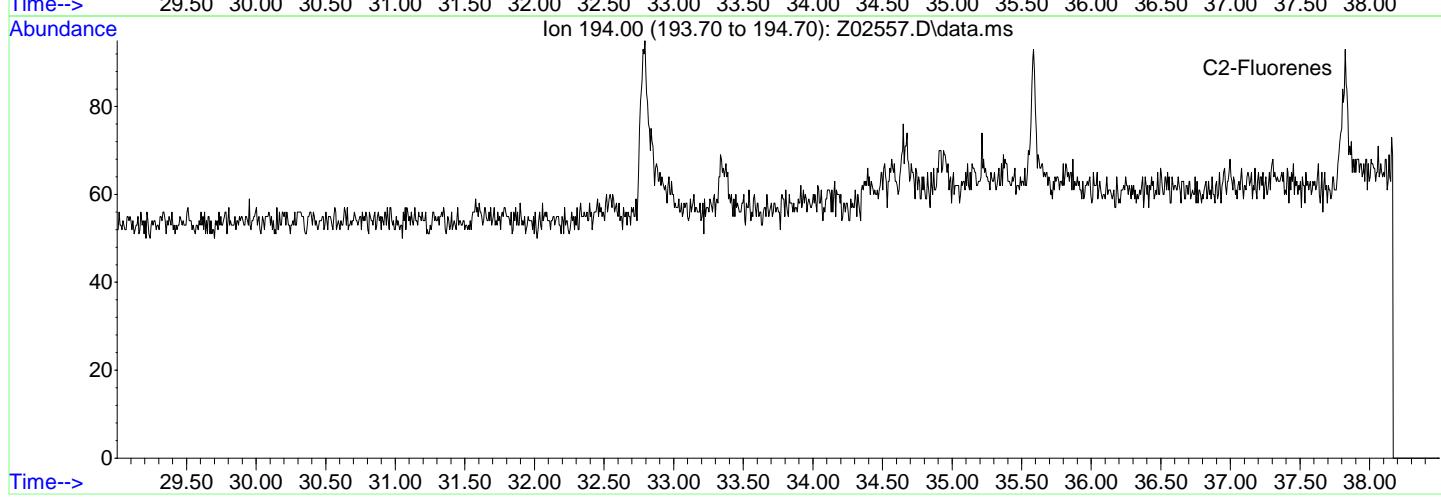
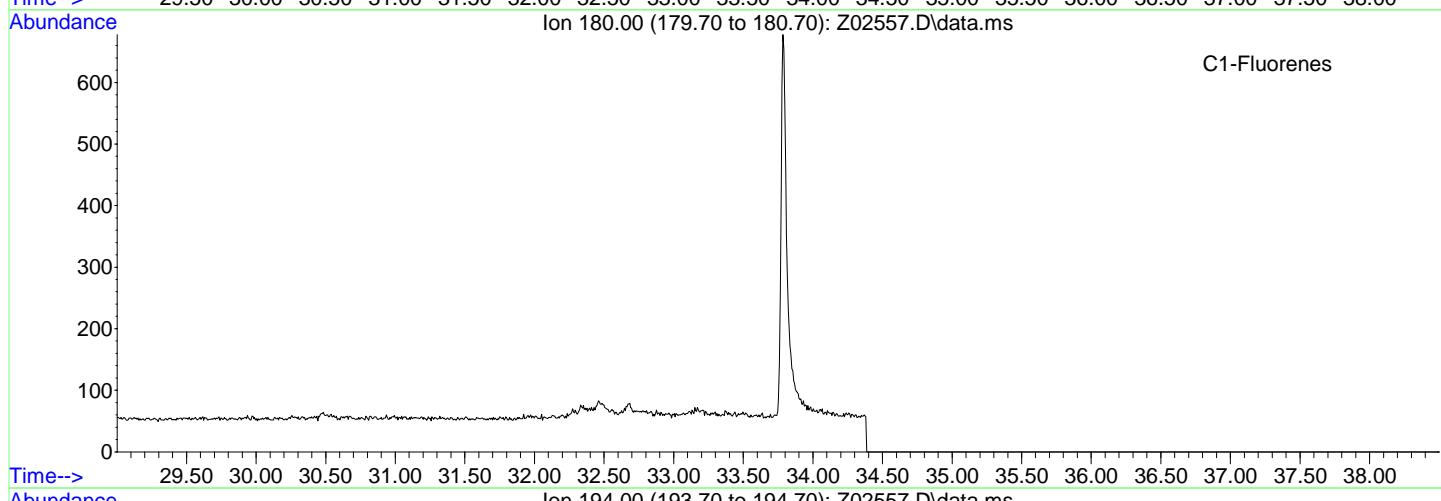
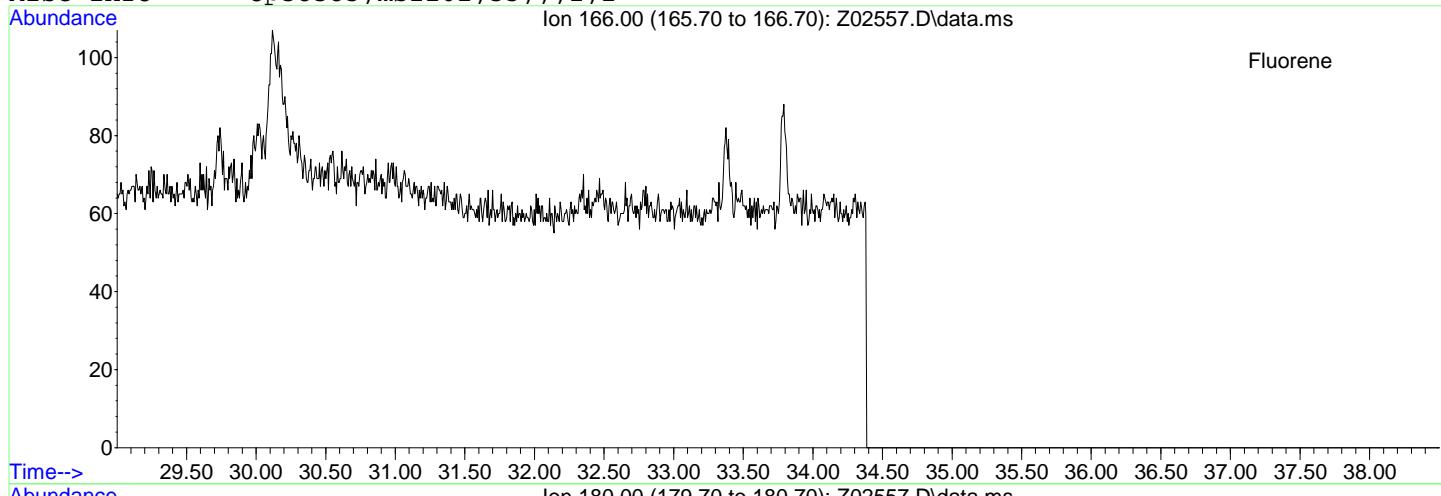
Time--> 20.00 21.00 22.00 23.00 24.00 25.00 26.00 27.00 28.00 29.00 30.00 31.00 32.00 33.00

Abundance Ion 184.00 (183.70 to 184.70): Z02557.D\data.ms

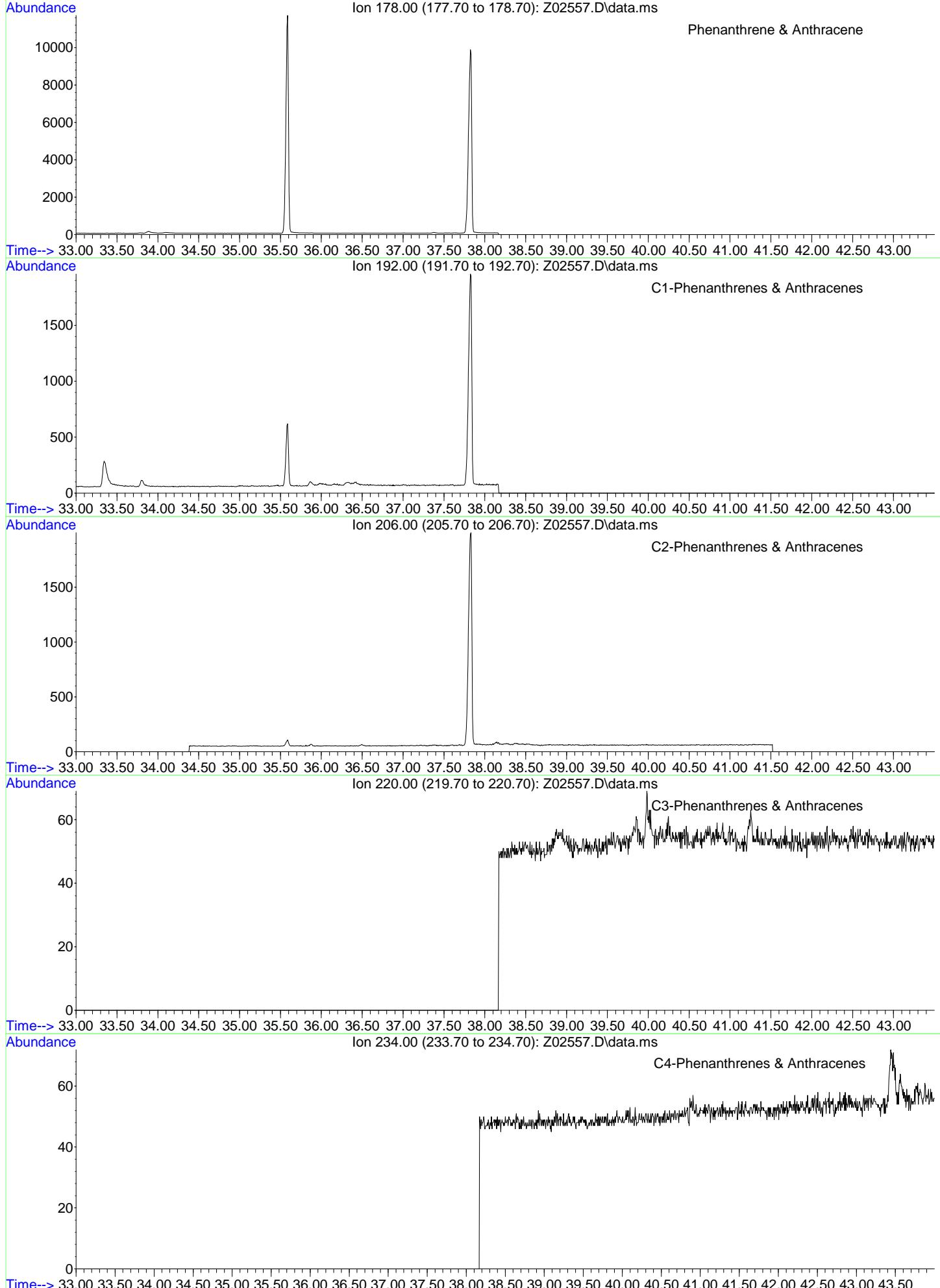
C4-Naphthalenes



File: Z:\2\data\Z140605\Z02557.D  
Date Acquired: 6 Jun 2014 9:51 pm  
Method File: ZAPAHSIM-MTBE.M  
Sample Name: mc30898-4  
Misc Info: op38385,msz101,35,,2,1

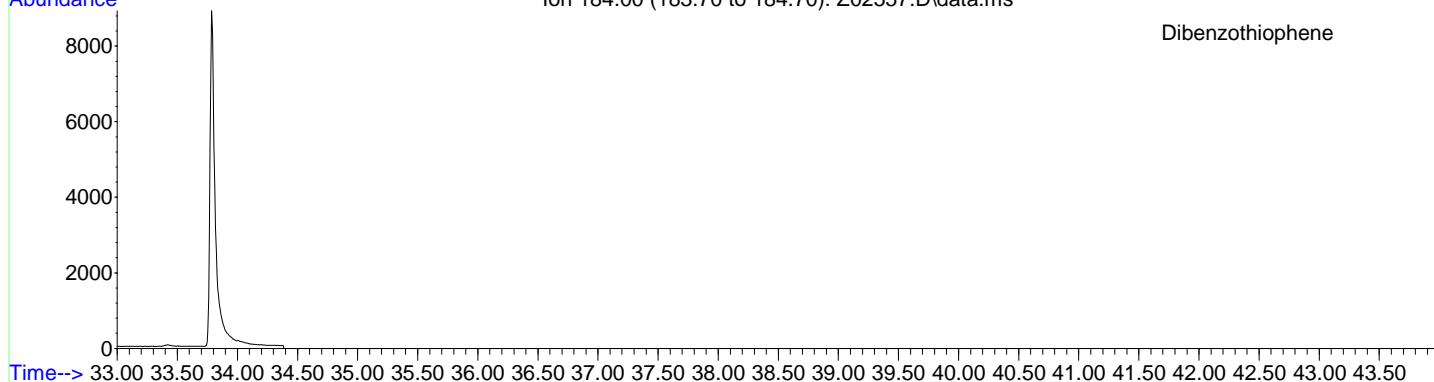


File: Z:\2\data\Z140605\Z02557.D  
Date Acquired: 6 Jun 2014 9:51 pm  
Sample Name: mc30898-4  
Misc Info: op38385,msz101,35,,,2,1



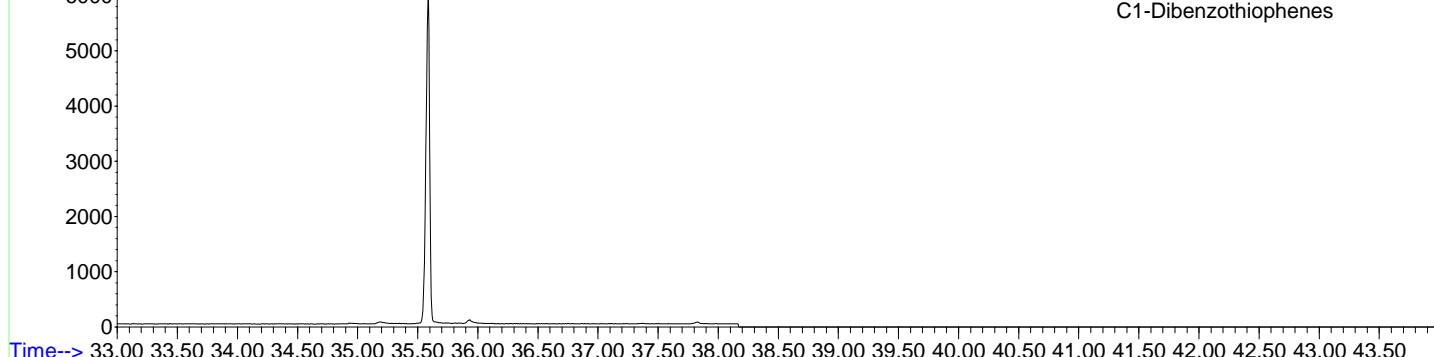
File: Z:\2\data\Z140605\Z02557.D  
Date Acquired: 6 Jun 2014 9:51 pm  
Sample Name: mc30898-4  
Misc Info: op38385,msz101,35,,2,1

Abundance Ion 184.00 (183.70 to 184.70): Z02557.D\data.ms



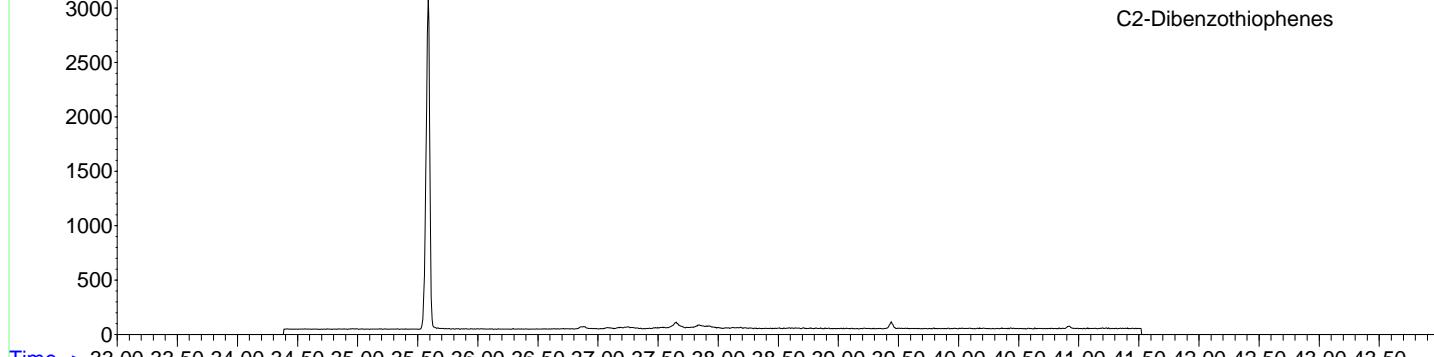
Time--> 33.00 33.50 34.00 34.50 35.00 35.50 36.00 36.50 37.00 37.50 38.00 38.50 39.00 39.50 40.00 40.50 41.00 41.50 42.00 42.50 43.00 43.50

Abundance Ion 198.00 (197.70 to 198.70): Z02557.D\data.ms



Time--> 33.00 33.50 34.00 34.50 35.00 35.50 36.00 36.50 37.00 37.50 38.00 38.50 39.00 39.50 40.00 40.50 41.00 41.50 42.00 42.50 43.00 43.50

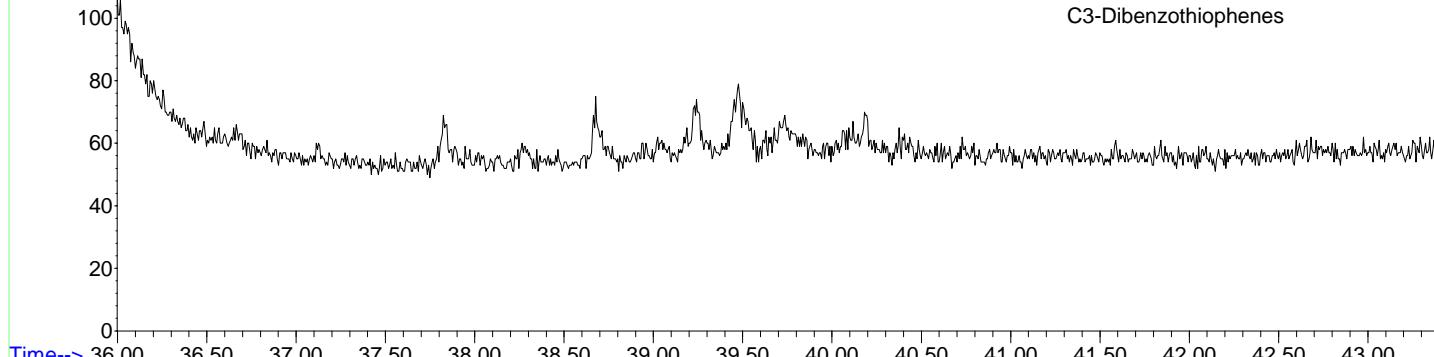
Abundance Ion 212.00 (211.70 to 212.70): Z02557.D\data.ms



Time--> 33.00 33.50 34.00 34.50 35.00 35.50 36.00 36.50 37.00 37.50 38.00 38.50 39.00 39.50 40.00 40.50 41.00 41.50 42.00 42.50 43.00 43.50

Abundance Ion 226.00 (225.70 to 226.70): Z02557.D\data.ms

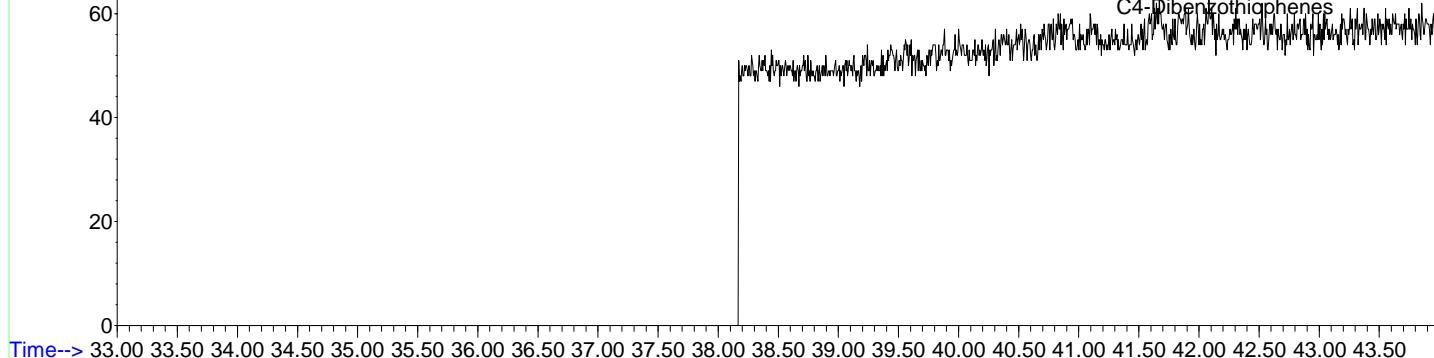
C3-Dibenzothiophenes



Time--> 36.00 36.50 37.00 37.50 38.00 38.50 39.00 39.50 40.00 40.50 41.00 41.50 42.00 42.50 43.00

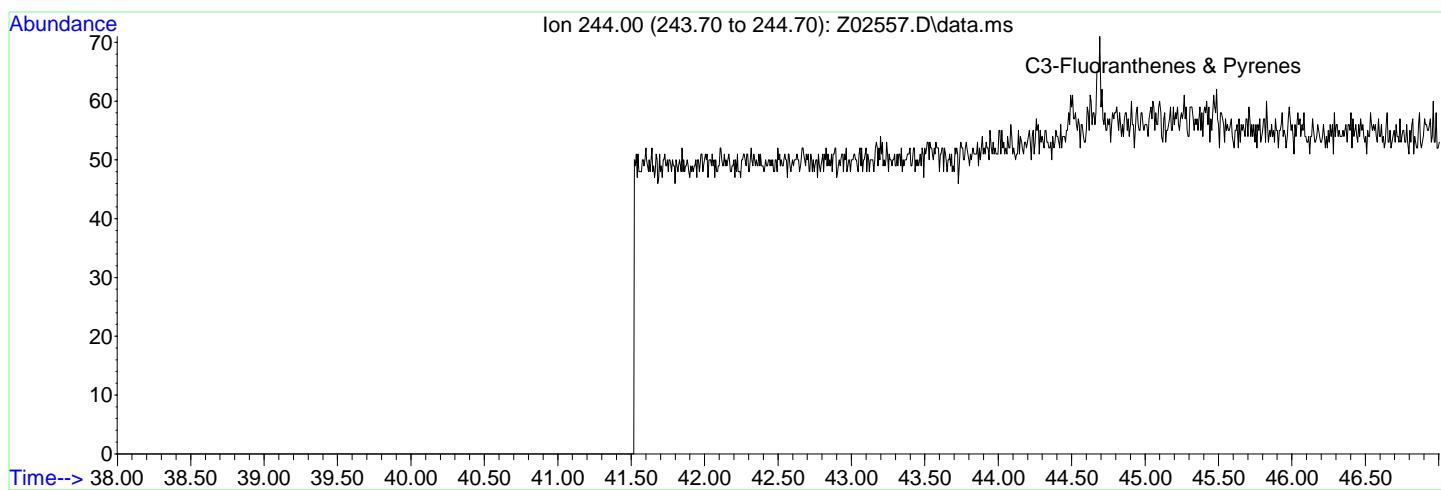
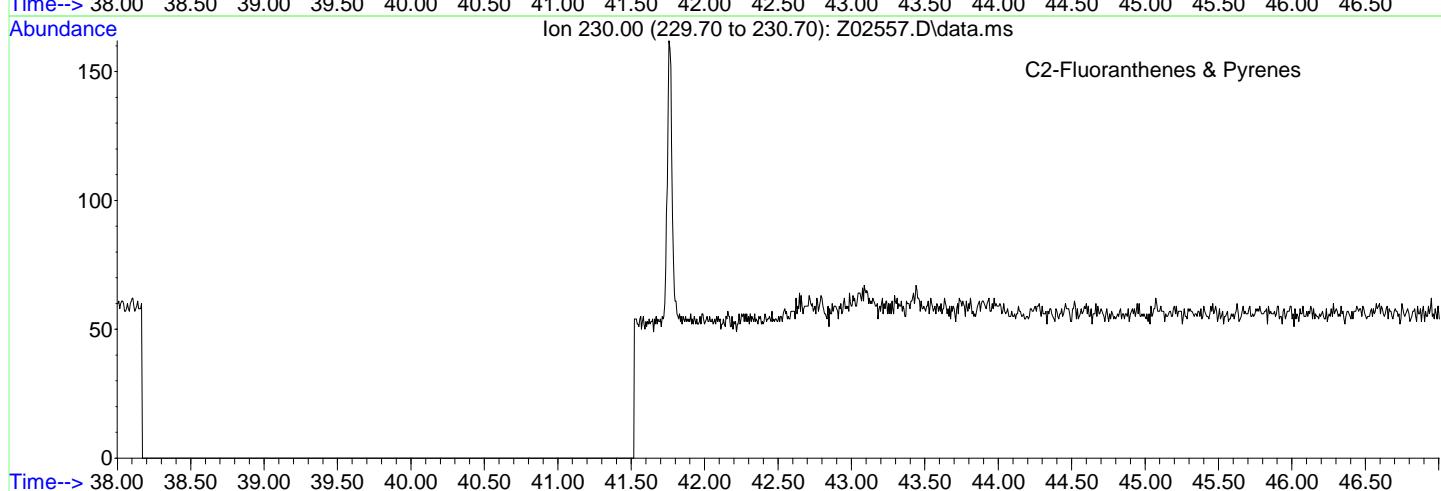
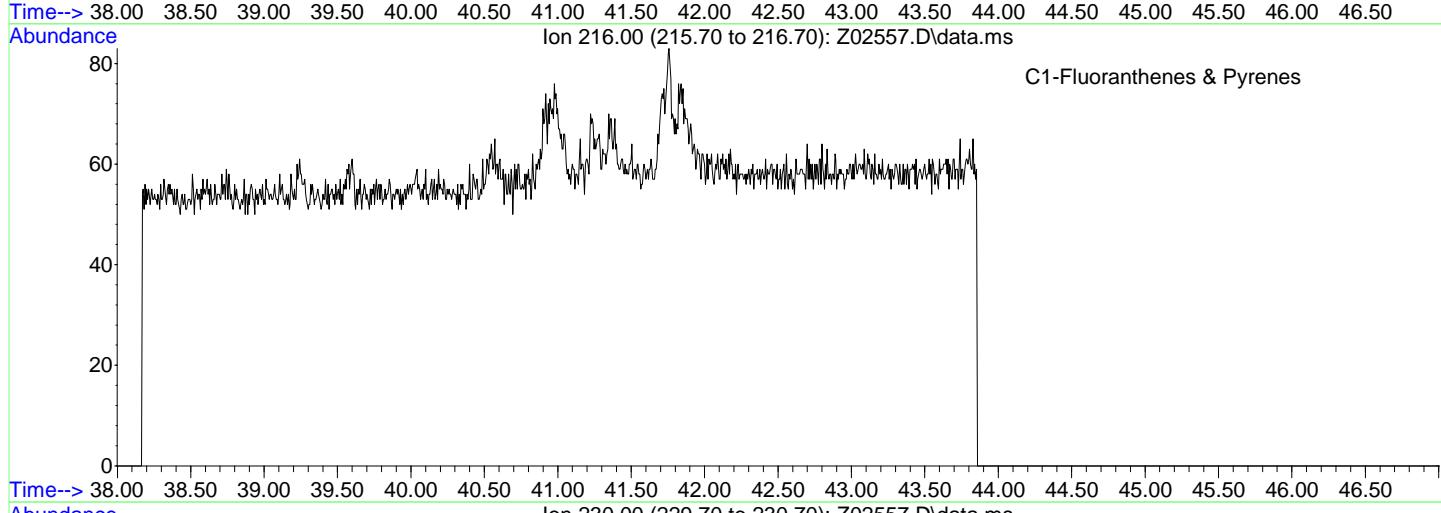
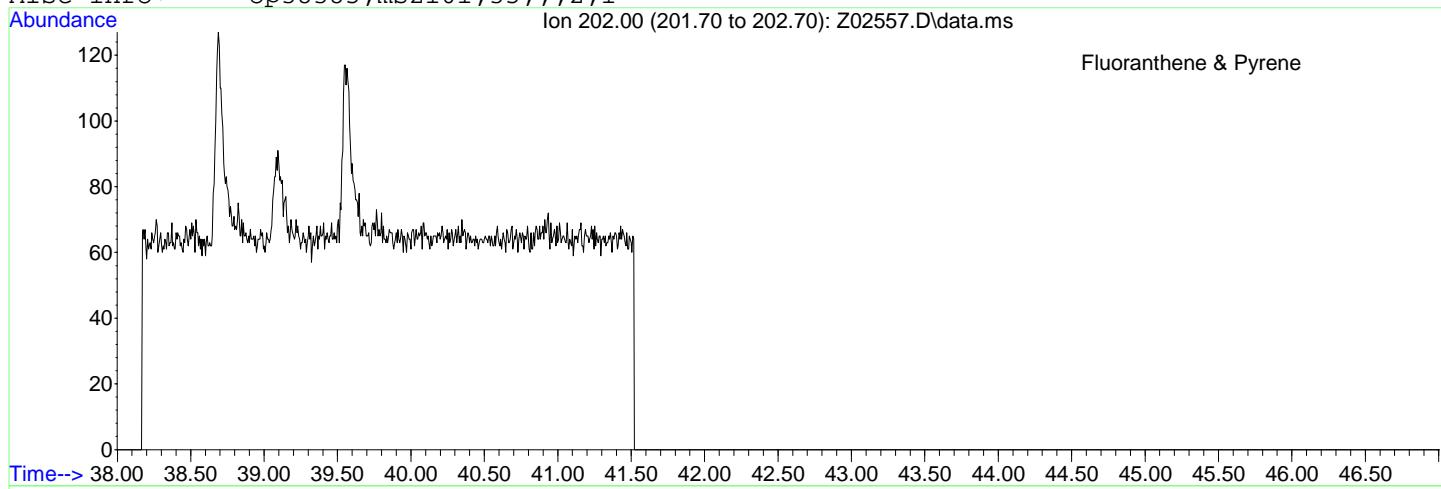
Abundance Ion 240.00 (239.70 to 240.70): Z02557.D\data.ms

C4-Dibenzothiophenes



Time--> 33.00 33.50 34.00 34.50 35.00 35.50 36.00 36.50 37.00 37.50 38.00 38.50 39.00 39.50 40.00 40.50 41.00 41.50 42.00 42.50 43.00 43.50

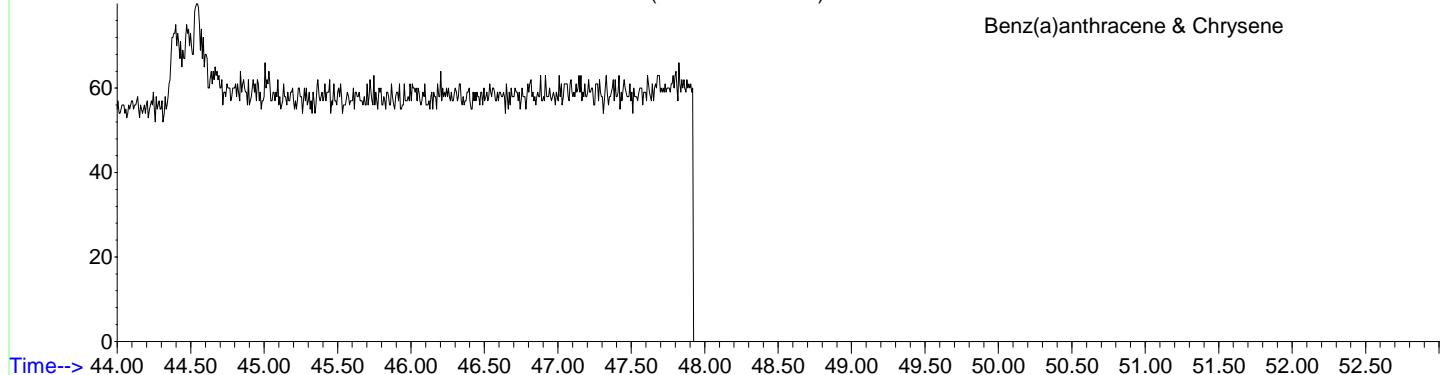
File: Z:\2\data\Z140605\Z02557.D  
Date Acquired: 6 Jun 2014 9:51 pm  
Method File: ZAPAHSIM-MTBE.M  
Sample Name: mc30898-4  
Misc Info: op38385,msz101,35,,2,1



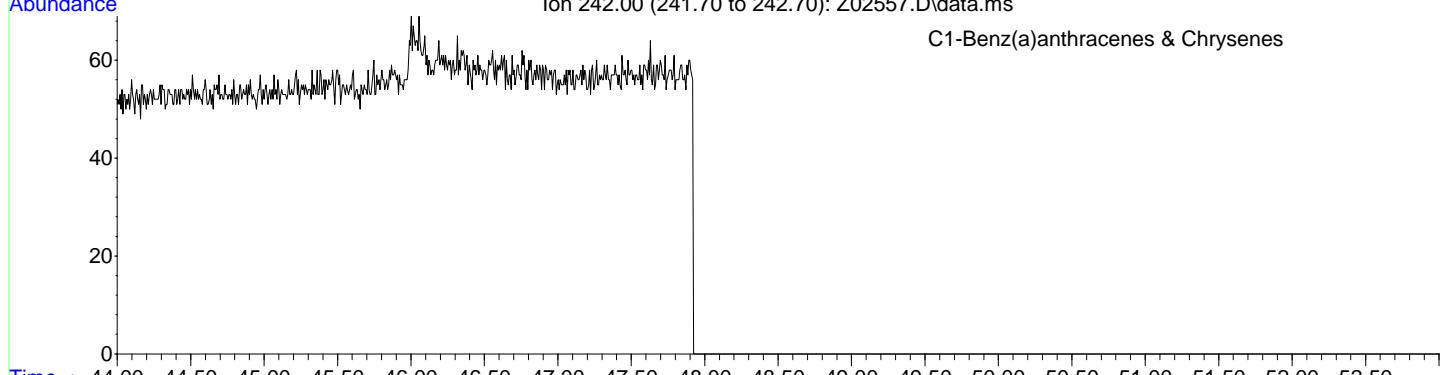
File: Z:\2\data\Z140605\Z02557.D  
Date Acquired: 6 Jun 2014 9:51 pm  
Sample Name: mc30898-4  
Misc Info: op38385,msz101,35,,,2,1

Abundance Ion 228.00 (227.70 to 228.70): Z02557.D\data.ms

Benz(a)anthracene & Chrysene

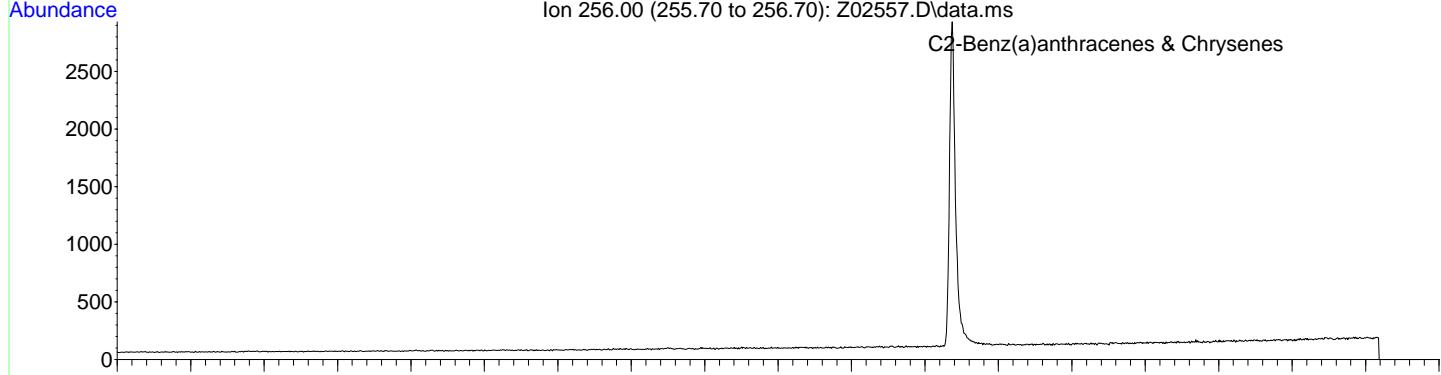


Time--> 44.00 44.50 45.00 45.50 46.00 46.50 47.00 47.50 48.00 48.50 49.00 49.50 50.00 50.50 51.00 51.50 52.00 52.50



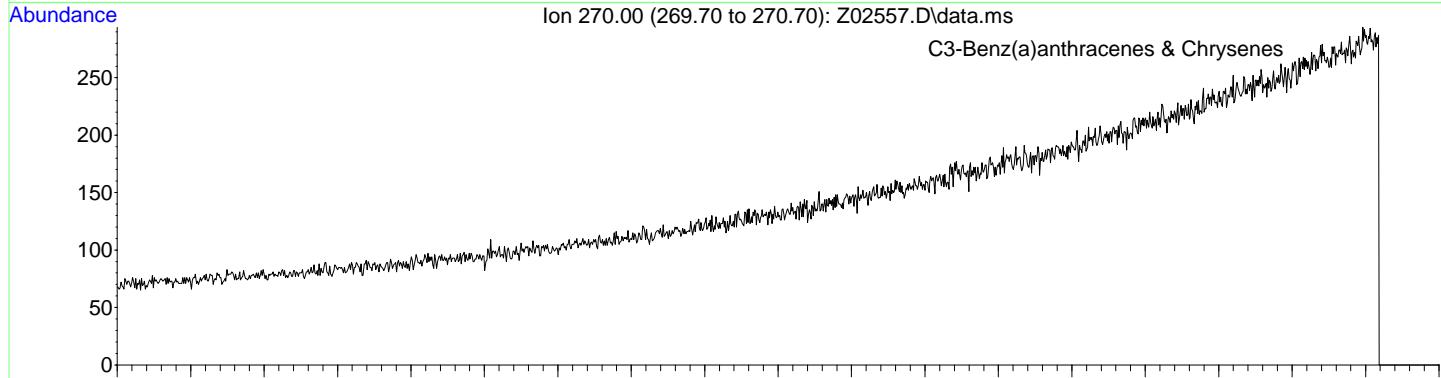
C1-Benz(a)anthracenes & Chrysenes

Time--> 44.00 44.50 45.00 45.50 46.00 46.50 47.00 47.50 48.00 48.50 49.00 49.50 50.00 50.50 51.00 51.50 52.00 52.50



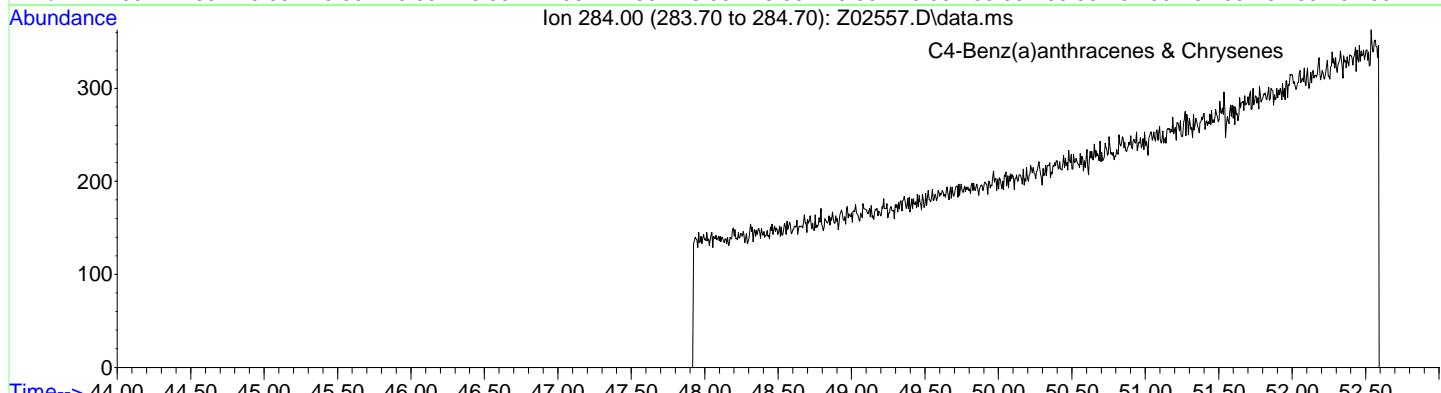
C2-Benz(a)anthracenes & Chrysenes

Time--> 44.00 44.50 45.00 45.50 46.00 46.50 47.00 47.50 48.00 48.50 49.00 49.50 50.00 50.50 51.00 51.50 52.00 52.50



C3-Benz(a)anthracenes & Chrysenes

Time--> 44.00 44.50 45.00 45.50 46.00 46.50 47.00 47.50 48.00 48.50 49.00 49.50 50.00 50.50 51.00 51.50 52.00 52.50



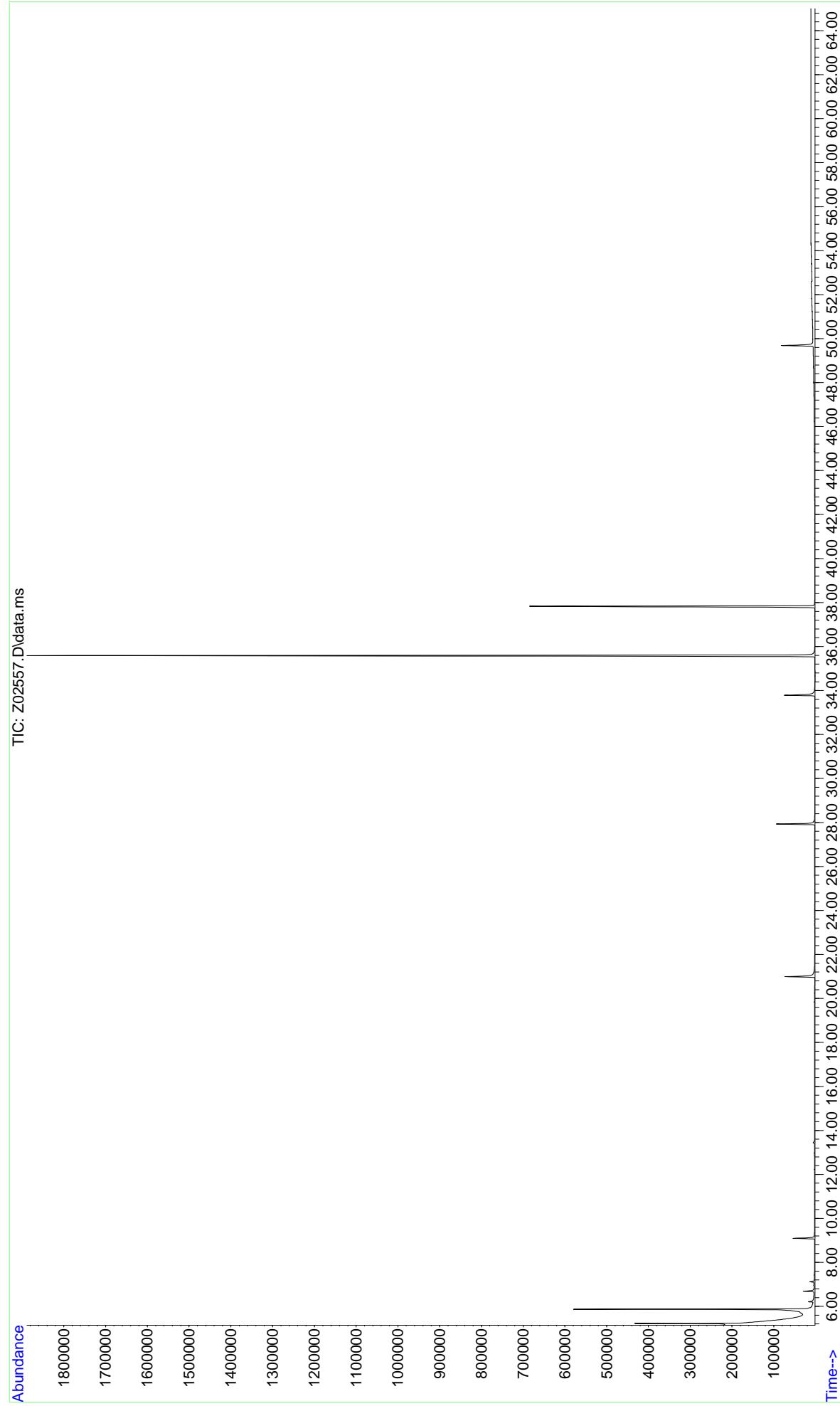
C4-Benz(a)anthracenes & Chrysenes

Time--> 44.00 44.50 45.00 45.50 46.00 46.50 47.00 47.50 48.00 48.50 49.00 49.50 50.00 50.50 51.00 51.50 52.00 52.50

## ACCUTEST

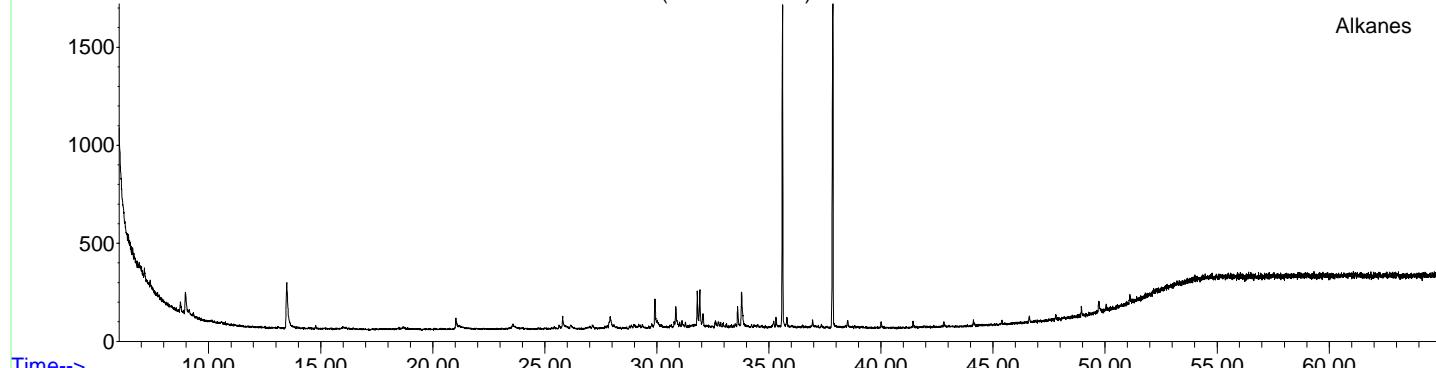
## GC/MS TOTAL ION CHROMATOGRAM

File: Z:\2\data\Z140605\Z02557.D  
Date Acquired: 6 Jun 2014 9:51 pm  
Method File: ZAPAHSIM-MTBE.M  
Sample Name: mc30898-4  
Misc Info: op38385,msz101,35,,2,1

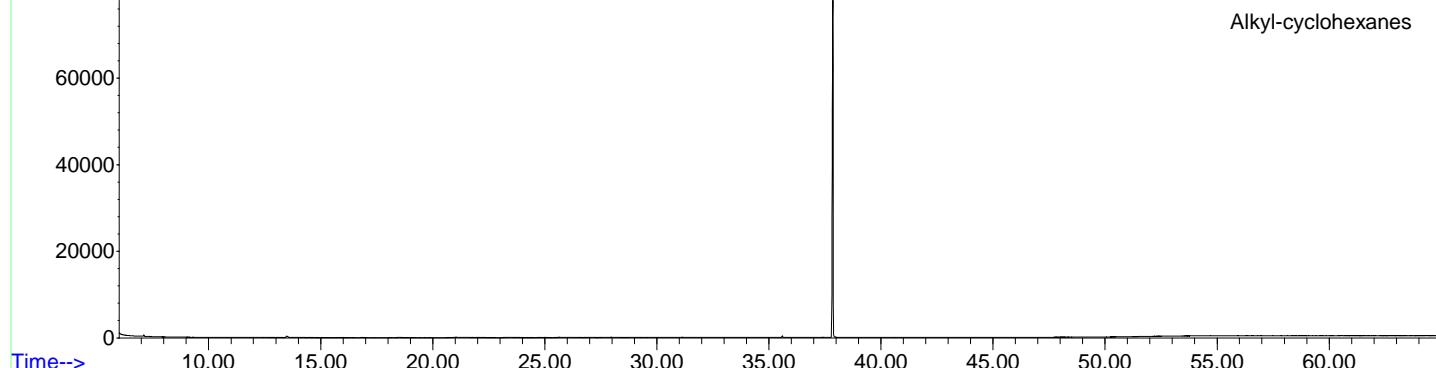


File: Z:\2\data\Z140604\Z02526.D  
Date Acquired: 5 Jun 2014 2:07 am  
Sample Name: op38366-mb, Method Blank  
Misc Info: op38366,msz100,5.00,,,2,1

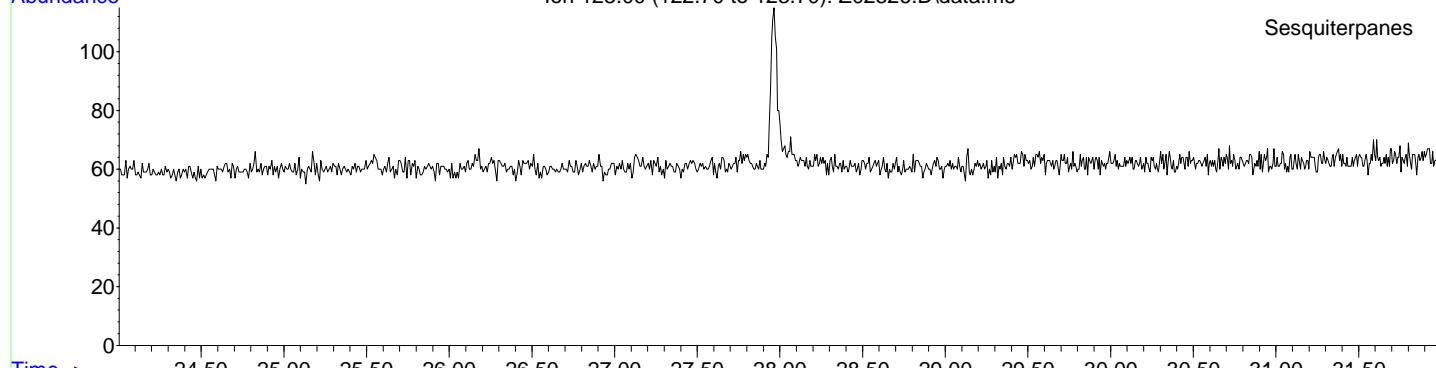
Abundance Ion 85.00 (84.70 to 85.70): Z02526.D\data.ms



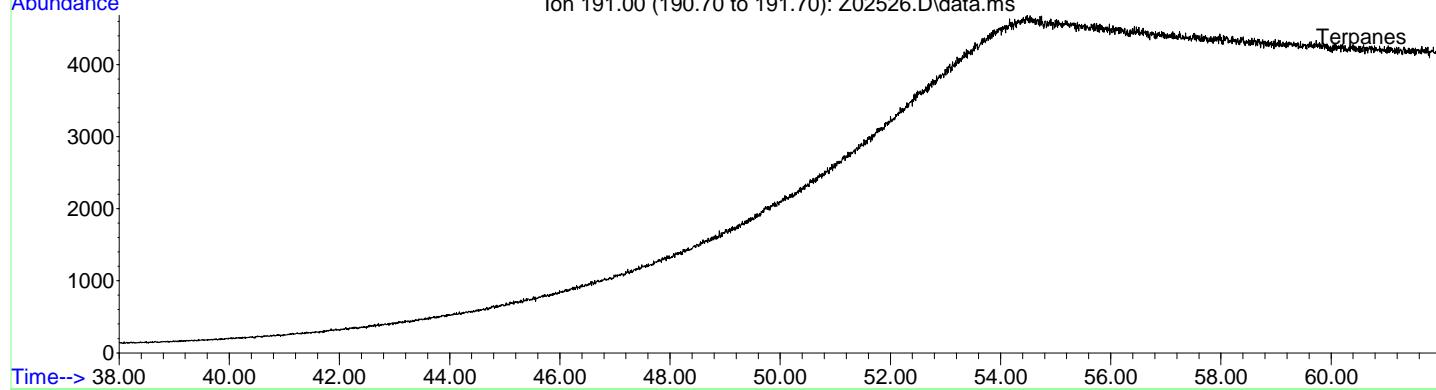
Time--> Abundance Ion 83.00 (82.70 to 83.70): Z02526.D\data.ms



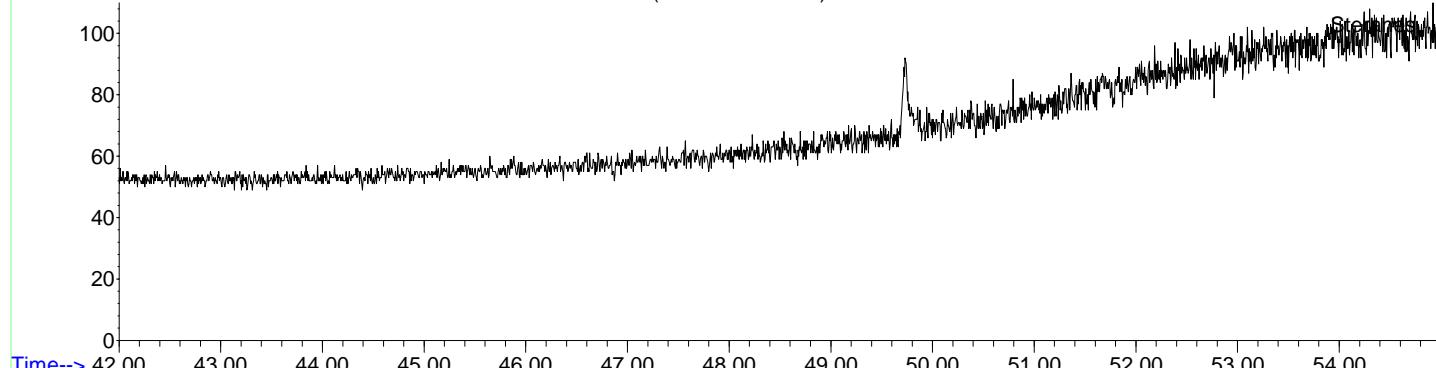
Time--> Abundance Ion 123.00 (122.70 to 123.70): Z02526.D\data.ms



Time--> Abundance Ion 191.00 (190.70 to 191.70): Z02526.D\data.ms



Time--> Abundance Ion 217.00 (216.70 to 217.70): Z02526.D\data.ms



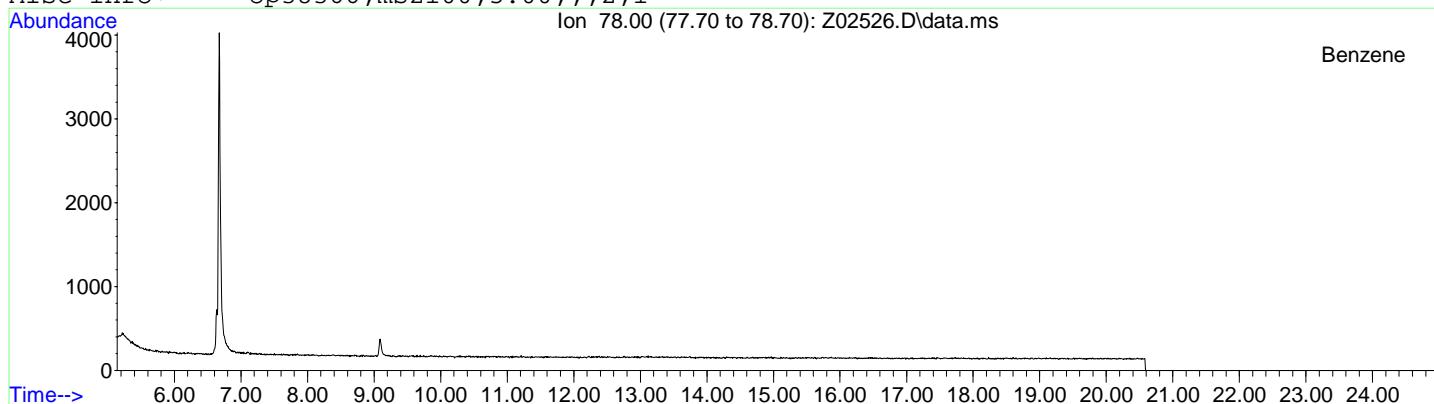
File: Z:\2\data\Z140604\Z02526.D

Date Acquired: 5 Jun 2014 2:07 am

Sample Name: op38366-mb, Method Blank

Misc Info: op38366,msz100,5.00,,,2,1

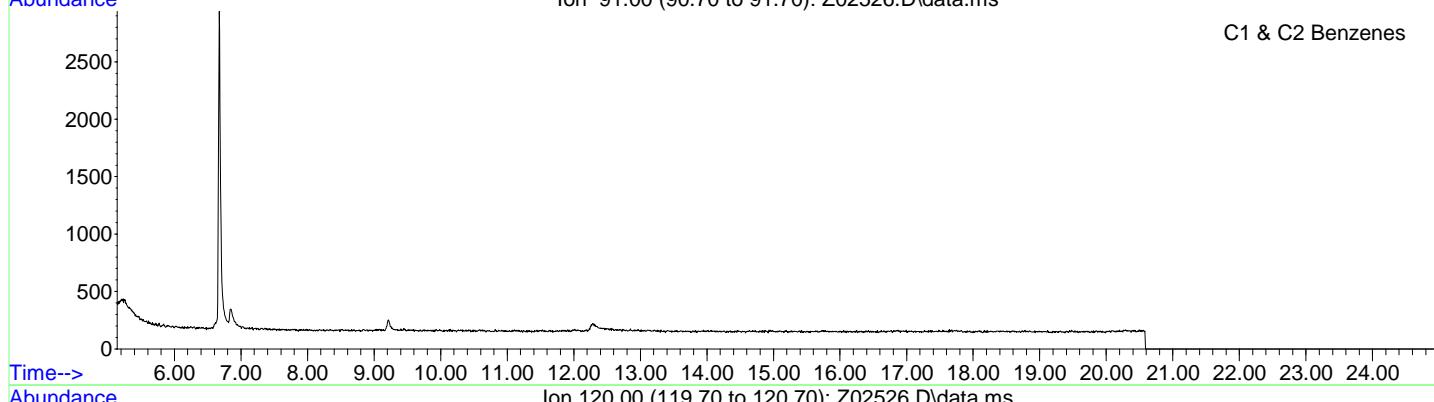
Ion 78.00 (77.70 to 78.70): Z02526.D\data.ms



Abundance

Ion 91.00 (90.70 to 91.70): Z02526.D\data.ms

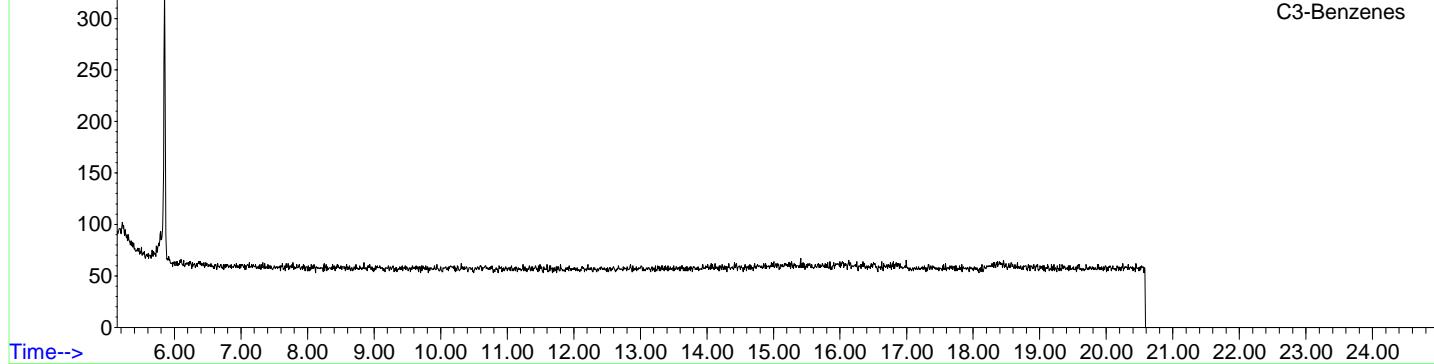
C1 & C2 Benzenes



Abundance

Ion 120.00 (119.70 to 120.70): Z02526.D\data.ms

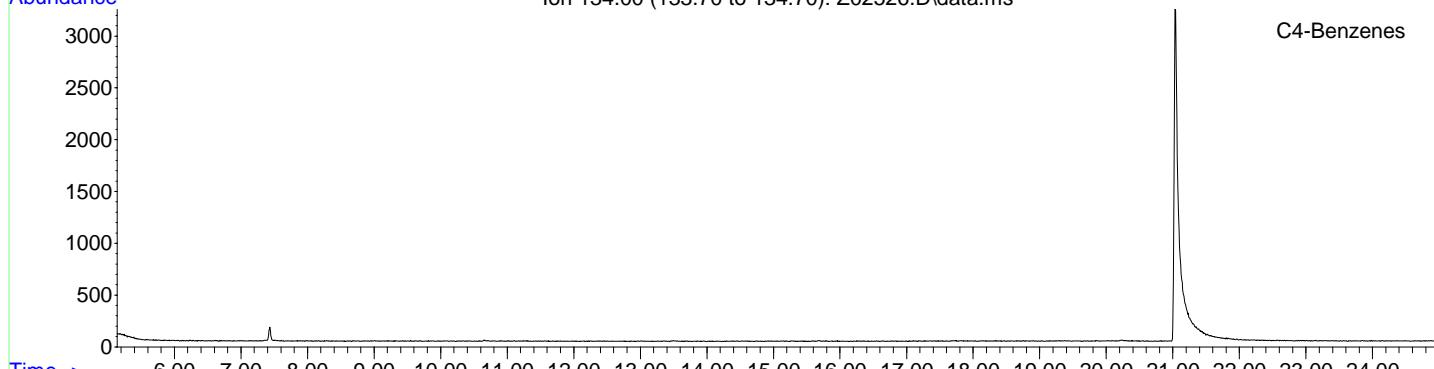
C3-Benzenes



Abundance

Ion 134.00 (133.70 to 134.70): Z02526.D\data.ms

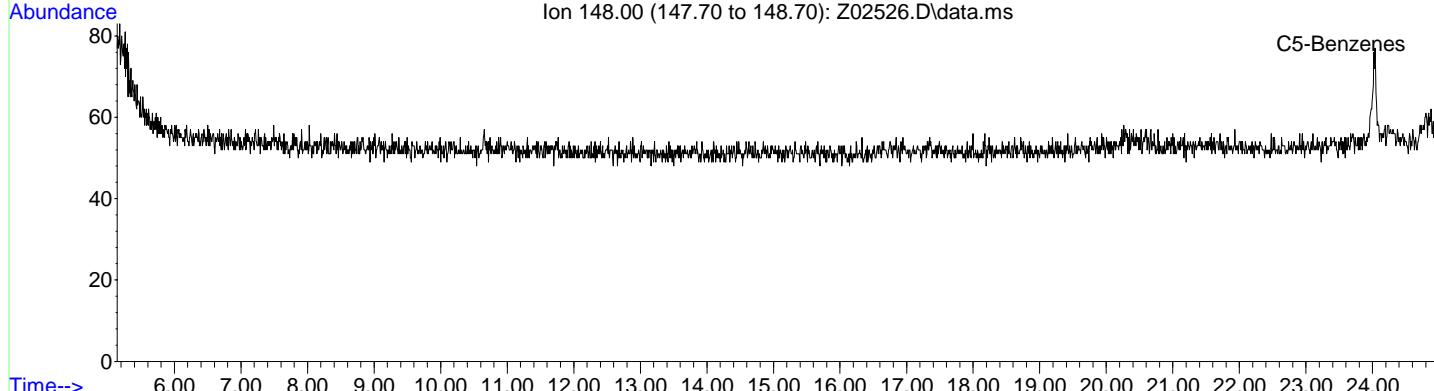
C4-Benzenes



Abundance

Ion 148.00 (147.70 to 148.70): Z02526.D\data.ms

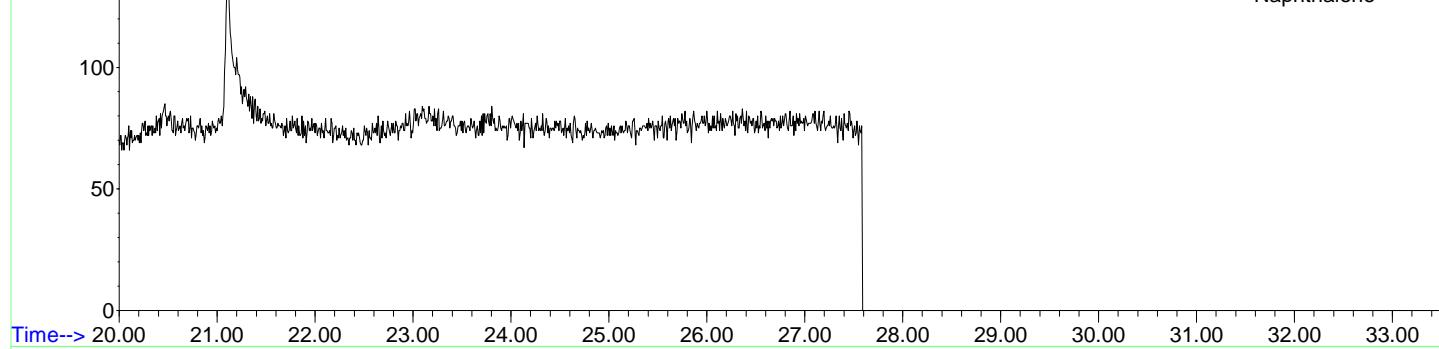
C5-Benzenes



File: Z:\2\data\Z140604\Z02526.D  
Date Acquired: 5 Jun 2014 2:07 am  
Sample Name: op38366-mb, Method Blank  
Misc Info: op38366,msz100,5.00,,,2,1

Abundance Ion 128.00 (127.70 to 128.70): Z02526.D\data.ms

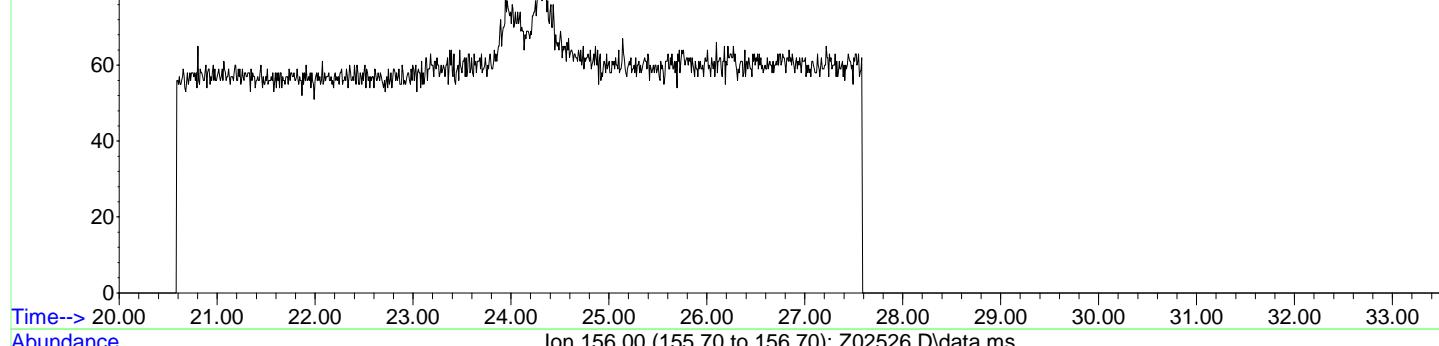
Naphthalene



Time--> 20.00 21.00 22.00 23.00 24.00 25.00 26.00 27.00 28.00 29.00 30.00 31.00 32.00 33.00

Abundance Ion 142.00 (141.70 to 142.70): Z02526.D\data.ms

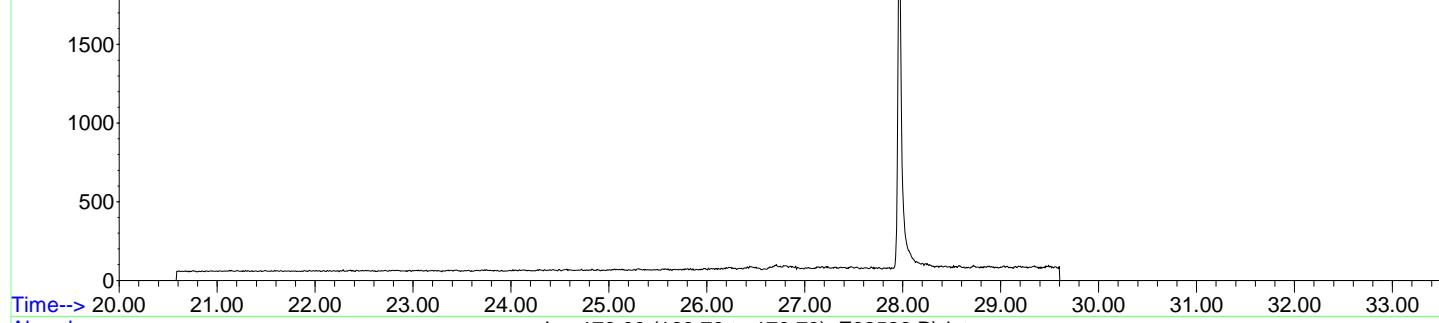
C1-Naphthalenes



Time--> 20.00 21.00 22.00 23.00 24.00 25.00 26.00 27.00 28.00 29.00 30.00 31.00 32.00 33.00

Abundance Ion 156.00 (155.70 to 156.70): Z02526.D\data.ms

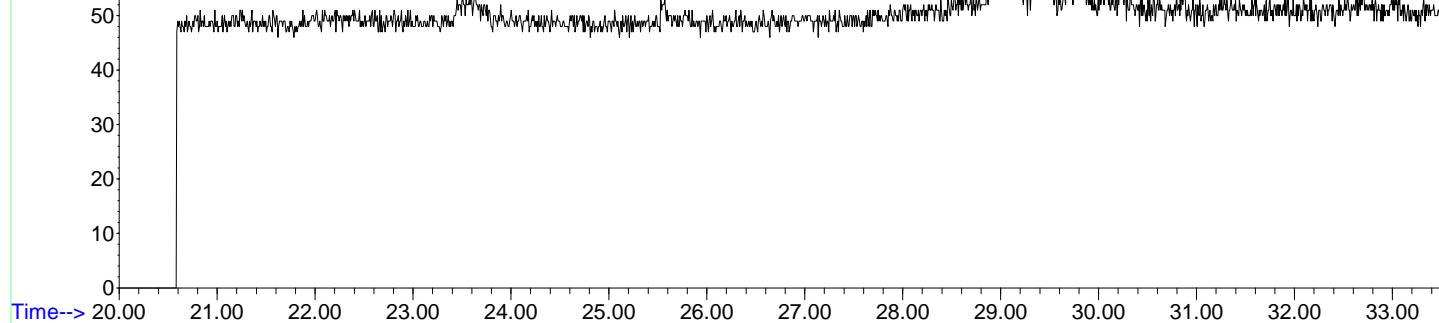
C2-Naphthalenes



Time--> 20.00 21.00 22.00 23.00 24.00 25.00 26.00 27.00 28.00 29.00 30.00 31.00 32.00 33.00

Abundance Ion 170.00 (169.70 to 170.70): Z02526.D\data.ms

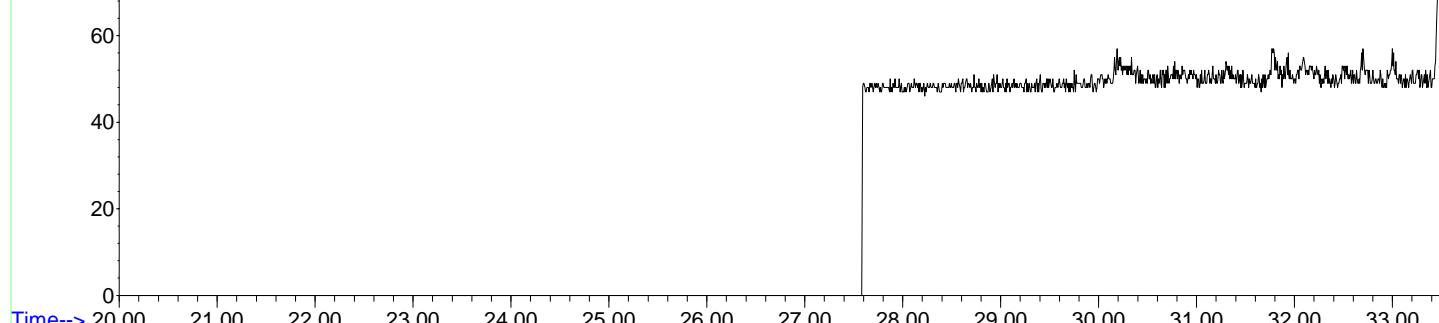
C3-Naphthalenes



Time--> 20.00 21.00 22.00 23.00 24.00 25.00 26.00 27.00 28.00 29.00 30.00 31.00 32.00 33.00

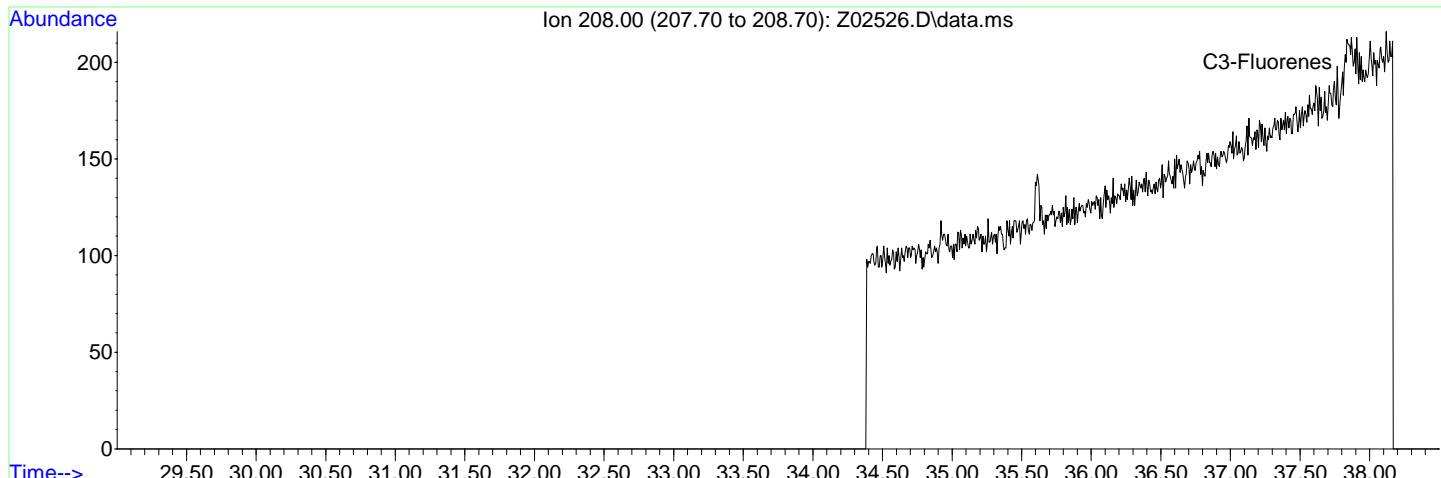
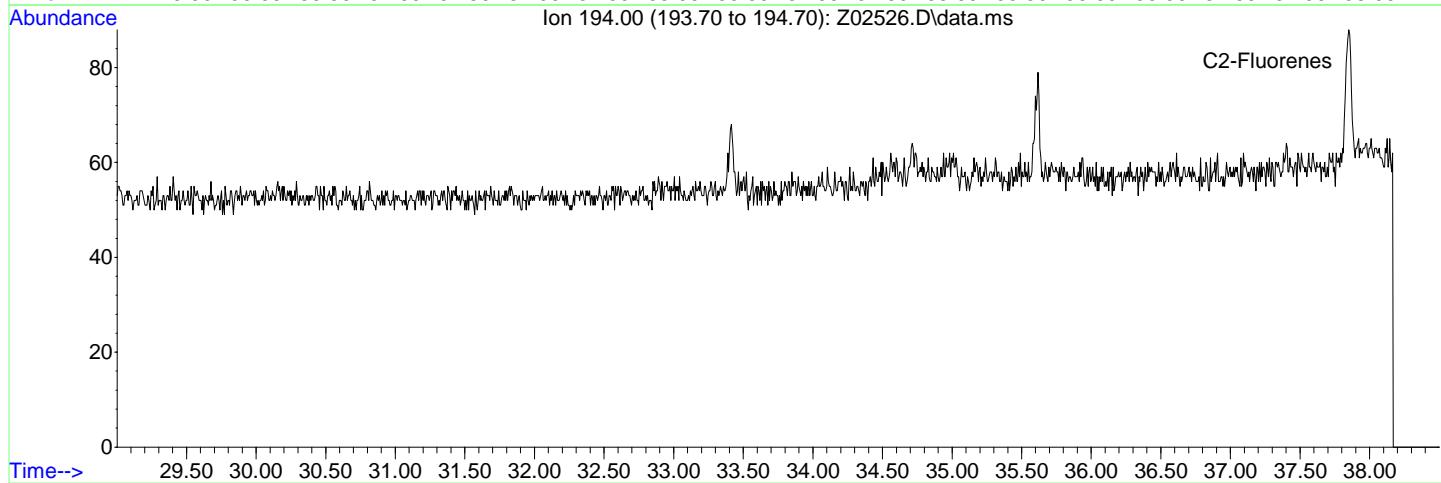
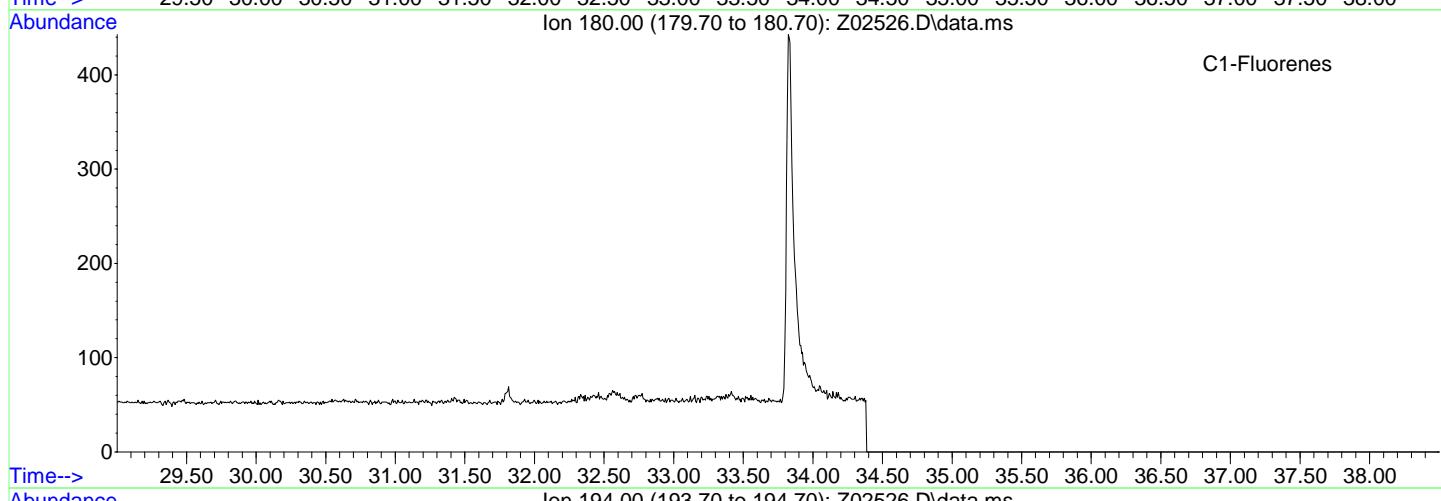
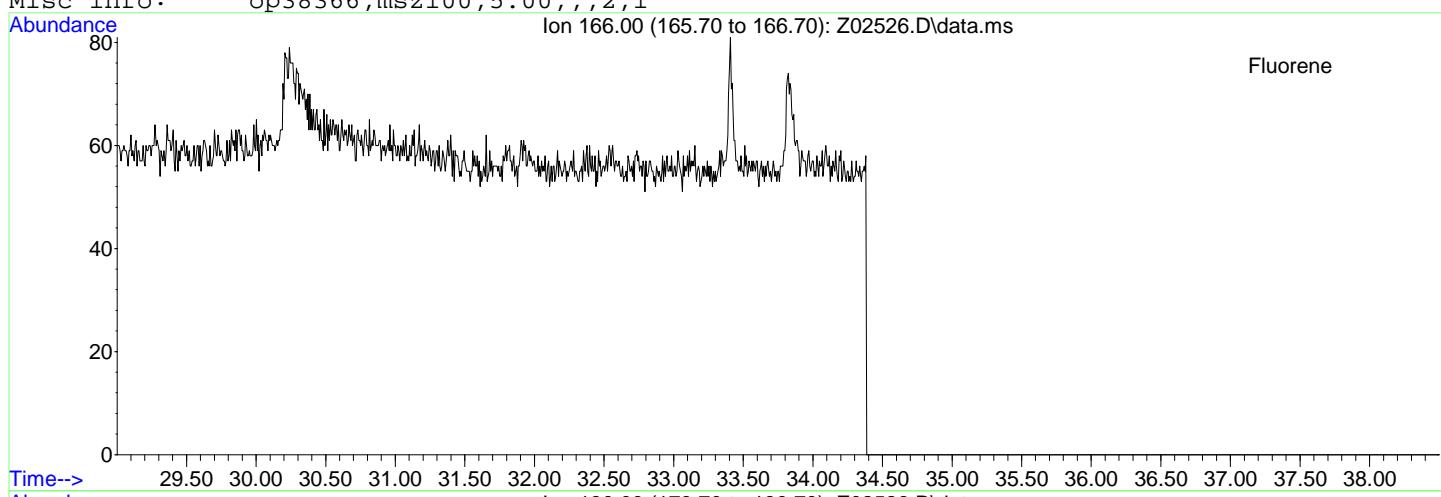
Abundance Ion 184.00 (183.70 to 184.70): Z02526.D\data.ms

C4-Naphthalenes

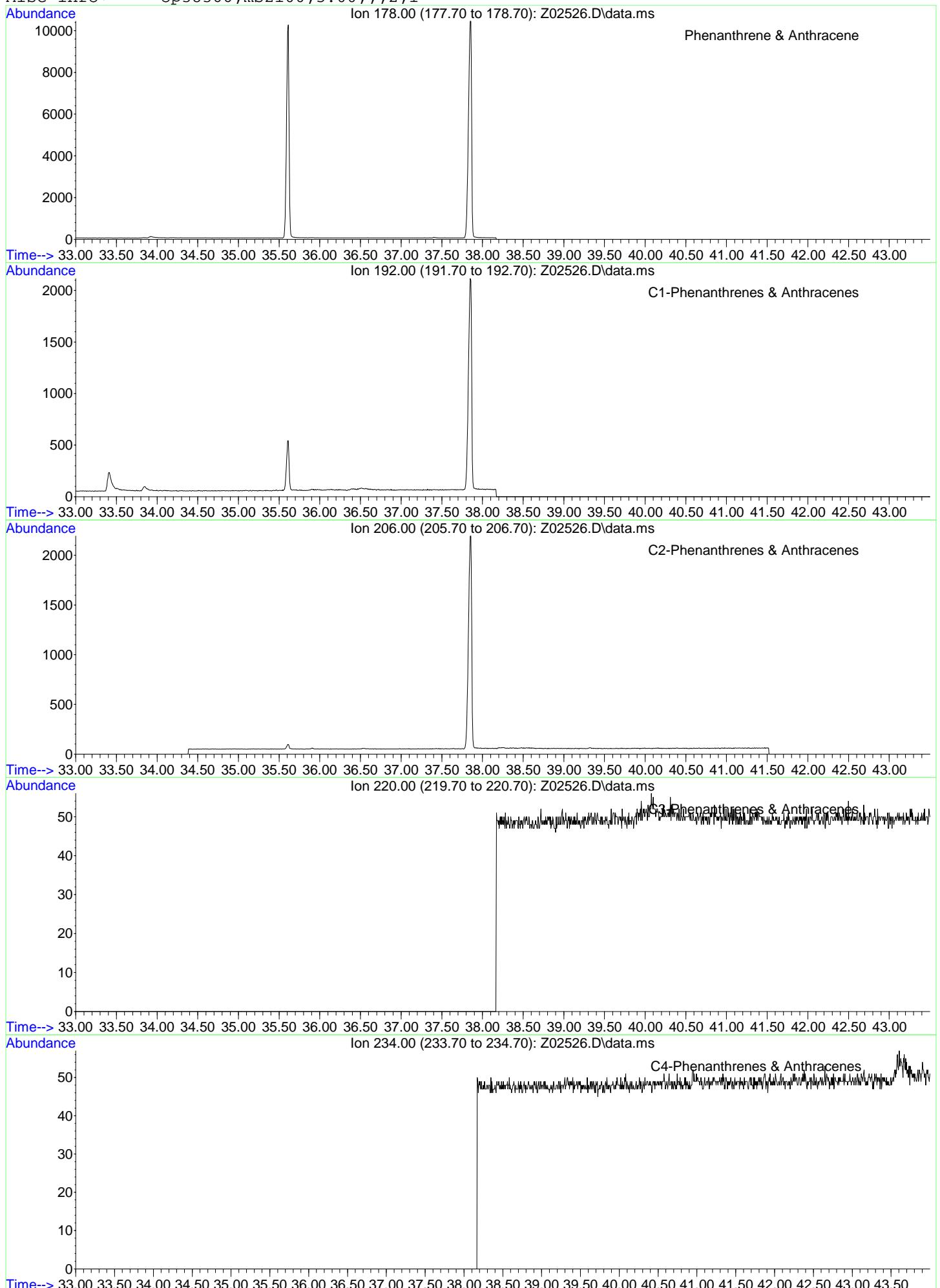


Time--> 20.00 21.00 22.00 23.00 24.00 25.00 26.00 27.00 28.00 29.00 30.00 31.00 32.00 33.00

File: Z:\2\data\Z140604\Z02526.D  
Date Acquired: 5 Jun 2014 2:07 am  
Method File: ZAPAHSIM-MTBE.M  
Sample Name: op38366-mb, Method Blank  
Misc Info: op38366,msz100,5.00,,,2,1

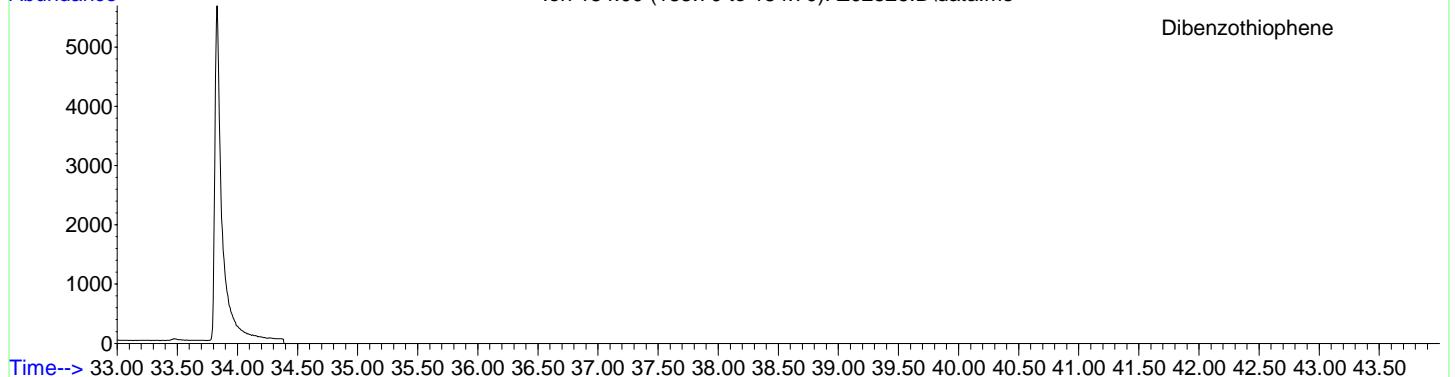


File: Z:\2\data\Z140604\Z02526.D  
Date Acquired: 5 Jun 2014 2:07 am  
Sample Name: op38366-mb, Method Blank  
Misc Info: op38366,msz100,5.00,,,2,1



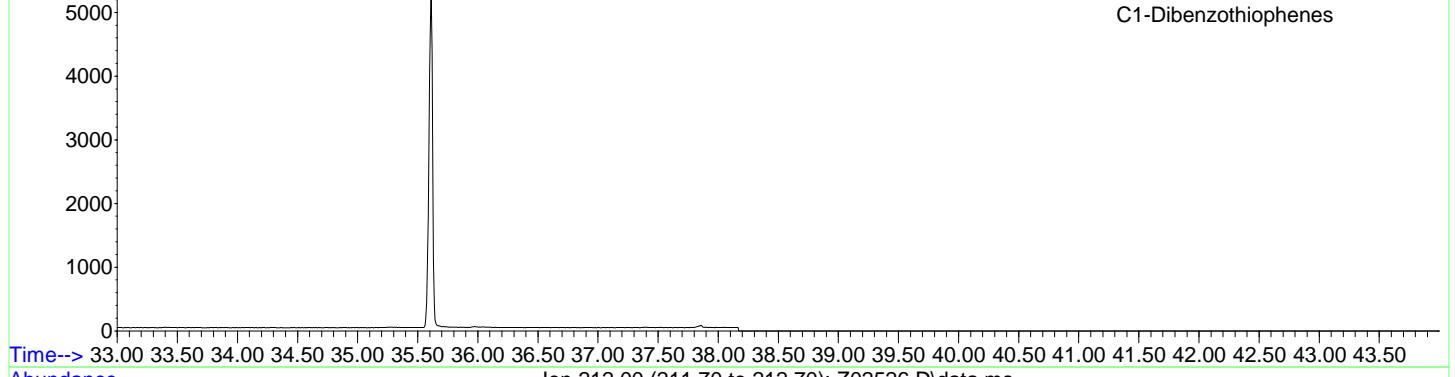
File: Z:\2\data\Z140604\Z02526.D  
Date Acquired: 5 Jun 2014 2:07 am  
Sample Name: op38366-mb, Method Blank  
Misc Info: op38366,msz100,5.00,,,2,1

Abundance Ion 184.00 (183.70 to 184.70): Z02526.D\data.ms



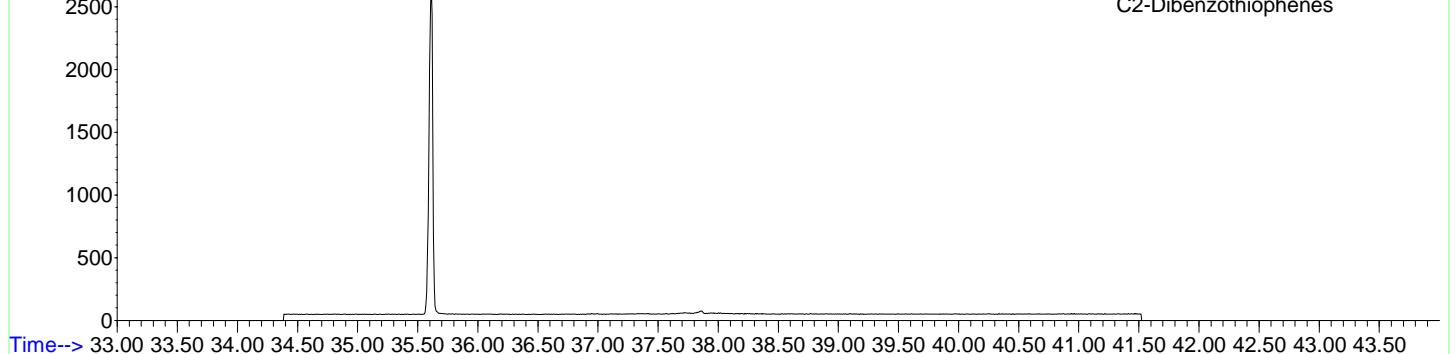
Time--> 33.00 33.50 34.00 34.50 35.00 35.50 36.00 36.50 37.00 37.50 38.00 38.50 39.00 39.50 40.00 40.50 41.00 41.50 42.00 42.50 43.00 43.50

Abundance Ion 198.00 (197.70 to 198.70): Z02526.D\data.ms



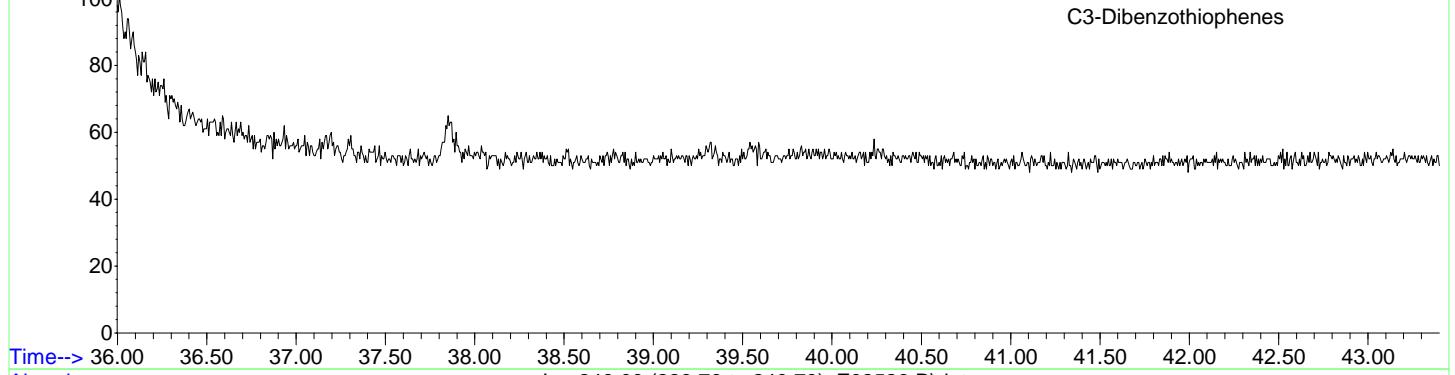
Time--> 33.00 33.50 34.00 34.50 35.00 35.50 36.00 36.50 37.00 37.50 38.00 38.50 39.00 39.50 40.00 40.50 41.00 41.50 42.00 42.50 43.00 43.50

Abundance Ion 212.00 (211.70 to 212.70): Z02526.D\data.ms



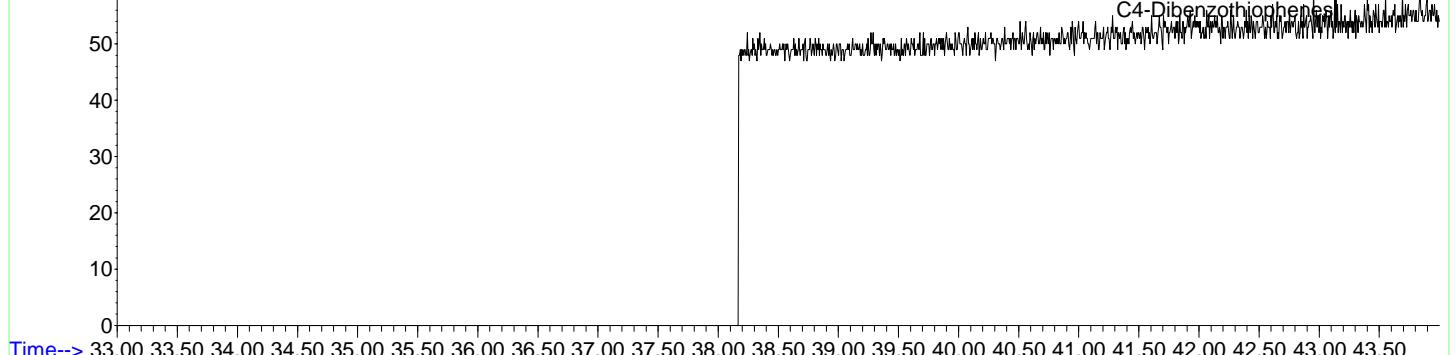
Time--> 33.00 33.50 34.00 34.50 35.00 35.50 36.00 36.50 37.00 37.50 38.00 38.50 39.00 39.50 40.00 40.50 41.00 41.50 42.00 42.50 43.00 43.50

Abundance Ion 226.00 (225.70 to 226.70): Z02526.D\data.ms



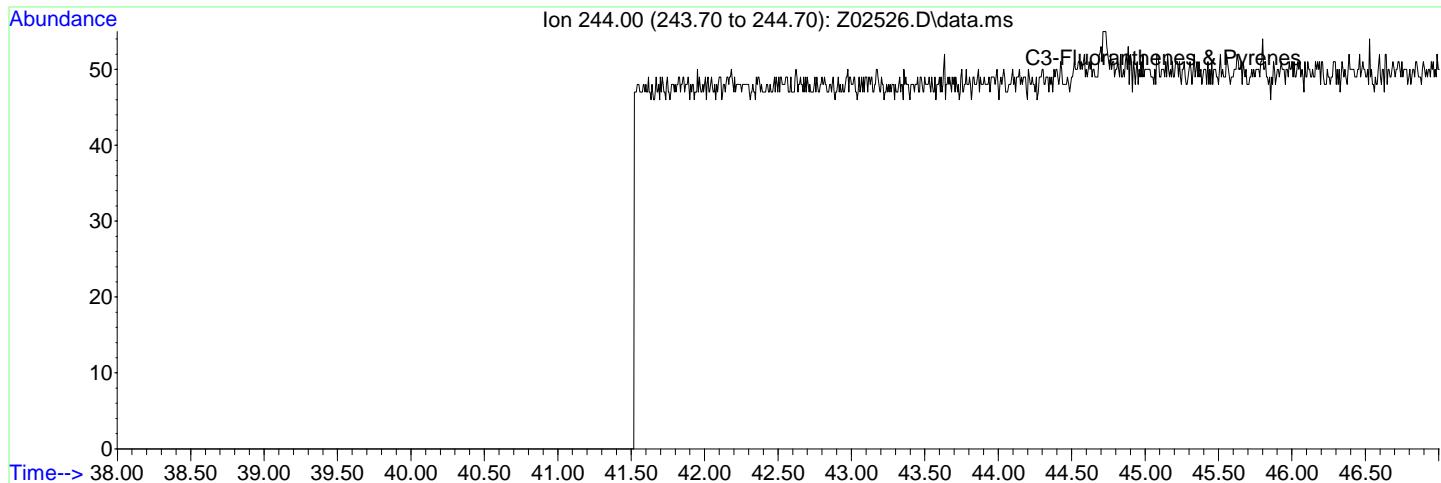
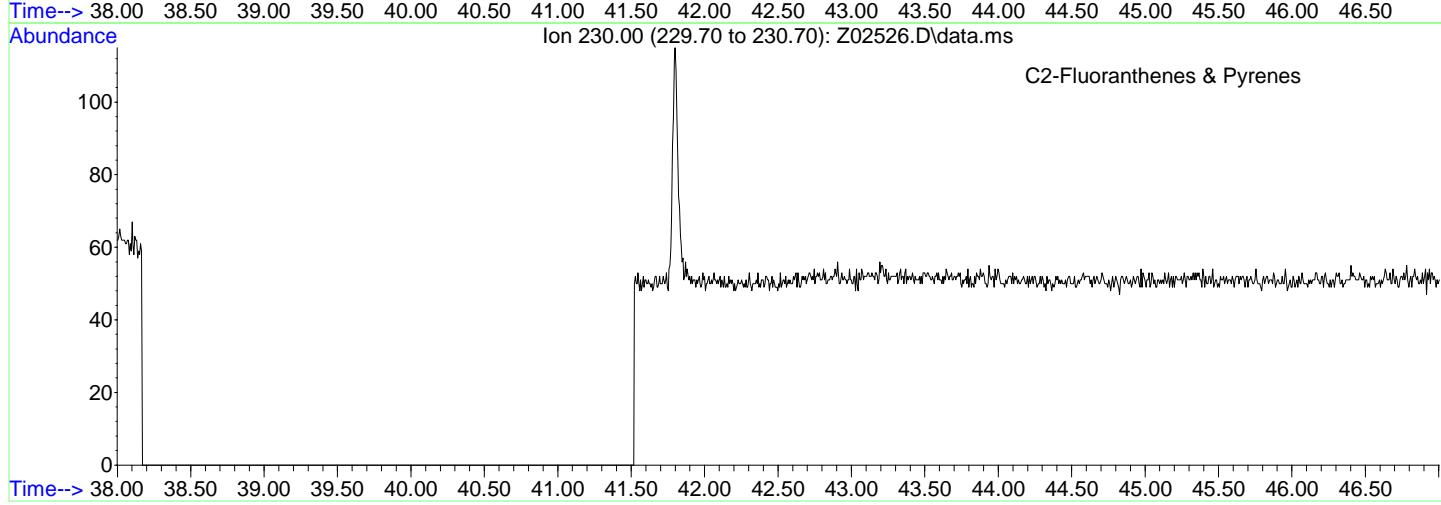
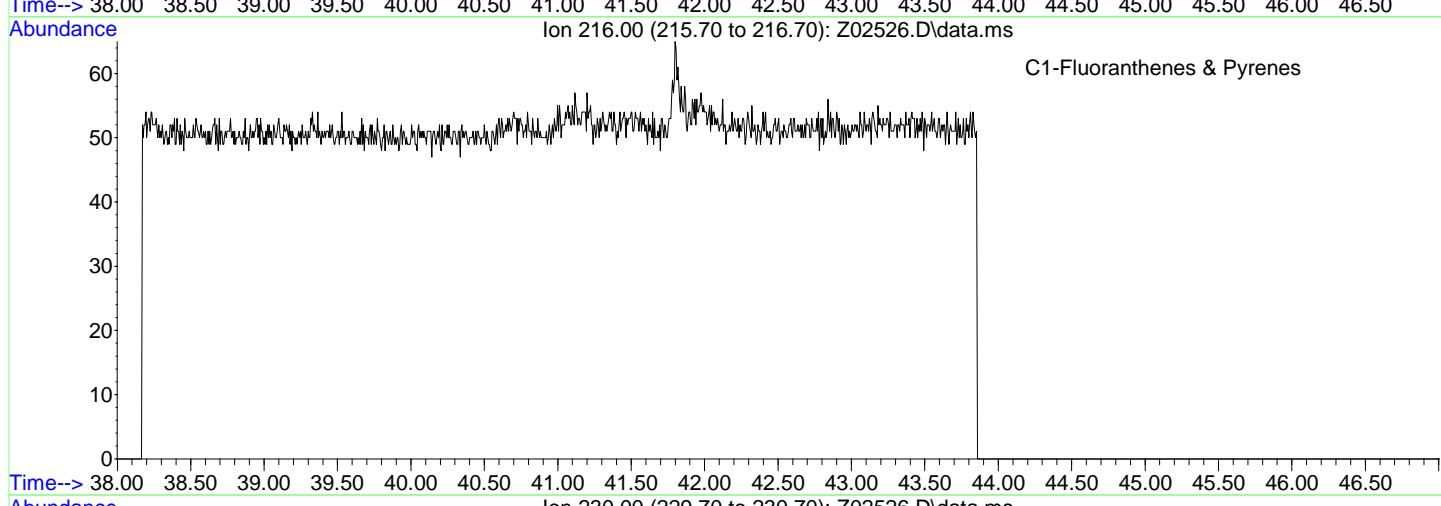
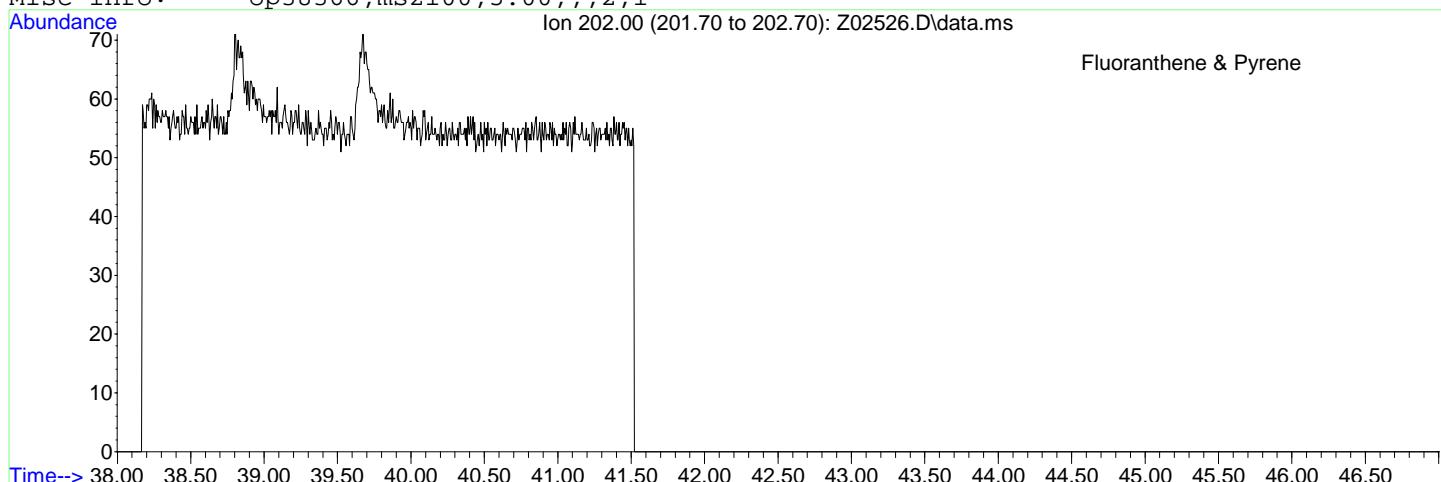
Time--> 36.00 36.50 37.00 37.50 38.00 38.50 39.00 39.50 40.00 40.50 41.00 41.50 42.00 42.50 43.00

Abundance Ion 240.00 (239.70 to 240.70): Z02526.D\data.ms

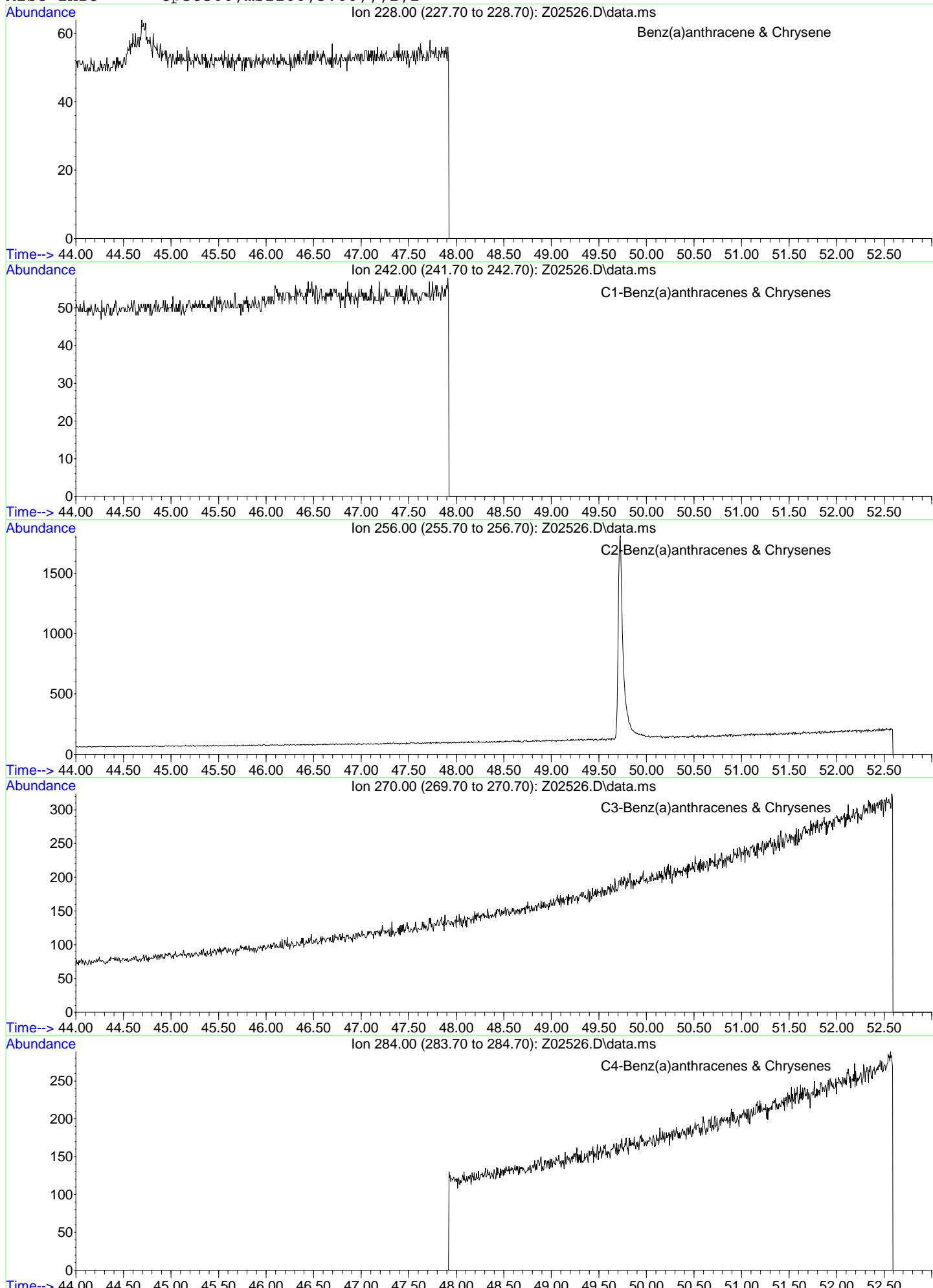


Time--> 33.00 33.50 34.00 34.50 35.00 35.50 36.00 36.50 37.00 37.50 38.00 38.50 39.00 39.50 40.00 40.50 41.00 41.50 42.00 42.50 43.00 43.50

File: Z:\2\data\Z140604\Z02526.D  
Date Acquired: 5 Jun 2014 2:07 am  
Method File: ZAPAHSIM-MTBE.M  
Sample Name: op38366-mb, Method Blank  
Misc Info: op38366,msz100,5.00,,,2,1



