

March 1, 2018

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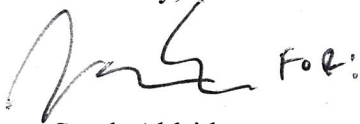
Subject: Second Half 2017 Semi-Annual Groundwater Monitoring Report
Patchogue Former MGP Site
Patchogue, Suffolk County, New York
Site No. 1-52-182

Dear Mr. Wu:

This letter serves to transmit one hard copy and one CD containing an electronic copy of the Second Half 2017 Semi-Annual Groundwater Monitoring Report for the Patchogue Former Manufactured Gas Plant (MGP) located in Patchogue, Suffolk County, New York (Site No. 1-52-182).

If you should have any questions, comments or require any additional information, please do not hesitate to contact me (516-545-2586).

Sincerely,

A handwritten signature in black ink, appearing to read 'Sarah Aldridge', followed by the initials 'F.O.B.'.

Sarah Aldridge
Project Manager, Site Investigation and Remediation

cc: Jacquelyn Nealon, NYSDOH (1 hard copy and electronic copy on CD)
Amy Juchatz, SCDHS (1 hard copy and electronic copy on CD)
Ralph Milito, SCDHS (electronic copy on CD)

Second Half 2017
Semi-Annual Groundwater Monitoring Report
Patchogue Former MGP Site
NYSDEC Site No. 1-52-182
Village of Patchogue, Suffolk County, New York

Prepared for
National Grid USA
Hicksville, New York
March 2018

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Prepared for
National Grid USA
175 East Old Country Road
Hicksville, New York 11801

March 2018

Project Number: 149322.750.004



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Section 1

Introduction

This Semi-Annual Groundwater Monitoring Report documents the implementation and summarizes the results of the groundwater monitoring activities conducted during the second half of 2017 at the Patchogue Former Manufactured Gas Plant (MGP) Site (hereinafter referred to as the “Site”). The groundwater monitoring activities included the performance of the water level measurements, non-aqueous phase liquid (NAPL) gauging and groundwater sampling activities.

The groundwater monitoring event and the preparation of this report are part of the routine groundwater monitoring program being conducted at the Site. This report has been prepared for submittal to the New York State Department of Environmental Conservation (NYSDEC) and includes the following:

- Description of the scope of the field activities, methods and procedures;
- Table summarizing the results of the water level measurements and the gauging for the presence of NAPL in the monitoring wells and piezometers (see Table 1);
- Table summarizing the analytical results for the groundwater samples obtained during the December 2017 monitoring event including a comparison to the applicable groundwater quality criteria (see Table 2);
- Comparison of data from this monitoring period to data from historical monitoring events (Tables 3 and 4);
- Discussion of the results and findings from the groundwater monitoring data;
- A water table elevation contour map depicting the generalized direction of groundwater flow based on groundwater elevation data obtained from monitoring wells and piezometers, as well as surface water elevation data obtained from staff gauges installed in the Patchogue River (Figure 1);
- Field Sampling Data Sheets (Appendix A);
- Laboratory Data Report (Appendix B);
- Data Usability Summary Report (Appendix C); and
- Electronic Data Deliverable (Appendix D).

1.1 Background

Groundwater monitoring events have been conducted at the Site since March 2008 including two monitoring events conducted as part of the remedial investigation (RI) in March 2008 and July 2008. The groundwater monitoring event conducted in December 2017 is the subject of this report. The results of previous monitoring events have had, in general, consistent concentrations and areal distribution of constituents in groundwater. Prior to the March 2010 groundwater monitoring event, site-related dissolved phase constituents [e.g., benzene, toluene, ethylbenzene, isomers of xylene (BTEX) and polycyclic aromatic hydrocarbons (PAHs)] were detected at concentrations above the Class GA groundwater quality criteria [i.e., standards from the 6 NYCRR Part 703 Standards and guidance values from the Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1] in a limited area near the center of the Site. These elevated concentrations did not extend downgradient to the wells closer to the Patchogue River. However, during the March 2010 and September 2010 monitoring events, detections of BTEX and PAH compounds were more widely distributed than during previous events. It was surmised that this change was the result of a temporary dewatering operation at a

construction project conducted by the Village of Patchogue at their wastewater treatment facility (WWTF) located directly across the river (east-southeast) from the Site. Based on the understanding of Site conditions, it was anticipated that when the dewatering operations had ceased, contaminant concentrations in groundwater would re-equilibrate with steady-state (i.e., pre-dewatering) groundwater flow conditions, and eventually return to levels similar to those prior to dewatering. To confirm this, National Grid increased the frequency of the groundwater monitoring from semi-annually to quarterly. The subsequent six quarterly monitoring events documented the return of groundwater flow and groundwater quality to conditions consistent with those prior to the dewatering operations.

Based on this finding, in a May 24, 2012 email, National Grid proposed to the NYSDEC that the frequency of groundwater sampling and analysis return to a semi-annual basis with the schedule for water level monitoring and NAPL gauging remaining on a quarterly basis. NYSDEC agreed with this proposal. Collection of NAPL gauging and water level data remained on a quarterly schedule to provide additional water level data from the piezometers that had been installed in the first half of 2012 in support of the Pre-Remedial Design Investigation. Subsequently, in an October 8, 2013 letter to the NYSDEC, National Grid proposed that the frequency of all components of the groundwater monitoring program (i.e., water level measurements, NAPL gauging and groundwater sampling) be returned to the semi-annual schedule. This proposal was made because the data from the water level measurements and NAPL gauging, including data from the newer piezometers, continued to indicate very consistent findings from quarter to quarter and confirmed the understanding of groundwater flow conditions and NAPL occurrence at the Site. The NYSDEC concurred with this proposal in a December 9, 2013 email.



Section 2

Scope of Work

Field activities for the second half 2017 groundwater monitoring were conducted by Brown and Caldwell Associates (BC) on December 20th and 21st, 2017. The activities conducted during this monitoring event are described below. Locations of the monitoring wells, piezometers and staff gauges referenced below are depicted on Figure 1.

Prior to groundwater sampling, water level measurements and NAPL gauging was performed in the piezometers and monitoring wells associated with the Site. The level of the Patchogue River was measured at the two staff gauges. Water level measurements and NAPL gauging were conducted using an electronic oil/water interface probe; measurements were made to the nearest 0.01 foot. At the locations where NAPL was detected using the oil/water interface probe, a 3-foot long threaded rod attached to a nylon mason line was lowered into the monitoring well or piezometer to confirm the presence of the NAPL. The threaded rod was lowered to the bottom of the monitoring well to measure the approximate thickness of the NAPL accumulation.

Groundwater sampling was conducted at ten monitoring wells following the water level and NAPL gauging activities. Monitoring wells MW-5 and MW-6 were not sampled during this monitoring period due to visible indications of MGP-related impacts (i.e., NAPL or sheen) in these wells. The visible indications of MGP-related impacts in these wells is consistent with observations during previous gauging activities. The standard protocol is that if NAPL is observed in a well during gauging or sampling, groundwater samples are not submitted for laboratory analyses. No NAPL was observed in MW-6 during the December 2017 gauging activities; however, samples were not collected from this location in December due a sheen observed on the threaded rod while gauging MW-6. Based on this observation and past observations of NAPL in MW-6, a field decision was made to not purge and sample MW-6 in December. Groundwater sampling was conducted using low flow purging and sampling techniques in accordance with the United States Environmental Protection Agency (USEPA) protocol (USEPA, July 1996, Revised January 2010). Samples were submitted to Aqua Pro-Tech Laboratories (APL) located in Fairfield, New Jersey. APL is certified (Certification No. 11634) through the New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP).

The groundwater samples were analyzed for: BTEX compounds and methyl tertiary-butyl ether (MTBE) using USEPA SW-846 Method 8260B; and PAHs using USEPA SW-846 Method 8270D. The selective ion monitoring (SIM) component of the 8270 analysis was also performed on the samples to obtain lower detection limits for certain PAH compounds. The groundwater samples were also analyzed in the field for pH, specific conductivity, temperature, turbidity, oxidation-reduction potential, and dissolved oxygen (see Appendix A for field data sheets).

The laboratory report from APL is provided in Appendix B. Laboratory analytical data were provided to BC in electronic form by APL and have been incorporated into the environmental database maintained by BC for the Site.

In addition to the samples described above, quality assurance/quality control (QA/QC) samples were also collected. The QA/QC samples included: trip blanks (one per cooler containing samples for BTEX and MTBE analysis), a field duplicate, and an equipment blank. Also, extra sample volume was collected

from one location to provide for matrix spike/matrix spike duplicate (MS/MSD) analysis. The trip blank sample was analyzed for BTEX and MTBE only. The other QA/QC samples were analyzed for BTEX, MTBE, and PAHs.

Laboratory results for the groundwater sample analyses were forwarded to a data validator, Environmental Data Services, Inc. of Newport News, Virginia, for review and preparation of a Data Usability Summary Report (DUSR). The DUSR presents a summary of data usability including a discussion of qualified data. The DUSR is provided as Appendix C. As described in the DUSR, the data were considered by the validator to be valid and usable. An Electronic Data Deliverable (EDD) of the validated analytical data, prepared in accordance with NYSDEC requirements, is provided in Appendix D.

Section 3

Results and Findings

3.1 Water Level Data

Table 1 provides the water level data and calculated water elevations from the December 20, 2017 measurements. Figure 1 illustrates the elevation contours of the water table based on these data. The contours were developed using water level elevation data from the shallow monitoring wells and shallow piezometers at the Site (i.e., those with screens that straddle, or are just below, the water table) and the two surface water staff gauges in the Patchogue River. The water level elevations used for contouring are representative of water table elevations at the Site. The groundwater elevation (hydraulic head) values for the wells and piezometers screened in deeper intervals are also posted for reference on Figure 1. The water table is relatively shallow and is typically positioned in the fill that overlies the native alluvial deposits and outwash deposits. The water table contours indicate that lateral groundwater flow is from northwest to southeast across the Site toward the Patchogue River. Comparisons of the groundwater elevations in the monitoring wells to the river elevation, as measured at the staff gauges, demonstrate that groundwater elevations are higher than the river level indicating that groundwater is discharging to the Patchogue River. The upward vertical hydraulic gradient measured at well pairs adjacent to the river (well pairs MW-4S and MW-4D, and MW-9S and MW-9D) is indicative of a discharge area and provides further support to the conclusion that groundwater is discharging to the Patchogue River. The general configuration of the water table contours, developed using the December 20, 2017 data, and the interpreted groundwater flow patterns are consistent with those from previous rounds of water level measurements with one exception. The exception occurred during the March 2010 sampling event when the large-scale dewatering activities were being conducted on the WWTF site located east of the Site on the opposite side of the river (see discussion in Section 1.1). Operation of this dewatering system temporarily altered groundwater flow patterns and levels at the Site (see “Groundwater Monitoring Report, Second Semiannual 2010 Sampling Event” [GEI, November 2010]).

3.2 NAPL Gauging

Table 1 presents the results of the NAPL gauging conducted in the monitoring wells and piezometers associated with the Site during the December 2017 groundwater monitoring event. NAPL was identified in MW-5 during the December 2017 gauging activities. Specifically, a black-brown viscous NAPL with a strong mothball-like odor was observed on the lower 0.4 feet of the threaded rod used to gauge the bottom of the well. NAPL has been observed in MW-5 during previous gauging events. Other visible indications of impact including sheens were observed on equipment lowered to the bottom of MW-6 and PZ-3A during the December 2017 gauging activities.

3.3 Groundwater Quality Data

Table 2 provides the results of the laboratory analyses of the groundwater samples collected during the December 2017 monitoring event and a comparison of the data to the New York State Class GA groundwater quality criteria. Comparisons of total BTEX and total PAH concentrations from this sampling event to previous sampling events are provided as Tables 3 and 4, respectively.

As previously stated, NAPL was identified in one of the 12 monitoring wells (MW-5) associated with the Site. This well is located in the central part of the Site in the area of former MGP operations (refer to Figure 1). As discussed in Section 2, because they contained visible indications of MGP-related impacts during the December 2017 NAPL gauging activities, groundwater samples were not collected from MW-5 and MW-6. Groundwater samples were collected from the remaining ten monitoring wells and submitted to the laboratory for analysis.

The constituent concentrations in groundwater samples collected during the December 2017 monitoring event were consistent with those measured during previous monitoring events. No MTBE or BTEX compounds were detected at any of the ten monitoring wells sampled during the December 2017 monitoring event.

PAH compounds were not detected at four of the ten monitoring wells that were sampled during the December 2017 monitoring event. However, in samples collected from monitoring wells MW-3, MW-4D, MW-7D, MW-8D, MW-9S, and MW-9D, PAH compounds were detected at low concentrations (i.e., slightly above the laboratory method detection limit) above the Class GA groundwater quality criteria during the December 2017 monitoring event. The PAH compounds that were identified in the groundwater samples from these sampling locations at concentrations above the Class GA groundwater quality criteria include one or more of the following four compounds: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, and indeno(1,2,3-cd)pyrene. These PAH compounds have very low aqueous solubilities, are not readily mobile in groundwater, and are unlikely to have migrated from the on-site source area. The criteria that were exceeded for four of these five PAHs are unpromulgated guidance values rather than 6 NYCRR Part 703 standards. The criteria for the fifth PAH, benzo(a)pyrene, is a Part 703 standard. The standard for benzo(a)pyrene is “non-detect” and the guidance value for the other four PAHs, 0.002 µg/L, is approximately an order of magnitude below the method detection limit. Therefore, any detection of these compounds in groundwater will result in an exceedance. The detection of these constituents is likely related to the disturbance of fine or colloid sized particles during purging or sampling activities. These particles are derived from within the well or the soil adjacent to the well that become suspended into the water column of the well as a result of disturbance during purging and sampling activities. The concentrations of these constituents will be further evaluated through continued semi-annual groundwater monitoring.

Section 4

Summary and Conclusions

As noted in previous monitoring events, visible indications of MGP-related impacts were identified in monitoring wells MW-5 and MW-6 and piezometer PZ-3A during the December 2017 event. MW-5, MW-6, and PZ-3A are located in the center of the Site in the area of former MGP operations where NAPL has been identified in the soil.

No MTBE or BTEX compounds were detected in groundwater samples from the ten monitoring wells sampled during the December 2017 monitoring event.

PAH compounds were not detected at four of the ten monitoring wells sampled during the December 2017 monitoring event. At MW-3, MW-4D, MW-7D, MW-8D, MW-9S, and MW-9D, one or more PAH compounds were detected at low concentrations (i.e., slightly above the laboratory method detection limit) above the Class GA groundwater quality criteria during the December 2017 monitoring event. The detected PAH compounds have very low aqueous solubilities, are not readily mobile in groundwater and are unlikely to have migrated from the on-site source area. In addition, the criteria that were exceeded for four of the five detected PAHs are unpromulgated guidance values rather than Part 703 standards. The criteria for these compounds are extremely low, approximately an order of magnitude below the laboratory method detection limit. Therefore, any detection of these compounds in groundwater will result in an exceedance. This will continue to be evaluated through subsequent semi-annual groundwater monitoring.

Section 5

References

- Brown and Caldwell Associates, December 2012, Construction Completion Report Utility Corridor Work Plan Implementation, Patchogue Former MGP Site, Village of Patchogue, Suffolk County, New York, Site ID No. 1-52-182.
- GEI, November 2010. Groundwater Monitoring Report, Second Semiannual 2010 Sampling Event, Patchogue Former MGP Site, Town of Brookhaven, Suffolk County, Long Island, New York, Site ID No. 1-52-182.
- USEPA, July 1996; Revised January 2010. Low-Stress (low flow) Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells.

Tables



TABLE 1
WATER ELEVATIONS AND NAPL MONITORING DATA
SECOND HALF 2017 SEMI-ANNUAL GROUNDWATER MONITORING EVENT
PATCHOGUE FORMER MGP SITE
PATCHOGUE, NEW YORK

Location ID	12/20/2017					Remarks
	Top of Casing Elevation ^(a) (ft., NAVD)	Depth to Water (ft., BTOC)	Water Elevation (ft., NAVD)	Depth to NAPL (ft., BTOC)	Total Depth of Well (ft., BTOC)	
MW-1	11.47	6.01	5.46	NI	15.20	
MW-3	5.56	2.52	3.04	NI	10.40	
MW-4S	7.97	5.25	2.72	NI	12.25	
MW-4D	7.79	5.03	2.76	NI	26.65	Mothball-like odor observed on oil/water interface probe.
MW-5	8.66	4.87	3.79	16.12	16.52	Black-brown viscous NAPL with a strong mothball-like odor on the lower 0.4 feet of the threaded rod.
MW-6	5.03	0.62	4.41	NI	18.45	Slight sheen and mothball-like odor observed on threaded rod.
MW-7S	8.45	4.68	3.77	NI	12.42	
MW-7D	8.31	4.54	3.77	NI	28.14	
MW-8S	5.08	1.01	4.07	NI	9.90	
MW-8D	4.98	0.94	4.04	NI	25.10	
MW-9S	4.47	1.75	2.72	NI	10.24	
MW-9D	4.66	1.61	3.05	NI	22.95	
PZ-1A	8.05	3.65	4.40	NI	10.00	
PZ-1B	8.91	4.78	4.13	NI	22.45	
PZ-2A	8.77	4.70	4.07	NI	8.05	
PZ-2B	8.29	4.13	4.16	NI	18.00	Mothball-like odor observed on oil/water interface probe.
PZ-3A	8.78	5.15	3.63	NI	8.95	Sheen observed on oil/water interface probe.
PZ-3B	8.90	5.38	3.52	NI	21.23	
PZ-4A	4.79	1.90	2.89	NI	4.90	
SG-1	5.23	4.23	1.00	NI	NA	
SG-2	5.17	3.98	1.19	NI	NA	

Notes:

NAVD - North American Vertical Datum 1988

ft. - Feet

ppm - parts per million

BGS - Below Ground Surface

BTOC - Below Top of Casing

NAPL - Non-Aqueous Phase Liquid

PID - Photoionization Detector

PVC - Polyvinyl chloride

NA - Not Applicable

NI - NAPL not Indicated by Oil/Water Interface Probe

MW - monitoring well

PZ - piezometer

SG - staff gauge

(a) - Monitoring wells resurveyed on 7/3/12 following utility corridor construction activities. See "Construction Completion Report, Utility Corridor Work Plan Implementation" (Brown and Caldwell, December 2012). Above ground casing at MW-5 was lowered during utility corridor construction activities

TABLE 2
GROUNDWATER ANALYSIS RESULTS
SECOND HALF 2017 SEMI-ANNUAL GROUNDWATER MONITORING EVENT
PATCHOGUE FORMER MGP SITE
PATCHOGUE, NEW YORK

Class GA Groundwater Criteria			Loc ID	MW-1	MW-3	MW-3 DUP	MW-4S	MW-4D	MW-7S	MW-7D	MW-8S	MW-8D	MW-9S	MW-9D	
TOGS 1.1.1	NYS Part 703														
Constituent	Guidance	Standard	Units	Date	12/20/2017	12/21/2017	12/21/2017	12/21/2017	12/21/2017	12/20/2017	12/20/2017	12/20/2017	12/20/2017	12/21/2017	12/21/2017
Volatile Organic Compounds (VOCs)															
BTEX Compounds															
Benzene	NE	1	µg/L		0.129 U	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U
Toluene	NE	5	µg/L		0.205 U	0.205 U	0.205 U	0.205 U	0.205 U	0.205 U	0.205 U	0.205 U	0.205 U	0.205 U	0.205 U
Ethylbenzene	NE	5	µg/L		0.244 U	0.244 U	0.244 U	0.244 U	0.244 U	0.244 U	0.244 U	0.244 U	0.244 U	0.244 U	0.244 U
m&p-Xylenes	NE	5	µg/L		0.461 U	0.461 U	0.461 U	0.461 U	0.461 U	0.461 U	0.461 U	0.461 U	0.461 U	0.461 U	0.461 U
o-Xylene	NE	5	µg/L		0.244 U	0.244 U	0.244 U	0.244 U	0.244 U	0.244 U	0.244 U	0.244 U	0.244 U	0.244 U	0.244 U
Xylenes, Total	NE	NE	µg/L		0.705 U	0.705 U	0.705 U	0.705 U	0.705 U	0.705 U	0.705 U	0.705 U	0.705 U	0.705 U	0.705 U
Total BTEX ^(a)	NE	NE	µg/L		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Other VOCs															
Methyl Tertiary Butyl Ether	10	NE	µg/L		0.596 U	0.596 U	0.596 U	0.596 U	0.596 U	0.596 U	0.596 U	0.596 U	0.596 U	0.596 U	0.596 U
Semi-Volatile Organic Compounds (SVOCs)															
Polycyclic Aromatic Hydrocarbons (PAHs)															
Acenaphthene	20	NE	µg/L		0.1 U	0.1 U	0.1 U	0.108 U	0.1 U	0.101 U	0.1 U	0.1 U	0.1 U	0.967 J	0.1 U
Acenaphthylene	NE	NE	µg/L		0.14 U	0.14 U	0.14 U	0.151 U	0.14 U	0.141 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Anthracene	50	NE	µg/L		0.121 U	0.121 U	0.121 U	0.13 U	0.121 U	0.122 U	0.121 U	0.121 U	0.121 U	0.121 U	0.121 U
Benzo(a)anthracene	0.002	NE	µg/L		0.0165 U	0.0281	0.0283	0.0177 U	0.018 J	0.0167 U	0.0257	0.0165 U	0.0167 J	0.595	0.0292
Benzo(a)pyrene	NE	0	µg/L		0.0124 U	0.0124 U	0.0124 U	0.0133 U	0.0129 J	0.0125 U	0.0243	0.0124 U	0.0124 U	0.499	0.0303
Benzo(b)fluoranthene	0.002	NE	µg/L		0.0177 U	0.0177 U	0.0177 U	0.019 U	0.0177 U	0.0179 U	0.0305	0.0177 U	0.0177 U	0.431	0.0396
Benzo(g,h,i)perylene	NE	NE	µg/L		0.0652 U	0.0652 U	0.0652 U	0.0701 U	0.0652 U	0.0659 U	0.0652 U	0.0652 U	0.0652 U	0.0652 U	0.0652 U
Benzo(k)fluoranthene	0.002	NE	µg/L		0.0071 U	0.0071 U	0.0071 U	0.00763 U	0.0071 U	0.00717 U	0.0123 J	0.0071 U	0.0071 U	0.202	0.0181 J
Chrysene	0.002	NE	µg/L		0.129 U	0.129 U	0.129 U	0.139 U	0.129 U	0.13 U	0.129 U	0.129 U	0.129 U	0.129 U	0.129 U
Dibenzo(a,h)anthracene	NE	NE	µg/L		0.016 U	0.016 U	0.016 U	0.0172 U	0.016 U	0.0162 U	0.016 U	0.016 U	0.016 U	0.0533	0.016 U
Fluoranthene	50	NE	µg/L		0.129 U	0.502 J	0.59 J	0.139 U	0.129 U	0.13 U	0.129 U	0.129 U	0.129 U	1.28 J	0.129 U
Fluorene	50	NE	µg/L		0.109 U	0.109 U	0.109 U	0.117 U	0.109 U	0.11 U	0.109 U	0.109 U	0.109 U	0.109 U	0.109 U
Indeno(1,2,3-cd)pyrene	0.002	NE	µg/L		0.0131 U	0.0131 U	0.0131 U	0.0141 U	0.0131 U	0.0132 U	0.0147 J	0.0131 U	0.0131 U	0.215	0.0184 J
Naphthalene	10	NE	µg/L		0.0607 U	0.0607 U	0.0607 U	0.0653 U	0.0607 U	0.06 U	0.0607 U	0.0607 U	0.0607 U	0.0607 U	0.0607 U
Phenanthrene	50	NE	µg/L		0.0725 U	0.0725 U	0.0725 U	0.078 U	0.0725 U	0.0732 U	0.0725 U	0.0725 U	0.0725 U	0.0725 U	0.0725 U
Pyrene	50	NE	µg/L		0.115 U	0.115 U	0.509 J	0.124 U	0.115 U	0.116 U	0.115 U	0.115 U	0.115 U	1.72 J	0.115 U
Total PAHs ^(b)	NE	NE	µg/L		ND	0.530 J	1.13 J	ND	0.0309 J	ND	0.108 J	ND	0.0167 J	5.96 J	0.136 J

Notes:

BTEX - benzene, toluene, ethylbenzene and isomers of xylene.

U - The analyte was analyzed for, but was not detected above the sample reporting limit. Value shown is representative of method detection limit for the analyzed constituent.

J - Estimated concentration. The result is below the reporting limit but above the method detection limit.

UJ - The analyte was not detected above the sample reporting limit; and the reporting limit is approximate.

µg/L - micrograms per liter

ND - Not detected.

NE - Not established.

(a) - To calculate total BTEX concentration, a value of zero is used for non-detect values.

(b) - To calculate total PAH concentration, a value of zero is used for non-detect values.

TABLE 3
SUMMARY OF HISTORICAL BTEX CONCENTRATIONS
PATCHOGUE FORMER MGP SITE
PATCHOGUE, NEW YORK

Sampling Date	Total BTEX Concentrations (µg/L) ^(a)														
	Monitoring Well/Piezometer														
	MW-1	MW-2S	MW-2D	MW-3	MW-4S	MW-4D	MW-5	MW-6	MW-7S	MW-7D	MW-8S	MW-8D	MW-9S	MW-9D	PZ-4A
Mar-08	0	0	0	0	3.4	0	1016	57	NS	NS	NS	NS	NS	NS	NI
Jul-08	NS	0	0	0	0	0	678	0	0	0	0	0	0	0	NI
Mar-09	0	0	0	0	0	0	975	0	0	1	0	0	0	0	NI
Sep-09	0	0	0	0	0	0	1257	1	0	0	0	0	0	0	NI
Mar-10	0	0	0	0	0	0	637	2	0	9	0	0	0	0	NI
Sep-10	0	0	0	0	0	0	NS	0	0	0	0	0	27	0	NI
Jan-11	1.7	0	0	0	0	0	NS	NS	0	0	0	0	1	0	NI
Apr-11	0	0	0	0	0	0	NS	NS	0	0	0	0	0	0	NI
Aug-11	0	0	0	0	0	0	NS	NS	0	0	0	0	0	0	NI
Nov-11	0	0	0	0	0	0	NS	NS	0	0	0	0	0	0	NI
Feb-12	0	0	0	0	0	0	NS	NS	0	0	0	0	0	0	NI
May-12	0	0	0	0	0	0	NS	NS	0	0	0	0	0	0	NI
Nov-12	0	-- (b)	-- (a)	0	12	0	NS	NS	1	0	0	0	NS	NS	NI
Jun-13	0	-- (b)	-- (b)	0	0.8	0	NS	NS	0.7	0	0	0	0	NS	NI
Dec-13	0	-- (b)	-- (b)	NS	0	0	NS	NS	0.8	0	0	0	NS	NS	NI
Jun-14	0	-- (b)	-- (b)	0	0	0	NS	NS	0.8	0	0	0	NS	NS	0
Dec-14	0	-- (b)	-- (b)	0	0	0	NS	NS	1.3	0	0	0	0	0	NS
Jun-15	0	-- (b)	-- (b)	0	0	0	NS	NS	0	0	0	0	0	0	NS
Dec-15	0	-- (b)	-- (b)	0	0	0	NS	NS	0.5	0	0	0	0	0	NS
Jun-16	0	-- (b)	-- (b)	0	0	0	NS	NS	0	0	0	0	0	0	NS
Dec-16	0	-- (b)	-- (b)	0	0	0	NS	NS	0	0	0	0	0	0	NS
Jun-17	0	-- (b)	-- (b)	0	0	0	NS	NS	0	0	0	0	0	0	NS
Dec-17	0	-- (b)	-- (b)	0	0	0	NS	NS	0	0	0	0	0	0	NS
Minimum	0	0	0	0	0	0	637	0	0	0	0	0	0	0	0
Maximum	1.7	0	0	0	12	0	1257	57	1.3	9	0	0	27	0	0
Mean	0.1	0	0	0	0.7	0	913	10	0.2	0.5	0	0	1	0	0

Notes:

BTEX - Benzene, toluene, ethylbenzene and isomers of xylene

µg/L - micrograms per liter

NS - Not sampled.

NI - Piezometer not installed at time of sampling.

(a) - To calculate total BTEX concentration, a value of zero is used for non-detect values.

(b) - Monitoring well was decommissioned on 6/4/12 as part of the Utility Corridor Construction activities. See "Construction Completion Report, Utility Corridor Work Plan Implementation" (Brown and Caldwell, December 2012).

TABLE 4
SUMMARY OF HISTORICAL PAH CONCENTRATIONS
PATCHOGUE FORMER MGP SITE
PATCHOGUE, NEW YORK

Sampling Date	Total PAH Concentrations (µg/L) ^(a)														
	Monitoring Well/Piezometer														
	MW-1	MW-2S	MW-2D	MW-3	MW-4S	MW-4D	MW-5	MW-6	MW-7S	MW-7D	MW-8S	MW-8D	MW-9S	MW-9D	PZ-4A
Mar-08	0	0	0	0.76	0.6	4.3	1774	214	NS	NS	NS	NS	NS	NS	NI
Jul-08	NS	0.7	0	0	8	0	1799	154	0	0.47	0	0	12	0	NI
Mar-09	0	0	0	0	0	0	2730	0	0	0	0	0	0	0	NI
Sep-09	0	0	0	0	0	0	3373	1	0	0	0	0	0	0	NI
Mar-10	0	0	0	0	0	39	2390	17	0	0	22	0	2	0	NI
Sep-10	0	0	0	128	0	6	NS	14	0	0	11	0	396	0	NI
Jan-11	22	0	0	17	0	12	NS	NS	0	0	6	0	42	5	NI
Apr-11	0	0	0	6	0	20	NS	NS	0	0	0	0	9	0	NI
Aug-11	0	0	0.1	14	0.1	0	NS	NS	0	0	0.4	0	16	1.2	NI
Nov-11	0	0	0.2	10	0.4	0	NS	NS	0	0	0.8	0.2	8	3.4	NI
Feb-12	0.2	0	0	6	0.6	4	NS	NS	0.1	0	0.6	0	5	2.9	NI
May-12	0.4	0.1	0.6	5	0	5.8	NS	NS	0.1	0.3	1	0	6	2.8	NI
Nov-12	0.1	-- (b)	-- (b)	5.6	0.4	11.7	NS	NS	2.5	2.6	0.8	1.2	NS	NS	NI
Jun-13	0.8	-- (b)	-- (b)	NS	0.3	3.7	NS	NS	1.3	0.4	0.4	0.6	2	NS	NI
Dec-13	0	-- (b)	-- (b)	NS	0	2.5	NS	NS	0.8	0.4	0.3	0	NS	NS	NI
Jun-14	0	-- (b)	-- (b)	2.2	0.9	0	NS	NS	0.8	0.3	0.2	0	NS	NS	0.3
Dec-14	0.1	-- (b)	-- (b)	1.2	0.4	0	NS	NS	3	0	0.1	0	21.4	0.3	NS
Jun-15	0	-- (b)	-- (b)	1.1	0.9	0	NS	NS	0.9	0	0.3	0	10.4	0.3	NS
Dec-15	0	-- (b)	-- (b)	0	0	0	NS	NS	0.9	0	0	0	3.9	0	NS
Jun-16	0	-- (b)	-- (b)	1.9	0.8	0	NS	NS	2.5	0	0	0	5.9	0	NS
Dec-16	0	-- (b)	-- (b)	0.02	0	0.1	NS	NS	0	0	0	0	5.5	0.07	NS
Jun-17	0	-- (b)	-- (b)	2.0	0.5	0	NS	NS	1	0	0	0	3.2	0	NS
Dec-17	0	-- (b)	-- (b)	0.53	0	0.031	NS	NS	0	0.11	0	0.017	5.96	0.14	NS
Min	0	0	0	0	0	0	1774	0	0	0	0	0	0	0	0.3
Max	22	0.7	0.6	128	8	39	3373	214	3	2.6	22	1.2	396	5	0.3
Mean	1.1	0.1	0.1	10	0.6	5	2413	67	0.6	0.2	2.0	0.1	29	0.9	0.3

Notes:

PAH - Polycyclic aromatic hydrocarbons

µg/L - micrograms per liter

NS - Not sampled.

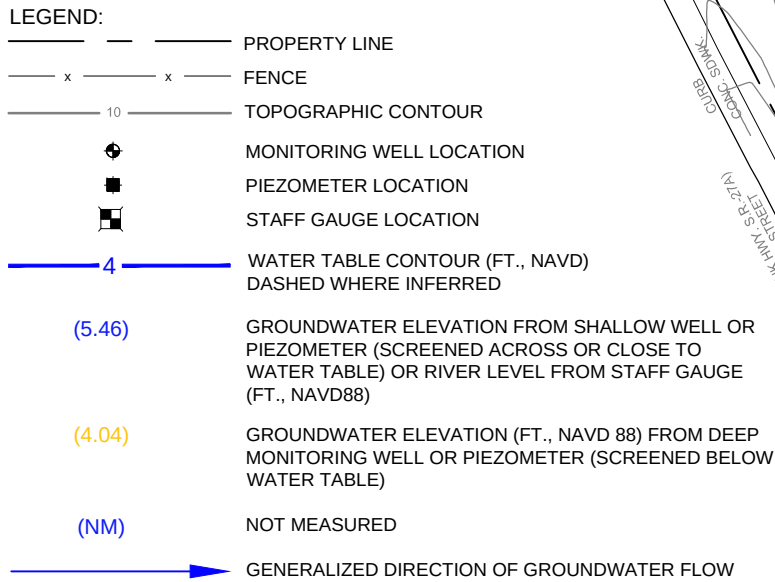
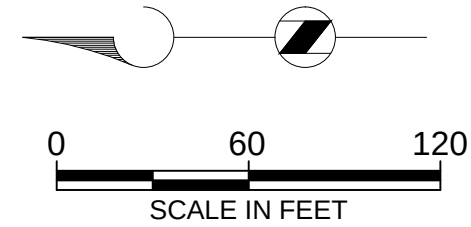
NI - Piezometer not installed at time of sampling.

(a) - To calculate total PAH concentration, a value of zero is used for non-detect values.

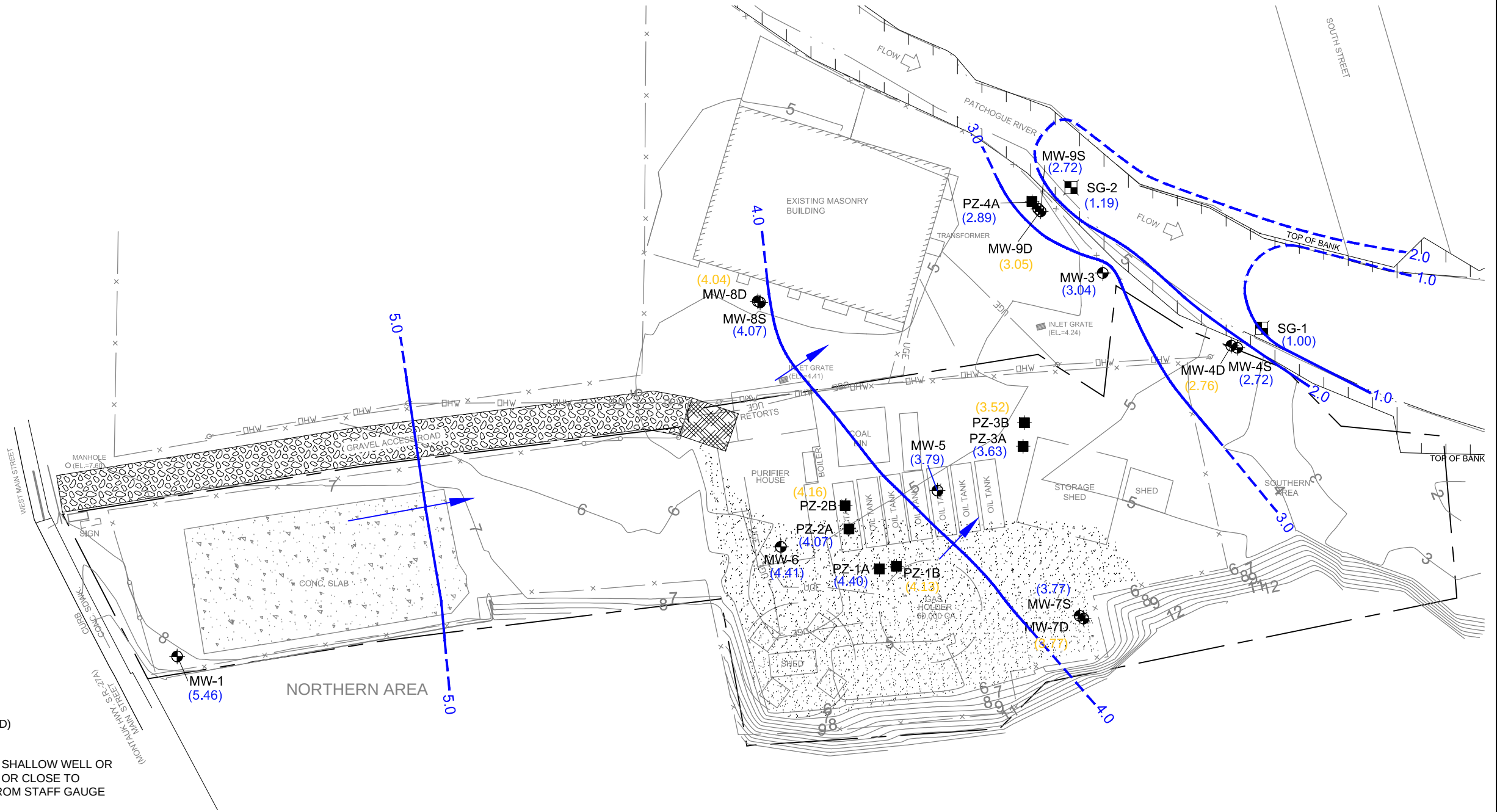
(b) - Monitoring well was decommissioned on 6/4/12 as part of the Utility Corridor Construction activities. See "Construction Completion Report, Utility Corridor Work Plan Implementation" (Brown and Caldwell, December 2012).

Figures





NOTES:
1. BASE MAP INFORMATION OBTAINED FROM TETRA
TECH EC, INC. DRAWING ENTITLED "CONCEPTUAL SITE
MODEL", DATED DECEMBER 17, 2008.



SCALE: 1" = 60'
149322
DATE: February 27, 2018

NATIONAL GRID
PATCHOGUE FORMER MGP SITE
VILLAGE OF PATCHOGUE, NEW YORK

WATER TABLE ELEVATION CONTOUR MAP
DECEMBER 20, 2017

FIGURE
1

Appendix A: Field Sampling Data Sheets



LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-1
Sample I.D.: MW-1-20171220 (if different from well no.)

Project: Patchogue Former MGP Site
Personnel: REH/TMB

Date: 12/20/17 Time: 12:10
Weather: cloudy Air Temp.: 40°

WELL DATA:

Casing Diameter: 6" ☐ Stainless Steel ☒ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2" ☐ Stainless Steel ☐ Galv. Steel ☒ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 6.0 ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☒ Top of Well Casing ☐ Other: _____
CONDITION: Is Well clearly labeled? ☒ Yes ☐ No Is well clean to bottom? ☒ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☒ Yes ☐ No
Does Weep Hole adequately drain well head? ☒ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☒ Yes ☐ No
Is Padlock Functional? ☐ Yes ☐ No ☐ NA Is Inner Casing Intact? ☒ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☒ Yes ☐ No
VOLUME OF WATER: Standing in well: NA To be purged: NA

PURGE DATA:

METHOD: ☐ Bailer, Size: _____ ☒ Bladder Pump ☐ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____
MATERIALS: Pump/Bailer: ☐ Teflon® ☒ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☒ Polyethylene ☐ Polypropylene ☐ Other: _____
Pumping Rate: 2.25 gpm Elapsed Time: 30 min Volume Pumped: 2.25 g
Was well Evacuated? ☐ Yes ☒ No Number of Well Volumes Removed: NA
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☒ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: _____ ☒ Bladder Pump ☐ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____
MATERIALS: Pump/Bailer: ☐ Teflon® ☒ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☒ Polyethylene ☐ Polypropylene ☐ Other: _____
SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☒ Field Cleaned
Metals samples field filtered? ☐ Yes ☒ No Method: _____
APPEARANCE: ☒ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP: ☒ No ☐ Yes Name: _____
MS/MSD: ☐ No ☒ Yes Name: MW-1-20171220-MS/MSD

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [Signature] Date: 12/20/17

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: Patchogue Former MGP Site	Project Number: 149322
Client: National Grid	Date: 12/20/17
Personnel: REH/TMB	Well ID: MW-1
Purge/Sample Depth: 212'	Sample ID: MW-1-20171220

Actual Time	Certified Parameters					ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
	pH	Temp (°C)	Cond (ms/cm)	DO (mg/L)	Turbidity (NTU)				
1216	6.76	14.49	1.51	9.41	138	-41	6.10	225 ↓ ✓	emptied Horizon
1219	7.01	14.53	1.72	3.38	215	-66	6.13		
1222	7.04	14.48	1.84	2.57	217	-74	6.15		
1225	7.12	14.410	1.92	2.07	187	-78	6.15		
1228	7.13	14.42	1.95	1.28	169	-80	6.16		
1231	7.11	14.34	1.96	1.03	136	-89	6.17		
1234	7.29	14.33	1.97	1.01	97.1	-94	6.17		
1237	7.15	14.36	1.96	0.91	92.6	-95	6.16		
1240	7.19	14.44	1.95	0.81	88.7	-95	6.13		
1243	7.16	14.42	1.94	0.80	87.1	-96	6.11		
1246	7.16	14.42	1.92	0.77	79.0	-98	6.10		
1249	Sample MW-1-2017					AMS/MSD			
gms 12/20/17									

Certified Sample Information:

Time of Sample: 1249

Analyst Signature: [Signature]

Instrument Data:

Manufacturer/Model:

Serial No. Unit: _____

Serial No. Handheld:

Calibration Date/Time: _____

Are low-flow parameters subject to field lab certification? ☐ Yes ☒ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

**Brown AND
Caldwell**

Upper Saddle River, NJ Office

**LOW-FLOW GROUNDWATER
SAMPLING FIELD DATA**

Well Number: MW-75

Sample I.D.: MW-75-20171220 (if different from well no.)

Project: Patchogue
Personnel: REH/TMB

Date: 12/20/17 Time: 1329
Weather: Overcast Air Temp.: 40°

WELL DATA:

Casing Diameter: 4" ☐ Stainless Steel ☒ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2" ☐ Stainless Steel ☐ Galv. Steel ☒ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: _____ ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☒ Top of Well Casing ☐ Other: _____
CONDITION: Is Well clearly labeled? ☒ Yes ☐ No Is well clean to bottom? ☐ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☒ Yes ☐ No
Does Weep Hole adequately drain well head? ☒ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☒ Yes ☐ No
Is Padlock Functional? ☒ Yes ☐ No ☐ NA Is Inner Casing Intact? ☐ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☒ Yes ☐ No

VOLUME OF WATER: Standing in well: NA To be purged: NA

PURGE DATA:

METHOD: ☐ Bailer, Size: _____ ☒ Bladder Pump ☐ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____
MATERIALS: Pump/Bailer: ☐ Teflon® ☒ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☒ Polyethylene ☐ Polypropylene ☐ Other: _____
Pumping Rate: 250 ml/min Elapsed Time: 90 min Volume Pumped: 2.5 gal
Was well Evacuated? ☐ Yes ☐ No Number of Well Volumes Removed: NA
PURGING EQUIPMENT: ☒ Dedicated ☒ Prepared Off-Site ☒ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: _____ ☒ Bladder Pump ☐ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____
MATERIALS: Pump/Bailer: ☐ Teflon® ☒ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☒ Polyethylene ☐ Polypropylene ☐ Other: _____
SAMPLING EQUIPMENT: ☐ Dedicated ☒ Prepared Off-Site ☐ Field Cleaned
Metals samples field filtered? ☐ Yes ☒ No Method: _____
APPEARANCE: ☐ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP: ☒ No ☐ Yes Name: _____
MS/MSD: ☒ No ☐ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: Richard H. Givens Date: 12/20/17

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

Project Name: Patchogue former MGP Site
Client: National Grid
Personnel: REH/TMB
Sample Depth: _____

Project Number: 14 9322
Date: 12/20/17
Well ID: MW-7S
Sample ID: 14U-7S-20171220

Certified Sample Information:

Time of Sample:

Analyst Signature:

Instrument Data:

Manufacturer/Model: Horiba U-52

Serial No. Unit: WEWB 6VLD

Serial No. Handheld: PLYF909B

Calibration Date/Time: 12/18/17

Are low-flow parameters subject to field lab certification? ☐ Yes ☒ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

**LOW-FLOW GROUNDWATER
SAMPLING FIELD DATA**Well Number: MW-7D

Sample I.D.: _____ (if different from well no.)

Project: Patchogue Former MGP Site

Personnel: REH/TMB

Date: 12/20/17 Time: 1423Weather: clouds Air Temp.: 45°**WELL DATA:**Casing Diameter: 6" ☐ Stainless Steel ☐ Steel ☐ PVC ☐ Teflon® ☐ Other: _____Intake Diameter: 2" ☐ Stainless Steel ☐ Galv. Steel ☐ PVC ☐ Teflon® ☐ Open rockDEPTH TO : Static Water Level: 4.53 ft Bottom of Well: _____ ftDATUM: ☐ Top of Protective Casing ☒ Top of Well Casing ☐ Other: _____CONDITION: Is Well clearly labeled? ☒ Yes ☐ No Is well clean to bottom? ☐ Yes ☐ NoIs Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☐ Yes ☐ NoDoes Weep Hole adequately drain well head? ☒ Yes ☐ NoIs Concrete Pad Intact? (not cracked or frost heaved) ☒ Yes ☐ NoIs Padlock Functional? ☒ Yes ☐ No ☐ NA Is Inner Casing Intact? ☒ Yes ☐ NoIs Inner Casing Properly Capped and Vented? ☒ Yes ☐ NoVOLUME OF WATER: Standing in well: NA To be purged: NA**PURGE DATA:**METHOD: ☐ Bailer, Size: _____ ☐ Bladder Pump ☐ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____MATERIALS: Pump/Bailer: ☐ Teflon® ☒ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☒ Polyethylene ☐ Polypropylene ☐ Other: _____Pumping Rate: 300 ml/min Elapsed Time: 40 min Volume Pumped: 3 galWas well Evacuated? ☐ Yes ☒ No Number of Well Volumes Removed: NAPURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☒ Field Cleaned**SAMPLING DATA:**METHOD: ☐ Bailer, Size: _____ ☐ Bladder Pump ☐ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____MATERIALS: Pump/Bailer: ☐ Teflon® ☒ Stainless Steel
Tubing/Rope: ☐ Teflon® ☒ PolyethyleneSAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☒ Field CleanedMetals samples field filtered? ☐ Yes ☒ No Method: _____APPEARANCE: ☒ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid

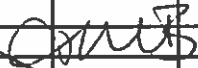
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP: ☒ No ☐ Yes Name: _____MS/MSD: ☒ No ☐ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [Signature]Date: 12/20/17

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Actual Time	Certified Parameters					ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
	pH	Temp (°C)	Cond (ms/cm)	DO (mg/L)	Turbidity (NTU)				
1425	7.03	12.98	0.502	14.39	50.8	-21	4.53	300	
1426	6.94	13.18	0.503	7.47	55.8	-13	4.54		
1429	6.40	13.55	0.512	4.73	83.4	20	4.55		
1432	6.47	13.62	0.524	2.76	106	31	4.55		
1435	6.45	13.51	0.545	3.82	145	51	4.54		
1438	6.26	13.56	0.551	2.60	149	60	4.54		
1441	6.21	13.40	0.558	2.37	129	73	4.55		
1444	6.21	13.26	0.553	2.19	120	83	4.55		
1447	6.32	12.92	0.554	2.38	113	90	4.56		
1450	6.21	12.67	0.557	2.00	107	77	4.56		
1453	6.18	12.58	0.558	1.94	101	100	4.56		
1456	6.19	12.46	0.559	1.89	96.8	105	4.55		
1459	6.19	12.41	0.560	1.88	94.7	108	4.56		
1502	6.19	12.35	0.561	1.81	91.1	114	4.56		
1505	Sample MW-7D-2017					1220			
 12/20/17									

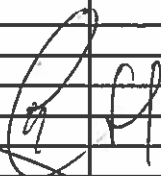
Calibration Date/Time: 12/18/17

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1807NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEETProject Name: Patchogue Former MGP SiteClient: National GridPersonnel: REH/TMB

Purge/Sample Depth: _____

Project Number: 149322Date: 12/20/17Well ID: MW-85Sample ID: MW-85-20171220

Actual Time	Certified Parameters					ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments	
	pH	Temp (°C)	Cond (ms/cm)	DO (mg/L)	Turbidity (NTU)					
1536	6.57	11.87	0.662	15.17	28.8	23	1.06	225 ↓ ✓		
1539	6.75	13.43	0.675	1.48	25.6	-27	1.06			
1542	6.76	13.29	0.676	1.32	18.4	-24	1.06			
1545	6.80	13.43	0.688	1.11	14.3	-31	1.05			
1548	6.80	13.69	0.700	0.76	95.1	-37	1.05			
1551	6.85	13.85	0.705	0.74	67.8	-43	1.05			
1554	6.85	14.02	0.710	0.69	60.9	-46	1.04			
1557	6.85	14.12	0.708	0.65	49.9	-49	1.04			
1600	6.93	14.29	0.714	0.64	32.6	-51	1.03			
1603	6.85	14.33	0.713	0.52	28.1	-53	1.03			
1606	6.88	14.35	0.714	0.53	27.7	-52	1.03			
1609	collect sample									
 12/21/17										

Certified Sample Information:

Time of Sample: 1609Analyst Signature: [Signature]

Instrument Data:

Manufacturer/Model: Horiba U-52Serial No. Unit: WEWBOULOSerial No. Handheld: PLYF909BCalibration Date/Time: 12/18/17Are low-flow parameters subject to field lab certification? ☐ Yes ☒ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

**Brown AND
Caldwell**

Upper Saddle River, NJ Office

**LOW-FLOW GROUNDWATER
SAMPLING FIELD DATA**Well Number: MW-8D

Sample I.D.: _____

(If different from well no.)

Project: Patchogue Former MGP Site

Personnel: REH/TMB

Date: 12/20/17 Time: 1616Weather: cloudy Air Temp.: 41°**WELL DATA:**Casing Diameter: 8" ☐ Stainless Steel ☒ Steel ☐ PVC ☐ Teflon® ☐ Other: _____Intake Diameter: 2" ☐ Stainless Steel ☐ Galv. Steel ☒ PVC ☐ Teflon® ☐ Open rockDEPTH TO: Static Water Level: 0.94 ft Bottom of Well: _____ ftDATUM: ☐ Top of Protective Casing ☒ Top of Well Casing ☐ Other: _____CONDITION: Is Well clearly labeled? ☐ Yes ☒ No Is well clean to bottom? ☒ Yes ☐ NoIs Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☒ Yes ☐ NoDoes Weep Hole adequately drain well head? ☒ Yes ☐ NoIs Concrete Pad Intact? (not cracked or frost heaved) ☒ Yes ☐ NoIs Padlock Functional? ☐ Yes ☐ No ☒ NA Is Inner Casing Intact? ☒ Yes ☐ NoIs Inner Casing Properly Capped and Vented? ☒ Yes ☐ NoVOLUME OF WATER: Standing in well: NA To be purged: NA**PURGE DATA:**METHOD: ☐ Bailer, Size: _____ ☒ Bladder Pump ☐ 2" Submersible Pump ☐ 4" Submersible Pump☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____MATERIALS: Pump/Bailer: ☐ Teflon® ☒ Stainless Steel ☐ PVC ☐ Other: _____Tubing/Rope: ☐ Teflon® ☒ Polyethylene ☐ Polypropylene ☐ Other: _____Pumping Rate: 150 ml/min Elapsed Time: 20 min Volume Pumped: 1.5 galWas well Evacuated? ☐ Yes ☒ No Number of Well Volumes Removed: NAPURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☒ Field Cleaned**SAMPLING DATA:**METHOD: ☐ Bailer, Size: _____ ☒ Bladder Pump ☐ 2" Submersible Pump ☐ 4" Submersible Pump☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____MATERIALS: Pump/Bailer: ☐ Teflon® ☒ Stainless SteelTubing/Rope: ☐ Teflon® ☒ PolyethyleneSAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☒ Field CleanedMetals samples field filtered? ☐ Yes ☒ No Method: _____APPEARANCE: ☒ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid

FIELD DETERMINATIONS: See attached form for field parameter data.

DUP: ☒ No ☐ Yes Name: _____MS/MSD: ☒ No ☐ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: _____

Date: 12/20/17

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 238-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: Patchogue Former MGP Site	Project Number: 149322
Client: National Grid	Date: 12/20/17
Personnel: REH/TMB	Well ID: MW-8D
Purge/Sample Depth: ~ 22'	Sample ID: MW-8D-20171220

[illegible]**Certified Sample Information:**

Time of Sample: 1649

Analyst Signature:

Instrument Data:

Manufacturer/Model: *Haribg 1-52*

Serial No. Unit: WFWBOU LO

Serial No. Handheld: PLYF909B

Calibration Date/Time: 12/18/17

Are low-flow parameters subject to field lab certification? ☐ Yes ☒ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

**Brown AND
Caldwell**

Upper Saddle River, NJ Office

**LOW-FLOW GROUNDWATER
SAMPLING FIELD DATA**Well Number: MS-48

Sample I.D.:

(If different from well no.)

Project: Patchogue Former MGP Site
Personnel: REH/TMBDate: 12/21/17 Time: 0809
Weather: Sun Air Temp.: 30°**WELL DATA:**

Casing Diameter: 6" ☐ Stainless Steel ☒ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2" ☐ Stainless Steel ☐ Galv. Steel ☒ PVC ☐ Teflon® ☐ Open rock
DEPTH TO: Static Water Level: 5.46 ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☒ Top of Well Casing ☐ Other: _____
CONDITION: Is Well clearly labeled? ☒ Yes ☐ No Is well clean to bottom? ☒ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☒ Yes ☐ No
Does Weep Hole adequately drain well head? ☒ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☒ Yes ☐ No
Is Padlock Functional? ☒ Yes ☐ No ☐ NA Is Inner Casing Intact? ☒ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☒ Yes ☐ No

VOLUME OF WATER: Standing in well: NA To be purged: NA**PURGE DATA:**

METHOD: ☐ Bailer, Size: _____ ☒ Bladder Pump ☐ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____
MATERIALS: (Pump/Bailer): ☐ Teflon® ☒ Stainless Steel ☐ PVC ☐ Other: _____
(Tubing/Rope): ☐ Teflon® ☒ Polyethylene ☐ Polypropylene ☐ Other: _____
Pumping Rate: 200 ml/min Elapsed Time: 30 min Volume Pumped: 29
Was well Evacuated? ☐ Yes ☐ No Number of Well Volumes Removed: NA
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☒ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: _____ ☒ Bladder Pump ☐ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____
MATERIALS: (Pump/Bailer): ☐ Teflon® ☒ Stainless Steel (Tubing/Rope): ☐ Teflon® ☒ Polyethylene
SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☒ Field Cleaned
Metals samples field filtered? ☐ Yes ☒ No Method: _____
APPEARANCE: ☒ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP: ☒ No ☐ Yes Name: _____
MS/MSD: ☒ No ☐ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [Signature] Date: 12/21/17

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: <u>Patchogue Former MGP Site</u>	Project Number: <u>149322</u>
Client: <u>National Grid</u>	Date: <u>12/21/17</u>
Personnel: <u>REH/TMB</u>	Well ID: <u>MW-45</u>
Purge/Sample Depth: <u>~10'</u>	Sample ID: <u>MW-45-20171221</u>

Actual Time	Certified Parameters					ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
	pH	Temp (°C)	Cond (ms/cm)	DO (mg/L)	Turbidity (NTU)				
0809	6.97	10.61	0.565	6.75	373	-46	5.46	2.00	
0810	7.05	10.95	0.584	6.87	420	-75	5.46		
0815	7.18	11.72	0.586	2.08	266	-89	5.46		
0818	7.28	11.48	0.591	1.56	152	-98	5.46		
0821	7.29	11.68	0.591	1.39	133	-104	5.46		
0824	7.51	11.66	0.589	1.12	149	-109	5.46		
0827	7.09	11.58	0.601	2.24	71.3	-92	5.46		emptied Honda
0830	7.25	11.61	0.602	0.98	49.3	-106	5.46		
0833	7.33	11.51	0.606	0.82	41.2	-113	5.46		
0836	7.54	11.45	0.608	0.79	37.0	-114	5.46		
0839	7.35	11.58	0.609	0.73	32.2	-117	5.45		
0842	Sample MW-45-2017					221			

Certified Sample Information:

Time of Sample:

Analyst Signature:

Instrument Data:

Manufacturer/Model: Honima U-52

Serial No. Unit: WEWB00LO

Serial No. Handheld: PLYF909B

Calibration Date/Time: 12/7/17

Are low-flow parameters subject to field lab certification? ☐ Yes ☒ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.



Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: NW-4D
Sample I.D.: NW-4D-20171221 (if different from well no.)

Project: Patchogue Former MGP Site
Personnel: REH/TMB

Date: 12/21/17 Time: 0920
Weather: Sunny Air Temp.: 34

WELL DATA:

Casing Diameter: 6" ☐ Stainless Steel ☒ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2" ☐ Stainless Steel ☐ Galv. Steel ☒ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 5.07 ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☒ Top of Well Casing ☐ Other: _____
CONDITION: Is Well clearly labeled? ☒ Yes ☐ No Is well clean to bottom? ☐ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☒ Yes ☐ No
Does Weep Hole adequately drain well head? ☐ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☒ Yes ☐ No
Is Padlock Functional? ☒ Yes ☐ No ☐ NA Is Inner Casing Intact? ☒ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☒ Yes ☐ No

VOLUME OF WATER: Standing in well: _____ To be purged: _____

PURGE DATA:

METHOD: ☐ Bailer, Size: _____ ☒ Bladder Pump ☐ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____
MATERIALS: Pump/Bailer: ☐ Teflon® ☒ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☒ Polyethylene ☐ Polypropylene ☐ Other: _____
Pumping Rate: 200 mL/min Elapsed Time: 30 min Volume Pumped: 2 G
Was well Evacuated? ☐ Yes ☒ No Number of Well Volumes Removed: _____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☒ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: _____ ☒ Bladder Pump ☐ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____
MATERIALS: Pump/Bailer: ☐ Teflon® ☒ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☒ Polyethylene ☐ Polypropylene ☐ Other: _____
SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☒ Field Cleaned
Metals samples field filtered? ☐ Yes ☒ No Method: _____
APPEARANCE: ☒ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.
DUP: ☒ No ☐ Yes Name: _____
MS/MSD: ☒ No ☐ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: Abdul G. Sirach Date: 12/21/17

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: <u>Patchogue Former MGP Site</u>	Project Number: <u>149322</u>
Client: <u>National Grid</u>	Date: <u>12/21/17</u>
Personnel: <u>REH/TMB</u>	Well ID: <u>NW-4D</u>
Purge/Sample Depth: _____	Sample ID: <u>NW-4D-20171221</u>

Actual Time	Certified Parameters					ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
	pH	Temp (°C)	Cond (ms/cm)	DO (mg/L)	Turbidity (NTU)				
0920	6.89	7.75	0.589	8.57	53.4	24	5.10	200 ↓ ✓	
0923	6.41	9.25	0.589	1.83	65.0	56	5.08		
0926	6.28	10.04	0.605	1.13	44.8	26	5.08		
0929	6.17	10.76	0.621	0.89	45.5	88	5.07		
0932	6.17	11.07	0.624	0.80	31.3	100	5.06		
0935	6.19	11.08	0.626	0.71	33.9	101	5.06		
0938	6.15	11.21	0.625	0.67	31.5	111	5.05		
0941	6.22	11.51	0.628	0.73	27.6	119	5.04		
0944	6.17	11.53	0.631	0.62	17.9	119	5.04		
0947	6.15	11.49	0.634	0.60	15.7	121	5.06		
0950	6.14	11.49	0.637	0.58	14.2	125	5.06		
0953	collect sample								
12/21/17									

Certified Sample Information:

Time of Sample: 0953

Analyst Signature:

Instrument Data:

Manufacturer/Model: Horiba U-5Z

Serial No. Unit: WEWBOULO

Serial No. Handheld:

Calibration Date/Time:

Are low-flow parameters subject to field lab certification? ☐ Yes ☒ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

**Brown AND
Caldwell**

Upper Saddle River, NJ Office

**LOW-FLOW GROUNDWATER
SAMPLING FIELD DATA**

Well Number: MW-3
Sample I.D.: MW-3-20171221 (if different from well no.)

Project: Patchogue Former MGP Site
Personnel: REH/TMB

Date: 12/21/17 Time: 1010
Weather: sun Air Temp.: 30

WELL DATA:

Casing Diameter: 8" ☐ Stainless Steel ☒ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2" ☐ Stainless Steel ☐ Galv. Steel ☒ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 3.56 ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☒ Top of Well Casing ☐ Other: _____
CONDITION: Is Well clearly labeled? ☐ Yes ☒ No Is well clean to bottom? ☒ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☒ Yes ☐ No
Does Weep Hole adequately drain well head? ☒ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☒ Yes ☐ No
Is Padlock Functional? ☐ Yes ☐ No ☒ NA Is Inner Casing Intact? ☒ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☒ Yes ☐ No

VOLUME OF WATER: Standing in well: NA To be purged: NA

PURGE DATA:

METHOD: ☐ Bailer, Size: _____ ☐ Bladder Pump ☐ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☒ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☒ Polyethylene ☐ Polypropylene ☐ Other: _____

Pumping Rate: _____ Elapsed Time: _____ Volume Pumped: _____
Was well Evacuated? ☐ Yes ☒ No Number of Well Volumes Removed: NA

PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☒ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: _____ ☒ Bladder Pump ☐ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☒ Stainless Steel
Tubing/Rope: ☐ Teflon® ☒ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☒ Field Cleaned

Metals samples field filtered? ☐ Yes ☒ No Method: _____

APPEARANCE: ☒ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid

FIELD DETERMINATIONS: See attached form for field parameter data.

DUP: ☐ No ☒ Yes Name: Dup-20171221
MS/MSD: ☒ No ☐ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [Signature]

Date: 12/21/17

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 238-1607

**NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET**

Project Name: Patchogue Former MGP SiteProject Number: 149322Client: National GridDate: 12/21/17Personnel: REH/TMBWell ID: MW-3Purge/Sample Depth: ~ 8'Sample ID: MW-3-20171221

Actual Time	Certified Parameters					ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
	pH	Temp (°C)	Cond (ms/cm)	DO (mg/L)	Turbidity (NTU)				
1010	6.82	11.04	0.915	1.32	10.3	90	2.56	2.00	
1013	6.89	11.09	0.957	2.44	7.1	80	2.58		
1016	6.93	12.11	0.945	1.63	5.0	71	2.60		
1019	7.04	12.51	0.929	0.94	3.5	67	2.60		
1022	7.05	12.06	0.925	0.80	3.1	62	2.61		
1025	7.04	12.81	0.917	0.68	2.8	60	2.61		
1028	7.06	12.85	0.914	0.63	2.5	62	2.61		
1031	7.06	12.96	0.913	0.56	1.9	55	2.67		
1034	7.05	13.01	0.908	0.54	1.8	53	2.67		
1037	7.04	13.02	0.908	0.53	1.6	55	2.63		
1040	7.02	13.04	0.904	0.50	1.5	51	2.63		
1043	Sample	MW-3-20171221							
cont 12/21/17									

Certified Sample Information:Time of Sample: 1043Analyst Signature: [Signature]**Instrument Data:**Manufacturer/Model: Horiba U-52Serial No. Unit: WEW5060Serial No. Handheld: PLYF709BCalibration Date/Time: 12/21/17Are low-flow parameters subject to field lab certification? ☐ Yes ☒ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-90
Sample I.D.: MW-90-20171221 (if different from well no.)

Project: Patchogue Former MGP Site
Personnel: REH/TMB

Date: 12/21/17 Time: 1101
Weather: Sunny Air Temp.: 34°

WELL DATA:

Casing Diameter: 8" ☐ Stainless Steel ☒ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2" ☐ Stainless Steel ☐ Galv. Steel ☒ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 1.102 ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☒ Top of Well Casing ☐ Other: _____
CONDITION: Is Well clearly labeled? ☒ Yes ☐ No Is well clean to bottom? ☐ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☒ Yes ☐ No
Does Weep Hole adequately drain well head? ☒ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☒ Yes ☐ No
Is Padlock Functional? ☒ Yes ☐ No ☐ NA Is Inner Casing Intact? ☒ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☒ Yes ☐ No

VOLUME OF WATER: Standing in well: _____ To be purged: _____

PURGE DATA:

METHOD: ☐ Bailer, Size: _____ ☒ Bladder Pump ☐ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____
MATERIALS: Pump/Bailer: ☐ Teflon® ☒ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☒ Polyethylene ☐ Polypropylene ☐ Other: _____
Pumping Rate: 100 ml/min Elapsed Time: 30 min Volume Pumped: 10 gal
Was well Evacuated? ☐ Yes ☒ No Number of Well Volumes Removed: NA
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☒ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: _____ ☒ Bladder Pump ☐ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____
MATERIALS: Pump/Bailer: ☐ Teflon® ☒ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☒ Polyethylene ☐ Polypropylene ☐ Other: _____
SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☒ Field Cleaned
Metals samples field filtered? ☐ Yes ☒ No Method: _____
APPEARANCE: ☒ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP: ☒ No ☐ Yes Name: _____
MS/MSD: ☒ No ☐ Yes Name: _____

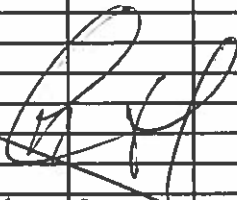
I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: Rachel Hernandez Date: 12/21/17

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: Patchogue Former MGP Site Project Number: 149322
 Client: National Grid Date: 12/21/17
 Personnel: REH/TMB Well ID: MW-9D
 Purge/Sample Depth: _____ Sample ID: MW-9D-20171221

Actual Time	Certified Parameters					ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
	pH	Temp (°C)	Cond (ms/cm)	DO (mg/L)	Turbidity (NTU)				
1101	7.05	11.40	0.498	7.36	25.3	65	1.68	150 ↓ ✓	
1104	6.37	11.76	0.494	7.86	23.4	126	1.69		
1107	5.75	12.36	0.504	7.02	28.7	171	1.70		
1110	5.69	12.46	0.505	1.58	25.0	182	1.72		
1113	5.57	12.65	0.506	1.20	22.6	200	1.73		
1116	5.44	13.25	0.507	0.89	16.6	220	1.73		
1119	5.43	13.41	0.506	0.80	14.2	224	1.71		
1122	5.39	13.51	0.506	1.41	13.7	232	1.70		
1125	5.44	13.53	0.505	0.72	14.9	236	1.70		
1128	5.44	13.65	0.505	0.63	13.5	241	1.70		
1131	5.42	13.73	0.503	0.60	13.0	245	1.70		
1134	Collect sample								
 12/21/17									

Certified Sample Information:

Time of Sample: 1134

Analyst Signature: [Signature]

Instrument Data:

Manufacturer/Model: Horiba U-52

Serial No. Unit: WEWBOULC

Serial No. Handheld: PLY F909B

Calibration Date/Time: 12/21/17

Are low-flow parameters subject to field lab certification? ☐ Yes ☒ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

**LOW-FLOW GROUNDWATER
SAMPLING FIELD DATA**Well Number: MW-95Sample I.D.: MW-95-20171221 (if different from well no.)Project: **Patchogue Former MGP Site**
Personnel: **REH/TMB**Date: 12/21/17 Time: 1143
Weather: sun Air Temp.: 30°**WELL DATA:**Casing Diameter: 8" ☐ Stainless Steel ☒ Steel ☐ PVC ☐ Teflon® ☐ Other: _____Intake Diameter: 2" ☐ Stainless Steel ☐ Galv. Steel ☐ PVC ☐ Teflon® ☐ Open rockDEPTH TO : Static Water Level: 1.74 ft Bottom of Well: _____ ftDATUM: ☐ Top of Protective Casing ☒ Top of Well Casing ☐ Other: _____CONDITION: Is Well clearly labeled? ☐ Yes ☒ No Is well clean to bottom? ☒ Yes ☐ NoIs Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☒ Yes ☐ NoDoes Weep Hole adequately drain well head? ☒ Yes ☐ NoIs Concrete Pad Intact? (not cracked or frost heaved) ☒ Yes ☐ NoIs Padlock Functional? ☐ Yes ☐ No ☒ NA Is Inner Casing Intact? ☒ Yes ☐ NoIs Inner Casing Properly Capped and Vented? ☒ Yes ☐ NoVOLUME OF WATER: Standing in well: NA To be purged: NA**PURGE DATA:**METHOD: ☐ Bailer, Size: _____ ☒ Bladder Pump ☐ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____MATERIALS: Pump/Bailer: ☐ Teflon® ☒ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☒ Polyethylene ☐ Polypropylene ☐ Other: _____Pumping Rate: 200m³/hr Elapsed Time: 30min Volume Pumped: 2G
Was well Evacuated? ☐ Yes ☐ No Number of Well Volumes Removed: NAPURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☒ Field Cleaned**SAMPLING DATA:**METHOD: ☐ Bailer, Size: _____ ☒ Bladder Pump ☐ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____MATERIALS: Pump/Bailer: ☐ Teflon® ☒ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☒ PolyethyleneSAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☒ Field CleanedMetals samples field filtered? ☐ Yes ☒ No Method: _____APPEARANCE: ☒ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid

FIELD DETERMINATIONS: See attached form for field parameter data.

DUP: ☒ No ☐ Yes Name: _____MS/MSD: ☒ No ☐ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [Signature]Date: 12/21/17

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: <u>Patchogue Former MGP Site</u>	Project Number: <u>149322</u>
Client: <u>National Grid</u>	Date: <u>12/21/17</u>
Personnel: <u>REH/TMB</u>	Well ID: <u>MW-95</u>
Purge/Sample Depth: <u>~ 8'</u>	Sample ID: <u>MW-95-20171221</u>

[illegible]**Certified Sample Information:**

Time of Sample: 1211

Analyst Signature:

Instrument Data:

Manufacturer/Model: Floriba V-52

Serial No. Unit: WE430VLD

Calibration Date/Time: 12/21/17

Serial No. Handheld:

PLYF909B

Are low-flow parameters subject to field lab certification? ☐ Yes ☒ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Appendix B: Laboratory Reports (CD-ROM)





AQUA PRO-TECH LABORATORIES
Certified Environmental Testing



ANALYTICAL RESULTS

FULL DELIVERABLES FORMAT

APL Work Order Number: 7120696

Brown and Caldwell USR

Project: Patchogue

Brian Wood
Laboratory Director

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

Report Date: Jan 26, 2018

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AQUA PRO-TECH LABORATORIES
Certified Environmental Testing

Sample Summary

Work Order: 7120696

Client: Brown and Caldwell USR

Project: Patchogue

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1 20171220	7120696-01	Ground Water	12/20/2017 12:49	12/21/2017 16:22
MW-7S 20171220	7120696-02	Ground Water	12/20/2017 14:11	12/21/2017 16:22
MW-7D 20171220	7120696-03	Ground Water	12/20/2017 15:05	12/21/2017 16:22
MW-8S 20171220	7120696-04	Ground Water	12/20/2017 16:09	12/21/2017 16:22
MW-8D 20171220	7120696-05	Ground Water	12/20/2017 16:49	12/21/2017 16:22
MW-4S 20171221	7120696-06	Ground Water	12/21/2017 08:42	12/21/2017 16:22
MW-4D 20171221	7120696-07	Ground Water	12/21/2017 09:53	12/21/2017 16:22
MW-3 20171221	7120696-08	Ground Water	12/21/2017 10:43	12/21/2017 16:22
DUP-20171221	7120696-09	Ground Water	12/21/2017 00:00	12/21/2017 16:22
FB-20171221	7120696-10	Ground Water	12/21/2017 11:01	12/21/2017 16:22
MW-9D 20171221	7120696-11	Ground Water	12/21/2017 11:34	12/21/2017 16:22
MW-9S 20171221	7120696-12	Ground Water	12/21/2017 00:00	12/21/2017 16:22
Trip Blank-20171221	7120696-13	Ground Water	12/21/2017 00:00	12/21/2017 16:22

APL 7120696

AQUA PRO-TECH LABORATORIES



www.aquaprotechlabs.com

TEL: 973.227.0422

FAX: 973.227.2813

CONTAMINATION LEVEL

☐ HIGH ☐ MEDIUM ☐ LOW

CHAIN OF CUSTODY

CLIENT: Brown and Caldwell	SEND REPORT TO: Jim Marolda
ADDRESS: 2 Park Way Suite 2A	ADDRESS: Same
Upper Saddle River, NJ 07458	
PHONE: 201-574-4700	PHONE: Same
E-MAIL: JMarolda@brownandcaldwell.com	FAX:
PROJECT NAME: petchoque	SEND INVOICE TO: Same
PROJECT MGR: Jim Marolda	ADDRESS:
PROJECT or PO #: 149322	SAMPLED BY: RCH/TMB

PAGE 0F

TURN-AROUND TIME

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

REPORT FORMAT	ELECTRONIC FORMAT
☐ RESULTS ONLY	☐ EMAIL DELIVERY
☐ NJ DEP REDUCED	☐ HAZSITE EDD
☐ NJ DEP FULL	☐ EXCEL
☐ STATE FORMS/E2 REPORTING	SRP#

PWSID#

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

APL Lab ID#	Sample Source: Field ID	Date	Time	Sample Type G R A B C O M P	M A R T I X	No. of Bottles	Preservative	Analysis Requested
1	MW-1-20171220 ~ms/msd	12/20/17	1249	X		Gr	HCL/none	BTEX, MTOE, PAHs
2	MW-75-20171220		1411	X		Gr	HCL/none	
3	MW-70-20171220		1505	X		Gr	HCL/none	
4	MW-85-20171220		1609	X		Gr	HCL/none	
5	MW-80-20171220		1649	X		Gr	HCL/none	
6	MW-45-20171221	12/21/17	0842	X		Gr	HCL/none	
7	MW-40-20171221		0953	X		Gr	HCL/none	
8	MW-3-20171221		1043	X		Gr	HCL/none	
9	DUP-20171221		9999	X		Gr	HCL/none	

RELINQUISHED BY (Print) Rachel Hejnacki	DATE 12/21/17	RECEIVED BY (Print) Drew McManus
Signature Rachel Hejnacki	Time 1615	Signature Drew McManus
RELINQUISHED BY (Print)	DATE	RECEIVED BY (Print)
Signature	Time	Signature
RELINQUISHED BY (Print)	DATE	RECEIVED BY (Print)
Signature	Time	Signature
COMMENTS/SPECIAL INSTRUCTIONS		
Cooler Temp. upon receipt at lab 36		

CERTIFICATIONS: NELAP (National Environmental Laboratory Accreditation Program) NUDEP #07010 PADEP #68-02903 NYDOH #11634 CTPH #0233 US ARMY

By signing this Chain of Custody Agreement, customer expressly agrees to pay APL for all charges, reasonably incurred in connection with analysis and reporting for these samples



Extractable Petroleum Hydrocarbons:

Gas Chromatography/Flame Ionization Detector

New Jersey Department of Environmental Protection Site Remediation Program Extractable Petroleum Hydrocarbons Methodology (Version 3.0).

USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 8015B or NJDEP Office of Quality Assurance Quantitation of Semi-Volatile Petroleum Products in Water, Soil and Sediment OQA-QAM-025, Revision 6.

Metals:

Inductively-Coupled Plasma Atomic Emission Spectrometry or Inductively-Coupled Plasma Mass Spectroscopy

Water Samples-USEPA Methods for the Analysis of Water and Wastes, Method 200.7, Method 200.8.

Soil Samples-USEPA Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 6010B.

Mercury:

Cold Vapor Atomic Absorption Spectrometry

Water Samples-USEPA Methods for the Analysis of Water and Wastes, Method 245.1.

Soil Samples-USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 7171A.

Volatile Organic Compounds:

Purge and Trap Gas Chromatography/Mass Spectroscopy

Drinking Water Samples-USEPA Methods for the Determination of Organic Compounds in Drinking Water, Method 524.2.

Water Samples-USEPA Methods for the Analysis of Water and Wastes, Method 624, Method 8260B.

Soil Samples-USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 8260B.

Semi-Volatile Organic Compounds:

Gas Chromatography/Mass Spectroscopy

Water Samples-USEPA Methods for the Analysis of Water and Wastes, Method 625, Method 8270C.

Soil Samples-USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 8270C.

Pesticides:

Gas Chromatography/Electron Capture Detector

Water Samples-USEPA Methods for the Analysis of Water and Wastes, Method 608, Method 8081A.

Soil Samples-USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 8081A.

Polychlorinated Biphenyls (PCBs):

Gas Chromatography/Electron Capture Detector

Water Samples-USEPA Methods for the Analysis of Water and Wastes, Method 608, Method 8082.

Soil Samples-USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 8082

General Chemistry Methods:

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

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

MDL:

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

RL:

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

Concentration (Conc) / Result:

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

Tentatively Identified Compound (TIC):

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

Qualifiers:

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

DATA OF KNOWN QUALITY CONFORMANCE/NON-CONFORMANCE SUMMARY QUESTIONNAIRE	
Laboratory Name: Aqua Pro-Tech Laboratories Client: Brown & Caldwell-USR Project Location: Patchogue Project Number: 7120696 Laboratory Sample ID(s): 01-13 Sampling Date(s): December 20-21, 2017 List DKQP Methods Used: 8260B; 8270D; 8270D-SIM	
1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the NJDEP Data of Known Quality performance standards? ☒ Yes ☐ No
1A	Were the method specified handling, preservation, and holding time requirements met? ☒ Yes ☐ No
1B	EPH Method: Was the EPH method conducted without significant modifications (see Section 11.3 of respective DKQ methods) ☐ Yes ☐ No ☒ N/A
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)? ☒ Yes ☐ No
3	Were samples received at an appropriate temperature (4±2° C)? ☒ Yes ☐ No ☐ N/A
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved? ☒ Yes ☐ No
5	Were reporting limits specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt? ☒ Yes ☐ No Were these reporting limits met? ☒ Yes ☐ No ☐ N/A
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the DKQP documents and/or site-specific QAPP? ☒ Yes ☐ No
7	Are project-specific matrix spikes and/or laboratory duplicates included in this data set? ☒ Yes ☐ No

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

Positive Results Only Summary

7120696-03 (Ground Water) Sample Name: **MW-7D 20171220**

SW 846 8270D - Semivolatile Organics - GC/MS - SIM

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Benzo(a)anthracene	0.0257		0.0165	0.0200	ug/L	1	12/23/17 2:02
Benzo(a)pyrene	0.0243		0.0124	0.0200	ug/L	1	12/23/17 2:02
Benzo(b)fluoranthene	0.0305		0.0177	0.0200	ug/L	1	12/23/17 2:02
Benzo(k)fluoranthene	0.0123	J	0.00710	0.0200	ug/L	1	12/23/17 2:02
Indeno(1,2,3-cd)pyrene	0.0147	J	0.0131	0.0200	ug/L	1	12/23/17 2:02

7120696-05 (Ground Water) Sample Name: **MW-8D 20171220**

SW 846 8270D - Semivolatile Organics - GC/MS - SIM

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Benzo(a)anthracene	0.0167	J	0.0165	0.0200	ug/L	1	12/23/17 2:56

7120696-07 (Ground Water) Sample Name: **MW-4D 20171221**

SW 846 8270D - Semivolatile Organics - GC/MS - SIM

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Benzo(a)anthracene	0.0180	J	0.0165	0.0200	ug/L	1	12/28/17 21:11
Benzo(a)pyrene	0.0129	J	0.0124	0.0200	ug/L	1	12/28/17 21:11

7120696-08 (Ground Water) Sample Name: **MW-3 20171221**

SW 846 8270D - Semivolatile Organics - GC/MS

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Fluoranthene	0.502	J	0.129	2.00	ug/L	1	12/26/17 22:39

SW 846 8270D - Semivolatile Organics - GC/MS - SIM

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Benzo(a)anthracene	0.0281		0.0165	0.0200	ug/L	1	12/28/17 21:38

7120696-09 (Ground Water) Sample Name: **DUP-20171221**

SW 846 8270D - Semivolatile Organics - GC/MS

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Fluoranthene	0.590	J	0.129	2.00	ug/L	1	12/26/17 23:02
Pyrene	0.509	J	0.115	2.00	ug/L	1	12/26/17 23:02

SW 846 8270D - Semivolatile Organics - GC/MS - SIM

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Benzo(a)anthracene	0.0283		0.0165	0.0200	ug/L	1	12/28/17 22:04

7120696-11 (Ground Water) Sample Name: **MW-9D 20171221**

Positive Results Only Summary

7120696-11 (Ground Water)

Sample Name: **MW-9D 20171221**
SW 846 8270D - Semivolatile Organics - GC/MS - SIM

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Benzo(a)anthracene	0.0292		0.0165	0.0200	ug/L	1	12/28/17 22:58
Benzo(a)pyrene	0.0303		0.0124	0.0200	ug/L	1	12/28/17 22:58
Benzo(b)fluoranthene	0.0396		0.0177	0.0200	ug/L	1	12/28/17 22:58
Benzo(k)fluoranthene	0.0181	J	0.00710	0.0200	ug/L	1	12/28/17 22:58
Indeno(1,2,3-cd)pyrene	0.0184	J	0.0131	0.0200	ug/L	1	12/28/17 22:58

7120696-12 (Ground Water)

Sample Name: **MW-9S 20171221**
SW 846 8270D - Semivolatile Organics - GC/MS

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Acenaphthene	0.967	J	0.100	2.00	ug/L	1	12/27/17 1:22
Fluoranthene	1.28	J	0.129	2.00	ug/L	1	12/27/17 1:22
Pyrene	1.72	J	0.115	2.00	ug/L	1	12/27/17 1:22

SW 846 8270D - Semivolatile Organics - GC/MS - SIM

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Benzo(a)anthracene	0.595		0.0165	0.0200	ug/L	1	12/28/17 23:25
Benzo(a)pyrene	0.499		0.0124	0.0200	ug/L	1	12/28/17 23:25
Benzo(b)fluoranthene	0.431		0.0177	0.0200	ug/L	1	12/28/17 23:25
Benzo(k)fluoranthene	0.202		0.00710	0.0200	ug/L	1	12/28/17 23:25
Dibenzo(a,h)anthracene	0.0533		0.0160	0.0200	ug/L	1	12/28/17 23:25
Indeno(1,2,3-cd)pyrene	0.215		0.0131	0.0200	ug/L	1	12/28/17 23:25



AQUA PRO-TECH LABORATORIES
Certified Environmental Testing

All Results Summary

Client: Brown and Caldwell USR
Project: Patchogue

Work Order: 7120696
Date to Lab: 12/21/2017 4:22:00PM

7120696-01 (Ground Water) Sample Name: **MW-1 20171220** Collected: **12/20/2017 12:49:00PM**

SW 846 8270D - Semivolatile Organics - GC/MS

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Acenaphthene	ND	U	0.100	2.00	ug/L	1	12/22/17 22:57
Acenaphthylene	ND	U	0.140	2.00	ug/L	1	12/22/17 22:57
Anthracene	ND	U	0.121	2.00	ug/L	1	12/22/17 22:57
Benzo(g,h,i)perylene	ND	U	0.0652	2.00	ug/L	1	12/22/17 22:57
Chrysene	ND	U	0.129	2.00	ug/L	1	12/22/17 22:57
Fluoranthene	ND	U	0.129	2.00	ug/L	1	12/22/17 22:57
Fluorene	ND	U	0.109	2.00	ug/L	1	12/22/17 22:57
Naphthalene	ND	U	0.0607	2.00	ug/L	1	12/22/17 22:57
Phenanthrene	ND	U	0.0725	2.00	ug/L	1	12/22/17 22:57
Pyrene	ND	U	0.115	2.00	ug/L	1	12/22/17 22:57

SW 846 8270D - Semivolatile Organics - GC/MS - SIM

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Benzo(a)anthracene	ND	U	0.0165	0.0200	ug/L	1	12/23/17 1:09
Benzo(a)pyrene	ND	U	0.0124	0.0200	ug/L	1	12/23/17 1:09
Benzo(b)fluoranthene	ND	U	0.0177	0.0200	ug/L	1	12/23/17 1:09
Benzo(k)fluoranthene	ND	U	0.00710	0.0200	ug/L	1	12/23/17 1:09
Dibenzo(a,h)anthracene	ND	U	0.0160	0.0200	ug/L	1	12/23/17 1:09
Indeno(1,2,3-cd)pyrene	ND	U	0.0131	0.0200	ug/L	1	12/23/17 1:09

SW 846 8260B - Volatile Organics - GC/MS

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Benzene	ND	U	0.129	1.00	ug/L	1	12/29/17 16:06
EthylBenzene	ND	U	0.244	1.00	ug/L	1	12/29/17 16:06
m+p-Xylenes	ND	U	0.461	2.00	ug/L	1	12/29/17 16:06
Methyl tert-Butyl Ether	ND	U	0.596	1.00	ug/L	1	12/29/17 16:06
o-Xylene	ND	U	0.244	1.00	ug/L	1	12/29/17 16:06
Toluene	ND	U	0.205	1.00	ug/L	1	12/29/17 16:06
Total Xylenes	ND	U	0.705	1.00	ug/L	1	12/29/17 16:06

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

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



AQUA PRO-TECH LABORATORIES
Certified Environmental Testing

All Results Summary

Client: Brown and Caldwell USR
Project: Patchogue

Work Order: 7120696
Date to Lab: 12/21/2017 4:22:00PM

7120696-02 (Ground Water) Sample Name: **MW-7S 20171220** Collected: **12/20/2017 2:11:00PM**

SW 846 8270D - Semivolatile Organics - GC/MS

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Acenaphthene	ND	U	0.101	2.02	ug/L	1	12/22/17 23:21
Acenaphthylene	ND	U	0.141	2.02	ug/L	1	12/22/17 23:21
Anthracene	ND	U	0.122	2.02	ug/L	1	12/22/17 23:21
Benzo(g,h,i)perylene	ND	U	0.0659	2.02	ug/L	1	12/22/17 23:21
Chrysene	ND	U	0.130	2.02	ug/L	1	12/22/17 23:21
Fluoranthene	ND	U	0.130	2.02	ug/L	1	12/22/17 23:21
Fluorene	ND	U	0.110	2.02	ug/L	1	12/22/17 23:21
Naphthalene	ND	U	0.0613	2.02	ug/L	1	12/22/17 23:21
Phenanthrene	ND	U	0.0732	2.02	ug/L	1	12/22/17 23:21
Pyrene	ND	U	0.116	2.02	ug/L	1	12/22/17 23:21

SW 846 8270D - Semivolatile Organics - GC/MS - SIM

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Benzo(a)anthracene	ND	U	0.0167	0.0202	ug/L	1	12/23/17 1:35
Benzo(a)pyrene	ND	U	0.0125	0.0202	ug/L	1	12/23/17 1:35
Benzo(b)fluoranthene	ND	U	0.0179	0.0202	ug/L	1	12/23/17 1:35
Benzo(k)fluoranthene	ND	U	0.00717	0.0202	ug/L	1	12/23/17 1:35
Dibenzo(a,h)anthracene	ND	U	0.0162	0.0202	ug/L	1	12/23/17 1:35
Indeno(1,2,3-cd)pyrene	ND	U	0.0132	0.0202	ug/L	1	12/23/17 1:35

SW 846 8260B - Volatile Organics - GC/MS

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Benzene	ND	U	0.129	1.00	ug/L	1	12/26/17 22:40
EthylBenzene	ND	U	0.244	1.00	ug/L	1	12/26/17 22:40
m+p-Xylenes	ND	U	0.461	2.00	ug/L	1	12/26/17 22:40
Methyl tert-Butyl Ether	ND	U	0.596	1.00	ug/L	1	12/26/17 22:40
o-Xylene	ND	U	0.244	1.00	ug/L	1	12/26/17 22:40
Toluene	ND	U	0.205	1.00	ug/L	1	12/26/17 22:40
Total Xylenes	ND	U	0.705	1.00	ug/L	1	12/26/17 22:40

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

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



AQUA PRO-TECH LABORATORIES
Certified Environmental Testing

All Results Summary

Client: Brown and Caldwell USR
Project: Patchogue

Work Order: 7120696
Date to Lab: 12/21/2017 4:22:00PM

7120696-03 (Ground Water) Sample Name: **MW-7D 20171220** Collected: **12/20/2017 3:05:00PM**

SW 846 8270D - Semivolatile Organics - GC/MS

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Acenaphthene	ND	U	0.100	2.00	ug/L	1	12/22/17 23:44
Acenaphthylene	ND	U	0.140	2.00	ug/L	1	12/22/17 23:44
Anthracene	ND	U	0.121	2.00	ug/L	1	12/22/17 23:44
Benzo(g,h,i)perylene	ND	U	0.0652	2.00	ug/L	1	12/22/17 23:44
Chrysene	ND	U	0.129	2.00	ug/L	1	12/22/17 23:44
Fluoranthene	ND	U	0.129	2.00	ug/L	1	12/22/17 23:44
Fluorene	ND	U	0.109	2.00	ug/L	1	12/22/17 23:44
Naphthalene	ND	U	0.0607	2.00	ug/L	1	12/22/17 23:44
Phenanthrene	ND	U	0.0725	2.00	ug/L	1	12/22/17 23:44
Pyrene	ND	U	0.115	2.00	ug/L	1	12/22/17 23:44

SW 846 8270D - Semivolatile Organics - GC/MS - SIM

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Benzo(a)anthracene	0.0257		0.0165	0.0200	ug/L	1	12/23/17 2:02
Benzo(a)pyrene	0.0243		0.0124	0.0200	ug/L	1	12/23/17 2:02
Benzo(b)fluoranthene	0.0305		0.0177	0.0200	ug/L	1	12/23/17 2:02
Benzo(k)fluoranthene	0.0123	J	0.00710	0.0200	ug/L	1	12/23/17 2:02
Dibenzo(a,h)anthracene	ND	U	0.0160	0.0200	ug/L	1	12/23/17 2:02
Indeno(1,2,3-cd)pyrene	0.0147	J	0.0131	0.0200	ug/L	1	12/23/17 2:02

SW 846 8260B - Volatile Organics - GC/MS

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Benzene	ND	U	0.129	1.00	ug/L	1	12/26/17 23:06
EthylBenzene	ND	U	0.244	1.00	ug/L	1	12/26/17 23:06
m+p-Xylenes	ND	U	0.461	2.00	ug/L	1	12/26/17 23:06
Methyl tert-Butyl Ether	ND	U	0.596	1.00	ug/L	1	12/26/17 23:06
o-Xylene	ND	U	0.244	1.00	ug/L	1	12/26/17 23:06
Toluene	ND	U	0.205	1.00	ug/L	1	12/26/17 23:06
Total Xylenes	ND	U	0.705	1.00	ug/L	1	12/26/17 23:06

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

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



AQUA PRO-TECH LABORATORIES
Certified Environmental Testing

All Results Summary

Client: Brown and Caldwell USR
Project: Patchogue

Work Order: 7120696
Date to Lab: 12/21/2017 4:22:00PM

7120696-04 (Ground Water) Sample Name: **MW-8S 20171220** Collected: **12/20/2017 4:09:00PM**

SW 846 8270D - Semivolatile Organics - GC/MS

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Acenaphthene	ND	U	0.100	2.00	ug/L	1	12/23/17 0:08
Acenaphthylene	ND	U	0.140	2.00	ug/L	1	12/23/17 0:08
Anthracene	ND	U	0.121	2.00	ug/L	1	12/23/17 0:08
Benzo(g,h,i)perylene	ND	U	0.0652	2.00	ug/L	1	12/23/17 0:08
Chrysene	ND	U	0.129	2.00	ug/L	1	12/23/17 0:08
Fluoranthene	ND	U	0.129	2.00	ug/L	1	12/23/17 0:08
Fluorene	ND	U	0.109	2.00	ug/L	1	12/23/17 0:08
Naphthalene	ND	U	0.0607	2.00	ug/L	1	12/23/17 0:08
Phenanthrene	ND	U	0.0725	2.00	ug/L	1	12/23/17 0:08
Pyrene	ND	U	0.115	2.00	ug/L	1	12/23/17 0:08

SW 846 8270D - Semivolatile Organics - GC/MS - SIM

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Benzo(a)anthracene	ND	U	0.0165	0.0200	ug/L	1	12/23/17 2:29
Benzo(a)pyrene	ND	U	0.0124	0.0200	ug/L	1	12/23/17 2:29
Benzo(b)fluoranthene	ND	U	0.0177	0.0200	ug/L	1	12/23/17 2:29
Benzo(k)fluoranthene	ND	U	0.00710	0.0200	ug/L	1	12/23/17 2:29
Dibenzo(a,h)anthracene	ND	U	0.0160	0.0200	ug/L	1	12/23/17 2:29
Indeno(1,2,3-cd)pyrene	ND	U	0.0131	0.0200	ug/L	1	12/23/17 2:29

SW 846 8260B - Volatile Organics - GC/MS

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Benzene	ND	U	0.129	1.00	ug/L	1	12/26/17 23:32
EthylBenzene	ND	U	0.244	1.00	ug/L	1	12/26/17 23:32
m+p-Xylenes	ND	U	0.461	2.00	ug/L	1	12/26/17 23:32
Methyl tert-Butyl Ether	ND	U	0.596	1.00	ug/L	1	12/26/17 23:32
o-Xylene	ND	U	0.244	1.00	ug/L	1	12/26/17 23:32
Toluene	ND	U	0.205	1.00	ug/L	1	12/26/17 23:32
Total Xylenes	ND	U	0.705	1.00	ug/L	1	12/26/17 23:32

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

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



AQUA PRO-TECH LABORATORIES
Certified Environmental Testing

All Results Summary

Client: Brown and Caldwell USR
Project: Patchogue

Work Order: 7120696
Date to Lab: 12/21/2017 4:22:00PM

7120696-05 (Ground Water) Sample Name: **MW-8D 20171220** Collected: **12/20/2017 4:49:00PM**

SW 846 8270D - Semivolatile Organics - GC/MS

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Acenaphthene	ND	U	0.100	2.00	ug/L	1	12/23/17 0:31
Acenaphthylene	ND	U	0.140	2.00	ug/L	1	12/23/17 0:31
Anthracene	ND	U	0.121	2.00	ug/L	1	12/23/17 0:31
Benzo(g,h,i)perylene	ND	U	0.0652	2.00	ug/L	1	12/23/17 0:31
Chrysene	ND	U	0.129	2.00	ug/L	1	12/23/17 0:31
Fluoranthene	ND	U	0.129	2.00	ug/L	1	12/23/17 0:31
Fluorene	ND	U	0.109	2.00	ug/L	1	12/23/17 0:31
Naphthalene	ND	U	0.0607	2.00	ug/L	1	12/23/17 0:31
Phenanthrene	ND	U	0.0725	2.00	ug/L	1	12/23/17 0:31
Pyrene	ND	U	0.115	2.00	ug/L	1	12/23/17 0:31

SW 846 8270D - Semivolatile Organics - GC/MS - SIM

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Benzo(a)anthracene	0.0167	J	0.0165	0.0200	ug/L	1	12/23/17 2:56
Benzo(a)pyrene	ND	U	0.0124	0.0200	ug/L	1	12/23/17 2:56
Benzo(b)fluoranthene	ND	U	0.0177	0.0200	ug/L	1	12/23/17 2:56
Benzo(k)fluoranthene	ND	U	0.00710	0.0200	ug/L	1	12/23/17 2:56
Dibenzo(a,h)anthracene	ND	U	0.0160	0.0200	ug/L	1	12/23/17 2:56
Indeno(1,2,3-cd)pyrene	ND	U	0.0131	0.0200	ug/L	1	12/23/17 2:56

SW 846 8260B - Volatile Organics - GC/MS

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Benzene	ND	U	0.129	1.00	ug/L	1	12/26/17 23:58
EthylBenzene	ND	U	0.244	1.00	ug/L	1	12/26/17 23:58
m+p-Xylenes	ND	U	0.461	2.00	ug/L	1	12/26/17 23:58
Methyl tert-Butyl Ether	ND	U	0.596	1.00	ug/L	1	12/26/17 23:58
o-Xylene	ND	U	0.244	1.00	ug/L	1	12/26/17 23:58
Toluene	ND	U	0.205	1.00	ug/L	1	12/26/17 23:58
Total Xylenes	ND	U	0.705	1.00	ug/L	1	12/26/17 23:58