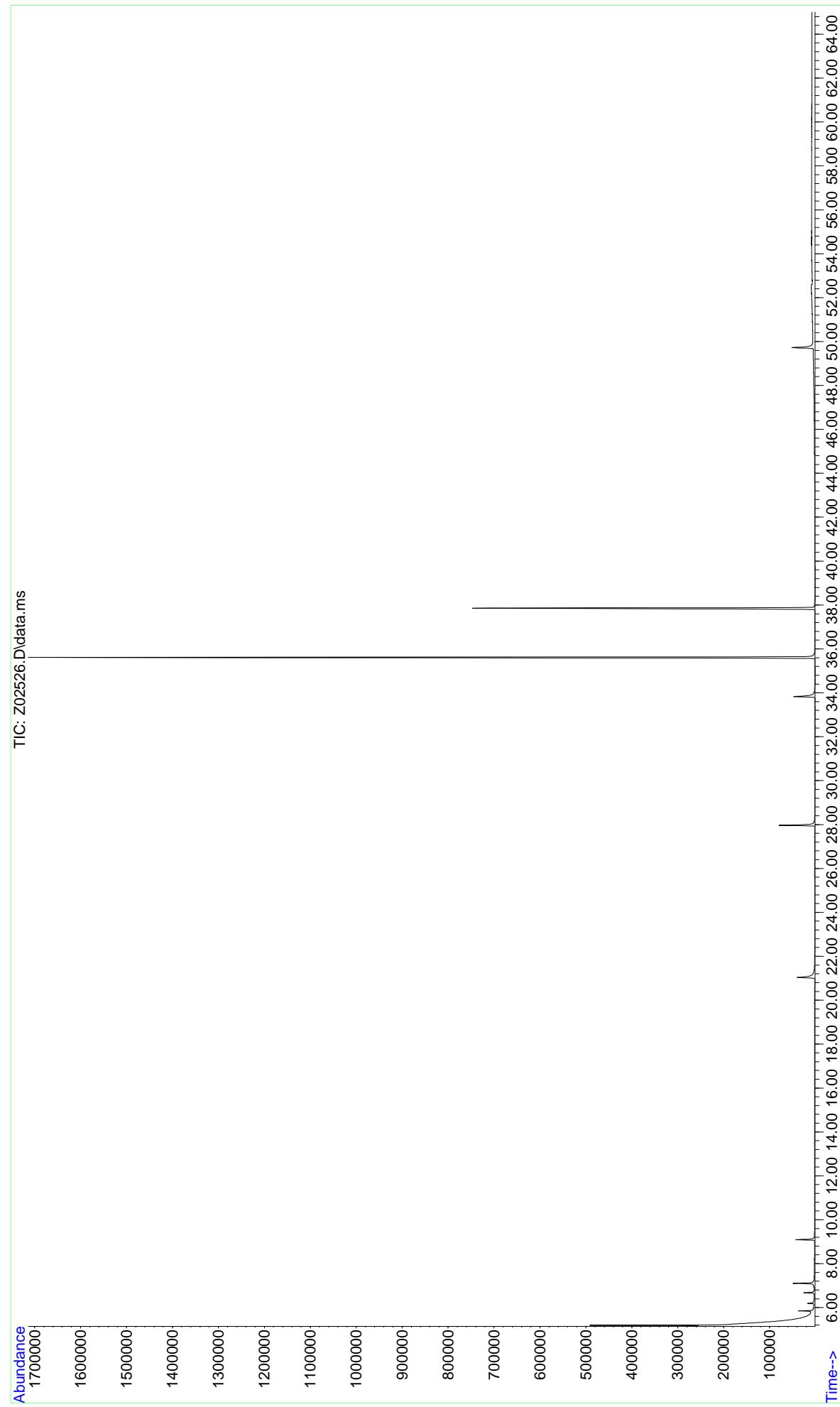
File: Z:\2\data\Z140604\Z02526.D  
Date Acquired: 5 Jun 2014 2:07 am  
Sample Name: op38366-mb, Method Blank  
Misc Info: op38366,msz100,5.00,,,2,1



## ACCUTEST

## GC/MS TOTAL ION CHROMATOGRAM

File: Z:\2\data\Z140604\Z02526.D  
 Date Acquired: 5 Jun 2014 2:07 am  
 Method File: ZAPAHSIM-MTBE.M  
 Sample Name: op38366-mb, Method Blank  
 Misc Info: op38366,msz100,5.00,,,2,,1



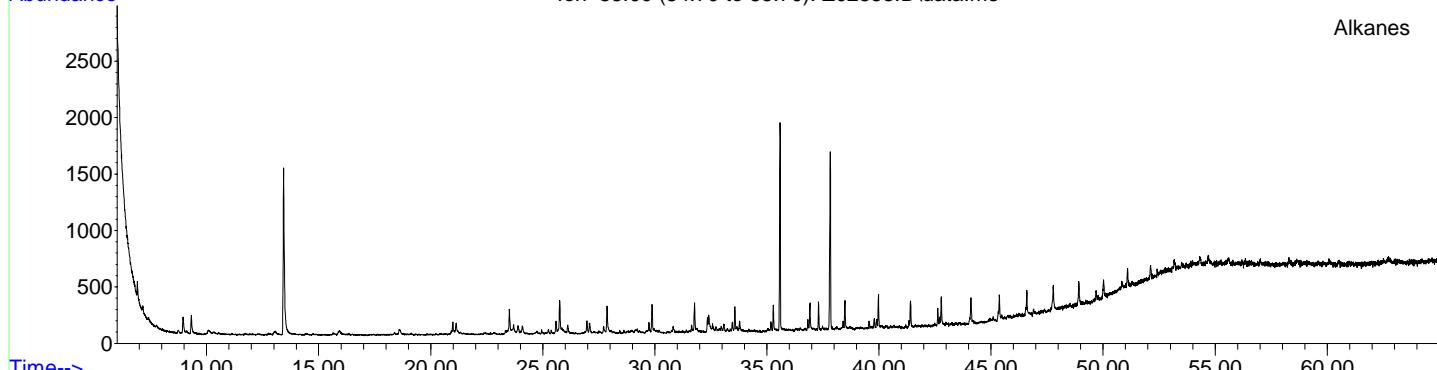
File: Z:\2\data\Z140605\Z02553.D

Date Acquired: 6 Jun 2014 4:38 pm

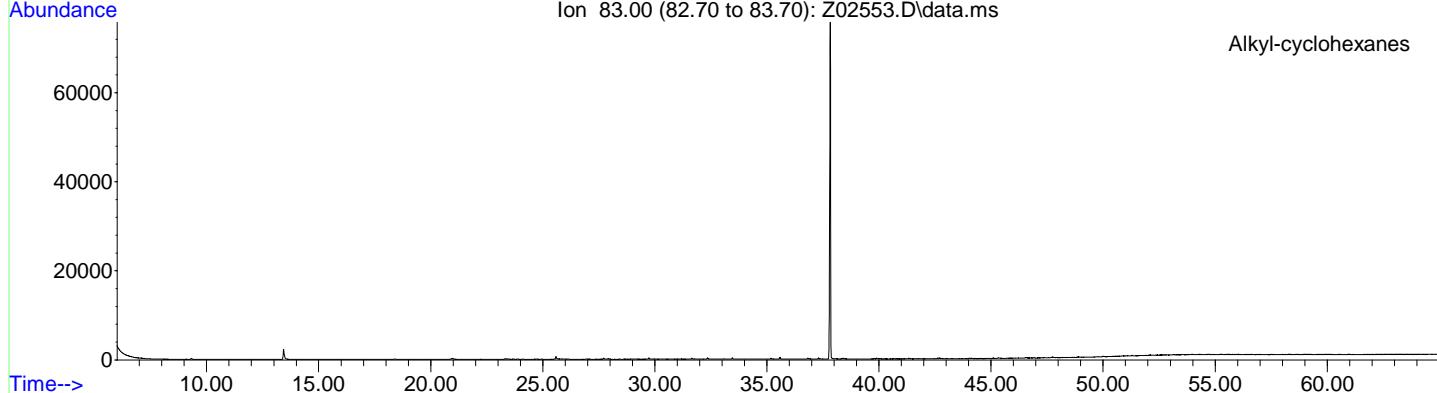
Sample Name: op38385-mb

Misc Info: op38385,msz101,35,,,2,1

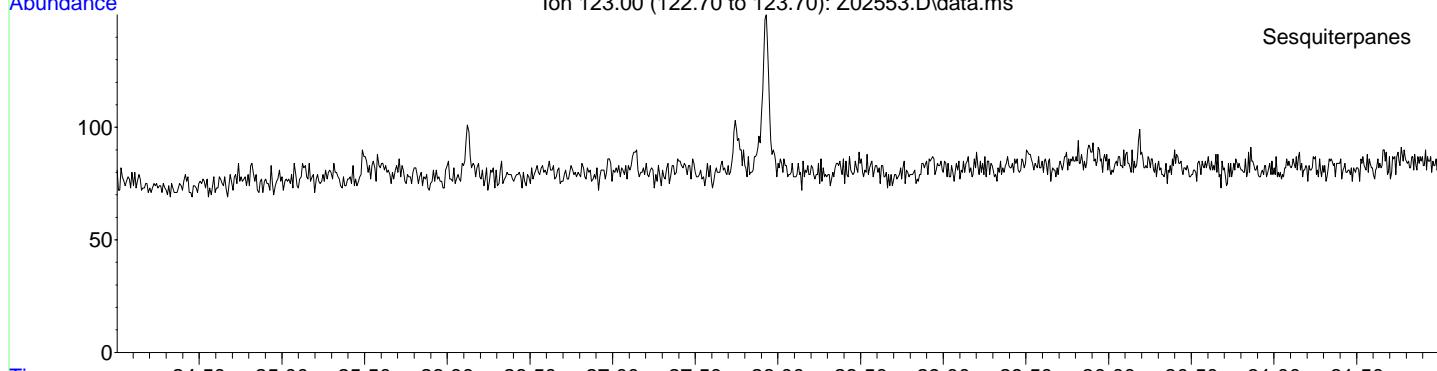
Abundance Ion 85.00 (84.70 to 85.70): Z02553.D\data.ms



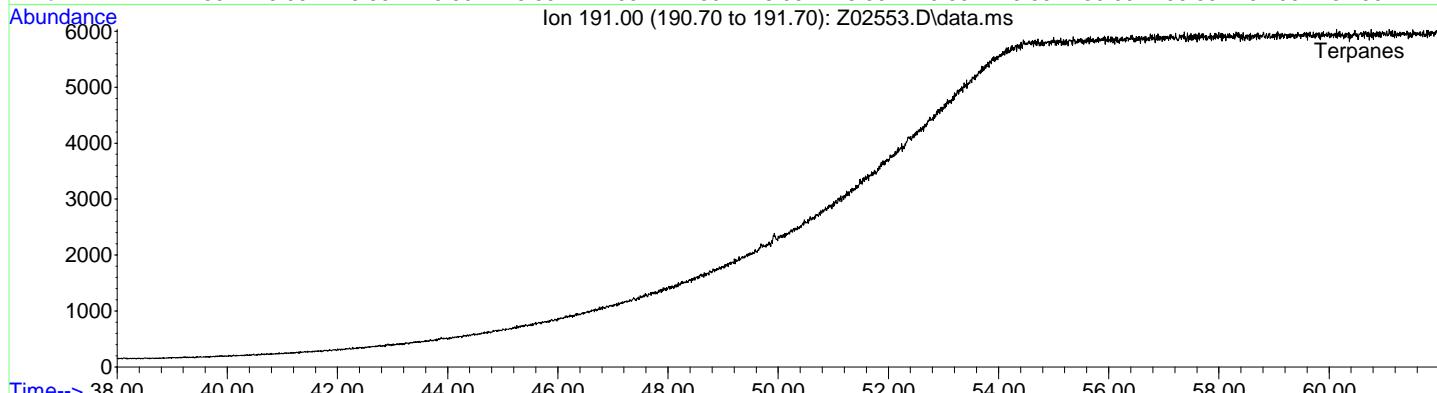
Time--&gt; Abundance Ion 83.00 (82.70 to 83.70): Z02553.D\data.ms



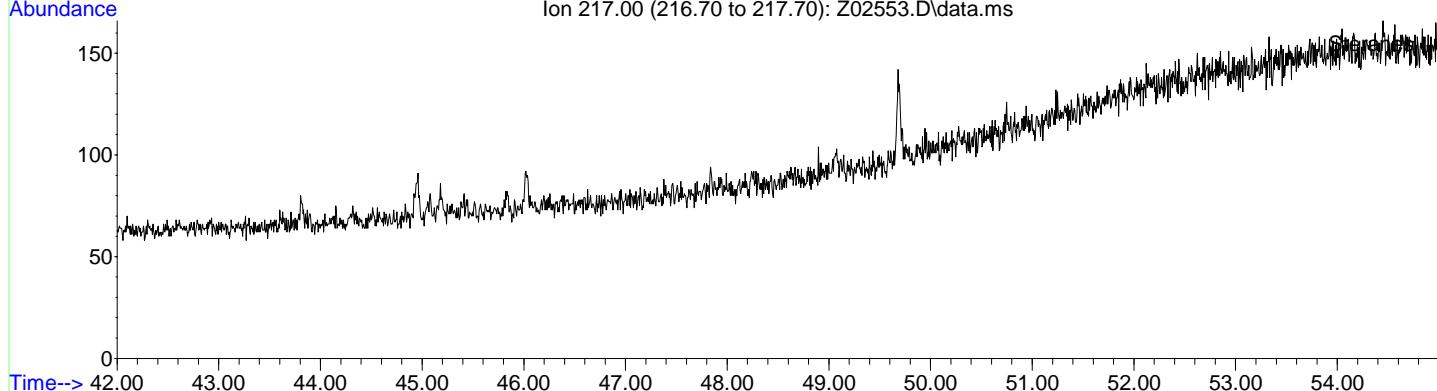
Time--&gt; Abundance Ion 123.00 (122.70 to 123.70): Z02553.D\data.ms



Time--&gt; Abundance Ion 191.00 (190.70 to 191.70): Z02553.D\data.ms



Time--&gt; Abundance Ion 217.00 (216.70 to 217.70): Z02553.D\data.ms



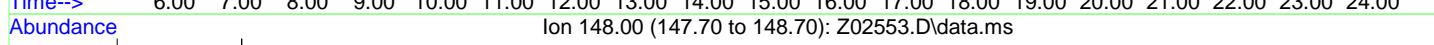
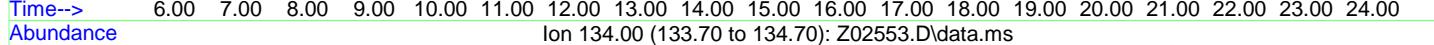
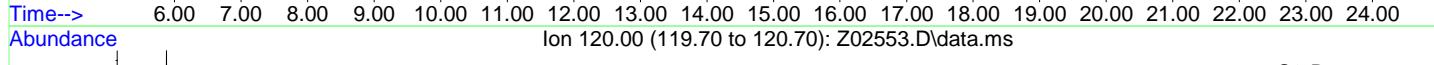
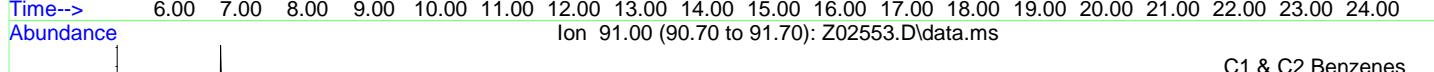
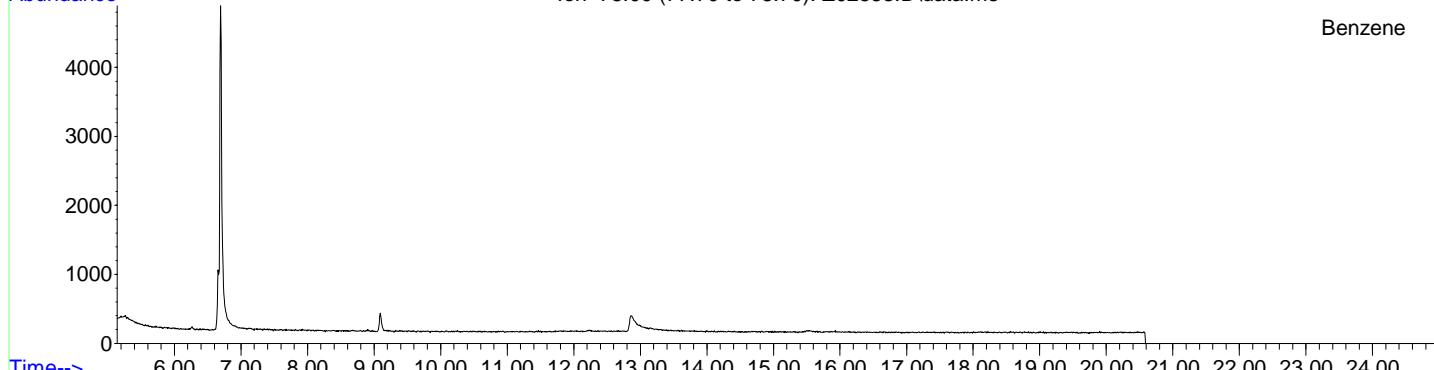
File: Z:\2\data\Z140605\Z02553.D

Date Acquired: 6 Jun 2014 4:38 pm

Sample Name: op38385-mb

Misc Info: op38385,msz101,35,,,2,1

Abundance Ion 78.00 (77.70 to 78.70): Z02553.D\data.ms



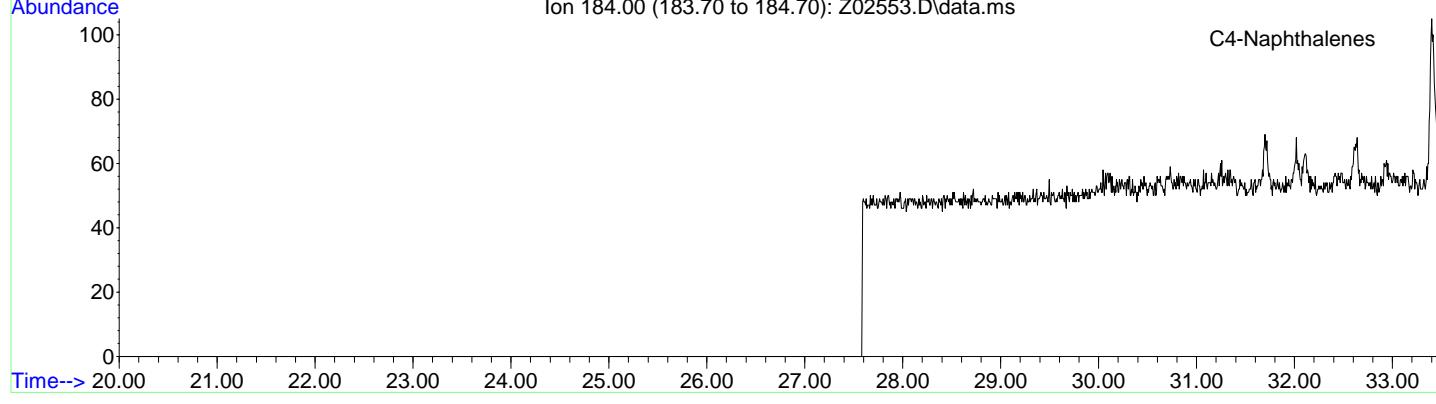
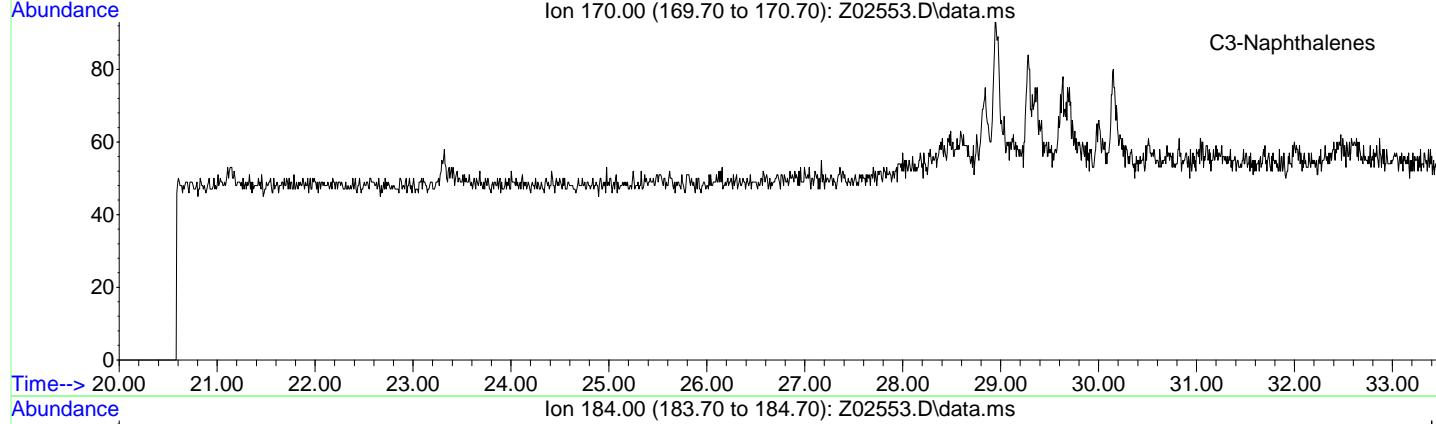
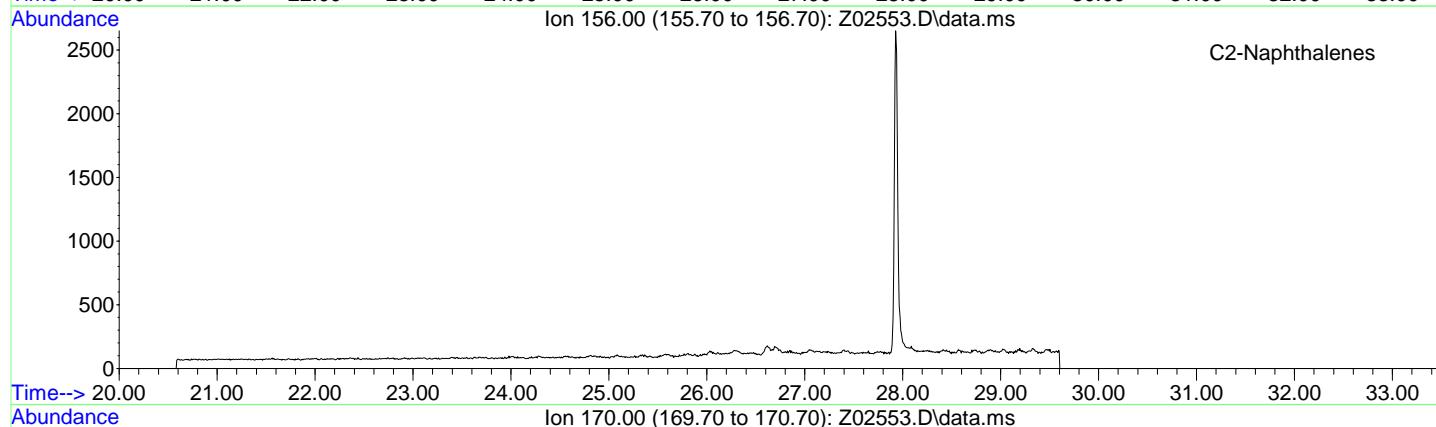
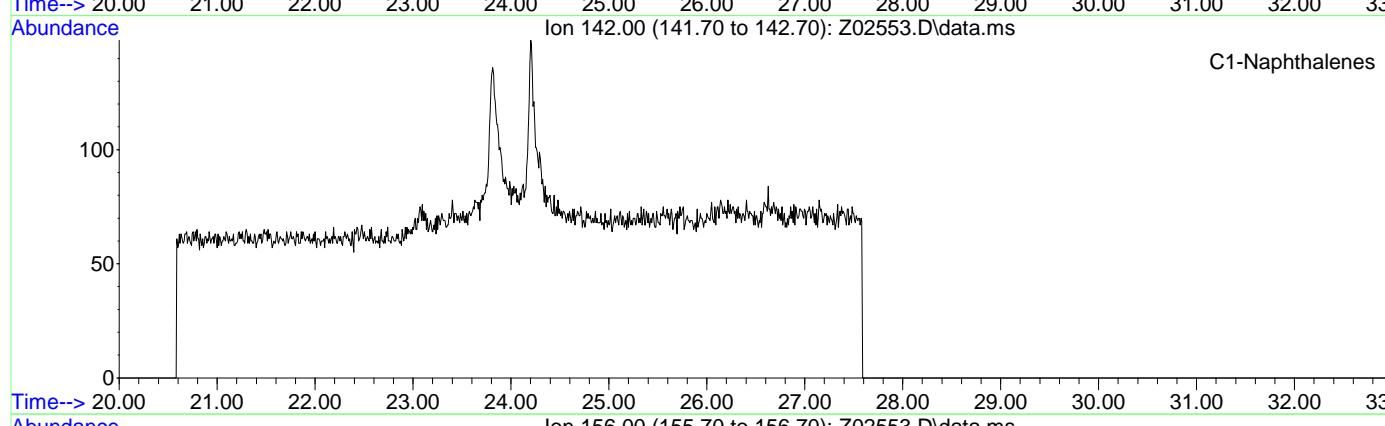
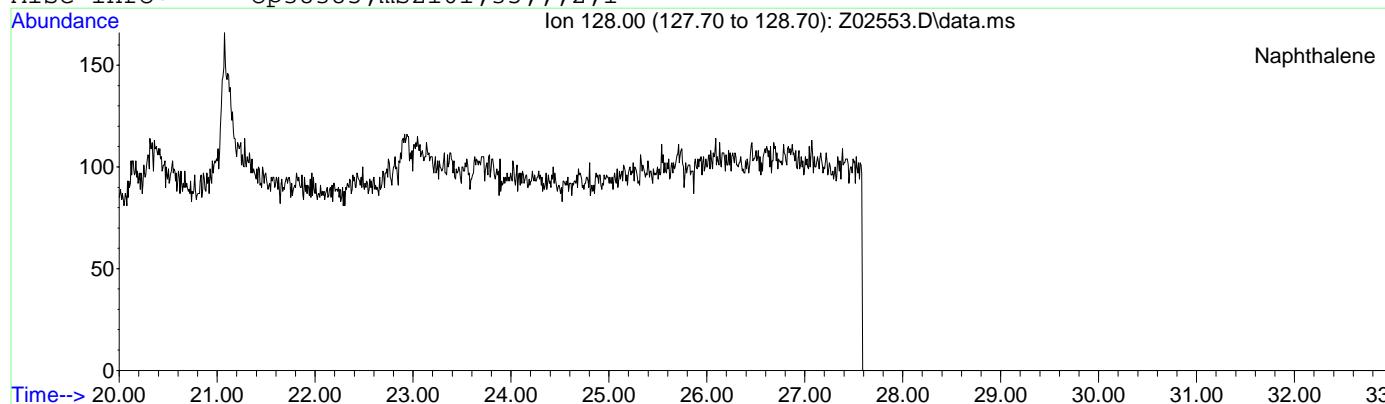
File: Z:\2\data\Z140605\Z02553.D

Date Acquired: 6 Jun 2014 4:38 pm

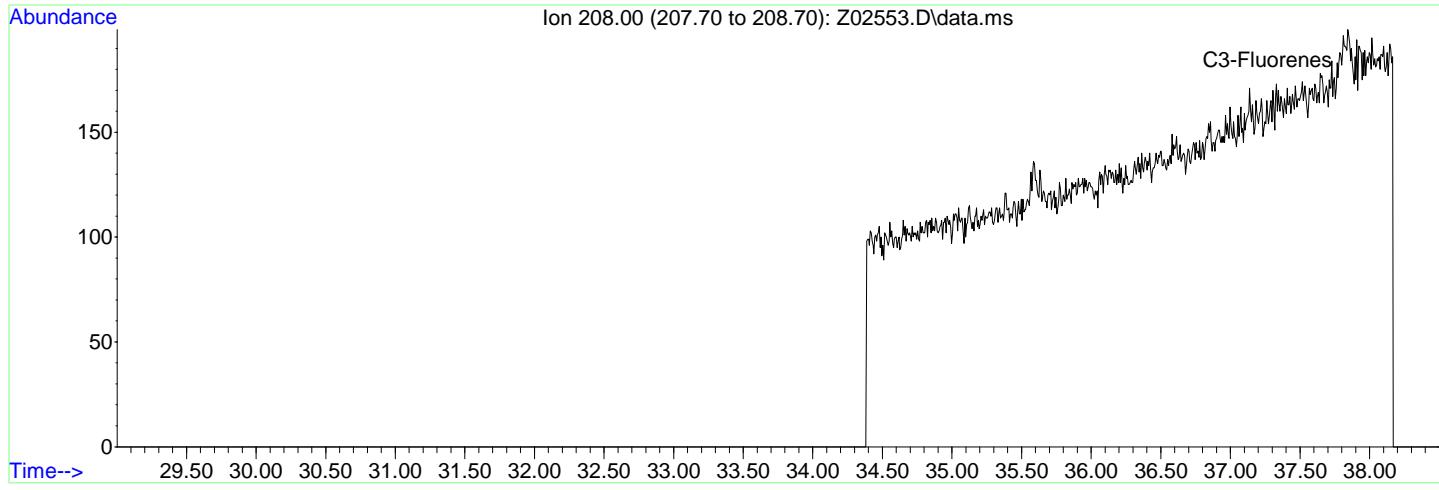
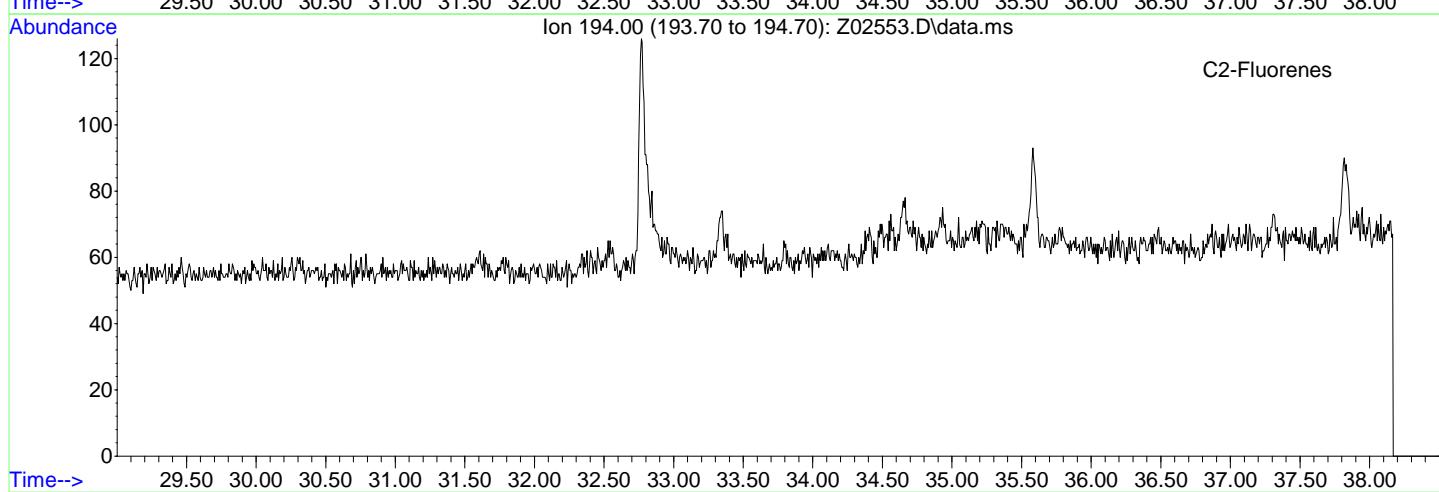
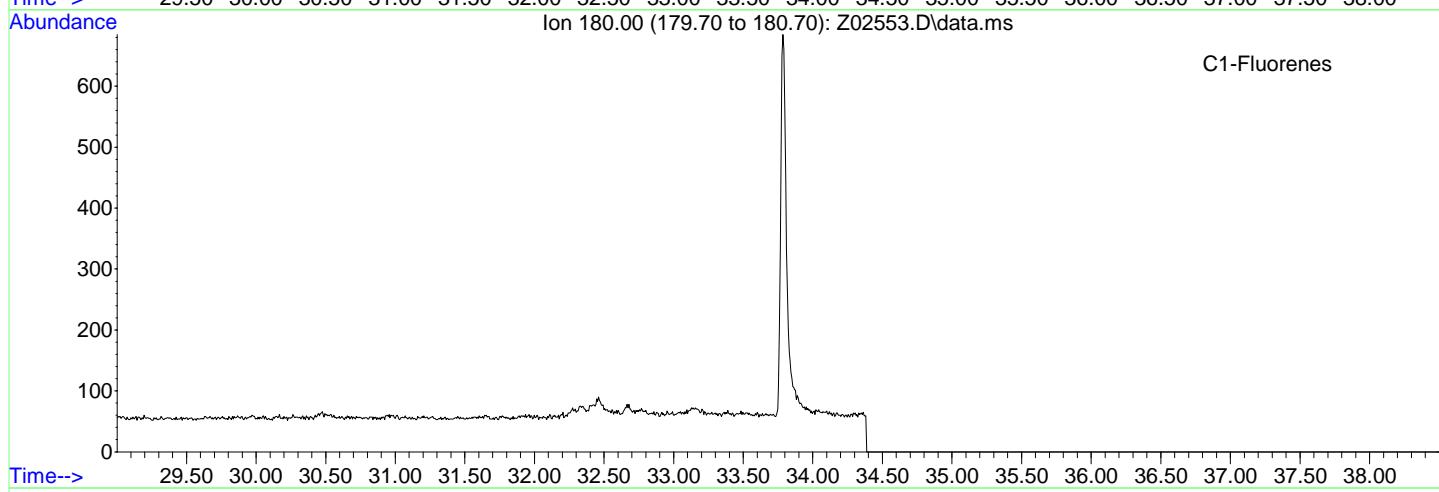
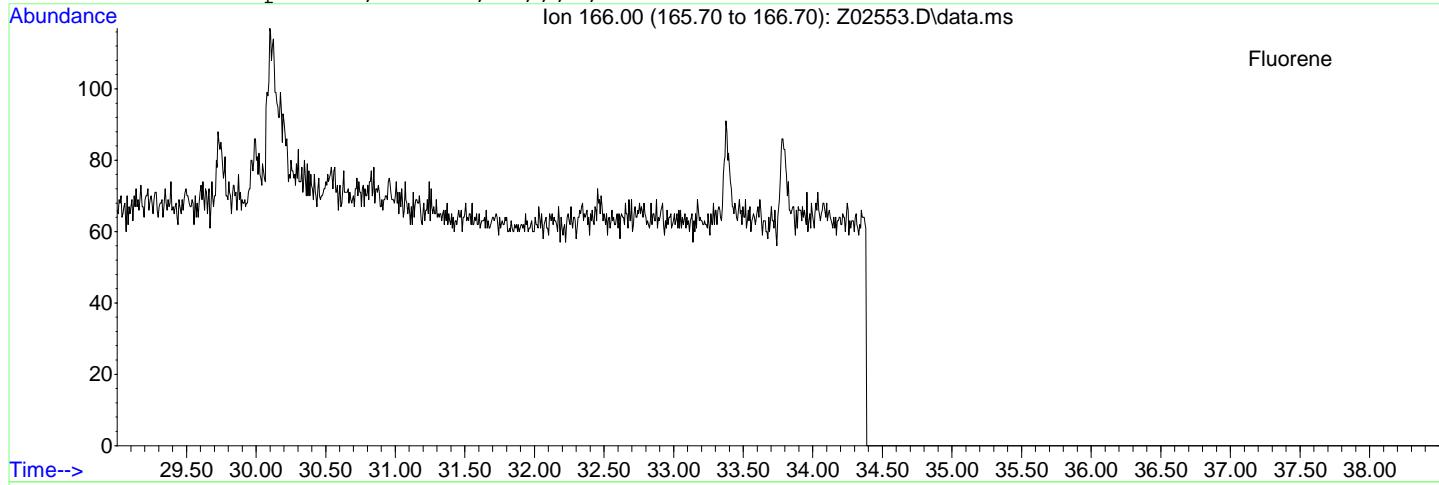
Sample Name: op38385-mb

Misc Info: op38385,msz101,35,,,2,1

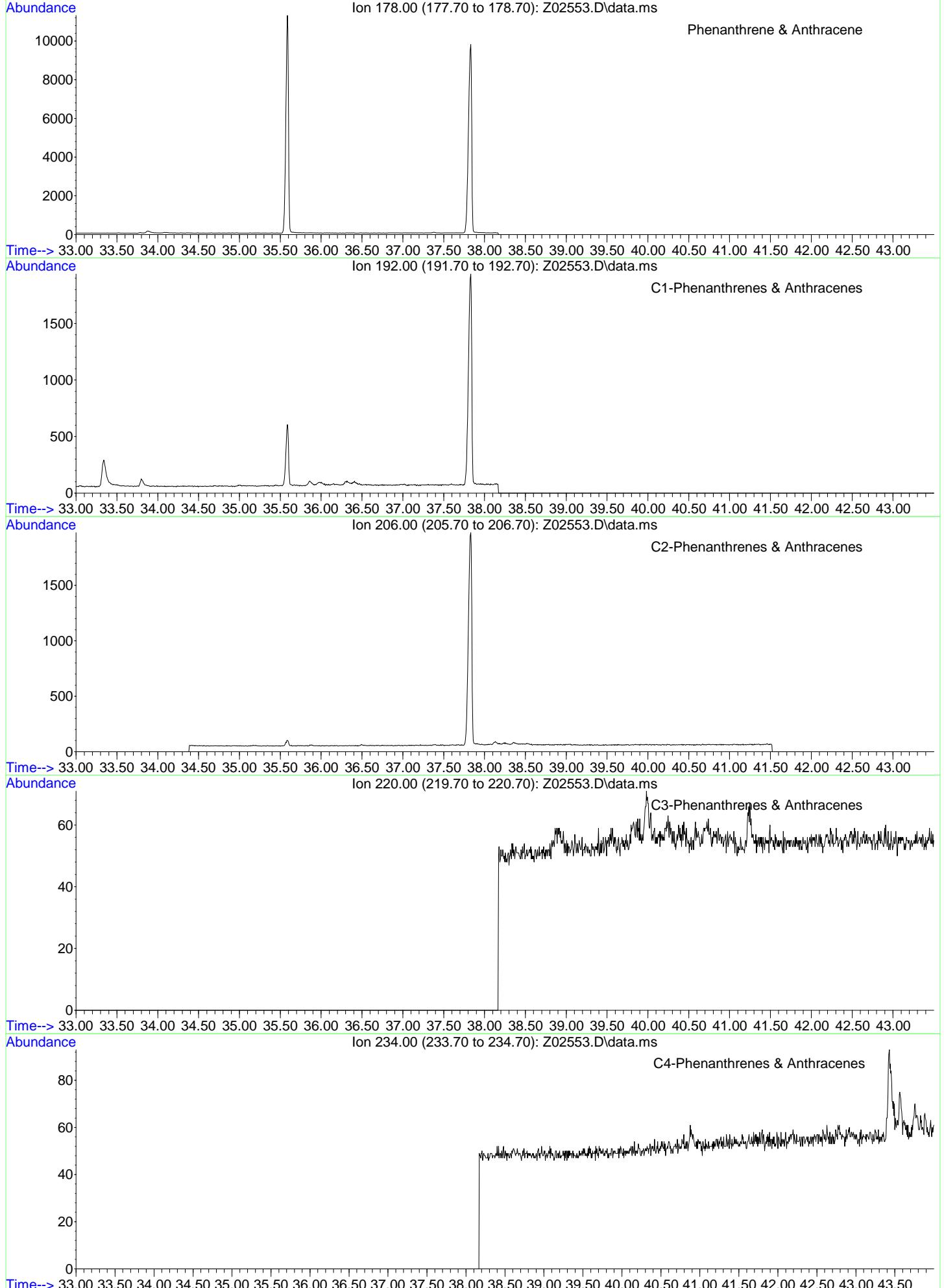
Ion 128.00 (127.70 to 128.70): Z02553.D\data.ms



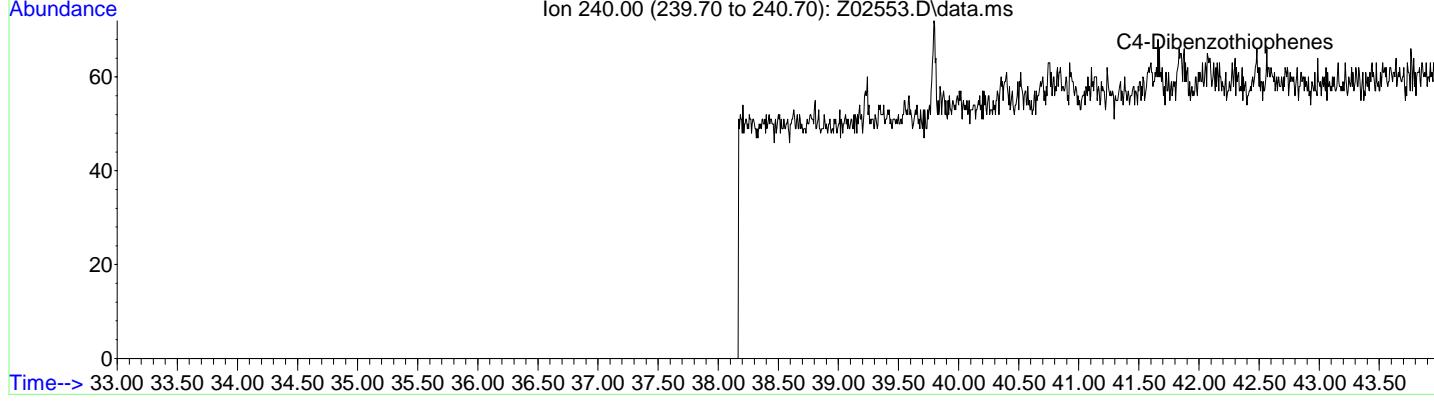
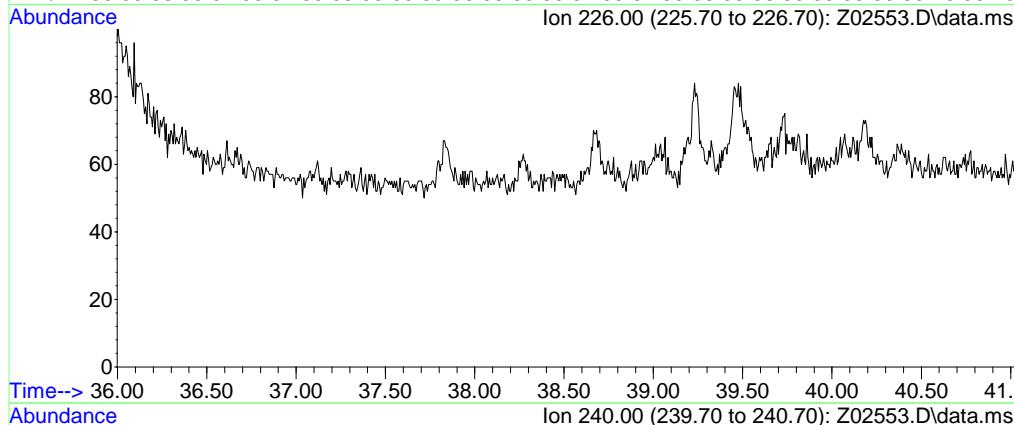
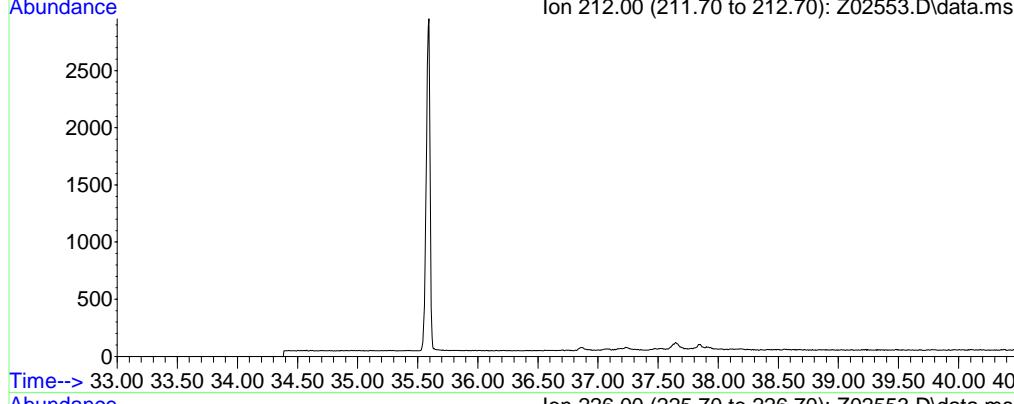
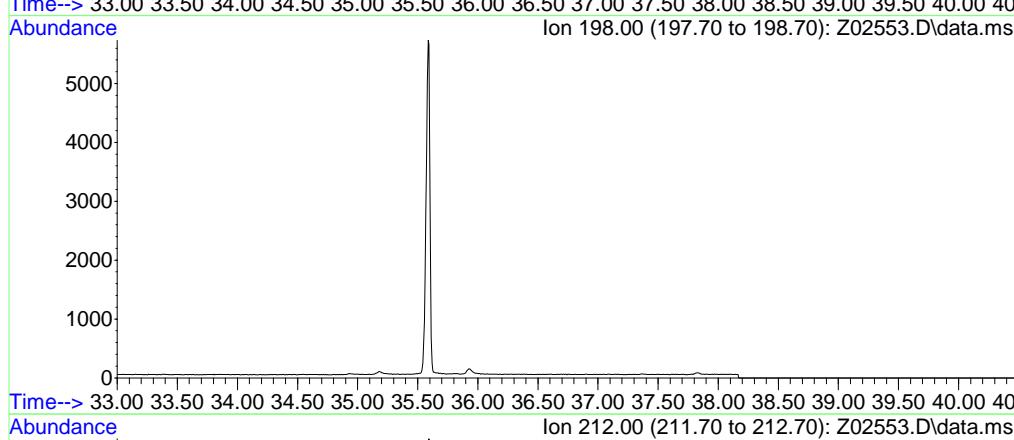
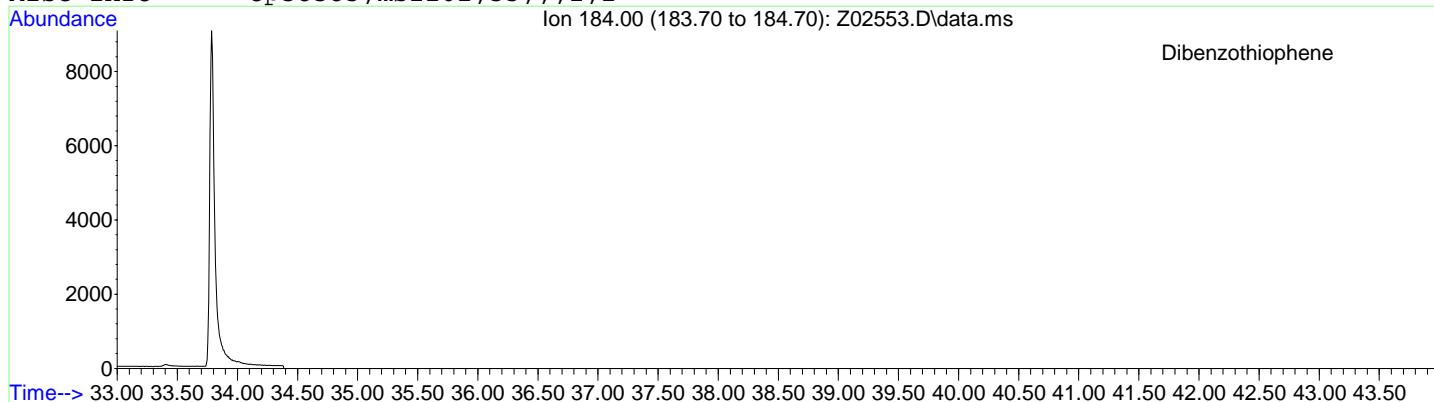
File: Z:\2\data\Z140605\Z02553.D  
Date Acquired: 6 Jun 2014 4:38 pm  
Method File: ZAPAHSIM-MTBE.M  
Sample Name: op38385-mb  
Misc Info: op38385,msz101,35,,2,1



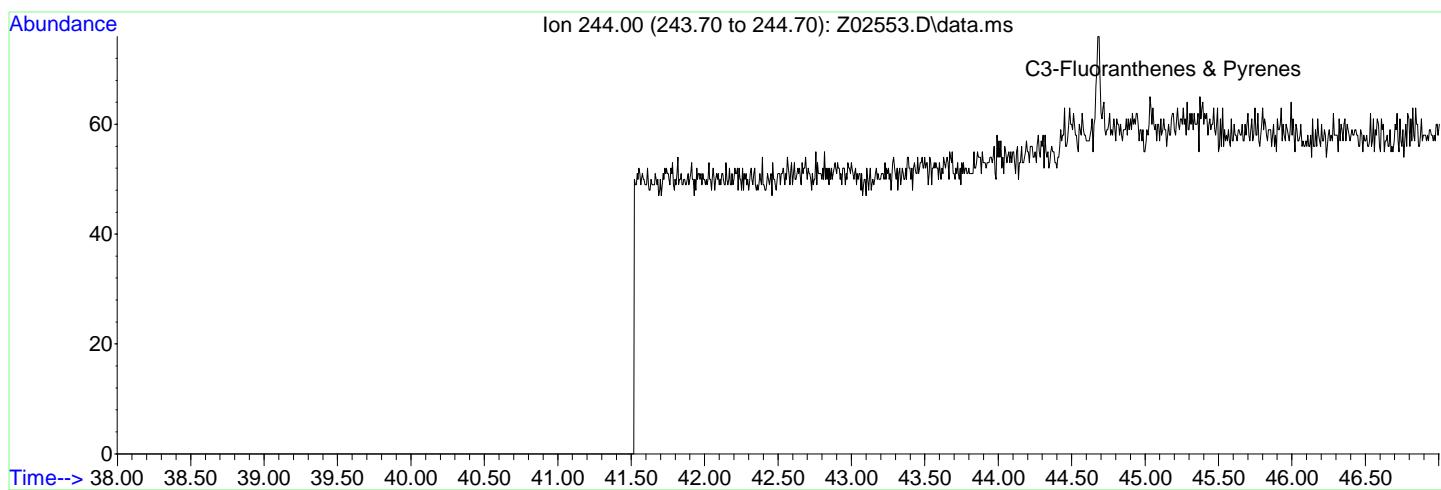
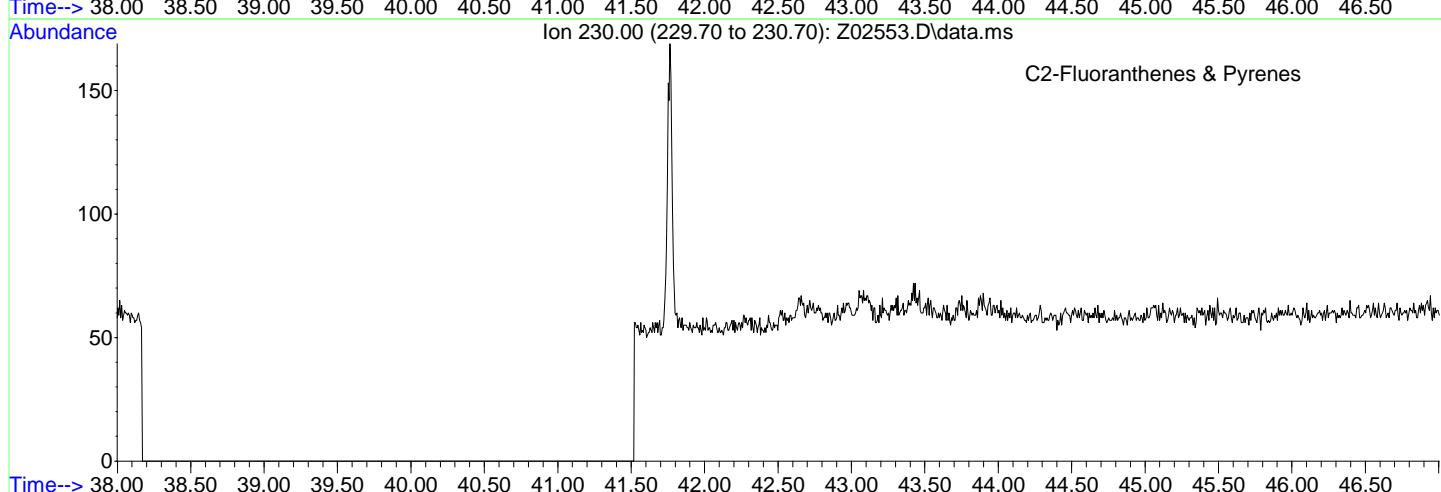
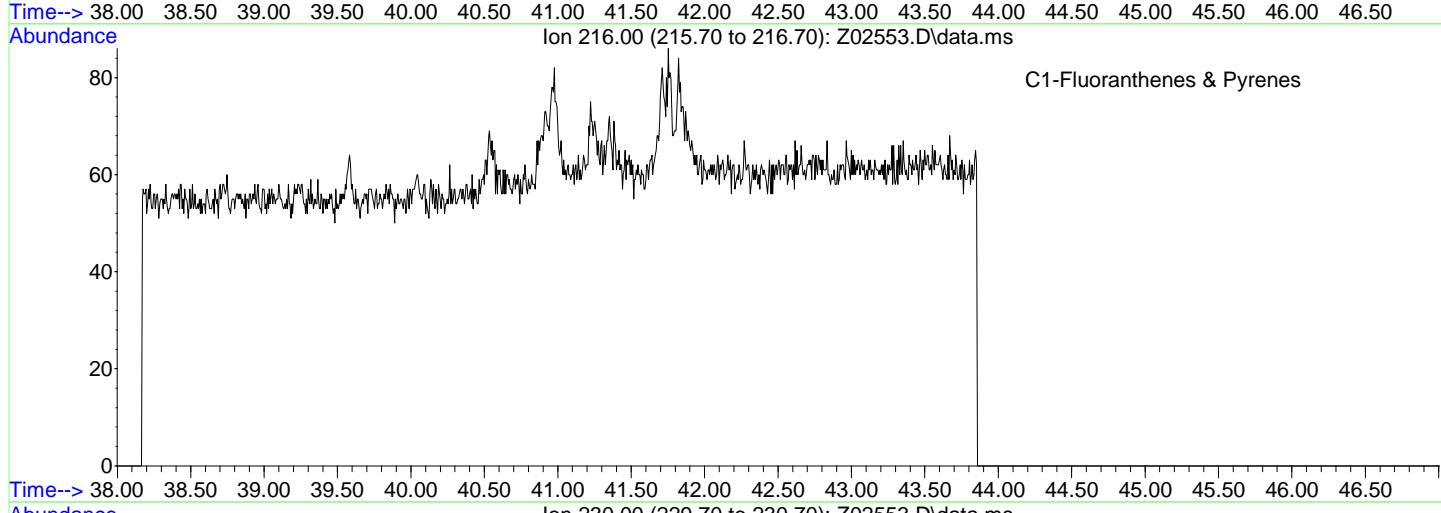
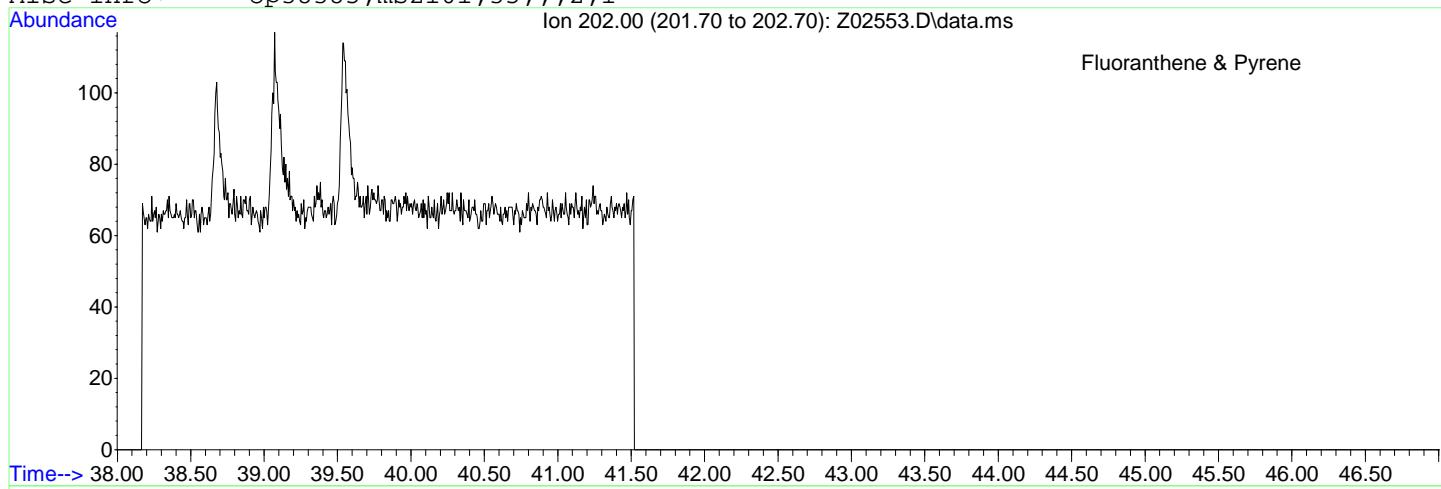
File: Z:\2\data\Z140605\Z02553.D  
Date Acquired: 6 Jun 2014 4:38 pm  
Sample Name: op38385-mb  
Misc Info: op38385,msz101,35,,,2,1



File: Z:\2\data\Z140605\Z02553.D  
Date Acquired: 6 Jun 2014 4:38 pm  
Sample Name: op38385-mb  
Misc Info: op38385,msz101,35,,,2,1  
Ion 184.00 (183.70 to 184.70): Z02553.D\data.ms



File: Z:\2\data\Z140605\Z02553.D  
Date Acquired: 6 Jun 2014 4:38 pm  
Method File: ZAPAHSIM-MTBE.M  
Sample Name: op38385-mb  
Misc Info: op38385,msz101,35,,2,1



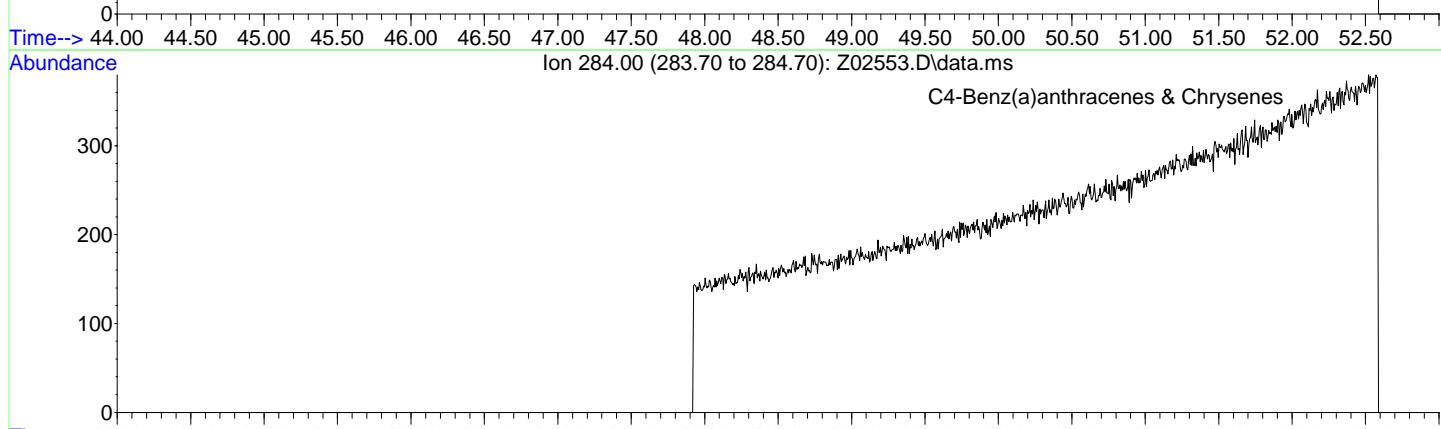
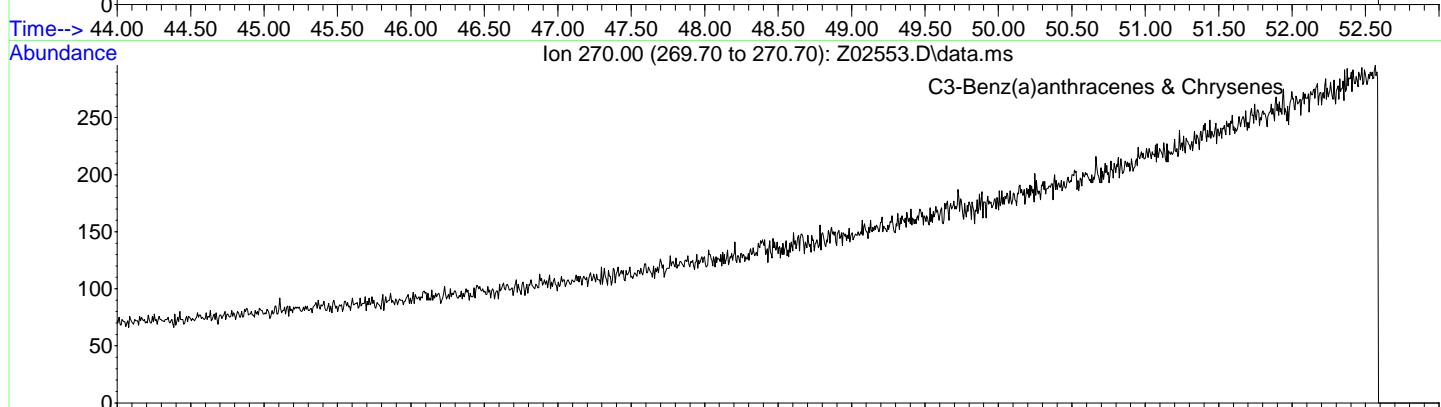
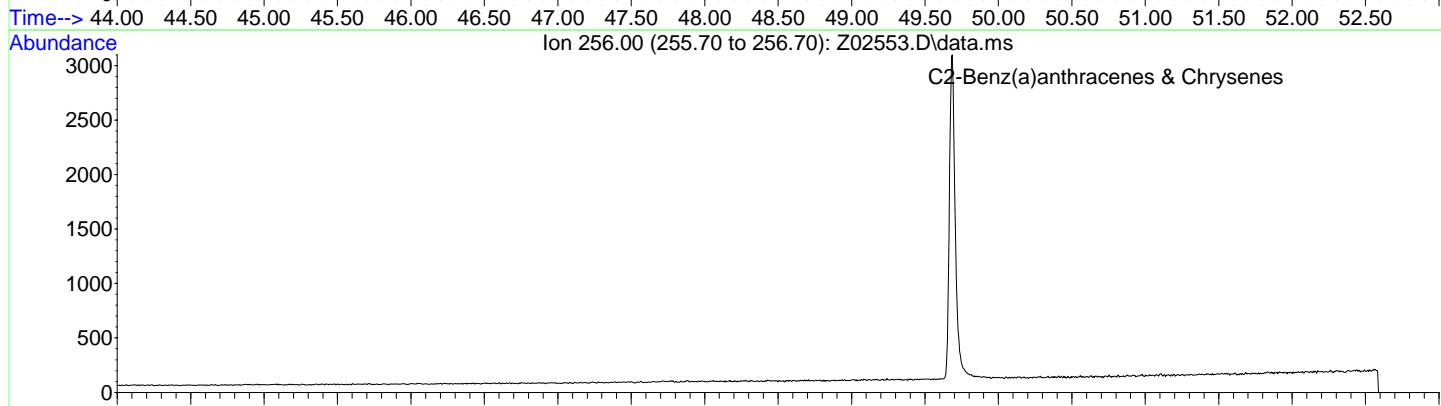
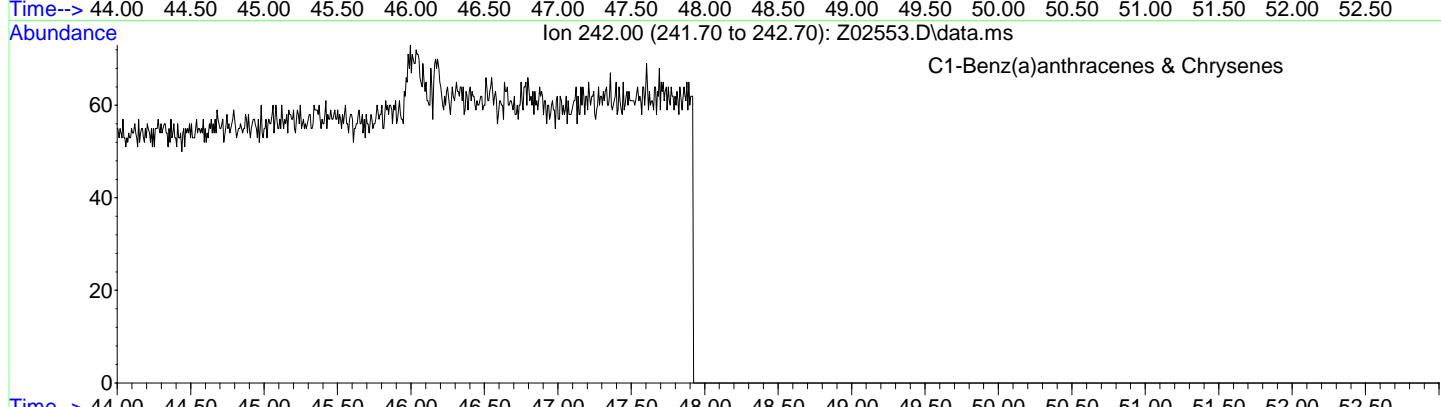
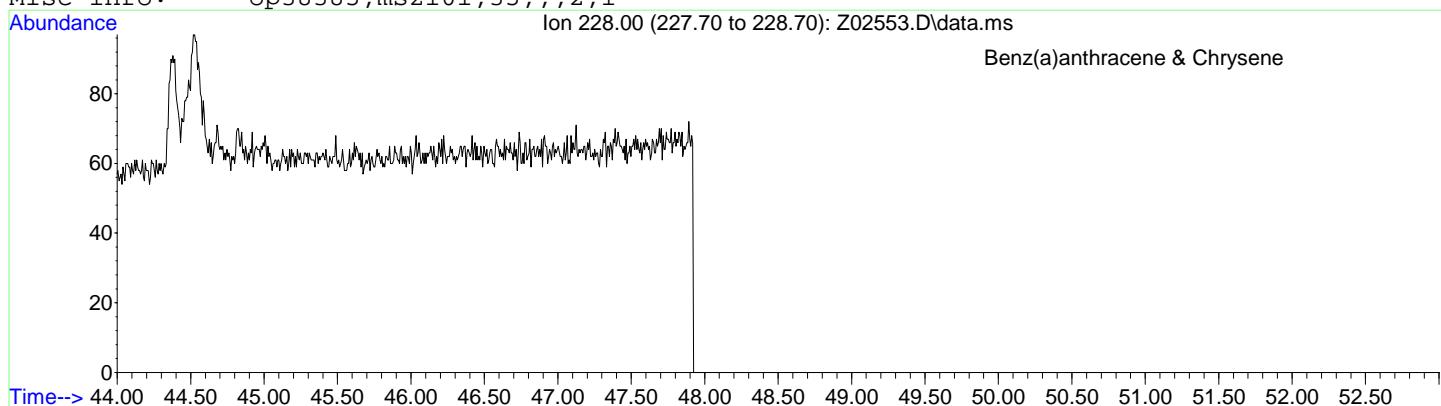
File: Z:\2\data\Z140605\Z02553.D

Date Acquired: 6 Jun 2014 4:38 pm

Sample Name: op38385-mb

Misc Info: op38385,msz101,35,,2,1

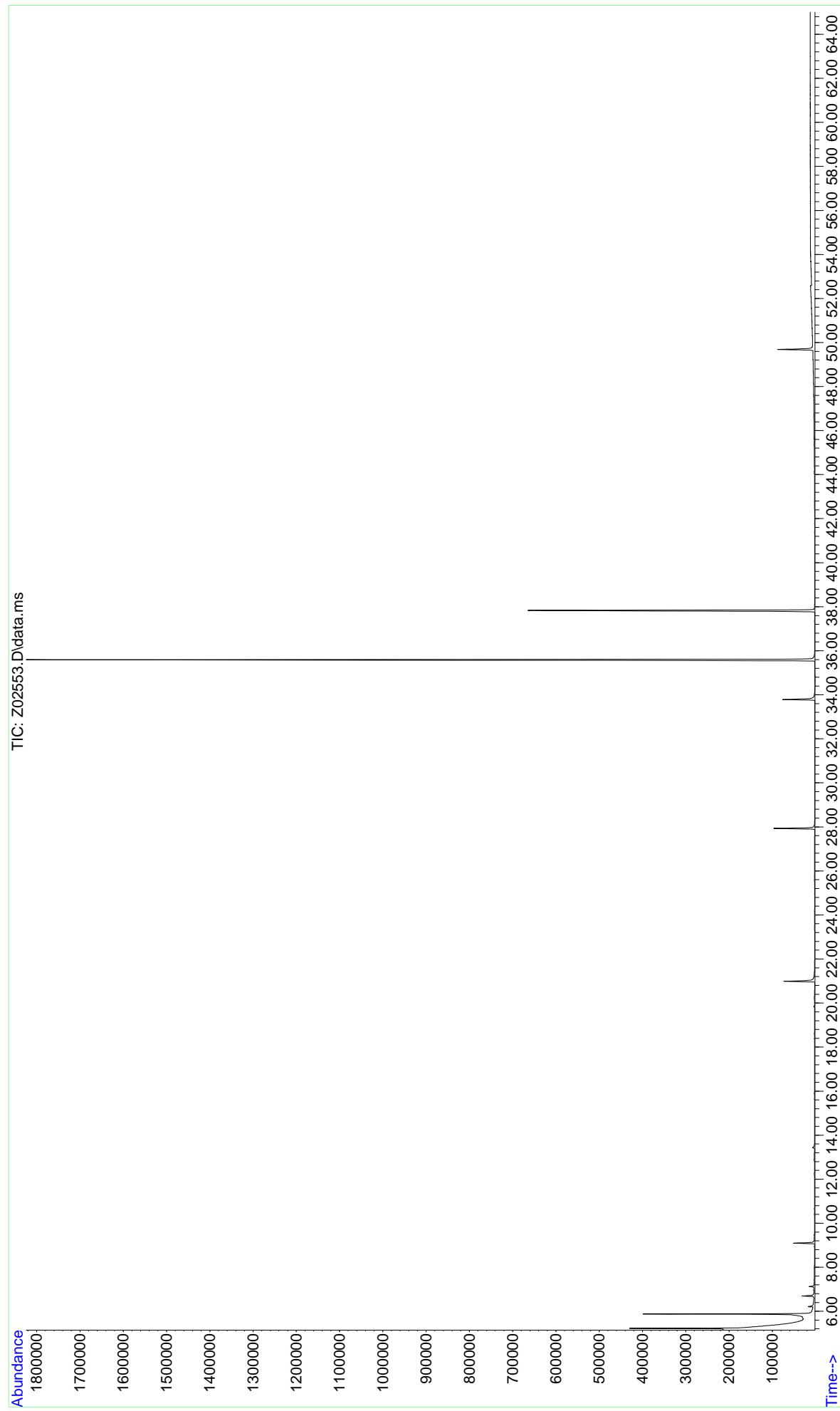
Ion 228.00 (227.70 to 228.70): Z02553.D\data.ms



## ACCUTEST

## GC/MS TOTAL ION CHROMATOGRAM

File: Z:\2\data\Z140605\Z02553.D  
Date Acquired: 6 Jun 2014 4:38 pm  
Method File: ZAPAHSIM-MTBE.M  
Sample Name: op38385-mb  
Misc Info: op38385,msz101,35,,,2,1



# **Appendix D**

## **Accutest Laboratories Report –**

### **MC30898**

---



06/16/14

## Technical Report for

**META Environmental, Inc.**

**GEINYA: RG&E West Station, Falls Street, Rochester, NY**

**Accutest Job Number: MC30898**

**Sampling Date: 05/27/14**

### Report to:

**META Environmental, Inc.  
115 Dean Avenue Suite 300  
Franklin MA 02038, MA 02038  
dmauro@metaenv.com**

**ATTN: Dave Mauro**

**Total number of pages in report: 212**



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.



Reza Pand  
Lab Director

**Client Service contact: Matthew Morrell 508-481-6200**

Certifications: MA (M-MA136, SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) ME (MA00136) FL (E87579)  
NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO MN (11546AA) NC (653) IL (002337) WI (399080220)  
DoD ELAP (L-A-B L2235)

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Test results relate only to samples analyzed.

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Accutest Laboratories

## Sample Summary

META Environmental, Inc.

Job No: MC30898

GEINYA: RG&amp;E West Station, Falls Street, Rochester, NY

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
MC30898-1	05/27/14	12:00	MC	05/28/14	AQ	Ground Water
MC30898-2	05/27/14	11:30	MC	05/28/14	SO	Soil
MC30898-3	05/27/14	12:00	MC	05/28/14	SO	Soil
MC30898-4	05/27/14	14:00	MC	05/28/14	AQ	Ground Water
						MW-26S

---

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



## SAMPLE DELIVERY GROUP CASE NARRATIVE

**Client:** META Environmental, Inc.

**Job No** MC30898

**Site:** GEINYA: RG&E West Station, Falls Street, Rochester, NY

**Report Date** 6/13/2014 4:36:47 PM

4 Sample(s) were collected on 05/27/2014 and were received at Accutest on 05/28/2014 properly preserved, at 0.2 Deg. C and intact. These Samples received an Accutest job number of MC30898. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

### Extractables by GCMS By Method D5739-06/8270C SIM

<b>Matrix</b>	AQ	<b>Batch ID:</b> OP38385
---------------	----	--------------------------

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) MC30898-1DUP were used as the QC samples indicated.
- Sample(s) MC30898-1, MC30898-4 have compound(s) reported with a “B” qualifier, indicating analyte is found in the associated method blank.
- RPD(s) for Duplicate for 1-Methylnaphthalene, C1-Naphthalenes: High RPD due to possible sample heterogeneity.
- RPD of OP38385-DUP for some of compounds: High RPD due to sample levels below reporting limit.

<b>Matrix</b>	SO	<b>Batch ID:</b> OP38366
---------------	----	--------------------------

- 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) MC30898-2DUP were used as the QC samples indicated.
- Blank Spike Recovery(s) for Benzene are outside control limits. Meets program technical requirements.
- RPD(s) for Duplicate for Benzo(b)fluorene, C3-Benzo(a)anthracenes/Chrysenes, C3-Fluoranthenes/Pyrenes, C4-Phenanthrenes/Anthracenes, 1,2,3-Trimethylbenzene, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, 2-Methylnaphthalene, Benzo(b)thiophene, Ethylbenzene, Fluorene, n-Butylbenzene, n-Propylbenzene, o-Xylene, Phenanthrene are outside control limits for sample OP38366-DUP8. High RPD due to possible sample heterogeneity.
- RPD of OP38366-DUP8 for trans-Decalin: High RPD due to sample levels below reporting limit.
- Sample(s) MC30898-2, MC30898-3 have compound(s) reported with a “B” qualifier, indicating analyte is found in the associated method blank.

## Extractables by GC By Method ASTM D3328-06

**Matrix** AQ

**Batch ID:** OP38384

- Sample(s) MC30898-1DUP were used as the QC samples indicated.

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

**Matrix** SO

**Batch ID:** OP38365

- All samples were extracted within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- Sample(s) MC30898-2DUP were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- RPD(s) for Duplicate for TPH (C8-C40) are outside control limits for sample OP38365-DUP8. High RPD due to possible sample heterogeneity.

## Wet Chemistry By Method SM21 2540 B MOD.

**Matrix** SO

**Batch ID:** GN47051

- Sample(s) MC30916-1DUP were used as the QC samples for Solids, Percent.

The Accutest Laboratories of New England certifies that all analysis were performed within method specification. It is further recommended that this report to be used in its entirety. The Accutest Laboratories of NE, Laboratory Director or assignee as verified by the signature on the cover page has authorized the release of this report(MC30898).

**Summary of Hits**

**Job Number:** MC30898  
**Account:** META Environmental, Inc.  
**Project:** GEINYA: RG&E West Station, Falls Street, Rochester, NY  
**Collected:** 05/27/14

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
---------------	------------------	-----------------	----	-----	-------	--------

**MC30898-1 SEEP-1**

C2-Benzenes	1.9	0.57	ug/l	D5739-06/8270C SIM
C3-Benzenes	1.6	0.57	ug/l	D5739-06/8270C SIM
C4-Benzenes	1.5	0.57	ug/l	D5739-06/8270C SIM
m,p-Xylene	0.88 B	0.57	ug/l	D5739-06/8270C SIM
Styrene	1.3 B	0.57	ug/l	D5739-06/8270C SIM
o-Xylene	2.4	0.57	ug/l	D5739-06/8270C SIM
Benzo(b)thiophene	2.9	0.57	ug/l	D5739-06/8270C SIM
C2-Naphthalenes	0.92	0.57	ug/l	D5739-06/8270C SIM
Acenaphthene	0.74	0.57	ug/l	D5739-06/8270C SIM

**MC30898-2 SEEP-1-0-3"**

Benzene	22.9 B	5.9	ug/kg	D5739-06/8270C SIM
C1-Benzene	27.2	5.9	ug/kg	D5739-06/8270C SIM
C2-Benzene	45.5	5.9	ug/kg	D5739-06/8270C SIM
C3-Benzene	25.9	5.9	ug/kg	D5739-06/8270C SIM
C4-Benzene	26.1	5.9	ug/kg	D5739-06/8270C SIM
C5-Benzene	22.4	5.9	ug/kg	D5739-06/8270C SIM
Toluene	43.6	5.9	ug/kg	D5739-06/8270C SIM
Ethylbenzene	8.3	5.9	ug/kg	D5739-06/8270C SIM
m,p-Xylene	70.2	5.9	ug/kg	D5739-06/8270C SIM
Styrene	51.4	5.9	ug/kg	D5739-06/8270C SIM
o-Xylene	13.8	5.9	ug/kg	D5739-06/8270C SIM
1,2,4-Trimethylbenzene	13.2	5.9	ug/kg	D5739-06/8270C SIM
n-Butylbenzene	6.3	5.9	ug/kg	D5739-06/8270C SIM
Benzo(b)thiophene	38.8	5.9	ug/kg	D5739-06/8270C SIM
Naphthalene	34.1	5.9	ug/kg	D5739-06/8270C SIM
2-Methylnaphthalene	26.0	5.9	ug/kg	D5739-06/8270C SIM
1-Methylnaphthalene	24.8	5.9	ug/kg	D5739-06/8270C SIM
C1-Naphthalenes	35.5	5.9	ug/kg	D5739-06/8270C SIM
C2-Naphthalenes	44.7	5.9	ug/kg	D5739-06/8270C SIM
C3-Naphthalenes	36.7	5.9	ug/kg	D5739-06/8270C SIM
C4-Naphthalenes	24.2	5.9	ug/kg	D5739-06/8270C SIM
Biphenyl	9.4	5.9	ug/kg	D5739-06/8270C SIM
Acenaphthylene	50.1	5.9	ug/kg	D5739-06/8270C SIM
Acenaphthene	37.7	5.9	ug/kg	D5739-06/8270C SIM
Dibenzofuran	24.7	5.9	ug/kg	D5739-06/8270C SIM
Fluorene	23.1	5.9	ug/kg	D5739-06/8270C SIM
C1-Fluorennes	13.9	5.9	ug/kg	D5739-06/8270C SIM
C2-Fluorennes	18.8	5.9	ug/kg	D5739-06/8270C SIM
C3-Fluorennes	34.1	5.9	ug/kg	D5739-06/8270C SIM
Dibenzothiophene	12.4	5.9	ug/kg	D5739-06/8270C SIM
C1-Dibenzothiophenes	15.4	5.9	ug/kg	D5739-06/8270C SIM

**Summary of Hits**

Job Number: MC30898

Account: META Environmental, Inc.

Project: GEINYA: RG&amp;E West Station, Falls Street, Rochester, NY

Collected: 05/27/14

3

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
C2-Dibenzothiophenes		24.1	5.9		ug/kg	D5739-06/8270C SIM
C3-Dibenzothiophenes		23.9	5.9		ug/kg	D5739-06/8270C SIM
C4-Dibenzothiophenes		47.0	5.9		ug/kg	D5739-06/8270C SIM
Phenanthrene		156	5.9		ug/kg	D5739-06/8270C SIM
Anthracene		55.2	5.9		ug/kg	D5739-06/8270C SIM
C1-Phenanthrenes/Anthracenes		72.4	5.9		ug/kg	D5739-06/8270C SIM
C2-Phenanthrenes/Anthracenes		45.1	5.9		ug/kg	D5739-06/8270C SIM
C3-Phenanthrenes/Anthracenes		30.0	5.9		ug/kg	D5739-06/8270C SIM
C4-Phenanthrenes/Anthracenes		22.9	5.9		ug/kg	D5739-06/8270C SIM
Retene		6.6	5.9		ug/kg	D5739-06/8270C SIM
Benzo(b)naphtho(2,1-d)thiophene		15.0	5.9		ug/kg	D5739-06/8270C SIM
Fluoranthene		273	5.9		ug/kg	D5739-06/8270C SIM
Pyrene		257	5.9		ug/kg	D5739-06/8270C SIM
C1-Fluoranthenes/Pyrenes		108	5.9		ug/kg	D5739-06/8270C SIM
C2-Fluoranthenes/Pyrenes		63.9	5.9		ug/kg	D5739-06/8270C SIM
C3-Fluoranthenes/Pyrenes		37.7	5.9		ug/kg	D5739-06/8270C SIM
Benzo(b)fluorene		11.3	5.9		ug/kg	D5739-06/8270C SIM
Benzo(c)fluorene		7.4	5.9		ug/kg	D5739-06/8270C SIM
2-Methylpyrene		12.5	5.9		ug/kg	D5739-06/8270C SIM
4-Methylpyrene		12.2	5.9		ug/kg	D5739-06/8270C SIM
1-Methylpyrene		9.4	5.9		ug/kg	D5739-06/8270C SIM
Benzo(a)anthracene		119	5.9		ug/kg	D5739-06/8270C SIM
Chrysene		126	5.9		ug/kg	D5739-06/8270C SIM
C1-Benzo(a)anthracenes/Chrysenes		53.6	5.9		ug/kg	D5739-06/8270C SIM
C2-Benzo(a)anthracenes/Chrysenes		26.7	5.9		ug/kg	D5739-06/8270C SIM
C3-Benzo(a)anthracenes/Chrysenes		30.0	5.9		ug/kg	D5739-06/8270C SIM
C4-Benzo(a)anthracenes/Chrysenes		17.6	5.9		ug/kg	D5739-06/8270C SIM
Benzo(b)fluoranthene		120	5.9		ug/kg	D5739-06/8270C SIM
Benzo(k)fluoranthene		107	5.9		ug/kg	D5739-06/8270C SIM
Benzo(e)pyrene		99.2	5.9		ug/kg	D5739-06/8270C SIM
Benzo(a)pyrene		145	5.9		ug/kg	D5739-06/8270C SIM
Perylene		76.0	5.9		ug/kg	D5739-06/8270C SIM
Indeno(1,2,3-cd)pyrene		82.9	5.9		ug/kg	D5739-06/8270C SIM
Dibenzo(a,h)anthracene		27.7	5.9		ug/kg	D5739-06/8270C SIM
Benzo(g,h,i)perylene		96.7	5.9		ug/kg	D5739-06/8270C SIM
Coronene		25.8	5.9		ug/kg	D5739-06/8270C SIM
TPH (C8-C40)		95.0	59		mg/kg	ASTM D3328-06

**MC30898-3 SEEP-1-12-14"**

Benzene	17.0 B	6.4	ug/kg	D5739-06/8270C SIM
C1-Benzene	23.7	6.4	ug/kg	D5739-06/8270C SIM
C2-Benzene	43.5	6.4	ug/kg	D5739-06/8270C SIM
C3-Benzene	40.1	6.4	ug/kg	D5739-06/8270C SIM
C4-Benzene	36.8	6.4	ug/kg	D5739-06/8270C SIM

**Summary of Hits**

**Job Number:** MC30898  
**Account:** META Environmental, Inc.  
**Project:** GEINYA: RG&E West Station, Falls Street, Rochester, NY  
**Collected:** 05/27/14

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
C5-Benzene		23.9	6.4		ug/kg	D5739-06/8270C SIM
Toluene		36.1	6.4		ug/kg	D5739-06/8270C SIM
Ethylbenzene		13.6	6.4		ug/kg	D5739-06/8270C SIM
m,p-Xylene		46.2	6.4		ug/kg	D5739-06/8270C SIM
Styrene		50.5	6.4		ug/kg	D5739-06/8270C SIM
o-Xylene		21.1	6.4		ug/kg	D5739-06/8270C SIM
n-Propylbenzene		8.6	6.4		ug/kg	D5739-06/8270C SIM
1,2,3-Trimethylbenzene		8.0	6.4		ug/kg	D5739-06/8270C SIM
1,2,4-Trimethylbenzene		24.4	6.4		ug/kg	D5739-06/8270C SIM
n-Butylbenzene		16.4	6.4		ug/kg	D5739-06/8270C SIM
Benzo(b)thiophene		45.0	6.4		ug/kg	D5739-06/8270C SIM
Naphthalene		57.4	6.4		ug/kg	D5739-06/8270C SIM
2-Methylnaphthalene		35.9	6.4		ug/kg	D5739-06/8270C SIM
1-Methylnaphthalene		37.1	6.4		ug/kg	D5739-06/8270C SIM
C1-Naphthalenes		48.5	6.4		ug/kg	D5739-06/8270C SIM
C2-Naphthalenes		54.6	6.4		ug/kg	D5739-06/8270C SIM
C3-Naphthalenes		45.7	6.4		ug/kg	D5739-06/8270C SIM
C4-Naphthalenes		34.0	6.4		ug/kg	D5739-06/8270C SIM
Biphenyl		13.3	6.4		ug/kg	D5739-06/8270C SIM
Acenaphthylene		57.0	6.4		ug/kg	D5739-06/8270C SIM
Acenaphthene		16.9	6.4		ug/kg	D5739-06/8270C SIM
Dibenzofuran		26.8	6.4		ug/kg	D5739-06/8270C SIM
Fluorene		17.2	6.4		ug/kg	D5739-06/8270C SIM
C1-Fluorennes		13.8	6.4		ug/kg	D5739-06/8270C SIM
C2-Fluorennes		27.9	6.4		ug/kg	D5739-06/8270C SIM
C3-Fluorennes		46.6	6.4		ug/kg	D5739-06/8270C SIM
Dibenzothiophene		10.5	6.4		ug/kg	D5739-06/8270C SIM
C1-Dibenzothiophenes		19.8	6.4		ug/kg	D5739-06/8270C SIM
C2-Dibenzothiophenes		32.4	6.4		ug/kg	D5739-06/8270C SIM
C3-Dibenzothiophenes		30.0	6.4		ug/kg	D5739-06/8270C SIM
C4-Dibenzothiophenes		38.9	6.4		ug/kg	D5739-06/8270C SIM
Phenanthrene		132	6.4		ug/kg	D5739-06/8270C SIM
Anthracene		55.4	6.4		ug/kg	D5739-06/8270C SIM
C1-Phenanthrenes/Anthracenes		91.0	6.4		ug/kg	D5739-06/8270C SIM
C2-Phenanthrenes/Anthracenes		81.1	6.4		ug/kg	D5739-06/8270C SIM
C3-Phenanthrenes/Anthracenes		47.1	6.4		ug/kg	D5739-06/8270C SIM
C4-Phenanthrenes/Anthracenes		25.9	6.4		ug/kg	D5739-06/8270C SIM
Retene		7.7	6.4		ug/kg	D5739-06/8270C SIM
Benzo(b)naphtho(2,1-d)thiophene		22.6	6.4		ug/kg	D5739-06/8270C SIM
Fluoranthene		310	6.4		ug/kg	D5739-06/8270C SIM
Pyrene		277	6.4		ug/kg	D5739-06/8270C SIM
C1-Fluoranthenes/Pyrenes		140	6.4		ug/kg	D5739-06/8270C SIM
C2-Fluoranthenes/Pyrenes		104	6.4		ug/kg	D5739-06/8270C SIM
C3-Fluoranthenes/Pyrenes		57.9	6.4		ug/kg	D5739-06/8270C SIM
Benzo(b)fluorene		11.8	6.4		ug/kg	D5739-06/8270C SIM

**Summary of Hits**

Job Number: MC30898

Account: META Environmental, Inc.

Project: GEINYA: RG&amp;E West Station, Falls Street, Rochester, NY

Collected: 05/27/14

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Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
2-Methylpyrene		18.9	6.4		ug/kg	D5739-06/8270C SIM
4-Methylpyrene		16.4	6.4		ug/kg	D5739-06/8270C SIM
1-Methylpyrene		12.0	6.4		ug/kg	D5739-06/8270C SIM
Benzo(a)anthracene		171	6.4		ug/kg	D5739-06/8270C SIM
Chrysene		181	6.4		ug/kg	D5739-06/8270C SIM
C1-Benzo(a)anthracenes/Chrysenes		83.7	6.4		ug/kg	D5739-06/8270C SIM
C2-Benzo(a)anthracenes/Chrysenes		46.7	6.4		ug/kg	D5739-06/8270C SIM
C3-Benzo(a)anthracenes/Chrysenes		42.8	6.4		ug/kg	D5739-06/8270C SIM
C4-Benzo(a)anthracenes/Chrysenes		39.9	6.4		ug/kg	D5739-06/8270C SIM
Benzo(b)fluoranthene		165	6.4		ug/kg	D5739-06/8270C SIM
Benzo(k)fluoranthene		156	6.4		ug/kg	D5739-06/8270C SIM
Benzo(e)pyrene		140	6.4		ug/kg	D5739-06/8270C SIM
Benzo(a)pyrene		198	6.4		ug/kg	D5739-06/8270C SIM
Perylene		94.8	6.4		ug/kg	D5739-06/8270C SIM
Indeno(1,2,3-cd)pyrene		113	6.4		ug/kg	D5739-06/8270C SIM
Dibenz(a,h)anthracene		42.4	6.4		ug/kg	D5739-06/8270C SIM
Benzo(g,h,i)perylene		139	6.4		ug/kg	D5739-06/8270C SIM
Coronene		36.2	6.4		ug/kg	D5739-06/8270C SIM
TPH (C8-C40)		198	64		mg/kg	ASTM D3328-06

**MC30898-4 MW-26S**

Styrene 1.1 B 0.57 ug/l D5739-06/8270C SIM



## Sample Results

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### Report of Analysis

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Accutest Laboratories

**Report of Analysis**

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<b>Client Sample ID:</b>	SEEP-1	<b>Date Sampled:</b>	05/27/14
<b>Lab Sample ID:</b>	MC30898-1	<b>Date Received:</b>	05/28/14
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	D5739-06/8270C SIM SW846 3511		
<b>Project:</b>	GEINYA: RG&E West Station, Falls Street, Rochester, NY		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	Z02556.D	1	06/06/14	SZ	06/03/14	OP38385	MSZ101
Run #2							

	<b>Initial Volume</b>	<b>Final Volume</b>
Run #1	35.0 ml	2.0 ml
Run #2		

**Alkylated PAHs**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>Units</b>	<b>Q</b>
71-43-2	Benzene	ND	0.57	ug/l	B
	C1-Benzene	ND	0.57	ug/l	
	C2-Benzenes	1.9	0.57	ug/l	
	C3-Benzenes	1.6	0.57	ug/l	
	C4-Benzenes	1.5	0.57	ug/l	
	C5-Benzenes	ND	0.57	ug/l	
108-88-3	Toluene	ND	0.57	ug/l	B
100-41-4	Ethylbenzene	ND	0.57	ug/l	
	m,p-Xylene	0.88	0.57	ug/l	B
100-42-5	Styrene	1.3	0.57	ug/l	B
95-47-6	o-Xylene	2.4	0.57	ug/l	
98-82-8	Isopropylbenzene	ND	0.57	ug/l	
103-65-1	n-Propylbenzene	ND	0.57	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	0.57	ug/l	
526-73-8	1,2,3-Trimethylbenzene	ND	0.57	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	0.57	ug/l	
98-06-6	t-Butylbenzene	ND	0.57	ug/l	
135-98-8	sec-Butylbenzene	ND	0.57	ug/l	
99-87-6	p-Isopropyltoluene	ND	0.57	ug/l	
104-51-8	n-Butylbenzene	ND	0.57	ug/l	
493-02-7	trans-Decalin	ND	0.57	ug/l	
493-01-6	cis-Decalin	ND	0.57	ug/l	
11095-43-5	Benzo(b)thiophene	2.9	0.57	ug/l	
91-20-3	Naphthalene	ND	0.57	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.57	ug/l	
90-12-0	1-Methylnaphthalene	ND	0.57	ug/l	
	C1-Naphthalenes	ND	0.57	ug/l	
	C2-Naphthalenes	0.92	0.57	ug/l	
	C3-Naphthalenes	ND	0.57	ug/l	
	C4-Naphthalenes	ND	0.57	ug/l	
92-52-4	Biphenyl	ND	0.57	ug/l	
208-96-8	Acenaphthylene	ND	0.57	ug/l	

ND = Not detected

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

Accutest Laboratories

**Report of Analysis**

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<b>Client Sample ID:</b>	SEEP-1	<b>Date Sampled:</b>	05/27/14
<b>Lab Sample ID:</b>	MC30898-1	<b>Date Received:</b>	05/28/14
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	D5739-06/8270C SIM SW846 3511		
<b>Project:</b>	GEINYA: RG&E West Station, Falls Street, Rochester, NY		

**Alkylated PAHs**

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	0.74	0.57	ug/l	
132-64-9	Dibenzofuran	ND	0.57	ug/l	
86-73-7	Fluorene	ND	0.57	ug/l	
	C1-Fluorenes	ND	0.57	ug/l	
	C2-Fluorenes	ND	0.57	ug/l	
	C3-Fluorenes	ND	0.57	ug/l	
132-65-0	Dibenzothiophene	ND	0.57	ug/l	
	C1-Dibenzothiophenes	ND	0.57	ug/l	
	C2-Dibenzothiophenes	ND	0.57	ug/l	
	C3-Dibenzothiophenes	ND	0.57	ug/l	
	C4-Dibenzothiophenes	ND	0.57	ug/l	
85-01-8	Phenanthrene	ND	0.57	ug/l	
120-12-7	Anthracene	ND	0.57	ug/l	
	C1-Phenanthrenes/Anthracene	ND	0.57	ug/l	
	C2-Phenanthrenes/Anthracene	ND	0.57	ug/l	
	C3-Phenanthrenes/Anthracene	ND	0.57	ug/l	
	C4-Phenanthrenes/Anthracene	ND	0.57	ug/l	
483-65-8	Retene	ND	0.57	ug/l	
239-35-0	Benzo(b)naphtho(2,1-d)thioph	ND	0.57	ug/l	
206-44-0	Fluoranthene	ND	0.57	ug/l	
129-00-0	Pyrene	ND	0.57	ug/l	
	C1-Fluoranthenes/Pyrenes	ND	0.57	ug/l	
	C2-Fluoranthenes/Pyrenes	ND	0.57	ug/l	
	C3-Fluoranthenes/Pyrenes	ND	0.57	ug/l	
243-17-4	Benzo(b)fluorene	ND	0.57	ug/l	
205-12-9	Benzo(c)fluorene	ND	0.57	ug/l	
3442-78-2	2-Methylpyrene	ND	0.57	ug/l	
3353-12-6	4-Methylpyrene	ND	0.57	ug/l	
2381-21-7	1-Methylpyrene	ND	0.57	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.57	ug/l	
218-01-9	Chrysene	ND	0.57	ug/l	
	C1-Benzo(a)anthracenes/Chrys	ND	0.57	ug/l	
	C2-Benzo(a)anthracenes/Chrys	ND	0.57	ug/l	
	C3-Benzo(a)anthracenes/Chrys	ND	0.57	ug/l	
	C4-Benzo(a)anthracenes/Chrys	ND	0.57	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.57	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.57	ug/l	
192-97-2	Benzo(e)pyrene	ND	0.57	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.57	ug/l	
198-55-0	Perylene	ND	0.57	ug/l	

ND = Not detected

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

Accutest Laboratories

**Report of Analysis**

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<b>Client Sample ID:</b>	SEEP-1	<b>Date Sampled:</b>	05/27/14
<b>Lab Sample ID:</b>	MC30898-1	<b>Date Received:</b>	05/28/14
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	D5739-06/8270C SIM SW846 3511		
<b>Project:</b>	GEINYA: RG&E West Station, Falls Street, Rochester, NY		

**Alkylated PAHs**

CAS No.	Compound	Result	RL	Units	Q
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.57	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.57	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.57	ug/l	
191-07-1	Coronene	ND	0.57	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	108%		40-140%
1146-65-2	Naphthalene-d8	97%		40-140%
1517-22-2	Phenanthrene-d10	103%		40-140%
	Perylene-d12	100%		40-140%

ND = Not detected

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

Accutest Laboratories

**Report of Analysis**

Page 1 of 1

<b>Client Sample ID:</b>	SEEP-1	<b>Date Sampled:</b>	05/27/14
<b>Lab Sample ID:</b>	MC30898-1	<b>Date Received:</b>	05/28/14
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	ASTM D3328-06 SW846 3511		
<b>Project:</b>	GEINYA: RG&E West Station, Falls Street, Rochester, NY		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	BG44610.D	1	06/05/14	RP	06/03/14	OP38384	GBG1703
Run #2							

	<b>Initial Volume</b>	<b>Final Volume</b>
Run #1	35.0 ml	2.0 ml
Run #2		

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>Units</b>	<b>Q</b>
	TPH (C8-C40)	ND	5.7	mg/l	

<b>CAS No.</b>	<b>Surrogate Recoveries</b>	<b>Run# 1</b>	<b>Run# 2</b>	<b>Limits</b>
84-15-1	o-Terphenyl	112%		40-140%

ND = Not detected

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

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<b>Client Sample ID:</b>	SEEP-1-0-3"	<b>Date Sampled:</b>	05/27/14
<b>Lab Sample ID:</b>	MC30898-2	<b>Date Received:</b>	05/28/14
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	57.8
<b>Method:</b>	D5739-06/8270C SIM SW846 3570		
<b>Project:</b>	GEINYA: RG&E West Station, Falls Street, Rochester, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z02548.D	1	06/06/14	SZ	06/02/14	OP38366	MSZ101
Run #2							

	Initial Weight	Final Volume
Run #1	5.91 g	2.0 ml
Run #2		

**Alkylated PAHs**

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	22.9	5.9	ug/kg	B
	C1-Benzene	27.2	5.9	ug/kg	
	C2-Benzenes	45.5	5.9	ug/kg	
	C3-Benzenes	25.9	5.9	ug/kg	
	C4-Benzenes	26.1	5.9	ug/kg	
	C5-Benzenes	22.4	5.9	ug/kg	
108-88-3	Toluene	43.6	5.9	ug/kg	
100-41-4	Ethylbenzene	8.3	5.9	ug/kg	
	m,p-Xylene	70.2	5.9	ug/kg	
100-42-5	Styrene	51.4	5.9	ug/kg	
95-47-6	o-Xylene	13.8	5.9	ug/kg	
98-82-8	Isopropylbenzene	ND	5.9	ug/kg	
103-65-1	n-Propylbenzene	ND	5.9	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	5.9	ug/kg	
526-73-8	1,2,3-Trimethylbenzene	ND	5.9	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	13.2	5.9	ug/kg	
98-06-6	t-Butylbenzene	ND	5.9	ug/kg	
135-98-8	sec-Butylbenzene	ND	5.9	ug/kg	
99-87-6	p-Isopropyltoluene	ND	5.9	ug/kg	
104-51-8	n-Butylbenzene	6.3	5.9	ug/kg	
493-02-7	trans-Decalin	ND	5.9	ug/kg	
493-01-6	cis-Decalin	ND	5.9	ug/kg	
11095-43-5	Benzo(b)thiophene	38.8	5.9	ug/kg	
91-20-3	Naphthalene	34.1	5.9	ug/kg	
91-57-6	2-Methylnaphthalene	26.0	5.9	ug/kg	
90-12-0	1-Methylnaphthalene	24.8	5.9	ug/kg	
	C1-Naphthalenes	35.5	5.9	ug/kg	
	C2-Naphthalenes	44.7	5.9	ug/kg	
	C3-Naphthalenes	36.7	5.9	ug/kg	
	C4-Naphthalenes	24.2	5.9	ug/kg	
92-52-4	Biphenyl	9.4	5.9	ug/kg	
208-96-8	Acenaphthylene	50.1	5.9	ug/kg	

ND = Not detected

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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<b>Client Sample ID:</b>	SEEP-1-0-3"	<b>Date Sampled:</b>	05/27/14
<b>Lab Sample ID:</b>	MC30898-2	<b>Date Received:</b>	05/28/14
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	57.8
<b>Method:</b>	D5739-06/8270C SIM SW846 3570		
<b>Project:</b>	GEINYA: RG&E West Station, Falls Street, Rochester, NY		

**Alkylated PAHs**

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	37.7	5.9	ug/kg	
132-64-9	Dibenzofuran	24.7	5.9	ug/kg	
86-73-7	Fluorene	23.1	5.9	ug/kg	
	C1-Fluorenes	13.9	5.9	ug/kg	
	C2-Fluorenes	18.8	5.9	ug/kg	
	C3-Fluorenes	34.1	5.9	ug/kg	
132-65-0	Dibenzothiophene	12.4	5.9	ug/kg	
	C1-Dibenzothiophenes	15.4	5.9	ug/kg	
	C2-Dibenzothiophenes	24.1	5.9	ug/kg	
	C3-Dibenzothiophenes	23.9	5.9	ug/kg	
	C4-Dibenzothiophenes	47.0	5.9	ug/kg	
85-01-8	Phenanthrene	156	5.9	ug/kg	
120-12-7	Anthracene	55.2	5.9	ug/kg	
	C1-Phenanthrenes/Anthracene	72.4	5.9	ug/kg	
	C2-Phenanthrenes/Anthracene	45.1	5.9	ug/kg	
	C3-Phenanthrenes/Anthracene	30.0	5.9	ug/kg	
	C4-Phenanthrenes/Anthracene	22.9	5.9	ug/kg	
483-65-8	Retene	6.6	5.9	ug/kg	
239-35-0	Benzo(b)naphtho(2,1-d)thioph	15.0	5.9	ug/kg	
206-44-0	Fluoranthene	273	5.9	ug/kg	
129-00-0	Pyrene	257	5.9	ug/kg	
	C1-Fluoranthenes/Pyrenes	108	5.9	ug/kg	
	C2-Fluoranthenes/Pyrenes	63.9	5.9	ug/kg	
	C3-Fluoranthenes/Pyrenes	37.7	5.9	ug/kg	
243-17-4	Benzo(b)fluorene	11.3	5.9	ug/kg	
205-12-9	Benzo(c)fluorene	7.4	5.9	ug/kg	
3442-78-2	2-Methylpyrene	12.5	5.9	ug/kg	
3353-12-6	4-Methylpyrene	12.2	5.9	ug/kg	
2381-21-7	1-Methylpyrene	9.4	5.9	ug/kg	
56-55-3	Benzo(a)anthracene	119	5.9	ug/kg	
218-01-9	Chrysene	126	5.9	ug/kg	
	C1-Benzo(a)anthracenes/Chrys	53.6	5.9	ug/kg	
	C2-Benzo(a)anthracenes/Chrys	26.7	5.9	ug/kg	
	C3-Benzo(a)anthracenes/Chrys	30.0	5.9	ug/kg	
	C4-Benzo(a)anthracenes/Chrys	17.6	5.9	ug/kg	
205-99-2	Benzo(b)fluoranthene	120	5.9	ug/kg	
207-08-9	Benzo(k)fluoranthene	107	5.9	ug/kg	
192-97-2	Benzo(e)pyrene	99.2	5.9	ug/kg	
50-32-8	Benzo(a)pyrene	145	5.9	ug/kg	
198-55-0	Perylene	76.0	5.9	ug/kg	

ND = Not detected

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

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<b>Client Sample ID:</b>	SEEP-1-0-3"	<b>Date Sampled:</b>	05/27/14
<b>Lab Sample ID:</b>	MC30898-2	<b>Date Received:</b>	05/28/14
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	57.8
<b>Method:</b>	D5739-06/8270C SIM SW846 3570		
<b>Project:</b>	GEINYA: RG&E West Station, Falls Street, Rochester, NY		

**Alkylated PAHs**

CAS No.	Compound	Result	RL	Units	Q
193-39-5	Indeno(1,2,3-cd)pyrene	82.9	5.9	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	27.7	5.9	ug/kg	
191-24-2	Benzo(g,h,i)perylene	96.7	5.9	ug/kg	
191-07-1	Coronene	25.8	5.9	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	65%		40-140%
1146-65-2	Naphthalene-d8	67%		40-140%
1517-22-2	Phenanthrene-d10	71%		40-140%
	Perylene-d12	73%		40-140%

ND = Not detected

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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

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<b>Client Sample ID:</b>	SEEP-1-0-3"	<b>Date Sampled:</b>	05/27/14
<b>Lab Sample ID:</b>	MC30898-2	<b>Date Received:</b>	05/28/14
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	57.8
<b>Method:</b>	ASTM D3328-06 SW846 3570		
<b>Project:</b>	GEINYA: RG&E West Station, Falls Street, Rochester, NY		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	BG44628.D	1	06/05/14	RP	06/02/14	OP38365	GBG1703
Run #2							

	<b>Initial Weight</b>	<b>Final Volume</b>
Run #1	5.91 g	2.0 ml
Run #2		

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>Units</b>	<b>Q</b>
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TPH (C8-C40)	95.0	59	mg/kg	
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<b>CAS No.</b>	<b>Surrogate Recoveries</b>	<b>Run# 1</b>	<b>Run# 2</b>	<b>Limits</b>
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84-15-1	o-Terphenyl	75%		40-140%
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ND = Not detected  
 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

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<b>Client Sample ID:</b>	SEEP-1-12-14"	<b>Date Sampled:</b>	05/27/14
<b>Lab Sample ID:</b>	MC30898-3	<b>Date Received:</b>	05/28/14
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	60.1
<b>Method:</b>	D5739-06/8270C SIM SW846 3570		
<b>Project:</b>	GEINYA: RG&E West Station, Falls Street, Rochester, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z02549.D	1	06/06/14	SZ	06/02/14	OP38366	MSZ101
Run #2							

	Initial Weight	Final Volume
Run #1	5.19 g	2.0 ml
Run #2		

**Alkylated PAHs**

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	17.0	6.4	ug/kg	B
	C1-Benzene	23.7	6.4	ug/kg	
	C2-Benzenes	43.5	6.4	ug/kg	
	C3-Benzenes	40.1	6.4	ug/kg	
	C4-Benzenes	36.8	6.4	ug/kg	
	C5-Benzenes	23.9	6.4	ug/kg	
108-88-3	Toluene	36.1	6.4	ug/kg	
100-41-4	Ethylbenzene	13.6	6.4	ug/kg	
	m,p-Xylene	46.2	6.4	ug/kg	
100-42-5	Styrene	50.5	6.4	ug/kg	
95-47-6	o-Xylene	21.1	6.4	ug/kg	
98-82-8	Isopropylbenzene	ND	6.4	ug/kg	
103-65-1	n-Propylbenzene	8.6	6.4	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	6.4	ug/kg	
526-73-8	1,2,3-Trimethylbenzene	8.0	6.4	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	24.4	6.4	ug/kg	
98-06-6	t-Butylbenzene	ND	6.4	ug/kg	
135-98-8	sec-Butylbenzene	ND	6.4	ug/kg	
99-87-6	p-Isopropyltoluene	ND	6.4	ug/kg	
104-51-8	n-Butylbenzene	16.4	6.4	ug/kg	
493-02-7	trans-Decalin	ND	6.4	ug/kg	
493-01-6	cis-Decalin	ND	6.4	ug/kg	
11095-43-5	Benzo(b)thiophene	45.0	6.4	ug/kg	
91-20-3	Naphthalene	57.4	6.4	ug/kg	
91-57-6	2-Methylnaphthalene	35.9	6.4	ug/kg	
90-12-0	1-Methylnaphthalene	37.1	6.4	ug/kg	
	C1-Naphthalenes	48.5	6.4	ug/kg	
	C2-Naphthalenes	54.6	6.4	ug/kg	
	C3-Naphthalenes	45.7	6.4	ug/kg	
	C4-Naphthalenes	34.0	6.4	ug/kg	
92-52-4	Biphenyl	13.3	6.4	ug/kg	
208-96-8	Acenaphthylene	57.0	6.4	ug/kg	

ND = Not detected

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>	SEEP-1-12-14"	<b>Date Sampled:</b>	05/27/14
<b>Lab Sample ID:</b>	MC30898-3	<b>Date Received:</b>	05/28/14
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	60.1
<b>Method:</b>	D5739-06/8270C SIM SW846 3570		
<b>Project:</b>	GEINYA: RG&E West Station, Falls Street, Rochester, NY		

**Alkylated PAHs**

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	16.9	6.4	ug/kg	
132-64-9	Dibenzofuran	26.8	6.4	ug/kg	
86-73-7	Fluorene	17.2	6.4	ug/kg	
	C1-Fluorenes	13.8	6.4	ug/kg	
	C2-Fluorenes	27.9	6.4	ug/kg	
	C3-Fluorenes	46.6	6.4	ug/kg	
132-65-0	Dibenzothiophene	10.5	6.4	ug/kg	
	C1-Dibenzothiophenes	19.8	6.4	ug/kg	
	C2-Dibenzothiophenes	32.4	6.4	ug/kg	
	C3-Dibenzothiophenes	30.0	6.4	ug/kg	
	C4-Dibenzothiophenes	38.9	6.4	ug/kg	
85-01-8	Phenanthrene	132	6.4	ug/kg	
120-12-7	Anthracene	55.4	6.4	ug/kg	
	C1-Phenanthrenes/Anthracene	91.0	6.4	ug/kg	
	C2-Phenanthrenes/Anthracene	81.1	6.4	ug/kg	
	C3-Phenanthrenes/Anthracene	47.1	6.4	ug/kg	
	C4-Phenanthrenes/Anthracene	25.9	6.4	ug/kg	
483-65-8	Retene	7.7	6.4	ug/kg	
239-35-0	Benzo(b)naphtho(2,1-d)thioph	22.6	6.4	ug/kg	
206-44-0	Fluoranthene	310	6.4	ug/kg	
129-00-0	Pyrene	277	6.4	ug/kg	
	C1-Fluoranthenes/Pyrenes	140	6.4	ug/kg	
	C2-Fluoranthenes/Pyrenes	104	6.4	ug/kg	
	C3-Fluoranthenes/Pyrenes	57.9	6.4	ug/kg	
243-17-4	Benzo(b)fluorene	11.8	6.4	ug/kg	
205-12-9	Benzo(c)fluorene	ND	6.4	ug/kg	
3442-78-2	2-Methylpyrene	18.9	6.4	ug/kg	
3353-12-6	4-Methylpyrene	16.4	6.4	ug/kg	
2381-21-7	1-Methylpyrene	12.0	6.4	ug/kg	
56-55-3	Benzo(a)anthracene	171	6.4	ug/kg	
218-01-9	Chrysene	181	6.4	ug/kg	
	C1-Benzo(a)anthracenes/Chrys	83.7	6.4	ug/kg	
	C2-Benzo(a)anthracenes/Chrys	46.7	6.4	ug/kg	
	C3-Benzo(a)anthracenes/Chrys	42.8	6.4	ug/kg	
	C4-Benzo(a)anthracenes/Chrys	39.9	6.4	ug/kg	
205-99-2	Benzo(b)fluoranthene	165	6.4	ug/kg	
207-08-9	Benzo(k)fluoranthene	156	6.4	ug/kg	
192-97-2	Benzo(e)pyrene	140	6.4	ug/kg	
50-32-8	Benzo(a)pyrene	198	6.4	ug/kg	
198-55-0	Perylene	94.8	6.4	ug/kg	

ND = Not detected

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

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**Report of Analysis**

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<b>Client Sample ID:</b>	SEEP-1-12-14"	<b>Date Sampled:</b>	05/27/14
<b>Lab Sample ID:</b>	MC30898-3	<b>Date Received:</b>	05/28/14
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	60.1
<b>Method:</b>	D5739-06/8270C SIM SW846 3570		
<b>Project:</b>	GEINYA: RG&E West Station, Falls Street, Rochester, NY		

**Alkylated PAHs**

CAS No.	Compound	Result	RL	Units	Q
193-39-5	Indeno(1,2,3-cd)pyrene	113	6.4	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	42.4	6.4	ug/kg	
191-24-2	Benzo(g,h,i)perylene	139	6.4	ug/kg	
191-07-1	Coronene	36.2	6.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	75%		40-140%
1146-65-2	Naphthalene-d8	76%		40-140%
1517-22-2	Phenanthrene-d10	80%		40-140%
	Perylene-d12	82%		40-140%

ND = Not detected

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

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<b>Client Sample ID:</b>	SEEP-1-12-14"	<b>Date Sampled:</b>	05/27/14
<b>Lab Sample ID:</b>	MC30898-3	<b>Date Received:</b>	05/28/14
<b>Matrix:</b>	SO - Soil	<b>Percent Solids:</b>	60.1
<b>Method:</b>	ASTM D3328-06 SW846 3570		
<b>Project:</b>	GEINYA: RG&E West Station, Falls Street, Rochester, NY		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	BG44630.D	2	06/05/14	RP	06/02/14	OP38365	GBG1703
Run #2							

	<b>Initial Weight</b>	<b>Final Volume</b>
Run #1	5.19 g	1.0 ml
Run #2		

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>Units</b>	<b>Q</b>
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TPH (C8-C40)	198	64	mg/kg
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<b>CAS No.</b>	<b>Surrogate Recoveries</b>	<b>Run# 1</b>	<b>Run# 2</b>	<b>Limits</b>
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84-15-1	o-Terphenyl	85%		40-140%
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ND = Not detected  
 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

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**Report of Analysis**

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<b>Client Sample ID:</b>	MW-26S	<b>Date Sampled:</b>	05/27/14
<b>Lab Sample ID:</b>	MC30898-4	<b>Date Received:</b>	05/28/14
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	D5739-06/8270C SIM SW846 3511		
<b>Project:</b>	GEINYA: RG&E West Station, Falls Street, Rochester, NY		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	Z02557.D	1	06/06/14	SZ	06/03/14	OP38385	MSZ101
Run #2							

	<b>Initial Volume</b>	<b>Final Volume</b>
Run #1	35.0 ml	2.0 ml
Run #2		

**Alkylated PAHs**

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>Units</b>	<b>Q</b>
71-43-2	Benzene	ND	0.57	ug/l	B
	C1-Benzene	ND	0.57	ug/l	
	C2-Benzenes	ND	0.57	ug/l	
	C3-Benzenes	ND	0.57	ug/l	
	C4-Benzenes	ND	0.57	ug/l	
	C5-Benzenes	ND	0.57	ug/l	
108-88-3	Toluene	ND	0.57	ug/l	B
100-41-4	Ethylbenzene	ND	0.57	ug/l	
	m,p-Xylene	ND	0.57	ug/l	B
100-42-5	Styrene	1.1	0.57	ug/l	B
95-47-6	o-Xylene	ND	0.57	ug/l	
98-82-8	Isopropylbenzene	ND	0.57	ug/l	
103-65-1	n-Propylbenzene	ND	0.57	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	0.57	ug/l	
526-73-8	1,2,3-Trimethylbenzene	ND	0.57	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	0.57	ug/l	
98-06-6	t-Butylbenzene	ND	0.57	ug/l	
135-98-8	sec-Butylbenzene	ND	0.57	ug/l	
99-87-6	p-Isopropyltoluene	ND	0.57	ug/l	
104-51-8	n-Butylbenzene	ND	0.57	ug/l	
493-02-7	trans-Decalin	ND	0.57	ug/l	
493-01-6	cis-Decalin	ND	0.57	ug/l	
11095-43-5	Benzo(b)thiophene	ND	0.57	ug/l	
91-20-3	Naphthalene	ND	0.57	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.57	ug/l	
90-12-0	1-Methylnaphthalene	ND	0.57	ug/l	
	C1-Naphthalenes	ND	0.57	ug/l	
	C2-Naphthalenes	ND	0.57	ug/l	
	C3-Naphthalenes	ND	0.57	ug/l	
	C4-Naphthalenes	ND	0.57	ug/l	
92-52-4	Biphenyl	ND	0.57	ug/l	
208-96-8	Acenaphthylene	ND	0.57	ug/l	

ND = Not detected

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

Accutest Laboratories

**Report of Analysis**

Page 2 of 3

<b>Client Sample ID:</b>	MW-26S	<b>Date Sampled:</b>	05/27/14
<b>Lab Sample ID:</b>	MC30898-4	<b>Date Received:</b>	05/28/14
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	D5739-06/8270C SIM SW846 3511		
<b>Project:</b>	GEINYA: RG&E West Station, Falls Street, Rochester, NY		

**Alkylated PAHs**

CAS No.	Compound	Result	RL	Units	Q
83-32-9	Acenaphthene	ND	0.57	ug/l	
132-64-9	Dibenzofuran	ND	0.57	ug/l	
86-73-7	Fluorene	ND	0.57	ug/l	
	C1-Fluorenes	ND	0.57	ug/l	
	C2-Fluorenes	ND	0.57	ug/l	
	C3-Fluorenes	ND	0.57	ug/l	
132-65-0	Dibenzothiophene	ND	0.57	ug/l	
	C1-Dibenzothiophenes	ND	0.57	ug/l	
	C2-Dibenzothiophenes	ND	0.57	ug/l	
	C3-Dibenzothiophenes	ND	0.57	ug/l	
	C4-Dibenzothiophenes	ND	0.57	ug/l	
85-01-8	Phenanthrene	ND	0.57	ug/l	
120-12-7	Anthracene	ND	0.57	ug/l	
	C1-Phenanthrenes/Anthracene	ND	0.57	ug/l	
	C2-Phenanthrenes/Anthracene	ND	0.57	ug/l	
	C3-Phenanthrenes/Anthracene	ND	0.57	ug/l	
	C4-Phenanthrenes/Anthracene	ND	0.57	ug/l	
483-65-8	Retene	ND	0.57	ug/l	
239-35-0	Benzo(b)naphtho(2,1-d)thioph	ND	0.57	ug/l	
206-44-0	Fluoranthene	ND	0.57	ug/l	
129-00-0	Pyrene	ND	0.57	ug/l	
	C1-Fluoranthenes/Pyrenes	ND	0.57	ug/l	
	C2-Fluoranthenes/Pyrenes	ND	0.57	ug/l	
	C3-Fluoranthenes/Pyrenes	ND	0.57	ug/l	
243-17-4	Benzo(b)fluorene	ND	0.57	ug/l	
205-12-9	Benzo(c)fluorene	ND	0.57	ug/l	
3442-78-2	2-Methylpyrene	ND	0.57	ug/l	
3353-12-6	4-Methylpyrene	ND	0.57	ug/l	
2381-21-7	1-Methylpyrene	ND	0.57	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.57	ug/l	
218-01-9	Chrysene	ND	0.57	ug/l	
	C1-Benzo(a)anthracenes/Chrys	ND	0.57	ug/l	
	C2-Benzo(a)anthracenes/Chrys	ND	0.57	ug/l	
	C3-Benzo(a)anthracenes/Chrys	ND	0.57	ug/l	
	C4-Benzo(a)anthracenes/Chrys	ND	0.57	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	0.57	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.57	ug/l	
192-97-2	Benzo(e)pyrene	ND	0.57	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.57	ug/l	
198-55-0	Perylene	ND	0.57	ug/l	

ND = Not detected

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

Accutest Laboratories

**Report of Analysis**

Page 3 of 3

<b>Client Sample ID:</b>	MW-26S	<b>Date Sampled:</b>	05/27/14
<b>Lab Sample ID:</b>	MC30898-4	<b>Date Received:</b>	05/28/14
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	D5739-06/8270C SIM SW846 3511		
<b>Project:</b>	GEINYA: RG&E West Station, Falls Street, Rochester, NY		

**Alkylated PAHs**

CAS No.	Compound	Result	RL	Units	Q
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.57	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.57	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.57	ug/l	
191-07-1	Coronene	ND	0.57	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2037-26-5	Toluene-D8	106%		40-140%
1146-65-2	Naphthalene-d8	93%		40-140%
1517-22-2	Phenanthrene-d10	101%		40-140%
	Perylene-d12	97%		40-140%

ND = Not detected

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

Accutest Laboratories

**Report of Analysis**

Page 1 of 1

<b>Client Sample ID:</b>	MW-26S	<b>Date Sampled:</b>	05/27/14
<b>Lab Sample ID:</b>	MC30898-4	<b>Date Received:</b>	05/28/14
<b>Matrix:</b>	AQ - Ground Water	<b>Percent Solids:</b>	n/a
<b>Method:</b>	ASTM D3328-06 SW846 3511		
<b>Project:</b>	GEINYA: RG&E West Station, Falls Street, Rochester, NY		

	<b>File ID</b>	<b>DF</b>	<b>Analyzed</b>	<b>By</b>	<b>Prep Date</b>	<b>Prep Batch</b>	<b>Analytical Batch</b>
Run #1	BG44612.D	1	06/05/14	RP	06/03/14	OP38384	GBG1703
Run #2							

	<b>Initial Volume</b>	<b>Final Volume</b>
Run #1	35.0 ml	2.0 ml
Run #2		

<b>CAS No.</b>	<b>Compound</b>	<b>Result</b>	<b>RL</b>	<b>Units</b>	<b>Q</b>
	TPH (C8-C40)	ND	5.7	mg/l	

<b>CAS No.</b>	<b>Surrogate Recoveries</b>	<b>Run# 1</b>	<b>Run# 2</b>	<b>Limits</b>
84-15-1	o-Terphenyl	109%		40-140%

ND = Not detected

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

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5

### Custody Documents and Other Forms

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Includes the following where applicable:

- Chain of Custody



## CHAIN OF CUSTODY

Accutest Laboratories of New England  
495 Technology Center West, Building One  
TEL. 508-481-6200 FAX: 508-481-7753  
[www.accutest.com](http://www.accutest.com)

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PED-EX Tracking # 804737357321 Bottle Order Control #  
Acu-Quote # AcuTest Job # M130594

5.1

## MC30898: Chain of Custody

Page 1 of 2

Accutest Job Number: MC30898

Client: GEI

Immediate Client Services Action Required: No

Date / Time Received: 5/28/2014

Delivery Method:

Client Service Action Required at Login: No

Project: RG E WEST STATION

No. Coolers:

1

Airbill #'s:

**Cooler Security****Y or N****Y or N**

1. Custody Seals Present:   3. COC Present:    
 2. Custody Seals Intact:   4. Smpl Dates/Time OK

**Cooler Temperature****Y or N**

1. Temp criteria achieved:    
 2. Cooler temp verification:  Infared gun  
 3. Cooler media:  Ice (bag)

**Quality Control Preservation****Y or N** **N/A**

1. Trip Blank present / cooler:     
 2. Trip Blank listed on COC:     
 3. Samples preserved properly:    
 4. VOCs headspace free:

**Sample Integrity - Documentation****Y or N**

1. Sample labels present on bottles:    
 2. Container labeling complete:    
 3. Sample container label / COC agree:

**Sample Integrity - Condition****Y or N**

1. Sample rcvd within HT:    
 2. All containers accounted for:    
 3. Condition of sample:  Intact

**Sample Integrity - Instructions****Y or N** **N/A**

1. Analysis requested is clear:    
 2. Bottles received for unspecified tests:    
 3. Sufficient volume rcvd for analysis:    
 4. Compositing instructions clear:     
 5. Filtering instructions clear:

Comments

**MC30898: Chain of Custody**
**Page 2 of 2**



## GC/MS Semi-volatiles

### QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries



**Method Blank Summary**

Page 1 of 3

Job Number: MC30898

Account: METAMAW META Environmental, Inc.