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

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



AQUA PRO-TECH LABORATORIES
Certified Environmental Testing

All Results Summary

Client: Brown and Caldwell USR
Project: Patchogue

Work Order: 7120696
Date to Lab: 12/21/2017 4:22:00PM

7120696-06 (Ground Water) Sample Name: **MW-4S 20171221** Collected: **12/21/2017 8:42:00AM**

SW 846 8270D - Semivolatile Organics - GC/MS

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Acenaphthene	ND	U	0.108	2.15	ug/L	1	12/26/17 21:52
Acenaphthylene	ND	U	0.151	2.15	ug/L	1	12/26/17 21:52
Anthracene	ND	U	0.130	2.15	ug/L	1	12/26/17 21:52
Benzo(g,h,i)perylene	ND	U	0.0701	2.15	ug/L	1	12/26/17 21:52
Chrysene	ND	U	0.139	2.15	ug/L	1	12/26/17 21:52
Fluoranthene	ND	U	0.139	2.15	ug/L	1	12/26/17 21:52
Fluorene	ND	U	0.117	2.15	ug/L	1	12/26/17 21:52
Naphthalene	ND	U	0.0653	2.15	ug/L	1	12/26/17 21:52
Phenanthrene	ND	U	0.0780	2.15	ug/L	1	12/26/17 21:52
Pyrene	ND	U	0.124	2.15	ug/L	1	12/26/17 21:52

SW 846 8270D - Semivolatile Organics - GC/MS - SIM

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Benzo(a)anthracene	ND	U	0.0177	0.0215	ug/L	1	12/28/17 20:44
Benzo(a)pyrene	ND	U	0.0133	0.0215	ug/L	1	12/28/17 20:44
Benzo(b)fluoranthene	ND	U	0.0190	0.0215	ug/L	1	12/28/17 20:44
Benzo(k)fluoranthene	ND	U	0.00763	0.0215	ug/L	1	12/28/17 20:44
Dibenzo(a,h)anthracene	ND	U	0.0172	0.0215	ug/L	1	12/28/17 20:44
Indeno(1,2,3-cd)pyrene	ND	U	0.0141	0.0215	ug/L	1	12/28/17 20:44

SW 846 8260B - Volatile Organics - GC/MS

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Benzene	ND	U	0.129	1.00	ug/L	1	12/27/17 0:23
EthylBenzene	ND	U	0.244	1.00	ug/L	1	12/27/17 0:23
m+p-Xylenes	ND	U	0.461	2.00	ug/L	1	12/27/17 0:23
Methyl tert-Butyl Ether	ND	U	0.596	1.00	ug/L	1	12/27/17 0:23
o-Xylene	ND	U	0.244	1.00	ug/L	1	12/27/17 0:23
Toluene	ND	U	0.205	1.00	ug/L	1	12/27/17 0:23
Total Xylenes	ND	U	0.705	1.00	ug/L	1	12/27/17 0:23

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

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



AQUA PRO-TECH LABORATORIES
Certified Environmental Testing

All Results Summary

Client: Brown and Caldwell USR
Project: Patchogue

Work Order: 7120696
Date to Lab: 12/21/2017 4:22:00PM

7120696-07 (Ground Water) Sample Name: **MW-4D 20171221** Collected: **12/21/2017 9:53:00AM**

SW 846 8270D - Semivolatile Organics - GC/MS

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Acenaphthene	ND	U	0.100	2.00	ug/L	1	12/26/17 22:16
Acenaphthylene	ND	U	0.140	2.00	ug/L	1	12/26/17 22:16
Anthracene	ND	U	0.121	2.00	ug/L	1	12/26/17 22:16
Benzo(g,h,i)perylene	ND	U	0.0652	2.00	ug/L	1	12/26/17 22:16
Chrysene	ND	U	0.129	2.00	ug/L	1	12/26/17 22:16
Fluoranthene	ND	U	0.129	2.00	ug/L	1	12/26/17 22:16
Fluorene	ND	U	0.109	2.00	ug/L	1	12/26/17 22:16
Naphthalene	ND	U	0.0607	2.00	ug/L	1	12/26/17 22:16
Phenanthrene	ND	U	0.0725	2.00	ug/L	1	12/26/17 22:16
Pyrene	ND	U	0.115	2.00	ug/L	1	12/26/17 22:16

SW 846 8270D - Semivolatile Organics - GC/MS - SIM

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Benzo(a)anthracene	0.0180	J	0.0165	0.0200	ug/L	1	12/28/17 21:11
Benzo(a)pyrene	0.0129	J	0.0124	0.0200	ug/L	1	12/28/17 21:11
Benzo(b)fluoranthene	ND	U	0.0177	0.0200	ug/L	1	12/28/17 21:11
Benzo(k)fluoranthene	ND	U	0.00710	0.0200	ug/L	1	12/28/17 21:11
Dibenzo(a,h)anthracene	ND	U	0.0160	0.0200	ug/L	1	12/28/17 21:11
Indeno(1,2,3-cd)pyrene	ND	U	0.0131	0.0200	ug/L	1	12/28/17 21:11

SW 846 8260B - Volatile Organics - GC/MS

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Benzene	ND	U	0.129	1.00	ug/L	1	12/27/17 0:49
EthylBenzene	ND	U	0.244	1.00	ug/L	1	12/27/17 0:49
m+p-Xylenes	ND	U	0.461	2.00	ug/L	1	12/27/17 0:49
Methyl tert-Butyl Ether	ND	U	0.596	1.00	ug/L	1	12/27/17 0:49
o-Xylene	ND	U	0.244	1.00	ug/L	1	12/27/17 0:49
Toluene	ND	U	0.205	1.00	ug/L	1	12/27/17 0:49
Total Xylenes	ND	U	0.705	1.00	ug/L	1	12/27/17 0:49

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

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



AQUA PRO-TECH LABORATORIES
Certified Environmental Testing

All Results Summary

Client: Brown and Caldwell USR
Project: Patchogue

Work Order: 7120696
Date to Lab: 12/21/2017 4:22:00PM

7120696-08 (Ground Water) Sample Name: **MW-3 20171221** Collected: **12/21/2017 10:43:00AM**

SW 846 8270D - Semivolatile Organics - GC/MS

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Acenaphthene	ND	U	0.100	2.00	ug/L	1	12/26/17 22:39
Acenaphthylene	ND	U	0.140	2.00	ug/L	1	12/26/17 22:39
Anthracene	ND	U	0.121	2.00	ug/L	1	12/26/17 22:39
Benzo(g,h,i)perylene	ND	U	0.0652	2.00	ug/L	1	12/26/17 22:39
Chrysene	ND	U	0.129	2.00	ug/L	1	12/26/17 22:39
Fluoranthene	0.502	J	0.129	2.00	ug/L	1	12/26/17 22:39
Fluorene	ND	U	0.109	2.00	ug/L	1	12/26/17 22:39
Naphthalene	ND	U	0.0607	2.00	ug/L	1	12/26/17 22:39
Phenanthrene	ND	U	0.0725	2.00	ug/L	1	12/26/17 22:39
Pyrene	ND	U	0.115	2.00	ug/L	1	12/26/17 22:39

SW 846 8270D - Semivolatile Organics - GC/MS - SIM

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Benzo(a)anthracene	0.0281		0.0165	0.0200	ug/L	1	12/28/17 21:38
Benzo(a)pyrene	ND	U	0.0124	0.0200	ug/L	1	12/28/17 21:38
Benzo(b)fluoranthene	ND	U	0.0177	0.0200	ug/L	1	12/28/17 21:38
Benzo(k)fluoranthene	ND	U	0.00710	0.0200	ug/L	1	12/28/17 21:38
Dibenzo(a,h)anthracene	ND	U	0.0160	0.0200	ug/L	1	12/28/17 21:38
Indeno(1,2,3-cd)pyrene	ND	U	0.0131	0.0200	ug/L	1	12/28/17 21:38

SW 846 8260B - Volatile Organics - GC/MS

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Benzene	ND	U	0.129	1.00	ug/L	1	12/27/17 1:14
EthylBenzene	ND	U	0.244	1.00	ug/L	1	12/27/17 1:14
m+p-Xylenes	ND	U	0.461	2.00	ug/L	1	12/27/17 1:14
Methyl tert-Butyl Ether	ND	U	0.596	1.00	ug/L	1	12/27/17 1:14
o-Xylene	ND	U	0.244	1.00	ug/L	1	12/27/17 1:14
Toluene	ND	U	0.205	1.00	ug/L	1	12/27/17 1:14
Total Xylenes	ND	U	0.705	1.00	ug/L	1	12/27/17 1:14

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

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



AQUA PRO-TECH LABORATORIES
Certified Environmental Testing

All Results Summary

Client: Brown and Caldwell USR
Project: Patchogue

Work Order: 7120696
Date to Lab: 12/21/2017 4:22:00PM

7120696-09 (Ground Water) Sample Name: **DUP-20171221** Collected: **12/21/2017 12:00:00AM**

SW 846 8270D - Semivolatile Organics - GC/MS

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Acenaphthene	ND	U	0.100	2.00	ug/L	1	12/26/17 23:02
Acenaphthylene	ND	U	0.140	2.00	ug/L	1	12/26/17 23:02
Anthracene	ND	U	0.121	2.00	ug/L	1	12/26/17 23:02
Benzo(g,h,i)perylene	ND	U	0.0652	2.00	ug/L	1	12/26/17 23:02
Chrysene	ND	U	0.129	2.00	ug/L	1	12/26/17 23:02
Fluoranthene	0.590	J	0.129	2.00	ug/L	1	12/26/17 23:02
Fluorene	ND	U	0.109	2.00	ug/L	1	12/26/17 23:02
Naphthalene	ND	U	0.0607	2.00	ug/L	1	12/26/17 23:02
Phenanthrene	ND	U	0.0725	2.00	ug/L	1	12/26/17 23:02
Pyrene	0.509	J	0.115	2.00	ug/L	1	12/26/17 23:02

SW 846 8270D - Semivolatile Organics - GC/MS - SIM

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Benzo(a)anthracene	0.0283		0.0165	0.0200	ug/L	1	12/28/17 22:04
Benzo(a)pyrene	ND	U	0.0124	0.0200	ug/L	1	12/28/17 22:04
Benzo(b)fluoranthene	ND	U	0.0177	0.0200	ug/L	1	12/28/17 22:04
Benzo(k)fluoranthene	ND	U	0.00710	0.0200	ug/L	1	12/28/17 22:04
Dibenzo(a,h)anthracene	ND	U	0.0160	0.0200	ug/L	1	12/28/17 22:04
Indeno(1,2,3-cd)pyrene	ND	U	0.0131	0.0200	ug/L	1	12/28/17 22:04

SW 846 8260B - Volatile Organics - GC/MS

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Benzene	ND	U	0.129	1.00	ug/L	1	12/27/17 1:40
EthylBenzene	ND	U	0.244	1.00	ug/L	1	12/27/17 1:40
m+p-Xylenes	ND	U	0.461	2.00	ug/L	1	12/27/17 1:40
Methyl tert-Butyl Ether	ND	U	0.596	1.00	ug/L	1	12/27/17 1:40
o-Xylene	ND	U	0.244	1.00	ug/L	1	12/27/17 1:40
Toluene	ND	U	0.205	1.00	ug/L	1	12/27/17 1:40
Total Xylenes	ND	U	0.705	1.00	ug/L	1	12/27/17 1:40

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

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



AQUA PRO-TECH LABORATORIES
Certified Environmental Testing

All Results Summary

Client: Brown and Caldwell USR
Project: Patchogue

Work Order: 7120696
Date to Lab: 12/21/2017 4:22:00PM

7120696-10 (Ground Water) Sample Name: **FB-20171221** Collected: **12/21/2017 11:01:00AM**

SW 846 8270D - Semivolatile Organics - GC/MS

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Acenaphthene	ND	U	0.100	2.00	ug/L	1	12/26/17 23:25
Acenaphthylene	ND	U	0.140	2.00	ug/L	1	12/26/17 23:25
Anthracene	ND	U	0.121	2.00	ug/L	1	12/26/17 23:25
Benzo(g,h,i)perylene	ND	U	0.0652	2.00	ug/L	1	12/26/17 23:25
Chrysene	ND	U	0.129	2.00	ug/L	1	12/26/17 23:25
Fluoranthene	ND	U	0.129	2.00	ug/L	1	12/26/17 23:25
Fluorene	ND	U	0.109	2.00	ug/L	1	12/26/17 23:25
Naphthalene	ND	U	0.0607	2.00	ug/L	1	12/26/17 23:25
Phenanthrene	ND	U	0.0725	2.00	ug/L	1	12/26/17 23:25
Pyrene	ND	U	0.115	2.00	ug/L	1	12/26/17 23:25

SW 846 8270D - Semivolatile Organics - GC/MS - SIM

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Benzo(a)anthracene	ND	U	0.0165	0.0200	ug/L	1	12/28/17 22:31
Benzo(a)pyrene	ND	U	0.0124	0.0200	ug/L	1	12/28/17 22:31
Benzo(b)fluoranthene	ND	U	0.0177	0.0200	ug/L	1	12/28/17 22:31
Benzo(k)fluoranthene	ND	U	0.00710	0.0200	ug/L	1	12/28/17 22:31
Dibenzo(a,h)anthracene	ND	U	0.0160	0.0200	ug/L	1	12/28/17 22:31
Indeno(1,2,3-cd)pyrene	ND	U	0.0131	0.0200	ug/L	1	12/28/17 22:31

SW 846 8260B - Volatile Organics - GC/MS

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Benzene	ND	U	0.129	1.00	ug/L	1	12/27/17 2:06
EthylBenzene	ND	U	0.244	1.00	ug/L	1	12/27/17 2:06
m+p-Xylenes	ND	U	0.461	2.00	ug/L	1	12/27/17 2:06
Methyl tert-Butyl Ether	ND	U	0.596	1.00	ug/L	1	12/27/17 2:06
o-Xylene	ND	U	0.244	1.00	ug/L	1	12/27/17 2:06
Toluene	ND	U	0.205	1.00	ug/L	1	12/27/17 2:06
Total Xylenes	ND	U	0.705	1.00	ug/L	1	12/27/17 2:06

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

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



AQUA PRO-TECH LABORATORIES
Certified Environmental Testing

All Results Summary

Client: Brown and Caldwell USR
Project: Patchogue

Work Order: 7120696
Date to Lab: 12/21/2017 4:22:00PM

7120696-11 (Ground Water) Sample Name: **MW-9D 20171221** Collected: **12/21/2017 11:34:00AM**

SW 846 8270D - Semivolatile Organics - GC/MS

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Acenaphthene	ND	U	0.100	2.00	ug/L	1	12/27/17 0:58
Acenaphthylene	ND	U	0.140	2.00	ug/L	1	12/27/17 0:58
Anthracene	ND	U	0.121	2.00	ug/L	1	12/27/17 0:58
Benzo(g,h,i)perylene	ND	U	0.0652	2.00	ug/L	1	12/27/17 0:58
Chrysene	ND	U	0.129	2.00	ug/L	1	12/27/17 0:58
Fluoranthene	ND	U	0.129	2.00	ug/L	1	12/27/17 0:58
Fluorene	ND	U	0.109	2.00	ug/L	1	12/27/17 0:58
Naphthalene	ND	U	0.0607	2.00	ug/L	1	12/27/17 0:58
Phenanthrene	ND	U	0.0725	2.00	ug/L	1	12/27/17 0:58
Pyrene	ND	U	0.115	2.00	ug/L	1	12/27/17 0:58

SW 846 8270D - Semivolatile Organics - GC/MS - SIM

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Benzo(a)anthracene	0.0292		0.0165	0.0200	ug/L	1	12/28/17 22:58
Benzo(a)pyrene	0.0303		0.0124	0.0200	ug/L	1	12/28/17 22:58
Benzo(b)fluoranthene	0.0396		0.0177	0.0200	ug/L	1	12/28/17 22:58
Benzo(k)fluoranthene	0.0181	J	0.00710	0.0200	ug/L	1	12/28/17 22:58
Dibenzo(a,h)anthracene	ND	U	0.0160	0.0200	ug/L	1	12/28/17 22:58
Indeno(1,2,3-cd)pyrene	0.0184	J	0.0131	0.0200	ug/L	1	12/28/17 22:58

SW 846 8260B - Volatile Organics - GC/MS

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Benzene	ND	U	0.129	1.00	ug/L	1	12/27/17 2:31
EthylBenzene	ND	U	0.244	1.00	ug/L	1	12/27/17 2:31
m+p-Xylenes	ND	U	0.461	2.00	ug/L	1	12/27/17 2:31
Methyl tert-Butyl Ether	ND	U	0.596	1.00	ug/L	1	12/27/17 2:31
o-Xylene	ND	U	0.244	1.00	ug/L	1	12/27/17 2:31
Toluene	ND	U	0.205	1.00	ug/L	1	12/27/17 2:31
Total Xylenes	ND	U	0.705	1.00	ug/L	1	12/27/17 2:31

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

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



AQUA PRO-TECH LABORATORIES
Certified Environmental Testing

All Results Summary

Client: Brown and Caldwell USR
Project: Patchogue

Work Order: 7120696
Date to Lab: 12/21/2017 4:22:00PM

7120696-12 (Ground Water) Sample Name: **MW-9S 20171221** Collected: **12/21/2017 12:00:00AM**

SW 846 8270D - Semivolatile Organics - GC/MS

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Acenaphthene	0.967	J	0.100	2.00	ug/L	1	12/27/17 1:22
Acenaphthylene	ND	U	0.140	2.00	ug/L	1	12/27/17 1:22
Anthracene	ND	U	0.121	2.00	ug/L	1	12/27/17 1:22
Benzo(g,h,i)perylene	ND	U	0.0652	2.00	ug/L	1	12/27/17 1:22
Chrysene	ND	U	0.129	2.00	ug/L	1	12/27/17 1:22
Fluoranthene	1.28	J	0.129	2.00	ug/L	1	12/27/17 1:22
Fluorene	ND	U	0.109	2.00	ug/L	1	12/27/17 1:22
Naphthalene	ND	U	0.0607	2.00	ug/L	1	12/27/17 1:22
Phenanthrene	ND	U	0.0725	2.00	ug/L	1	12/27/17 1:22
Pyrene	1.72	J	0.115	2.00	ug/L	1	12/27/17 1:22

SW 846 8270D - Semivolatile Organics - GC/MS - SIM

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Benzo(a)anthracene	0.595		0.0165	0.0200	ug/L	1	12/28/17 23:25
Benzo(a)pyrene	0.499		0.0124	0.0200	ug/L	1	12/28/17 23:25
Benzo(b)fluoranthene	0.431		0.0177	0.0200	ug/L	1	12/28/17 23:25
Benzo(k)fluoranthene	0.202		0.00710	0.0200	ug/L	1	12/28/17 23:25
Dibenzo(a,h)anthracene	0.0533		0.0160	0.0200	ug/L	1	12/28/17 23:25
Indeno(1,2,3-cd)pyrene	0.215		0.0131	0.0200	ug/L	1	12/28/17 23:25

SW 846 8260B - Volatile Organics - GC/MS

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Benzene	ND	U	0.129	1.00	ug/L	1	12/27/17 2:57
EthylBenzene	ND	U	0.244	1.00	ug/L	1	12/27/17 2:57
m+p-Xylenes	ND	U	0.461	2.00	ug/L	1	12/27/17 2:57
Methyl tert-Butyl Ether	ND	U	0.596	1.00	ug/L	1	12/27/17 2:57
o-Xylene	ND	U	0.244	1.00	ug/L	1	12/27/17 2:57
Toluene	ND	U	0.205	1.00	ug/L	1	12/27/17 2:57
Total Xylenes	ND	U	0.705	1.00	ug/L	1	12/27/17 2:57

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

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



AQUA PRO-TECH LABORATORIES
Certified Environmental Testing

All Results Summary

Client: Brown and Caldwell USR
Project: Patchogue

Work Order: 7120696
Date to Lab: 12/21/2017 4:22:00PM

7120696-13 (Ground Water)	Sample Name: Trip Blank-20171221	Collected: 12/21/2017 12:00:00AM

SW 846 8260B - Volatile Organics - GC/MS

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Benzene	ND	U	0.129	1.00	ug/L	1	12/27/17 3:23
EthylBenzene	ND	U	0.244	1.00	ug/L	1	12/27/17 3:23
m+p-Xylenes	ND	U	0.461	2.00	ug/L	1	12/27/17 3:23
Methyl tert-Butyl Ether	ND	U	0.596	1.00	ug/L	1	12/27/17 3:23
o-Xylene	ND	U	0.244	1.00	ug/L	1	12/27/17 3:23
Toluene	ND	U	0.205	1.00	ug/L	1	12/27/17 3:23
Total Xylenes	ND	U	0.705	1.00	ug/L	1	12/27/17 3:23

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

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



AQUA PRO-TECH LABORATORIES
Certified Environmental Testing

SEMIVOLATILES

Brown and Caldwell USR

Work Order: 7120696

Project: Patchogue



ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

Client: Brown and Caldwell USR
Client Sample ID: Blank
Lab Sample ID: B7L2204-BLK2

Project: Patchogue
Work Order: 7120696

Init/Final Vol:	1000 mL / 1 mL	Prep Date:	12/22/2017 09:16	File ID:	AS03568.D
		Prep Batch:	B7L2204	Analyzed:	12/22/2017 20:37
		Matrix:	Ground Water	Sequence:	S7L2811
		Prep Method:	Sep Funnel MS 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
83-32-9	Acenaphthene	ND	0.100	2.00	U
208-96-8	Acenaphthylene	ND	0.140	2.00	U
120-12-7	Anthracene	ND	0.121	2.00	U
191-24-2	Benzo(g,h,i)perylene	ND	0.0652	2.00	U
218-01-9	Chrysene	ND	0.129	2.00	U
206-44-0	Fluoranthene	ND	0.129	2.00	U
86-73-7	Fluorene	ND	0.109	2.00	U
91-20-3	Naphthalene	ND	0.0607	2.00	U
85-01-8	Phenanthrene	ND	0.0725	2.00	U
129-00-0	Pyrene	ND	0.115	2.00	U

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8.1.

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20171222\AS03568.D
 Acq On : 22 Dec 2017 20:37
 Sample : B7L2204-BLK2
 Misc :

Vial: 6
 Operator: GCH
 Inst : GCMS-A
 Multiplr: 1.00

MS Integration Params: RTEINT.P
 Quant Time: Dec 28 20:13 2017

Quant Results File: 0426ABNS.RES

Quant Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)
 Title : BNA Extractables GC/MS 8270C
 Last Update : Tue Dec 26 11:51:00 2017
 Response via : Initial Calibration
 DataAcq Meth : RUN8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.60	152	105475	40.00	ug/kg	0.00
21) Naphthalene-d8	5.80	136	345285	40.00	ug/kg	0.00
39) Acenaphthene-d10	7.53	164	178516	40.00	ug/kg	0.00
62) Phenanthrene-d10	9.00	188	325857	40.00	ug/kg	0.00
76) Chrysene-d12	11.69	240	273031	40.00	ug/kg	0.00
85) Perylene-d12	13.37	264	242523	40.00	ug/kg	0.00

System Monitoring Compounds

4) 2-Fluorophenol	3.39	112	9	0.00	ug/kg	-0.15
Spiked Amount 100.000	Range 15 - 48		Recovery =	0.00%#		
7) Phenol-d6	4.29	99	13	0.00	ug/kg	0.03
Spiked Amount 100.000	Range 15 - 53		Recovery =	0.00%#		
22) Nitrobenzene-d5	5.11	82	146617	39.43	ug/kg	-0.08
Spiked Amount 50.000	Range 34 - 81		Recovery =	78.86%		
44) 2-Fluorobiphenyl	6.85	172	330643	39.81	ug/kg	-0.01
Spiked Amount 50.000	Range 33 - 86		Recovery =	79.62%		
66) 2,4,6-Tribromophenol	8.15	330	9	0.01	ug/kg	-0.17
Spiked Amount 100.000	Range 51 - 111		Recovery =	0.01%#		
79) p-Terphenyl-d14	10.57	244	306084m	42.14	ug/kg	0.01
Spiked Amount 50.000	Range 47 - 86		Recovery =	84.28%		

Target Compounds

Qvalue

(#) = qualifier out of range (m) = manual integration
 AS03568.D 0426ABNS.M Wed Jan 03 14:41:22 2018 SS

Page 1

Quantitation Report

Data File : G:\HPCHEM\A\DATA\20171222\AS03568.D

Vial: 6

Acq On : 22 Dec 2017 20:37

Operator: GCH

Sample : B7L2204-BLK2

Inst : GCMS-A

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 28 20:13 2017

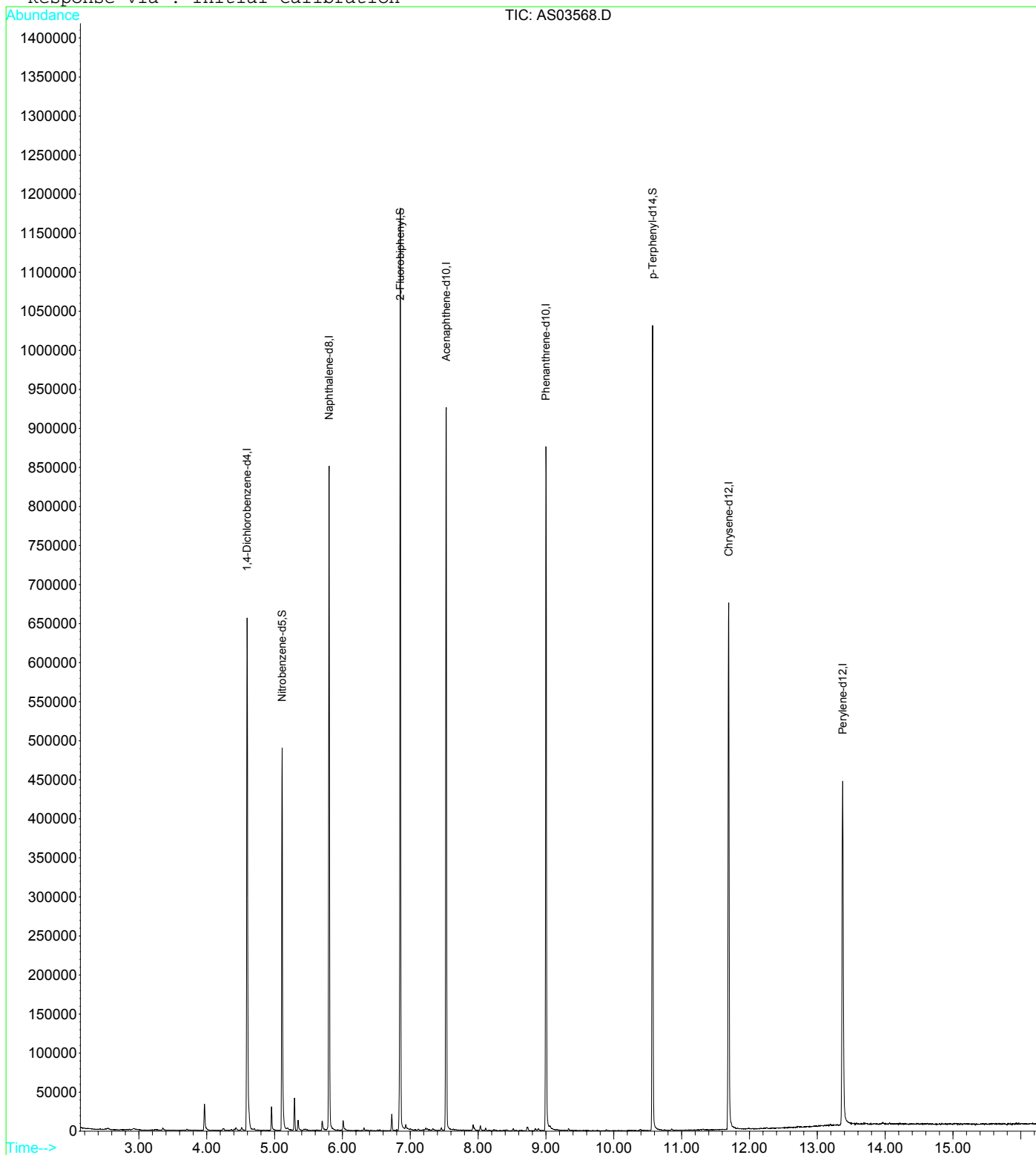
Quant Results File: 0426ABNS.RES

Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C

Last Update : Wed Dec 20 18:30:37 2017

Response via : Initial Calibration



AS03568.D 0426ABNS.M

Wed Jan 03 14:41:23 2018

SS

Page 2

ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

Client: Brown and Caldwell USR
Client Sample ID: Blank
Lab Sample ID: B7L2204-BLK3

Project: Patchogue
Work Order: 7120696

Init/Final Vol:	1000 mL / 1 mL	Prep Date:	12/26/2017 10:00	File ID:	AS03592.D
		Prep Batch:	B7L2204	Analyzed:	12/26/2017 18:47
		Matrix:	Ground Water	Sequence:	S7L2902
		Prep Method:	Sep Funnel MS 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
83-32-9	Acenaphthene	ND	0.100	2.00	U
208-96-8	Acenaphthylene	ND	0.140	2.00	U
120-12-7	Anthracene	ND	0.121	2.00	U
191-24-2	Benzo(g,h,i)perylene	ND	0.0652	2.00	U
218-01-9	Chrysene	ND	0.129	2.00	U
206-44-0	Fluoranthene	ND	0.129	2.00	U
86-73-7	Fluorene	ND	0.109	2.00	U
91-20-3	Naphthalene	ND	0.0607	2.00	U
85-01-8	Phenanthrene	ND	0.0725	2.00	U
129-00-0	Pyrene	ND	0.115	2.00	U

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20171226\AS03592.D

Vial: 4

Acq On : 26 Dec 2017 18:47

Operator: GCH

Sample : B7L2204-BLK3

Inst : GCMS-A

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 27 12:52 2017

Quant Results File: 0426ABNS.RES

Quant Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C

Last Update : Wed Dec 20 18:30:37 2017

Response via : Initial Calibration

DataAcq Meth : RUN8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.60	152	170258	40.00	ug/kg	0.00
21) Naphthalene-d8	5.80	136	549011	40.00	ug/kg	0.00
39) Acenaphthene-d10	7.53	164	293805	40.00	ug/kg	0.00
62) Phenanthrene-d10	9.00	188	544850	40.00	ug/kg	0.00
76) Chrysene-d12	11.69	240	462960	40.00	ug/kg	0.00
85) Perylene-d12	13.37	264	393098	40.00	ug/kg	0.00

System Monitoring Compounds

4) 2-Fluorophenol	3.58	112	31	0.00	ug/kg	0.03
Spiked Amount 100.000	Range 15 - 48		Recovery =	0.00%#		
7) Phenol-d6	4.28	99	9	0.00	ug/kg	0.02
Spiked Amount 100.000	Range 15 - 53		Recovery =	0.00%#		
22) Nitrobenzene-d5	5.11	82	216382	36.60	ug/kg	-0.09
Spiked Amount 50.000	Range 34 - 81		Recovery =	73.20%		
44) 2-Fluorobiphenyl	6.85	172	448752	32.83	ug/kg	-0.01
Spiked Amount 50.000	Range 33 - 86		Recovery =	65.66%		
66) 2,4,6-Tribromophenol	8.34	330	9	0.01	ug/kg	0.02
Spiked Amount 100.000	Range 51 - 111		Recovery =	0.01%#		
79) p-Terphenyl-d14	10.57	244	459379	37.30	ug/kg	0.01
Spiked Amount 50.000	Range 47 - 86		Recovery =	74.60%		

Target Compounds

Qvalue

(#) = qualifier out of range (m) = manual integration

AS03592.D 0426ABNS.M Fri Dec 29 15:29:04 2017 SS

Page 1

Quantitation Report

Data File : G:\HPCHEM\A\DATA\20171226\AS03592.D

Vial: 4

Acq On : 26 Dec 2017 18:47

Operator: GCH

Sample : B7L2204-BLK3

Inst : GCMS-A

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 27 12:52 2017

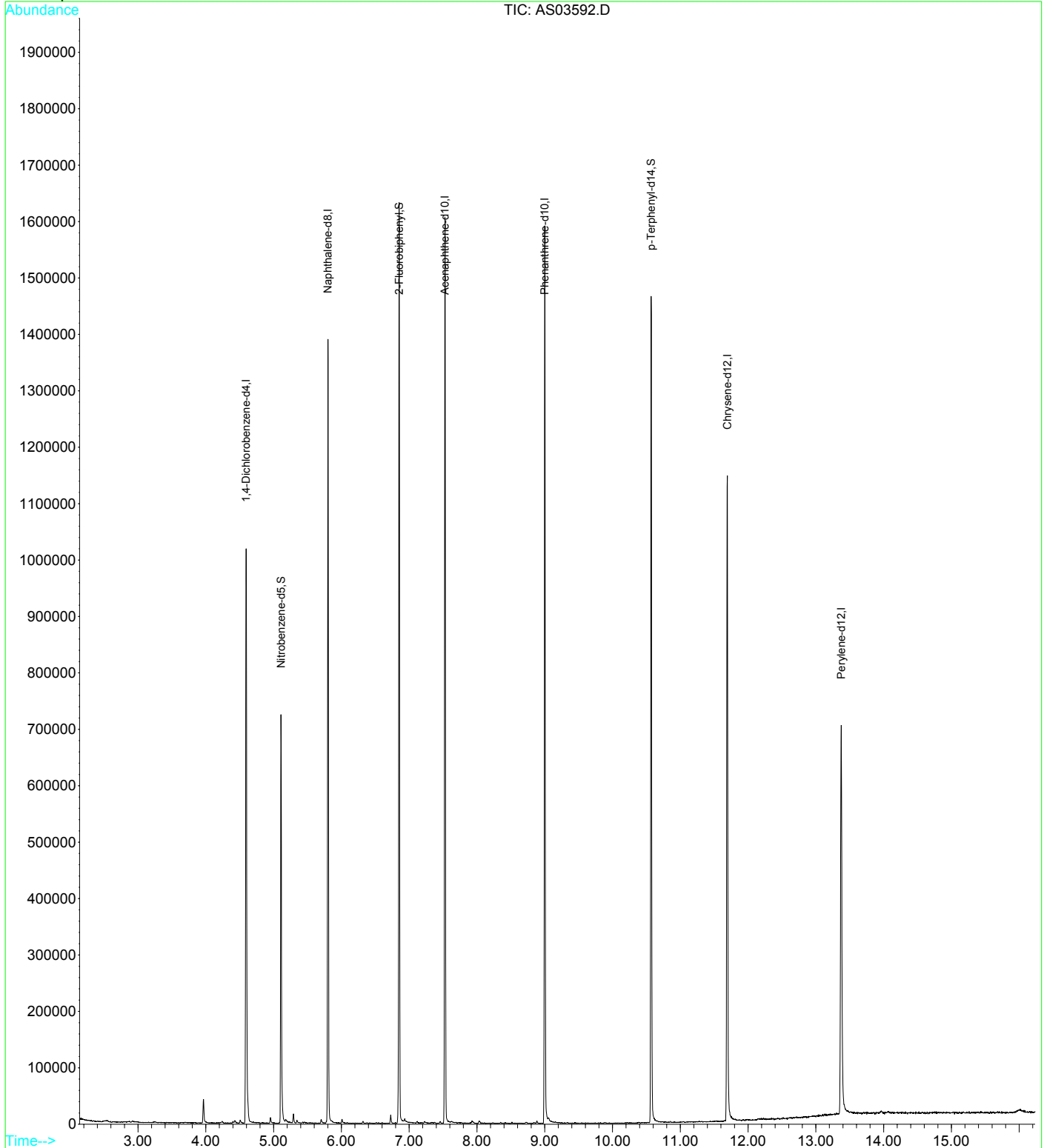
Quant Results File: 0426ABNS.RES

Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C

Last Update : Wed Dec 20 18:30:37 2017

Response via : Initial Calibration



AS03592.D 0426ABNS.M

Fri Dec 29 15:29:04 2017

SS

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ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

Client: Brown and Caldwell USR
Client Sample ID: Blank
Lab Sample ID: B7L2608-BLK2

Project: Patchogue
Work Order: 7120696

Init/Final Vol:	1000 mL / 1 mL	Prep Date:	12/26/2017 09:26	File ID:	AS03594.D
		Prep Batch:	B7L2608	Analyzed:	12/26/2017 19:33
		Matrix:	Ground Water	Sequence:	S7L2902
		Prep Method:	Sep Funnel MS 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
83-32-9	Acenaphthene	ND	0.100	2.00	U
208-96-8	Acenaphthylene	ND	0.140	2.00	U
120-12-7	Anthracene	ND	0.121	2.00	U
191-24-2	Benzo(g,h,i)perylene	ND	0.0652	2.00	U
218-01-9	Chrysene	ND	0.129	2.00	U
206-44-0	Fluoranthene	ND	0.129	2.00	U
86-73-7	Fluorene	ND	0.109	2.00	U
91-20-3	Naphthalene	ND	0.0607	2.00	U
85-01-8	Phenanthrene	ND	0.0725	2.00	U
129-00-0	Pyrene	ND	0.115	2.00	U

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F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20171226\AS03594.D

Vial: 6

Acq On : 26 Dec 2017 19:33

Operator: GCH

Sample : B7L2608-BLK2

Inst : GCMS-A

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 28 12:32 2017

Quant Results File: 0426ABNS.RES

Quant Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C

Last Update : Wed Dec 20 18:30:37 2017

Response via : Initial Calibration

DataAcq Meth : RUN8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.59	152	186510	40.00	ug/kg	0.00
21) Naphthalene-d8	5.80	136	600479	40.00	ug/kg	0.00
39) Acenaphthene-d10	7.53	164	311944	40.00	ug/kg	0.00
62) Phenanthrene-d10	9.00	188	576142	40.00	ug/kg	0.00
76) Chrysene-d12	11.69	240	489993	40.00	ug/kg	0.00
85) Perylene-d12	13.37	264	427667	40.00	ug/kg	0.00

System Monitoring Compounds

4) 2-Fluorophenol	3.44	112	187318	26.21	ug/kg	-0.10
Spiked Amount 100.000	Range 15 - 48		Recovery =	26.21%		
7) Phenol-d6	4.25	99	149662	17.99	ug/kg	-0.01
Spiked Amount 100.000	Range 15 - 53		Recovery =	17.99%		
22) Nitrobenzene-d5	5.11	82	225014	34.79	ug/kg	-0.09
Spiked Amount 50.000	Range 34 - 81		Recovery =	69.58%		
44) 2-Fluorobiphenyl	6.85	172	444456	30.62	ug/kg	-0.01
Spiked Amount 50.000	Range 33 - 86		Recovery =	61.24%		
66) 2,4,6-Tribromophenol	8.31	330	119538	73.51	ug/kg	-0.01
Spiked Amount 100.000	Range 51 - 111		Recovery =	73.51%		
79) p-Terphenyl-d14	10.57	244	503934	38.66	ug/kg	0.01
Spiked Amount 50.000	Range 47 - 86		Recovery =	77.32%		

Target Compounds

Qvalue

(#) = qualifier out of range (m) = manual integration

AS03594.D 0426ABNS.M Fri Dec 29 15:29:07 2017 SS

Page 1

Quantitation Report

Data File : G:\HPCHEM\A\DATA\20171226\AS03594.D

Vial: 6

Acq On : 26 Dec 2017 19:33

Operator: GCH

Sample : B7L2608-BLK2

Inst : GCMS-A

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 28 12:32 2017

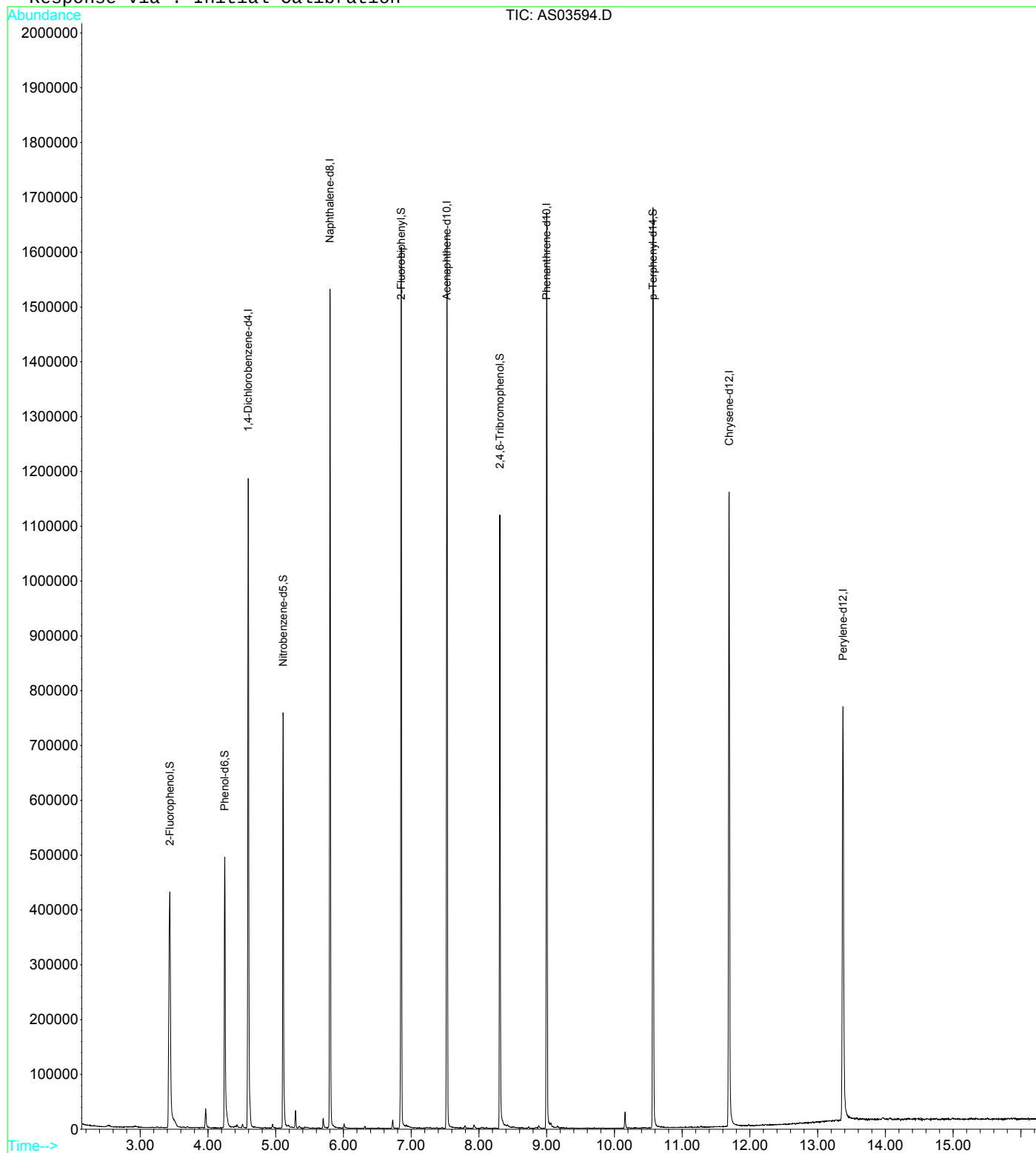
Quant Results File: 0426ABNS.RES

Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C

Last Update : Wed Dec 20 18:30:37 2017

Response via : Initial Calibration



AS03594.D 0426ABNS.M

Fri Dec 29 15:29:08 2017

SS

Page 2

ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

Client: Brown and Caldwell USR
Client Sample ID: MW-1 20171220
Lab Sample ID: 7120696-01
Project: Patchogue
Work Order: 7120696

Date Sampled:	12/20/17 12:49	Prep Date:	12/22/17 09:16	File ID:	AS03574.D
Init/Final Vol:	1000 mL / 1 mL	Prep Batch:	B7L2204	Analyzed:	12/22/17 22:57
Dilution:	1	Matrix:	Ground Water	Sequence:	S7L2811
		Prep Method:	Sep Funnel MS 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
83-32-9	Acenaphthene	ND	0.100	2.00	U
208-96-8	Acenaphthylene	ND	0.140	2.00	U
120-12-7	Anthracene	ND	0.121	2.00	U
191-24-2	Benzo(g,h,i)perylene	ND	0.0652	2.00	U
218-01-9	Chrysene	ND	0.129	2.00	U
206-44-0	Fluoranthene	ND	0.129	2.00	U
86-73-7	Fluorene	ND	0.109	2.00	U
91-20-3	Naphthalene	ND	0.0607	2.00	U
85-01-8	Phenanthrene	ND	0.0725	2.00	U
129-00-0	Pyrene	ND	0.115	2.00	U

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

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

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20171222\AS03574.D
 Acq On : 22 Dec 2017 22:57
 Sample : 7120696-01
 Misc : B7L2204

Vial: 12
 Operator: GCH
 Inst : GCMS-A
 Multiplr: 1.00

MS Integration Params: RTEINT.P
 Quant Time: Dec 26 11:21 2017

Quant Results File: 0426ABNS.RES

Quant Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C

Last Update : Wed Dec 20 18:30:37 2017

Response via : Initial Calibration

DataAcq Meth : RUN8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.60	152	118798	40.00	ug/kg	0.00
21) Naphthalene-d8	5.80	136	398969	40.00	ug/kg	0.00
39) Acenaphthene-d10	7.53	164	204700	40.00	ug/kg	0.00
62) Phenanthrene-d10	9.00	188	381144	40.00	ug/kg	0.00
76) Chrysene-d12	11.69	240	333707	40.00	ug/kg	0.00
85) Perylene-d12	13.37	264	303076	40.00	ug/kg	0.00

System Monitoring Compounds

4) 2-Fluorophenol	3.51	112	11	0.00	ug/kg	-0.03
Spiked Amount	100.000	Range	15 - 48	Recovery	=	0.00%#
7) Phenol-d6	4.14	99	38	0.01	ug/kg	-0.12
Spiked Amount	100.000	Range	15 - 53	Recovery	=	0.01%#
22) Nitrobenzene-d5	5.11	82	145815	33.94	ug/kg	-0.08
Spiked Amount	50.000	Range	34 - 81	Recovery	=	67.88%
44) 2-Fluorobiphenyl	6.85	172	318476	33.44	ug/kg	-0.01
Spiked Amount	50.000	Range	33 - 86	Recovery	=	66.88%
66) 2,4,6-Tribromophenol	8.31	330	10	0.01	ug/kg	-0.01
Spiked Amount	100.000	Range	51 - 111	Recovery	=	0.01%#
79) p-Terphenyl-d14	10.57	244	338402	38.12	ug/kg	0.01
Spiked Amount	50.000	Range	47 - 86	Recovery	=	76.24%

Target Compounds

Qvalue

(#) = qualifier out of range (m) = manual integration

AS03574.D 0426ABNS.M Thu Jan 25 11:39:40 2018 SS

Page 1

Quantitation Report

Data File : G:\HPCHEM\A\DATA\20171222\AS03574.D

Vial: 12

Acq On : 22 Dec 2017 22:57

Operator: GCH

Sample : 7120696-01

Inst : GCMS-A

Misc : B7L2204

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 26 11:21 2017

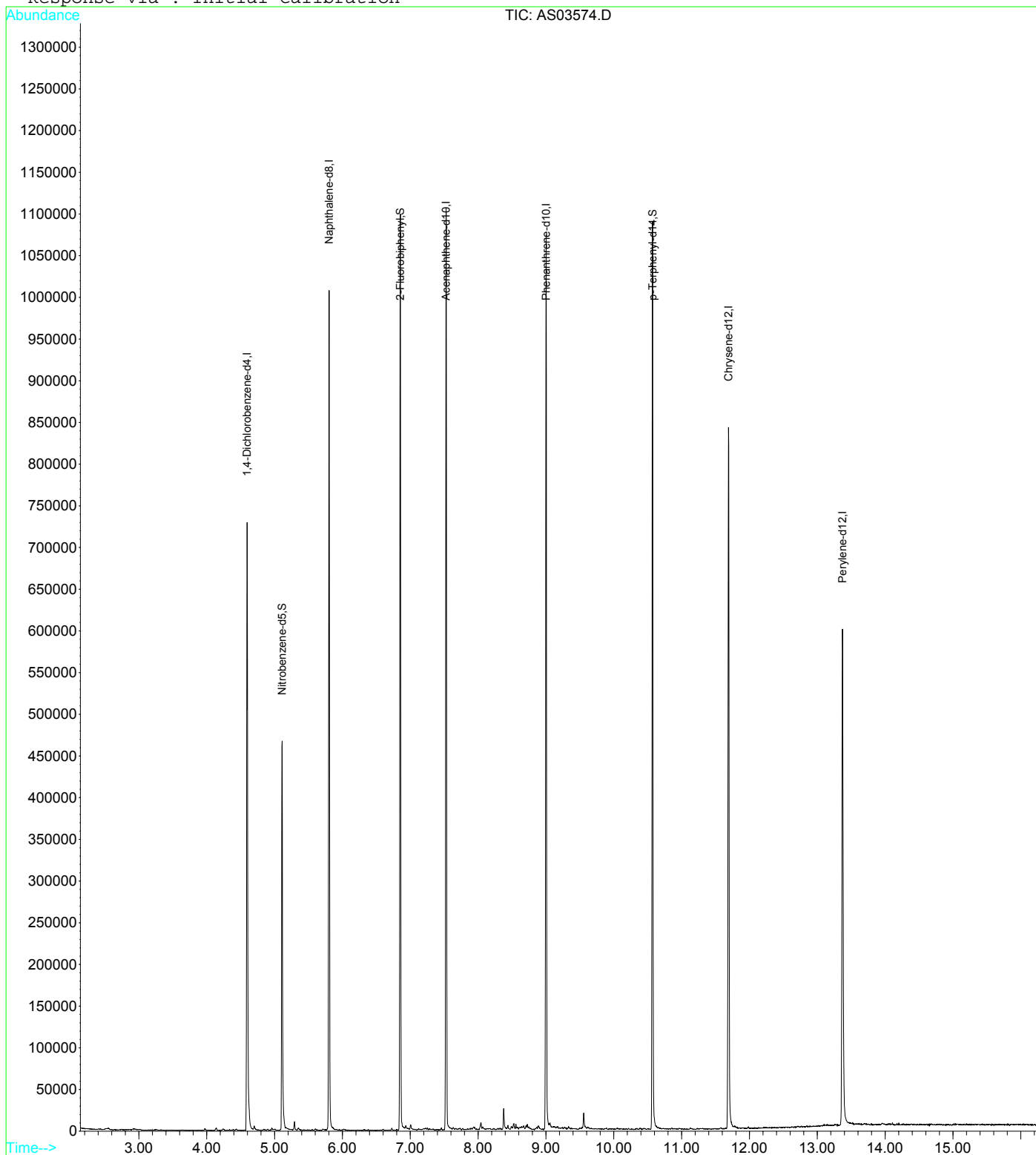
Quant Results File: 0426ABNS.RES

Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C

Last Update : Wed Dec 20 18:30:37 2017

Response via : Initial Calibration



AS03574.D 0426ABNS.M

Thu Jan 25 11:39:40 2018

SS

Page 2

ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

Client: Brown and Caldwell USR
Client Sample ID: MW-7S 20171220
Lab Sample ID: 7120696-02
Project: Patchogue
Work Order: 7120696

Date Sampled:	12/20/17 14:11	Prep Date:	12/22/17 09:16	File ID:	AS03575.D
Init/Final Vol:	990 mL / 1 mL	Prep Batch:	B7L2204	Analyzed:	12/22/17 23:21
Dilution:	1	Matrix:	Ground Water	Sequence:	S7L2811
		Prep Method:	Sep Funnel MS 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
83-32-9	Acenaphthene	ND	0.101	2.02	U
208-96-8	Acenaphthylene	ND	0.141	2.02	U
120-12-7	Anthracene	ND	0.122	2.02	U
191-24-2	Benzo(g,h,i)perylene	ND	0.0659	2.02	U
218-01-9	Chrysene	ND	0.130	2.02	U
206-44-0	Fluoranthene	ND	0.130	2.02	U
86-73-7	Fluorene	ND	0.110	2.02	U
91-20-3	Naphthalene	ND	0.0613	2.02	U
85-01-8	Phenanthrene	ND	0.0732	2.02	U
129-00-0	Pyrene	ND	0.116	2.02	U

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

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

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20171222\AS03575.D Vial: 13
 Acq On : 22 Dec 2017 23:21 Operator: GCH
 Sample : 7120696-02 Inst : GCMS-A
 Misc : B7L2204 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Dec 26 11:21 2017 Quant Results File: 0426ABNS.RES

Quant Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)
 Title : BNA Extractables GC/MS 8270C
 Last Update : Wed Dec 20 18:30:37 2017
 Response via : Initial Calibration
 DataAcq Meth : RUN8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.59	152	122762	40.00	ug/kg	0.00
21) Naphthalene-d8	5.80	136	400769	40.00	ug/kg	0.00
39) Acenaphthene-d10	7.53	164	208868	40.00	ug/kg	0.00
62) Phenanthrene-d10	9.00	188	384470	40.00	ug/kg	0.00
76) Chrysene-d12	11.69	240	336628	40.00	ug/kg	0.00
85) Perylene-d12	13.37	264	306705	40.00	ug/kg	0.00

System Monitoring Compounds

4) 2-Fluorophenol	0.00	112	0	0.00	ug/kg	
Spiked Amount	100.000	Range	15 - 48	Recovery	=	0.00%#
7) Phenol-d6	4.36	99	13	0.00	ug/kg	0.09
Spiked Amount	100.000	Range	15 - 53	Recovery	=	0.00%#
22) Nitrobenzene-d5	5.11	82	122364	28.35	ug/kg	-0.09
Spiked Amount	50.000	Range	34 - 81	Recovery	=	56.70%
44) 2-Fluorobiphenyl	6.85	172	274668	28.26	ug/kg	-0.01
Spiked Amount	50.000	Range	33 - 86	Recovery	=	56.52%
66) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug/kg	
Spiked Amount	100.000	Range	51 - 111	Recovery	=	0.00%#
79) p-Terphenyl-d14	10.57	244	295177	32.96	ug/kg	0.01
Spiked Amount	50.000	Range	47 - 86	Recovery	=	65.92%

Target Compounds

Qvalue

(#) = qualifier out of range (m) = manual integration
 AS03575.D 0426ABNS.M Thu Jan 25 11:39:42 2018 SS

Page 1

Quantitation Report

Data File : G:\HPCHEM\A\DATA\20171222\AS03575.D

Vial: 13

Acq On : 22 Dec 2017 23:21

Operator: GCH

Sample : 7120696-02

Inst : GCMS-A

Misc : B7L2204

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 26 11:21 2017

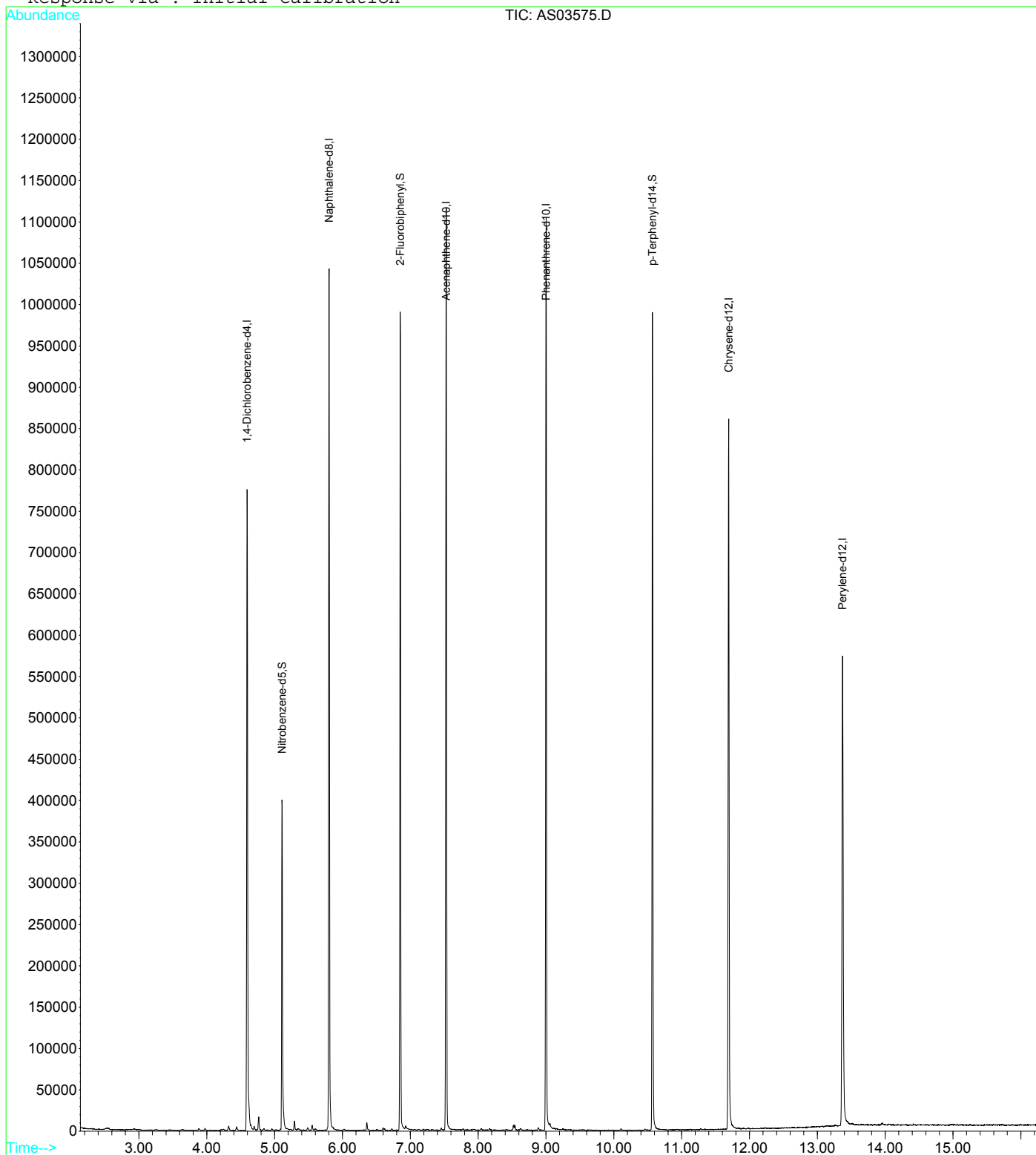
Quant Results File: 0426ABNS.RES

Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C

Last Update : Wed Dec 20 18:30:37 2017

Response via : Initial Calibration



AS03575.D 0426ABNS.M

Thu Jan 25 11:39:42 2018

SS

Page 2

ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

Client: Brown and Caldwell USR
Client Sample ID: MW-7D 20171220
Lab Sample ID: 7120696-03
Project: Patchogue
Work Order: 7120696

Date Sampled:	12/20/17 15:05	Prep Date:	12/22/17 09:16	File ID:	AS03576.D
Init/Final Vol:	1000 mL / 1 mL	Prep Batch:	B7L2204	Analyzed:	12/22/17 23:44
Dilution:	1	Matrix:	Ground Water	Sequence:	S7L2811
		Prep Method:	Sep Funnel MS 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
83-32-9	Acenaphthene	ND	0.100	2.00	U
208-96-8	Acenaphthylene	ND	0.140	2.00	U
120-12-7	Anthracene	ND	0.121	2.00	U
191-24-2	Benzo(g,h,i)perylene	ND	0.0652	2.00	U
218-01-9	Chrysene	ND	0.129	2.00	U
206-44-0	Fluoranthene	ND	0.129	2.00	U
86-73-7	Fluorene	ND	0.109	2.00	U
91-20-3	Naphthalene	ND	0.0607	2.00	U
85-01-8	Phenanthrene	ND	0.0725	2.00	U
129-00-0	Pyrene	ND	0.115	2.00	U

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

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

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20171222\AS03576.D Vial: 14
 Acq On : 22 Dec 2017 23:44 Operator: GCH
 Sample : 7120696-03 Inst : GCMS-A
 Misc : B7L2204 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Dec 26 11:21 2017 Quant Results File: 0426ABNS.RES

Quant Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)
 Title : BNA Extractables GC/MS 8270C
 Last Update : Wed Dec 20 18:30:37 2017
 Response via : Initial Calibration
 DataAcq Meth : RUN8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.59	152	123076	40.00	ug/kg	0.00
21) Naphthalene-d8	5.80	136	404473	40.00	ug/kg	0.00
39) Acenaphthene-d10	7.53	164	205864	40.00	ug/kg	0.00
62) Phenanthrene-d10	9.00	188	374030	40.00	ug/kg	0.00
76) Chrysene-d12	11.69	240	318022	40.00	ug/kg	0.00
85) Perylene-d12	13.37	264	293656	40.00	ug/kg	0.00

System Monitoring Compounds

4) 2-Fluorophenol	0.00	112	0	0.00	ug/kg	
Spiked Amount	100.000	Range	15 - 48	Recovery	=	0.00%#
7) Phenol-d6	4.43	99	17	0.00	ug/kg	0.17
Spiked Amount	100.000	Range	15 - 53	Recovery	=	0.00%#
22) Nitrobenzene-d5	5.11	82	143705	32.99	ug/kg	-0.08
Spiked Amount	50.000	Range	34 - 81	Recovery	=	65.98%
44) 2-Fluorobiphenyl	6.85	172	315177	32.91	ug/kg	-0.01
Spiked Amount	50.000	Range	33 - 86	Recovery	=	65.82%
66) 2,4,6-Tribromophenol	8.34	330	14	0.01	ug/kg	0.02
Spiked Amount	100.000	Range	51 - 111	Recovery	=	0.01%#
79) p-Terphenyl-d14	10.57	244	281836	33.32	ug/kg	0.01
Spiked Amount	50.000	Range	47 - 86	Recovery	=	66.64%

Target Compounds

Qvalue

(#) = qualifier out of range (m) = manual integration
 AS03576.D 0426ABNS.M Thu Jan 25 11:39:44 2018 SS

Page 1

Quantitation Report

Data File : G:\HPCHEM\A\DATA\20171222\AS03576.D

Vial: 14

Acq On : 22 Dec 2017 23:44

Operator: GCH

Sample : 7120696-03

Inst : GCMS-A

Misc : B7L2204

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 26 11:21 2017

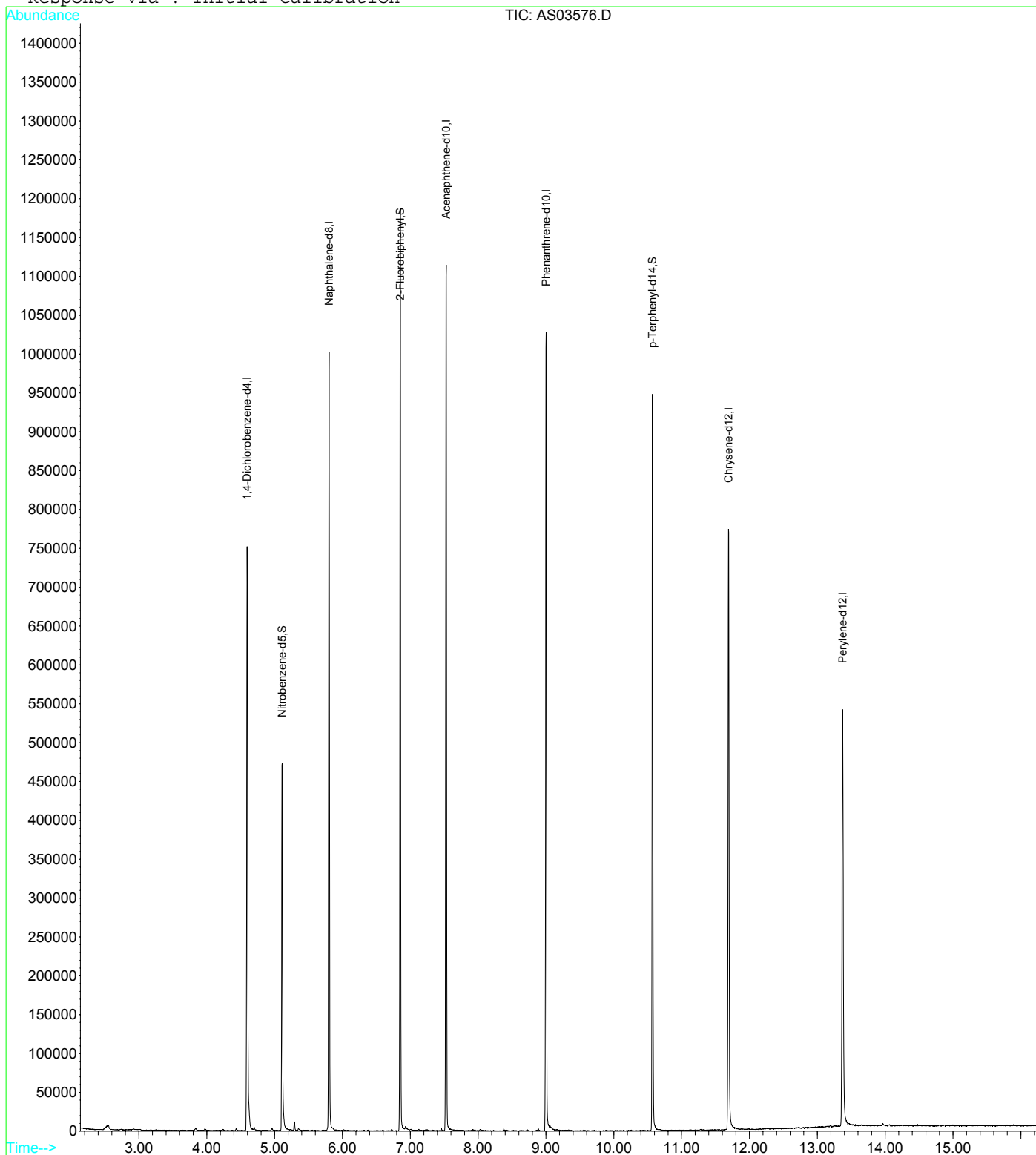
Quant Results File: 0426ABNS.RES

Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C

Last Update : Wed Dec 20 18:30:37 2017

Response via : Initial Calibration



AS03576.D 0426ABNS.M

Thu Jan 25 11:39:44 2018

SS

Page 2

ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

Client: Brown and Caldwell USR
Client Sample ID: MW-8S 20171220
Lab Sample ID: 7120696-04
Project: Patchogue
Work Order: 7120696

Date Sampled:	12/20/17 16:09	Prep Date:	12/22/17 09:16	File ID:	AS03577.D
Init/Final Vol:	1000 mL / 1 mL	Prep Batch:	B7L2204	Analyzed:	12/23/17 00:08
Dilution:	1	Matrix:	Ground Water	Sequence:	S7L2811
		Prep Method:	Sep Funnel MS 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
83-32-9	Acenaphthene	ND	0.100	2.00	U
208-96-8	Acenaphthylene	ND	0.140	2.00	U
120-12-7	Anthracene	ND	0.121	2.00	U
191-24-2	Benzo(g,h,i)perylene	ND	0.0652	2.00	U
218-01-9	Chrysene	ND	0.129	2.00	U
206-44-0	Fluoranthene	ND	0.129	2.00	U
86-73-7	Fluorene	ND	0.109	2.00	U
91-20-3	Naphthalene	ND	0.0607	2.00	U
85-01-8	Phenanthrene	ND	0.0725	2.00	U
129-00-0	Pyrene	ND	0.115	2.00	U

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

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

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20171222\AS03577.D Vial: 15
 Acq On : 23 Dec 2017 00:08 Operator: GCH
 Sample : 7120696-04 Inst : GCMS-A
 Misc : B7L2204 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Dec 26 11:21 2017 Quant Results File: 0426ABNS.RES

Quant Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)
 Title : BNA Extractables GC/MS 8270C
 Last Update : Wed Dec 20 18:30:37 2017
 Response via : Initial Calibration
 DataAcq Meth : RUN8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.59	152	117184	40.00	ug/kg	0.00
21) Naphthalene-d8	5.80	136	386836	40.00	ug/kg	0.00
39) Acenaphthene-d10	7.53	164	203724	40.00	ug/kg	0.00
62) Phenanthrene-d10	9.00	188	370614	40.00	ug/kg	0.00
76) Chrysene-d12	11.69	240	319121	40.00	ug/kg	0.00
85) Perylene-d12	13.37	264	286381	40.00	ug/kg	0.00

System Monitoring Compounds

4) 2-Fluorophenol	0.00	112	0	0.00	ug/kg	
Spiked Amount	100.000	Range	15 - 48	Recovery	=	0.00%#
7) Phenol-d6	4.33	99	9	0.00	ug/kg	0.06
Spiked Amount	100.000	Range	15 - 53	Recovery	=	0.00%#
22) Nitrobenzene-d5	5.11	82	138408	33.22	ug/kg	-0.08
Spiked Amount	50.000	Range	34 - 81	Recovery	=	66.44%
44) 2-Fluorobiphenyl	6.85	172	302030	31.87	ug/kg	-0.01
Spiked Amount	50.000	Range	33 - 86	Recovery	=	63.74%
66) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug/kg	
Spiked Amount	100.000	Range	51 - 111	Recovery	=	0.00%#
79) p-Terphenyl-d14	10.57	244	308023	36.29	ug/kg	0.01
Spiked Amount	50.000	Range	47 - 86	Recovery	=	72.58%

Target Compounds

Qvalue

(#) = qualifier out of range (m) = manual integration
 AS03577.D 0426ABNS.M Thu Jan 25 11:39:46 2018 SS

Page 1

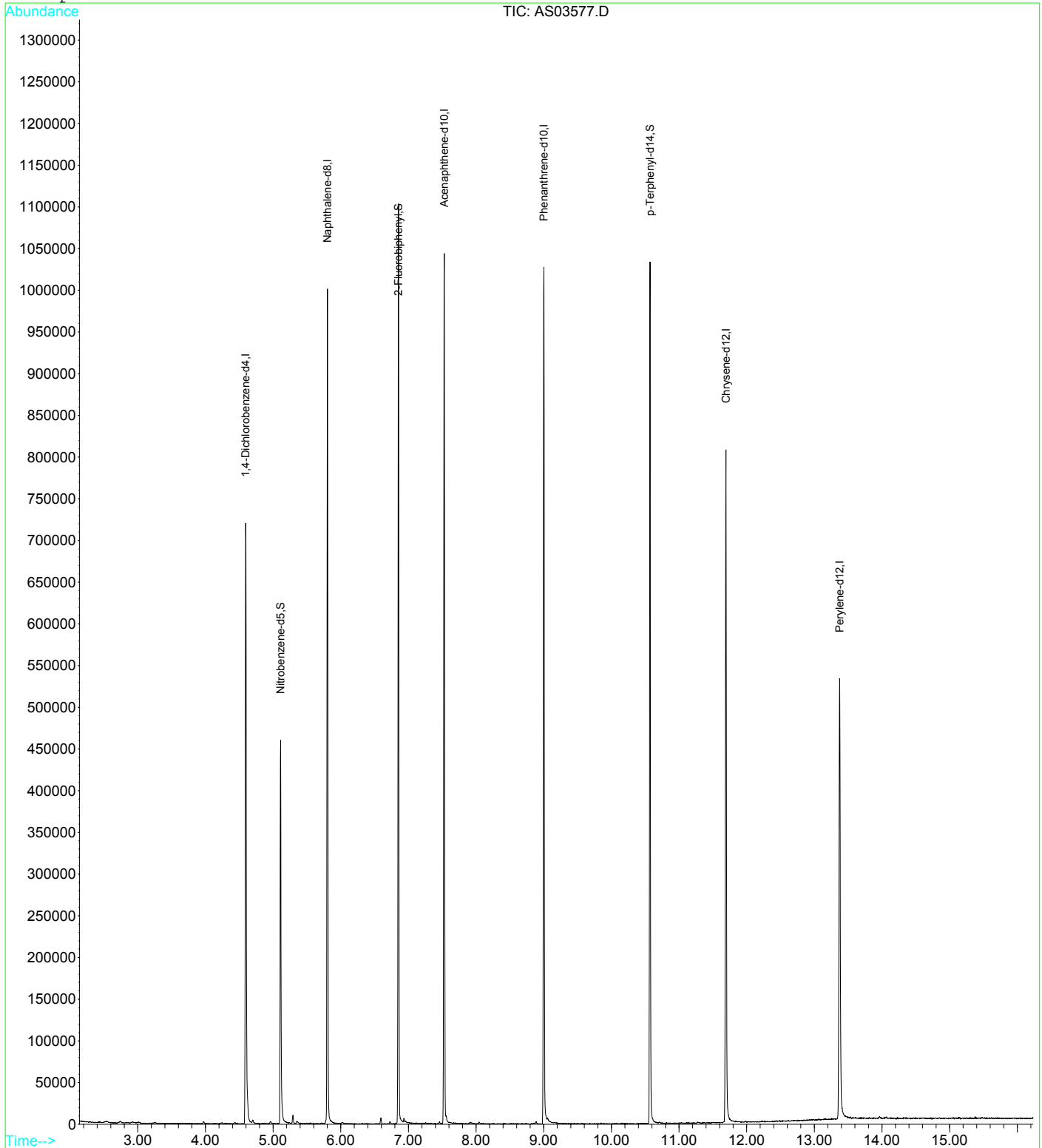
Quantitation Report

Data File : G:\HPCHEM\A\DATA\20171222\AS03577.D
 Acq On : 23 Dec 2017 00:08
 Sample : 7120696-04
 Misc : B7L2204
 MS Integration Params: RTEINT.P
 Quant Time: Dec 26 11:21 2017

Vial: 15
 Operator: GCH
 Inst : GCMS-A
 Multiplr: 1.00

Quant Results File: 0426ABNS.RES

Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)
 Title : BNA Extractables GC/MS 8270C
 Last Update : Wed Dec 20 18:30:37 2017
 Response via : Initial Calibration



AS03577.D 0426ABNS.M

Thu Jan 25 11:39:46 2018

SS

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ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

Client: Brown and Caldwell USR
Client Sample ID: MW-8D 20171220
Lab Sample ID: 7120696-05
Project: Patchogue
Work Order: 7120696

Date Sampled:	12/20/17 16:49	Prep Date:	12/22/17 09:16	File ID:	AS03578.D
Init/Final Vol:	1000 mL / 1 mL	Prep Batch:	B7L2204	Analyzed:	12/23/17 00:31
Dilution:	1	Matrix:	Ground Water	Sequence:	S7L2811
		Prep Method:	Sep Funnel MS 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
83-32-9	Acenaphthene	ND	0.100	2.00	U
208-96-8	Acenaphthylene	ND	0.140	2.00	U
120-12-7	Anthracene	ND	0.121	2.00	U
191-24-2	Benzo(g,h,i)perylene	ND	0.0652	2.00	U
218-01-9	Chrysene	ND	0.129	2.00	U
206-44-0	Fluoranthene	ND	0.129	2.00	U
86-73-7	Fluorene	ND	0.109	2.00	U
91-20-3	Naphthalene	ND	0.0607	2.00	U
85-01-8	Phenanthrene	ND	0.0725	2.00	U
129-00-0	Pyrene	ND	0.115	2.00	U

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

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

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20171222\AS03578.D Vial: 16
 Acq On : 23 Dec 2017 00:31 Operator: GCH
 Sample : 7120696-05 Inst : GCMS-A
 Misc : B7L2204 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Dec 26 11:21 2017 Quant Results File: 0426ABNS.RES

Quant Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)
 Title : BNA Extractables GC/MS 8270C
 Last Update : Wed Dec 20 18:30:37 2017
 Response via : Initial Calibration
 DataAcq Meth : RUN8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.60	152	117427	40.00	ug/kg	0.00
21) Naphthalene-d8	5.80	136	385222	40.00	ug/kg	0.00
39) Acenaphthene-d10	7.53	164	197332	40.00	ug/kg	0.00
62) Phenanthrene-d10	9.00	188	363507	40.00	ug/kg	0.00
76) Chrysene-d12	11.69	240	313133	40.00	ug/kg	0.00
85) Perylene-d12	13.37	264	285879	40.00	ug/kg	0.00

System Monitoring Compounds

4) 2-Fluorophenol	3.55	112	9	0.00	ug/kg	0.01
Spiked Amount 100.000	Range 15 - 48		Recovery =	0.00%#		
7) Phenol-d6	4.31	99	10	0.00	ug/kg	0.05
Spiked Amount 100.000	Range 15 - 53		Recovery =	0.00%#		
22) Nitrobenzene-d5	5.11	82	110180	26.56	ug/kg	-0.09
Spiked Amount 50.000	Range 34 - 81		Recovery =	53.12%		
44) 2-Fluorobiphenyl	6.85	172	240091	26.15	ug/kg	-0.01
Spiked Amount 50.000	Range 33 - 86		Recovery =	52.30%		
66) 2,4,6-Tribromophenol	8.32	330	64	0.06	ug/kg	0.00
Spiked Amount 100.000	Range 51 - 111		Recovery =	0.06%#		
79) p-Terphenyl-d14	10.57	244	250481	30.07	ug/kg	0.01
Spiked Amount 50.000	Range 47 - 86		Recovery =	60.14%		

Target Compounds

Qvalue

(#) = qualifier out of range (m) = manual integration
 AS03578.D 0426ABNS.M Thu Jan 25 11:39:47 2018 SS

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Quantitation Report

Data File : G:\HPCHEM\A\DATA\20171222\AS03578.D

Vial: 16

Acq On : 23 Dec 2017 00:31

Operator: GCH

Sample : 7120696-05

Inst : GCMS-A

Misc : B7L2204

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 26 11:21 2017

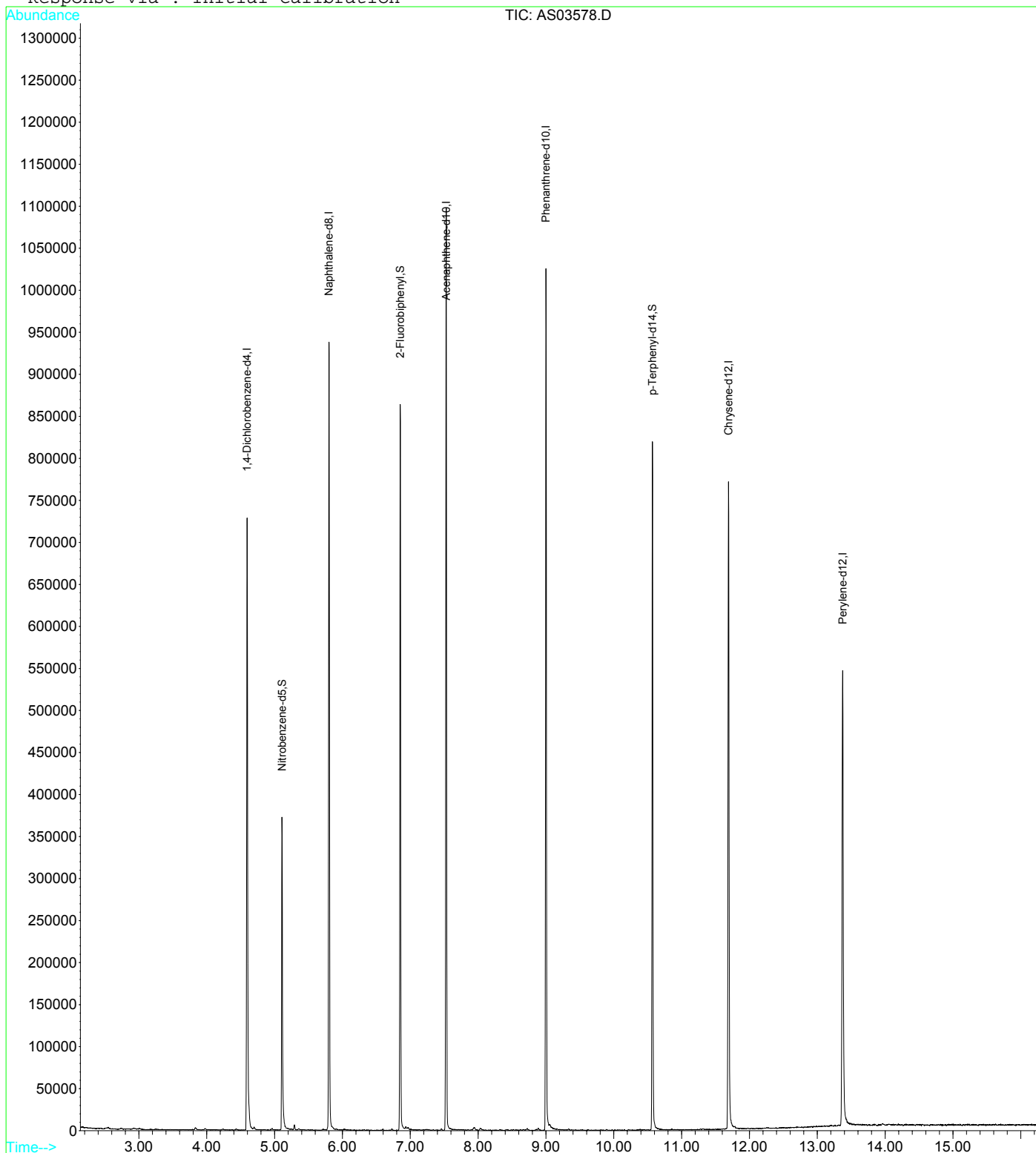
Quant Results File: 0426ABNS.RES

Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C

Last Update : Wed Dec 20 18:30:37 2017

Response via : Initial Calibration



AS03578.D 0426ABNS.M

Thu Jan 25 11:39:48 2018

SS

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ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

Client: Brown and Caldwell USR
Client Sample ID: MW-4S 20171221
Lab Sample ID: 7120696-06
Project: Patchogue
Work Order: 7120696

Date Sampled:	12/21/17 08:42	Prep Date:	12/26/17 10:00	File ID:	AS03600.D
Init/Final Vol:	930 mL / 1 mL	Prep Batch:	B7L2204	Analyzed:	12/26/17 21:52
Dilution:	1	Matrix:	Ground Water	Sequence:	S7L2902
		Prep Method:	Sep Funnel MS 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
83-32-9	Acenaphthene	ND	0.108	2.15	U
208-96-8	Acenaphthylene	ND	0.151	2.15	U
120-12-7	Anthracene	ND	0.130	2.15	U
191-24-2	Benzo(g,h,i)perylene	ND	0.0701	2.15	U
218-01-9	Chrysene	ND	0.139	2.15	U
206-44-0	Fluoranthene	ND	0.139	2.15	U
86-73-7	Fluorene	ND	0.117	2.15	U
91-20-3	Naphthalene	ND	0.0653	2.15	U
85-01-8	Phenanthrene	ND	0.0780	2.15	U
129-00-0	Pyrene	ND	0.124	2.15	U

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

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

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20171226\AS03600.D
 Acq On : 26 Dec 2017 21:52
 Sample : 7120696-06
 Misc : B7L2204

Vial: 12
 Operator: GCH
 Inst : GCMS-A
 Multiplr: 1.00

MS Integration Params: RTEINT.P
 Quant Time: Dec 27 12:53 2017

Quant Results File: 0426ABNS.RES

Quant Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)
 Title : BNA Extractables GC/MS 8270C
 Last Update : Wed Dec 20 18:30:37 2017
 Response via : Initial Calibration
 DataAcq Meth : RUN8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.60	152	201539	40.00	ug/kg	0.00
21) Naphthalene-d8	5.80	136	643538	40.00	ug/kg	0.00
39) Acenaphthene-d10	7.53	164	341666	40.00	ug/kg	0.00
62) Phenanthrene-d10	9.00	188	652889	40.00	ug/kg	0.00
76) Chrysene-d12	11.69	240	520944	40.00	ug/kg	0.00
85) Perylene-d12	13.37	264	471843	40.00	ug/kg	0.00

System Monitoring Compounds

4) 2-Fluorophenol	3.50	112	13	0.00	ug/kg	-0.04
Spiked Amount 100.000	Range 15 - 48		Recovery =	0.00%#		
7) Phenol-d6	4.28	99	12	0.00	ug/kg	0.02
Spiked Amount 100.000	Range 15 - 53		Recovery =	0.00%#		
22) Nitrobenzene-d5	5.11	82	219693	31.70	ug/kg	-0.09
Spiked Amount 50.000	Range 34 - 81		Recovery =	63.40%		
44) 2-Fluorobiphenyl	6.85	172	466620	29.35	ug/kg	-0.01
Spiked Amount 50.000	Range 33 - 86		Recovery =	58.70%		
66) 2,4,6-Tribromophenol	8.33	330	15	0.01	ug/kg	0.00
Spiked Amount 100.000	Range 51 - 111		Recovery =	0.01%#		
79) p-Terphenyl-d14	10.57	244	487305	35.17	ug/kg	0.01
Spiked Amount 50.000	Range 47 - 86		Recovery =	70.34%		

Target Compounds

Qvalue

(#) = qualifier out of range (m) = manual integration
 AS03600.D 0426ABNS.M Thu Jan 25 11:37:37 2018

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Quantitation Report

Data File : G:\HPCHEM\A\DATA\20171226\AS03600.D

Vial: 12

Acq On : 26 Dec 2017 21:52

Operator: GCH

Sample : 7120696-06

Inst : GCMS-A

Misc : B7L2204

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 27 12:53 2017

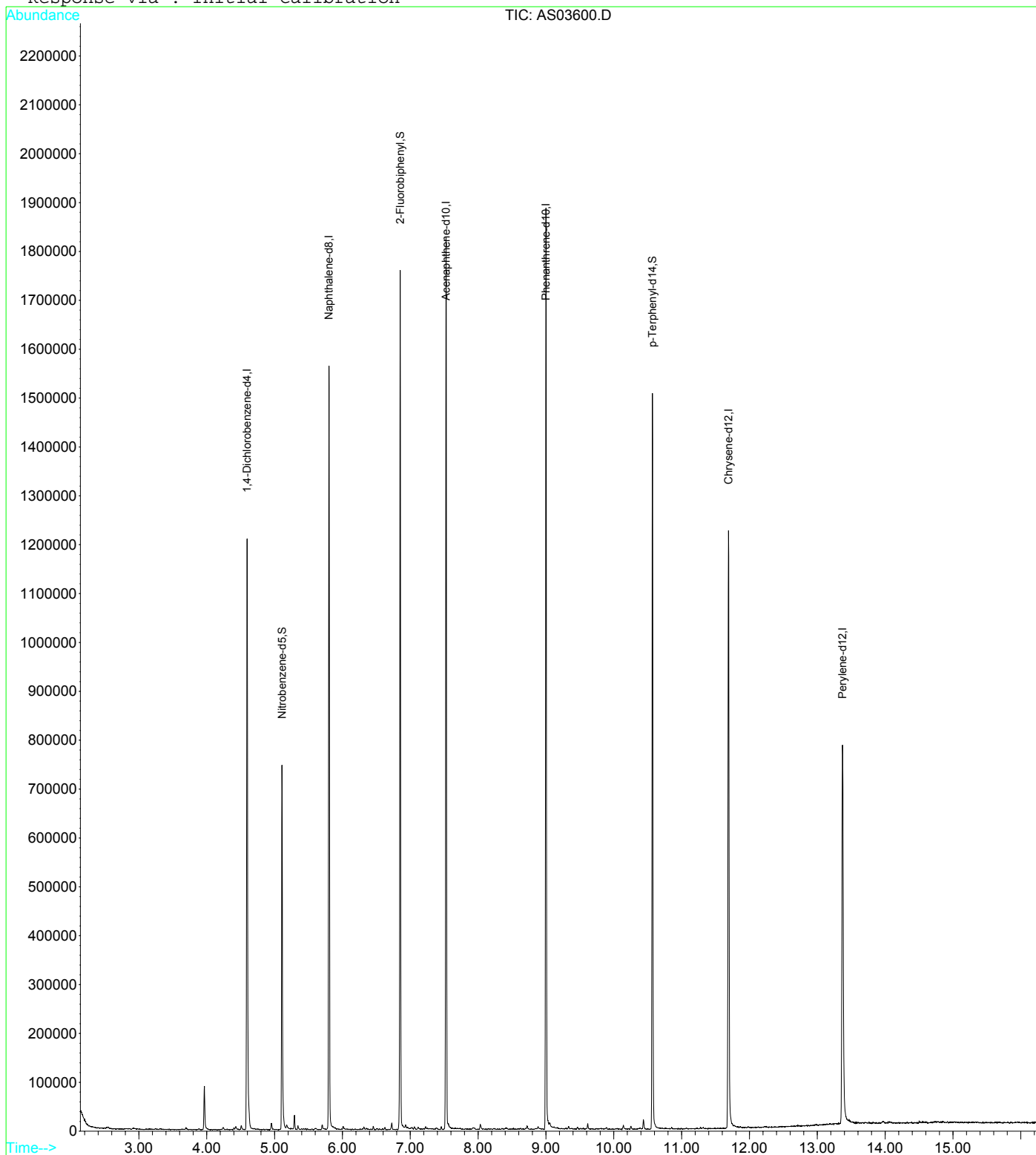
Quant Results File: 0426ABNS.RES

Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C

Last Update : Wed Dec 20 18:30:37 2017

Response via : Initial Calibration



AS03600.D 0426ABNS.M

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ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

Client: Brown and Caldwell USR
Client Sample ID: MW-4D 20171221
Lab Sample ID: 7120696-07
Project: Patchogue
Work Order: 7120696

Date Sampled:	12/21/17 09:53	Prep Date:	12/26/17 10:00	File ID:	AS03601.D
Init/Final Vol:	1000 mL / 1 mL	Prep Batch:	B7L2204	Analyzed:	12/26/17 22:16
Dilution:	1	Matrix:	Ground Water	Sequence:	S7L2902
		Prep Method:	Sep Funnel MS 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
83-32-9	Acenaphthene	ND	0.100	2.00	U
208-96-8	Acenaphthylene	ND	0.140	2.00	U
120-12-7	Anthracene	ND	0.121	2.00	U
191-24-2	Benzo(g,h,i)perylene	ND	0.0652	2.00	U
218-01-9	Chrysene	ND	0.129	2.00	U
206-44-0	Fluoranthene	ND	0.129	2.00	U
86-73-7	Fluorene	ND	0.109	2.00	U
91-20-3	Naphthalene	ND	0.0607	2.00	U
85-01-8	Phenanthrene	ND	0.0725	2.00	U
129-00-0	Pyrene	ND	0.115	2.00	U

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

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

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20171226\AS03601.D Vial: 13
 Acq On : 26 Dec 2017 22:16 Operator: GCH
 Sample : 7120696-07 Inst : GCMS-A
 Misc : B7L2204 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Dec 27 12:53 2017 Quant Results File: 0426ABNS.RES

Quant Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)
 Title : BNA Extractables GC/MS 8270C
 Last Update : Wed Dec 20 18:30:37 2017
 Response via : Initial Calibration
 DataAcq Meth : RUN8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.60	152	196838	40.00	ug/kg	0.00
21) Naphthalene-d8	5.80	136	638772	40.00	ug/kg	0.00
39) Acenaphthene-d10	7.53	164	333002	40.00	ug/kg	0.00
62) Phenanthrene-d10	9.00	188	625380	40.00	ug/kg	0.00
76) Chrysene-d12	11.69	240	544742	40.00	ug/kg	0.00
85) Perylene-d12	13.37	264	472138	40.00	ug/kg	0.00

System Monitoring Compounds

4) 2-Fluorophenol	3.59	112	9	0.00	ug/kg	0.05
Spiked Amount 100.000	Range 15 - 48		Recovery =	0.00%#		
7) Phenol-d6	4.27	99	10	0.00	ug/kg	0.00
Spiked Amount 100.000	Range 15 - 53		Recovery =	0.00%#		
22) Nitrobenzene-d5	5.11	82	178251	25.91	ug/kg	-0.09
Spiked Amount 50.000	Range 34 - 81		Recovery =	51.82%		
44) 2-Fluorobiphenyl	6.85	172	401583	25.92	ug/kg	-0.01
Spiked Amount 50.000	Range 33 - 86		Recovery =	51.84%		
66) 2,4,6-Tribromophenol	8.45	330	14	0.01	ug/kg	0.13
Spiked Amount 100.000	Range 51 - 111		Recovery =	0.01%#		
79) p-Terphenyl-d14	10.57	244	396409	27.36	ug/kg	0.01
Spiked Amount 50.000	Range 47 - 86		Recovery =	54.72%		

Target Compounds

Qvalue

(#) = qualifier out of range (m) = manual integration
 AS03601.D 0426ABNS.M Thu Jan 25 11:37:39 2018 SS

Page 1

Quantitation Report

Data File : G:\HPCHEM\A\DATA\20171226\AS03601.D

Vial: 13

Acq On : 26 Dec 2017 22:16

Operator: GCH

Sample : 7120696-07

Inst : GCMS-A

Misc : B7L2204

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 27 12:53 2017

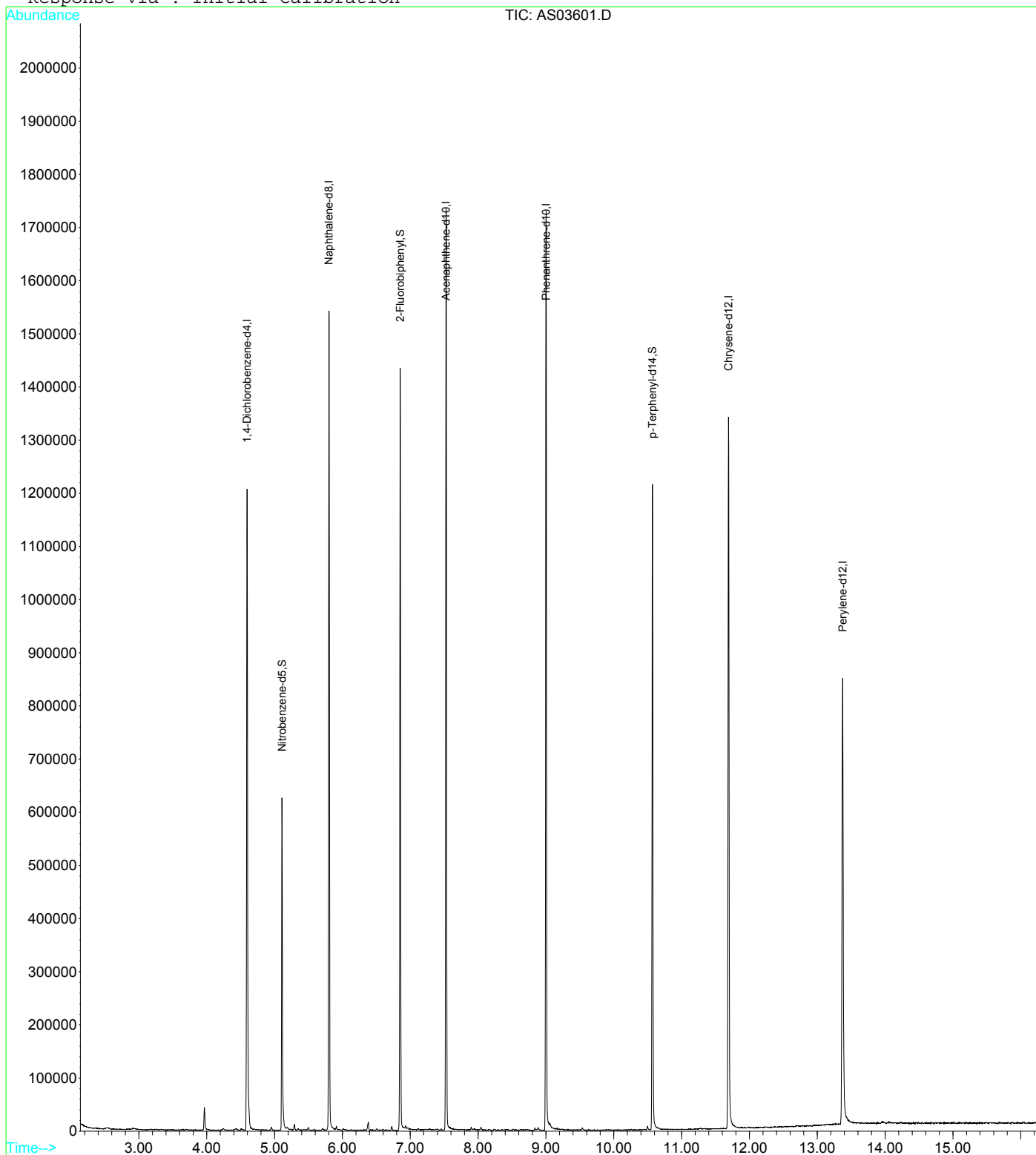
Quant Results File: 0426ABNS.RES

Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C

Last Update : Wed Dec 20 18:30:37 2017

Response via : Initial Calibration



AS03601.D 0426ABNS.M

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SS

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8.2.

ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

Client: Brown and Caldwell USR
Client Sample ID: MW-3 20171221
Lab Sample ID: 7120696-08
Project: Patchogue
Work Order: 7120696

Date Sampled:	12/21/17 10:43	Prep Date:	12/26/17 10:00	File ID:	AS03602.D
Init/Final Vol:	1000 mL / 1 mL	Prep Batch:	B7L2204	Analyzed:	12/26/17 22:39
Dilution:	1	Matrix:	Ground Water	Sequence:	S7L2902
		Prep Method:	Sep Funnel MS 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
83-32-9	Acenaphthene	ND	0.100	2.00	U
208-96-8	Acenaphthylene	ND	0.140	2.00	U
120-12-7	Anthracene	ND	0.121	2.00	U
191-24-2	Benzo(g,h,i)perylene	ND	0.0652	2.00	U
218-01-9	Chrysene	ND	0.129	2.00	U
206-44-0	Fluoranthene	0.502	0.129	2.00	J
86-73-7	Fluorene	ND	0.109	2.00	U
91-20-3	Naphthalene	ND	0.0607	2.00	U
85-01-8	Phenanthrene	ND	0.0725	2.00	U
129-00-0	Pyrene	ND	0.115	2.00	U

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

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

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20171226\AS03602.D Vial: 14
 Acq On : 26 Dec 2017 22:39 Operator: GCH
 Sample : 7120696-08 Inst : GCMS-A
 Misc : B7L2204 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Dec 27 12:53 2017 Quant Results File: 0426ABNS.RES

Quant Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)
 Title : BNA Extractables GC/MS 8270C
 Last Update : Wed Dec 20 18:30:37 2017
 Response via : Initial Calibration
 DataAcq Meth : RUN8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.60	152	189704	40.00	ug/kg	0.00
21) Naphthalene-d8	5.80	136	613021	40.00	ug/kg	0.00
39) Acenaphthene-d10	7.53	164	318618	40.00	ug/kg	0.00
62) Phenanthrene-d10	9.00	188	607192	40.00	ug/kg	0.00
76) Chrysene-d12	11.69	240	541018	40.00	ug/kg	0.00
85) Perylene-d12	13.37	264	447535	40.00	ug/kg	0.00

System Monitoring Compounds

4) 2-Fluorophenol	3.58	112	11	0.00	ug/kg	0.03
Spiked Amount 100.000	Range 15 - 48		Recovery =		0.00%#	
7) Phenol-d6	4.25	99	12	0.00	ug/kg	-0.02
Spiked Amount 100.000	Range 15 - 53		Recovery =		0.00%#	
22) Nitrobenzene-d5	5.11	82	216704	32.82	ug/kg	-0.09
Spiked Amount 50.000	Range 34 - 81		Recovery =		65.64%	
44) 2-Fluorobiphenyl	6.85	172	488335	32.94	ug/kg	-0.01
Spiked Amount 50.000	Range 33 - 86		Recovery =		65.88%	
66) 2,4,6-Tribromophenol	8.41	330	10	0.01	ug/kg	0.09
Spiked Amount 100.000	Range 51 - 111		Recovery =		0.01%#	
79) p-Terphenyl-d14	10.57	244	512992	35.65	ug/kg	0.01
Spiked Amount 50.000	Range 47 - 86		Recovery =		71.30%	

Target Compounds

					Qvalue	
75) Fluoranthene	10.21	202	9218	0.50	ug/kg	95

(#) = qualifier out of range (m) = manual integration

AS03602.D 0426ABNS.M Thu Jan 25 11:46:20 2018 SS

Page 1

Quantitation Report

Data File : G:\HPCHEM\A\DATA\20171226\AS03602.D

Vial: 14

Acq On : 26 Dec 2017 22:39

Operator: GCH

Sample : 7120696-08

Inst : GCMS-A

Misc : B7L2204

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 27 12:53 2017

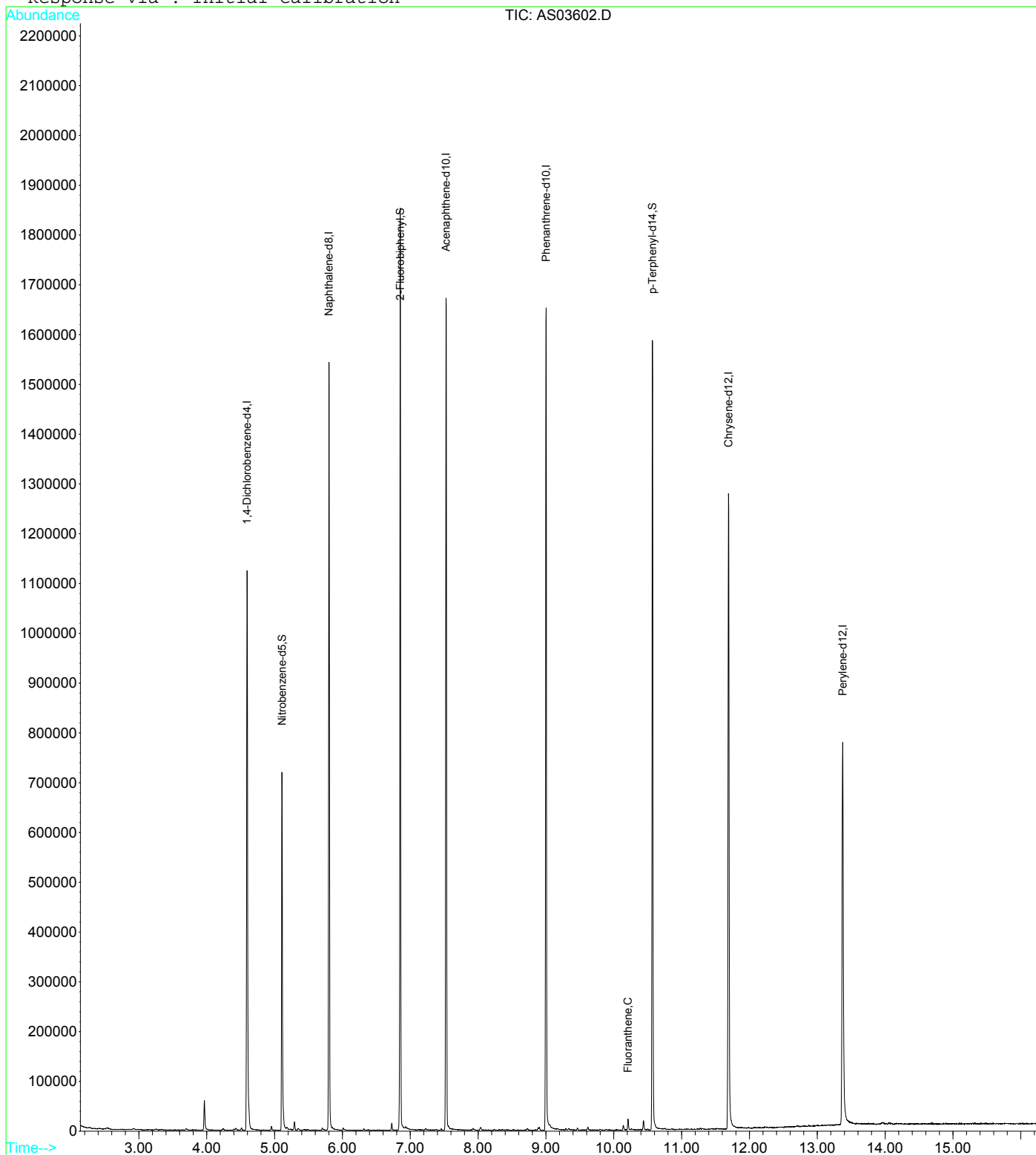
Quant Results File: 0426ABNS.RES

Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C

Last Update : Wed Dec 20 18:30:37 2017

Response via : Initial Calibration

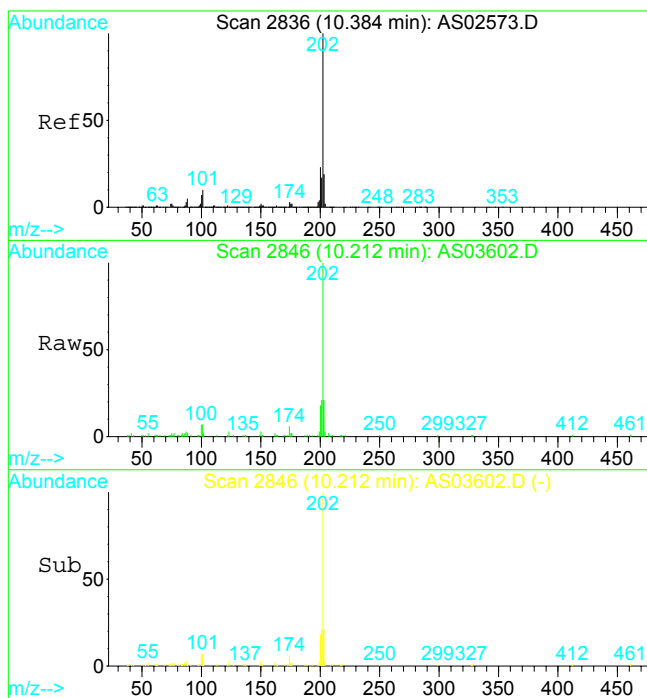


AS03602.D 0426ABNS.M

Thu Jan 25 11:46:20 2018

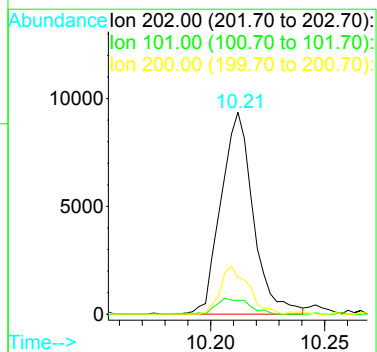
SS

Page 2



#75
Fluoranthene
Concen: 0.50 ug/kg
RT: 10.21 min Scan# 2846
Delta R.T. 0.02 min
Lab File: AS03602.D
Acq: 26 Dec 2017 22:39

Tgt Ion: 202 Resp: 9218
Ion Ratio Lower Upper
202 100
101 8.0 5.1 15.2
200 20.6 11.3 33.8



ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

Client: Brown and Caldwell USR
Client Sample ID: DUP-20171221
Lab Sample ID: 7120696-09
Project: Patchogue
Work Order: 7120696

Date Sampled:	12/21/17 00:00	Prep Date:	12/26/17 10:00	File ID:	AS03603.D
Init/Final Vol:	1000 mL / 1 mL	Prep Batch:	B7L2204	Analyzed:	12/26/17 23:02
Dilution:	1	Matrix:	Ground Water	Sequence:	S7L2902
		Prep Method:	Sep Funnel MS 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
83-32-9	Acenaphthene	ND	0.100	2.00	U
208-96-8	Acenaphthylene	ND	0.140	2.00	U
120-12-7	Anthracene	ND	0.121	2.00	U
191-24-2	Benzo(g,h,i)perylene	ND	0.0652	2.00	U
218-01-9	Chrysene	ND	0.129	2.00	U
206-44-0	Fluoranthene	0.590	0.129	2.00	J
86-73-7	Fluorene	ND	0.109	2.00	U
91-20-3	Naphthalene	ND	0.0607	2.00	U
85-01-8	Phenanthrene	ND	0.0725	2.00	U
129-00-0	Pyrene	0.509	0.115	2.00	J

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

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

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20171226\AS03603.D Vial: 15
 Acq On : 26 Dec 2017 23:02 Operator: GCH
 Sample : 7120696-09 Inst : GCMS-A
 Misc : B7L2204 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Dec 27 12:53 2017 Quant Results File: 0426ABNS.RES

Quant Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)
 Title : BNA Extractables GC/MS 8270C
 Last Update : Wed Dec 20 18:30:37 2017
 Response via : Initial Calibration
 DataAcq Meth : RUN8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.59	152	180418	40.00	ug/kg	0.00
21) Naphthalene-d8	5.80	136	586720	40.00	ug/kg	0.00
39) Acenaphthene-d10	7.53	164	308957	40.00	ug/kg	0.00
62) Phenanthrene-d10	9.00	188	572861	40.00	ug/kg	0.00
76) Chrysene-d12	11.69	240	510568	40.00	ug/kg	0.00
85) Perylene-d12	13.37	264	437671	40.00	ug/kg	0.00

System Monitoring Compounds

4) 2-Fluorophenol	3.55	112	10	0.00	ug/kg	0.01
Spiked Amount 100.000	Range 15 - 48		Recovery =		0.00%#	
7) Phenol-d6	4.24	99	9	0.00	ug/kg	-0.02
Spiked Amount 100.000	Range 15 - 53		Recovery =		0.00%#	
22) Nitrobenzene-d5	5.11	82	207199	32.79	ug/kg	-0.09
Spiked Amount 50.000	Range 34 - 81		Recovery =		65.58%	
44) 2-Fluorobiphenyl	6.85	172	467362	32.51	ug/kg	-0.01
Spiked Amount 50.000	Range 33 - 86		Recovery =		65.02%	
66) 2,4,6-Tribromophenol	8.36	330	10	0.01	ug/kg	0.03
Spiked Amount 100.000	Range 51 - 111		Recovery =		0.01%#	
79) p-Terphenyl-d14	10.57	244	467837	34.45	ug/kg	0.01
Spiked Amount 50.000	Range 47 - 86		Recovery =		68.90%	

Target Compounds

						Qvalue
75) Fluoranthene	10.21	202	10214	0.59	ug/kg	98
78) Pyrene	10.44	202	9436	0.51	ug/kg	99

(#) = qualifier out of range (m) = manual integration

AS03603.D 0426ABNS.M Thu Jan 25 11:46:22 2018 SS

Page 1

Quantitation Report

Data File : G:\HPCHEM\A\DATA\20171226\AS03603.D

Vial: 15

Acq On : 26 Dec 2017 23:02

Operator: GCH

Sample : 7120696-09

Inst : GCMS-A

Misc : B7L2204

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 27 12:53 2017

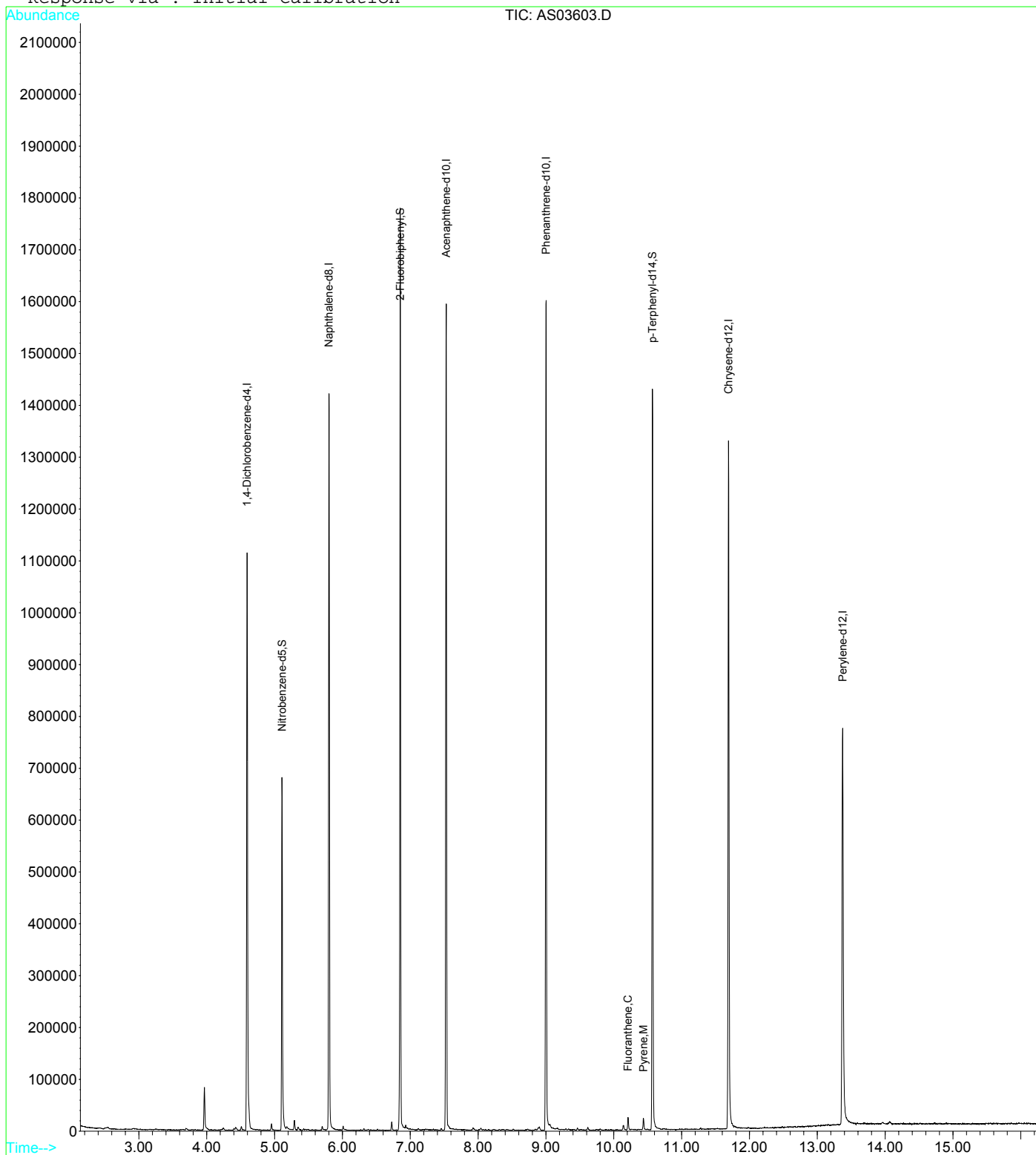
Quant Results File: 0426ABNS.RES

Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C

Last Update : Wed Dec 20 18:30:37 2017

Response via : Initial Calibration

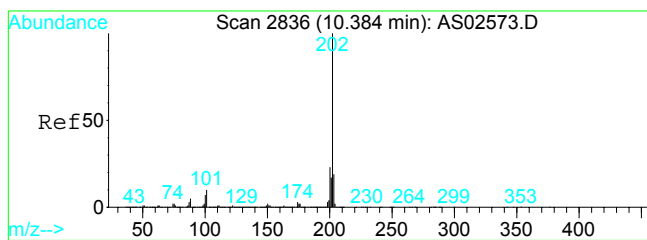


AS03603.D 0426ABNS.M

Thu Jan 25 11:46:22 2018

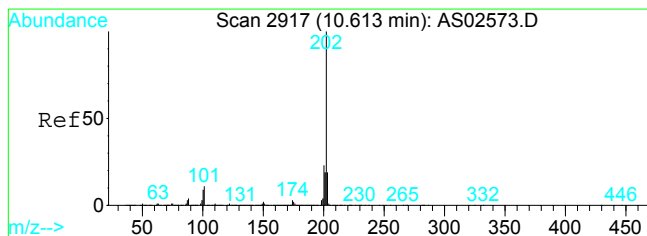
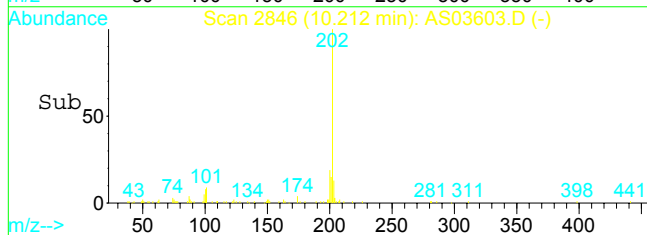
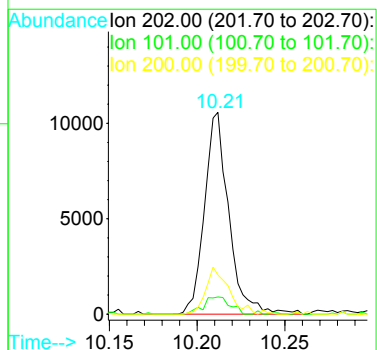
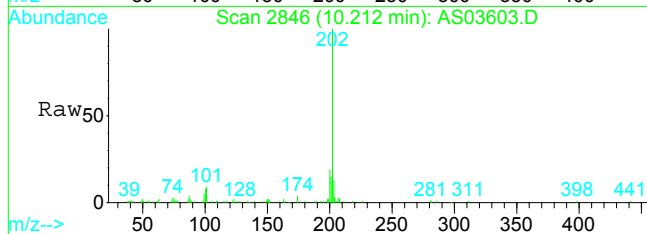
SS

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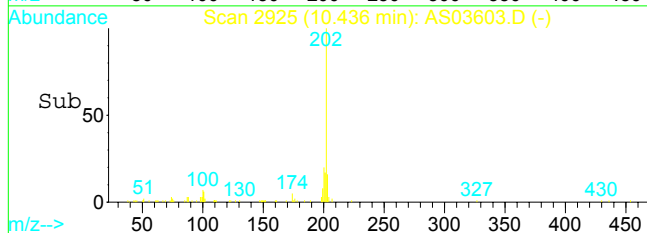
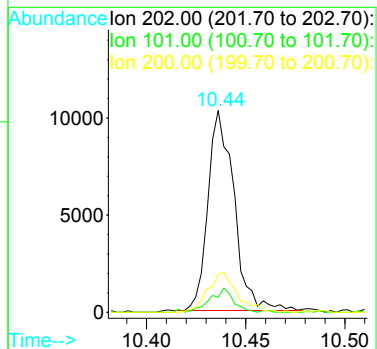
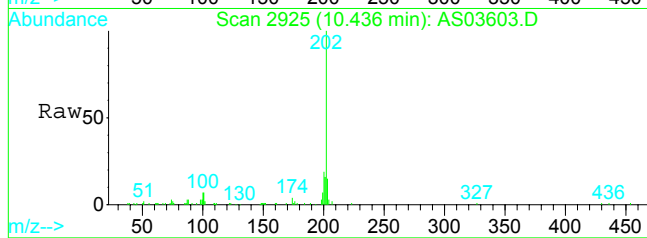
#75
Fluoranthene
Concen: 0.59 ug/kg
RT: 10.21 min Scan# 2846
Delta R.T. 0.02 min
Lab File: AS03603.D
Acq: 26 Dec 2017 23:02

Tgt Ion: 202 Resp: 10214
Ion Ratio Lower Upper
202 100
101 9.3 5.1 15.2
200 21.7 11.3 33.8



#78
Pyrene
Concen: 0.51 ug/kg
RT: 10.44 min Scan# 2925
Delta R.T. 0.00 min
Lab File: AS03603.D
Acq: 26 Dec 2017 23:02

Tgt Ion: 202 Resp: 9436
Ion Ratio Lower Upper
202 100
101 10.5 5.3 16.1
200 22.5 11.5 34.5



ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

Client: Brown and Caldwell USR
Client Sample ID: FB-20171221
Lab Sample ID: 7120696-10
Project: Patchogue
Work Order: 7120696

Date Sampled:	12/21/17 11:01	Prep Date:	12/26/17 10:00	File ID:	AS03604.D
Init/Final Vol:	1000 mL / 1 mL	Prep Batch:	B7L2204	Analyzed:	12/26/17 23:25
Dilution:	1	Matrix:	Ground Water	Sequence:	S7L2902
		Prep Method:	Sep Funnel MS 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
83-32-9	Acenaphthene	ND	0.100	2.00	U
208-96-8	Acenaphthylene	ND	0.140	2.00	U
120-12-7	Anthracene	ND	0.121	2.00	U
191-24-2	Benzo(g,h,i)perylene	ND	0.0652	2.00	U
218-01-9	Chrysene	ND	0.129	2.00	U
206-44-0	Fluoranthene	ND	0.129	2.00	U
86-73-7	Fluorene	ND	0.109	2.00	U
91-20-3	Naphthalene	ND	0.0607	2.00	U
85-01-8	Phenanthrene	ND	0.0725	2.00	U
129-00-0	Pyrene	ND	0.115	2.00	U

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

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

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20171226\AS03604.D
 Acq On : 26 Dec 2017 23:25
 Sample : 7120696-10
 Misc : B7L2204

Vial: 16
 Operator: GCH
 Inst : GCMS-A
 Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 27 12:53 2017

Quant Results File: 0426ABNS.RES

Quant Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C

Last Update : Wed Dec 20 18:30:37 2017

Response via : Initial Calibration

DataAcq Meth : RUN8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.60	152	177613	40.00	ug/kg	0.00
21) Naphthalene-d8	5.80	136	564983	40.00	ug/kg	0.00
39) Acenaphthene-d10	7.53	164	298081	40.00	ug/kg	0.00
62) Phenanthrene-d10	9.00	188	553867	40.00	ug/kg	0.00
76) Chrysene-d12	11.69	240	492060	40.00	ug/kg	0.00
85) Perylene-d12	13.37	264	419150	40.00	ug/kg	0.00

System Monitoring Compounds

4) 2-Fluorophenol	3.43	112	9	0.00	ug/kg	-0.11
Spiked Amount	100.000	Range	15 - 48	Recovery	=	0.00%#
7) Phenol-d6	4.23	99	11	0.00	ug/kg	-0.03
Spiked Amount	100.000	Range	15 - 53	Recovery	=	0.00%#
22) Nitrobenzene-d5	5.11	82	220954	36.31	ug/kg	-0.09
Spiked Amount	50.000	Range	34 - 81	Recovery	=	72.62%
44) 2-Fluorobiphenyl	6.85	172	465949	33.60	ug/kg	-0.01
Spiked Amount	50.000	Range	33 - 86	Recovery	=	67.20%
66) 2,4,6-Tribromophenol	8.34	330	10	0.01	ug/kg	0.02
Spiked Amount	100.000	Range	51 - 111	Recovery	=	0.01%#
79) p-Terphenyl-d14	10.57	244	458386	35.02	ug/kg	0.01
Spiked Amount	50.000	Range	47 - 86	Recovery	=	70.04%

Target Compounds

Qvalue

(#) = qualifier out of range (m) = manual integration

AS03604.D 0426ABNS.M Thu Jan 25 11:37:45 2018 SS

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Quantitation Report

Data File : G:\HPCHEM\A\DATA\20171226\AS03604.D

Vial: 16

Acq On : 26 Dec 2017 23:25

Operator: GCH

Sample : 7120696-10

Inst : GCMS-A

Misc : B7L2204

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 27 12:53 2017

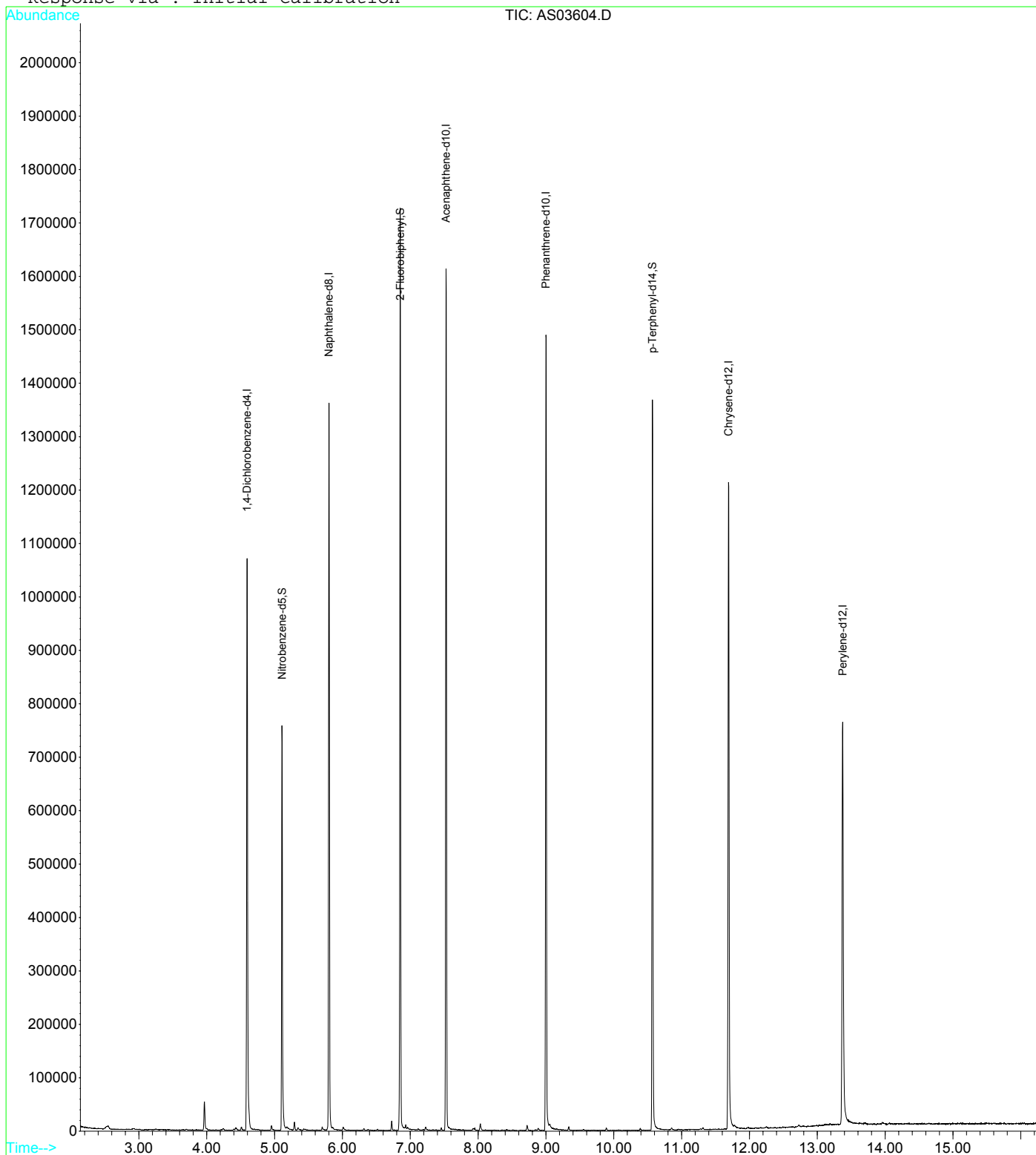
Quant Results File: 0426ABNS.RES

Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C

Last Update : Wed Dec 20 18:30:37 2017

Response via : Initial Calibration



AS03604.D 0426ABNS.M

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SS

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ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

Client: Brown and Caldwell USR
Client Sample ID: MW-9D 20171221
Lab Sample ID: 7120696-11
Project: Patchogue
Work Order: 7120696

Date Sampled:	12/21/17 11:34	Prep Date:	12/26/17 09:26	File ID:	AS03608.D
Init/Final Vol:	1000 mL / 1 mL	Prep Batch:	B7L2608	Analyzed:	12/27/17 00:58
Dilution:	1	Matrix:	Ground Water	Sequence:	S7L2902
		Prep Method:	Sep Funnel MS 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
83-32-9	Acenaphthene	ND	0.100	2.00	U
208-96-8	Acenaphthylene	ND	0.140	2.00	U
120-12-7	Anthracene	ND	0.121	2.00	U
191-24-2	Benzo(g,h,i)perylene	ND	0.0652	2.00	U
218-01-9	Chrysene	ND	0.129	2.00	U
206-44-0	Fluoranthene	ND	0.129	2.00	U
86-73-7	Fluorene	ND	0.109	2.00	U
91-20-3	Naphthalene	ND	0.0607	2.00	U
85-01-8	Phenanthrene	ND	0.0725	2.00	U
129-00-0	Pyrene	ND	0.115	2.00	U

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

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

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20171226\AS03608.D Vial: 20
 Acq On : 27 Dec 2017 00:58 Operator: GCH
 Sample : 7120696-11 Inst : GCMS-A
 Misc : B7L2608 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Dec 27 12:53 2017 Quant Results File: 0426ABNS.RES

Quant Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)
 Title : BNA Extractables GC/MS 8270C
 Last Update : Wed Dec 20 18:30:37 2017
 Response via : Initial Calibration
 DataAcq Meth : RUN8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.59	152	163763	40.00	ug/kg	0.00
21) Naphthalene-d8	5.80	136	529062	40.00	ug/kg	0.00
39) Acenaphthene-d10	7.53	164	280188	40.00	ug/kg	0.00
62) Phenanthrene-d10	9.00	188	533265	40.00	ug/kg	0.00
76) Chrysene-d12	11.69	240	471388	40.00	ug/kg	0.00
85) Perylene-d12	13.38	264	421078	40.00	ug/kg	0.00

System Monitoring Compounds

4) 2-Fluorophenol	3.51	112	11	0.00	ug/kg	-0.03
Spiked Amount 100.000	Range 15 - 48		Recovery =	0.00%#		
7) Phenol-d6	4.28	99	10	0.00	ug/kg	0.02
Spiked Amount 100.000	Range 15 - 53		Recovery =	0.00%#		
22) Nitrobenzene-d5	5.11	82	198230	34.79	ug/kg	-0.09
Spiked Amount 50.000	Range 34 - 81		Recovery =	69.58%		
44) 2-Fluorobiphenyl	6.85	172	408411	31.33	ug/kg	-0.01
Spiked Amount 50.000	Range 33 - 86		Recovery =	62.66%		
66) 2,4,6-Tribromophenol	8.26	330	9	0.01	ug/kg	-0.07
Spiked Amount 100.000	Range 51 - 111		Recovery =	0.01%#		
79) p-Terphenyl-d14	10.57	244	411244	32.80	ug/kg	0.01
Spiked Amount 50.000	Range 47 - 86		Recovery =	65.60%		

Target Compounds

Qvalue

(#) = qualifier out of range (m) = manual integration

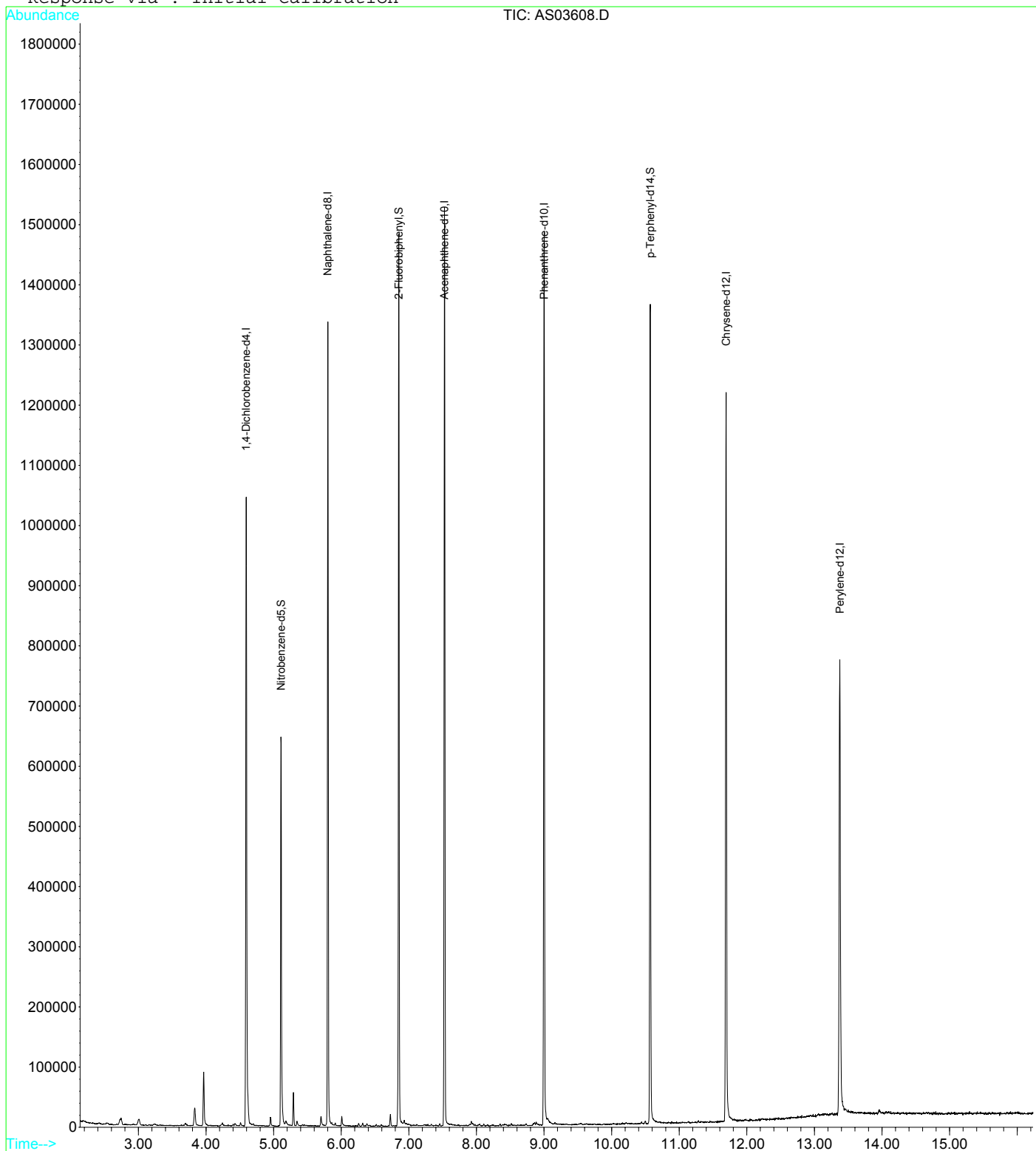
AS03608.D 0426ABNS.M Thu Jan 25 11:37:47 2018 SS

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Quantitation Report

Data File : G:\HPCHEM\A\DATA\20171226\AS03608.D Vial: 20
 Acq On : 27 Dec 2017 00:58 Operator: GCH
 Sample : 7120696-11 Inst : GCMS-A
 Misc : B7L2608 Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Dec 27 12:53 2017 Quant Results File: 0426ABNS.RES

Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)
 Title : BNA Extractables GC/MS 8270C
 Last Update : Wed Dec 20 18:30:37 2017
 Response via : Initial Calibration



AS03608.D 0426ABNS.M

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SS

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ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

Client: Brown and Caldwell USR
Client Sample ID: MW-9S 20171221
Lab Sample ID: 7120696-12
Project: Patchogue
Work Order: 7120696

Date Sampled:	12/21/17 00:00	Prep Date:	12/26/17 09:26	File ID:	AS03609.D
Init/Final Vol:	1000 mL / 1 mL	Prep Batch:	B7L2608	Analyzed:	12/27/17 01:22
Dilution:	1	Matrix:	Ground Water	Sequence:	S7L2902
		Prep Method:	Sep Funnel MS 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
83-32-9	Acenaphthene	0.967	0.100	2.00	J
208-96-8	Acenaphthylene	ND	0.140	2.00	U
120-12-7	Anthracene	ND	0.121	2.00	U
191-24-2	Benzo(g,h,i)perylene	ND	0.0652	2.00	U
218-01-9	Chrysene	ND	0.129	2.00	U
206-44-0	Fluoranthene	1.28	0.129	2.00	J
86-73-7	Fluorene	ND	0.109	2.00	U
91-20-3	Naphthalene	ND	0.0607	2.00	U
85-01-8	Phenanthrene	ND	0.0725	2.00	U
129-00-0	Pyrene	1.72	0.115	2.00	J

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

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

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20171226\AS03609.D
 Acq On : 27 Dec 2017 1:22
 Sample : 7120696-12
 Misc : B7L2608

Vial: 21
 Operator: GCH
 Inst : GCMS-A
 Multiplr: 1.00

MS Integration Params: RTEINT.P
 Quant Time: Dec 27 12:53 2017

Quant Results File: 0426ABNS.RES

Quant Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)
 Title : BNA Extractables GC/MS 8270C
 Last Update : Wed Dec 20 18:30:37 2017
 Response via : Initial Calibration
 DataAcq Meth : RUN8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.59	152	174949	40.00	ug/kg	0.00
21) Naphthalene-d8	5.80	136	566789	40.00	ug/kg	0.00
39) Acenaphthene-d10	7.53	164	302214	40.00	ug/kg	0.00
62) Phenanthrene-d10	9.00	188	577455	40.00	ug/kg	0.00
76) Chrysene-d12	11.69	240	528069	40.00	ug/kg	0.00
85) Perylene-d12	13.37	264	443913	40.00	ug/kg	0.00

System Monitoring Compounds

4) 2-Fluorophenol	3.55	112	12	0.00	ug/kg	0.01
Spiked Amount 100.000	Range 15 - 48		Recovery =		0.00%#	
7) Phenol-d6	4.28	99	12	0.00	ug/kg	0.02
Spiked Amount 100.000	Range 15 - 53		Recovery =		0.00%#	
22) Nitrobenzene-d5	5.11	82	199980	32.76	ug/kg	-0.09
Spiked Amount 50.000	Range 34 - 81		Recovery =		65.52%	
44) 2-Fluorobiphenyl	6.85	172	404698	28.78	ug/kg	-0.01
Spiked Amount 50.000	Range 33 - 86		Recovery =		57.56%	
66) 2,4,6-Tribromophenol	8.33	330	10	0.01	ug/kg	0.00
Spiked Amount 100.000	Range 51 - 111		Recovery =		0.01%#	
79) p-Terphenyl-d14	10.57	244	437568	31.15	ug/kg	0.01
Spiked Amount 50.000	Range 47 - 86		Recovery =		62.30%	

Target Compounds

						Qvalue
52) Acenaphthene	7.56	153	10629	0.97	ug/kg	100
75) Fluoranthene	10.21	202	22350	1.28	ug/kg	93
78) Pyrene	10.44	202	33009	1.72	ug/kg	96
81) Benzo(a)anthracene	11.68	228	9948	0.64	ug/kg	85

(#) = qualifier out of range (m) = manual integration

AS03609.D 0426ABNS.M Thu Jan 25 11:46:24 2018 SS

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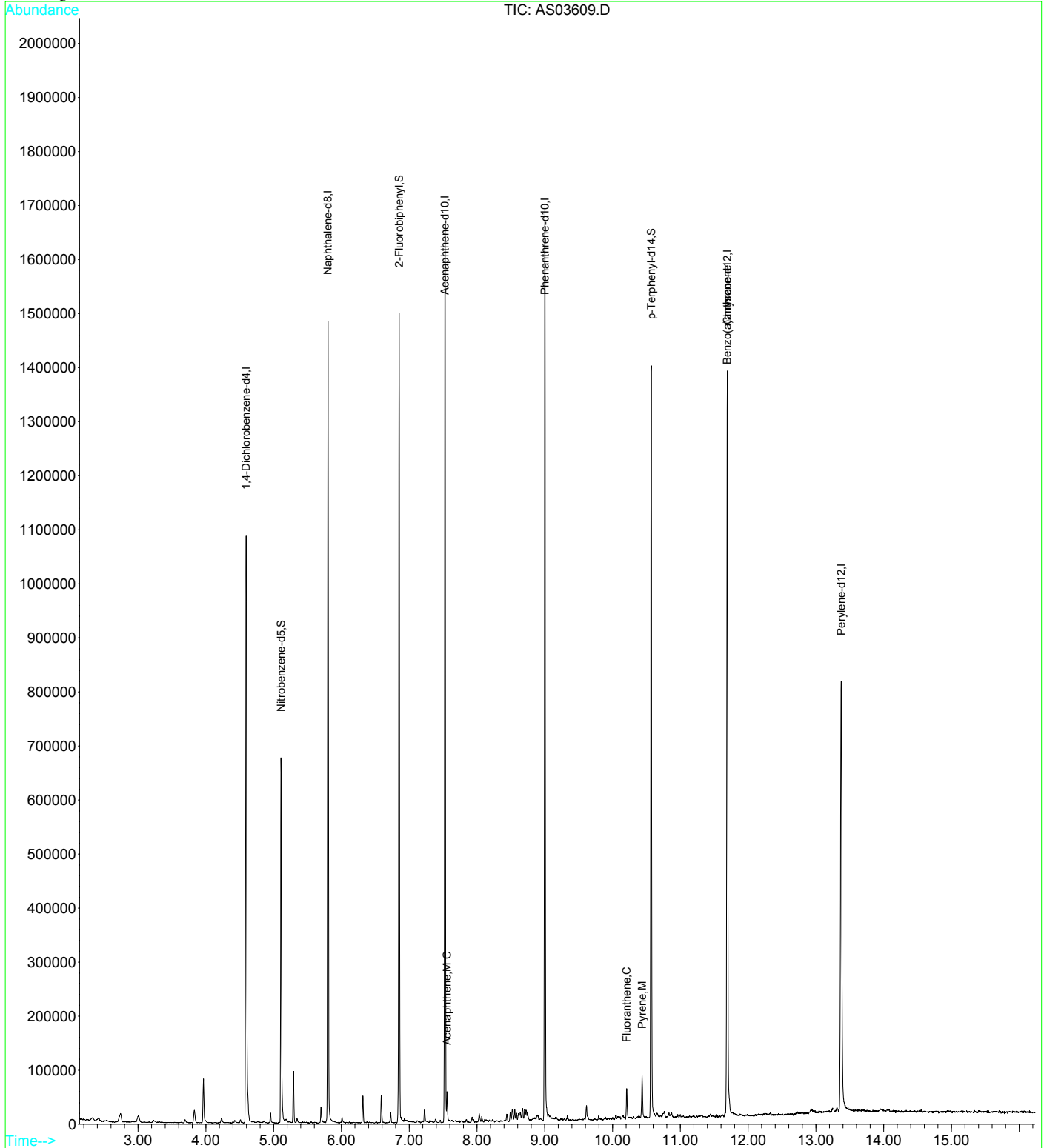
Quantitation Report

Data File : G:\HPCHEM\A\DATA\20171226\AS03609.D
 Acq On : 27 Dec 2017 1:22
 Sample : 7120696-12
 Misc : B7L2608
 MS Integration Params: RTEINT.P
 Quant Time: Dec 27 12:53 2017

Vial: 21
 Operator: GCH
 Inst : GCMS-A
 Multiplr: 1.00

Quant Results File: 0426ABNS.RES

Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)
 Title : BNA Extractables GC/MS 8270C
 Last Update : Wed Dec 20 18:30:37 2017
 Response via : Initial Calibration

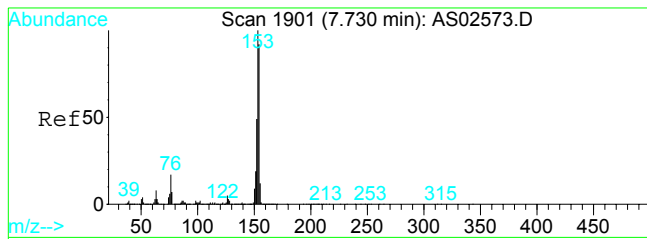


AS03609.D 0426ABNS.M

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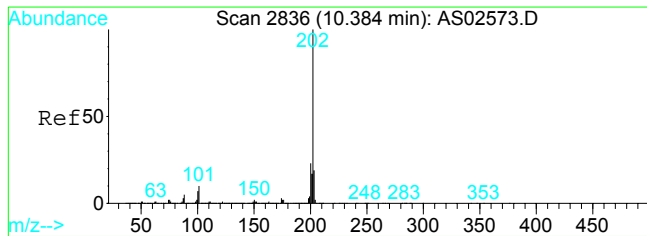
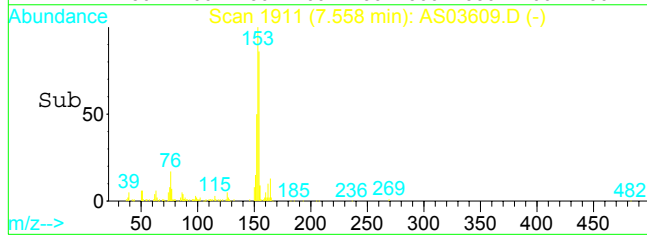
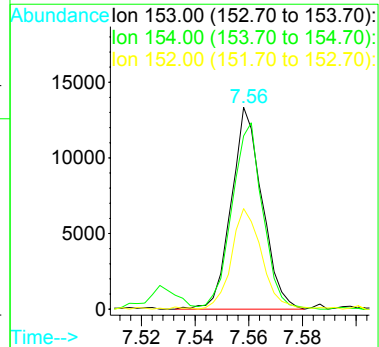
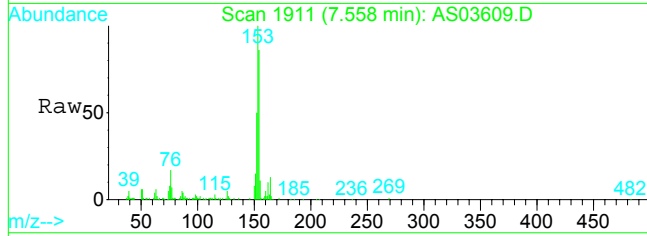
SS

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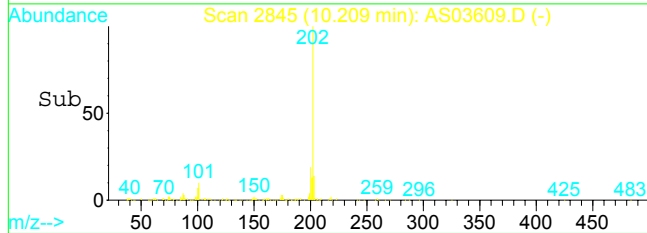
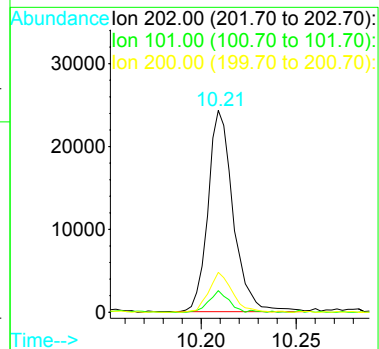
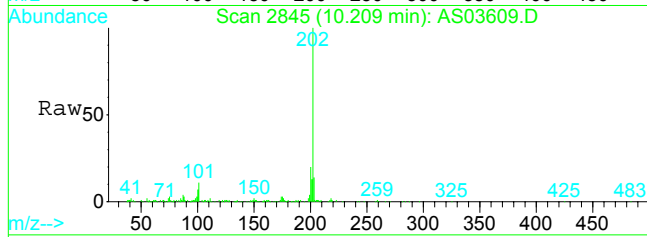
#52
Acenaphthene
Concen: 0.97 ug/kg
RT: 7.56 min Scan# 1911
Delta R.T. -0.01 min
Lab File: AS03609.D
Acq: 27 Dec 2017 1:22

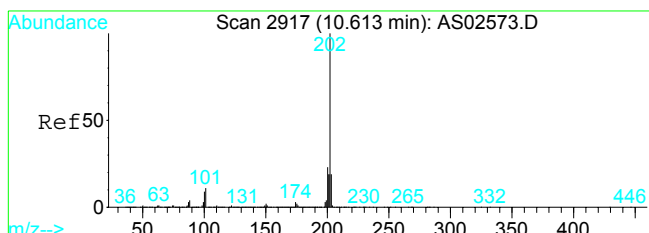
Tgt Ion:153 Resp: 10629
Ion Ratio Lower Upper
153 100
154 92.1 46.3 138.8
152 49.0 24.4 73.2



#75
Fluoranthene
Concen: 1.28 ug/kg
RT: 10.21 min Scan# 2845
Delta R.T. 0.02 min
Lab File: AS03609.D
Acq: 27 Dec 2017 1:22

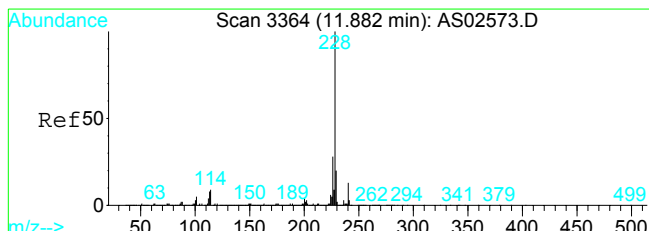
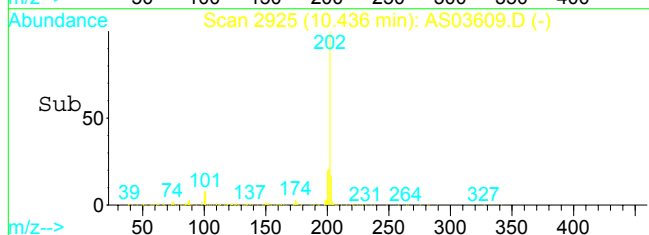
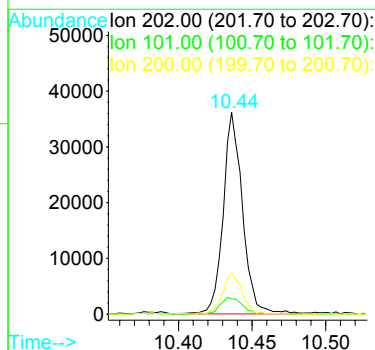
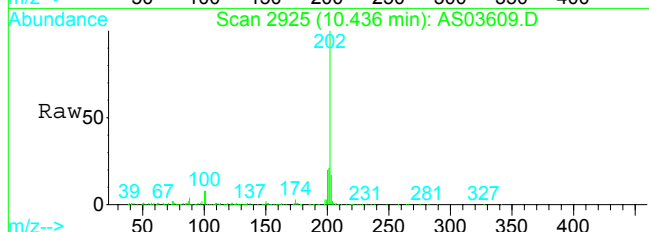
Tgt Ion:202 Resp: 22350
Ion Ratio Lower Upper
202 100
101 8.3 5.1 15.2
200 18.5 11.3 33.8





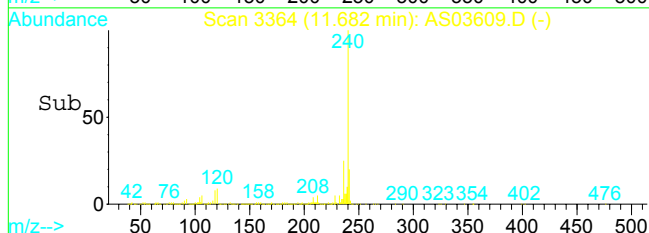
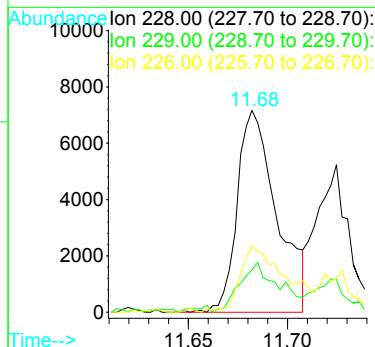
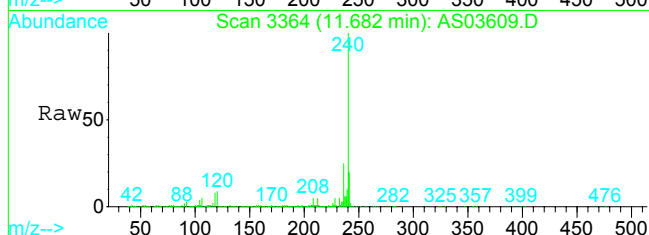
#78
Pyrene
Concen: 1.72 ug/kg
RT: 10.44 min Scan# 2925
Delta R.T. 0.00 min
Lab File: AS03609.D
Acq: 27 Dec 2017 1:22

Tgt Ion: 202 Resp: 33009
Ion Ratio Lower Upper
202 100
101 9.6 5.3 16.1
200 20.7 11.5 34.5



#81
Benzo(a)anthracene
Concen: 0.64 ug/kg
RT: 11.68 min Scan# 3364
Delta R.T. -0.00 min
Lab File: AS03609.D
Acq: 27 Dec 2017 1:22

Tgt Ion: 228 Resp: 9948
Ion Ratio Lower Upper
228 100
229 24.6 10.1 30.1
226 37.8 14.0 42.0



SURROGATE RECOVERIES

Analysis Class: SEMIVOLATILES

Matrix: Ground Water

Method: SW 846 8270D

BN-PAH

Lab Number	File ID	NBZ	FPB	TER-D14
7120696-01	AS03574.D	67.9	66.9	76.2
7120696-02	AS03575.D	56.7	56.5	65.9
7120696-03	AS03576.D	66.0	65.8	66.6
7120696-04	AS03577.D	66.4	63.7	72.6
7120696-05	AS03578.D	53.1	52.3	60.1
7120696-06	AS03600.D	63.4	58.7	70.3
7120696-07	AS03601.D	51.8	51.8	54.7
7120696-08	AS03602.D	65.6	65.9	71.3
7120696-09	AS03603.D	65.6	65.0	68.9
7120696-10	AS03604.D	72.6	67.2	70.0
7120696-11	AS03608.D	69.6	62.7	65.6
7120696-12	AS03609.D	65.5	57.6	62.3
B7L2204-BLK2	AS03568.D	78.9	79.6	84.3
B7L2204-BLK3	AS03592.D	73.2	65.7	74.6
B7L2204-BS1	AS03569.D	65.0	64.7	67.8
B7L2204-BS2	AS03593.D	76.3	69.7	71.9
B7L2204-MS1	AS03582.D	43.1	40.5	37.1 *
B7L2204-MSD1	AS03583.D	38.8	35.7	33.4 *
B7L2608-BLK2	AS03594.D	69.6	61.2	77.3
B7L2608-BS1	AS03595.D	76.7	74.4	82.8
B7L2608-MS1	AS03616.D	89.5*	80.9	91.1 *
B7L2608-MSD1	AS03617.D	74.6	68.7	78.0

Surrogate Limits		Lo Limit	Hi Limit
NBZ	Nitrobenzene-d5	33.5	81.2
FPB	2-Fluorobiphenyl	32.7	85.7
TER-D14	p-Terphenyl-d14	47.2	86.4

* - Outside of QC Limits

Semivolatile Organics - GC/MS - Quality Control
Aqua Pro-Tech Laboratories

Batch B7L2204			Method: SW 846 8270D			Prepared: 12/22/2017			
Lab Number	Source	Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD Limit
B7L2204-BS1		Acenaphthene	32.6	ug/L	50.0		65.2	61.5-111	
B7L2204-BS1		Acenaphthylene	33.7	ug/L	50.0		67.5	65.2-114	
B7L2204-BS1		Anthracene	37.1	ug/L	50.0		74.2	67.9-129	
B7L2204-BS1		Benzo(g,h,i)perylene	33.4	ug/L	50.0		66.7	62-139	
B7L2204-BS1		Chrysene	38.5	ug/L	50.0		77.0	71.1-122	
B7L2204-BS1		Fluoranthene	38.8	ug/L	50.0		77.5	71.6-150	
B7L2204-BS1		Fluorene	34.6	ug/L	50.0		69.2	66.3-126	
B7L2204-BS1		Naphthalene	29.9	ug/L	50.0		59.7	57.1-110	
B7L2204-BS1		Phenanthrene	36.4	ug/L	50.0		72.8	66-128	
B7L2204-BS1		Pyrene	36.9	ug/L	50.0		73.8	64.9-107	

* - Outside of QC Limits

NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20171222\AS03569.D

Vial: 7

Acq On : 22 Dec 2017 21:00

Operator: GCH

Sample : B7L2204-BS1

Inst : GCMS-A

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 28 20:15 2017

Quant Results File: 0426ABNS.RES

Quant Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C

Last Update : Thu Dec 28 12:26:46 2017

Response via : Initial Calibration

DataAcq Meth : RUN8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.60	152	105886	40.00	ug/kg	0.00
21) Naphthalene-d8	5.80	136	344958	40.00	ug/kg	0.00
39) Acenaphthene-d10	7.53	164	182721	40.00	ug/kg	0.00
62) Phenanthrene-d10	9.00	188	354875	40.00	ug/kg	0.00
76) Chrysene-d12	11.69	240	321129	40.00	ug/kg	0.00
85) Perylene-d12	13.37	264	300280	40.00	ug/kg	0.00

System Monitoring Compounds

4) 2-Fluorophenol	0.00	112	0d	0.00	ug/kg	
Spiked Amount	100.000	Range	15 - 48	Recovery	=	0.00%#
7) Phenol-d6	0.00	99	0d	0.00	ug/kg	
Spiked Amount	100.000	Range	15 - 53	Recovery	=	0.00%#
22) Nitrobenzene-d5	5.11	82	120794	32.51	ug/kg	-0.08
Spiked Amount	50.000	Range	34 - 81	Recovery	=	65.02%
44) 2-Fluorobiphenyl	6.85	172	275152	32.37	ug/kg	-0.01
Spiked Amount	50.000	Range	33 - 86	Recovery	=	64.74%
66) 2,4,6-Tribromophenol	0.00	330	0d	0.00	ug/kg	
Spiked Amount	100.000	Range	51 - 111	Recovery	=	0.00%#
79) p-Terphenyl-d14	10.57	244	289566	33.90	ug/kg	0.01
Spiked Amount	50.000	Range	47 - 86	Recovery	=	67.80%

Target Compounds

						Qvalue
2) Pyridine	2.32	79	65024	15.74	ng/uL	98
3) N-Nitroso-dimethylamine	2.29	42	19077	12.14	ng/uL	99
5) Benzaldehyde	4.21	77	5898m	3.38	ug/kg	
6) Aniline	4.29	93	124905	27.02	ug/kg	93
9) bis(2-Chloroethyl) ether	4.34	93	94197	27.04	ug/kg	95
11) 1,3-Dichlorobenzene	4.55	146	120312	29.27	ug/kg	96
12) 1,4-Dichlorobenzene	4.55	146	120312	28.15	ug/kg	96
13) Benzyl Alcohol	4.71	108	32864	14.78	ug/kg	82
14) 1,2-Dichlorobenzene	4.76	146	116569	29.64	ug/kg	96
16) bis(2-Chloroisopropyl) ethe	4.84	45	101377	23.03	ug/kg	91
17) Acetophenone	4.96	105	165225m	38.74	ug/kg	
19) n-Nitroso-di-n-propylamine	4.96	70	63178	33.77	ug/kg	84
20) Hexachloroethane	5.07	117	46670	31.89	ug/kg	86
23) Nitrobenzene	5.13	77	119630	35.05	ug/kg	88
24) Isophorone	5.35	82	197513	36.31	ug/kg	95
27) bis(2-Chloroethoxy) methane	5.55	93	106175	30.78	ug/kg	98
30) 1,2,4-Trichlorobenzene	5.75	180	125199	37.04	ug/kg	99
31) Naphthalene	5.82	128	290166	29.86	ug/kg	97
33) 4-Chloroaniline	5.87	127	113235	36.89	ug/kg	94
34) Hexachlorobutadiene	5.94	225	88997	44.39	ug/kg	99
35) Caprolactam	6.18	113	1954m	2.35	ug/kg	
37) 2-Methylnaphthalene	6.50	142	213737	34.80	ug/kg	98
38) 1-Methylnaphthalene	6.60	142	200337	31.67	ng/uL	98
40) Hexachlorocyclopentadiene	6.66	237	56674	27.92	ug/kg	98
41) 1,2,4,5-Tetrachlorobenzene	6.67	216	152301	38.80	ug/kg	98
45) Biphenyl	6.96	154	265488	32.31	ug/kg	98
46) 2-Chloronaphthalene	6.98	162	216256	33.06	ug/kg	98
47) 2-Nitroaniline	7.08	138	62691m	33.38	ug/kg	
48) Dimethylphthalate	7.25	163	262566m	40.55	ug/kg	
49) Acenaphthylene	7.39	152	310247	33.75	ug/kg	97
50) 2,6-Dinitrotoluene	7.31	165	54596	42.74	ug/kg	96
51) 3-Nitroaniline	7.48	138	43932	48.61	ug/kg	90
52) Acenaphthene	7.56	153	216802	32.62	ug/kg	98
54) Dibenzofuran	7.73	168	316768	35.57	ug/kg	99
56) 2,4-Dinitrotoluene	7.72	165	70097m	38.34	ug/kg	
58) Fluorene	8.07	166	246705	34.62	ug/kg	98

(#)= qualifier out of range (m)= manual integration

AS03569.D 0426ABNS.M

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Page 1

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20171222\AS03569.D

Vial: 7

Acq On : 22 Dec 2017 21:00

Operator: GCH

Sample : B7L2204-BS1

Inst : GCMS-A

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 28 20:15 2017

Quant Results File: 0426ABNS.RES

Quant Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C

Last Update : Thu Dec 28 12:26:46 2017

Response via : Initial Calibration

DataAcq Meth : RUN8270A

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
59) Diethylphthalate	7.94	149	201245	34.23	ug/kg	98
60) 4-Chlorophenyl phenyl ethe	8.06	204	145168	42.33	ug/kg	98
61) 4-Nitroaniline	8.09	138	37310	45.89	ug/kg	83
64) n-Nitrosodiphenylamine	8.18	169	206353	43.04	ug/kg	96
65) 1,2-Diphenylhydrazine	8.22	77	207848	33.04	ug/kg	99
67) 4-Bromophenyl-phenyl ether	8.55	248	98302	45.33	ug/kg	97
68) Hexachlorobenzene	8.63	284	110283	47.26	ug/kg	99
69) Atrazine	8.70	200	74492	46.94	ug/kg	92
71) Phenanthrene	9.03	178	367042	36.42	ug/kg	97
72) Anthracene	9.08	178	372718	37.09	ug/kg	97
73) Carbazole	9.23	167	299174	47.30	ug/kg#	86
74) Di-n-butylphthalate	9.55	149	302481	34.35	ug/kg	97
75) Fluoranthene	10.21	202	415680	38.76	ug/kg	96
78) Pyrene	10.44	202	430147	36.92	ug/kg	96
80) Butylbenzylphthalate	11.05	149	108947	33.24	ug/kg	98
81) Benzo(a)anthracene	11.68	228	383913	40.53	ug/kg	97
82) 3,3'-Dichlorobenzidine	11.64	252	87185m	54.37	ug/kg	
83) Chrysene	11.72	228	364218	38.50	ug/kg	96
84) bis(2-Ethylhexyl)phthalate	11.66	149	107567	25.47	ug/kg	98
86) Di-n-octylphthalate	12.40	149	155902	22.15	ug/kg	99
87) Benzo(b)fluoranthene	12.92	252	323116	38.08	ug/kg	97
88) Benzo(k)fluoranthene	12.95	252	331520m	35.73	ug/kg	
89) Benzo(a)pyrene	13.31	252	299339	36.43	ug/kg	97
90) Indeno(1,2,3-cd)pyrene	14.92	276	258961	31.69	ug/kg	99
91) Dibenzo(a,h)anthracene	14.93	278	200379	30.41	ug/kg	98
92) Benzo(g,h,i)perylene	15.39	276	228837	33.35	ug/kg	98

(#) = qualifier out of range (m) = manual integration

AS03569.D 0426ABNS.M

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SS

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Semivolatile Organics - GC/MS - Quality Control
Aqua Pro-Tech Laboratories

Batch B7L2204			Method: SW 846 8270D			Prepared: 12/26/2017			
Lab Number	Source	Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD Limit
B7L2204-BS2		Acenaphthene	35.4	ug/L	50.0		70.8	61.5-111	
B7L2204-BS2		Acenaphthylene	36.8	ug/L	50.0		73.6	65.2-114	
B7L2204-BS2		Anthracene	39.9	ug/L	50.0		79.9	67.9-129	
B7L2204-BS2		Benzo(g,h,i)perylene	31.7	ug/L	50.0		63.5	62-139	
B7L2204-BS2		Chrysene	39.7	ug/L	50.0		79.3	71.1-122	
B7L2204-BS2		Fluoranthene	42.8	ug/L	50.0		85.6	71.6-150	
B7L2204-BS2		Fluorene	37.5	ug/L	50.0		74.9	66.3-126	
B7L2204-BS2		Naphthalene	33.6	ug/L	50.0		67.1	57.1-110	
B7L2204-BS2		Phenanthrene	39.4	ug/L	50.0		78.8	66-128	
B7L2204-BS2		Pyrene	38.2	ug/L	50.0		76.4	64.9-107	

* - Outside of QC Limits

NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20171226\AS03593.D
 Acq On : 26 Dec 2017 19:10
 Sample : B7L2204-BS2
 Misc :

Vial: 5
 Operator: GCH
 Inst : GCMS-A
 Multiplr: 1.00

MS Integration Params: RTEINT.P
 Quant Time: Dec 28 12:32 2017

Quant Results File: 0426ABNS.RES

Quant Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C

Last Update : Thu Dec 28 12:26:46 2017

Response via : Initial Calibration

DataAcq Meth : RUN8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.60	152	163147	40.00	ug/kg	0.00
21) Naphthalene-d8	5.80	136	520667	40.00	ug/kg	0.00
39) Acenaphthene-d10	7.53	164	280813	40.00	ug/kg	0.00
62) Phenanthrene-d10	9.00	188	546634	40.00	ug/kg	0.00
76) Chrysene-d12	11.70	240	519056	40.00	ug/kg	0.00
85) Perylene-d12	13.37	264	462177	40.00	ug/kg	0.00

System Monitoring Compounds

4) 2-Fluorophenol	0.00	112	0d	0.00	ug/kg	
Spiked Amount	100.000	Range	15 - 48	Recovery	=	0.00%#
7) Phenol-d6	0.00	99	0d	0.00	ug/kg	
Spiked Amount	100.000	Range	15 - 53	Recovery	=	0.00%#
22) Nitrobenzene-d5	5.11	82	214038	38.17	ug/kg	-0.08
Spiked Amount	50.000	Range	34 - 81	Recovery	=	76.34%
44) 2-Fluorobiphenyl	6.85	172	455564	34.87	ug/kg	-0.01
Spiked Amount	50.000	Range	33 - 86	Recovery	=	69.74%
66) 2,4,6-Tribromophenol	0.00	330	0d	0.00	ug/kg	
Spiked Amount	100.000	Range	51 - 111	Recovery	=	0.00%#
79) p-Terphenyl-d14	10.57	244	496260	35.94	ug/kg	0.01
Spiked Amount	50.000	Range	47 - 86	Recovery	=	71.88%

Target Compounds

						Qvalue
2) Pyridine	2.32	79	128757	20.22	ng/uL	96
3) N-Nitroso-dimethylamine	2.28	42	42027	17.36	ng/uL	90
5) Benzaldehyde	4.29	77	9190m	3.42	ug/kg	
6) Aniline	4.29	93	213389	29.96	ug/kg	92
9) bis(2-Chloroethyl)ether	4.34	93	160198	29.84	ug/kg	98
11) 1,3-Dichlorobenzene	4.55	146	199412	31.48	ug/kg	94
12) 1,4-Dichlorobenzene	4.61	146	204964m	31.12	ug/kg	
13) Benzyl Alcohol	4.71	108	59276	17.30	ug/kg	80
14) 1,2-Dichlorobenzene	4.76	146	196473	32.42	ug/kg	95
16) bis(2-Chloroisopropyl)ethe	4.83	45	180626	26.64	ug/kg	94
17) Acetophenone	4.96	105	191346	29.12	ug/kg	88
19) n-Nitroso-di-n-propylamine	4.96	70	116647	40.47	ug/kg#	84
20) Hexachloroethane	5.07	117	80986	35.92	ug/kg	91
23) Nitrobenzene	5.13	77	208449	40.47	ug/kg	87
24) Isophorone	5.35	82	353147	43.01	ug/kg	95
27) bis(2-Chloroethoxy)methane	5.55	93	185298	35.59	ug/kg	100
30) 1,2,4-Trichlorobenzene	5.75	180	207809	40.73	ug/kg	97
31) Naphthalene	5.82	128	492165	33.56	ug/kg	97
33) 4-Chloroaniline	5.87	127	186651	40.29	ug/kg	93
34) Hexachlorobutadiene	5.94	225	148360	49.03	ug/kg	99
35) Caprolactam	6.17	113	4805	3.82	ug/kg	87
37) 2-Methylnaphthalene	6.50	142	351458	37.92	ug/kg	98
38) 1-Methylnaphthalene	6.60	142	340904	35.71	ng/uL	97
40) Hexachlorocyclopentadiene	6.66	237	89901	28.82	ug/kg	97
41) 1,2,4,5-Tetrachlorobenzene	6.67	216	246227	40.81	ug/kg	98
45) Biphenyl	6.95	154	437773	34.66	ug/kg	99
46) 2-Chloronaphthalene	6.98	162	360106	35.82	ug/kg	98
47) 2-Nitroaniline	7.08	138	101047	35.01	ug/kg	99
48) Dimethylphthalate	7.25	163	382374	38.43	ug/kg	99
49) Acenaphthylene	7.39	152	519733	36.79	ug/kg	97
50) 2,6-Dinitrotoluene	7.31	165	93226	47.48	ug/kg	96
51) 3-Nitroaniline	7.48	138	75097	54.07	ug/kg	92
52) Acenaphthene	7.56	153	361443	35.39	ug/kg	98
54) Dibenzofuran	7.73	168	525758	38.42	ug/kg	99
56) 2,4-Dinitrotoluene	7.72	165	117719	41.89	ug/kg	85
58) Fluorene	8.07	166	410363	37.47	ug/kg	99

(#) = qualifier out of range (m) = manual integration

AS03593.D 0426ABNS.M Fri Dec 29 15:29:05 2017 SS

Page 1

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20171226\AS03593.D

Vial: 5

Acq On : 26 Dec 2017 19:10

Operator: GCH

Sample : B7L2204-BS2

Inst : GCMS-A

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 28 12:32 2017

Quant Results File: 0426ABNS.RES

Quant Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C

Last Update : Thu Dec 28 12:26:46 2017

Response via : Initial Calibration

DataAcq Meth : RUN8270A

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
59) Diethylphthalate	7.94	149	355868	39.38	ug/kg	98
60) 4-Chlorophenyl phenyl ethe	8.06	204	240794	45.69	ug/kg	99
61) 4-Nitroaniline	8.09	138	64345	51.49	ug/kg	91
64) n-Nitrosodiphenylamine	8.18	169	340311	46.08	ug/kg	97
65) 1,2-Diphenylhydrazine	8.22	77	362431	37.40	ug/kg	98
67) 4-Bromophenyl-phenyl ether	8.55	248	156716	46.91	ug/kg	96
68) Hexachlorobenzene	8.63	284	172859	48.09	ug/kg	98
69) Atrazine	8.70	200	122708	50.20	ug/kg	93
71) Phenanthrene	9.03	178	611289	39.38	ug/kg	97
72) Anthracene	9.08	178	618394	39.95	ug/kg	98
73) Carbazole	9.23	167	512491	52.60	ug/kg#	87
74) Di-n-butylphthalate	9.55	149	514688	37.94	ug/kg	98
75) Fluoranthene	10.21	202	707125	42.80	ug/kg	95
78) Pyrene	10.44	202	718979	38.18	ug/kg	96
80) Butylbenzylphthalate	11.05	149	196898	37.16	ug/kg	97
81) Benzo(a)anthracene	11.69	228	643566	42.03	ug/kg	98
82) 3,3'-Dichlorobenzidine	11.64	252	177862	68.62	ug/kg	99
83) Chrysene	11.72	228	606489	39.67	ug/kg	96
84) bis(2-Ethylhexyl)phthalate	11.66	149	164731	24.14	ug/kg	97
86) Di-n-octylphthalate	12.40	149	245042	22.62	ug/kg	98
87) Benzo(b)fluoranthene	12.92	252	510418	39.08	ug/kg	98
88) Benzo(k)fluoranthene	12.95	252	530582m	37.15	ug/kg	
89) Benzo(a)pyrene	13.31	252	461430	36.49	ug/kg	98
90) Indeno(1,2,3-cd)pyrene	14.93	276	378962	30.13	ug/kg	99
91) Dibenzo(a,h)anthracene	14.93	278	295067	29.09	ug/kg	99
92) Benzo(g,h,i)perylene	15.40	276	335141	31.74	ug/kg	98

(#) = qualifier out of range (m) = manual integration

AS03593.D 0426ABNS.M

Fri Dec 29 15:29:05 2017

SS

Page 2

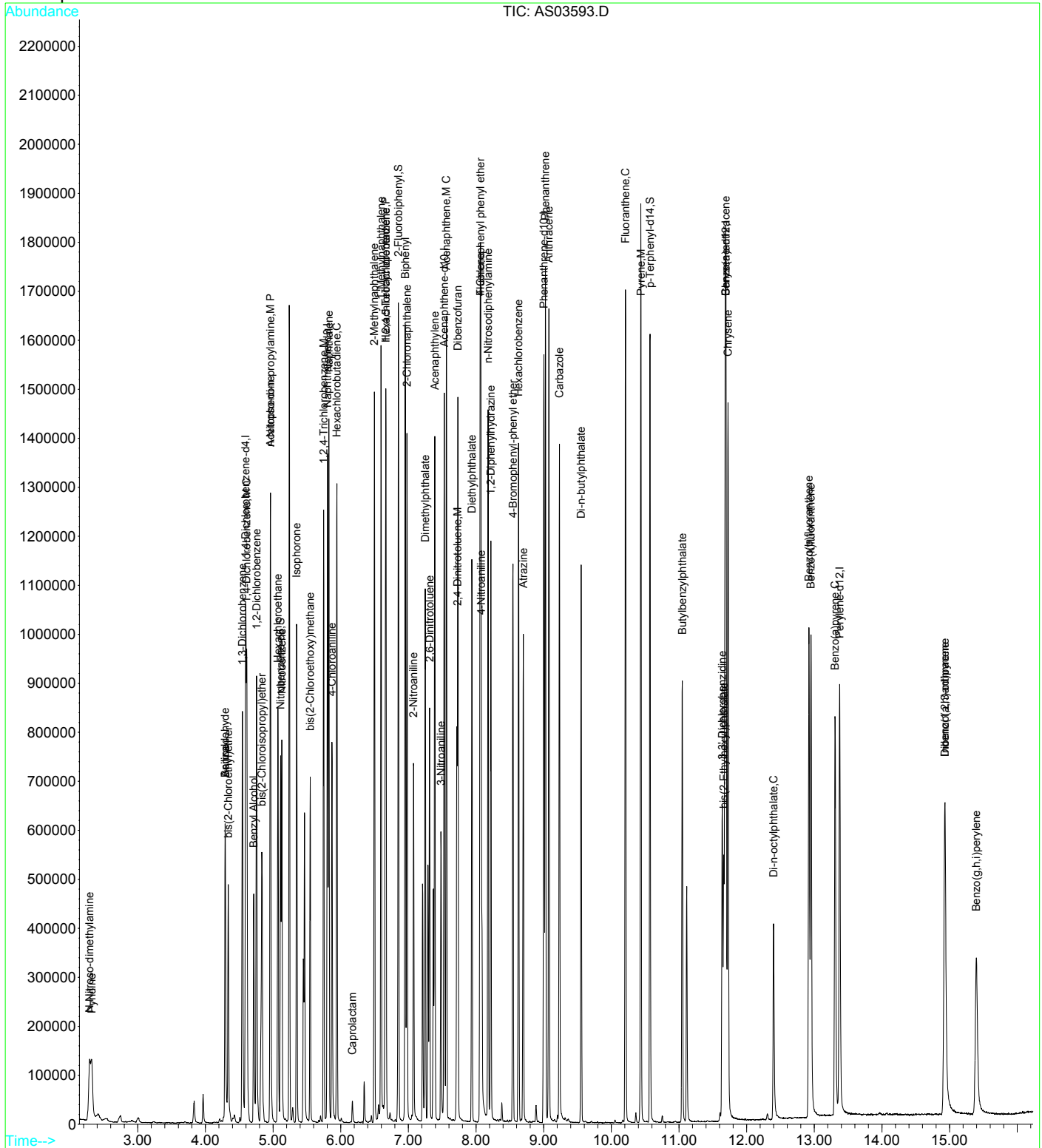
Quantitation Report

Data File : G:\HPCHEM\A\DATA\20171226\AS03593.D
 Acq On : 26 Dec 2017 19:10
 Sample : B7L2204-BS2
 Misc :
 MS Integration Params: RTEINT.P
 Quant Time: Dec 28 12:32 2017

Vial: 5
 Operator: GCH
 Inst : GCMS-A
 Multiplr: 1.00

Quant Results File: 0426ABNS.RES

Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)
 Title : BNA Extractables GC/MS 8270C
 Last Update : Wed Dec 20 18:30:37 2017
 Response via : Initial Calibration



AS03593.D 0426ABNS.M

Fri Dec 29 15:29:06 2017

SS

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Semivolatile Organics - GC/MS - Quality Control
Aqua Pro-Tech Laboratories

Batch B7L2204			Method: SW 846 8270D			Prepared: 12/22/2017				
Lab Number	Source	Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
B7L2204-MS1	7120602-01	Acenaphthene	87.2	ug/L	100	2.29	84.9	44.9-140		
B7L2204-MS1	7120602-01	Acenaphthylene	88.9	ug/L	100	ND	88.9	66.7-122		
B7L2204-MS1	7120602-01	Anthracene	92.2	ug/L	100	ND	92.2	72-124		
B7L2204-MS1	7120602-01	Benzo(g,h,i)perylene	75.5	ug/L	100	ND	75.5	34.1-151		
B7L2204-MS1	7120602-01	Chrysene	91.1	ug/L	100	ND	91.1	61.3-124		
B7L2204-MS1	7120602-01	Fluoranthene	97.2	ug/L	100	ND	97.2	74.2-128		
B7L2204-MS1	7120602-01	Fluorene	92.1	ug/L	100	2.89	89.2	68.2-119		
B7L2204-MS1	7120602-01	Naphthalene	82.5	ug/L	100	ND	82.5	38.7-133		
B7L2204-MS1	7120602-01	Phenanthrene	94.3	ug/L	100	0.949	93.4	69.4-127		
B7L2204-MS1	7120602-01	Pyrene	87.6	ug/L	100	ND	87.6	67.7-124		

* - Outside of QC Limits

NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20171222\AS03582.D

Vial: 20

Acq On : 23 Dec 2017 2:05

Operator: GCH

Sample : B7L2204-MS1

Inst : GCMS-A

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 28 12:28 2017

Quant Results File: 0426ABNS.RES

Quant Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C

Last Update : Thu Dec 28 12:26:46 2017

Response via : Initial Calibration

DataAcq Meth : RUN8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.60	152	99727	40.00	ug/kg	0.00
21) Naphthalene-d8	5.80	136	322834	40.00	ug/kg	0.00
39) Acenaphthene-d10	7.53	164	172554	40.00	ug/kg	0.00
62) Phenanthrene-d10	9.00	188	330060	40.00	ug/kg	0.00
76) Chrysene-d12	11.69	240	314881	40.00	ug/kg	0.00
85) Perylene-d12	13.37	264	282474	40.00	ug/kg	0.00

System Monitoring Compounds

4) 2-Fluorophenol	0.00	112	0d	0.00	ug/kg	
Spiked Amount	100.000	Range	15 - 48	Recovery	=	0.00%#
7) Phenol-d6	0.00	99	0d	0.00	ug/kg	
Spiked Amount	100.000	Range	15 - 53	Recovery	=	0.00%#
22) Nitrobenzene-d5	5.11	82	74915	21.55	ug/kg	-0.08
Spiked Amount	50.000	Range	34 - 81	Recovery	=	43.10%
44) 2-Fluorobiphenyl	6.85	172	162527	20.24	ug/kg	-0.01
Spiked Amount	50.000	Range	33 - 86	Recovery	=	40.48%
66) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug/kg	
Spiked Amount	100.000	Range	51 - 111	Recovery	=	0.00%#
79) p-Terphenyl-d14	10.57	244	155291	18.54	ug/kg	0.01
Spiked Amount	50.000	Range	47 - 86	Recovery	=	37.08%#

Target Compounds

						Qvalue
2) Pyridine	2.32	79	80947	20.80	ng/uL	99
3) N-Nitroso-dimethylamine	2.29	42	27265	18.43	ng/uL	92
5) Benzaldehyde	4.21	77	2722	1.66	ug/kg	87
6) Aniline	4.29	93	152754	35.09	ug/kg	91
9) bis(2-Chloroethyl) ether	4.34	93	113655	34.64	ug/kg	99
11) 1,3-Dichlorobenzene	4.55	146	149611	38.64	ug/kg	94
12) 1,4-Dichlorobenzene	4.55	146	149586	37.15	ug/kg	94
13) Benzyl Alcohol	4.71	108	40100	19.15	ug/kg	77
14) 1,2-Dichlorobenzene	4.76	146	144802	39.09	ug/kg	95
16) bis(2-Chloroisopropyl) ethe	4.84	45	130308	31.44	ug/kg#	61
17) Acetophenone	4.96	105	180345	44.89	ug/kg	90
19) n-Nitroso-di-n-propylamine	4.96	70	82245	46.68	ug/kg	87
20) Hexachloroethane	5.07	117	70857	51.41	ug/kg	86
23) Nitrobenzene	5.13	77	154241	48.29	ug/kg	88
24) Isophorone	5.35	82	250264	49.16	ug/kg	95
27) bis(2-Chloroethoxy) methane	5.55	93	134325	41.61	ug/kg	97
30) 1,2,4-Trichlorobenzene	5.75	180	155545	49.17	ug/kg	99
31) Naphthalene	5.82	128	375314	41.27	ug/kg	96
33) 4-Chloroaniline	5.87	127	136475	47.51	ug/kg	93
34) Hexachlorobutadiene	5.94	225	113505	60.50	ug/kg	99
35) Caprolactam	6.18	113	3763	4.83	ug/kg	96
37) 2-Methylnaphthalene	6.50	142	269723	46.93	ug/kg	97
38) 1-Methylnaphthalene	6.60	142	302452	51.09	ng/uL	96
40) Hexachlorocyclopentadiene	6.66	237	64606	33.71	ug/kg	97
41) 1,2,4,5-Tetrachlorobenzene	6.67	216	188001	50.71	ug/kg	98
45) Biphenyl	6.96	154	324721	41.84	ug/kg	98
46) 2-Chloronaphthalene	6.98	162	270917	43.86	ug/kg	98
47) 2-Nitroaniline	7.08	138	73633	41.52	ug/kg	98
48) Dimethylphthalate	7.25	163	294945	48.24	ug/kg	98
49) Acenaphthylene	7.39	152	386068	44.47	ug/kg	98
50) 2,6-Dinitrotoluene	7.31	165	67469	55.92	ug/kg	97
51) 3-Nitroaniline	7.48	138	53527	62.72	ug/kg	93
52) Acenaphthene	7.56	153	273613	43.59	ug/kg	99
54) Dibenzofuran	7.73	168	392892	46.72	ug/kg	98
56) 2,4-Dinitrotoluene	7.72	165	86865	50.30	ug/kg#	74
58) Fluorene	8.07	166	310009	46.07	ug/kg	98

(#)= qualifier out of range (m)= manual integration

AS03582.D 0426ABNS.M

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Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20171222\AS03582.D Vial: 20
 Acq On : 23 Dec 2017 2:05 Operator: GCH
 Sample : B7L2204-MS1 Inst : GCMS-A
 Misc : Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 28 12:28 2017

Quant Results File: 0426ABNS.RES

Quant Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C

Last Update : Thu Dec 28 12:26:46 2017

Response via : Initial Calibration

DataAcq Meth : RUN8270A

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
59) Diethylphthalate	7.94	149	259378	46.71	ug/kg	98
60) 4-Chlorophenyl phenyl ethe	8.06	204	170476	52.64	ug/kg	98
61) 4-Nitroaniline	8.09	138	49239	64.13	ug/kg	92
63) 4,6-Dinitro-2-methylphenol	8.14	198	213	0.56	ug/kg#	40
64) n-Nitrosodiphenylamine	8.18	169	257497	57.74	ug/kg	95
65) 1,2-Diphenylhydrazine	8.22	77	257181	43.96	ug/kg	98
67) 4-Bromophenyl-phenyl ether	8.55	248	115275	57.15	ug/kg	96
68) Hexachlorobenzene	8.63	284	124041	57.15	ug/kg	99
69) Atrazine	8.70	200	89431	60.60	ug/kg	92
71) Phenanthrene	9.03	178	441916	47.15	ug/kg	98
72) Anthracene	9.08	178	430686	46.08	ug/kg	98
73) Carbazole	9.23	167	372274	63.28	ug/kg#	88
74) Di-n-butylphthalate	9.55	149	356062	43.47	ug/kg	98
75) Fluoranthene	10.21	202	484949	48.62	ug/kg	96
78) Pyrene	10.44	202	500231	43.79	ug/kg	96
80) Butylbenzylphthalate	11.05	149	142027	44.19	ug/kg	99
81) Benzo(a)anthracene	11.68	228	441868	47.57	ug/kg	98
82) 3,3'-Dichlorobenzidine	11.64	252	131763	83.80	ug/kg	98
83) Chrysene	11.72	228	422354	45.53	ug/kg	96
84) bis(2-Ethylhexyl)phthalate	11.66	149	115949	28.00	ug/kg	98
86) Di-n-octylphthalate	12.39	149	164308	24.82	ug/kg	99
87) Benzo(b)fluoranthene	12.92	252	358814	44.95	ug/kg	98
88) Benzo(k)fluoranthene	12.95	252	371969m	42.61	ug/kg	
89) Benzo(a)pyrene	13.31	252	335205	43.37	ug/kg	98
90) Indeno(1,2,3-cd)pyrene	14.93	276	291242	37.89	ug/kg	99
91) Dibenzo(a,h)anthracene	14.93	278	239150	38.58	ug/kg	98
92) Benzo(g,h,i)perylene	15.39	276	243756	37.77	ug/kg	98

(#) = qualifier out of range (m) = manual integration

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Semivolatile Organics - GC/MS - Quality Control
Aqua Pro-Tech Laboratories

Batch B7L2204			Method: SW 846 8270D			Prepared: 12/22/2017				
Lab Number	Source	Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
B7L2204-MSD1	7120602-01	Acenaphthene	80.5	ug/L	100	2.29	78.2	44.9-140	7.98	20
B7L2204-MSD1	7120602-01	Acenaphthylene	81.9	ug/L	100	ND	81.9	66.7-122	8.18	20
B7L2204-MSD1	7120602-01	Anthracene	84.5	ug/L	100	ND	84.5	72-124	8.71	20
B7L2204-MSD1	7120602-01	Benzo(g,h,i)perylene	67.5	ug/L	100	ND	67.5	34.1-151	11.3	20
B7L2204-MSD1	7120602-01	Chrysene	83.5	ug/L	100	ND	83.5	61.3-124	8.71	20
B7L2204-MSD1	7120602-01	Fluoranthene	91.3	ug/L	100	ND	91.3	74.2-128	6.25	20
B7L2204-MSD1	7120602-01	Fluorene	84.6	ug/L	100	2.89	81.7	68.2-119	8.59	20
B7L2204-MSD1	7120602-01	Naphthalene	74.9	ug/L	100	ND	74.9	38.7-133	9.67	20
B7L2204-MSD1	7120602-01	Phenanthrene	85.7	ug/L	100	0.949	84.7	69.4-127	9.56	20
B7L2204-MSD1	7120602-01	Pyrene	81.3	ug/L	100	ND	81.3	67.7-124	7.43	20

* - Outside of QC Limits

NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20171222\AS03583.D

Vial: 21

Acq On : 23 Dec 2017 2:28

Operator: GCH

Sample : B7L2204-MSD1

Inst : GCMS-A

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 28 12:29 2017

Quant Results File: 0426ABNS.RES

Quant Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C

Last Update : Thu Dec 28 12:26:46 2017

Response via : Initial Calibration

DataAcq Meth : RUN8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.59	152	110577	40.00	ug/kg	0.00
21) Naphthalene-d8	5.80	136	358077	40.00	ug/kg	0.00
39) Acenaphthene-d10	7.53	164	191146	40.00	ug/kg	0.00
62) Phenanthrene-d10	9.00	188	367120	40.00	ug/kg	0.00
76) Chrysene-d12	11.69	240	351628	40.00	ug/kg	0.00
85) Perylene-d12	13.37	264	315146	40.00	ug/kg	0.00

System Monitoring Compounds

4) 2-Fluorophenol	0.00	112	0d	0.00	ug/kg	
Spiked Amount	100.000	Range	15 - 48	Recovery	=	0.00%#
7) Phenol-d6	0.00	99	0d	0.00	ug/kg	
Spiked Amount	100.000	Range	15 - 53	Recovery	=	0.00%#
22) Nitrobenzene-d5	5.11	82	74780	19.39	ug/kg	-0.08
Spiked Amount	50.000	Range	34 - 81	Recovery	=	38.78%
44) 2-Fluorobiphenyl	6.85	172	158680	17.84	ug/kg	-0.01
Spiked Amount	50.000	Range	33 - 86	Recovery	=	35.68%
66) 2,4,6-Tribromophenol	0.00	330	0d	0.00	ug/kg	
Spiked Amount	100.000	Range	51 - 111	Recovery	=	0.00%#
79) p-Terphenyl-d14	10.57	244	156020	16.68	ug/kg	0.01
Spiked Amount	50.000	Range	47 - 86	Recovery	=	33.36%#

Target Compounds

						Qvalue
2) Pyridine	2.32	79	81966	19.00	ng/uL	99
3) N-Nitroso-dimethylamine	2.28	42	27672	16.87	ng/uL	92
5) Benzaldehyde	4.21	77	2817	1.55	ug/kg	89
6) Aniline	4.29	93	150833	31.25	ug/kg	90
9) bis(2-Chloroethyl) ether	4.34	93	115437	31.73	ug/kg	98
11) 1,3-Dichlorobenzene	4.55	146	148301	34.54	ug/kg	93
12) 1,4-Dichlorobenzene	4.55	146	148301	33.22	ug/kg	94
13) Benzyl Alcohol	4.71	108	39981	17.22	ug/kg	77
14) 1,2-Dichlorobenzene	4.76	146	145424	35.40	ug/kg	95
16) bis(2-Chloroisopropyl) ethe	4.84	45	128576	27.98	ug/kg	74
17) Acetophenone	4.96	105	182697	41.02	ug/kg	91
19) n-Nitroso-di-n-propylamine	4.96	70	84467	43.23	ug/kg	87
20) Hexachloroethane	5.07	117	70471	46.11	ug/kg	86
23) Nitrobenzene	5.13	77	157832	44.55	ug/kg	88
24) Isophorone	5.35	82	253352	44.86	ug/kg	96
27) bis(2-Chloroethoxy) methane	5.55	93	138048	38.55	ug/kg	97
30) 1,2,4-Trichlorobenzene	5.75	180	156412	44.58	ug/kg	99
31) Naphthalene	5.83	128	377898	37.46	ug/kg	96
33) 4-Chloroaniline	5.87	127	137806	43.25	ug/kg	91
34) Hexachlorobutadiene	5.94	225	113108	54.35	ug/kg	99
35) Caprolactam	6.18	113	4105	4.75	ug/kg	93
37) 2-Methylnaphthalene	6.50	142	269491	42.28	ug/kg	96
38) 1-Methylnaphthalene	6.60	142	308573	47.00	ng/uL#	96
40) Hexachlorocyclopentadiene	6.66	237	67605	31.84	ug/kg	97
41) 1,2,4,5-Tetrachlorobenzene	6.67	216	189005	46.03	ug/kg	98
45) Biphenyl	6.95	154	325967	37.92	ug/kg	98
46) 2-Chloronaphthalene	6.98	162	276477	40.40	ug/kg	98
47) 2-Nitroaniline	7.08	138	74700	38.02	ug/kg	98
48) Dimethylphthalate	7.25	163	298758	44.11	ug/kg	100
49) Acenaphthylene	7.39	152	394042	40.97	ug/kg	97
50) 2,6-Dinitrotoluene	7.31	165	70249	52.57	ug/kg	95
51) 3-Nitroaniline	7.48	138	55396	58.59	ug/kg	93
52) Acenaphthene	7.56	153	279826	40.25	ug/kg	99
54) Dibenzofuran	7.73	168	400745	43.02	ug/kg	98
56) 2,4-Dinitrotoluene	7.72	165	89650	46.87	ug/kg#	75
58) Fluorene	8.07	166	315126	42.28	ug/kg	98

(#)= qualifier out of range (m)= manual integration

AS03583.D 0426ABNS.M

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SS

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Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20171222\AS03583.D