Project: GEINYA: RG&amp;E West Station, Falls Street, Rochester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38366-MB	Z02526.D	1	06/05/14	SZ	06/02/14	OP38366	MSZ100

**The QC reported here applies to the following samples:****Method: D5739-06/8270C SIM**

MC30898-2, MC30898-3

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	2.5	4.0	ug/kg	J
	C1-Benzene	ND	4.0	ug/kg	
	C2-Benzenes	ND	4.0	ug/kg	
	C3-Benzenes	ND	4.0	ug/kg	
	C4-Benzenes	ND	4.0	ug/kg	
	C5-Benzenes	ND	4.0	ug/kg	
108-88-3	Toluene	ND	4.0	ug/kg	
100-41-4	Ethylbenzene	ND	4.0	ug/kg	
	m,p-Xylene	ND	4.0	ug/kg	
100-42-5	Styrene	ND	4.0	ug/kg	
95-47-6	o-Xylene	ND	4.0	ug/kg	
98-82-8	Isopropylbenzene	ND	4.0	ug/kg	
103-65-1	n-Propylbenzene	ND	4.0	ug/kg	
108-67-8	1,3,5-Trimethylbenzene	ND	4.0	ug/kg	
526-73-8	1,2,3-Trimethylbenzene	ND	4.0	ug/kg	
95-63-6	1,2,4-Trimethylbenzene	ND	4.0	ug/kg	
98-06-6	t-Butylbenzene	ND	4.0	ug/kg	
135-98-8	sec-Butylbenzene	ND	4.0	ug/kg	
99-87-6	p-Isopropyltoluene	ND	4.0	ug/kg	
104-51-8	n-Butylbenzene	ND	4.0	ug/kg	
493-02-7	trans-Decalin	ND	4.0	ug/kg	
493-01-6	cis-Decalin	ND	4.0	ug/kg	
11095-43-5	Benzo(b)thiophene	ND	4.0	ug/kg	
91-20-3	Naphthalene	ND	4.0	ug/kg	
91-57-6	2-Methylnaphthalene	ND	4.0	ug/kg	
90-12-0	1-Methylnaphthalene	ND	4.0	ug/kg	
	C1-Naphthalenes	ND	4.0	ug/kg	
	C2-Naphthalenes	ND	4.0	ug/kg	
	C3-Naphthalenes	ND	4.0	ug/kg	
	C4-Naphthalenes	ND	4.0	ug/kg	
92-52-4	Biphenyl	ND	4.0	ug/kg	
208-96-8	Acenaphthylene	ND	4.0	ug/kg	
83-32-9	Acenaphthene	ND	4.0	ug/kg	
132-64-9	Dibenzofuran	ND	4.0	ug/kg	
86-73-7	Fluorene	ND	4.0	ug/kg	
	C1-Fluorenes	ND	4.0	ug/kg	

**Method Blank Summary**

Job Number: MC30898

Account: METAMAW META Environmental, Inc.

Project: GEINYA: RG&amp;E West Station, Falls Street, Rochester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38366-MB	Z02526.D	1	06/05/14	SZ	06/02/14	OP38366	MSZ100

**The QC reported here applies to the following samples:****Method: D5739-06/8270C SIM**

MC30898-2, MC30898-3

CAS No.	Compound	Result	RL	Units	Q
132-65-0	C2-Fluorenes	ND	4.0	ug/kg	
	C3-Fluorenes	ND	4.0	ug/kg	
	Dibenzothiophene	ND	4.0	ug/kg	
	C1-Dibenzothiophenes	ND	4.0	ug/kg	
	C2-Dibenzothiophenes	ND	4.0	ug/kg	
	C3-Dibenzothiophenes	ND	4.0	ug/kg	
85-01-8	C4-Dibenzothiophenes	ND	4.0	ug/kg	
	Phenanthrene	ND	4.0	ug/kg	
120-12-7	Anthracene	ND	4.0	ug/kg	
	C1-Phenanthrenes/Anthracene	ND	4.0	ug/kg	
	C2-Phenanthrenes/Anthracene	ND	4.0	ug/kg	
	C3-Phenanthrenes/Anthracene	ND	4.0	ug/kg	
	C4-Phenanthrenes/Anthracene	ND	4.0	ug/kg	
483-65-8	Retene	ND	4.0	ug/kg	
239-35-0	Benzo(b)naphtho(2,1-d)thioph	ND	4.0	ug/kg	
206-44-0	Fluoranthene	ND	4.0	ug/kg	
129-00-0	Pyrene	ND	4.0	ug/kg	
	C1-Fluoranthenes/Pyrenes	ND	4.0	ug/kg	
	C2-Fluoranthenes/Pyrenes	ND	4.0	ug/kg	
	C3-Fluoranthenes/Pyrenes	ND	4.0	ug/kg	
243-17-4	Benzo(b)fluorene	ND	4.0	ug/kg	
205-12-9	Benzo(c)fluorene	ND	4.0	ug/kg	
3442-78-2	2-Methylpyrene	ND	4.0	ug/kg	
3353-12-6	4-Methylpyrene	ND	4.0	ug/kg	
2381-21-7	1-Methylpyrene	ND	4.0	ug/kg	
56-55-3	Benzo(a)anthracene	ND	4.0	ug/kg	
218-01-9	Chrysene	ND	4.0	ug/kg	
	C1-Benzo(a)anthracenes/Chrys	ND	4.0	ug/kg	
	C2-Benzo(a)anthracenes/Chrys	ND	4.0	ug/kg	
	C3-Benzo(a)anthracenes/Chrys	ND	4.0	ug/kg	
	C4-Benzo(a)anthracenes/Chrys	ND	4.0	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	4.0	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	4.0	ug/kg	
192-97-2	Benzo(e)pyrene	ND	4.0	ug/kg	
50-32-8	Benzo(a)pyrene	ND	4.0	ug/kg	
198-55-0	Perylene	ND	4.0	ug/kg	

**Method Blank Summary**

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Job Number: MC30898

Account: METAMAW META Environmental, Inc.

Project: GEINYA: RG&amp;E West Station, Falls Street, Rochester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38366-MB	Z02526.D	1	06/05/14	SZ	06/02/14	OP38366	MSZ100

**The QC reported here applies to the following samples:****Method:** D5739-06/8270C SIM

MC30898-2, MC30898-3

CAS No.	Compound	Result	RL	Units	Q
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.0	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	4.0	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	4.0	ug/kg	
191-07-1	Coronene	ND	4.0	ug/kg	

CAS No.	Surrogate Recoveries	Limits
2037-26-5	Toluene-D8	90% 40-140%
1146-65-2	Naphthalene-d8	79% 40-140%
1517-22-2	Phenanthrene-d10	86% 40-140%
	Perylene-d12	82% 40-140%



**Method Blank Summary**

Page 1 of 3

Job Number: MC30898

Account: METAMAW META Environmental, Inc.

Project: GEINYA: RG&amp;E West Station, Falls Street, Rochester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38385-MB	Z02553.D	1	06/06/14	SZ	06/03/14	OP38385	MSZ101

**The QC reported here applies to the following samples:****Method: D5739-06/8270C SIM**

MC30898-1, MC30898-4

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	0.58	0.57	ug/l	
	C1-Benzene	ND	0.57	ug/l	
	C2-Benzenes	ND	0.57	ug/l	
	C3-Benzenes	ND	0.57	ug/l	
	C4-Benzenes	ND	0.57	ug/l	
	C5-Benzenes	ND	0.57	ug/l	
108-88-3	Toluene	0.40	0.57	ug/l	J
100-41-4	Ethylbenzene	ND	0.57	ug/l	
	m,p-Xylene	0.43	0.57	ug/l	J
100-42-5	Styrene	1.9	0.57	ug/l	
95-47-6	o-Xylene	ND	0.57	ug/l	
98-82-8	Isopropylbenzene	ND	0.57	ug/l	
103-65-1	n-Propylbenzene	ND	0.57	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	0.57	ug/l	
526-73-8	1,2,3-Trimethylbenzene	ND	0.57	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	0.57	ug/l	
98-06-6	t-Butylbenzene	ND	0.57	ug/l	
135-98-8	sec-Butylbenzene	ND	0.57	ug/l	
99-87-6	p-Isopropyltoluene	ND	0.57	ug/l	
104-51-8	n-Butylbenzene	ND	0.57	ug/l	
493-02-7	trans-Decalin	ND	0.57	ug/l	
493-01-6	cis-Decalin	ND	0.57	ug/l	
11095-43-5	Benzo(b)thiophene	ND	0.57	ug/l	
91-20-3	Naphthalene	ND	0.57	ug/l	
91-57-6	2-Methylnaphthalene	ND	0.57	ug/l	
90-12-0	1-Methylnaphthalene	ND	0.57	ug/l	
	C1-Naphthalenes	ND	0.57	ug/l	
	C2-Naphthalenes	ND	0.57	ug/l	
	C3-Naphthalenes	ND	0.57	ug/l	
	C4-Naphthalenes	ND	0.57	ug/l	
92-52-4	Biphenyl	ND	0.57	ug/l	
208-96-8	Acenaphthylene	ND	0.57	ug/l	
83-32-9	Acenaphthene	ND	0.57	ug/l	
132-64-9	Dibenzofuran	ND	0.57	ug/l	
86-73-7	Fluorene	ND	0.57	ug/l	
	C1-Fluorenes	ND	0.57	ug/l	

**Method Blank Summary**

Job Number: MC30898

Account: METAMAW META Environmental, Inc.

Project: GEINYA: RG&amp;E West Station, Falls Street, Rochester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38385-MB	Z02553.D	1	06/06/14	SZ	06/03/14	OP38385	MSZ101

**The QC reported here applies to the following samples:****Method: D5739-06/8270C SIM**

MC30898-1, MC30898-4

CAS No.	Compound	Result	RL	Units	Q
132-65-0	C2-Fluorenes	ND	0.57	ug/l	
	C3-Fluorenes	ND	0.57	ug/l	
	Dibenzothiophene	ND	0.57	ug/l	
	C1-Dibenzothiophenes	ND	0.57	ug/l	
	C2-Dibenzothiophenes	ND	0.57	ug/l	
	C3-Dibenzothiophenes	ND	0.57	ug/l	
85-01-8	C4-Dibenzothiophenes	ND	0.57	ug/l	
	Phenanthrene	ND	0.57	ug/l	
120-12-7	Anthracene	ND	0.57	ug/l	
	C1-Phenanthrenes/Anthracene	ND	0.57	ug/l	
	C2-Phenanthrenes/Anthracene	ND	0.57	ug/l	
	C3-Phenanthrenes/Anthracene	ND	0.57	ug/l	
	C4-Phenanthrenes/Anthracene	ND	0.57	ug/l	
483-65-8	Retene	ND	0.57	ug/l	
239-35-0	Benzo(b)naphtho(2,1-d)thioph	ND	0.57	ug/l	
206-44-0	Fluoranthene	ND	0.57	ug/l	
129-00-0	Pyrene	ND	0.57	ug/l	
	C1-Fluoranthenes/Pyrenes	ND	0.57	ug/l	
	C2-Fluoranthenes/Pyrenes	ND	0.57	ug/l	
	C3-Fluoranthenes/Pyrenes	ND	0.57	ug/l	
243-17-4	Benzo(b)fluorene	ND	0.57	ug/l	
205-12-9	Benzo(c)fluorene	ND	0.57	ug/l	
3442-78-2	2-Methylpyrene	ND	0.57	ug/l	
3353-12-6	4-Methylpyrene	ND	0.57	ug/l	
2381-21-7	1-Methylpyrene	ND	0.57	ug/l	
56-55-3	Benzo(a)anthracene	ND	0.57	ug/l	
218-01-9	Chrysene	ND	0.57	ug/l	
	C1-Benzo(a)anthracenes/Chrys	ND	0.57	ug/l	
	C2-Benzo(a)anthracenes/Chrys	ND	0.57	ug/l	
	C3-Benzo(a)anthracenes/Chrys	ND	0.57	ug/l	
	C4-Benzo(a)anthracenes/Chrys	ND	0.57	ug/l	
	Benzo(b)fluoranthene	ND	0.57	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	0.57	ug/l	
192-97-2	Benzo(e)pyrene	ND	0.57	ug/l	
50-32-8	Benzo(a)pyrene	ND	0.57	ug/l	
198-55-0	Perylene	ND	0.57	ug/l	

**Method Blank Summary**

Page 3 of 3

Job Number: MC30898

Account: METAMAW META Environmental, Inc.

Project: GEINYA: RG&amp;E West Station, Falls Street, Rochester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38385-MB	Z02553.D	1	06/06/14	SZ	06/03/14	OP38385	MSZ101

**The QC reported here applies to the following samples:****Method:** D5739-06/8270C SIM

MC30898-1, MC30898-4

CAS No.	Compound	Result	RL	Units	Q
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.57	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	0.57	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	0.57	ug/l	
191-07-1	Coronene	ND	0.57	ug/l	

CAS No.	Surrogate Recoveries	Limits
2037-26-5	Toluene-D8	98%
1146-65-2	Naphthalene-d8	90%
1517-22-2	Phenanthrene-d10	98%
	Perylene-d12	99%

**Blank Spike Summary**

Page 1 of 3

Job Number: MC30898

Account: METAMAW META Environmental, Inc.

Project: GEINYA: RG&amp;E West Station, Falls Street, Rochester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38366-BS2	Z02527.D	1	06/05/14	SZ	06/02/14	OP38366	MSZ100

**The QC reported here applies to the following samples:****Method:** D5739-06/8270C SIM

MC30898-2, MC30898-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	2000	855	43* <sup>a</sup>	50-150
	C1-Benzene		ND		50-150 <sup>b</sup>
	C2-Benzenes		ND		50-150 <sup>b</sup>
	C3-Benzenes		ND		50-150 <sup>b</sup>
	C4-Benzenes		ND		50-150 <sup>b</sup>
	C5-Benzenes		ND		50-150 <sup>b</sup>
108-88-3	Toluene	2000	1450	73	50-150
100-41-4	Ethylbenzene	2000	1760	88	50-150
	m,p-Xylene	2000	1770	89	50-150
100-42-5	Styrene	2000	1710	86	50-150
95-47-6	o-Xylene	2000	1730	87	50-150
98-82-8	Isopropylbenzene	2000	1740	87	50-150
103-65-1	n-Propylbenzene	2000	1910	96	50-150
108-67-8	1,3,5-Trimethylbenzene	2000	1770	89	50-150
526-73-8	1,2,3-Trimethylbenzene	2000	1790	90	50-150
95-63-6	1,2,4-Trimethylbenzene	2000	1880	94	50-150
98-06-6	t-Butylbenzene	2000	1760	88	50-150
135-98-8	sec-Butylbenzene	2000	1780	89	50-150
99-87-6	p-Isopropyltoluene	2000	1820	91	50-150
104-51-8	n-Butylbenzene	2000	1970	99	50-150
493-02-7	trans-Decalin	2000	1660	83	50-150
493-01-6	cis-Decalin	2000	1680	84	50-150
11095-43-5	Benzo(b)thiophene	2000	1930	97	50-150
91-20-3	Naphthalene	2000	1920	96	50-150
91-57-6	2-Methylnaphthalene	2000	1940	97	50-150
90-12-0	1-Methylnaphthalene	2000	1790	90	50-150
	C1-Naphthalenes		ND		50-150 <sup>b</sup>
	C2-Naphthalenes		ND		50-150 <sup>b</sup>
	C3-Naphthalenes		ND		50-150 <sup>b</sup>
	C4-Naphthalenes		ND		50-150 <sup>b</sup>
92-52-4	Biphenyl	2000	1930	97	50-150
208-96-8	Acenaphthylene	2000	1970	99	50-150
83-32-9	Acenaphthene	2000	1860	93	50-150
132-64-9	Dibenzofuran	2000	2010	101	50-150
86-73-7	Fluorene	2000	2020	101	50-150
	C1-Fluorenes		ND		50-150 <sup>b</sup>

\* = Outside of Control Limits.

**Blank Spike Summary**

Job Number: MC30898

Account: METAMAW META Environmental, Inc.

Project: GEINYA: RG&amp;E West Station, Falls Street, Rochester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38366-BS2	Z02527.D	1	06/05/14	SZ	06/02/14	OP38366	MSZ100

**The QC reported here applies to the following samples:****Method:** D5739-06/8270C SIM

MC30898-2, MC30898-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
132-65-0	C2-Fluorenes		ND		50-150 <sup>b</sup>
	C3-Fluorenes		ND		50-150 <sup>b</sup>
	Dibenzothiophene	2000	1980	99	50-150
	C1-Dibenzothiophenes		ND		50-150 <sup>b</sup>
	C2-Dibenzothiophenes		ND		50-150 <sup>b</sup>
85-01-8	C3-Dibenzothiophenes		ND		50-150 <sup>b</sup>
	C4-Dibenzothiophenes		ND		50-150 <sup>b</sup>
	Phenanthrene	2000	2010	101	50-150
	Anthracene	2000	1960	98	50-150
	C1-Phenanthrenes/Anthracene		ND		50-150 <sup>b</sup>
120-12-7	C2-Phenanthrenes/Anthracene		ND		50-150 <sup>b</sup>
	C3-Phenanthrenes/Anthracene		ND		50-150 <sup>b</sup>
	C4-Phenanthrenes/Anthracene		ND		50-150 <sup>b</sup>
	Retene	2000	2160	108	50-150
	Benzo(b)naphtho(2,1-d)thioph	2000	2080	104	50-150
206-44-0	Fluoranthene	2000	2120	106	50-150
129-00-0	Pyrene	2000	2070	104	50-150
	C1-Fluoranthenes/Pyrenes		ND		50-150 <sup>b</sup>
	C2-Fluoranthenes/Pyrenes		ND		50-150 <sup>b</sup>
	C3-Fluoranthenes/Pyrenes		ND		50-150 <sup>b</sup>
	Benzo(b)fluorene		ND		50-150 <sup>b</sup>
205-12-9	Benzo(c)fluorene		ND		50-150 <sup>b</sup>
3442-78-2	2-Methylpyrene		ND		50-150 <sup>b</sup>
3353-12-6	4-Methylpyrene		ND		50-150 <sup>b</sup>
2381-21-7	1-Methylpyrene		ND		50-150 <sup>b</sup>
56-55-3	Benzo(a)anthracene	2000	2210	111	50-150
218-01-9	Chrysene	2000	2000	100	50-150
	C1-Benzo(a)anthracenes/Chrys		ND		50-150 <sup>b</sup>
	C2-Benzo(a)anthracenes/Chrys		ND		50-150 <sup>b</sup>
	C3-Benzo(a)anthracenes/Chrys		ND		50-150 <sup>b</sup>
	C4-Benzo(a)anthracenes/Chrys		ND		50-150 <sup>b</sup>
205-99-2	Benzo(b)fluoranthene	2000	2150	108	50-150
207-08-9	Benzo(k)fluoranthene	2000	2000	100	50-150
192-97-2	Benzo(e)pyrene	2000	1980	99	50-150
50-32-8	Benzo(a)pyrene	2000	2090	105	50-150
198-55-0	Perylene	2000	2020	101	50-150

\* = Outside of Control Limits.

**Blank Spike Summary**

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Job Number: MC30898

Account: METAMAW META Environmental, Inc.

Project: GEINYA: RG&amp;E West Station, Falls Street, Rochester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38366-BS2	Z02527.D	1	06/05/14	SZ	06/02/14	OP38366	MSZ100

**The QC reported here applies to the following samples:****Method:** D5739-06/8270C SIM

MC30898-2, MC30898-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
193-39-5	Indeno(1,2,3-cd)pyrene	2000	2070	104	50-150
53-70-3	Dibenzo(a,h)anthracene	2000	2120	106	50-150
191-24-2	Benzo(g,h,i)perylene	2000	1970	99	50-150
191-07-1	Coronene	2000	1930	97	50-150 <sup>b</sup>

CAS No.	Surrogate Recoveries	BSP	Limits
2037-26-5	Toluene-D8	79%	40-140%
1146-65-2	Naphthalene-d8	88%	40-140%
1517-22-2	Phenanthrene-d10	95%	40-140%
	Perylene-d12	89%	40-140%

(a) Outside control limits. Meets program technical requirements.

(b) Advisory control limits.

\* = Outside of Control Limits.

**Blank Spike Summary**

Page 1 of 3

Job Number: MC30898

Account: METAMAW META Environmental, Inc.

Project: GEINYA: RG&amp;E West Station, Falls Street, Rochester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38385-BS2	Z02554.D	1	06/06/14	SZ	06/03/14	OP38385	MSZ101

**The QC reported here applies to the following samples:****Method:** D5739-06/8270C SIM

MC30898-1, MC30898-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	286	244	85	50-150
	C1-Benzene		ND		50-150 <sup>a</sup>
	C2-Benzenes		ND		50-150 <sup>a</sup>
	C3-Benzenes		ND		50-150 <sup>a</sup>
	C4-Benzenes		ND		50-150 <sup>a</sup>
	C5-Benzenes		ND		50-150 <sup>a</sup>
108-88-3	Toluene	286	281	98	50-150
100-41-4	Ethylbenzene	286	317	111	50-150
	m,p-Xylene	286	322	113	50-150
100-42-5	Styrene	286	334	117	50-150
95-47-6	o-Xylene	286	307	107	50-150
98-82-8	Isopropylbenzene	286	310	108	50-150
103-65-1	n-Propylbenzene	286	341	119	50-150
108-67-8	1,3,5-Trimethylbenzene	286	311	109	50-150
526-73-8	1,2,3-Trimethylbenzene	286	314	110	50-150
95-63-6	1,2,4-Trimethylbenzene	286	331	116	50-150
98-06-6	t-Butylbenzene	286	307	107	50-150
135-98-8	sec-Butylbenzene	286	312	109	50-150
99-87-6	p-Isopropyltoluene	286	319	112	50-150
104-51-8	n-Butylbenzene	286	352	123	50-150
493-02-7	trans-Decalin	286	296	104	50-150
493-01-6	cis-Decalin	286	297	104	50-150
11095-43-5	Benzo(b)thiophene	286	345	121	50-150
91-20-3	Naphthalene	286	336	118	50-150
91-57-6	2-Methylnaphthalene	286	342	120	50-150
90-12-0	1-Methylnaphthalene	286	316	111	50-150
	C1-Naphthalenes		ND		50-150 <sup>a</sup>
	C2-Naphthalenes		ND		50-150 <sup>a</sup>
	C3-Naphthalenes		ND		50-150 <sup>a</sup>
	C4-Naphthalenes		ND		50-150 <sup>a</sup>
92-52-4	Biphenyl	286	339	119	50-150
208-96-8	Acenaphthylene	286	353	124	50-150
83-32-9	Acenaphthene	286	324	113	50-150
132-64-9	Dibenzofuran	286	352	123	50-150
86-73-7	Fluorene	286	358	125	50-150
	C1-Fluorenes		ND		50-150 <sup>a</sup>

\* = Outside of Control Limits.

**Blank Spike Summary**

Page 2 of 3

Job Number: MC30898

Account: METAMAW META Environmental, Inc.

Project: GEINYA: RG&amp;E West Station, Falls Street, Rochester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38385-BS2	Z02554.D	1	06/06/14	SZ	06/03/14	OP38385	MSZ101

**The QC reported here applies to the following samples:****Method:** D5739-06/8270C SIM

MC30898-1, MC30898-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
132-65-0	C2-Fluorenes		ND		50-150 <sup>a</sup>
	C3-Fluorenes		ND		50-150 <sup>a</sup>
	Dibenzothiophene	286	346	121	50-150
	C1-Dibenzothiophenes		ND		50-150 <sup>a</sup>
	C2-Dibenzothiophenes		ND		50-150 <sup>a</sup>
85-01-8	C3-Dibenzothiophenes		ND		50-150 <sup>a</sup>
	C4-Dibenzothiophenes		ND		50-150 <sup>a</sup>
	Phenanthrene	286	344	120	50-150
	Anthracene	286	343	120	50-150
	C1-Phenanthrenes/Anthracene		ND		50-150 <sup>a</sup>
120-12-7	C2-Phenanthrenes/Anthracene		ND		50-150 <sup>a</sup>
	C3-Phenanthrenes/Anthracene		ND		50-150 <sup>a</sup>
	C4-Phenanthrenes/Anthracene		ND		50-150 <sup>a</sup>
	Retene	286	376	132	50-150
	Benzo(b)naphtho(2,1-d)thioph	286	361	126	50-150
206-44-0	Fluoranthene	286	368	129	50-150
129-00-0	Pyrene	286	360	126	50-150
	C1-Fluoranthenes/Pyrenes		ND		50-150 <sup>a</sup>
	C2-Fluoranthenes/Pyrenes		ND		50-150 <sup>a</sup>
	C3-Fluoranthenes/Pyrenes		ND		50-150 <sup>a</sup>
	Benzo(b)fluorene		ND		50-150 <sup>a</sup>
205-12-9	Benzo(c)fluorene		ND		50-150 <sup>a</sup>
3442-78-2	2-Methylpyrene		ND		50-150 <sup>a</sup>
3353-12-6	4-Methylpyrene		ND		50-150 <sup>a</sup>
2381-21-7	1-Methylpyrene		ND		50-150 <sup>a</sup>
56-55-3	Benzo(a)anthracene	286	382	134	50-150
218-01-9	Chrysene	286	345	121	50-150
	C1-Benzo(a)anthracenes/Chrys		ND		50-150 <sup>a</sup>
	C2-Benzo(a)anthracenes/Chrys		ND		50-150 <sup>a</sup>
	C3-Benzo(a)anthracenes/Chrys		ND		50-150 <sup>a</sup>
	C4-Benzo(a)anthracenes/Chrys		ND		50-150 <sup>a</sup>
205-99-2	Benzo(b)fluoranthene	286	371	130	50-150
207-08-9	Benzo(k)fluoranthene	286	334	117	50-150
192-97-2	Benzo(e)pyrene	286	336	118	50-150
50-32-8	Benzo(a)pyrene	286	361	126	50-150
198-55-0	Perylene	286	352	123	50-150

\* = Outside of Control Limits.

**Blank Spike Summary**

Job Number: MC30898

Account: METAMAW META Environmental, Inc.

Project: GEINYA: RG&amp;E West Station, Falls Street, Rochester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38385-BS2	Z02554.D	1	06/06/14	SZ	06/03/14	OP38385	MSZ101

**The QC reported here applies to the following samples:****Method:** D5739-06/8270C SIM

MC30898-1, MC30898-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
193-39-5	Indeno(1,2,3-cd)pyrene	286	345	121	50-150
53-70-3	Dibenzo(a,h)anthracene	286	355	124	50-150
191-24-2	Benzo(g,h,i)perylene	286	332	116	50-150
191-07-1	Coronene	286	308	108	50-150 <sup>a</sup>

CAS No.	Surrogate Recoveries	BSP	Limits
2037-26-5	Toluene-D8	101%	40-140%
1146-65-2	Naphthalene-d8	103%	40-140%
1517-22-2	Phenanthrene-d10	108%	40-140%
	Perylene-d12	101%	40-140%

(a) Advisory control limits.

\* = Outside of Control Limits.

**Duplicate Summary**

Job Number: MC30898

Account: METAMAW META Environmental, Inc.

Project: GEINYA: RG&amp;E West Station, Falls Street, Rochester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38366-DUP8	Z02547.D	1	06/06/14	SZ	06/02/14	OP38366	MSZ101
MC30898-2	Z02548.D	1	06/06/14	SZ	06/02/14	OP38366	MSZ101

**The QC reported here applies to the following samples:****Method:** D5739-06/8270C SIM

MC30898-2, MC30898-3

CAS No.	Compound	MC30898-2 DUP					
		ug/kg	Q	ug/kg	Q	RPD	Limits
71-43-2	Benzene	22.9	B	29.7		26	30
	C1-Benzene	27.2		34.5		24	30 <sup>a</sup>
	C2-Benzenes	45.5		57.6		23	30 <sup>a</sup>
	C3-Benzenes	25.9		35.1		30	30 <sup>a</sup>
	C4-Benzenes	26.1		33.3		24	30 <sup>a</sup>
	C5-Benzenes	22.4		26.0		15	30 <sup>a</sup>
108-88-3	Toluene	43.6		53.6		21	30
100-41-4	Ethylbenzene	8.3		11.4		31* b	30
	m,p-Xylene	70.2		92.1		27	30
100-42-5	Styrene	51.4		54.8		6	30
95-47-6	o-Xylene	13.8		21.4		43* b	30
98-82-8	Isopropylbenzene	3.1		4.1	J	28	30
103-65-1	n-Propylbenzene	5.2		7.3		34* b	30
108-67-8	1,3,5-Trimethylbenzene	5.3		7.7		37* b	30
526-73-8	1,2,3-Trimethylbenzene	5.8		8.7		40* b	30
95-63-6	1,2,4-Trimethylbenzene	13.2		20.7		44* b	30
98-06-6	t-Butylbenzene	ND		ND		nc	30
135-98-8	sec-Butylbenzene	ND		ND		nc	30
99-87-6	p-Isopropyltoluene	3.0		3.7	J	21	30
104-51-8	n-Butylbenzene	6.3		9.2		37* b	30
493-02-7	trans-Decalin	ND		3.2	J	200* c	30
493-01-6	cis-Decalin	ND		ND		nc	30
11095-43-5	Benzo(b)thiophene	38.8		57.9		40* b	30
91-20-3	Naphthalene	34.1		41.4		19	30
91-57-6	2-Methylnaphthalene	26.0		38.8		40* b	30
90-12-0	1-Methylnaphthalene	24.8		33.4		30	30
	C1-Naphthalenes	35.5		46.0		26	30 <sup>a</sup>
	C2-Naphthalenes	44.7		52.7		16	30 <sup>a</sup>
	C3-Naphthalenes	36.7		48.0		27	30 <sup>a</sup>
	C4-Naphthalenes	24.2		28.2		15	30 <sup>a</sup>
92-52-4	Biphenyl	9.4		11.1		17	30
208-96-8	Acenaphthylene	50.1		51.2		2	30
83-32-9	Acenaphthene	37.7		35.8		5	30
132-64-9	Dibenzofuran	24.7		25.8		4	30
86-73-7	Fluorene	23.1		14.5		46* b	30
	C1-Fluorenes	13.9		12.5		11	30 <sup>a</sup>

\* = Outside of Control Limits.

**Duplicate Summary**

Job Number: MC30898

Account: METAMAW META Environmental, Inc.

Project: GEINYA: RG&amp;E West Station, Falls Street, Rochester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38366-DUP8	Z02547.D	1	06/06/14	SZ	06/02/14	OP38366	MSZ101
MC30898-2	Z02548.D	1	06/06/14	SZ	06/02/14	OP38366	MSZ101

**The QC reported here applies to the following samples:****Method:** D5739-06/8270C SIM

MC30898-2, MC30898-3

CAS No.	Compound	MC30898-2 DUP					
		ug/kg	Q	ug/kg	Q	RPD	Limits
132-65-0	C2-Fluorenes	18.8		24.0	24		30 <sup>a</sup>
	C3-Fluorenes	34.1		43.8	25		30 <sup>a</sup>
	Dibenzothiophene	12.4		9.7	24		30
	C1-Dibenzothiophenes	15.4		16.7	8		30 <sup>a</sup>
	C2-Dibenzothiophenes	24.1		26.7	10		30 <sup>a</sup>
	C3-Dibenzothiophenes	23.9		29.8	22		30 <sup>a</sup>
85-01-8	C4-Dibenzothiophenes	47.0		52.0	10		30 <sup>a</sup>
	Phenanthrene	156		110	35* <sup>b</sup>		30
120-12-7	Anthracene	55.2		45.3	20		30
	C1-Phenanthrenes/Anthracene	72.4		74.6	3		30 <sup>a</sup>
	C2-Phenanthrenes/Anthracene	45.1		56.0	22		30 <sup>a</sup>
	C3-Phenanthrenes/Anthracene	30.0		36.4	19		30 <sup>a</sup>
	C4-Phenanthrenes/Anthracene	22.9		31.4	31* <sup>b</sup>		30 <sup>a</sup>
483-65-8	Retene	6.6		8.9	30		30
239-35-0	Benzo(b)naphtho(2,1-d)thioph	15.0		18.9	23		30
206-44-0	Fluoranthene	273		263	4		30
129-00-0	Pyrene	257		251	2		30
	C1-Fluoranthenes/Pyrenes	108		117	8		30 <sup>a</sup>
	C2-Fluoranthenes/Pyrenes	63.9		80.5	23		30 <sup>a</sup>
	C3-Fluoranthenes/Pyrenes	37.7		52.5	33* <sup>b</sup>		30 <sup>a</sup>
243-17-4	Benzo(b)fluorene	11.3		7.8	37* <sup>b</sup>		30 <sup>a</sup>
205-12-9	Benzo(c)fluorene	7.4		5.8	24		30 <sup>a</sup>
3442-78-2	2-Methylpyrene	12.5		14.2	13		30 <sup>a</sup>
3353-12-6	4-Methylpyrene	12.2		13.7	12		30 <sup>a</sup>
2381-21-7	1-Methylpyrene	9.4		9.6	2		30 <sup>a</sup>
56-55-3	Benzo(a)anthracene	119		128	7		30
218-01-9	Chrysene	126		148	16		30
	C1-Benzo(a)anthracenes/Chrys	53.6		63.0	16		30 <sup>a</sup>
	C2-Benzo(a)anthracenes/Chrys	26.7		36.0	30		30 <sup>a</sup>
	C3-Benzo(a)anthracenes/Chrys	30.0		40.8	31* <sup>b</sup>		30 <sup>a</sup>
	C4-Benzo(a)anthracenes/Chrys	17.6		19.6	11		30 <sup>a</sup>
205-99-2	Benzo(b)fluoranthene	120		151	23		30
207-08-9	Benzo(k)fluoranthene	107		129	19		30
192-97-2	Benzo(e)pyrene	99.2		121	20		30
50-32-8	Benzo(a)pyrene	145		160	10		30
198-55-0	Perylene	76.0		74.2	2		30

\* = Outside of Control Limits.

**Duplicate Summary**

Job Number: MC30898

Account: METAMAW META Environmental, Inc.

Project: GEINYA: RG&amp;E West Station, Falls Street, Rochester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38366-DUP8	Z02547.D	1	06/06/14	SZ	06/02/14	OP38366	MSZ101
MC30898-2	Z02548.D	1	06/06/14	SZ	06/02/14	OP38366	MSZ101

**The QC reported here applies to the following samples:****Method:** D5739-06/8270C SIM

MC30898-2, MC30898-3

CAS No.	Compound	MC30898-2 DUP					
		ug/kg	Q	ug/kg	Q	RPD	Limits
193-39-5	Indeno(1,2,3-cd)pyrene	82.9		101		20	30
53-70-3	Dibenzo(a,h)anthracene	27.7		34.2		21	30
191-24-2	Benzo(g,h,i)perylene	96.7		119		21	30
191-07-1	Coronene	25.8		34.9		30	30 <sup>a</sup>

CAS No.	Surrogate Recoveries	DUP	MC30898-2 Limits	
2037-26-5	Toluene-D8	70%	65%	40-140%
1146-65-2	Naphthalene-d8	71%	67%	40-140%
1517-22-2	Phenanthrene-d10	75%	71%	40-140%
	Perylene-d12	79%	73%	40-140%

- (a) Advisory control limits.  
 (b) High RPD due to possible sample heterogeneity.  
 (c) High RPD due to sample levels below reporting limit.

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\* = Outside of Control Limits.

**Duplicate Summary**

Job Number: MC30898

Account: METAMAW META Environmental, Inc.

Project: GEINYA: RG&amp;E West Station, Falls Street, Rochester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38385-DUP	Z02555.D	1	06/06/14	SZ	06/03/14	OP38385	MSZ101
MC30898-1	Z02556.D	1	06/06/14	SZ	06/03/14	OP38385	MSZ101

**The QC reported here applies to the following samples:****Method:** D5739-06/8270C SIM

MC30898-1, MC30898-4

CAS No.	Compound	MC30898-1 DUP					
		ug/l	Q	ug/l	Q	RPD	Limits
71-43-2	Benzene	0.54	B	0.49	JB	10	30
	C1-Benzene	ND		ND		nc	30 <sup>a</sup>
	C2-Benzenes	1.9		1.8		5	30 <sup>a</sup>
	C3-Benzenes	1.6		1.5		6	30 <sup>a</sup>
	C4-Benzenes	1.5		1.6		6	30 <sup>a</sup>
	C5-Benzenes	ND		ND		nc	30 <sup>a</sup>
108-88-3	Toluene	0.31	B	0.38	JB	20	30
100-41-4	Ethylbenzene	ND		ND		nc	30
	m,p-Xylene	0.88	B	0.93	B	6	30
100-42-5	Styrene	1.3	B	1.4	B	7	30
95-47-6	o-Xylene	2.4		2.5		4	30
98-82-8	Isopropylbenzene	ND		ND		nc	30
103-65-1	n-Propylbenzene	ND		ND		nc	30
108-67-8	1,3,5-Trimethylbenzene	ND		ND		nc	30
526-73-8	1,2,3-Trimethylbenzene	0.43		0.48	J	11	30
95-63-6	1,2,4-Trimethylbenzene	ND		0.29	J	200* <sup>b</sup>	30
98-06-6	t-Butylbenzene	ND		ND		nc	30
135-98-8	sec-Butylbenzene	ND		ND		nc	30
99-87-6	p-Isopropyltoluene	ND		ND		nc	30
104-51-8	n-Butylbenzene	ND		ND		nc	30
493-02-7	trans-Decalin	ND		ND		nc	30
493-01-6	cis-Decalin	ND		ND		nc	30
11095-43-5	Benzo(b)thiophene	2.9		3.5		19	30
91-20-3	Naphthalene	ND		ND		nc	30
91-57-6	2-Methylnaphthalene	ND		ND		nc	30
90-12-0	1-Methylnaphthalene	0.35		0.49	J	33* <sup>c</sup>	30
	C1-Naphthalenes	0.35		0.52	J	39* <sup>c</sup>	30 <sup>a</sup>
	C2-Naphthalenes	0.92		0.92		0	30 <sup>a</sup>
	C3-Naphthalenes	0.38		0.31	J	20	30 <sup>a</sup>
	C4-Naphthalenes	ND		ND		nc	30 <sup>a</sup>
92-52-4	Biphenyl	ND		ND		nc	30
208-96-8	Acenaphthylene	ND		0.43	J	200* <sup>b</sup>	30
83-32-9	Acenaphthene	0.74		0.98		28	30
132-64-9	Dibenzofuran	ND		0.39	J	200* <sup>b</sup>	30
86-73-7	Fluorene	ND		0.41	J	200* <sup>b</sup>	30
	C1-Fluorenes	ND		ND		nc	30 <sup>a</sup>

\* = Outside of Control Limits.

**Duplicate Summary**

Page 2 of 3

Job Number: MC30898

Account: METAMAW META Environmental, Inc.

Project: GEINYA: RG&amp;E West Station, Falls Street, Rochester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38385-DUP	Z02555.D	1	06/06/14	SZ	06/03/14	OP38385	MSZ101
MC30898-1	Z02556.D	1	06/06/14	SZ	06/03/14	OP38385	MSZ101

**The QC reported here applies to the following samples:****Method:** D5739-06/8270C SIM

MC30898-1, MC30898-4

CAS No.	Compound	MC30898-1 DUP					
		ug/l	Q	ug/l	Q	RPD	Limits
132-65-0	C2-Fluorenes	ND		ND		nc	30 <sup>a</sup>
	C3-Fluorenes	ND		ND		nc	30 <sup>a</sup>
	Dibenzothiophene	ND	0.35	J	200* <sup>b</sup>	30	
	C1-Dibenzothiophenes	ND		ND		nc	30 <sup>a</sup>
	C2-Dibenzothiophenes	ND	0.35	J	200* <sup>b</sup>	30 <sup>a</sup>	
	C3-Dibenzothiophenes	ND		ND		nc	30 <sup>a</sup>
85-01-8	C4-Dibenzothiophenes	ND		ND		nc	30 <sup>a</sup>
	Phenanthrene	ND	0.37	J	200* <sup>b</sup>	30	
120-12-7	Anthracene	ND		ND		nc	30
	C1-Phenanthrenes/Anthracene	ND		ND		nc	30 <sup>a</sup>
	C2-Phenanthrenes/Anthracene	ND		ND		nc	30 <sup>a</sup>
	C3-Phenanthrenes/Anthracene	ND		ND		nc	30 <sup>a</sup>
	C4-Phenanthrenes/Anthracene	ND		ND		nc	30 <sup>a</sup>
483-65-8	Retene	ND		ND		nc	30
239-35-0	Benzo(b)naphtho(2,1-d)thioph	ND	0.33	J	200* <sup>b</sup>	30	
206-44-0	Fluoranthene	ND	0.37	J	200* <sup>b</sup>	30	
129-00-0	Pyrene	ND	0.35	J	200* <sup>b</sup>	30	
	C1-Fluoranthenes/Pyrenes	ND		ND		nc	30 <sup>a</sup>
	C2-Fluoranthenes/Pyrenes	ND		ND		nc	30 <sup>a</sup>
	C3-Fluoranthenes/Pyrenes	ND		ND		nc	30 <sup>a</sup>
243-17-4	Benzo(b)fluorene	ND		ND		nc	30 <sup>a</sup>
205-12-9	Benzo(c)fluorene	ND		ND		nc	30 <sup>a</sup>
3442-78-2	2-Methylpyrene	ND		ND		nc	30 <sup>a</sup>
3353-12-6	4-Methylpyrene	ND		ND		nc	30 <sup>a</sup>
2381-21-7	1-Methylpyrene	ND		ND		nc	30 <sup>a</sup>
56-55-3	Benzo(a)anthracene	ND	0.33	J	200* <sup>b</sup>	30	
218-01-9	Chrysene	ND	0.36	J	200* <sup>b</sup>	30	
	C1-Benzo(a)anthracenes/Chrys	ND		ND		nc	30 <sup>a</sup>
	C2-Benzo(a)anthracenes/Chrys	ND		ND		nc	30 <sup>a</sup>
	C3-Benzo(a)anthracenes/Chrys	ND		ND		nc	30 <sup>a</sup>
	C4-Benzo(a)anthracenes/Chrys	ND		ND		nc	30 <sup>a</sup>
205-99-2	Benzo(b)fluoranthene	ND	0.36	J	200* <sup>b</sup>	30	
207-08-9	Benzo(k)fluoranthene	ND	0.41	J	200* <sup>b</sup>	30	
192-97-2	Benzo(e)pyrene	ND	0.42	J	200* <sup>b</sup>	30	
50-32-8	Benzo(a)pyrene	ND	0.47	J	200* <sup>b</sup>	30	
198-55-0	Perylene	ND	0.43	J	200* <sup>b</sup>	30	

\* = Outside of Control Limits.

**Duplicate Summary**

Job Number: MC30898

Account: METAMAW META Environmental, Inc.

Project: GEINYA: RG&amp;E West Station, Falls Street, Rochester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38385-DUP	Z02555.D	1	06/06/14	SZ	06/03/14	OP38385	MSZ101
MC30898-1	Z02556.D	1	06/06/14	SZ	06/03/14	OP38385	MSZ101

**The QC reported here applies to the following samples:****Method:** D5739-06/8270C SIM

MC30898-1, MC30898-4

CAS No.	Compound	MC30898-1 DUP					
		ug/l	Q	ug/l	Q	RPD	Limits
193-39-5	Indeno(1,2,3-cd)pyrene	ND		0.45	J	200* <sup>b</sup>	30
53-70-3	Dibenzo(a,h)anthracene	ND		0.48	J	200* <sup>b</sup>	30
191-24-2	Benzo(g,h,i)perylene	ND		0.60		200* <sup>b</sup>	30
191-07-1	Coronene	ND		1.0		200* <sup>b</sup>	30 <sup>a</sup>

CAS No.	Surrogate Recoveries	DUP	MC30898-1 Limits		
2037-26-5	Toluene-D8	105%	108%	40-140%	
1146-65-2	Naphthalene-d8	98%	97%	40-140%	
1517-22-2	Phenanthrene-d10	103%	103%	40-140%	
	Perylene-d12	102%	100%	40-140%	

(a) Advisory control limits.

(b) High RPD due to sample levels below reporting limit.

(c) High RPD due to possible sample heterogeneity.

\* = Outside of Control Limits.

## Semivolatile Surrogate Recovery Summary

Page 1 of 1

Job Number: MC30898

Account: METAMAW META Environmental, Inc.

Project: GEINYA: RG&amp;E West Station, Falls Street, Rochester, NY

Method: D5739-06/8270C SIM

Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
MC30898-1	Z02556.D	108	97	103	100
MC30898-4	Z02557.D	106	93	101	97
OP38385-BS2	Z02554.D	101	103	108	101
OP38385-DUP	Z02555.D	105	98	103	102
OP38385-MB	Z02553.D	98	90	98	99

Surrogate Compounds	Recovery Limits
------------------------	--------------------

S1 = Toluene-D8	40-140%
S2 = Naphthalene-d8	40-140%
S3 = Phenanthrene-d10	40-140%
S4 = Perylene-d12	40-140%

6.4.1  
6

**Semivolatile Surrogate Recovery Summary**

Page 1 of 1

Job Number: MC30898

Account: METAMAW META Environmental, Inc.

Project: GEINYA: RG&amp;E West Station, Falls Street, Rochester, NY

**Method:** D5739-06/8270C SIM**Matrix:** SO**Samples and QC shown here apply to the above method**

Lab Sample ID	Lab File ID	S1	S2	S3	S4
MC30898-2	Z02548.D	65	67	71	73
MC30898-3	Z02549.D	75	76	80	82
OP38366-BS2	Z02527.D	79	88	95	89
OP38366-DUP8	Z02547.D	70	71	75	79
OP38366-MB	Z02526.D	90	79	86	82

Surrogate Compounds	Recovery Limits
------------------------	--------------------

S1 = Toluene-d8	40-140%
S2 = Naphthalene-d8	40-140%
S3 = Phenanthrene-d10	40-140%
S4 = Perylene-d12	40-140%



## GC/MS Semi-volatiles

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Raw Data

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7

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\2\data\Z140605\Z02556.D  
 Sample : mc30898-1  
 Misc : op38385,msz101,35,,,2,1  
 ALS Vial : 13 Sample Multiplier: 1  
 Acq On : 6 Jun 2014 8:32 pm

Operator: sofyaz

Quant Time: Jun 10 10:36:15 2014  
 Quant Method : C:\msdchem\2\methods\Z140604-MAHPAHEXT.M  
 Quant Title : PAHs & Alkylated PAHs by GC/MS/SIM

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<hr/>						
Internal Standards						
1) Acenaphthene-d10	27.929	164	111505	1000.00	ng/mL	-0.02
<hr/>						
System Monitoring Compounds						
2) Toluene-d8	9.092	98	128760	1079.52	ng/mL	0.00
Spiked Amount	1000.000		Recovery	= 107.95%		
3) Naphthalene-d8	20.992	136	203634	965.04	ng/mL	0.00
Spiked Amount	1000.000		Recovery	= 96.50%		
4) Phenanthrene-d10	33.785	188	188844	1034.48	ng/mL	-0.03
Spiked Amount	1000.000		Recovery	= 103.45%		
5) Perylene-d12	49.685	264	160868	1003.16	ng/mL	-0.05
Spiked Amount	1000.000		Recovery	= 100.32%		
<hr/>						
Target Compounds						
7) Benzene	6.657	78	1566m	9.52	ng/mL	
8) C1-Benzene	9.214	92	647	3.93	ng/mL	86
9) C2-Benzenes	12.895	106	5415m	32.90	ng/mL	
10) C3-Benzenes	15.431	120	4465m	27.13	ng/mL	
11) C4-Benzenes	19.191	134	4233m	25.72	ng/mL	
14) Toluene	9.214	91	970	5.43	ng/mL	89
15) Ethylbenzene	11.973	91	608	3.30	ng/mL#	44
16) m,p-xylene	12.225	91	2157	15.34	ng/mL	95
17) Styrene	12.881	104	2364	22.88	ng/mL#	73
18) o-Xylene	12.895	91	6400	42.37	ng/mL	97
23) 1,2,4-Trimethylbenzene	15.841	105	576	3.74	ng/mL	87
25) 1,2,3-Trimethylbenzene	16.655	105	1295	7.58	ng/mL	94
34) Benzo(b)thiophene	21.306	134	10189	50.84	ng/mL#	83
44) Naphthalene	21.058	128	568m	2.26	ng/mL	
45) 2-Methylnaphthalene	23.805	142	402	2.57	ng/mL#	79
46) 1-Methylnaphthalene	24.201	142	1028	6.07	ng/mL	94
47) C1-Naphthalenes	24.201	142	1560m	6.20	ng/mL	
48) C2-Naphthalenes	26.617	156	4036m	16.05	ng/mL	
49) C3-Naphthalenes	29.274	170	1678m	6.67	ng/mL	
52) Acenaphthylene	27.343	152	860	3.54	ng/mL#	67
53) Acenaphthene	28.058	154	1977	13.00	ng/mL	99
54) Dibenzofuran	28.763	168	521	2.47	ng/mL#	67
55) Fluorene	30.110	166	582	3.42	ng/mL#	71
59) Dibenzothiophene	33.408	184	232	0.98	ng/mL#	75
60) C1-Dibenzothiophenes (...)	35.586	198	14256m	60.21	ng/mL	
61) C1-Dibenzothiophenes (...)	35.586	198	13388	56.54	ng/mL#	1
65) Phenanthrene	33.875	178	431	1.69	ng/mL#	64
66) Anthracene	34.086	178	235	0.96	ng/mL#	64
78) Fluoranthene	38.688	202	365	1.47	ng/mL#	63
79) Pyrene	39.547	202	299	1.15	ng/mL#	59
96) Benzo(e)pyrene	49.342	252	276	1.14	ng/mL#	61
97) Benzo(a)pyrene	49.517	252	305	1.41	ng/mL#	56
98) Perylene	49.781	252	202	0.94	ng/mL#	54
99) Indeno(1,2,3-cd)pyrene	53.119	276	432	1.56	ng/mL#	45
100) Dibenz(a,h)anthracene	53.157	278	314m	1.28	ng/mL	
101) Benzo(g,h,i)perylene	53.924	276	433	1.55	ng/mL#	52
102) Coronene	59.927	300	844	3.16	ng/mL#	49
103) C-17	31.769	85	499	10.90	ng/mL#	64
104) Pristane	31.769	85	499	14.57	ng/mL#	67
105) C-18	33.568	85	453	9.95	ng/mL#	62

## Quantitation Report (QT Reviewed)

Data File: C:\msdchem\2\data\Z140605\Z02556.D  
Sample : mc30898-1  
Misc : op38385,msz101,35,,,2,1  
ALS Vial : 13 Sample Multiplier: 1  
Acq On : 6 Jun 2014 8:32 pm Operator: sofyaz

Quant Time: Jun 10 10:36:15 2014  
Quant Method : C:\msdchem\2\methods\Z140604-MAHPAHEXT.M  
Quant Title : PAHs & Alkylated PAHs by GC/MS/SIM

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) Phytane	33.785	85	275	6.09	ng/mL#	68

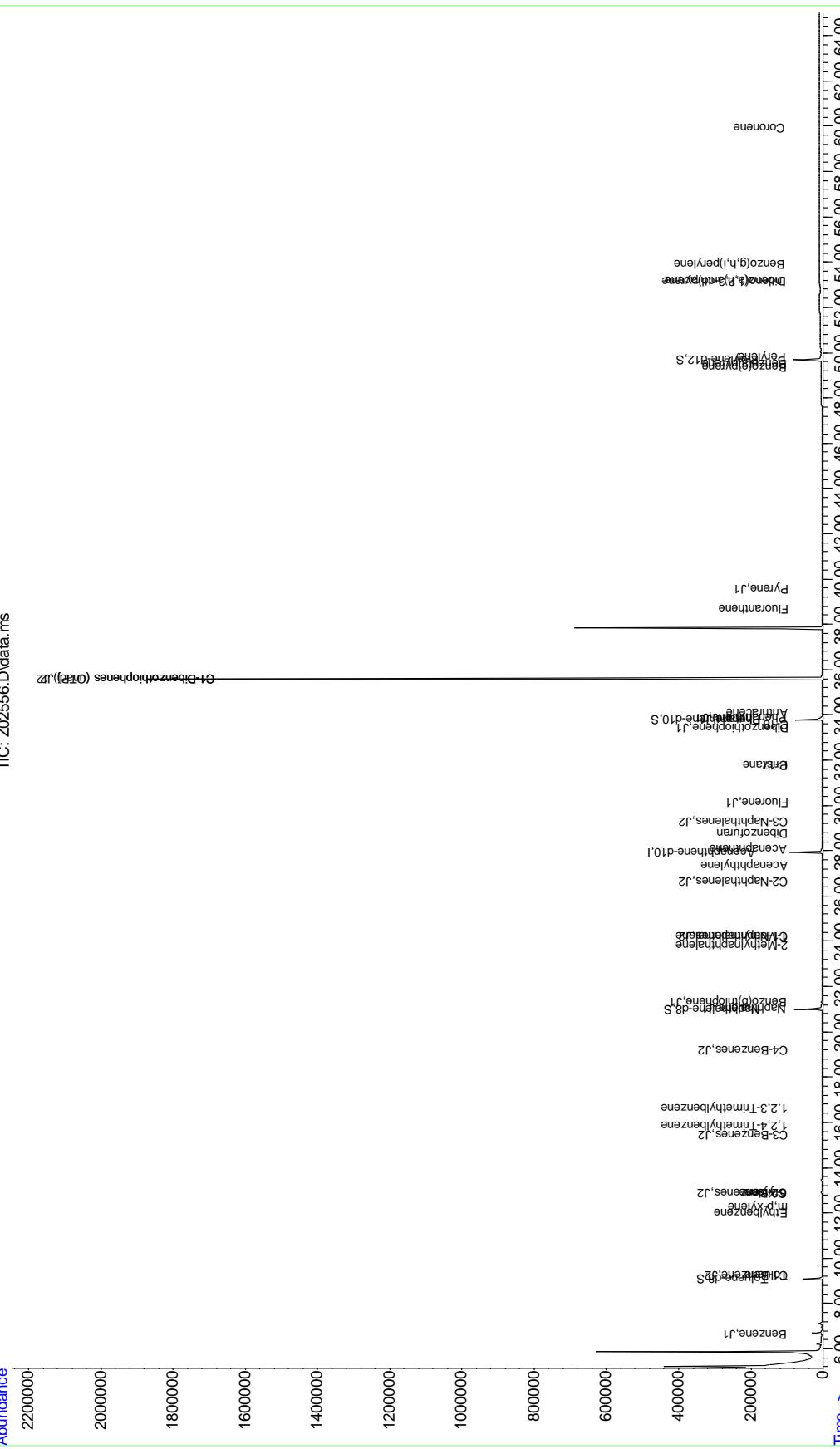
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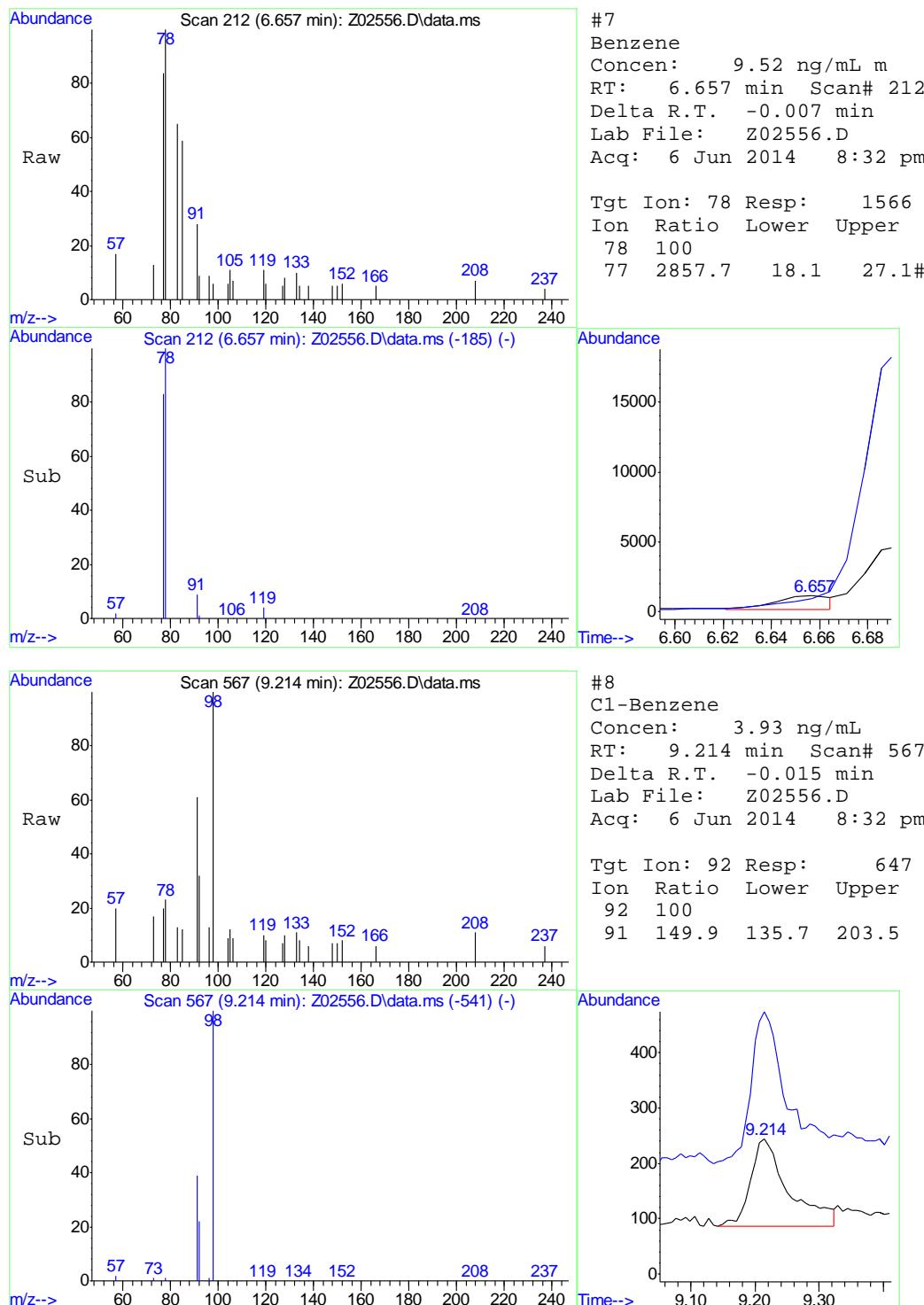
## Quantitation Report (QT Reviewed)

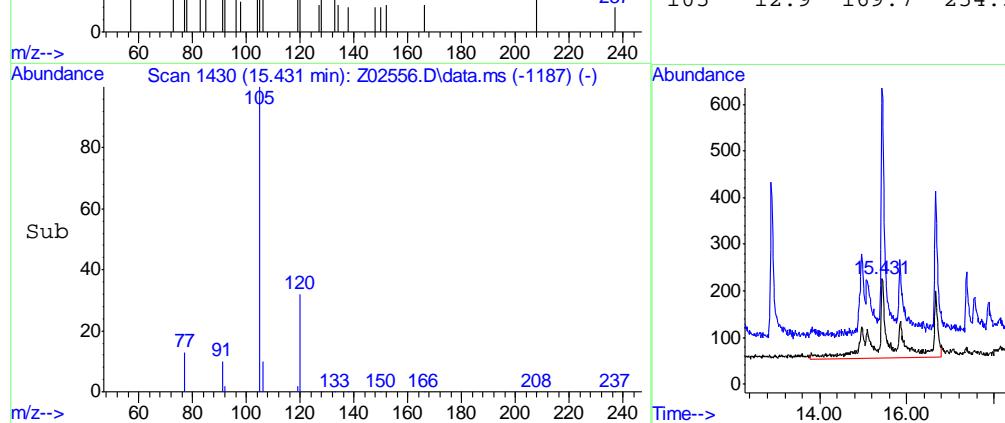
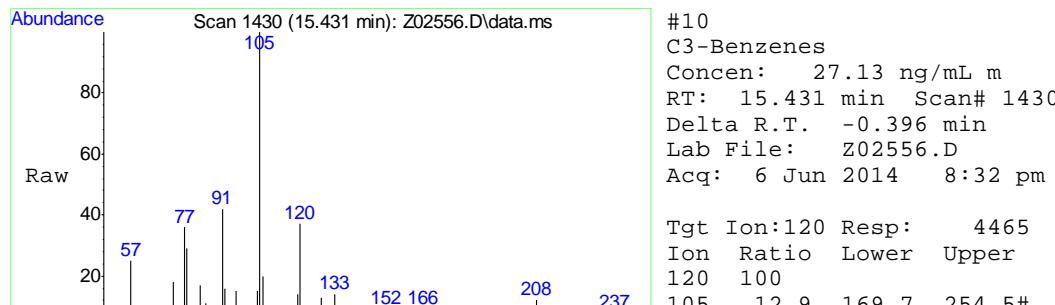
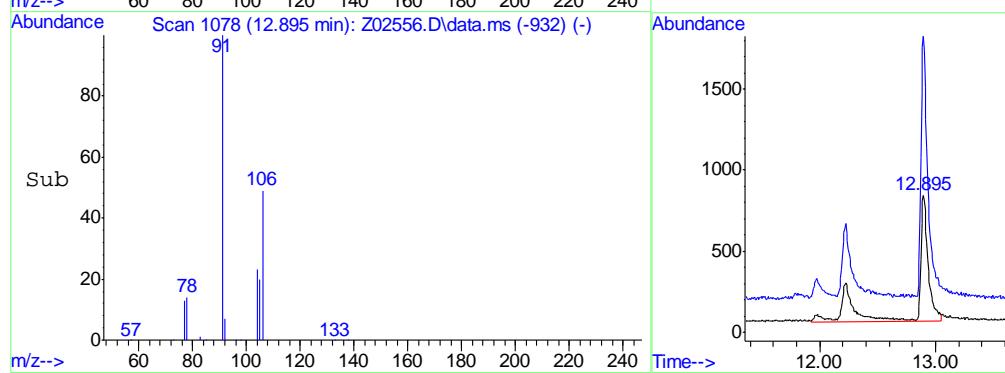
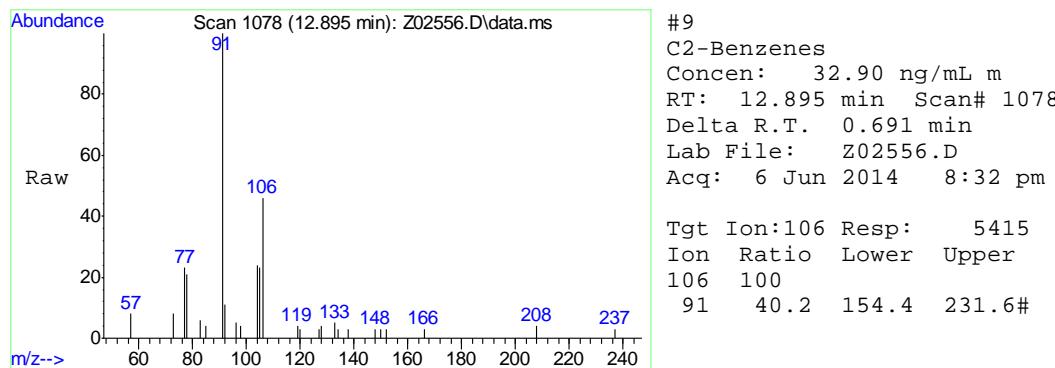
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 A/S Vial : 13 Sample Multiplier: 1  
 Acq On : 6 Jun 2014 8:32 PM  
 Operator: soyaz

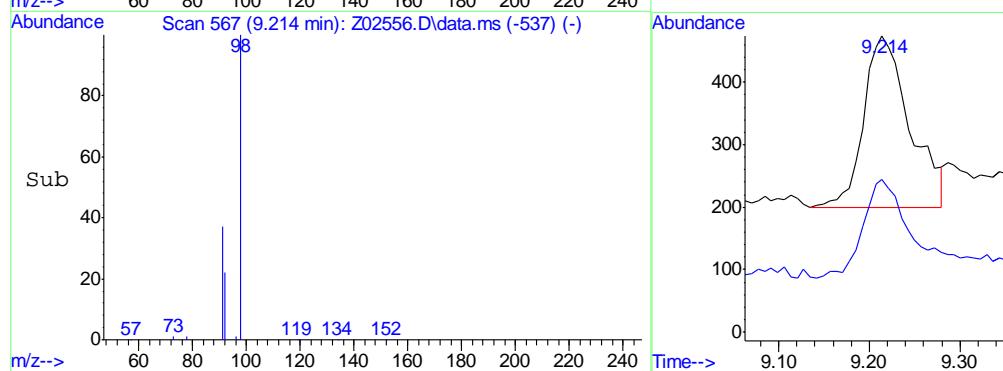
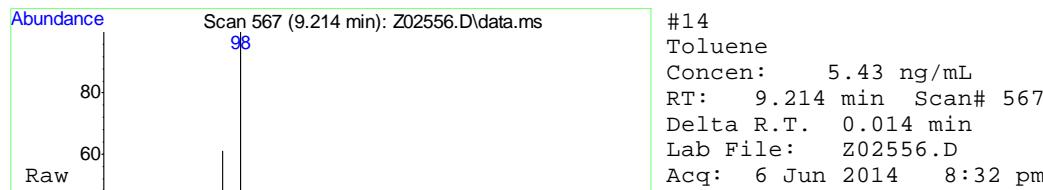
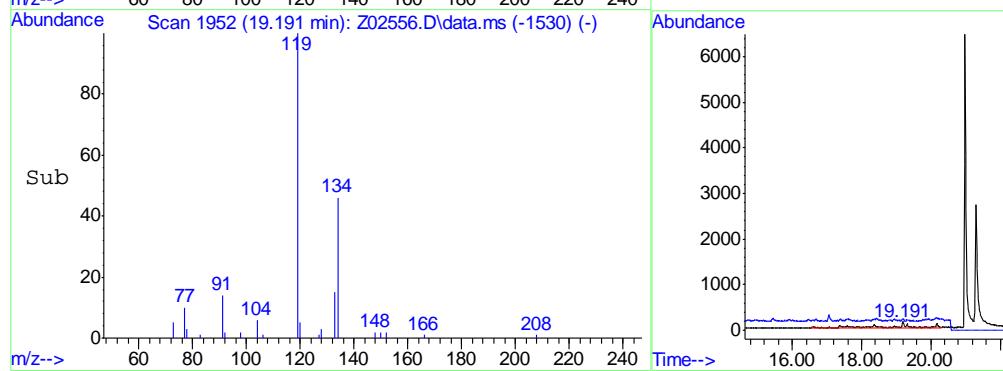
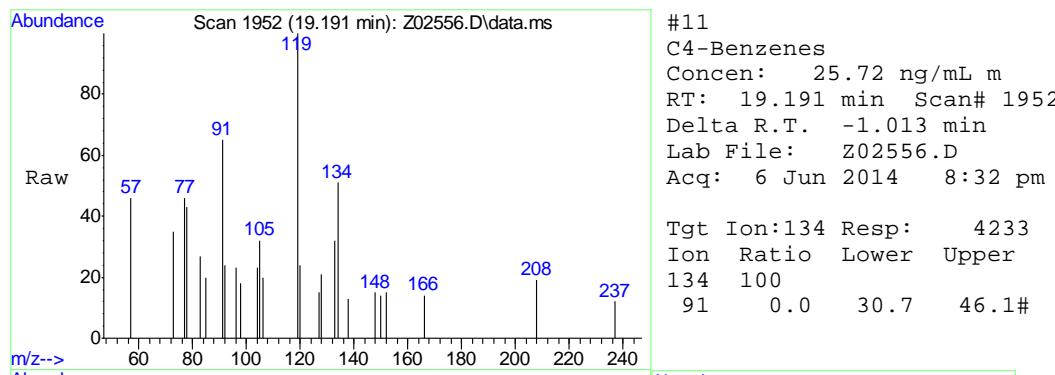
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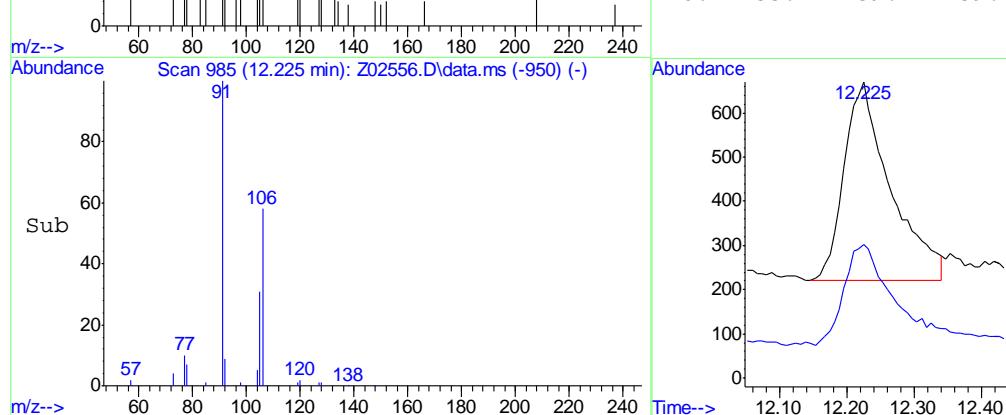
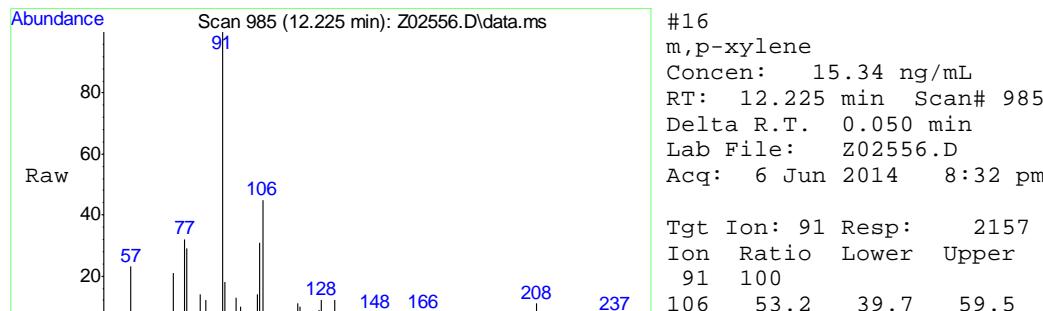
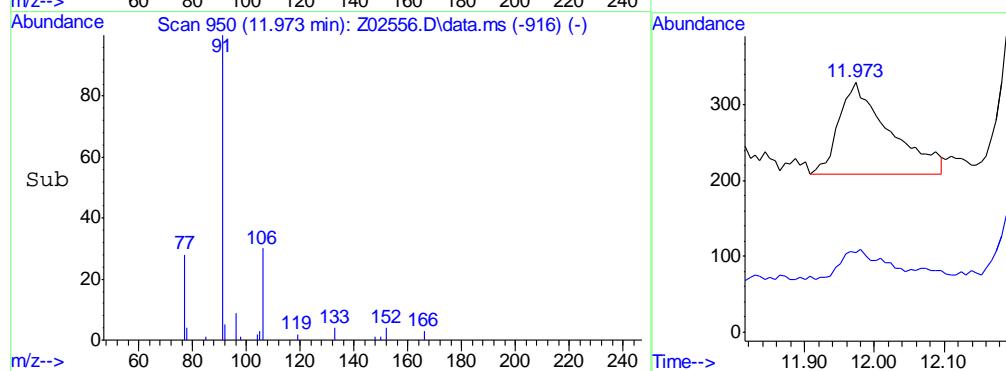
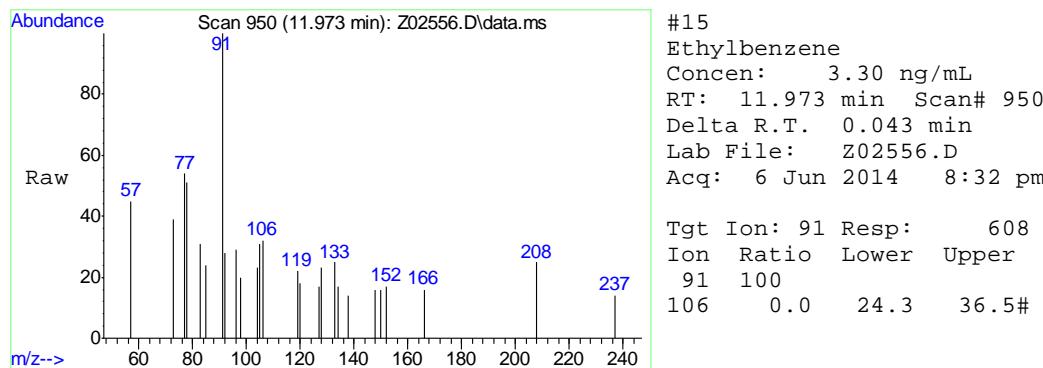
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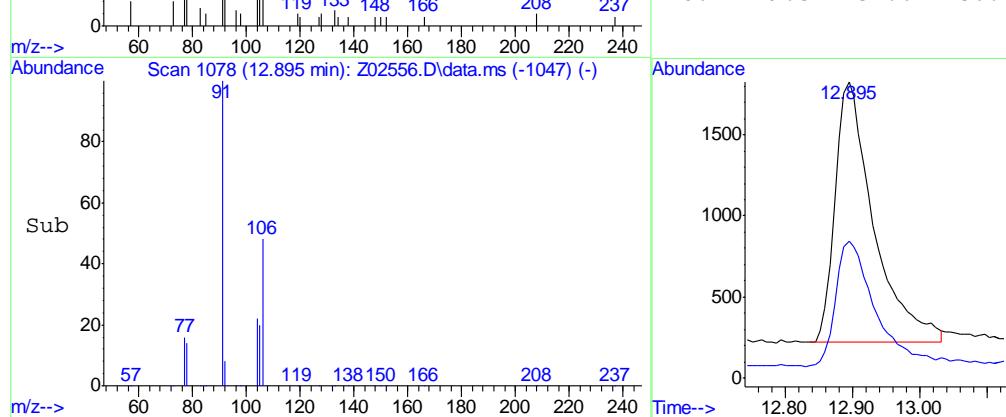
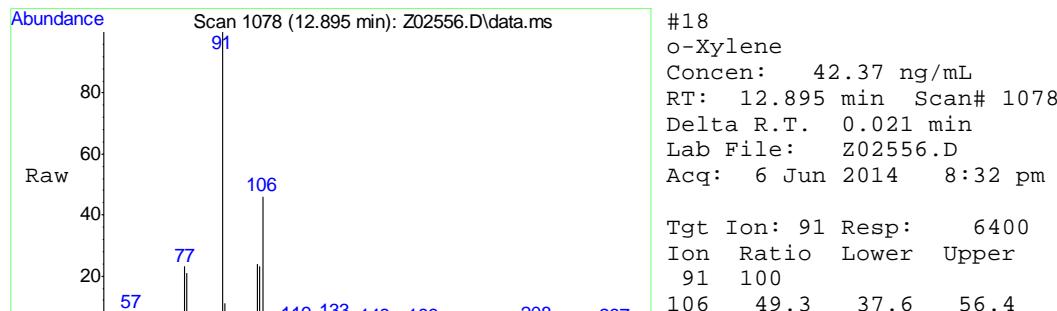
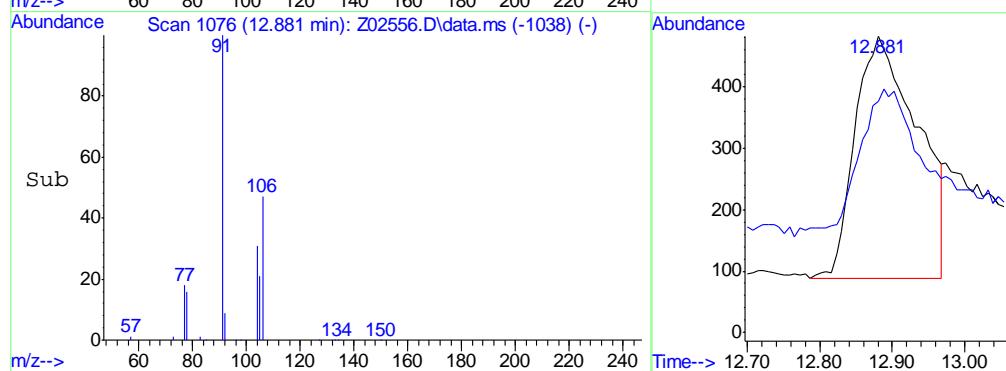
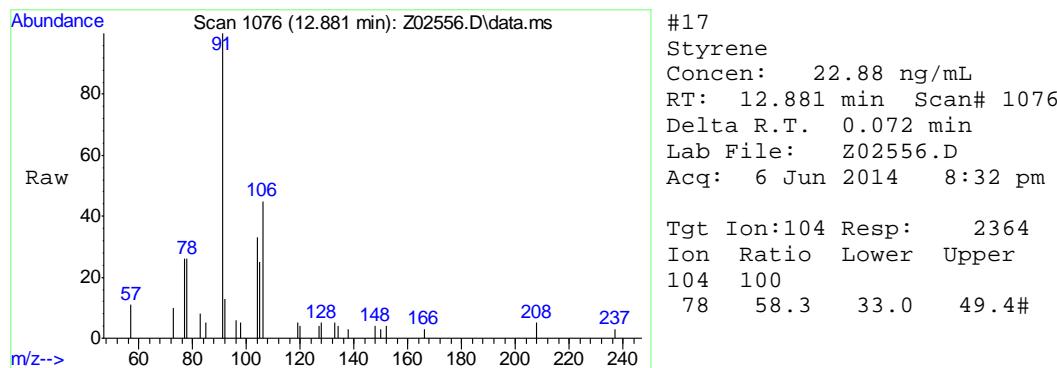


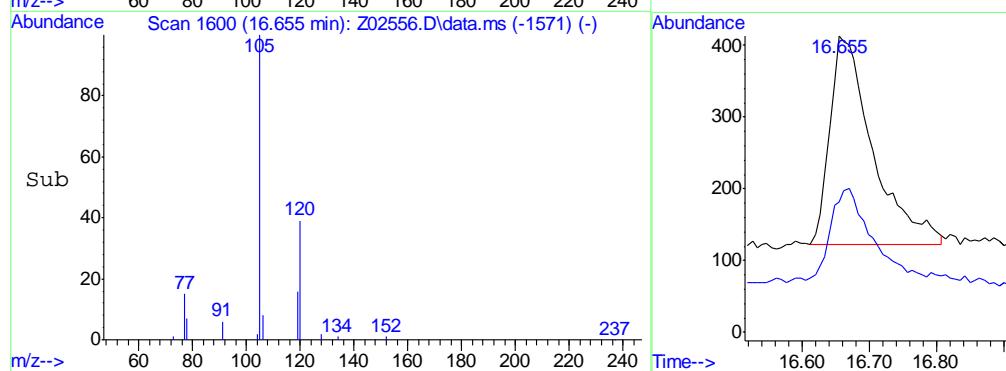
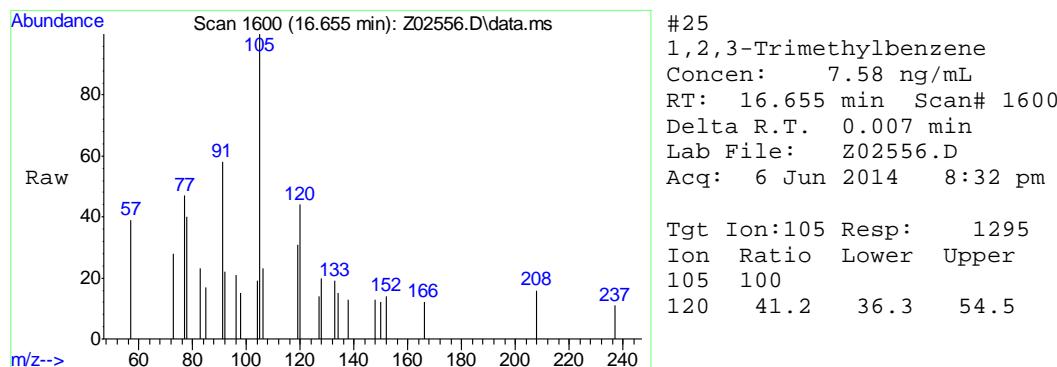
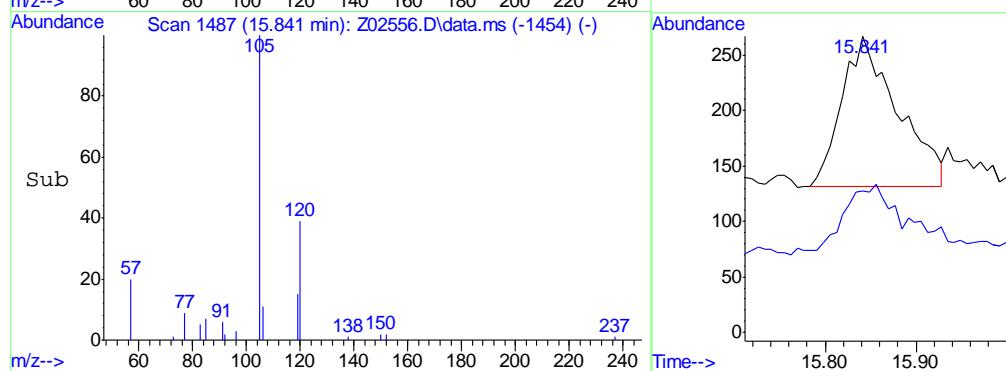
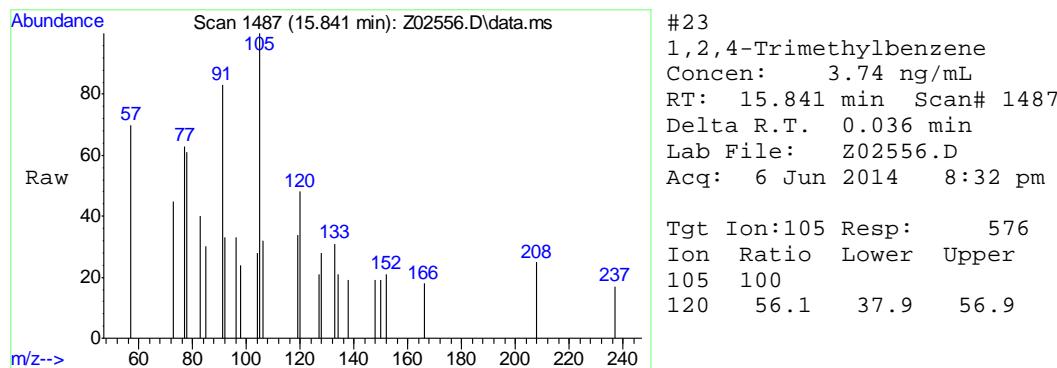


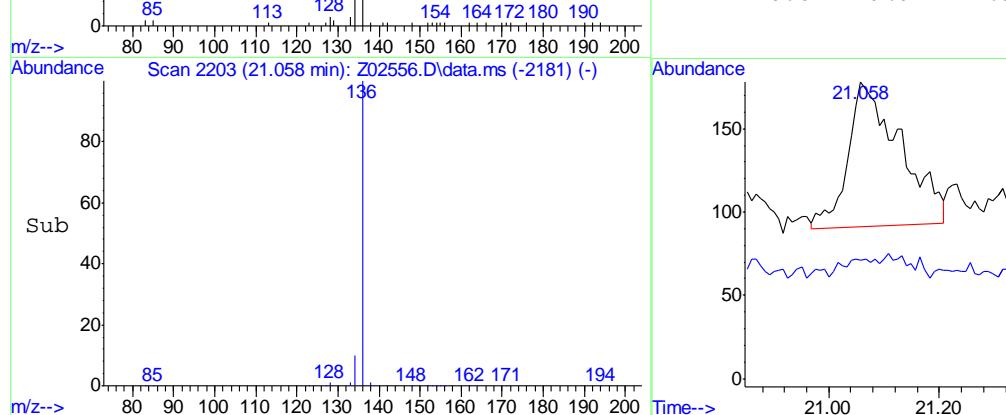
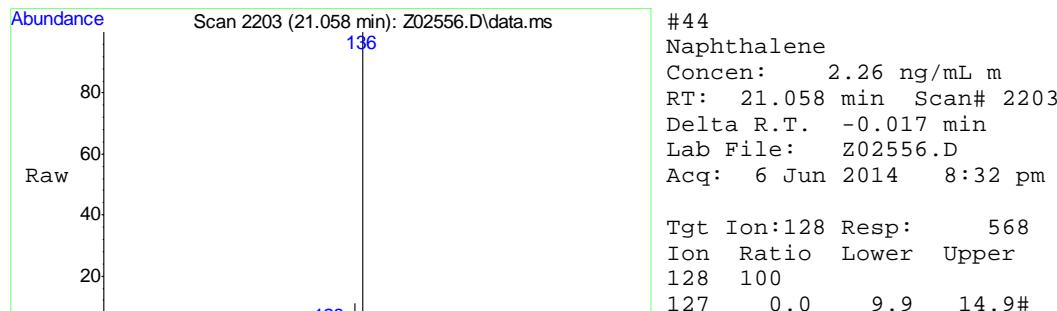
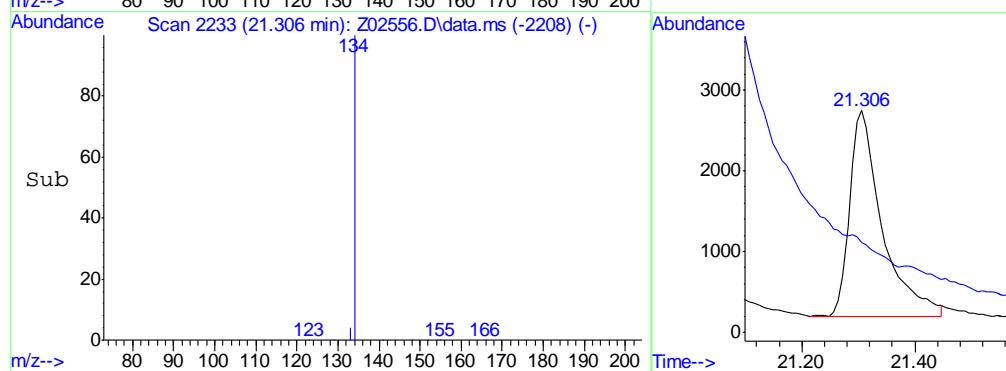
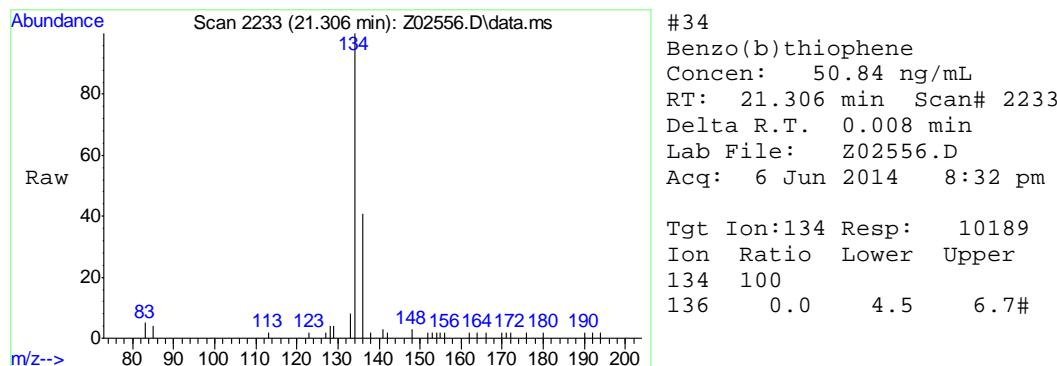


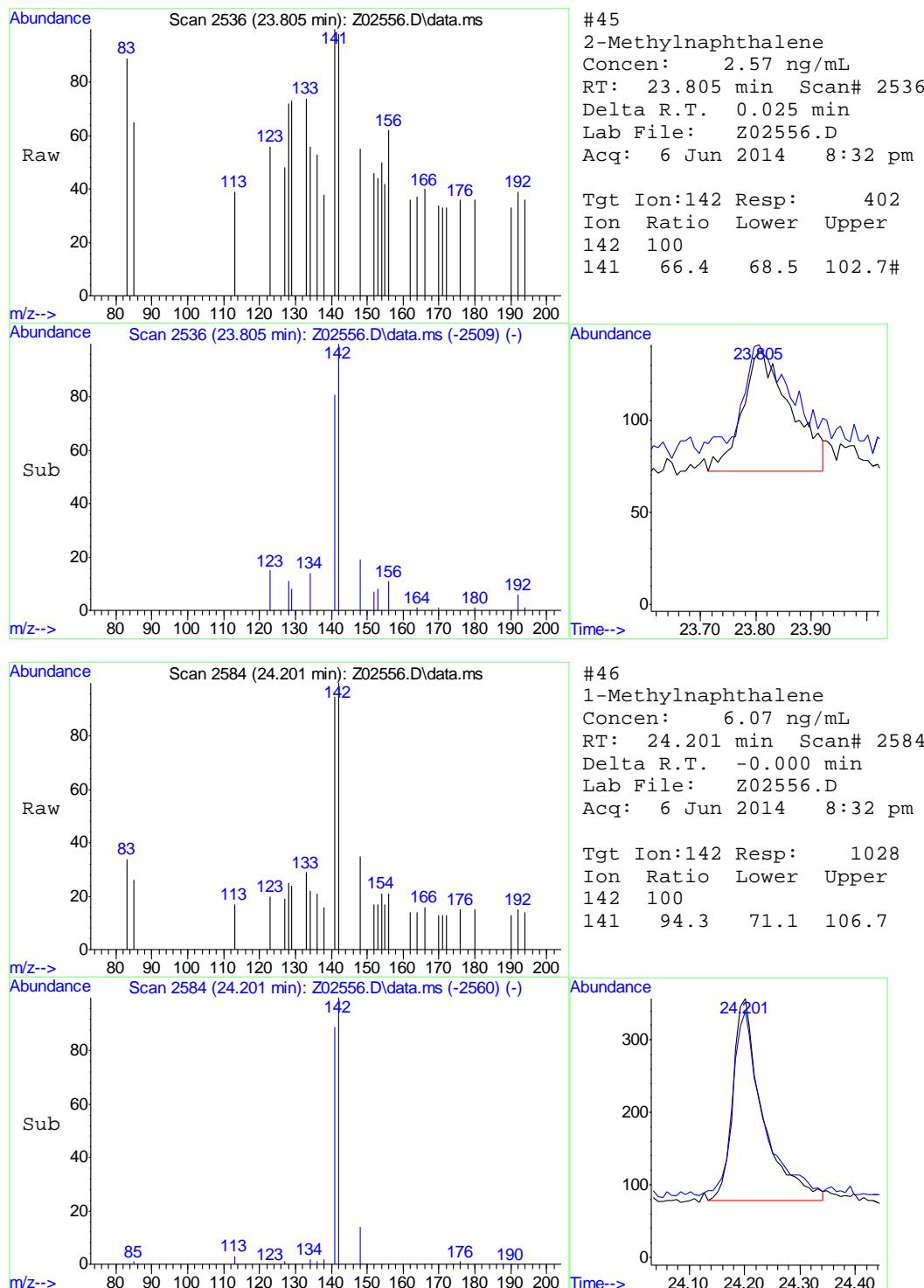


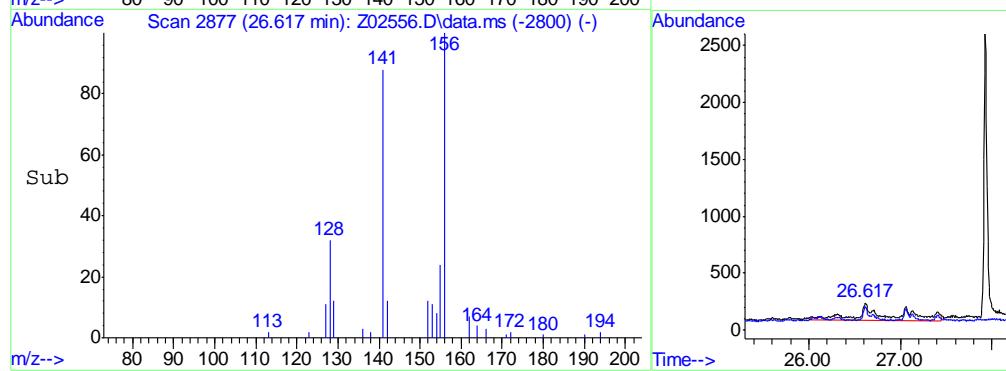
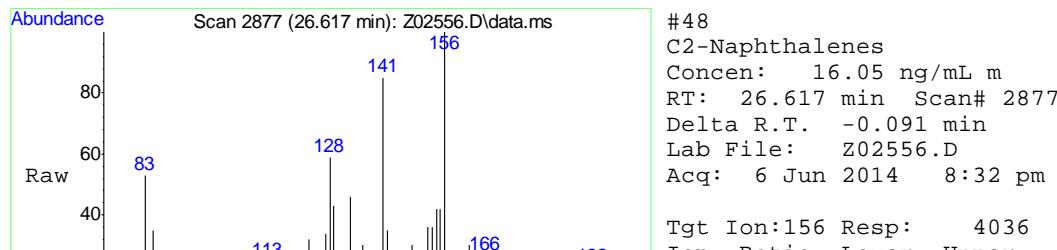
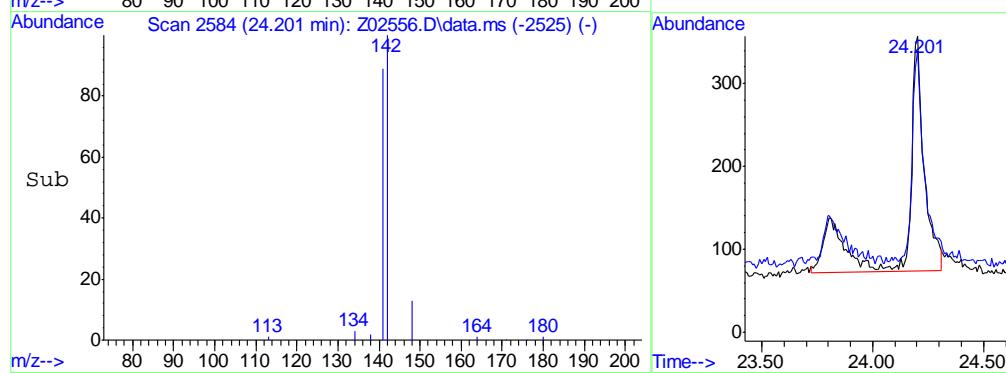
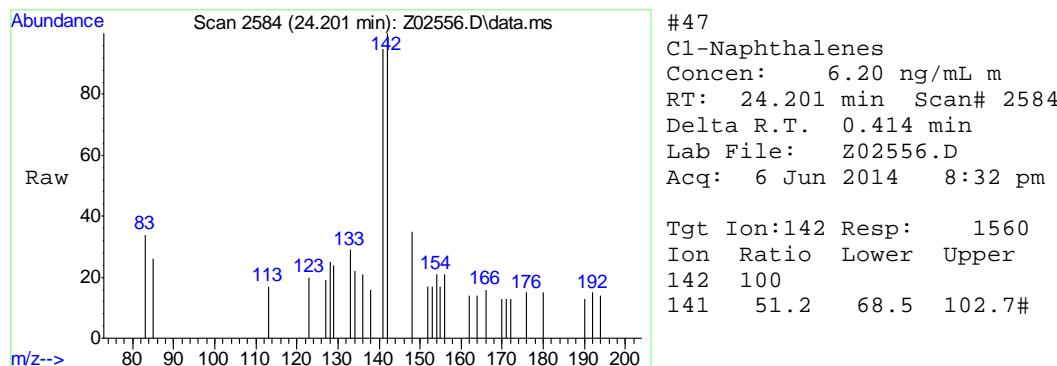


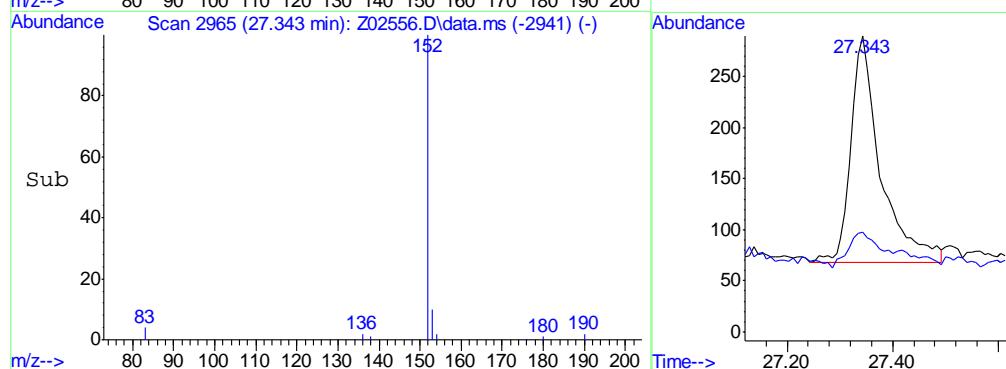
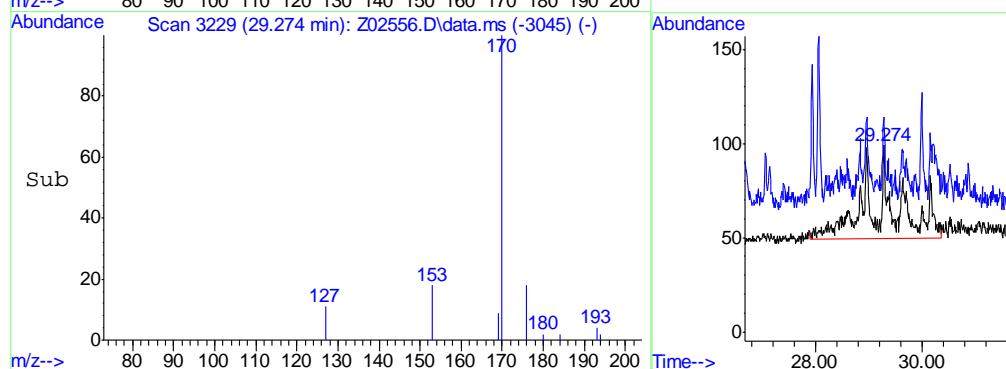
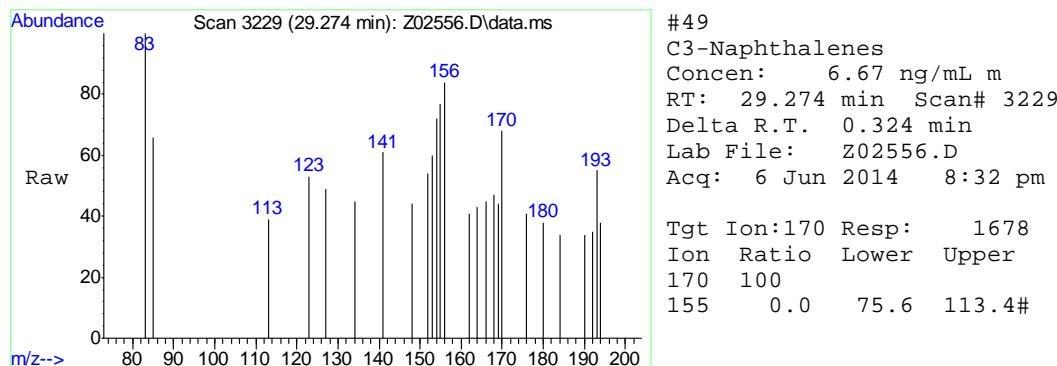