Vial: 21

Acq On : 23 Dec 2017 2:28

Operator: GCH

Sample : B7L2204-MSD1

Inst : GCMS-A

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 28 12:29 2017

Quant Results File: 0426ABNS.RES

Quant Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C

Last Update : Thu Dec 28 12:26:46 2017

Response via : Initial Calibration

DataAcq Meth : RUN8270A

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
59) Diethylphthalate	7.94	149	263807	42.89	ug/kg	98
60) 4-Chlorophenyl phenyl ethe	8.06	204	177171	49.39	ug/kg	99
61) 4-Nitroaniline	8.09	138	50117	58.92	ug/kg	91
64) n-Nitrosodiphenylamine	8.18	169	265243	53.47	ug/kg	94
65) 1,2-Diphenylhydrazine	8.22	77	262561	40.35	ug/kg	97
67) 4-Bromophenyl-phenyl ether	8.55	248	119656	53.33	ug/kg	95
68) Hexachlorobenzene	8.63	284	127307	52.74	ug/kg	99
69) Atrazine	8.70	200	90132	54.91	ug/kg	93
71) Phenanthrene	9.03	178	446683	42.85	ug/kg	98
72) Anthracene	9.08	178	439050	42.23	ug/kg	98
73) Carbazole	9.23	167	380415	58.14	ug/kg#	86
74) Di-n-butylphthalate	9.56	149	362293	39.77	ug/kg	98
75) Fluoranthene	10.21	202	506689	45.67	ug/kg	96
78) Pyrene	10.44	202	518566	40.65	ug/kg	96
80) Butylbenzylphthalate	11.05	149	143048	39.86	ug/kg	99
81) Benzo(a)anthracene	11.68	228	449707	43.36	ug/kg	98
82) 3,3'-Dichlorobenzidine	11.64	252	135224	77.01	ug/kg	97
83) Chrysene	11.72	228	432281	41.73	ug/kg	96
84) bis(2-Ethylhexyl)phthalate	11.66	149	115494	24.98	ug/kg	98
86) Di-n-octylphthalate	12.39	149	164567	22.28	ug/kg	98
87) Benzo(b)fluoranthene	12.92	252	365916	41.09	ug/kg	98
88) Benzo(k)fluoranthene	12.95	252	381551m	39.18	ug/kg	
89) Benzo(a)pyrene	13.31	252	345149	40.03	ug/kg	98
90) Indeno(1,2,3-cd)pyrene	14.93	276	297052	34.64	ug/kg	99
91) Dibenzo(a,h)anthracene	14.93	278	241263	34.89	ug/kg	99
92) Benzo(g,h,i)perylene	15.39	276	242883	33.73	ug/kg	99

(#) = qualifier out of range (m) = manual integration

AS03583.D 0426ABNS.M

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SS

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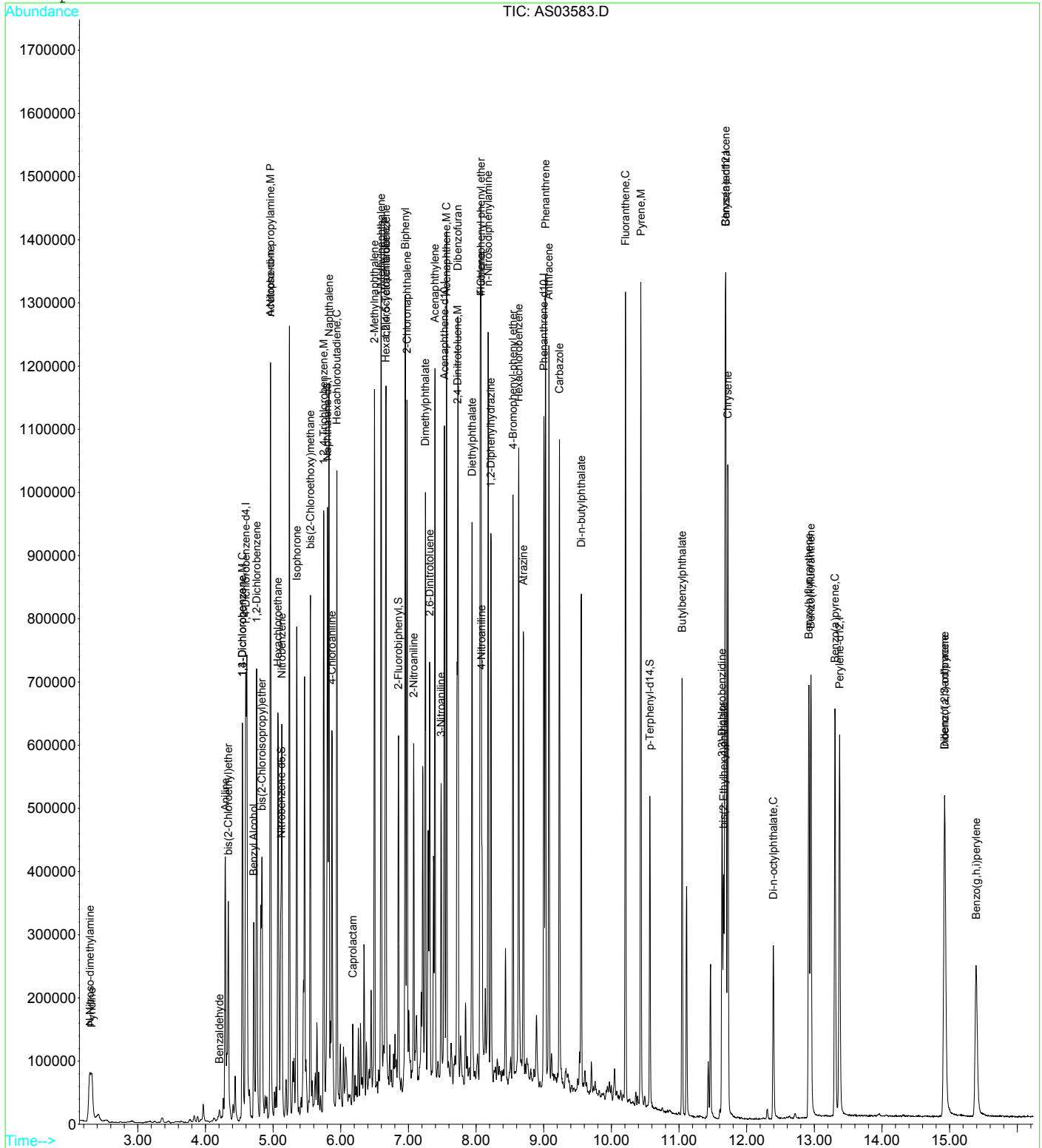
Quantitation Report

Data File : G:\HPCHEM\A\DATA\20171222\AS03583.D
 Acq On : 23 Dec 2017 2:28
 Sample : B7L2204-MSD1
 Misc :
 MS Integration Params: RTEINT.P
 Quant Time: Dec 28 12:29 2017

Vial: 21
 Operator: GCH
 Inst : GCMS-A
 Multiplr: 1.00

Quant Results File: 0426ABNS.RES

Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)
 Title : BNA Extractables GC/MS 8270C
 Last Update : Wed Dec 20 18:30:37 2017
 Response via : Initial Calibration



AS03583.D 0426ABNS.M

Thu Jan 25 11:40:55 2018

SS

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Semivolatile Organics - GC/MS - Quality Control
Aqua Pro-Tech Laboratories

Batch B7L2608			Method: SW 846 8270D			Prepared: 12/26/2017			
Lab Number	Source	Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD Limit
B7L2608-BS1		Acenaphthene	39.0	ug/L	50.0		78.1	61.5-111	
B7L2608-BS1		Acenaphthylene	40.6	ug/L	50.0		81.2	65.2-114	
B7L2608-BS1		Anthracene	45.2	ug/L	50.0		90.4	67.9-129	
B7L2608-BS1		Benzo(g,h,i)perylene	43.4	ug/L	50.0		86.9	62-139	
B7L2608-BS1		Chrysene	46.5	ug/L	50.0		93.1	71.1-122	
B7L2608-BS1		Fluoranthene	49.0	ug/L	50.0		97.9	71.6-150	
B7L2608-BS1		Fluorene	42.1	ug/L	50.0		84.2	66.3-126	
B7L2608-BS1		Naphthalene	33.4	ug/L	50.0		66.8	57.1-110	
B7L2608-BS1		Phenanthrene	44.9	ug/L	50.0		89.7	66-128	
B7L2608-BS1		Pyrene	42.8	ug/L	50.0		85.6	64.9-107	

* - Outside of QC Limits

NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20171226\AS03595.D
 Acq On : 26 Dec 2017 19:56
 Sample : B7L2608-BS1
 Misc :

Vial: 7
 Operator: GCH
 Inst : GCMS-A
 Multiplr: 1.00

MS Integration Params: RTEINT.P
 Quant Time: Dec 28 12:34 2017

Quant Results File: 0426ABNS.RES

Quant Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C

Last Update : Thu Dec 28 12:26:46 2017

Response via : Initial Calibration

DataAcq Meth : RUN8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.59	152	163930	40.00	ug/kg	0.00
21) Naphthalene-d8	5.80	136	529053	40.00	ug/kg	0.00
39) Acenaphthene-d10	7.53	164	275003	40.00	ug/kg	0.00
62) Phenanthrene-d10	9.00	188	544890	40.00	ug/kg	0.00
76) Chrysene-d12	11.70	240	534354	40.00	ug/kg	0.00
85) Perylene-d12	13.37	264	471714	40.00	ug/kg	0.00

System Monitoring Compounds

4) 2-Fluorophenol	3.44	112	168786	27.49	ug/kg	-0.10
Spiked Amount 100.000	Range 15 - 48		Recovery =	27.49%		
7) Phenol-d6	4.25	99	140819	20.24	ug/kg	-0.01
Spiked Amount 100.000	Range 15 - 53		Recovery =	20.24%		
22) Nitrobenzene-d5	5.11	82	218595	38.37	ug/kg	-0.08
Spiked Amount 50.000	Range 34 - 81		Recovery =	76.74%		
44) 2-Fluorobiphenyl	6.85	172	475976	37.20	ug/kg	-0.01
Spiked Amount 50.000	Range 33 - 86		Recovery =	74.40%		
66) 2,4,6-Tribromophenol	8.31	330	184355	107.97	ug/kg	0.00
Spiked Amount 100.000	Range 51 - 111		Recovery =	107.97%		
79) p-Terphenyl-d14	10.57	244	588463	41.40	ug/kg	0.01
Spiked Amount 50.000	Range 47 - 86		Recovery =	82.80%		

Target Compounds

						Qvalue
2) Pyridine	2.32	79	97936	15.31	ng/uL	93
3) N-Nitroso-dimethylamine	2.29	42	73477	30.21	ng/uL	88
5) Benzaldehyde	4.20	77	167618	62.14	ug/kg	87
6) Aniline	4.29	93	215565	30.12	ug/kg	89
8) Phenol	4.26	94	102866m	15.05	ug/kg	
9) bis(2-Chloroethyl)ether	4.34	93	164269	30.46	ug/kg	99
10) 2-Chlorophenol	4.40	128	167108	29.00	ug/kg	98
11) 1,3-Dichlorobenzene	4.55	146	179144	28.15	ug/kg	94
12) 1,4-Dichlorobenzene	4.61	146	185580m	28.04	ug/kg	
13) Benzyl Alcohol	4.71	108	91294	26.52	ug/kg	79
14) 1,2-Dichlorobenzene	4.76	146	179078	29.41	ug/kg	95
15) 2-Methylphenol	4.82	108	132046	26.97	ug/kg	88
16) bis(2-Chloroisopropyl)ethe	4.84	45	198493	29.13	ug/kg	80
17) Acetophenone	4.96	105	265289	40.17	ug/kg	95
18) 3+4-Methylphenol	4.96	108	132136m	26.47	ug/kg	
19) n-Nitroso-di-n-propylamine	4.96	70	124750	43.07	ug/kg#	90
20) Hexachloroethane	5.07	117	68599	30.28	ug/kg	90
23) Nitrobenzene	5.13	77	216278	41.32	ug/kg	88
24) Isophorone	5.35	82	371101	44.48	ug/kg	94
25) 2-Nitrophenol	5.44	139	91364	37.03	ug/kg#	87
26) 2,4-Dimethylphenol	5.46	107	164901	36.19	ug/kg	87
27) bis(2-Chloroethoxy)methane	5.55	93	192902	36.46	ug/kg	99
28) 2,4-Dichlorophenol	5.66	162	172978	42.65	ug/kg	98
30) 1,2,4-Trichlorobenzene	5.75	180	198770	38.34	ug/kg	99
31) Naphthalene	5.82	128	498122	33.42	ug/kg	97
33) 4-Chloroaniline	5.87	127	193698	41.15	ug/kg	93
34) Hexachlorobutadiene	5.94	225	131469	42.76	ug/kg	99
35) Caprolactam	6.19	113	11934	9.34	ug/kg	85
36) 4-Chloro-3-methylphenol	6.34	107	157857	43.12	ug/kg	87
37) 2-Methylnaphthalene	6.50	142	377592	40.09	ug/kg	97
38) 1-Methylnaphthalene	6.60	142	356955	36.80	ng/uL	97
40) Hexachlorocyclopentadiene	6.66	237	89328	29.24	ug/kg	98
41) 1,2,4,5-Tetrachlorobenzene	6.67	216	261077	44.19	ug/kg	98
42) 2,4,6-Trichlorophenol	6.78	196	144612	44.67	ug/kg	98
43) 2,4,5-Trichlorophenol	6.82	196	151176	45.22	ug/kg	97
45) Biphenyl	6.95	154	471358	38.11	ug/kg	98

(#) = qualifier out of range (m) = manual integration

AS03595.D 0426ABNS.M Fri Dec 29 15:29:09 2017 SS

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Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20171226\AS03595.D
 Acq On : 26 Dec 2017 19:56
 Sample : B7L2608-BS1
 Misc :

Vial: 7
 Operator: GCH
 Inst : GCMS-A
 Multiplr: 1.00

MS Integration Params: RTEINT.P
 Quant Time: Dec 28 12:34 2017

Quant Results File: 0426ABNS.RES

Quant Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)
 Title : BNA Extractables GC/MS 8270C
 Last Update : Thu Dec 28 12:26:46 2017
 Response via : Initial Calibration
 DataAcq Meth : RUN8270A

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
46) 2-Chloronaphthalene	6.98	162	383945	39.00	ug/kg	99
47) 2-Nitroaniline	7.08	138	112687	39.87	ug/kg	99
48) Dimethylphthalate	7.25	163	443232	45.48	ug/kg	100
49) Acenaphthylene	7.39	152	561471	40.58	ug/kg	98
50) 2,6-Dinitrotoluene	7.31	165	103628	53.90	ug/kg	95
51) 3-Nitroaniline	7.48	138	83373	61.30	ug/kg	94
52) Acenaphthene	7.56	153	390460	39.03	ug/kg	98
53) 2,4-Dinitrophenol	7.60	184	6408	24.34	ug/kg	91
54) Dibenzofuran	7.73	168	576563	43.02	ug/kg	99
55) 4-Nitrophenol	7.66	65	10271m	7.93	ug/kg	
56) 2,4-Dinitrotoluene	7.72	165	136183	49.48	ug/kg#	77
57) 2,3,4,6-Tetrachlorophenol	7.86	232	138719	52.71	ug/kg	95
58) Fluorene	8.07	166	451724	42.12	ug/kg	98
59) Diethylphthalate	7.94	149	402741	45.51	ug/kg	98
60) 4-Chlorophenyl phenyl ethe	8.06	204	266647	51.67	ug/kg	98
61) 4-Nitroaniline	8.09	138	65685	53.68	ug/kg	86
63) 4,6-Dinitro-2-methylphenol	8.13	198	44030	40.21	ug/kg	96
64) n-Nitrosodiphenylamine	8.18	169	372020	50.53	ug/kg	98
65) 1,2-Diphenylhydrazine	8.22	77	398631	41.27	ug/kg	99
67) 4-Bromophenyl-phenyl ether	8.55	248	179270	53.84	ug/kg	97
68) Hexachlorobenzene	8.63	284	197911	55.24	ug/kg	99
69) Atrazine	8.70	200	139882	57.41	ug/kg	92
70) Pentachlorophenol	8.82	266	59706	30.38	ug/kg	98
71) Phenanthrene	9.03	178	693980	44.85	ug/kg	97
72) Anthracene	9.08	178	697147	45.18	ug/kg	98
73) Carbazole	9.23	167	520840	53.63	ug/kg#	87
74) Di-n-butylphthalate	9.55	149	591417	43.74	ug/kg	98
75) Fluoranthene	10.21	202	806298	48.96	ug/kg	96
78) Pyrene	10.44	202	829467	42.79	ug/kg	96
80) Butylbenzylphthalate	11.05	149	245354	44.98	ug/kg	99
81) Benzo(a)anthracene	11.68	228	773226	49.06	ug/kg	98
82) 3,3'-Dichlorobenzidine	11.64	252	129889	48.68	ug/kg	99
83) Chrysene	11.72	228	732615	46.54	ug/kg	96
84) bis(2-Ethylhexyl)phthalate	11.66	149	311088	44.28	ug/kg	97
86) Di-n-octylphthalate	12.40	149	445844	40.33	ug/kg	99
87) Benzo(b)fluoranthene	12.92	252	659355	49.47	ug/kg	98
88) Benzo(k)fluoranthene	12.95	252	705337m	48.38	ug/kg	
89) Benzo(a)pyrene	13.31	252	608407	47.14	ug/kg	98
90) Indeno(1,2,3-cd)pyrene	14.93	276	549629	42.82	ug/kg	99
91) Dibenzo(a,h)anthracene	14.93	278	437373	42.25	ug/kg	99
92) Benzo(g,h,i)perylene	15.40	276	468118	43.43	ug/kg	98

(#) = qualifier out of range (m) = manual integration

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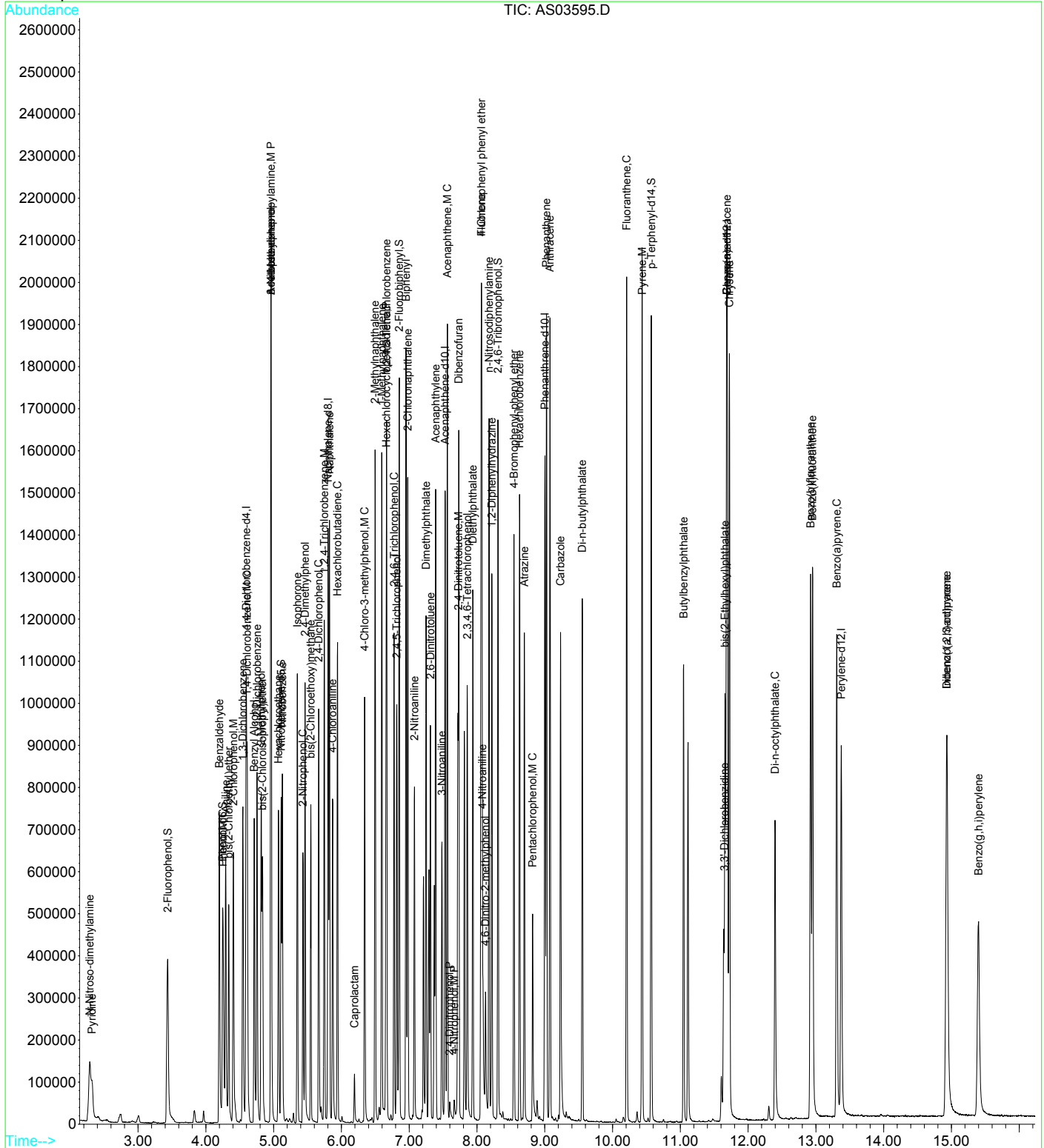
Quantitation Report

Data File : G:\HPCHEM\A\DATA\20171226\AS03595.D
 Acq On : 26 Dec 2017 19:56
 Sample : B7L2608-BS1
 Misc :
 MS Integration Params: RTEINT.P
 Quant Time: Dec 28 12:34 2017

Vial: 7
 Operator: GCH
 Inst : GCMS-A
 Multiplr: 1.00

Quant Results File: 0426ABNS.RES

Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)
 Title : BNA Extractables GC/MS 8270C
 Last Update : Wed Dec 20 18:30:37 2017
 Response via : Initial Calibration



AS03595.D 0426ABNS.M

Fri Dec 29 15:29:10 2017

SS

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Semivolatile Organics - GC/MS - Quality Control
Aqua Pro-Tech Laboratories

Batch B7L2608			Method: SW 846 8270D			Prepared: 12/26/2017				
Lab Number	Source	Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
B7L2608-MS1	7120685-01	Acenaphthene	83.7	ug/L	100	ND	83.7	44.9-140		
B7L2608-MS1	7120685-01	Acenaphthylene	86.1	ug/L	100	ND	86.1	66.7-122		
B7L2608-MS1	7120685-01	Anthracene	96.5	ug/L	100	ND	96.5	72-124		
B7L2608-MS1	7120685-01	Benzo(g,h,i)perylene	69.9	ug/L	100	ND	69.9	34.1-151		
B7L2608-MS1	7120685-01	Chrysene	101	ug/L	100	ND	101	61.3-124		
B7L2608-MS1	7120685-01	Fluoranthene	102	ug/L	100	ND	102	74.2-128		
B7L2608-MS1	7120685-01	Fluorene	90.7	ug/L	100	ND	90.7	68.2-119		
B7L2608-MS1	7120685-01	Naphthalene	77.6	ug/L	100	ND	77.6	38.7-133		
B7L2608-MS1	7120685-01	Phenanthrene	96.9	ug/L	100	ND	96.9	69.4-127		
B7L2608-MS1	7120685-01	Pyrene	96.6	ug/L	100	ND	96.6	67.7-124		

8
8.4.

* - Outside of QC Limits

NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20171226\AS03616.D
 Acq On : 27 Dec 2017 4:04
 Sample : B7L2608-MS1
 Misc :

Vial: 28
 Operator: GCH
 Inst : GCMS-A
 Multiplr: 1.00

MS Integration Params: RTEINT.P
 Quant Time: Dec 28 12:35 2017

Quant Results File: 0426ABNS.RES

Quant Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C

Last Update : Thu Dec 28 12:26:46 2017

Response via : Initial Calibration

DataAcq Meth : RUN8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.60	152	159539	40.00	ug/kg	0.00
21) Naphthalene-d8	5.80	136	510215	40.00	ug/kg	0.00
39) Acenaphthene-d10	7.53	164	275898	40.00	ug/kg	0.00
62) Phenanthrene-d10	9.00	188	537410	40.00	ug/kg	0.00
76) Chrysene-d12	11.69	240	485995	40.00	ug/kg	0.00
85) Perylene-d12	13.37	264	386464	40.00	ug/kg	0.00

System Monitoring Compounds

4) 2-Fluorophenol	3.44	112	198608	33.24	ug/kg	-0.10
Spiked Amount 100.000	Range 15 - 48		Recovery =	33.24%		
7) Phenol-d6	4.25	99	188698	27.87	ug/kg	-0.01
Spiked Amount 100.000	Range 15 - 53		Recovery =	27.87%		
22) Nitrobenzene-d5	5.11	82	245766	44.73	ug/kg	-0.08
Spiked Amount 50.000	Range 34 - 81		Recovery =	89.46%#		
44) 2-Fluorobiphenyl	6.85	172	519500	40.47	ug/kg	-0.01
Spiked Amount 50.000	Range 33 - 86		Recovery =	80.94%		
66) 2,4,6-Tribromophenol	8.31	330	199210	118.29	ug/kg	0.00
Spiked Amount 100.000	Range 51 - 111		Recovery =	118.29%#		
79) p-Terphenyl-d14	10.57	244	588615	45.53	ug/kg	0.01
Spiked Amount 50.000	Range 47 - 86		Recovery =	91.06%#		

Target Compounds

Qvalue

2) Pyridine	2.32	79	118022	18.96	ng/uL	98
3) N-Nitroso-dimethylamine	2.28	42	79859	33.74	ng/uL	89
5) Benzaldehyde	4.20	77	137345	52.32	ug/kg	85
6) Aniline	4.29	93	205696	29.53	ug/kg	89
8) Phenol	4.26	94	98706	14.84	ug/kg	78
9) bis(2-Chloroethyl)ether	4.34	93	186417	35.51	ug/kg	99
10) 2-Chlorophenol	4.41	128	195253	34.82	ug/kg	98
11) 1,3-Dichlorobenzene	4.55	146	211986	34.22	ug/kg	94
12) 1,4-Dichlorobenzene	4.61	146	222394m	34.53	ug/kg	
13) Benzyl Alcohol	4.71	108	99368	29.66	ug/kg	78
14) 1,2-Dichlorobenzene	4.76	146	208964	35.26	ug/kg	93
15) 2-Methylphenol	4.71	108	99368	20.85	ug/kg#	52
16) bis(2-Chloroisopropyl)ethe	4.83	45	208427	31.43	ug/kg	77
17) Acetophenone	4.96	105	299719	46.64	ug/kg	93
18) 3+4-Methylphenol	4.96	108	167061m	34.39	ug/kg	
19) n-Nitroso-di-n-propylamine	4.96	70	136434	48.40	ug/kg	88
20) Hexachloroethane	5.07	117	83275	37.77	ug/kg	89
23) Nitrobenzene	5.13	77	246383	48.81	ug/kg	88
24) Isophorone	5.35	82	402064	49.97	ug/kg	95
25) 2-Nitrophenol	5.44	139	108001	45.38	ug/kg#	85
26) 2,4-Dimethylphenol	5.46	107	206882	47.08	ug/kg	86
27) bis(2-Chloroethoxy)methane	5.55	93	210637	41.28	ug/kg	99
28) 2,4-Dichlorophenol	5.67	162	198700	50.80	ug/kg	99
30) 1,2,4-Trichlorobenzene	5.75	180	235212	47.05	ug/kg	99
31) Naphthalene	5.82	128	557715	38.80	ug/kg	97
33) 4-Chloroaniline	5.87	127	176805	38.95	ug/kg	92
34) Hexachlorobutadiene	5.94	225	160268	54.05	ug/kg	100
35) Caprolactam	6.20	113	12313	10.00	ug/kg	88
36) 4-Chloro-3-methylphenol	6.34	107	174080	49.31	ug/kg	86
37) 2-Methylnaphthalene	6.50	142	418853	46.11	ug/kg	95
38) 1-Methylnaphthalene	6.60	142	393800	42.09	ng/uL	97
40) Hexachlorocyclopentadiene	6.66	237	105395	34.39	ug/kg	96
41) 1,2,4,5-Tetrachlorobenzene	6.67	216	301887	50.93	ug/kg	98
42) 2,4,6-Trichlorophenol	6.78	196	167071	51.44	ug/kg	97
43) 2,4,5-Trichlorophenol	6.82	196	168787	50.32	ug/kg	97
45) Biphenyl	6.95	154	520901	41.98	ug/kg	99

(#)=qualifier out of range (m)=manual integration

AS03616.D 0426ABNS.M Fri Dec 29 15:29:49 2017 SS

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Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20171226\AS03616.D
 Acq On : 27 Dec 2017 4:04
 Sample : B7L2608-MS1
 Misc :

Vial: 28
 Operator: GCH
 Inst : GCMS-A
 Multiplr: 1.00

MS Integration Params: RTEINT.P
 Quant Time: Dec 28 12:35 2017

Quant Results File: 0426ABNS.RES

Quant Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)
 Title : BNA Extractables GC/MS 8270C
 Last Update : Thu Dec 28 12:26:46 2017
 Response via : Initial Calibration
 DataAcq Meth : RUN8270A

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
46) 2-Chloronaphthalene	6.98	162	427965	43.33	ug/kg	99
47) 2-Nitroaniline	7.08	138	120372	42.45	ug/kg	98
48) Dimethylphthalate	7.25	163	470342	48.11	ug/kg	99
49) Acenaphthylene	7.39	152	597756	43.06	ug/kg	98
50) 2,6-Dinitrotoluene	7.31	165	110395	57.23	ug/kg	96
51) 3-Nitroaniline	7.48	138	69854	51.19	ug/kg	93
52) Acenaphthene	7.56	153	419855	41.84	ug/kg	99
53) 2,4-Dinitrophenol	7.60	184	25014	51.49	ug/kg	96
54) Dibenzofuran	7.73	168	615731	45.79	ug/kg	99
55) 4-Nitrophenol	7.67	65	13476	10.37	ug/kg	80
56) 2,4-Dinitrotoluene	7.72	165	143851	52.10	ug/kg#	73
57) 2,3,4,6-Tetrachlorophenol	7.86	232	158003	59.84	ug/kg	94
58) Fluorene	8.07	166	487942	45.35	ug/kg	99
59) Diethylphthalate	7.94	149	432254	48.69	ug/kg	97
60) 4-Chlorophenyl phenyl ethe	8.06	204	285082	55.06	ug/kg	99
61) 4-Nitroaniline	8.09	138	38955	31.73	ug/kg	75
63) 4,6-Dinitro-2-methylphenol	8.13	198	66390	53.70	ug/kg	97
64) n-Nitrosodiphenylamine	8.18	169	397153	54.70	ug/kg	98
65) 1,2-Diphenylhydrazine	8.22	77	426839	44.81	ug/kg	98
67) 4-Bromophenyl-phenyl ether	8.55	248	191289	58.24	ug/kg	96
68) Hexachlorobenzene	8.63	284	213026	60.28	ug/kg	99
69) Atrazine	8.70	200	129378	53.84	ug/kg	93
70) Pentachlorophenol	8.82	266	85826	44.27	ug/kg	98
71) Phenanthrene	9.03	178	739004	48.43	ug/kg	97
72) Anthracene	9.08	178	734254	48.25	ug/kg	98
73) Carbazole	9.23	167	585575	61.13	ug/kg#	87
74) Di-n-butylphthalate	9.55	149	636854	47.75	ug/kg	98
75) Fluoranthene	10.21	202	829588	51.08	ug/kg	96
78) Pyrene	10.44	202	851334	48.28	ug/kg	96
80) Butylbenzylphthalate	11.05	149	241359	48.66	ug/kg	93
81) Benzo(a)anthracene	11.68	228	721891	50.36	ug/kg	98
82) 3,3'-Dichlorobenzidine	11.64	252	30037	12.38	ug/kg	94
83) Chrysene	11.72	228	726304	50.73	ug/kg	96
84) bis(2-Ethylhexyl)phthalate	11.66	149	298002	46.63	ug/kg	99
86) Di-n-octylphthalate	12.40	149	461417	50.95	ug/kg	98
87) Benzo(b)fluoranthene	12.92	252	616598	56.46	ug/kg	98
88) Benzo(k)fluoranthene	12.95	252	636602m	53.30	ug/kg	
89) Benzo(a)pyrene	13.31	252	543320	51.38	ug/kg	97
90) Indeno(1,2,3-cd)pyrene	14.93	276	391312	37.21	ug/kg	99
91) Dibenzo(a,h)anthracene	14.94	278	323981	38.20	ug/kg	99
92) Benzo(g,h,i)perylene	15.39	276	308611	34.95	ug/kg	98

(#) = qualifier out of range (m) = manual integration

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Semivolatile Organics - GC/MS - Quality Control
Aqua Pro-Tech Laboratories

Batch B7L2608			Method: SW 846 8270D			Prepared: 12/26/2017				
Lab Number	Source	Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
B7L2608-MSD1	7120685-01	Acenaphthene	71.6	ug/L	100	ND	71.6	44.9-140	15.5	20
B7L2608-MSD1	7120685-01	Acenaphthylene	73.8	ug/L	100	ND	73.8	66.7-122	15.5	20
B7L2608-MSD1	7120685-01	Anthracene	81.4	ug/L	100	ND	81.4	72-124	17.0	20
B7L2608-MSD1	7120685-01	Benzo(g,h,i)perylene	64.2	ug/L	100	ND	64.2	34.1-151	8.52	20
B7L2608-MSD1	7120685-01	Chrysene	84.7	ug/L	100	ND	84.7	61.3-124	18.0	20
B7L2608-MSD1	7120685-01	Fluoranthene	86.8	ug/L	100	ND	86.8	74.2-128	16.2	20
B7L2608-MSD1	7120685-01	Fluorene	75.8	ug/L	100	ND	75.8	68.2-119	17.9	20
B7L2608-MSD1	7120685-01	Naphthalene	65.5	ug/L	100	ND	65.5	38.7-133	16.9	20
B7L2608-MSD1	7120685-01	Phenanthrene	80.4	ug/L	100	ND	80.4	69.4-127	18.6	20
B7L2608-MSD1	7120685-01	Pyrene	82.7	ug/L	100	ND	82.7	67.7-124	15.5	20

* - Outside of QC Limits

NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20171226\AS03617.D
 Acq On : 27 Dec 2017 4:27
 Sample : B7L2608-MSD1
 Misc :

Vial: 29
 Operator: GCH
 Inst : GCMS-A
 Multiplr: 1.00

MS Integration Params: RTEINT.P
 Quant Time: Dec 28 12:35 2017

Quant Results File: 0426ABNS.RES

Quant Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C

Last Update : Thu Dec 28 12:26:46 2017

Response via : Initial Calibration

DataAcq Meth : RUN8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.59	152	179046	40.00	ug/kg	0.00
21) Naphthalene-d8	5.80	136	571585	40.00	ug/kg	0.00
39) Acenaphthene-d10	7.53	164	301068	40.00	ug/kg	0.00
62) Phenanthrene-d10	9.00	188	592473	40.00	ug/kg	0.00
76) Chrysene-d12	11.70	240	524722	40.00	ug/kg	0.00
85) Perylene-d12	13.37	264	460155	40.00	ug/kg	0.00

System Monitoring Compounds

4) 2-Fluorophenol	3.44	112	203187	30.30	ug/kg	-0.10
Spiked Amount 100.000	Range 15 - 48		Recovery =	30.30%		
7) Phenol-d6	4.25	99	179977	23.69	ug/kg	-0.01
Spiked Amount 100.000	Range 15 - 53		Recovery =	23.69%		
22) Nitrobenzene-d5	5.11	82	229747	37.32	ug/kg	-0.08
Spiked Amount 50.000	Range 34 - 81		Recovery =	74.64%		
44) 2-Fluorobiphenyl	6.85	172	481174	34.35	ug/kg	-0.01
Spiked Amount 50.000	Range 33 - 86		Recovery =	68.70%		
66) 2,4,6-Tribromophenol	8.31	330	190902	102.82	ug/kg	0.00
Spiked Amount 100.000	Range 51 - 111		Recovery =	102.82%		
79) p-Terphenyl-d14	10.57	244	544619	39.02	ug/kg	0.01
Spiked Amount 50.000	Range 47 - 86		Recovery =	78.04%		

Target Compounds

						Qvalue
2) Pyridine	2.32	79	120210	17.20	ng/uL	99
3) N-Nitroso-dimethylamine	2.28	42	76257	28.71	ng/uL	92
5) Benzaldehyde	4.20	77	131046	44.48	ug/kg	85
6) Aniline	4.29	93	197778	25.30	ug/kg	89
8) Phenol	4.26	94	90170	12.08	ug/kg#	77
9) bis(2-Chloroethyl)ether	4.34	93	172967	29.36	ug/kg	97
10) 2-Chlorophenol	4.41	128	192818	30.64	ug/kg	99
11) 1,3-Dichlorobenzene	4.55	146	203364	29.25	ug/kg	94
12) 1,4-Dichlorobenzene	4.61	146	209263m	28.95	ug/kg	
13) Benzyl Alcohol	4.71	108	94545	25.15	ug/kg	80
14) 1,2-Dichlorobenzene	4.76	146	201365	30.28	ug/kg	95
15) 2-Methylphenol	4.82	108	157491	29.45	ug/kg	79
16) bis(2-Chloroisopropyl)ethe	4.84	45	194437	26.13	ug/kg	78
17) Acetophenone	4.96	105	281276	39.00	ug/kg	91
18) 3+4-Methylphenol	4.96	108	156743m	28.75	ug/kg	
19) n-Nitroso-di-n-propylamine	4.96	70	122125	38.60	ug/kg	88
20) Hexachloroethane	5.07	117	77988	31.52	ug/kg	88
23) Nitrobenzene	5.13	77	227371	40.21	ug/kg	89
24) Isophorone	5.35	82	366145	40.62	ug/kg	95
25) 2-Nitrophenol	5.44	139	106272	39.86	ug/kg#	91
26) 2,4-Dimethylphenol	5.47	107	198238	40.27	ug/kg	87
27) bis(2-Chloroethoxy)methane	5.55	93	202506	35.43	ug/kg	99
28) 2,4-Dichlorophenol	5.67	162	194409	44.37	ug/kg	97
30) 1,2,4-Trichlorobenzene	5.75	180	223706	39.94	ug/kg	99
31) Naphthalene	5.82	128	527439	32.76	ug/kg	97
33) 4-Chloroaniline	5.87	127	166833	32.81	ug/kg	93
34) Hexachlorobutadiene	5.94	225	149853	45.11	ug/kg	99
35) Caprolactam	6.20	113	12075	8.75	ug/kg	86
36) 4-Chloro-3-methylphenol	6.34	107	163722	41.40	ug/kg	87
37) 2-Methylnaphthalene	6.50	142	385158	37.85	ug/kg	97
38) 1-Methylnaphthalene	6.60	142	369122	35.22	ng/uL	97
40) Hexachlorocyclopentadiene	6.66	237	99255	29.68	ug/kg	97
41) 1,2,4,5-Tetrachlorobenzene	6.67	216	276587	42.76	ug/kg	98
42) 2,4,6-Trichlorophenol	6.78	196	155922	44.00	ug/kg	97
43) 2,4,5-Trichlorophenol	6.82	196	157793	43.11	ug/kg	97
45) Biphenyl	6.95	154	485558	35.86	ug/kg	98

(#) = qualifier out of range (m) = manual integration

AS03617.D 0426ABNS.M Fri Dec 29 15:29:51 2017 SS

Page 1

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20171226\AS03617.D
 Acq On : 27 Dec 2017 4:27
 Sample : B7L2608-MSD1
 Misc :

Vial: 29
 Operator: GCH
 Inst : GCMS-A
 Multiplr: 1.00

MS Integration Params: RTEINT.P
 Quant Time: Dec 28 12:35 2017

Quant Results File: 0426ABNS.RES

Quant Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)
 Title : BNA Extractables GC/MS 8270C
 Last Update : Thu Dec 28 12:26:46 2017
 Response via : Initial Calibration
 DataAcq Meth : RUN8270A

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
46) 2-Chloronaphthalene	6.98	162	392037	36.37	ug/kg	99
47) 2-Nitroaniline	7.08	138	113065	36.54	ug/kg	97
48) Dimethylphthalate	7.25	163	439203	41.17	ug/kg	98
49) Acenaphthylene	7.39	152	558693	36.88	ug/kg	97
50) 2,6-Dinitrotoluene	7.31	165	101140	48.05	ug/kg	95
51) 3-Nitroaniline	7.48	138	67629	45.42	ug/kg	90
52) Acenaphthene	7.56	153	392210	35.82	ug/kg	98
53) 2,4-Dinitrophenol	7.59	184	24944	49.06	ug/kg	89
54) Dibenzofuran	7.73	168	564851	38.50	ug/kg	99
55) 4-Nitrophenol	7.66	65	14752	10.41	ug/kg	87
56) 2,4-Dinitrotoluene	7.72	165	135475	44.97	ug/kg	82
57) 2,3,4,6-Tetrachlorophenol	7.86	232	150298	52.16	ug/kg	95
58) Fluorene	8.07	166	445106	37.91	ug/kg	100
59) Diethylphthalate	7.94	149	394719	40.74	ug/kg	98
60) 4-Chlorophenyl phenyl ethe	8.06	204	256556	45.41	ug/kg	98
61) 4-Nitroaniline	8.09	138	47411	35.39	ug/kg	92
63) 4,6-Dinitro-2-methylphenol	8.13	198	60834	47.42	ug/kg	93
64) n-Nitrosodiphenylamine	8.18	169	367134	45.86	ug/kg	97
65) 1,2-Diphenylhydrazine	8.22	77	407124	38.76	ug/kg	98
67) 4-Bromophenyl-phenyl ether	8.55	248	176757	48.82	ug/kg	96
68) Hexachlorobenzene	8.63	284	198009	50.83	ug/kg	99
69) Atrazine	8.70	200	126884	47.89	ug/kg	93
70) Pentachlorophenol	8.82	266	78791	36.87	ug/kg	98
71) Phenanthrene	9.03	178	676415	40.21	ug/kg	97
72) Anthracene	9.08	178	682917	40.70	ug/kg	98
73) Carbazole	9.23	167	524828	49.70	ug/kg#	87
74) Di-n-butylphthalate	9.56	149	569322	38.72	ug/kg	98
75) Fluoranthene	10.21	202	777424	43.42	ug/kg	96
78) Pyrene	10.44	202	787102	41.35	ug/kg	96
80) Butylbenzylphthalate	11.05	149	218292	40.76	ug/kg	94
81) Benzo(a)anthracene	11.68	228	679387	43.89	ug/kg	97
82) 3,3'-Dichlorobenzidine	11.64	252	39154	14.94	ug/kg	98
83) Chrysene	11.72	228	654828	42.37	ug/kg	96
84) bis(2-Ethylhexyl)phthalate	11.66	149	275885	39.99	ug/kg	98
86) Di-n-octylphthalate	12.40	149	427334	39.63	ug/kg	99
87) Benzo(b)fluoranthene	12.92	252	601122	46.23	ug/kg	98
88) Benzo(k)fluoranthene	12.95	252	616678m	43.37	ug/kg	
89) Benzo(a)pyrene	13.31	252	525188	41.71	ug/kg	98
90) Indeno(1,2,3-cd)pyrene	14.93	276	426905	34.10	ug/kg	99
91) Dibenzo(a,h)anthracene	14.93	278	351695	34.83	ug/kg	99
92) Benzo(g,h,i)perylene	15.39	276	337427	32.09	ug/kg	98

(#) = qualifier out of range (m) = manual integration

AS03617.D 0426ABNS.M Fri Dec 29 15:29:51 2017 SS

Page 2

METHOD BLANK SUMMARY

Batch ID: B7L2204

<u>Lab Number</u>	<u>Sample Id</u>	<u>Extraction Date</u>	<u>Analysis Date</u>
B7L2204-BLK2	BLK2	12/22/2017	12/22/2017 20:37
B7L2204-BS1	BS1	12/22/2017	12/22/2017 21:00
B7L2204-MS1	MS1	12/22/2017	12/23/2017 02:05
B7L2204-MSD1	MSD1	12/22/2017	12/23/2017 02:28
7120696-01	MW-1 20171220	12/22/2017	12/22/2017 22:57
7120696-02	MW-7S 20171220	12/22/2017	12/22/2017 23:21
7120696-03	MW-7D 20171220	12/22/2017	12/22/2017 23:44
7120696-04	MW-8S 20171220	12/22/2017	12/23/2017 00:08
7120696-05	MW-8D 20171220	12/22/2017	12/23/2017 00:31

<u>Lab Number</u>	<u>Sample Id</u>	<u>Extraction Date</u>	<u>Analysis Date</u>
B7L2204-BLK3	BLK3	12/26/2017	12/26/2017 18:47
B7L2204-BS2	BS2	12/26/2017	12/26/2017 19:10
7120696-06	MW-4S 20171221	12/26/2017	12/26/2017 21:52
7120696-07	MW-4D 20171221	12/26/2017	12/26/2017 22:16
7120696-08	MW-3 20171221	12/26/2017	12/26/2017 22:39
7120696-09	DUP-20171221	12/26/2017	12/26/2017 23:02
7120696-10	FB-20171221	12/26/2017	12/26/2017 23:25

Batch ID: B7L2608

<u>Lab Number</u>	<u>Sample Id</u>	<u>Extraction Date</u>	<u>Analysis Date</u>
B7L2608-BLK2	BLK2	12/26/2017	12/26/2017 19:33
B7L2608-BS1	BS1	12/26/2017	12/26/2017 19:56
B7L2608-MS1	MS1	12/26/2017	12/27/2017 04:04
B7L2608-MSD1	MSD1	12/26/2017	12/27/2017 04:27
7120696-11	MW-9D 20171221	12/26/2017	12/27/2017 00:58
7120696-12	MW-9S 20171221	12/26/2017	12/27/2017 01:22

INSTRUMENT PERFORMANCE CHECK

Client: Brown and Caldwell USR
Instrument ID: GCMS-A
Sequence: S7D2809

Work Order: 7120696
Project: Patchogue

Lab Sample ID: **S7D2809-TUN1** Injection Date: 04/26/2017 Injection Time: 18:58
Lab File ID: AS00031.D

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	PASS/FAIL
51	30 - 60% of 198	34	PASS
68	Less than 2% of 69	0.424	PASS
69	Less than 100% of 198	32.1	PASS
70	Less than 2% of 69	0.669	PASS
127	40 - 60% of 198	41.9	PASS
197	Less than 1% of 198	0	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	6.94	PASS
275	10 - 30% of 198	26.2	PASS
365	1 - 100% of 198	2.64	PASS
441	0.01 - 99.9% of 443	76.7	PASS
442	40 - 100% of 198	76.8	PASS
443	17 - 23% of 442	19.7	PASS

Samples Associated with Tune

Client ID or QC Type	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Cal Standard	S7D2809-CAL1	AS00032.D	04/26/2017	19:14.00
Cal Standard	S7D2809-CAL2	AS00033.D	04/26/2017	19:41.00
Cal Standard	S7D2809-CAL3	AS00035.D	04/26/2017	20:35.00
Cal Standard	S7D2809-CAL4	AS00036.D	04/26/2017	21:03.00
Cal Standard	S7D2809-CAL5	AS00037.D	04/26/2017	21:30.00
Cal Standard	S7D2809-CAL6	AS00038.D	04/26/2017	21:57.00

F-V

DFTPP

Data File : G:\HPCHEM\A\DATA\20170426\AS00031.D

Vial: 2

Acq On : 26 Apr 2017 18:58

Operator: GCH

Sample : SEQ-TUN

Inst : GCMS-A

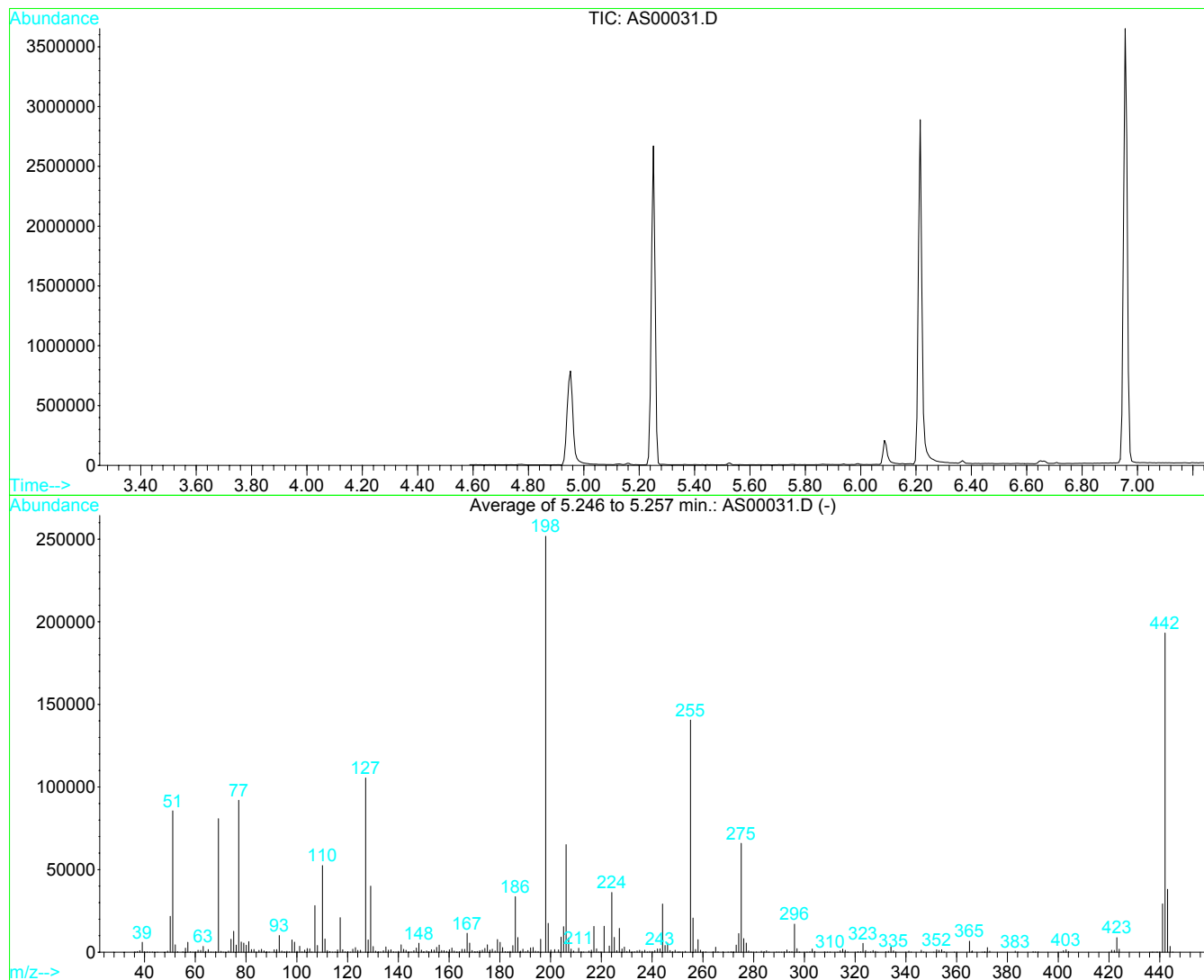
Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C



Spectrum Information: Average of 5.246 to 5.257 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	34.0	85575	PASS
68	69	0.00	2	0.4	343	PASS
69	198	0.00	100	32.1	80872	PASS
70	69	0.00	2	0.7	541	PASS
127	198	40	60	41.9	105504	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	251776	PASS
199	198	5	9	6.9	17465	PASS
275	198	10	30	26.2	65944	PASS
365	198	1	100	2.6	6651	PASS
441	443	0.01	100	76.7	29248	PASS
442	198	40	100	76.8	193245	PASS
443	442	17	23	19.7	38112	PASS

AS00031.D 0426ABNS.M Fri Apr 28 15:16:11 2017 SS

INSTRUMENT PERFORMANCE CHECK

Client: Brown and Caldwell USR
Instrument ID: GCMS-A
Sequence: S7L2811

Work Order: 7120696
Project: Patchogue

Lab Sample ID: **S7L2811-TUN1** Injection Date: 12/22/2017 Injection Time: 19:12
Lab File ID: AS03564.D

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	PASS/FAIL
51	30 - 60% of 198	32.8	PASS
68	Less than 2% of 69	0	PASS
69	Less than 100% of 198	40.5	PASS
70	Less than 2% of 69	0.503	PASS
127	40 - 60% of 198	42.6	PASS
197	Less than 1% of 198	0	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	7.1	PASS
275	10 - 30% of 198	28.3	PASS
365	1 - 100% of 198	3.62	PASS
441	0.01 - 99.9% of 443	78.7	PASS
442	40 - 100% of 198	50.7	PASS
443	17 - 23% of 442	19.8	PASS

Samples Associated with Tune

Client ID or QC Type	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Calibration Check	S7L2811-CCV1	AS03565.D	12/22/2017	19:26.00
Blank	B7L2204-BLK2	AS03568.D	12/22/2017	20:37.00
LCS	B7L2204-BS1	AS03569.D	12/22/2017	21:00.00
MW-1 20171220	7120696-01	AS03574.D	12/22/2017	22:57.00
MW-7S 20171220	7120696-02	AS03575.D	12/22/2017	23:21.00
MW-7D 20171220	7120696-03	AS03576.D	12/22/2017	23:44.00
MW-8S 20171220	7120696-04	AS03577.D	12/23/2017	0:08.00
MW-8D 20171220	7120696-05	AS03578.D	12/23/2017	0:31.00
Matrix Spike	B7L2204-MS1	AS03582.D	12/23/2017	2:05.00
Matrix Spike Dup	B7L2204-MSD1	AS03583.D	12/23/2017	2:28.00

F-V

DFTPP

Data File : G:\HPCHEM\A\DATA\20171222\AS03564.D

Vial: 2

Acq On : 22 Dec 2017 19:12

Operator: GCH

Sample : SEQ-TUN

Inst : GCMS-A

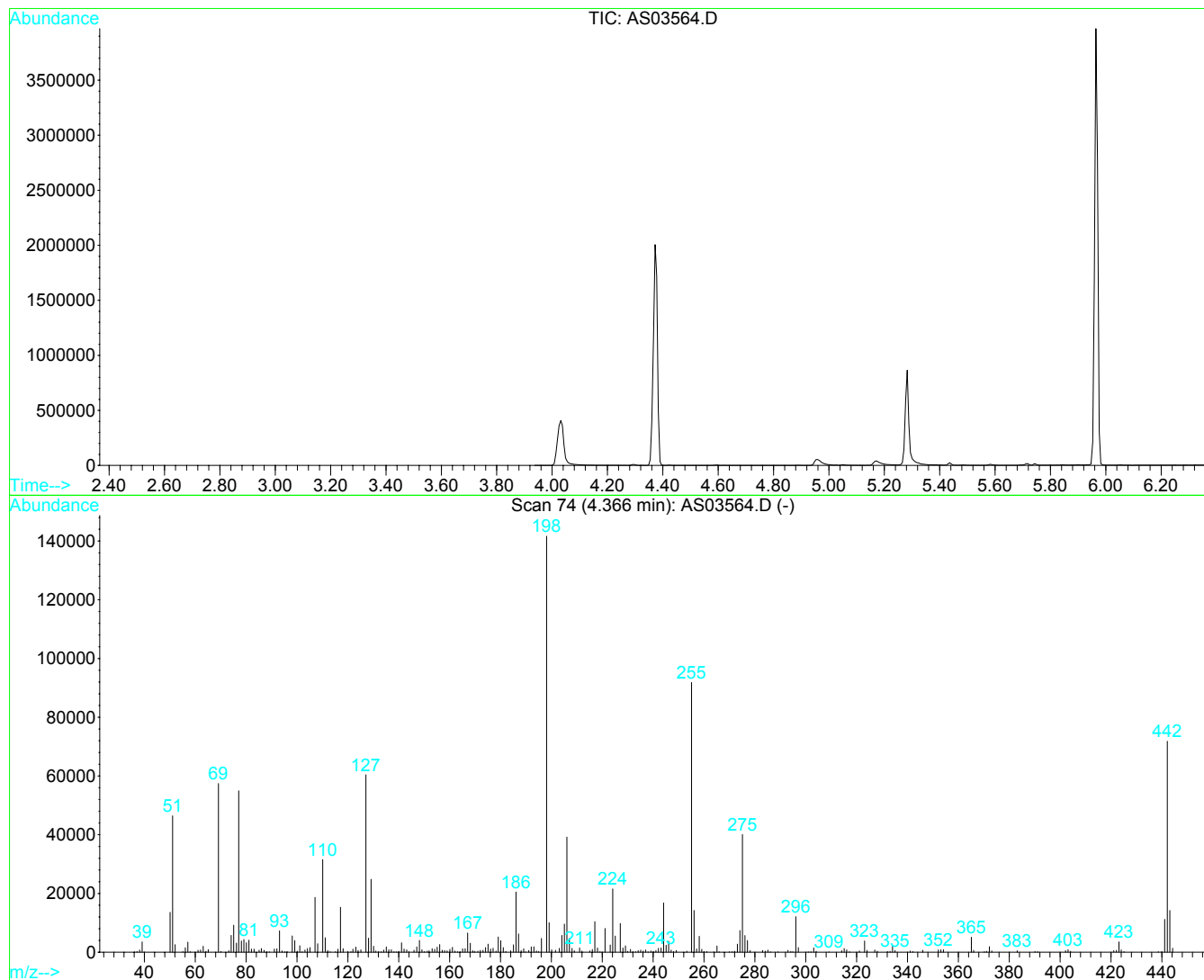
Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C



Spectrum Information: Scan 74

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	32.8	46440	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	40.5	57424	PASS
70	69	0.00	2	0.5	289	PASS
127	198	40	60	42.6	60400	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	141632	PASS
199	198	5	9	7.1	10058	PASS
275	198	10	30	28.3	40056	PASS
365	198	1	100	3.6	5121	PASS
441	443	0.01	100	78.7	11198	PASS
442	198	40	100	50.7	71824	PASS
443	442	17	23	19.8	14225	PASS

AS03564.D 0426ABNS.M

Thu Dec 28 20:08:53 2017 SS

INSTRUMENT PERFORMANCE CHECK

Client: Brown and Caldwell USR
Instrument ID: GCMS-A
Sequence: S7L2902

Work Order: 7120696
Project: Patchogue

Lab Sample ID: **S7L2902-TUN1** Injection Date: 12/26/2017 Injection Time: 18:04
Lab File ID: AS03590.D

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	PASS/FAIL
51	30 - 60% of 198	38	PASS
68	Less than 2% of 69	0	PASS
69	Less than 100% of 198	43.9	PASS
70	Less than 2% of 69	0.606	PASS
127	40 - 60% of 198	43.4	PASS
197	Less than 1% of 198	0	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	7.03	PASS
275	10 - 30% of 198	28.9	PASS
365	1 - 100% of 198	3.63	PASS
441	0.01 - 99.9% of 443	74	PASS
442	40 - 100% of 198	45.3	PASS
443	17 - 23% of 442	19.9	PASS

Samples Associated with Tune

Client ID or QC Type	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Calibration Check	S7L2902-CCV1	AS03591.D	12/26/2017	18:24.00
Blank	B7L2204-BLK3	AS03592.D	12/26/2017	18:47.00
LCS	B7L2204-BS2	AS03593.D	12/26/2017	19:10.00
Blank	B7L2608-BLK2	AS03594.D	12/26/2017	19:33.00
LCS	B7L2608-BS1	AS03595.D	12/26/2017	19:56.00
MW-4S 20171221	7120696-06	AS03600.D	12/26/2017	21:52.00
MW-4D 20171221	7120696-07	AS03601.D	12/26/2017	22:16.00
MW-3 20171221	7120696-08	AS03602.D	12/26/2017	22:39.00
DUP-20171221	7120696-09	AS03603.D	12/26/2017	23:02.00
FB-20171221	7120696-10	AS03604.D	12/26/2017	23:25.00
MW-9D 20171221	7120696-11	AS03608.D	12/27/2017	0:58.00
MW-9S 20171221	7120696-12	AS03609.D	12/27/2017	1:22.00
Matrix Spike	B7L2608-MS1	AS03616.D	12/27/2017	4:04.00
Matrix Spike Dup	B7L2608-MSD1	AS03617.D	12/27/2017	4:27.00

F-V

DFTPP

Data File : G:\HPCHEM\A\DATA\20171226\AS03590.D

Vial: 2

Acq On : 26 Dec 2017 18:04

Operator: GCH

Sample : SEQ-TUN

Inst : GCMS-A

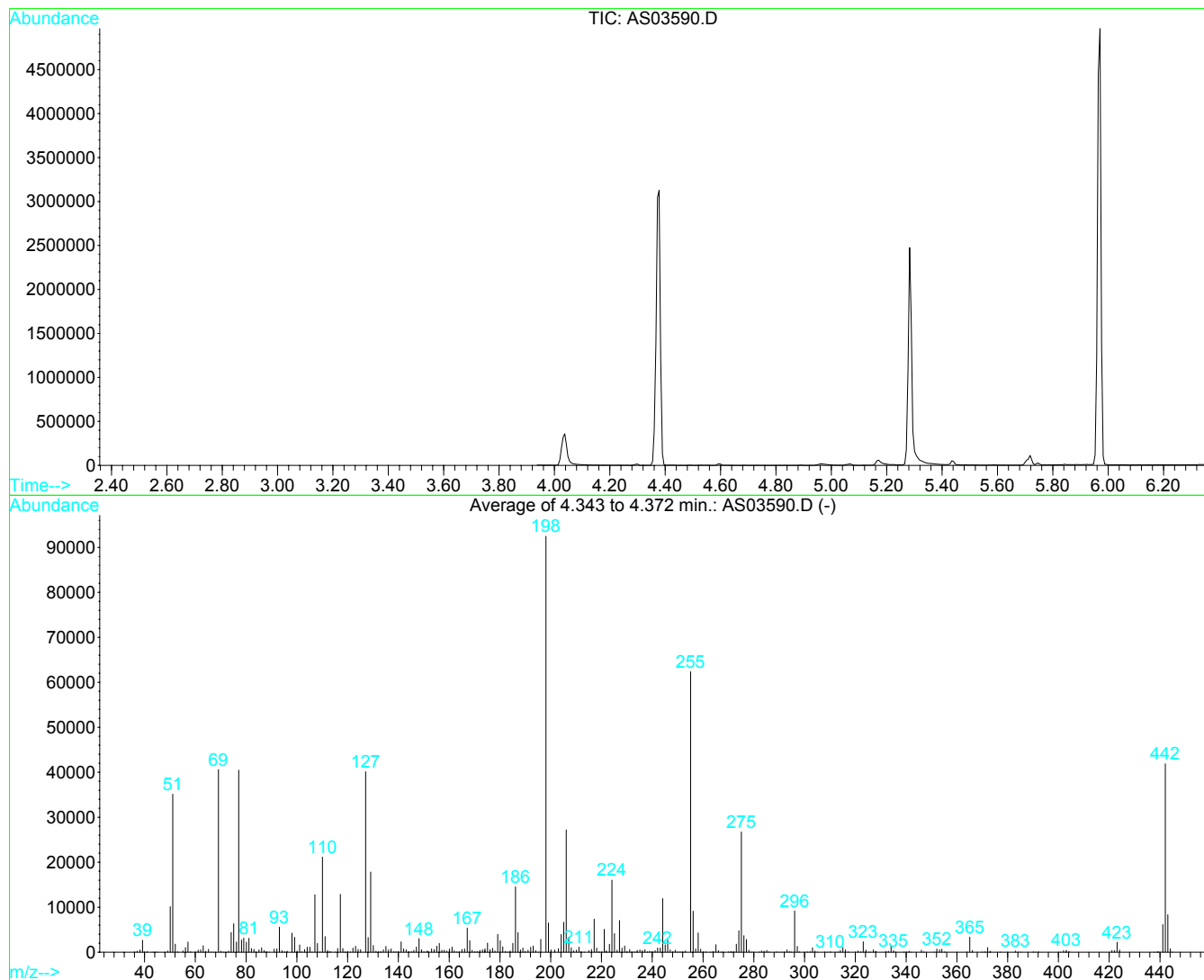
Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C



Spectrum Information: Average of 4.343 to 4.372 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	38.0	35139	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	43.9	40587	PASS
70	69	0.00	2	0.6	246	PASS
127	198	40	60	43.4	40129	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	92468	PASS
199	198	5	9	7.0	6503	PASS
275	198	10	30	28.9	26739	PASS
365	198	1	100	3.6	3352	PASS
441	443	0.01	100	74.0	6174	PASS
442	198	40	100	45.3	41901	PASS
443	442	17	23	19.9	8342	PASS

AS03590.D 0426ABNS.M

Fri Dec 29 15:28:43 2017 SS

Response Factor Report GCMS-A

Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)
 Title : BNA Extractables GC/MS 8270C
 Last Update : Wed Oct 11 15:09:56 2017
 Response via : Initial Calibration

Calibration Files

2 =AS00032.D 5 =AS00033.D 20 =AS00035.D
 50 =AS00036.D 60 =AS00037.D 80 =AS00038.D

	Compound	2	5	20	50	60	80	Avg	%RSD
1) I	1,4-Dichlorobenzene-d	-----ISTD-----							
2)	Pyridine	1.680	1.667	1.488	1.485	1.536	1.510	1.561	5.70
3)	N-Nitroso-dimethyla	0.611	0.617	0.596	0.580	0.582	0.574	0.593	3.00
4) S	2-Fluorophenol	1.567	1.619	1.517	1.484	1.523	1.488	1.533	3.37
5)	Benzaldehyde	0.667	0.690	0.835	0.802	0.612	0.617	0.704	13.38
6)	Aniline	1.681	1.804	1.763	1.800	1.804	1.692	1.757	3.25
7) S	Phenol-d6	1.906	1.929	1.759	1.717	1.723	1.670	1.784	6.03
8) M C	Phenol	1.849	1.829	1.613	1.585	1.598	1.532	1.668	8.14
9)	bis(2-Chloroethyl)e	1.468	1.378	1.300	1.256	1.240	1.254	1.316	6.84
10) M	2-Chlorophenol	1.451	1.493	1.376	1.377	1.383	1.356	1.406	3.82
11)	1,3-Dichlorobenzene	1.711	1.690	1.500	1.488	1.491	1.437	1.553	7.50
12) M C	1,4-Dichlorobenzene	1.842	1.776	1.500	1.488	1.568	1.514	1.615	9.55
13)	Benzyl Alcohol	0.881	0.890	0.804	0.824	0.827	0.814	0.840	4.33
14)	1,2-Dichlorobenzene	1.667	1.631	1.437	1.413	1.412	1.356	1.486	8.71
15)	2-Methylphenol	1.288	1.304	1.159	1.149	1.152	1.117	1.195	6.67
16)	bis(2-Chloroisoprop	2.047	2.027	1.811	1.720	1.707	1.604	1.819	9.94
17)	Acetophenone	1.912	1.872	1.645	1.641	1.639	1.581	1.715	8.16
18)	3+4-Methylphenol	1.296	1.305	1.175	1.185	1.182	1.165	1.218	5.28
19) M P	n-Nitroso-di-n-prop	0.755	0.777	0.695	0.717	0.711	0.700	0.726	4.52
20)	Hexachloroethane	0.588	0.611	0.555	0.558	0.562	0.545	0.570	4.32
21) I	Naphthalene-d8	-----ISTD-----							
22) S	Nitrobenzene-d5	0.442	0.437	0.415	0.429	0.436	0.426	0.431	2.20
23)	Nitrobenzene	0.420	0.407	0.389	0.390	0.390	0.379	0.396	3.78
24)	Isophorone	0.666	0.675	0.622	0.618	0.614	0.590	0.631	5.20
25) C	2-Nitrophenol	0.151	0.167	0.177	0.211	0.209	0.204	0.187	13.47
26)	2,4-Dimethylphenol	0.376	0.376	0.335	0.331	0.330	0.318	0.344	7.38
27)	bis(2-Chloroethoxy)	0.442	0.430	0.384	0.386	0.384	0.374	0.400	7.15
28) C	2,4-Dichlorophenol	0.286	0.312	0.301	0.305	0.309	0.306	0.303	3.06
29)	Benzoic Acid	0.055	0.068	0.095	0.132	0.132	0.160	0.107	38.48
30) M	1,2,4-Trichlorobenz	0.426	0.424	0.380	0.376	0.380	0.365	0.392	6.73
31)	Naphthalene	1.269	1.254	1.100	1.069	1.077	0.991	1.127	9.84
32)	2,6-Dichlorophenol	0.314	0.326	0.303	0.309	0.305	0.303	0.310	2.87
33)	4-Chloroaniline	0.419	0.430	0.399	0.384	0.355	0.343	0.388	8.94
34) C	Hexachlorobutadiene	0.240	0.250	0.218	0.222	0.222	0.222	0.229	5.51
35)	Caprolactam	0.083	0.095	0.092	0.101	0.104	0.105	0.097	8.60
36) M C	4-Chloro-3-methylph	0.271	0.292	0.268	0.277	0.278	0.275	0.277	3.06
37)	2-Methylnaphthalene	0.786	0.808	0.706	0.675	0.670	0.628	0.712	9.89
38)	1-Methylnaphthalene	0.669	0.675	0.799	0.773	0.758	0.727	0.733	7.23
39) I	Acenaphthene-d10	-----ISTD-----							
40) P	Hexachlorocyclopent	0.388	0.409	0.440	0.477	0.478	0.474	0.444	8.71
41)	1,2,4,5-Tetrachloro	0.933	0.930	0.831	0.835	0.820	0.806	0.859	6.59
42) C	2,4,6-Trichlorophen	0.384	0.446	0.443	0.476	0.466	0.474	0.448	7.67
43)	2,4,5-Trichlorophen	0.424	0.484	0.480	0.508	0.513	0.509	0.486	6.93
44) S	2-Fluorobiphenyl	2.074	2.010	1.812	1.813	1.757	1.701	1.861	7.92
45)	Biphenyl	1.992	1.968	1.767	1.730	1.705	1.632	1.799	8.18
46)	2-Chloronaphthalene	1.575	1.561	1.397	1.382	1.354	1.322	1.432	7.58
47)	2-Nitroaniline	0.343	0.377	0.398	0.440	0.452	0.456	0.411	11.13
48)	Dimethylphthalate	1.527	1.558	1.375	1.380	1.352	1.312	1.417	7.08
49)	Acenaphthylene	2.098	2.197	1.992	1.985	1.941	1.862	2.013	5.88
50)	2,6-Dinitrotoluene	0.211	0.255	0.274	0.312	0.307	0.318	0.280	14.80
51)	3-Nitroaniline	0.241	0.272	0.237	0.206	0.182	0.201	0.223	14.75
52) M C	Acenaphthene	1.592	1.584	1.438	1.418	1.379	1.318	1.455	7.62
53) P	2,4-Dinitrophenol	0.009	0.020	0.034	0.069	0.080	0.104	0.053	71.25
54)	Dibenzofuran	2.202	2.131	1.919	1.863	1.836	1.745	1.949	9.16
55) M P	4-Nitrophenol	0.172	0.155	0.187	0.214	0.214	0.222	0.194	13.86
56) M	2,4-Dinitrotoluene	0.256	0.273	0.317	0.390	0.400	0.410	0.341	19.92
57)	2,3,4,6-Tetrachloro	0.261	0.309	0.311	0.364	0.368	0.383	0.333	14.06

(#) = Out of Range
 0426ABNS.M

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SS

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Response Factor Report GCMS-A

Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)
 Title : BNA Extractables GC/MS 8270C
 Last Update : Wed Oct 11 15:09:56 2017
 Response via : Initial Calibration

Calibration Files

2 =AS00032.D 5 =AS00033.D 20 =AS00035.D
 50 =AS00036.D 60 =AS00037.D 80 =AS00038.D

	Compound	2	5	20	50	60	80	Avg	%RSD
58)	Fluorene	1.694	1.699	1.544	1.515	1.475	1.431	1.560	7.22
59)	Diethylphthalate	1.360	1.381	1.251	1.280	1.241	1.210	1.287	5.31
60)	4-Chlorophenyl phen	0.797	0.809	0.730	0.738	0.721	0.709	0.751	5.54
61)	4-Nitroaniline	0.177	0.175	0.158	0.178	0.192	0.188	0.178	6.77
62) I	Phenanthrene-d10	-----ISTD-----							
63)	4,6-Dinitro-2-methy	0.025	0.032	0.052	0.089	0.100	0.114	0.069	54.25
64)	n-Nitrosodiphenylam	0.590	0.605	0.523	0.509	0.513	0.502	0.540	8.31
65)	1,2-Diphenylhydraz	0.758	0.792	0.706	0.683	0.676	0.640	0.709	7.96
66) S	2,4,6-Tribromopheno	0.087	0.105	0.109	0.123	0.126	0.127	0.113	13.87
67)	4-Bromophenyl-pheny	0.246	0.263	0.234	0.240	0.236	0.235	0.243	4.63
68)	Hexachlorobenzene	0.277	0.280	0.246	0.255	0.258	0.251	0.261	5.38
69)	Atrazine	0.176	0.203	0.186	0.174	0.170	0.164	0.179	7.81
70) M C	Pentachlorophenol	0.068	0.090	0.108	0.139	0.145	0.148	0.116	28.63
71)	Phenanthrene	1.276	1.261	1.099	1.084	1.076	1.019	1.136	9.37
72)	Anthracene	1.192	1.246	1.108	1.115	1.102	1.034	1.133	6.61
73)	Carbazole	1.070	1.094	0.628	0.516	0.465	0.506	0.713	40.79
74)	Di-n-butylphthalate	0.911	1.052	1.000	1.030	1.014	0.949	0.993	5.35
75) C	Fluoranthene	1.212	1.312	1.222	1.211	1.178	1.119	1.209	5.21
76) I	Chrysene-d12	-----ISTD-----							
77)	Benzidine	0.101	0.085	0.040	0.033	0.058		0.063	46.10
78) M	Pyrene	1.509	1.592	1.447	1.403	1.415	1.342	1.451	6.07
79) S	p-Terphenyl-d14	1.090	1.165	1.036	1.032	1.048	1.013	1.064	5.22
80)	Butylbenzylphthalat	0.322	0.377	0.403	0.451	0.452	0.444	0.408	12.67
81)	Benzo(a)anthracene	1.195	1.262	1.154	1.160	1.173	1.135	1.180	3.80
82)	3,3'-Dichlorobenzid	0.227	0.271	0.242	0.212	0.205	0.192	0.225	12.69
83)	Chrysene	1.225	1.278	1.137	1.160	1.141	1.128	1.178	5.09
84)	bis(2-Ethylhexyl)ph	0.539	0.422	0.489	0.575	0.571	0.558	0.526	11.32
85) I	Perylene-d12	-----ISTD-----							
86) C	Di-n-octylphthalate	0.953	0.774	0.803	1.045	1.021	1.028	0.937	12.78
87)	Benzo(b)fluoranthene	1.086	1.097	1.124	1.183	1.189	1.188	1.144	4.21
88)	Benzo(k)fluoranthene	1.229	1.244	1.185	1.262	1.261	1.236	1.236	2.28
89) C	Benzo(a)pyrene	1.096	1.119	1.009	1.117	1.110	1.115	1.094	3.90
90)	Indeno(1,2,3-cd)pyr	0.944	1.037	1.048	1.155	1.161	1.186	1.088	8.66
91)	Dibenzo(a,h)anthrac	0.740	0.825	0.858	0.943	0.935	0.965	0.878	9.86
92)	Benzo(g,h,i)perylene	0.868	0.886	0.856	0.956	0.961	0.957	0.914	5.36

(#) = Out of Range
 0426ABNS.M

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SS

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Compound List Report GCMS-A

Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)
 Title : BNA Extractables GC/MS 8270C
 Last Update : Wed Oct 11 15:09:56 2017
 Response via : Initial Calibration
 Total Cpnds : 92

PK#		Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I	1,4-Dichlorobenzene-d4	152	4.75	1.000	A	2	A	B
2		Pyridine	79	2.49	0.525	A	1	A	B
3		N-Nitroso-dimethylamine	42	2.46	0.518	A	2	A	B
4	S	2-Fluorophenol	112	3.66	0.771	A	3	A	B
5		Benzaldehyde	77	4.41	0.927	A	3	A	B
6		Aniline	93	4.48	0.943	A	2	A	B
7	S	Phenol-d6	99	4.41	0.927	A	2	A	B
8	M C	Phenol	94	4.42	0.930	A	2	A	B
9		bis(2-Chloroethyl)ether	93	4.51	0.948	A	2	A	B
10	M	2-Chlorophenol	128	4.59	0.965	A	2	A	B
11		1,3-Dichlorobenzene	146	4.71	0.992	A	3	A	B
12	M C	1,4-Dichlorobenzene	146	4.71	0.992	A	3	A	B
13		Benzyl Alcohol	108	4.83	1.017	A	2	A	B
14		1,2-Dichlorobenzene	146	4.90	1.030	A	3	A	B
15		2-Methylphenol	108	4.90	1.032	A	2	A	B
16		bis(2-Chloroisopropyl)ether	45	4.93	1.038	A	2	A	B
17		Acetophenone	105	5.06	1.064	A	2	A	B
18		3+4-Methylphenol	108	5.02	1.056	A	2	A	B
19	M P	n-Nitroso-di-n-propylamine	70	5.04	1.061	A	2	A	B
20		Hexachloroethane	117	5.18	1.089	A	3	A	B
21	I	Naphthalene-d8	136	5.96	1.000	A	3	A	B
22	S	Nitrobenzene-d5	82	5.34	0.895	A	2	A	B
23		Nitrobenzene	77	5.35	0.897	A	2	A	B
24		Isophorone	82	5.54	0.929	A	2	A	B
25	C	2-Nitrophenol	139	5.62	0.943	A	2	A	B
26		2,4-Dimethylphenol	107	5.62	0.942	A	3	A	B
27		bis(2-Chloroethoxy)methane	93	5.70	0.955	A	2	A	B
28	C	2,4-Dichlorophenol	162	5.82	0.976	A	2	A	B
29		Benzoic Acid	105	5.66	0.949	Q0	2	A	B
30	M	1,2,4-Trichlorobenzene	180	5.90	0.990	A	2	A	B
31		Naphthalene	128	5.98	1.003	A	3	A	B
32		2,6-Dichlorophenol	162	6.02	1.009	A	2	A	B
33		4-Chloroaniline	127	6.00	1.006	A	2	A	B
34	C	Hexachlorobutadiene	225	6.08	1.019	A	3	A	B
35		Caprolactam	113	6.29	1.055	A	2	A	B
36	M C	4-Chloro-3-methylphenol	107	6.39	1.072	A	2	A	B
37		2-Methylnaphthalene	142	6.66	1.117	A	2	A	B
38		1-Methylnaphthalene	142	6.71	1.125	A	2	A	B
39	I	Acenaphthene-d10	164	7.70	1.000	A	2	A	B
40	P	Hexachlorocyclopentadiene	237	6.82	0.886	A	2	A	B
41		1,2,4,5-Tetrachlorobenzene	216	6.83	0.888	A	2	A	B
42	C	2,4,6-Trichlorophenol	196	6.94	0.902	A	3	A	B
43		2,4,5-Trichlorophenol	196	6.98	0.907	A	3	A	B
44	S	2-Fluorobiphenyl	172	7.01	0.911	A	2	A	B
45		Biphenyl	154	7.12	0.925	A	2	A	B
46		2-Chloronaphthalene	162	7.15	0.928	A	2	A	B
47		2-Nitroaniline	138	7.24	0.941	A	2	A	B
48		Dimethylphthalate	163	7.41	0.962	A	2	A	B
49		Acenaphthylene	152	7.56	0.982	A	2	A	B
50		2,6-Dinitrotoluene	165	7.47	0.971	A	2	A	B
51		3-Nitroaniline	138	7.65	0.994	A	2	A	B
52	M C	Acenaphthene	153	7.73	1.004	A	2	A	B
53	P	2,4-Dinitrophenol	184	7.75	1.007	Q0	1	A	B
54		Dibenzofuran	168	7.90	1.027	A	2	A	B
55	M P	4-Nitrophenol	65	7.81	1.015	A	2	A	B
56	M	2,4-Dinitrotoluene	165	7.88	1.024	L0	2	A	B
57		2,3,4,6-Tetrachlorophenol	232	8.02	1.042	A	2	A	B
58		Fluorene	166	8.24	1.071	A	2	A	B
59		Diethylphthalate	149	8.10	1.053	A	2	A	B
60		4-Chlorophenyl phenyl ether	204	8.23	1.069	A	2	A	B
61		4-Nitroaniline	138	8.25	1.073	A	2	A	B
62	I	Phenanthrene-d10	188	9.17	1.000	A	2	A	B
63		4,6-Dinitro-2-methylphenol	198	8.29	0.903	Q0	2	A	B

64		n-Nitrosodiphenylamine	169	8.34	0.909	A	2	A	B
65		1,2-Diphenylhydrazine	77	8.39	0.914	A	2	A	B
66	S	2,4,6-Tribromophenol	330	8.48	0.925	A	2	A	B
67		4-Bromophenyl-phenyl ether	248	8.71	0.950	A	2	A	B
68		Hexachlorobenzene	284	8.80	0.959	A	2	A	B
69		Atrazine	200	8.86	0.966	A	2	A	B
70	M C	Pentachlorophenol	266	8.99	0.980	LO	2	A	B
71		Phenanthrene	178	9.20	1.002	A	2	A	B
72		Anthracene	178	9.25	1.008	A	2	A	B
73		Carbazole	167	9.40	1.025	LO	2	A	B
74		Di-n-butylphthalate	149	9.71	1.059	A	2	A	B
75	C	Fluoranthene	202	10.38	1.132	A	2	A	B
76	I	Chrysene-d12	240	11.90	1.000	A	2	A	B
77		Benzydine	184	10.49	0.882	LO	2	A	B
78	M	Pyrene	202	10.61	0.892	A	2	A	B
79	S	p-Terphenyl-d14	244	10.74	0.903	A	2	A	B
80		Butylbenzylphthalate	149	11.22	0.943	A	2	A	B
81		Benzo(a)anthracene	228	11.88	0.999	A	2	A	B
82		3,3'-Dichlorobenzidine	252	11.84	0.995	A	2	A	B
83		Chrysene	228	11.93	1.003	A	2	A	B
84		bis(2-Ethylhexyl)phthalate	149	11.85	0.996	A	2	A	B
85	I	Perylene-d12	264	13.63	1.000	A	2	A	B
86	C	Di-n-octylphthalate	149	12.60	0.924	A	1	A	B
87		Benzo(b)fluoranthene	252	13.15	0.965	A	3	A	B
88		Benzo(k)fluoranthene	252	13.18	0.967	A	3	A	B
89	C	Benzo(a)pyrene	252	13.56	0.995	A	3	A	B
90		Indeno(1,2,3-cd)pyrene	276	15.32	1.124	A	2	A	B
91		Dibenzo(a,h)anthracene	278	15.33	1.125	A	2	A	B
92		Benzo(g,h,i)perylene	276	15.83	1.161	A	2	A	B

Cal A = Average L = Linear LO = Linear w/origin Q = Quad Q0 = Quad w/origin

#Qual = number of qualifiers

A/H = Area or Height

ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

0426ABNS.M Thu Oct 12 13:17:57 2017 SS

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20170426\AS00032.D

Vial: 3

Acq On : 26 Apr 2017 19:14

Operator: GCH

Sample : SEQ-CAL@X2

Inst : GCMS-A

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Apr 28 14:45 2017

Quant Results File: 0426ABNS.RES

Quant Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C

Last Update : Thu Apr 27 11:16:21 2017

Response via : Initial Calibration

DataAcq Meth : RUN8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.57	152	283186	40.00	ug/kg	0.00
21) Naphthalene-d8	6.80	136	941639	40.00	ug/kg	0.00
38) Acenaphthene-d10	8.55	164	428667	40.00	ug/kg	0.00
61) Phenanthrene-d10	10.05	188	757453	40.00	ug/kg	0.00
75) Chrysene-d12	12.96	240	647526	40.00	ug/kg	0.00
84) Perylene-d12	15.21	264	527212	40.00	ug/kg	-0.01

System Monitoring Compounds

4) 2-Fluorophenol	4.37	112	22187	2.10	ug/kg	0.00
Spiked Amount	100.000	Range	30 - 130	Recovery	=	2.10%#
7) Phenol-d6	5.15	99	26993	2.20	ug/kg	0.00
Spiked Amount	100.000	Range	30 - 130	Recovery	=	2.20%#
22) Nitrobenzene-d5	6.08	82	20797	2.08	ug/kg	0.00
Spiked Amount	50.000	Range	30 - 130	Recovery	=	4.16%#
43) 2-Fluorobiphenyl	7.84	172	44450	2.26	ug/kg	0.00
Spiked Amount	50.000	Range	30 - 130	Recovery	=	4.52%#
65) 2,4,6-Tribromophenol	9.34	330	3290m	1.56	ug/kg	0.00
Spiked Amount	100.000	Range	30 - 130	Recovery	=	1.56%#
78) p-Terphenyl-d14	11.66	244	35284	2.09	ug/kg	0.00
Spiked Amount	50.000	Range	30 - 130	Recovery	=	4.18%#

Target Compounds

						Qvalue
2) Pyridine	3.31	79	23781	2.19	ng/uL	99
3) N-Nitroso-dimethylamine	3.25	42	8656	2.06	ng/uL	91
5) Benzaldehyde	5.16	77	9446	1.51	ug/kg	91
6) Aniline	5.25	93	23805	1.87	ug/kg	97
8) Phenol	5.17	94	26184	2.28	ug/kg	99
9) bis(2-Chloroethyl)ether	5.28	93	20791	2.28	ug/kg	100
10) 2-Chlorophenol	5.37	128	20550	2.11	ug/kg	96
11) 1,3-Dichlorobenzene	5.52	146	24224	2.25	ug/kg	98
12) 1,4-Dichlorobenzene	5.58	146	26078m	2.32	ug/kg	
13) Benzyl Alcohol	5.66	108	12474	2.12	ug/kg	99
14) 1,2-Dichlorobenzene	5.74	146	23599	2.29	ug/kg	99
15) 2-Methylphenol	5.74	108	18240	2.20	ug/kg	97
16) bis(2-Chloroisopropyl)ethe	5.78	45	28979m	2.26	ug/kg	
17) Acetophenone	5.92	105	27078	2.28	ug/kg#	62
18) 3+4-Methylphenol	5.87	108	18357	2.18	ug/kg	98
19) n-Nitroso-di-n-propylamine	5.90	70	10697	2.11	ug/kg	83
20) Hexachloroethane	6.06	117	8324	2.06	ug/kg	96
23) Nitrobenzene	6.10	77	19763	2.16	ug/kg	97
24) Isophorone	6.31	82	31374	2.12	ug/kg	99
25) 2-Nitrophenol	6.41	139	7119m	1.67	ug/kg	
26) 2,4-Dimethylphenol	6.40	107	17724	2.24	ug/kg	99
27) bis(2-Chloroethoxy)methane	6.49	93	20819	2.24	ug/kg	99
28) 2,4-Dichlorophenol	6.63	162	13458	1.89	ug/kg	95
29) Benzoic Acid	6.41	105	2576m	1.01	ug/kg	
30) 1,2,4-Trichlorobenzene	6.73	180	20067	2.21	ug/kg	99
31) Naphthalene	6.82	128	59745	2.29	ug/kg	99
32) 2,6-Dichlorophenol	6.86	162	14799	2.06	ug/kg	100
33) 4-Chloroaniline	6.84	127	19745	2.15	ug/kg	98
34) Hexachlorobutadiene	6.92	225	11295	2.13	ug/kg	97
35) Caprolactam	7.14	113	3902	1.75	ug/kg	92
36) 4-Chloro-3-methylphenol	7.28	107	12753	1.99	ug/kg	98
37) 2-Methylnaphthalene	7.49	142	55511	3.37	ug/kg	99
39) Hexachlorocyclopentadiene	7.65	237	8322	1.74	ug/kg	99
40) 1,2,4,5-Tetrachlorobenzene	7.66	216	19997	2.22	ug/kg	97
41) 2,4,6-Trichlorophenol	7.76	196	8229	1.74	ug/kg	94
42) 2,4,5-Trichlorophenol	7.80	196	9079	1.78	ug/kg	97

(#)=qualifier out of range (m)=manual integration

AS00032.D 0426ABNS.M

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Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20170426\AS00032.D

Vial: 3

Acq On : 26 Apr 2017 19:14

Operator: GCH

Sample : SEQ-CAL@X2

Inst : GCMS-A

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Apr 28 14:45 2017

Quant Results File: 0426ABNS.RES

Quant Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C

Last Update : Thu Apr 27 11:16:21 2017

Response via : Initial Calibration

DataAcq Meth : RUN8270A

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
44) Biphenyl	7.95	154	42685	2.27	ug/kg	99
45) 2-Chloronaphthalene	7.99	162	33759	2.24	ug/kg	100
46) 2-Nitroaniline	8.06	138	7358	1.73	ug/kg	97
47) Dimethylphthalate	8.21	163	32727	2.22	ug/kg	99
48) Acenaphthylene	8.41	152	44969	2.12	ug/kg	100
49) 2,6-Dinitrotoluene	8.29	165	4529	1.56	ug/kg	84
50) 3-Nitroaniline	8.47	138	5169m	2.16	ug/kg	
51) Acenaphthene	8.58	153	34125	2.21	ug/kg	98
53) Dibenzofuran	8.75	168	47188	2.29	ug/kg	99
54) 4-Nitrophenol	8.59	65	3694m	1.61	ug/kg	
55) 2,4-Dinitrotoluene	8.70	165	5489m	1.57	ug/kg	
56) 2,3,4,6-Tetrachlorophenol	8.86	232	5593m	1.62	ug/kg	
57) Fluorene	9.10	166	36314	2.20	ug/kg	99
58) Diethylphthalate	8.91	149	29141	2.14	ug/kg	99
59) 4-Chlorophenyl phenyl ethe	9.07	204	17076	2.15	ug/kg	97
60) 4-Nitroaniline	9.08	138	3795m	1.80	ug/kg	
62) 4,6-Dinitro-2-methylphenol	9.11	198	955m	0.75	ug/kg	
63) n-Nitrosodiphenylamine	9.18	169	22337	2.24	ug/kg	98
64) 1,2-Diphenylhydrazine	9.23	77	28719	2.16	ug/kg	98
66) 4-Bromophenyl-phenyl ether	9.56	248	9330	2.05	ug/kg	93
67) Hexachlorobenzene	9.67	284	10490	2.17	ug/kg	96
68) Atrazine	9.67	200	6683	1.98	ug/kg	96
69) Pentachlorophenol	9.84	266	2561m	1.18	ug/kg	
70) Phenanthrene	10.07	178	48324	2.30	ug/kg	98
71) Anthracene	10.13	178	45152	2.15	ug/kg	99
72) Carbazole	10.26	167	40520m	3.58	ug/kg	
73) Di-n-butylphthalate	10.54	149	34497	1.86	ug/kg	98
74) Fluoranthene	11.29	202	45896	2.03	ug/kg	100
76) Benzidine	11.39	184	3280m	2.29	ug/kg	
77) Pyrene	11.55	202	48845	2.11	ug/kg	99
79) Butylbenzylphthalate	12.17	149	10435m	1.56	ug/kg	
80) Benzo(a)anthracene	12.95	228	38697	2.07	ug/kg	98
81) 3,3'-Dichlorobenzidine	12.87	252	7364m	1.98	ug/kg	
82) Chrysene	13.00	228	39667	2.11	ug/kg	98
83) bis(2-Ethylhexyl)phthalate	12.84	149	17465m	2.15	ug/kg	
85) Di-n-octylphthalate	13.69	149	25109m	2.18	ug/kg	
86) Benzo(b)fluoranthene	14.51	252	28625	1.92	ug/kg	98
87) Benzo(k)fluoranthene	14.55	252	32392m	2.02	ug/kg	
88) Benzo(a)pyrene	15.11	252	28902m	2.04	ug/kg	
89) Indeno(1,2,3-cd)pyrene	17.68	276	24881m	1.74	ug/kg	
90) Dibenzo(a,h)anthracene	17.70	278	19504m	1.74	ug/kg	
91) Benzo(g,h,i)perylene	18.45	276	22881m	1.92	ug/kg	

(#) = qualifier out of range (m) = manual integration

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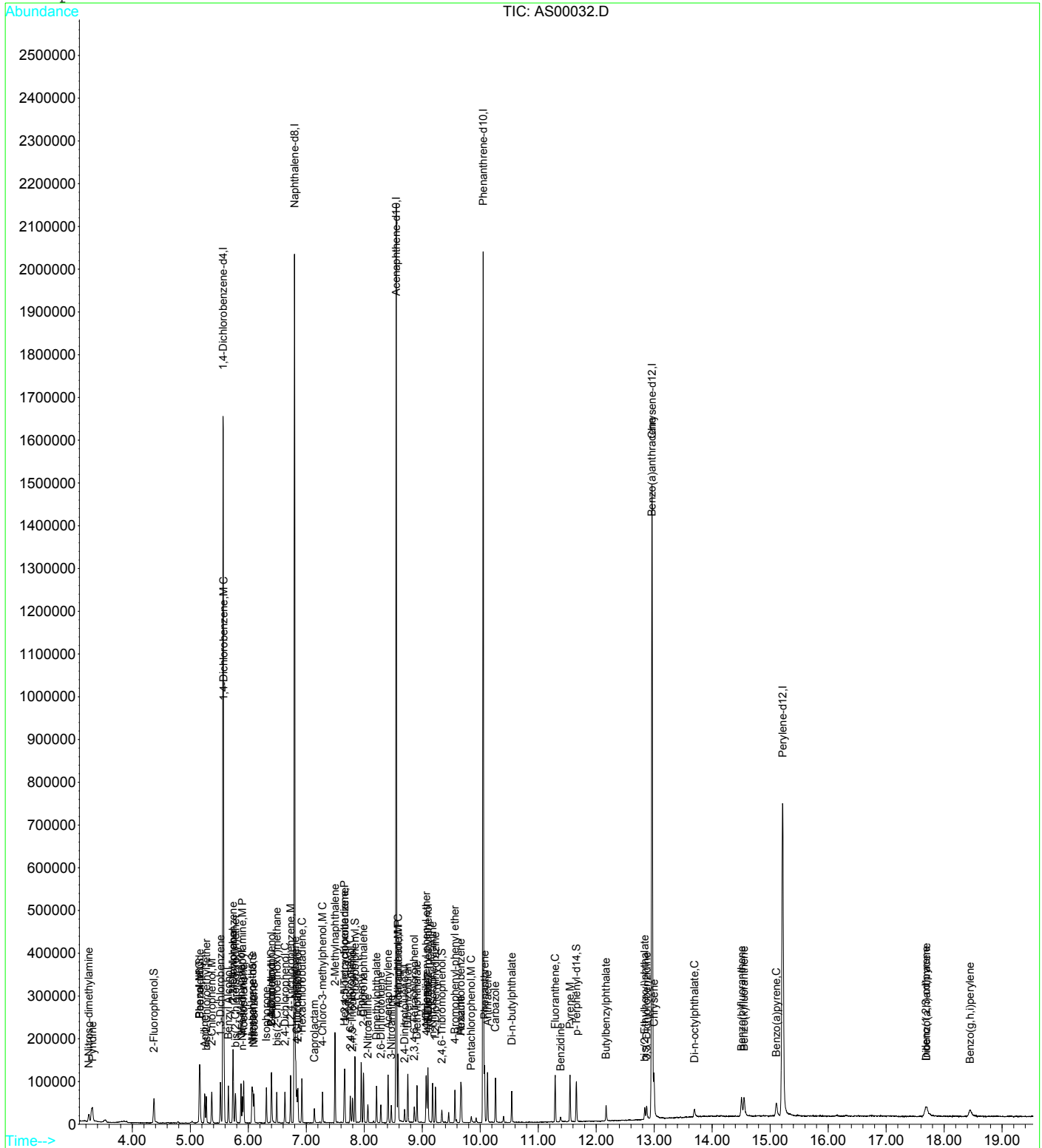
Quantitation Report

Data File : G:\HPCHEM\A\DATA\20170426\AS00032.D
 Acq On : 26 Apr 2017 19:14
 Sample : SEQ-CAL@X2
 Misc :
 MS Integration Params: RTEINT.P
 Quant Time: Apr 28 14:45 2017

Vial: 3
 Operator: GCH
 Inst : GCMS-A
 Multiplr: 1.00

Quant Results File: 0426ABNS.RES

Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)
 Title : BNA Extractables GC/MS 8270C
 Last Update : Fri Jun 09 14:49:19 2017
 Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20170426\AS00033.D

Vial: 4

Acq On : 26 Apr 2017 19:41

Operator: GCH

Sample : SEQ-CAL@X5

Inst : GCMS-A

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Apr 28 14:45 2017

Quant Results File: 0426ABNS.RES

Quant Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C

Last Update : Thu Apr 27 13:31:47 2017

Response via : Initial Calibration

DataAcq Meth : RUN8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.57	152	289298	40.00	ug/kg	0.00
21) Naphthalene-d8	6.80	136	977039	40.00	ug/kg	0.00
38) Acenaphthene-d10	8.55	164	451874	40.00	ug/kg	0.00
61) Phenanthrene-d10	10.05	188	802970	40.00	ug/kg	0.00
75) Chrysene-d12	12.96	240	695686	40.00	ug/kg	0.00
84) Perylene-d12	15.21	264	573036	40.00	ug/kg	0.00

System Monitoring Compounds

4) 2-Fluorophenol	4.38	112	58551	5.27	ug/kg	0.00
Spiked Amount	100.000	Range	30 - 130	Recovery	=	5.27%#
7) Phenol-d6	5.16	99	69769	5.38	ug/kg	0.00
Spiked Amount	100.000	Range	30 - 130	Recovery	=	5.38%#
22) Nitrobenzene-d5	6.08	82	53383	5.04	ug/kg	0.00
Spiked Amount	50.000	Range	30 - 130	Recovery	=	10.08%#
43) 2-Fluorobiphenyl	7.84	172	113512	5.35	ug/kg	0.00
Spiked Amount	50.000	Range	30 - 130	Recovery	=	10.70%#
65) 2,4,6-Tribromophenol	9.34	330	10544m	4.68	ug/kg	0.00
Spiked Amount	100.000	Range	30 - 130	Recovery	=	4.68%#
78) p-Terphenyl-d14	11.66	244	101278	5.45	ug/kg	0.00
Spiked Amount	50.000	Range	30 - 130	Recovery	=	10.90%#

Target Compounds

						Qvalue
2) Pyridine	3.31	79	60287	5.32	ng/uL	95
3) N-Nitroso-dimethylamine	3.25	42	22322	5.17	ng/uL	98
5) Benzaldehyde	5.16	77	24962	4.17	ug/kg	96
6) Aniline	5.25	93	65232	5.03	ug/kg	98
8) Phenol	5.17	94	66146	5.47	ug/kg	99
9) bis(2-Chloroethyl)ether	5.28	93	49830	5.19	ug/kg	95
10) 2-Chlorophenol	5.37	128	53990	5.29	ug/kg	99
11) 1,3-Dichlorobenzene	5.52	146	61118	5.42	ug/kg	100
12) 1,4-Dichlorobenzene	5.58	146	64227m	5.44	ug/kg	
13) Benzyl Alcohol	5.66	108	32195	5.26	ug/kg	99
14) 1,2-Dichlorobenzene	5.74	146	58969	5.46	ug/kg	99
15) 2-Methylphenol	5.74	108	47142	5.44	ug/kg	99
16) bis(2-Chloroisopropyl)ethe	5.78	45	73295m	5.48	ug/kg	
17) Acetophenone	5.92	105	67699	5.43	ug/kg#	60
18) 3+4-Methylphenol	5.87	108	47178	5.35	ug/kg	100
19) n-Nitroso-di-n-propylamine	5.90	70	28106	5.32	ug/kg	81
20) Hexachloroethane	6.06	117	22085	5.32	ug/kg	98
23) Nitrobenzene	6.10	77	49744	5.08	ug/kg	98
24) Isophorone	6.31	82	82398	5.28	ug/kg	99
25) 2-Nitrophenol	6.41	139	20403m	4.51	ug/kg	
26) 2,4-Dimethylphenol	6.40	107	45970	5.44	ug/kg	96
27) bis(2-Chloroethoxy)methane	6.49	93	52530	5.33	ug/kg	98
28) 2,4-Dichlorophenol	6.63	162	38086	5.10	ug/kg	99
29) Benzoic Acid	6.42	105	8318m	3.05	ug/kg	
30) 1,2,4-Trichlorobenzene	6.73	180	51808	5.36	ug/kg	98
31) Naphthalene	6.82	128	153196	5.56	ug/kg	99
32) 2,6-Dichlorophenol	6.86	162	39797	5.21	ug/kg	98
33) 4-Chloroaniline	6.84	127	52481	5.47	ug/kg	99
34) Hexachlorobutadiene	6.92	225	30477	5.45	ug/kg	98
35) Caprolactam	7.14	113	11630	4.92	ug/kg	98
36) 4-Chloro-3-methylphenol	7.28	107	35713	5.26	ug/kg	99
37) 2-Methylnaphthalene	7.50	142	147944	8.48	ug/kg	98
39) Hexachlorocyclopentadiene	7.65	237	23079	4.51	ug/kg	99
40) 1,2,4,5-Tetrachlorobenzene	7.67	216	52507	5.39	ug/kg	99
41) 2,4,6-Trichlorophenol	7.76	196	25164	4.96	ug/kg	98
42) 2,4,5-Trichlorophenol	7.80	196	27322	4.98	ug/kg	99

(#)=qualifier out of range (m)=manual integration

AS00033.D 0426ABNS.M Mon Jun 12 11:21:56 2017

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Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20170426\AS00033.D

Vial: 4

Acq On : 26 Apr 2017 19:41

Operator: GCH

Sample : SEQ-CAL@X5

Inst : GCMS-A

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Apr 28 14:45 2017

Quant Results File: 0426ABNS.RES

Quant Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C

Last Update : Thu Apr 27 13:31:47 2017

Response via : Initial Calibration

DataAcq Meth : RUN8270A

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
44) Biphenyl	7.95	154	111182	5.47	ug/kg	99
45) 2-Chloronaphthalene	7.99	162	88164	5.43	ug/kg	99
46) 2-Nitroaniline	8.06	138	21290	4.63	ug/kg	96
47) Dimethylphthalate	8.21	163	88004	5.50	ug/kg	99
48) Acenaphthylene	8.41	152	124076	5.43	ug/kg	99
49) 2,6-Dinitrotoluene	8.29	165	14415	4.59	ug/kg	94
50) 3-Nitroaniline	8.47	138	15368m	5.90	ug/kg	
51) Acenaphthene	8.58	153	89471	5.39	ug/kg	99
52) 2,4-Dinitrophenol	8.57	184	1128m	1.88	ug/kg	
53) Dibenzofuran	8.75	168	120368	5.42	ug/kg	100
54) 4-Nitrophenol	8.59	65	8730m	4.14	ug/kg	
55) 2,4-Dinitrotoluene	8.70	165	15435	4.10	ug/kg	91
56) 2,3,4,6-Tetrachlorophenol	8.86	232	17453m	4.76	ug/kg	
57) Fluorene	9.10	166	95968	5.37	ug/kg	98
58) Diethylphthalate	8.91	149	77996	5.29	ug/kg	99
59) 4-Chlorophenyl phenyl ethe	9.07	204	45686	5.35	ug/kg	98
60) 4-Nitroaniline	9.08	138	9880m	4.32	ug/kg	
62) 4,6-Dinitro-2-methylphenol	9.11	198	3207	2.31	ug/kg	98
63) n-Nitrosodiphenylamine	9.18	169	60731	5.58	ug/kg	99
64) 1,2-Diphenylhydrazine	9.23	77	79504	5.53	ug/kg	98
66) 4-Bromophenyl-phenyl ether	9.56	248	26442	5.38	ug/kg	98
67) Hexachlorobenzene	9.67	284	28072	5.35	ug/kg	99
68) Atrazine	9.67	200	20389	5.64	ug/kg	98
69) Pentachlorophenol	9.84	266	8989m	3.90	ug/kg	
70) Phenanthrene	10.07	178	126574	5.53	ug/kg	99
71) Anthracene	10.13	178	125047	5.47	ug/kg	100
72) Carbazole	10.26	167	109764m	8.79	ug/kg	
73) Di-n-butylphthalate	10.54	149	105579	5.27	ug/kg	99
74) Fluoranthene	11.29	202	131651	5.40	ug/kg	100
76) Benzidine	11.38	184	7393m	5.16	ug/kg	
77) Pyrene	11.55	202	138453	5.45	ug/kg	99
79) Butylbenzylphthalate	12.17	149	32818	4.61	ug/kg	100
80) Benzo(a)anthracene	12.95	228	109733	5.32	ug/kg	99
81) 3,3'-Dichlorobenzidine	12.87	252	23549m	5.78	ug/kg	
82) Chrysene	13.00	228	111126	5.41	ug/kg	99
83) bis(2-Ethylhexyl)phthalate	12.84	149	36734	4.23	ug/kg	98
85) Di-n-octylphthalate	13.69	149	55473m	4.49	ug/kg	
86) Benzo(b)fluoranthene	14.50	252	78543	4.73	ug/kg	98
87) Benzo(k)fluoranthene	14.55	252	89127	5.02	ug/kg	97
88) Benzo(a)pyrene	15.11	252	80169m	5.15	ug/kg	
89) Indeno(1,2,3-cd)pyrene	17.68	276	74247m	4.73	ug/kg	
90) Dibenzo(a,h)anthracene	17.70	278	59108m	4.79	ug/kg	
91) Benzo(g,h,i)perylene	18.45	276	63465m	4.84	ug/kg	

(#) = qualifier out of range (m) = manual integration

AS00033.D 0426ABNS.M

Mon Jun 12 11:21:56 2017

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Page 2

Quantitation Report

Data File : G:\HPCHEM\A\DATA\20170426\AS00033.D

Acq On : 26 Apr 2017 19:41

Sample : SEQ-CAL@X5

Misc :

MS Integration Params: RTEINT.P

Quant Time: Apr 28 14:45 2017

Vial: 4

Operator: GCH

Inst : GCMS-A

Multiplr: 1.00

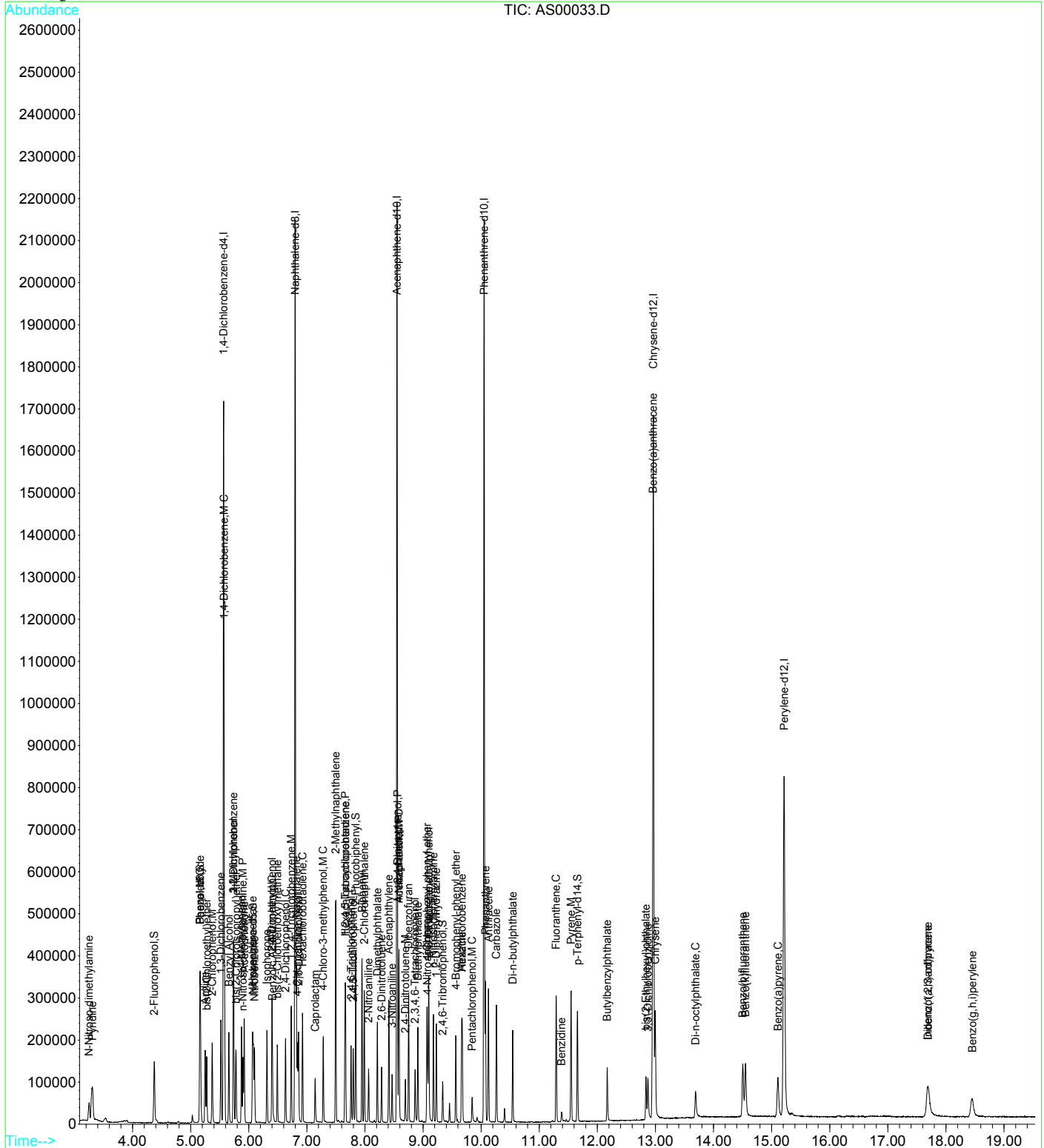
Quant Results File: 0426ABNS.RES

Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C

Last Update : Fri Jun 09 14:49:19 2017

Response via : Initial Calibration



AS00033.D 0426ABNS.M

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Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20170426\AS00035.D

Vial: 6

Acq On : 26 Apr 2017 20:35

Operator: GCH

Sample : SEQ-CAL@X20

Inst : GCMS-A

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Apr 28 14:46 2017

Quant Results File: 0426ABNS.RES

Quant Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C

Last Update : Thu Apr 27 11:00:03 2017

Response via : Initial Calibration

DataAcq Meth : RUN8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.57	152	271703	40.00	ug/kg	0.00
21) Naphthalene-d8	6.80	136	891890	40.00	ug/kg	0.00
38) Acenaphthene-d10	8.55	164	407728	40.00	ug/kg	0.00
61) Phenanthrene-d10	10.05	188	736256	40.00	ug/kg	0.00
75) Chrysene-d12	12.97	240	648151	40.00	ug/kg	0.00
84) Perylene-d12	15.22	264	532931	40.00	ug/kg	0.00

System Monitoring Compounds

4) 2-Fluorophenol	4.37	112	206153	21.04	ug/kg	0.00
Spiked Amount	100.000	Range	30 - 130	Recovery	=	21.04%#
7) Phenol-d6	5.16	99	238949	20.57	ug/kg	0.00
Spiked Amount	100.000	Range	30 - 130	Recovery	=	20.57%#
22) Nitrobenzene-d5	6.08	82	185222	23.65	ug/kg	0.00
Spiked Amount	50.000	Range	30 - 130	Recovery	=	47.30%
43) 2-Fluorobiphenyl	7.84	172	369374	21.87	ug/kg	0.00
Spiked Amount	50.000	Range	30 - 130	Recovery	=	43.74%
65) 2,4,6-Tribromophenol	9.34	330	40268	21.58	ug/kg	0.00
Spiked Amount	100.000	Range	30 - 130	Recovery	=	21.58%#
78) p-Terphenyl-d14	11.66	244	335849	21.16	ug/kg	0.00
Spiked Amount	50.000	Range	30 - 130	Recovery	=	42.32%

Target Compounds

						Qvalue
2) Pyridine	3.31	79	202168	18.70	ng/uL	81
3) N-Nitroso-dimethylamine	3.25	42	80982	14.26	ng/uL	91
5) Benzaldehyde	5.16	77	113410m	34.90	ug/kg	
6) Aniline	5.25	93	239552	19.41	ug/kg	88
8) Phenol	5.17	94	219146	20.43	ug/kg	83
9) bis(2-Chloroethyl)ether	5.28	93	176635	23.76	ug/kg	63
10) 2-Chlorophenol	5.37	128	186934	20.25	ug/kg	95
11) 1,3-Dichlorobenzene	5.52	146	203813	20.13	ug/kg	96
12) 1,4-Dichlorobenzene	5.52	146	203813	18.93	ug/kg	93
13) Benzyl Alcohol	5.66	108	109271	19.72	ug/kg	89
14) 1,2-Dichlorobenzene	5.74	146	195200	20.42	ug/kg	97
15) 2-Methylphenol	5.74	108	157474	20.09	ug/kg	94
16) bis(2-Chloroisopropyl)ethe	5.78	45	246017	13.96	ug/kg#	72
17) Acetophenone	5.92	105	223424	20.00	ug/kg#	92
18) 3+4-Methylphenol	5.88	108	159625	20.14	ug/kg	98
19) n-Nitroso-di-n-propylamine	5.90	70	94438	20.15	ug/kg	91
20) Hexachloroethane	6.06	117	75441	20.44	ug/kg	90
23) Nitrobenzene	6.10	77	173289	23.52	ug/kg	91
24) Isophorone	6.31	82	277254	20.58	ug/kg	95
25) 2-Nitrophenol	6.41	139	78788	26.58	ug/kg	86
26) 2,4-Dimethylphenol	6.40	107	149523	20.51	ug/kg	94
27) bis(2-Chloroethoxy)methane	6.49	93	171115	20.54	ug/kg	95
28) 2,4-Dichlorophenol	6.64	162	134219	20.75	ug/kg	96
29) Benzoic Acid	6.43	105	42365m	28.18	ug/kg	
30) 1,2,4-Trichlorobenzene	6.73	180	169660	22.38	ug/kg	97
31) Naphthalene	6.82	128	490553	20.15	ug/kg	90
32) 2,6-Dichlorophenol	6.86	162	135102	21.17	ug/kg	96
33) 4-Chloroaniline	6.84	127	177749	15.63	ug/kg	97
34) Hexachlorobutadiene	6.92	225	97391	22.88	ug/kg	99
35) Caprolactam	7.15	113	41028	20.64	ug/kg	77
36) 4-Chloro-3-methylphenol	7.29	107	119604	20.56	ug/kg	93
37) 2-Methylnaphthalene	7.50	142	472358	32.00	ug/kg	94
39) Hexachlorocyclopentadiene	7.66	237	89794	25.37	ug/kg	99
40) 1,2,4,5-Tetrachlorobenzene	7.67	216	169500	23.36	ug/kg	96
41) 2,4,6-Trichlorophenol	7.76	196	90221	23.00	ug/kg	95
42) 2,4,5-Trichlorophenol	7.80	196	97891	22.38	ug/kg	98

(#)=qualifier out of range (m)=manual integration

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Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20170426\AS00035.D

Vial: 6

Acq On : 26 Apr 2017 20:35

Operator: GCH

Sample : SEQ-CAL@X20

Inst : GCMS-A

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Apr 28 14:46 2017

Quant Results File: 0426ABNS.RES

Quant Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C

Last Update : Thu Apr 27 11:00:03 2017

Response via : Initial Calibration

DataAcq Meth : RUN8270A

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
44) Biphenyl	7.95	154	360136	22.06	ug/kg	91
45) 2-Chloronaphthalene	7.99	162	284887	21.44	ug/kg	91
46) 2-Nitroaniline	8.07	138	81178	27.06	ug/kg	94
47) Dimethylphthalate	8.22	163	280393	21.12	ug/kg	99
48) Acenaphthylene	8.41	152	406006	21.82	ug/kg	89
49) 2,6-Dinitrotoluene	8.29	165	55949	27.74	ug/kg	93
50) 3-Nitroaniline	8.47	138	48337	27.32	ug/kg	86
51) Acenaphthene	8.58	153	293106	22.56	ug/kg	96
52) 2,4-Dinitrophenol	8.57	184	6864	37.38	ug/kg#	1
53) Dibenzofuran	8.75	168	391245	22.18	ug/kg	93
54) 4-Nitrophenol	8.59	65	38152m	21.12	ug/kg	
55) 2,4-Dinitrotoluene	8.70	165	64569	29.23	ug/kg	91
56) 2,3,4,6-Tetrachlorophenol	8.86	232	63385	23.68	ug/kg	98
57) Fluorene	9.10	166	314747	22.35	ug/kg	95
58) Diethylphthalate	8.91	149	255061	21.27	ug/kg	92
59) 4-Chlorophenyl phenyl ethe	9.07	204	148901	22.94	ug/kg	97
60) 4-Nitroaniline	9.08	138	32168	21.58	ug/kg	88
62) 4,6-Dinitro-2-methylphenol	9.11	198	19175	31.33	ug/kg	94
63) n-Nitrosodiphenylamine	9.18	169	192657	20.01	ug/kg	94
64) 1,2-Diphenylhydrazine	9.23	77	259763	19.66	ug/kg	95
66) 4-Bromophenyl-phenyl ether	9.57	248	86095	20.61	ug/kg	98
67) Hexachlorobenzene	9.67	284	90448	20.10	ug/kg	98
68) Atrazine	9.68	200	68439	19.67	ug/kg	98
69) Pentachlorophenol	9.85	266	39632	23.93	ug/kg	99
70) Phenanthrene	10.08	178	404510	20.16	ug/kg	99
71) Anthracene	10.13	178	408069	20.16	ug/kg	99
72) Carbazole	10.27	167	231096	16.20	ug/kg	100
73) Di-n-butylphthalate	10.54	149	368244	19.46	ug/kg	99
74) Fluoranthene	11.30	202	449981	21.33	ug/kg	98
76) Benzidine	11.39	184	12896m	12.89	ug/kg	
77) Pyrene	11.55	202	468841	21.93	ug/kg	99
79) Butylbenzylphthalate	12.17	149	130641	18.86	ug/kg	99
80) Benzo(a)anthracene	12.95	228	374012	21.67	ug/kg	99
81) 3,3'-Dichlorobenzidine	12.87	252	78379	20.56	ug/kg	98
82) Chrysene	13.00	228	368569	21.74	ug/kg	99
83) bis(2-Ethylhexyl)phthalate	12.84	149	158622	18.04	ug/kg	99
85) Di-n-octylphthalate	13.70	149	213975	16.84	ug/kg	99
86) Benzo(b)fluoranthene	14.51	252	299400	19.18	ug/kg	99
87) Benzo(k)fluoranthene	14.56	252	315795	20.33	ug/kg	98
88) Benzo(a)pyrene	15.11	252	268846	19.83	ug/kg	98
89) Indeno(1,2,3-cd)pyrene	17.69	276	279286	22.83	ug/kg#	75
90) Dibenzo(a,h)anthracene	17.71	278	228552m	24.03	ug/kg	
91) Benzo(g,h,i)perylene	18.46	276	228197	22.72	ug/kg#	85

(#) = qualifier out of range (m) = manual integration

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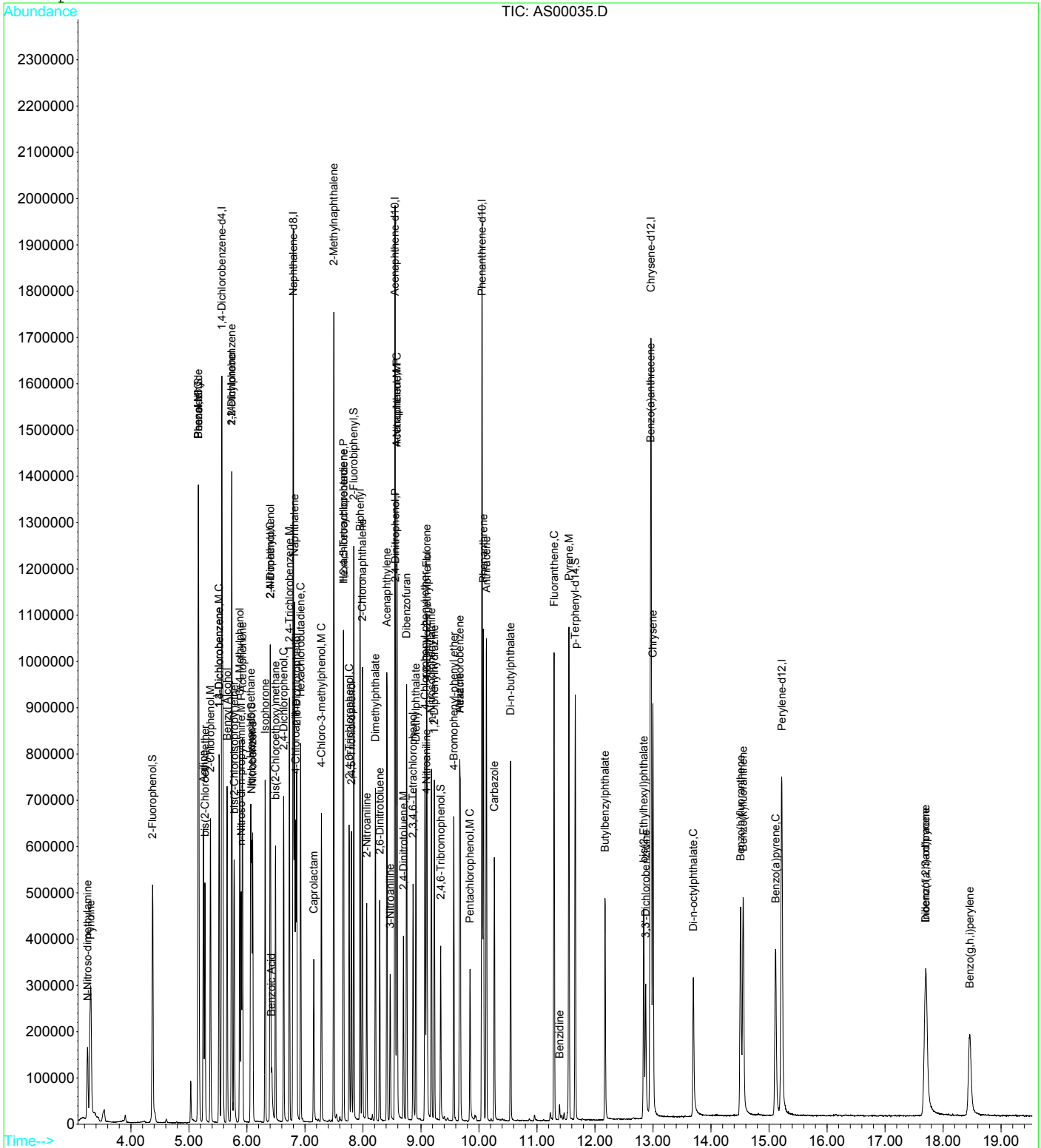
Quantitation Report

Data File : G:\HPCHEM\A\DATA\20170426\AS00035.D
 Acq On : 26 Apr 2017 20:35
 Sample : SEQ-CAL@X20
 Misc :
 MS Integration Params: RTEINT.P
 Quant Time: Apr 28 14:46 2017

Vial: 6
 Operator: GCH
 Inst : GCMS-A
 Multiplr: 1.00

Quant Results File: 0426ABNS.RES

Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)
 Title : BNA Extractables GC/MS 8270C
 Last Update : Fri Jun 09 14:49:19 2017
 Response via : Initial Calibration



AS00035.D 0426ABNS.M

Mon Jun 12 11:22:03 2017

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Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20170426\AS00036.D

Vial: 7

Acq On : 26 Apr 2017 21:03

Operator: GCH

Sample : SEQ-CAL@X50

Inst : GCMS-A

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Apr 28 14:40 2017

Quant Results File: 0426ABNS.RES

Quant Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C

Last Update : Thu Apr 27 11:00:03 2017

Response via : Initial Calibration

DataAcq Meth : RUN8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.57	152	282930	40.00	ug/kg	0.00
21) Naphthalene-d8	6.80	136	941754	40.00	ug/kg	0.00
38) Acenaphthene-d10	8.55	164	432367	40.00	ug/kg	0.00
61) Phenanthrene-d10	10.05	188	795736	40.00	ug/kg	0.00
75) Chrysene-d12	12.97	240	706301	40.00	ug/kg	0.00
84) Perylene-d12	15.22	264	584425	40.00	ug/kg	0.00

System Monitoring Compounds

4) 2-Fluorophenol	4.38	112	524758	51.42	ug/kg	0.00
Spiked Amount	100.000	Range	30 - 130	Recovery	=	51.42%
7) Phenol-d6	5.16	99	607332	50.20	ug/kg	0.00
Spiked Amount	100.000	Range	30 - 130	Recovery	=	50.20%
22) Nitrobenzene-d5	6.08	82	504961	61.06	ug/kg	0.00
Spiked Amount	50.000	Range	30 - 130	Recovery	=	122.12%
43) 2-Fluorobiphenyl	7.84	172	979889	54.71	ug/kg	0.00
Spiked Amount	50.000	Range	30 - 130	Recovery	=	109.42%
65) 2,4,6-Tribromophenol	9.34	330	122272	60.63	ug/kg	0.00
Spiked Amount	100.000	Range	30 - 130	Recovery	=	60.63%
78) p-Terphenyl-d14	11.66	244	911324	52.68	ug/kg	0.00
Spiked Amount	50.000	Range	30 - 130	Recovery	=	105.36%

Target Compounds

						Qvalue
2) Pyridine	3.31	79	525099	46.65	ng/uL	79
3) N-Nitroso-dimethylamine	3.25	42	204957	34.65	ng/uL	95
5) Benzaldehyde	5.16	77	283693m	83.83	ug/kg	
6) Aniline	5.25	93	636693	49.54	ug/kg	89
8) Phenol	5.18	94	560587	50.19	ug/kg	84
9) bis(2-Chloroethyl)ether	5.28	93	444178	57.39	ug/kg	65
10) 2-Chlorophenol	5.37	128	486984	50.65	ug/kg	95
11) 1,3-Dichlorobenzene	5.52	146	526368	49.91	ug/kg	96
12) 1,4-Dichlorobenzene	5.52	146	526368	46.95	ug/kg	94
13) Benzyl Alcohol	5.66	108	291291	50.48	ug/kg	89
14) 1,2-Dichlorobenzene	5.74	146	499873	50.21	ug/kg	97
15) 2-Methylphenol	5.74	108	406479	49.79	ug/kg	95
16) bis(2-Chloroisopropyl)ethe	5.78	45	608334	33.16	ug/kg#	72
17) Acetophenone	5.93	105	580402	49.90	ug/kg#	91
18) 3+4-Methylphenol	5.88	108	419114	50.77	ug/kg	97
19) n-Nitroso-di-n-propylamine	5.91	70	253747	52.00	ug/kg	69
20) Hexachloroethane	6.06	117	197197	51.30	ug/kg	89
23) Nitrobenzene	6.10	77	459306	59.03	ug/kg	92
24) Isophorone	6.32	82	728046	51.18	ug/kg	95
25) 2-Nitrophenol	6.41	139	248588	79.42	ug/kg	93
26) 2,4-Dimethylphenol	6.40	107	389469	50.59	ug/kg	94
27) bis(2-Chloroethoxy)methane	6.50	93	454862	51.72	ug/kg	95
28) 2,4-Dichlorophenol	6.64	162	359587	52.64	ug/kg	96
29) Benzoic Acid	6.46	105	155958	98.26	ug/kg#	67
30) 1,2,4-Trichlorobenzene	6.73	180	442800	55.33	ug/kg	98
31) Naphthalene	6.82	128	1258357	48.96	ug/kg	90
32) 2,6-Dichlorophenol	6.86	162	364039	54.01	ug/kg	96
33) 4-Chloroaniline	6.84	127	451945	37.63	ug/kg	98
34) Hexachlorobutadiene	6.93	225	261855	58.26	ug/kg	99
35) Caprolactam	7.17	113	118942	56.67	ug/kg	83
36) 4-Chloro-3-methylphenol	7.29	107	325972	53.08	ug/kg	94
37) 2-Methylnaphthalene	7.50	142	1191045	76.43	ug/kg	97
39) Hexachlorocyclopentadiene	7.66	237	257714	68.66	ug/kg	98
40) 1,2,4,5-Tetrachlorobenzene	7.67	216	451408	58.66	ug/kg	96
41) 2,4,6-Trichlorophenol	7.76	196	257218	61.83	ug/kg	94
42) 2,4,5-Trichlorophenol	7.80	196	274642	59.20	ug/kg	98

(#)= qualifier out of range (m)= manual integration

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Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20170426\AS00036.D

Vial: 7

Acq On : 26 Apr 2017 21:03

Operator: GCH

Sample : SEQ-CAL@X50

Inst : GCMS-A

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Apr 28 14:40 2017

Quant Results File: 0426ABNS.RES

Quant Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C

Last Update : Thu Apr 27 11:00:03 2017

Response via : Initial Calibration

DataAcq Meth : RUN8270A

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
44) Biphenyl	7.95	154	934792	54.00	ug/kg	91
45) 2-Chloronaphthalene	7.99	162	747067	53.02	ug/kg	92
46) 2-Nitroaniline	8.07	138	237892	74.77	ug/kg	94
47) Dimethylphthalate	8.22	163	746008	52.99	ug/kg	99
48) Acenaphthylene	8.41	152	1073011	54.38	ug/kg	90
49) 2,6-Dinitrotoluene	8.29	165	168556	78.80	ug/kg	95
50) 3-Nitroaniline	8.47	138	111587	59.48	ug/kg	89
51) Acenaphthene	8.59	153	766326	55.62	ug/kg	97
52) 2,4-Dinitrophenol	8.57	184	37116	190.63	ug/kg#	1
53) Dibenzofuran	8.76	168	1007011	53.83	ug/kg	93
54) 4-Nitrophenol	8.60	65	115696	60.40	ug/kg	89
55) 2,4-Dinitrotoluene	8.70	165	211023	90.09	ug/kg	95
56) 2,3,4,6-Tetrachlorophenol	8.87	232	196606	69.26	ug/kg	96
57) Fluorene	9.10	166	819031	54.85	ug/kg	95
58) Diethylphthalate	8.92	149	691815	54.39	ug/kg	93
59) 4-Chlorophenyl phenyl ethe	9.07	204	398659	57.93	ug/kg	99
60) 4-Nitroaniline	9.09	138	96059	60.78	ug/kg	90
62) 4,6-Dinitro-2-methylphenol	9.12	198	88631	134.00	ug/kg	98
63) n-Nitrosodiphenylamine	9.18	169	506271	48.66	ug/kg	95
64) 1,2-Diphenylhydrazine	9.23	77	679022	47.55	ug/kg	96
66) 4-Bromophenyl-phenyl ether	9.57	248	238949	52.92	ug/kg	98
67) Hexachlorobenzene	9.67	284	253806	52.18	ug/kg	99
68) Atrazine	9.68	200	172755	45.93	ug/kg	98
69) Pentachlorophenol	9.85	266	138532	77.38	ug/kg	98
70) Phenanthrene	10.08	178	1078035	49.70	ug/kg	99
71) Anthracene	10.13	178	1108786	50.67	ug/kg	99
72) Carbazole	10.27	167	513050m	33.28	ug/kg	
73) Di-n-butylphthalate	10.55	149	1024886	50.12	ug/kg	99
74) Fluoranthene	11.30	202	1204645	52.84	ug/kg	99
76) Benzidine	11.39	184	29254m	26.84	ug/kg	
77) Pyrene	11.55	202	1238469	53.15	ug/kg	99
79) Butylbenzylphthalate	12.17	149	397951	52.71	ug/kg	100
80) Benzo(a)anthracene	12.95	228	1023925	54.44	ug/kg	100
81) 3,3'-Dichlorobenzidine	12.88	252	186748	44.95	ug/kg	100
82) Chrysene	13.00	228	1023841	55.41	ug/kg	100
83) bis(2-Ethylhexyl)phthalate	12.84	149	507759	52.98	ug/kg	99
85) Di-n-octylphthalate	13.69	149	763669	54.80	ug/kg	100
86) Benzo(b)fluoranthene	14.52	252	864426	50.50	ug/kg	99
87) Benzo(k)fluoranthene	14.56	252	921627	54.09	ug/kg	99
88) Benzo(a)pyrene	15.12	252	815905	54.89	ug/kg	99
89) Indeno(1,2,3-cd)pyrene	17.71	276	843522	62.88	ug/kg	99
90) Dibenzo(a,h)anthracene	17.72	278	688906	66.06	ug/kg	99
91) Benzo(g,h,i)perylene	18.47	276	698456	63.41	ug/kg	100

(#) = qualifier out of range (m) = manual integration

AS00036.D 0426ABNS.M

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Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20170426\AS00037.D

Vial: 8

Acq On : 26 Apr 2017 21:30

Operator: GCH

Sample : SEQ-CAL@X60

Inst : GCMS-A

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Apr 28 14:47 2017

Quant Results File: 0426ABNS.RES

Quant Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C

Last Update : Thu Apr 27 15:05:41 2017

Response via : Initial Calibration

DataAcq Meth : RUN8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.57	152	286181	40.00	ug/kg	0.00
21) Naphthalene-d8	6.80	136	949388	40.00	ug/kg	0.00
38) Acenaphthene-d10	8.55	164	443840	40.00	ug/kg	0.00
61) Phenanthrene-d10	10.05	188	807003	40.00	ug/kg	0.00
75) Chrysene-d12	12.97	240	693696	40.00	ug/kg	0.00
84) Perylene-d12	15.22	264	574663	40.00	ug/kg	0.00

System Monitoring Compounds

4) 2-Fluorophenol	4.37	112	653648	58.32	ug/kg	0.00
Spiked Amount	100.000	Range	30 - 130	Recovery	=	58.32%
7) Phenol-d6	5.16	99	739549	56.63	ug/kg	0.00
Spiked Amount	100.000	Range	30 - 130	Recovery	=	56.63%
22) Nitrobenzene-d5	6.08	82	620481	59.30	ug/kg	0.00
Spiked Amount	50.000	Range	30 - 130	Recovery	=	118.60%
43) 2-Fluorobiphenyl	7.84	172	1169768	55.50	ug/kg	0.00
Spiked Amount	50.000	Range	30 - 130	Recovery	=	111.00%
65) 2,4,6-Tribromophenol	9.34	330	152797	65.84	ug/kg	0.00
Spiked Amount	100.000	Range	30 - 130	Recovery	=	65.84%
78) p-Terphenyl-d14	11.66	244	1090172	57.50	ug/kg	0.00
Spiked Amount	50.000	Range	30 - 130	Recovery	=	115.00%

Target Compounds

						Qvalue
2) Pyridine	3.31	79	659198	57.87	ng/uL	96
3) N-Nitroso-dimethylamine	3.25	42	249718	57.64	ng/uL	99
5) Benzaldehyde	5.16	77	262829m	47.12	ug/kg	
6) Aniline	5.25	93	774325	60.05	ug/kg	99
8) Phenol	5.18	94	685820	56.26	ug/kg	98
9) bis(2-Chloroethyl)ether	5.28	93	532131	55.46	ug/kg	100
10) 2-Chlorophenol	5.37	128	593721	57.67	ug/kg	100
11) 1,3-Dichlorobenzene	5.52	146	640202	56.36	ug/kg	100
12) 1,4-Dichlorobenzene	5.58	146	673237m	56.84	ug/kg	
13) Benzyl Alcohol	5.66	108	354876	57.56	ug/kg	100
14) 1,2-Dichlorobenzene	5.74	146	606050	55.63	ug/kg	100
15) 2-Methylphenol	5.74	108	494364	56.55	ug/kg	99
16) bis(2-Chloroisopropyl)ethe	5.78	45	732722	54.44	ug/kg	99
17) Acetophenone	5.93	105	703678	56.03	ug/kg	99
18) 3+4-Methylphenol	5.88	108	507511	56.93	ug/kg	99
19) n-Nitroso-di-n-propylamine	5.91	70	305389	57.27	ug/kg	99
20) Hexachloroethane	6.06	117	241441	57.88	ug/kg	99
23) Nitrobenzene	6.10	77	555153	57.77	ug/kg	99
24) Isophorone	6.32	82	873978	57.06	ug/kg	100
25) 2-Nitrophenol	6.41	139	298270m	65.99	ug/kg	
26) 2,4-Dimethylphenol	6.40	107	469981	56.29	ug/kg	100
27) bis(2-Chloroethoxy)methane	6.49	93	546979	56.46	ug/kg	100
28) 2,4-Dichlorophenol	6.63	162	440258	59.74	ug/kg	99
29) Benzoic Acid	6.46	105	187281m	68.79	ug/kg	
30) 1,2,4-Trichlorobenzene	6.73	180	540930	56.91	ug/kg	98
31) Naphthalene	6.82	128	1534311	56.40	ug/kg	100
32) 2,6-Dichlorophenol	6.86	162	434581	57.47	ug/kg	100
33) 4-Chloroaniline	6.84	127	505155	53.83	ug/kg	100
34) Hexachlorobutadiene	6.92	225	316526	57.12	ug/kg	99
35) Caprolactam	7.17	113	147522	63.28	ug/kg	99
36) 4-Chloro-3-methylphenol	7.29	107	395397	58.89	ug/kg	100
37) 2-Methylnaphthalene	7.50	142	1430885	82.91	ug/kg	100
39) Hexachlorocyclopentadiene	7.66	237	317935	62.83	ug/kg	99
40) 1,2,4,5-Tetrachlorobenzene	7.67	216	546192	56.09	ug/kg	100
41) 2,4,6-Trichlorophenol	7.76	196	310189	61.17	ug/kg	99
42) 2,4,5-Trichlorophenol	7.80	196	341514	62.07	ug/kg	99

(#)=qualifier out of range (m)=manual integration

AS00037.D 0426ABNS.M

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Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20170426\AS00037.D

Vial: 8

Acq On : 26 Apr 2017 21:30

Operator: GCH

Sample : SEQ-CAL@X60

Inst : GCMS-A

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Apr 28 14:47 2017

Quant Results File: 0426ABNS.RES

Quant Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C

Last Update : Thu Apr 27 15:05:41 2017

Response via : Initial Calibration

DataAcq Meth : RUN8270A

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
44) Biphenyl	7.95	154	1135446	55.91	ug/kg	100
45) 2-Chloronaphthalene	7.99	162	901524	55.67	ug/kg	99
46) 2-Nitroaniline	8.07	138	301037	64.95	ug/kg	98
47) Dimethylphthalate	8.22	163	900128	56.13	ug/kg	100
48) Acenaphthylene	8.41	152	1292418	56.61	ug/kg	99
49) 2,6-Dinitrotoluene	8.29	165	204441m	64.18	ug/kg	
50) 3-Nitroaniline	8.47	138	120869m	46.30	ug/kg	
51) Acenaphthene	8.59	153	918304	55.48	ug/kg	99
52) 2,4-Dinitrophenol	8.57	184	53408	88.77	ug/kg	80
53) Dibenzofuran	8.76	168	1222400	55.32	ug/kg	100
54) 4-Nitrophenol	8.60	65	142149m	66.59	ug/kg	
55) 2,4-Dinitrotoluene	8.70	165	266062	69.69	ug/kg	99
56) 2,3,4,6-Tetrachlorophenol	8.86	232	245197	66.16	ug/kg	100
57) Fluorene	9.10	166	982077	55.34	ug/kg	99
58) Diethylphthalate	8.91	149	826390	56.40	ug/kg	99
59) 4-Chlorophenyl phenyl ethe	9.07	204	480068	56.38	ug/kg	99
60) 4-Nitroaniline	9.09	138	128069m	56.19	ug/kg	
62) 4,6-Dinitro-2-methylphenol	9.12	198	121496	85.05	ug/kg	98
63) n-Nitrosodiphenylamine	9.18	169	621273	55.41	ug/kg	99
64) 1,2-Diphenylhydrazine	9.23	77	818118	55.73	ug/kg	100
66) 4-Bromophenyl-phenyl ether	9.57	248	286235	56.90	ug/kg	99
67) Hexachlorobenzene	9.67	284	312558	58.01	ug/kg	100
68) Atrazine	9.68	200	206047	55.82	ug/kg	99
69) Pentachlorophenol	9.85	266	175363	74.30	ug/kg	99
70) Phenanthrene	10.08	178	1303062	55.59	ug/kg	100
71) Anthracene	10.13	178	1333798	56.86	ug/kg	99
72) Carbazole	10.27	167	562849m	43.53	ug/kg	
73) Di-n-butylphthalate	10.54	149	1227533	59.67	ug/kg	100
74) Fluoranthene	11.30	202	1425517	56.88	ug/kg	99
76) Benzidine	11.39	184	21072m	17.20	ug/kg	
77) Pyrene	11.55	202	1472534	57.09	ug/kg	99
79) Butylbenzylphthalate	12.17	149	470763	64.78	ug/kg	99
80) Benzo(a)anthracene	12.95	228	1220673	58.13	ug/kg	99
81) 3,3'-Dichlorobenzidine	12.88	252	213391m	51.96	ug/kg	
82) Chrysene	13.00	228	1187602	56.66	ug/kg	99
83) bis(2-Ethylhexyl)phthalate	12.84	149	594608	67.32	ug/kg	100
85) Di-n-octylphthalate	13.69	149	880378	70.07	ug/kg	99
86) Benzo(b)fluoranthene	14.51	252	1025316	60.77	ug/kg	99
87) Benzo(k)fluoranthene	14.56	252	1086710	59.99	ug/kg	99
88) Benzo(a)pyrene	15.12	252	956466	59.24	ug/kg	99
89) Indeno(1,2,3-cd)pyrene	17.70	276	1000857	61.98	ug/kg	99
90) Dibenzo(a,h)anthracene	17.72	278	806153	63.09	ug/kg	99
91) Benzo(g,h,i)perylene	18.47	276	828239	61.45	ug/kg	99

(#) = qualifier out of range (m) = manual integration

AS00037.D 0426ABNS.M

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SS

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Vial: 8

Operator: GCH

Inst : GCMS-A

Multiplr: 1.00

MS Integration Params: RTEINT.P

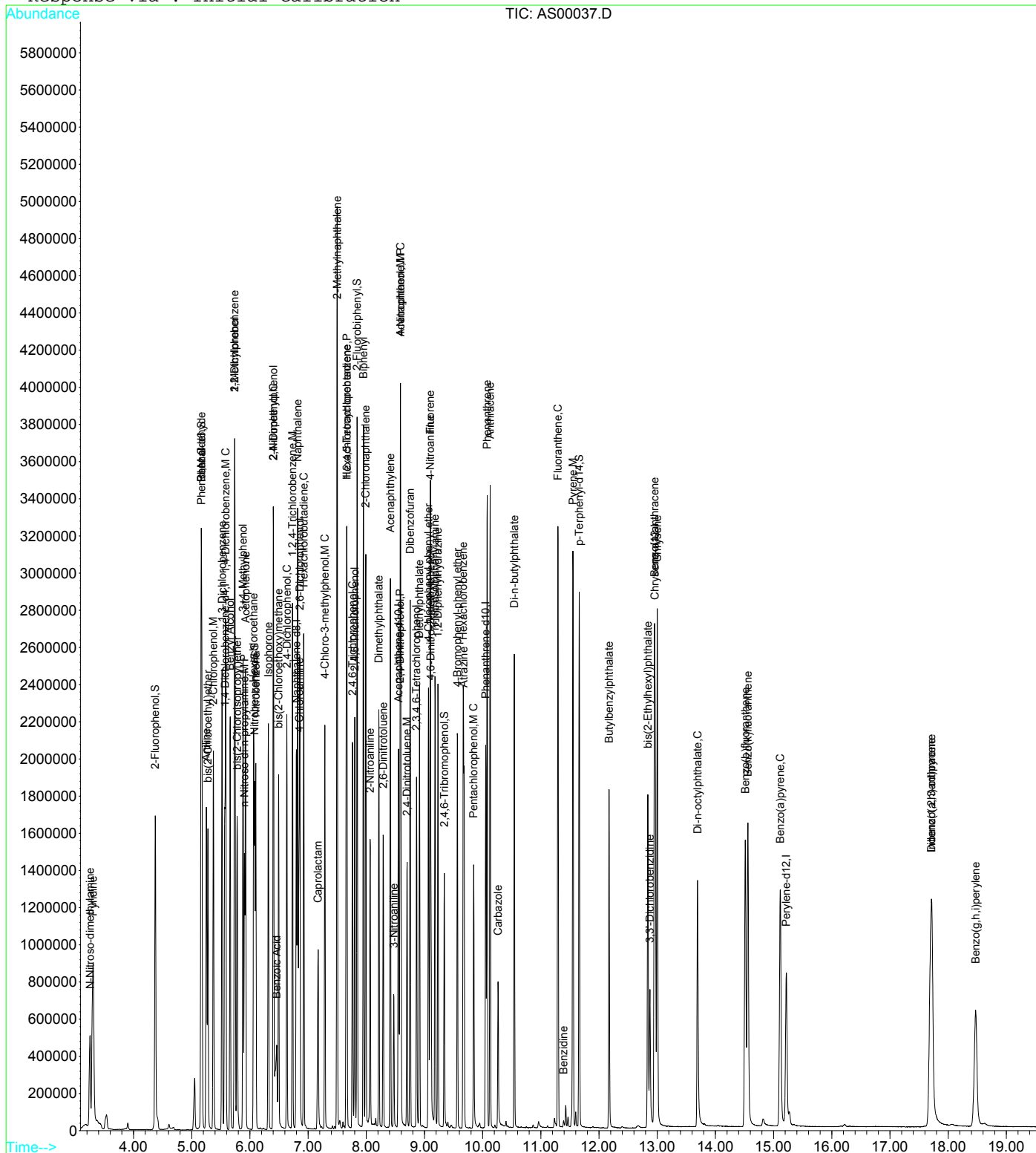
Quant Results File: 0426ABNS.RES

Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C

Last Update : Fri Jun 09 14:49:19 2017

Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20170426\AS00038.D

Vial: 9

Acq On : 26 Apr 2017 21:57

Operator: GCH

Sample : SEQ-CAL@X80

Inst : GCMS-A

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Apr 28 14:47 2017

Quant Results File: 0426ABNS.RES

Quant Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C

Last Update : Thu Apr 27 15:06:12 2017

Response via : Initial Calibration

DataAcq Meth : RUN8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.57	152	300116	40.00	ug/kg	0.00
21) Naphthalene-d8	6.80	136	998922	40.00	ug/kg	0.00
38) Acenaphthene-d10	8.55	164	465551	40.00	ug/kg	0.00
61) Phenanthrene-d10	10.05	188	858004	40.00	ug/kg	0.00
75) Chrysene-d12	12.97	240	743187	40.00	ug/kg	0.00
84) Perylene-d12	15.21	264	624127	40.00	ug/kg	0.00

System Monitoring Compounds

4) 2-Fluorophenol	4.38	112	893210	76.75	ug/kg	0.00
Spiked Amount	100.000	Range	30 - 130	Recovery	=	76.75%
7) Phenol-d6	5.17	99	1002686	73.99	ug/kg	0.00
Spiked Amount	100.000	Range	30 - 130	Recovery	=	73.99%
22) Nitrobenzene-d5	6.08	82	850837	78.15	ug/kg	0.00
Spiked Amount	50.000	Range	30 - 130	Recovery	=	156.30%#
43) 2-Fluorobiphenyl	7.84	172	1583402	72.39	ug/kg	0.00
Spiked Amount	50.000	Range	30 - 130	Recovery	=	144.78%#
65) 2,4,6-Tribromophenol	9.34	330	217753	89.62	ug/kg	0.00
Spiked Amount	100.000	Range	30 - 130	Recovery	=	89.62%
78) p-Terphenyl-d14	11.66	244	1506253	75.01	ug/kg	0.00
Spiked Amount	50.000	Range	30 - 130	Recovery	=	150.02%#

Target Compounds

						Qvalue
2) Pyridine	3.31	79	906579	76.87	ng/uL	96
3) N-Nitroso-dimethylamine	3.25	42	344757	76.77	ng/uL	99
5) Benzaldehyde	5.16	77	370144m	67.07	ug/kg	
6) Aniline	5.26	93	1015306	75.58	ug/kg	98
8) Phenol	5.18	94	919503	72.59	ug/kg	98
9) bis(2-Chloroethyl)ether	5.28	93	752868	76.00	ug/kg	96
10) 2-Chlorophenol	5.37	128	813782	76.20	ug/kg	99
11) 1,3-Dichlorobenzene	5.52	146	862653	73.06	ug/kg	100
12) 1,4-Dichlorobenzene	5.58	146	908843m	73.99	ug/kg	
13) Benzyl Alcohol	5.66	108	488450	76.48	ug/kg	100
14) 1,2-Dichlorobenzene	5.74	146	813712	71.95	ug/kg	100
15) 2-Methylphenol	5.75	108	670542	73.86	ug/kg	100
16) bis(2-Chloroisopropyl)ethe	5.78	45	962887m	68.83	ug/kg	
17) Acetophenone	5.93	105	948774	72.72	ug/kg	98
18) 3+4-Methylphenol	5.89	108	699169	75.54	ug/kg	99
19) n-Nitroso-di-n-propylamine	5.91	70	420373	76.10	ug/kg	96
20) Hexachloroethane	6.07	117	327191	75.47	ug/kg	99
23) Nitrobenzene	6.10	77	756559	75.69	ug/kg	98
24) Isophorone	6.32	82	1178731	73.93	ug/kg	99
25) 2-Nitrophenol	6.41	139	407231	86.67	ug/kg	97
26) 2,4-Dimethylphenol	6.40	107	635009	73.00	ug/kg	99
27) bis(2-Chloroethoxy)methane	6.50	93	746201	73.92	ug/kg	99
28) 2,4-Dichlorophenol	6.64	162	611375	79.76	ug/kg	99
29) Benzoic Acid	6.48	105	320191m	113.87	ug/kg	
30) 1,2,4-Trichlorobenzene	6.73	180	728793	73.62	ug/kg	99
31) Naphthalene	6.82	128	1979873	69.59	ug/kg	98
32) 2,6-Dichlorophenol	6.86	162	605039	77.15	ug/kg	100
33) 4-Chloroaniline	6.84	127	684479	70.23	ug/kg	99
34) Hexachlorobutadiene	6.93	225	442909	76.75	ug/kg	99
35) Caprolactam	7.18	113	209068	86.11	ug/kg	97
36) 4-Chloro-3-methylphenol	7.29	107	548521	78.54	ug/kg	99
37) 2-Methylnaphthalene	7.50	142	1883180	104.72	ug/kg	99
39) Hexachlorocyclopentadiene	7.66	237	441623	84.29	ug/kg	99
40) 1,2,4,5-Tetrachlorobenzene	7.67	216	750887	74.22	ug/kg	100
41) 2,4,6-Trichlorophenol	7.76	196	440960	83.86	ug/kg	100
42) 2,4,5-Trichlorophenol	7.80	196	474025	82.95	ug/kg	99

(#)= qualifier out of range (m)= manual integration

AS00038.D 0426ABNS.M Mon Jun 12 11:22:09 2017 SS

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Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20170426\AS00038.D

Vial: 9

Acq On : 26 Apr 2017 21:57

Operator: GCH

Sample : SEQ-CAL@X80

Inst : GCMS-A

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Apr 28 14:47 2017

Quant Results File: 0426ABNS.RES

Quant Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C

Last Update : Thu Apr 27 15:06:12 2017

Response via : Initial Calibration

DataAcq Meth : RUN8270A

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
44) Biphenyl	7.95	154	1519314	71.89	ug/kg	99
45) 2-Chloronaphthalene	7.99	162	1231063	73.15	ug/kg	100
46) 2-Nitroaniline	8.07	138	424472	87.96	ug/kg	97
47) Dimethylphthalate	8.22	163	1221329	73.30	ug/kg	100
48) Acenaphthylene	8.41	152	1734104	73.25	ug/kg	99
49) 2,6-Dinitrotoluene	8.29	165	296156	89.42	ug/kg	97
50) 3-Nitroaniline	8.48	138	187023m	70.39	ug/kg	
51) Acenaphthene	8.59	153	1227657	71.57	ug/kg	98
52) 2,4-Dinitrophenol	8.57	184	97079	157.68	ug/kg	53
53) Dibenzofuran	8.76	168	1624921	70.79	ug/kg	99
54) 4-Nitrophenol	8.60	65	206251m	93.81	ug/kg	
55) 2,4-Dinitrotoluene	8.70	165	382040	96.51	ug/kg	98
56) 2,3,4,6-Tetrachlorophenol	8.87	232	356442	93.03	ug/kg	98
57) Fluorene	9.10	166	1332607	72.57	ug/kg	99
58) Diethylphthalate	8.92	149	1127009	74.28	ug/kg	99
59) 4-Chlorophenyl phenyl ethe	9.07	204	660616	74.74	ug/kg	100
60) 4-Nitroaniline	9.09	138	175110m	74.72	ug/kg	
62) 4,6-Dinitro-2-methylphenol	9.12	198	194815	130.65	ug/kg	97
63) n-Nitrosodiphenylamine	9.18	169	862033	73.38	ug/kg	99
64) 1,2-Diphenylhydrazine	9.23	77	1097887	71.18	ug/kg	99
66) 4-Bromophenyl-phenyl ether	9.57	248	402731	76.31	ug/kg	99
67) Hexachlorobenzene	9.67	284	430234	75.76	ug/kg	99
68) Atrazine	9.68	200	280991	72.51	ug/kg	98
69) Pentachlorophenol	9.85	266	254784	102.81	ug/kg	99
70) Phenanthrene	10.08	178	1748354	70.87	ug/kg	99
71) Anthracene	10.13	178	1773498	71.94	ug/kg	98
72) Carbazole	10.27	167	867978m	63.73	ug/kg	
73) Di-n-butylphthalate	10.54	149	1627702	75.33	ug/kg	99
74) Fluoranthene	11.30	202	1919711	72.97	ug/kg	99
76) Benzidine	11.39	184	26910m	20.90	ug/kg	
77) Pyrene	11.55	202	1994349	72.85	ug/kg	99
79) Butylbenzylphthalate	12.17	149	659552	85.81	ug/kg	99
80) Benzo(a)anthracene	12.95	228	1687704	75.87	ug/kg	100
81) 3,3'-Dichlorobenzidine	12.88	252	285145m	65.91	ug/kg	
82) Chrysene	13.00	228	1677106	75.55	ug/kg	99
83) bis(2-Ethylhexyl)phthalate	12.84	149	829239	89.02	ug/kg	99
85) Di-n-octylphthalate	13.69	149	1283165	96.09	ug/kg	99
86) Benzo(b)fluoranthene	14.52	252	1482995	81.99	ug/kg	99
87) Benzo(k)fluoranthene	14.56	252	1543298	78.98	ug/kg	99
88) Benzo(a)pyrene	15.12	252	1392411	80.64	ug/kg	99
89) Indeno(1,2,3-cd)pyrene	17.71	276	1480424	85.86	ug/kg	100
90) Dibenzo(a,h)anthracene	17.72	278	1205185	87.98	ug/kg	98
91) Benzo(g,h,i)perylene	18.47	276	1194043	82.52	ug/kg	99

(#) = qualifier out of range (m) = manual integration

AS00038.D 0426ABNS.M

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CALIBRATION VERIFICATION SUMMARY

SW 846 8270D

CCV ID: S7L2811-CCV1

Analyzed: 12/22/17 19:26

Analyte	Response Factor	Expected Result	Result	% Drift	Limit(s)
Acenaphthene	1.387457	50.00	47.68	5	20 (CCC)
Acenaphthylene	1.833763	50.00	45.56	9	30
Anthracene	1.089256	50.00	48.08	4	30
Benzo(g,h,i)perylene	0.7376981	50.00	40.36	19	30
Chrysene	1.173497	50.00	49.80	0	30
Fluoranthene	1.254188	50.00	51.87	4	20 (CCC)
Fluorene	1.486594	50.00	47.65	5	30
Naphthalene	1.039965	50.00	46.15	8	30
Phenanthrene	1.094289	50.00	48.17	4	30
Pyrene	1.303843	50.00	44.92	10	30

F-VII

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20171222\AS03565.D

Vial: 3

Acq On : 22 Dec 2017 19:26

Operator: GCH

Sample : SEQ-CCV

Inst : GCMS-A

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 29 10:28 2017

Quant Results File: 0426ABNS.RES

Quant Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C

Last Update : Fri Dec 29 10:26:37 2017

Response via : Initial Calibration

DataAcq Meth : RUN8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.60	152	164226	40.00	ug/kg	0.00
21) Naphthalene-d8	5.80	136	521622	40.00	ug/kg	0.00
39) Acenaphthene-d10	7.53	164	276225	40.00	ug/kg	0.00
62) Phenanthrene-d10	9.00	188	529634	40.00	ug/kg	0.00
76) Chrysene-d12	11.70	240	527013	40.00	ug/kg	0.00
85) Perylene-d12	13.37	264	443274	40.00	ug/kg	0.00

System Monitoring Compounds

4) 2-Fluorophenol	3.44	112	247665m	39.35	ug/kg	-0.10
Spiked Amount 100.000	Range 15 - 48		Recovery =	39.35%		
7) Phenol-d6	4.25	99	293202	40.03	ug/kg	-0.01
Spiked Amount 100.000	Range 15 - 53		Recovery =	40.03%		
22) Nitrobenzene-d5	5.11	82	300449	53.48	ug/kg	-0.08
Spiked Amount 50.000	Range 34 - 81		Recovery =	106.96%#		
44) 2-Fluorobiphenyl	6.85	172	607440	47.27	ug/kg	-0.01
Spiked Amount 50.000	Range 33 - 86		Recovery =	94.54%#		
66) 2,4,6-Tribromophenol	8.31	330	101953	68.21	ug/kg	-0.01
Spiked Amount 100.000	Range 51 - 111		Recovery =	68.21%		
79) p-Terphenyl-d14	10.57	244	655743	46.78	ug/kg	0.01
Spiked Amount 50.000	Range 47 - 86		Recovery =	93.56%#		

Target Compounds

						Qvalue
2) Pyridine	2.32	79	309398	48.28	ng/uL	97
3) N-Nitroso-dimethylamine	2.29	42	146864m	59.90	ng/uL	
5) Benzaldehyde	4.20	77	147395	51.00	ug/kg	83
6) Aniline	4.29	93	294123m	41.02	ug/kg	
8) Phenol	4.27	94	313612	45.80	ug/kg	81
9) bis(2-Chloroethyl)ether	4.34	93	226660	41.95	ug/kg	95
10) 2-Chlorophenol	4.41	128	271538	47.04	ug/kg	98
11) 1,3-Dichlorobenzene	4.55	146	309271	48.50	ug/kg	94
12) 1,4-Dichlorobenzene	4.61	146	316507m	47.74	ug/kg	
13) Benzyl Alcohol	4.72	108	149602	43.38	ug/kg	81
14) 1,2-Dichlorobenzene	4.76	146	299225	49.05	ug/kg	95
15) 2-Methylphenol	4.82	108	240332	48.99	ug/kg	83
16) bis(2-Chloroisopropyl)ethe	4.84	45	307218m	45.01	ug/kg	
17) Acetophenone	4.97	105	328983	46.72	ug/kg	92
18) 3+4-Methylphenol	4.96	108	255409m	51.07	ug/kg	
19) n-Nitroso-di-n-propylamine	4.96	70	144655	48.52	ug/kg	89
20) Hexachloroethane	5.07	117	123397	52.74	ug/kg	88
23) Nitrobenzene	5.13	77	285095	55.25	ug/kg	88
24) Isophorone	5.35	82	392158	47.67	ug/kg	95
25) 2-Nitrophenol	5.44	139	137350	56.45	ug/kg#	85
26) 2,4-Dimethylphenol	5.47	107	274274	59.84	ug/kg	86
27) bis(2-Chloroethoxy)methane	5.55	93	241151	46.23	ug/kg	98
28) 2,4-Dichlorophenol	5.67	162	241456m	59.62	ug/kg	
29) Benzoic Acid	5.55	105	50293m	34.95	ug/kg	
30) 1,2,4-Trichlorobenzene	5.75	180	294646	57.65	ug/kg	99
31) Naphthalene	5.83	128	678086	46.15	ug/kg	97
32) 2,6-Dichlorophenol	5.88	162	240189m	58.93	ug/kg	
33) 4-Chloroaniline	5.88	127	186909m	40.27	ug/kg	
34) Hexachlorobutadiene	5.94	225	216851	71.10	ug/kg	100
35) Caprolactam	6.21	113	53891	42.80	ug/kg	83
36) 4-Chloro-3-methylphenol	6.35	107	213787	59.23	ug/kg	90
37) 2-Methylnaphthalene	6.50	142	765955	82.48	ug/kg	97
38) 1-Methylnaphthalene	6.60	142	684670	71.58	ng/uL	98
40) Hexachlorocyclopentadiene	6.66	237	171939	56.03	ug/kg	97
41) 1,2,4,5-Tetrachlorobenzene	6.67	216	357401	58.66	ug/kg	98
42) 2,4,6-Trichlorophenol	6.78	196	194816m	59.91	ug/kg	

(#)=qualifier out of range (m)=manual integration

AS03565.D 0426ABNS.M

Fri Dec 29 10:31:33 2017

SS

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Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20171222\AS03565.D
 Acq On : 22 Dec 2017 19:26
 Sample : SEQ-CCV
 Misc :

Vial: 3
 Operator: GCH
 Inst : GCMS-A
 Multiplr: 1.00

MS Integration Params: RTEINT.P
 Quant Time: Dec 29 10:28 2017

Quant Results File: 0426ABNS.RES

Quant Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)
 Title : BNA Extractables GC/MS 8270C
 Last Update : Fri Dec 29 10:26:37 2017
 Response via : Initial Calibration
 DataAcq Meth : RUN8270A

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2,4,5-Trichlorophenol	6.82	196	201722	57.39	ug/kg	96
45) Biphenyl	6.96	154	555060	44.68	ug/kg	99
46) 2-Chloronaphthalene	6.98	162	463424	46.86	ug/kg	99
47) 2-Nitroaniline	7.08	138	130816	46.08	ug/kg	99
48) Dimethylphthalate	7.25	163	482945	49.34	ug/kg	99
49) Acenaphthylene	7.39	152	633164	45.56	ug/kg	98
50) 2,6-Dinitrotoluene	7.31	165	109361	56.63	ug/kg	96
51) 3-Nitroaniline	7.49	138	48662m	35.62	ug/kg	
52) Acenaphthene	7.56	153	479063	47.68	ug/kg	97
53) 2,4-Dinitrophenol	7.60	184	16397m	40.76	ug/kg	
54) Dibenzofuran	7.73	168	645785	47.97	ug/kg	99
55) 4-Nitrophenol	7.66	65	59001	44.07	ug/kg	90
56) 2,4-Dinitrotoluene	7.72	165	148050	53.56	ug/kg#	76
57) 2,3,4,6-Tetrachlorophenol	7.86	232	161211m	62.64	ug/kg	
58) Fluorene	8.07	166	513293	47.65	ug/kg	99
59) Diethylphthalate	7.94	149	426411	47.97	ug/kg	98
60) 4-Chlorophenyl phenyl ethe	8.06	204	285895	55.15	ug/kg	98
61) 4-Nitroaniline	8.09	138	69297m	56.38	ug/kg	
63) 4,6-Dinitro-2-methylphenol	8.13	198	61326	51.57	ug/kg	98
64) n-Nitrosodiphenylamine	8.18	169	310166	43.34	ug/kg	97
65) 1,2-Diphenylhydrazine	8.22	77	430418	45.85	ug/kg	99
67) 4-Bromophenyl-phenyl ether	8.55	248	190870	59.44	ug/kg	96
68) Hexachlorobenzene	8.63	284	219438	62.78	ug/kg	99
69) Atrazine	8.70	200	124267	52.47	ug/kg	93
70) Pentachlorophenol	8.82	266	85533	44.77	ug/kg	98
71) Phenanthrene	9.03	178	724466	48.17	ug/kg	97
72) Anthracene	9.08	178	721134	48.08	ug/kg	98
73) Carbazole	9.24	167	376038m	56.63	ug/kg	
74) Di-n-butylphthalate	9.56	149	606702	46.16	ug/kg	98
75) Fluoranthene	10.21	202	830326	51.87	ug/kg	95
77) Benzidine	10.33	184	1813	3.89	ug/kg	94
78) Pyrene	10.44	202	858928	44.92	ug/kg	96
80) Butylbenzylphthalate	11.05	149	245311	45.60	ug/kg	99
81) Benzo(a)anthracene	11.68	228	807682	51.96	ug/kg	98
82) 3,3'-Dichlorobenzidine	11.64	252	106719	40.29	ug/kg	96
83) Chrysene	11.72	228	773060	49.80	ug/kg	96
84) bis(2-Ethylhexyl)phthalate	11.66	149	314778	45.42	ug/kg	98
86) Di-n-octylphthalate	12.40	149	486437	46.82	ug/kg	99
87) Benzo(b)fluoranthene	12.92	252	696932	54.95	ug/kg	97
88) Benzo(k)fluoranthene	12.95	252	727757m	53.13	ug/kg	
89) Benzo(a)pyrene	13.31	252	600415	49.51	ug/kg	97
90) Indeno(1,2,3-cd)pyrene	14.93	276	533849	44.26	ug/kg	98
91) Dibenzo(a,h)anthracene	14.94	278	438332	45.06	ug/kg	98
92) Benzo(g,h,i)perylene	15.40	276	408753	40.36	ug/kg	98

(#) = qualifier out of range (m) = manual integration

AS03565.D 0426ABNS.M Fri Dec 29 10:31:33 2017 SS

Page 2

CALIBRATION VERIFICATION SUMMARY

SW 846 8270D

CCV ID: S7L2902-CCV1

Analyzed: 12/26/17 18:24

Analyte	Response Factor	Expected Result	Result	% Drift	Limit(s)
Acenaphthene	1.377495	50.00	47.34	5	20 (CCC)
Acenaphthylene	1.893086	50.00	47.03	6	30
Anthracene	1.089481	50.00	48.09	4	30
Benzo(g,h,i)perylene	0.74855	50.00	40.95	18	30
Chrysene	1.182821	50.00	50.19	0	30
Fluoranthene	1.253391	50.00	51.84	4	20 (CCC)
Fluorene	1.52574	50.00	48.91	2	30
Naphthalene	1.040329	50.00	46.16	8	30
Phenanthrene	1.105785	50.00	48.68	3	30
Pyrene	1.319088	50.00	45.45	9	30

F-VII

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20171226\AS03591.D
 Acq On : 26 Dec 2017 18:24
 Sample : SEQ-CCV
 Misc :

Vial: 3
 Operator: GCH
 Inst : GCMS-A
 Multiplr: 1.00

MS Integration Params: RTEINT.P
 Quant Time: Dec 28 11:55 2017

Quant Results File: 0426ABNS.RES

Quant Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C

Last Update : Thu Dec 28 11:51:14 2017

Response via : Initial Calibration

DataAcq Meth : RUN8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.59	152	162119	40.00	ug/kg	0.00
21) Naphthalene-d8	5.80	136	529287	40.00	ug/kg	0.00
39) Acenaphthene-d10	7.53	164	286422	40.00	ug/kg	0.00
62) Phenanthrene-d10	9.00	188	555579	40.00	ug/kg	0.00
76) Chrysene-d12	11.70	240	545517	40.00	ug/kg	0.00
85) Perylene-d12	13.38	264	450783	40.00	ug/kg	0.00

System Monitoring Compounds

4) 2-Fluorophenol	3.44	112	247402m	40.75	ug/kg	-0.10
Spiked Amount 100.000	Range 15 - 48		Recovery =	40.75%		
7) Phenol-d6	4.25	99	302820	44.02	ug/kg	0.00
Spiked Amount 100.000	Range 15 - 53		Recovery =	44.02%		
22) Nitrobenzene-d5	5.11	82	316052	55.45	ug/kg	-0.08
Spiked Amount 50.000	Range 34 - 81		Recovery =	110.90%#		
44) 2-Fluorobiphenyl	6.85	172	647063	48.56	ug/kg	-0.01
Spiked Amount 50.000	Range 33 - 86		Recovery =	97.12%#		
66) 2,4,6-Tribromophenol	8.31	330	95833	55.05	ug/kg	-0.01
Spiked Amount 100.000	Range 51 - 111		Recovery =	55.05%		
79) p-Terphenyl-d14	10.57	244	689538	47.52	ug/kg	0.01
Spiked Amount 50.000	Range 47 - 86		Recovery =	95.04%#		

Target Compounds

						Qvalue
2) Pyridine	2.32	79	340001	53.74	ng/uL	96
3) N-Nitroso-dimethylamine	2.28	42	148433m	61.72	ng/uL	
5) Benzaldehyde	4.20	77	133385	50.00	ug/kg	87
6) Aniline	4.30	93	288434	40.75	ug/kg	87
8) Phenol	4.27	94	325365	48.14	ug/kg	83
9) bis(2-Chloroethyl)ether	4.34	93	228519	42.84	ug/kg	98
10) 2-Chlorophenol	4.41	128	273487	47.99	ug/kg	97
11) 1,3-Dichlorobenzene	4.55	146	305110	48.47	ug/kg	93
12) 1,4-Dichlorobenzene	4.61	146	319966m	48.89	ug/kg	
13) Benzyl Alcohol	4.72	108	152692	44.85	ug/kg	82
14) 1,2-Dichlorobenzene	4.76	146	296469	49.23	ug/kg	95
15) 2-Methylphenol	4.82	108	242144	50.00	ug/kg	81
16) bis(2-Chloroisopropyl)ethe	4.84	45	261577	38.82	ug/kg	84
17) Acetophenone	4.97	105	346925	53.12	ug/kg	93
18) 3+4-Methylphenol	4.96	108	264498m	53.58	ug/kg	
19) n-Nitroso-di-n-propylamine	4.96	70	156843	54.76	ug/kg	90
20) Hexachloroethane	5.07	117	126881	56.63	ug/kg	91
23) Nitrobenzene	5.13	77	302208	57.71	ug/kg	87
24) Isophorone	5.35	82	423604	50.75	ug/kg	94
25) 2-Nitrophenol	5.44	139	137980m	55.89	ug/kg	
26) 2,4-Dimethylphenol	5.47	107	265966m	58.35	ug/kg	
27) bis(2-Chloroethoxy)methane	5.55	93	248375	46.93	ug/kg	99
28) 2,4-Dichlorophenol	5.67	162	239636m	59.06	ug/kg	
29) Benzoic Acid	5.54	105	16767m	14.39	ug/kg	
30) 1,2,4-Trichlorobenzene	5.75	180	300390	57.92	ug/kg	99
31) Naphthalene	5.83	128	688291	46.16	ug/kg	96
32) 2,6-Dichlorophenol	5.88	162	261500	63.16	ug/kg	100
33) 4-Chloroaniline	5.88	127	184732	39.23	ug/kg	91
34) Hexachlorobutadiene	5.94	225	224013	72.83	ug/kg	99
35) Caprolactam	6.21	113	56019	43.84	ug/kg	88
36) 4-Chloro-3-methylphenol	6.35	107	219029	59.81	ug/kg	83
37) 2-Methylnaphthalene	6.50	142	798307	84.72	ug/kg	96
38) 1-Methylnaphthalene	6.60	142	723264	74.52	ng/uL	97
40) Hexachlorocyclopentadiene	6.66	237	174173	54.74	ug/kg	97
41) 1,2,4,5-Tetrachlorobenzene	6.67	216	362068	58.84	ug/kg	99
42) 2,4,6-Trichlorophenol	6.78	196	202109m	59.94	ug/kg	

(#) = qualifier out of range (m) = manual integration

AS03591.D 0426ABNS.M Fri Dec 29 15:29:01 2017 SS

Page 1

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\A\DATA\20171226\AS03591.D

Vial: 3

Acq On : 26 Dec 2017 18:24

Operator: GCH

Sample : SEQ-CCV

Inst : GCMS-A

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 28 11:55 2017

Quant Results File: 0426ABNS.RES

Quant Method : G:\HPCHEM\A\METHODS\0426ABNS.M (RTE Integrator)

Title : BNA Extractables GC/MS 8270C

Last Update : Thu Dec 28 11:51:14 2017

Response via : Initial Calibration

DataAcq Meth : RUN8270A

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
43) 2,4,5-Trichlorophenol	6.82	196	212489	61.02	ug/kg	98
45) Biphenyl	6.96	154	574758	44.62	ug/kg	99
46) 2-Chloronaphthalene	6.98	162	492923	48.07	ug/kg	99
47) 2-Nitroaniline	7.08	138	131745	44.75	ug/kg	94
48) Dimethylphthalate	7.25	163	508108	50.06	ug/kg	97
49) Acenaphthylene	7.39	152	677777	47.03	ug/kg	97
50) 2,6-Dinitrotoluene	7.31	165	115639	57.75	ug/kg	91
51) 3-Nitroaniline	7.49	138	52328m	36.94	ug/kg	
52) Acenaphthene	7.56	153	493181	47.34	ug/kg	99
53) 2,4-Dinitrophenol	7.60	184	17473	41.58	ug/kg	93
54) Dibenzofuran	7.73	168	676672	48.48	ug/kg	99
55) 4-Nitrophenol	7.66	65	59464	44.10	ug/kg	88
56) 2,4-Dinitrotoluene	7.72	165	154900	54.04	ug/kg#	68
57) 2,3,4,6-Tetrachlorophenol	7.86	232	177459	64.74	ug/kg	95
58) Fluorene	8.07	166	546257	48.91	ug/kg	98
59) Diethylphthalate	7.94	149	457776	49.67	ug/kg	98
60) 4-Chlorophenyl phenyl ethe	8.06	204	306155	56.96	ug/kg	100
61) 4-Nitroaniline	8.10	138	59573m	46.74	ug/kg	
63) 4,6-Dinitro-2-methylphenol	8.13	198	74240	56.57	ug/kg	97
64) n-Nitrosodiphenylamine	8.18	169	324589	43.24	ug/kg	97
65) 1,2-Diphenylhydrazine	8.22	77	495211	50.28	ug/kg	96
67) 4-Bromophenyl-phenyl ether	8.55	248	200277	58.99	ug/kg	97
68) Hexachlorobenzene	8.63	284	219077	59.97	ug/kg	98
69) Atrazine	8.70	200	128652	51.79	ug/kg	94
70) Pentachlorophenol	8.82	266	94001	46.90	ug/kg	98
71) Phenanthrene	9.03	178	767939	48.68	ug/kg	97
72) Anthracene	9.08	178	756616	48.09	ug/kg	98
73) Carbazole	9.24	167	405682m	58.25	ug/kg	
74) Di-n-butylphthalate	9.55	149	650122	47.15	ug/kg	98
75) Fluoranthene	10.21	202	870447	51.84	ug/kg	96
77) Benzidine	10.33	184	3335m	6.92	ug/kg	
78) Pyrene	10.44	202	899481	45.45	ug/kg	97
80) Butylbenzylphthalate	11.05	149	259178	46.55	ug/kg	98
81) Benzo(a)anthracene	11.68	228	835304	51.91	ug/kg	98
82) 3,3'-Dichlorobenzidine	11.64	252	117298	43.06	ug/kg	99
83) Chrysene	11.73	228	806561	50.19	ug/kg	96
84) bis(2-Ethylhexyl)phthalate	11.66	149	338899	47.25	ug/kg	97
86) Di-n-octylphthalate	12.40	149	489735	46.36	ug/kg	98
87) Benzo(b)fluoranthene	12.92	252	692014	53.65	ug/kg	97
88) Benzo(k)fluoranthene	12.95	252	760024m	54.56	ug/kg	
89) Benzo(a)pyrene	13.31	252	613711	49.76	ug/kg	98
90) Indeno(1,2,3-cd)pyrene	14.93	276	544359	44.38	ug/kg	99
91) Dibenzo(a,h)anthracene	14.94	278	445652	45.05	ug/kg	99
92) Benzo(g,h,i)perylene	15.40	276	421792	40.95	ug/kg	98

(#) = qualifier out of range (m) = manual integration

AS03591.D 0426ABNS.M Fri Dec 29 15:29:02 2017 SS

Page 2

INTERNAL STANDARD REPORT

Analysis Class: SEMIVOLATILES

Analysis Batch: S7L2811

Lab Number	File ID	DCB-D4		NAP-D8		ACE-D10		PHE-D10		CHR-D12		PER-D12	
		Area	Rt	Area	Rt	Area	Rt	Area	Rt	Area	Rt	Area	Rt
B7L2204-BLK2	AS03568.D	105475	4.6	345285	5.8	178516	7.53	325857	9	273031	11.69	242523	13.37
7120696-01	AS03574.D	118798	4.6	398969	5.8	204700	7.53	381144	9	333707	11.69	303076	13.37
7120696-02	AS03575.D	122762	4.59	400769	5.8	208868	7.53	384470	9	336628	11.69	306705	13.37
7120696-03	AS03576.D	123076	4.59	404473	5.8	205864	7.53	374030	9	318022	11.69	293656	13.37
7120696-04	AS03577.D	117184	4.59	386836	5.8	203724	7.53	370614	9	319121	11.69	286381	13.37
7120696-05	AS03578.D	117427	4.6	385222	5.8	197332	7.53	363507	9	313133	11.69	285879	13.37

8
8.10.

Reference Std ID

S7L2811-CCV1

Internal Standard		Ref Area	Area Limit	Ref RT	RT Limit
DCB-D4	1,4-Dichlorobenzene-d4	164226	82,113.00 - 328,452.00	4.6	0.50
NAP-D8	Naphthalene-d8	521622	260,811.00 - 1,043,244.00	5.8	0.50
ACE-D10	Acenaphthene-d10	276225	138,112.50 - 552,450.00	7.53	0.50
PHE-D10	Phenanthrene-d10	529634	264,817.00 - 1,059,268.00	9	0.50
CHR-D12	Chrysene-d12	527013	263,506.50 - 1,054,026.00	11.7	0.50
PER-D12	Perylene-d12	443274	221,637.00 - 886,548.00	13.37	0.50

* - Outside of QC Limits

F-VIII

INTERNAL STANDARD REPORT

Analysis Class: SEMIVOLATILES

Analysis Batch: S7L2902

Lab Number	File ID	DCB-D4		NAP-D8		ACE-D10		PHE-D10		CHR-D12		PER-D12	
		Area	Rt	Area	Rt	Area	Rt	Area	Rt	Area	Rt	Area	Rt
B7L2204-BLK3	AS03592.D	170258	4.6	549011	5.8	293805	7.53	544850	9	462960	11.69	393098	13.37
B7L2608-BLK2	AS03594.D	186510	4.59	600479	5.8	311944	7.53	576142	9	489993	11.69	427667	13.37
7120696-06	AS03600.D	201539	4.6	643538	5.8	341666	7.53	652889	9	520944	11.69	471843	13.37
7120696-07	AS03601.D	196838	4.6	638772	5.8	333002	7.53	625380	9	544742	11.69	472138	13.37
7120696-08	AS03602.D	189704	4.6	613021	5.8	318618	7.53	607192	9	541018	11.69	447535	13.37
7120696-09	AS03603.D	180418	4.59	586720	5.8	308957	7.53	572861	9	510568	11.69	437671	13.37
7120696-10	AS03604.D	177613	4.6	564983	5.8	298081	7.53	553867	9	492060	11.69	419150	13.37
7120696-11	AS03608.D	163763	4.59	529062	5.8	280188	7.53	533265	9	471388	11.69	421078	13.38
7120696-12	AS03609.D	174949	4.59	566789	5.8	302214	7.53	577455	9	528069	11.69	443913	13.37

Reference Std ID

S7L2902-CCV1

Internal Standard		Ref Area	Area Limit	Ref RT	RT Limit
DCB-D4	1,4-Dichlorobenzene-d4	162119	81,059.50 - 324,238.00	4.59	0.50
NAP-D8	Naphthalene-d8	529287	264,643.50 - 1,058,574.00	5.8	0.50
ACE-D10	Acenaphthene-d10	286422	143,211.00 - 572,844.00	7.53	0.50
PHE-D10	Phenanthrene-d10	555579	277,789.50 - 1,111,158.00	9	0.50
CHR-D12	Chrysene-d12	545517	272,758.50 - 1,091,034.00	11.7	0.50
PER-D12	Perylene-d12	450783	225,391.50 - 901,566.00	13.38	0.50

* - Outside of QC Limits

F-VIII



AQUA PRO-TECH LABORATORIES
Certified Environmental Testing

SEMIVOLATILES

Select Ion Monitoring (SIM)

Brown and Caldwell USR

Work Order: 7120696

Project: Patchogue



ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SIM - SW 846 8270D

Client: Brown and Caldwell USR
Client Sample ID: Blank
Lab Sample ID: B7L2204-BLK1

Project: Patchogue
Work Order: 7120696

Init/Final Vol:	1000 mL / 1 mL	Prep Date:	12/22/2017 09:16	File ID:	BM12738.D
		Prep Batch:	B7L2204	Analyzed:	12/22/2017 19:18
		Matrix:	Ground Water	Sequence:	S7L2809
		Prep Method:	Sep Funnel MS 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
56-55-3	Benzo(a)anthracene	ND	0.0165	0.0200	U
50-32-8	Benzo(a)pyrene	ND	0.0124	0.0200	U
205-99-2	Benzo(b)fluoranthene	ND	0.0177	0.0200	U
207-08-9	Benzo(k)fluoranthene	ND	0.00710	0.0200	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.0160	0.0200	U
118-74-1	Hexachlorobenzene	ND	0.0160	0.0200	U
87-68-3	Hexachlorobutadiene	ND	0.0137	0.0200	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.0131	0.0200	U
62-75-9	n-Nitroso-dimethylamine	ND	0.00520	0.0200	U

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\B\DATA\20171222\BM12738.D Vial: 8
 Acq On : 22 Dec 2017 19:18 Operator: GCH
 Sample : B7L2204-BLK1 Inst : GCMS-B
 Misc : SIM Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Dec 26 13:26 2017 Quant Results File: 1004SIM.RES

Quant Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)
 Title : Method 8270C Select Ion Monitoring
 Last Update : Wed Nov 08 15:29:45 2017
 Response via : Initial Calibration
 DataAcq Meth : SIM8270A

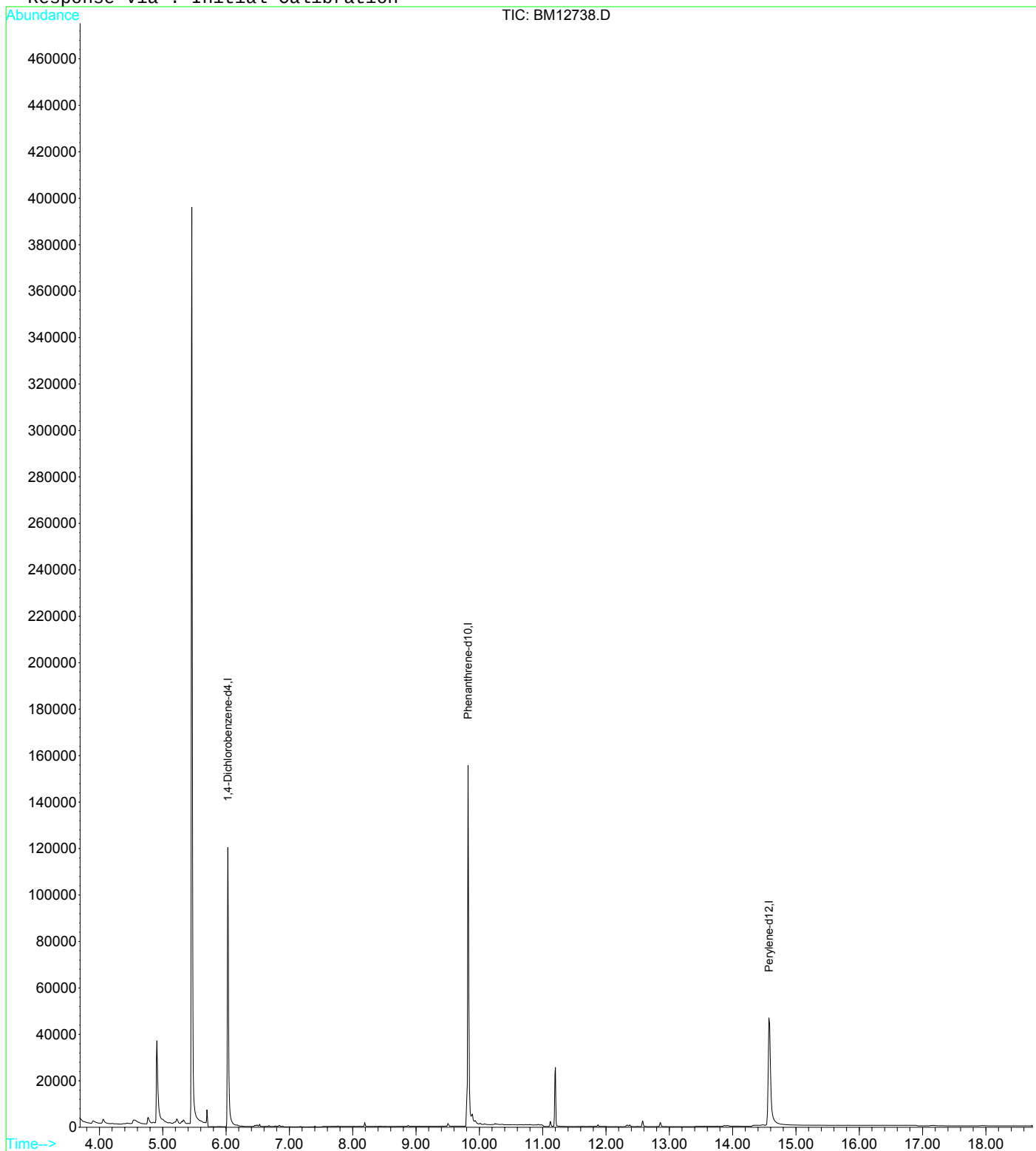
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.03	152	51552	0.50	ug/L	-0.03
3) Phenanthrene-d10	9.82	188	147989	0.50	ug/L	-0.04
14) Perylene-d12	14.57	264	85590	0.50	ug/L	-0.07

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
 BM12738.D 1004SIM.M Thu Dec 28 19:48:08 2017 SS

Quantitation Report

Data File : G:\HPCHEM\B\DATA\20171222\BM12738.D Vial: 8
 Acq On : 22 Dec 2017 19:18 Operator: GCH
 Sample : B7L2204-BLK1 Inst : GCMS-B
 Misc : SIM Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Dec 26 13:26 2017 Quant Results File: 1004SIM.RES
 Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)
 Title : Method 8270C Select Ion Monitoring
 Last Update : Wed Nov 08 15:29:45 2017
 Response via : Initial Calibration



BM12738.D 1004SIM.M

Thu Dec 28 19:48:08 2017

SS

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ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SIM - SW 846 8270D

Client: Brown and Caldwell USR
Client Sample ID: Blank
Lab Sample ID: B7L2204-BLK4

Project: Patchogue
Work Order: 7120696

Init/Final Vol:	1000 mL / 1 mL	Prep Date:	12/26/2017 09:16	File ID:	BM12765.D
		Prep Batch:	B7L2204	Analyzed:	12/27/2017 13:16
		Matrix:	Ground Water	Sequence:	S7L2903
		Prep Method:	Sep Funnel MS 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
56-55-3	Benzo(a)anthracene	ND	0.0165	0.0200	U
50-32-8	Benzo(a)pyrene	ND	0.0124	0.0200	U
205-99-2	Benzo(b)fluoranthene	ND	0.0177	0.0200	U
207-08-9	Benzo(k)fluoranthene	ND	0.00710	0.0200	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.0160	0.0200	U
118-74-1	Hexachlorobenzene	ND	0.0160	0.0200	U
87-68-3	Hexachlorobutadiene	ND	0.0137	0.0200	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.0131	0.0200	U
62-75-9	n-Nitroso-dimethylamine	ND	0.00520	0.0200	U

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\B\DATA\20171227\BM12765.D Vial: 4
 Acq On : 27 Dec 2017 13:16 Operator: GCH
 Sample : B7L2204-BLK4 Inst : GCMS-B
 Misc : SIM Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Dec 29 11:22 2017 Quant Results File: 1004SIM.RES

Quant Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)
 Title : Method 8270C Select Ion Monitoring
 Last Update : Thu Dec 28 19:44:01 2017
 Response via : Initial Calibration
 DataAcq Meth : SIM8270A

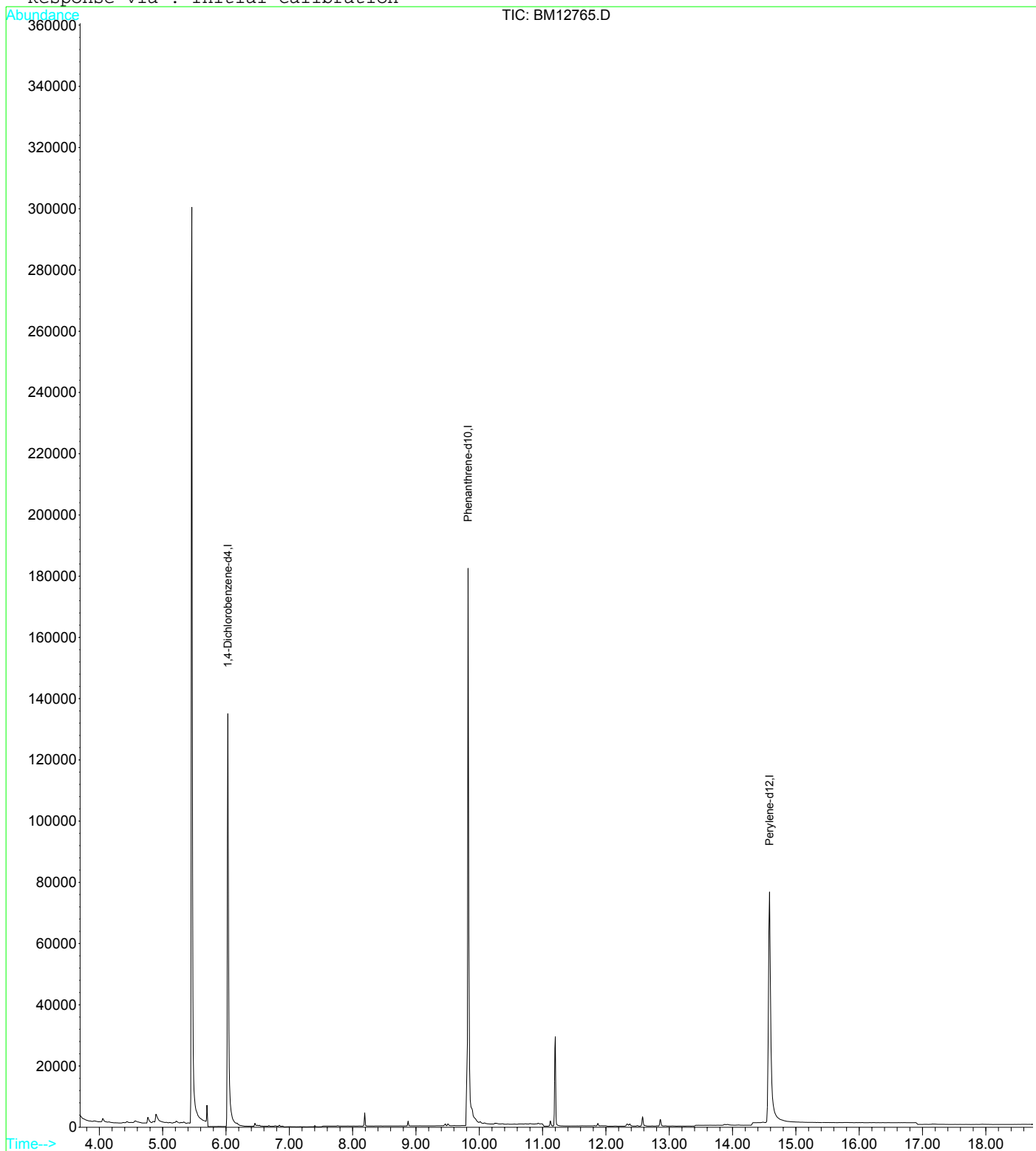
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.03	152	62340	0.50	ug/L	-0.03
3) Phenanthrene-d10	9.82	188	182543	0.50	ug/L	-0.03
14) Perylene-d12	14.58	264	135288	0.50	ug/L	-0.06

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
 BM12765.D 1004SIM.M Wed Jan 03 15:16:27 2018 SS

Quantitation Report

Data File : G:\HPCHEM\B\DATA\20171227\BM12765.D Vial: 4
 Acq On : 27 Dec 2017 13:16 Operator: GCH
 Sample : B7L2204-BLK4 Inst : GCMS-B
 Misc : SIM Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Dec 29 11:22 2017 Quant Results File: 1004SIM.RES
 Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)
 Title : Method 8270C Select Ion Monitoring
 Last Update : Wed Nov 08 15:29:45 2017
 Response via : Initial Calibration



BM12765.D 1004SIM.M

Wed Jan 03 15:16:27 2018

SS

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ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SIM - SW 846 8270D

Client: Brown and Caldwell USR
Client Sample ID: Blank
Lab Sample ID: B7L2608-BLK1

Project: Patchogue
Work Order: 7120696

Init/Final Vol:	1000 mL / 1 mL	Prep Date:	12/26/2017 09:26	File ID:	BM12766.D
		Prep Batch:	B7L2608	Analyzed:	12/27/2017 13:42
		Matrix:	Ground Water	Sequence:	S7L2903
		Prep Method:	Sep Funnel MS 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
56-55-3	Benzo(a)anthracene	ND	0.0165	0.0200	U
50-32-8	Benzo(a)pyrene	ND	0.0124	0.0200	U
205-99-2	Benzo(b)fluoranthene	ND	0.0177	0.0200	U
207-08-9	Benzo(k)fluoranthene	ND	0.00710	0.0200	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.0160	0.0200	U
118-74-1	Hexachlorobenzene	ND	0.0160	0.0200	U
87-68-3	Hexachlorobutadiene	ND	0.0137	0.0200	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.0131	0.0200	U
62-75-9	n-Nitroso-dimethylamine	ND	0.00520	0.0200	U