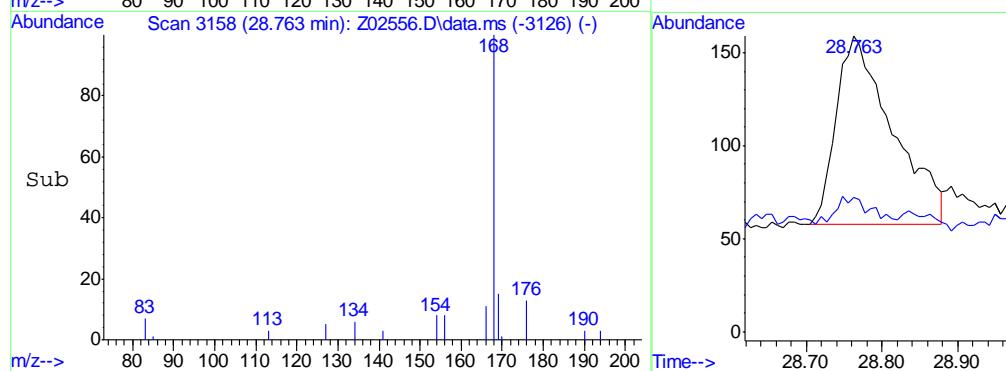
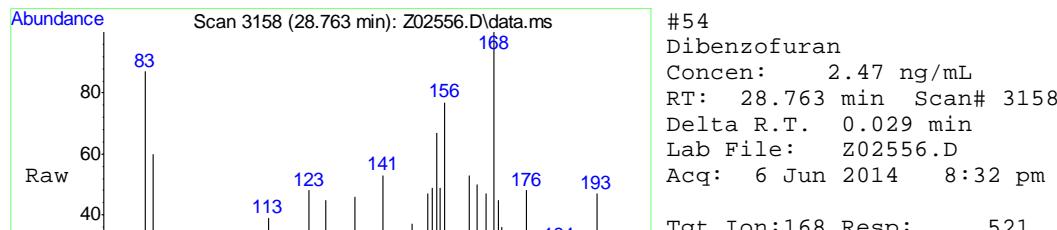
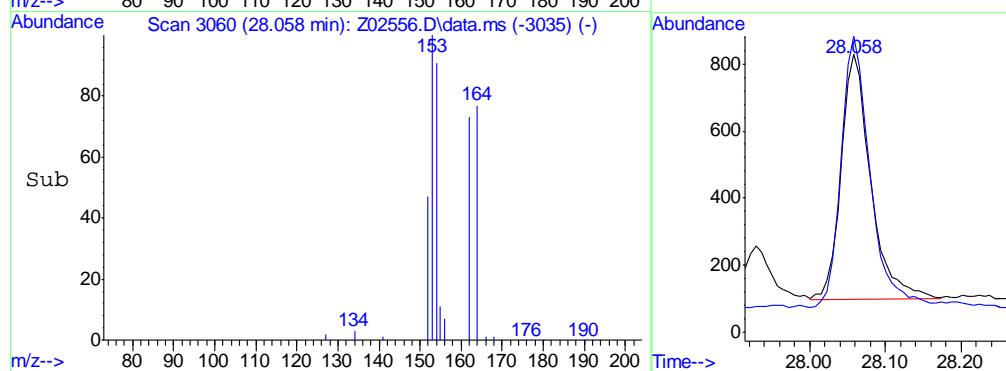
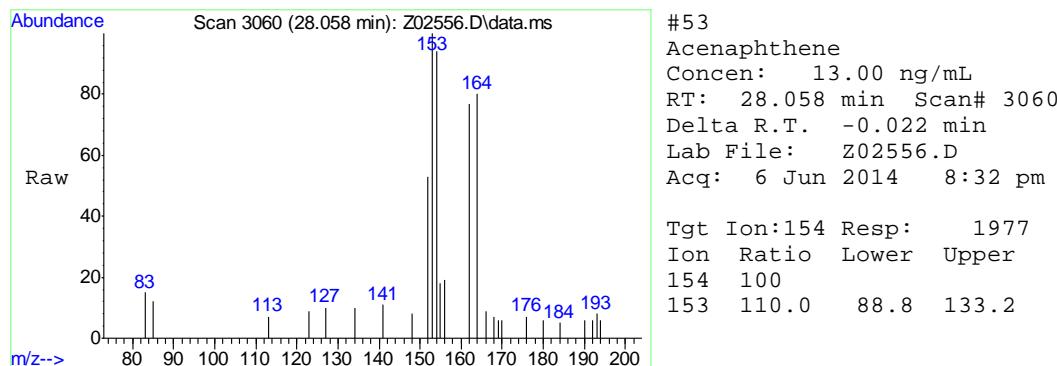


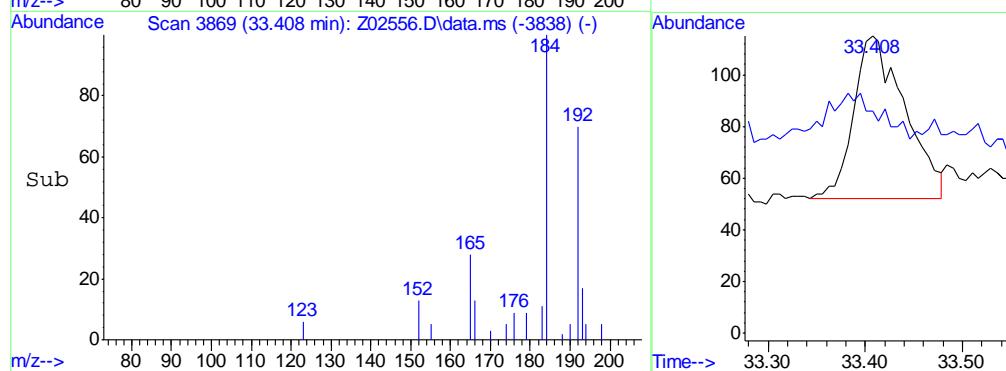
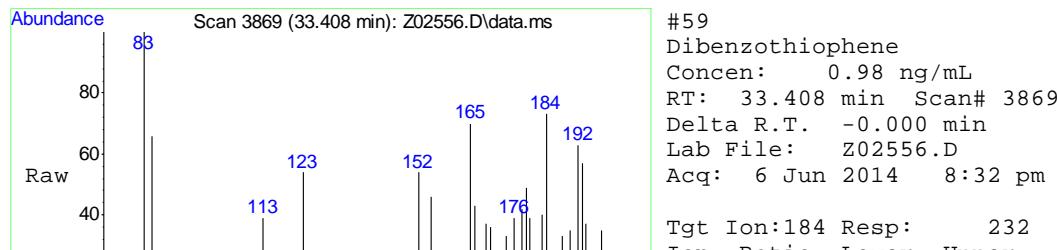
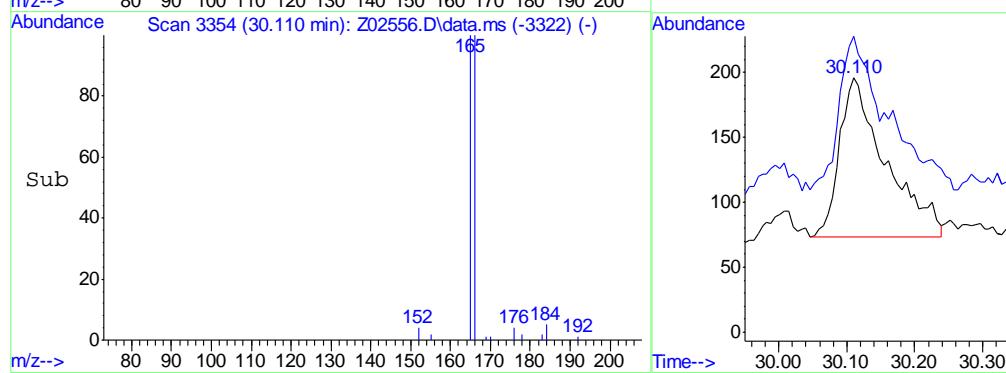
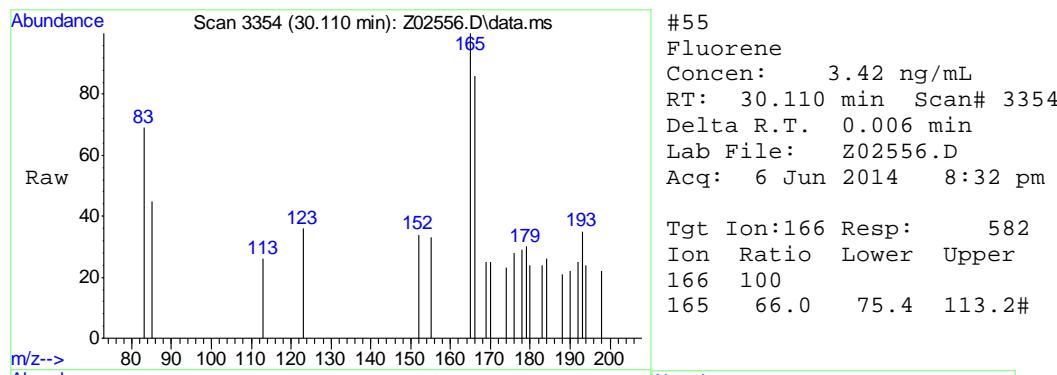


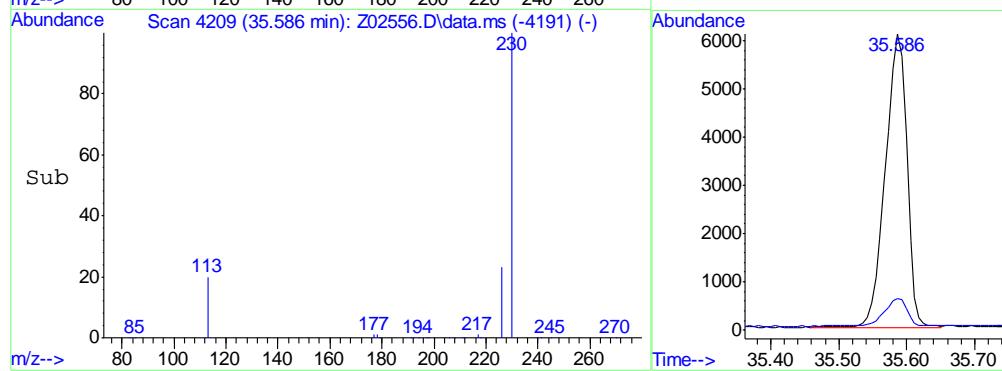
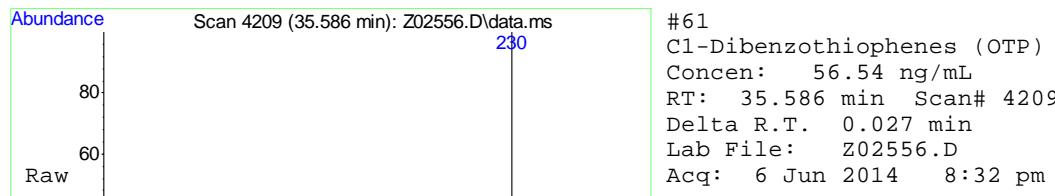
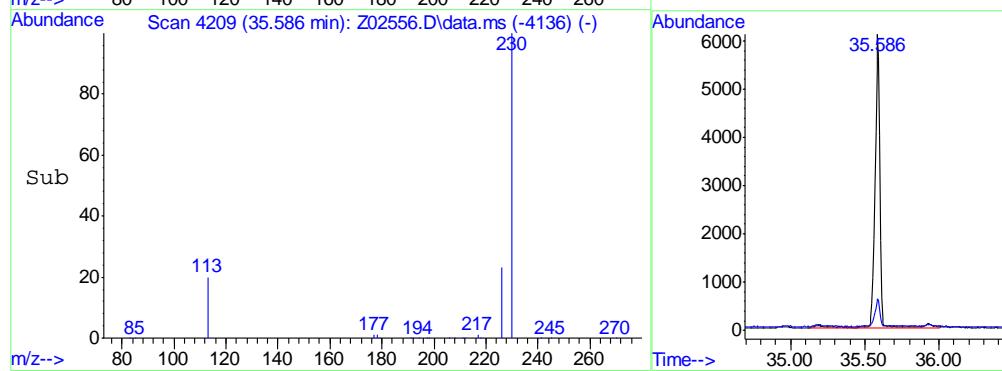
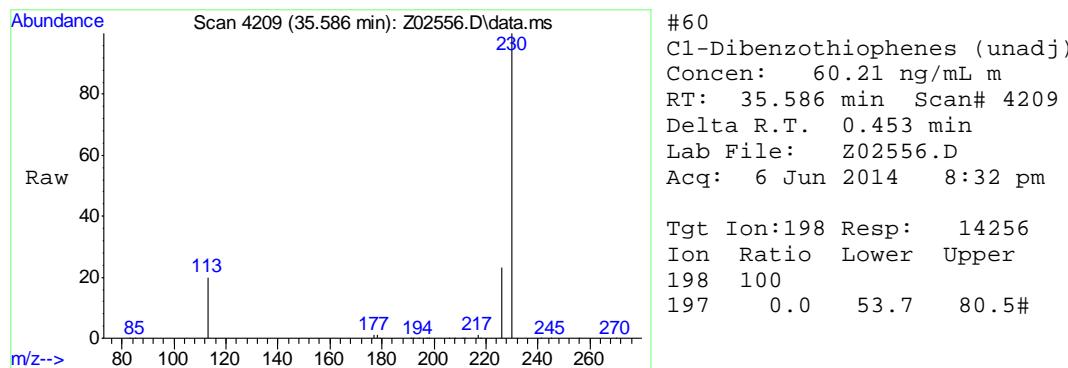


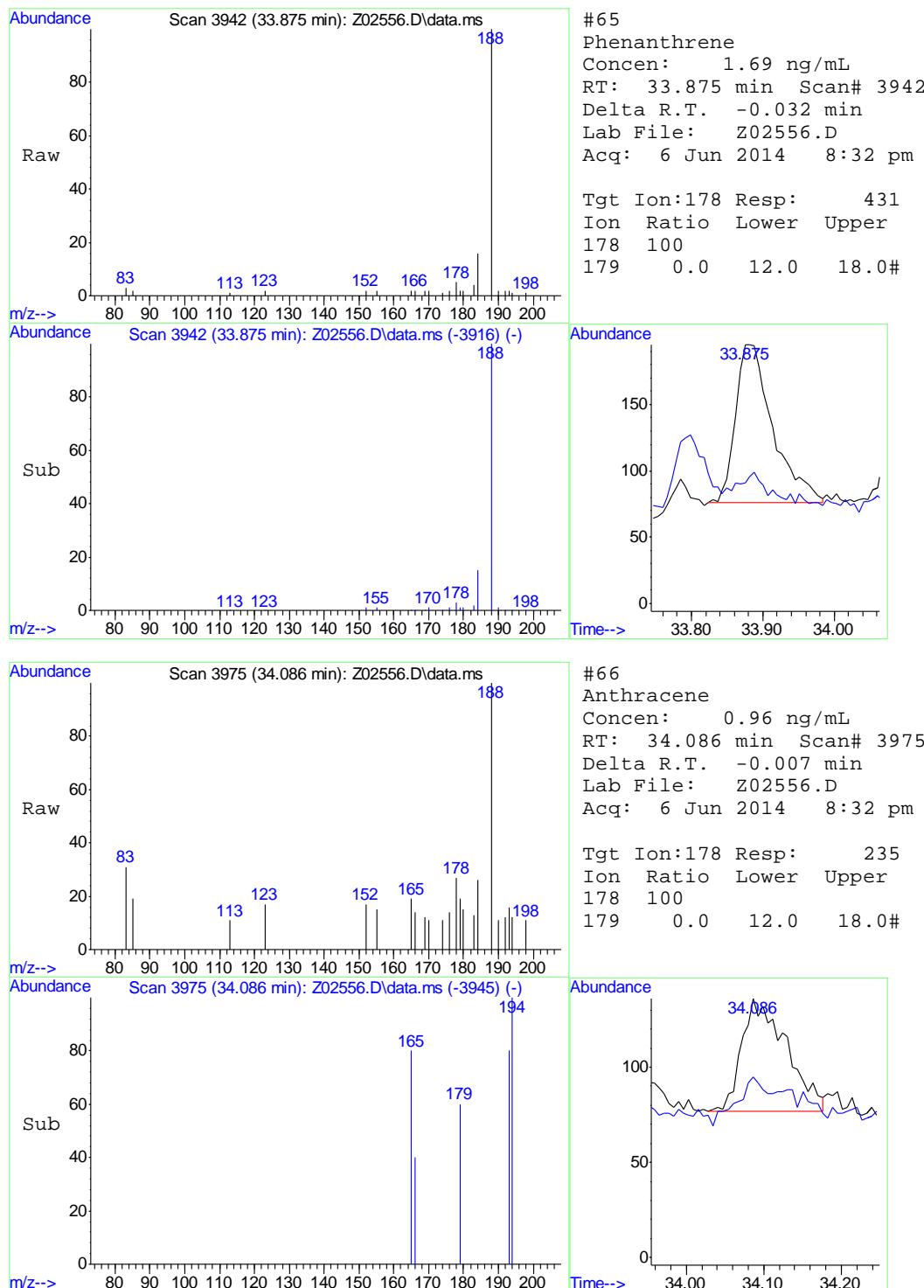


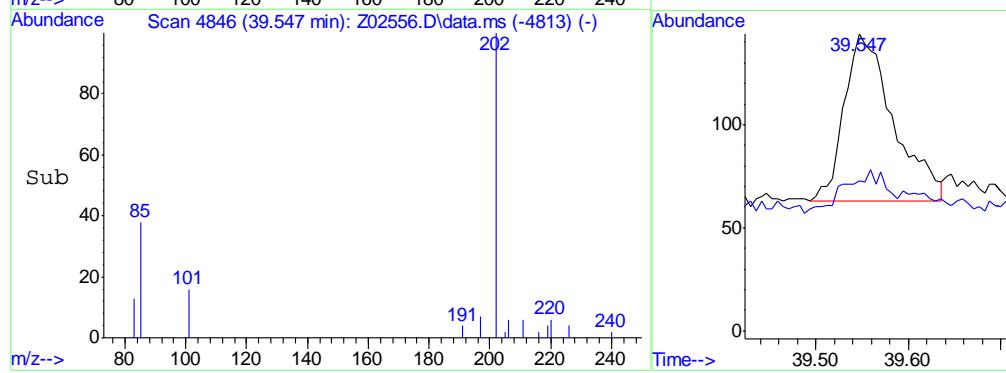
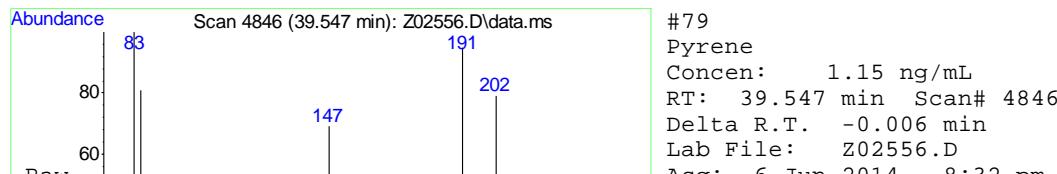
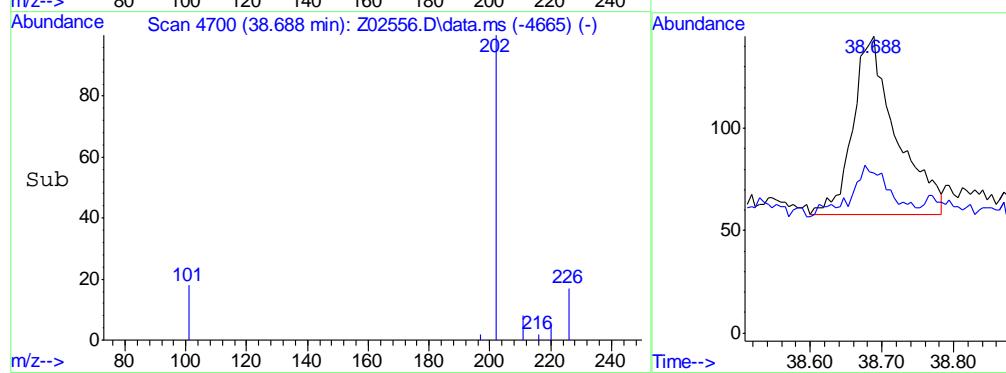
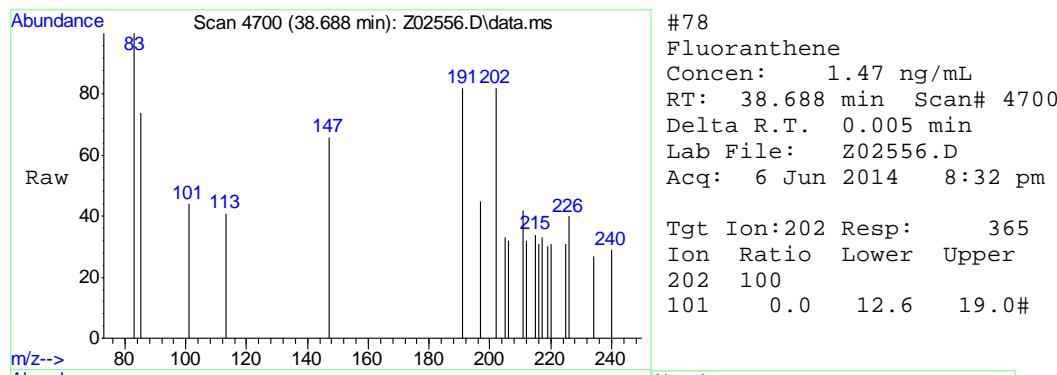


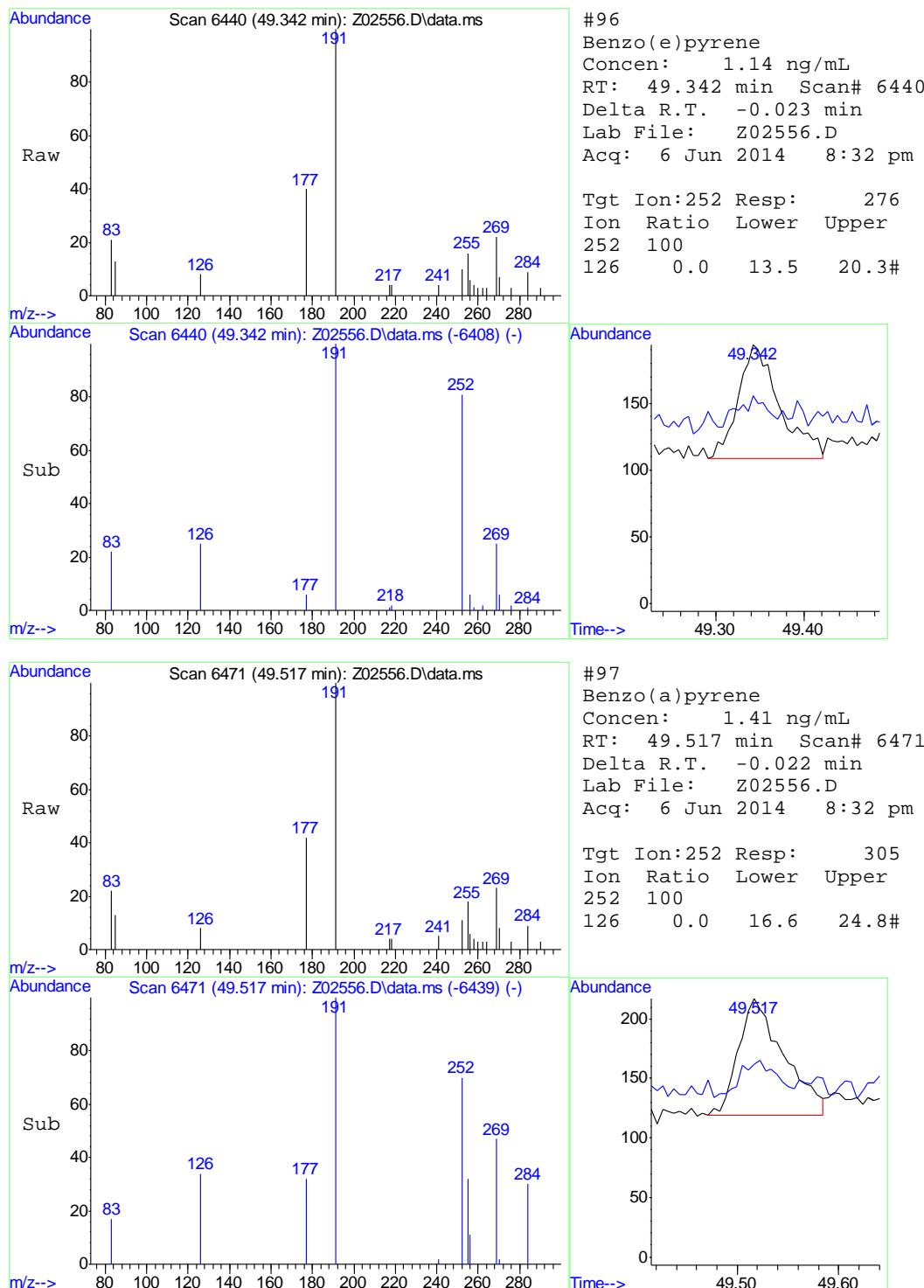


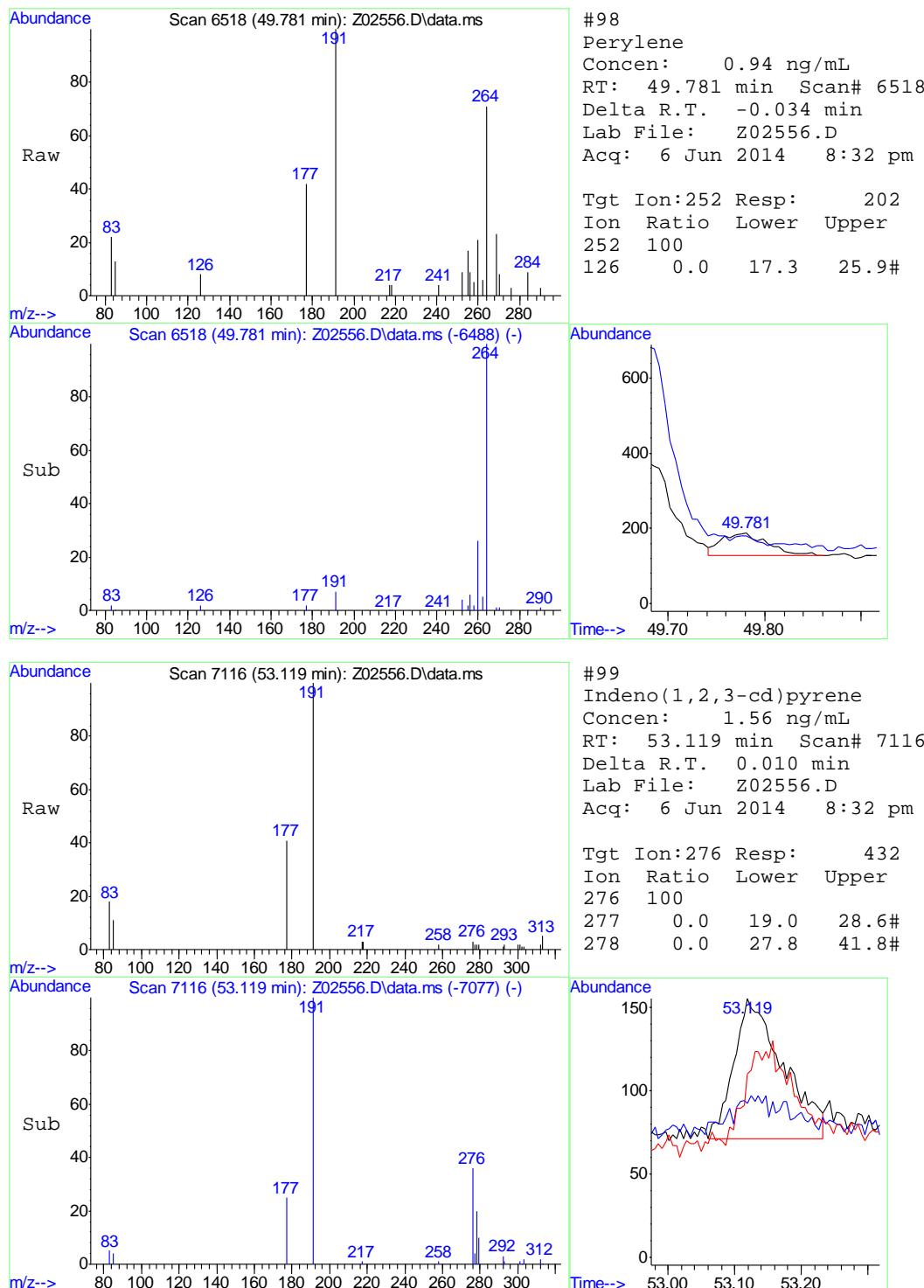


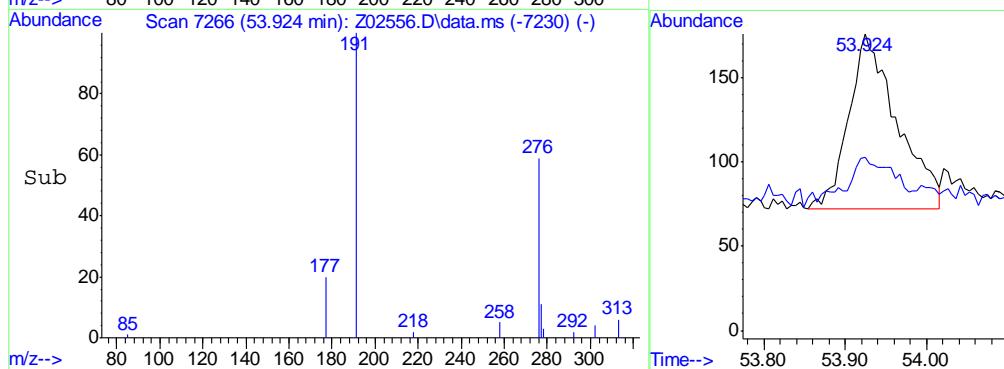
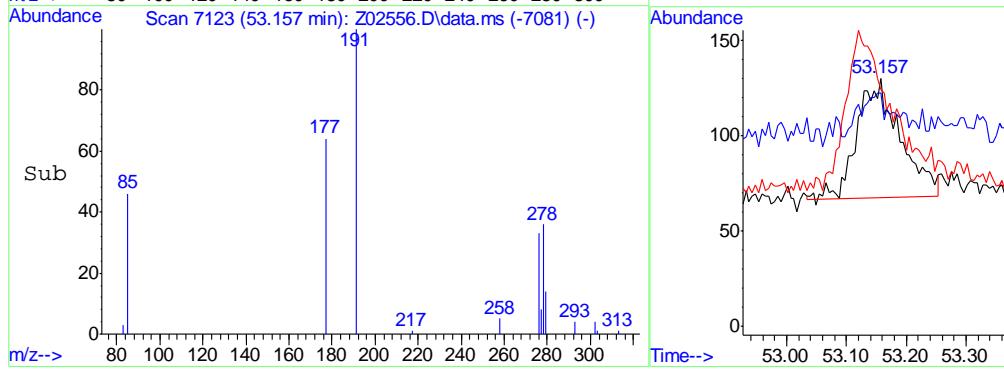
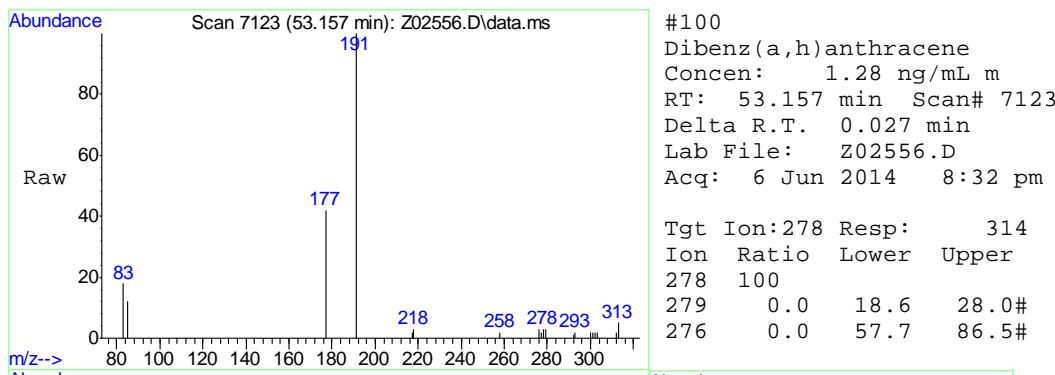


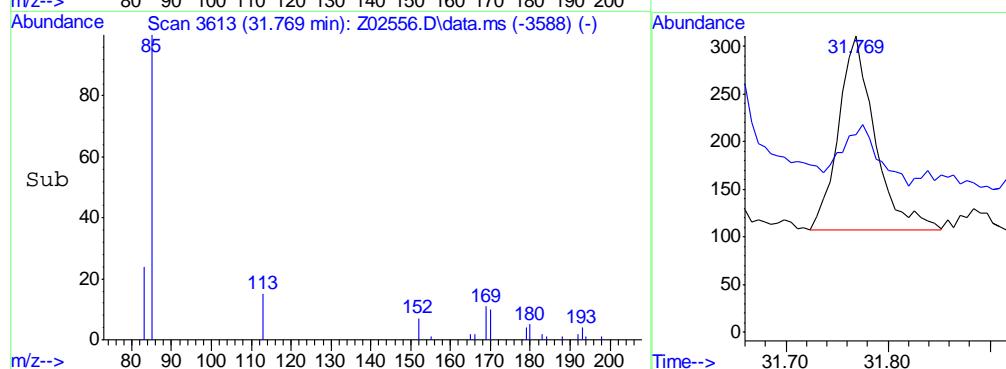
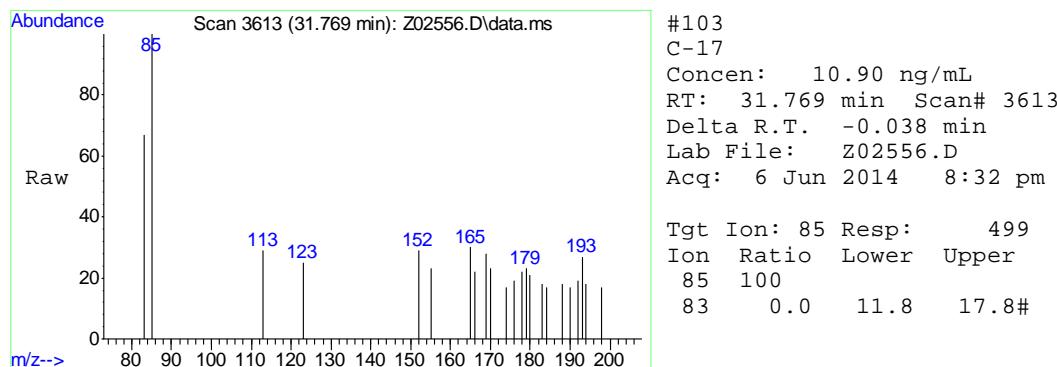
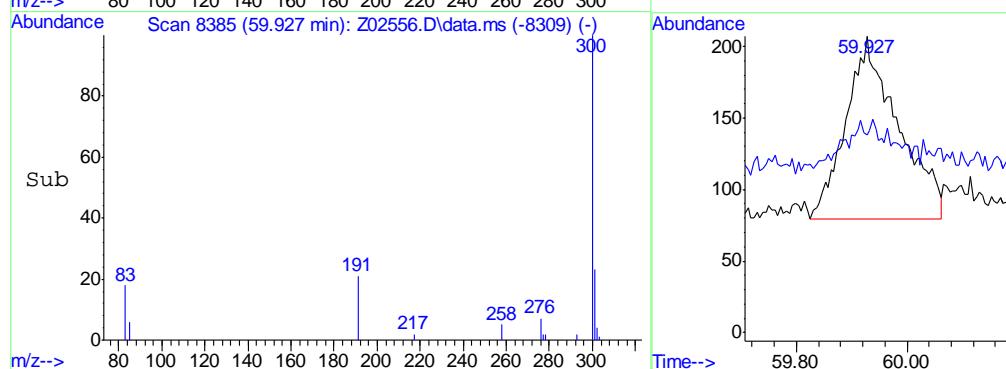
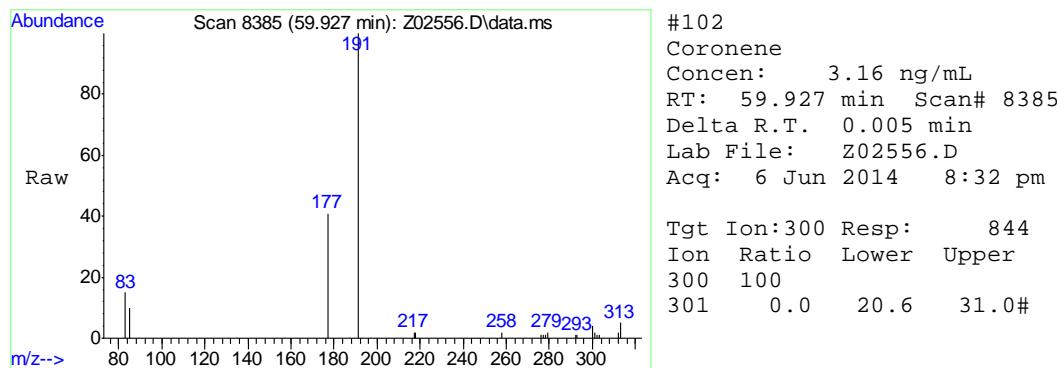


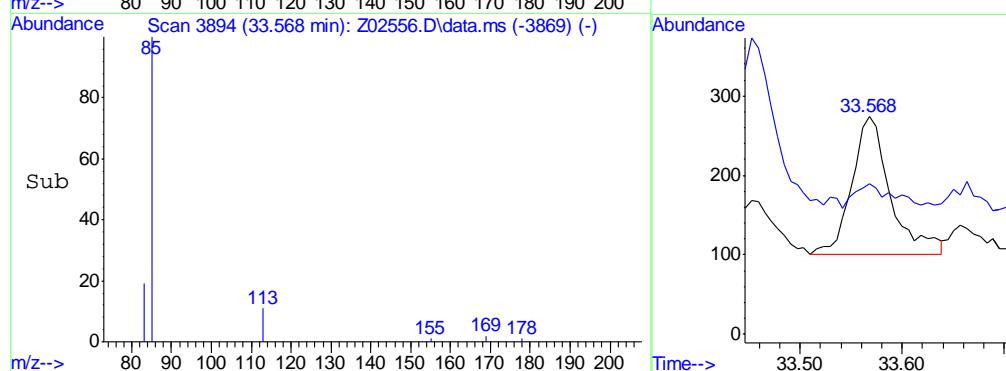
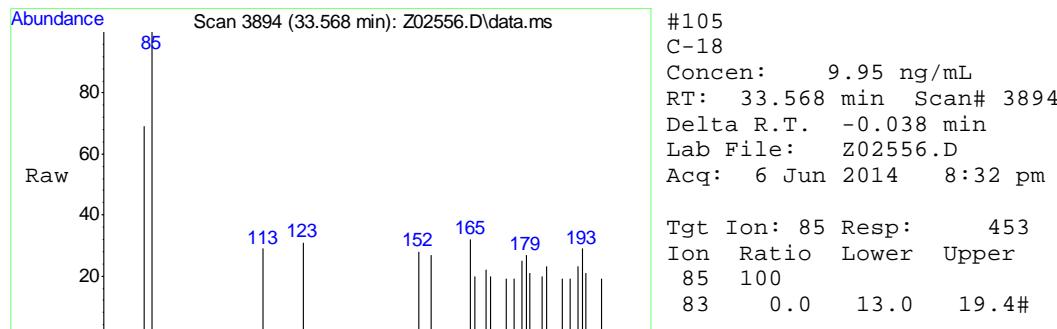
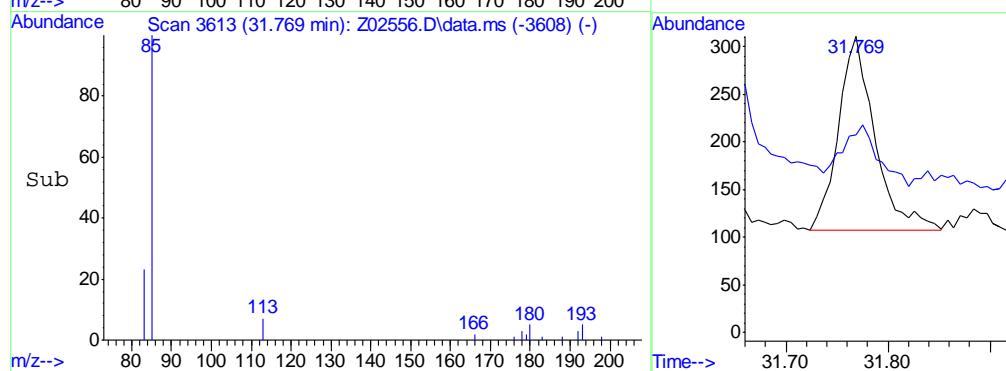
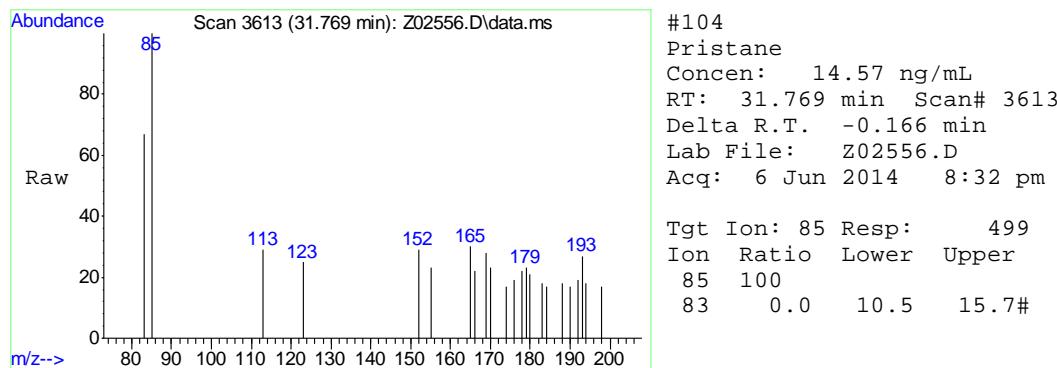


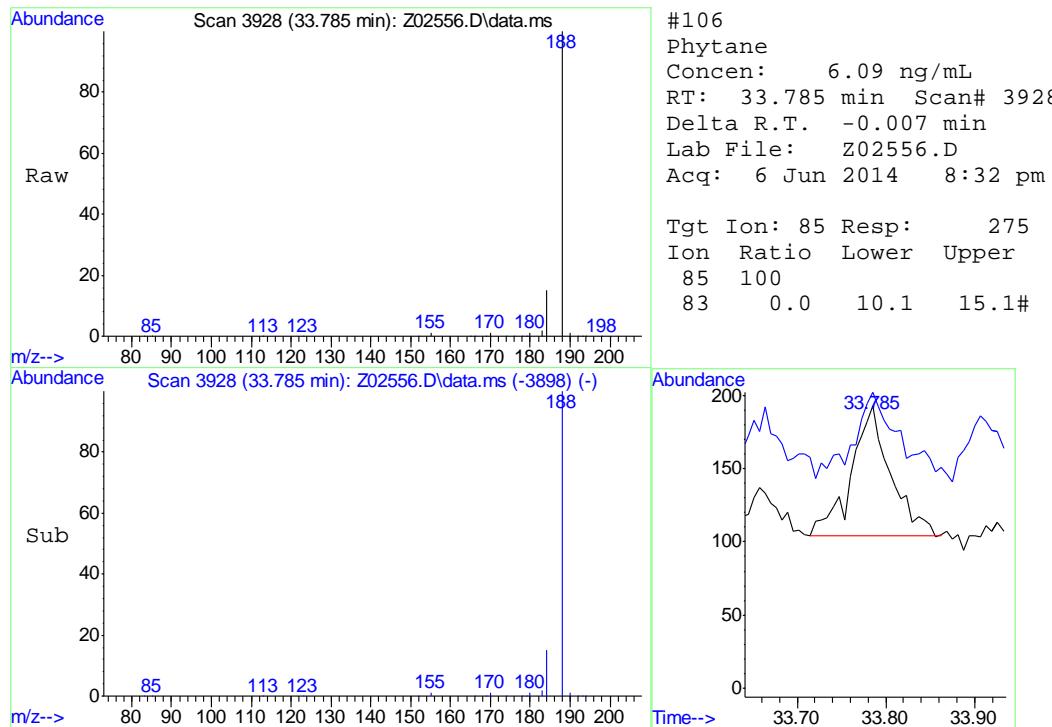












James Roush  
 06/13/14 15:51

## Quantitation Report (QT Reviewed)

Data File: C:\msdchem\2\data\Z140605\Z02548.D  
 Sample : mc30898-2  
 Misc : op38366,msz101,5.91,,,2,1  
 ALS Vial : 8 Sample Multiplier: 1  
 Acq On : 6 Jun 2014 10:09 am

Operator: sofyaz

Quant Time: Jun 10 11:03:22 2014  
 Quant Method : C:\msdchem\2\methods\Z140604-MAHPAHEXT.M  
 Quant Title : PAHs & Alkylated PAHs by GC/MS/SIM

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<hr/>						
Internal Standards						
1) Acenaphthene-d10	27.929	164	128206	1000.00	ng/mL	-0.02
<hr/>						
System Monitoring Compounds						
2) Toluene-d8	9.092	98	88794	647.47	ng/mL	0.00
Spiked Amount	1000.000		Recovery	=	64.75%	
3) Naphthalene-d8	20.984	136	162567	670.06	ng/mL	-0.02
Spiked Amount	1000.000		Recovery	=	67.01%	
4) Phenanthrene-d10	33.779	188	149503	712.28	ng/mL	-0.04
Spiked Amount	1000.000		Recovery	=	71.23%	
5) Perylene-d12	49.680	264	135091	732.68	ng/mL	-0.05
Spiked Amount	1000.000		Recovery	=	73.27%	
<hr/>						
Target Compounds						
7) Benzene	6.650	78	7414	39.18	ng/mL#	53
8) C1-Benzene	9.207	92	8792	46.46	ng/mL	94
9) C2-Benzene	12.182	106	14705m	77.71	ng/mL	
10) C3-Benzene	15.812	120	8357m	44.16	ng/mL	
11) C4-Benzene	19.183	134	8437m	44.59	ng/mL	
12) C5-Benzene	20.214	148	7251m	38.32	ng/mL	
13) Methylcyclohexane	8.004	83	2238	29.21	ng/mL	94
14) Toluene	9.207	91	15298	74.53	ng/mL	98
15) Ethylbenzene	11.951	91	2986	14.11	ng/mL	92
16) m,p-xylene	12.175	91	19385	119.90	ng/mL	98
17) Styrene	12.830	104	10431	87.81	ng/mL	99
18) o-Xylene	12.881	91	4083	23.51	ng/mL	96
19) Isopropylbenzene	13.795	105	1085	5.32	ng/mL	100
20) n-Propylbenzene	14.667	91	2106	8.83	ng/mL	98
21) 1,3,5-Trimethylbenzene	15.078	105	1685	9.11	ng/mL#	78
23) 1,2,4-Trimethylbenzene	15.812	105	3993	22.57	ng/mL	99
25) 1,2,3-Trimethylbenzene	16.648	105	1950	9.93	ng/mL	98
26) p-Isopropyltoluene	16.662	119	1132m	5.14	ng/mL	
27) n-Butylbenzene	17.548	91	1968	10.78	ng/mL#	46
34) Benzo(b)thiophene	21.289	134	15255	66.20	ng/mL	98
44) Naphthalene	21.067	128	16816	58.16	ng/mL	99
45) 2-Methylnaphthalene	23.772	142	7992	44.47	ng/mL	98
46) 1-Methylnaphthalene	24.184	142	8239	42.33	ng/mL	99
47) C1-Naphthalenes	24.184	142	17551m	60.70	ng/mL	
48) C2-Naphthalenes	26.601	156	22090m	76.40	ng/mL	
49) C3-Naphthalenes	28.936	170	18114m	62.65	ng/mL	
50) C4-Naphthalenes	32.934	184	11960m	41.37	ng/mL	
51) Biphenyl	25.669	154	3672	16.08	ng/mL	90
52) Acenaphthylene	27.318	152	23934	85.57	ng/mL	96
53) Acenaphthene	28.051	154	11247	64.31	ng/mL	99
54) Dibenzofuran	28.713	168	10257	42.25	ng/mL	99
55) Fluorene	30.078	166	7722m	39.50	ng/mL	
56) C1-Fluorennes	32.447	180	4628m	23.67	ng/mL	
57) C2-Fluorennes	34.631	194	6287m	32.16	ng/mL	
58) C3-Fluorennes	37.183	208	11396m	58.30	ng/mL	
59) Dibenzothiophene	33.382	184	5777	21.22	ng/mL	98
60) C1-Dibenzothiophenes (...)	35.586	198	17479m	64.20	ng/mL	
61) C1-Dibenzothiophenes (...)	35.586	198	10323m	37.92	ng/mL	
62) C2-Dibenzothiophenes	38.087	212	11199m	41.14	ng/mL	
63) C3-Dibenzothiophenes	39.053	226	11109m	40.81	ng/mL	

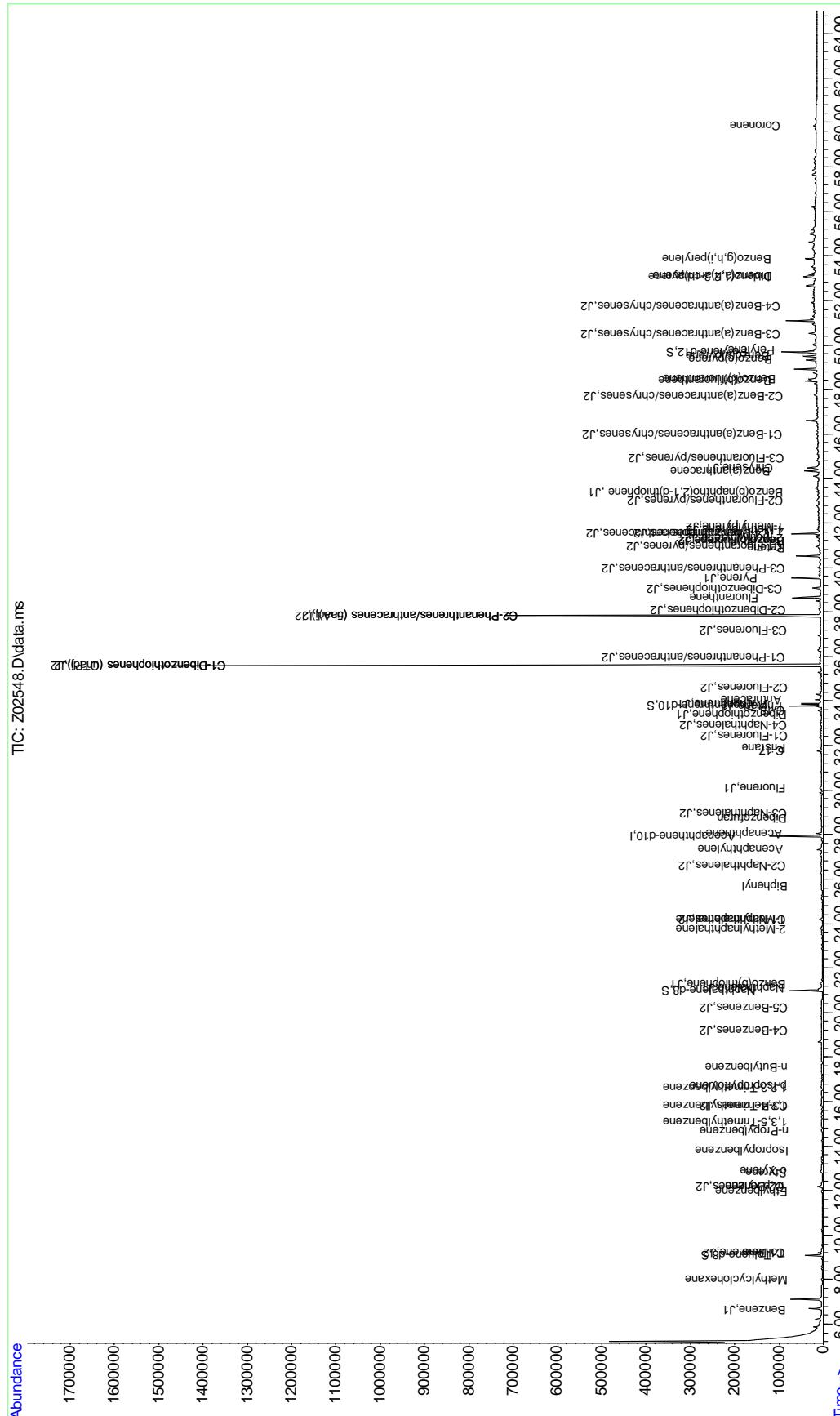
## Quantitation Report (QT Reviewed)

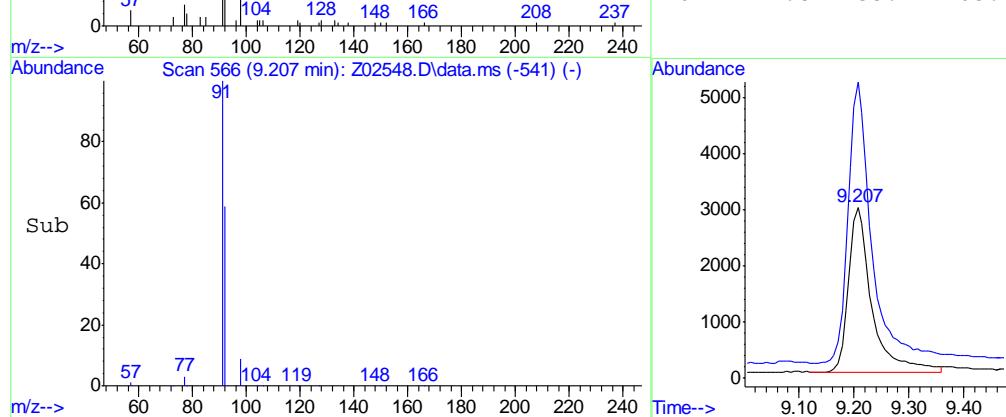
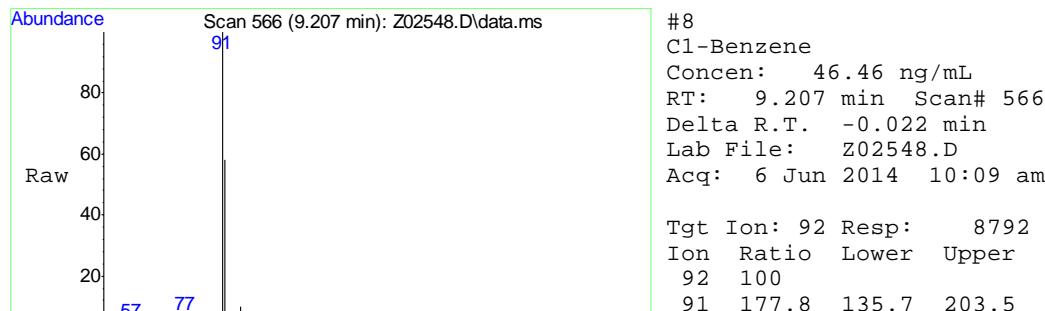
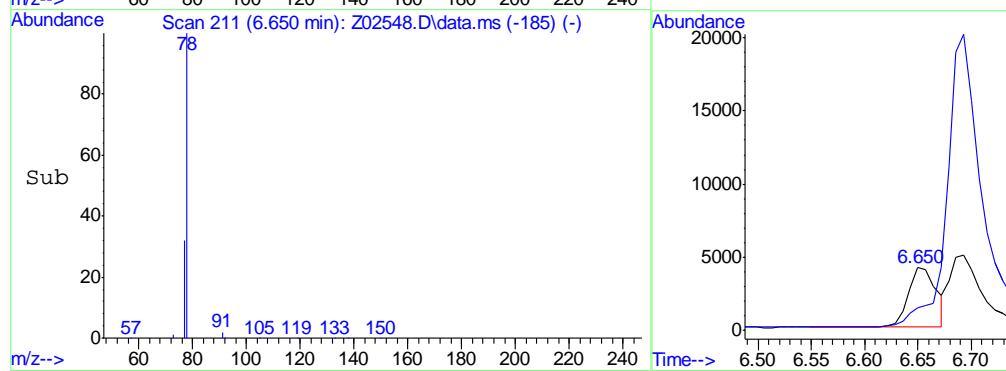
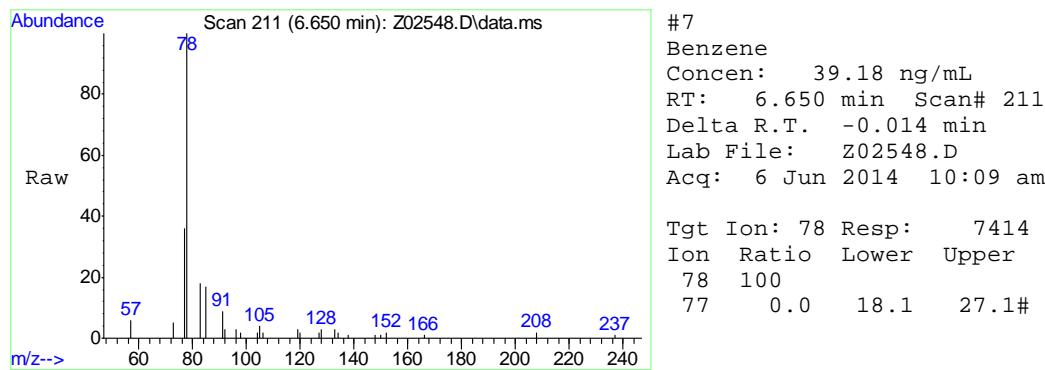
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 Sample : mc30898-2  
 Misc : op38366,msz101,5.91,,,2,1  
 ALS Vial : 8 Sample Multiplier: 1  
 Acq On : 6 Jun 2014 10:09 am Operator: sofyaz

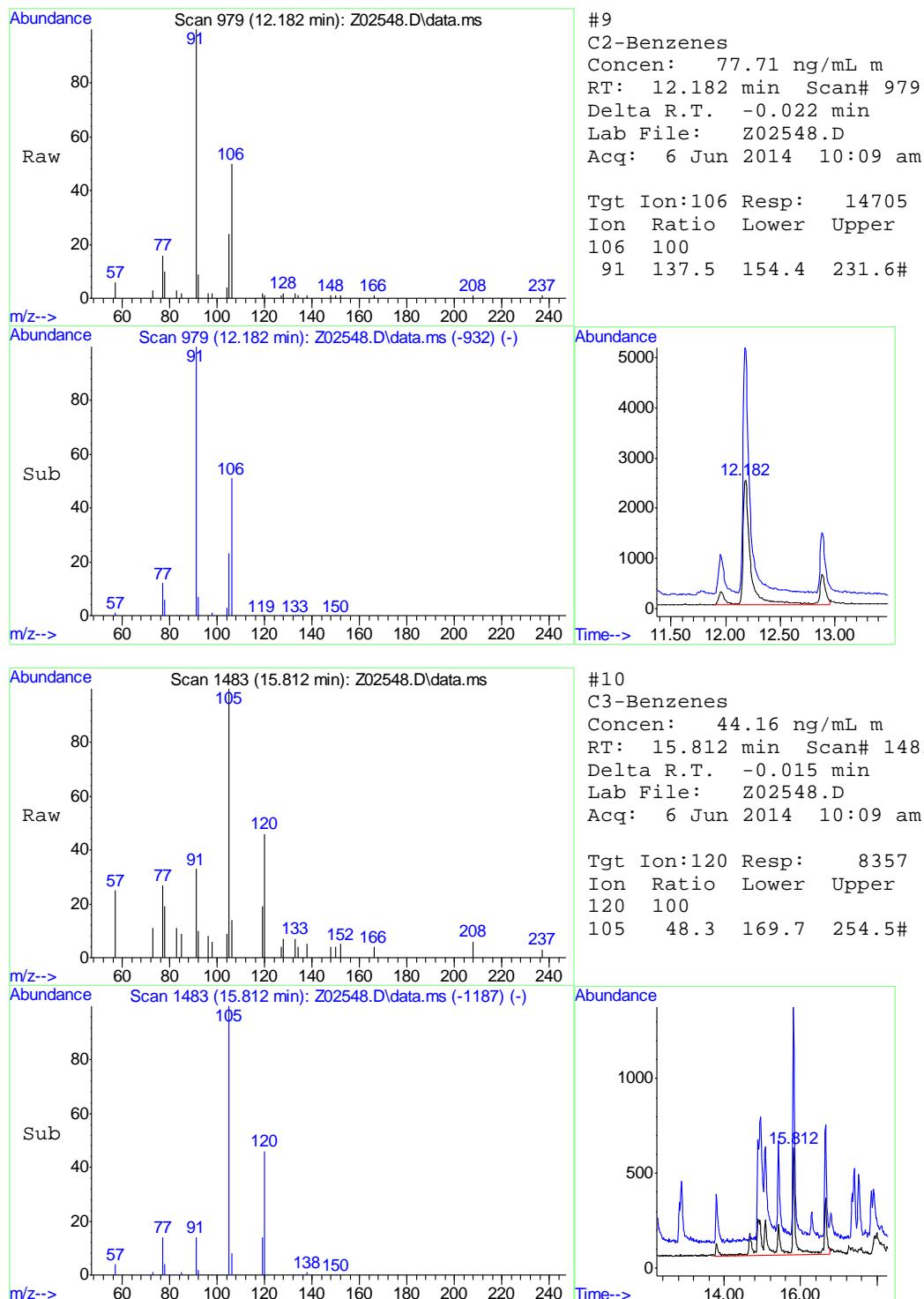
Quant Time: Jun 10 11:03:22 2014  
 Quant Method : C:\msdchem\2\methods\Z140604-MAHPAHEXT.M  
 Quant Title : PAHs & Alkylated PAHs by GC/MS/SIM

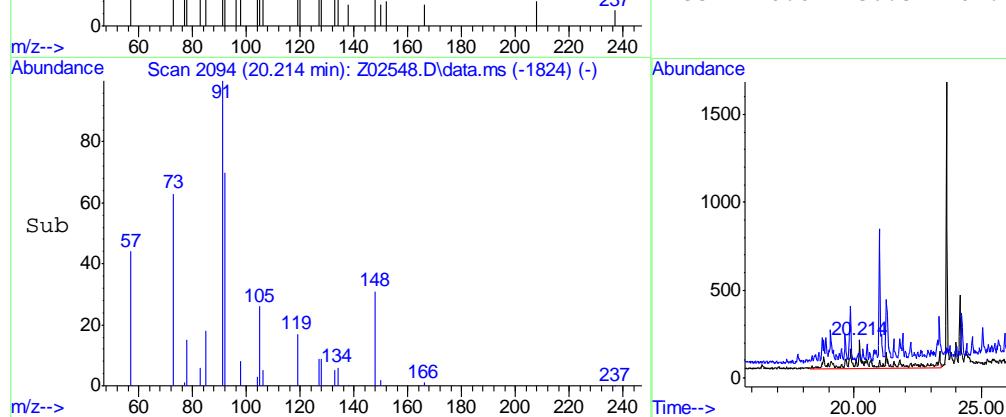
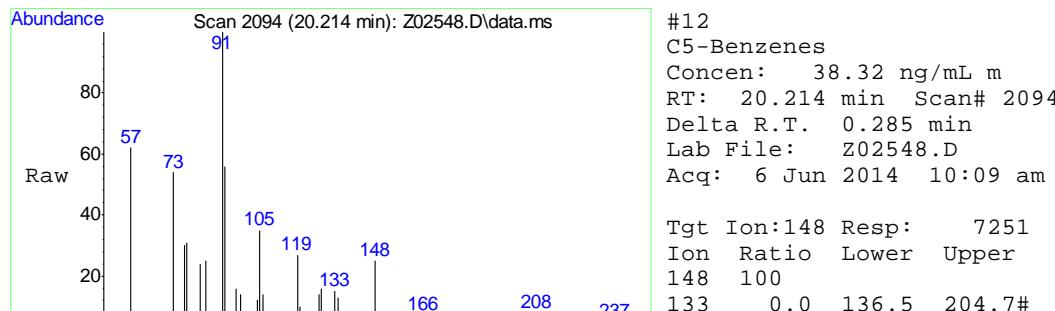
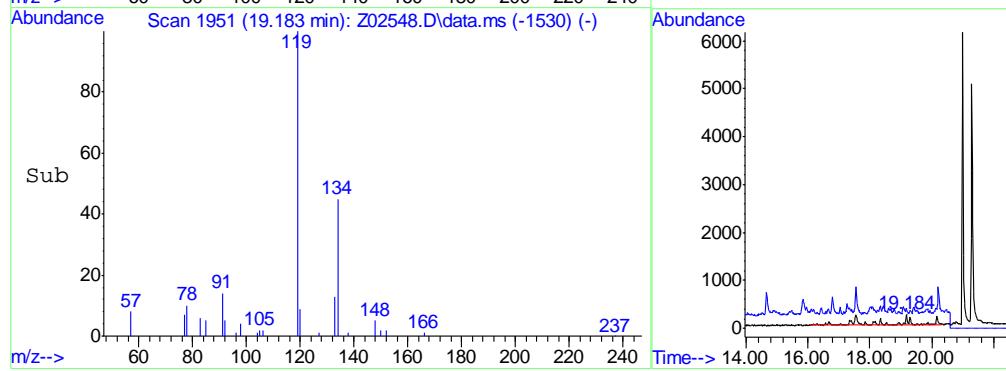
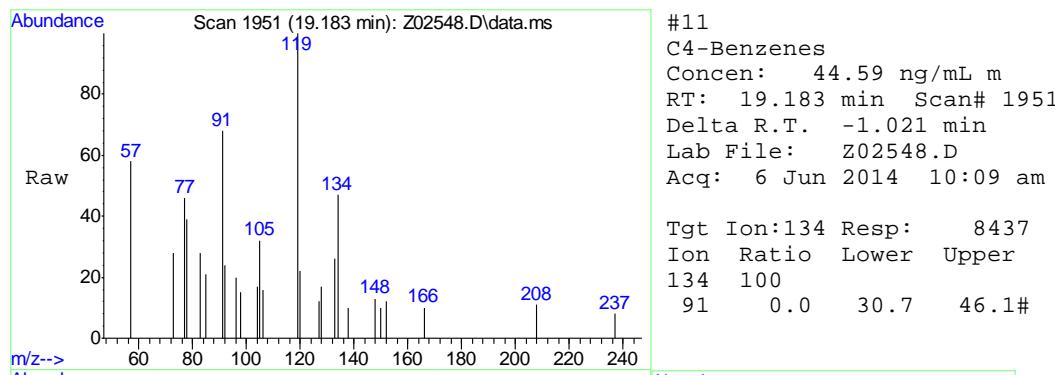
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
64) C4-Dibenzothiophenes	41.523	240	21844m	80.24	ng/mL	
65) Phenanthrene	33.869	178	78289	267.01	ng/mL	100
66) Anthracene	34.061	178	26509	94.23	ng/mL#	85
67) C1-Phenanthrenes/anthr...	35.958	192	36254m	123.65	ng/mL	
68) C2-Phenanthrenes/anthr...	37.825	206	30406m	103.70	ng/mL	
69) C2-Phenanthrenes/anthr...	37.825	206	7803m	26.61	ng/mL	
70) C3-Phenanthrenes/anthr...	39.964	220	15044m	51.31	ng/mL	
71) C4-Phenanthrenes/anthr...	41.523	234	11457m	39.08	ng/mL	
72) Retene	40.876	234	410	11.33	ng/mL	78
73) Benzo(b)naphtho(2,1-d)...	43.393	234	6861	25.60	ng/mL	100
78) Fluoranthene	38.641	202	132807	465.76	ng/mL	100
79) Pyrene	39.518	202	131575	438.70	ng/mL	97
80) C1-Fluoranthenes/pyrenes	40.941	216	55514m	185.10	ng/mL	
81) Benzo(b)fluorene	41.182	216	5807m	19.36	ng/mL	
82) Benzo(c)fluorene	41.199	216	3791m	12.64	ng/mL	
83) 2-Methylpyrene	41.335	216	6382m	21.28	ng/mL	
84) 4-Methylpyrene	41.693	216	6229m	20.77	ng/mL	
85) 1-Methylpyrene	41.811	216	4790	15.97	ng/mL#	77
86) C2-Fluoranthenes/pyrenes	43.023	230	32752m	109.20	ng/mL	
87) C3-Fluoranthenes/pyrenes	44.880	244	19289m	64.31	ng/mL	
88) Benz(a)anthracene	44.325	228	50788m	202.65	ng/mL	
89) Chrysene	44.486	228	56254	215.04	ng/mL	99
90) C1-Benz(a)anthracenes/...	45.981	242	23927m	91.46	ng/mL	
91) C2-Benz(a)anthracenes/...	47.704	256	11930m	45.60	ng/mL	
92) C3-Benz(a)anthracenes/...	50.501	270	13394m	51.20	ng/mL	
93) C4-Benz(a)anthracenes/...	51.733	284	7881m	30.13	ng/mL	
94) Benzo(b)fluoranthene	48.392	252	56439	205.13	ng/mL	99
95) Benzo(k)fluoranthene	48.465	252	57541	183.47	ng/mL	100
96) Benzo(e)pyrene	49.325	252	47048	169.37	ng/mL	99
97) Benzo(a)pyrene	49.494	252	61899	248.50	ng/mL	99
98) Perylene	49.770	252	31993	129.81	ng/mL	100
99) Indeno(1,2,3-cd)pyrene	53.060	276	45133m	141.60	ng/mL	
100) Dibenz(a,h)anthracene	53.077	278	13318	47.23	ng/mL#	33
101) Benzo(g,h,i)perylene	53.876	276	53032	165.16	ng/mL	99
102) Coronene	59.847	300	13544	44.05	ng/mL	97
103) C-17	31.769	85	10483m	199.10	ng/mL	
104) Pristane	31.884	85	5516	140.04	ng/mL#	84
105) C-18	33.568	85	11247	214.89	ng/mL#	91
106) Phytane	33.753	85	5232	100.77	ng/mL#	66

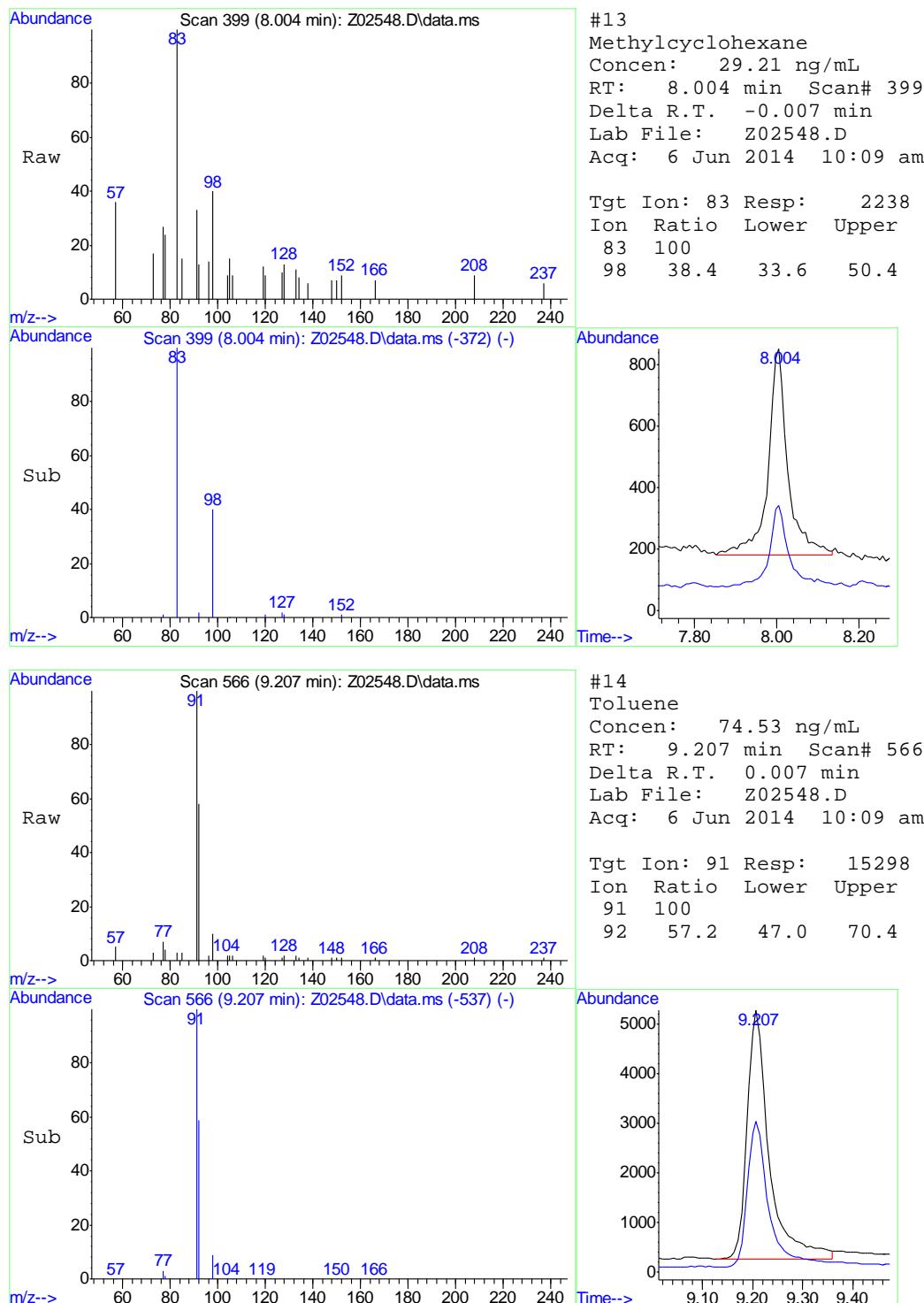
(#) = qualifier out of range (m) = manual integration (+) = signals summed

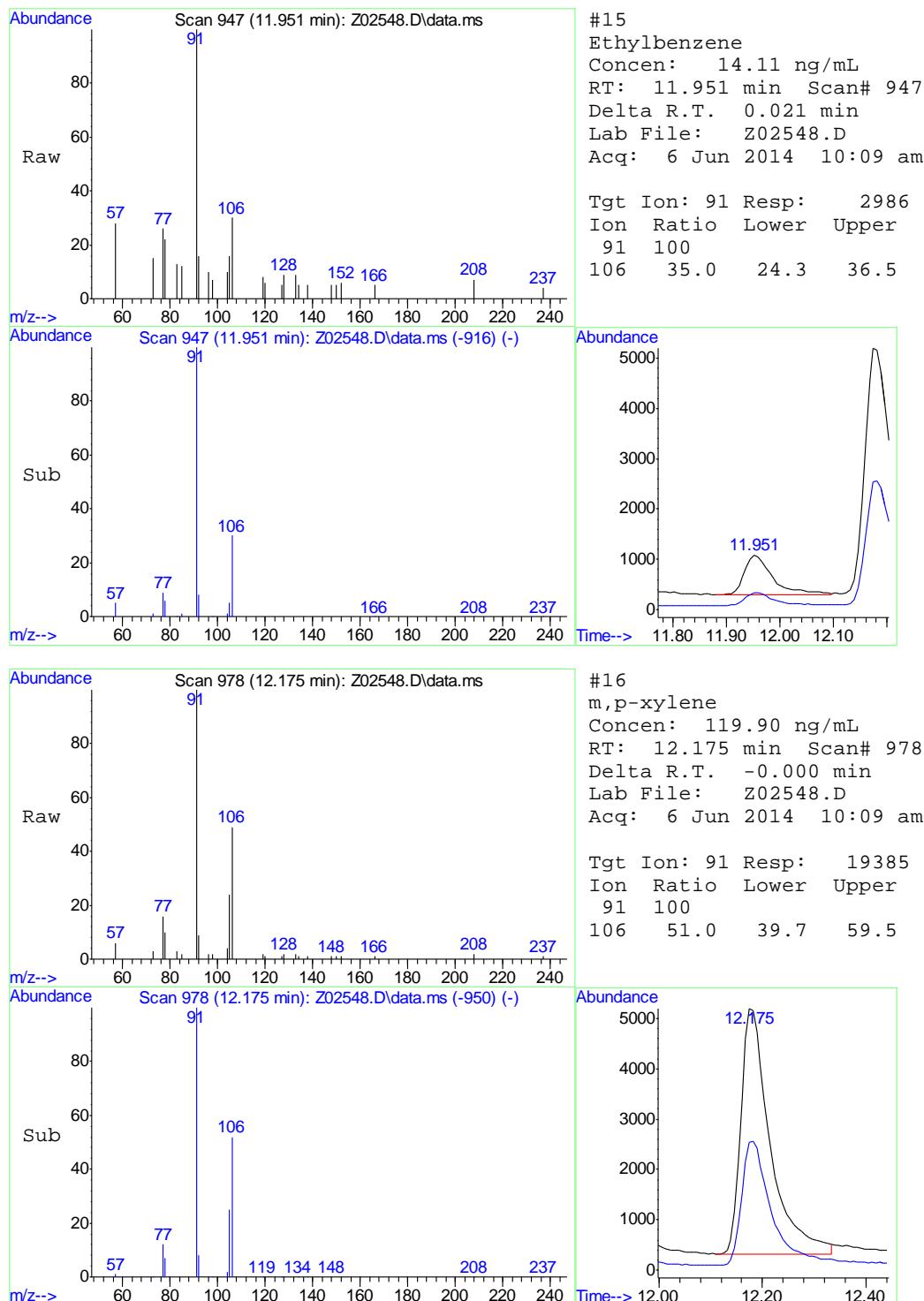


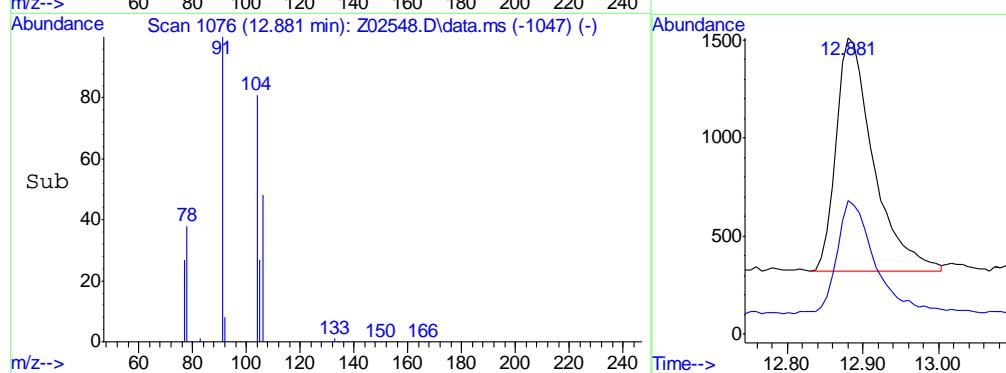
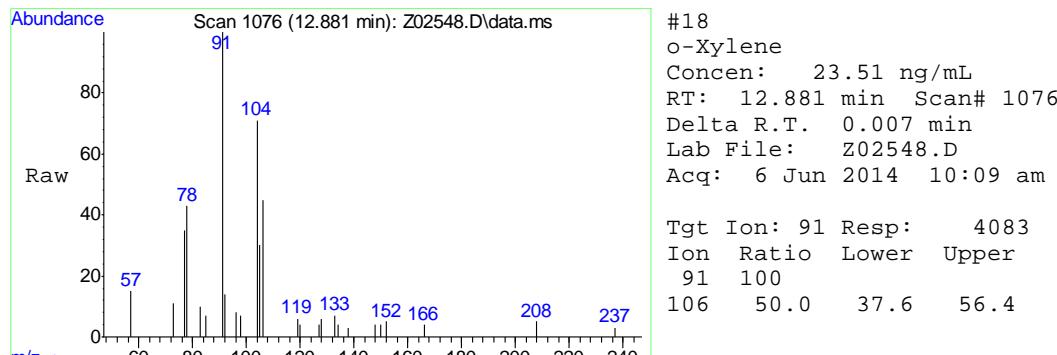
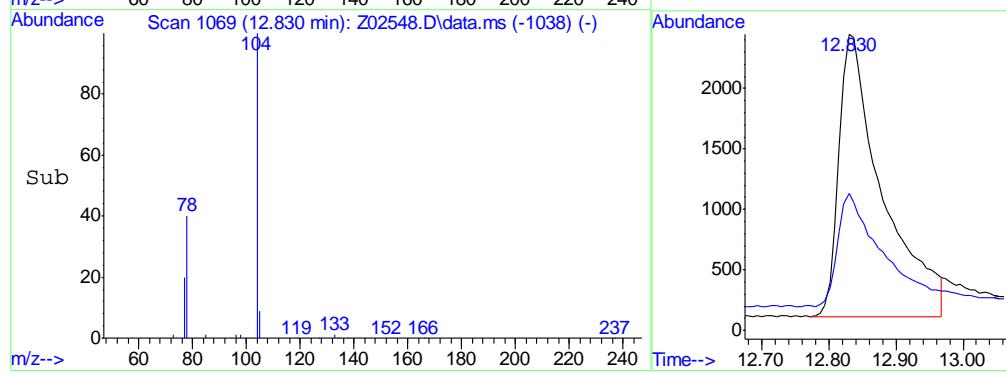
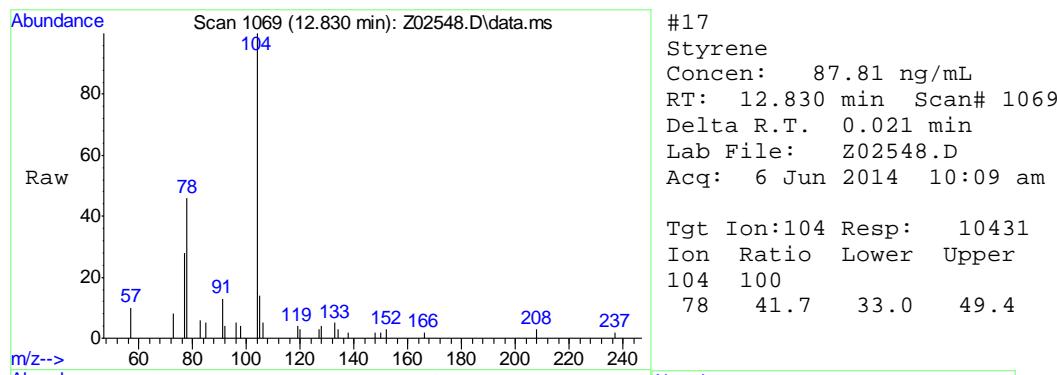


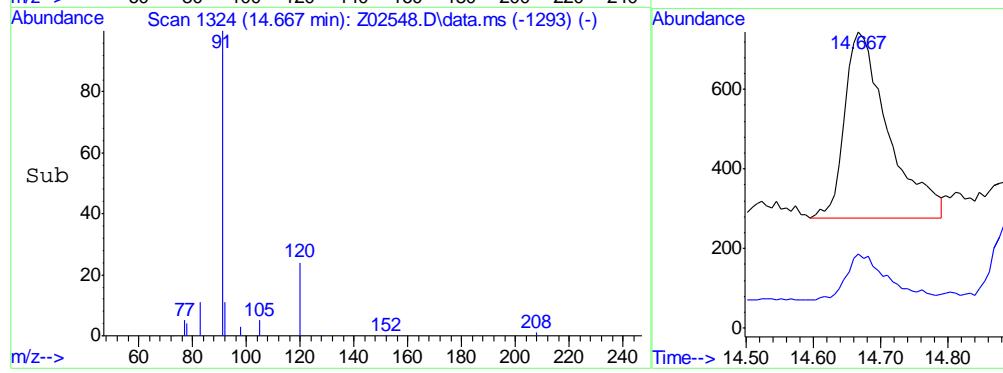
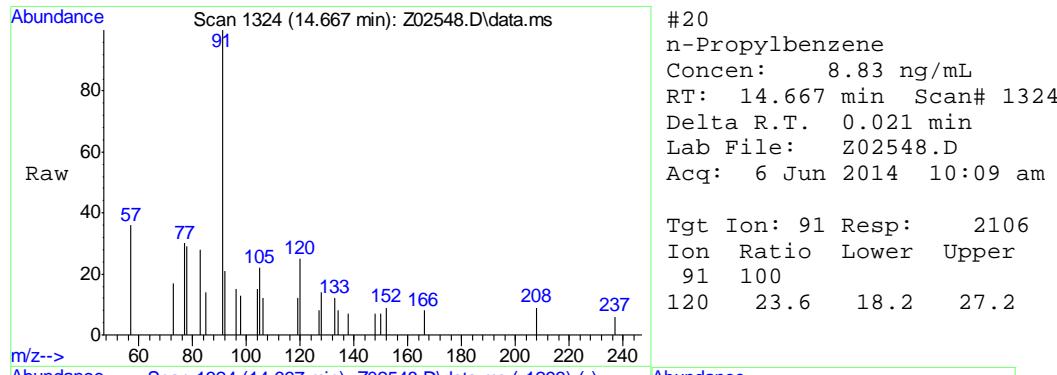
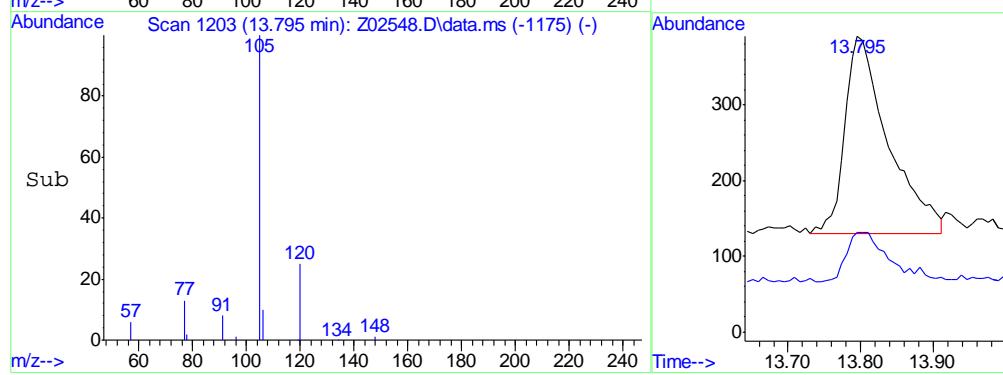
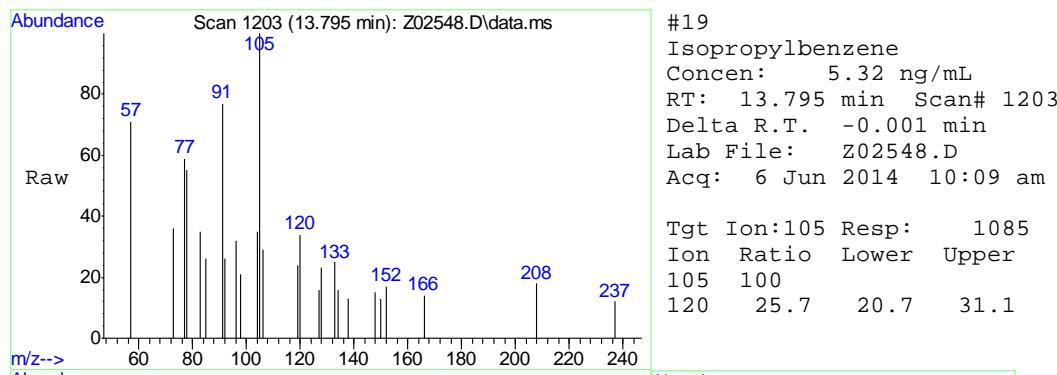


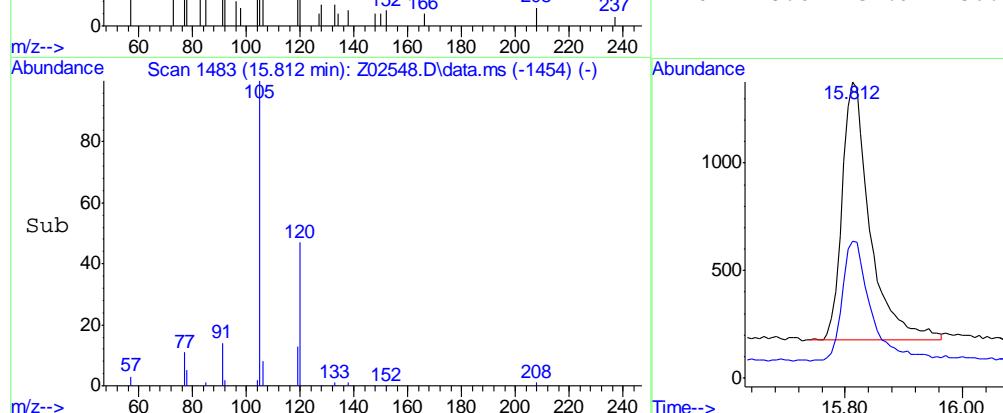
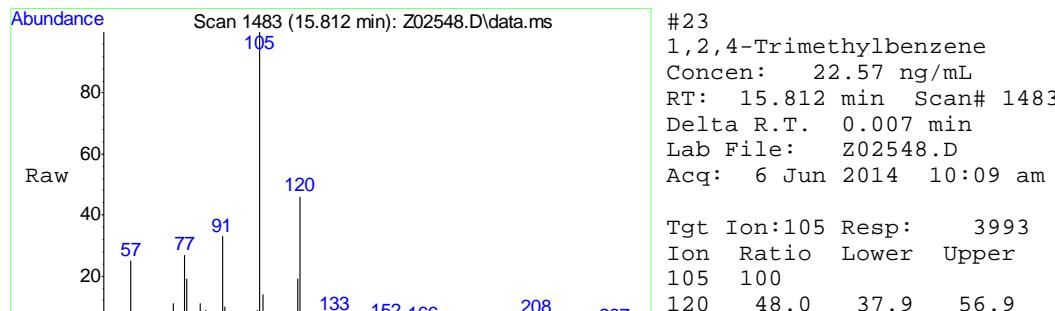
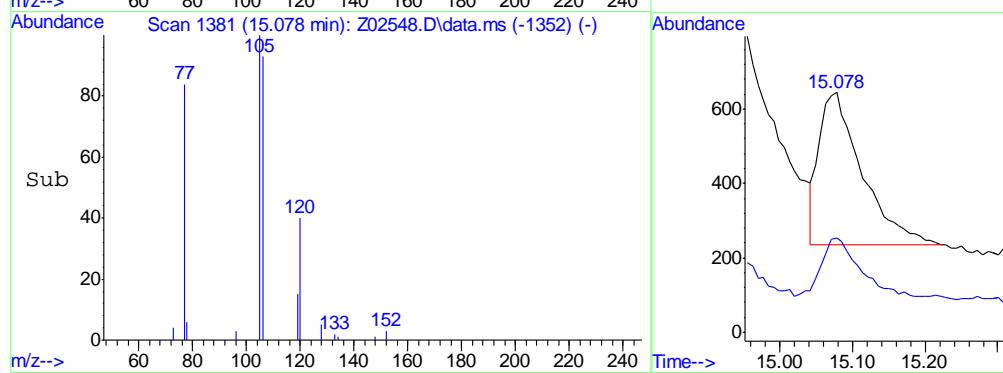
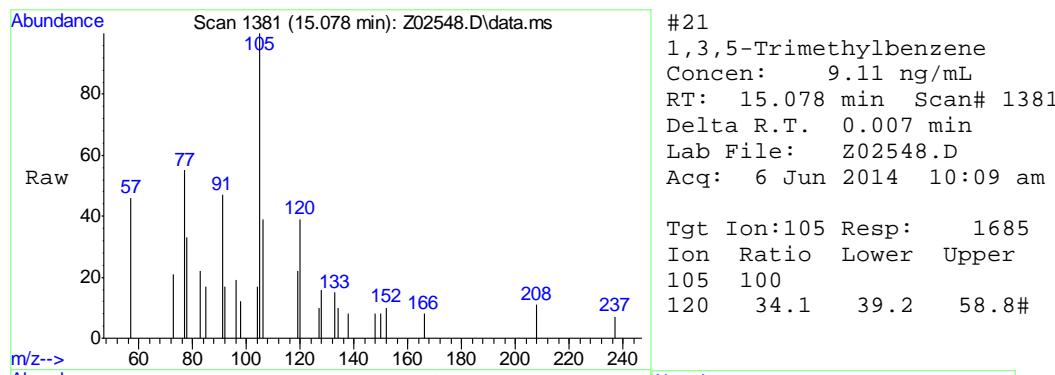


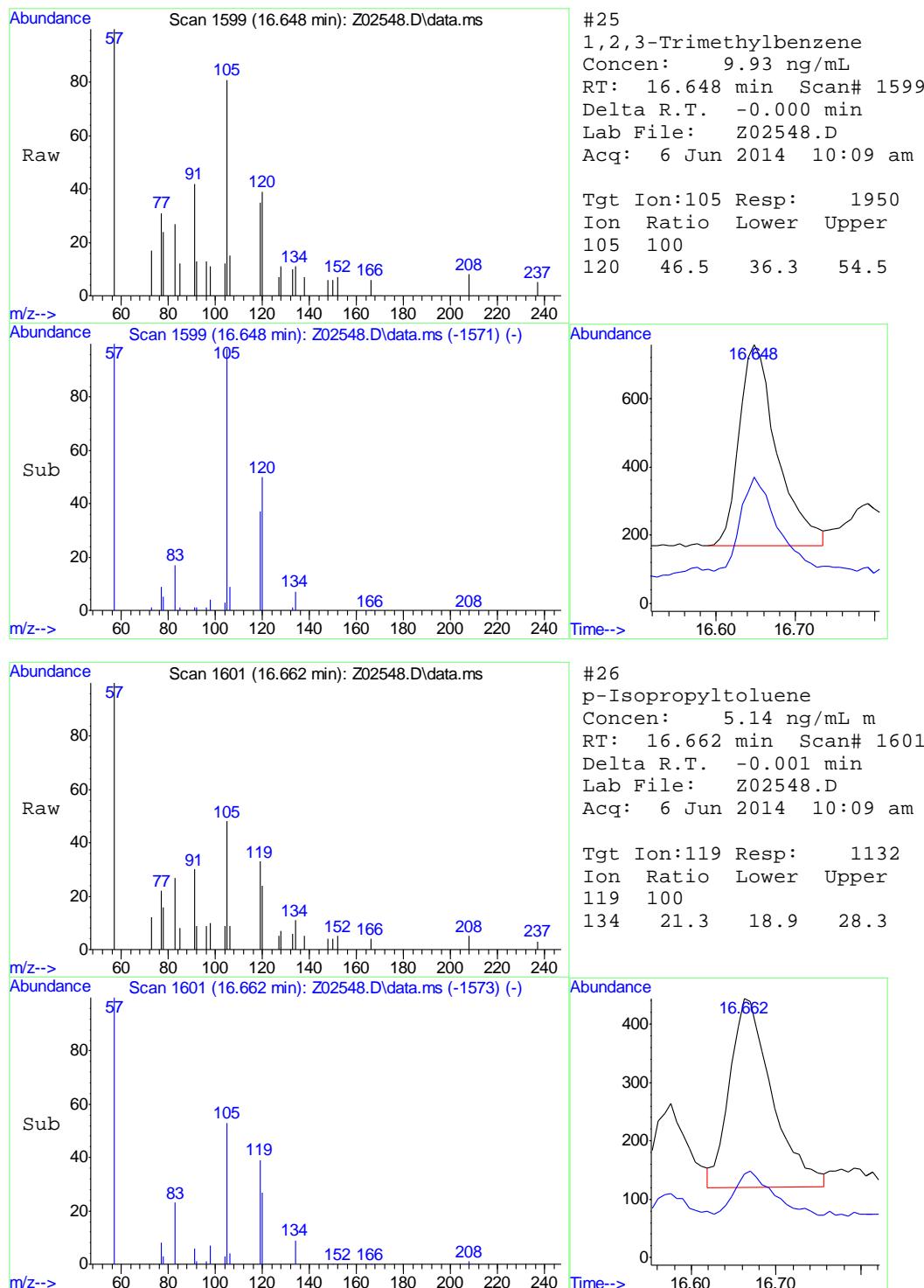


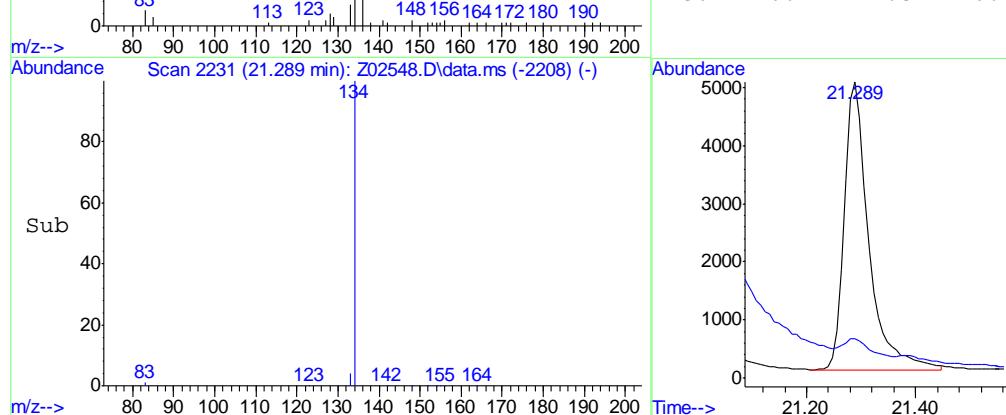
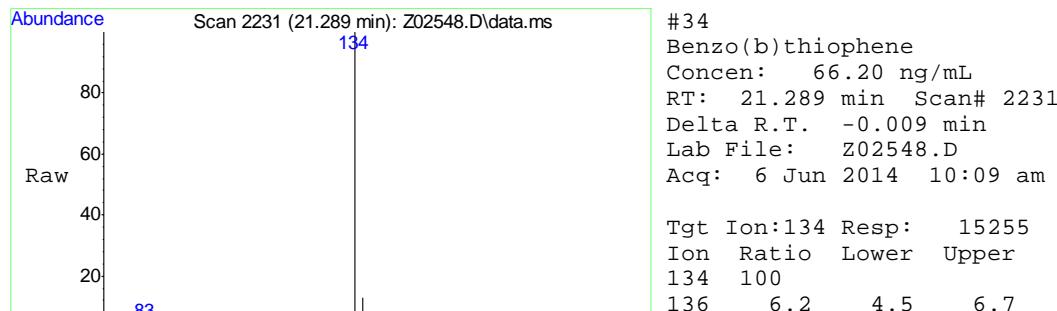
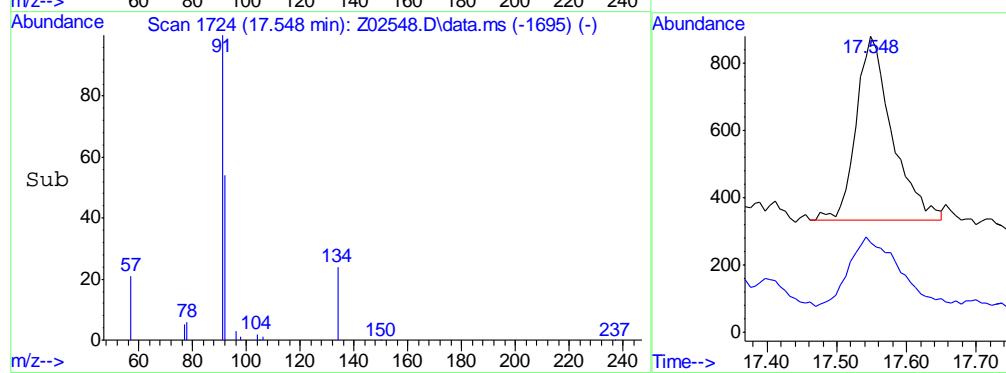
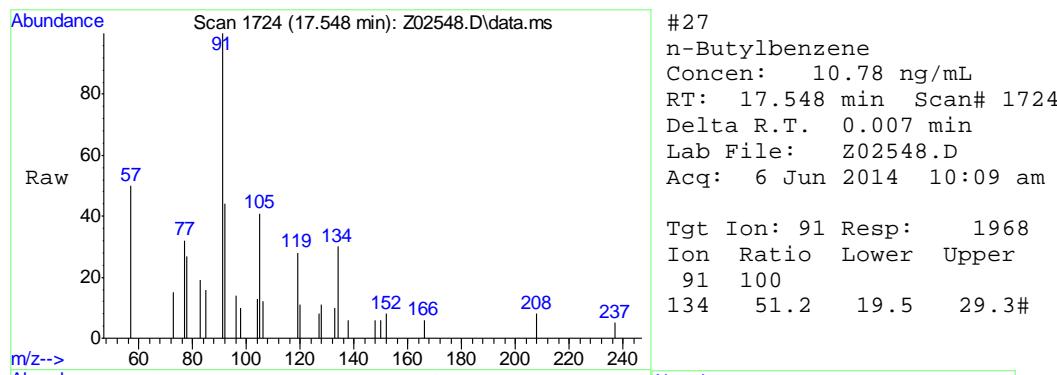


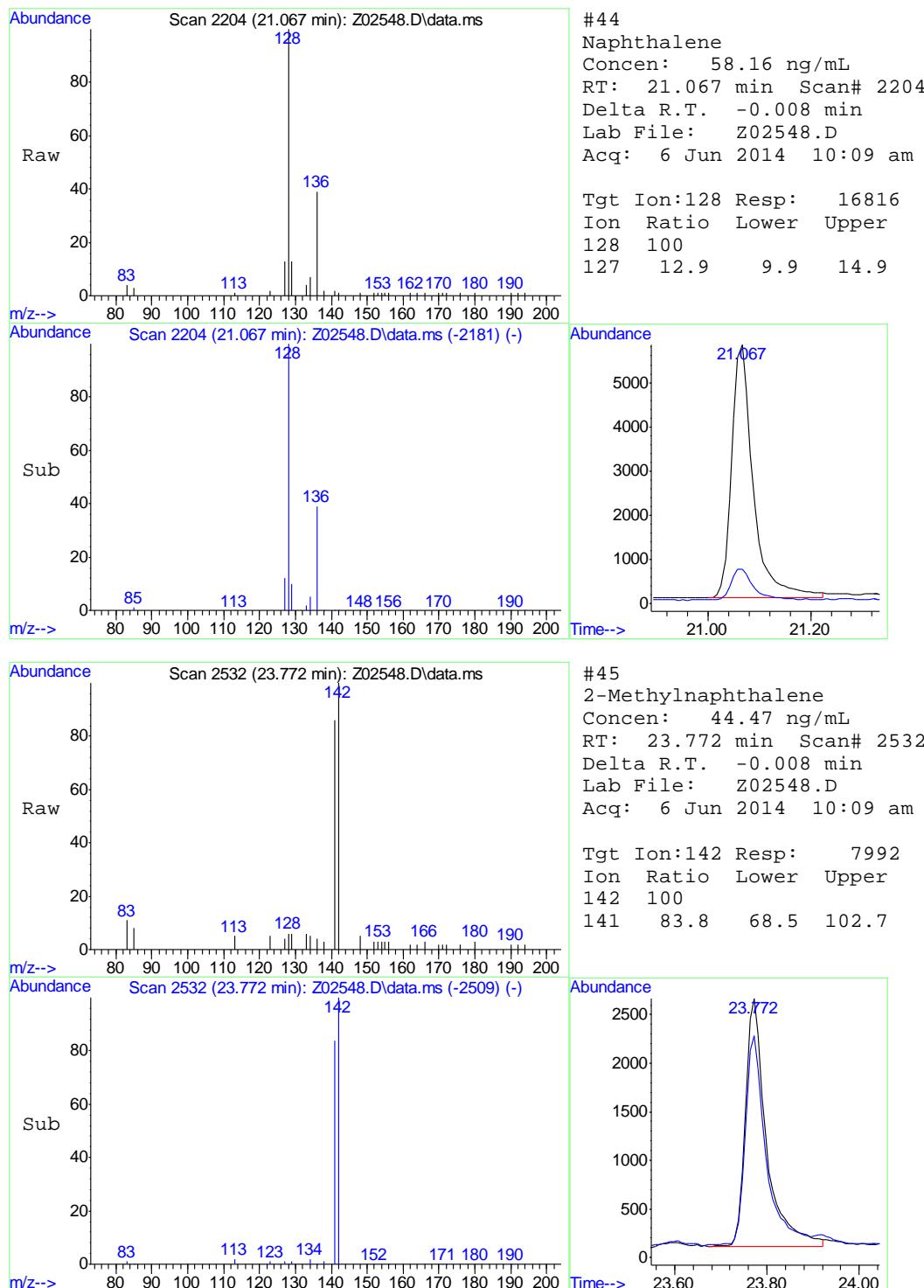


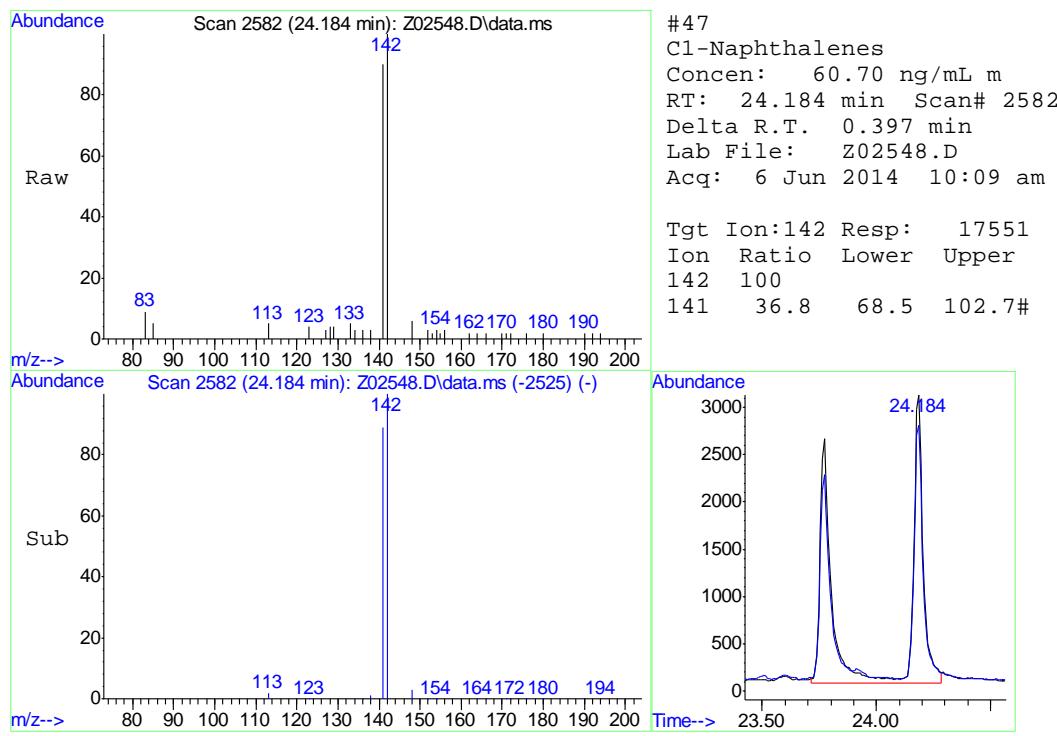
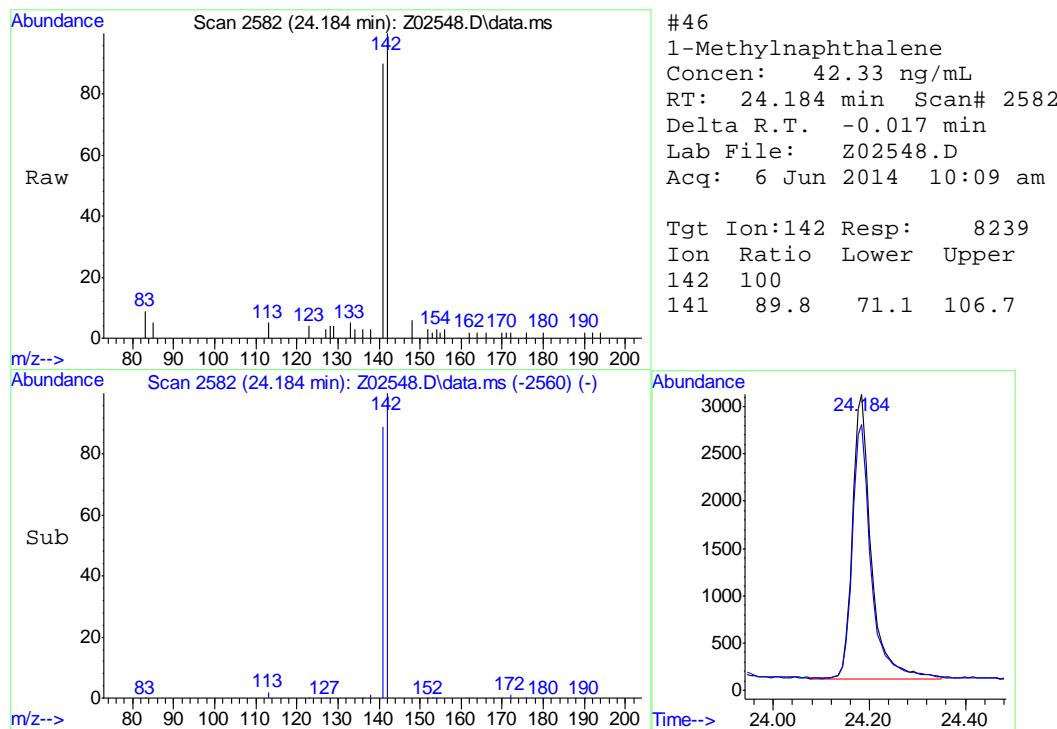


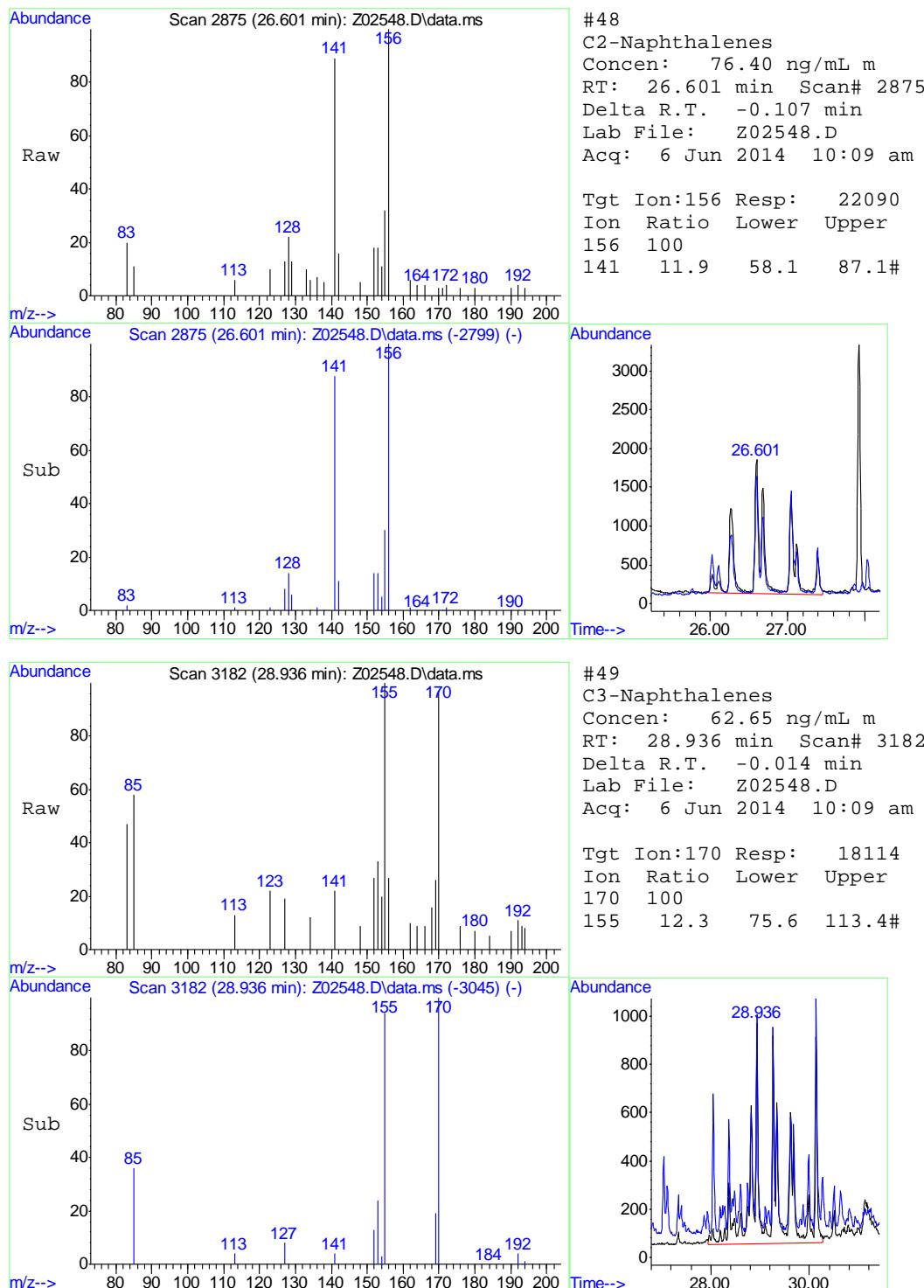


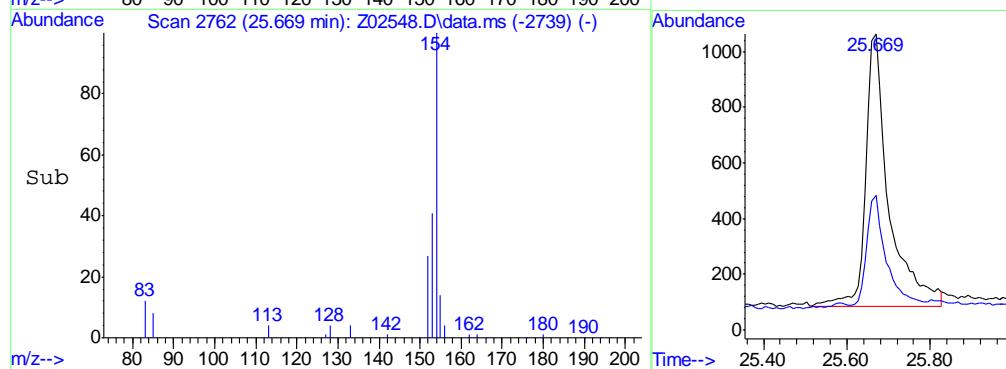
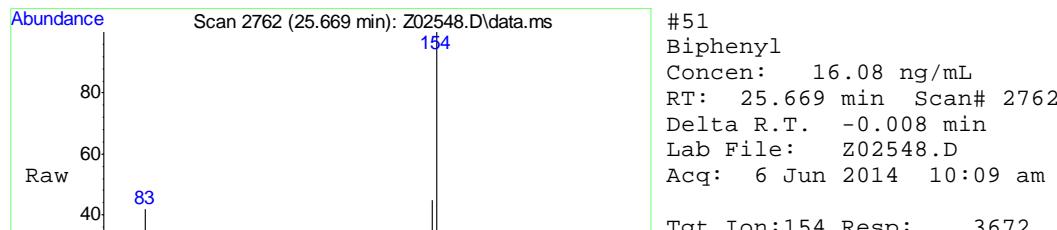
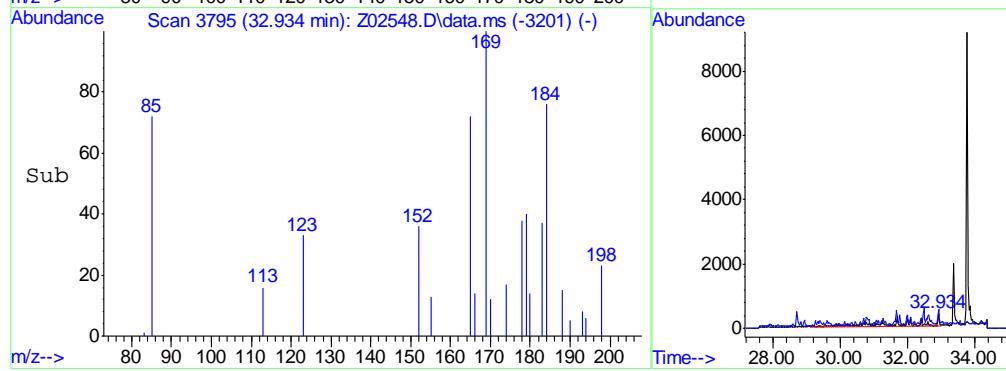
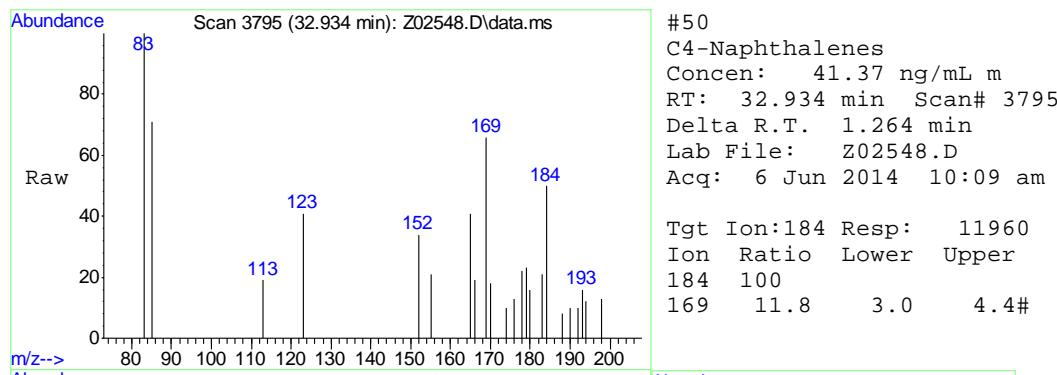


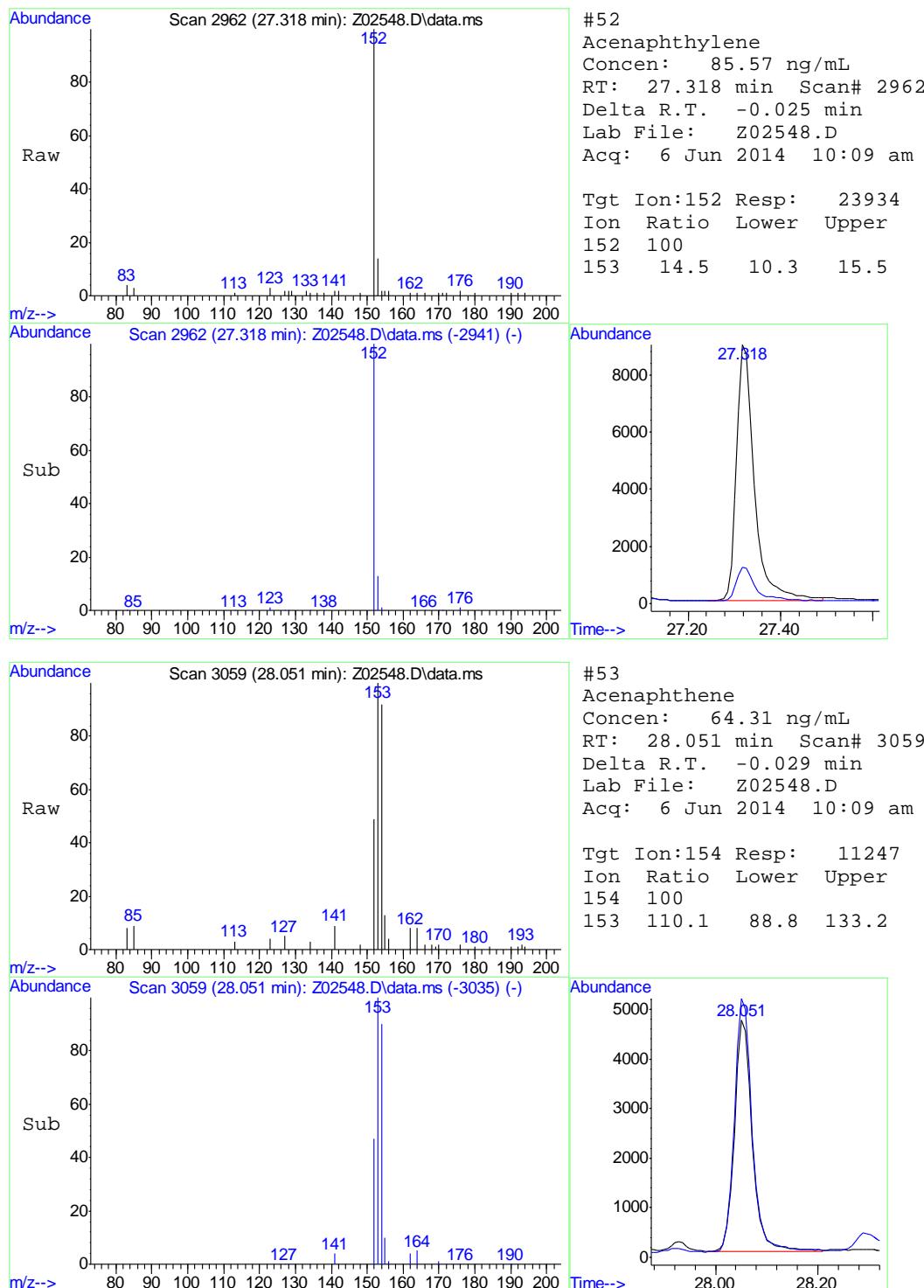


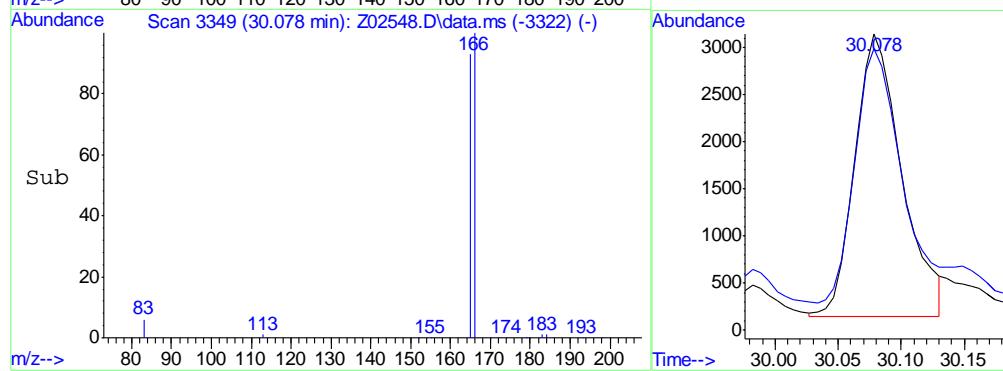
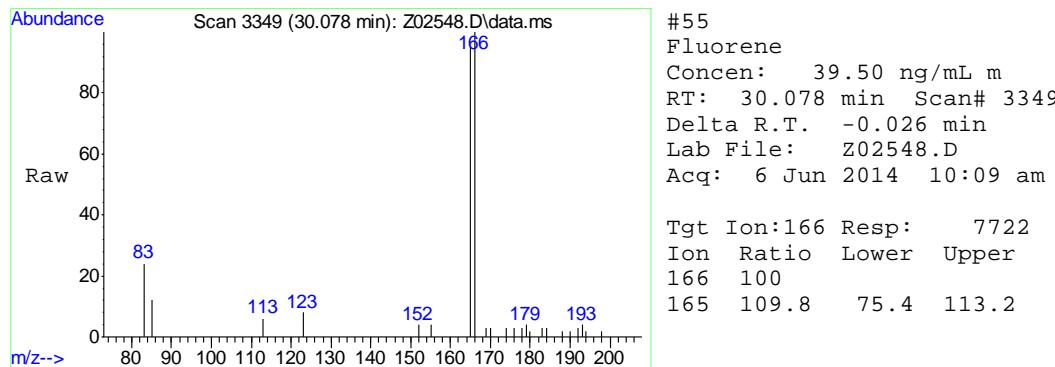
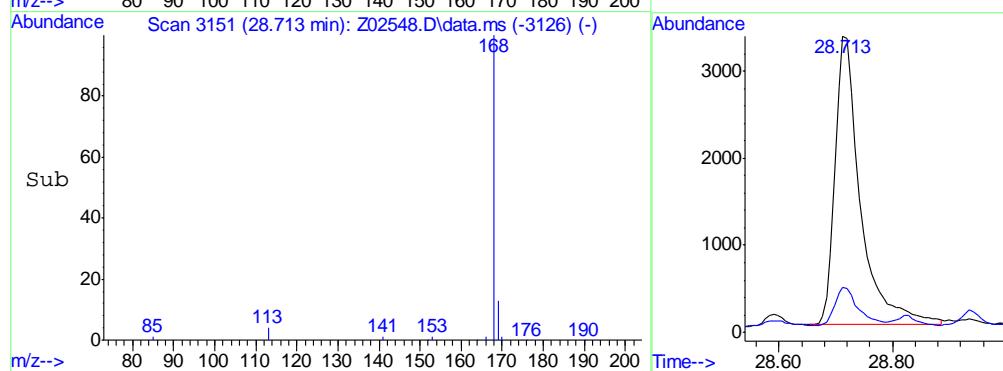
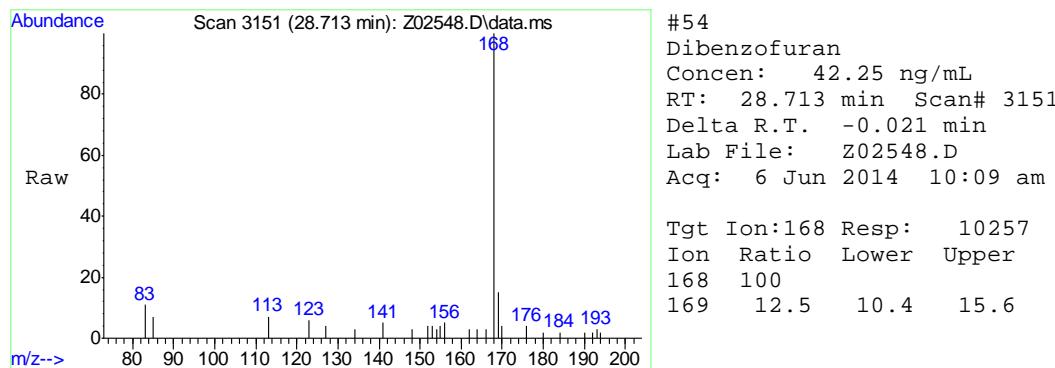


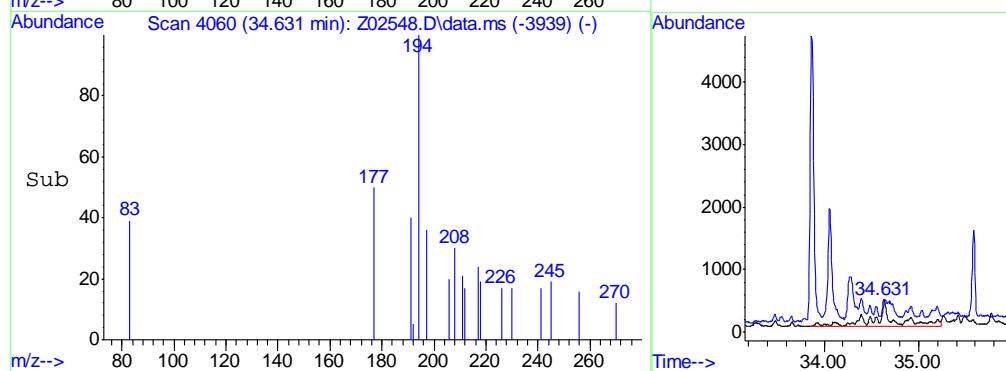
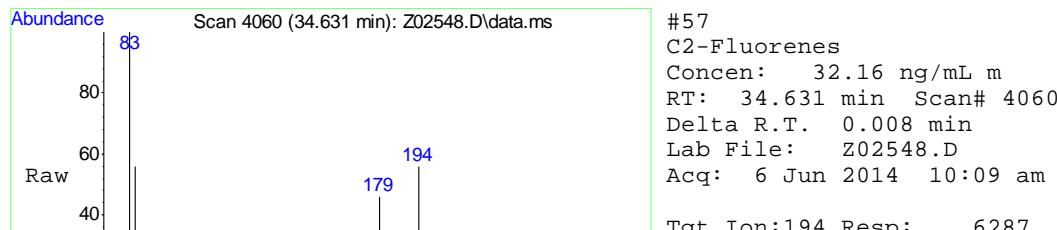
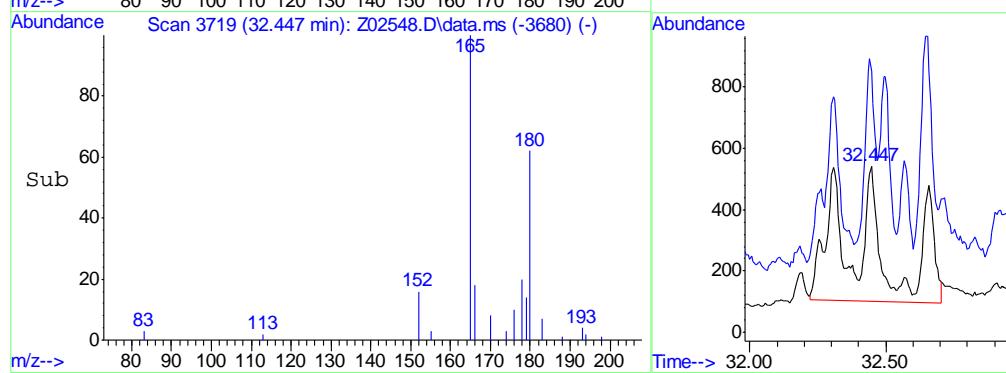
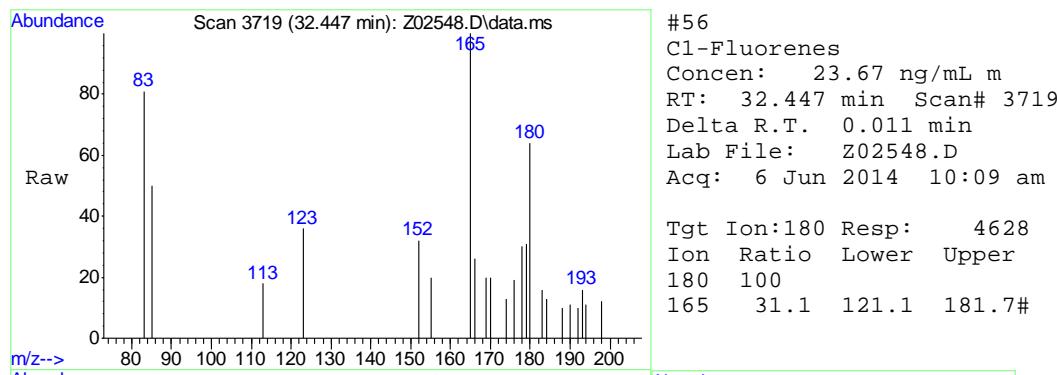


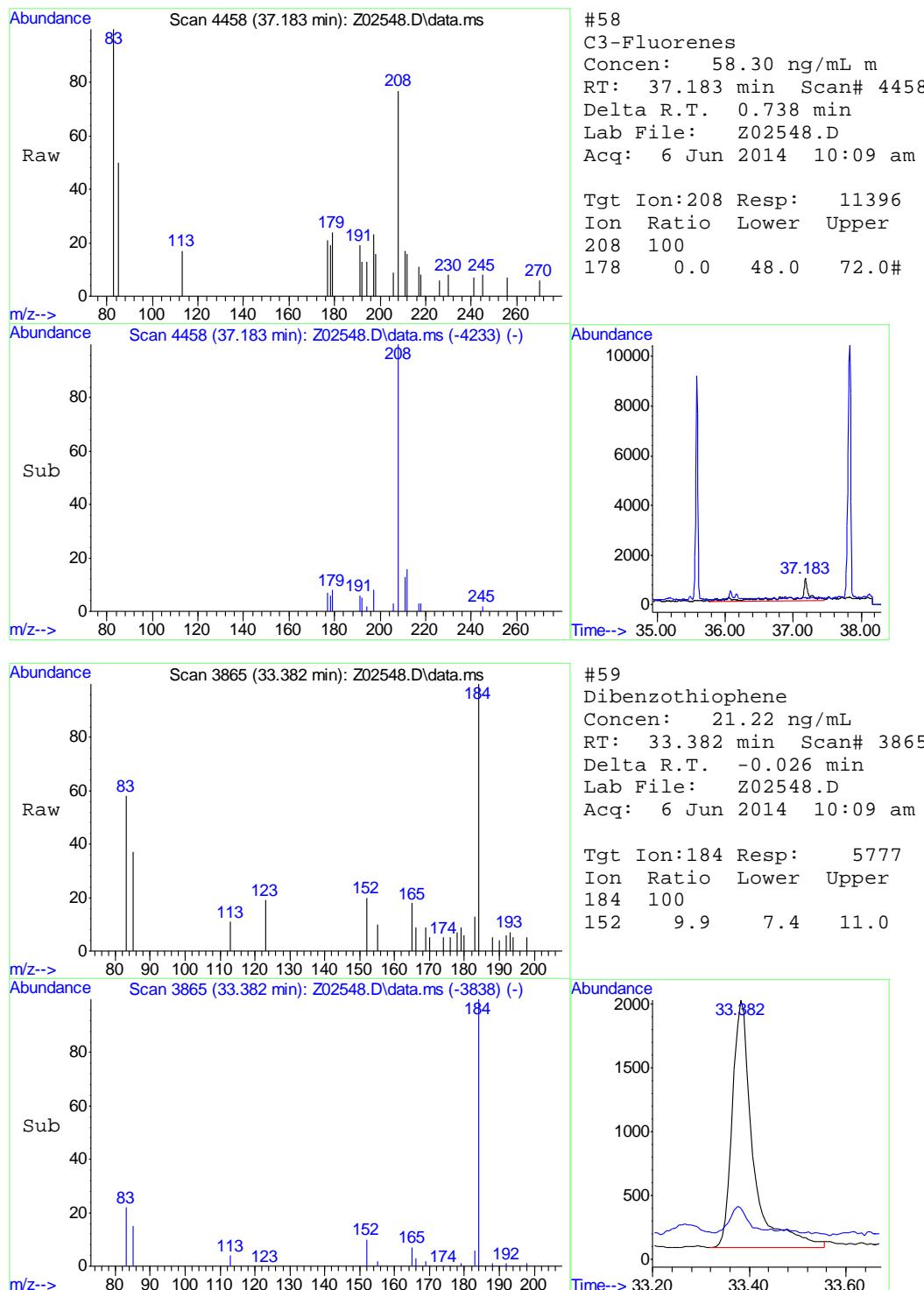


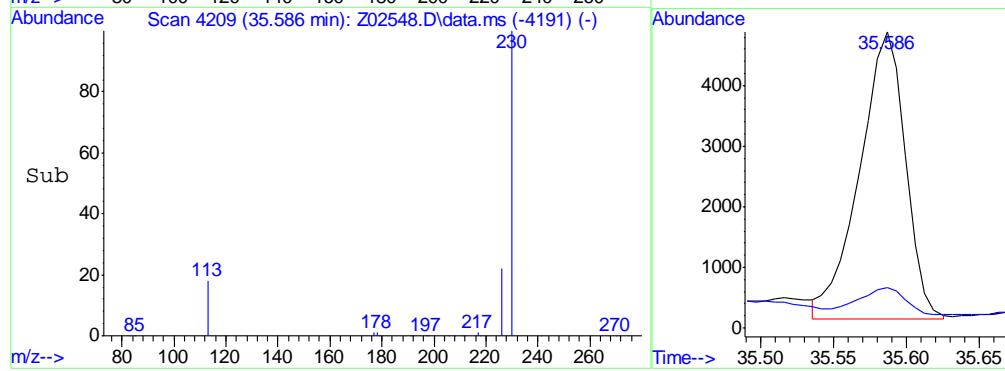
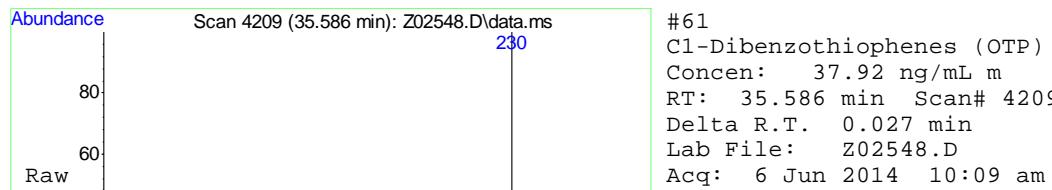
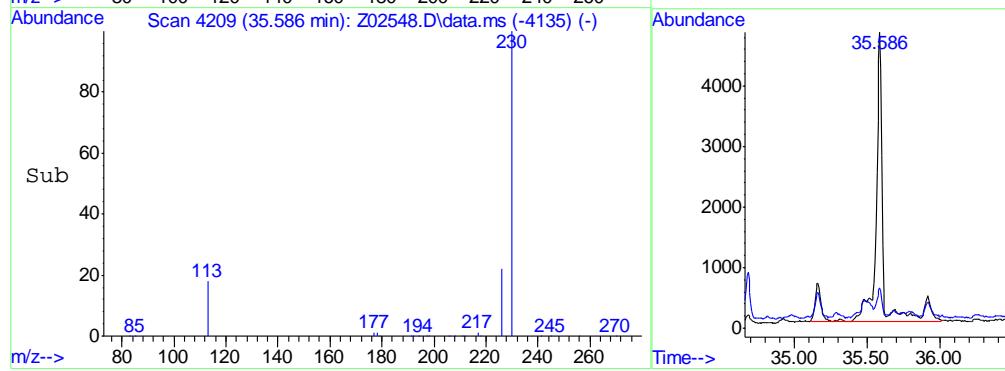
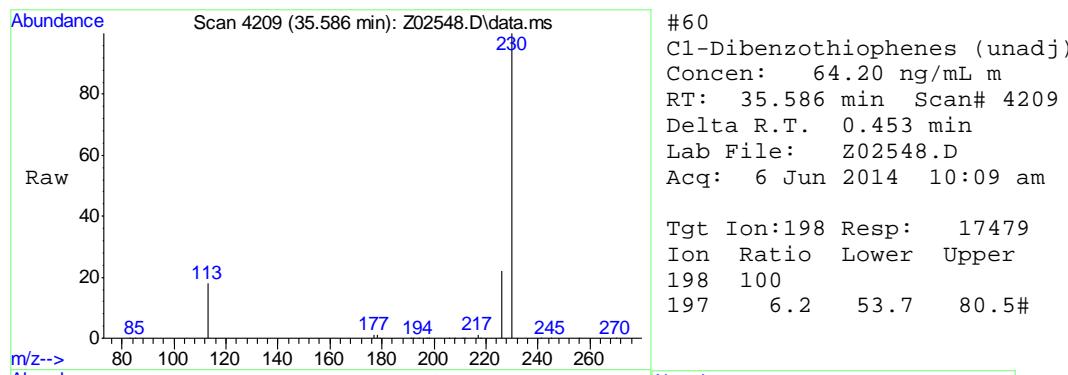


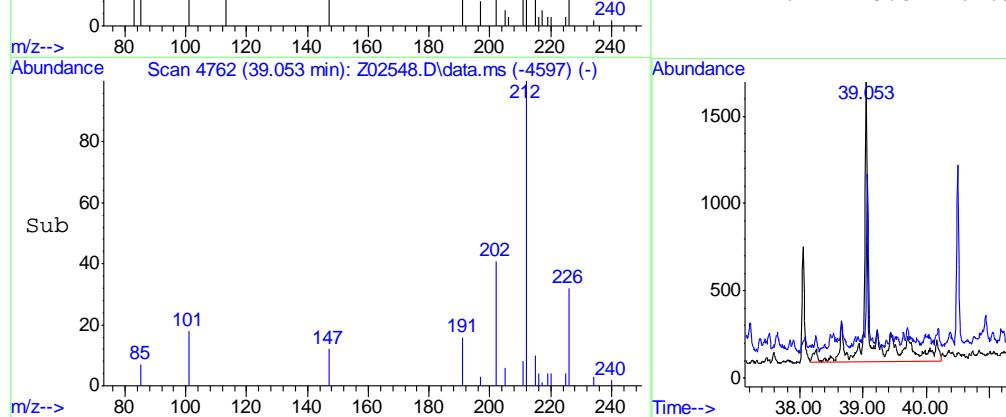
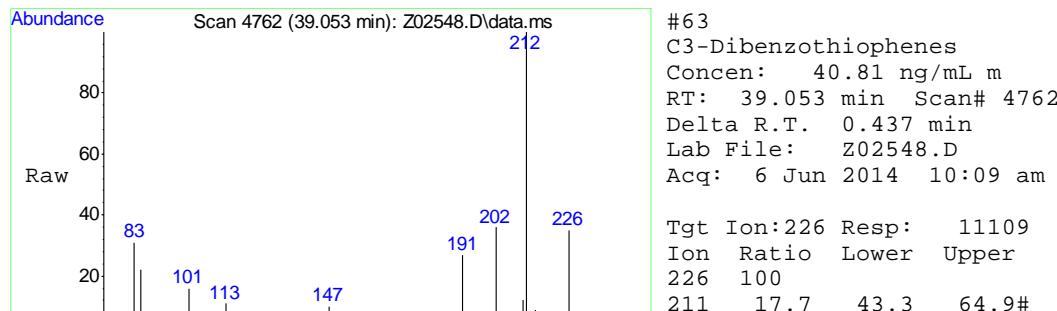
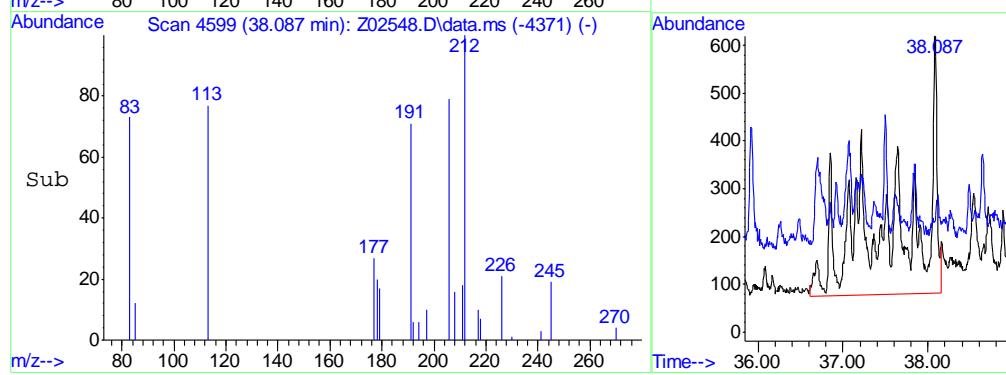
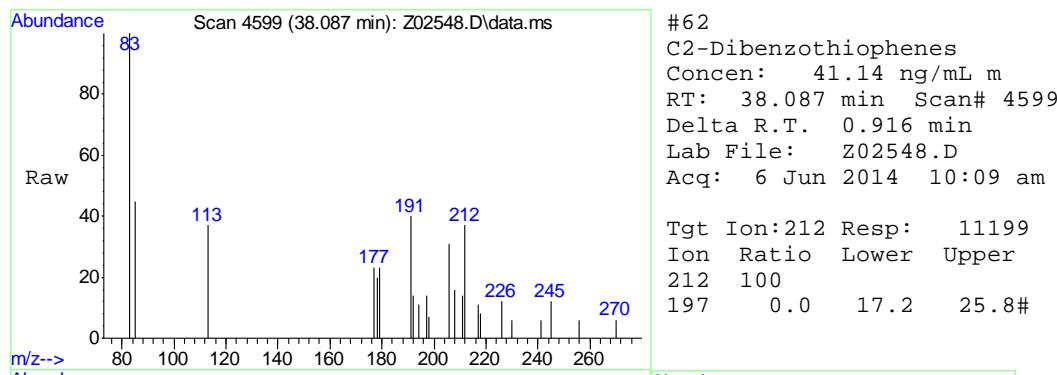


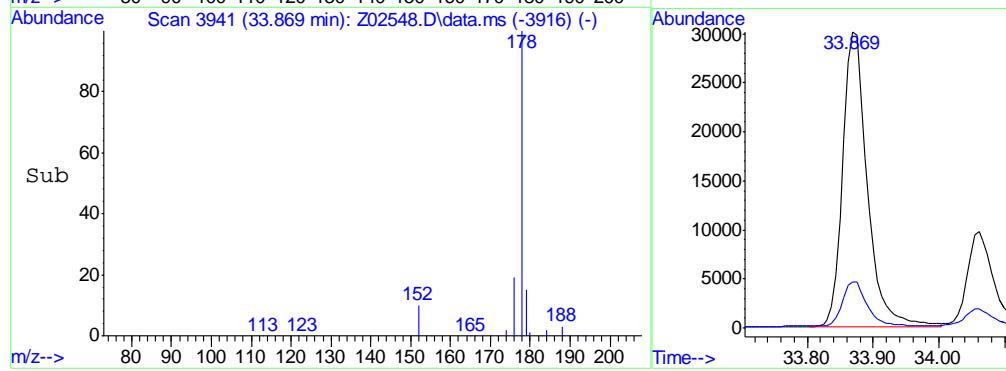
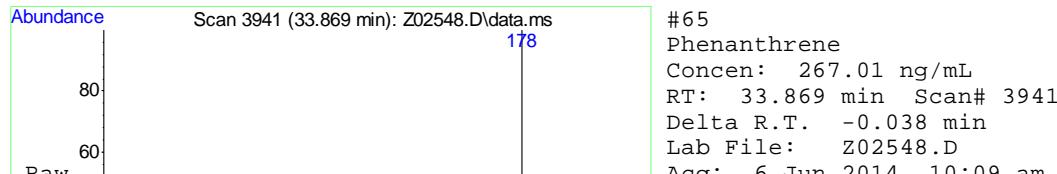
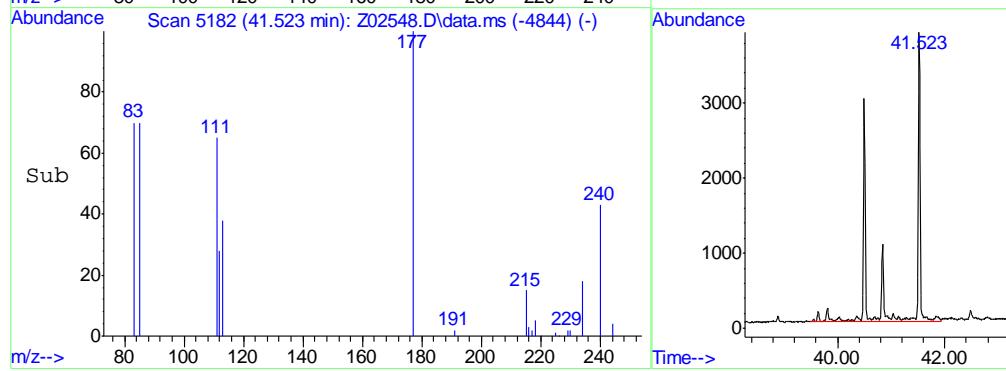
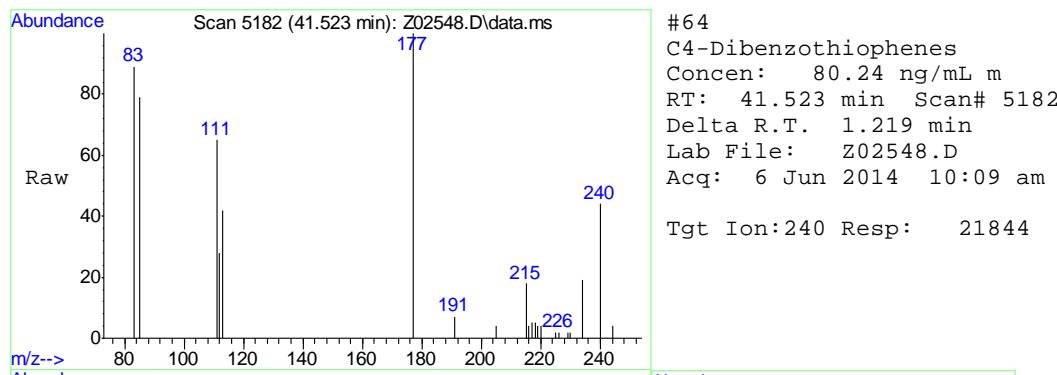


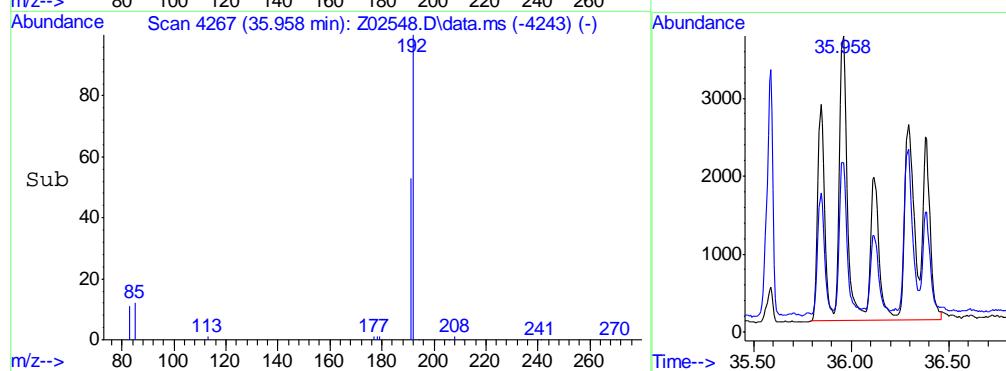
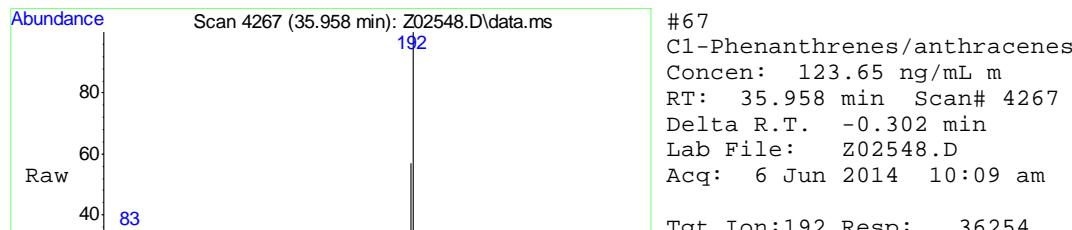
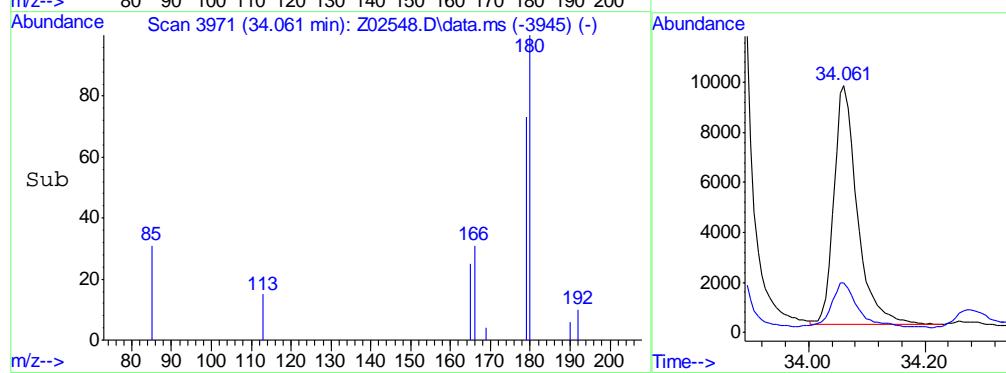
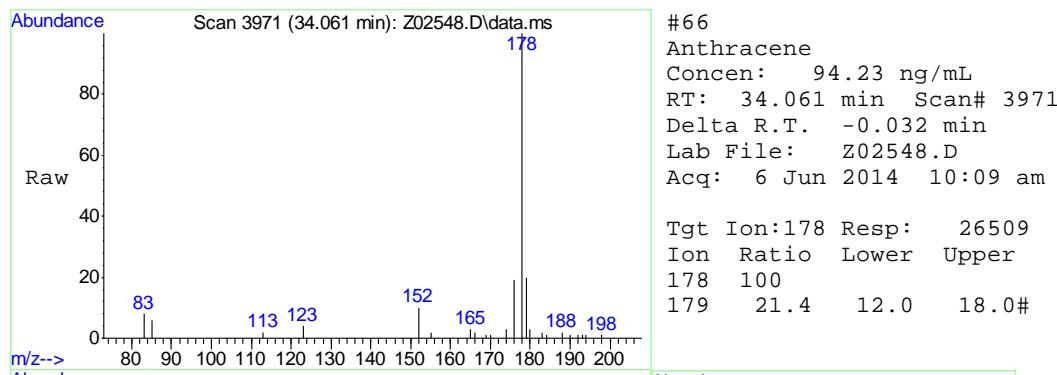


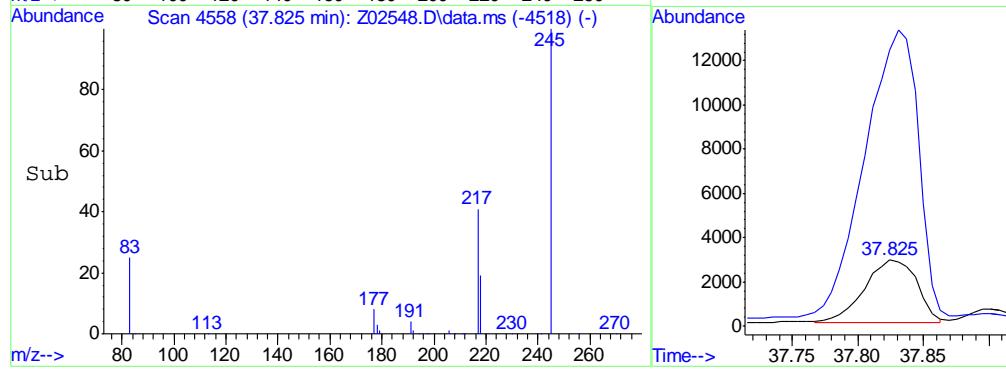
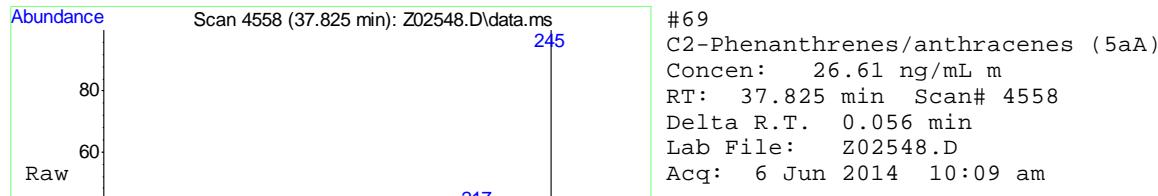
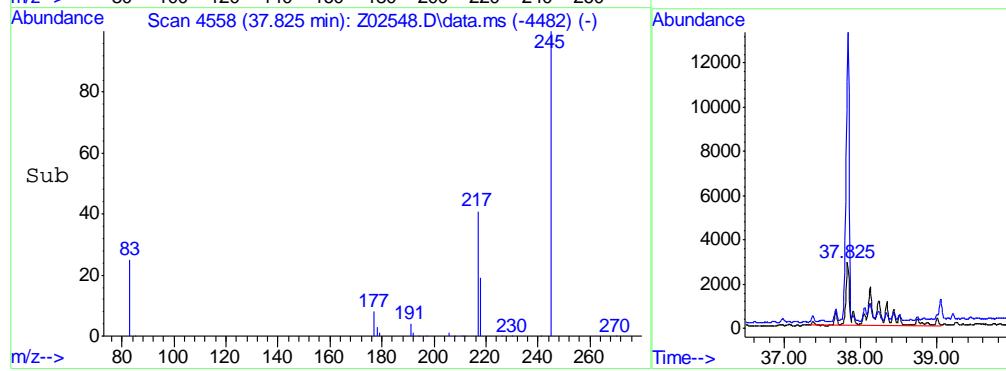
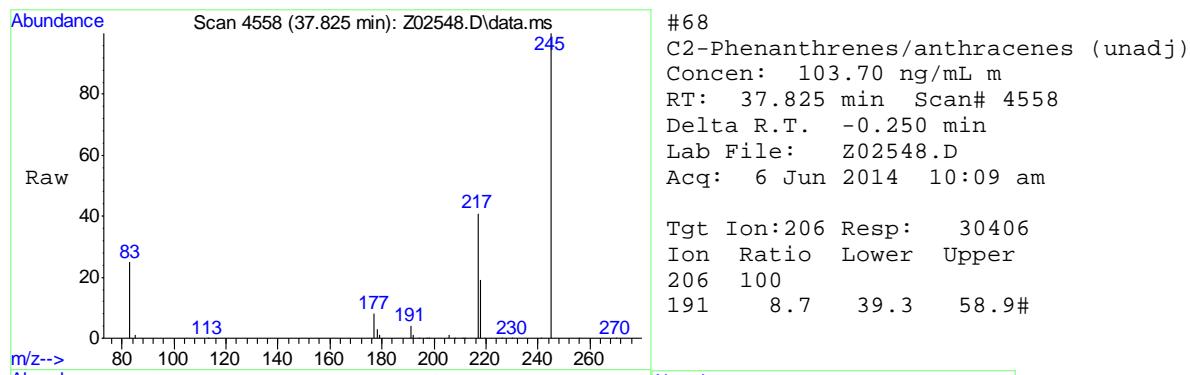


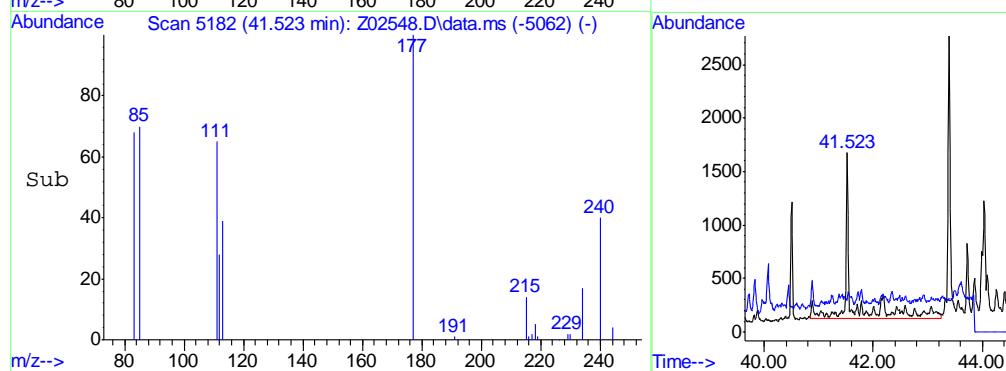
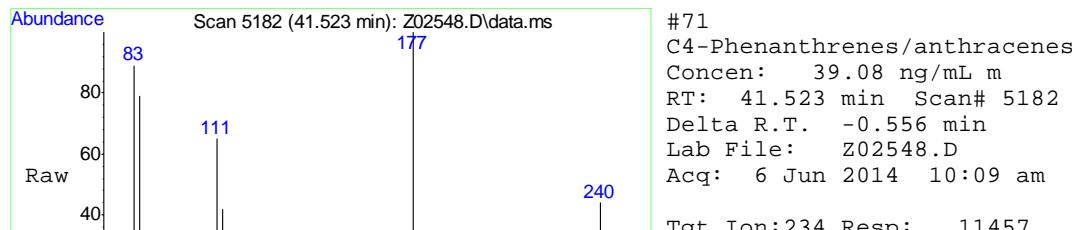
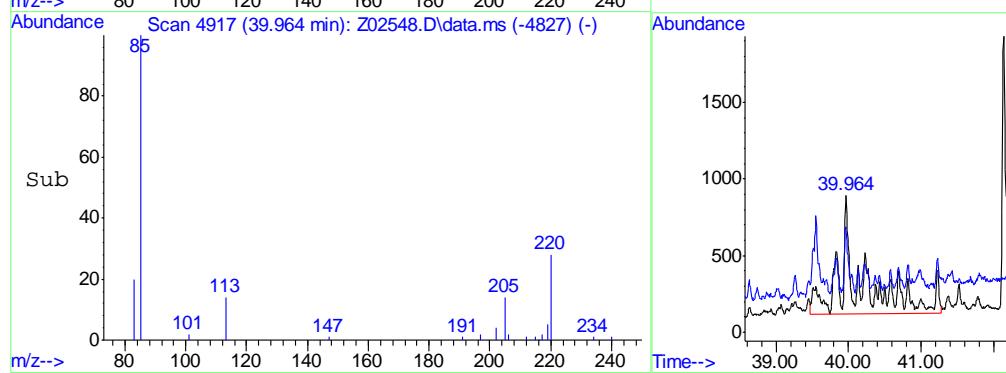
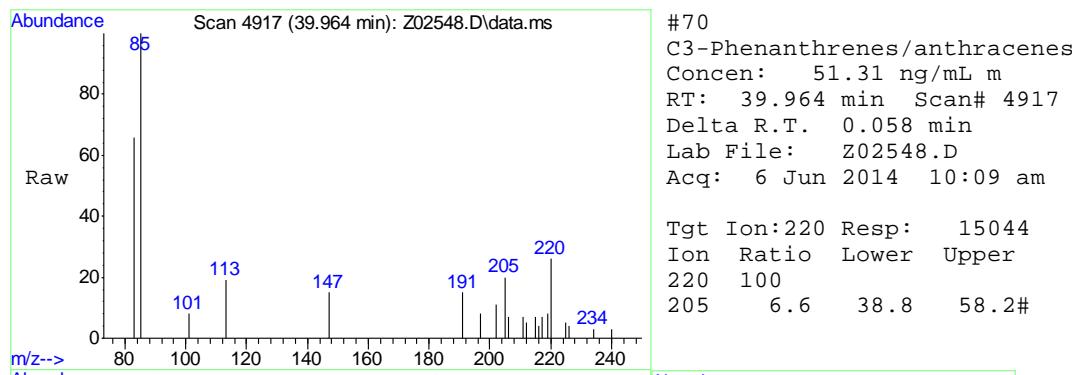


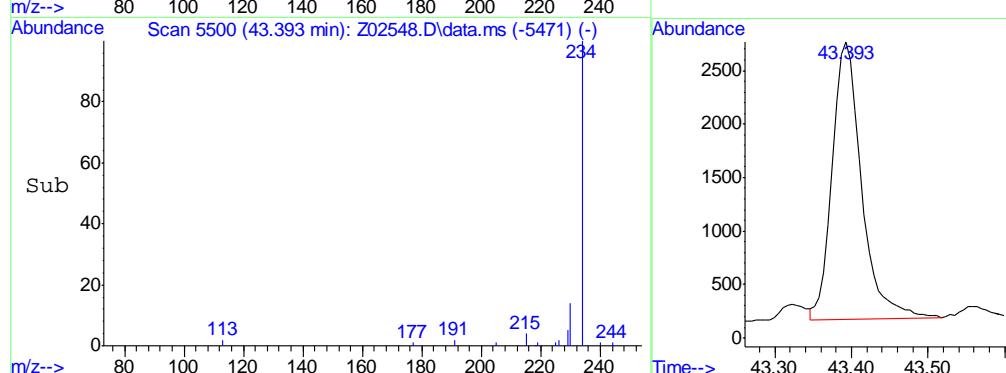
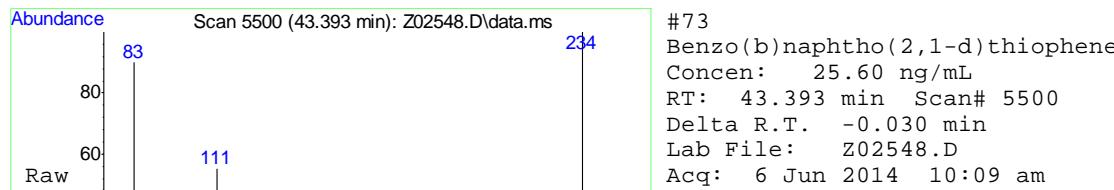
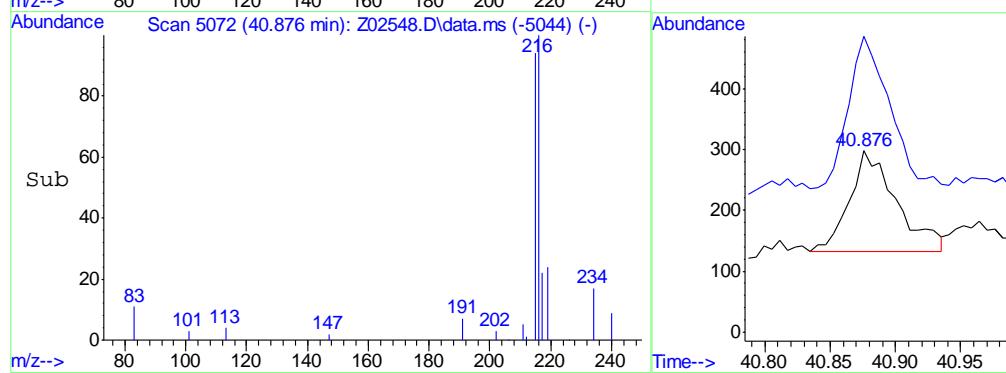
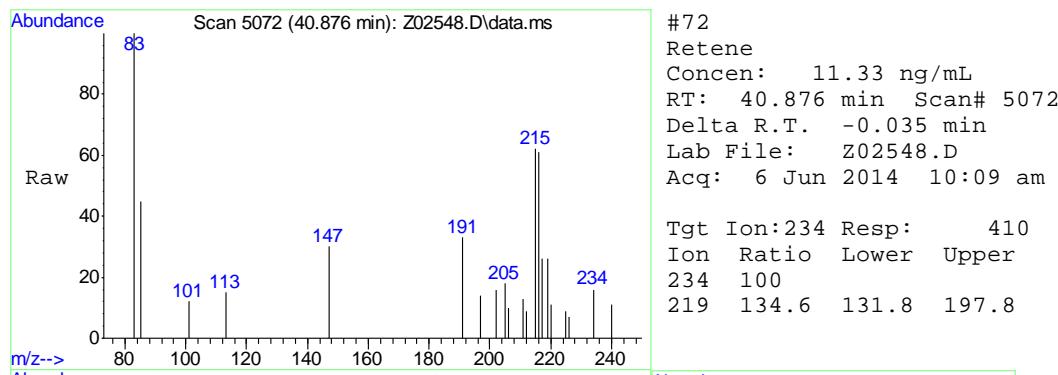


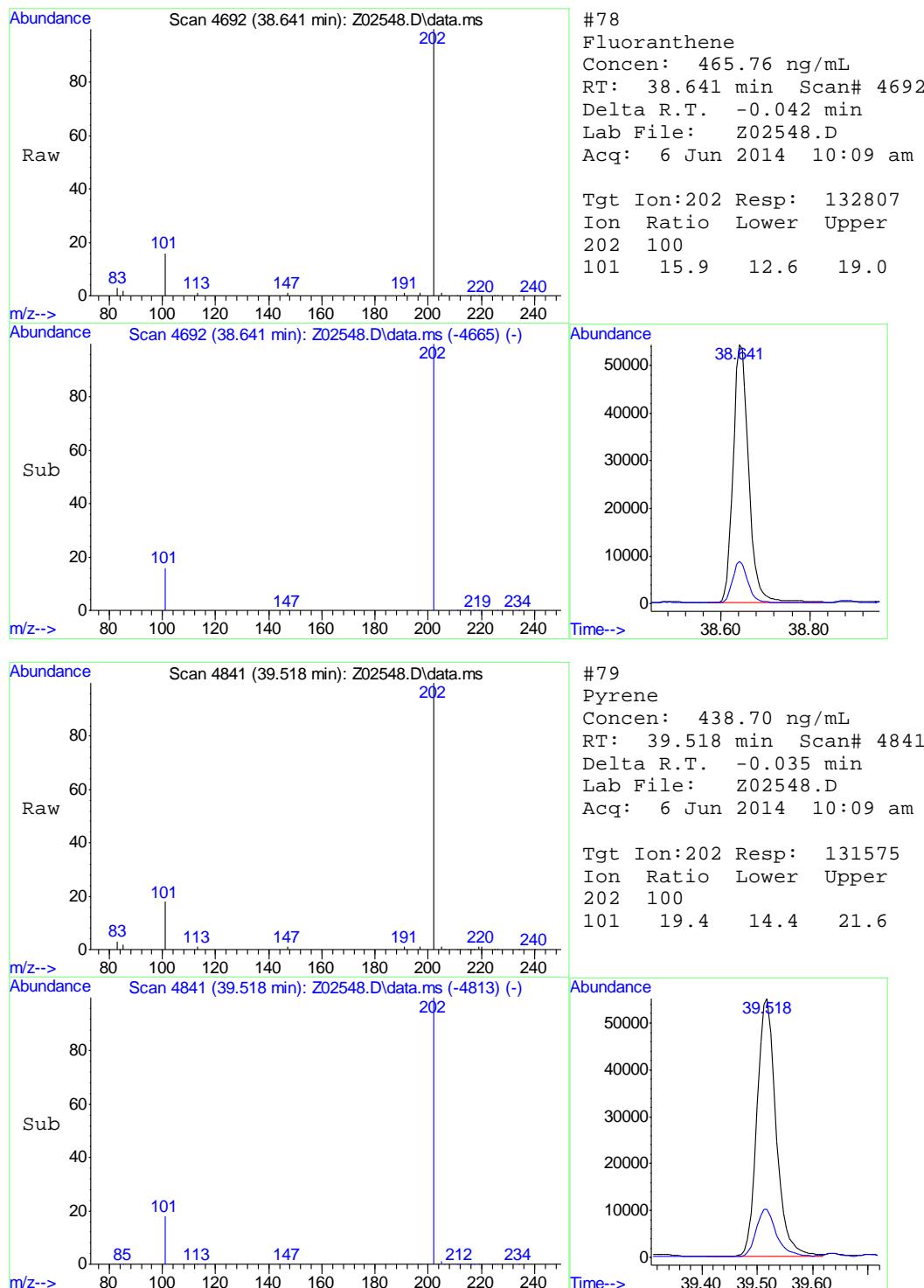


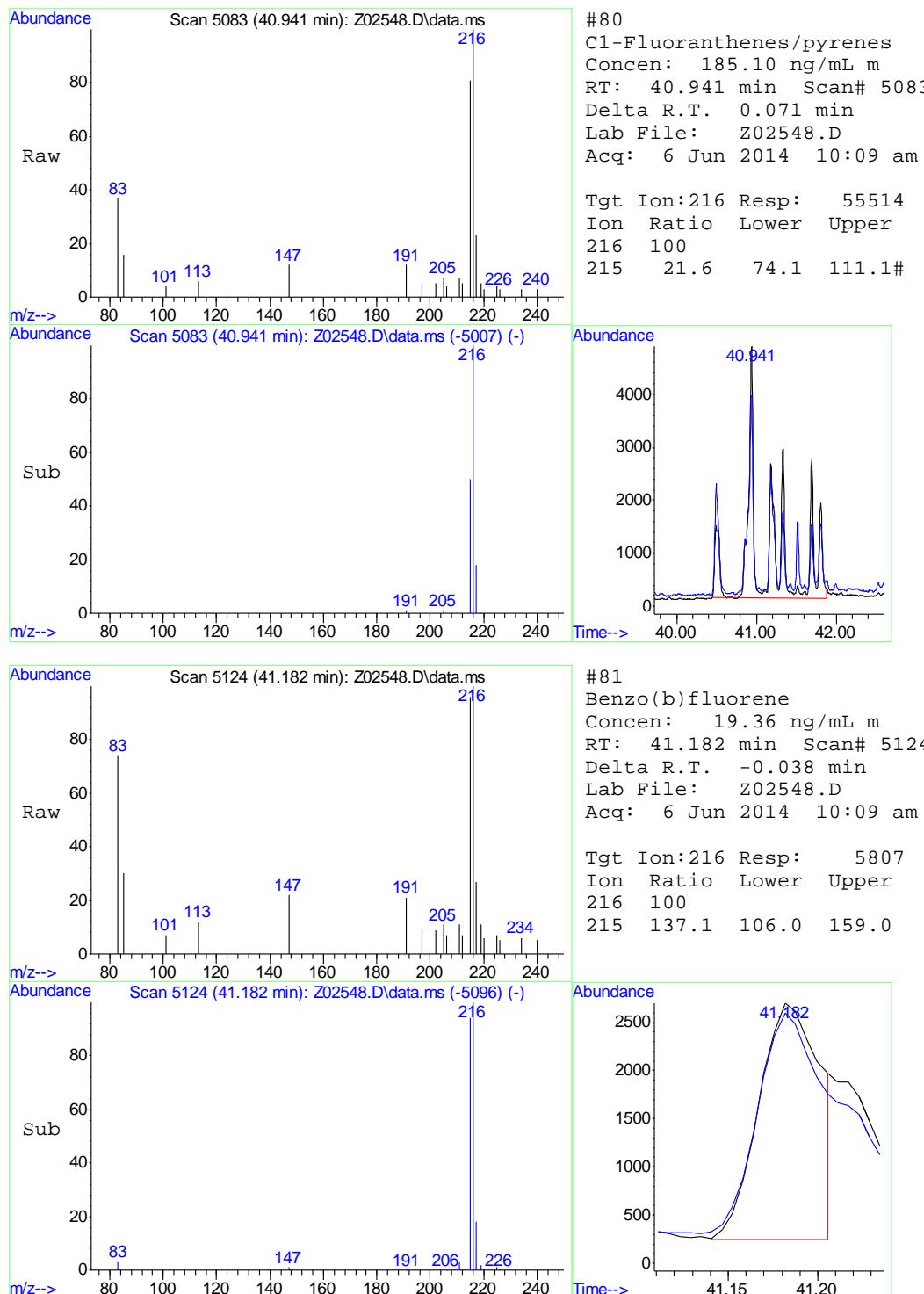


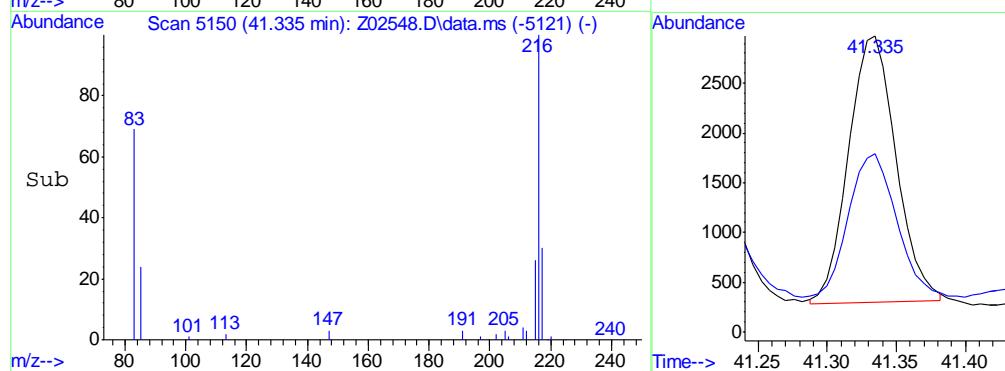
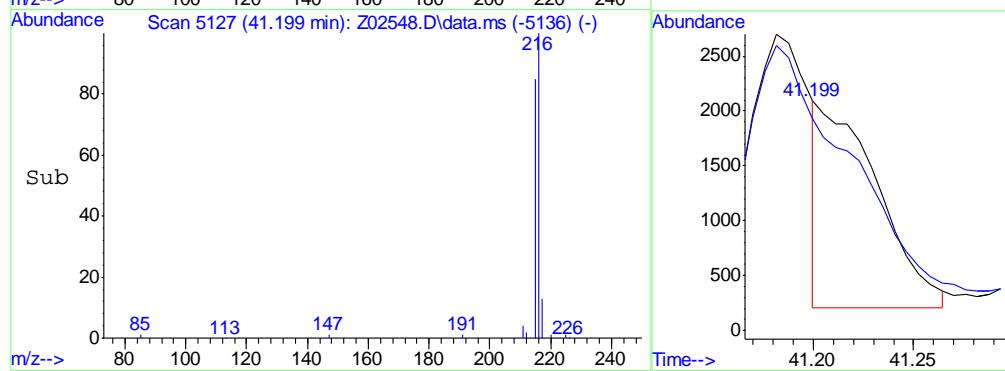
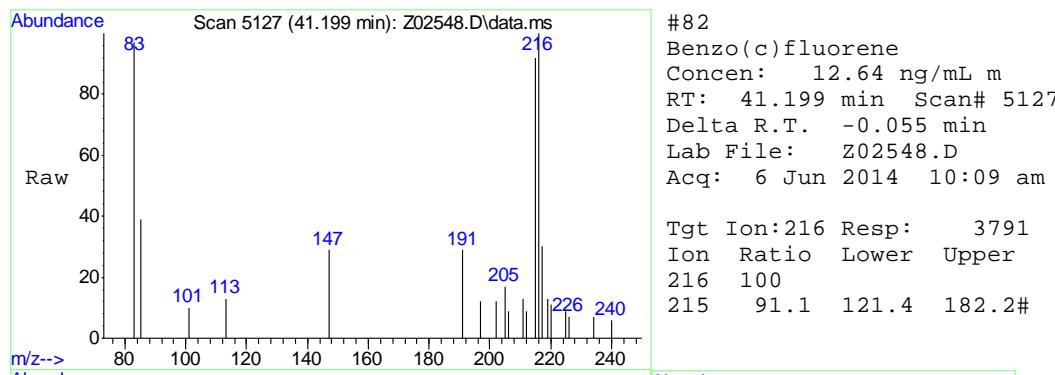


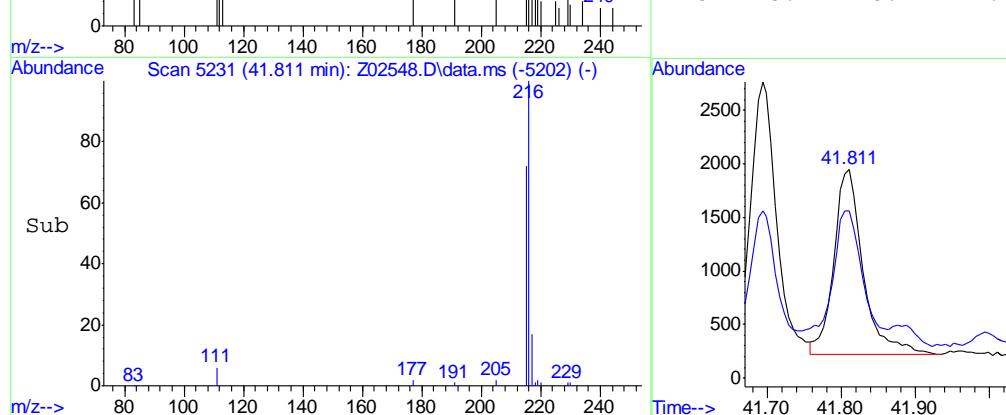
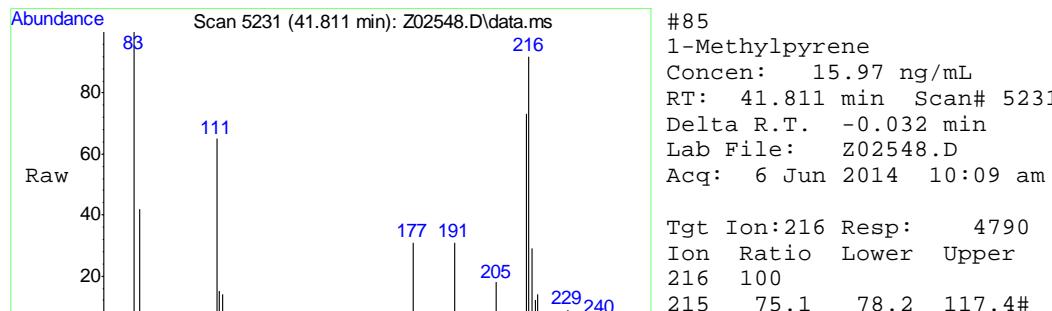
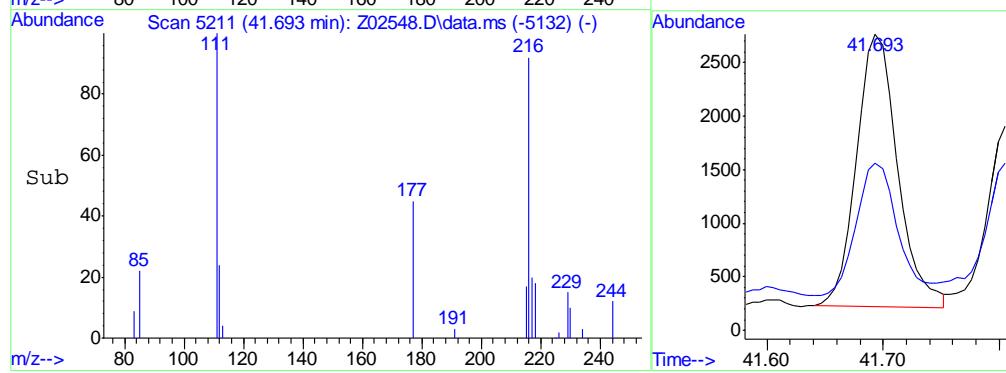
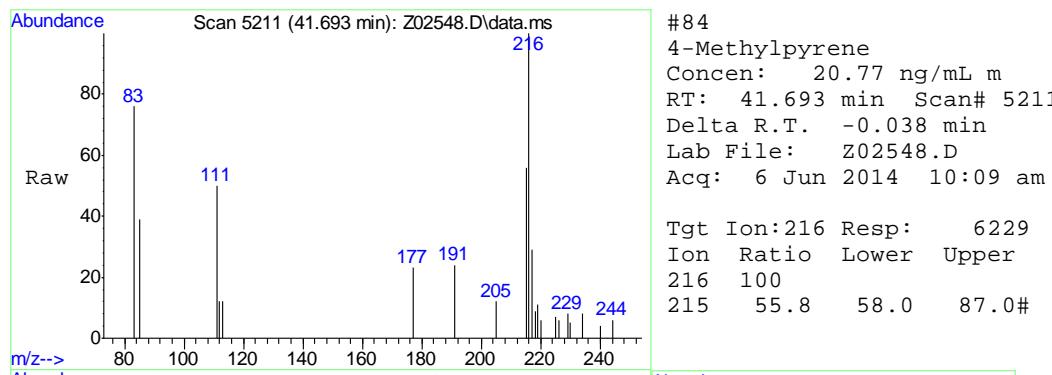


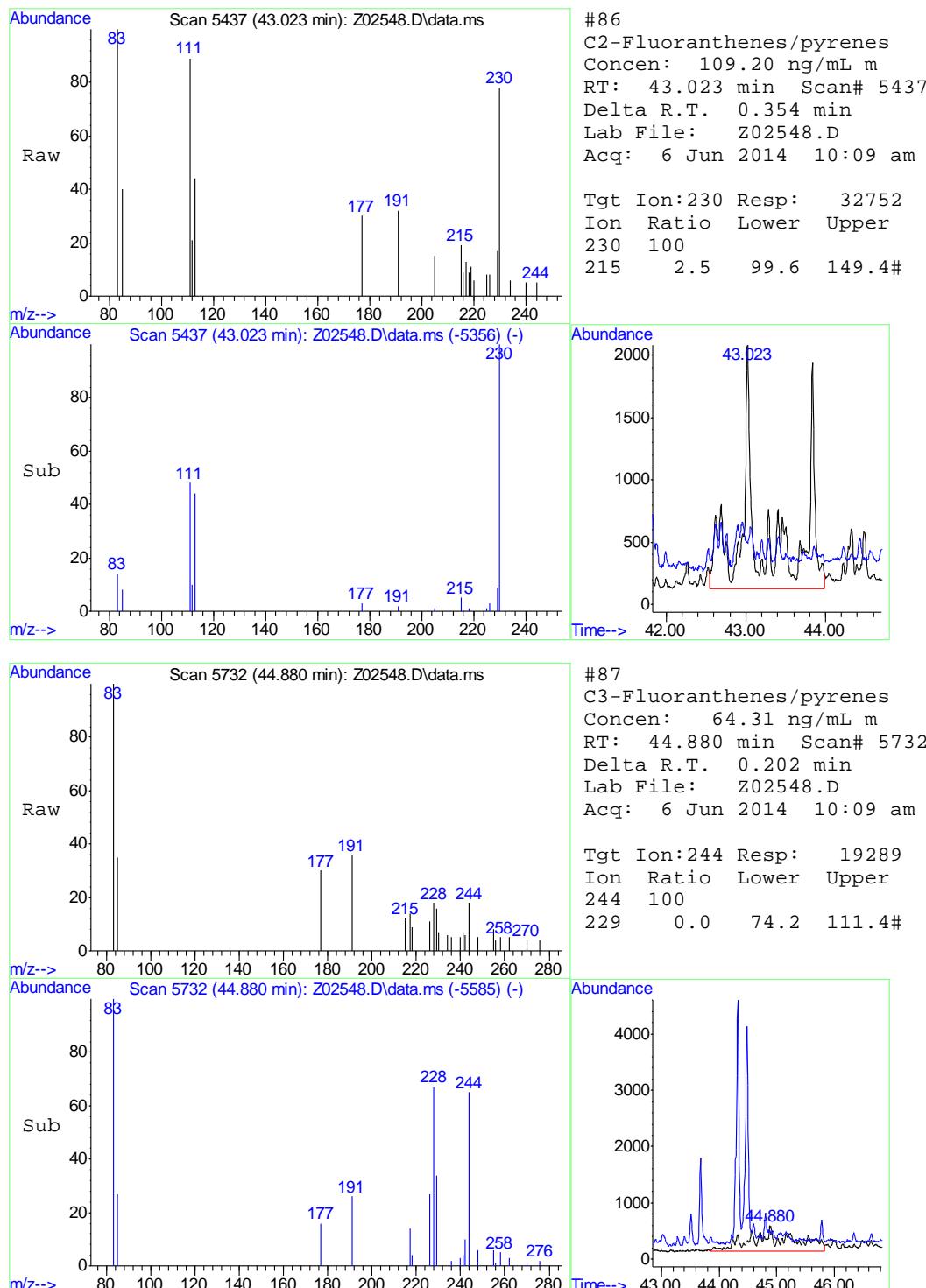


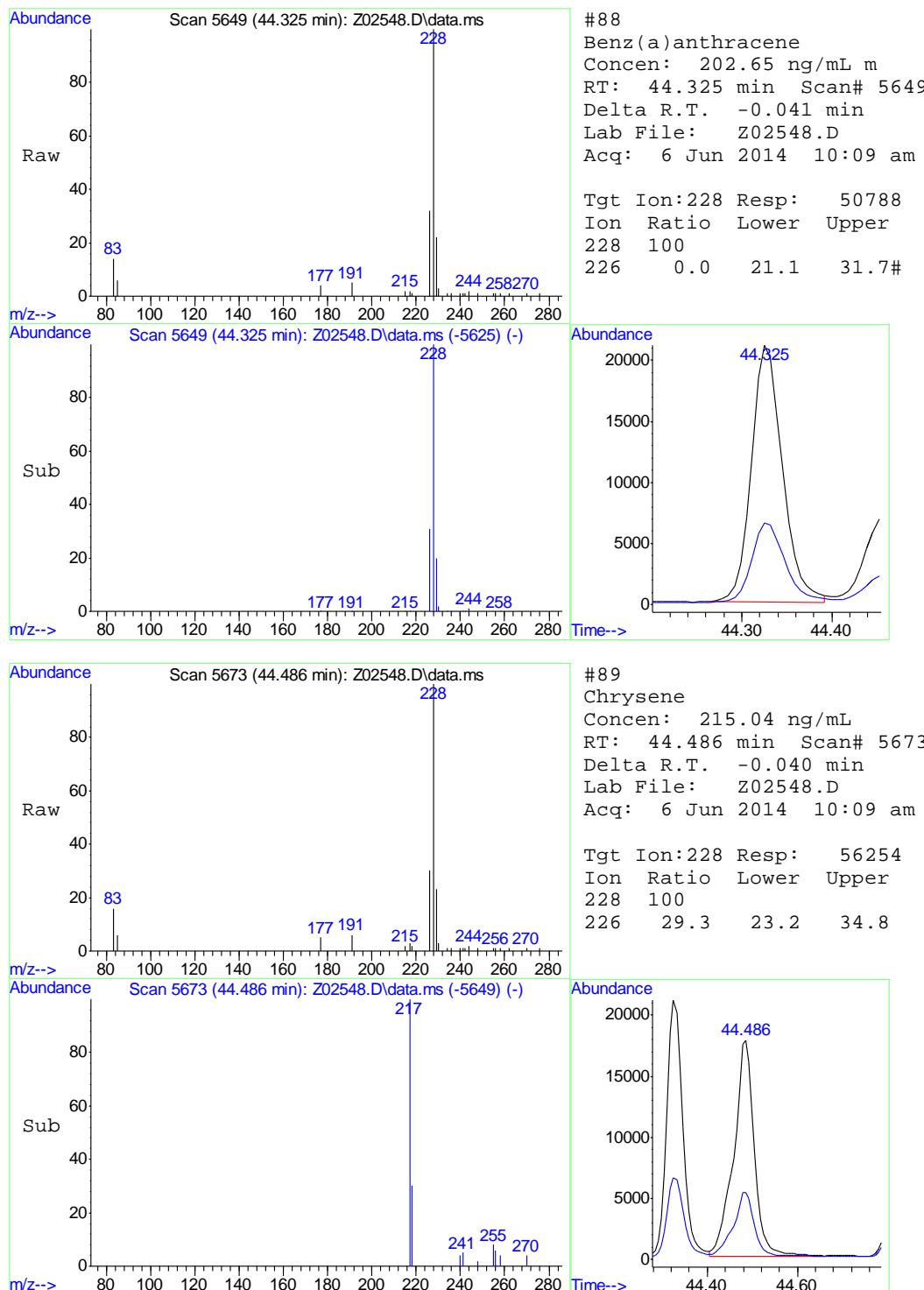


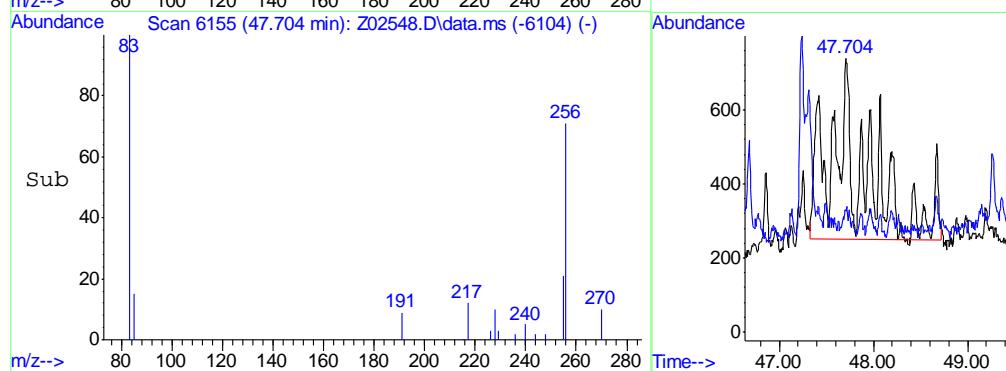
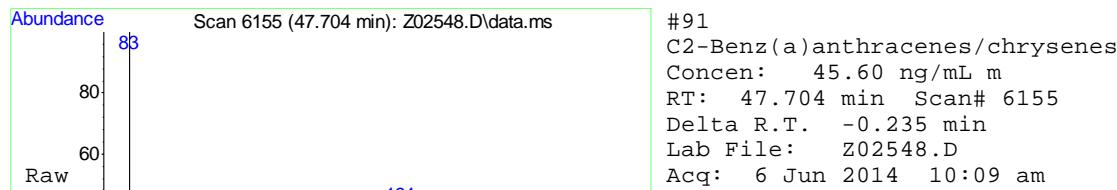
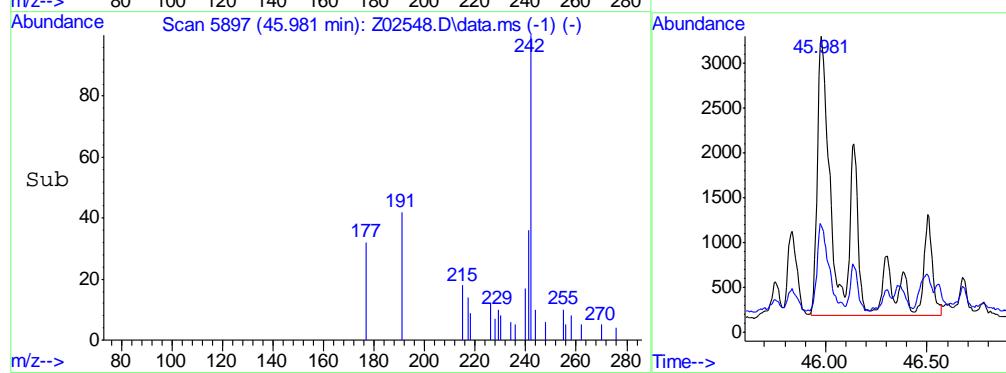
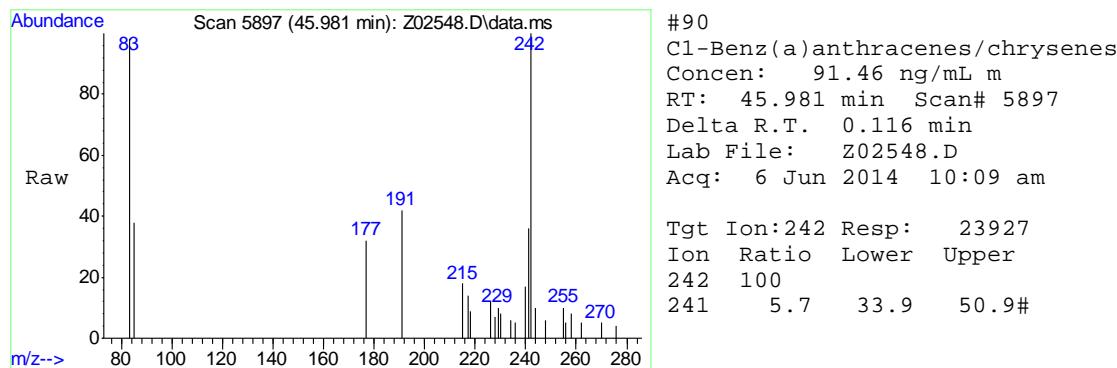


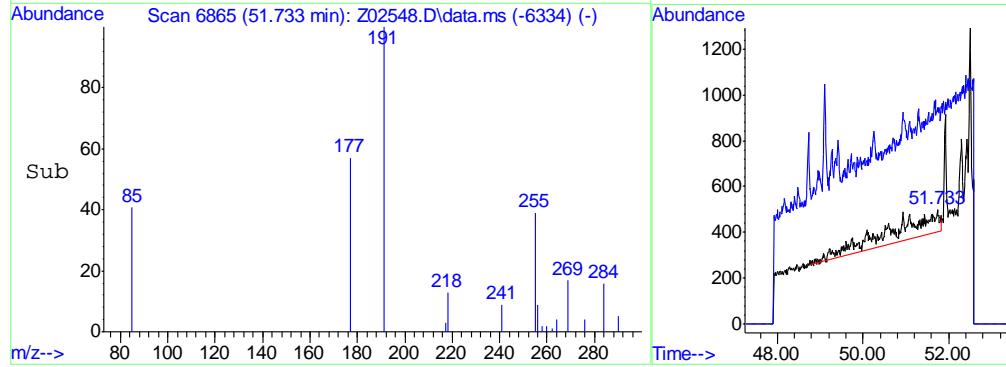
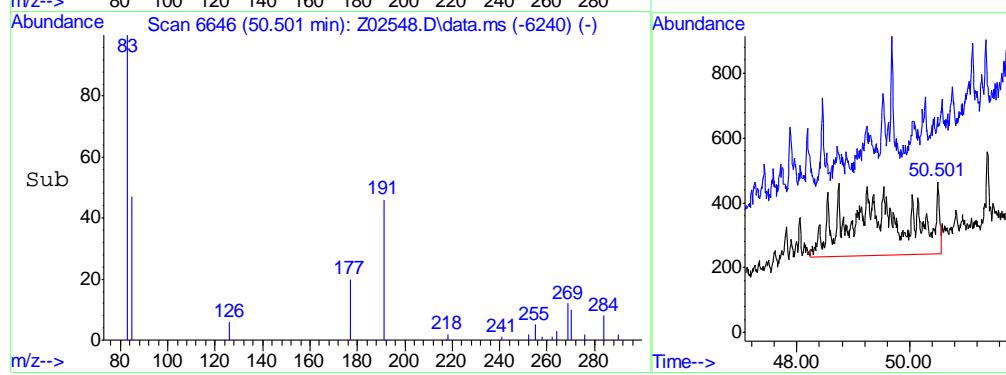
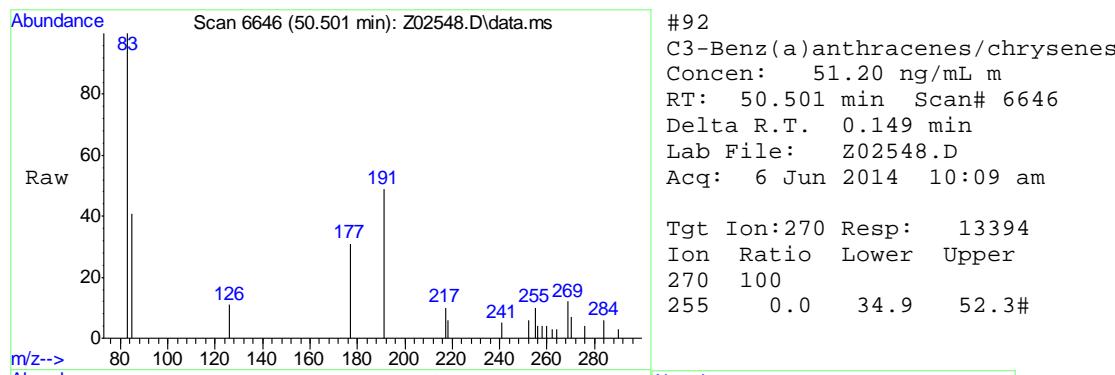


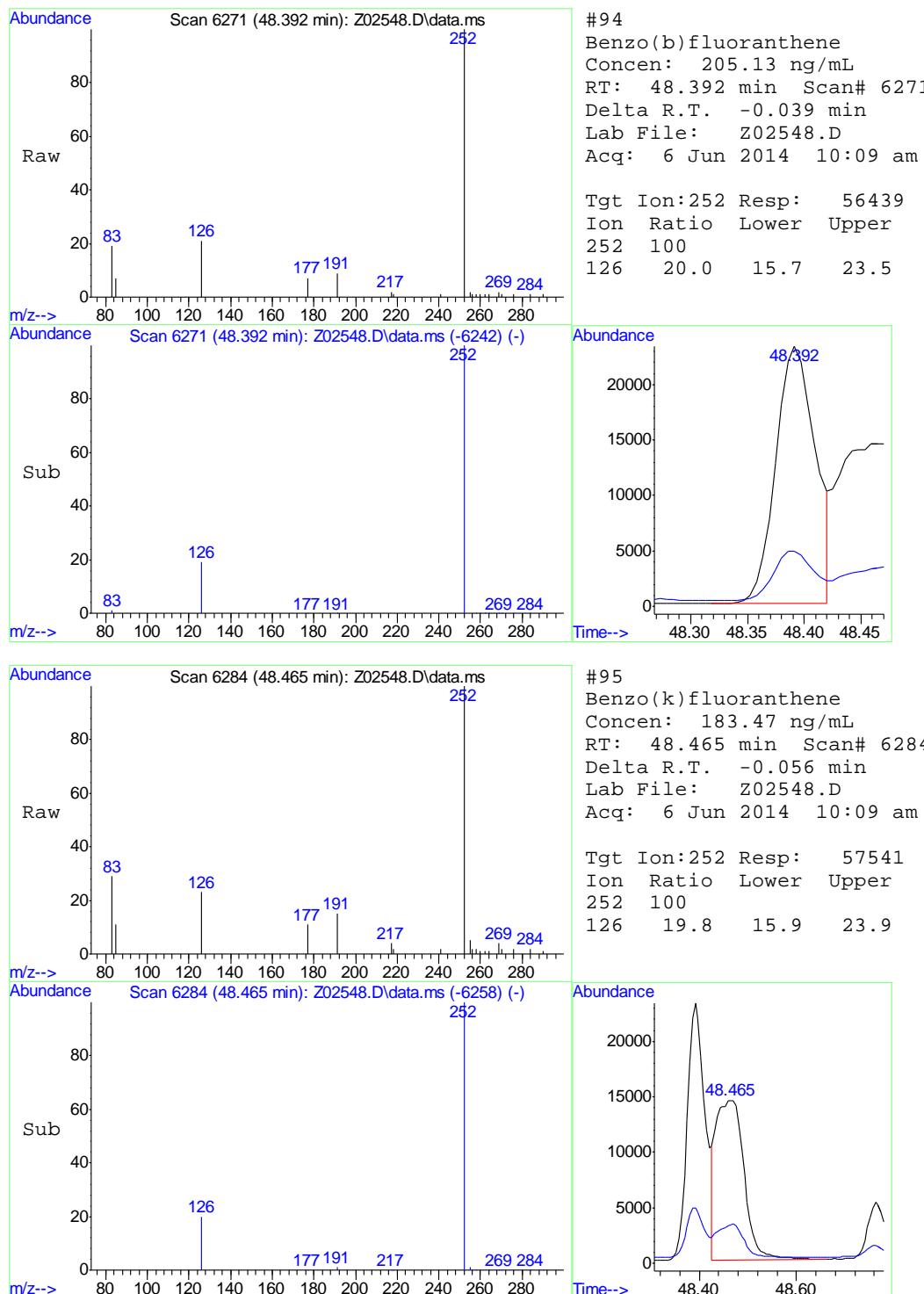


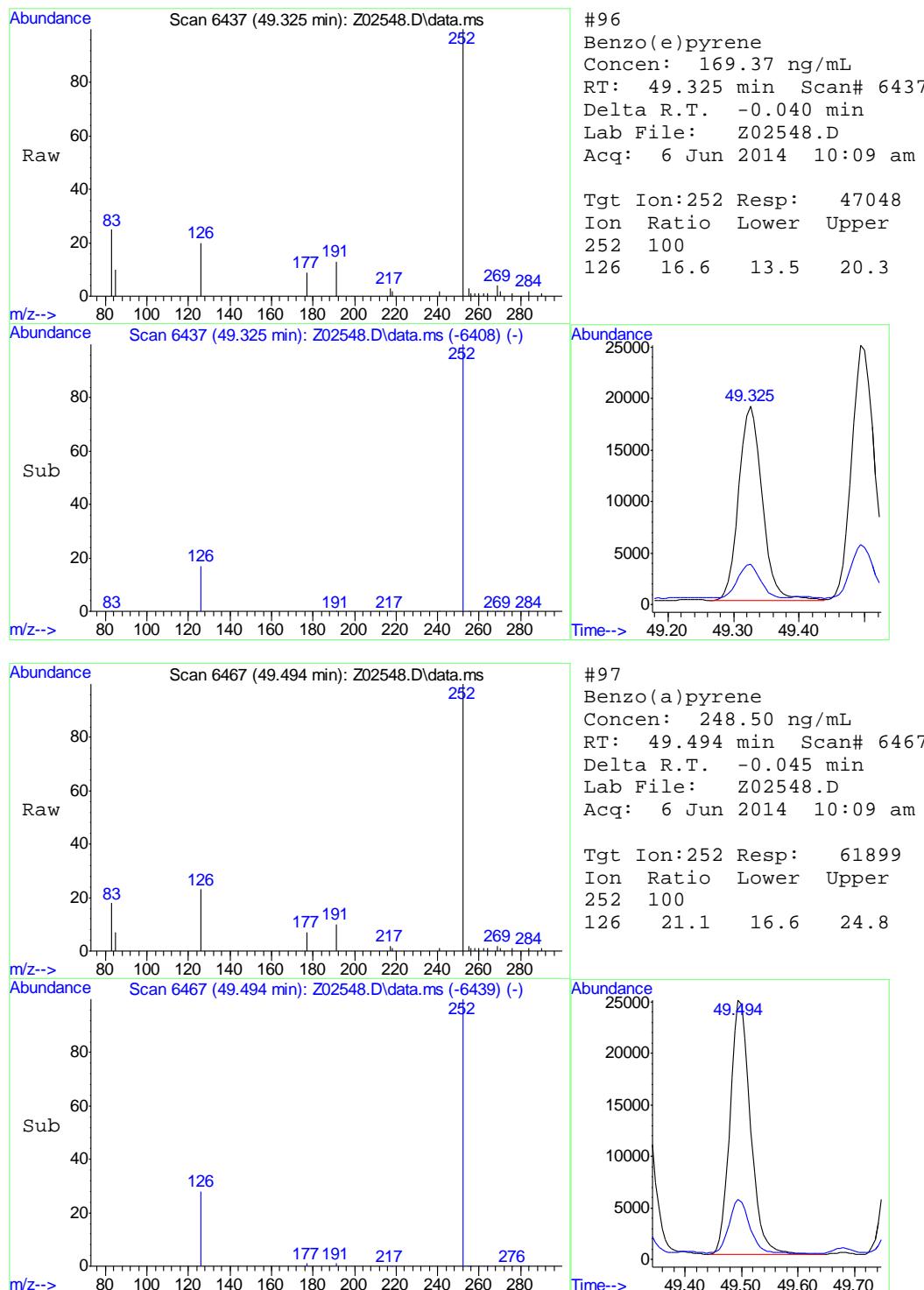


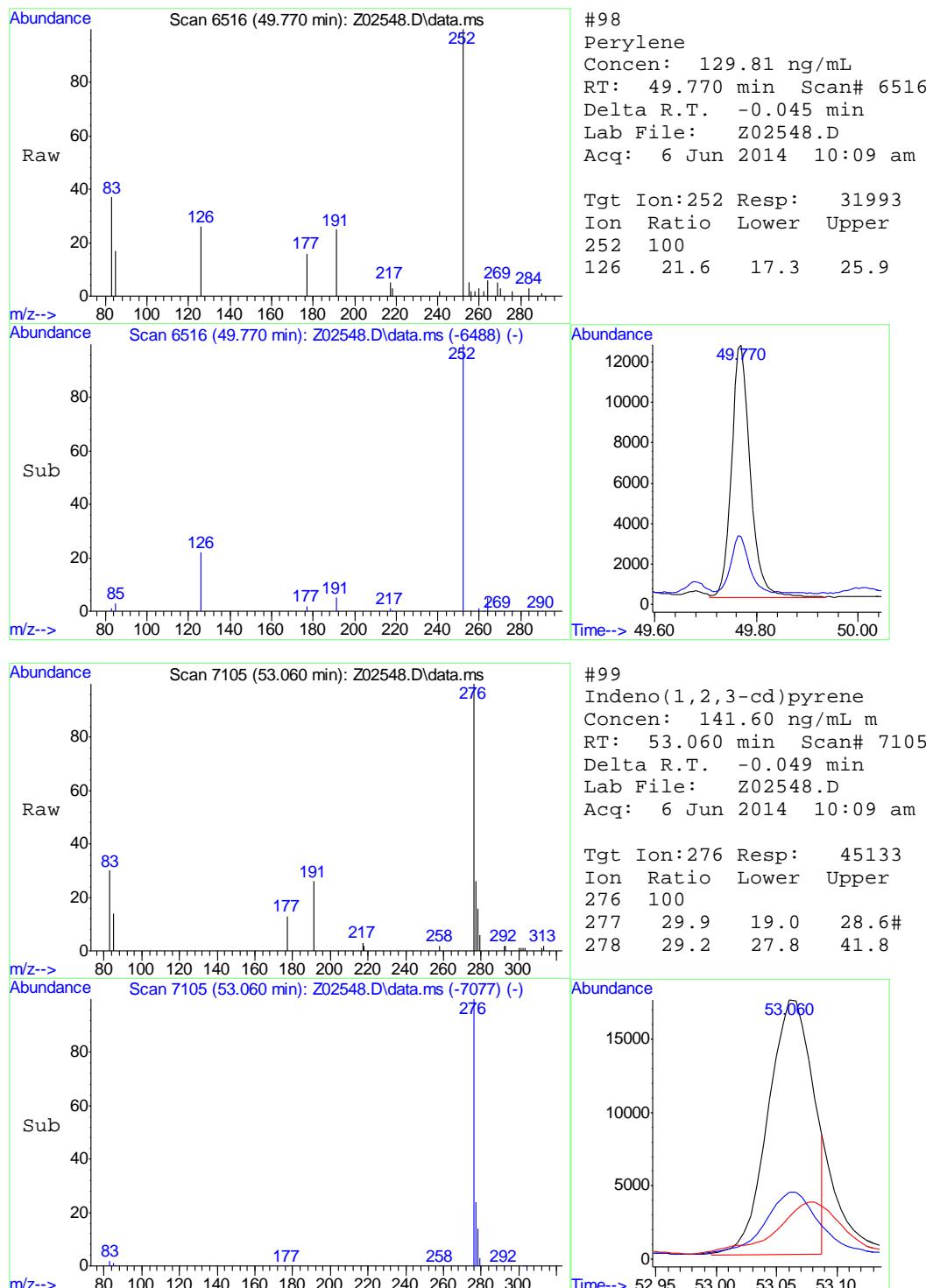


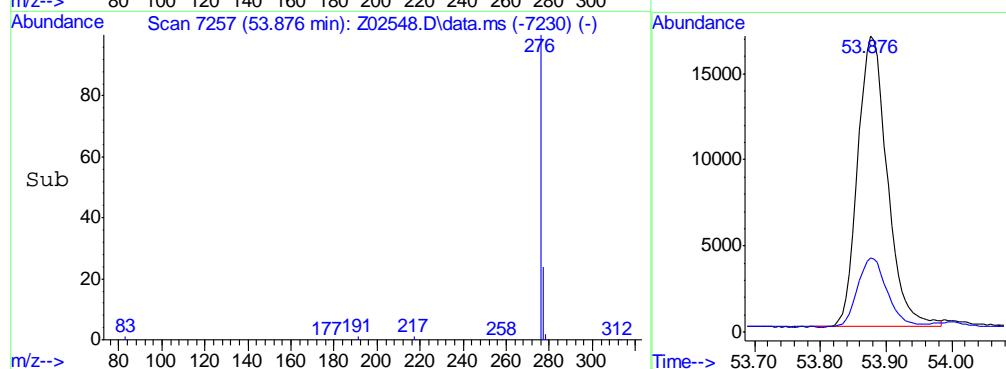
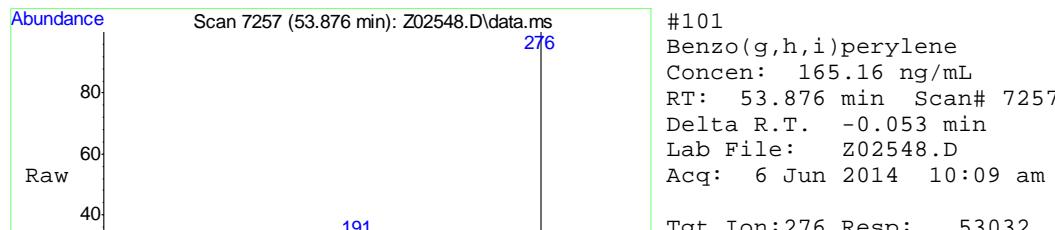
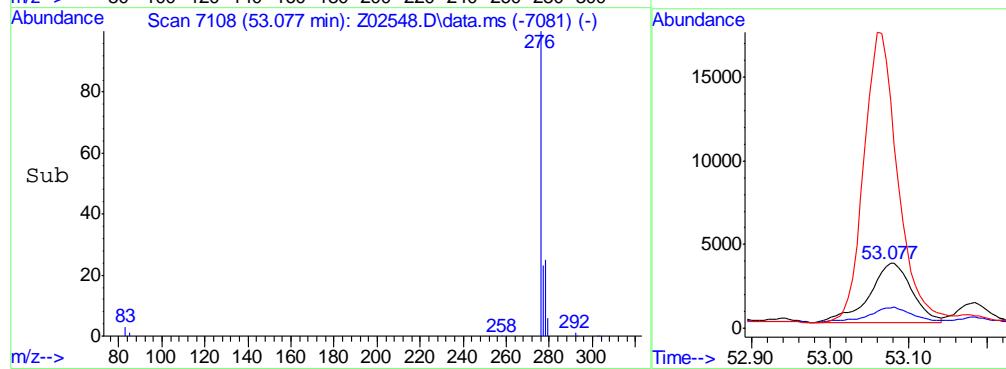
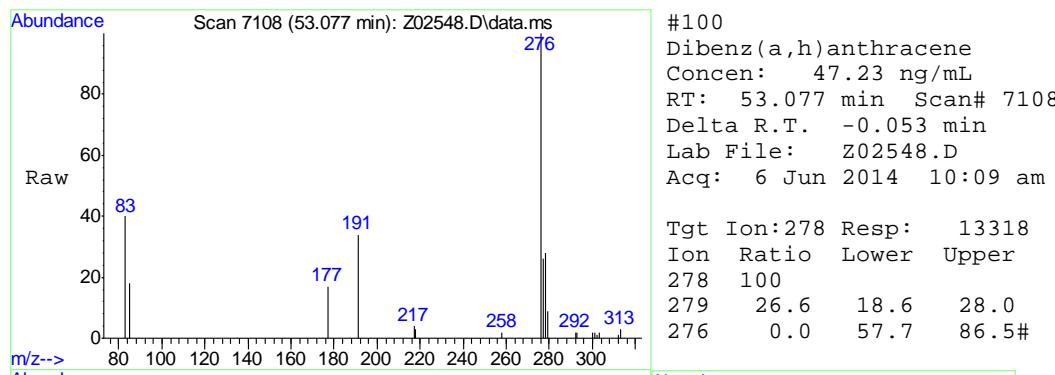


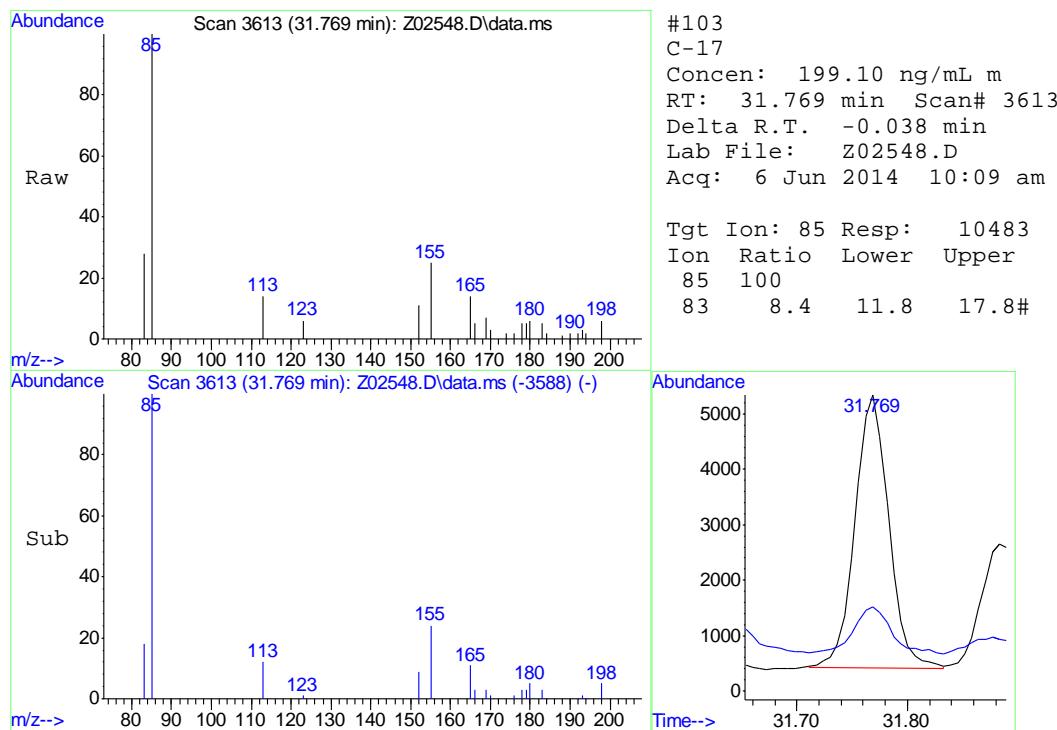
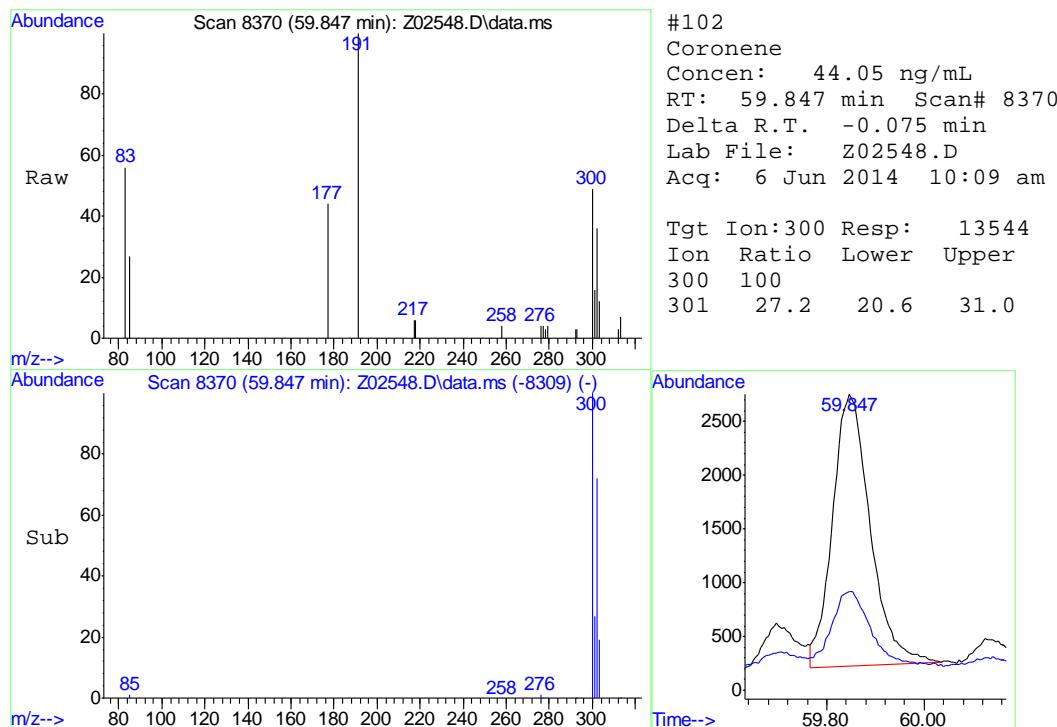


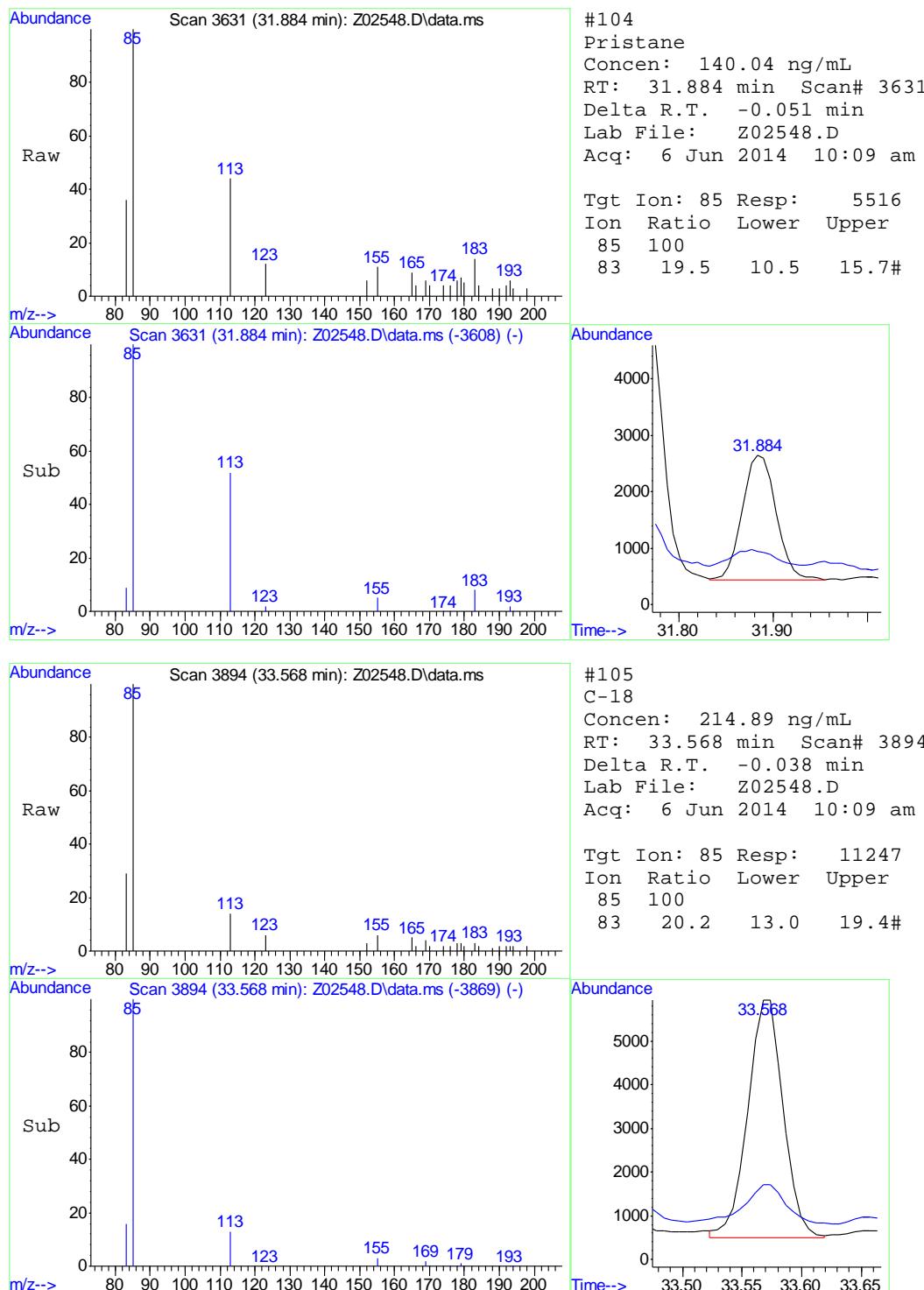


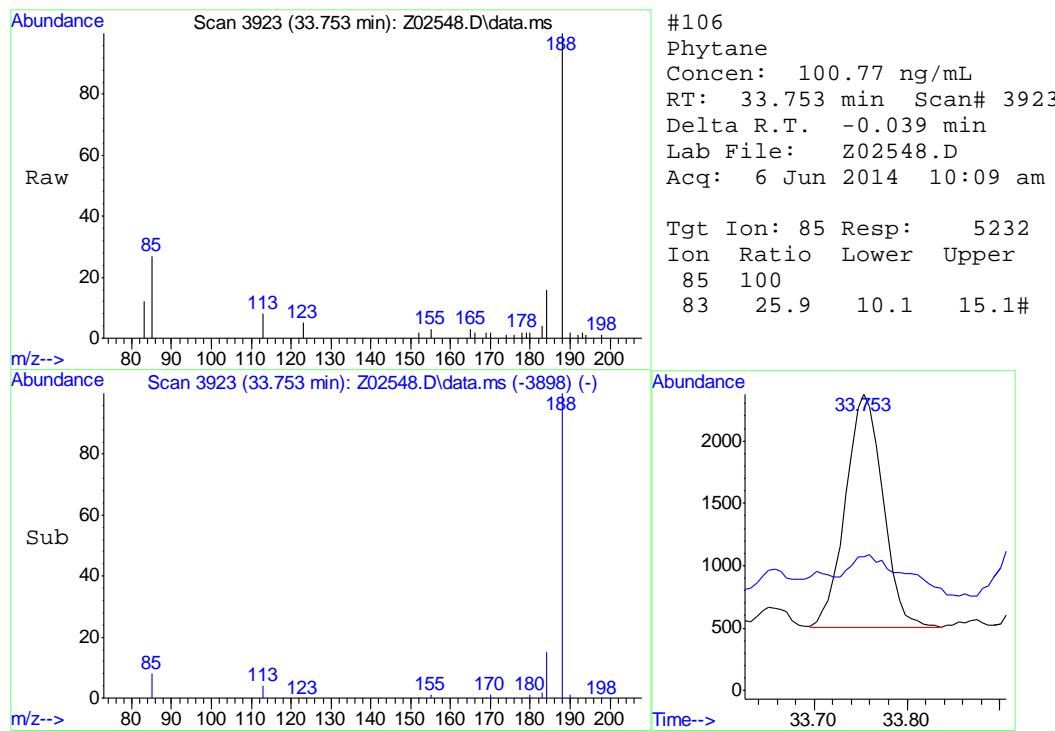












Quantitation Report (QT Reviewed)