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\B\DATA\20171227\BM12766.D Vial: 5
 Acq On : 27 Dec 2017 13:42 Operator: GCH
 Sample : B7L2608-BLK1 Inst : GCMS-B
 Misc : SIM Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Dec 29 11:22 2017 Quant Results File: 1004SIM.RES

Quant Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)
 Title : Method 8270C Select Ion Monitoring
 Last Update : Thu Dec 28 19:44:01 2017
 Response via : Initial Calibration
 DataAcq Meth : SIM8270A

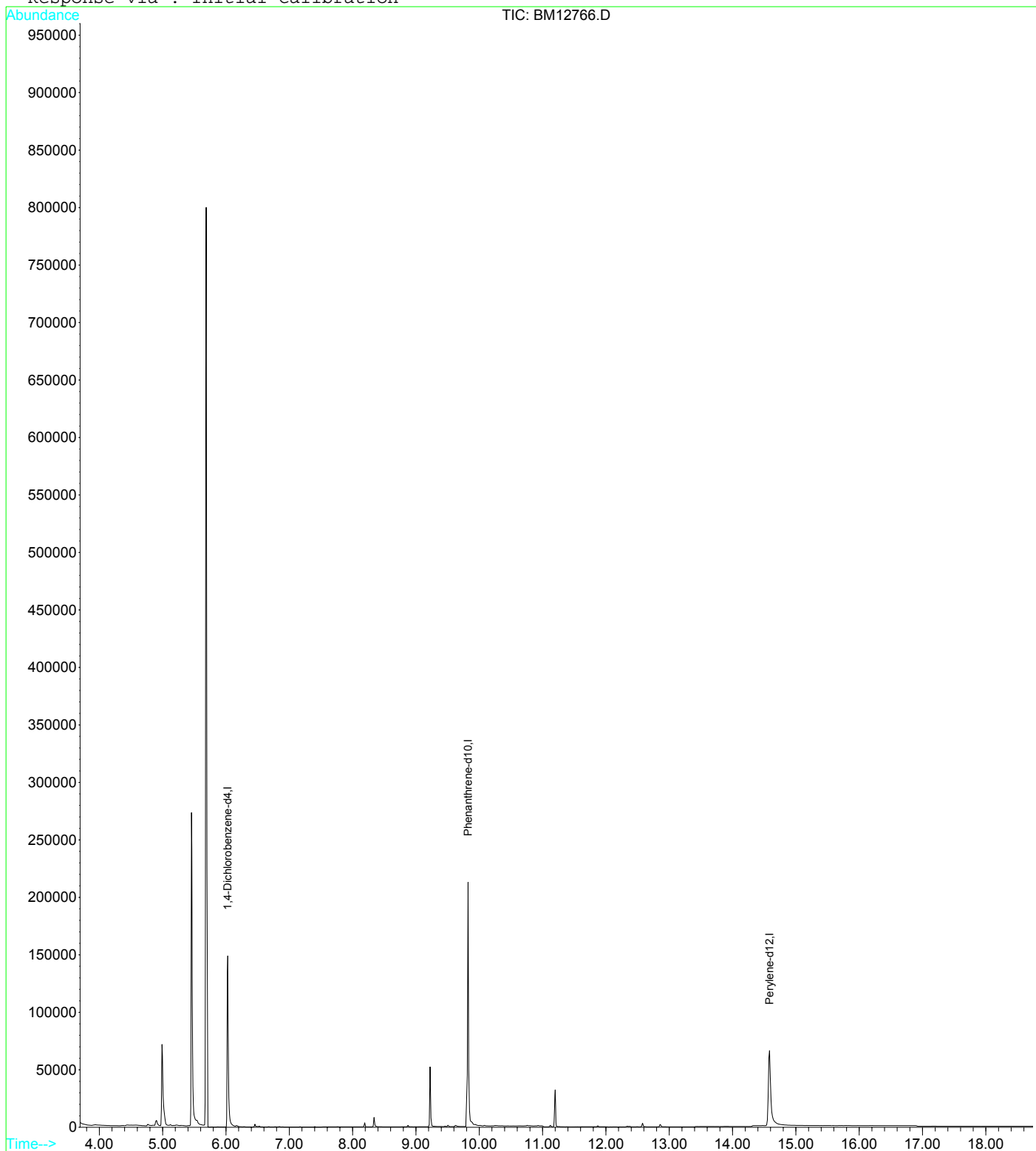
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.03	152	65592	0.50	ug/L	-0.03
3) Phenanthrene-d10	9.82	188	192667	0.50	ug/L	-0.03
14) Perylene-d12	14.58	264	123747	0.50	ug/L	-0.06

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
 BM12766.D 1004SIM.M Tue Jan 09 11:37:32 2018 SS

Quantitation Report

Data File : G:\HPCHEM\B\DATA\20171227\BM12766.D Vial: 5
 Acq On : 27 Dec 2017 13:42 Operator: GCH
 Sample : B7L2608-BLK1 Inst : GCMS-B
 Misc : SIM Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Dec 29 11:22 2017 Quant Results File: 1004SIM.RES
 Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)
 Title : Method 8270C Select Ion Monitoring
 Last Update : Wed Nov 08 15:29:45 2017
 Response via : Initial Calibration



BM12766.D 1004SIM.M

Tue Jan 09 11:37:32 2018

SS

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ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SIM - SW 846 8270D

Client: Brown and Caldwell USR
Client Sample ID: MW-1 20171220
Lab Sample ID: 7120696-01
Project: Patchogue
Work Order: 7120696

Date Sampled:	12/20/17 12:49	Prep Date:	12/22/17 09:16	File ID:	BM12751.D
Init/Final Vol:	1000 mL / 1 mL	Prep Batch:	B7L2204	Analyzed:	12/23/17 01:09
Dilution:	1	Matrix:	Ground Water	Sequence:	S7L2809
		Prep Method:	Sep Funnel MS 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
56-55-3	Benzo(a)anthracene	ND	0.0165	0.0200	U
50-32-8	Benzo(a)pyrene	ND	0.0124	0.0200	U
205-99-2	Benzo(b)fluoranthene	ND	0.0177	0.0200	U
207-08-9	Benzo(k)fluoranthene	ND	0.00710	0.0200	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.0160	0.0200	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.0131	0.0200	U

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

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

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\B\DATA\20171222\BM12751.D Vial: 21
 Acq On : 23 Dec 2017 1:09 Operator: GCH
 Sample : 7120696-01 Inst : GCMS-B
 Misc : B7L2204 SIM Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Dec 26 13:33 2017 Quant Results File: 1004SIM.RES

Quant Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)
 Title : Method 8270C Select Ion Monitoring
 Last Update : Wed Nov 08 15:29:45 2017
 Response via : Initial Calibration
 DataAcq Meth : SIM8270A

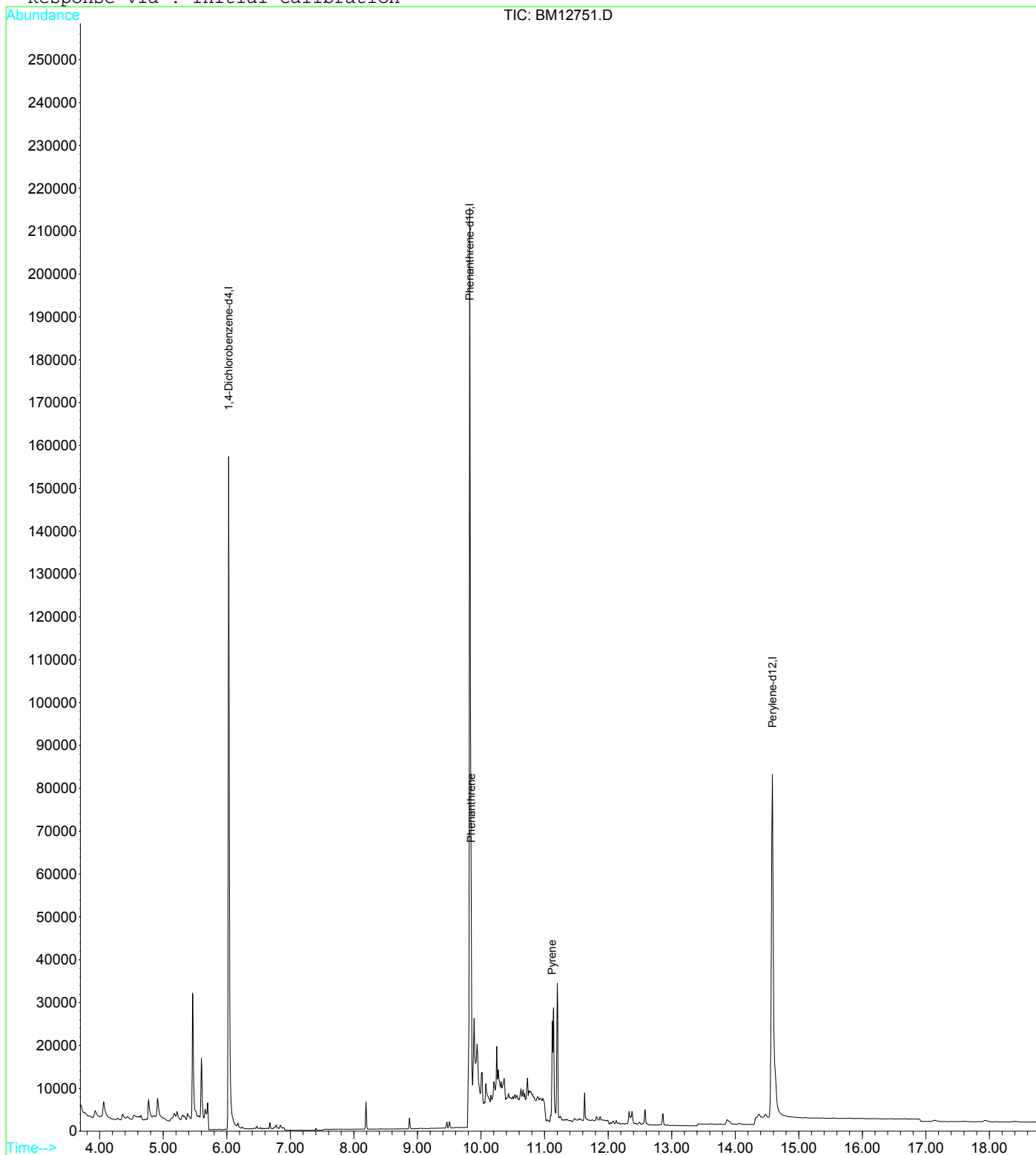
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.03	152	65214	0.50	ug/L	-0.03
3) Phenanthrene-d10	9.82	188	199806	0.50	ug/L	-0.04
14) Perylene-d12	14.59	264	123805	0.50	ug/L	-0.05
Target Compounds						Qvalue
7) Phenanthrene	9.84	178	43172	0.1037	ug/L #	68
8) Pyrene	11.12	202	21520	0.0537	ug/L #	1

(#) = qualifier out of range (m) = manual integration
 BM12751.D 1004SIM.M Thu Jan 25 11:48:08 2018 SS

Quantitation Report

Data File : G:\HPCHEM\B\DATA\20171222\BM12751.D Vial: 21
 Acq On : 23 Dec 2017 1:09 Operator: GCH
 Sample : 7120696-01 Inst : GCMS-B
 Misc : B7L2204 SIM Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Dec 26 13:33 2017 Quant Results File: 1004SIM.RES

Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)
 Title : Method 8270C Select Ion Monitoring
 Last Update : Wed Nov 08 15:29:45 2017
 Response via : Initial Calibration

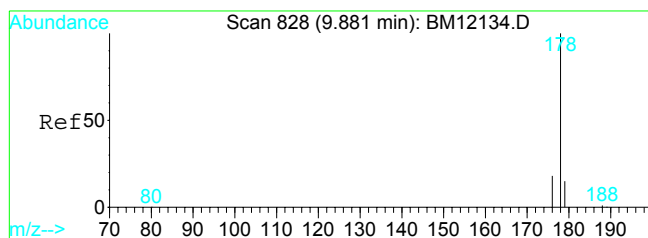


BM12751.D 1004SIM.M

Thu Jan 25 11:48:08 2018

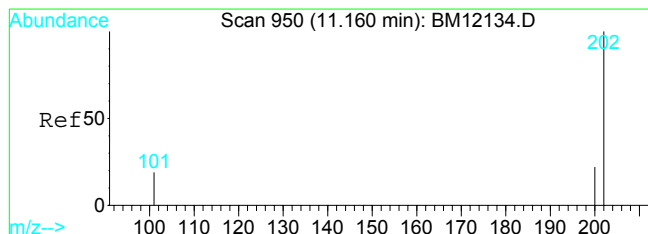
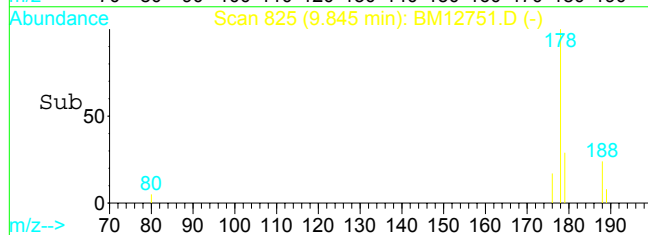
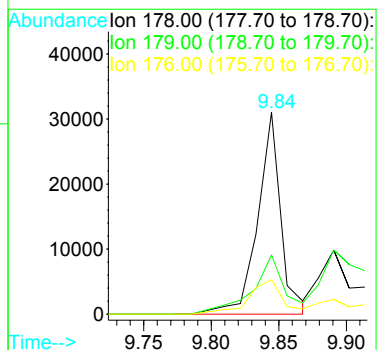
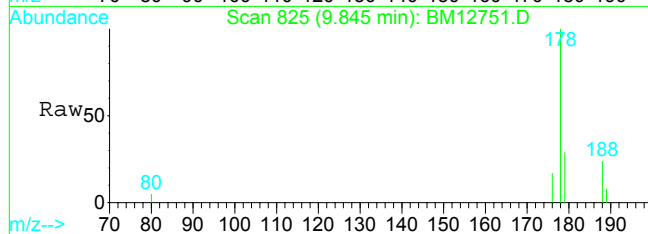
SS

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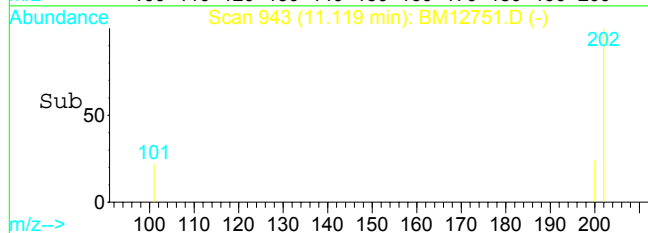
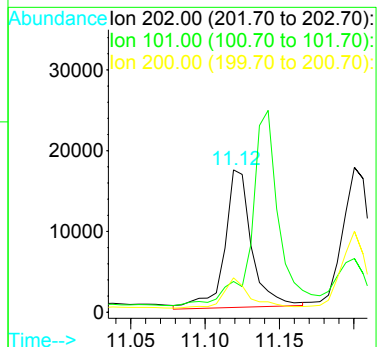
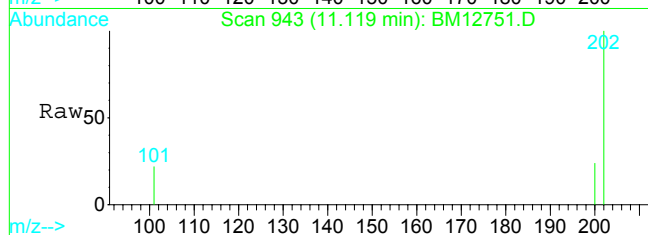
#7
Phenanthrene
Concen: 0.1037 ug/L
RT: 9.84 min Scan# 825
Delta R.T. -0.04 min
Lab File: BM12751.D
Acq: 23 Dec 2017 1:09

Tgt Ion:178 Resp: 43172
Ion Ratio Lower Upper
178 100
179 40.2 12.4 18.6#
176 24.6 15.9 23.9#



#8
Pyrene
Concen: 0.0537 ug/L
RT: 11.12 min Scan# 943
Delta R.T. -0.04 min
Lab File: BM12751.D
Acq: 23 Dec 2017 1:09

Tgt Ion:202 Resp: 21520
Ion Ratio Lower Upper
202 100
101 149.6 14.7 22.1#
200 26.0 16.7 25.1#



ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SIM - SW 846 8270D

Client: Brown and Caldwell USR
Client Sample ID: MW-7S 20171220
Lab Sample ID: 7120696-02
Project: Patchogue
Work Order: 7120696

Date Sampled:	12/20/17 14:11	Prep Date:	12/22/17 09:16	File ID:	BM12752.D
Init/Final Vol:	990 mL / 1 mL	Prep Batch:	B7L2204	Analyzed:	12/23/17 01:35
Dilution:	1	Matrix:	Ground Water	Sequence:	S7L2809
		Prep Method:	Sep Funnel MS 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
56-55-3	Benzo(a)anthracene	ND	0.0167	0.0202	U
50-32-8	Benzo(a)pyrene	ND	0.0125	0.0202	U
205-99-2	Benzo(b)fluoranthene	ND	0.0179	0.0202	U
207-08-9	Benzo(k)fluoranthene	ND	0.00717	0.0202	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.0162	0.0202	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.0132	0.0202	U

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

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

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\B\DATA\20171222\BM12752.D Vial: 22
 Acq On : 23 Dec 2017 1:35 Operator: GCH
 Sample : 7120696-02 Inst : GCMS-B
 Misc : B7L2204 SIM Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Dec 26 13:33 2017 Quant Results File: 1004SIM.RES

Quant Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)
 Title : Method 8270C Select Ion Monitoring
 Last Update : Wed Nov 08 15:29:45 2017
 Response via : Initial Calibration
 DataAcq Meth : SIM8270A

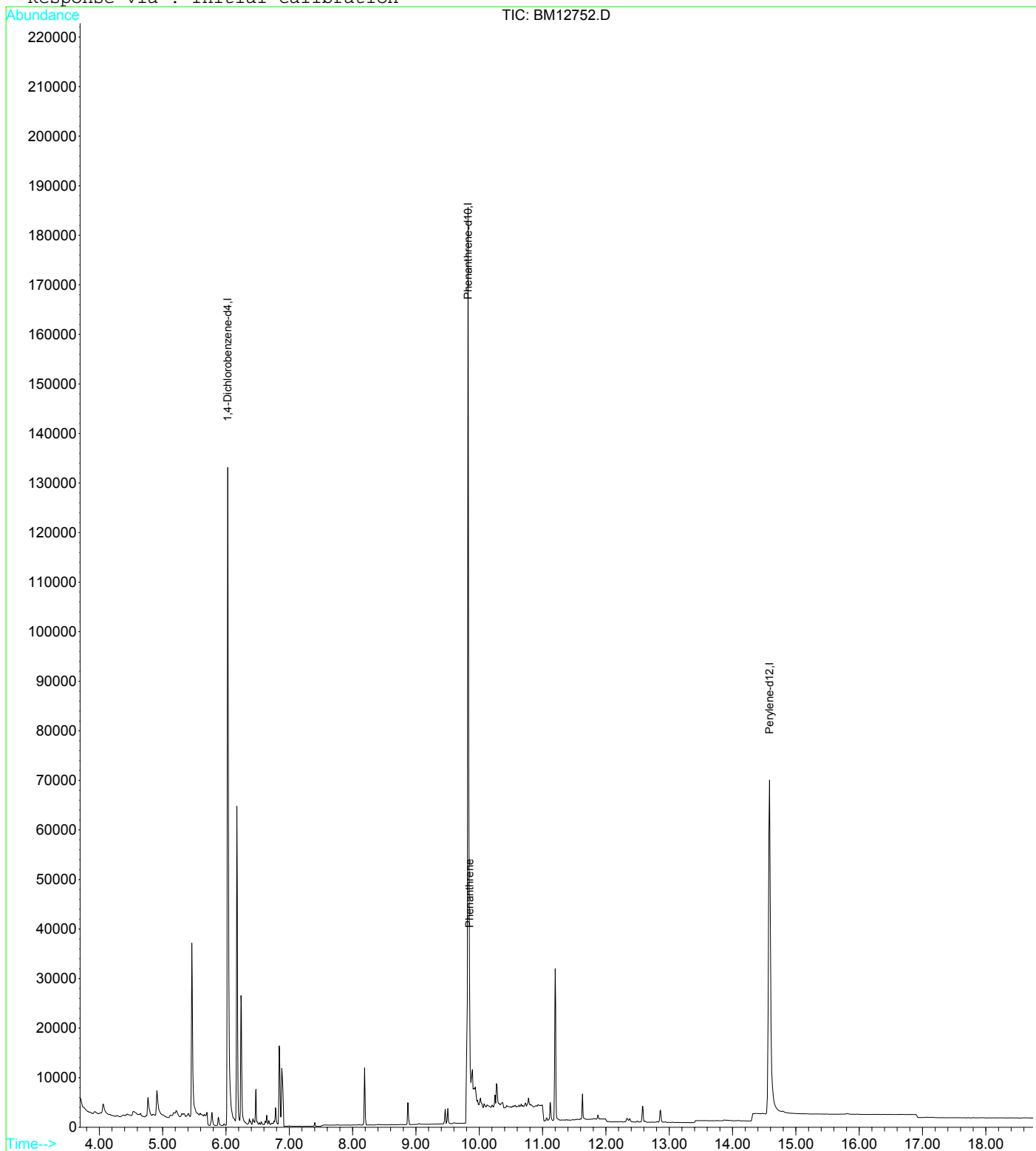
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.03	152	59275	0.50	ug/L	-0.03
3) Phenanthrene-d10	9.82	188	179285	0.50	ug/L	-0.03
14) Perylene-d12	14.58	264	108295	0.50	ug/L	-0.06
Target Compounds						Qvalue
7) Phenanthrene	9.85	178	20533	0.0550	ug/L	# 69

(#) = qualifier out of range (m) = manual integration
 BM12752.D 1004SIM.M Thu Jan 25 11:48:09 2018 SS

Quantitation Report

Data File : G:\HPCHEM\B\DATA\20171222\BM12752.D Vial: 22
 Acq On : 23 Dec 2017 1:35 Operator: GCH
 Sample : 7120696-02 Inst : GCMS-B
 Misc : B7L2204 SIM Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Dec 26 13:33 2017 Quant Results File: 1004SIM.RES

Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)
 Title : Method 8270C Select Ion Monitoring
 Last Update : Wed Nov 08 15:29:45 2017
 Response via : Initial Calibration

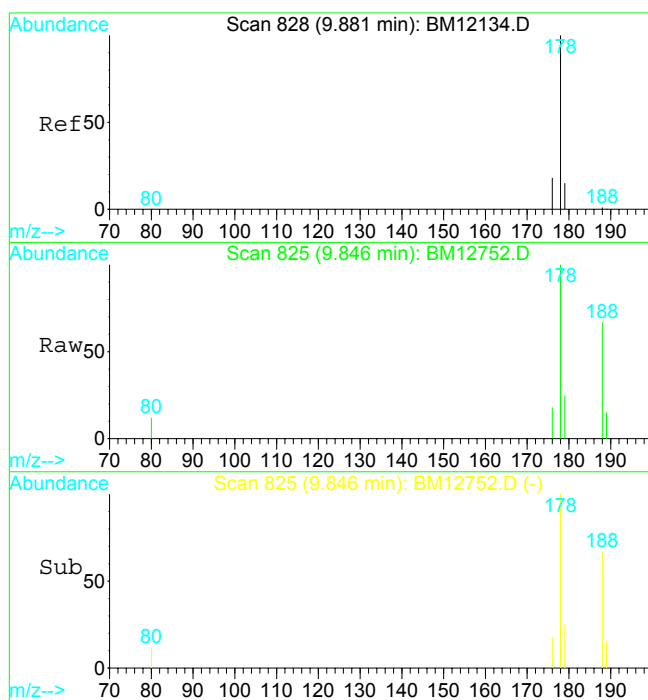


BM12752.D 1004SIM.M

Thu Jan 25 11:48:10 2018

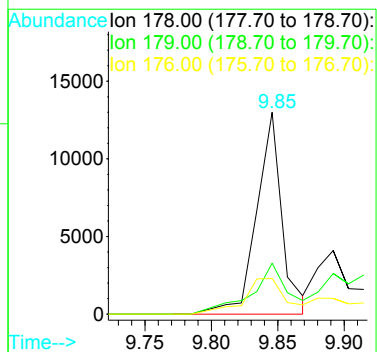
SS

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#7
Phenanthrene
Concen: 0.0550 ug/L
RT: 9.85 min Scan# 825
Delta R.T. -0.03 min
Lab File: BM12752.D
Acq: 23 Dec 2017 1:35

Tgt Ion	Ratio	Lower	Upper
178	100		
179	35.0	12.4	18.6#
176	28.2	15.9	23.9#



ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SIM - SW 846 8270D

Client: Brown and Caldwell USR
Client Sample ID: MW-7D 20171220
Lab Sample ID: 7120696-03
Project: Patchogue
Work Order: 7120696

Date Sampled:	12/20/17 15:05	Prep Date:	12/22/17 09:16	File ID:	BM12753.D
Init/Final Vol:	1000 mL / 1 mL	Prep Batch:	B7L2204	Analyzed:	12/23/17 02:02
Dilution:	1	Matrix:	Ground Water	Sequence:	S7L2809
		Prep Method:	Sep Funnel MS 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
56-55-3	Benzo(a)anthracene	0.0257	0.0165	0.0200	
50-32-8	Benzo(a)pyrene	0.0243	0.0124	0.0200	
205-99-2	Benzo(b)fluoranthene	0.0305	0.0177	0.0200	
207-08-9	Benzo(k)fluoranthene	0.0123	0.00710	0.0200	J
53-70-3	Dibenzo(a,h)anthracene	ND	0.0160	0.0200	U
193-39-5	Indeno(1,2,3-cd)pyrene	0.0147	0.0131	0.0200	J

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

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

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\B\DATA\20171222\BM12753.D Vial: 23
 Acq On : 23 Dec 2017 2:02 Operator: GCH
 Sample : 7120696-03 Inst : GCMS-B
 Misc : B7L2204 SIM Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Dec 26 13:33 2017 Quant Results File: 1004SIM.RES

Quant Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)
 Title : Method 8270C Select Ion Monitoring
 Last Update : Wed Nov 08 15:29:45 2017
 Response via : Initial Calibration
 DataAcq Meth : SIM8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.03	152	55665	0.50	ug/L	-0.03
3) Phenanthrene-d10	9.82	188	165994	0.50	ug/L	-0.04
14) Perylene-d12	14.58	264	99397	0.50	ug/L	-0.06

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
7) Phenanthrene	9.85	178	20382	0.0590	ug/L #	86
8) Pyrene	11.12	202	18890	0.0567	ug/L	95
9) Benzo(a)anthracene	12.33	228	6688	0.0257	ug/L	95
10) Chrysene	12.37	228	6989	0.0231	ug/L #	86
11) Benzo(b)fluoranthene	13.87	252	6981m	0.0305	ug/L	
12) Benzo(k)fluoranthene	13.90	252	3120m	0.0123	ug/L	
13) Benzo(a)pyrene	14.48	252	4621	0.0243	ug/L	95
15) Indeno(1,2,3-cd)pyrene	17.13	276	3285m	0.0147	ug/L	

(#) = qualifier out of range (m) = manual integration
 BM12753.D 1004SIM.M Thu Jan 25 11:48:11 2018 SS

Page 1

Quantitation Report

Data File : G:\HPCHEM\B\DATA\20171222\BM12753.D

Vial: 23

Acq On : 23 Dec 2017 2:02

Operator: GCH

Sample : 7120696-03

Inst : GCMS-B

Misc : B7L2204 SIM

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Dec 26 13:33 2017

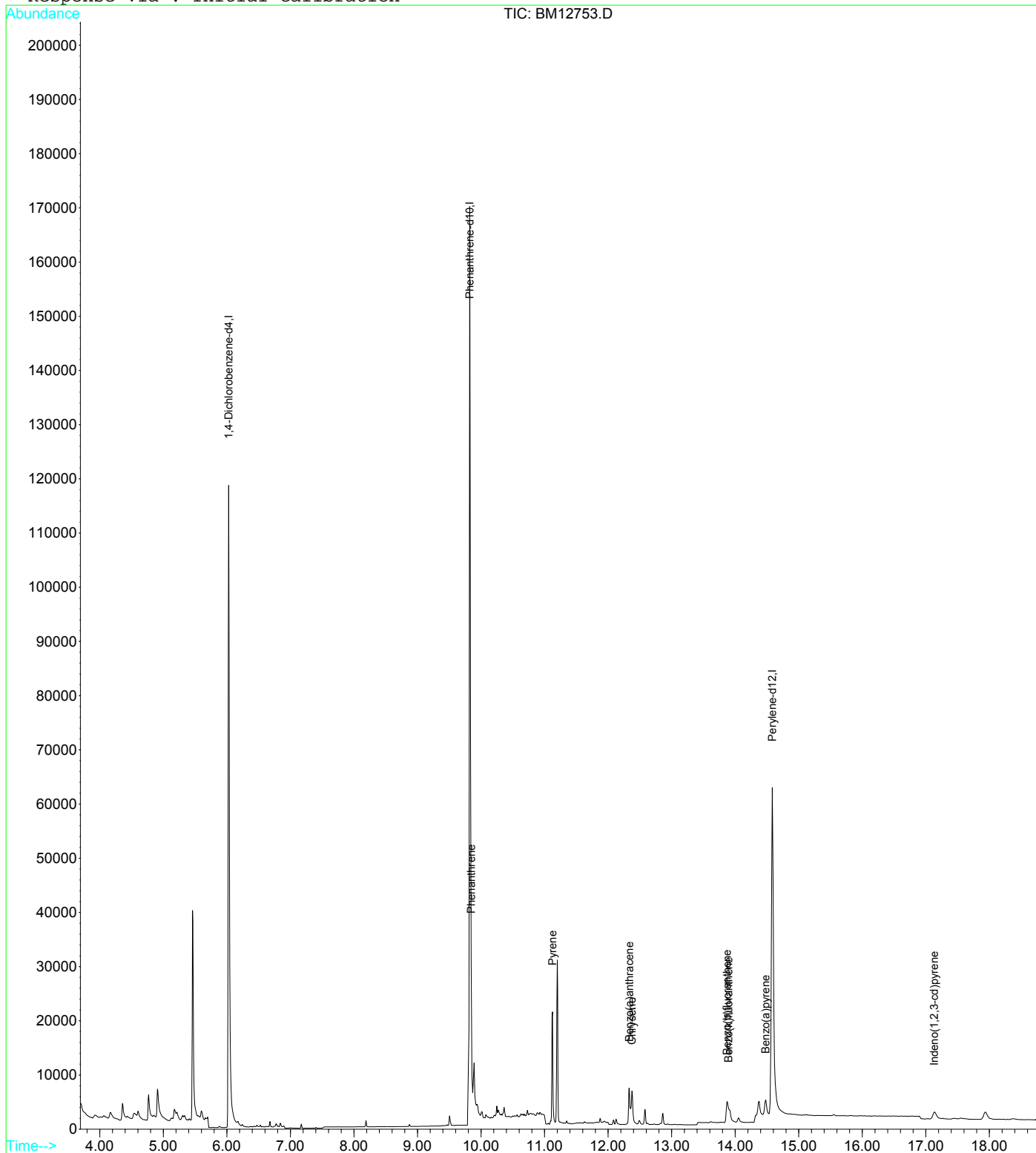
Quant Results File: 1004SIM.RES

Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)

Title : Method 8270C Select Ion Monitoring

Last Update : Wed Nov 08 15:29:45 2017

Response via : Initial Calibration

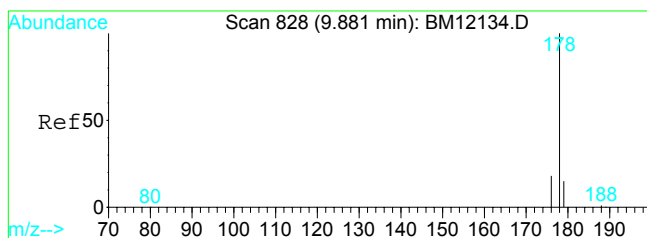


BM12753.D 1004SIM.M

Thu Jan 25 11:48:11 2018

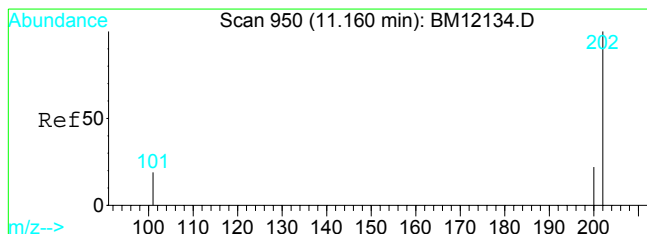
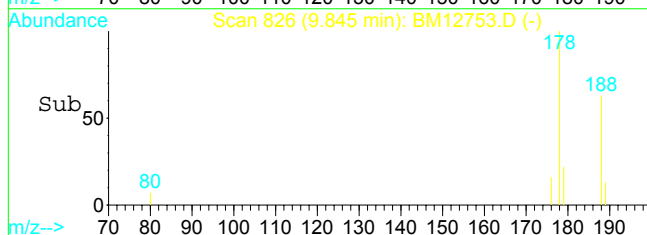
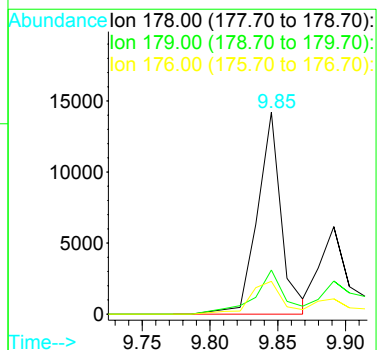
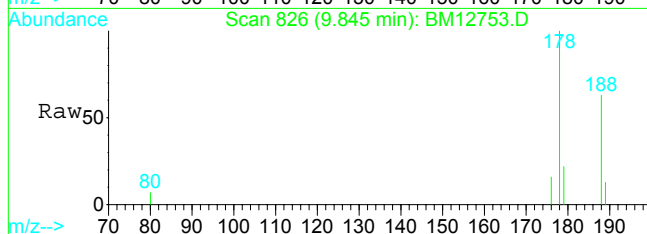
SS

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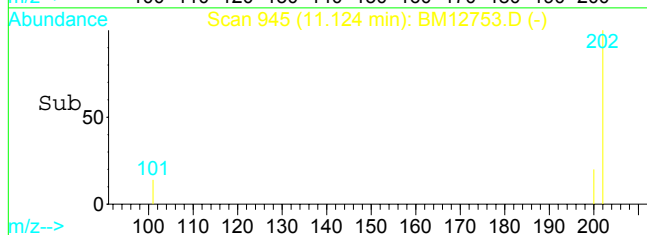
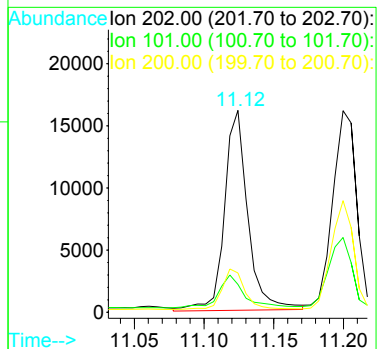
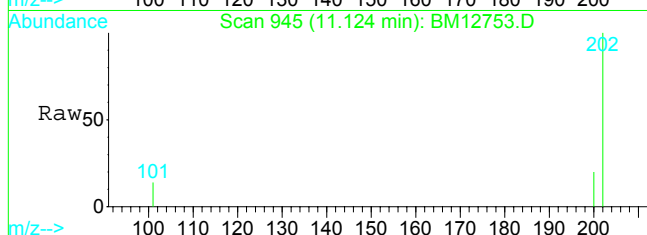
#7
Phenanthrene
Concen: 0.0590 ug/L
RT: 9.85 min Scan# 826
Delta R.T. -0.04 min
Lab File: BM12753.D
Acq: 23 Dec 2017 2:02

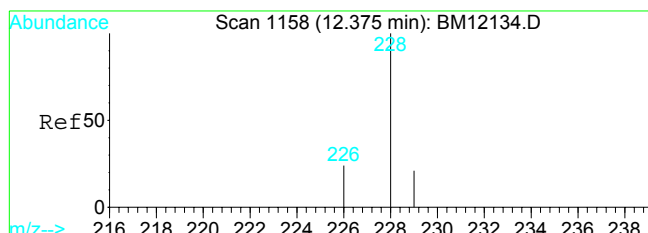
Tgt Ion:178 Resp: 20382
Ion Ratio Lower Upper
178 100
179 27.1 12.4 18.6#
176 21.8 15.9 23.9



#8
Pyrene
Concen: 0.0567 ug/L
RT: 11.12 min Scan# 945
Delta R.T. -0.04 min
Lab File: BM12753.D
Acq: 23 Dec 2017 2:02

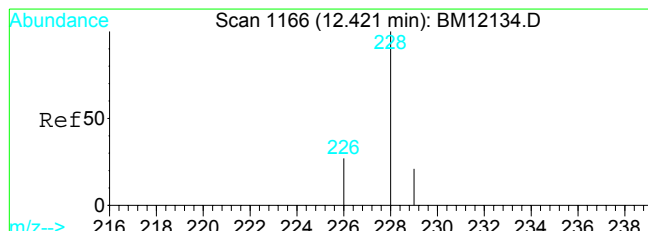
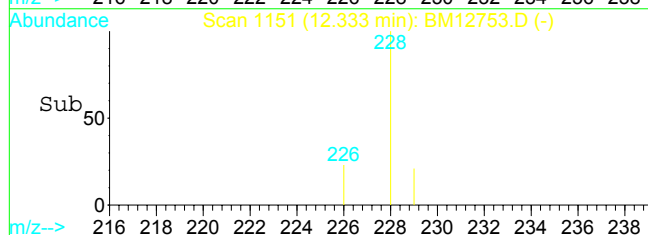
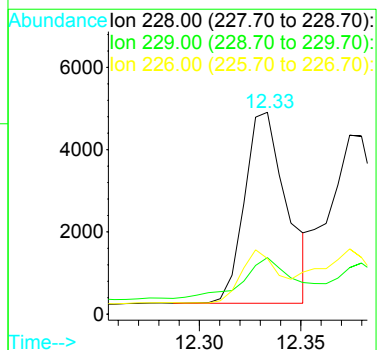
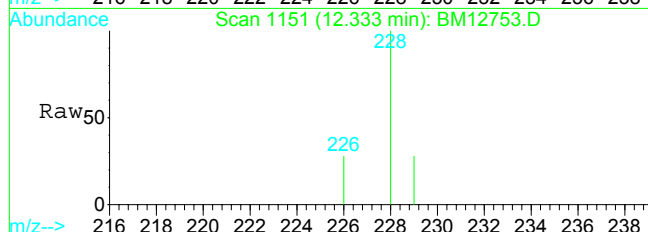
Tgt Ion:202 Resp: 18890
Ion Ratio Lower Upper
202 100
101 21.7 14.7 22.1
200 19.8 16.7 25.1





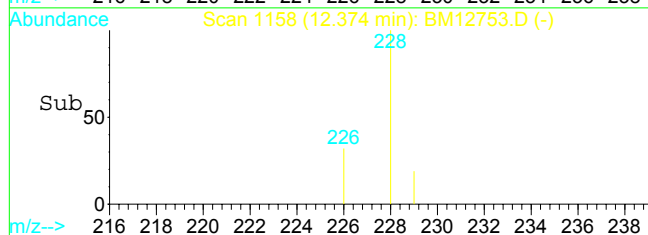
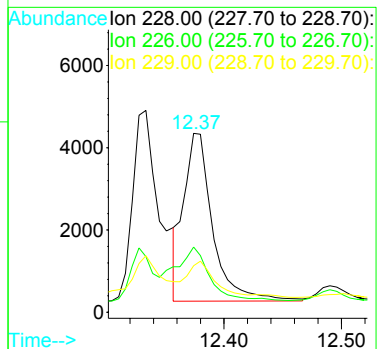
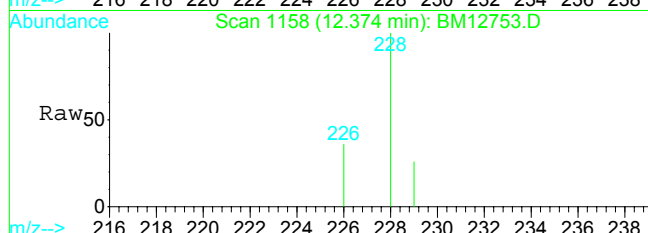
#9
Benzo(a)anthracene
Concen: 0.0257 ug/L
RT: 12.33 min Scan# 1151
Delta R.T. -0.04 min
Lab File: BM12753.D
Acq: 23 Dec 2017 2:02

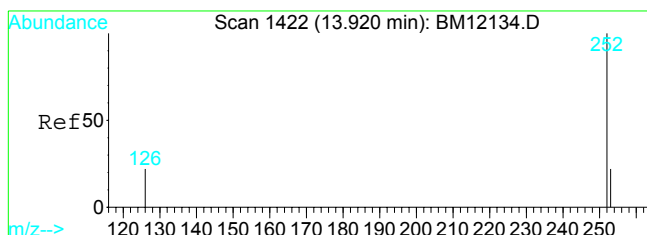
Tgt Ion:228 Resp: 6688
Ion Ratio Lower Upper
228 100
229 21.3 13.4 24.8
226 23.2 18.0 33.4



#10
Chrysene
Concen: 0.0231 ug/L
RT: 12.37 min Scan# 1158
Delta R.T. -0.05 min
Lab File: BM12753.D
Acq: 23 Dec 2017 2:02

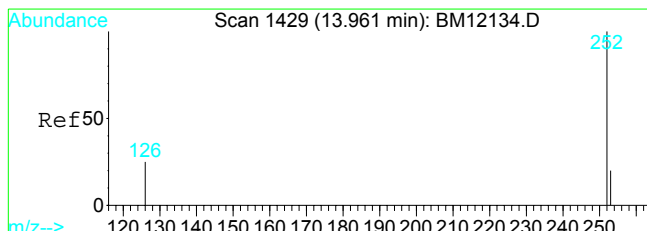
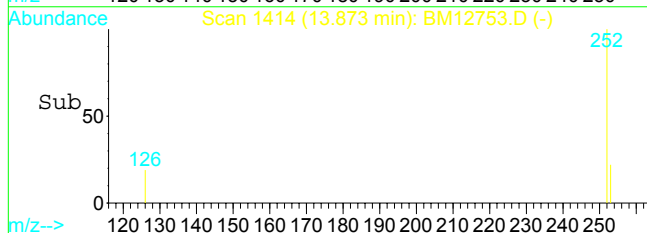
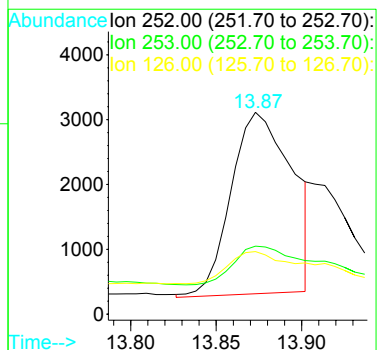
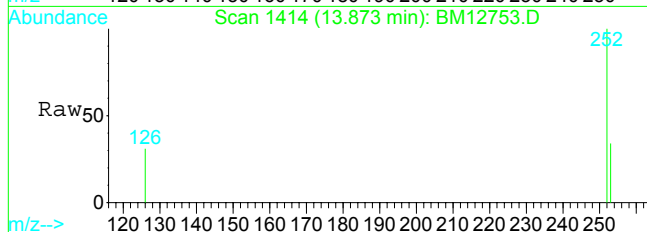
Tgt Ion:228 Resp: 6989
Ion Ratio Lower Upper
228 100
226 40.0 23.5 35.3#
229 22.0 15.6 23.4





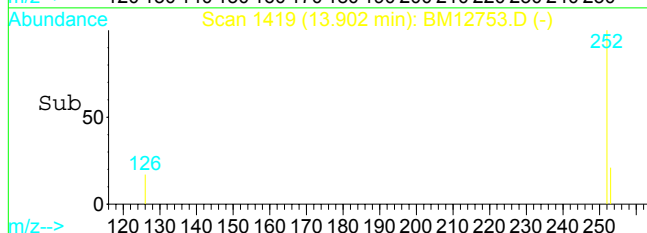
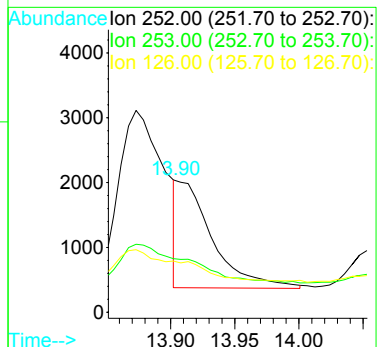
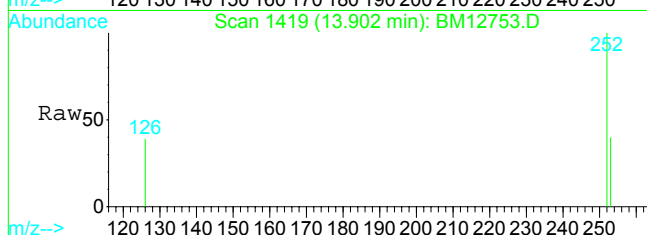
#11
Benzo(b) fluoranthene
Concen: 0.0305 ug/L m
RT: 13.87 min Scan# 1414
Delta R.T. -0.05 min
Lab File: BM12753.D
Acq: 23 Dec 2017 2:02

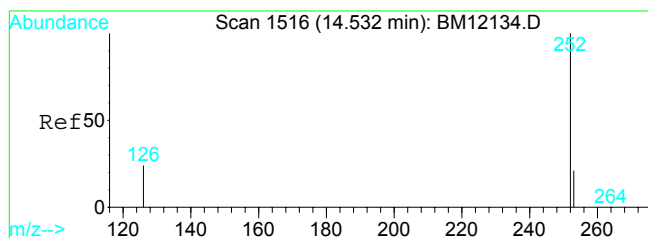
Tgt Ion:252 Resp: 6981
Ion Ratio Lower Upper
252 100
253 33.7 15.5 28.7#
126 31.0 13.6 25.4#



#12
Benzo(k) fluoranthene
Concen: 0.0123 ug/L m
RT: 13.90 min Scan# 1419
Delta R.T. -0.06 min
Lab File: BM12753.D
Acq: 23 Dec 2017 2:02

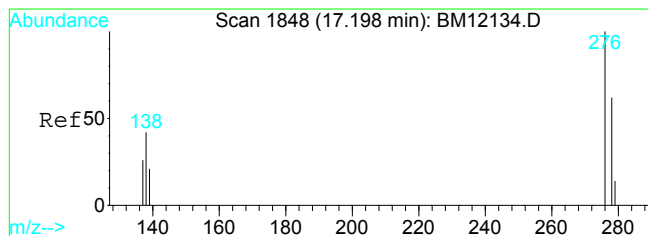
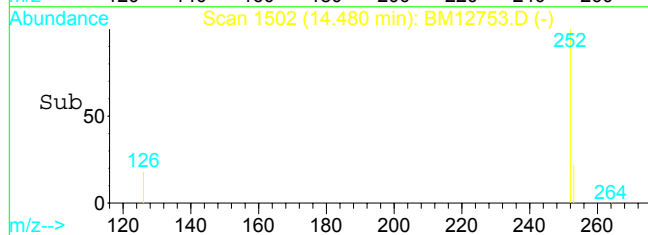
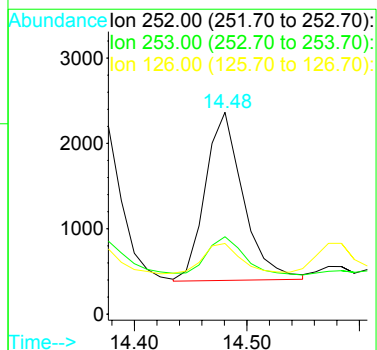
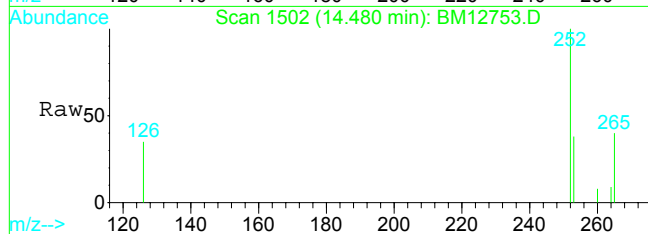
Tgt Ion:252 Resp: 3120
Ion Ratio Lower Upper
252 100
253 40.5 14.4 26.7#
126 38.7 16.3 30.3#





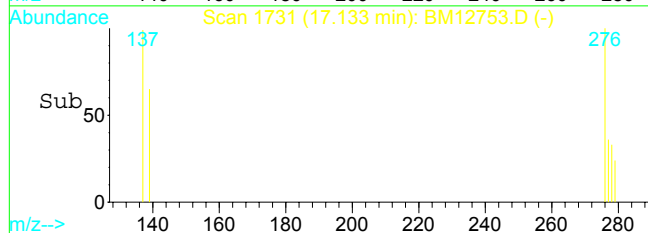
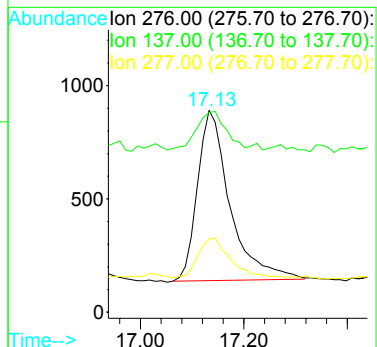
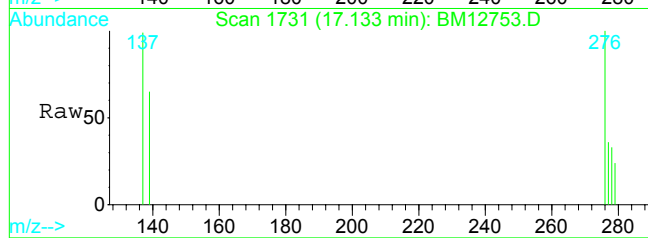
#13
Benzo(a)pyrene
Concen: 0.0243 ug/L
RT: 14.48 min Scan# 1502
Delta R.T. -0.05 min
Lab File: BM12753.D
Acq: 23 Dec 2017 2:02

Tgt Ion: 252 Resp: 4621
Ion Ratio Lower Upper
252 100
253 23.0 15.3 28.5
126 17.8 14.8 27.4



#15
Indeno(1,2,3-cd)pyrene
Concen: 0.0147 ug/L m
RT: 17.13 min Scan# 1731
Delta R.T. -0.07 min
Lab File: BM12753.D
Acq: 23 Dec 2017 2:02

Tgt Ion: 276 Resp: 3285
Ion Ratio Lower Upper
276 100
137 98.9 17.4 32.4#
277 36.1 17.4 32.2#



ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SIM - SW 846 8270D

Client: Brown and Caldwell USR
Client Sample ID: MW-8S 20171220
Lab Sample ID: 7120696-04
Project: Patchogue
Work Order: 7120696

Date Sampled:	12/20/17 16:09	Prep Date:	12/22/17 09:16	File ID:	BM12754.D
Init/Final Vol:	1000 mL / 1 mL	Prep Batch:	B7L2204	Analyzed:	12/23/17 02:29
Dilution:	1	Matrix:	Ground Water	Sequence:	S7L2809
		Prep Method:	Sep Funnel MS 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
56-55-3	Benzo(a)anthracene	ND	0.0165	0.0200	U
50-32-8	Benzo(a)pyrene	ND	0.0124	0.0200	U
205-99-2	Benzo(b)fluoranthene	ND	0.0177	0.0200	U
207-08-9	Benzo(k)fluoranthene	ND	0.00710	0.0200	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.0160	0.0200	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.0131	0.0200	U

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

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

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\B\DATA\20171222\BM12754.D Vial: 24
 Acq On : 23 Dec 2017 2:29 Operator: GCH
 Sample : 7120696-04 Inst : GCMS-B
 Misc : B7L2204 SIM Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Dec 26 13:34 2017 Quant Results File: 1004SIM.RES

Quant Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)
 Title : Method 8270C Select Ion Monitoring
 Last Update : Wed Nov 08 15:29:45 2017
 Response via : Initial Calibration
 DataAcq Meth : SIM8270A

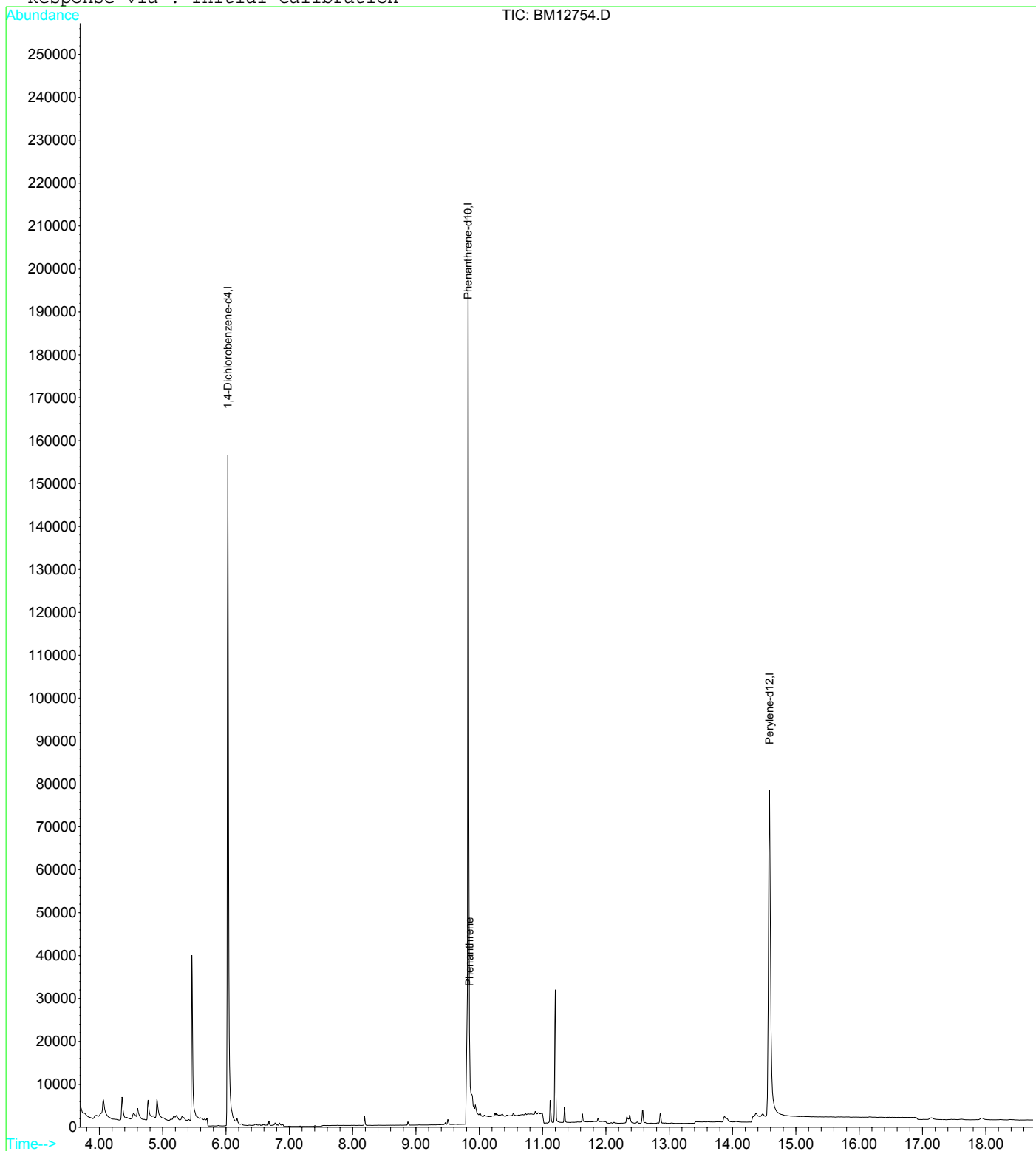
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.03	152	69375	0.50	ug/L	-0.03
3) Phenanthrene-d10	9.82	188	207956	0.50	ug/L	-0.03
14) Perylene-d12	14.58	264	124549	0.50	ug/L	-0.06
Target Compounds						Qvalue
7) Phenanthrene	9.85	178	5842m	0.0135	ug/L	

(#) = qualifier out of range (m) = manual integration
 BM12754.D 1004SIM.M Thu Jan 25 11:48:13 2018 SS

Quantitation Report

Data File : G:\HPCHEM\B\DATA\20171222\BM12754.D Vial: 24
 Acq On : 23 Dec 2017 2:29 Operator: GCH
 Sample : 7120696-04 Inst : GCMS-B
 Misc : B7L2204 SIM Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Dec 26 13:34 2017 Quant Results File: 1004SIM.RES

Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)
 Title : Method 8270C Select Ion Monitoring
 Last Update : Wed Nov 08 15:29:45 2017
 Response via : Initial Calibration

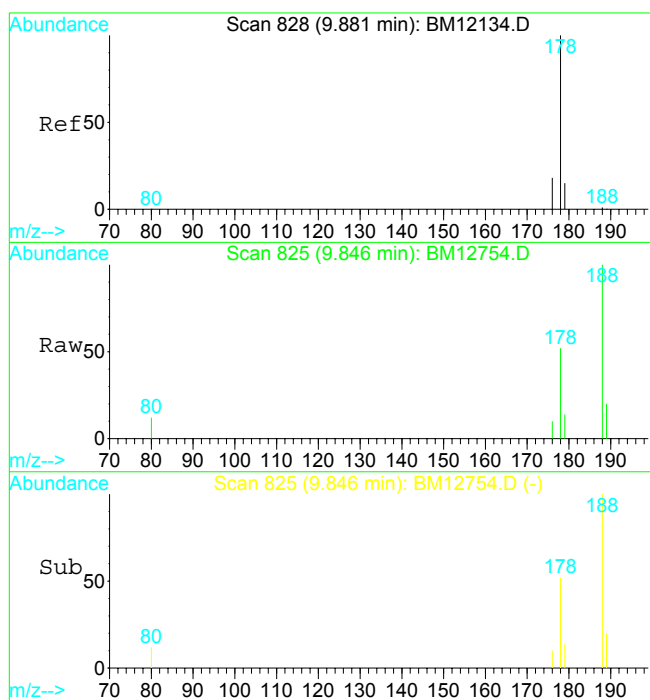


BM12754.D 1004SIM.M

Thu Jan 25 11:48:13 2018

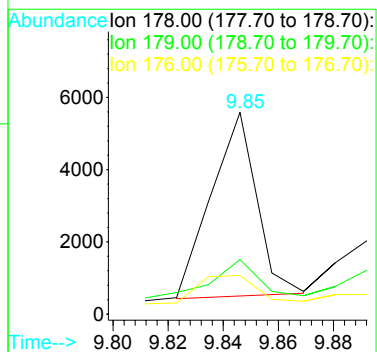
SS

Page 2



#7
Phenanthrene
Concen: 0.0135 ug/L m
RT: 9.85 min Scan# 825
Delta R.T. -0.03 min
Lab File: BM12754.D
Acq: 23 Dec 2017 2:29

Tgt Ion	Ratio	Lower	Upper
178	100		
179	64.6	12.4	18.6#
176	49.6	15.9	23.9#



ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SIM - SW 846 8270D

Client: Brown and Caldwell USR
Client Sample ID: MW-8D 20171220
Lab Sample ID: 7120696-05
Project: Patchogue
Work Order: 7120696

Date Sampled:	12/20/17 16:49	Prep Date:	12/22/17 09:16	File ID:	BM12755.D
Init/Final Vol:	1000 mL / 1 mL	Prep Batch:	B7L2204	Analyzed:	12/23/17 02:56
Dilution:	1	Matrix:	Ground Water	Sequence:	S7L2809
		Prep Method:	Sep Funnel MS 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
56-55-3	Benzo(a)anthracene	0.0167	0.0165	0.0200	J
50-32-8	Benzo(a)pyrene	ND	0.0124	0.0200	U
205-99-2	Benzo(b)fluoranthene	ND	0.0177	0.0200	U
207-08-9	Benzo(k)fluoranthene	ND	0.00710	0.0200	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.0160	0.0200	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.0131	0.0200	U

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

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

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\B\DATA\20171222\BM12755.D Vial: 25
Acq On : 23 Dec 2017 2:56 Operator: GCH
Sample : 7120696-05 Inst : GCMS-B
Misc : B7L2204 SIM Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 26 13:35 2017 Quant Results File: 1004SIM.RES

Quant Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)
Title : Method 8270C Select Ion Monitoring
Last Update : Wed Nov 08 15:29:45 2017
Response via : Initial Calibration
DataAcq Meth : SIM8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.03	152	60182	0.50	ug/L	-0.04
3) Phenanthrene-d10	9.82	188	177470	0.50	ug/L	-0.03
14) Perylene-d12	14.58	264	109021	0.50	ug/L	-0.06

Target Compounds						Qvalue
7) Phenanthrene	9.85	178	36042	0.0975	ug/L #	92
8) Pyrene	11.12	202	17761	0.0499	ug/L	97
9) Benzo(a)anthracene	12.33	228	4654	0.0167	ug/L	98
10) Chrysene	12.37	228	5594	0.0173	ug/L #	85
11) Benzo(b)fluoranthene	13.87	252	3429m	0.0140	ug/L	
13) Benzo(a)pyrene	14.48	252	2079	0.0102	ug/L	96

(#) = qualifier out of range (m) = manual integration
BM12755.D 1004SIM.M Thu Jan 25 11:48:14 2018 SS

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Quantitation Report

Data File : G:\HPCHEM\B\DATA\20171222\BM12755.D

Vial: 25

Acq On : 23 Dec 2017 2:56

Operator: GCH

Sample : 7120696-05

Inst : GCMS-B

Misc : B7L2204 SIM

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Dec 26 13:35 2017

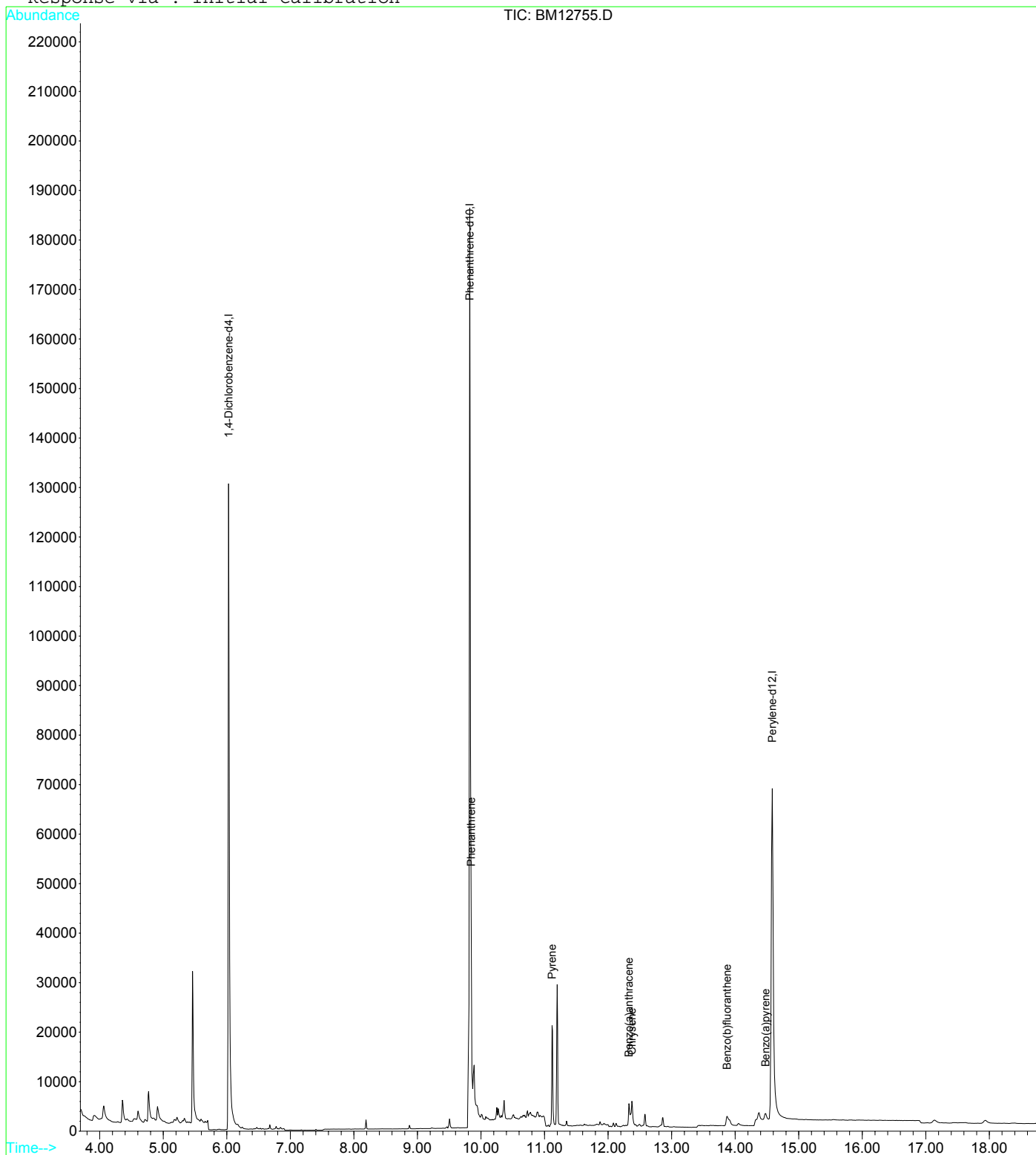
Quant Results File: 1004SIM.RES

Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)

Title : Method 8270C Select Ion Monitoring

Last Update : Wed Nov 08 15:29:45 2017

Response via : Initial Calibration

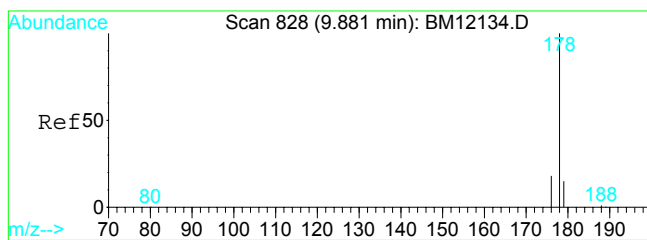


BM12755.D 1004SIM.M

Thu Jan 25 11:48:14 2018

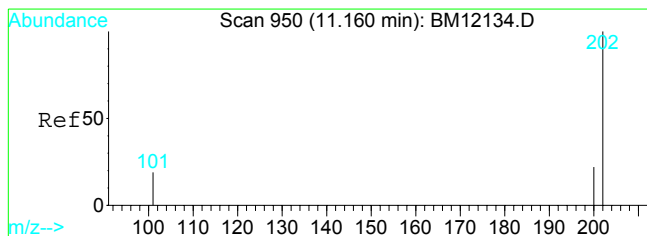
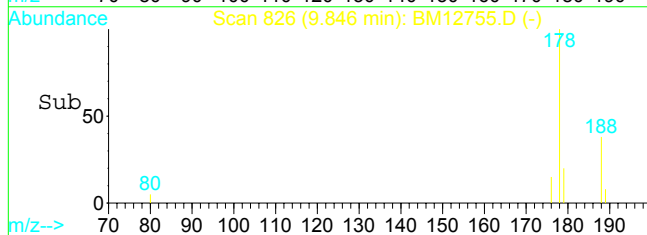
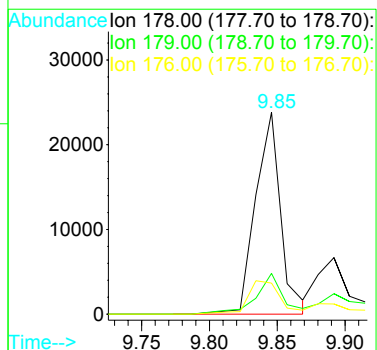
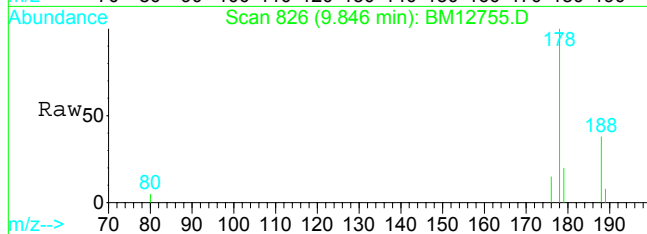
SS

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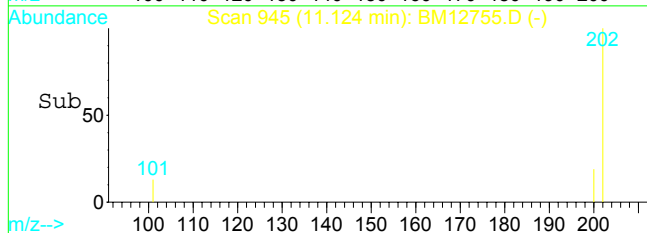
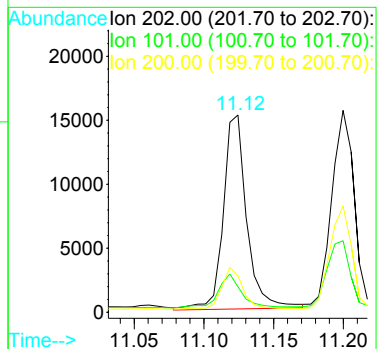
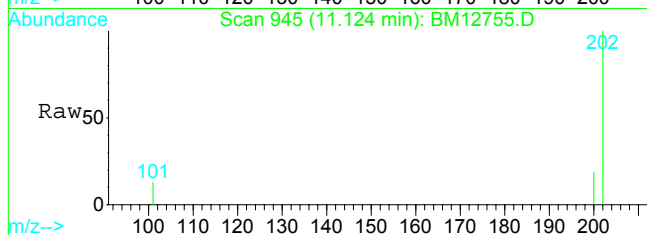
#7
Phenanthrene
Concen: 0.0975 ug/L
RT: 9.85 min Scan# 826
Delta R.T. -0.03 min
Lab File: BM12755.D
Acq: 23 Dec 2017 2:56

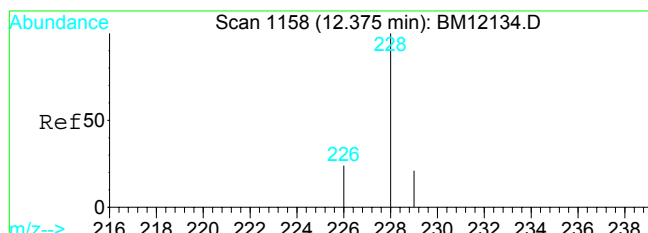
Tgt Ion:178 Resp: 36042
Ion Ratio Lower Upper
178 100
179 21.5 12.4 18.6#
176 21.2 15.9 23.9



#8
Pyrene
Concen: 0.0499 ug/L
RT: 11.12 min Scan# 945
Delta R.T. -0.04 min
Lab File: BM12755.D
Acq: 23 Dec 2017 2:56

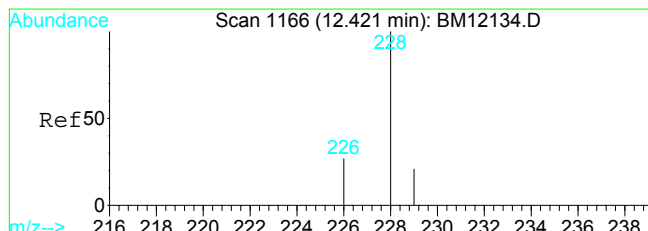
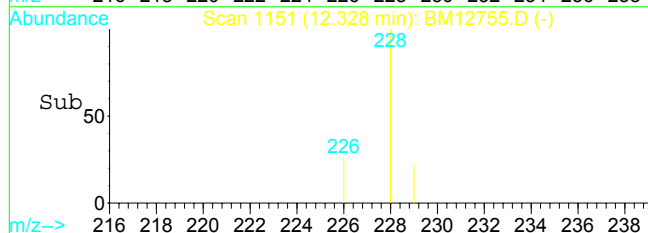
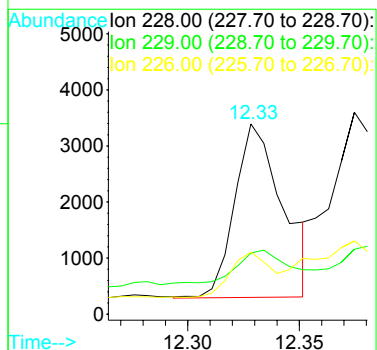
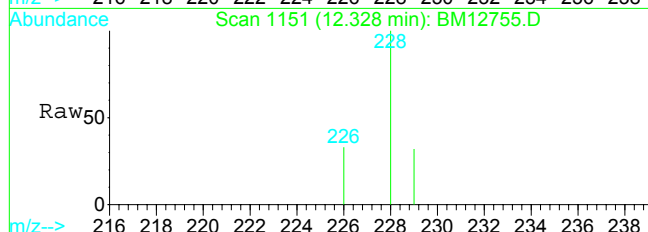
Tgt Ion:202 Resp: 17761
Ion Ratio Lower Upper
202 100
101 17.4 14.7 22.1
200 22.3 16.7 25.1





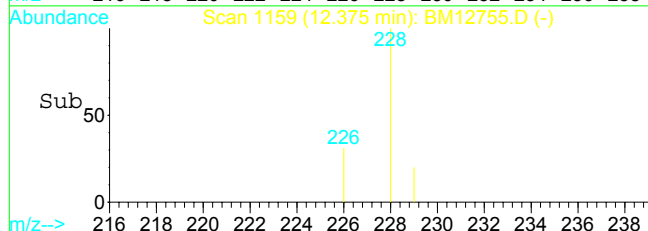
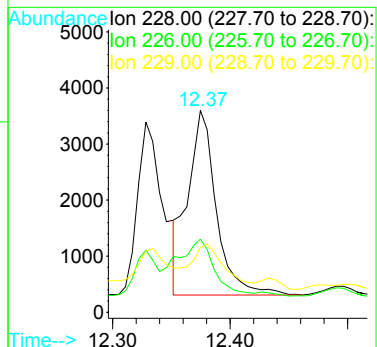
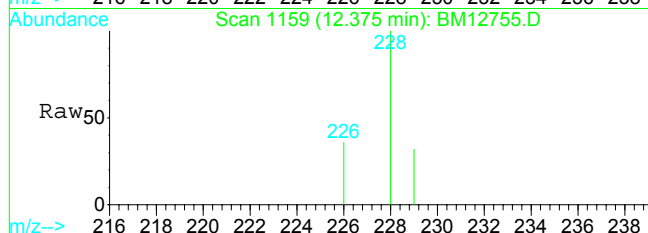
#9
Benzo(a)anthracene
Concen: 0.0167 ug/L
RT: 12.33 min Scan# 1151
Delta R.T. -0.05 min
Lab File: BM12755.D
Acq: 23 Dec 2017 2:56

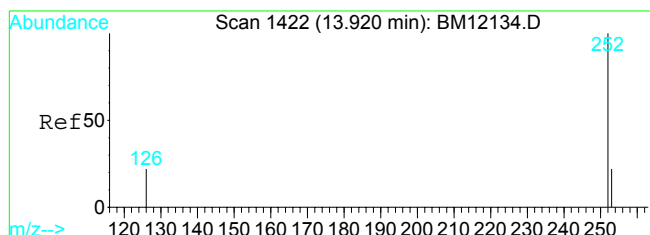
Tgt Ion:	228	Resp:	4654
Ion	Ratio	Lower	Upper
228	100		
229	17.5	13.4	24.8
226	26.0	18.0	33.4



#10
Chrysene
Concen: 0.0173 ug/L
RT: 12.37 min Scan# 1159
Delta R.T. -0.05 min
Lab File: BM12755.D
Acq: 23 Dec 2017 2:56

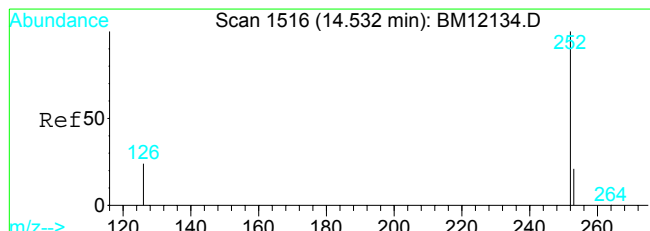
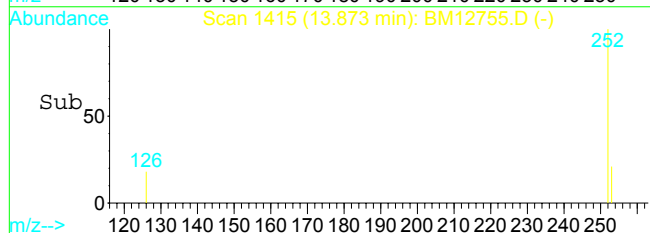
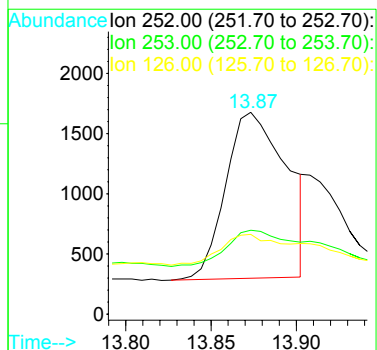
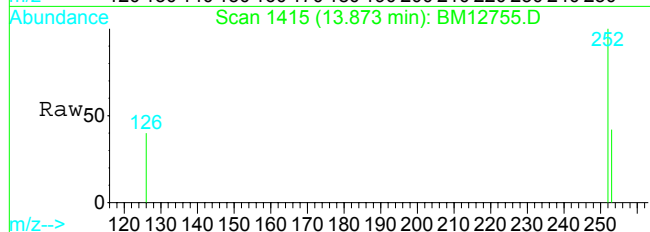
Tgt Ion:	228	Resp:	5594
Ion	Ratio	Lower	Upper
228	100		
226	37.6	23.5	35.3#
229	26.1	15.6	23.4#





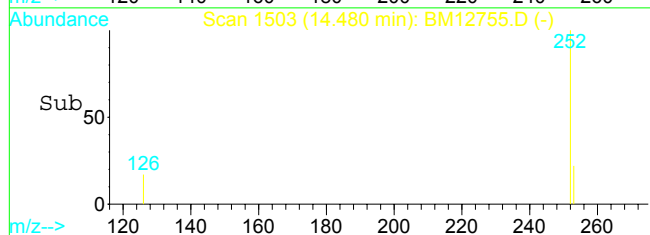
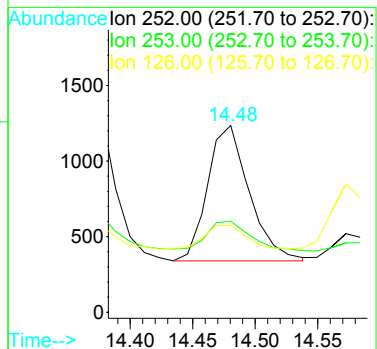
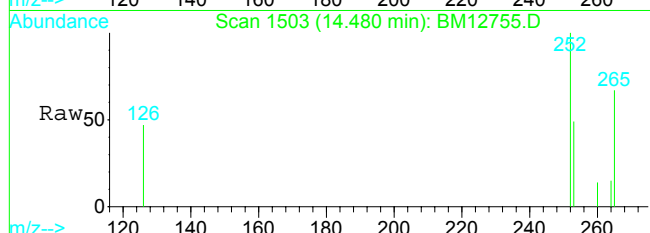
#11
Benzo(b)fluoranthene
Concen: 0.0140 ug/L m
RT: 13.87 min Scan# 1415
Delta R.T. -0.05 min
Lab File: BM12755.D
Acq: 23 Dec 2017 2:56

Tgt Ion: 252 Resp: 3429
Ion Ratio Lower Upper
252 100
253 41.6 15.5 28.7#
126 39.5 13.6 25.4#



#13
Benzo(a)pyrene
Concen: 0.0102 ug/L
RT: 14.48 min Scan# 1503
Delta R.T. -0.05 min
Lab File: BM12755.D
Acq: 23 Dec 2017 2:56

Tgt Ion: 252 Resp: 2079
Ion Ratio Lower Upper
252 100
253 21.9 15.3 28.5
126 17.0 14.8 27.4



ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SIM - SW 846 8270D

Client: Brown and Caldwell USR
Client Sample ID: MW-4S 20171221
Lab Sample ID: 7120696-06
Project: Patchogue
Work Order: 7120696

Date Sampled:	12/21/17 08:42	Prep Date:	12/26/17 10:00	File ID:	BM12794.D
Init/Final Vol:	930 mL / 1 mL	Prep Batch:	B7L2204	Analyzed:	12/28/17 20:44
Dilution:	1	Matrix:	Ground Water	Sequence:	S8A0213
		Prep Method:	Sep Funnel MS 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
56-55-3	Benzo(a)anthracene	ND	0.0177	0.0215	U
50-32-8	Benzo(a)pyrene	ND	0.0133	0.0215	U
205-99-2	Benzo(b)fluoranthene	ND	0.0190	0.0215	U
207-08-9	Benzo(k)fluoranthene	ND	0.00763	0.0215	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.0172	0.0215	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.0141	0.0215	U

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

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

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\B\DATA\20171228\BM12794.D Vial: 7
 Acq On : 28 Dec 2017 20:44 Operator: GCH
 Sample : 7120696-06 Inst : GCMS-B
 Misc : B7L2204 SIM Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Dec 29 11:52 2017 Quant Results File: 1004SIM.RES

Quant Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)
 Title : Method 8270C Select Ion Monitoring
 Last Update : Fri Dec 29 11:49:16 2017
 Response via : Initial Calibration
 DataAcq Meth : SIM8270A

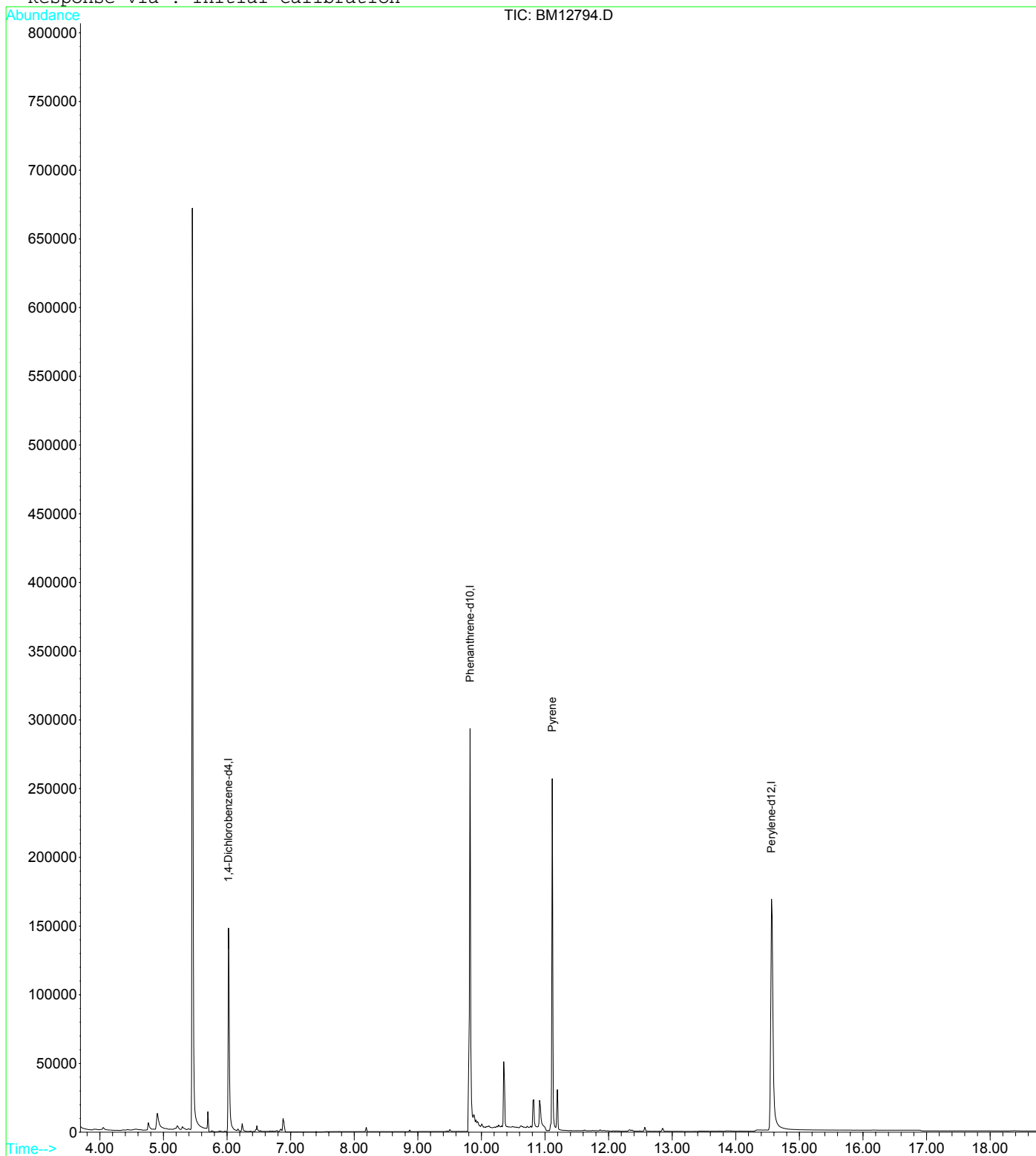
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.03	152	65234	0.50	ug/L	-0.03
3) Phenanthrene-d10	9.82	188	279141	0.50	ug/L	-0.04
14) Perylene-d12	14.56	264	239848m	0.50	ug/L	-0.08
Target Compounds						Qvalue
8) Pyrene	11.11	202	195754	0.3495	ug/L	98

(#) = qualifier out of range (m) = manual integration
 BM12794.D 1004SIM.M Thu Jan 25 11:49:15 2018 SS

Quantitation Report

Data File : G:\HPCHEM\B\DATA\20171228\BM12794.D Vial: 7
 Acq On : 28 Dec 2017 20:44 Operator: GCH
 Sample : 7120696-06 Inst : GCMS-B
 Misc : B7L2204 SIM Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Dec 29 11:52 2017 Quant Results File: 1004SIM.RES

Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)
 Title : Method 8270C Select Ion Monitoring
 Last Update : Wed Nov 08 15:29:45 2017
 Response via : Initial Calibration

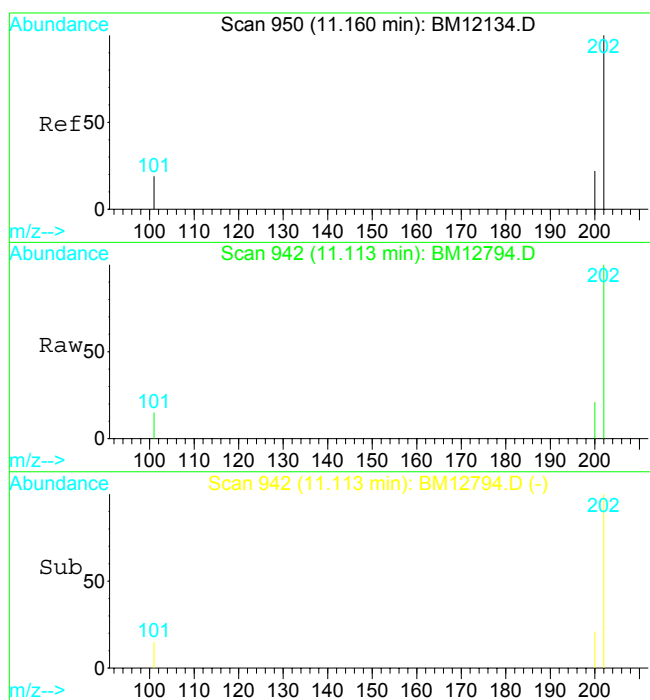


BM12794.D 1004SIM.M

Thu Jan 25 11:49:15 2018

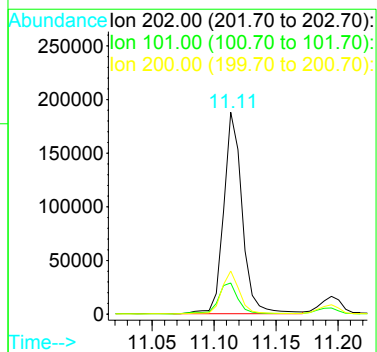
SS

Page 2



#8
 Pyrene
 Concen: 0.3495 ug/L
 RT: 11.11 min Scan# 942
 Delta R.T. -0.05 min
 Lab File: BM12794.D
 Acq: 28 Dec 2017 20:44

Tgt Ion	Ratio	Lower	Upper
202	100		
101	16.5	14.7	22.1
200	20.5	16.7	25.1



ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SIM - SW 846 8270D

Client: Brown and Caldwell USR
Client Sample ID: MW-4D 20171221
Lab Sample ID: 7120696-07
Project: Patchogue
Work Order: 7120696

Date Sampled:	12/21/17 09:53	Prep Date:	12/26/17 10:00	File ID:	BM12795.D
Init/Final Vol:	1000 mL / 1 mL	Prep Batch:	B7L2204	Analyzed:	12/28/17 21:11
Dilution:	1	Matrix:	Ground Water	Sequence:	S8A0213
		Prep Method:	Sep Funnel MS 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
56-55-3	Benzo(a)anthracene	0.0180	0.0165	0.0200	J
50-32-8	Benzo(a)pyrene	0.0129	0.0124	0.0200	J
205-99-2	Benzo(b)fluoranthene	ND	0.0177	0.0200	U
207-08-9	Benzo(k)fluoranthene	ND	0.00710	0.0200	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.0160	0.0200	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.0131	0.0200	U

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

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

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\B\DATA\20171228\BM12795.D Vial: 8
Acq On : 28 Dec 2017 21:11 Operator: GCH
Sample : 7120696-07 Inst : GCMS-B
Misc : B7L2204 SIM Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 29 15:42 2017 Quant Results File: 1004SIM.RES

Quant Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)
Title : Method 8270C Select Ion Monitoring
Last Update : Fri Dec 29 11:49:16 2017
Response via : Initial Calibration
DataAcq Meth : SIM8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.03	152	59862	0.50	ug/L	-0.03
3) Phenanthrene-d10	9.82	188	192425	0.50	ug/L	-0.04
14) Perylene-d12	14.57	264	202704	0.50	ug/L	-0.07

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
7) Phenanthrene	9.83	178	10192	0.0254	ug/L #	79
8) Pyrene	11.12	202	10242	0.0265	ug/L #	95
9) Benzo(a)anthracene	12.32	228	5432	0.0180	ug/L	100
10) Chrysene	12.37	228	4933	0.0141	ug/L #	93
11) Benzo(b)fluoranthene	13.86	252	4458m	0.0155	ug/L	
13) Benzo(a)pyrene	14.46	252	3060	0.0129	ug/L	96

(#) = qualifier out of range (m) = manual integration
BM12795.D 1004SIM.M Thu Jan 25 11:49:16 2018 SS

Page 1

Quantitation Report

Data File : G:\HPCHEM\B\DATA\20171228\BM12795.D

Vial: 8

Acq On : 28 Dec 2017 21:11

Operator: GCH

Sample : 7120696-07

Inst : GCMS-B

Misc : B7L2204 SIM

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Dec 29 15:42 2017

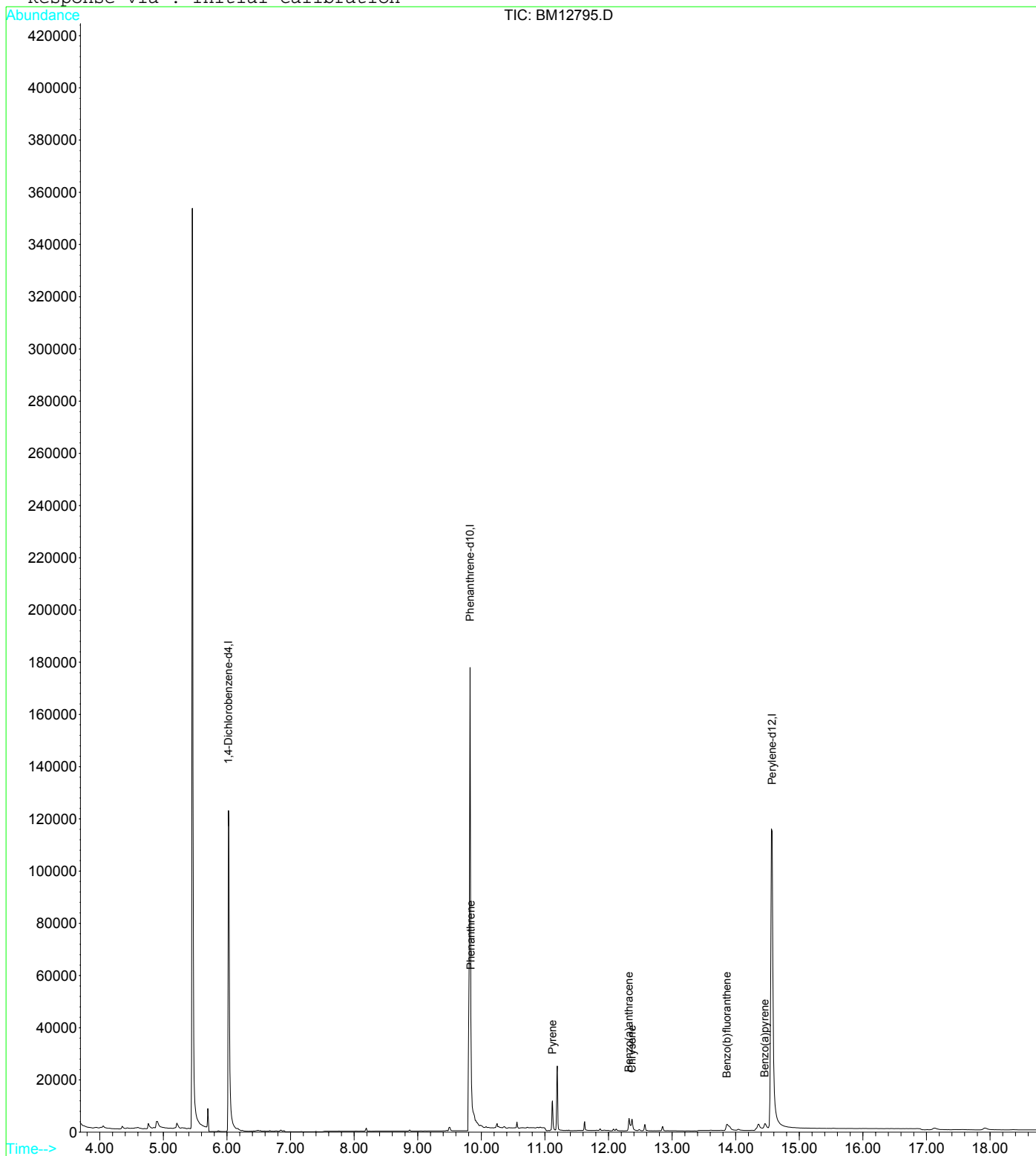
Quant Results File: 1004SIM.RES

Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)