Data File: C:\msdchem\2\data\Z140605\Z02549.D  
 Sample : mc30898-3  
 Misc : op38366,msz101,5.19,,,2,1  
 ALS Vial : 9 Sample Multiplier: 1  
 Acq On : 6 Jun 2014 11:26 am

Operator: sofyaz

Quant Time: Jun 10 12:06:18 2014  
 Quant Method : C:\msdchem\2\methods\Z140604-MAHPAHEXT.M  
 Quant Title : PAHs & Alkylated PAHs by GC/MS/SIM

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<hr/>						
Internal Standards						
1) Acenaphthene-d10	27.929	164	128298	1000.00	ng/mL	-0.02
<hr/>						
System Monitoring Compounds						
2) Toluene-d8	9.092	98	103315	752.81	ng/mL	0.00
Spiked Amount	1000.000		Recovery	=	75.28%	
3) Naphthalene-d8	20.984	136	185095	762.37	ng/mL	-0.02
Spiked Amount	1000.000		Recovery	=	76.24%	
4) Phenanthrene-d10	33.779	188	168803	803.66	ng/mL	-0.04
Spiked Amount	1000.000		Recovery	=	80.37%	
5) Perylene-d12	49.685	264	151461	820.87	ng/mL	-0.05
Spiked Amount	1000.000		Recovery	=	82.09%	
<hr/>						
Target Compounds						
7) Benzene	6.657	78	5029	26.56	ng/mL#	53
8) C1-Benzene	9.207	92	6985	36.89	ng/mL	97
9) C2-Benzene	12.182	106	12859m	67.91	ng/mL	
10) C3-Benzene	15.812	120	11843m	62.54	ng/mL	
11) C4-Benzene	17.548	134	10871m	57.41	ng/mL	
12) C5-Benzene	20.214	148	7045m	37.20	ng/mL	
13) Methylcyclohexane	8.004	83	3142	40.97	ng/mL	99
14) Toluene	9.207	91	11557	56.26	ng/mL	99
15) Ethylbenzene	11.951	91	4492	21.22	ng/mL	94
16) m,p-xylene	12.182	91	11650	72.01	ng/mL	98
17) Styrene	12.837	104	9368	78.81	ng/mL	97
18) o-Xylene	12.881	91	5722	32.93	ng/mL	99
19) Isopropylbenzene	13.796	105	1575	7.72	ng/mL	98
20) n-Propylbenzene	14.667	91	3211	13.45	ng/mL	98
21) 1,3,5-Trimethylbenzene	15.078	105	1768	9.55	ng/mL	93
23) 1,2,4-Trimethylbenzene	15.812	105	6746	38.11	ng/mL	99
25) 1,2,3-Trimethylbenzene	16.648	105	2458	12.51	ng/mL	92
26) p-Isopropyltoluene	16.576	119	753	3.42	ng/mL	90
27) n-Butylbenzene	17.548	91	4682	25.62	ng/mL#	77
34) Benzo(b)thiophene	21.289	134	16176	70.15	ng/mL#	82
44) Naphthalene	21.067	128	25882	89.45	ng/mL	99
45) 2-Methylnaphthalene	23.772	142	10065	55.97	ng/mL	99
46) 1-Methylnaphthalene	24.176	142	11280	57.92	ng/mL	100
47) C1-Naphthalenes	24.176	142	21889m	75.65	ng/mL	
48) C2-Naphthalenes	26.601	156	24638m	85.16	ng/mL	
49) C3-Naphthalenes	30.136	170	20642m	71.34	ng/mL	
50) C4-Naphthalenes	32.934	184	15345m	53.04	ng/mL	
51) Biphenyl	25.669	154	4735	20.72	ng/mL	95
52) Acenaphthylene	27.327	152	24863	88.83	ng/mL	96
53) Acenaphthene	28.051	154	4606	26.32	ng/mL	98
54) Dibenzofuran	28.720	168	10171	41.86	ng/mL	98
55) Fluorene	30.078	166	5240	26.79	ng/mL	94
56) C1-Fluorennes	32.447	180	4199m	21.46	ng/mL	
57) C2-Fluorennes	34.637	194	8505m	43.48	ng/mL	
58) C3-Fluorennes	37.183	208	14224m	72.71	ng/mL	
59) Dibenzothiophene	33.382	184	4458m	16.36	ng/mL	
60) C1-Dibenzothiophenes (...)	35.586	198	19366m	71.08	ng/mL	
61) C1-Dibenzothiophenes (...)	35.586	198	10969m	40.26	ng/mL	
62) C2-Dibenzothiophenes	38.087	212	13757m	50.50	ng/mL	
63) C3-Dibenzothiophenes	39.053	226	12754m	46.81	ng/mL	

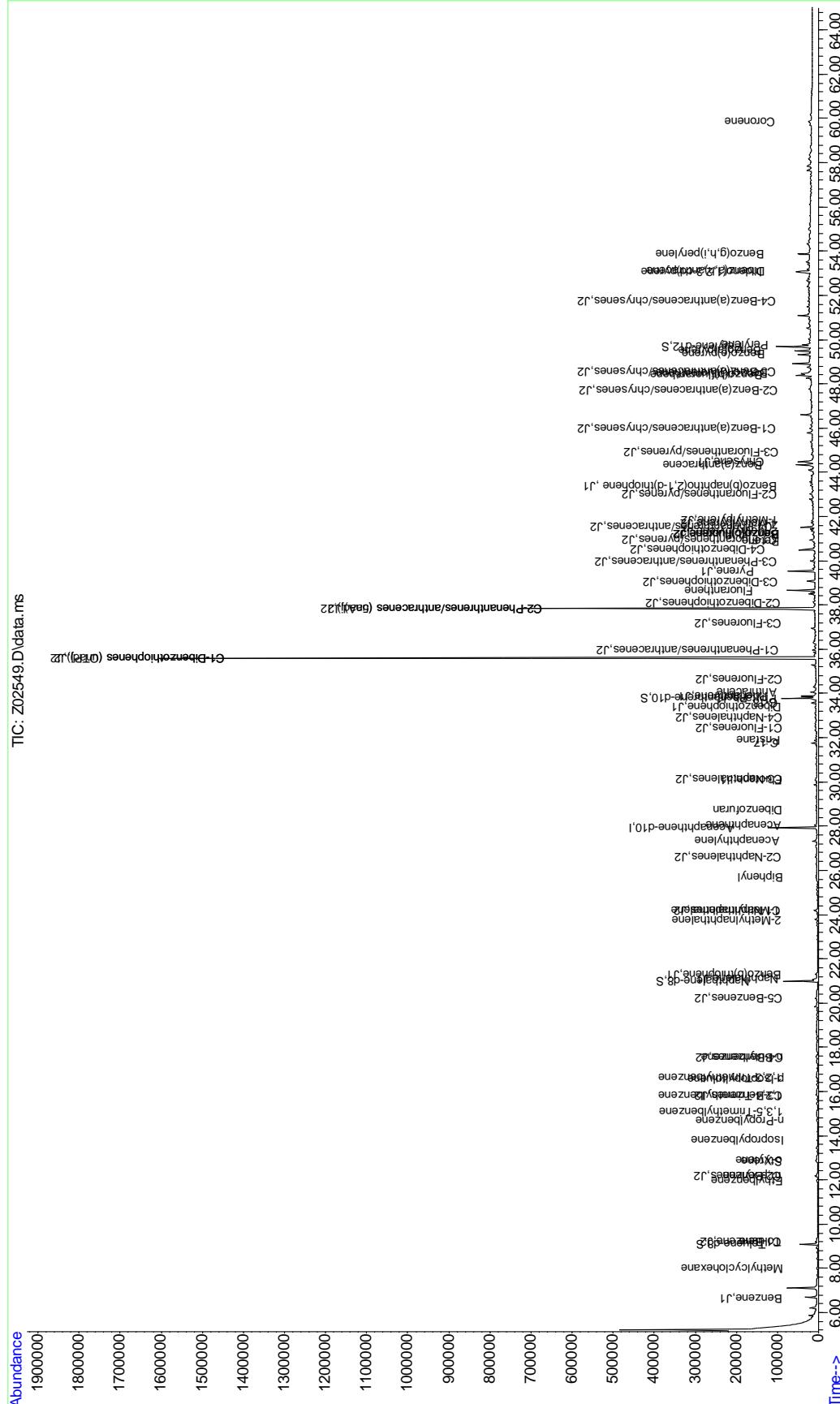
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 Misc : op38366,msz101,5.19,,,2,1  
 ALS Vial : 9 Sample Multiplier: 1  
 Acq On : 6 Jun 2014 11:26 am Operator: sofyaz

Quant Time: Jun 10 12:06:18 2014  
 Quant Method : C:\msdchem\2\methods\Z140604-MAHPAHEXT.M  
 Quant Title : PAHs & Alkylated PAHs by GC/MS/SIM

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
64) C4-Dibenzothiophenes	40.500	240	16515m	60.62	ng/mL	
65) Phenanthrene	33.875	178	60309	205.54	ng/mL	100
66) Anthracene	34.061	178	24335	86.44	ng/mL#	86
67) C1-Phenanthrenes/anthr...	35.958	192	41626m	141.87	ng/mL	
68) C2-Phenanthrenes/anthr...	37.825	206	45517m	155.13	ng/mL	
69) C2-Phenanthrenes/anthr...	37.825	206	8422m	28.70	ng/mL	
70) C3-Phenanthrenes/anthr...	39.970	220	21569m	73.51	ng/mL	
71) C4-Phenanthrenes/anthr...	41.523	234	11843m	40.36	ng/mL	
72) Retene	40.882	234	436	12.04	ng/mL	89
73) Benzo(b)naphtho(2,1-d)...	43.393	234	9467	35.30	ng/mL	100
78) Fluoranthene	38.647	202	137955	483.46	ng/mL	100
79) Pyrene	39.518	202	129616	431.86	ng/mL	96
80) C1-Fluoranthenes/pyrenes	40.941	216	65716m	218.96	ng/mL	
81) Benzo(b)fluorene	41.188	216	5515m	18.38	ng/mL	
82) Benzo(c)fluorene	41.211	216	2809m	9.36	ng/mL	
83) 2-Methylpyrene	41.329	216	8831m	29.42	ng/mL	
84) 4-Methylpyrene	41.693	216	7671m	25.56	ng/mL	
85) 1-Methylpyrene	41.805	216	5635	18.78	ng/mL#	65
86) C2-Fluoranthenes/pyrenes	43.017	230	48892m	162.90	ng/mL	
87) C3-Fluoranthenes/pyrenes	44.886	244	27107m	90.32	ng/mL	
88) Benz(a)anthracene	44.325	228	66723m	266.04	ng/mL	
89) Chrysene	44.486	228	74028	282.78	ng/mL	99
90) C1-Benz(a)anthracenes/...	45.981	242	34188m	130.59	ng/mL	
91) C2-Benz(a)anthracenes/...	47.711	256	19058m	72.80	ng/mL	
92) C3-Benz(a)anthracenes/...	48.544	270	17472m	66.74	ng/mL	
93) C4-Benz(a)anthracenes/...	51.716	284	16297m	62.25	ng/mL	
94) Benzo(b)fluoranthene	48.392	252	70768	257.02	ng/mL	99
95) Benzo(k)fluoranthene	48.465	252	76180	242.73	ng/mL	99
96) Benzo(e)pyrene	49.325	252	60827	218.82	ng/mL	99
97) Benzo(a)pyrene	49.500	252	76793	308.08	ng/mL	99
98) Perylene	49.770	252	36470	147.87	ng/mL	100
99) Indeno(1,2,3-cd)pyrene	53.061	276	56418m	176.88	ng/mL	
100) Dibenz(a,h)anthracene	53.077	278	18651	66.09	ng/mL#	1
101) Benzo(g,h,i)perylene	53.876	276	69430	216.07	ng/mL	99
102) Coronene	59.847	300	17395	56.53	ng/mL	98
103) C-17	31.769	85	15044	285.52	ng/mL	94
104) Pristane	31.884	85	7718	195.81	ng/mL#	85
105) C-18	33.568	85	16215	309.58	ng/mL	93
106) Phytane	33.753	85	7660	147.42	ng/mL#	72

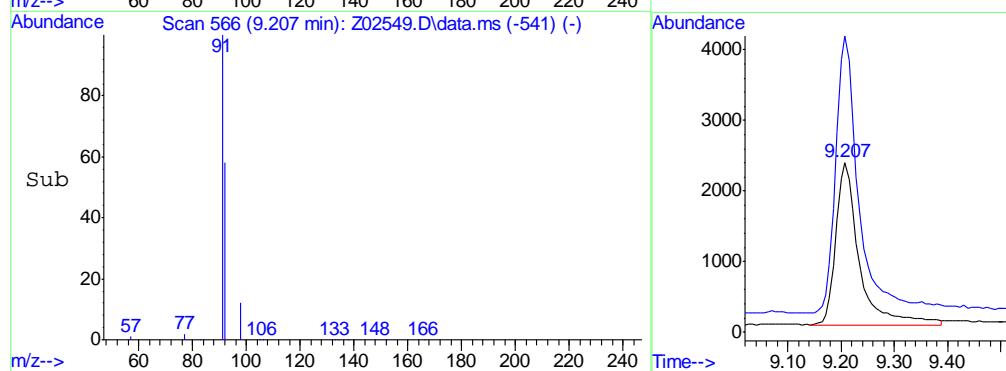
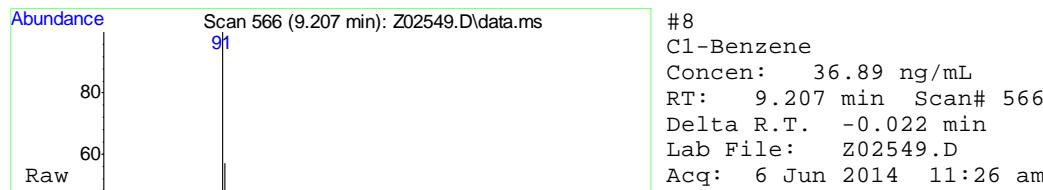
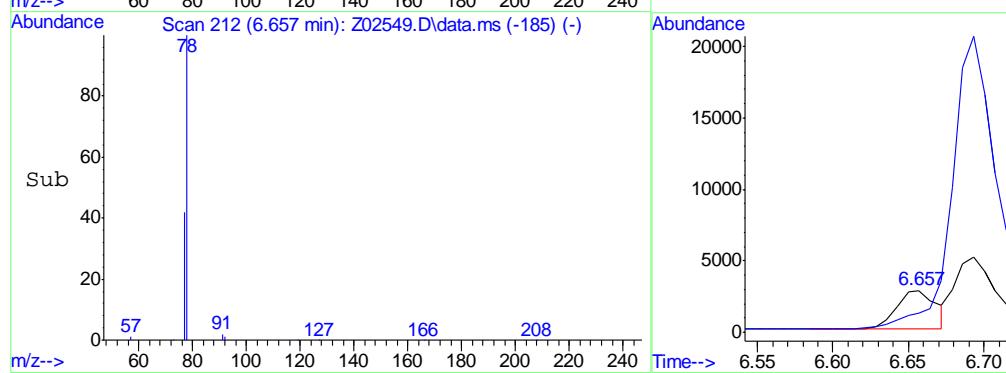
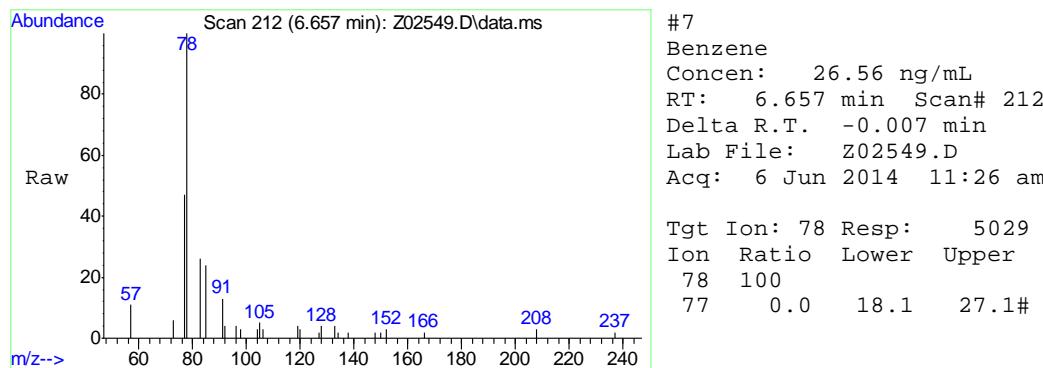
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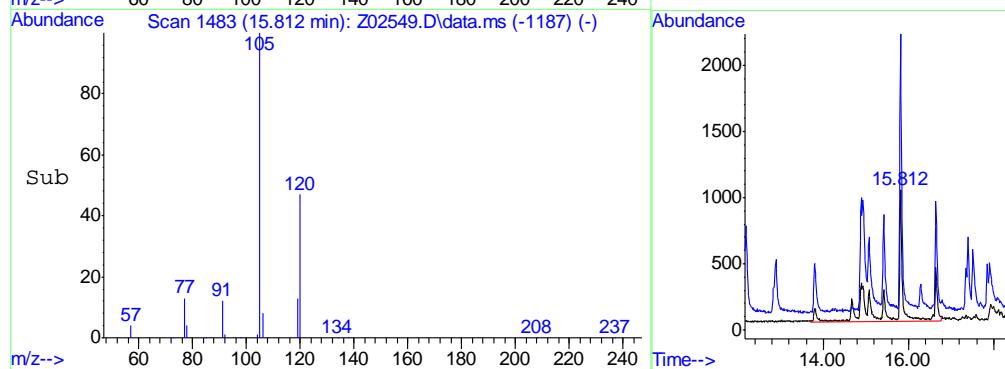
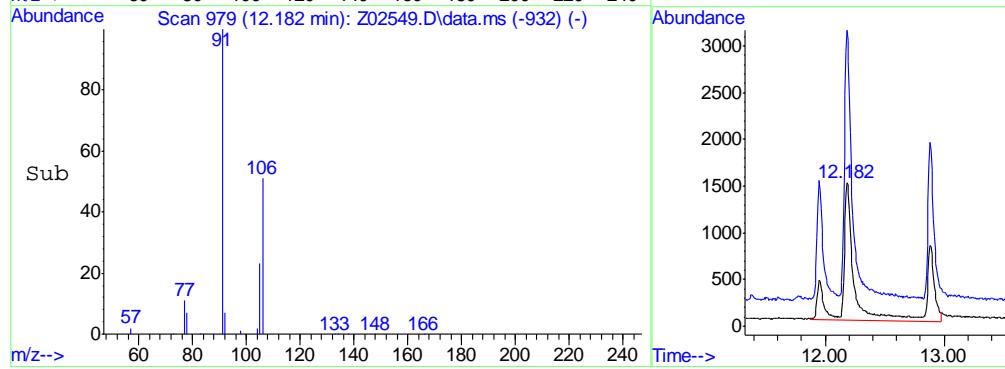
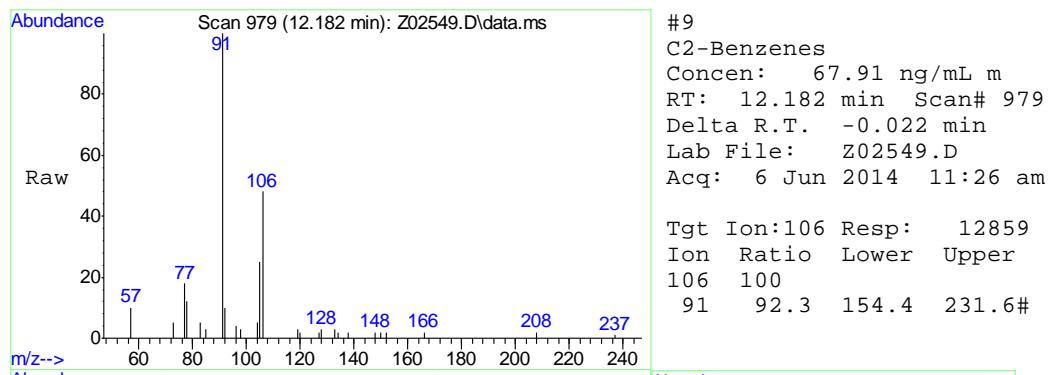


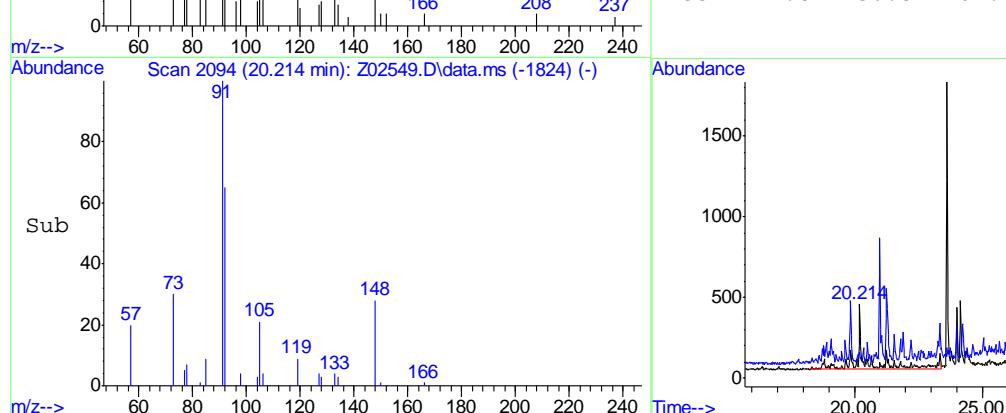
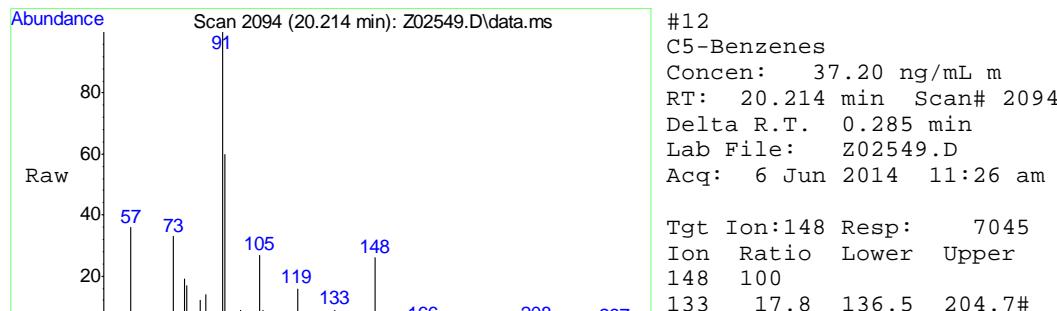
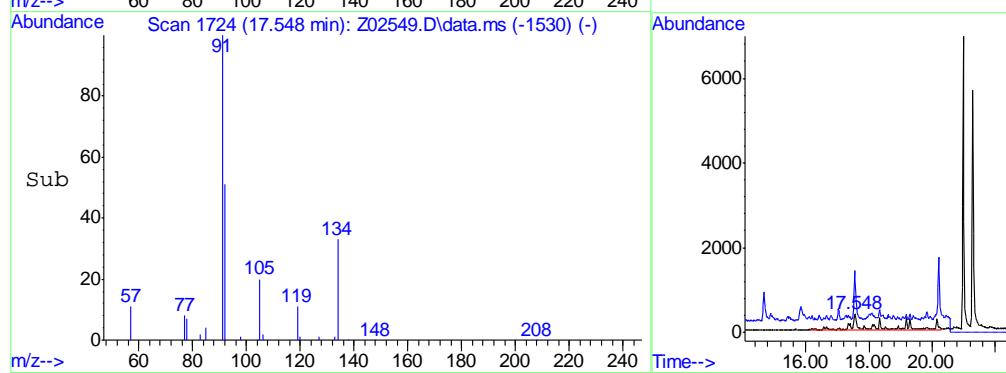
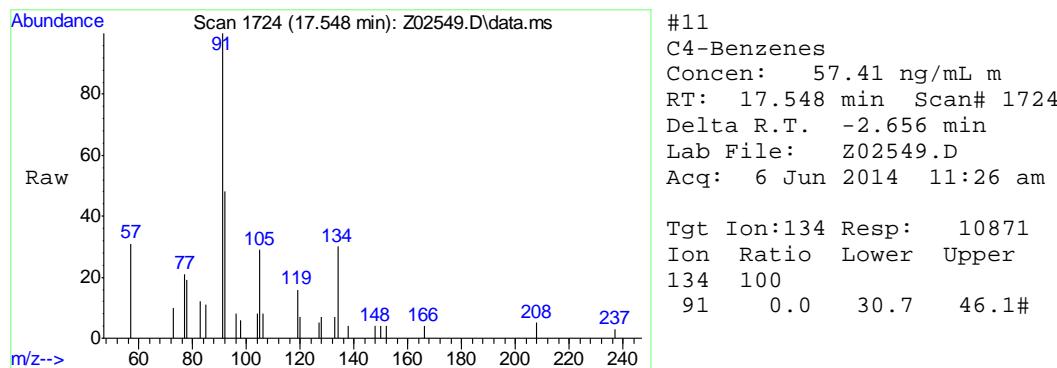
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ALS Vial : 9 Sample Multiplier: 1  
Acc On : 6 Jun 2014 11:26 am

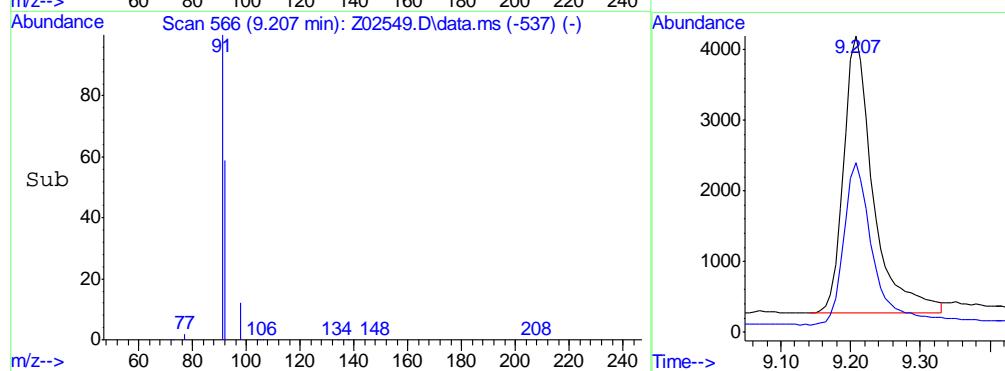
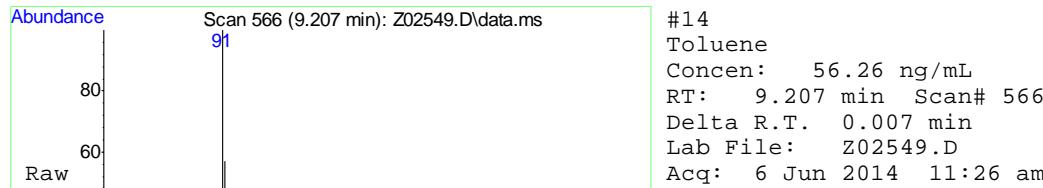
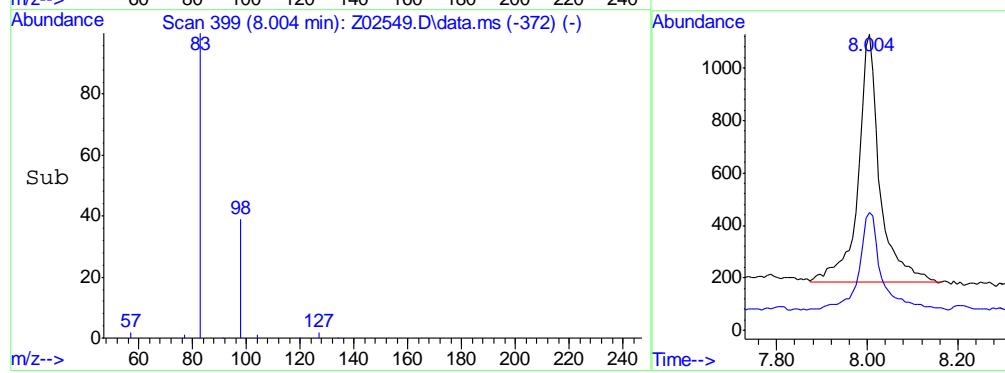
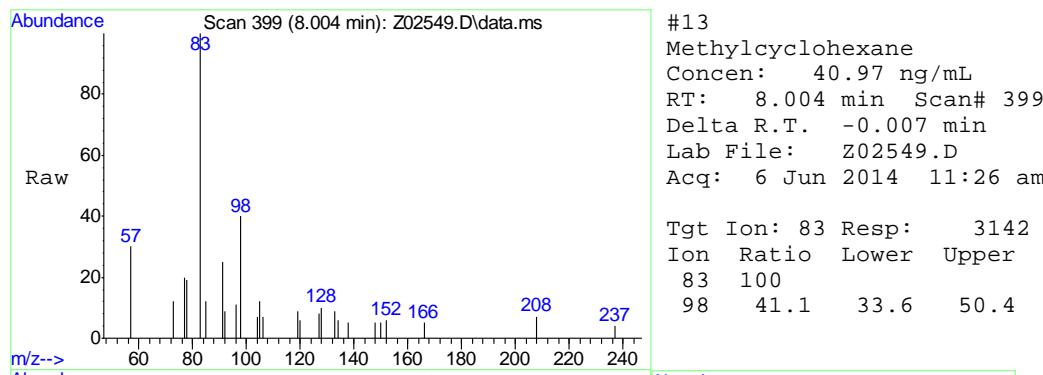
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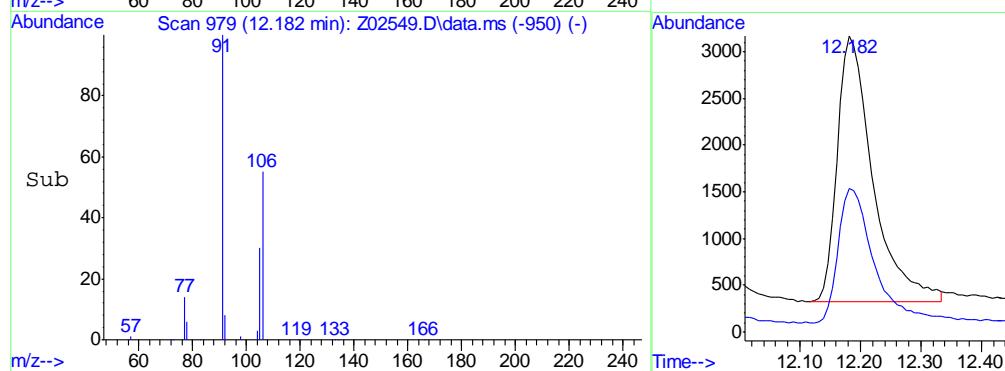
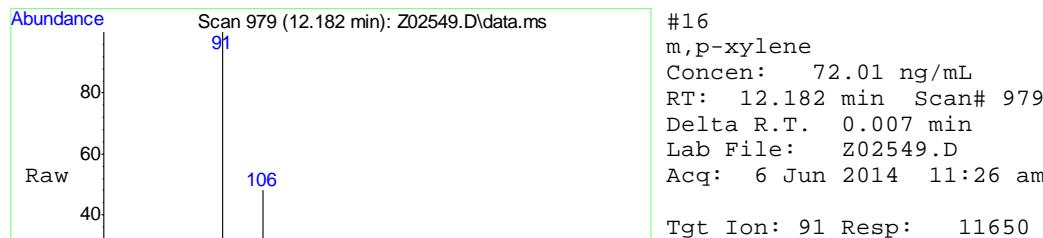
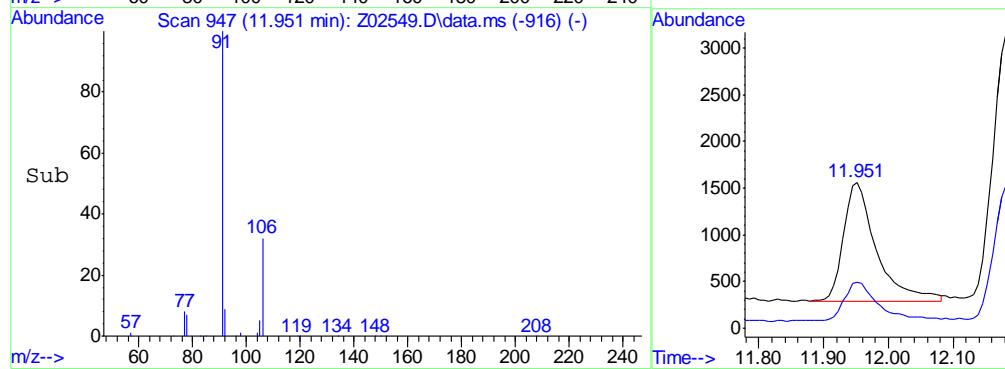
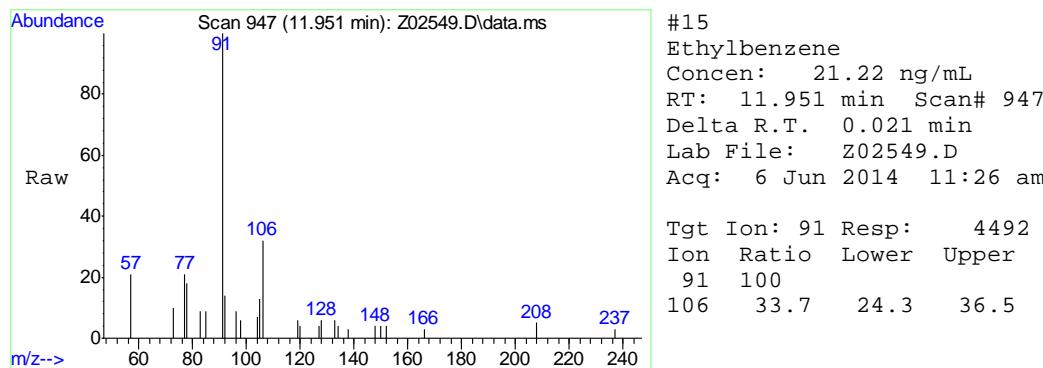
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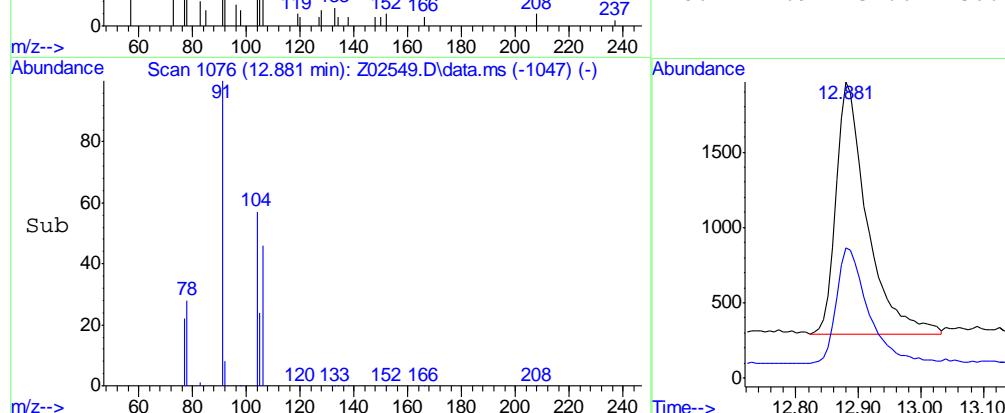
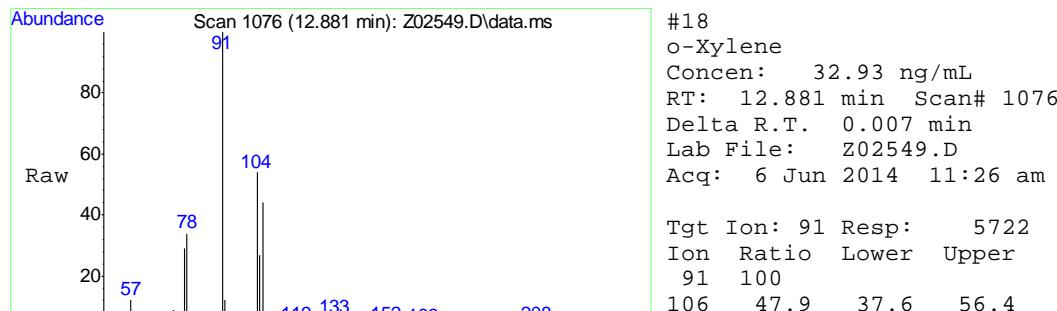
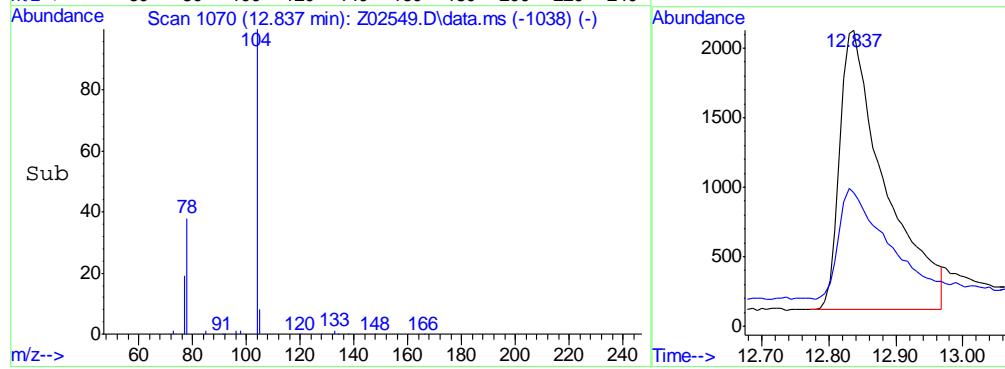
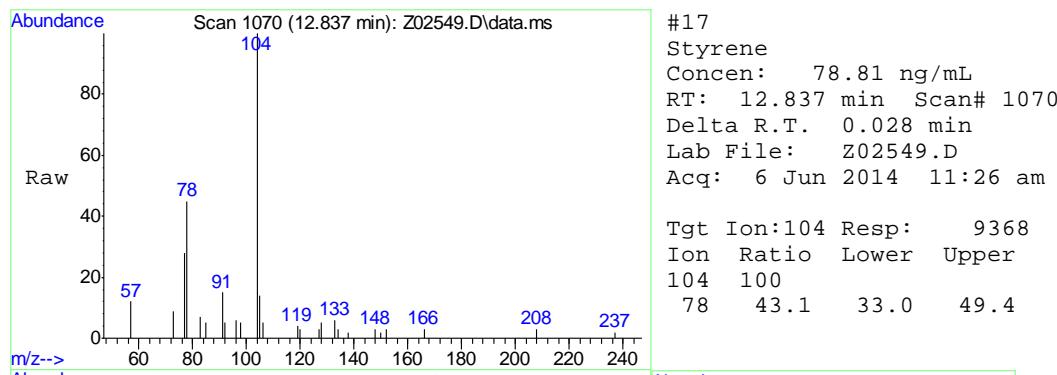


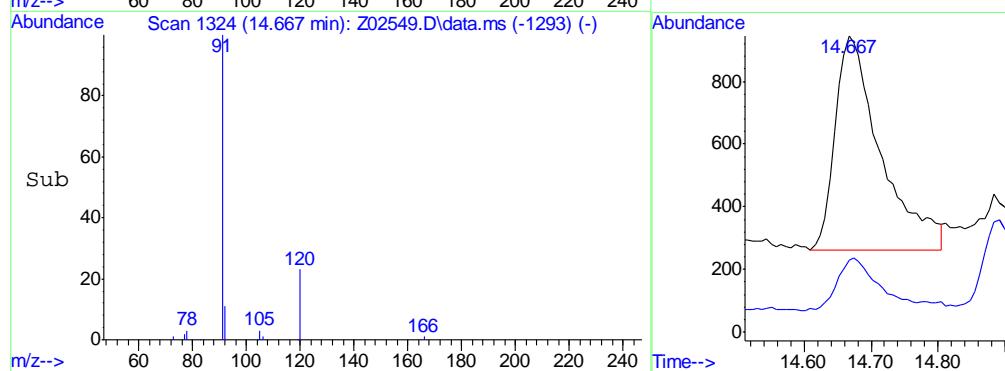
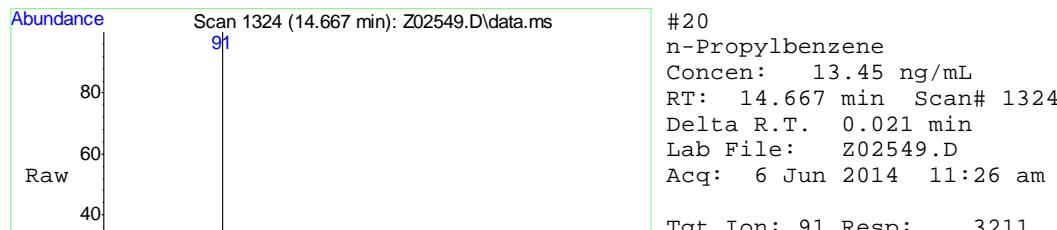
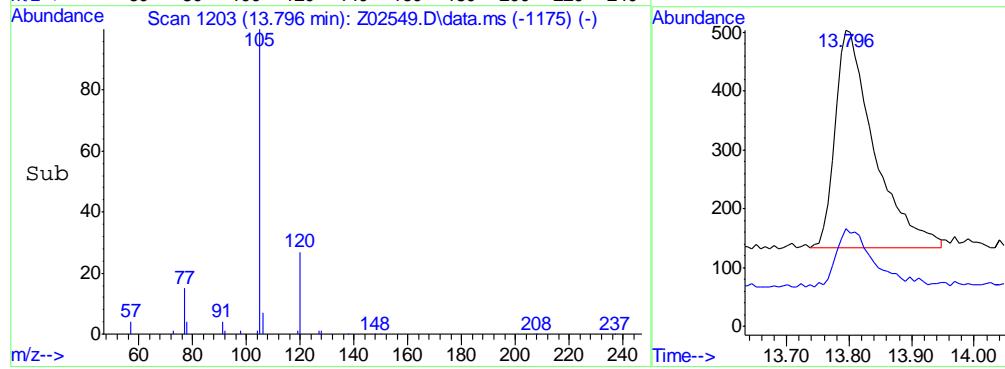
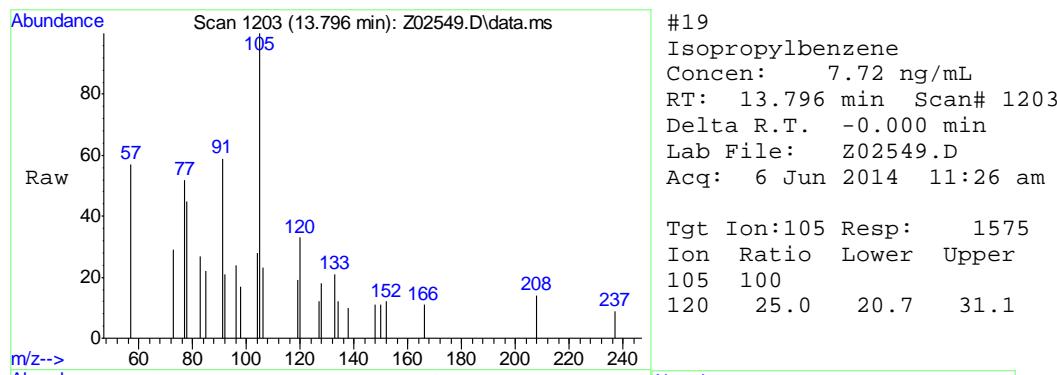


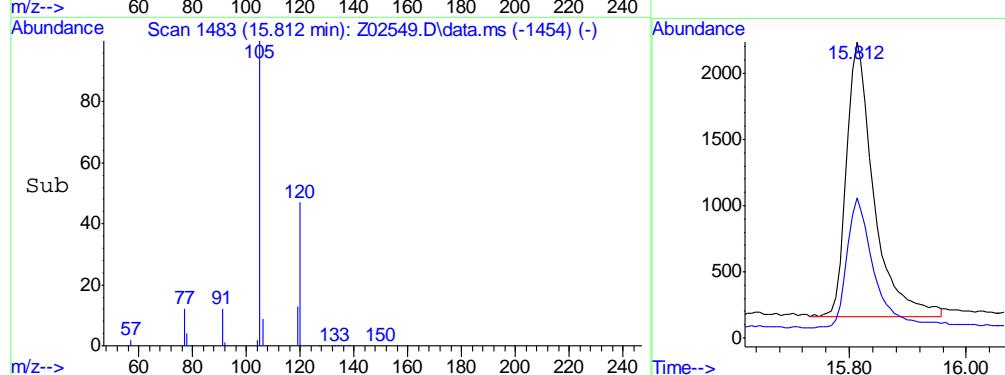
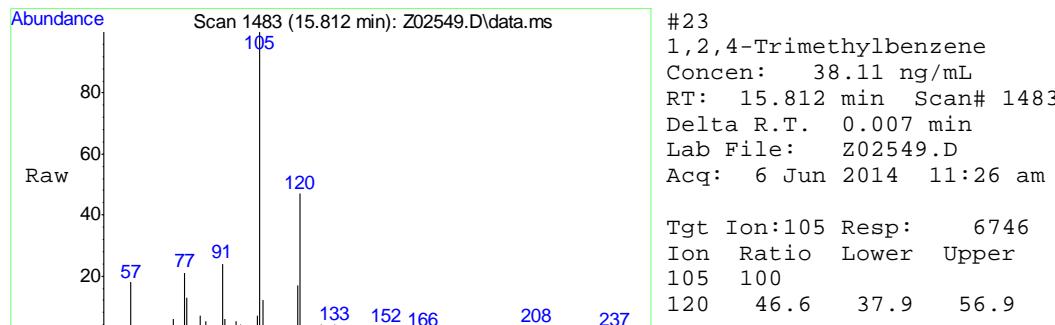
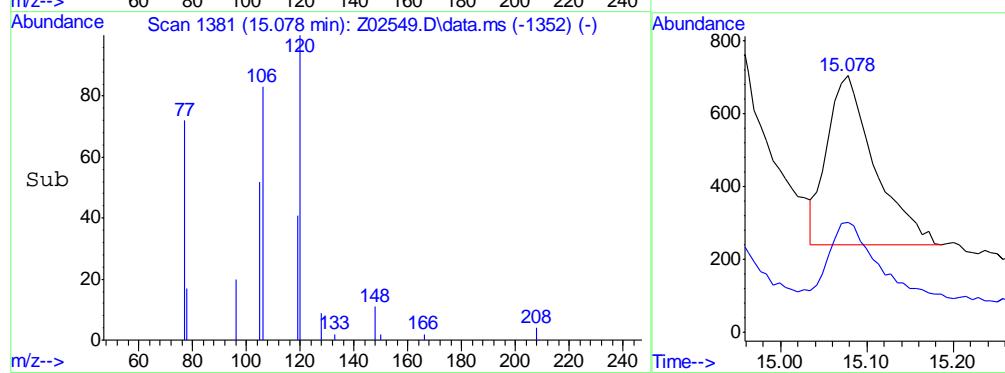
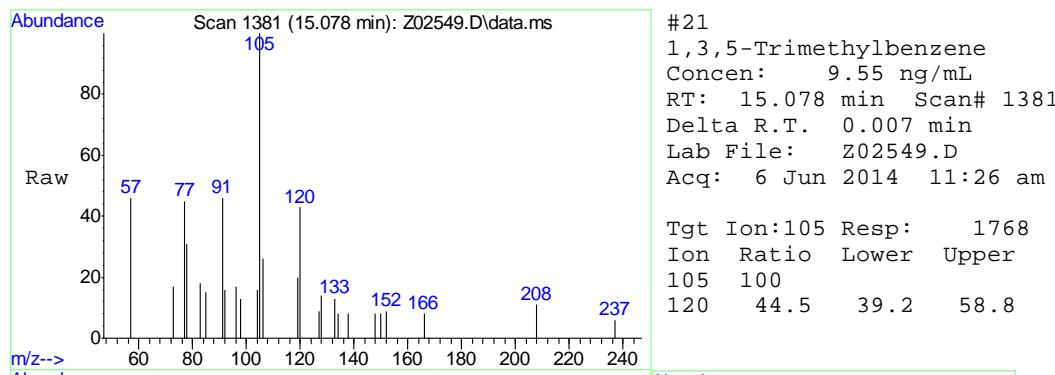


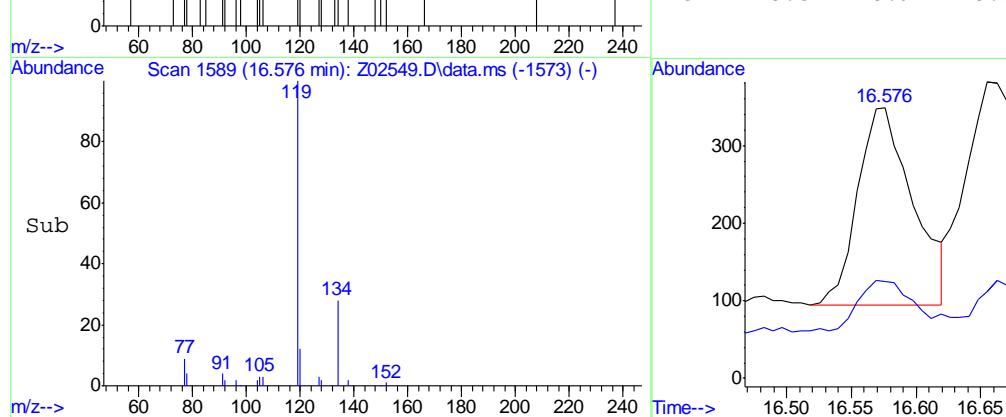
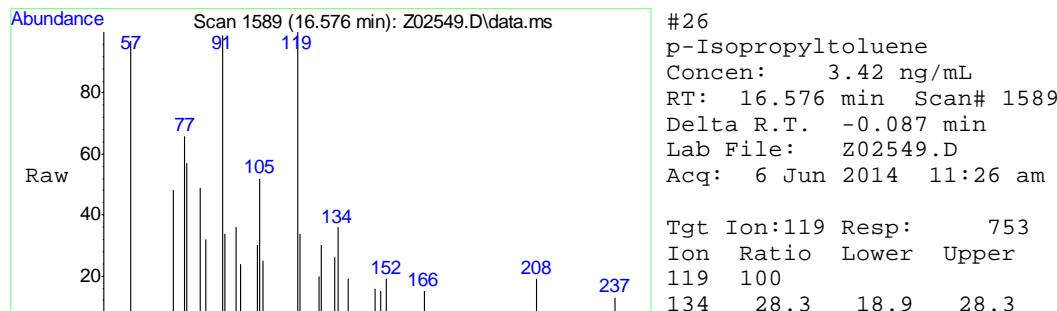
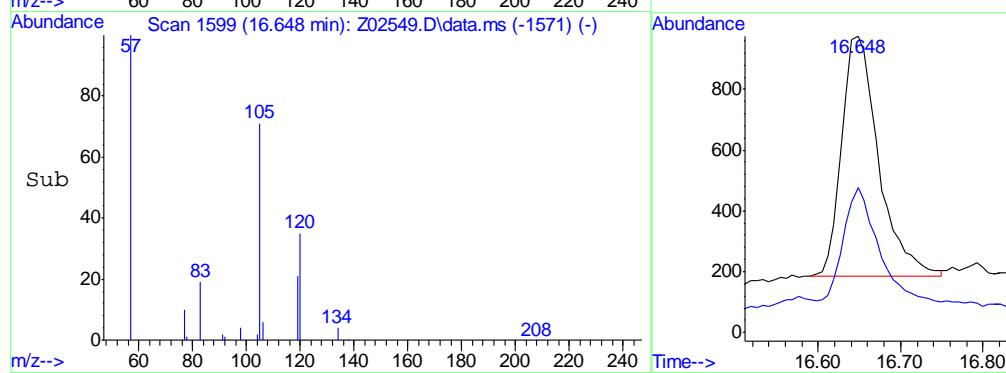
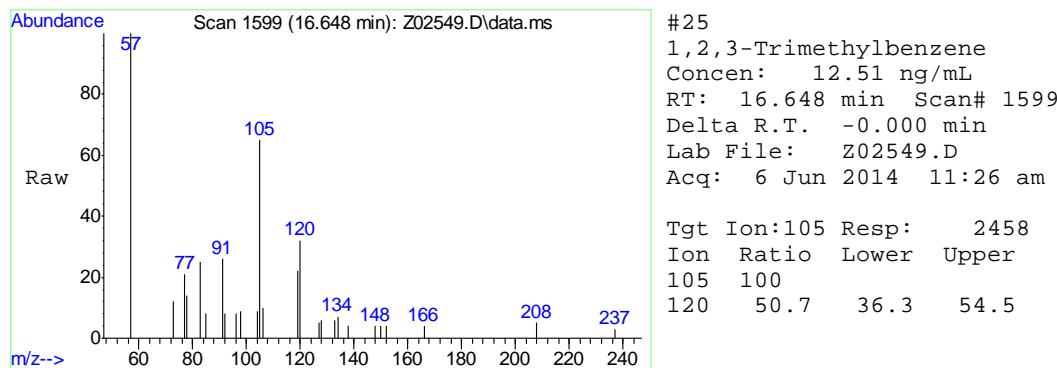


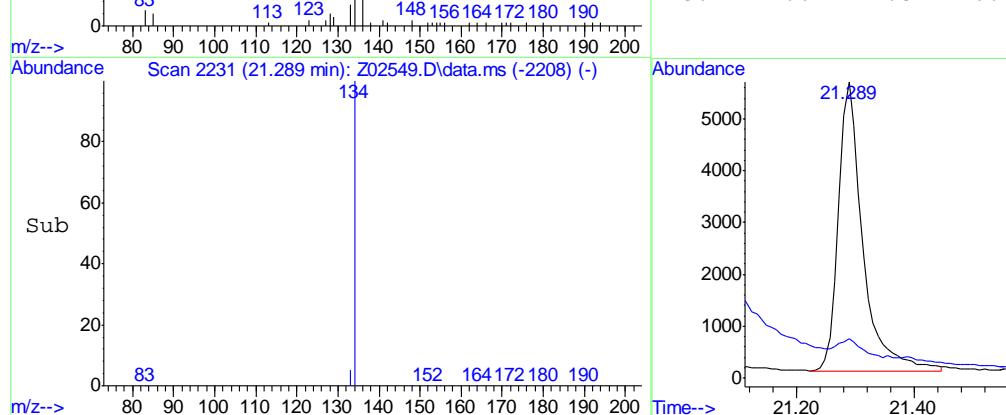
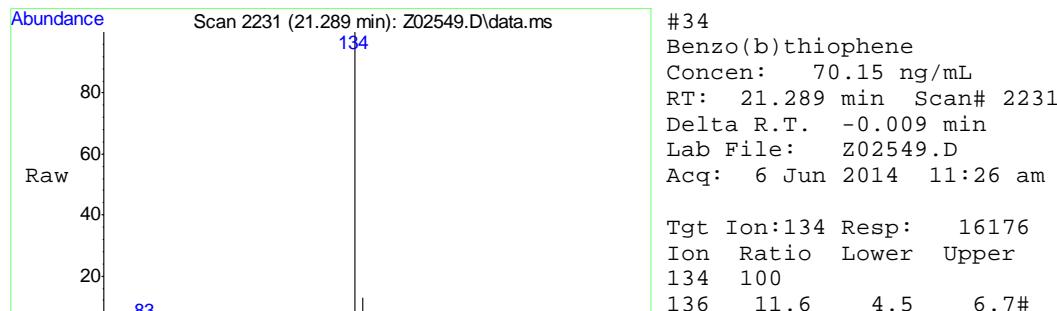
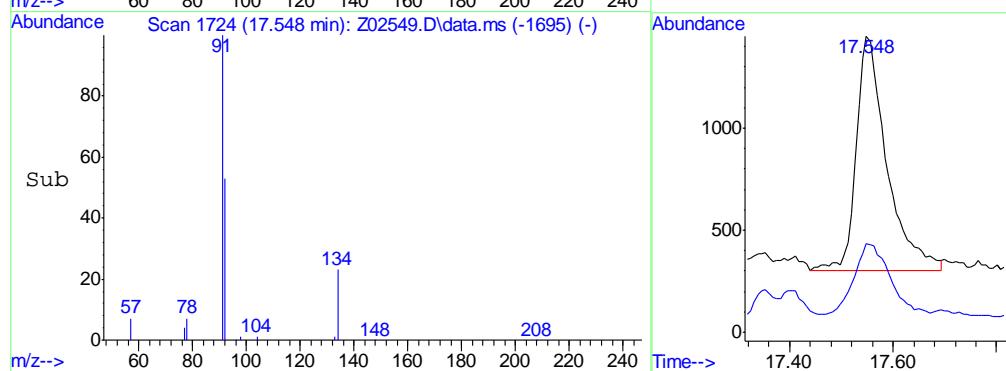
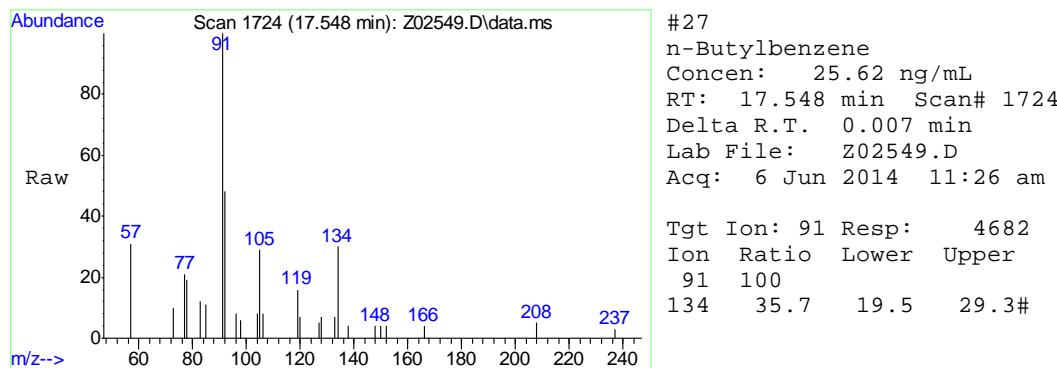


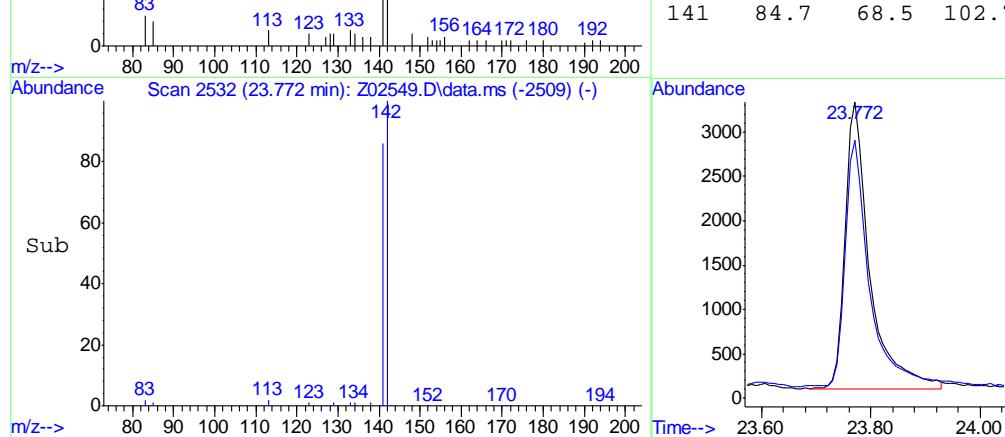
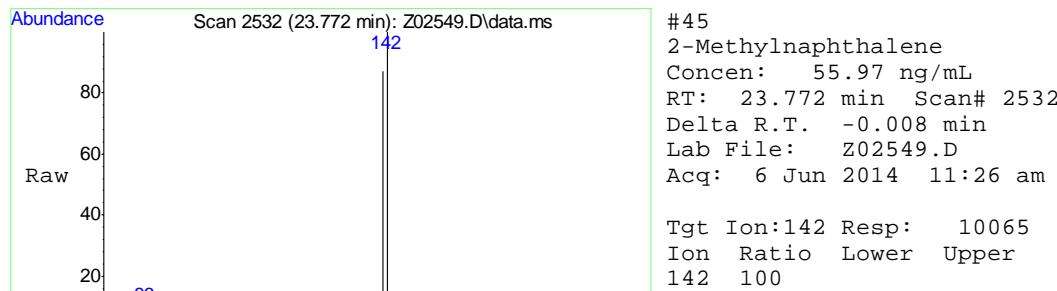
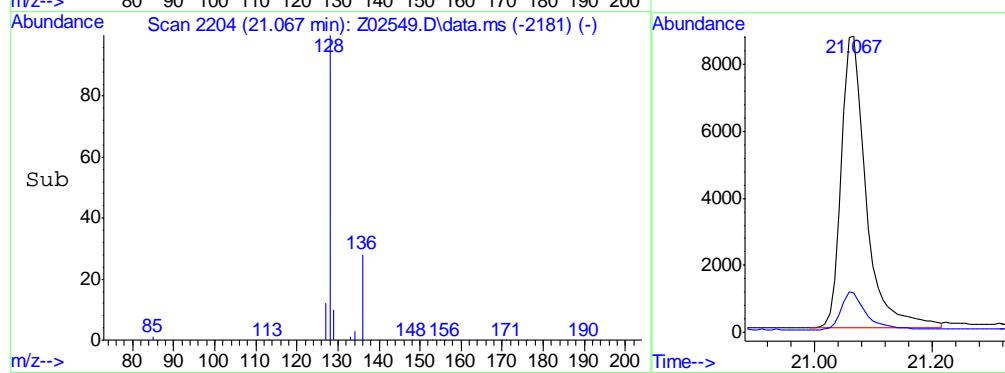
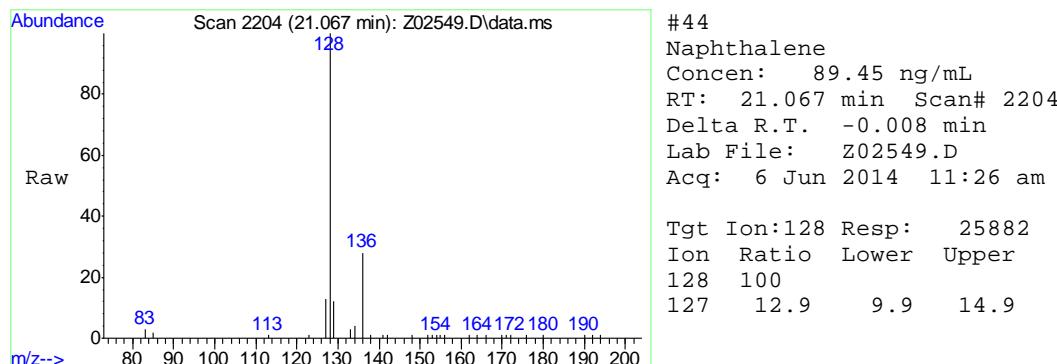


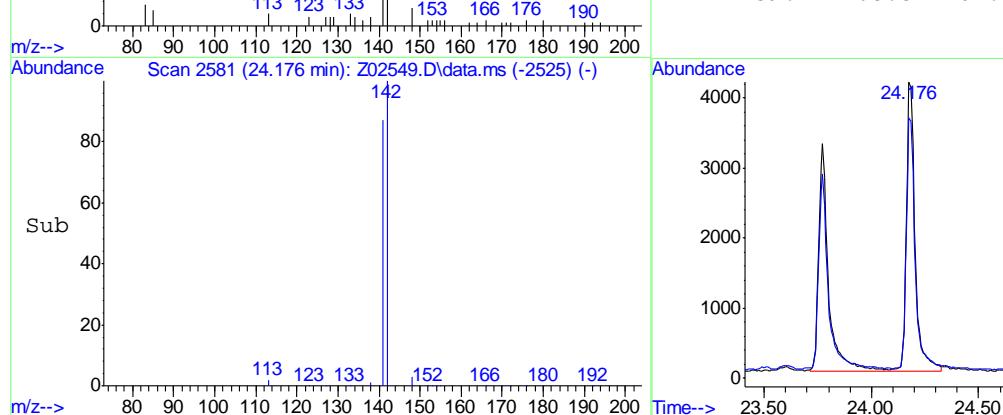
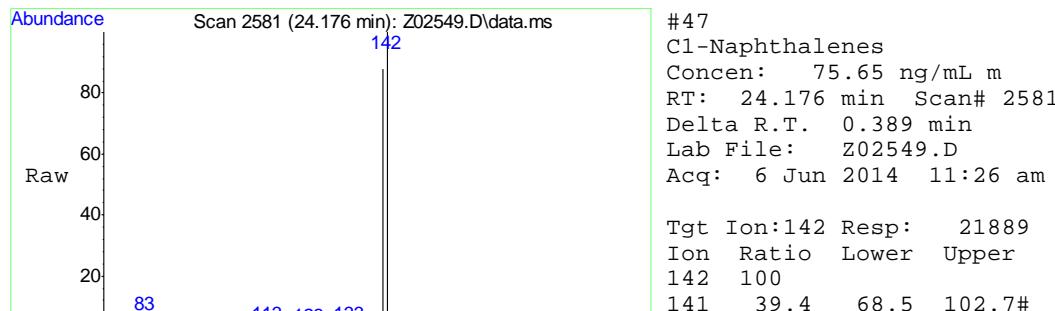
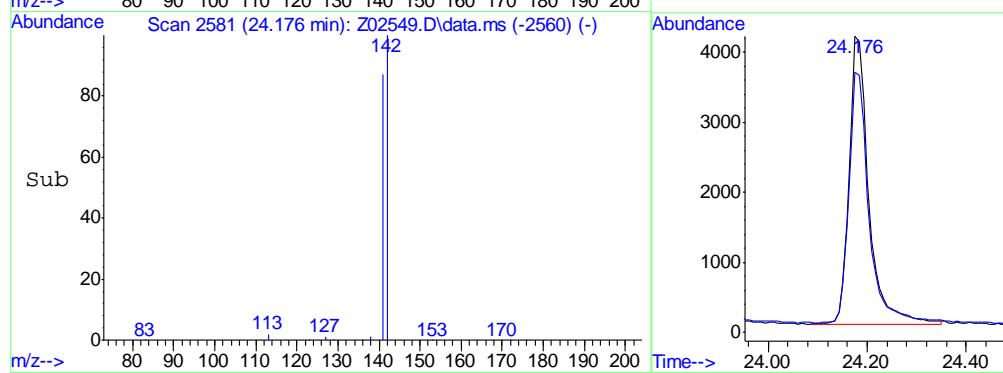
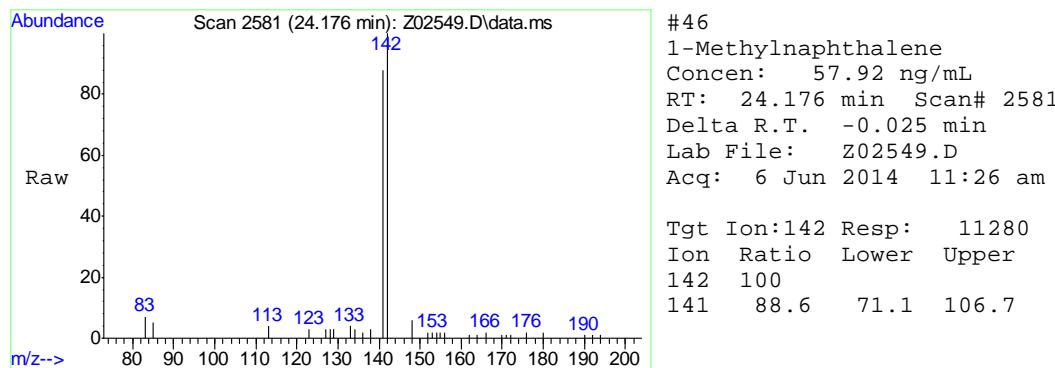


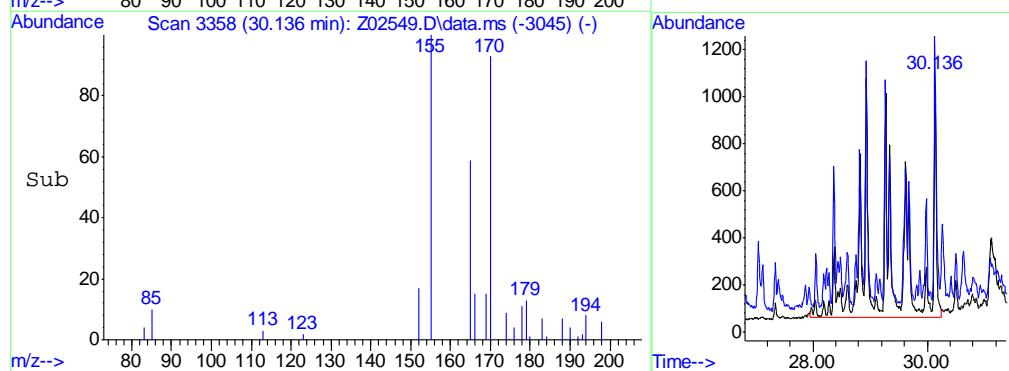
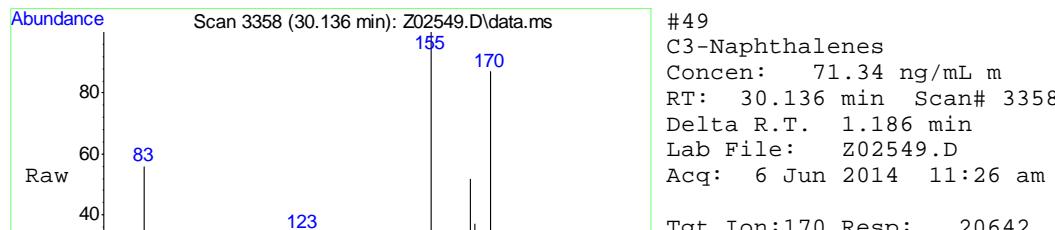
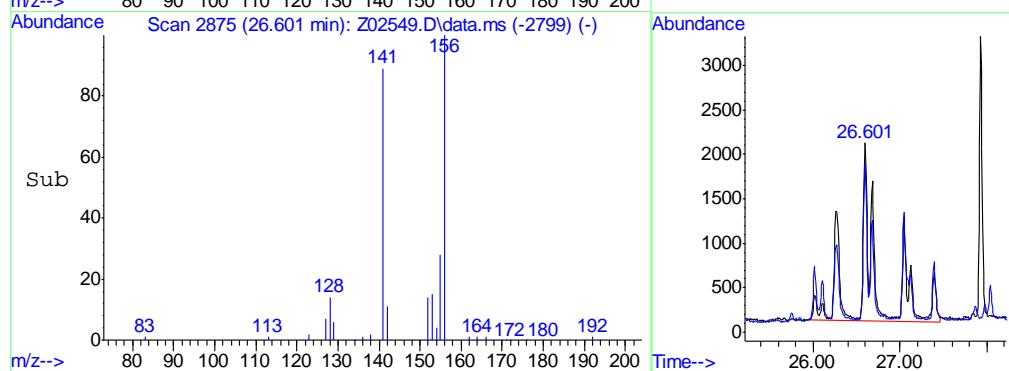
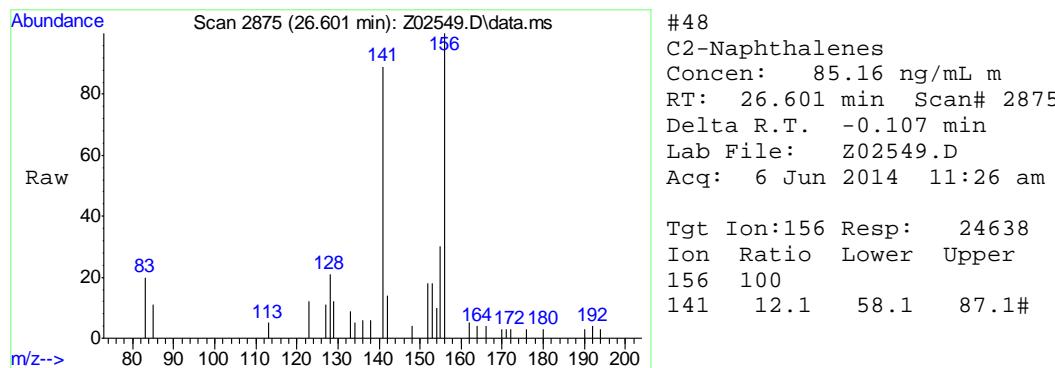


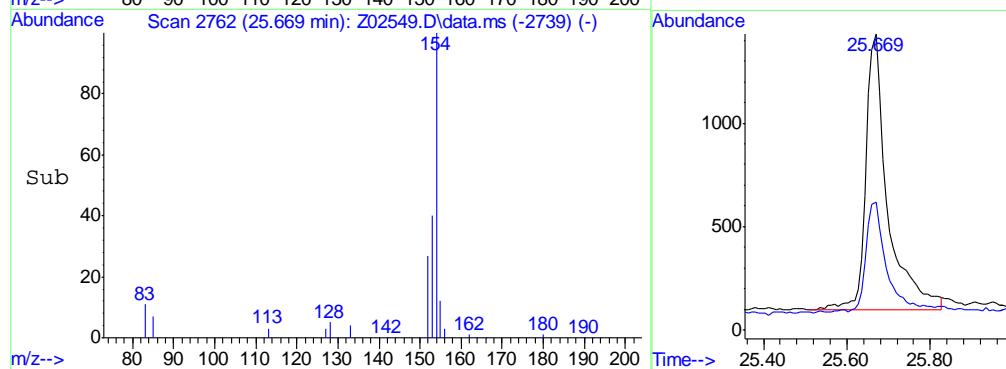
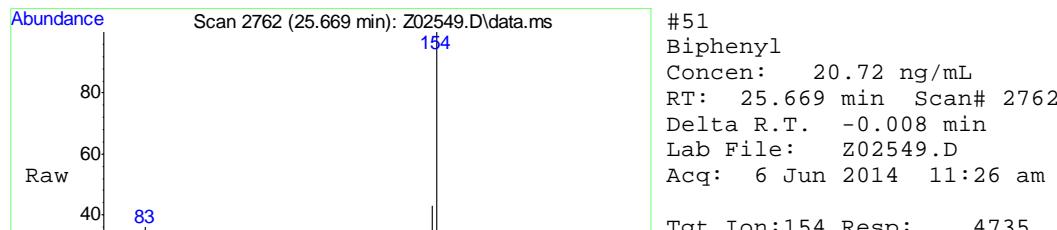
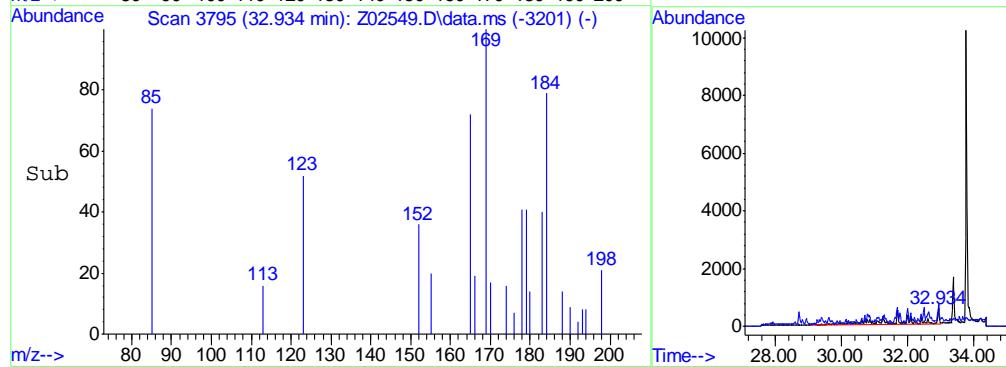
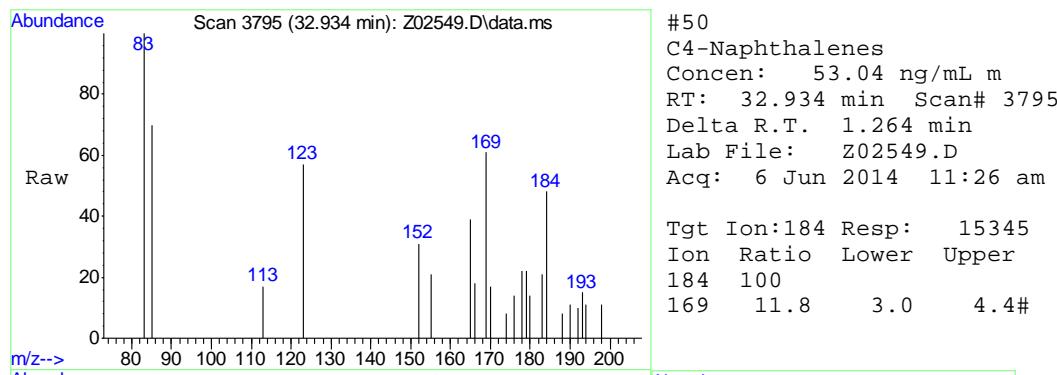


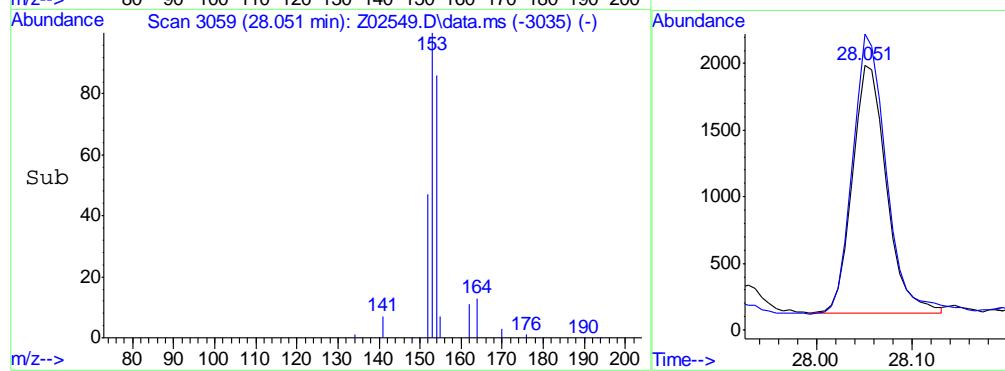
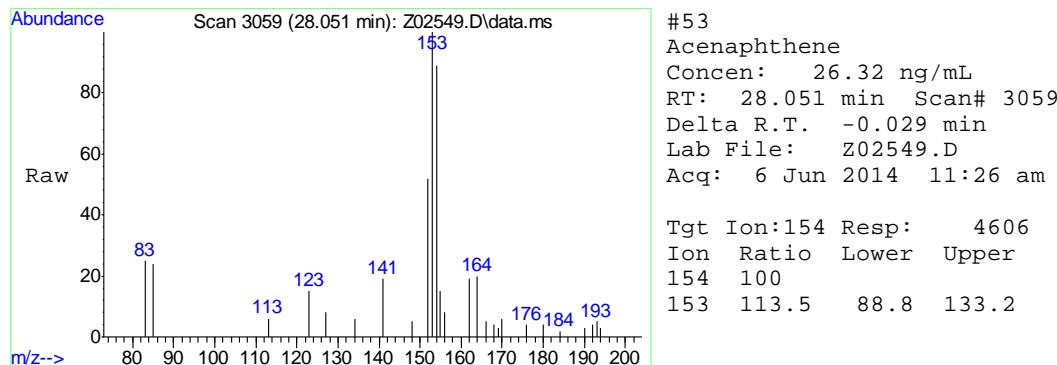
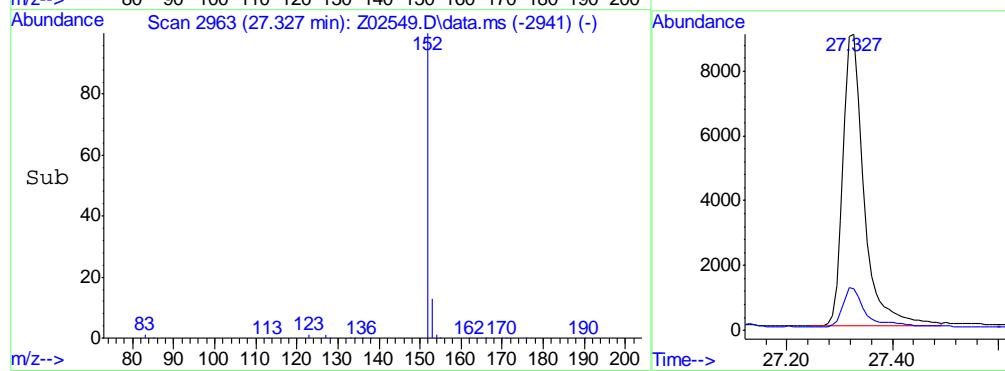
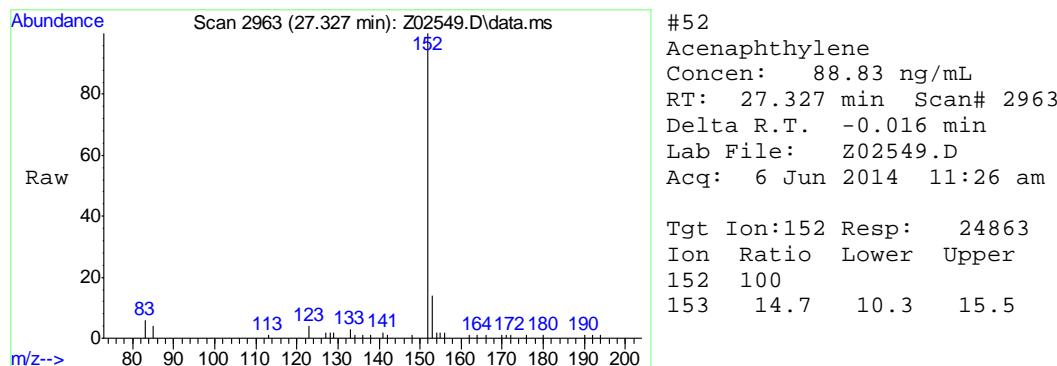


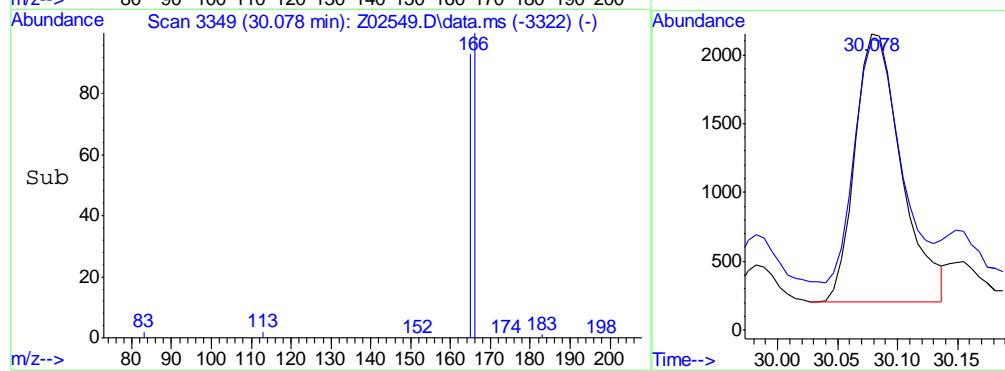
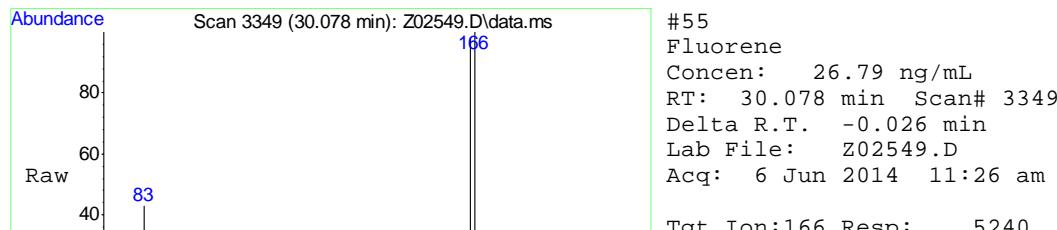
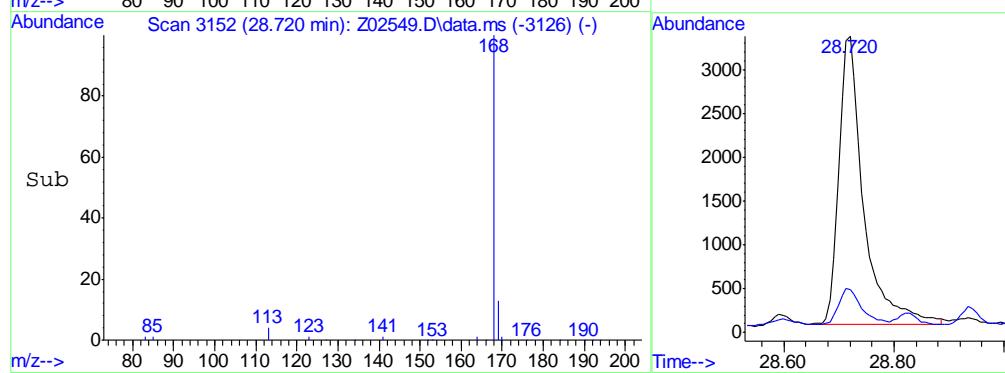
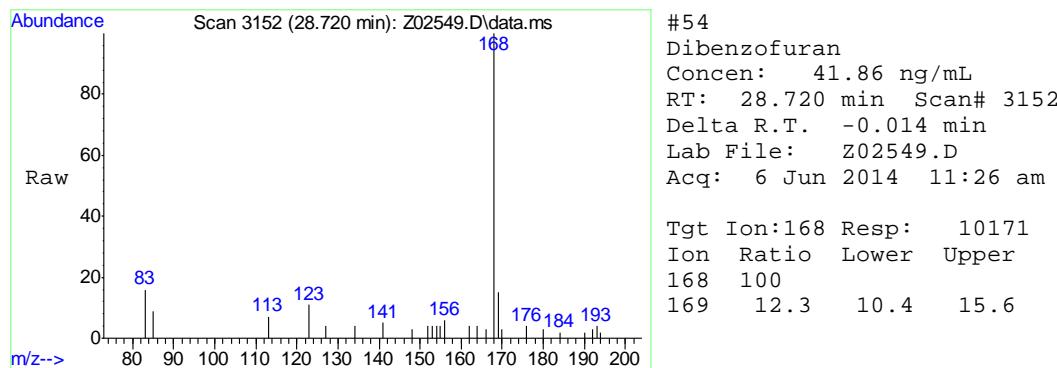


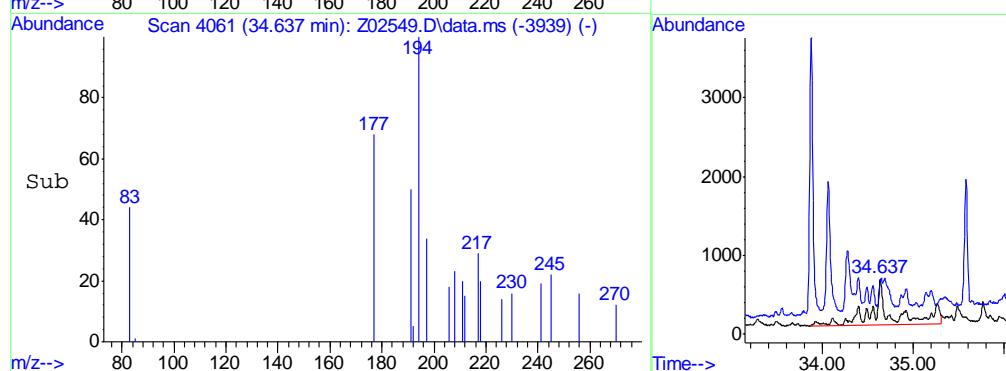
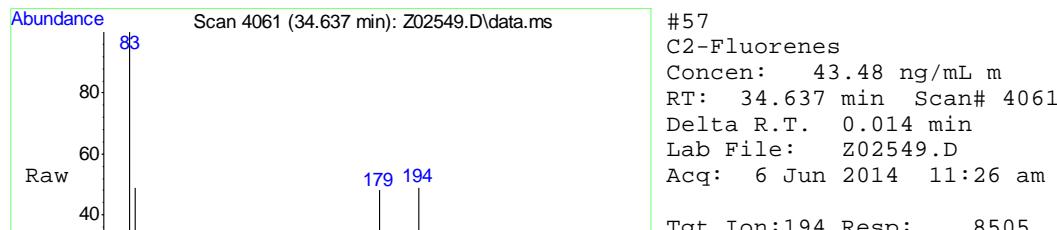
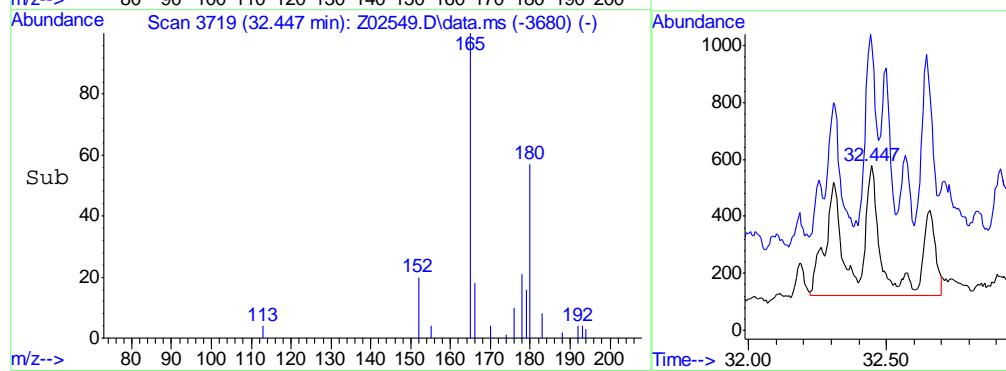
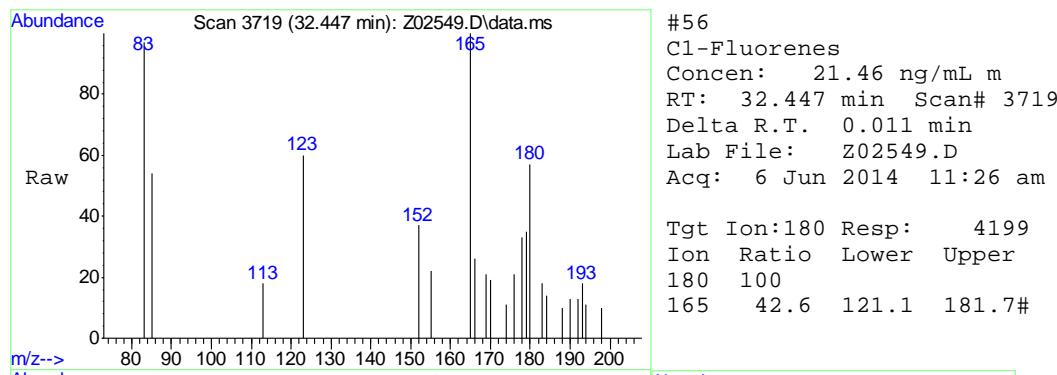


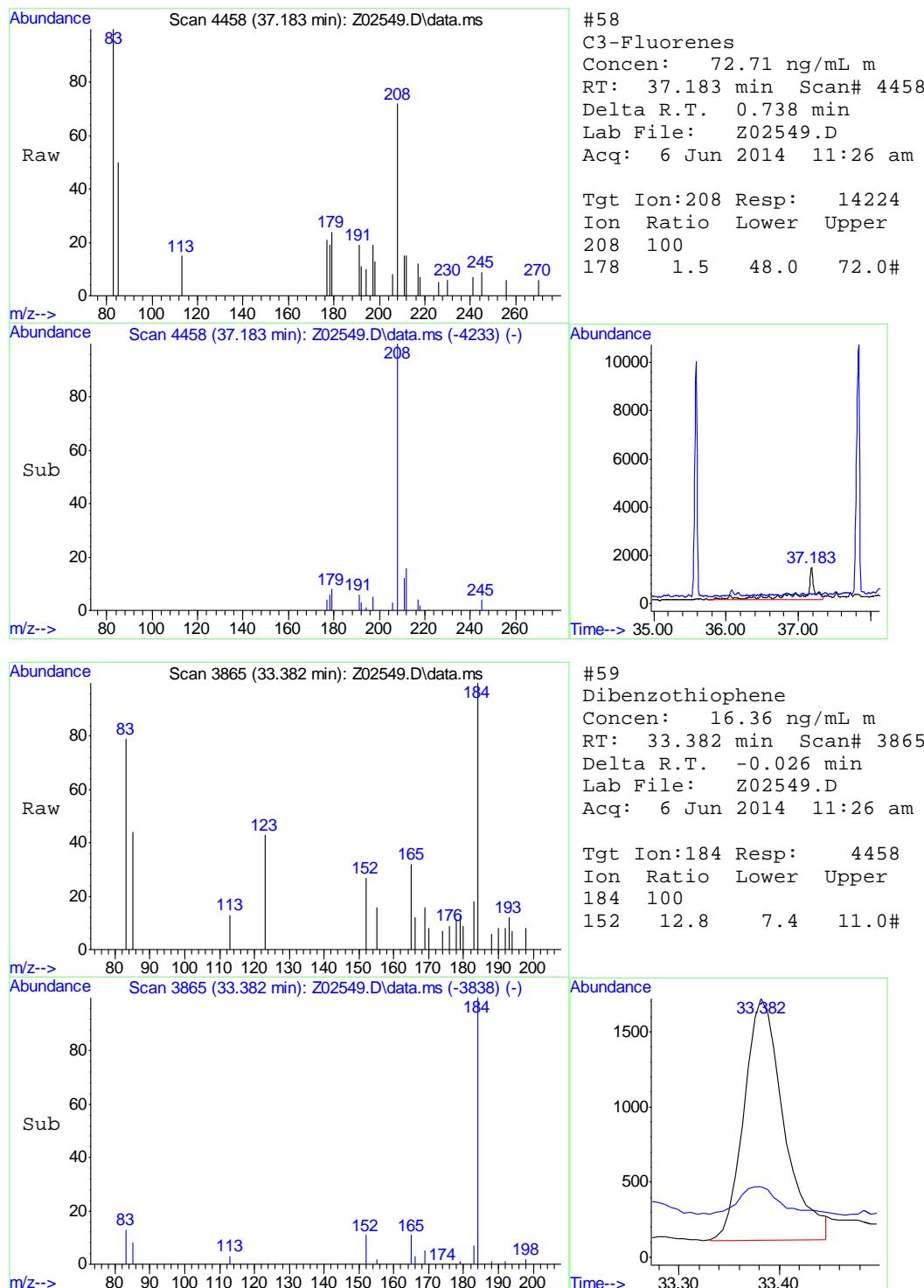


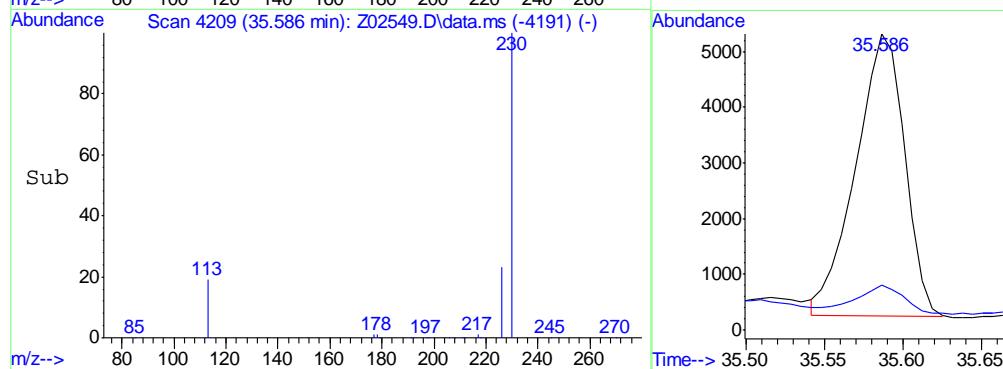
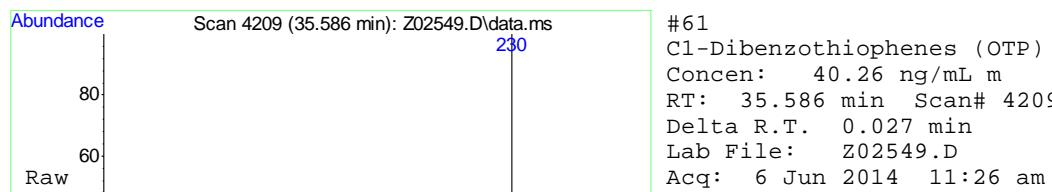
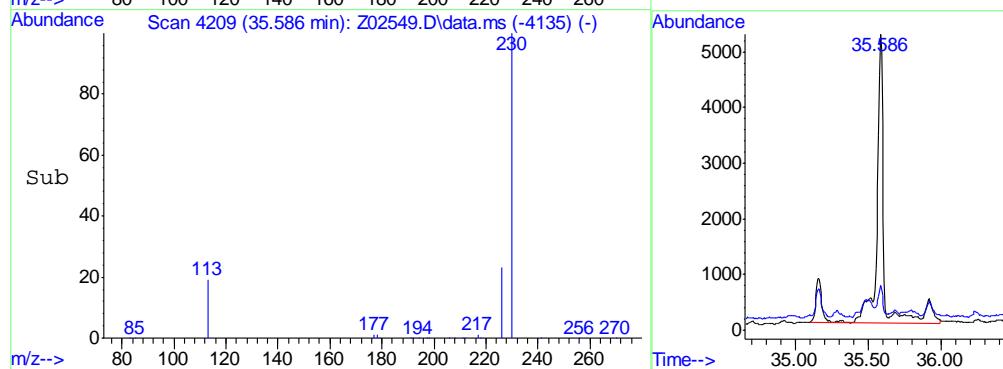
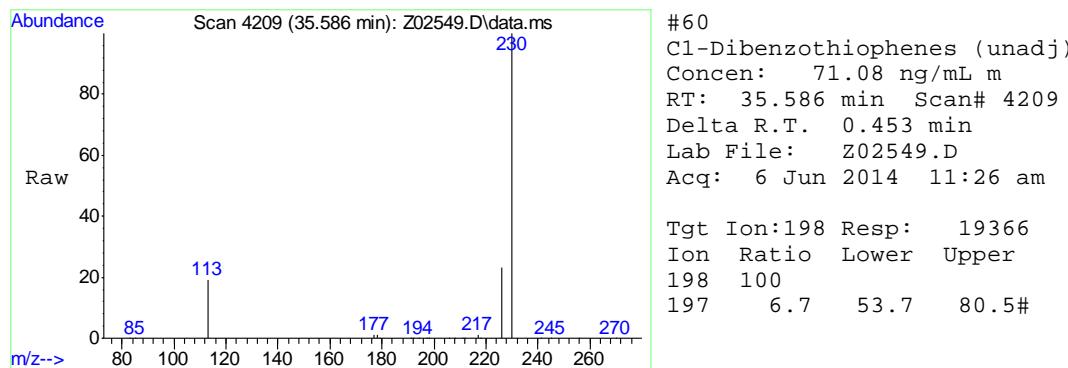


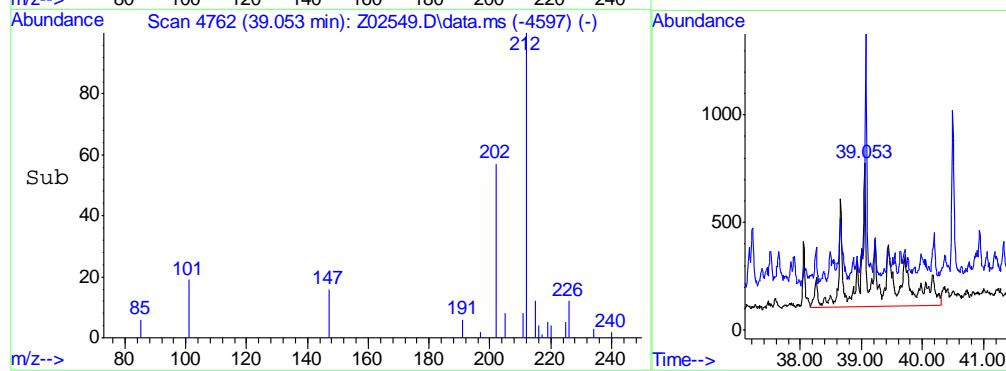
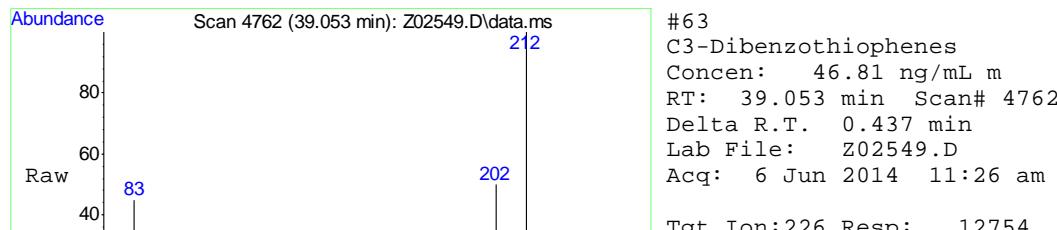
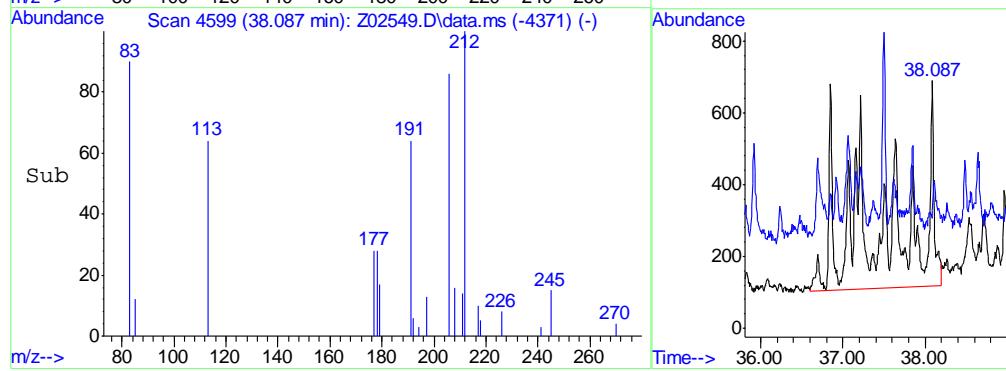
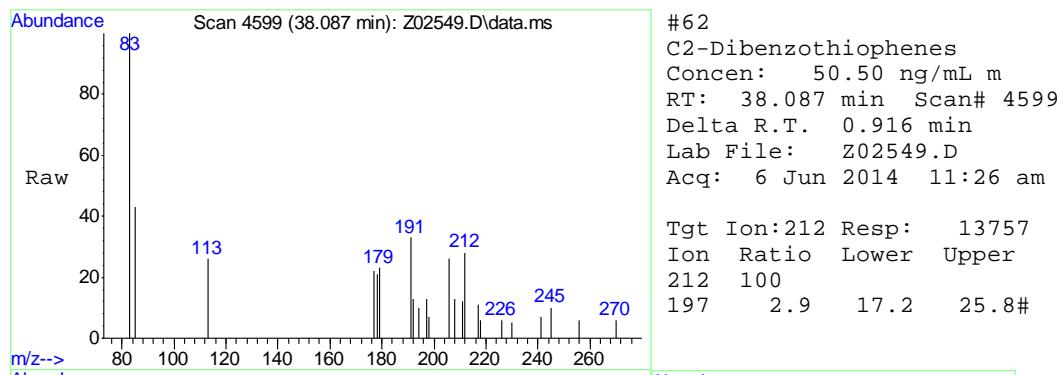


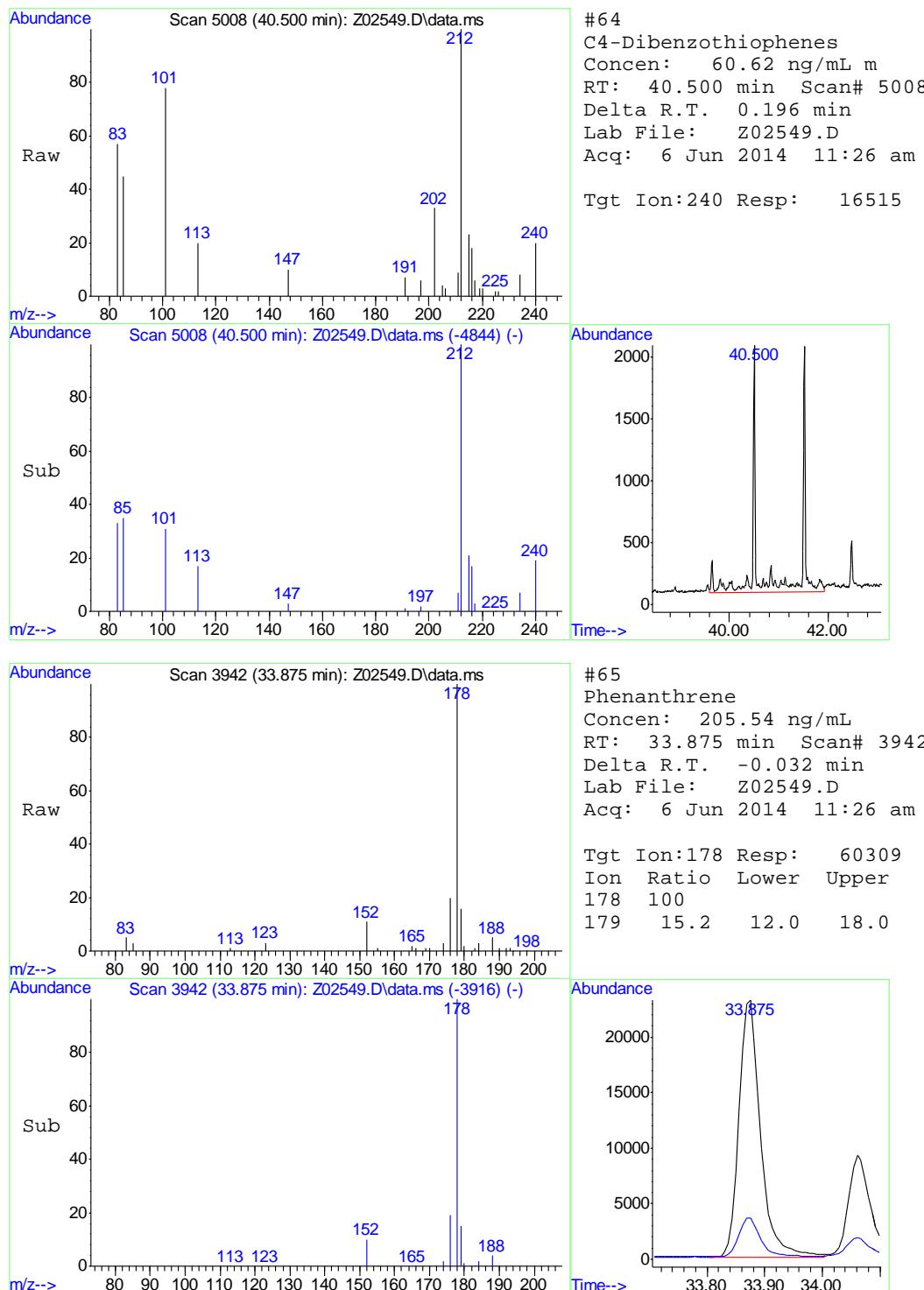


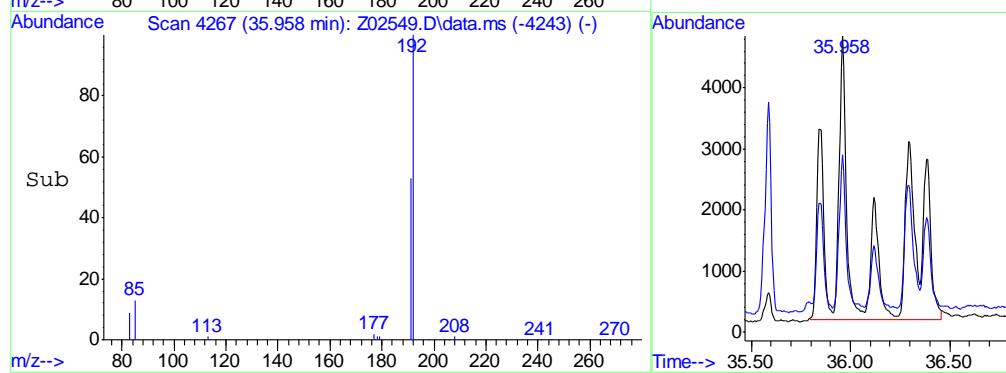
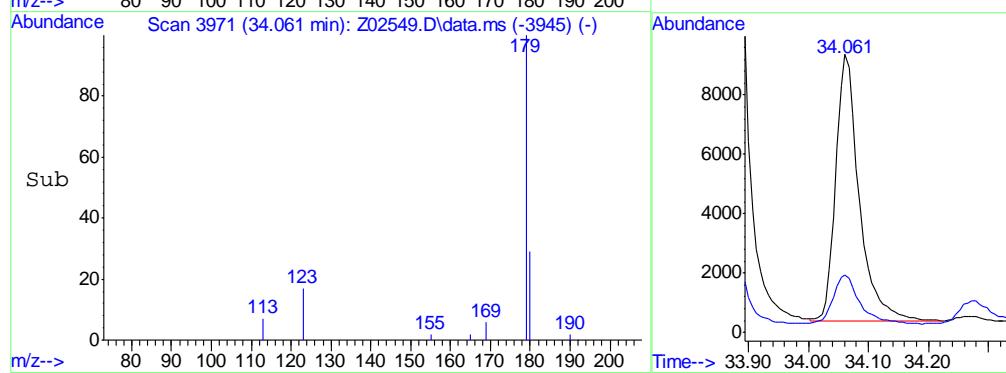
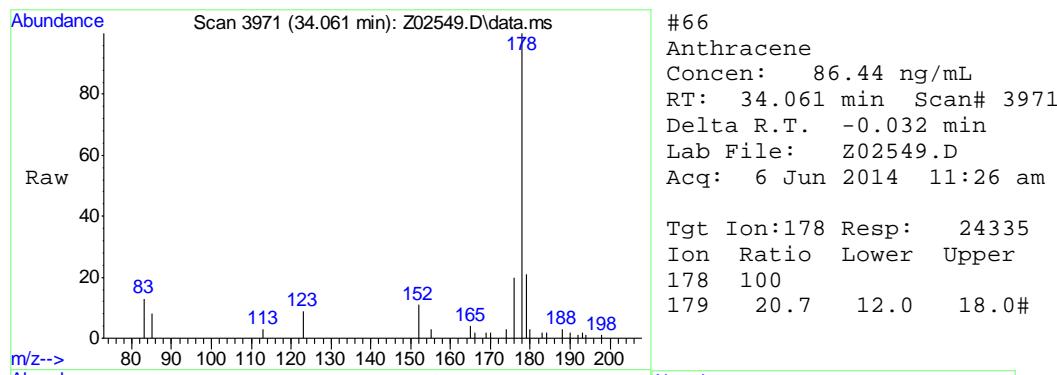