Title : Method 8270C Select Ion Monitoring

Last Update : Wed Nov 08 15:29:45 2017

Response via : Initial Calibration

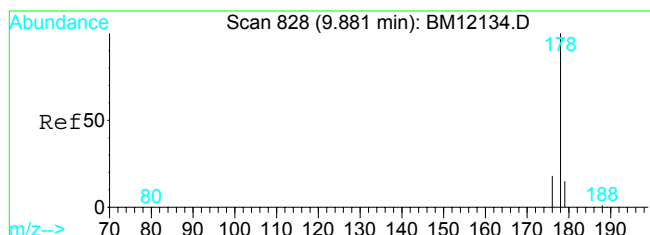


BM12795.D 1004SIM.M

Thu Jan 25 11:49:16 2018

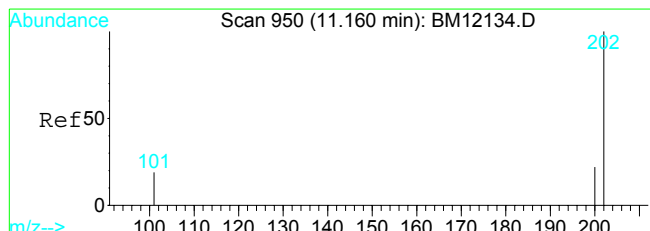
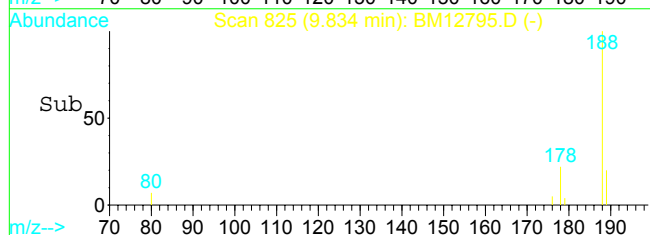
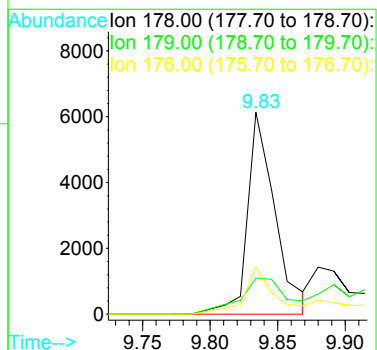
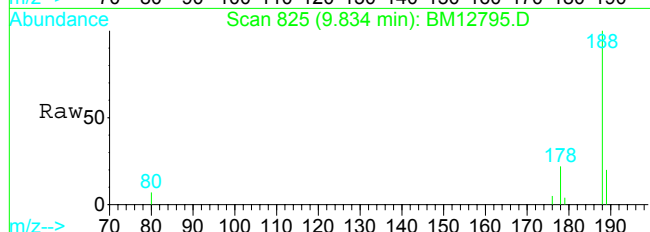
SS

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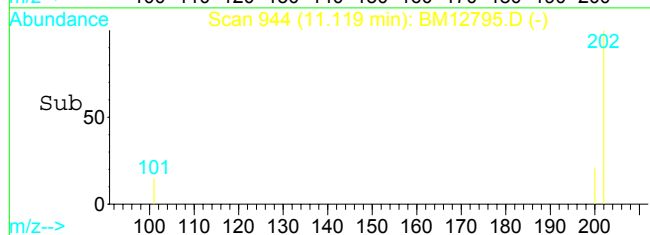
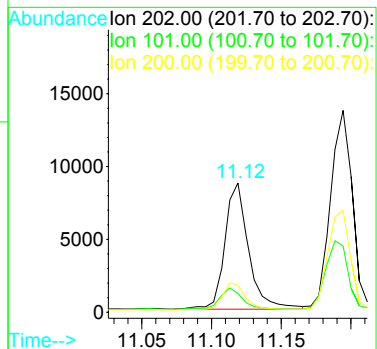
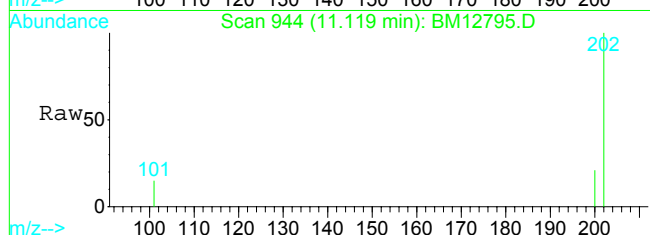
#7
Phenanthrene
Concen: 0.0254 ug/L
RT: 9.83 min Scan# 825
Delta R.T. -0.05 min
Lab File: BM12795.D
Acq: 28 Dec 2017 21:11

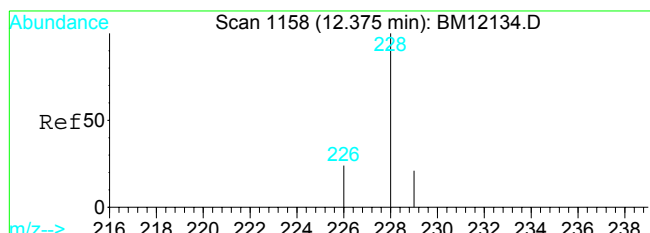
Tgt Ion:178 Resp: 10192
Ion Ratio Lower Upper
178 100
179 30.0 12.4 18.6#
176 25.0 15.9 23.9#



#8
Pyrene
Concen: 0.0265 ug/L
RT: 11.12 min Scan# 944
Delta R.T. -0.04 min
Lab File: BM12795.D
Acq: 28 Dec 2017 21:11

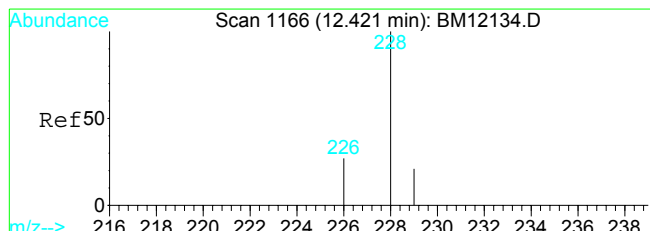
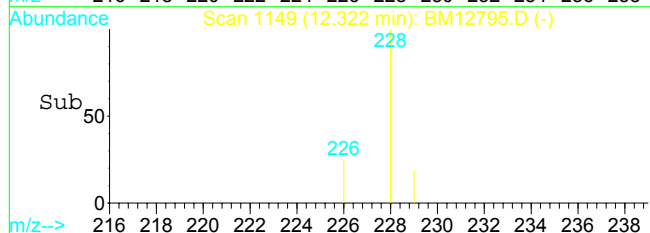
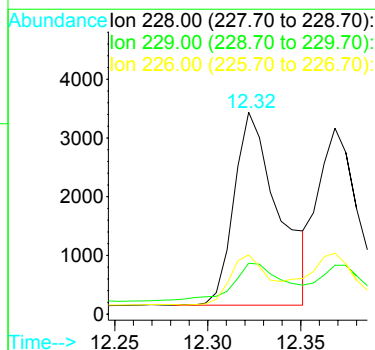
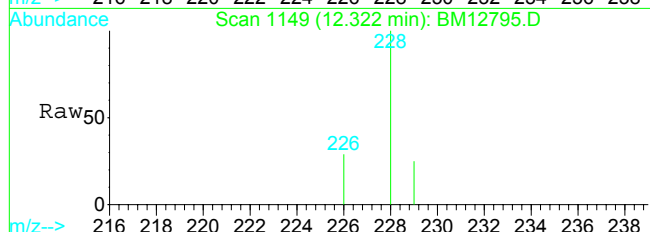
Tgt Ion:202 Resp: 10242
Ion Ratio Lower Upper
202 100
101 23.1 14.7 22.1#
200 21.0 16.7 25.1





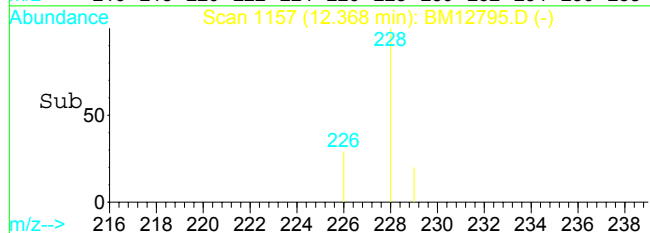
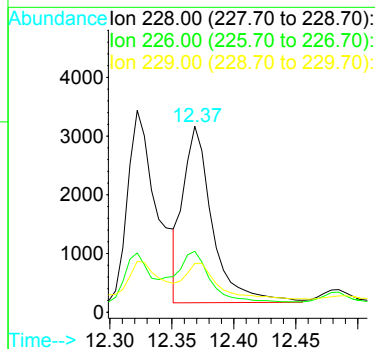
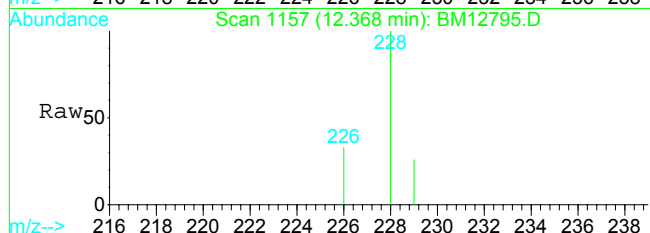
#9
Benzo(a)anthracene
Concen: 0.0180 ug/L
RT: 12.32 min Scan# 1149
Delta R.T. -0.05 min
Lab File: BM12795.D
Acq: 28 Dec 2017 21:11

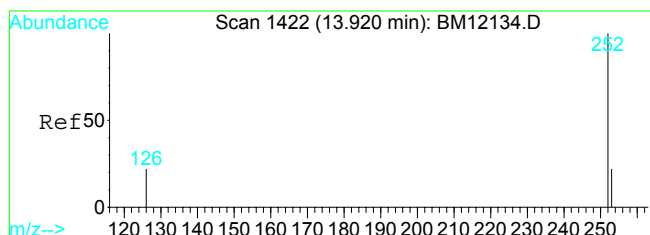
Tgt Ion:	228	Resp:	5432
Ion	Ratio	Lower	Upper
228	100		
229	19.0	13.4	24.8
226	25.7	18.0	33.4



#10
Chrysene
Concen: 0.0141 ug/L
RT: 12.37 min Scan# 1157
Delta R.T. -0.05 min
Lab File: BM12795.D
Acq: 28 Dec 2017 21:11

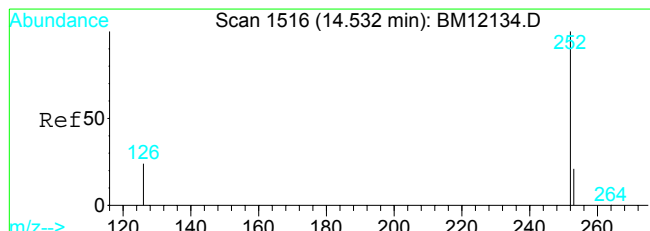
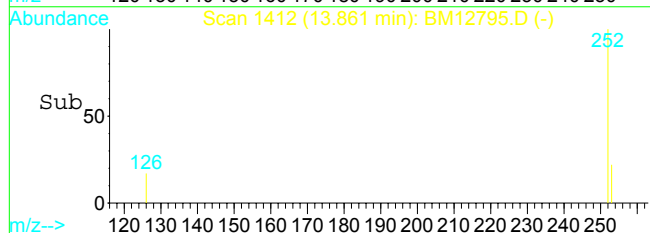
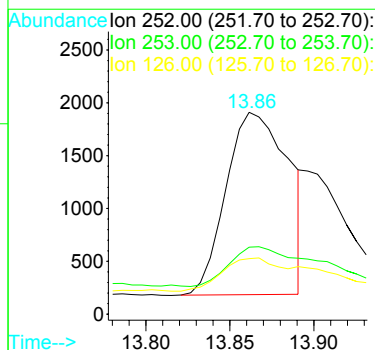
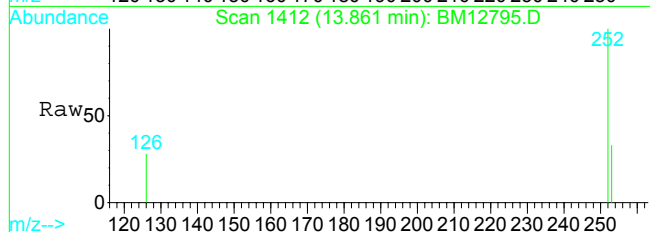
Tgt Ion:	228	Resp:	4933
Ion	Ratio	Lower	Upper
228	100		
226	32.7	23.5	35.3
229	23.6	15.6	23.4





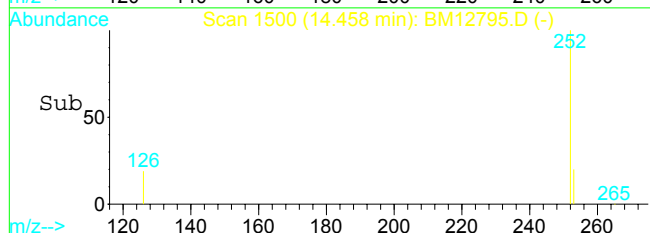
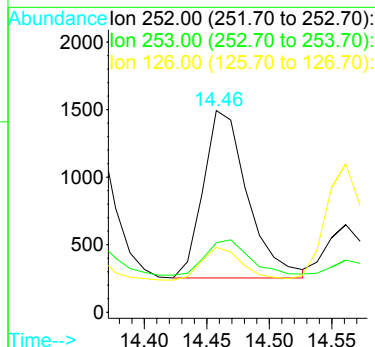
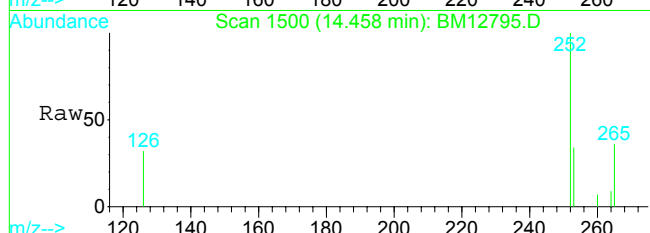
#11
Benzo(b) fluoranthene
Concen: 0.0155 ug/L m
RT: 13.86 min Scan# 1412
Delta R.T. -0.06 min
Lab File: BM12795.D
Acq: 28 Dec 2017 21:11

Tgt Ion:252 Resp: 4458
Ion Ratio Lower Upper
252 100
253 33.2 15.5 28.7#
126 27.5 13.6 25.4#



#13
Benzo(a) pyrene
Concen: 0.0129 ug/L
RT: 14.46 min Scan# 1500
Delta R.T. -0.07 min
Lab File: BM12795.D
Acq: 28 Dec 2017 21:11

Tgt Ion:252 Resp: 3060
Ion Ratio Lower Upper
252 100
253 19.4 15.3 28.5
126 19.7 14.8 27.4



ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SIM - SW 846 8270D

Client: Brown and Caldwell USR
Client Sample ID: MW-3 20171221
Lab Sample ID: 7120696-08
Project: Patchogue
Work Order: 7120696

Date Sampled:	12/21/17 10:43	Prep Date:	12/26/17 10:00	File ID:	BM12796.D
Init/Final Vol:	1000 mL / 1 mL	Prep Batch:	B7L2204	Analyzed:	12/28/17 21:38
Dilution:	1	Matrix:	Ground Water	Sequence:	S8A0213
		Prep Method:	Sep Funnel MS 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
56-55-3	Benzo(a)anthracene	0.0281	0.0165	0.0200	
50-32-8	Benzo(a)pyrene	ND	0.0124	0.0200	U
205-99-2	Benzo(b)fluoranthene	ND	0.0177	0.0200	U
207-08-9	Benzo(k)fluoranthene	ND	0.00710	0.0200	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.0160	0.0200	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.0131	0.0200	U

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

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

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\B\DATA\20171228\BM12796.D Vial: 9
Acq On : 28 Dec 2017 21:38 Operator: GCH
Sample : 7120696-08 Inst : GCMS-B
Misc : B7L2204 SIM Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 29 15:43 2017 Quant Results File: 1004SIM.RES

Quant Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)
Title : Method 8270C Select Ion Monitoring
Last Update : Fri Dec 29 11:49:16 2017
Response via : Initial Calibration
DataAcq Meth : SIM8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.03	152	62220	0.50	ug/L	-0.03
3) Phenanthrene-d10	9.82	188	187404	0.50	ug/L	-0.03
14) Perylene-d12	14.57	264	167525	0.50	ug/L	-0.07

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
8) Pyrene	11.11	202	214374	0.5702	ug/L	98
9) Benzo(a)anthracene	12.32	228	8263	0.0281	ug/L	98
10) Chrysene	12.35	228	7269m	0.0213	ug/L	

(#) = qualifier out of range (m) = manual integration

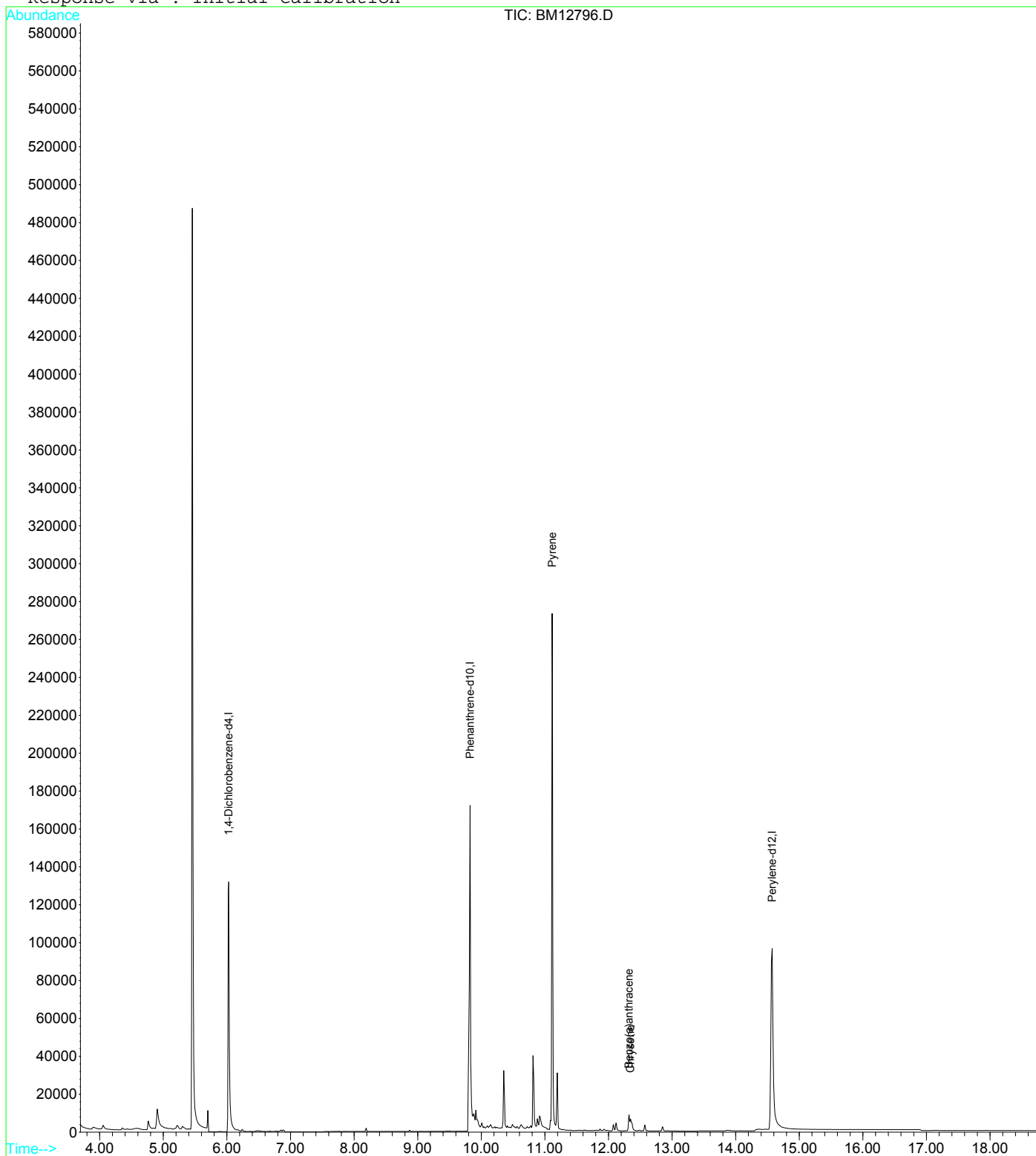
BM12796.D 1004SIM.M Thu Jan 25 11:49:17 2018 SS

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Quantitation Report

Data File : G:\HPCHEM\B\DATA\20171228\BM12796.D Vial: 9
 Acq On : 28 Dec 2017 21:38 Operator: GCH
 Sample : 7120696-08 Inst : GCMS-B
 Misc : B7L2204 SIM Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Dec 29 15:43 2017 Quant Results File: 1004SIM.RES

Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)
 Title : Method 8270C Select Ion Monitoring
 Last Update : Wed Nov 08 15:29:45 2017
 Response via : Initial Calibration

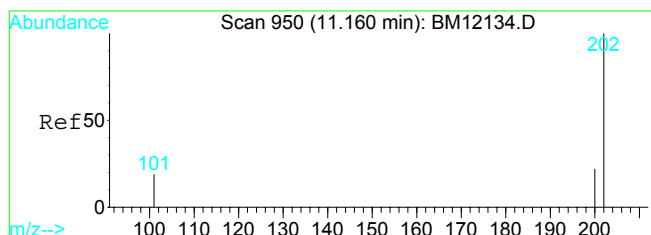


BM12796.D 1004SIM.M

Thu Jan 25 11:49:18 2018

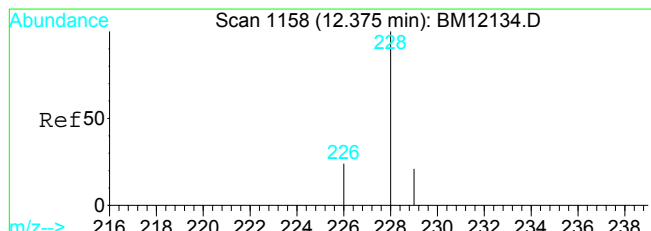
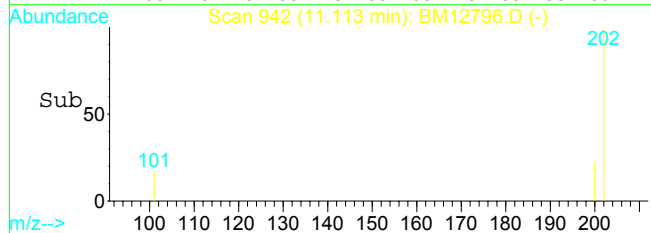
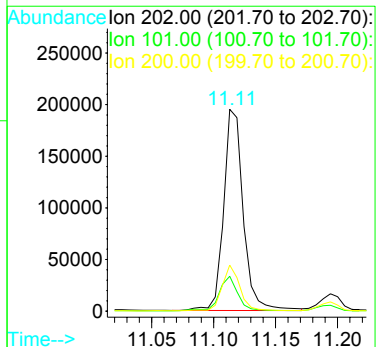
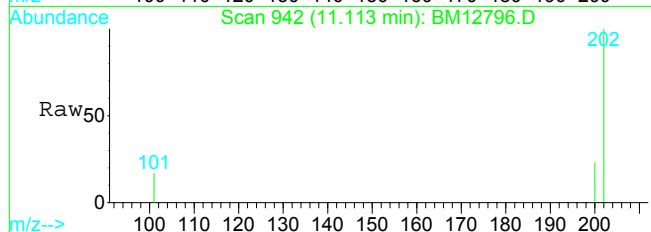
SS

Page 2



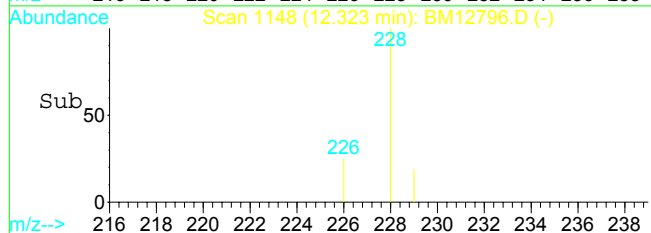
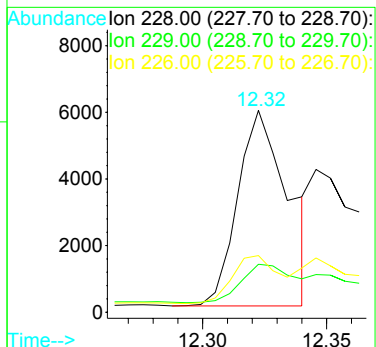
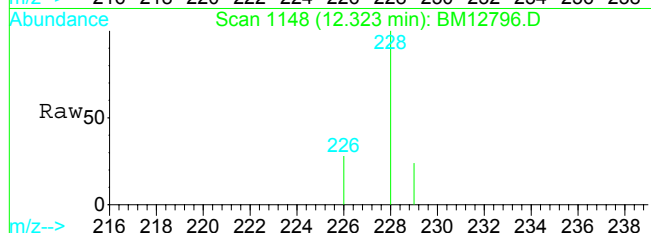
#8
Pyrene
Concen: 0.5702 ug/L
RT: 11.11 min Scan# 942
Delta R.T. -0.05 min
Lab File: BM12796.D
Acq: 28 Dec 2017 21:38

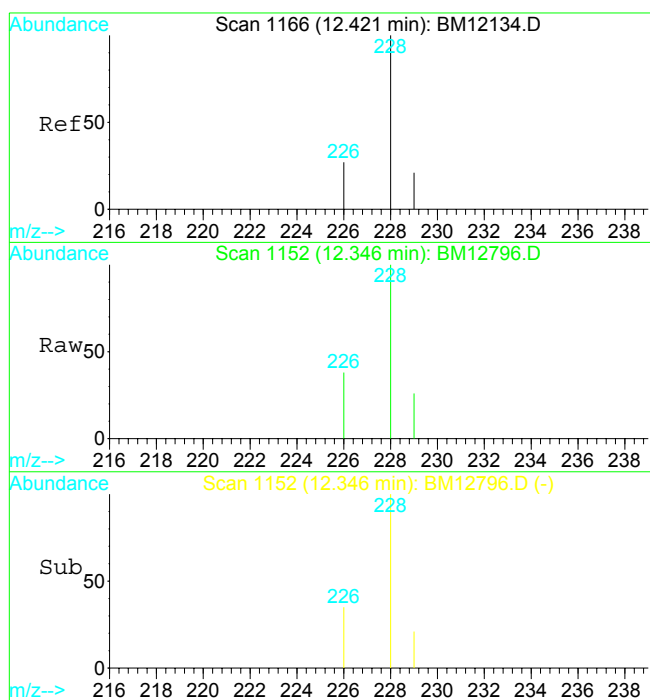
Tgt Ion:202 Resp: 214374
Ion Ratio Lower Upper
202 100
101 17.0 14.7 22.1
200 20.6 16.7 25.1



#9
Benzo(a)anthracene
Concen: 0.0281 ug/L
RT: 12.32 min Scan# 1148
Delta R.T. -0.05 min
Lab File: BM12796.D
Acq: 28 Dec 2017 21:38

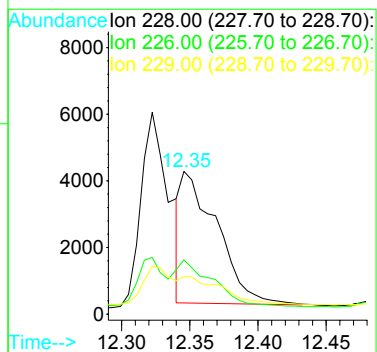
Tgt Ion:228 Resp: 8263
Ion Ratio Lower Upper
228 100
229 19.5 13.4 24.8
226 24.4 18.0 33.4





#10
 Chrysene
 Concen: 0.0213 ug/L m
 RT: 12.35 min Scan# 1152
 Delta R.T. -0.08 min
 Lab File: BM12796.D
 Acq: 28 Dec 2017 21:38

Tgt Ion: 228 Resp: 7269
 Ion Ratio Lower Upper
 228 100
 226 27.8 23.5 35.3
 229 23.3 15.6 23.4



ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SIM - SW 846 8270D

Client: Brown and Caldwell USR
Client Sample ID: DUP-20171221
Lab Sample ID: 7120696-09
Project: Patchogue
Work Order: 7120696

Date Sampled:	12/21/17 00:00	Prep Date:	12/26/17 10:00	File ID:	BM12797.D
Init/Final Vol:	1000 mL / 1 mL	Prep Batch:	B7L2204	Analyzed:	12/28/17 22:04
Dilution:	1	Matrix:	Ground Water	Sequence:	S8A0213
		Prep Method:	Sep Funnel MS 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
56-55-3	Benzo(a)anthracene	0.0283	0.0165	0.0200	
50-32-8	Benzo(a)pyrene	ND	0.0124	0.0200	U
205-99-2	Benzo(b)fluoranthene	ND	0.0177	0.0200	U
207-08-9	Benzo(k)fluoranthene	ND	0.00710	0.0200	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.0160	0.0200	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.0131	0.0200	U

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

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

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\B\DATA\20171228\BM12797.D Vial: 10
Acq On : 28 Dec 2017 22:04 Operator: GCH
Sample : 7120696-09 Inst : GCMS-B
Misc : B7L2204 SIM Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 29 15:43 2017 Quant Results File: 1004SIM.RES

Quant Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)
Title : Method 8270C Select Ion Monitoring
Last Update : Fri Dec 29 11:49:16 2017
Response via : Initial Calibration
DataAcq Meth : SIM8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.03	152	67649	0.50	ug/L	-0.04
3) Phenanthrene-d10	9.82	188	202628	0.50	ug/L	-0.03
14) Perylene-d12	14.57	264	151126	0.50	ug/L	-0.07
Target Compounds						Qvalue
8) Pyrene	11.11	202	264619	0.6509	ug/L	98
9) Benzo(a)anthracene	12.32	228	8974	0.0283	ug/L	99
10) Chrysene	12.35	228	8635m	0.0234	ug/L	

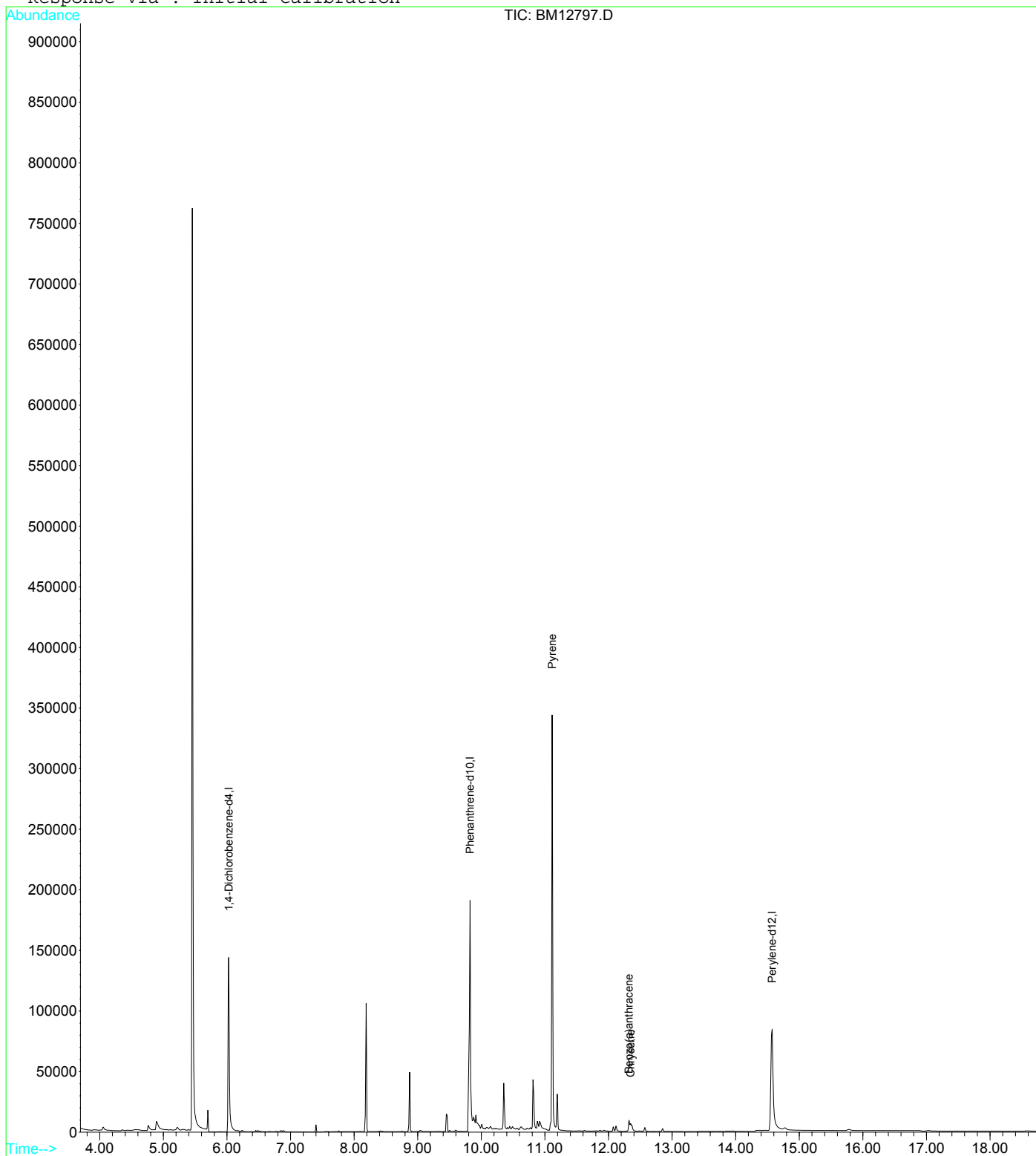
(#) = qualifier out of range (m) = manual integration

BM12797.D 1004SIM.M Thu Jan 25 11:49:19 2018 SS

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Quantitation Report

Data File : G:\HPCHEM\B\DATA\20171228\BM12797.D Vial: 10
 Acq On : 28 Dec 2017 22:04 Operator: GCH
 Sample : 7120696-09 Inst : GCMS-B
 Misc : B7L2204 SIM Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Dec 29 15:43 2017 Quant Results File: 1004SIM.RES
 Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)
 Title : Method 8270C Select Ion Monitoring
 Last Update : Wed Nov 08 15:29:45 2017
 Response via : Initial Calibration

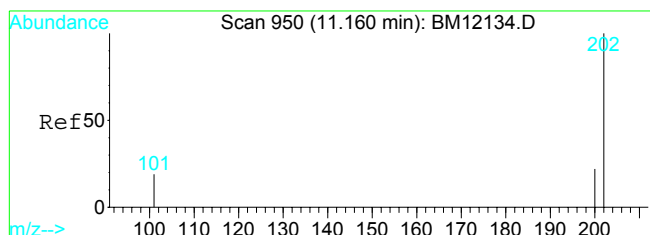


BM12797.D 1004SIM.M

Thu Jan 25 11:49:19 2018

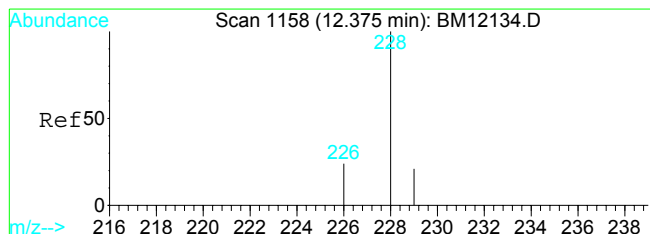
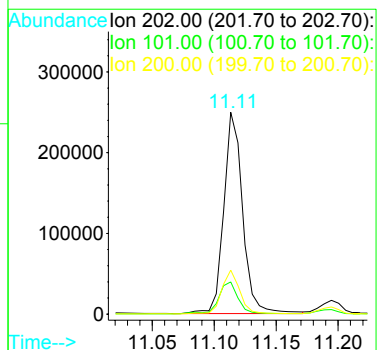
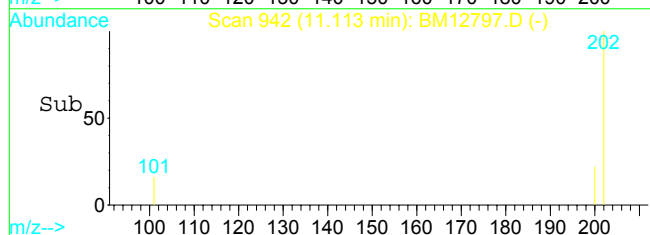
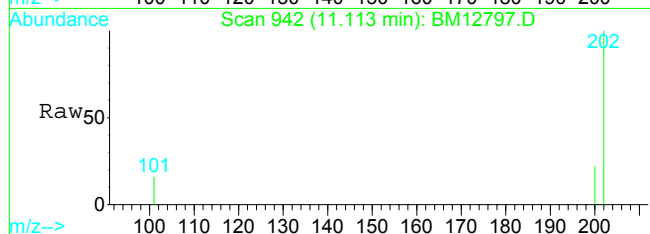
SS

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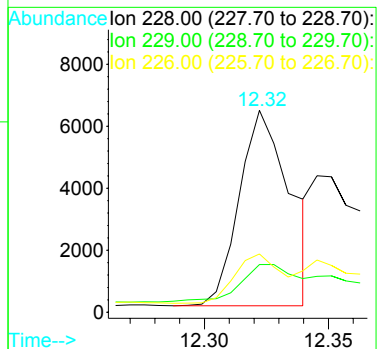
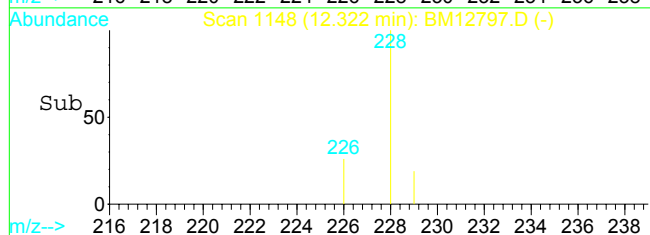
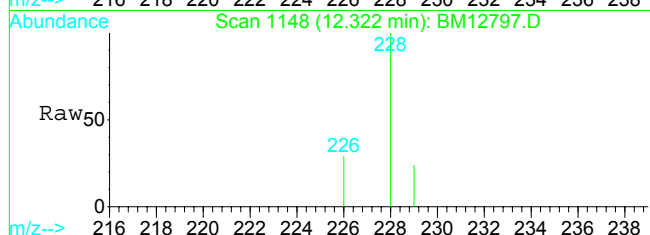
#8
Pyrene
Concen: 0.6509 ug/L
RT: 11.11 min Scan# 942
Delta R.T. -0.05 min
Lab File: BM12797.D
Acq: 28 Dec 2017 22:04

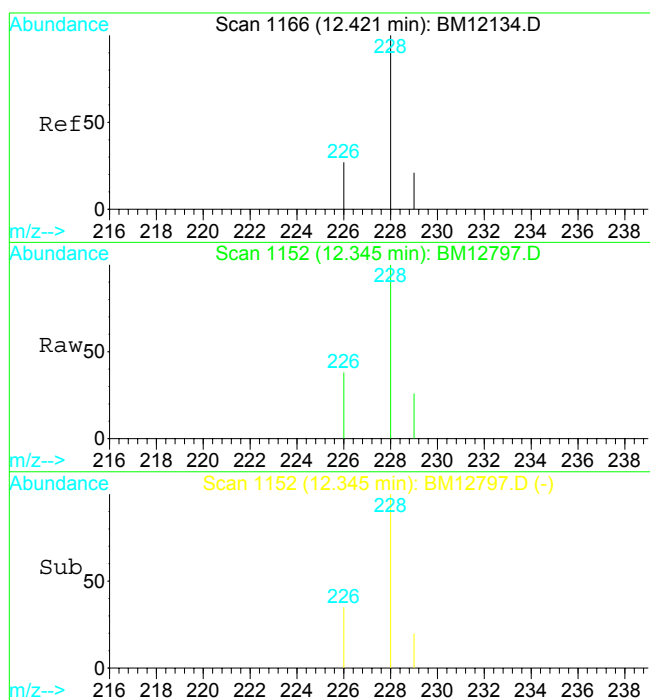
Tgt Ion:202 Resp: 264619
Ion Ratio Lower Upper
202 100
101 16.5 14.7 22.1
200 20.7 16.7 25.1



#9
Benzo(a)anthracene
Concen: 0.0283 ug/L
RT: 12.32 min Scan# 1148
Delta R.T. -0.05 min
Lab File: BM12797.D
Acq: 28 Dec 2017 22:04

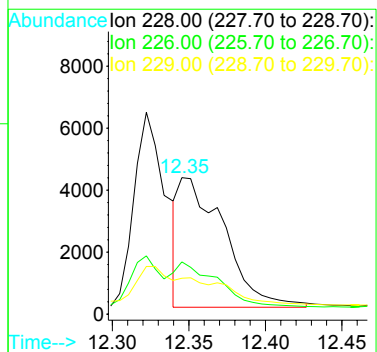
Tgt Ion:228 Resp: 8974
Ion Ratio Lower Upper
228 100
229 18.7 13.4 24.8
226 25.2 18.0 33.4





#10
 Chrysene
 Concen: 0.0234 ug/L m
 RT: 12.35 min Scan# 1152
 Delta R.T. -0.08 min
 Lab File: BM12797.D
 Acq: 28 Dec 2017 22:04

Tgt Ion: 228 Resp: 8635
 Ion Ratio Lower Upper
 228 100
 226 26.1 23.5 35.3
 229 46.9 15.6 23.4#



ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SIM - SW 846 8270D

Client: Brown and Caldwell USR
Client Sample ID: FB-20171221
Lab Sample ID: 7120696-10
Project: Patchogue
Work Order: 7120696

Date Sampled:	12/21/17 11:01	Prep Date:	12/26/17 10:00	File ID:	BM12798.D
Init/Final Vol:	1000 mL / 1 mL	Prep Batch:	B7L2204	Analyzed:	12/28/17 22:31
Dilution:	1	Matrix:	Ground Water	Sequence:	S8A0213
		Prep Method:	Sep Funnel MS 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
56-55-3	Benzo(a)anthracene	ND	0.0165	0.0200	U
50-32-8	Benzo(a)pyrene	ND	0.0124	0.0200	U
205-99-2	Benzo(b)fluoranthene	ND	0.0177	0.0200	U
207-08-9	Benzo(k)fluoranthene	ND	0.00710	0.0200	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.0160	0.0200	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.0131	0.0200	U

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

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

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\B\DATA\20171228\BM12798.D Vial: 11
 Acq On : 28 Dec 2017 22:31 Operator: GCH
 Sample : 7120696-10 Inst : GCMS-B
 Misc : B7L2204 SIM Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Dec 29 15:43 2017 Quant Results File: 1004SIM.RES

Quant Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)
 Title : Method 8270C Select Ion Monitoring
 Last Update : Fri Dec 29 11:49:16 2017
 Response via : Initial Calibration
 DataAcq Meth : SIM8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.03	152	56797	0.50	ug/L	-0.04
3) Phenanthrene-d10	9.82	188	168357	0.50	ug/L	-0.04
14) Perylene-d12	14.57	264	112190	0.50	ug/L	-0.07

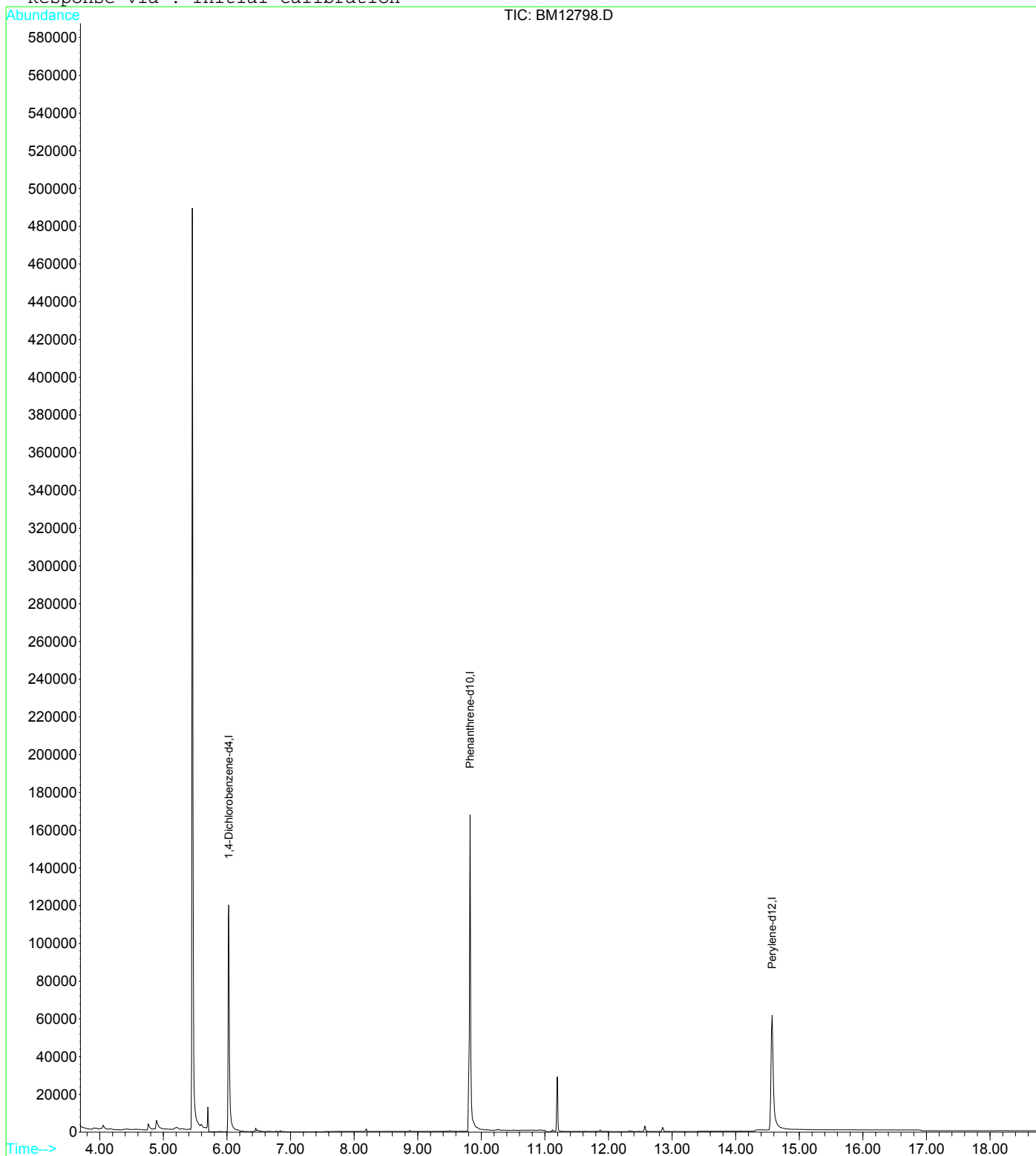
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
 BM12798.D 1004SIM.M Thu Jan 25 11:49:20 2018 SS

Quantitation Report

Data File : G:\HPCHEM\B\DATA\20171228\BM12798.D Vial: 11
 Acq On : 28 Dec 2017 22:31 Operator: GCH
 Sample : 7120696-10 Inst : GCMS-B
 Misc : B7L2204 SIM Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Dec 29 15:43 2017 Quant Results File: 1004SIM.RES

Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)
 Title : Method 8270C Select Ion Monitoring
 Last Update : Wed Nov 08 15:29:45 2017
 Response via : Initial Calibration



BM12798.D 1004SIM.M

Thu Jan 25 11:49:20 2018

SS

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ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SIM - SW 846 8270D

Client: Brown and Caldwell USR
Client Sample ID: MW-9D 20171221
Lab Sample ID: 7120696-11
Project: Patchogue
Work Order: 7120696

Date Sampled:	12/21/17 11:34	Prep Date:	12/26/17 09:26	File ID:	BM12799.D
Init/Final Vol:	1000 mL / 1 mL	Prep Batch:	B7L2608	Analyzed:	12/28/17 22:58
Dilution:	1	Matrix:	Ground Water	Sequence:	S8A0213
		Prep Method:	Sep Funnel MS 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
56-55-3	Benzo(a)anthracene	0.0292	0.0165	0.0200	
50-32-8	Benzo(a)pyrene	0.0303	0.0124	0.0200	
205-99-2	Benzo(b)fluoranthene	0.0396	0.0177	0.0200	
207-08-9	Benzo(k)fluoranthene	0.0181	0.00710	0.0200	J
53-70-3	Dibenzo(a,h)anthracene	ND	0.0160	0.0200	U
193-39-5	Indeno(1,2,3-cd)pyrene	0.0184	0.0131	0.0200	J

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

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

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\B\DATA\20171228\BM12799.D Vial: 12
 Acq On : 28 Dec 2017 22:58 Operator: GCH
 Sample : 7120696-11 Inst : GCMS-B
 Misc : B7L2608 SIM Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Dec 29 15:44 2017 Quant Results File: 1004SIM.RES

Quant Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)
 Title : Method 8270C Select Ion Monitoring
 Last Update : Fri Dec 29 11:49:16 2017
 Response via : Initial Calibration
 DataAcq Meth : SIM8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.03	152	55371	0.50	ug/L	-0.03
3) Phenanthrene-d10	9.82	188	165384	0.50	ug/L	-0.03
14) Perylene-d12	14.57	264	109569	0.50	ug/L	-0.07

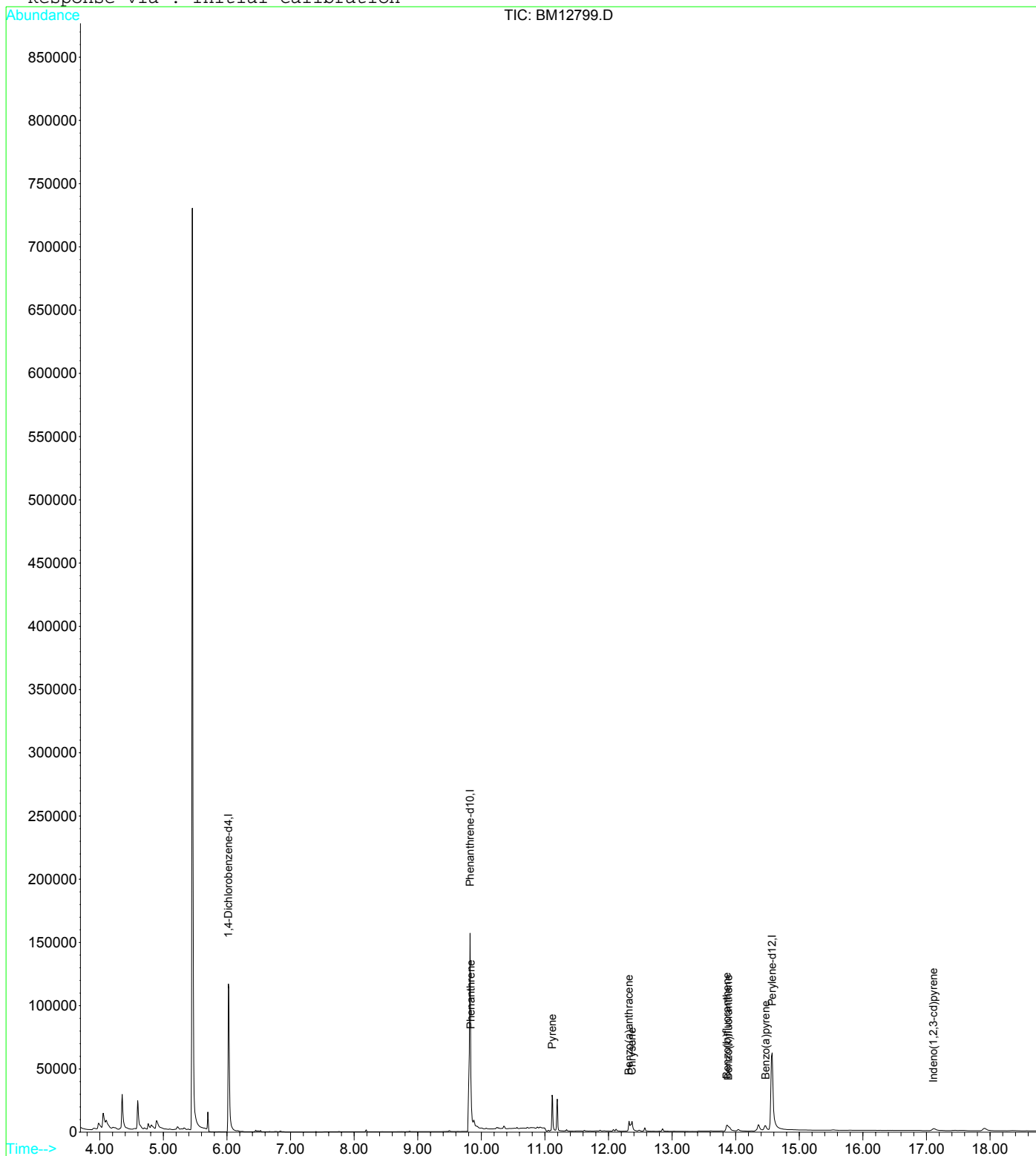
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
7) Phenanthrene	9.83	178	17599	0.0511	ug/L #	82
8) Pyrene	11.12	202	25857	0.0779	ug/L	99
9) Benzo(a)anthracene	12.32	228	7559	0.0292	ug/L	99
10) Chrysene	12.37	228	9741	0.0324	ug/L #	71
11) Benzo(b)fluoranthene	13.86	252	9789m	0.0396	ug/L	
12) Benzo(k)fluoranthene	13.89	252	5005m	0.0181	ug/L	
13) Benzo(a)pyrene	14.47	252	6185	0.0303	ug/L	97
15) Indeno(1,2,3-cd)pyrene	17.11	276	4510m	0.0184	ug/L	

(#) = qualifier out of range (m) = manual integration
 BM12799.D 1004SIM.M Thu Jan 25 11:49:21 2018 SS

Quantitation Report

Data File : G:\HPCHEM\B\DATA\20171228\BM12799.D Vial: 12
 Acq On : 28 Dec 2017 22:58 Operator: GCH
 Sample : 7120696-11 Inst : GCMS-B
 Misc : B7L2608 SIM Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Dec 29 15:44 2017 Quant Results File: 1004SIM.RES

Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)
 Title : Method 8270C Select Ion Monitoring
 Last Update : Wed Nov 08 15:29:45 2017
 Response via : Initial Calibration

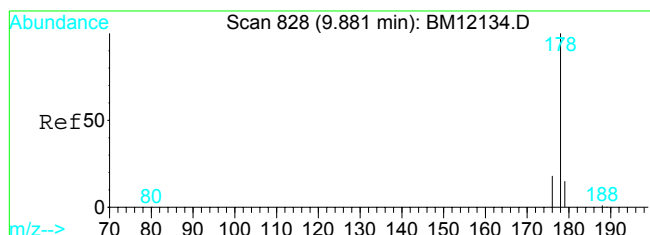


BM12799.D 1004SIM.M

Thu Jan 25 11:49:21 2018

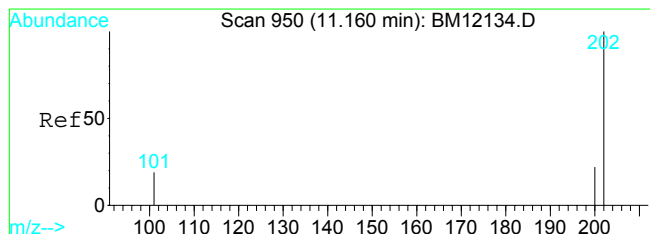
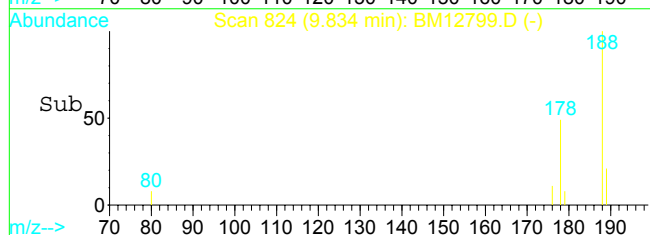
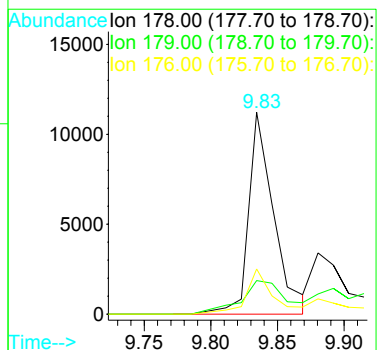
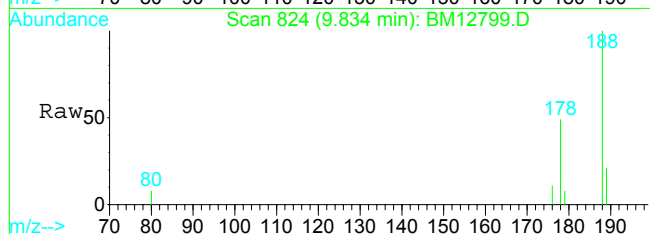
SS

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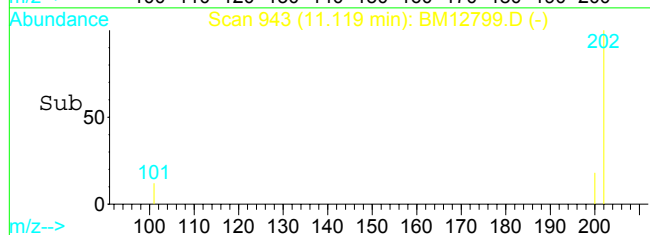
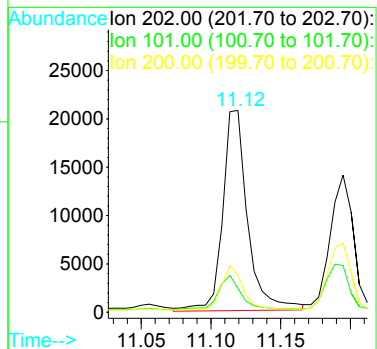
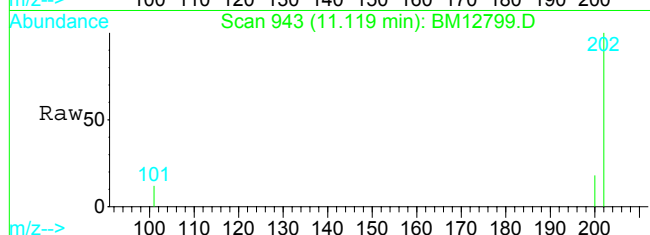
#7
Phenanthrene
Concen: 0.0511 ug/L
RT: 9.83 min Scan# 824
Delta R.T. -0.05 min
Lab File: BM12799.D
Acq: 28 Dec 2017 22:58

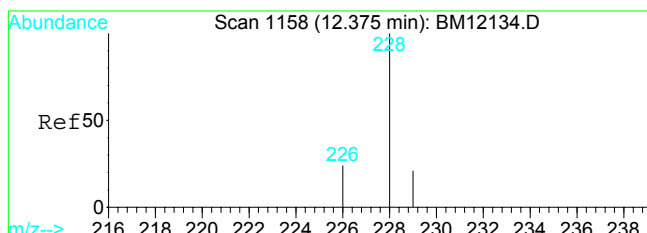
Tgt Ion:178 Resp: 17599
Ion Ratio Lower Upper
178 100
179 28.6 12.4 18.6#
176 23.6 15.9 23.9



#8
Pyrene
Concen: 0.0779 ug/L
RT: 11.12 min Scan# 943
Delta R.T. -0.04 min
Lab File: BM12799.D
Acq: 28 Dec 2017 22:58

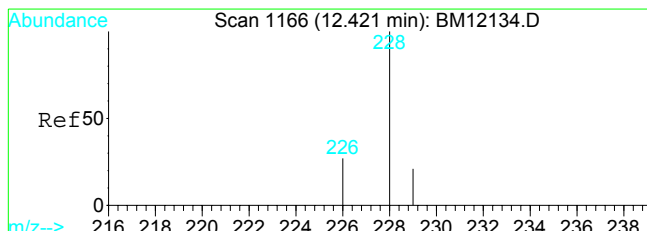
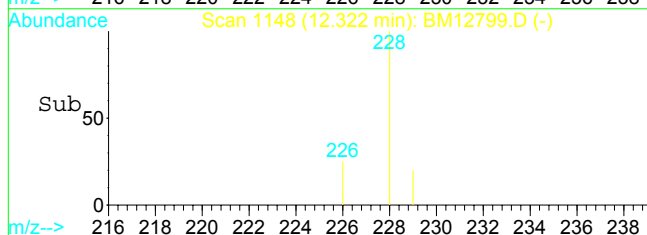
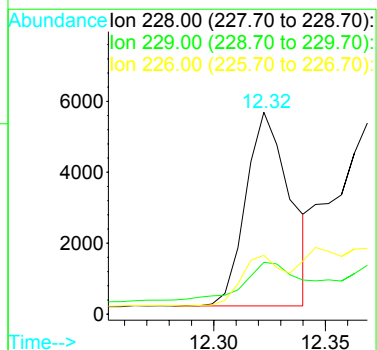
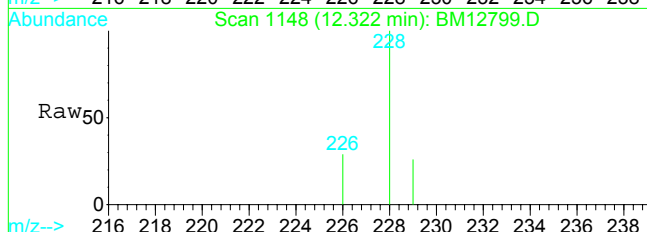
Tgt Ion:202 Resp: 25857
Ion Ratio Lower Upper
202 100
101 18.3 14.7 22.1
200 21.3 16.7 25.1





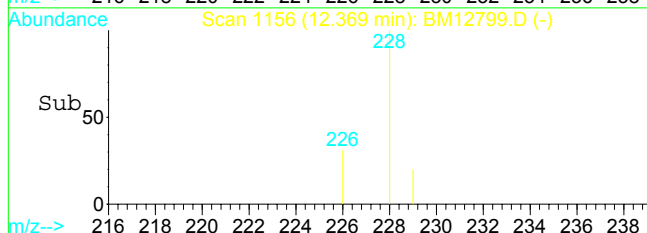
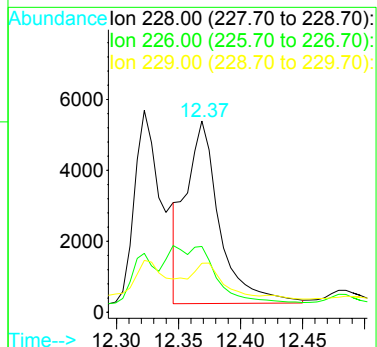
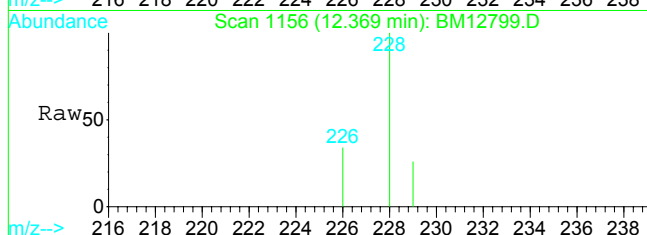
#9
Benzo(a)anthracene
Concen: 0.0292 ug/L
RT: 12.32 min Scan# 1148
Delta R.T. -0.05 min
Lab File: BM12799.D
Acq: 28 Dec 2017 22:58

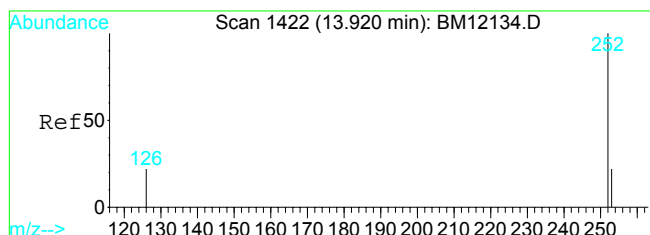
Tgt Ion:228 Resp: 7559
Ion Ratio Lower Upper
228 100
229 19.5 13.4 24.8
226 25.9 18.0 33.4



#10
Chrysene
Concen: 0.0324 ug/L
RT: 12.37 min Scan# 1156
Delta R.T. -0.05 min
Lab File: BM12799.D
Acq: 28 Dec 2017 22:58

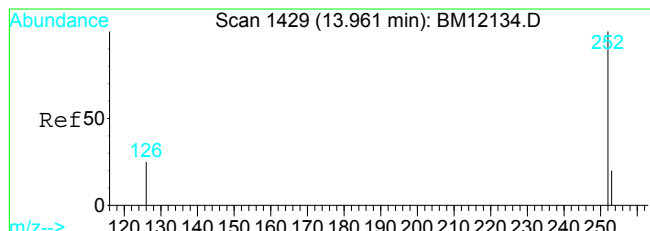
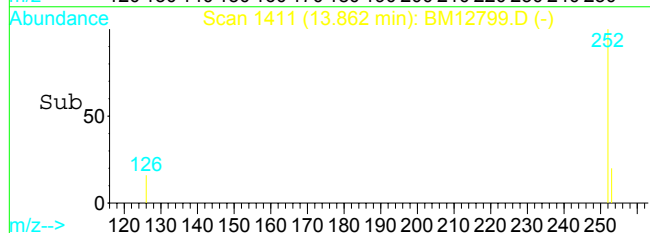
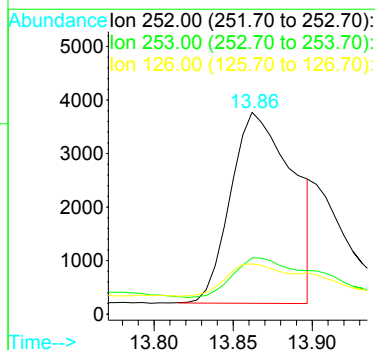
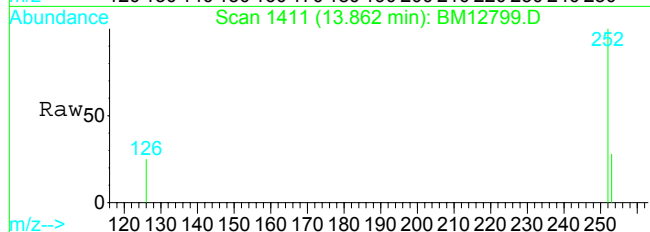
Tgt Ion:228 Resp: 9741
Ion Ratio Lower Upper
228 100
226 7.7 23.5 35.3#
229 14.4 15.6 23.4#





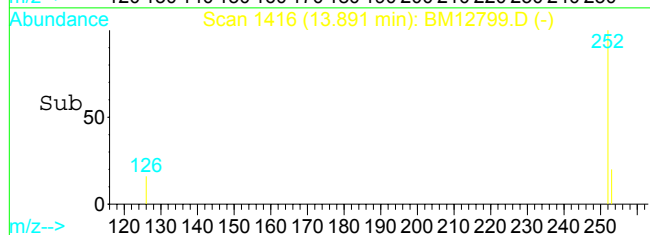
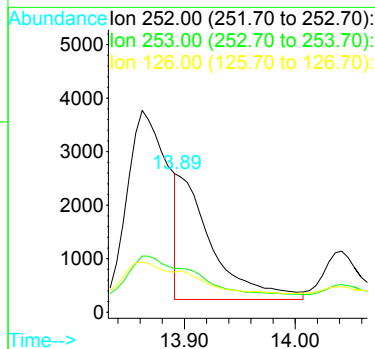
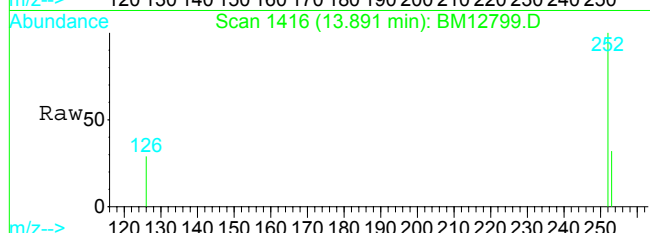
#11
Benzo(b) fluoranthene
Concen: 0.0396 ug/L m
RT: 13.86 min Scan# 1411
Delta R.T. -0.06 min
Lab File: BM12799.D
Acq: 28 Dec 2017 22:58

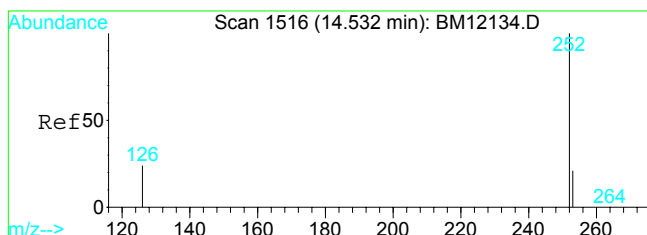
Tgt Ion:252 Resp: 9789
Ion Ratio Lower Upper
252 100
253 27.8 15.5 28.7
126 24.9 13.6 25.4



#12
Benzo(k) fluoranthene
Concen: 0.0181 ug/L m
RT: 13.89 min Scan# 1416
Delta R.T. -0.07 min
Lab File: BM12799.D
Acq: 28 Dec 2017 22:58

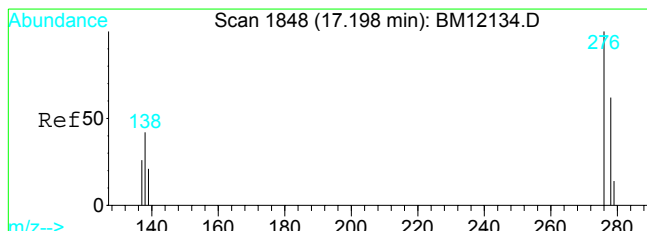
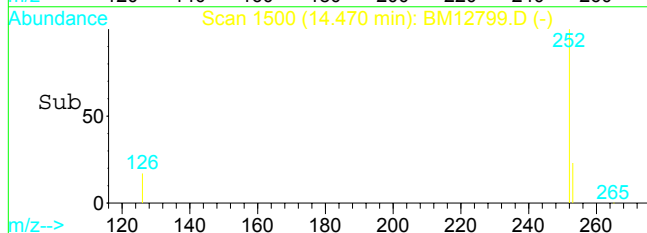
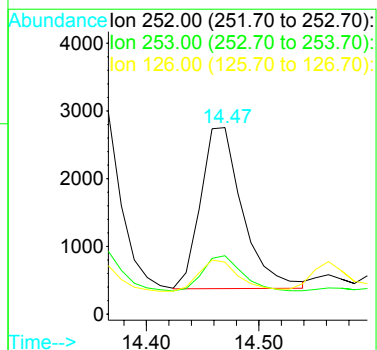
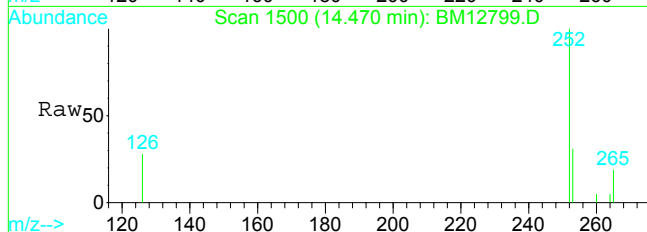
Tgt Ion:252 Resp: 5005
Ion Ratio Lower Upper
252 100
253 31.5 14.4 26.7#
126 29.0 16.3 30.3





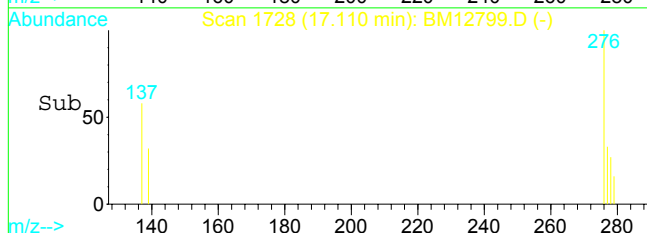
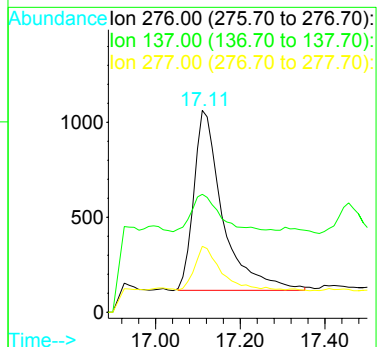
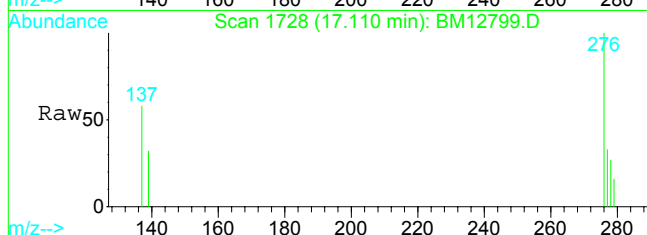
#13
Benzo(a)pyrene
Concen: 0.0303 ug/L
RT: 14.47 min Scan# 1500
Delta R.T. -0.06 min
Lab File: BM12799.D
Acq: 28 Dec 2017 22:58

Tgt Ion: 252 Resp: 6185
Ion Ratio Lower Upper
252 100
253 21.9 15.3 28.5
126 18.0 14.8 27.4



#15
Indeno(1,2,3-cd)pyrene
Concen: 0.0184 ug/L m
RT: 17.11 min Scan# 1728
Delta R.T. -0.09 min
Lab File: BM12799.D
Acq: 28 Dec 2017 22:58

Tgt Ion: 276 Resp: 4510
Ion Ratio Lower Upper
276 100
137 58.4 17.4 32.4#
277 32.6 17.4 32.2#



ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SIM - SW 846 8270D

Client: Brown and Caldwell USR
Client Sample ID: MW-9S 20171221
Lab Sample ID: 7120696-12
Project: Patchogue
Work Order: 7120696

Date Sampled:	12/21/17 00:00	Prep Date:	12/26/17 09:26	File ID:	BM12800.D
Init/Final Vol:	1000 mL / 1 mL	Prep Batch:	B7L2608	Analyzed:	12/28/17 23:25
Dilution:	1	Matrix:	Ground Water	Sequence:	S8A0213
		Prep Method:	Sep Funnel MS 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
56-55-3	Benzo(a)anthracene	0.595	0.0165	0.0200	
50-32-8	Benzo(a)pyrene	0.499	0.0124	0.0200	
205-99-2	Benzo(b)fluoranthene	0.431	0.0177	0.0200	
207-08-9	Benzo(k)fluoranthene	0.202	0.00710	0.0200	
53-70-3	Dibenzo(a,h)anthracene	0.0533	0.0160	0.0200	
193-39-5	Indeno(1,2,3-cd)pyrene	0.215	0.0131	0.0200	

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

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

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\B\DATA\20171228\BM12800.D Vial: 13
 Acq On : 28 Dec 2017 23:25 Operator: GCH
 Sample : 7120696-12 Inst : GCMS-B
 Misc : B7L2608 SIM Multiplr: 1.00
 MS Integration Params: rteint.p
 Quant Time: Dec 29 15:44 2017 Quant Results File: 1004SIM.RES

Quant Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)
 Title : Method 8270C Select Ion Monitoring
 Last Update : Fri Dec 29 11:49:16 2017
 Response via : Initial Calibration
 DataAcq Meth : SIM8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.03	152	62993	0.50	ug/L	-0.03
3) Phenanthrene-d10	9.82	188	188481	0.50	ug/L	-0.04
14) Perylene-d12	14.56	264	131975	0.50	ug/L	-0.08

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
7) Phenanthrene	9.83	178	94394	0.2405	ug/L	# 89
8) Pyrene	11.11	202	742219	1.9628	ug/L	98
9) Benzo(a)anthracene	12.32	228	175724	0.5948	ug/L	99
10) Chrysene	12.37	228	175555m	0.5119	ug/L	
11) Benzo(b)fluoranthene	13.86	252	121186m	0.4307	ug/L	
12) Benzo(k)fluoranthene	13.88	252	63632m	0.2016	ug/L	
13) Benzo(a)pyrene	14.46	252	115958	0.4992	ug/L	98
15) Indeno(1,2,3-cd)pyrene	17.11	276	63521	0.2147	ug/L	93
16) Dibenzo(a,h)anthracene	17.11	278	13415	0.0533	ug/L	95

(#) = qualifier out of range (m) = manual integration
 BM12800.D 1004SIM.M Thu Jan 25 11:49:23 2018 SS

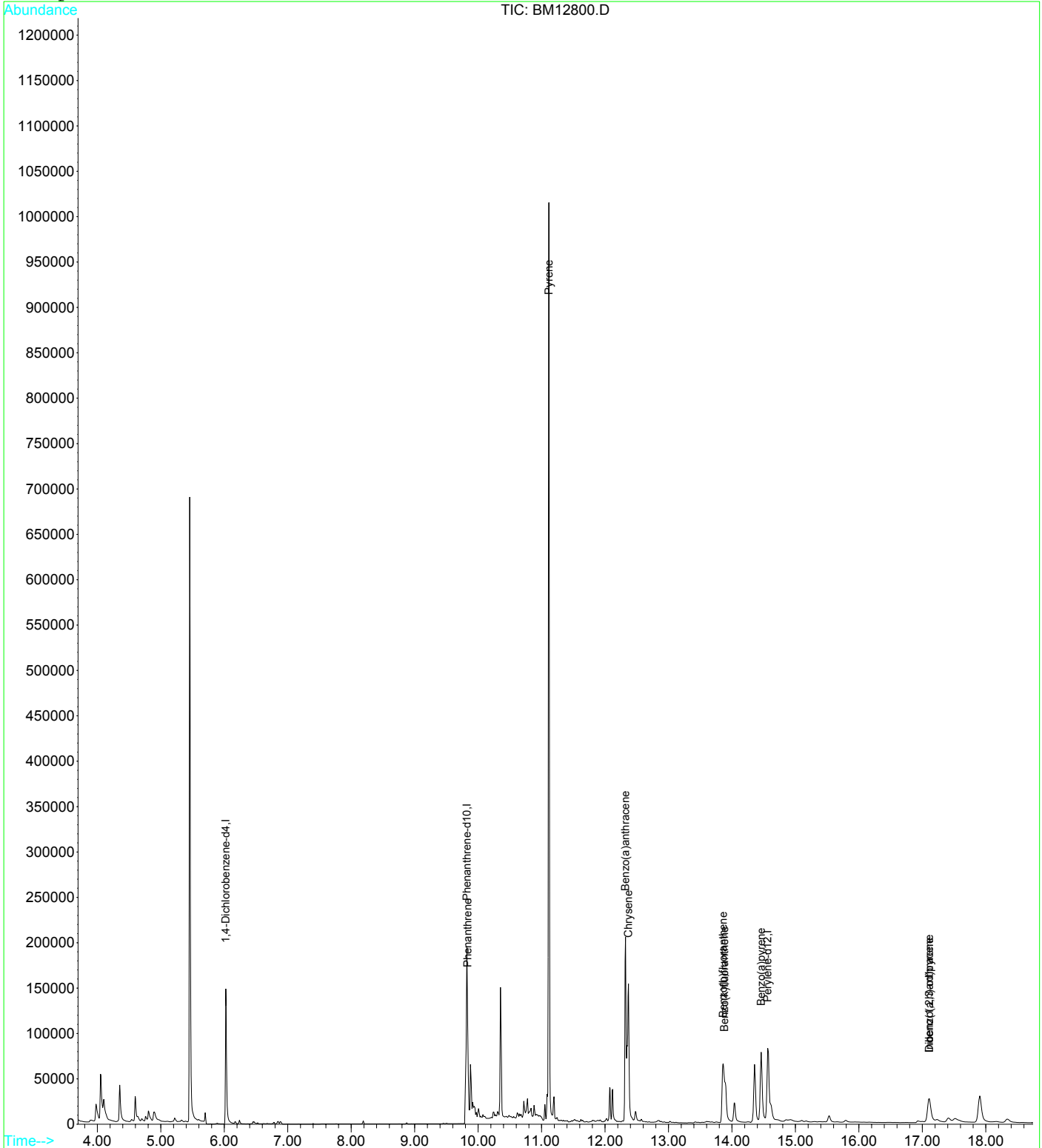
Quantitation Report

Data File : G:\HPCHEM\B\DATA\20171228\BM12800.D
 Acq On : 28 Dec 2017 23:25
 Sample : 7120696-12
 Misc : B7L2608 SIM
 MS Integration Params: rteint.p
 Quant Time: Dec 29 15:44 2017

Vial: 13
 Operator: GCH
 Inst : GCMS-B
 Multiplr: 1.00

Quant Results File: 1004SIM.RES

Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)
 Title : Method 8270C Select Ion Monitoring
 Last Update : Wed Nov 08 15:29:45 2017
 Response via : Initial Calibration

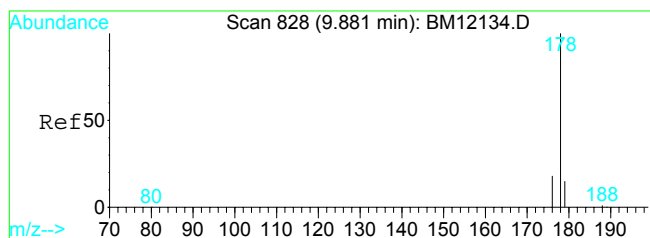


BM12800.D 1004SIM.M

Thu Jan 25 11:49:23 2018

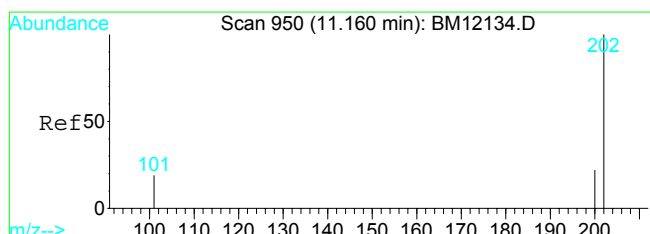
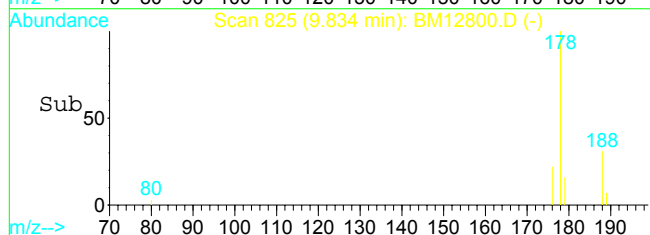
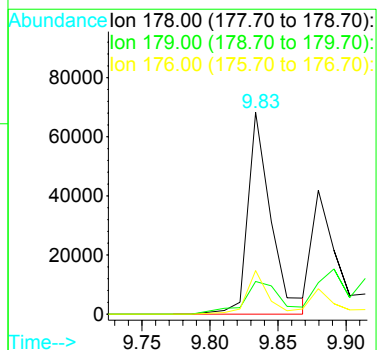
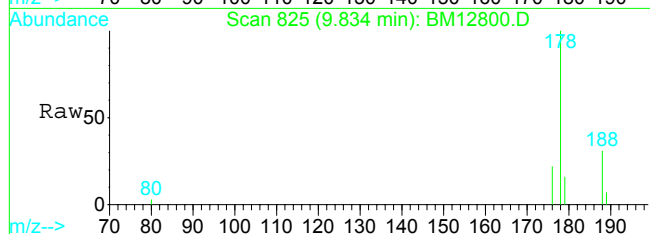
SS

Page 2



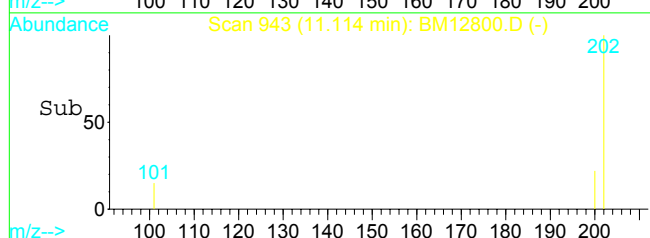
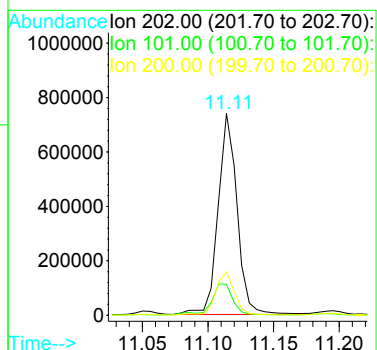
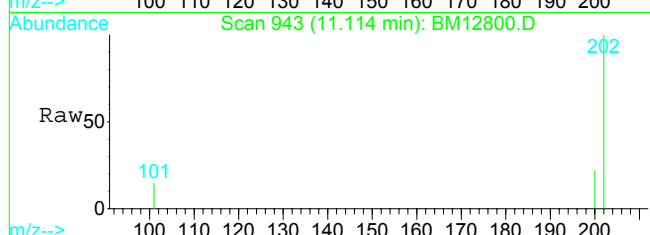
#7
Phenanthrene
Concen: 0.2405 ug/L
RT: 9.83 min Scan# 825
Delta R.T. -0.05 min
Lab File: BM12800.D
Acq: 28 Dec 2017 23:25

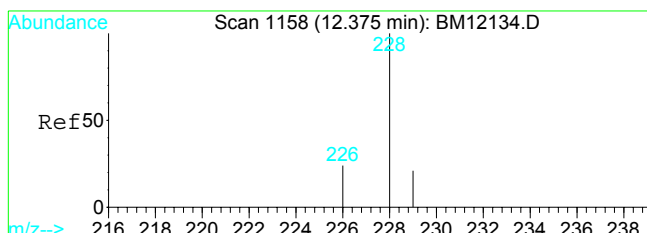
Tgt Ion:178 Resp: 94394
Ion Ratio Lower Upper
178 100
179 25.7 12.4 18.6#
176 20.0 15.9 23.9



#8
Pyrene
Concen: 1.9628 ug/L
RT: 11.11 min Scan# 943
Delta R.T. -0.05 min
Lab File: BM12800.D
Acq: 28 Dec 2017 23:25

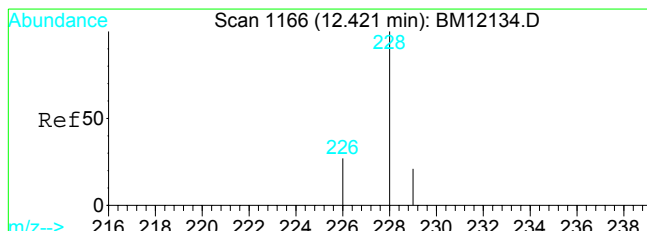
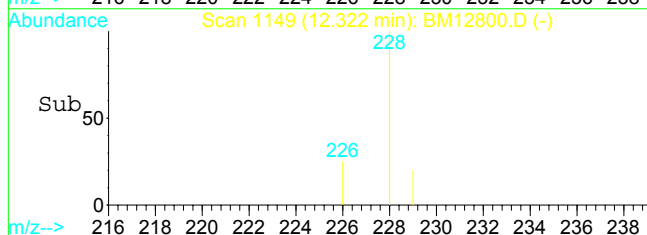
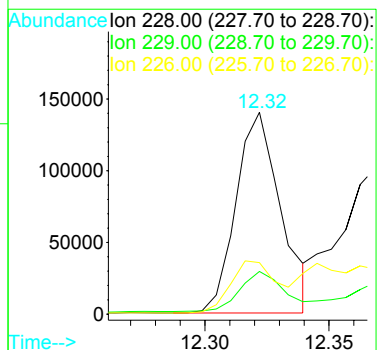
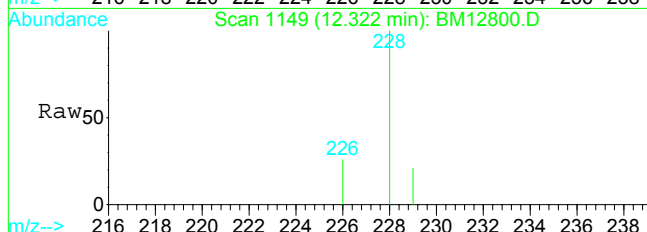
Tgt Ion:202 Resp: 742219
Ion Ratio Lower Upper
202 100
101 17.8 14.7 22.1
200 21.8 16.7 25.1





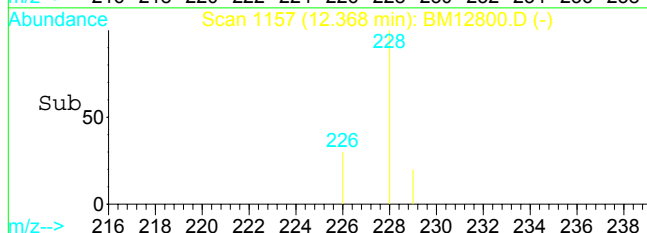
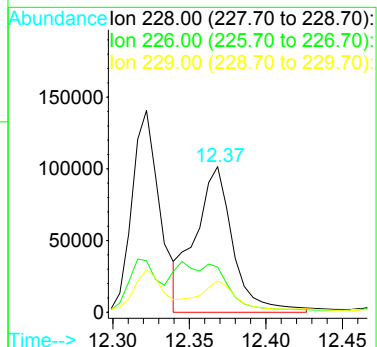
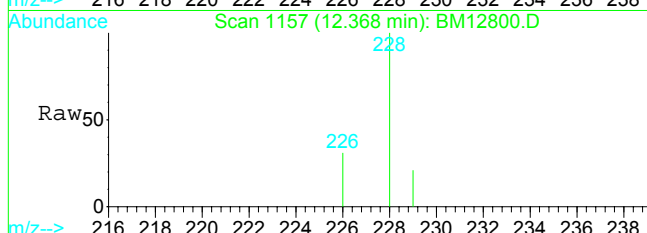
#9
Benzo(a)anthracene
Concen: 0.5948 ug/L
RT: 12.32 min Scan# 1149
Delta R.T. -0.05 min
Lab File: BM12800.D
Acq: 28 Dec 2017 23:25

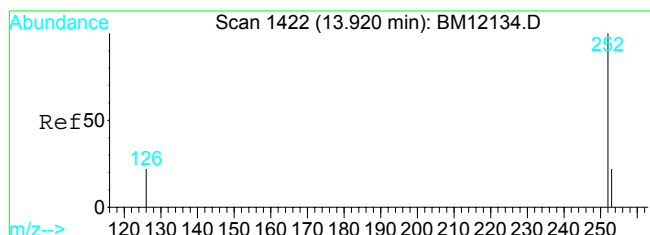
Tgt Ion:228 Resp: 175724
Ion Ratio Lower Upper
228 100
229 20.0 13.4 24.8
226 25.1 18.0 33.4



#10
Chrysene
Concen: 0.5119 ug/L m
RT: 12.37 min Scan# 1157
Delta R.T. -0.05 min
Lab File: BM12800.D
Acq: 28 Dec 2017 23:25

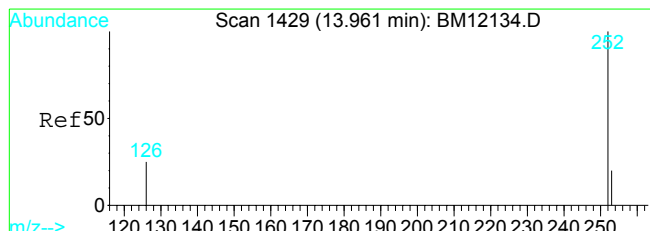
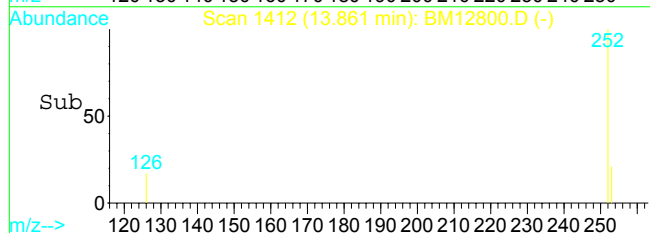
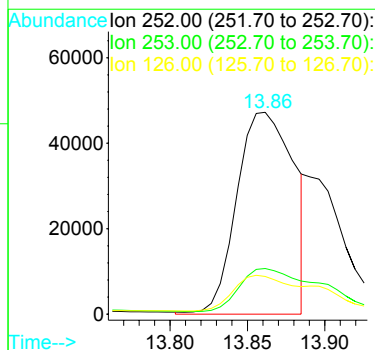
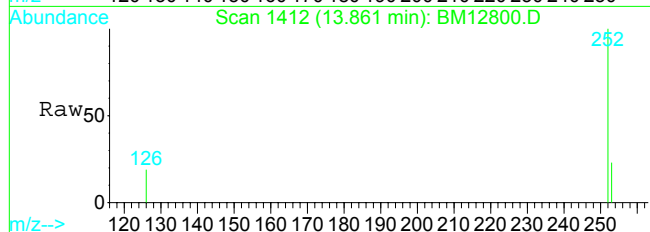
Tgt Ion:228 Resp: 175555
Ion Ratio Lower Upper
228 100
226 27.5 23.5 35.3
229 21.5 15.6 23.4





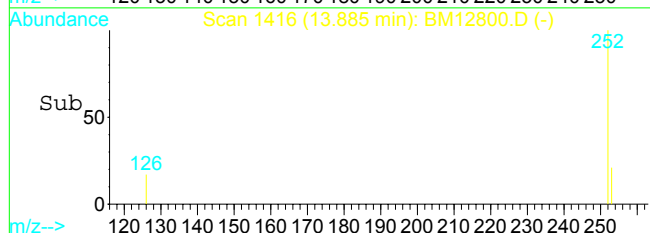
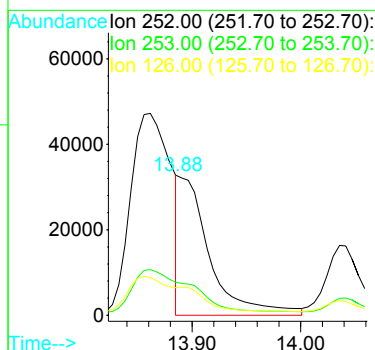
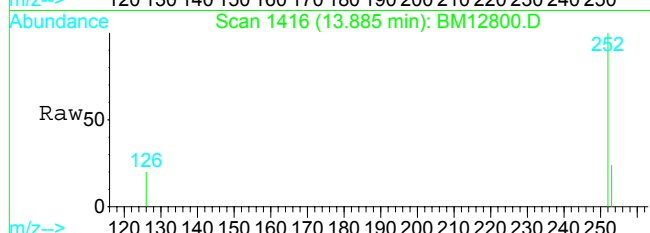
#11
Benzo(b) fluoranthene
Concen: 0.4307 ug/L m
RT: 13.86 min Scan# 1412
Delta R.T. -0.06 min
Lab File: BM12800.D
Acq: 28 Dec 2017 23:25

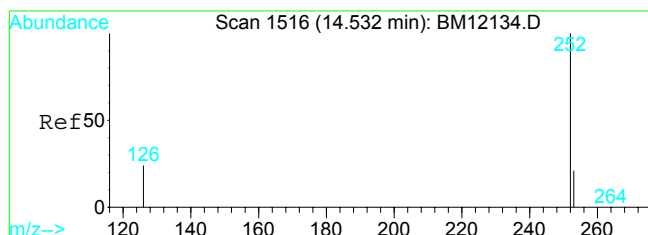
Tgt Ion:252 Resp: 121186
Ion Ratio Lower Upper
252 100
253 22.6 15.5 28.7
126 18.6 13.6 25.4



#12
Benzo(k) fluoranthene
Concen: 0.2016 ug/L m
RT: 13.88 min Scan# 1416
Delta R.T. -0.08 min
Lab File: BM12800.D
Acq: 28 Dec 2017 23:25

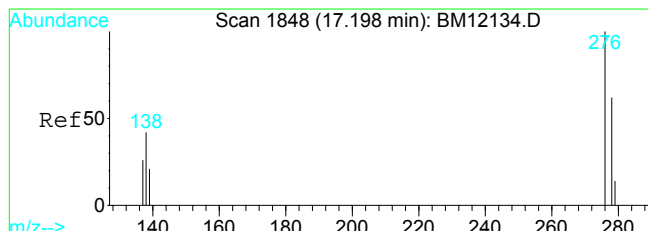
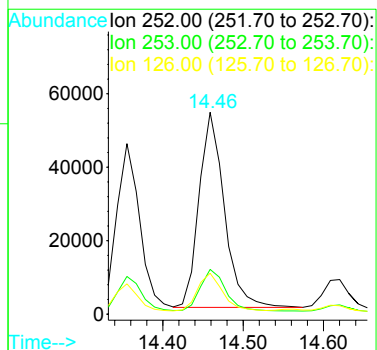
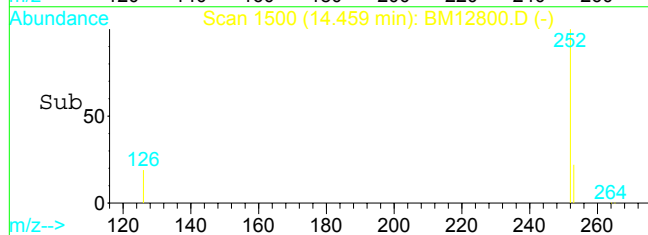
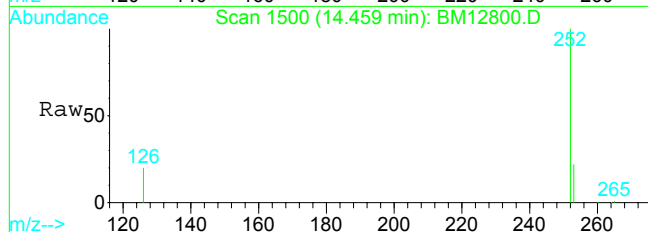
Tgt Ion:252 Resp: 63632
Ion Ratio Lower Upper
252 100
253 23.7 14.4 26.7
126 19.6 16.3 30.3