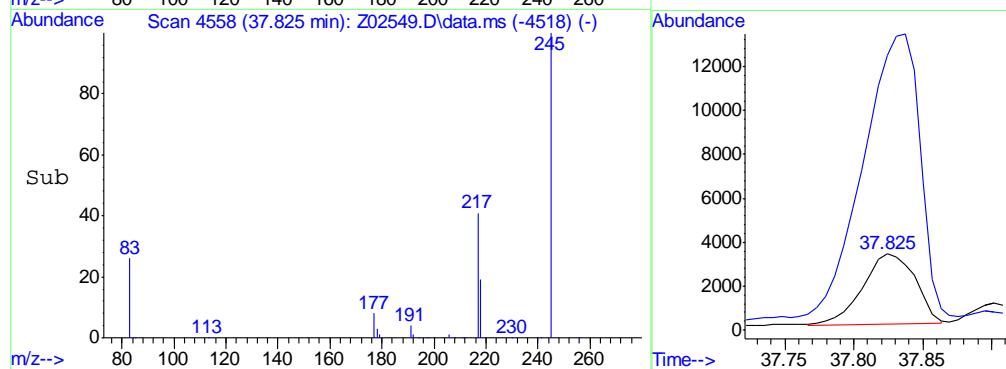
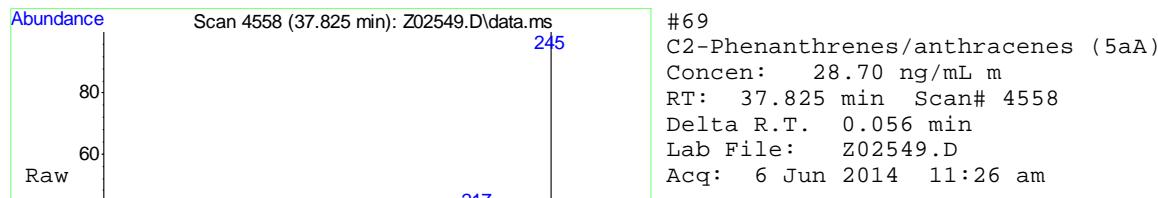
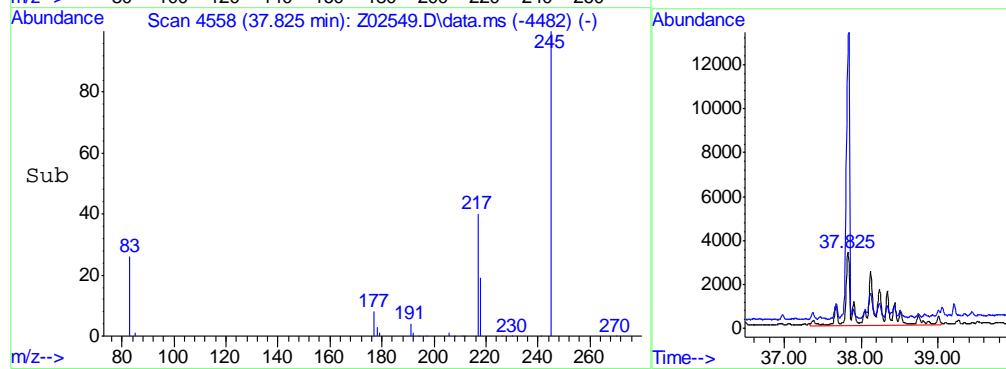
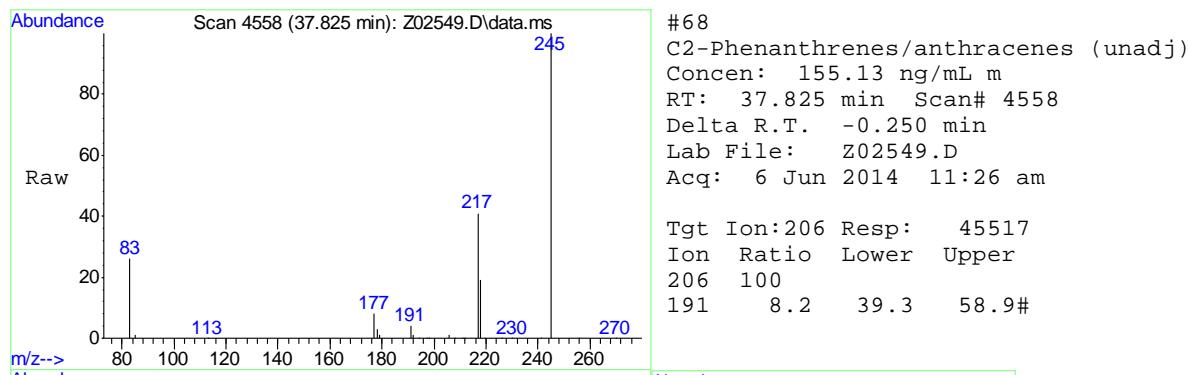


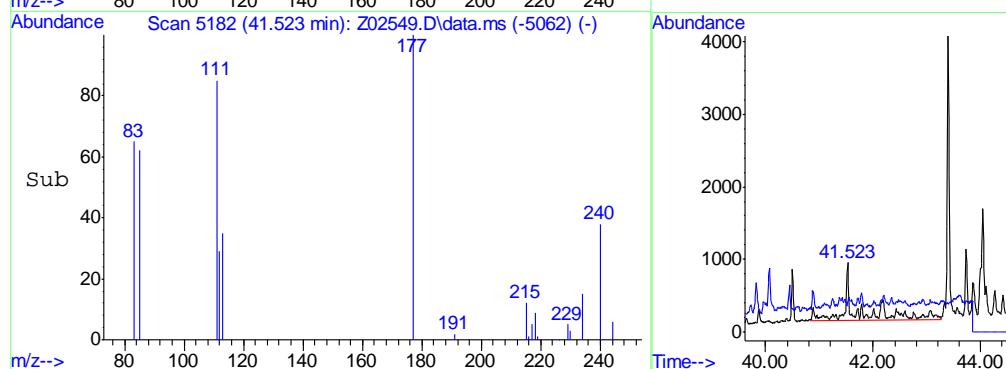
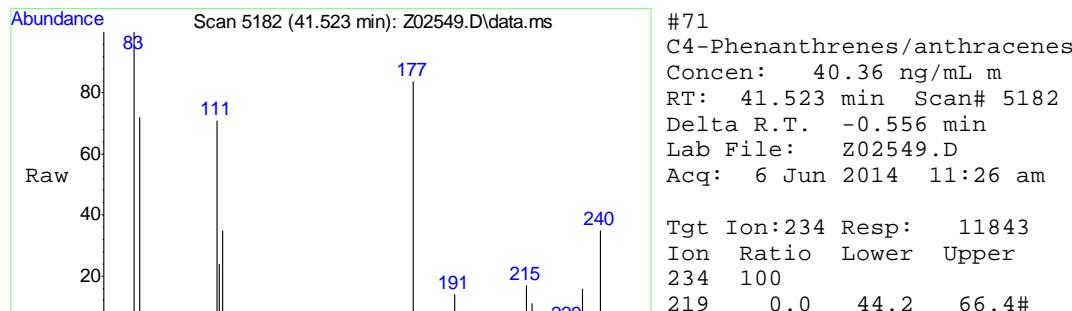
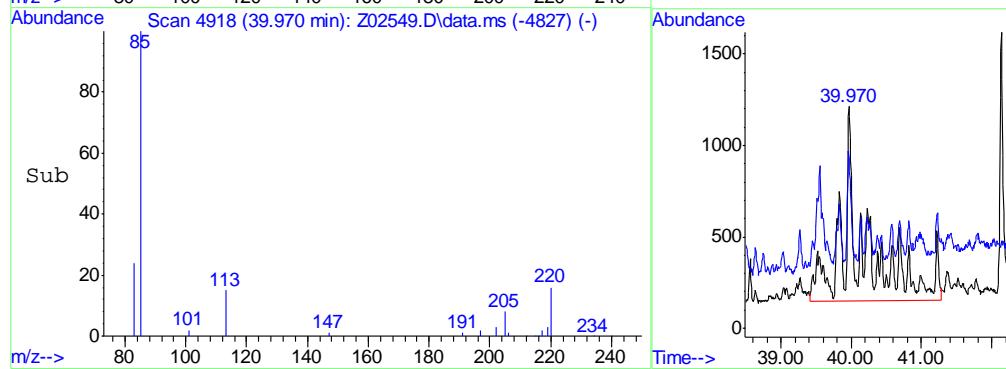
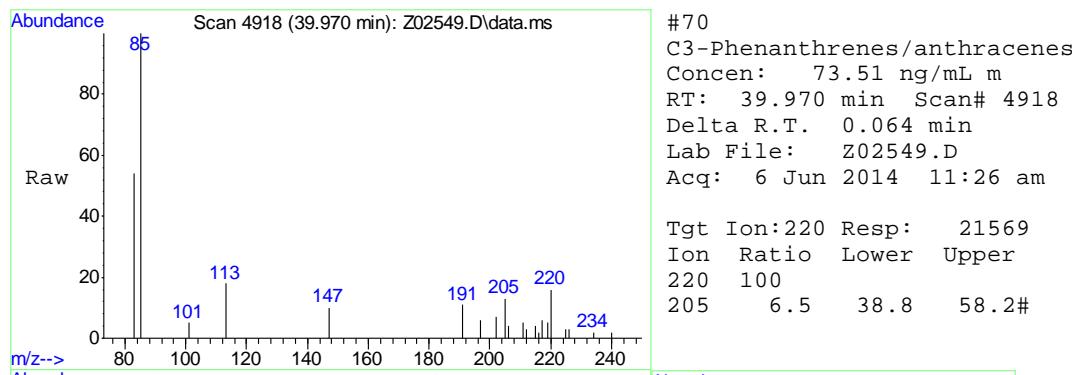


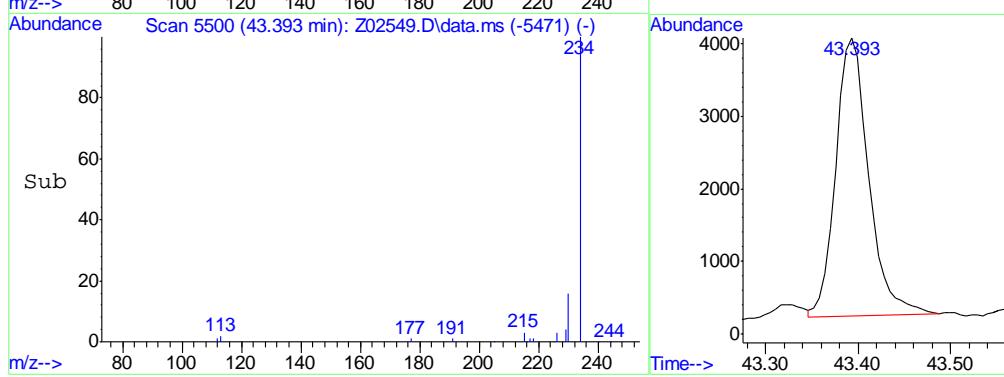
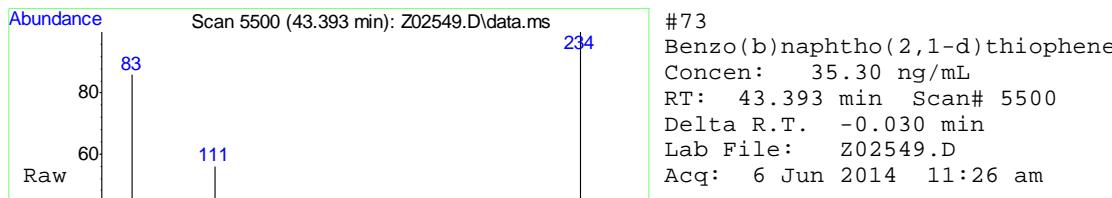
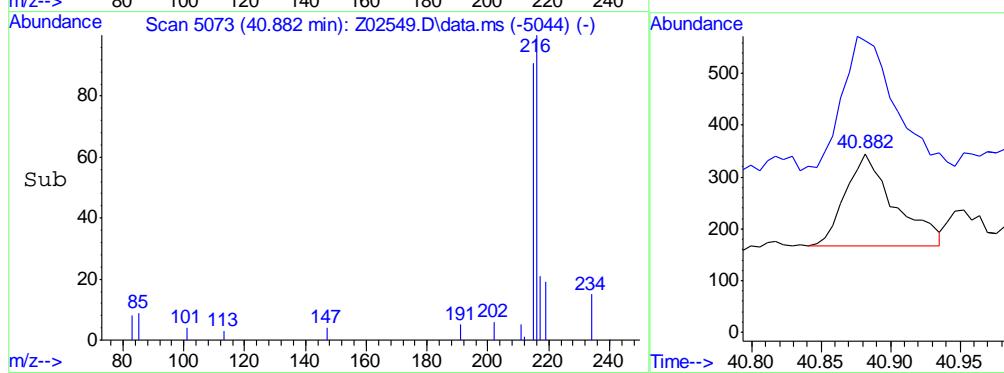
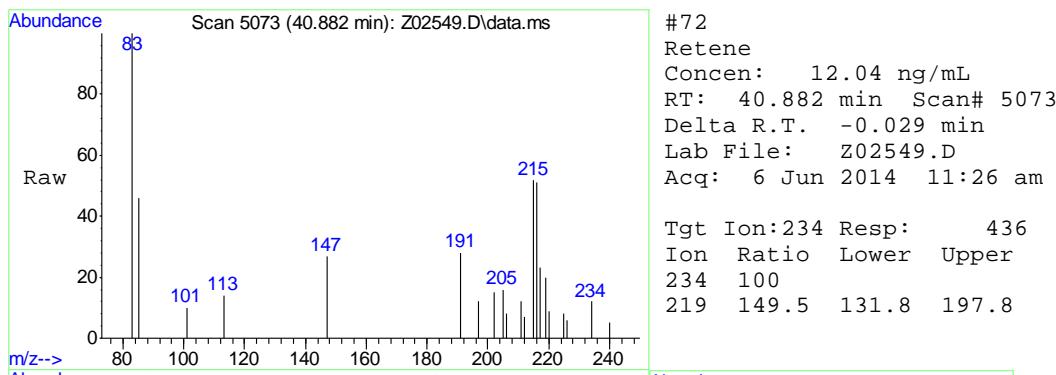


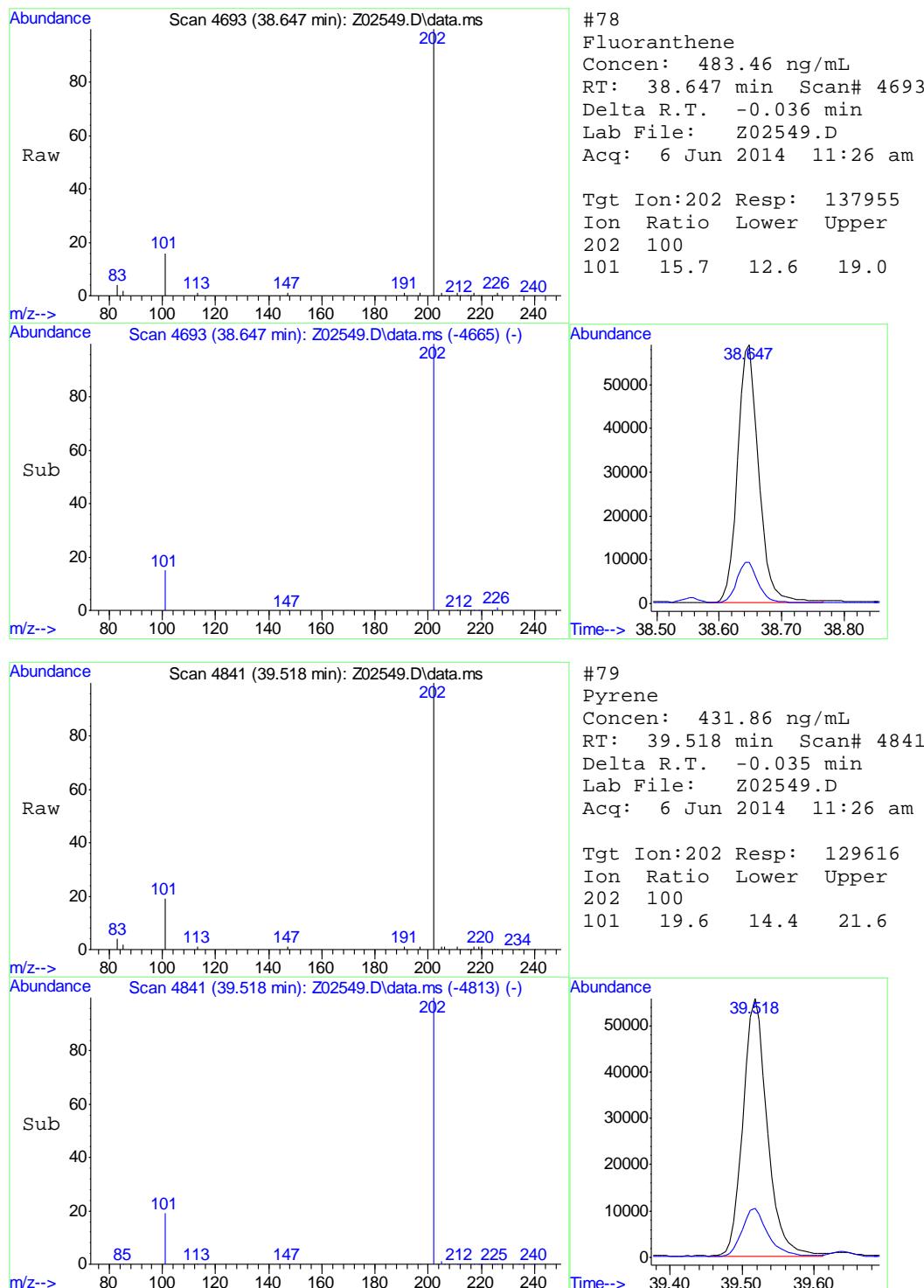


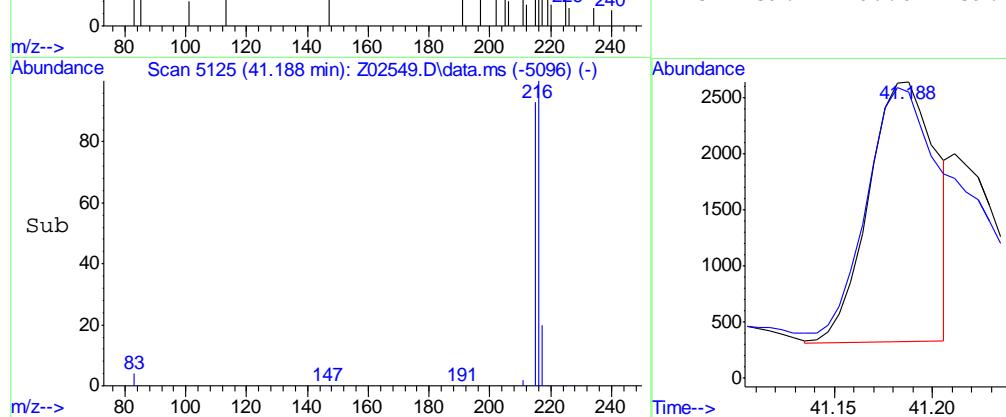
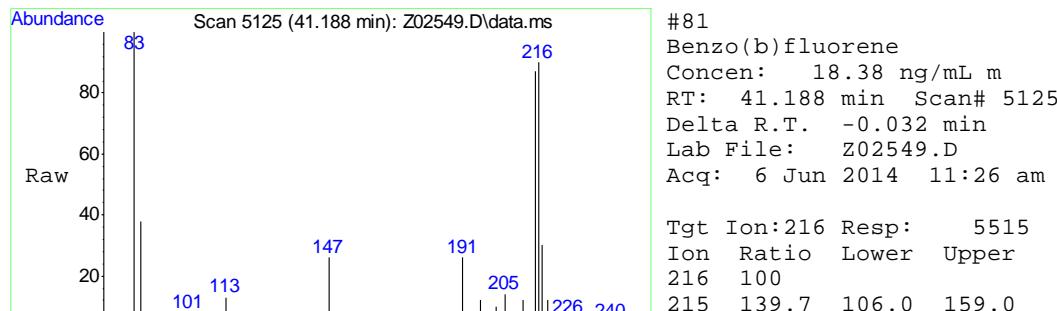
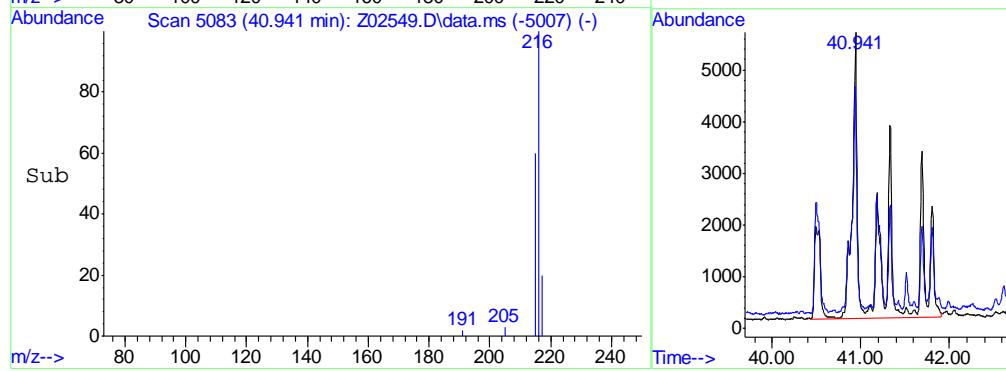
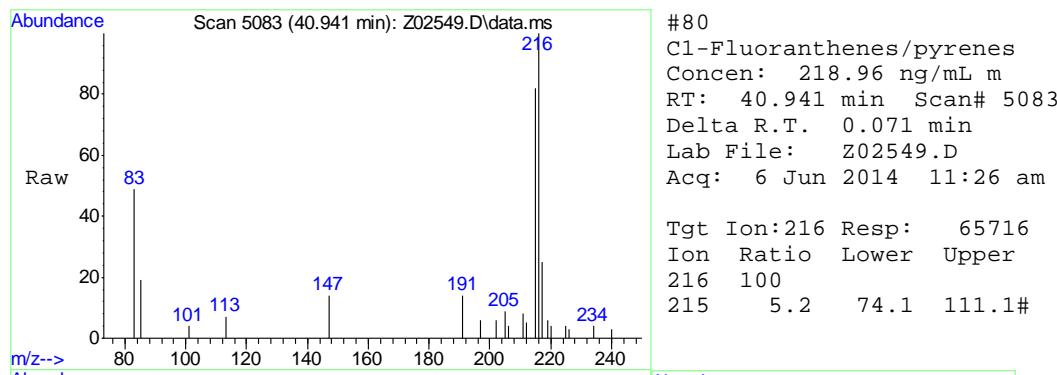


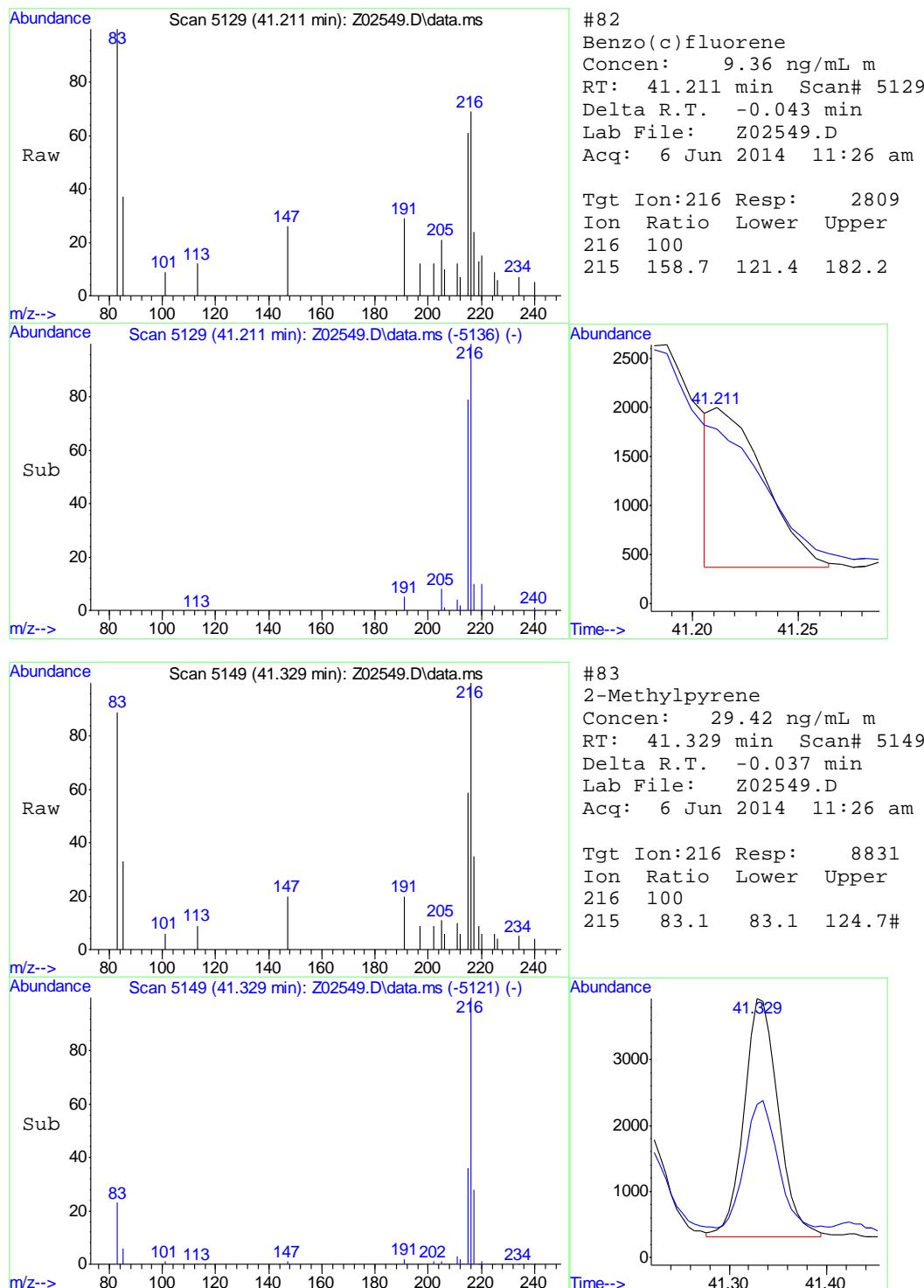


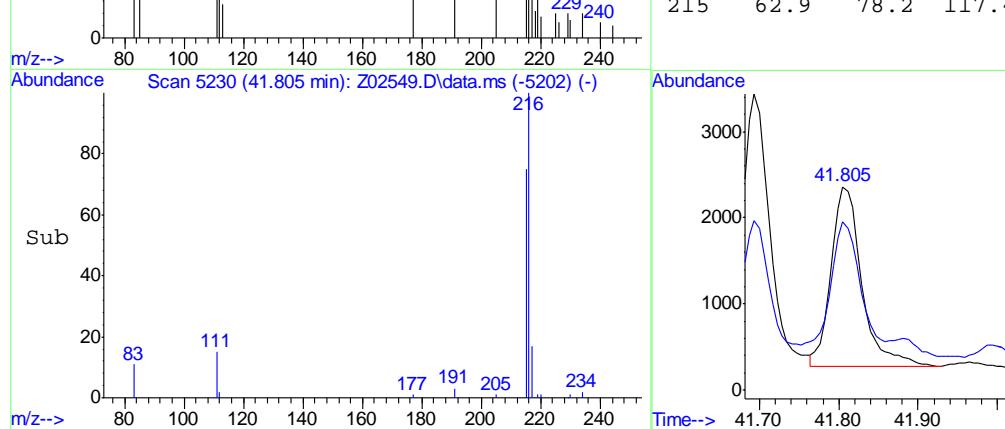
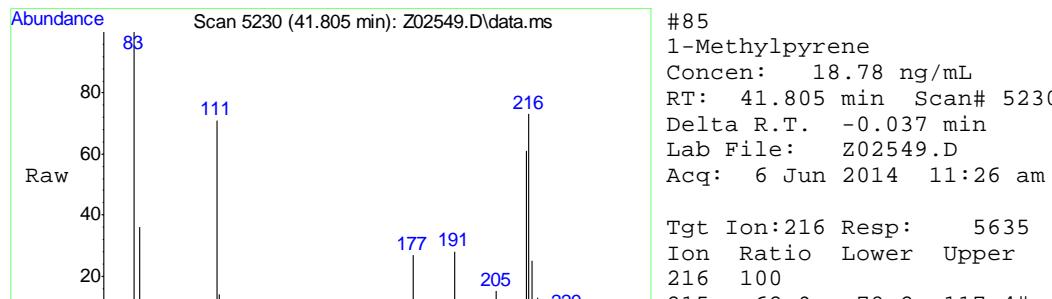
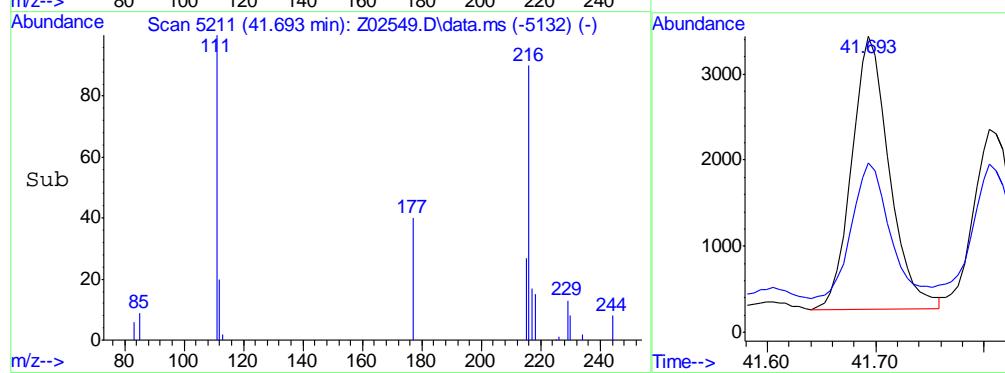
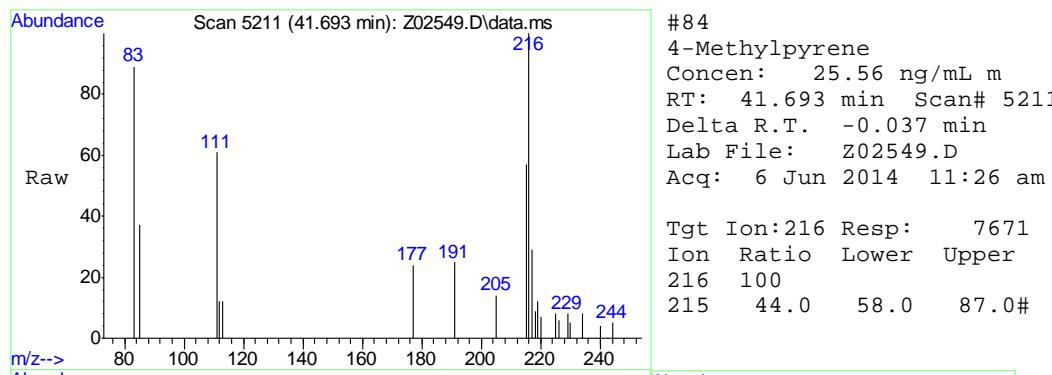


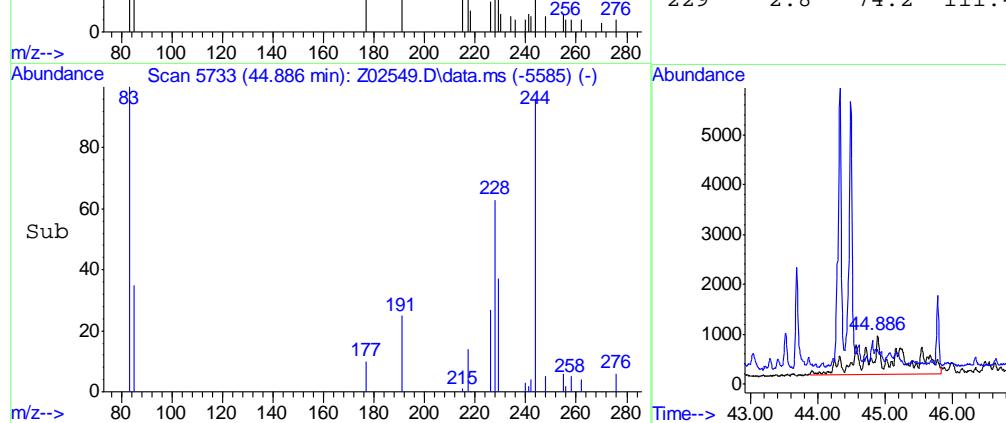
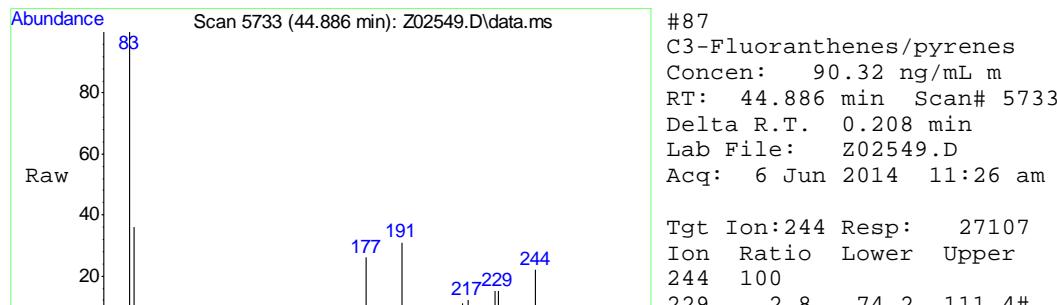
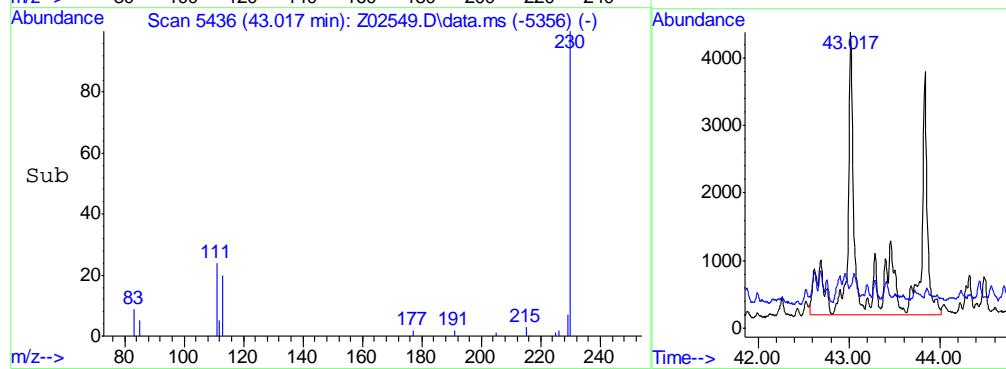
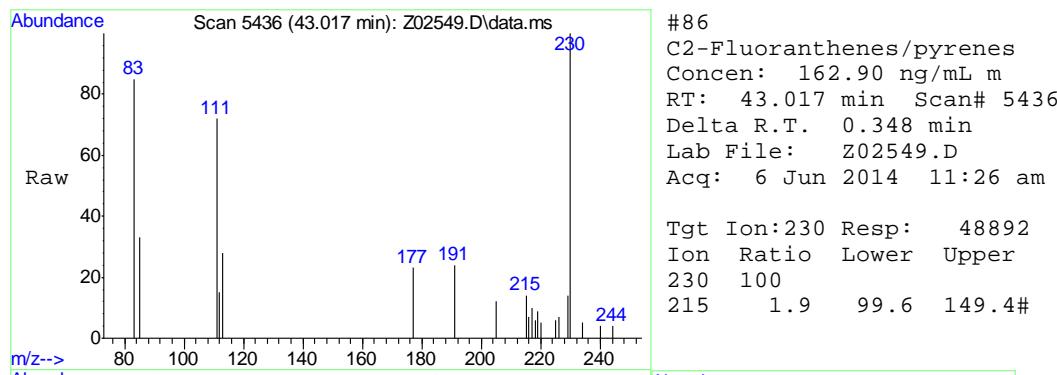


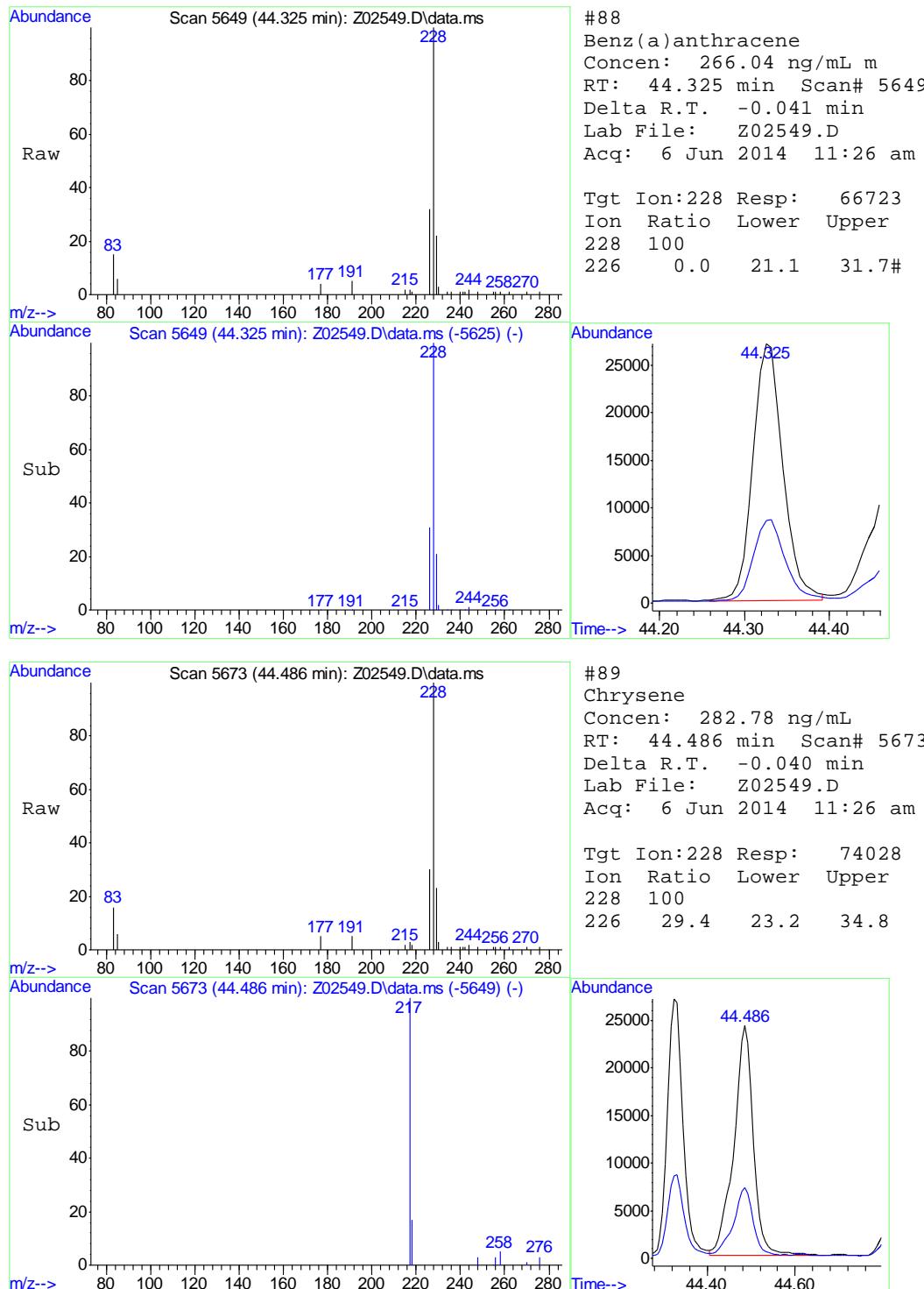


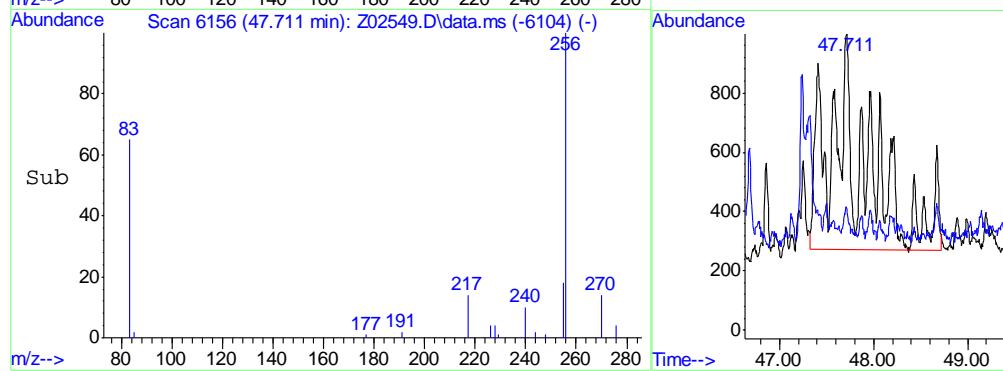
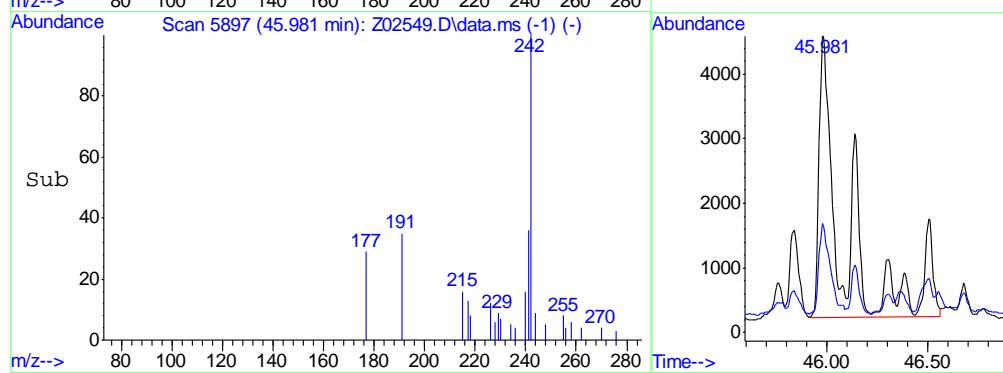
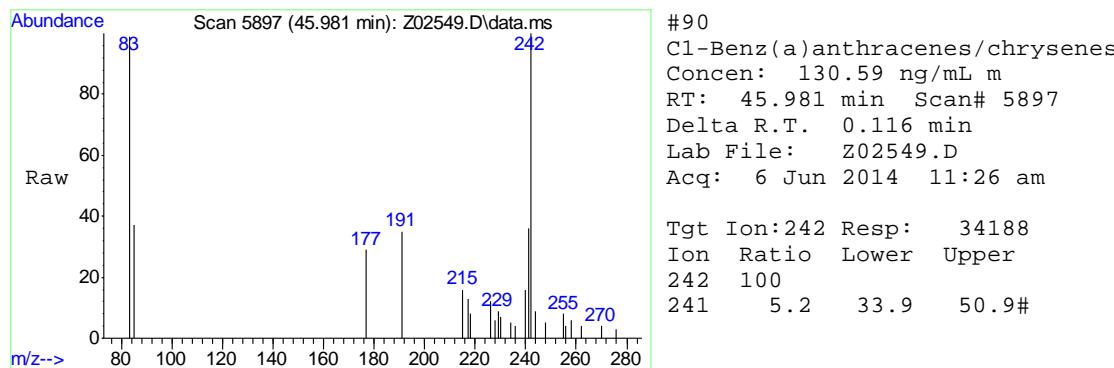


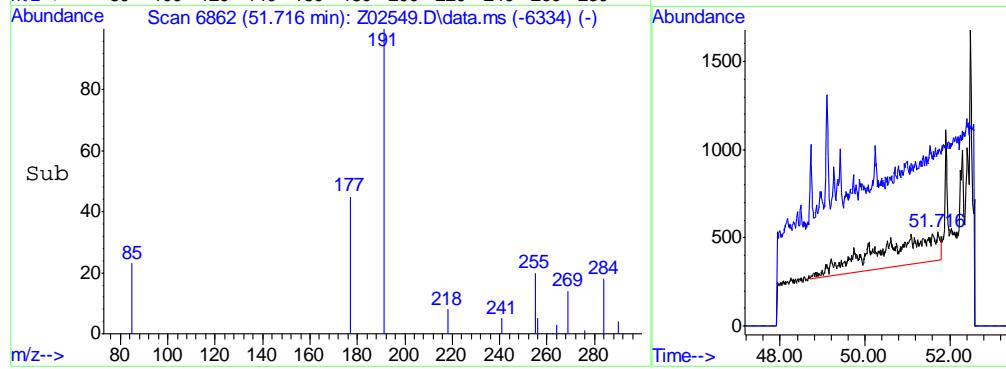
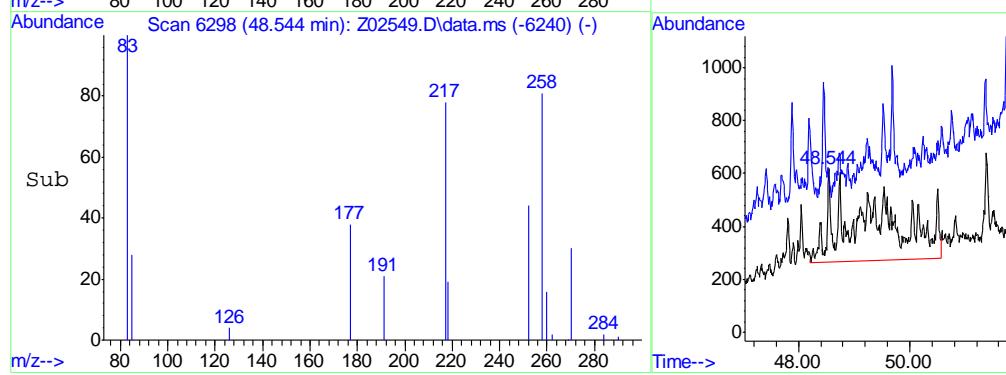
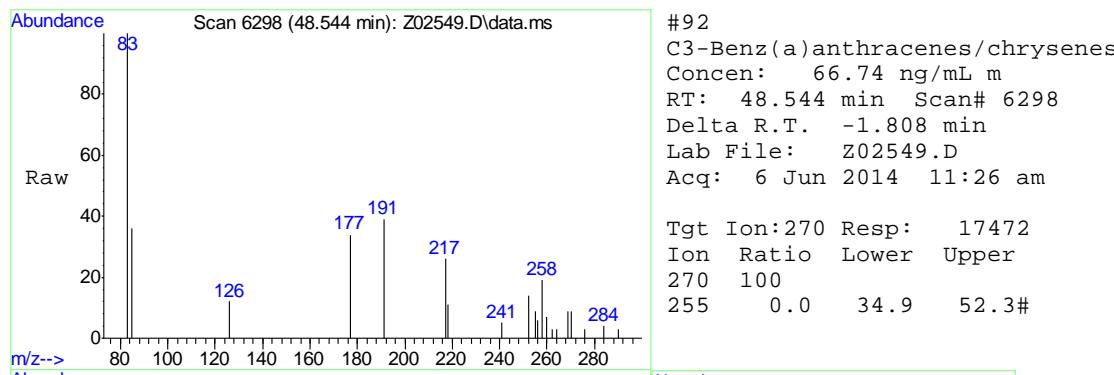


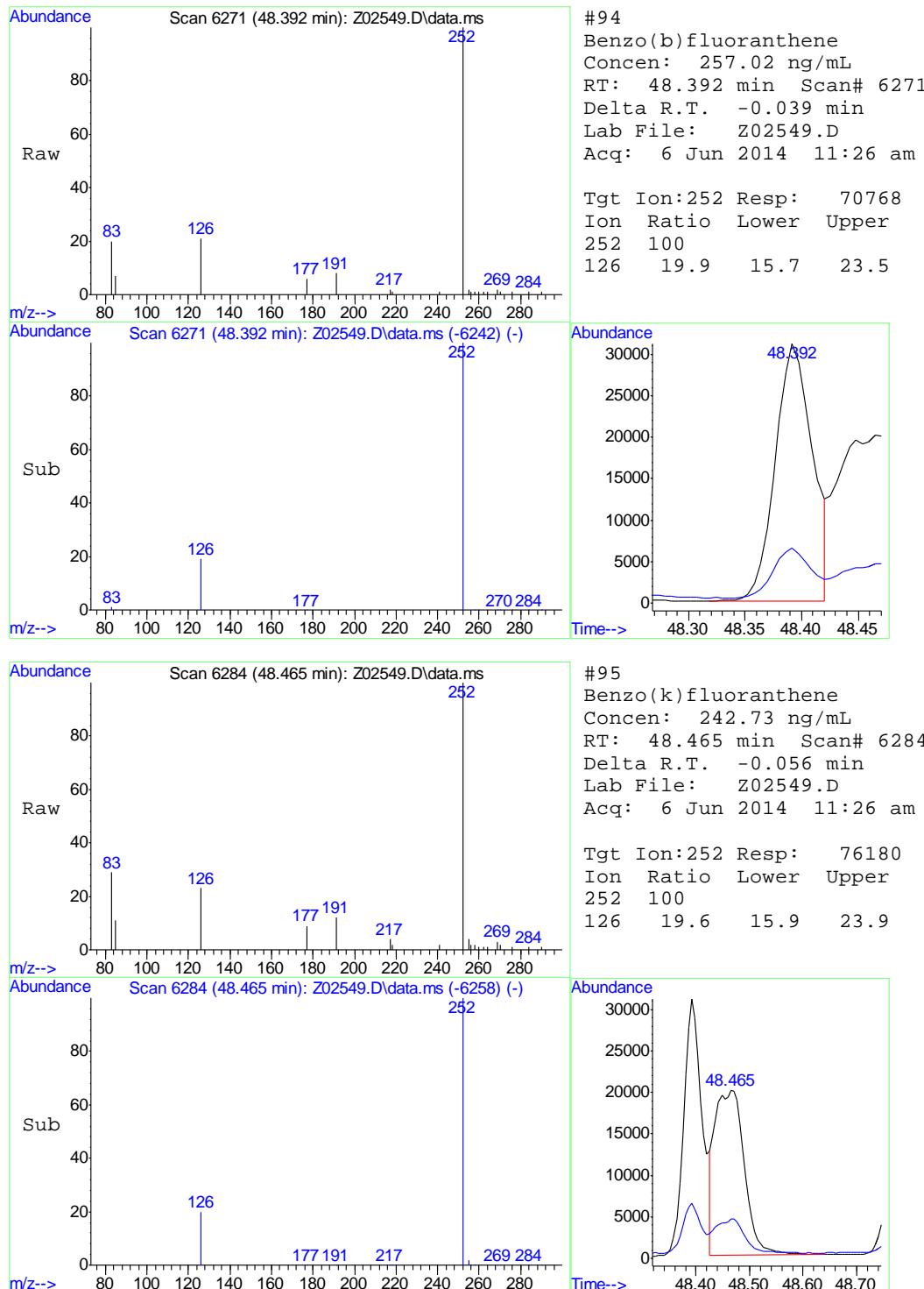


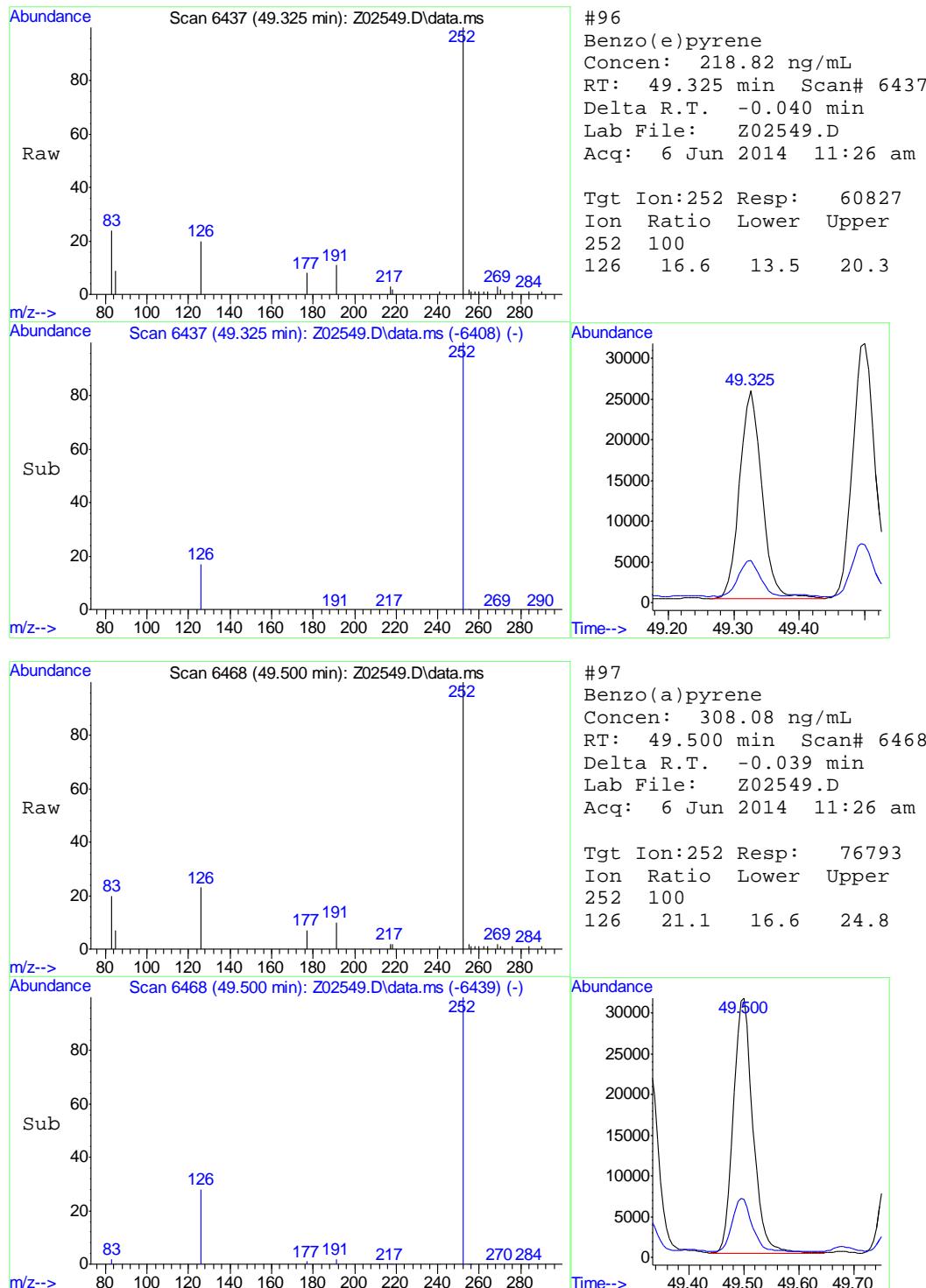


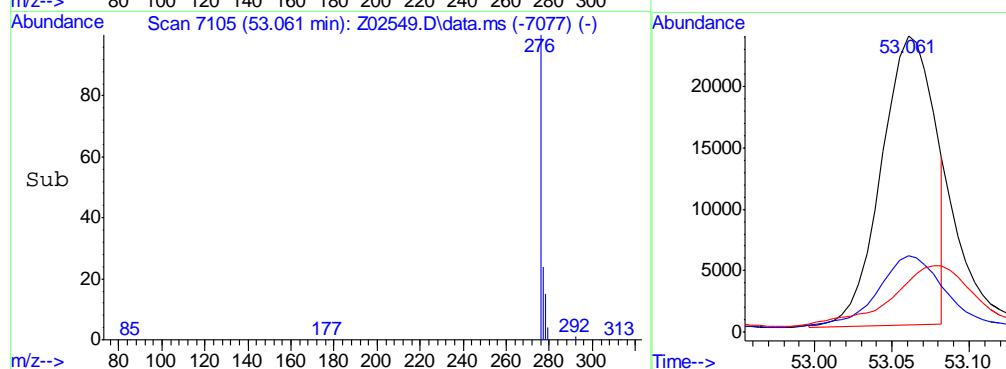
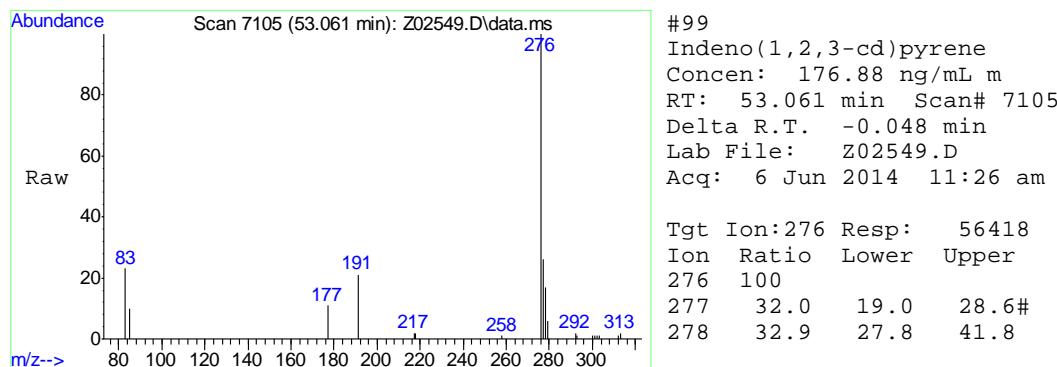
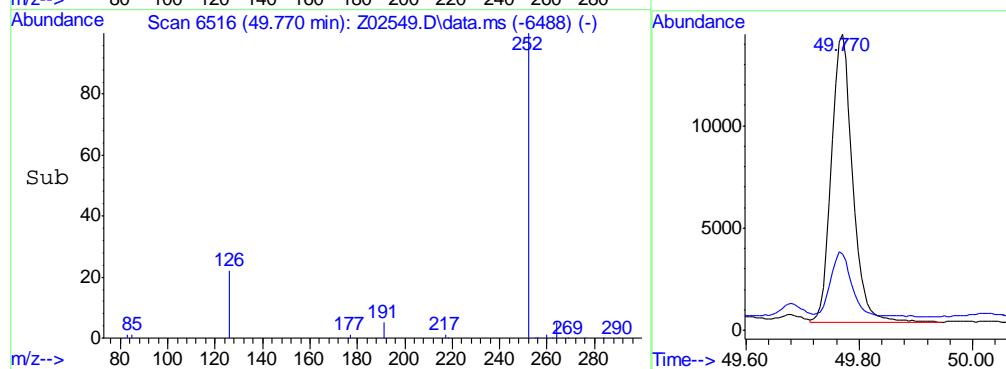
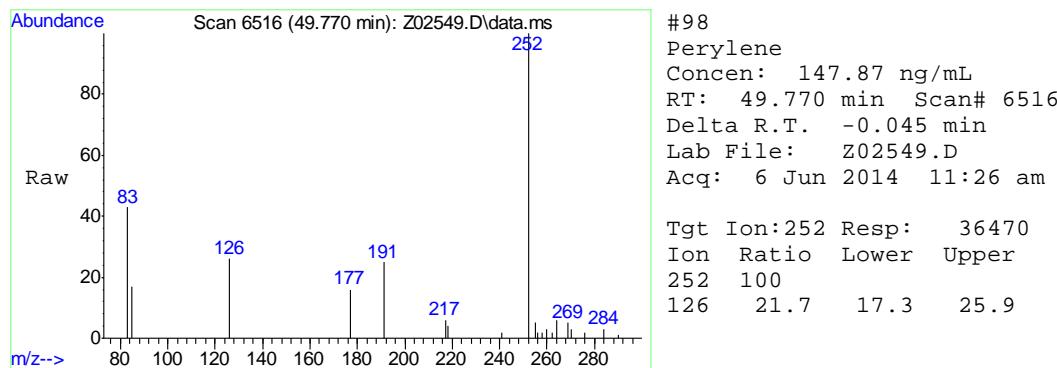


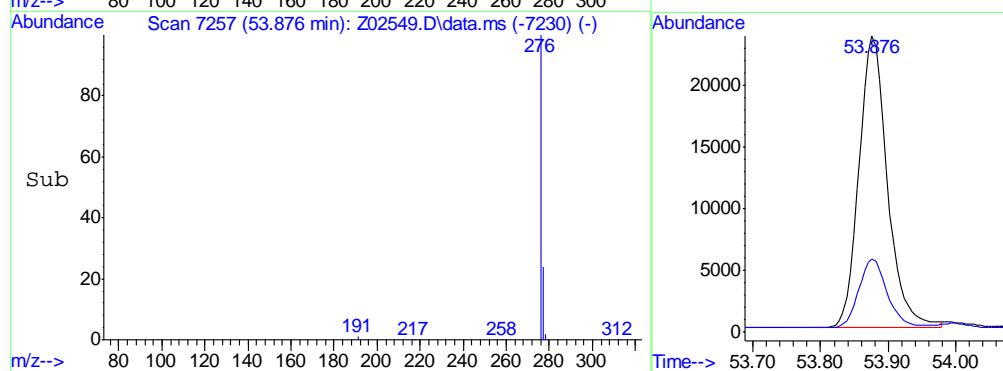
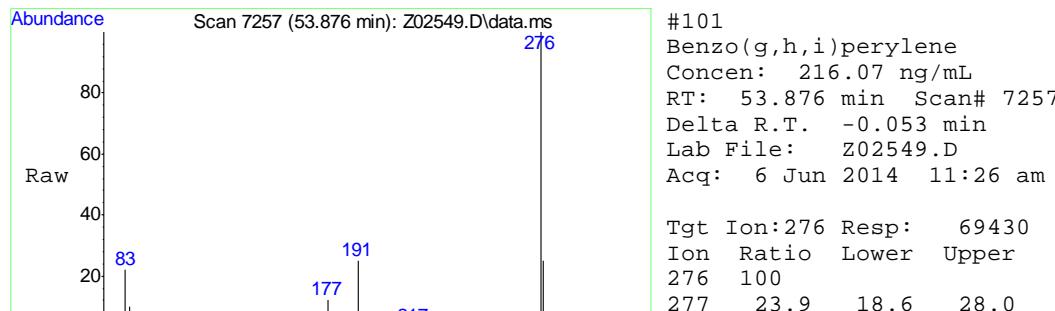
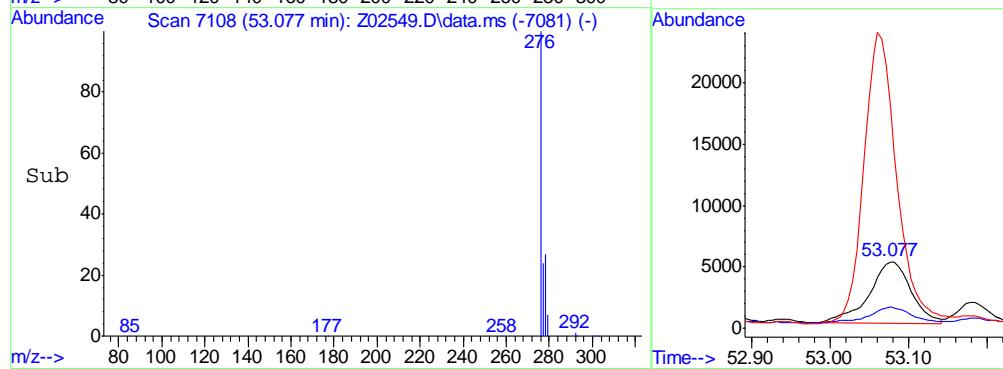
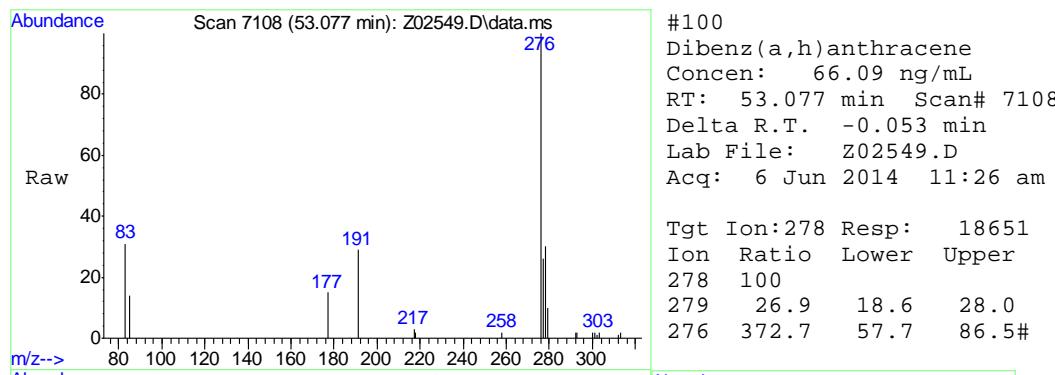


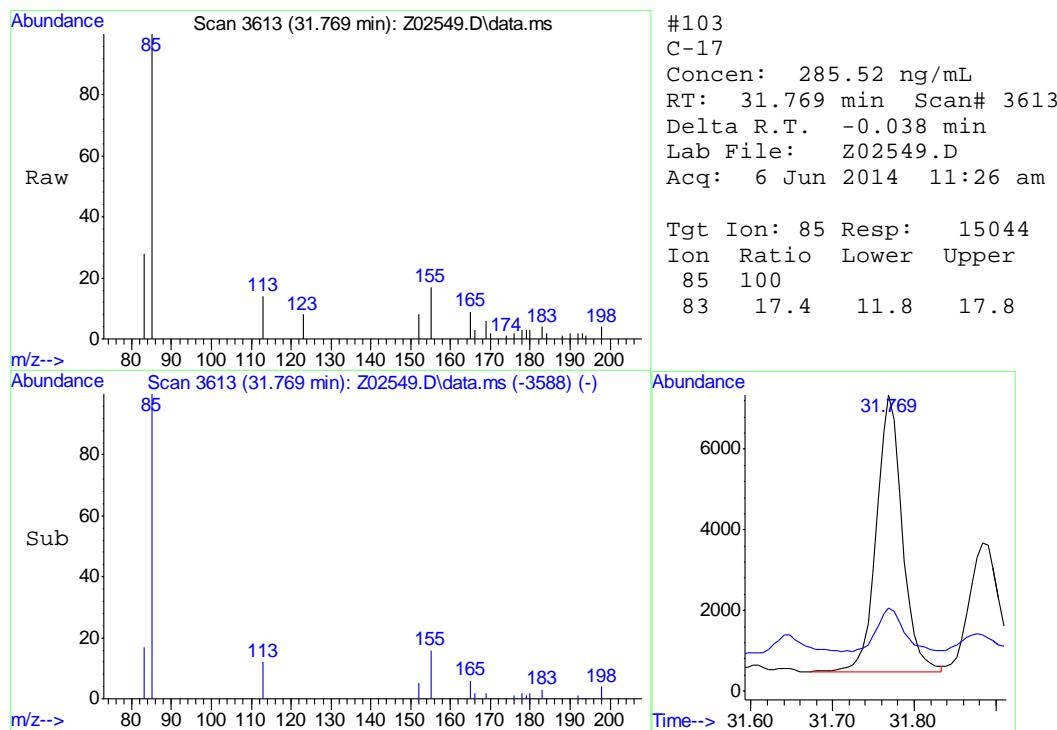
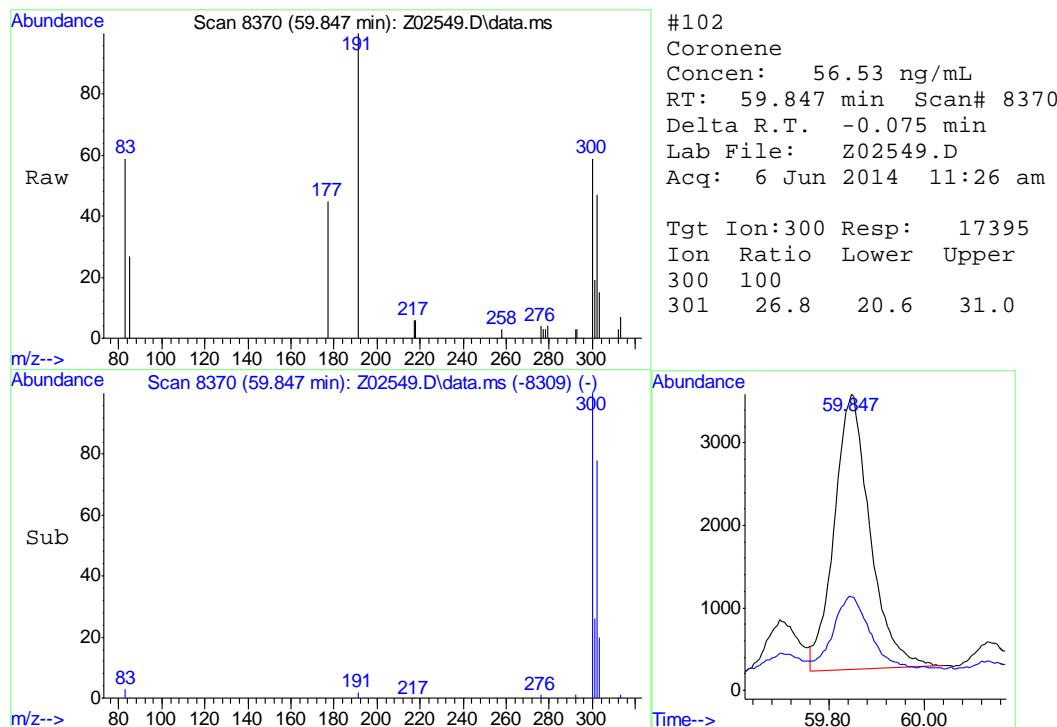


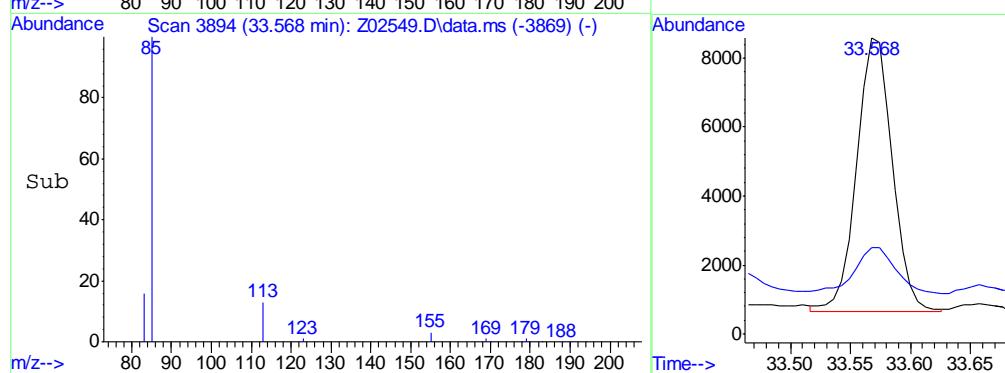
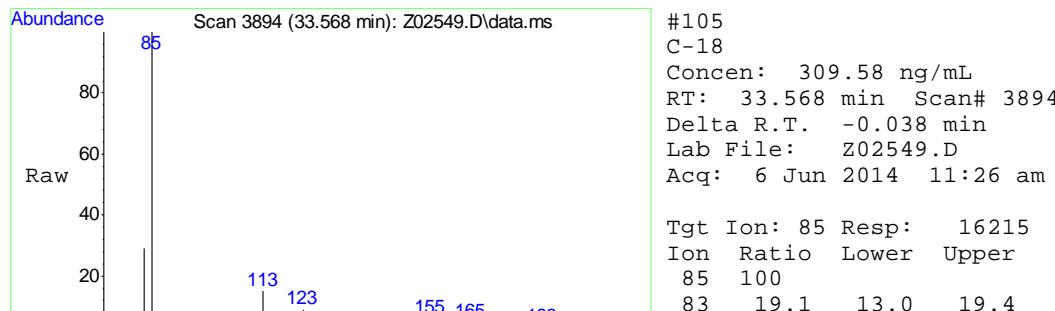
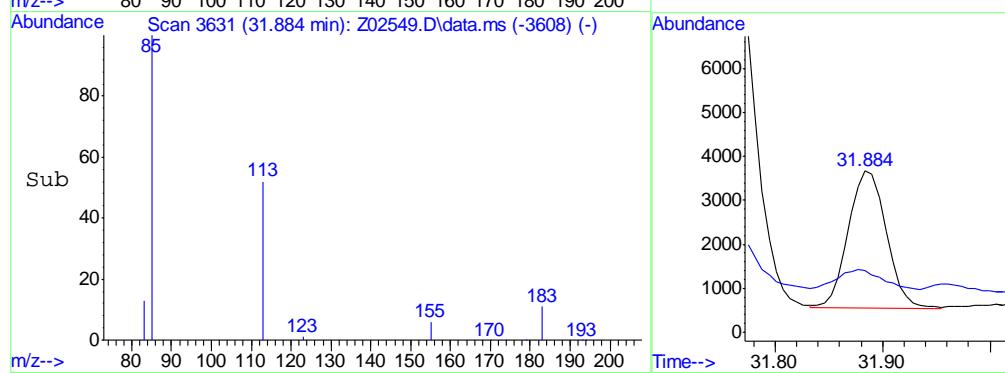
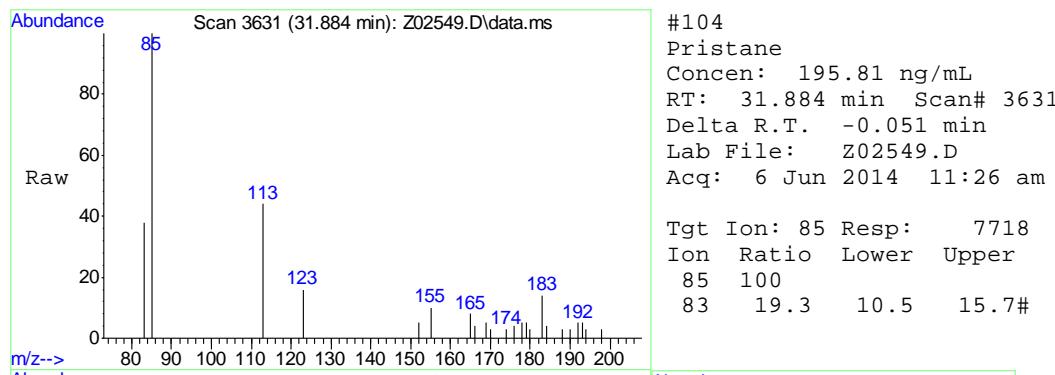


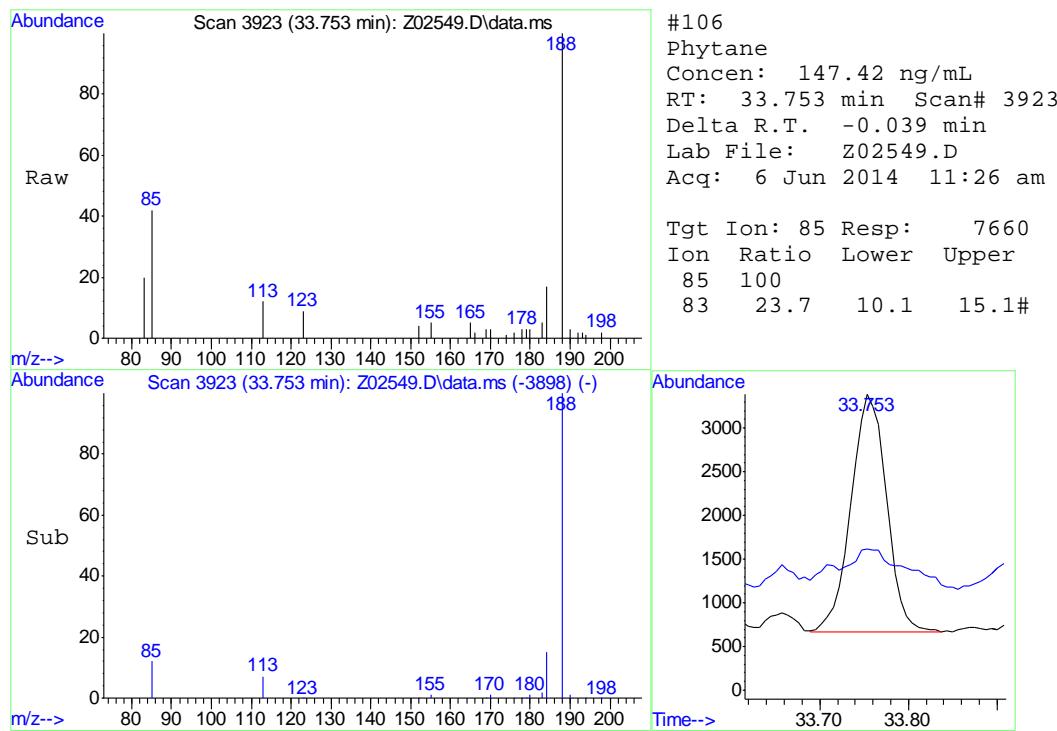












## Quantitation Report (QT Reviewed)

Manual Integrations  
APPROVED  
235 of 285  
(compounds with "m" flag)

James Roush  
06/13/14 15:51

Data File: C:\msdchem\2\data\Z140605\Z02557.D  
Sample : mc30898-4  
Misc : op38385,msz101,35,,,2,1  
ALS Vial : 14 Sample Multiplier: 1  
Acq On : 6 Jun 2014 9:51 pm

Operator: sofyaz

Quant Time: Jun 10 10:31:12 2014  
Quant Method : C:\msdchem\2\methods\Z140604-MAHPAHEXT.M  
Quant Title : PAHs & Alkylated PAHs by GC/MS/SIM

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<hr/>						
Internal Standards						
1) Acenaphthene-d10	27.929	164	110861	1000.00	ng/mL	-0.02
<hr/>						
System Monitoring Compounds						
2) Toluene-d8	9.092	98	126217	1064.34	ng/mL	0.00
Spiked Amount 1000.000			Recovery =	106.43%		
3) Naphthalene-d8	20.992	136	194443	926.84	ng/mL	0.00
Spiked Amount 1000.000			Recovery =	92.68%		
4) Phenanthrene-d10	33.785	188	182435	1005.17	ng/mL	-0.03
Spiked Amount 1000.000			Recovery =	100.52%		
5) Perylene-d12	49.686	264	155311	974.13	ng/mL	-0.05
Spiked Amount 1000.000			Recovery =	97.41%		
<hr/>						
Target Compounds				Qvalue		
7) Benzene	6.657	78	1449m	8.86	ng/mL	
8) C1-Benzene	9.214	92	608	3.72	ng/mL	96
9) C2-Benzenes	12.225	106	1359m	8.31	ng/mL	
14) Toluene	9.214	91	997	5.62	ng/mL	97
16) m,p-xylene	12.225	91	1046	7.48	ng/mL	97
17) Styrene	12.881	104	1910	18.60	ng/mL	97
45) 2-Methylnaphthalene	23.838	142	355	2.28	ng/mL	84
46) 1-Methylnaphthalene	24.209	142	429	2.55	ng/mL	91
47) C1-Naphthalenes	24.209	142	890m	3.56	ng/mL	
52) Acenaphthylene	27.343	152	848	3.51	ng/mL#	67
53) Acenaphthene	28.058	154	1003	6.63	ng/mL	96
98) Perylene	49.686	252	689	3.23	ng/mL#	1
103) C-17	31.762	85	486	10.67	ng/mL#	64
104) Pristane	31.762	85	441	12.95	ng/mL#	67
105) C-18	33.561	85	368	8.13	ng/mL#	62
106) Phytane	33.779	85	271	6.04	ng/mL#	68
<hr/>						

(#) = qualifier out of range (m) = manual integration (+) = signals summed

## Quantitation Report (QT Reviewed)

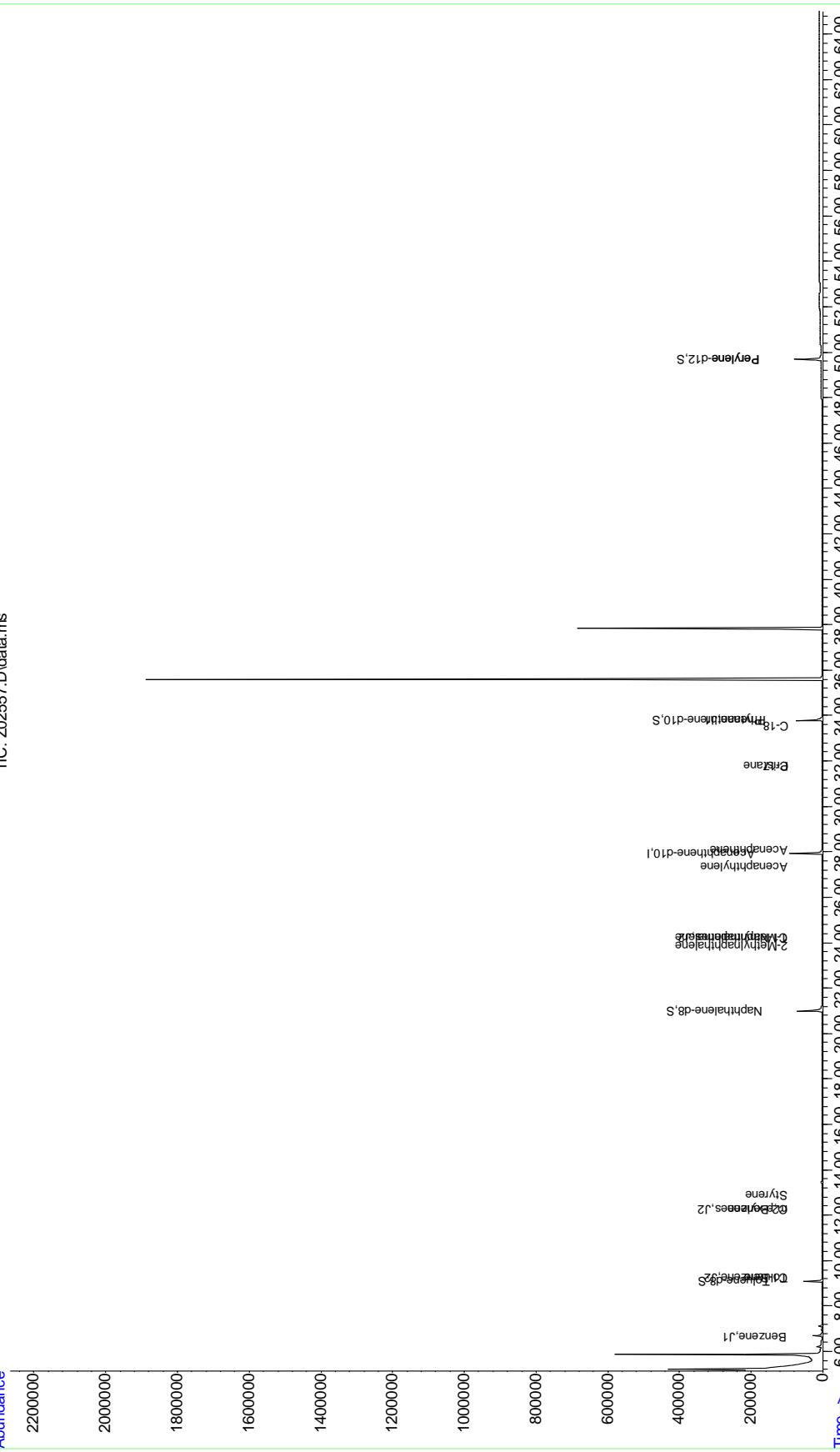
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 Sample : mc30898-4  
 Misc : op38385,msz101,35,,2,1  
 ALS Vial : 14 Sample Multiplier: 1  
 Acq On : 6 Jun 2014 9:51 PM  
 Operator: sofyaz

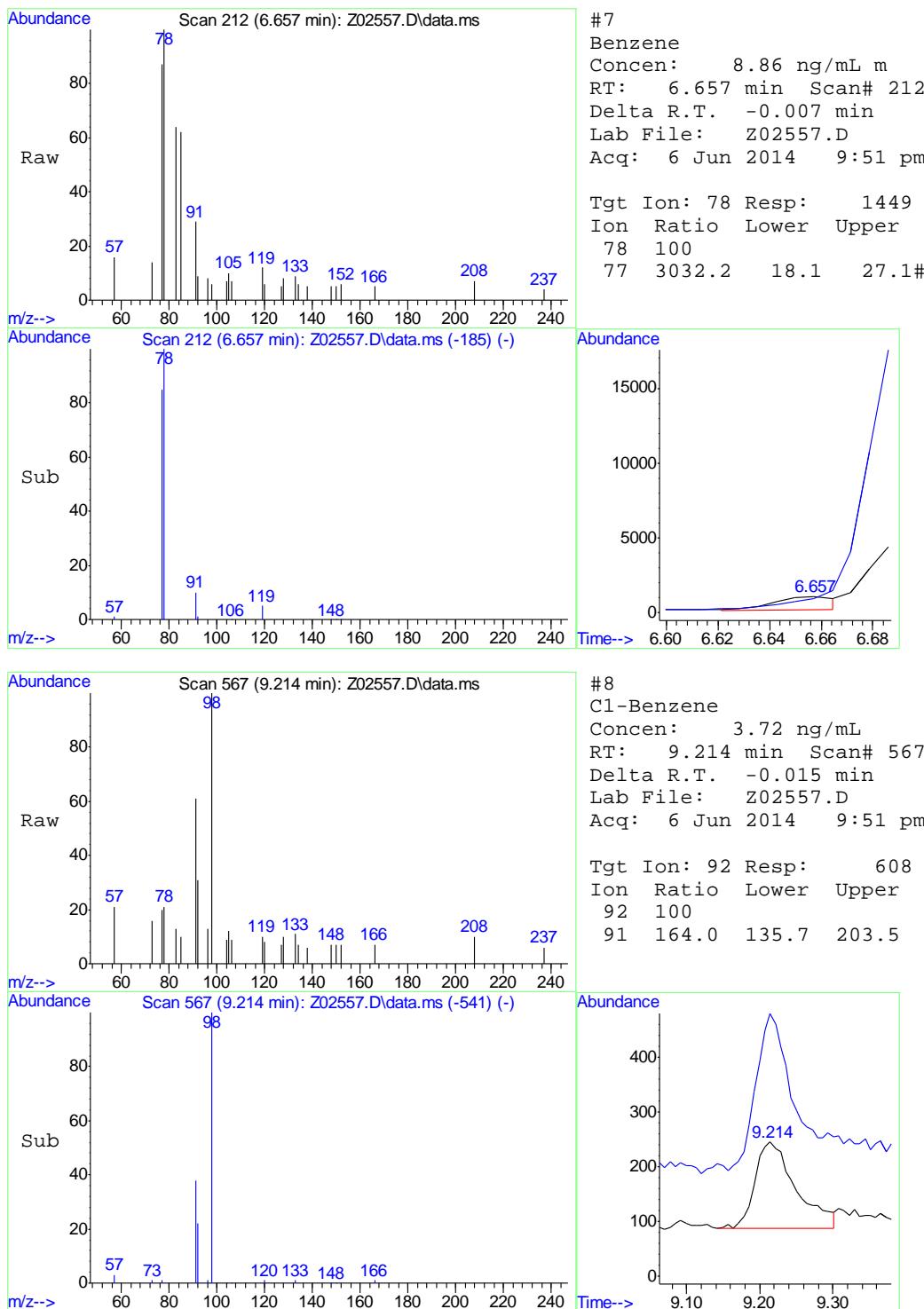
Quant Time: Jun 10 10:31:12 2014

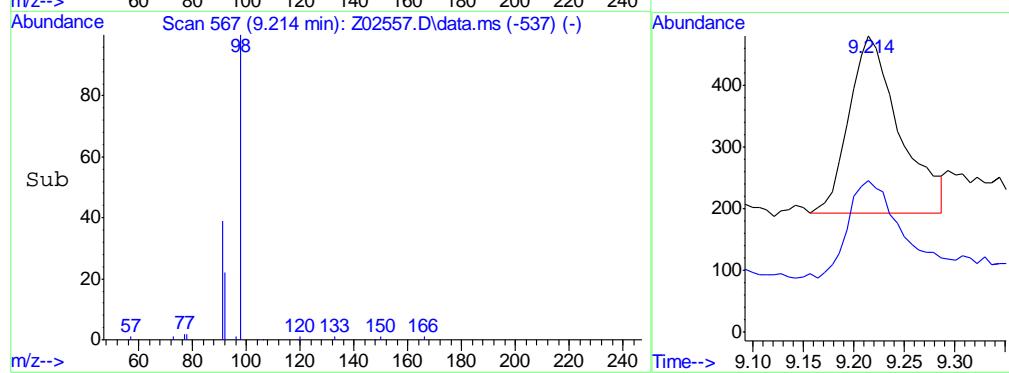
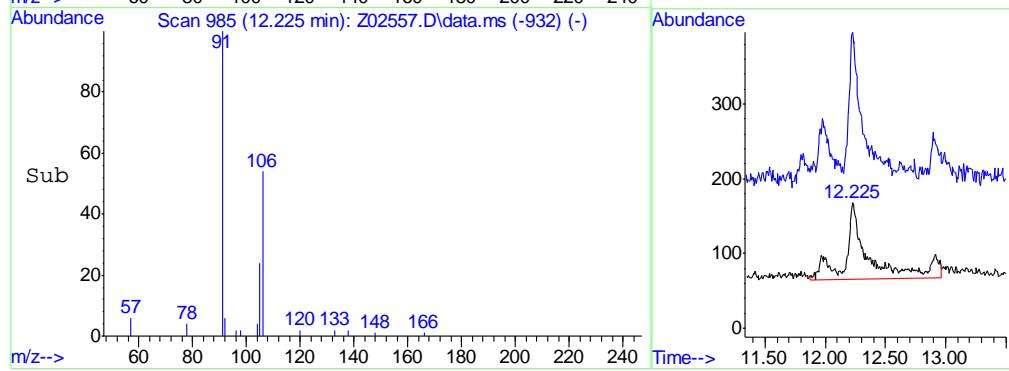
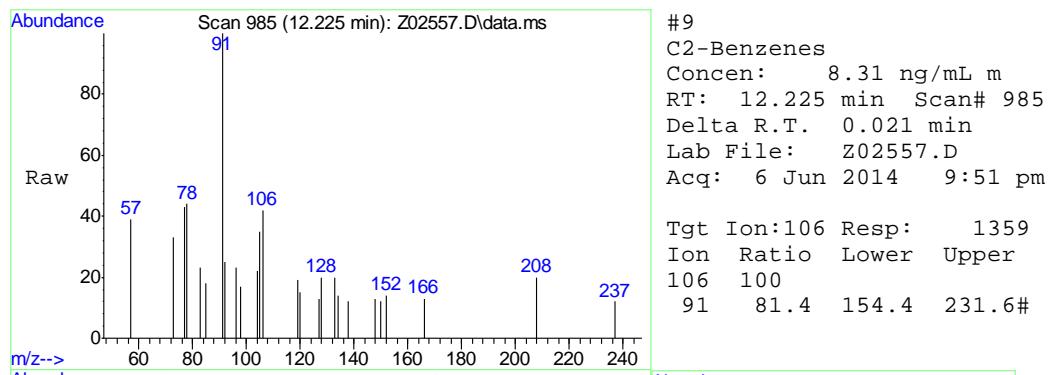
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 Quant Title : PAHs & Alkylated PAHs by GC/MS / SIM

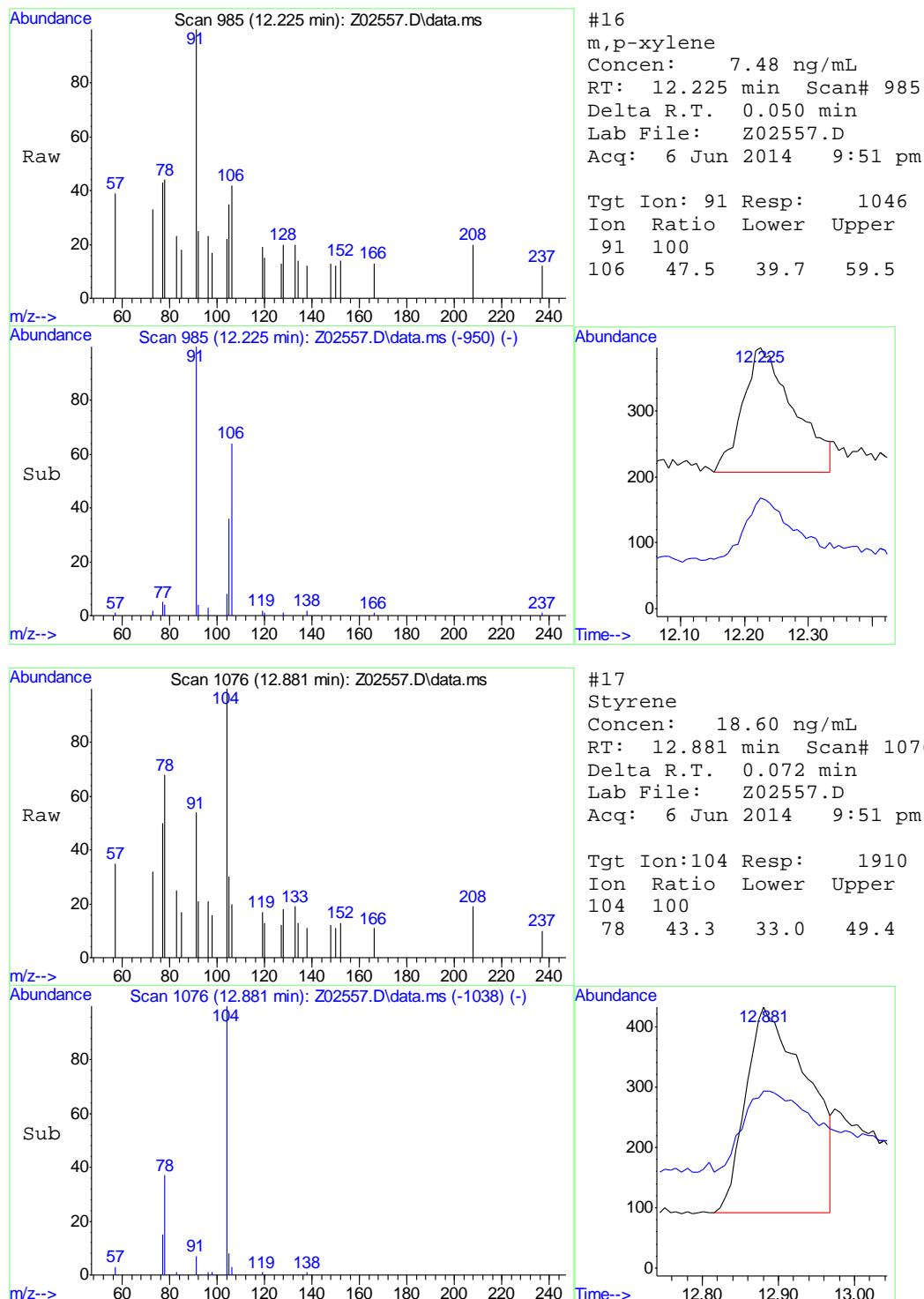
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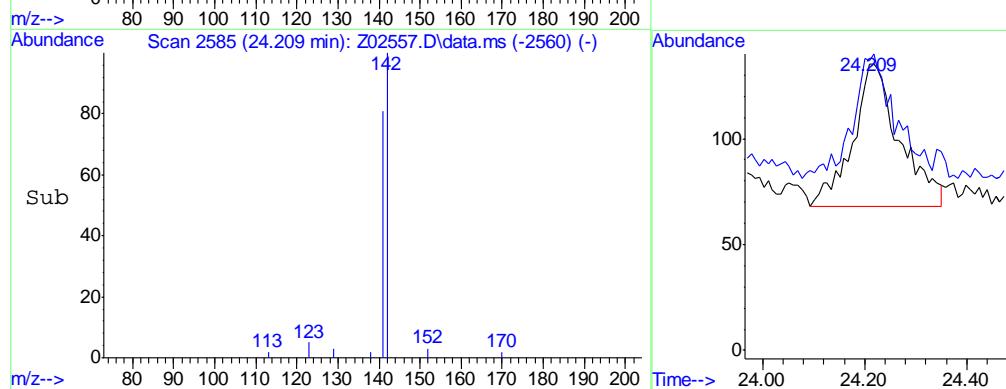
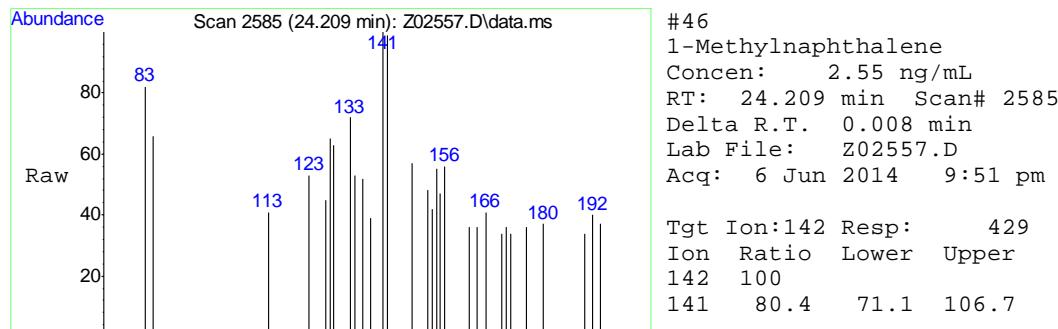
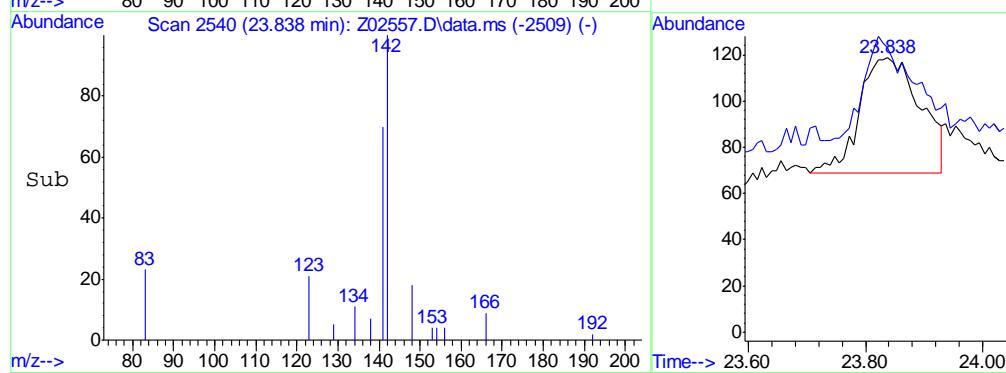
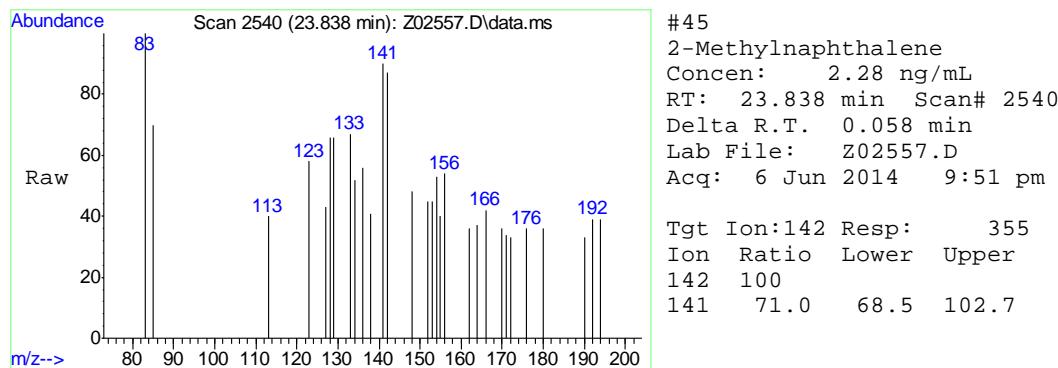
Abundance

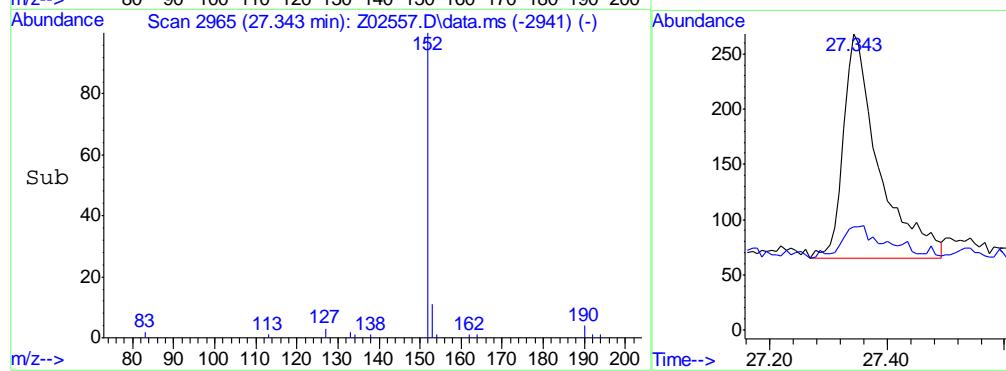
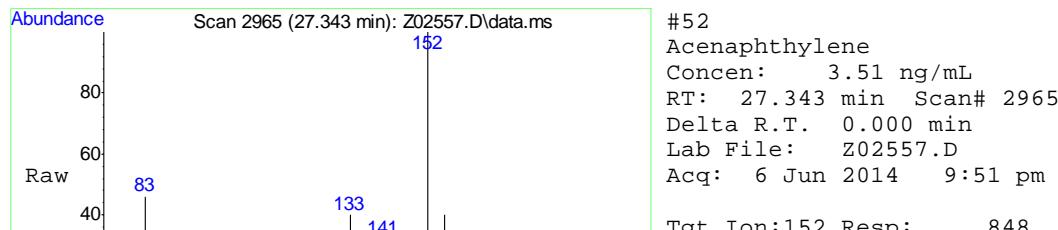
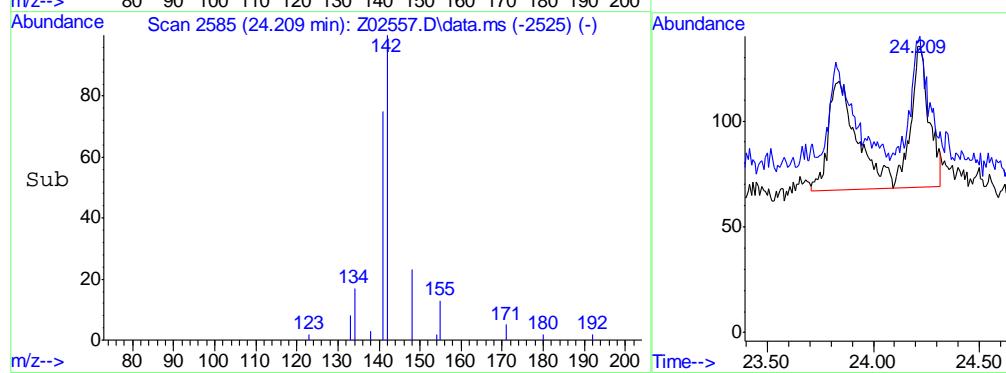
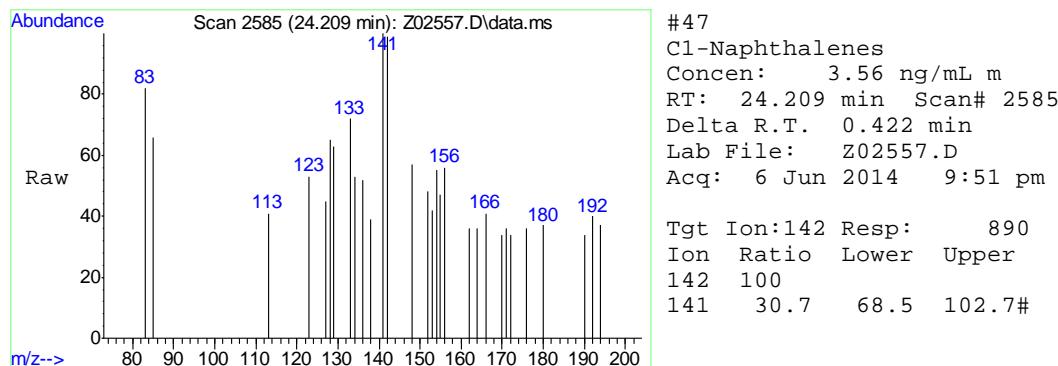
163 of 212  
ACCUTEST  
LABORATORIES  
MC30898

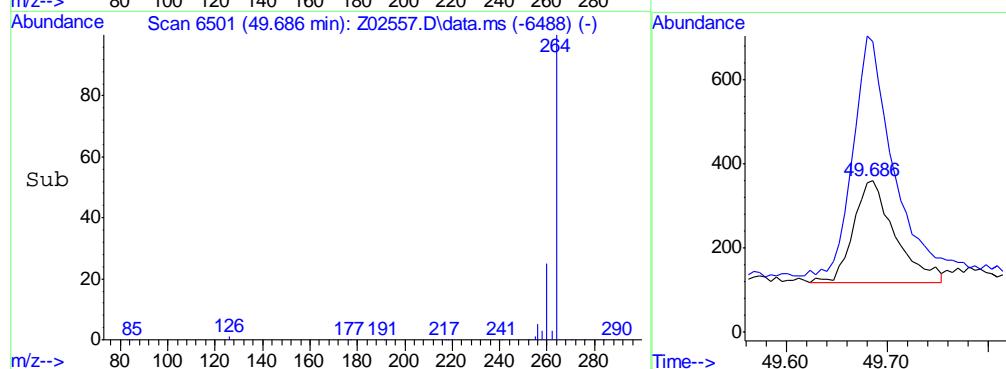
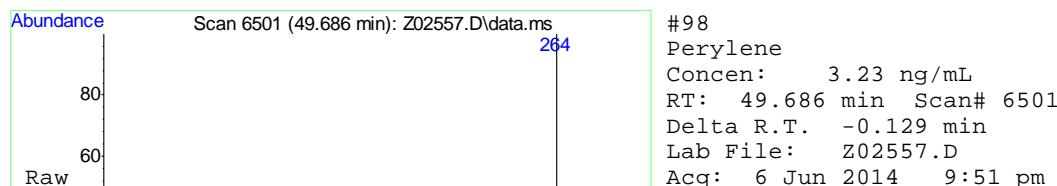
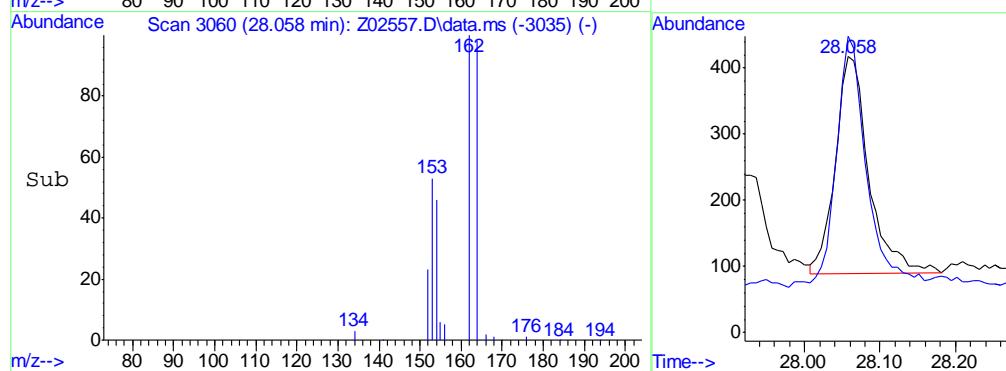
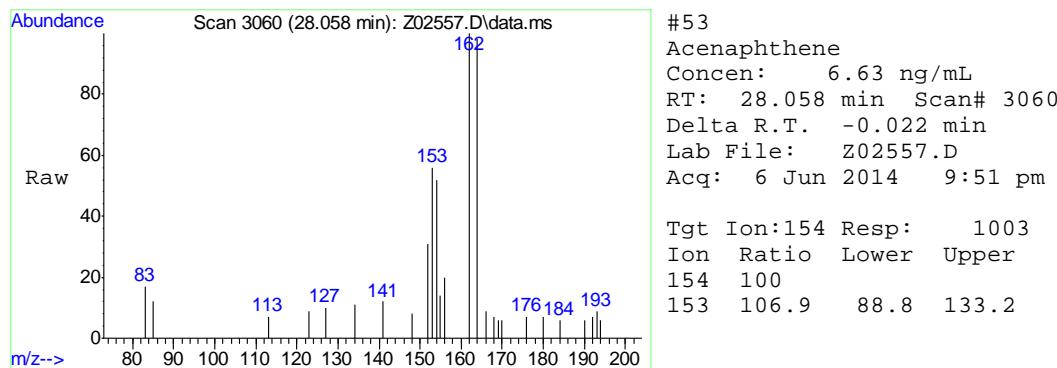


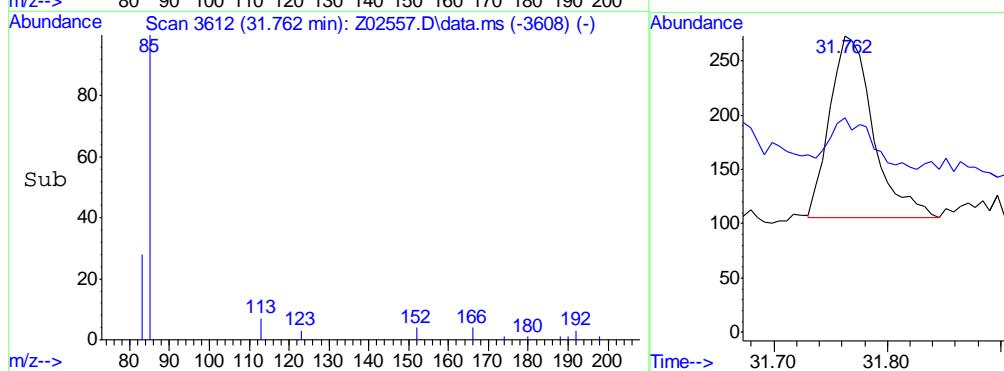
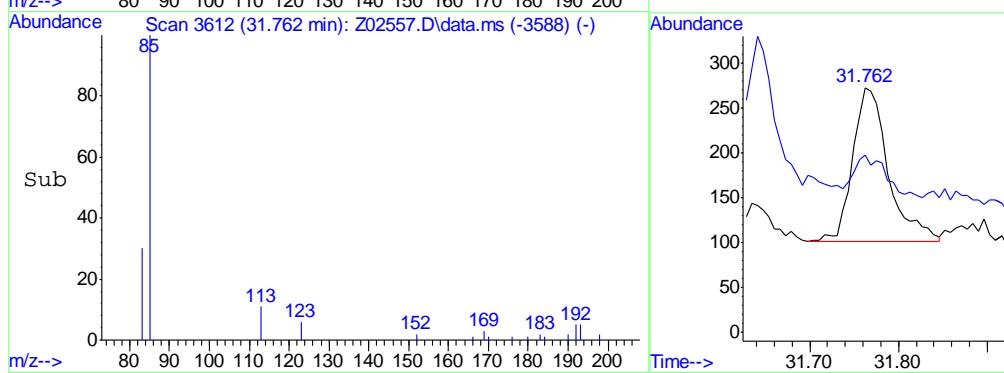
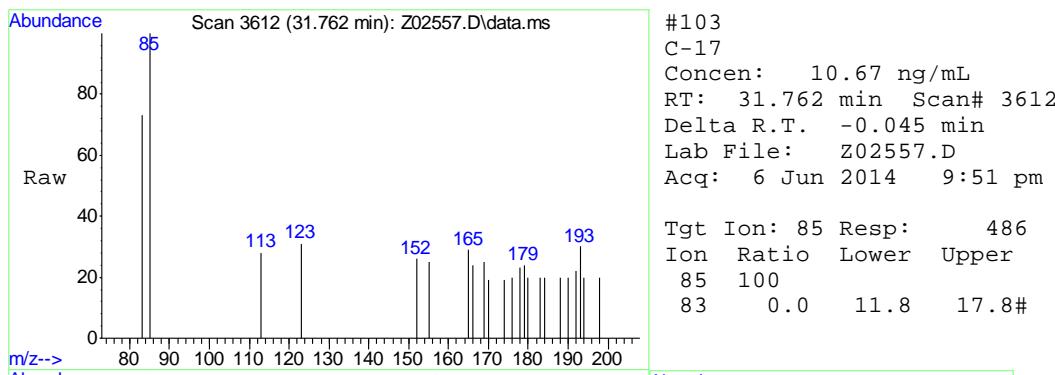


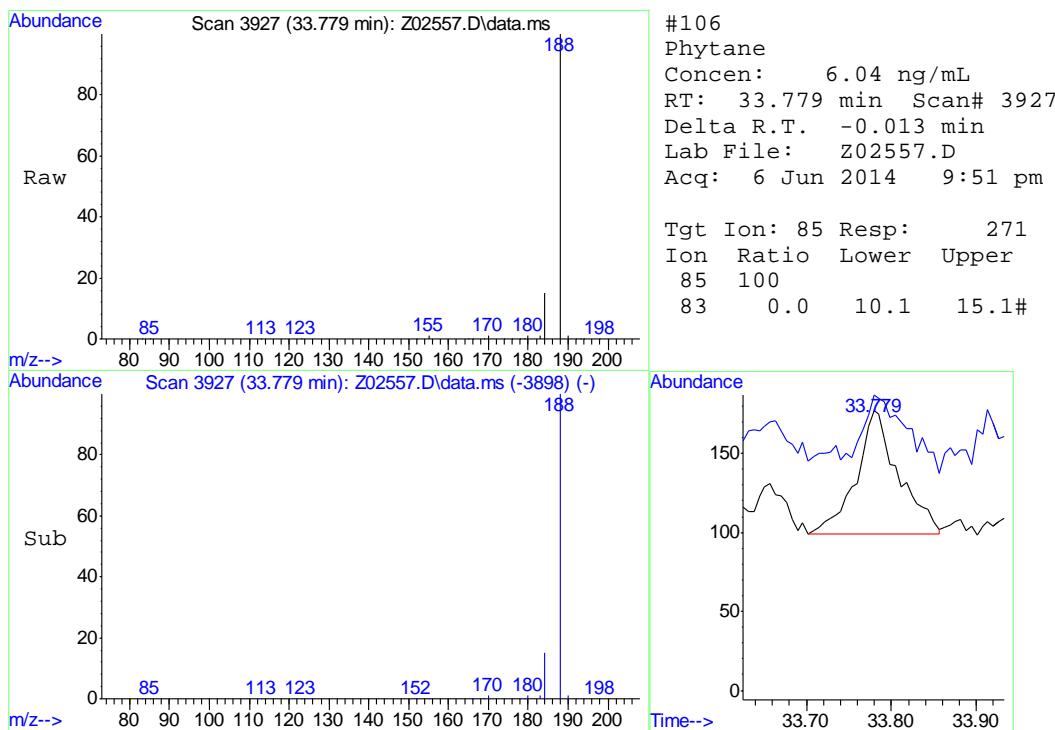
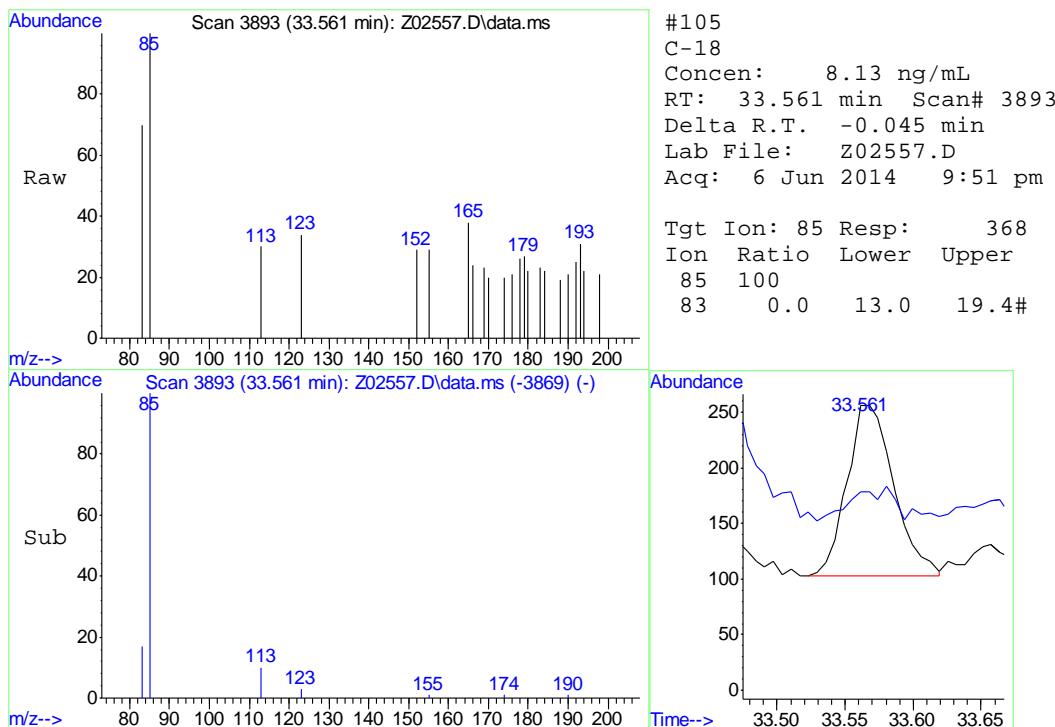












**Manual Integrations**  
**APPROVED**  
 245 of 283  
**(compounds with "m" flag)**  
**James Roush**  
**06/06/14 14:43**

Quantitation Report (QT Reviewed)

Data File: C:\msdchem\2\data\Z140604\Z02526.D  
 Sample : op38366-mb  
 Misc : op38366,msz100,5.00,,,2,1  
 ALS Vial : 8 Sample Multiplier: 1  
 Acq On : 5 Jun 2014 2:07 am

Operator: sofyaz

Quant Time: Jun 06 12:28:26 2014  
 Quant Method : C:\msdchem\2\methods\Z140604-MAHPAHEXT.M  
 Quant Title : PAHs & Alkylated PAHs by GC/MS/SIM

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<hr/>						
Internal Standards						
1) Acenaphthene-d10	27.965	164	104716	1000.00	ng/mL	0.01
<hr/>						
System Monitoring Compounds						
2) Toluene-d8	9.092	98	100738	899.34	ng/mL	0.00
Spiked Amount	1000.000			Recovery	=	89.93%
3) Naphthalene-d8	21.034	136	155861m	786.53	ng/mL	0.03
Spiked Amount	1000.000			Recovery	=	78.65%
4) Phenanthrene-d10	33.830	188	148067	863.69	ng/mL	0.01
Spiked Amount	1000.000			Recovery	=	86.37%
5) Perylene-d12	49.719	264	122841	815.69	ng/mL	-0.01
Spiked Amount	1000.000			Recovery	=	81.57%
<hr/>						
Target Compounds				Qvalue		
7) Benzene	6.650	78	966m	6.25	ng/mL	
14) Toluene	9.214	91	342	2.04	ng/mL#	21
103) C-17	31.807	85	468	10.88	ng/mL#	64
104) Pristane	31.922	85	530	16.47	ng/mL#	67
105) C-18	33.606	85	274	6.41	ng/mL#	62
106) Phytane	33.779	85	681	16.06	ng/mL#	68
<hr/>						

(#) = qualifier out of range (m) = manual integration (+) = signals summed

## Quantitation Report (QT Reviewed)

Data File: C:\msdchem\2\data\Z140604\Z02526.D

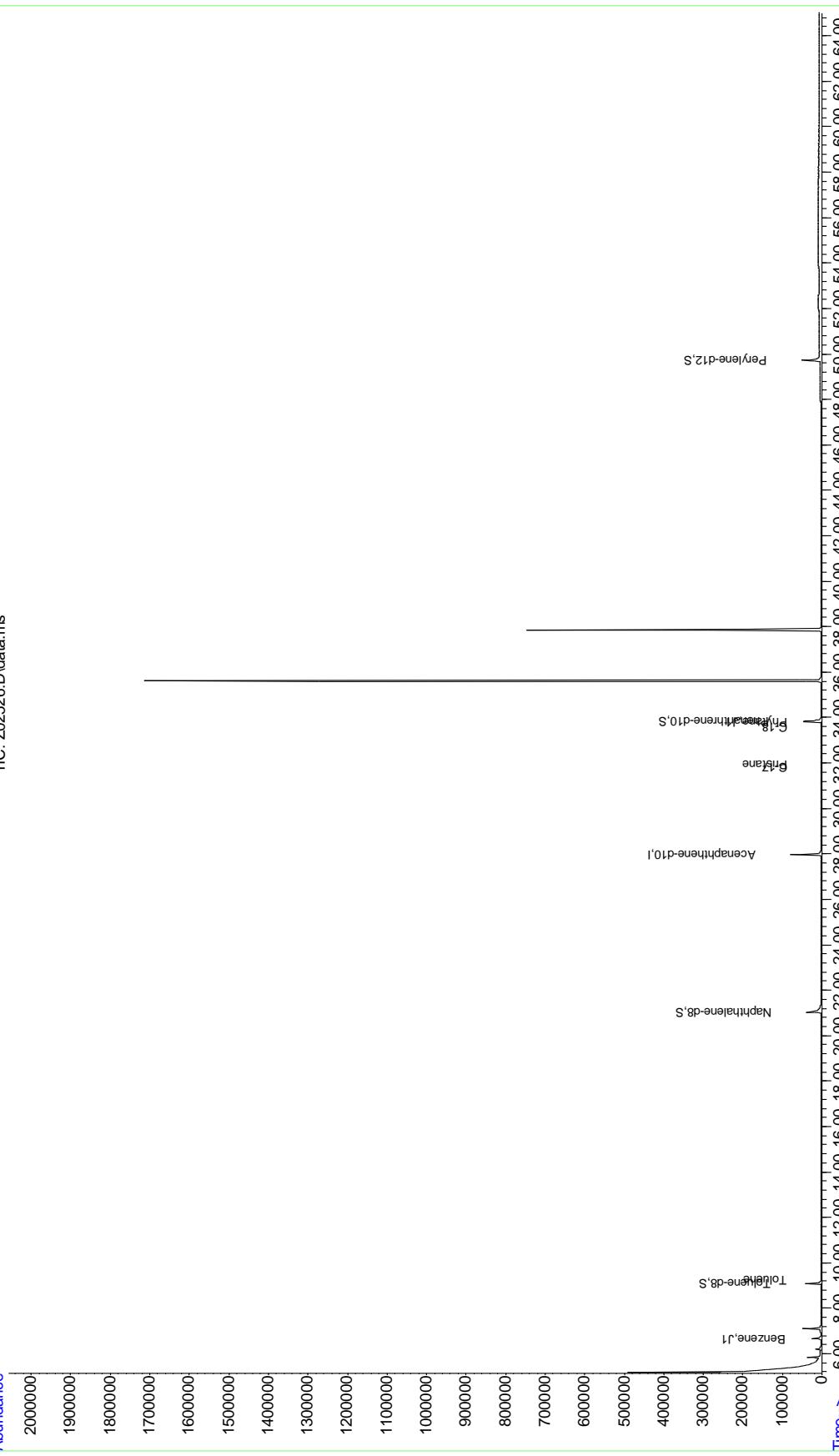
Sample : op38366-mb  
 Misc : op38366,msz100,5.00,,2,1  
 ALS Vial : 8 Sample Multiplier: 1  
 Acq On : 5 Jun 2014 2:07 am  
 Operator: sofyaz

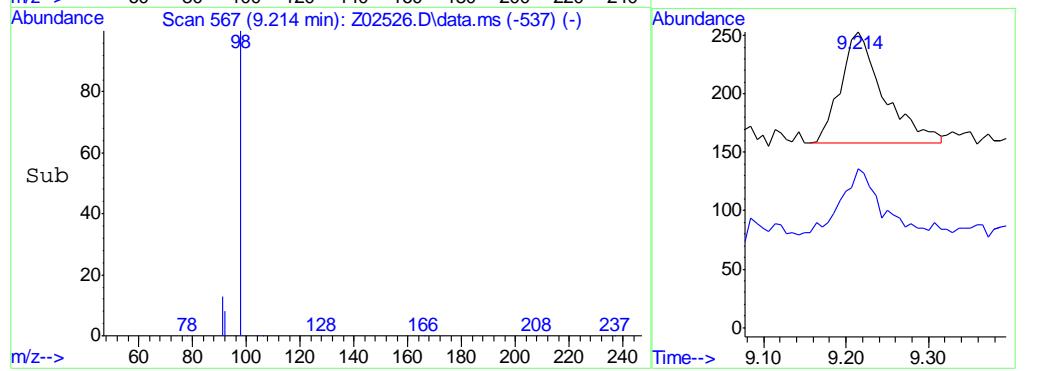
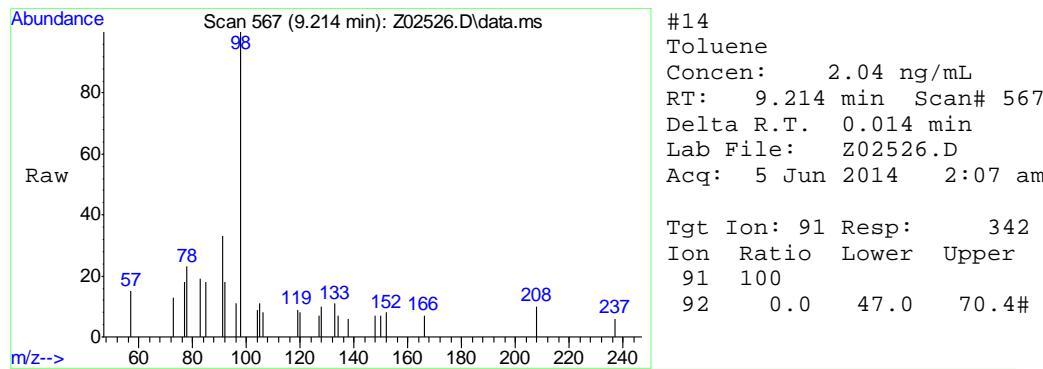
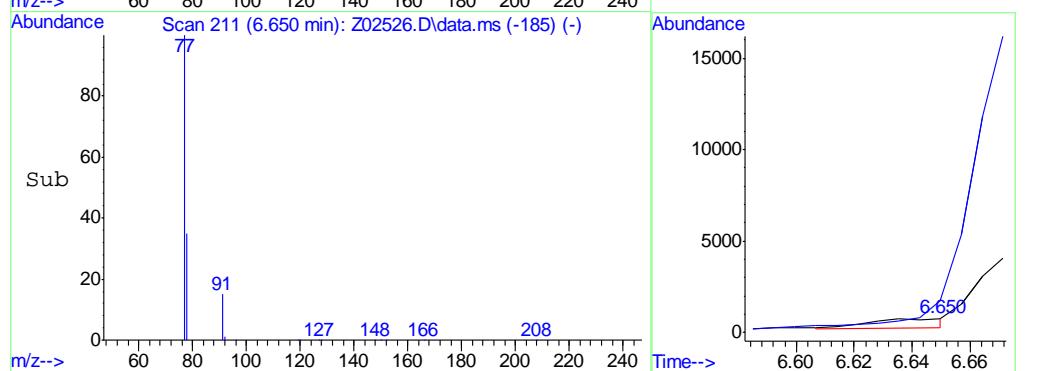
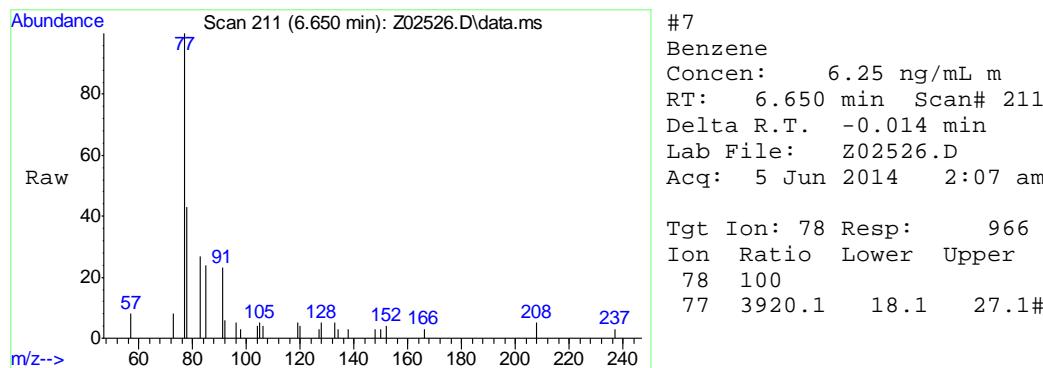
Quant Time: Jun 06 12:28:26 2014

Quant Method : C:\msdchem\2\methods\Z140604-MAHPAHEXT.M  
 Quant Title : PAHs & Alkylated PAHs by GC/MS / SIM

TIC: Z02526.D\data.ms

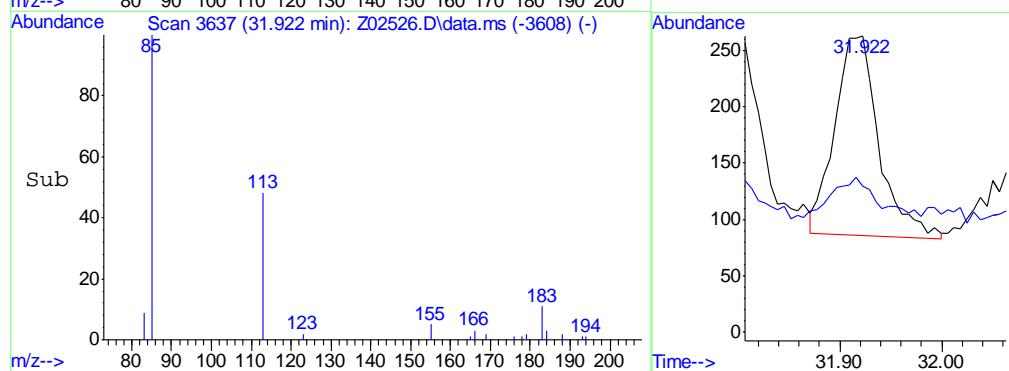
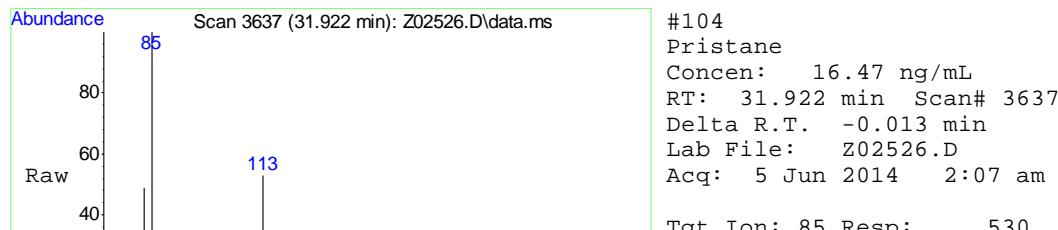
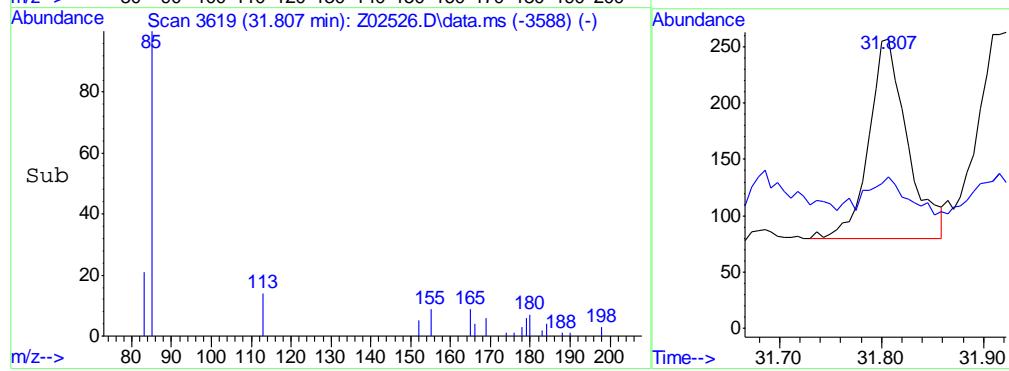
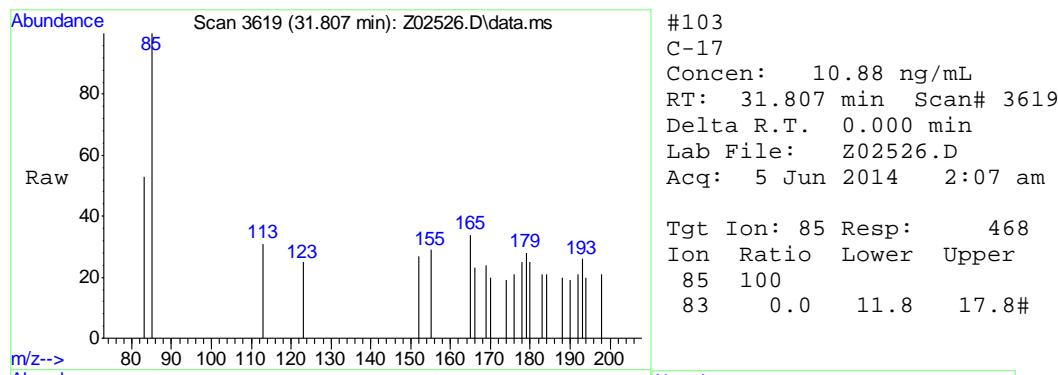
Abundance

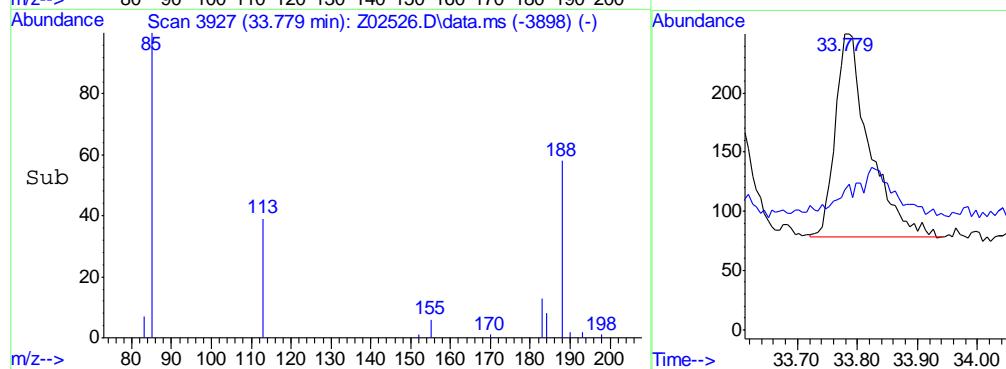
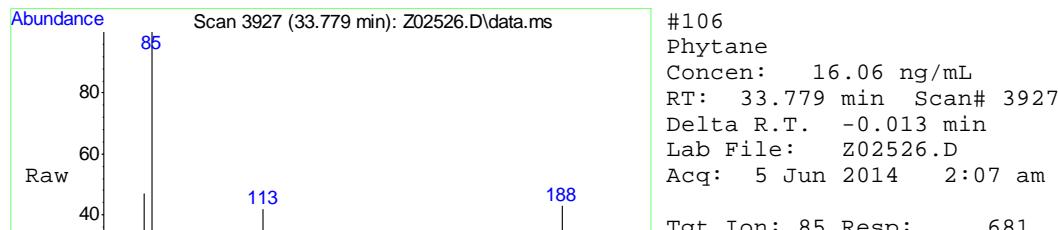
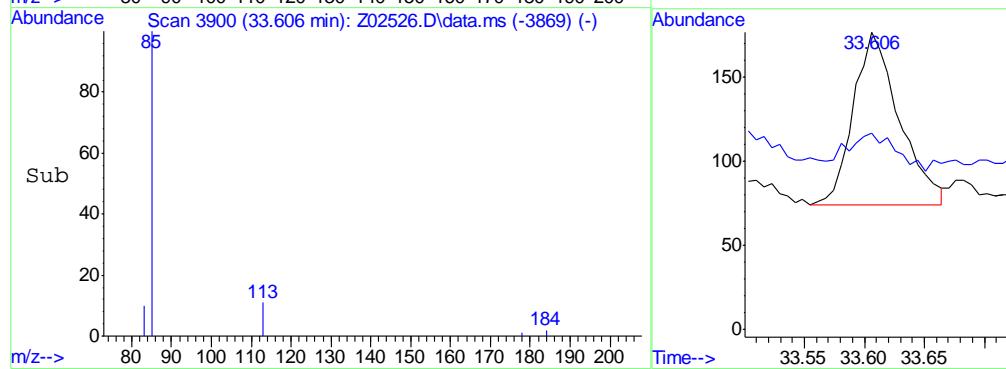
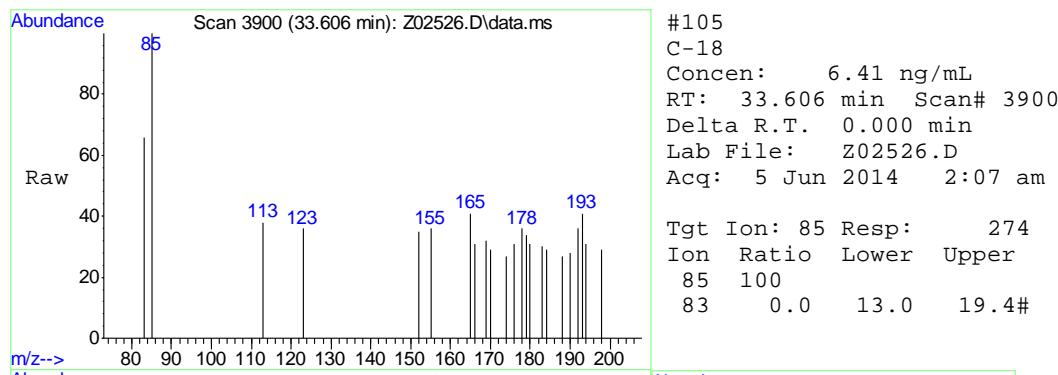




7.2.1

7





Quantitation Report (QT Reviewed)

Data File: C:\msdchem\2\data\Z140605\Z02553.D  
 Sample : op38385-mb  
 Misc : op38385,msz101,35,,,2,1  
 ALS Vial : 10 Sample Multiplier: 1  
 Acq On : 6 Jun 2014 4:38 pm

Operator: sofyaz

Quant Time: Jun 09 08:36:35 2014  
 Quant Method : C:\msdchem\2\methods\Z140604-MAHPAHEXT.M  
 Quant Title : PAHs & Alkylated PAHs by GC/MS/SIM

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<hr/>						
Internal Standards						
1) Acenaphthene-d10	27.929	164	112706	1000.00	ng/mL	-0.02
<hr/>						
System Monitoring Compounds						
2) Toluene-d8	9.092	98	118029	979.00	ng/mL	0.00
Spiked Amount	1000.000		Recovery	=	97.90%	
3) Naphthalene-d8	20.992	136	191130	896.13	ng/mL	0.00
Spiked Amount	1000.000		Recovery	=	89.61%	
4) Phenanthrene-d10	33.786	188	180418	977.79	ng/mL	-0.03
Spiked Amount	1000.000		Recovery	=	97.78%	
5) Perylene-d12	49.686	264	160030	987.30	ng/mL	-0.05
Spiked Amount	1000.000		Recovery	=	98.73%	
<hr/>						
Target Compounds				Qvalue		
7) Benzene	6.657	78	1693m	10.18	ng/mL	
8) C1-Benzene	9.214	92	595	3.58	ng/mL#	70
14) Toluene	9.214	91	1254	6.95	ng/mL	85
16) m,p-xylene	12.218	91	1061	7.47	ng/mL	93
17) Styrene	12.866	104	3476	33.29	ng/mL	100
45) 2-Methylnaphthalene	23.813	142	458	2.90	ng/mL#	7
46) 1-Methylnaphthalene	24.201	142	281	1.64	ng/mL	85
52) Acenaphthylene	27.335	152	479	1.95	ng/mL#	67
103) C-17	31.769	85	633	13.68	ng/mL#	64
105) C-18	33.568	85	515	11.19	ng/mL#	62
106) Phytane	33.786	85	285	6.24	ng/mL#	68
<hr/>						

(#) = qualifier out of range (m) = manual integration (+) = signals summed

## Quantitation Report (QT Reviewed)

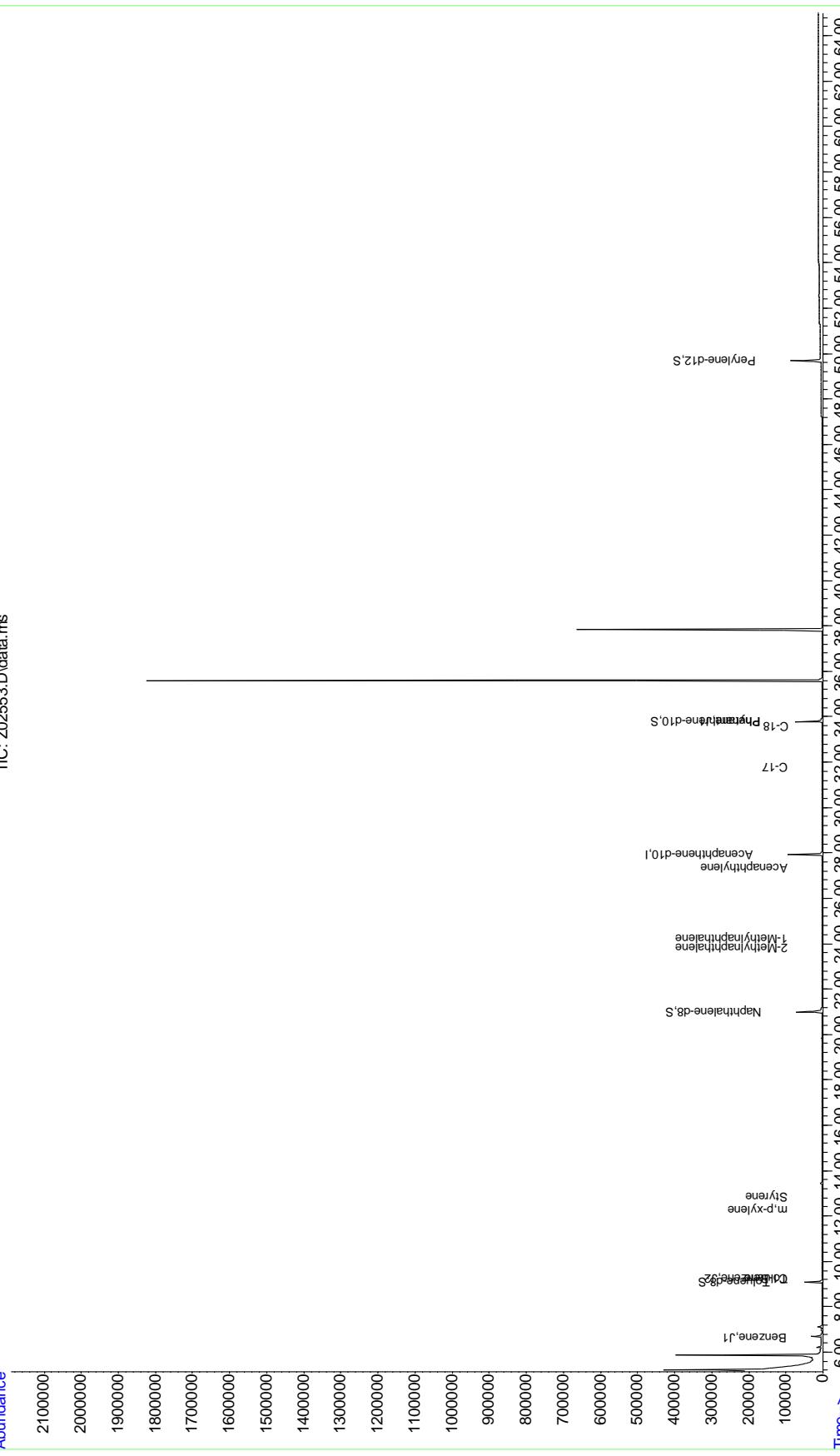
Data File: C:\msdchem\2\data\Z140605\Z02553.D  
 Sample : op38385-mb  
 Misc : op38385,msz101,35,,2,1  
 ALS Vial : 10 Sample Multiplier: 1  
 Acq On : 6 Jun 2014 4:38 PM  
 Operator: soyaz

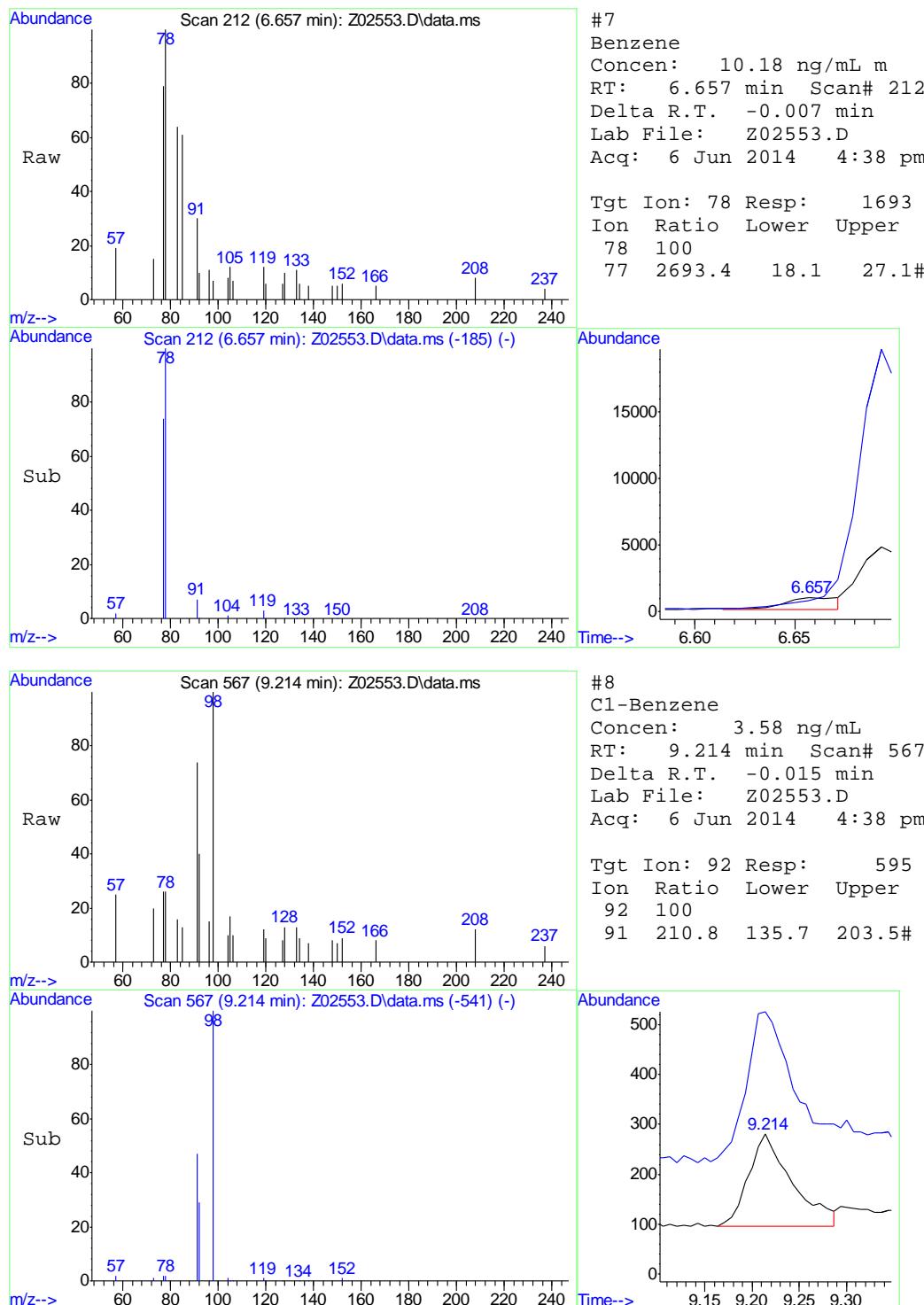
Quant Time: Jun 09 08:36:35 2014

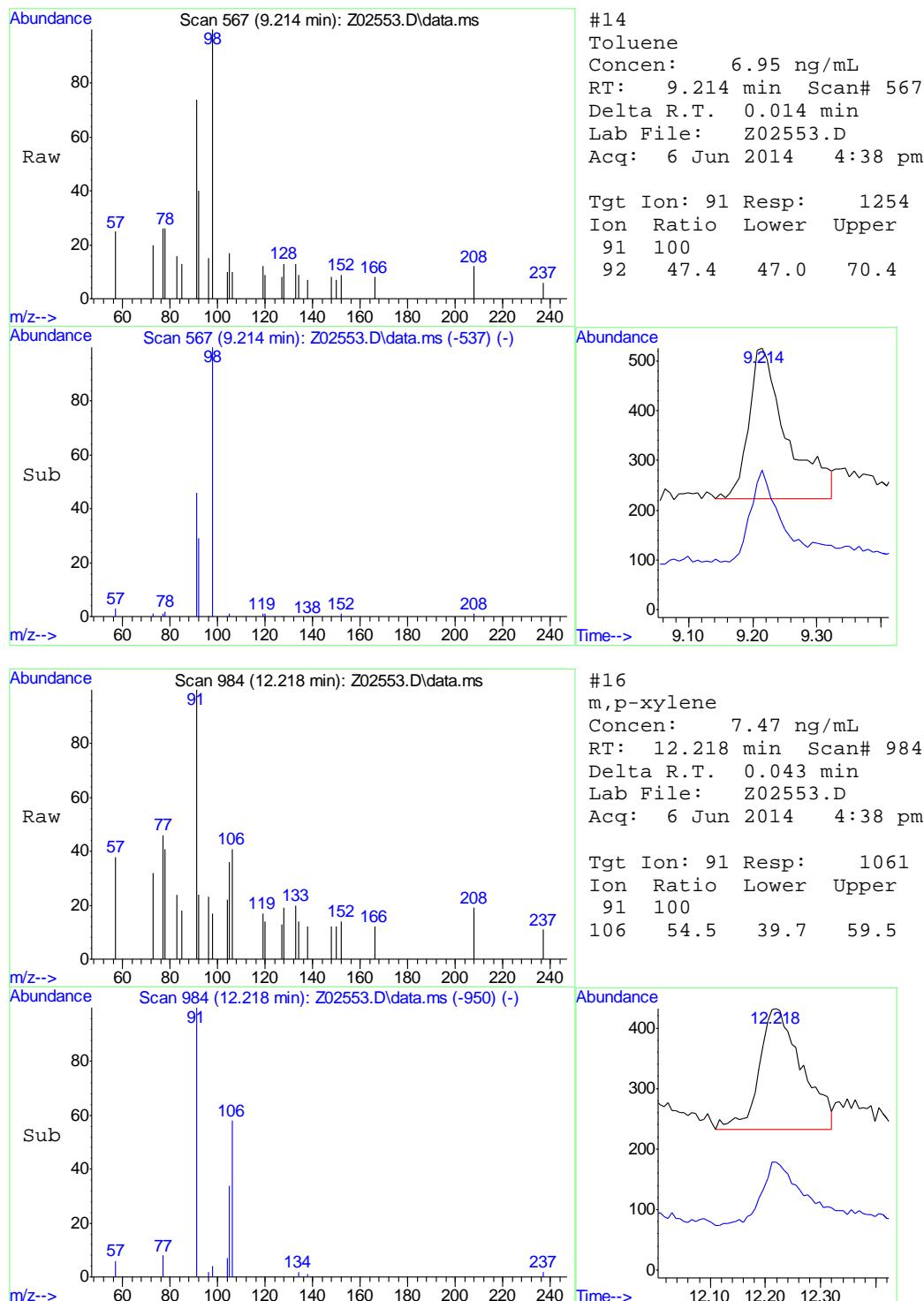
Quant Method : C:\msdchem\2\methods\Z140604-MAHPAHEXT.M

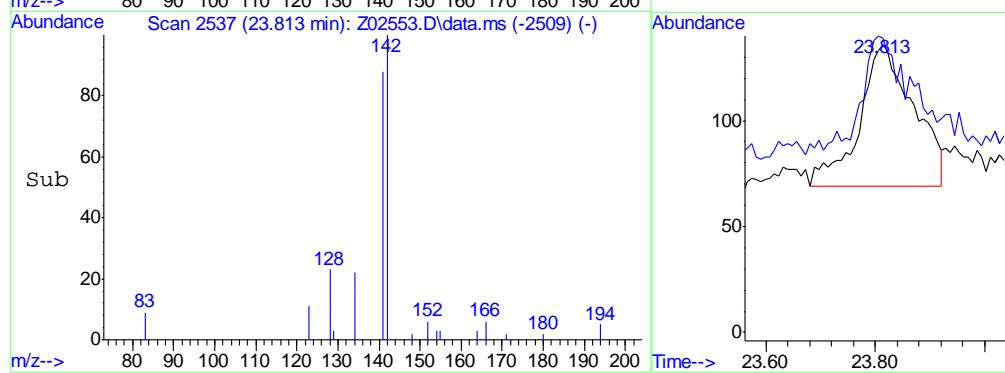
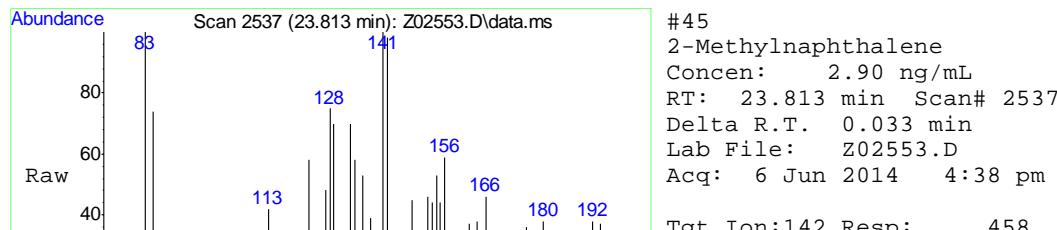
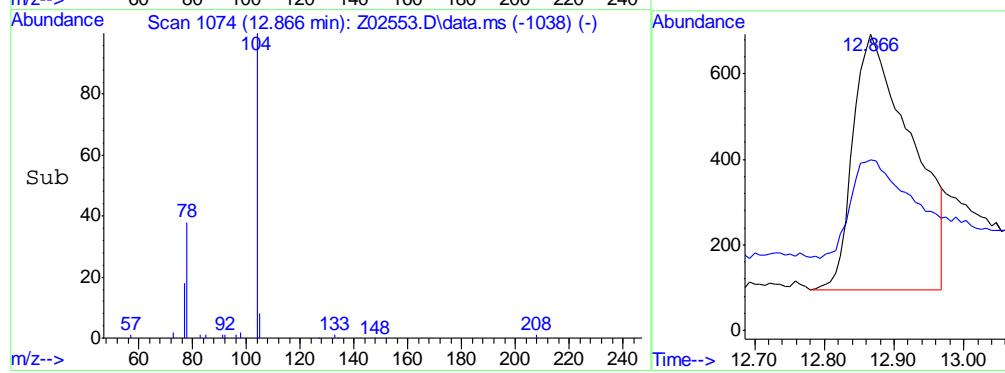
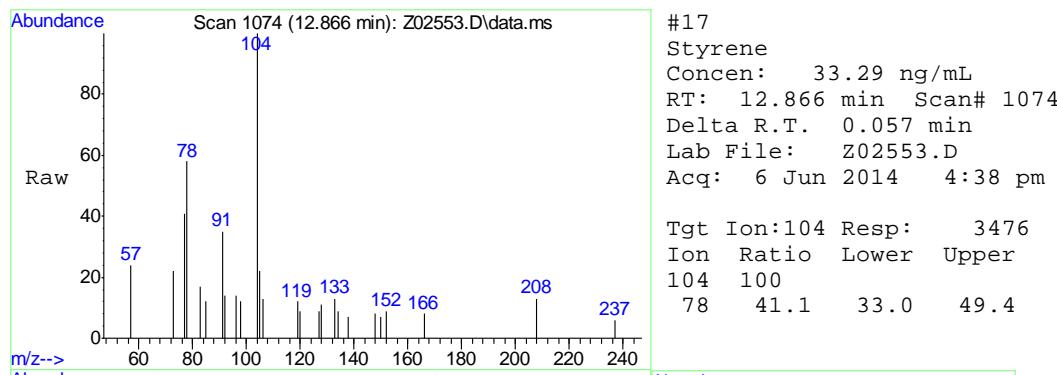
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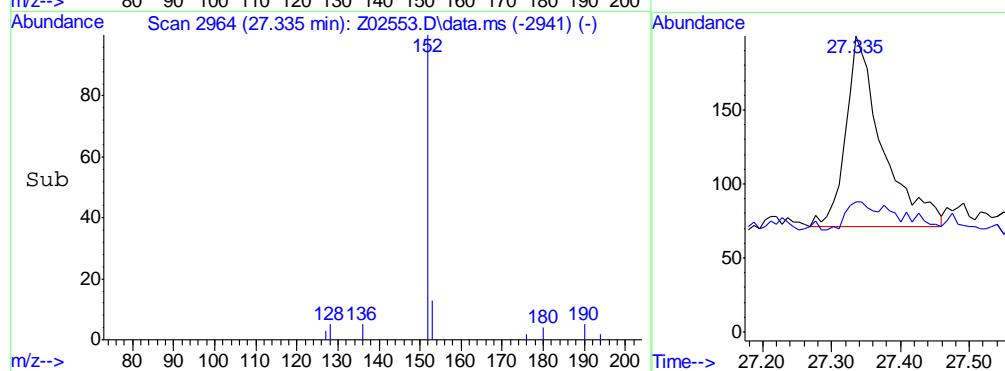
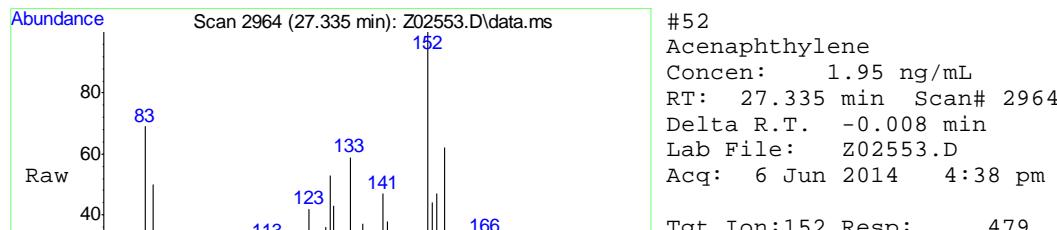
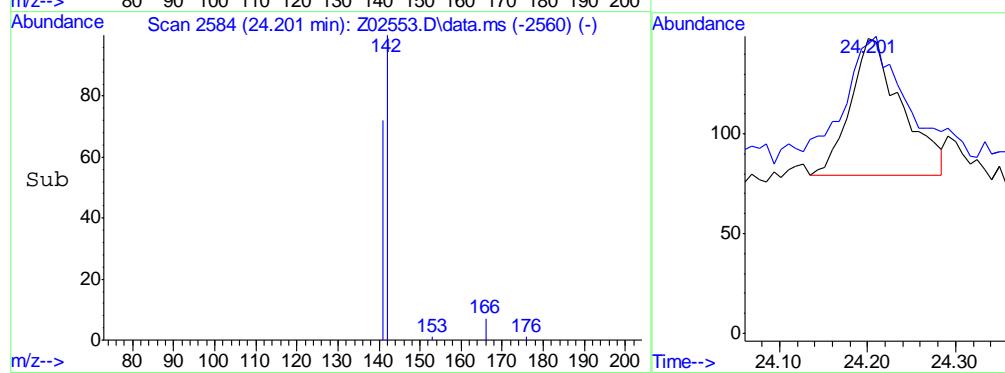
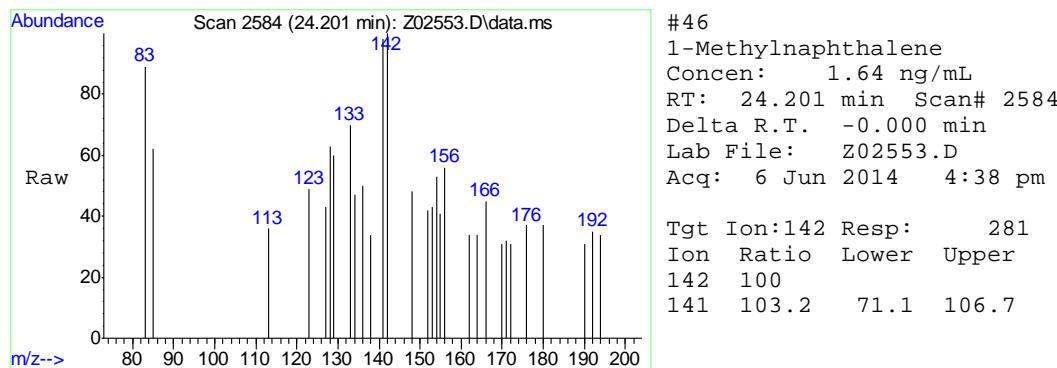
Abundance

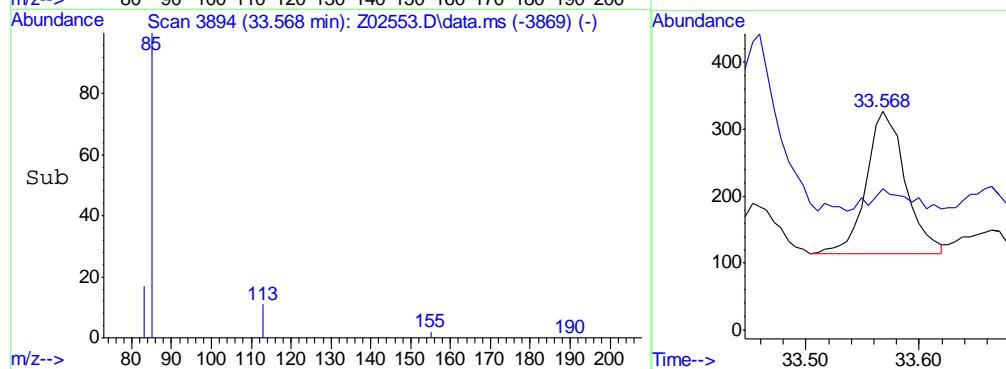
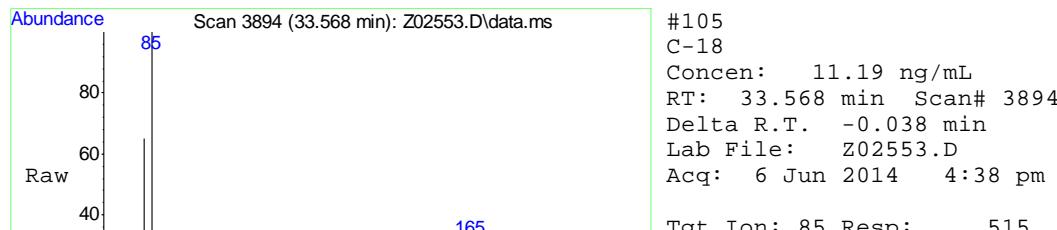
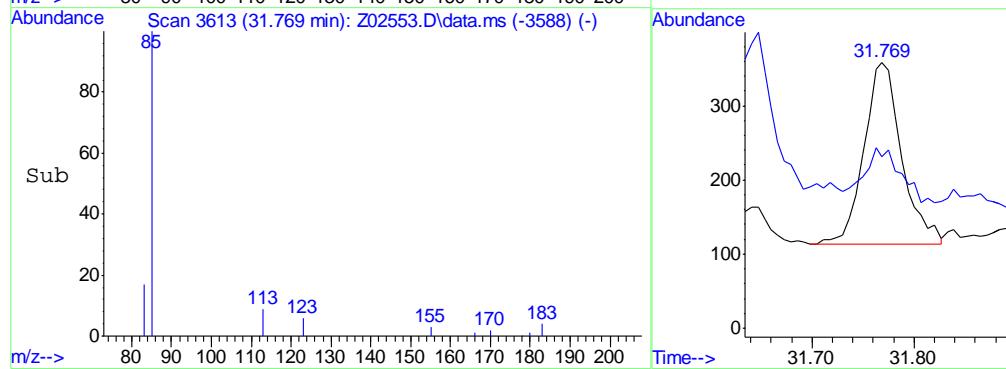
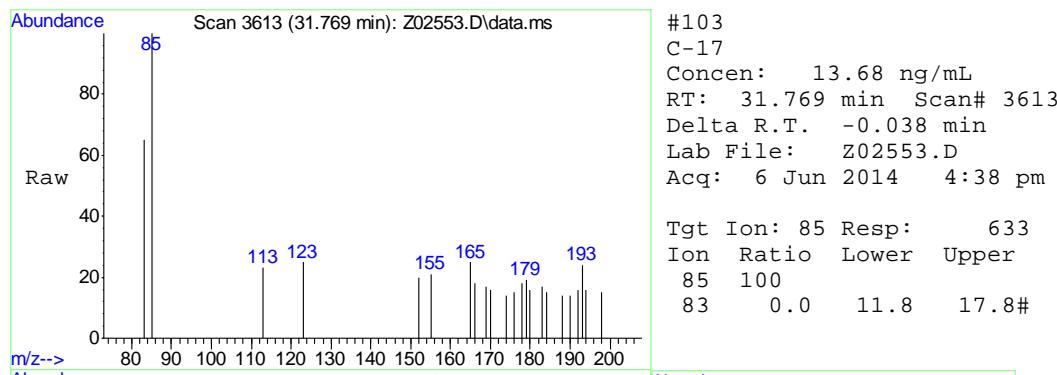


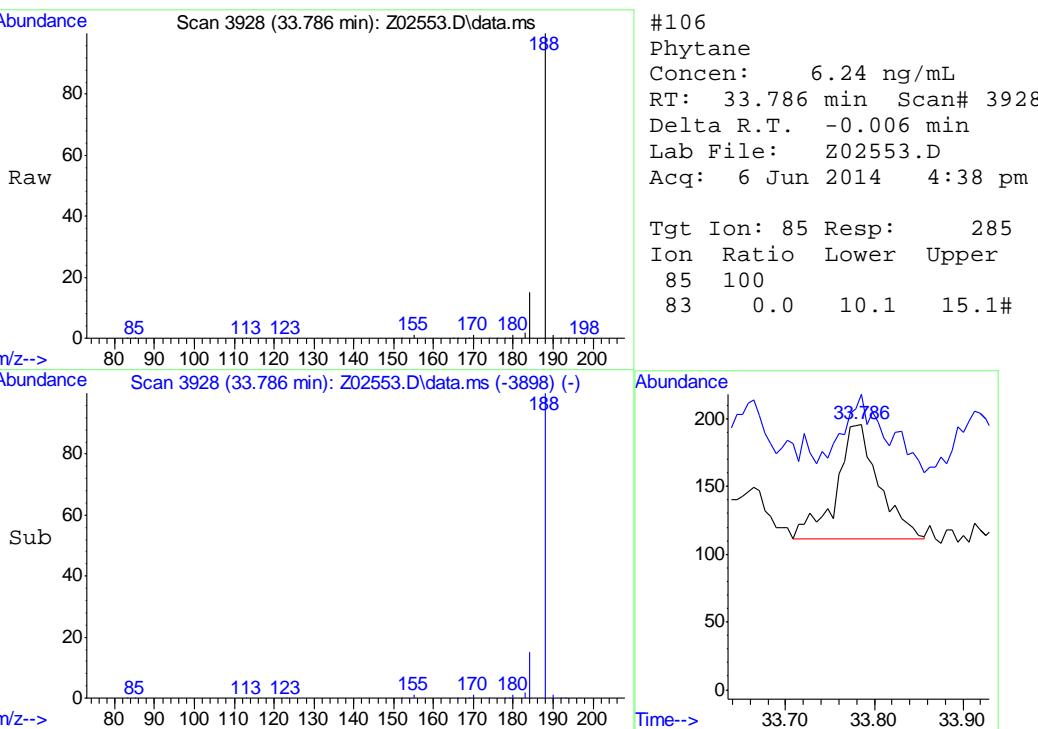










7.2.2  
7



## GC 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
- Surrogate Recovery Summaries

## Method Blank Summary

Page 1 of 1

Job Number: MC30898

Account: METAMAW META Environmental, Inc.

Project: GEINYA: RG&amp;E West Station, Falls Street, Rochester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38365-MB	BG44581A.D	1	06/04/14	RP	06/02/14	OP38365	GBG1702

The QC reported here applies to the following samples:

Method: ASTM D3328-06

MC30898-2, MC30898-3

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	ND	40	mg/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	95% 40-140%

8.1.1

8

## Method Blank Summary

Page 1 of 1

Job Number: MC30898

Account: METAMAW META Environmental, Inc.

Project: GEINYA: RG&amp;E West Station, Falls Street, Rochester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38384-MB	BG44604.D	1	06/05/14	RP	06/03/14	OP38384	GBG1703

The QC reported here applies to the following samples:

Method: ASTM D3328-06

MC30898-1, MC30898-4

CAS No.	Compound	Result	RL	Units	Q
	TPH (C8-C40)	ND	5.7	mg/l	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	107% 40-140%

**Blank Spike Summary**

Page 1 of 1

Job Number: MC30898

Account: METAMAW META Environmental, Inc.

Project: GEINYA: RG&amp;E West Station, Falls Street, Rochester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38365-BS1	BG44583.D	1	06/04/14	RP	06/02/14	OP38365	GBG1702

The QC reported here applies to the following samples:

Method: ASTM D3328-06

MC30898-2, MC30898-3

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH (C8-C40)	ND		40-140	

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	97%	40-140%

\* = Outside of Control Limits.

**Blank Spike Summary**

Page 1 of 1

Job Number: MC30898

Account: METAMAW META Environmental, Inc.

Project: GEINYA: RG&amp;E West Station, Falls Street, Rochester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38384-BS1	BG44606.D	1	06/05/14	RP	06/03/14	OP38384	GBG1703

The QC reported here applies to the following samples:

Method: ASTM D3328-06

MC30898-1, MC30898-4

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH (C8-C40)		ND		40-140

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	104%	40-140%

\* = Outside of Control Limits.

**Duplicate Summary**

Page 1 of 1

Job Number: MC30898

Account: METAMAW META Environmental, Inc.

Project: GEINYA: RG&amp;E West Station, Falls Street, Rochester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38365-DUP8	BG44626.D	1	06/05/14	RP	06/02/14	OP38365	GBG1703
MC30898-2	BG44628.D	1	06/05/14	RP	06/02/14	OP38365	GBG1703

The QC reported here applies to the following samples:

Method: ASTM D3328-06

MC30898-2, MC30898-3

CAS No.	Compound	MC30898-2 DUP					
		mg/kg	Q	mg/kg	Q	RPD	Limits
	TPH (C8-C40)	95.0		202		72* a	30

CAS No.	Surrogate Recoveries	DUP	MC30898-2 Limits		
			79%	75%	40-140%
84-15-1	o-Terphenyl				

(a) High RPD due to possible sample heterogeneity.

\* = Outside of Control Limits.

**Duplicate Summary**

Page 1 of 1

Job Number: MC30898

Account: METAMAW META Environmental, Inc.

Project: GEINYA: RG&amp;E West Station, Falls Street, Rochester, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP38384-DUP	BG44608.D	1	06/05/14	RP	06/03/14	OP38384	GBG1703
MC30898-1	BG44610.D	1	06/05/14	RP	06/03/14	OP38384	GBG1703

The QC reported here applies to the following samples:

Method: ASTM D3328-06

MC30898-1, MC30898-4

CAS No.	Compound	MC30898-1 DUP				Limits
		mg/l	Q	mg/l	RPD	
	TPH (C8-C40)	ND		ND	nc	20
CAS No.		Surrogate Recoveries		DUP	MC30898-1 Limits	
84-15-1	o-Terphenyl	111%		112%		40-140%

\* = Outside of Control Limits.

**Semivolatile Surrogate Recovery Summary**

Page 1 of 1

**Job Number:** MC30898**Account:** METAMAW META Environmental, Inc.**Project:** GEINYA: RG&E West Station, Falls Street, Rochester, NY**Method:** ASTM D3328-06**Matrix:** AQ**Samples and QC shown here apply to the above method**

<b>Lab Sample ID</b>	<b>Lab File ID</b>	<b>S1<sup>a</sup></b>
--------------------------	------------------------	-----------------------

MC30898-1	BG44610.D	112
MC30898-4	BG44612.D	109
OP38384-BS1	BG44606.D	104
OP38384-DUP	BG44608.D	111
OP38384-MB	BG44604.D	107

<b>Surrogate Compounds</b>	<b>Recovery Limits</b>
--------------------------------	----------------------------

<b>S1 = o-Terphenyl</b>	40-140%
-------------------------	---------

(a) Recovery from GC signal #1

8.4.1

8

## Semivolatile Surrogate Recovery Summary

Page 1 of 1

Job Number: MC30898

Account: METAMAW META Environmental, Inc.

Project: GEINYA: RG&amp;E West Station, Falls Street, Rochester, NY

Method: ASTM D3328-06

Matrix: SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 <sup>a</sup>
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MC30898-2	BG44628.D	75
MC30898-3	BG44630.D	85
OP38365-BS1	BG44583.D	97
OP38365-DUP8	BG44626.D	79
OP38365-MB	BG44581A.D	95

Surrogate Compounds	Recovery Limits
------------------------	--------------------

S1 = o-Terphenyl	40-140%
------------------	---------

(a) Recovery from GC signal #1

8.4.2  
8



## GC Semi-volatiles

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Raw Data

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Manual Integrations  
APPROVED  
268 of 285  
(compounds with "m" flag)  
James Roush  
06/13/14 12:10

## Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\BG140604.SEC\BG44610.D  
 Sample : MC30898-1  
 Misc : OP38384,GBG1703,35,,,2,1  
 ALS Vial : 31 Sample Multiplier: 1  
 Acq On : 5 Jun 2014 11:17 am Operator: RubenP

Quant Time: Jun 11 11:47:50 2014  
 Quant Method : G:\1\methods\BG140522ALK-Rear.m\BG140522ALK-Rear.m  
 Quant Title : n-C8 - n-C40 normal alkanes w/ isoprenoids

Compound	R.T.	Response	Conc	Units
<hr/>				
Internal Standards				
1) I 5a-Androstan e	31.696	107313786	50.000	µg/mL
<hr/>				
System Monitoring Compounds				
2) S o-Terphenyl	29.675	60955249	27.947	µg/mL
Spiked Amount	25.000	Recovery	=	111.79%
<hr/>				
Target Compounds				
41) H TPH (C8-C40)	31.554	39522228	19.430	µg/mL
<hr/>				
SemiQuant Compounds - Not Calibrated on this Instrument				
<hr/>				
(f)=RT Delta > 1/2 Window		(m)=manual int.		

9.1.1

6

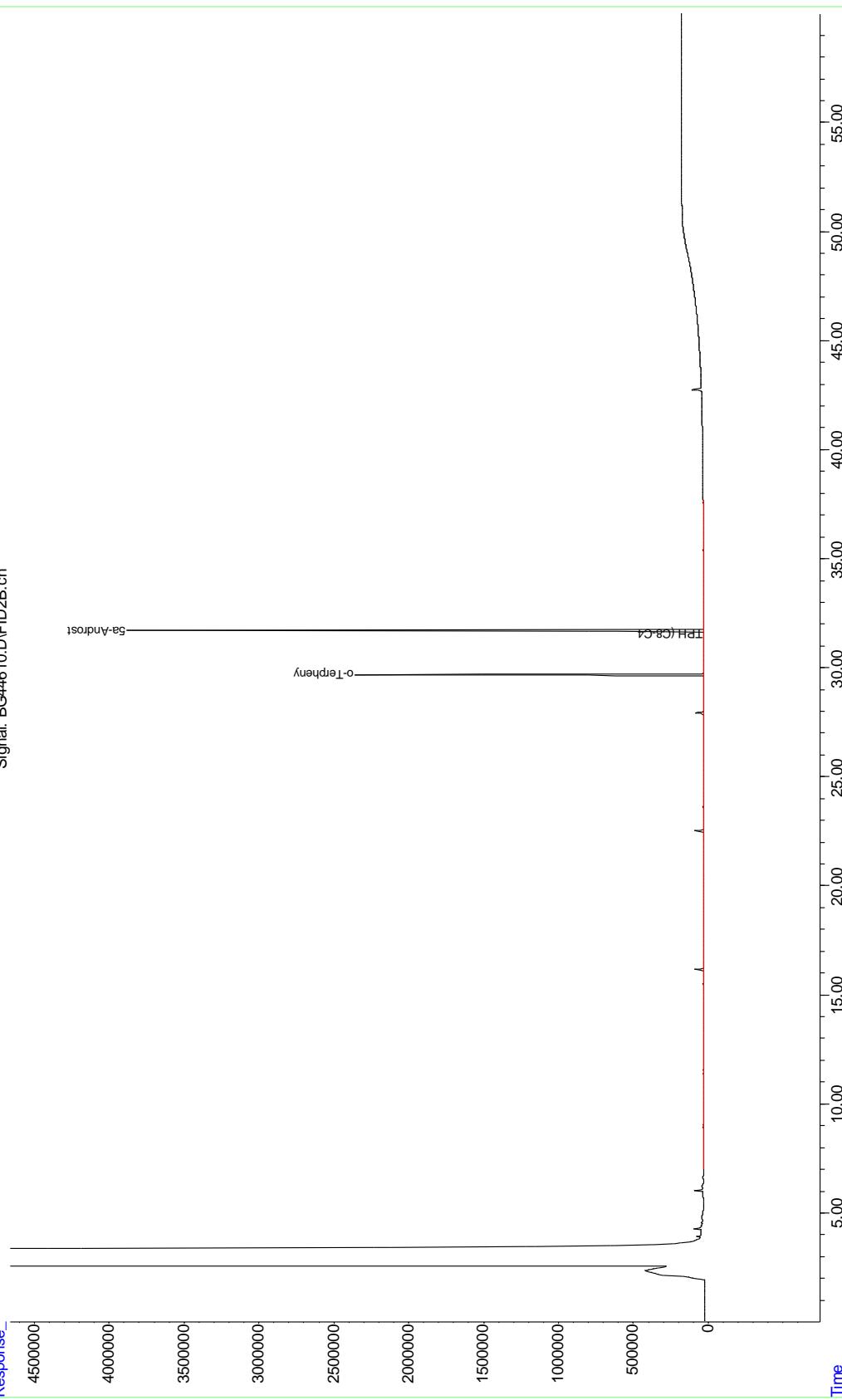
## Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\BG140604.SEC\BG44610.D  
 Sample : MC30898-1  
 Misc : OP38384, GBG1703,35,,2,1  
 ALS Vial : 31 Sample Multiplier: 1  
 Acq On : 5 Jun 2014 11:17 am  
 Operator: RubenP

Quant Time: Jun 11 11:47:50 2014

Quant Method : G:\1\methods\BG140522ALK-Rear.m\BG140522ALK-Rear.m  
 Quant Title : n-C8 - n-C40 normal alkanes w/ isoprenoids

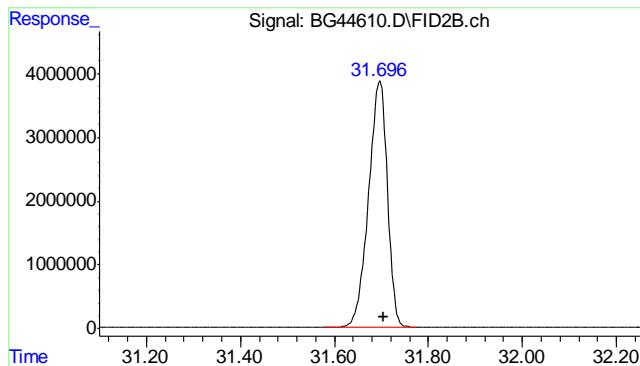
Response\_ Signal: BG44610.D\FID2B.ch



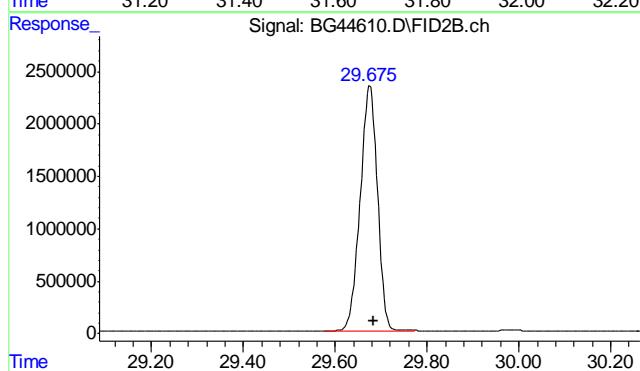
196G140522ALK-Rear.m Wed Jun 11 13:01:33 2014

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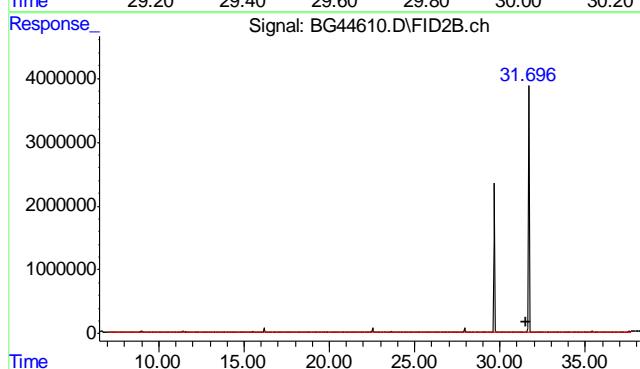
6 1.1



#1 5a-Androstan  
R.T.: 31.696 min  
Delta R.T.: -0.010 min  
Response: 107313786  
Conc: 50.00 µg/mL m



#2 o-Terphenyl  
R.T.: 29.675 min  
Delta R.T.: -0.010 min  
Response: 60955249  
Conc: 27.95 µg/mL m



#41 TPH (C8-C40)  
R.T.: 31.554 min  
Delta R.T.: 0.000 min  
Response: 39522228  
Conc: 19.43 µg/mL m

James Roush  
 06/13/14 12:10

## Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\BG140604.SEC\BG44628.D  
 Sample : MC30898-2  
 Misc : OP38365,GBG1703,5.91,,,2,1  
 ALS Vial : 39 Sample Multiplier: 1  
 Acq On : 5 Jun 2014 9:33 pm

Operator: RubenP

Quant Time: Jun 11 11:59:11 2014  
 Quant Method : G:\1\methods\BG140522ALK-Rear.m\BG140522ALK-Rear.m  
 Quant Title : n-C8 - n-C40 normal alkanes w/ isoprenoids

Compound	R.T.	Response	Conc	Units
<hr/>				
Internal Standards				
1) I 5a-Androstan e	31.694	86298720	50.000	µg/mLm
<hr/>				
System Monitoring Compounds				
2) S o-Terphenyl	29.672	32932085	18.776	µg/mLm
Spiked Amount	25.000	Recovery	=	75.10%
<hr/>				
Target Compounds				
41) H TPH (C8-C40)	31.554	265285446	162.180	µg/mLm
<hr/>				
SemiQuant Compounds - Not Calibrated on this Instrument				
<hr/>				
(f)=RT Delta > 1/2 Window				(m)=manual int.

9.1.2

9

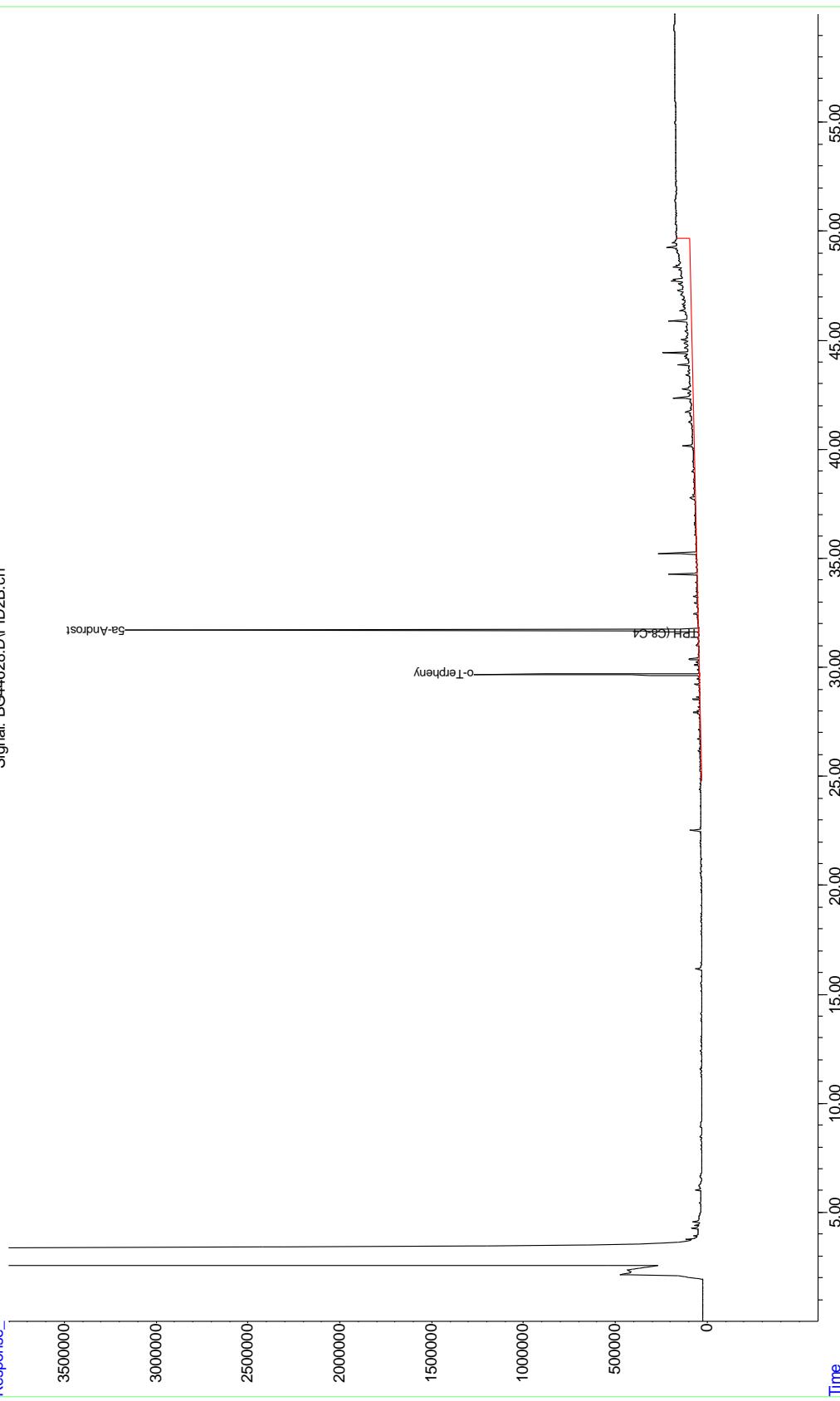
## Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\BG140604.SEC\BG44628.D  
 Sample : MC30898-2  
 Misc : OP38365, GBG1703,5.91,,2,1  
 ALS Vial : 39 Sample Multiplier: 1  
 Acq On : 5 Jun 2014 9:33 pm  
 Operator: RubenP

Quant Time: Jun 11 11:59:11 2014

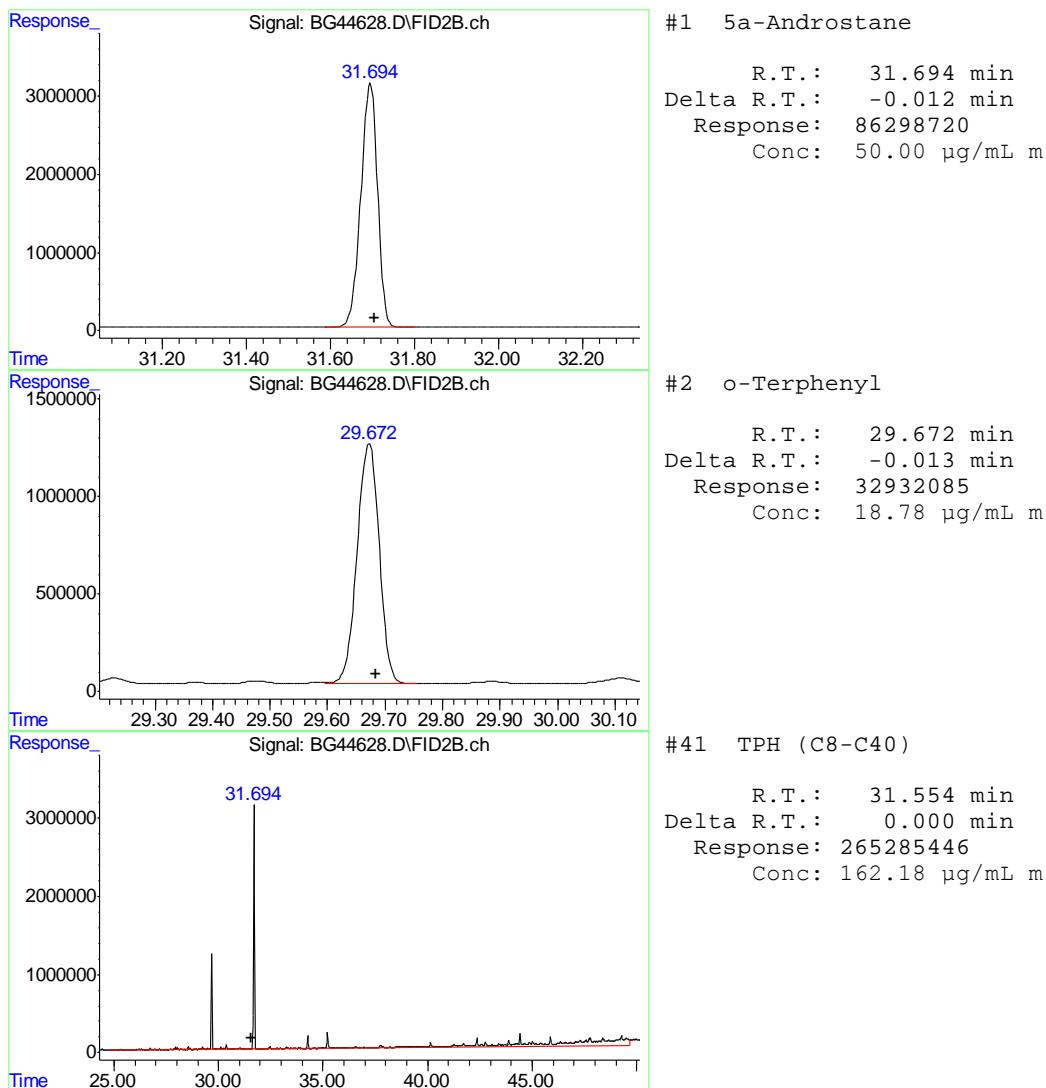
Quant Method : G:\1\methods\BG140522ALK-Rear.m\BG140522ALK-Rear.m  
 Quant Title : n-C8 - n-C40 normal alkanes w/ isoprenoids

Response\_



199G140522ALK-Rear.m Wed Jun 11 13:03:40 2014

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Manual Integrations  
APPROVED  
274 of 285  
(compounds with "m" flag)

James Roush  
06/13/14 12:10

## Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\BG140604.SEC\BG44630.D  
Sample : MC30898-3  
Misc : OP38365,GBG1703,5.19,,,2,1  
ALS Vial : 40 Sample Multiplier: 1  
Acq On : 5 Jun 2014 10:41 pm

Operator: RubenP

Quant Time: Jun 11 11:58:38 2014  
Quant Method : G:\1\methods\BG140522ALK-Rear.m\BG140522ALK-Rear.m  
Quant Title : n-C8 - n-C40 normal alkanes w/ isoprenoids

Compound	R.T.	Response	Conc	Units
<hr/>				
Internal Standards				
1) I 5a-Androstan e	31.695	88344204	50.000	µg/mLm
<hr/>				
System Monitoring Compounds				
2) S o-Terphenyl	29.674	38072407	21.204	µg/mLm
Spiked Amount	25.000	Recovery	=	84.82%
<hr/>				
Target Compounds				
41) H TPH (C8-C40)	31.554	516966008	308.725	µg/mLm
<hr/>				
SemiQuant Compounds - Not Calibrated on this Instrument				
<hr/>				
(f)=RT Delta > 1/2 Window			(m)=manual int.	

9.1.3

9

## Quantitation Report (QT Reviewed)

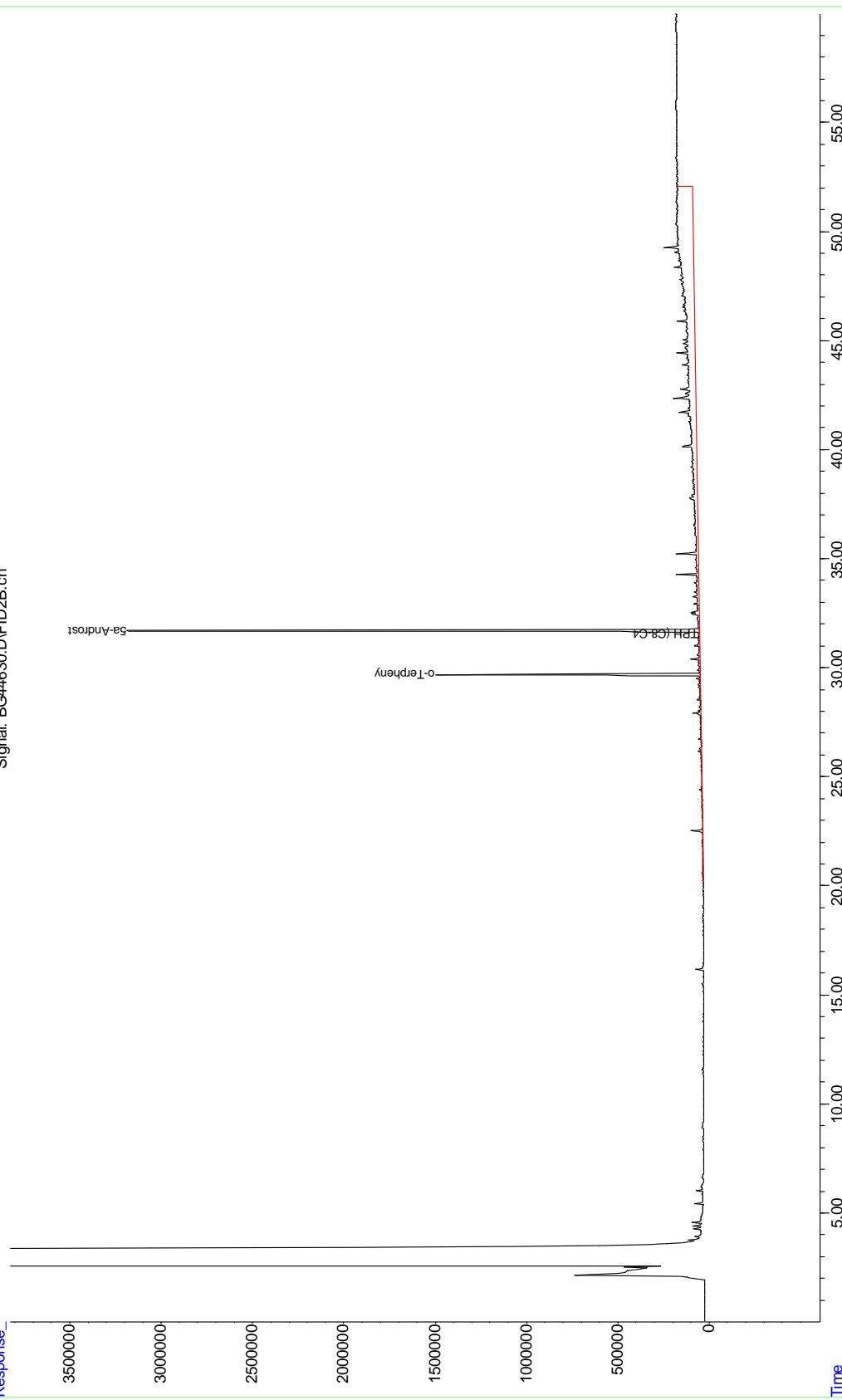
Data File: C:\msdchem\1\data\BG140604.SEC\BG44630.D  
 Sample : MC30898-3  
 Misc : OP38365, GBG1703,5.19,,,2,1  
 ALS Vial : 40 Sample Multiplier: 1  
 Acq On : 5 Jun 2014 10:41 pm  
 Operator: RubenP

Quant Time: Jun 11 11:58:38 2014

Quant Method : G:\1\methods\BG140522ALK-Rear.m\BG140522ALK-Rear.m

Quant Title : n-C8 - n-C40 normal alkanes w/ isoprenoids

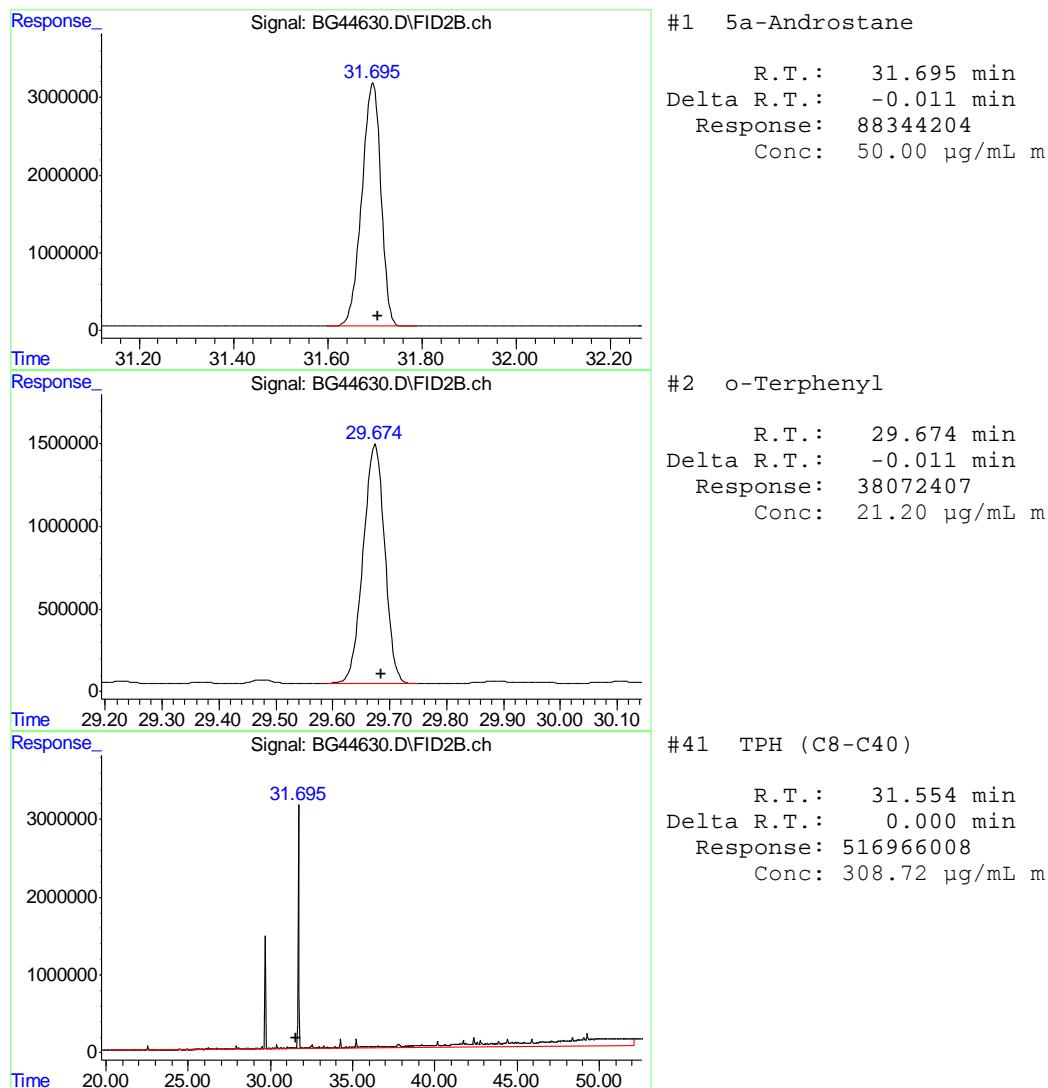
Response\_



202G140522ALK-Rear.m Wed Jun 11 13:03:47 2014

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9.1.3

9.1.3  
9

James Roush  
 06/13/14 12:10

## Quantitation Report (QT Reviewed)

Data File: C:\msdchem\1\data\BG140604.SEC\BG44612.D  
 Sample : MC30898-4  
 Misc : OP38384,GBG1703,35,,,2,1  
 ALS Vial : 32 Sample Multiplier: 1  
 Acq On : 5 Jun 2014 12:27 pm

Operator: RubenP

Quant Time: Jun 11 11:48:20 2014  
 Quant Method : G:\1\methods\BG140522ALK-Rear.m\BG140522ALK-Rear.m  
 Quant Title : n-C8 - n-C40 normal alkanes w/ isoprenoids

Compound	R.T.	Response	Conc	Units
<hr/>				
Internal Standards				
1) I 5a-Androstan e	31.691	78816546	50.000	µg/mLm
<hr/>				
System Monitoring Compounds				
2) S o-Terphenyl	29.672	43745777	27.309	µg/mLm
Spiked Amount	25.000	Recovery	=	109.24%
<hr/>				
Target Compounds				
41) H TPH (C8-C40)	31.554	26979912	18.060	µg/mLm
<hr/>				
SemiQuant Compounds - Not Calibrated on this Instrument				
<hr/>				
(f)=RT Delta > 1/2 Window				(m)=manual int.

9.1.4

9

## Quantitation Report (QT Reviewed)

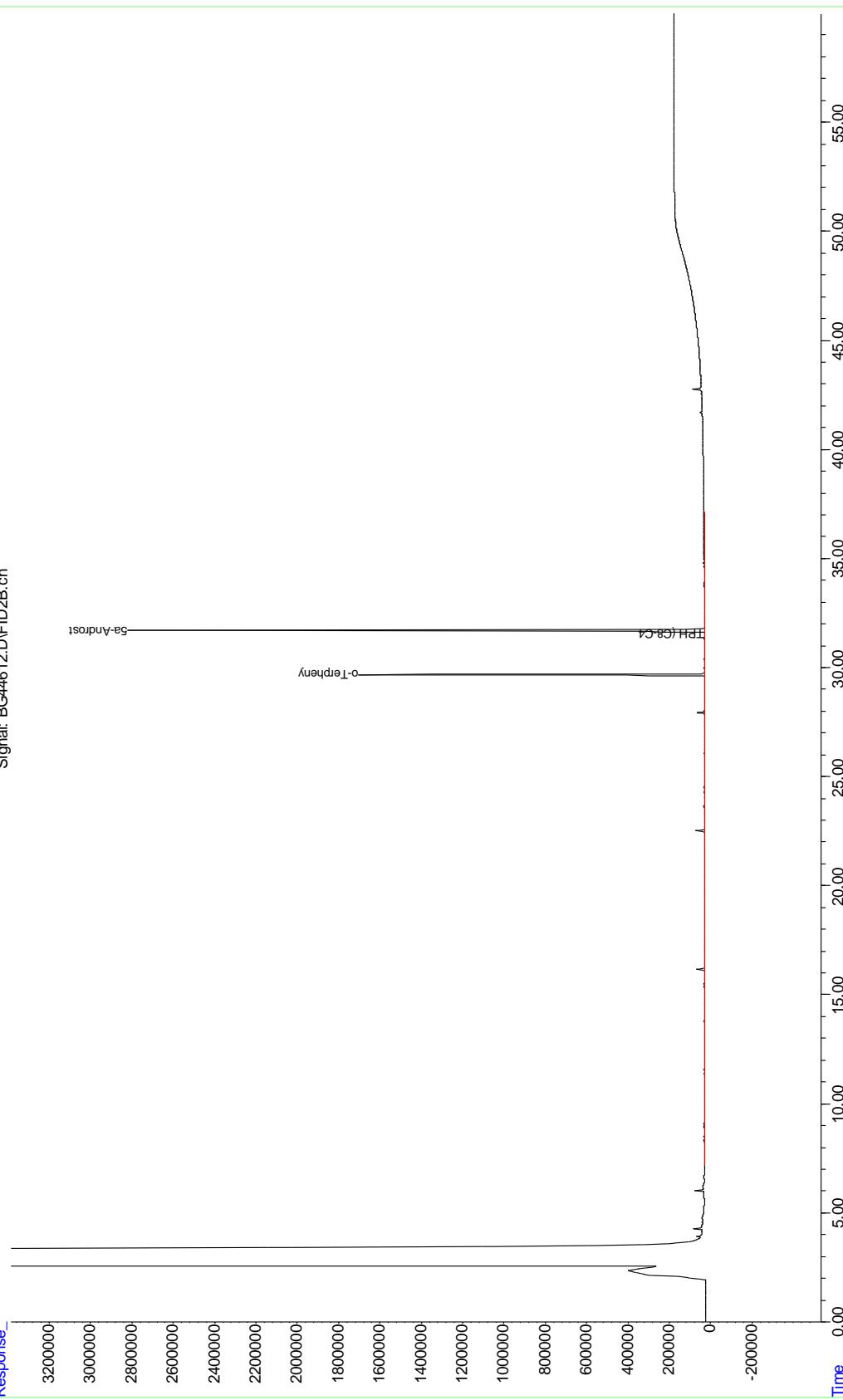
Data File: C:\msdchem\1\data\BG140604.SEC\BG44612.D  
 Sample : MC30898-4  
 Misc : OP3884, GBG1703,35,,2,1  
 ALS Vial : 32 Sample Multiplier: 1  
 Acq On : 5 Jun 2014 12:27 PM  
 Operator: RubenP

Quant Time: Jun 11 11:48:20 2014

Quant Method : G:\1\methods\BG140522ALK-Rear.m\BG140522ALK-Rear.m

Quant Title : n-C8 - n-C40 normal alkanes w/ isoprenoids

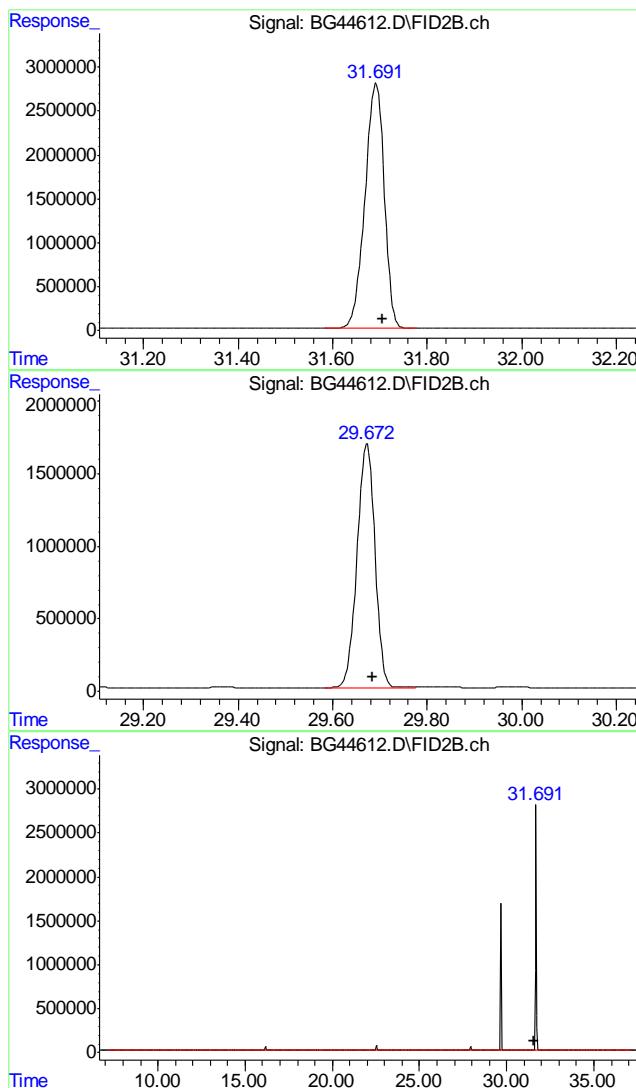
Response\_



205G140522ALK-Rear.m Wed Jun 11 13:01:55 2014

Page: 2

9.1.4



#1 5a-Androstane

R.T.: 31.691 min  
 Delta R.T.: -0.015 min  
 Response: 78816546  
 Conc: 50.00  $\mu\text{g/mL}$

#2 o-Terphenyl

R.T.: 29.672 min  
 Delta R.T.: -0.013 min  
 Response: 43745777  
 Conc: 27.31  $\mu\text{g/mL}$

#41 TPH (C8-C40)

R.T.: 31.554 min  
 Delta R.T.: 0.000 min  
 Response: 26979912  
 Conc: 18.06  $\mu\text{g/mL}$

Data File: G:\1\data\BG140604\BG44581a.d  
 Sample : OP38365-MB  
 Misc : OP38365,GBG1702,5.0,,,2,1  
 ALS Vial : 3 Sample Multiplier: 1  
 Acq On : 4 Jun 2014 5:35 pm Operator: RubenP

Quant Time: Jun 06 13:35:32 2014  
 Quant Method : G:\1\methods\BG130925ALK-Front.m  
 Quant Title : n-C8 - n-C40 normal alkanes w/ isoprenoids

Compound	R.T.	Response	Conc Units
<hr/>			
Internal Standards			
1) I 5a-Androstan	32.037	75087092	50.000 µg/mL
<hr/>			
System Monitoring Compounds			
2) S o-Terphenyl	30.022	37602341	23.844 µg/mL
Spiked Amount	25.000	Recovery	= 95.38%
<hr/>			
Target Compounds			
41) H TPH (C8-C40)	29.763	30260222	20.971 µg/mL
<hr/>			
SemiQuant Compounds - Not Calibrated on this Instrument			
<hr/>			

(f)=RT Delta &gt; 1/2 Window

(m)=manual int.

9.2.1

9

## Quantitation Report (QT Reviewed)

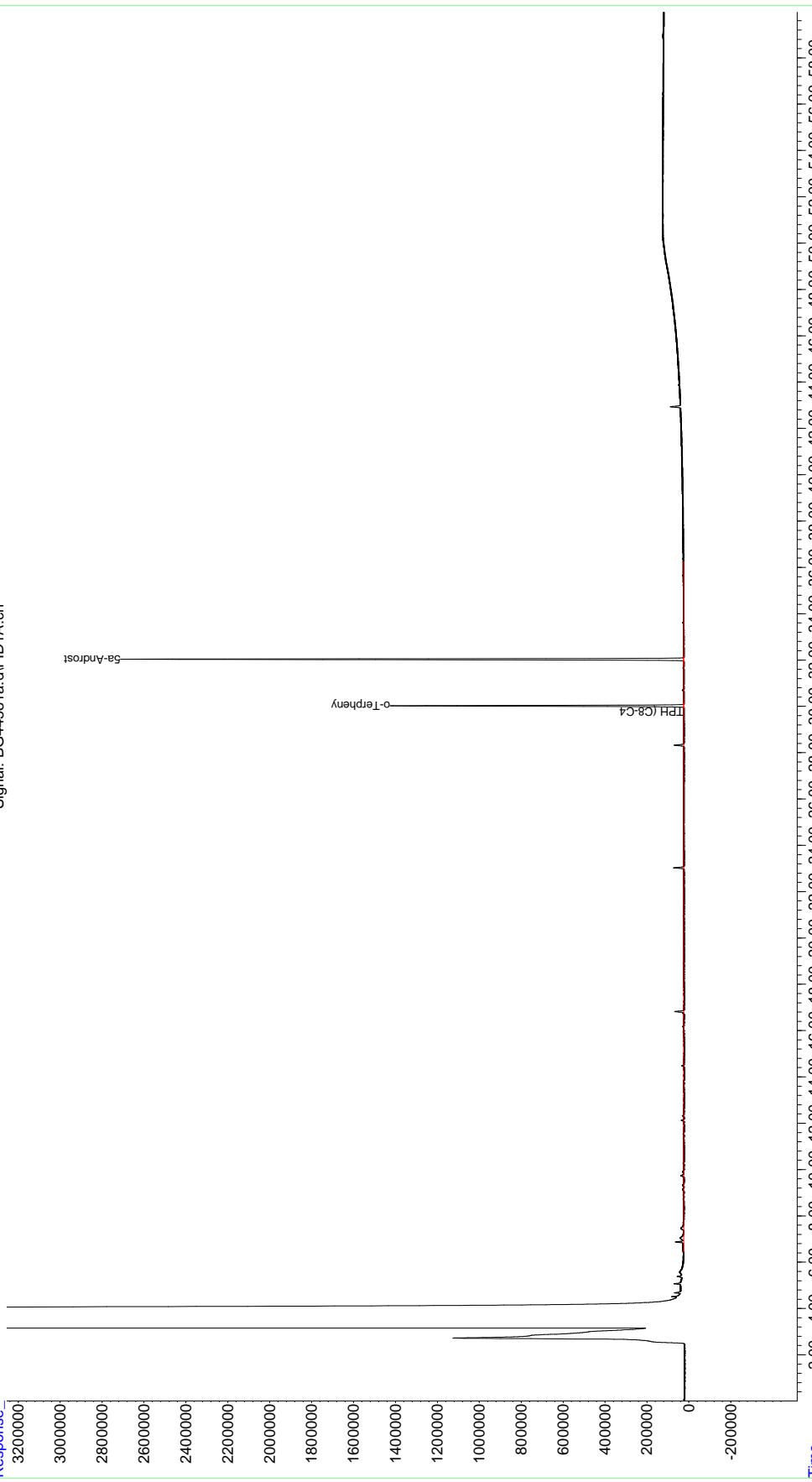
Data File: G:\1\data\BG140604\BG44581a.d  
 Sample : OP38365-MB  
 Misc : OP38365,GBG1702,5.0,,2,1  
 ALS Vial : 3 Sample Multiplier: 1  
 Acq On : 4 Jun 2014 5:35 pm  
 Operator: RubenP

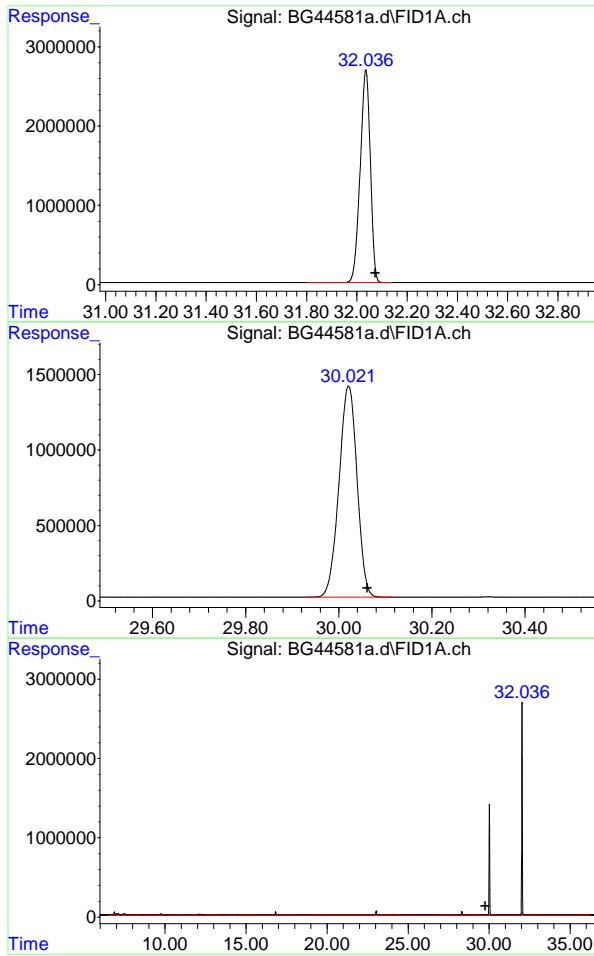
Quant Time: Jun 06 13:35:32 2014

Quant Method: G:\1\methods\BG130925ALK-Front.m

Quant Title: n-C8 - n-C40 normal alkanes w/ isoprenoids

Response



#1 5 $\alpha$ -Androstane

R.T.: 32.037 min  
 Delta R.T.: -0.037 min  
 Response: 75087092  
 Conc: 50.00  $\mu\text{g}/\text{mL}$

#2 o-Terphenyl

R.T.: 30.022 min  
 Delta R.T.: -0.039 min  
 Response: 37602341  
 Conc: 23.84  $\mu\text{g}/\text{mL}$

#41 TPH (C8-C40)

R.T.: 29.763 min  
 Delta R.T.: 0.000 min  
 Response: 30260222  
 Conc: 20.97  $\mu\text{g}/\text{mL}$

9.2.1

9

Data File: G:\1\data\BG140604.SEC\BG44604.D  
 Sample : OP38384-MB  
 Misc : OP38384,GBG1703,35,,,2,1  
 ALS Vial : 28 Sample Multiplier: 1  
 Acq On : 5 Jun 2014 7:47 am

Operator: RubenP

Manual Integrations  
 APPROVED  
 283 of 283  
 (compounds with "m" flag)

Ruben Parrilla  
 06/16/14 10:10

Quant Time: Jun 11 11:49:14 2014  
 Quant Method : G:\1\methods\BG140522ALK-Rear.m\BG140522ALK-Rear.m  
 Quant Title : n-C8 - n-C40 normal alkanes w/ isoprenoids

Compound	R.T.	Response	Conc Units
<hr/>			
Internal Standards			
1) I 5a-Androstan	31.692	79141703	50.000 µg/mLm
<hr/>			
System Monitoring Compounds			
2) S o-Terphenyl	29.672	42988169	26.726 µg/mLm
Spiked Amount	25.000	Recovery	= 106.90%
<hr/>			
Target Compounds			
41) H TPH (C8-C40)	31.554	38698989	25.798 µg/mLm
<hr/>			
SemiQuant Compounds - Not Calibrated on this Instrument			
<hr/>			

(f)=RT Delta &gt; 1/2 Window

(m)=manual int.

9.2.2  
9

## Quantitation Report (QT Reviewed)

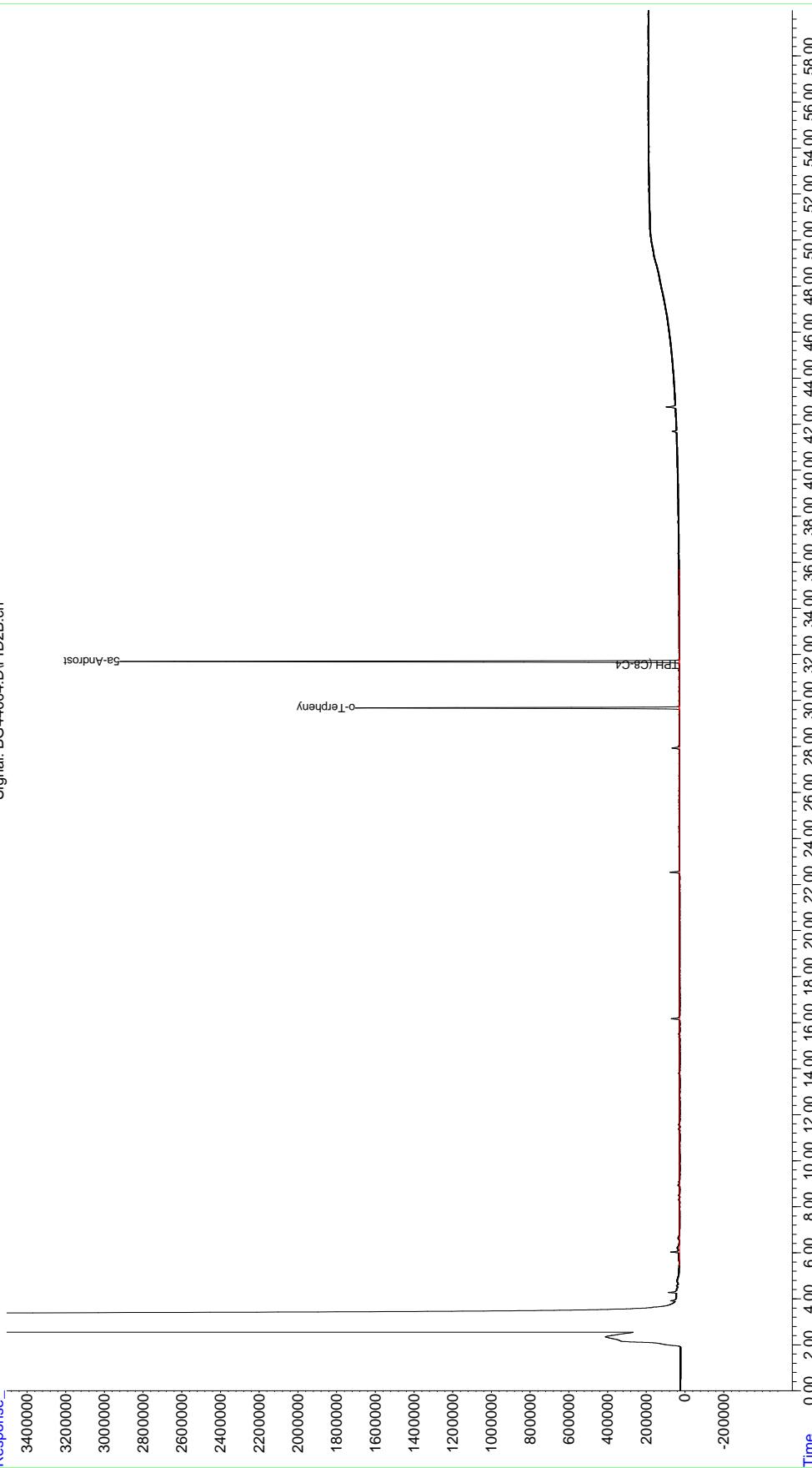
Data File: G:\1\data\BG140604.SEC\BG44604.D

Sample : OP38384-MB  
 Misc : OP38384,GBG1703,35,,2,1  
 ALS Vial : 28 Sample Multiplier: 1  
 Acq On : 5 Jun 2014 7:47 am

Quant Time: Jun 11 11:49:14 2014

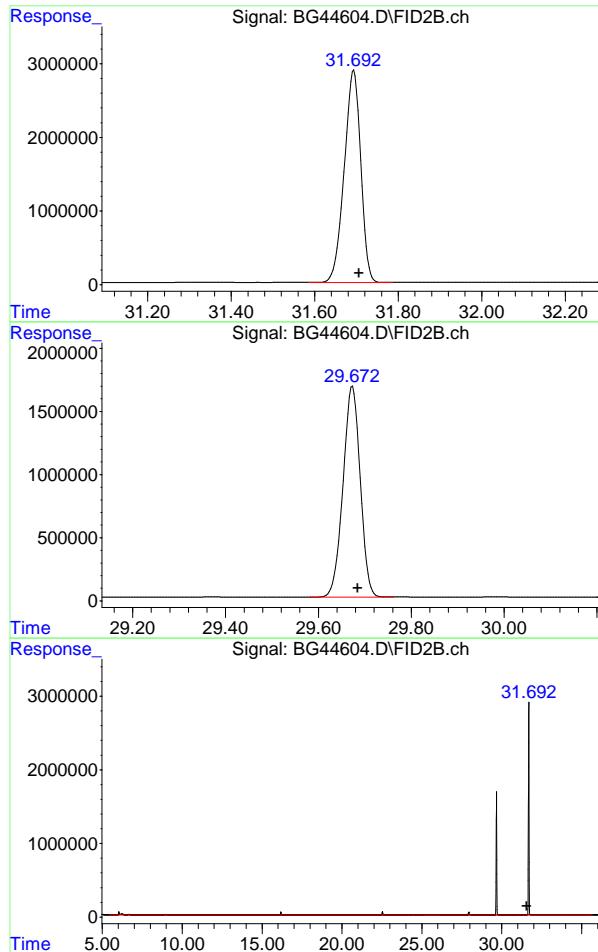
Quant Method : G:\1\methods\BG140522ALK-Rear.m\BG140522ALK-Rear.m  
 Quant Title : n-C8 - n-C40 normal alkanes w/ isoprenoids

Response\_



,G140522ALK-Rear.m Mon Jun 16 10:12:11 2014

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#1 5a-Androstan

R.T.: 31.692 min  
 Delta R.T.: -0.013 min  
 Response: 79141703  
 Conc: 50.00  $\mu\text{g/mL}$

#2 o-Terphenyl

R.T.: 29.672 min  
 Delta R.T.: -0.012 min  
 Response: 42988169  
 Conc: 26.73  $\mu\text{g/mL}$

#41 TPH (C8-C40)

R.T.: 31.554 min  
 Delta R.T.: 0.000 min  
 Response: 38698989  
 Conc: 25.80  $\mu\text{g/mL}$

9.2.2  
9