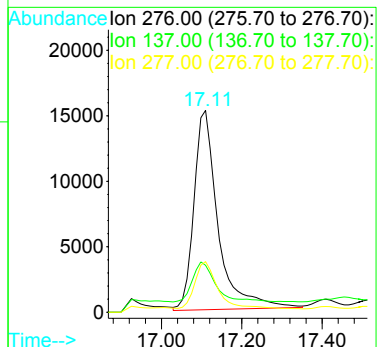
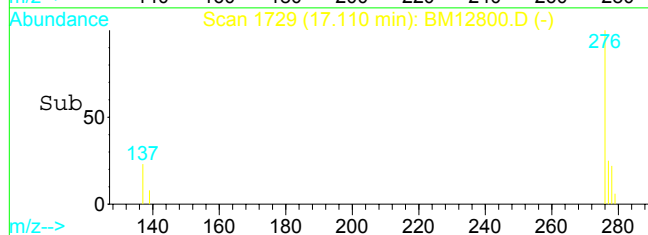
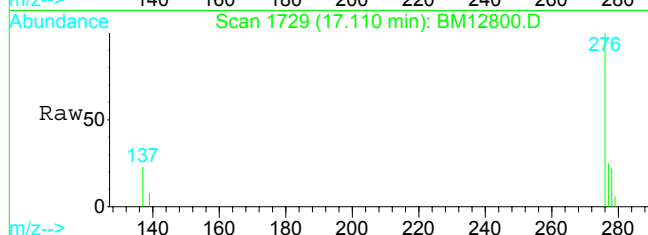
#13
Benzo(a)pyrene
Concen: 0.4992 ug/L
RT: 14.46 min Scan# 1500
Delta R.T. -0.07 min
Lab File: BM12800.D
Acq: 28 Dec 2017 23:25

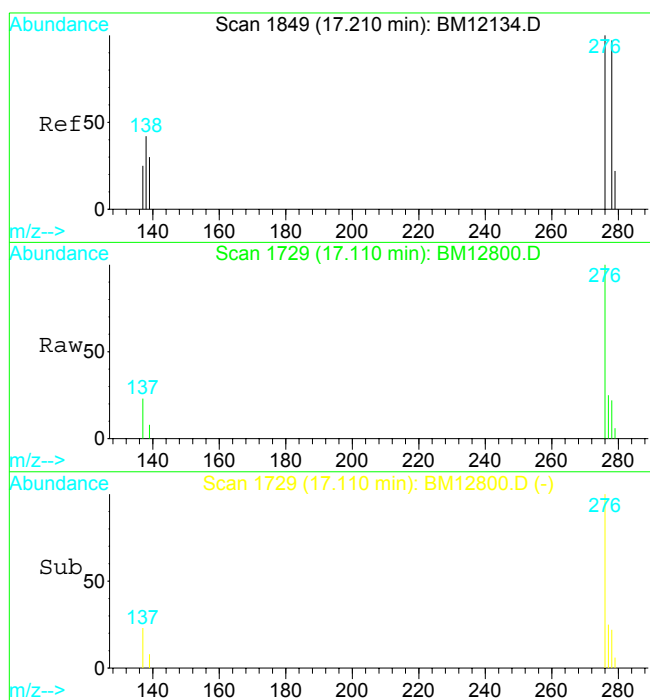
Tgt Ion:252 Resp: 115958
Ion Ratio Lower Upper
252 100
253 21.4 15.3 28.5
126 19.3 14.8 27.4



#15
Indeno(1,2,3-cd)pyrene
Concen: 0.2147 ug/L
RT: 17.11 min Scan# 1729
Delta R.T. -0.09 min
Lab File: BM12800.D
Acq: 28 Dec 2017 23:25

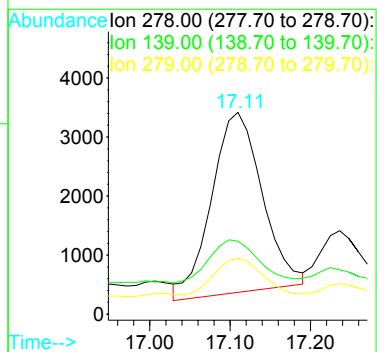
Tgt Ion:276 Resp: 63521
Ion Ratio Lower Upper
276 100
137 18.6 17.4 32.4
277 24.0 17.4 32.2





#16
 Dibenzo(a,h)anthracene
 Concen: 0.0533 ug/L
 RT: 17.11 min Scan# 1729
 Delta R.T. -0.10 min
 Lab File: BM12800.D
 Acq: 28 Dec 2017 23:25

Tgt Ion: 278	Resp:	13415
Ion Ratio	Lower	Upper
278	100	
139	24.3	18.9 35.1
279	21.0	16.3 30.3



METHOD BLANK SUMMARY

Batch ID: B7L2204

<u>Lab Number</u>	<u>Sample Id</u>	<u>Extraction Date</u>	<u>Analysis Date</u>
B7L2204-BLK1	BLK1	12/22/2017	12/22/2017 19:18
7120696-01	MW-1 20171220	12/22/2017	12/23/2017 01:09
7120696-02	MW-7S 20171220	12/22/2017	12/23/2017 01:35
7120696-03	MW-7D 20171220	12/22/2017	12/23/2017 02:02
7120696-04	MW-8S 20171220	12/22/2017	12/23/2017 02:29
7120696-05	MW-8D 20171220	12/22/2017	12/23/2017 02:56

<u>Lab Number</u>	<u>Sample Id</u>	<u>Extraction Date</u>	<u>Analysis Date</u>
B7L2204-BLK4	BLK4	12/26/2017	12/27/2017 13:16
7120696-06	MW-4S 20171221	12/26/2017	12/28/2017 20:44
7120696-07	MW-4D 20171221	12/26/2017	12/28/2017 21:11
7120696-08	MW-3 20171221	12/26/2017	12/28/2017 21:38
7120696-09	DUP-20171221	12/26/2017	12/28/2017 22:04
7120696-10	FB-20171221	12/26/2017	12/28/2017 22:31

Batch ID: B7L2608

<u>Lab Number</u>	<u>Sample Id</u>	<u>Extraction Date</u>	<u>Analysis Date</u>
B7L2608-BLK1	BLK1	12/26/2017	12/27/2017 13:42
7120696-11	MW-9D 20171221	12/26/2017	12/28/2017 22:58
7120696-12	MW-9S 20171221	12/26/2017	12/28/2017 23:25

INSTRUMENT PERFORMANCE CHECK

Client: Brown and Caldwell USR
Instrument ID: GCMS-B
Sequence: S7J0919

Work Order: 7120696
Project: Patchogue

Lab Sample ID: **S7J0919-TUN1** Injection Date: 10/04/2017 Injection Time: 21:05
Lab File ID: BM11886.D

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	PASS/FAIL
51	30 - 60% of 198	41	PASS
68	Less than 2% of 69	1.55	PASS
69	Less than 100% of 198	40	PASS
70	Less than 2% of 69	0.538	PASS
127	40 - 60% of 198	53.7	PASS
197	Less than 1% of 198	0	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	7.07	PASS
275	10 - 30% of 198	24.6	PASS
365	1 - 100% of 198	2.69	PASS
441	0.01 - 99.9% of 443	71.9	PASS
442	40 - 100% of 198	73.4	PASS
443	17 - 23% of 442	19.9	PASS

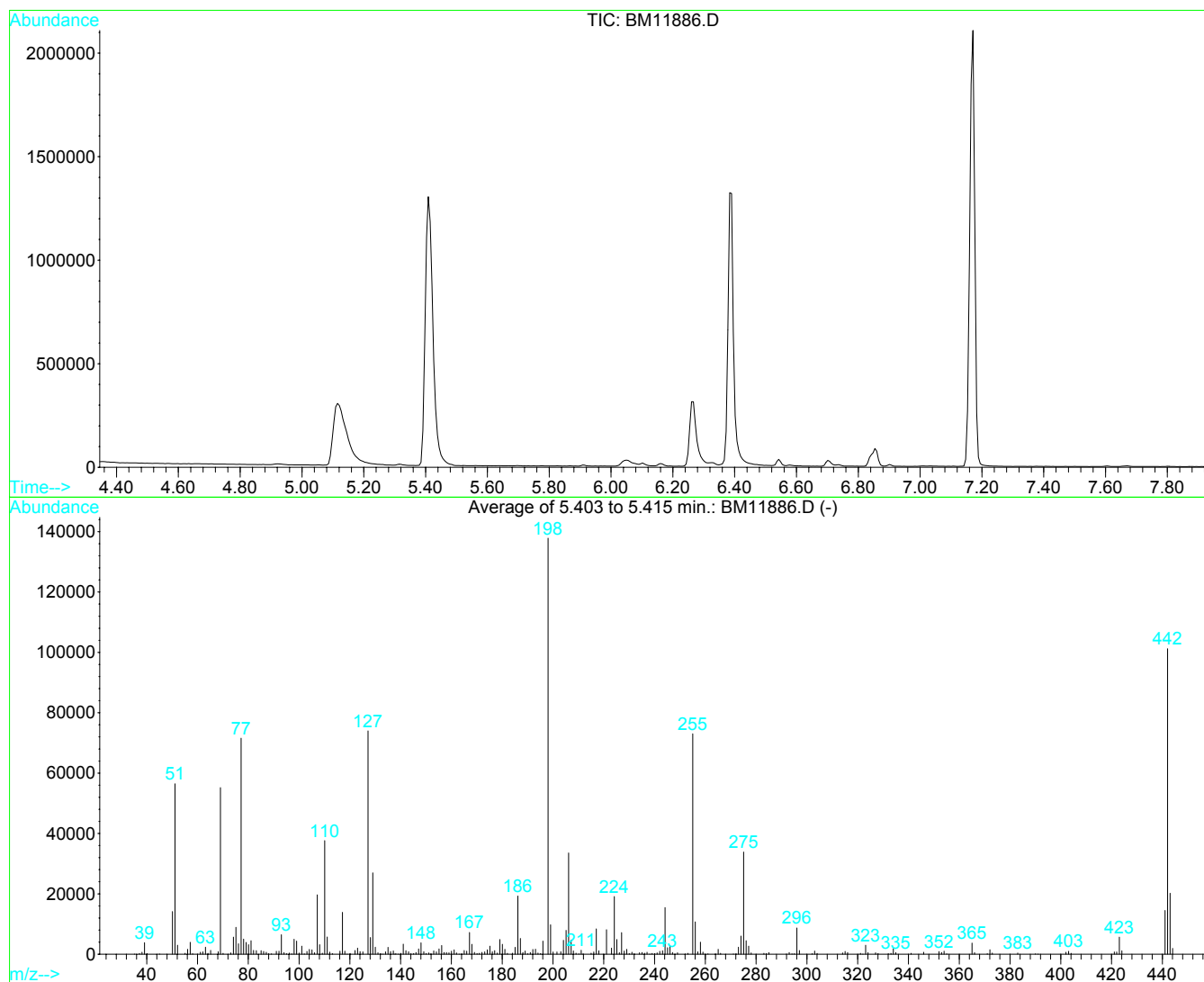
Samples Associated with Tune

Client ID or QC Type	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Cal Standard	S7J0919-CAL1	BM11887.D	10/04/2017	21:24.00
Cal Standard	S7J0919-CAL2	BM11888.D	10/04/2017	21:52.00
Cal Standard	S7J0919-CAL3	BM11889.D	10/04/2017	22:20.00
Cal Standard	S7J0919-CAL4	BM11890.D	10/04/2017	22:48.00
Cal Standard	S7J0919-CAL5	BM11891.D	10/04/2017	23:16.00
Cal Standard	S7J0919-CAL6	BM11892.D	10/04/2017	23:44.00

F-V

DFTPP

Data File : G:\HPCHEM\B\DATA\20171004\BM11886.D Vial: 2
 Acq On : 4 Oct 2017 21:05 Operator: GCH
 Sample : SEQ-TUN Inst : GCMS-B
 Misc : Multiplr: 1.00
 MS Integration Params: rteint.p
 Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)
 Title : Method 8270C Select Ion Monitoring



Spectrum Information: Average of 5.403 to 5.415 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	41.0	56469	PASS
68	69	0.00	2	1.5	854	PASS
69	198	0.00	100	40.0	55189	PASS
70	69	0.00	2	0.5	297	PASS
127	198	40	60	53.7	73981	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	137845	PASS
199	198	5	9	7.1	9741	PASS
275	198	10	30	24.6	33875	PASS
365	198	1	100	2.7	3705	PASS
441	443	0.01	100	71.9	14519	PASS
442	198	40	100	73.4	101216	PASS
443	442	17	23	19.9	20189	PASS

BM11886.D 1004SIM.M Fri Oct 27 09:55:56 2017 SS

INSTRUMENT PERFORMANCE CHECK

Client: Brown and Caldwell USR
Instrument ID: GCMS-B
Sequence: S7L2809

Work Order: 7120696
Project: Patchogue

Lab Sample ID: **S7L2809-TUN1** Injection Date: 12/22/2017 Injection Time: 16:46
Lab File ID: BM12732.D

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	PASS/FAIL
51	30 - 60% of 198	39.5	PASS
68	Less than 2% of 69	0.661	PASS
69	Less than 100% of 198	36.2	PASS
70	Less than 2% of 69	0.652	PASS
127	40 - 60% of 198	48.2	PASS
197	Less than 1% of 198	0	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	6.84	PASS
275	10 - 30% of 198	27.6	PASS
365	1 - 100% of 198	3.29	PASS
441	0.01 - 99.9% of 443	73.9	PASS
442	40 - 100% of 198	99.1	PASS
443	17 - 23% of 442	19.3	PASS

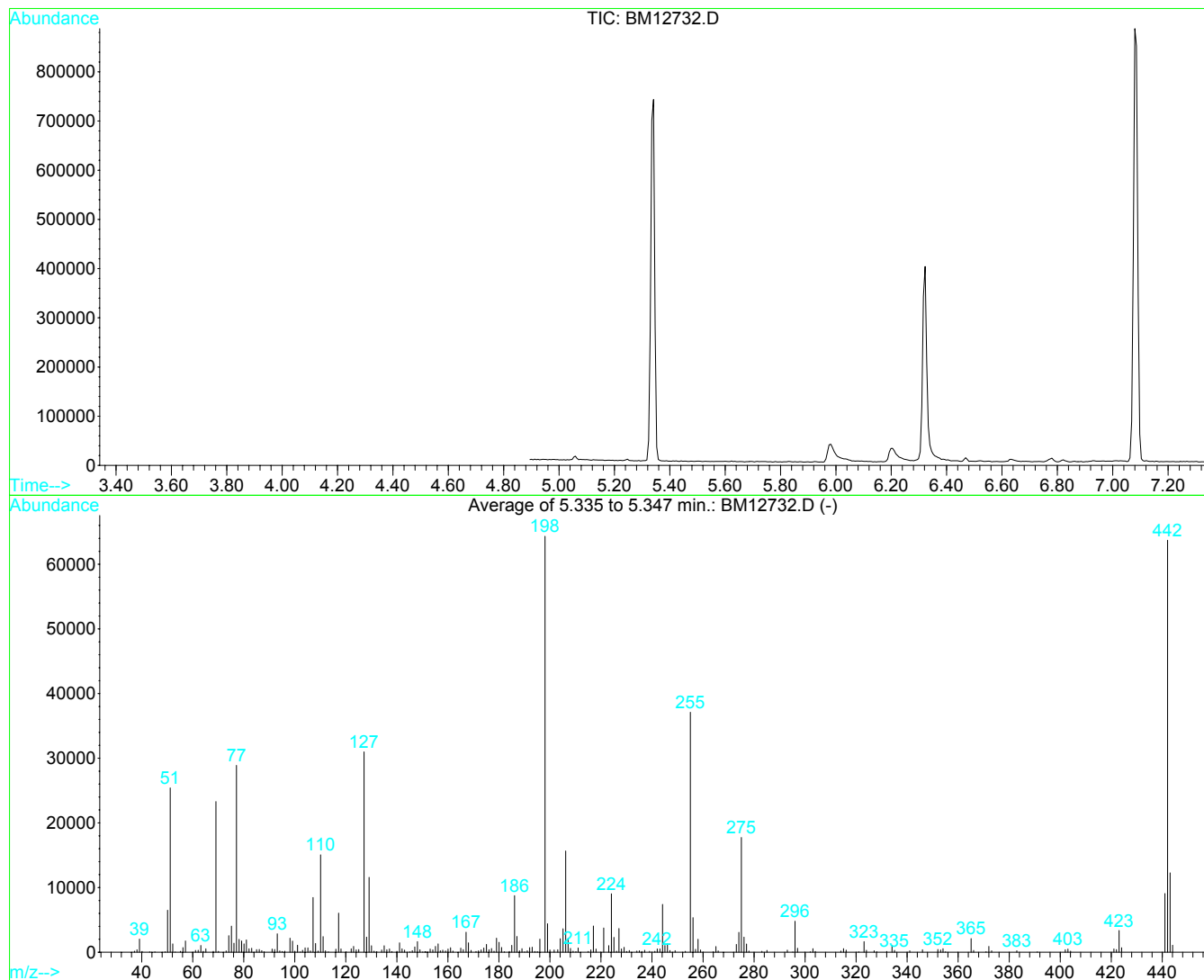
Samples Associated with Tune

Client ID or QC Type	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Calibration Check	S7L2809-CCV1	BM12733.D	12/22/2017	17:02.00
Blank	B7L2204-BLK1	BM12738.D	12/22/2017	19:18.00
MW-1 20171220	7120696-01	BM12751.D	12/23/2017	1:09.00
MW-7S 20171220	7120696-02	BM12752.D	12/23/2017	1:35.00
MW-7D 20171220	7120696-03	BM12753.D	12/23/2017	2:02.00
MW-8S 20171220	7120696-04	BM12754.D	12/23/2017	2:29.00
MW-8D 20171220	7120696-05	BM12755.D	12/23/2017	2:56.00

F-V

DFTPP

Data File : G:\HPCHEM\B\DATA\20171222\BM12732.D Vial: 2
 Acq On : 22 Dec 2017 16:46 Operator: GCH
 Sample : SEQ-TUN Inst : GCMS-B
 Misc : Multiplr: 1.00
 MS Integration Params: rteint.p
 Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)
 Title : Method 8270C Select Ion Monitoring



Spectrum Information: Average of 5.335 to 5.347 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	39.5	25422	PASS
68	69	0.00	2	0.7	154	PASS
69	198	0.00	100	36.2	23303	PASS
70	69	0.00	2	0.7	152	PASS
127	198	40	60	48.2	30977	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	64328	PASS
199	198	5	9	6.8	4400	PASS
275	198	10	30	27.6	17742	PASS
365	198	1	100	3.3	2119	PASS
441	443	0.01	100	73.9	9080	PASS
442	198	40	100	99.1	63717	PASS
443	442	17	23	19.3	12282	PASS

BM12732.D 1004SIM.M Tue Jan 02 15:37:17 2018 SS

INSTRUMENT PERFORMANCE CHECK

Client: Brown and Caldwell USR
Instrument ID: GCMS-B
Sequence: S7L2903

Work Order: 7120696
Project: Patchogue

Lab Sample ID: **S7L2903-TUN1** Injection Date: 12/27/2017 Injection Time: 12:30
Lab File ID: BM12763.D

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	PASS/FAIL
51	30 - 60% of 198	45.2	PASS
68	Less than 2% of 69	1.3	PASS
69	Less than 100% of 198	40.5	PASS
70	Less than 2% of 69	0.491	PASS
127	40 - 60% of 198	51.3	PASS
197	Less than 1% of 198	0	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	6.91	PASS
275	10 - 30% of 198	25.5	PASS
365	1 - 100% of 198	3.06	PASS
441	0.01 - 99.9% of 443	71.9	PASS
442	40 - 100% of 198	82.1	PASS
443	17 - 23% of 442	19.6	PASS

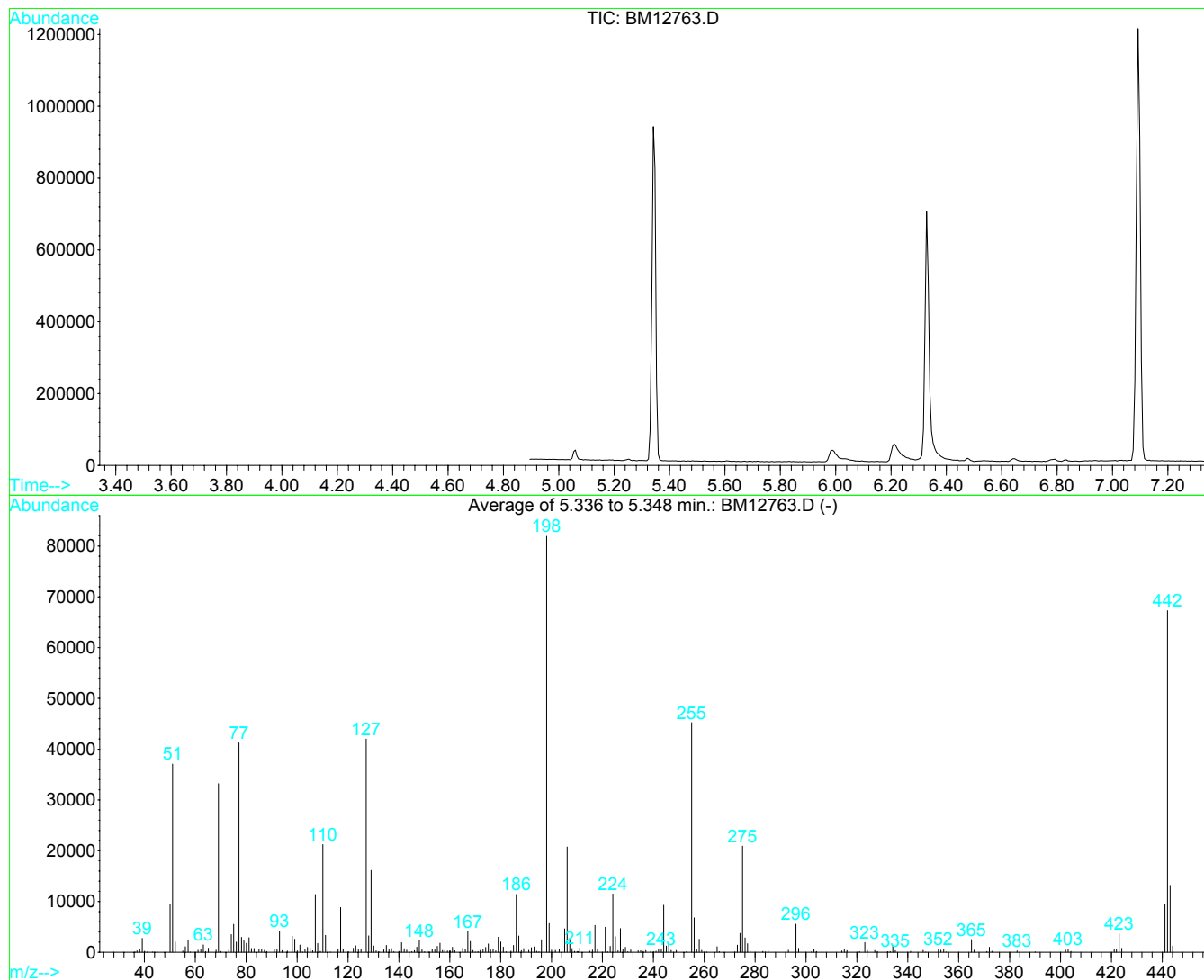
Samples Associated with Tune

Client ID or QC Type	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Calibration Check	S7L2903-CCV1	BM12764.D	12/27/2017	12:45.00
Blank	B7L2204-BLK4	BM12765.D	12/27/2017	13:16.00
Blank	B7L2608-BLK1	BM12766.D	12/27/2017	13:42.00

F-V

DFTPP

Data File : G:\HPCHEM\B\DATA\20171227\BM12763.D Vial: 2
 Acq On : 27 Dec 2017 12:30 Operator: GCH
 Sample : SEQ-TUN Inst : GCMS-B
 Misc : Multiplr: 1.00
 MS Integration Params: rteint.p
 Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)
 Title : Method 8270C Select Ion Monitoring



Spectrum Information: Average of 5.336 to 5.348 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	45.2	37074	PASS
68	69	0.00	2	1.3	433	PASS
69	198	0.00	100	40.5	33205	PASS
70	69	0.00	2	0.5	163	PASS
127	198	40	60	51.3	42000	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	81933	PASS
199	198	5	9	6.9	5660	PASS
275	198	10	30	25.5	20906	PASS
365	198	1	100	3.1	2504	PASS
441	443	0.01	100	71.9	9482	PASS
442	198	40	100	82.1	67299	PASS
443	442	17	23	19.6	13194	PASS

BM12763.D 1004SIM.M Fri Jan 26 10:12:09 2018 SS

INSTRUMENT PERFORMANCE CHECK

Client: Brown and Caldwell USR
Instrument ID: GCMS-B
Sequence: S8A0213

Work Order: 7120696
Project: Patchogue

Lab Sample ID: **S8A0213-TUN1** Injection Date: 12/28/2017 Injection Time: 18:42
Lab File ID: BM12789.D

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	PASS/FAIL
51	30 - 60% of 198	42.1	PASS
68	Less than 2% of 69	1.78	PASS
69	Less than 100% of 198	37.4	PASS
70	Less than 2% of 69	0.567	PASS
127	40 - 60% of 198	50.5	PASS
197	Less than 1% of 198	0	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	6.76	PASS
275	10 - 30% of 198	27.7	PASS
365	1 - 100% of 198	3.23	PASS
441	0.01 - 99.9% of 443	73.9	PASS
442	40 - 100% of 198	92.4	PASS
443	17 - 23% of 442	19.5	PASS

Samples Associated with Tune

Client ID or QC Type	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Calibration Check	S8A0213-CCV1	BM12790.D	12/28/2017	18:58.00
MW-4S 20171221	7120696-06	BM12794.D	12/28/2017	20:44.00
MW-4D 20171221	7120696-07	BM12795.D	12/28/2017	21:11.00
MW-3 20171221	7120696-08	BM12796.D	12/28/2017	21:38.00
DUP-20171221	7120696-09	BM12797.D	12/28/2017	22:04.00
FB-20171221	7120696-10	BM12798.D	12/28/2017	22:31.00
MW-9D 20171221	7120696-11	BM12799.D	12/28/2017	22:58.00
MW-9S 20171221	7120696-12	BM12800.D	12/28/2017	23:25.00

F-V

DFTPP

Data File : G:\HPCHEM\B\DATA\20171228\BM12789.D

Vial: 2

Acq On : 28 Dec 2017 18:42

Operator: GCH

Sample : SEQ-TUN

Inst : GCMS-B

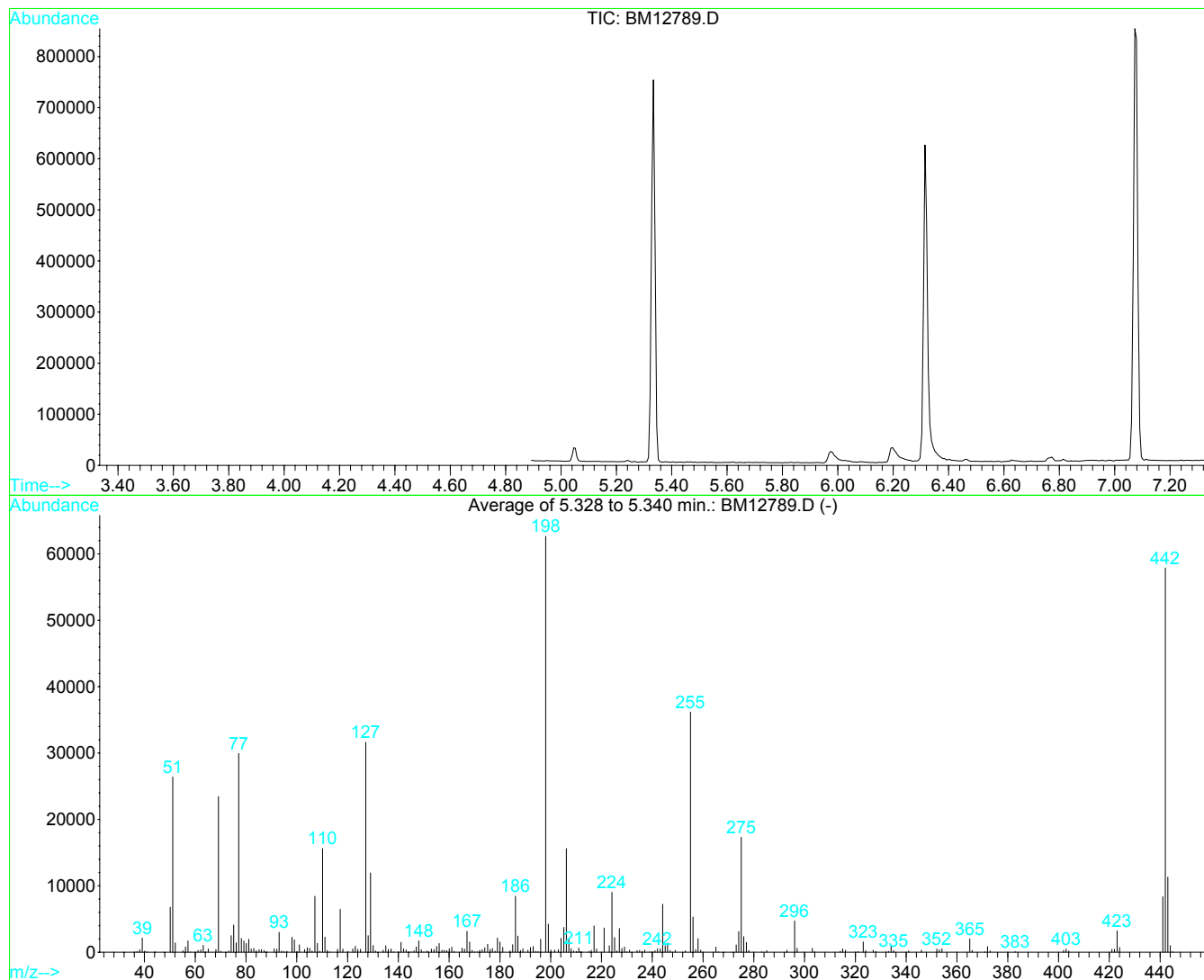
Misc :

Multiplr: 1.00

MS Integration Params: rteint.p

Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)

Title : Method 8270C Select Ion Monitoring



Spectrum Information: Average of 5.328 to 5.340 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	42.1	26399	PASS
68	69	0.00	2	1.8	417	PASS
69	198	0.00	100	37.4	23450	PASS
70	69	0.00	2	0.6	133	PASS
127	198	40	60	50.5	31613	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	62661	PASS
199	198	5	9	6.8	4233	PASS
275	198	10	30	27.7	17327	PASS
365	198	1	100	3.2	2024	PASS
441	443	0.01	100	73.9	8363	PASS
442	198	40	100	92.4	57899	PASS
443	442	17	23	19.5	11312	PASS

BM12789.D 1004SIM.M

Tue Jan 02 15:14:51 2018 SS

Response Factor Report GCMS-B

Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)
Title : Method 8270C Select Ion Monitoring
Last Update : Mon Oct 09 10:00:03 2017
Response via : Initial Calibration

Calibration Files

0.02 =BM11887.D 0.1 =BM11888.D 0.25 =BM11889.D
0.50 =BM11890.D 1.0 =BM11891.D 2.0 =BM11892.D

	Compound	0.02	0.1	0.25	0.50	1.0	2.0	Avg	%RSD
1) I	1,4-Dichlorobenzene-d	-----ISTD-----							
2)	n-nitroso-dimethyla	0.362	0.449	0.418	0.396	0.390	0.403	0.403	7.20
3) I	Phenanthrene-d10	-----ISTD-----							
4)	Hexachlorobutadiene	0.197	0.198	0.202	0.196	0.189	0.184	0.194	3.45
5)	Hexachlorobenzene	0.222	0.249	0.256	0.252	0.237	0.236	0.242	5.22
6)	Pentachlorophenol	0.051	0.051	0.042	0.059	0.053	0.048	0.051	10.55
7)	Phenanthrene	1.040	1.042	1.090	1.070	1.020	0.987	1.041	3.49
8)	Pyrene	0.936	0.941	1.017	1.055	1.043	1.028	1.003	5.17
9)	Benzo(a)anthracene	0.721	0.673	0.776	0.832	0.848	0.852	0.784	9.47
10)	Chrysene	0.890	0.915	0.941	0.935	0.901	0.876	0.910	2.80
11)	Benzo(b)fluoranthen	0.628	0.592	0.694	0.717	0.755	0.748	0.689	9.54
12)	Benzo(k)fluoranthen	0.650	0.721	0.770	0.802	0.811	0.847	0.767	9.29
13)	Benzo(a)pyrene	0.613	0.510	0.517	0.572	0.594	0.626	0.572	8.56
14) I	Perylene-d12	-----ISTD-----							
15)	Indeno(1,2,3-cd)pyr	1.026	0.993	1.086	1.160	1.223	1.237	1.121	9.12
16)	Dibenzo(a,h)anthrac	0.911	0.854	0.918	0.969	1.010	1.061	0.954	7.85

(#) = Out of Range
1004SIM.M

Thu Oct 12 15:16:19 2017

SS

Page 1

Compound List Report GCMS-B

Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)
 Title : Method 8270C Select Ion Monitoring
 Last Update : Mon Oct 09 10:00:03 2017
 Response via : Initial Calibration
 Total Cpnds : 16

PK#	Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1 I	1,4-Dichlorobenzene-d4	152	6.12	1.000	A	2	A	B
2	n-nitroso-dimethylamine	42	3.98	0.650	A	2	A	B
3 I	Phenanthrene-d10	188	9.92	1.000	A	2	A	B
4	Hexachlorobutadiene	225	7.28	0.733	A	3	A	B
5	Hexachlorobenzene	284	9.59	0.966	A	3	A	B
6	Pentachlorophenol	266	9.73	0.981	A	3	A	B
7	Phenanthrene	178	9.93	1.001	A	2	A	B
8	Pyrene	202	11.22	1.131	A	2	A	B
9	Benzo(a)anthracene	228	12.44	1.254	A	2	A	B
10	Chrysene	228	12.49	1.259	A	2	A	B
11	Benzo(b)fluoranthene	252	14.02	1.413	A	2	A	B
12	Benzo(k)fluoranthene	252	14.07	1.418	A	2	A	B
13	Benzo(a)pyrene	252	14.65	1.476	A	2	A	B
14 I	Perylene-d12	264	14.76	1.000	A	2	A	B
15	Indeno(1,2,3-cd)pyrene	276	17.37	1.177	A	2	A	B
16	Dibenzo(a,h)anthracene	278	17.39	1.178	A	2	A	B

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
 #Qual = number of qualifiers
 A/H = Area or Height
 ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

 1004SIM.M Thu Oct 12 15:16:18 2017 SS

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\B\DATA\20171004\BM11887.D

Vial: 4

Acq On : 4 Oct 2017 21:24

Operator: GCH

Sample : SEQ-CAL@X0.02

Inst : GCMS-B

Misc :

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Oct 5 9:42 2017

Quant Results File: 1004SIM.RES

Quant Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)

Title : Method 8270C Select Ion Monitoring

Last Update : Fri Sep 22 12:19:42 2017

Response via : Initial Calibration

DataAcq Meth : SIM8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.09	152	68916	0.50	ug/L	-0.03
3) Phenanthrene-d10	9.89	188	184311	0.50	ug/L	-0.03
14) Perylene-d12	14.71	264	96316	0.50	ug/L	-0.05

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) n-nitroso-dimethylamine	3.99	42	999m	0.0210	ug/L	
4) Hexachlorobutadiene	7.24	225	1450	0.0105	ug/L	# 100
5) Hexachlorobenzene	9.56	284	1637	0.0157	ug/L	# 90
7) Phenanthrene	9.91	178	7664m	0.0149	ug/L	
8) Pyrene	11.19	202	6897	0.0186	ug/L	99
9) Benzo(a)anthracene	12.41	228	5317m	0.0254	ug/L	
10) Chrysene	12.46	228	6560	0.0277	ug/L	99
11) Benzo(b)fluoranthene	13.98	252	4632m	0.0265	ug/L	
12) Benzo(k)fluoranthene	14.02	252	4794m	0.0273	ug/L	
13) Benzo(a)pyrene	14.59	252	4516m	0.0335	ug/L	
15) Indeno(1,2,3-cd)pyrene	17.29	276	3954m	0.0141	ug/L	
16) Dibenzo(a,h)anthracene	17.31	278	3509m	0.0158	ug/L	

(#) = qualifier out of range (m) = manual integration

BM11887.D 1004SIM.M

Mon Nov 06 15:24:29 2017

SS

Page 1

Quantitation Report

Data File : G:\HPCHEM\B\DATA\20171004\BM11887.D

Vial: 4

Acq On : 4 Oct 2017 21:24

Operator: GCH

Sample : SEQ-CAL@X0.02

Inst : GCMS-B

Misc :

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Oct 5 9:42 2017

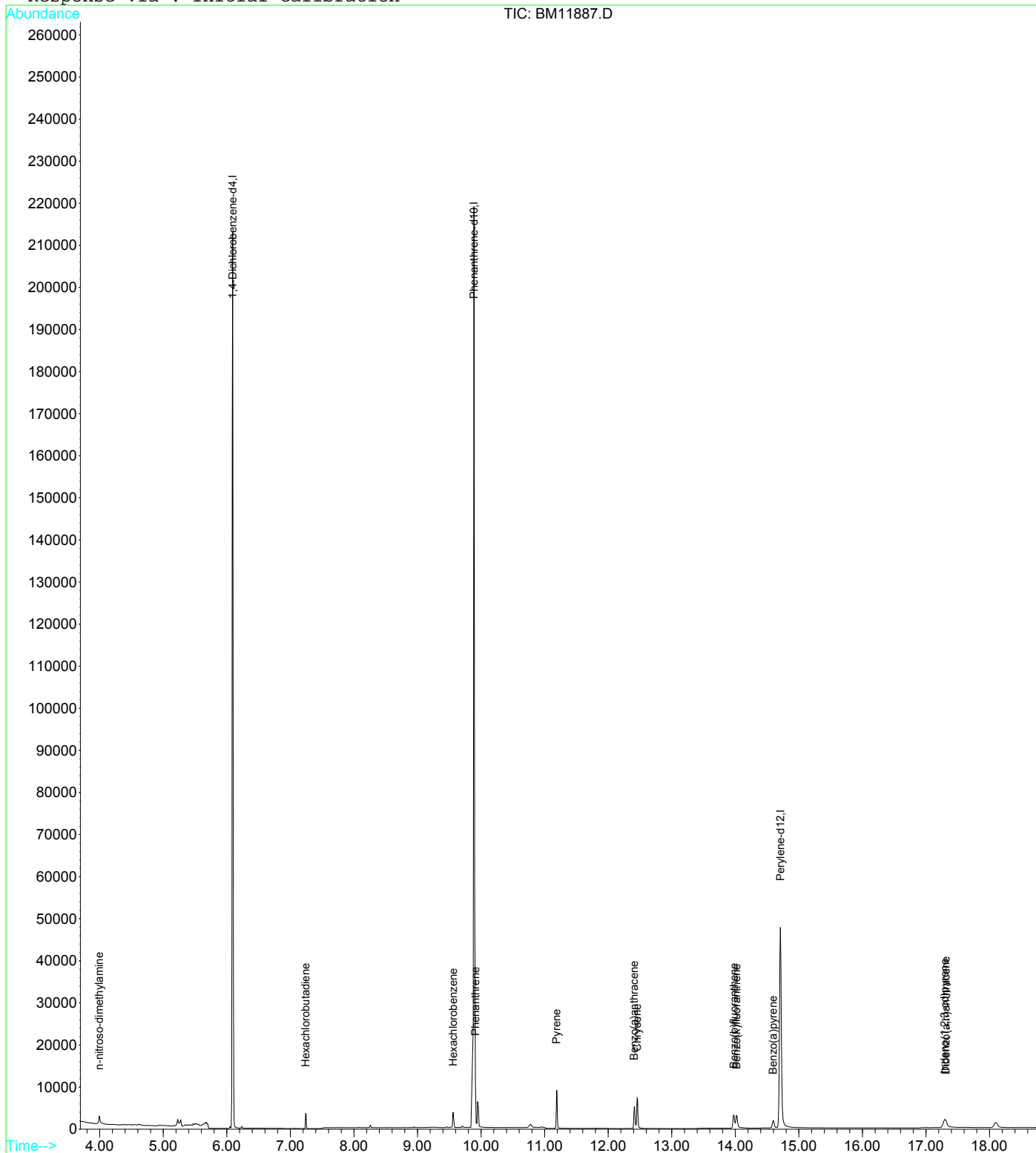
Quant Results File: 1004SIM.RES

Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)

Title : Method 8270C Select Ion Monitoring

Last Update : Fri Oct 20 11:14:14 2017

Response via : Initial Calibration



BM11887.D 1004SIM.M

Mon Nov 06 15:24:29 2017

SS

Page 2

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\B\DATA\20171004\BM11888.D

Vial: 5

Acq On : 4 Oct 2017 21:52

Operator: GCH

Sample : SEQ-CAL@X0.1

Inst : GCMS-B

Misc :

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Oct 5 9:42 2017

Quant Results File: 1004SIM.RES

Quant Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)

Title : Method 8270C Select Ion Monitoring

Last Update : Thu Oct 05 10:24:00 2017

Response via : Initial Calibration

DataAcq Meth : SIM8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.09	152	68708	0.50	ug/L	-0.03
3) Phenanthrene-d10	9.89	188	191137	0.50	ug/L	-0.03
14) Perylene-d12	14.70	264	97298	0.50	ug/L	-0.05

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) n-nitroso-dimethylamine	3.99	42	6171	0.1220	ug/L #	78
4) Hexachlorobutadiene	7.24	225	7582	0.0562	ug/L #	100
5) Hexachlorobenzene	9.56	284	9527	0.0909	ug/L #	74
6) Pentachlorophenol	9.71	266	1640m	0.0620	ug/L	
7) Phenanthrene	9.91	178	39845m	0.0766	ug/L	
8) Pyrene	11.19	202	35975	0.0963	ug/L	100
9) Benzo(a)anthracene	12.41	228	25709	0.1122	ug/L	96
10) Chrysene	12.46	228	34974	0.1323	ug/L	99
11) Benzo(b)fluoranthene	13.97	252	22638	0.1192	ug/L	98
12) Benzo(k)fluoranthene	14.02	252	27549m	0.1414	ug/L	
13) Benzo(a)pyrene	14.59	252	19482m	0.1359	ug/L	
15) Indeno(1,2,3-cd)pyrene	17.29	276	19315m	0.0734	ug/L	
16) Dibenzo(a,h)anthracene	17.30	278	16615m	0.0788	ug/L	

(#) = qualifier out of range (m) = manual integration

BM11888.D 1004SIM.M Mon Nov 06 15:24:30 2017 SS

Page 1

Quantitation Report

Data File : G:\HPCHEM\B\DATA\20171004\BM11888.D

Vial: 5

Acq On : 4 Oct 2017 21:52

Operator: GCH

Sample : SEQ-CAL@X0.1

Inst : GCMS-B

Misc :

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Oct 5 9:42 2017

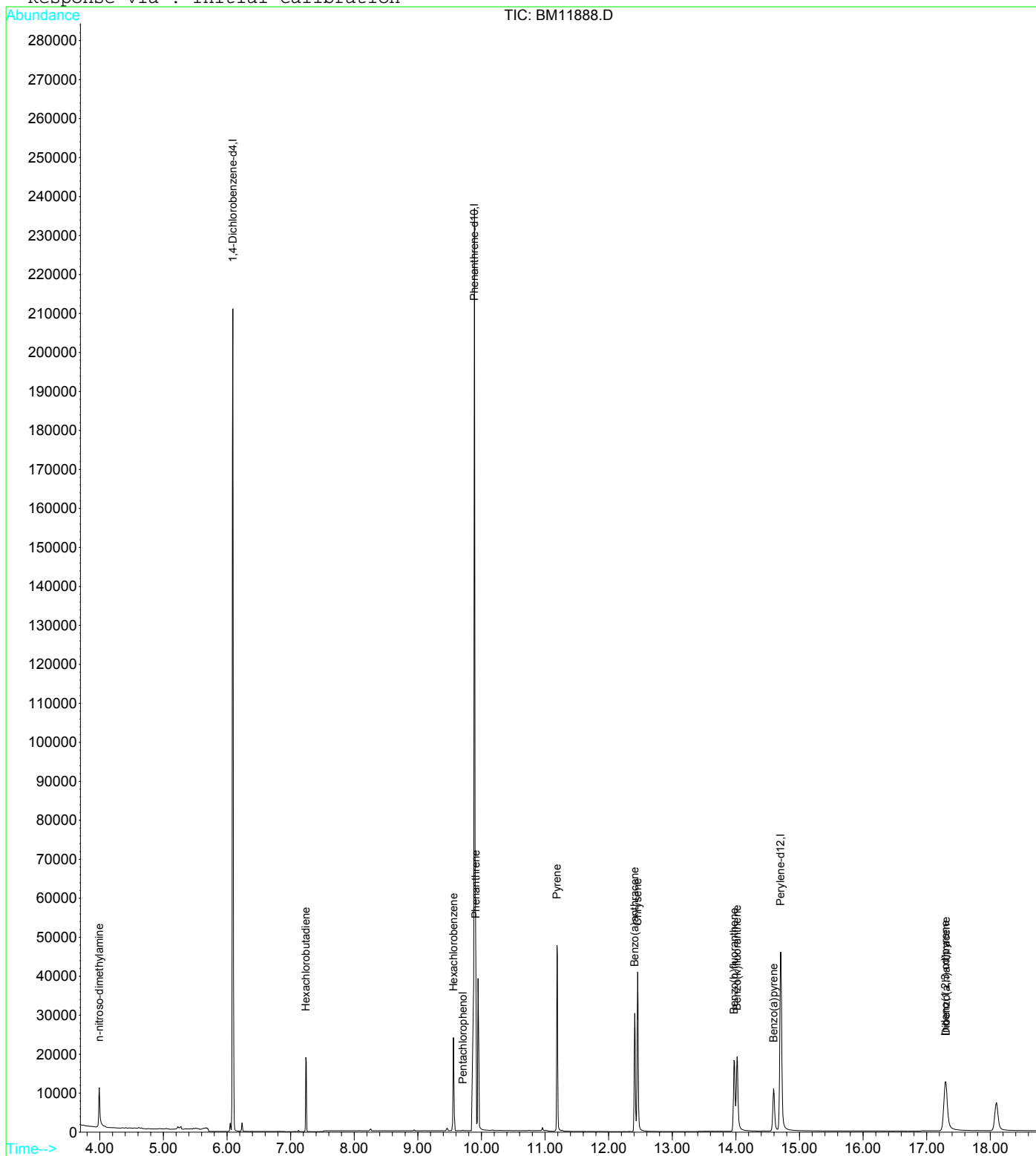
Quant Results File: 1004SIM.RES

Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)

Title : Method 8270C Select Ion Monitoring

Last Update : Fri Oct 20 11:14:14 2017

Response via : Initial Calibration



BM11888.D 1004SIM.M

Mon Nov 06 15:24:30 2017

SS

Page 2

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\B\DATA\20171004\BM11889.D

Vial: 6

Acq On : 4 Oct 2017 22:20

Operator: GCH

Sample : SEQ-CAL@X0.25

Inst : GCMS-B

Misc :

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Oct 5 9:35 2017

Quant Results File: 1004SIM.RES

Quant Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)

Title : Method 8270C Select Ion Monitoring

Last Update : Thu Oct 05 10:24:23 2017

Response via : Initial Calibration

DataAcq Meth : SIM8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.09	152	71437	0.50	ug/L	-0.03
3) Phenanthrene-d10	9.89	188	194489	0.50	ug/L	-0.03
14) Perylene-d12	14.70	264	104158	0.50	ug/L	-0.05

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) n-nitroso-dimethylamine	3.99	42	14913	0.2679	ug/L #	68
4) Hexachlorobutadiene	7.24	225	19684	0.1557	ug/L #	100
5) Hexachlorobenzene	9.56	284	24846	0.2414	ug/L #	68
6) Pentachlorophenol	9.71	266	3322m	0.1543	ug/L	
7) Phenanthrene	9.90	178	105951m	0.1986	ug/L	
8) Pyrene	11.19	202	98905	0.2627	ug/L	99
9) Benzo(a)anthracene	12.41	228	75454	0.3140	ug/L	99
10) Chrysene	12.46	228	91502	0.3194	ug/L	99
11) Benzo(b)fluoranthene	13.97	252	67534	0.3368	ug/L	99
12) Benzo(k)fluoranthene	14.02	252	74895	0.3521	ug/L	99
13) Benzo(a)pyrene	14.59	252	50274	0.3404	ug/L	98
15) Indeno(1,2,3-cd)pyrene	17.29	276	56546	0.2162	ug/L	98
16) Dibenzo(a,h)anthracene	17.30	278	47791	0.2251	ug/L	98

(#) = qualifier out of range (m) = manual integration

BM11889.D 1004SIM.M Mon Nov 06 15:24:31 2017 SS

Page 1

Quantitation Report

Data File : G:\HPCHEM\B\DATA\20171004\BM11889.D

Vial: 6

Acq On : 4 Oct 2017 22:20

Operator: GCH

Sample : SEQ-CAL@X0.25

Inst : GCMS-B

Misc :

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Oct 5 9:35 2017

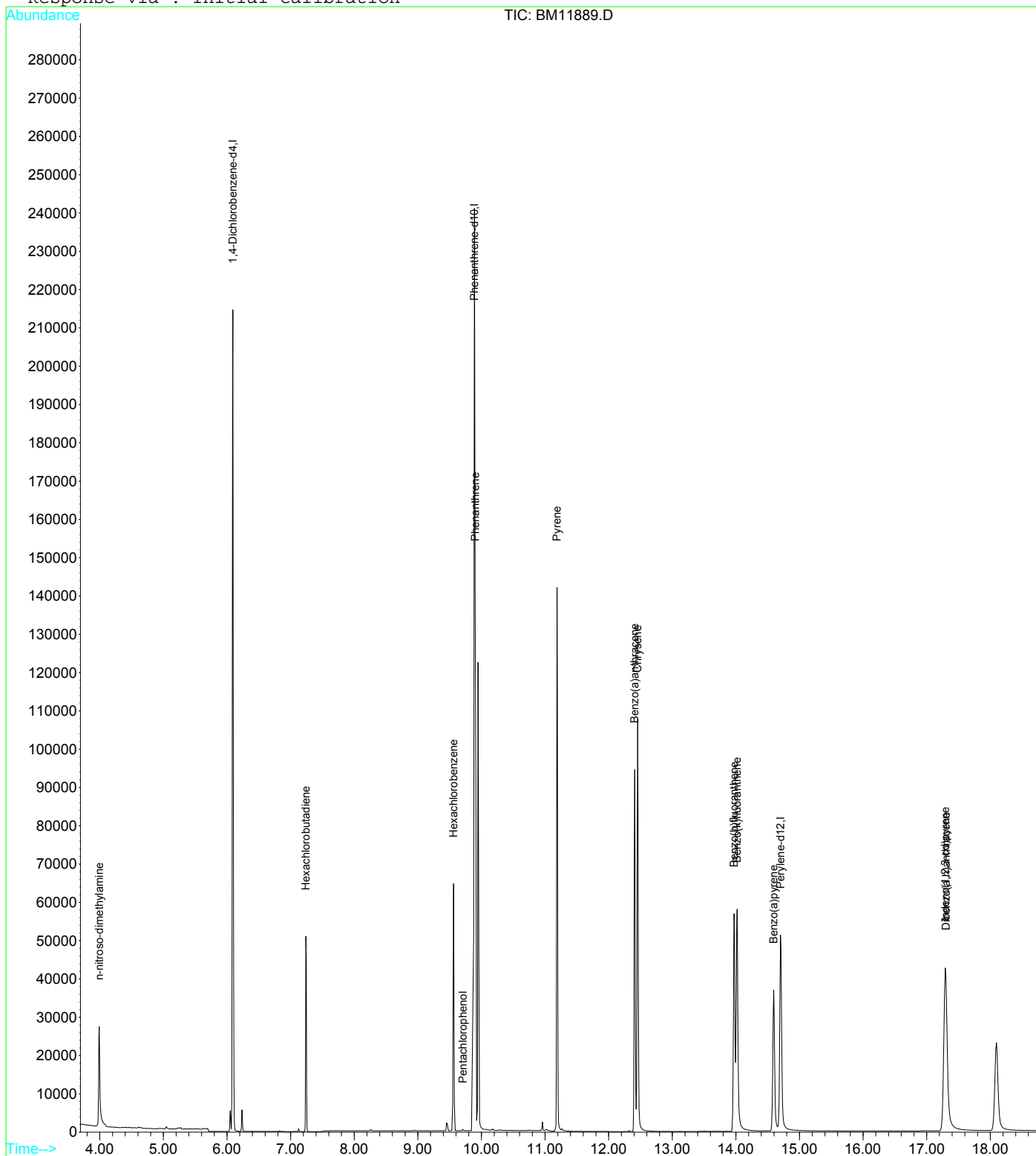
Quant Results File: 1004SIM.RES

Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)

Title : Method 8270C Select Ion Monitoring

Last Update : Fri Oct 20 11:14:14 2017

Response via : Initial Calibration



BM11889.D 1004SIM.M

Mon Nov 06 15:24:32 2017

SS

Page 2

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\B\DATA\20171004\BM11890.D

Acq On : 4 Oct 2017 22:48

Sample : SEQ-CCV

Misc :

Vial: 3

Operator: GCH

Inst : GCMS-B

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Oct 27 12:33 2017

Quant Results File: 1004SIM.RES

Quant Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)

Title : Method 8270C Select Ion Monitoring

Last Update : Fri Oct 20 11:14:14 2017

Response via : Initial Calibration

DataAcq Meth : SIM8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.06	152	91051	0.50	ug/L	0.00
3) Phenanthrene-d10	9.86	188	244040	0.50	ug/L	0.00
14) Perylene-d12	14.64	264	160462	0.50	ug/L	0.00

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) n-nitroso-dimethylamine	3.97	42	33257	0.4533	ug/L #	28
4) Hexachlorobutadiene	7.22	225	43116	0.4545	ug/L #	30
5) Hexachlorobenzene	9.53	284	48750	0.4129	ug/L	100
6) Pentachlorophenol	9.68	266	10485	0.4249	ug/L #	64
7) Phenanthrene	9.88	178	243615m	0.4793	ug/L	
8) Pyrene	11.16	202	246153	0.5027	ug/L #	91
9) Benzo(a)anthracene	12.38	228	209747	0.5484	ug/L	96
10) Chrysene	12.42	228	215451	0.4852	ug/L	97
11) Benzo(b)fluoranthene	13.92	252	201044	0.5978	ug/L #	90
12) Benzo(k)fluoranthene	13.96	252	196186	0.5242	ug/L #	81
13) Benzo(a)pyrene	14.53	252	161952m	0.5802	ug/L	
15) Indeno(1,2,3-cd)pyrene	17.20	276	183918	0.5113	ug/L #	58
16) Dibenzo(a,h)anthracene	17.21	278	148833	0.4863	ug/L #	85

(#) = qualifier out of range (m) = manual integration

BM11890.D 1004SIM.M

Mon Nov 06 15:24:32 2017

SS

Page 1

Quantitation Report

Data File : G:\HPCHEM\B\DATA\20171004\BM11890.D

Vial: 3

Acq On : 4 Oct 2017 22:48

Operator: GCH

Sample : SEQ-CCV

Inst : GCMS-B

Misc :

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Oct 27 12:33 2017

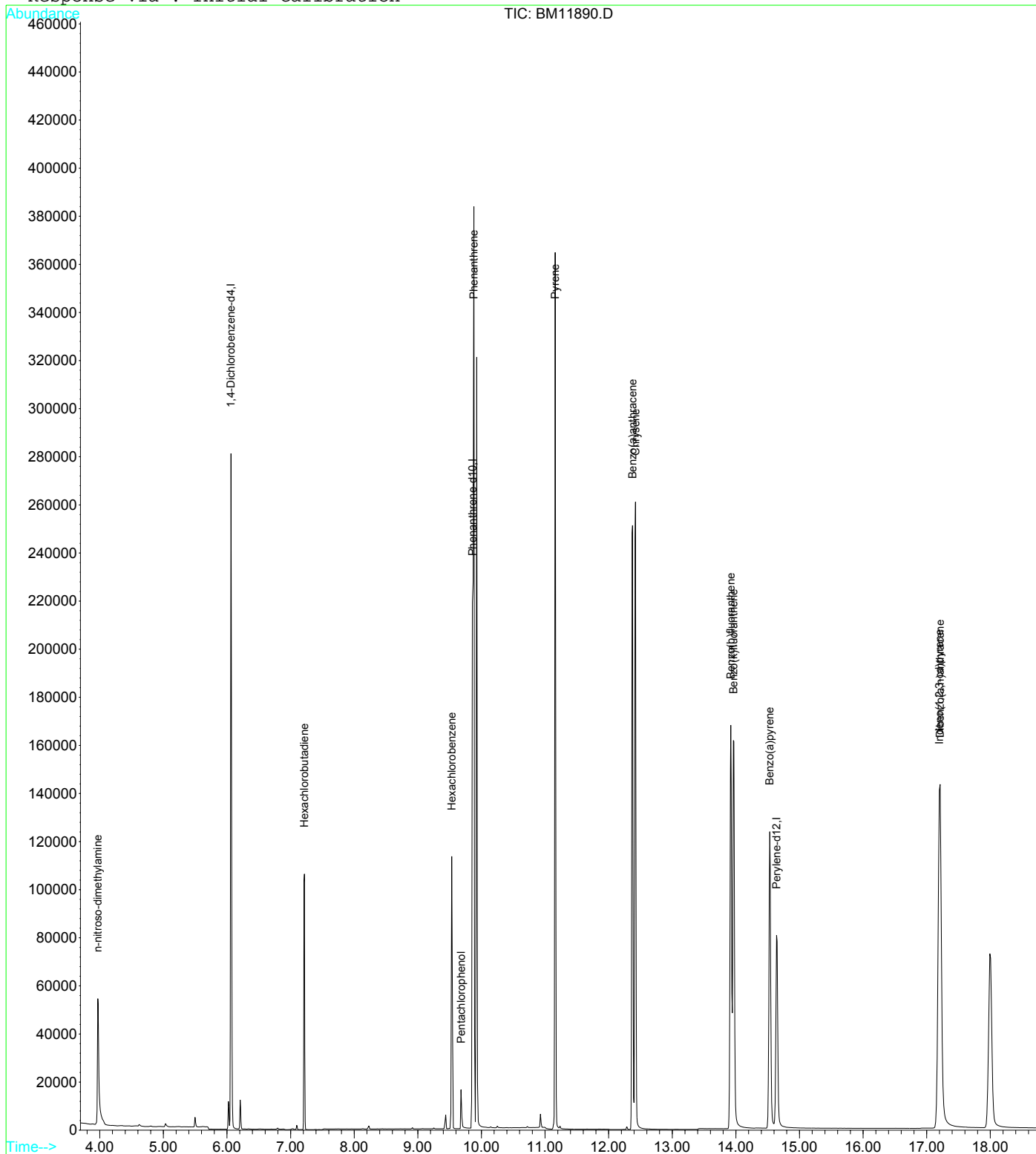
Quant Results File: 1004SIM.RES

Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)

Title : Method 8270C Select Ion Monitoring

Last Update : Fri Oct 20 11:14:14 2017

Response via : Initial Calibration



BM11890.D 1004SIM.M

Mon Nov 06 15:24:32 2017

SS

Page 2

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\B\DATA\20171004\BM11891.D

Vial: 8

Acq On : 4 Oct 2017 23:16

Operator: GCH

Sample : SEQ-CAL@X1.00

Inst : GCMS-B

Misc :

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Oct 5 9:40 2017

Quant Results File: 1004SIM.RES

Quant Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)

Title : Method 8270C Select Ion Monitoring

Last Update : Thu Oct 05 10:25:11 2017

Response via : Initial Calibration

DataAcq Meth : SIM8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.09	152	71015	0.50	ug/L	-0.03
3) Phenanthrene-d10	9.89	188	197769	0.50	ug/L	-0.03
14) Perylene-d12	14.70	264	110621	0.50	ug/L	-0.05

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) n-nitroso-dimethylamine	3.99	42	55345	0.9546	ug/L #	51
4) Hexachlorobutadiene	7.24	225	74608	0.7356	ug/L #	100
5) Hexachlorobenzene	9.56	284	93583	0.9319	ug/L #	70
6) Pentachlorophenol	9.71	266	10814m	0.9118	ug/L	
7) Phenanthrene	9.90	178	403251m	0.7925	ug/L	
8) Pyrene	11.19	202	412603	1.0503	ug/L	99
9) Benzo(a)anthracene	12.41	228	335481	1.2080	ug/L	98
10) Chrysene	12.46	228	356423	1.0735	ug/L	100
11) Benzo(b)fluoranthene	13.97	252	298437	1.2643	ug/L	99
12) Benzo(k)fluoranthene	14.02	252	320766	1.2417	ug/L	99
13) Benzo(a)pyrene	14.59	252	235010m	1.3418	ug/L	
15) Indeno(1,2,3-cd)pyrene	17.29	276	270646	1.0525	ug/L	99
16) Dibenzo(a,h)anthracene	17.30	278	223409	1.0499	ug/L	97

(#) = qualifier out of range (m) = manual integration

BM11891.D 1004SIM.M Mon Nov 06 15:24:33 2017 SS

Page 1

Quantitation Report

Data File : G:\HPCHEM\B\DATA\20171004\BM11891.D

Vial: 8

Acq On : 4 Oct 2017 23:16

Operator: GCH

Sample : SEQ-CAL@X1.00

Inst : GCMS-B

Misc :

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Oct 5 9:40 2017

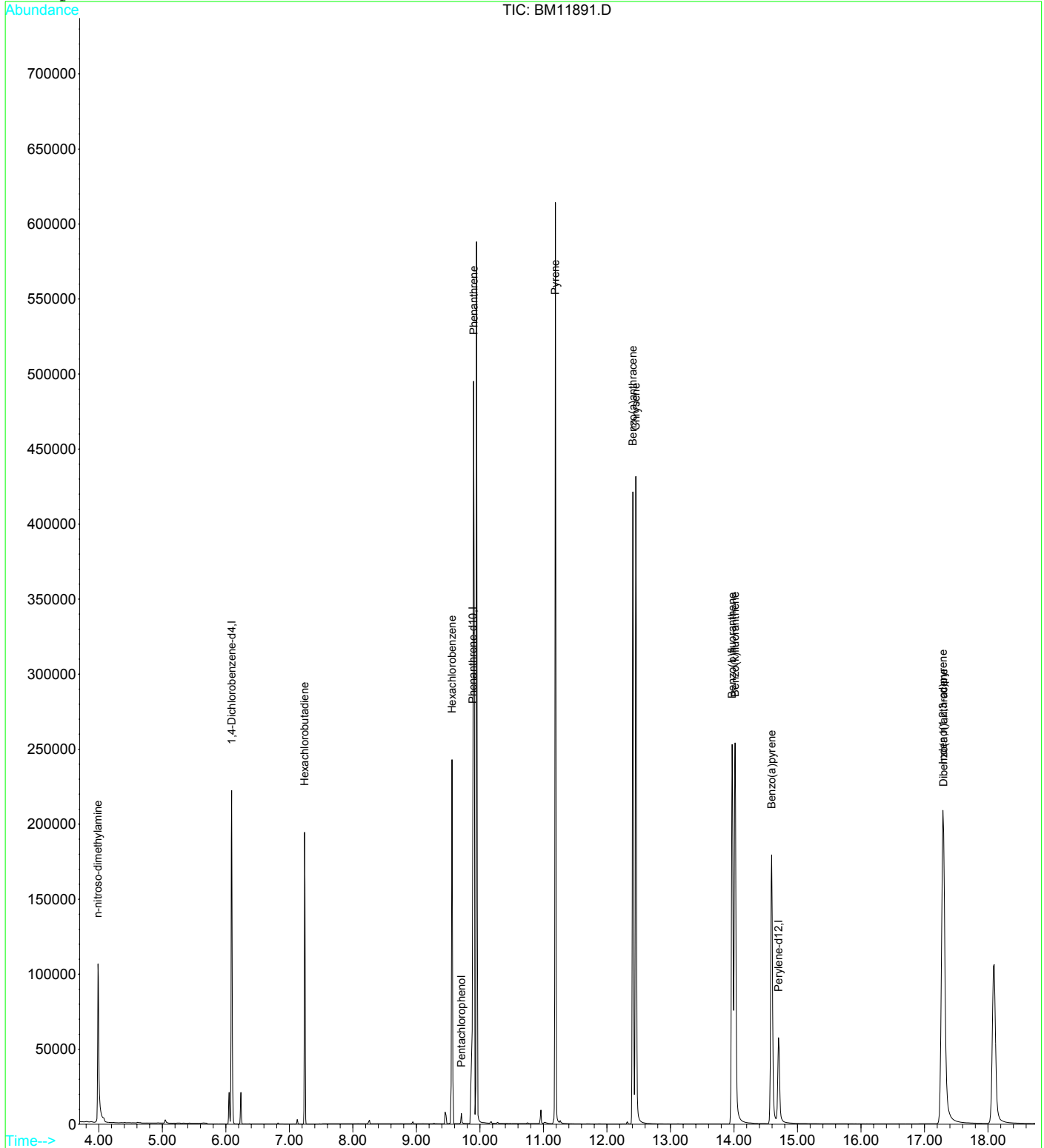
Quant Results File: 1004SIM.RES

Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)

Title : Method 8270C Select Ion Monitoring

Last Update : Fri Oct 20 11:14:14 2017

Response via : Initial Calibration



BM11891.D 1004SIM.M

Mon Nov 06 15:24:33 2017

SS

Page 2

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\B\DATA\20171004\BM11892.D
 Acq On : 4 Oct 2017 23:44
 Sample : SEQ-CAL@X2.00
 Misc :

Vial: 9
 Operator: GCH
 Inst : GCMS-B
 Multiplr: 1.00

MS Integration Params: rteint.p
 Quant Time: Oct 5 9:39 2017

Quant Results File: 1004SIM.RES

Quant Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)
 Title : Method 8270C Select Ion Monitoring
 Last Update : Thu Oct 05 10:25:35 2017
 Response via : Initial Calibration
 DataAcq Meth : SIM8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.09	152	70680	0.50	ug/L	-0.03
3) Phenanthrene-d10	9.89	188	200316	0.50	ug/L	-0.03
14) Perylene-d12	14.70	264	114146	0.50	ug/L	-0.06

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) n-nitroso-dimethylamine	3.99	42	113900	1.9377	ug/L #	59
4) Hexachlorobutadiene	7.24	225	147576	1.6352	ug/L #	100
5) Hexachlorobenzene	9.56	284	189210	1.9084	ug/L #	68
6) Pentachlorophenol	9.71	266	27446m	3.4518	ug/L	
7) Phenanthrene	9.90	178	790792m	1.5918	ug/L	
8) Pyrene	11.19	202	823308	2.0532	ug/L	97
9) Benzo(a)anthracene	12.41	228	682880	2.2960	ug/L	97
10) Chrysene	12.45	228	702261	1.9983	ug/L	99
11) Benzo(b)fluoranthene	13.97	252	598954	2.3448	ug/L	98
12) Benzo(k)fluoranthene	14.01	252	679027	2.4154	ug/L	96
13) Benzo(a)pyrene	14.59	252	501775m	2.5917	ug/L	
15) Indeno(1,2,3-cd)pyrene	17.29	276	564848m	2.2137	ug/L	
16) Dibenzo(a,h)anthracene	17.30	278	484452	2.2848	ug/L	96

(#) = qualifier out of range (m) = manual integration
 BM11892.D 1004SIM.M Mon Nov 06 15:24:33 2017 SS

Page 1

Quantitation Report

Data File : G:\HPCHEM\B\DATA\20171004\BM11892.D

Vial: 9

Acq On : 4 Oct 2017 23:44

Operator: GCH

Sample : SEQ-CAL@X2.00

Inst : GCMS-B

Misc :

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Oct 5 9:39 2017

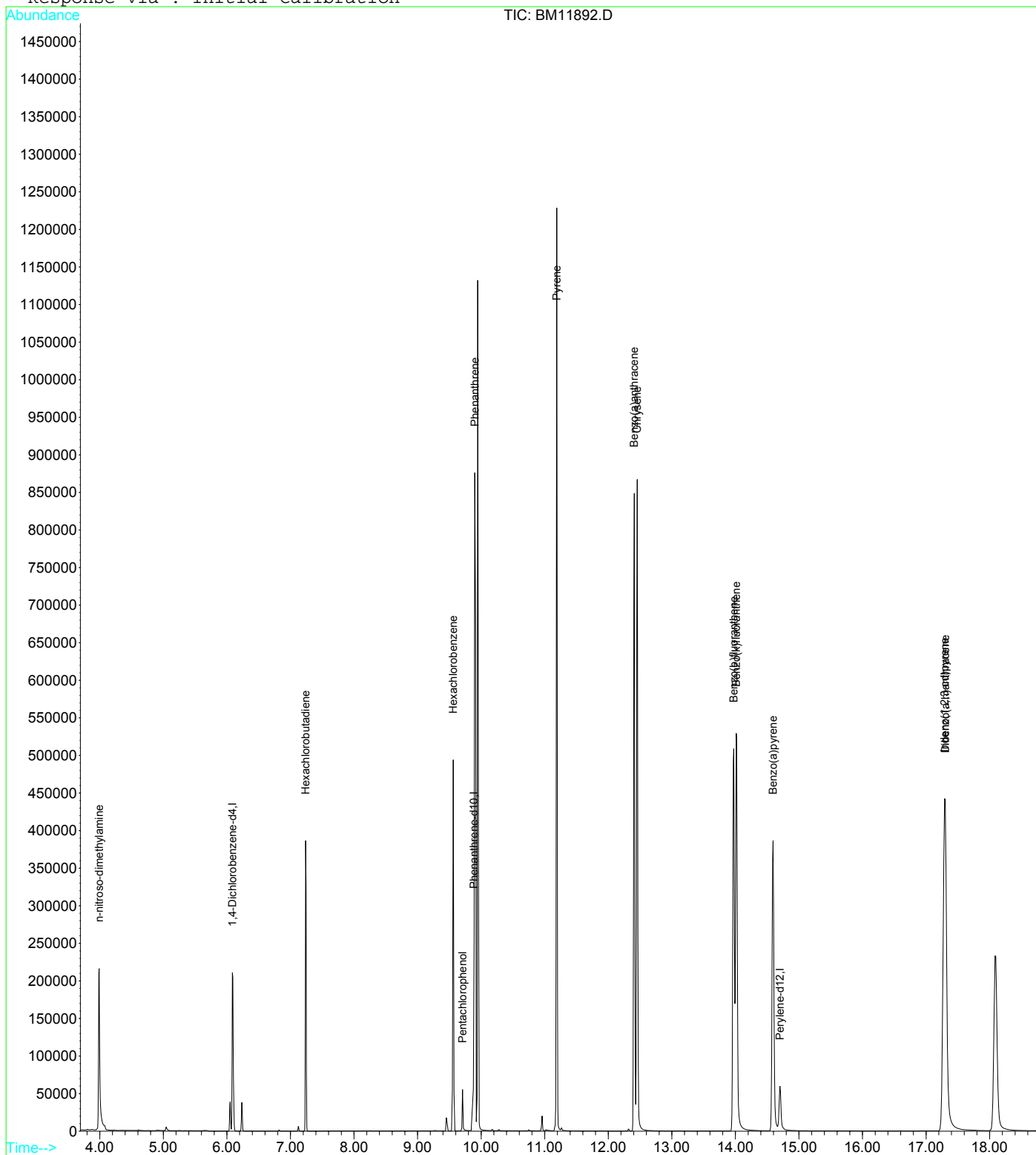
Quant Results File: 1004SIM.RES

Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)

Title : Method 8270C Select Ion Monitoring

Last Update : Fri Oct 20 11:14:14 2017

Response via : Initial Calibration



BM11892.D 1004SIM.M

Mon Nov 06 15:24:33 2017

SS

Page 2

CALIBRATION VERIFICATION SUMMARY

SW 846 8270D

CCV ID: S7L2809-CCV1

Analyzed: 12/22/17 17:02

Analyte	Response Factor	Expected Result	Result	% Drift	Limit(s)
Benzo(a)anthracene	0.8714636	0.50	0.56	11	30
Benzo(a)pyrene	0.6648704	0.50	0.54	8	30
Benzo(b)fluoranthene	0.849764	0.50	0.57	14	30
Benzo(k)fluoranthene	0.9316578	0.50	0.56	11	30
Dibenzo(a,h)anthracene	1.041811	0.50	0.55	9	30
Hexachlorobenzene	0.2359618	0.50	0.49	2	30
Hexachlorobutadiene	0.1802832	0.50	0.46	7	30
Indeno(1,2,3-cd)pyrene	1.295069	0.50	0.58	16	30
n-Nitroso-dimethylamine	0.3645101	0.50	0.45	10	30

9

9.7.

F-VII

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\B\DATA\20171222\BM12733.D

Vial: 3

Acq On : 22 Dec 2017 17:02

Operator: GCH

Sample : SEQ-CCV

Inst : GCMS-B

Misc :

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Dec 28 19:44 2017

Quant Results File: 1004SIM.RES

Quant Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)

Title : Method 8270C Select Ion Monitoring

Last Update : Thu Dec 28 19:44:01 2017

Response via : Initial Calibration

DataAcq Meth : SIM8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.03	152	67732	0.50	ug/L	-0.04
3) Phenanthrene-d10	9.82	188	200418	0.50	ug/L	-0.03
14) Perylene-d12	14.57	264	130610	0.50	ug/L	-0.07

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) n-nitroso-dimethylamine	3.94	42	24689m	0.4524	ug/L	
4) Hexachlorobutadiene	7.17	225	36132	0.4638	ug/L #	100
5) Hexachlorobenzene	9.50	284	47291	0.4877	ug/L #	75
6) Pentachlorophenol	9.65	266	8781m	0.4333	ug/L	
7) Phenanthrene	9.83	178	216249	0.5181	ug/L	99
8) Pyrene	11.12	202	216336	0.5380	ug/L	97
9) Benzo(a)anthracene	12.33	228	174657	0.5560	ug/L	99
10) Chrysene	12.37	228	196920	0.5400	ug/L	100
11) Benzo(b)fluoranthene	13.86	252	170308	0.5692	ug/L	98
12) Benzo(k)fluoranthene	13.91	252	186721	0.5564	ug/L	95
13) Benzo(a)pyrene	14.47	252	133252m	0.5395	ug/L	
15) Indeno(1,2,3-cd)pyrene	17.12	276	169149	0.5777	ug/L	97
16) Dibenzo(a,h)anthracene	17.13	278	136071	0.5462	ug/L	97

(#) = qualifier out of range (m) = manual integration

BM12733.D 1004SIM.M Thu Dec 28 19:48:03 2017 SS

Page 1

Quantitation Report

Data File : G:\HPCHEM\B\DATA\20171222\BM12733.D

Acq On : 22 Dec 2017 17:02

Sample : SEQ-CCV

Misc :

MS Integration Params: rteint.p

Quant Time: Dec 28 19:44 2017

Vial: 3

Operator: GCH

Inst : GCMS-B

Multiplr: 1.00

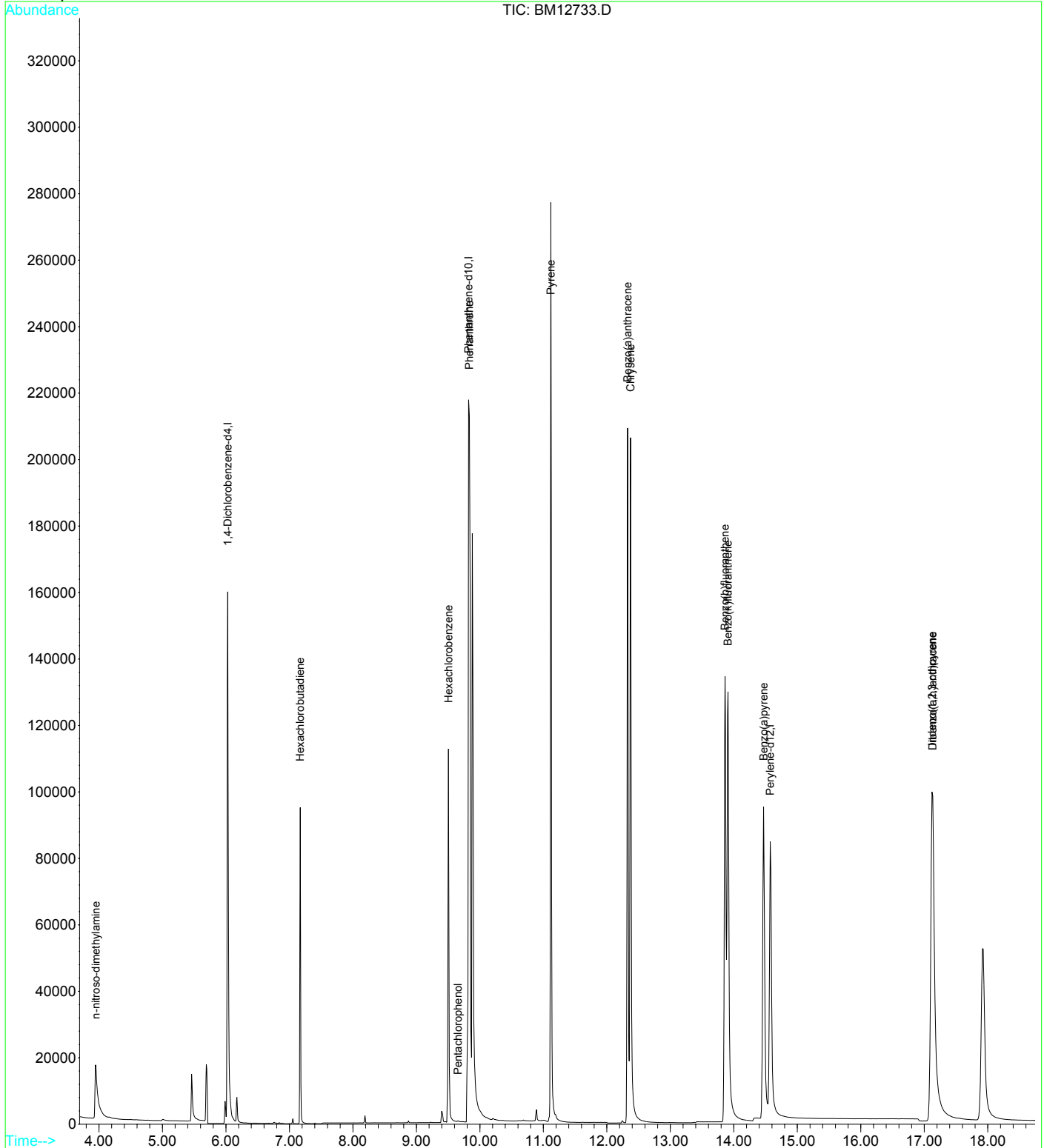
Quant Results File: 1004SIM.RES

Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)

Title : Method 8270C Select Ion Monitoring

Last Update : Wed Nov 08 15:29:45 2017

Response via : Initial Calibration



BM12733.D 1004SIM.M

Thu Dec 28 19:48:03 2017

SS

Page 2

CALIBRATION VERIFICATION SUMMARY

SW 846 8270D

CCV ID: S7L2903-CCV1

Analyzed: 12/27/17 12:45

Analyte	Response Factor	Expected Result	Result	% Drift	Limit(s)
Benzo(a)anthracene	0.8714636	0.50	0.56	11	30
Benzo(a)pyrene	0.7249748	0.50	0.59	18	30
Benzo(b)fluoranthene	0.849764	0.50	0.57	14	30
Benzo(k)fluoranthene	0.9316578	0.50	0.56	11	30
Dibenzo(a,h)anthracene	1.041811	0.50	0.55	9	30
Hexachlorobenzene	0.2359618	0.50	0.49	2	30
Hexachlorobutadiene	0.1802832	0.50	0.46	7	30
Indeno(1,2,3-cd)pyrene	1.295069	0.50	0.58	16	30
n-Nitroso-dimethylamine	0.3285744	0.50	0.41	18	30

9

9.7.

F-VII

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\B\DATA\20171227\BM12764.D

Vial: 3

Acq On : 27 Dec 2017 12:45

Operator: GCH

Sample : SEQ-CCV

Inst : GCMS-B

Misc :

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Dec 28 19:48 2017

Quant Results File: 1004SIM.RES

Quant Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)

Title : Method 8270C Select Ion Monitoring

Last Update : Thu Dec 28 19:44:01 2017

Response via : Initial Calibration

DataAcq Meth : SIM8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.03	152	67732	0.50	ug/L	-0.04
3) Phenanthrene-d10	9.82	188	200418	0.50	ug/L	-0.03
14) Perylene-d12	14.57	264	130610	0.50	ug/L	-0.07

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) n-nitroso-dimethylamine	3.94	42	22255m	0.4078	ug/L	
4) Hexachlorobutadiene	7.17	225	36132	0.4638	ug/L	# 100
5) Hexachlorobenzene	9.50	284	47291	0.4877	ug/L	# 75
6) Pentachlorophenol	9.65	266	8861m	0.4373	ug/L	
7) Phenanthrene	9.83	178	216249	0.5181	ug/L	99
8) Pyrene	11.12	202	216336	0.5380	ug/L	97
9) Benzo(a)anthracene	12.33	228	174657	0.5560	ug/L	99
10) Chrysene	12.37	228	196920	0.5400	ug/L	100
11) Benzo(b)fluoranthene	13.86	252	170308	0.5692	ug/L	98
12) Benzo(k)fluoranthene	13.91	252	186721	0.5564	ug/L	95
13) Benzo(a)pyrene	14.47	252	145298m	0.5883	ug/L	
15) Indeno(1,2,3-cd)pyrene	17.12	276	169149	0.5777	ug/L	97
16) Dibenzo(a,h)anthracene	17.13	278	136071	0.5462	ug/L	97

(#) = qualifier out of range (m) = manual integration

BM12764.D 1004SIM.M

Wed Jan 03 14:46:44 2018

SS

Page 1

Quantitation Report

Data File : G:\HPCHEM\B\DATA\20171227\BM12764.D

Vial: 3

Acq On : 27 Dec 2017 12:45

Operator: GCH

Sample : SEQ-CCV

Inst : GCMS-B

Misc :

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Dec 28 19:48 2017

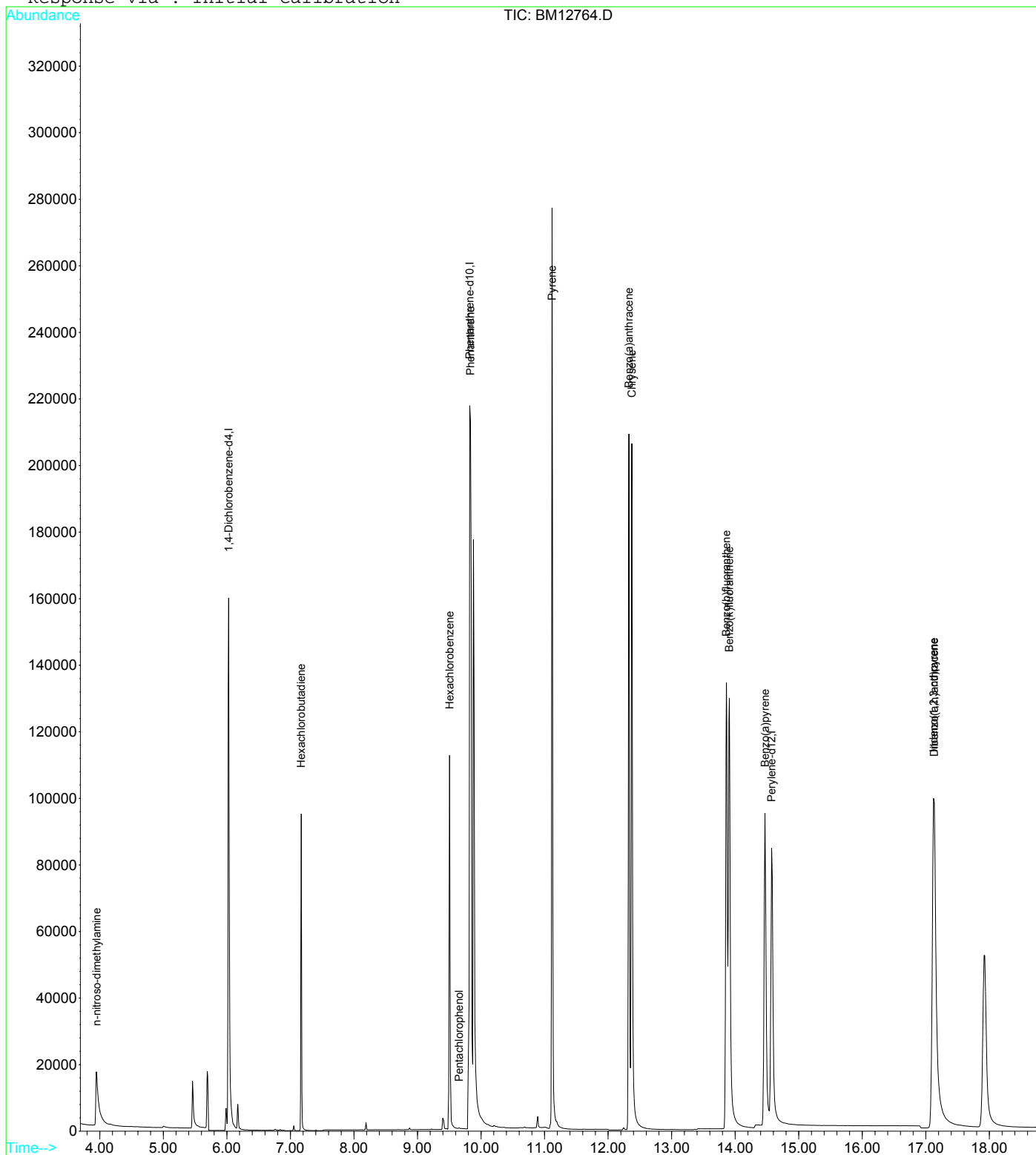
Quant Results File: 1004SIM.RES

Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)

Title : Method 8270C Select Ion Monitoring

Last Update : Wed Nov 08 15:29:45 2017

Response via : Initial Calibration



BM12764.D 1004SIM.M

Wed Jan 03 14:46:44 2018

SS

Page 2

CALIBRATION VERIFICATION SUMMARY

SW 846 8270D

CCV ID: S8A0213-CCV1

Analyzed: 12/28/17 18:58

Analyte	Response Factor	Expected Result	Result	% Drift	Limit(s)
Benzo(a)anthracene	0.8896904	0.50	0.57	14	30
Benzo(a)pyrene	0.7040337	0.50	0.57	14	30
Benzo(b)fluoranthene	0.8354314	0.50	0.56	12	30
Benzo(k)fluoranthene	0.9867791	0.50	0.59	18	30
Dibenzo(a,h)anthracene	1.09959	0.50	0.58	15	30
Hexachlorobenzene	0.2421868	0.50	0.50	0	30
Hexachlorobutadiene	0.1829588	0.50	0.47	6	30
Indeno(1,2,3-cd)pyrene	1.294128	0.50	0.58	15	30
n-Nitroso-dimethylamine	0.3275703	0.50	0.41	19	30

9

9.7.

F-VII

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\B\DATA\20171228\BM12790.D

Vial: 3

Acq On : 28 Dec 2017 18:58

Operator: GCH

Sample : SEQ-CCV

Inst : GCMS-B

Misc :

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Dec 29 11:49 2017

Quant Results File: 1004SIM.RES

Quant Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)

Title : Method 8270C Select Ion Monitoring

Last Update : Fri Dec 29 11:49:16 2017

Response via : Initial Calibration

DataAcq Meth : SIM8270A

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.03	152	65070	0.50	ug/L	-0.03
3) Phenanthrene-d10	9.82	188	189775	0.50	ug/L	-0.04
14) Perylene-d12	14.57	264	127101	0.50	ug/L	-0.07

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) n-nitroso-dimethylamine	3.94	42	21315m	0.4065	ug/L	
4) Hexachlorobutadiene	7.17	225	34721	0.4707	ug/L #	100
5) Hexachlorobenzene	9.50	284	45961	0.5005	ug/L #	84
6) Pentachlorophenol	9.65	266	10150m	0.5290	ug/L	
7) Phenanthrene	9.83	178	219573	0.5555	ug/L	98
8) Pyrene	11.11	202	209137	0.5493	ug/L	97
9) Benzo(a)anthracene	12.32	228	168841	0.5676	ug/L	98
10) Chrysene	12.37	228	190877	0.5528	ug/L	100
11) Benzo(b)fluoranthene	13.86	252	158544	0.5596	ug/L	98
12) Benzo(k)fluoranthene	13.90	252	187266	0.5893	ug/L	96
13) Benzo(a)pyrene	14.46	252	133608m	0.5713	ug/L	
15) Indeno(1,2,3-cd)pyrene	17.11	276	164485	0.5773	ug/L	96
16) Dibenzo(a,h)anthracene	17.12	278	139759	0.5765	ug/L	97

(#) = qualifier out of range (m) = manual integration

BM12790.D 1004SIM.M

Tue Jan 02 15:15:22 2018

SS

Page 1

Quantitation Report

Data File : G:\HPCHEM\B\DATA\20171228\BM12790.D

Vial: 3

Acq On : 28 Dec 2017 18:58

Operator: GCH

Sample : SEQ-CCV

Inst : GCMS-B

Misc :

Multiplr: 1.00

MS Integration Params: rteint.p

Quant Time: Dec 29 11:49 2017

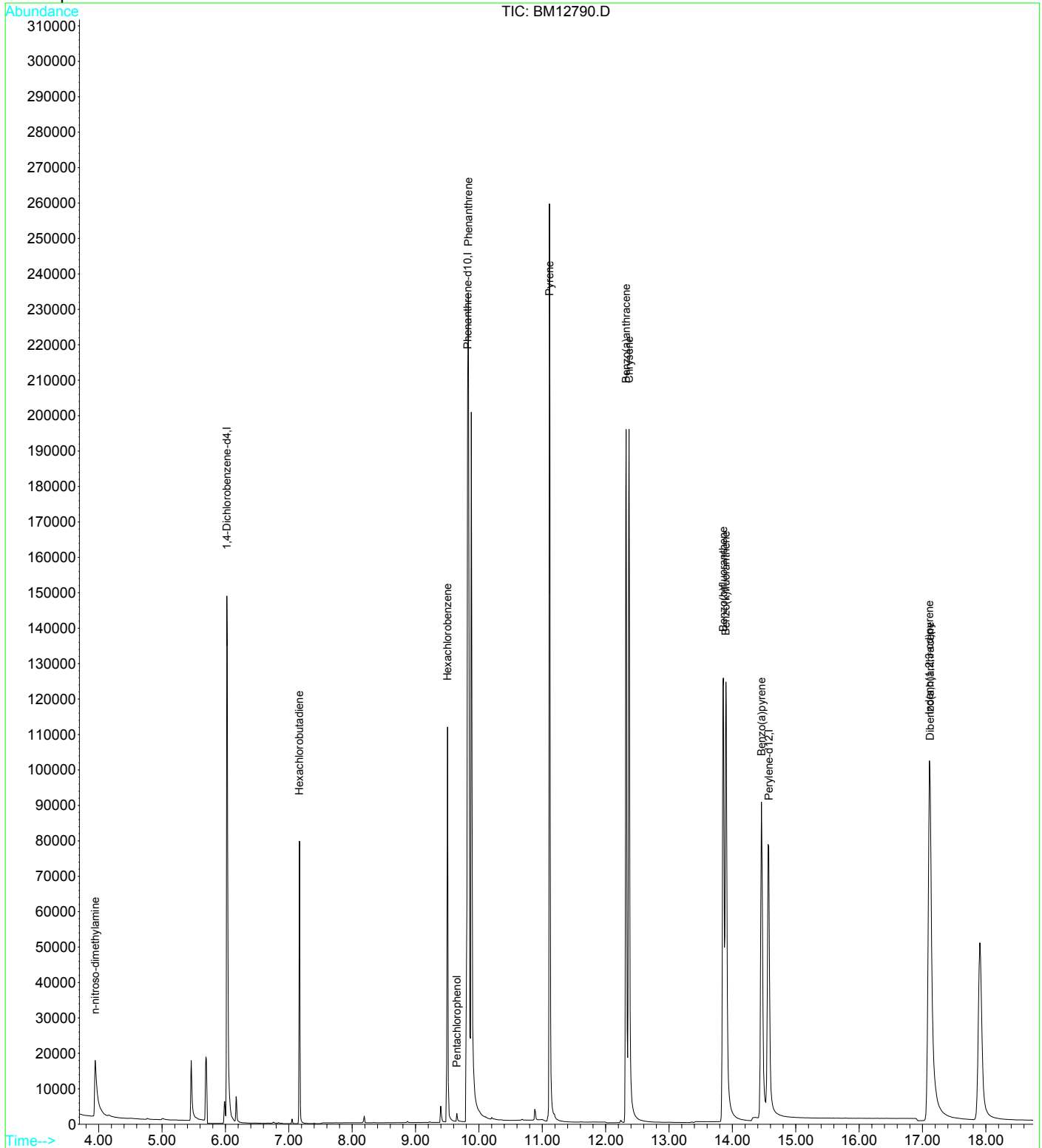
Quant Results File: 1004SIM.RES

Method : G:\HPCHEM\B\METHODS\1004SIM.M (RTE Integrator)

Title : Method 8270C Select Ion Monitoring

Last Update : Wed Nov 08 15:29:45 2017

Response via : Initial Calibration



BM12790.D 1004SIM.M

Tue Jan 02 15:15:22 2018

SS

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AQUA PRO-TECH LABORATORIES
Certified Environmental Testing

VOLATILES

Brown and Caldwell USR

Work Order: 7120696

Project: Patchogue

10

10.

ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260B

Client: Brown and Caldwell USR
Client Sample ID: Blank
Lab Sample ID: B7L2718-BLK1

Project: Patchogue
Work Order: 7120696

Init/Final Vol:	5 mL / 5 mL	Prep Date:	12/26/2017 17:07	File ID:	6V16312.D
		Prep Batch:	B7L2718	Analyzed:	12/26/2017 17:07
		Matrix:	Ground Water	Sequence:	S7L2804
		Prep Method:	PURGE & TRAP 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
71-43-2	Benzene	ND	0.129	1.00	U
100-41-4	EthylBenzene	ND	0.244	1.00	U
179601-23-1	m+p-Xylenes	ND	0.461	2.00	U
1634-04-4	Methyl tert-Butyl Ether	ND	0.596	1.00	U
95-47-6	o-Xylene	ND	0.244	1.00	U
75-65-0	tert-Butyl alcohol	ND	8.17	10.0	U
108-88-3	Toluene	ND	0.205	1.00	U
1330-20-7	Total Xylenes	ND	0.705	1.00	U

10
10.1.

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\6\DATA\12262017\6V16312.D
 Acq On : 26 Dec 2017 17:07
 Sample : B7L2718-BLK1
 Misc :

Vial: 5
 Operator: sdp
 Inst : GCMS-6
 Multiplr: 1.00

MS Integration Params: RTEINT.P
 Quant Time: Dec 28 13:29 2017

Quant Results File: 1114V06.RES

Quant Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)
 Title : VOC's by EPA Method 8260B
 Last Update : Sun Nov 26 15:00:58 2017
 Response via : Initial Calibration
 DataAcq Meth : VOCRUN6

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.65	168	804645	30.00	ug/L	0.00
33) 1,4-Difluorobenzene	7.78	114	1192559	30.00	ug/L	0.00
52) Chlorobenzene-d5	11.28	82	557263	30.00	ug/L	0.00
74) 1,4-Dichlorobenzene-d4	14.23	152	563733	30.00	ug/L	0.00

System Monitoring Compounds

26) Dibromofluoromethane	6.88	113	340500	30.41	ug/L	0.00
Spiked Amount	30.000	Range 75 - 123	Recovery	=	101.37%	
43) Toluene-d8	9.51	98	1387427	30.42	ug/L	0.00
Spiked Amount	30.000	Range 76 - 130	Recovery	=	101.40%	
62) 4-Bromofluorobenzene	12.75	95	500883	29.04	ug/L	0.00
Spiked Amount	30.000	Range 75 - 141	Recovery	=	96.80%	

Target Compounds

Qvalue

(#) = qualifier out of range (m) = manual integration

6V16312.D 1114V06.M Thu Dec 28 15:22:17 2017 SS

Page 1

Quantitation Report

Data File : G:\HPCHEM\6\DATA\12262017\6V16312.D

Vial: 5

Acq On : 26 Dec 2017 17:07

Operator: sdp

Sample : B7L2718-BLK1

Inst : GCMS-6

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 28 13:29 2017

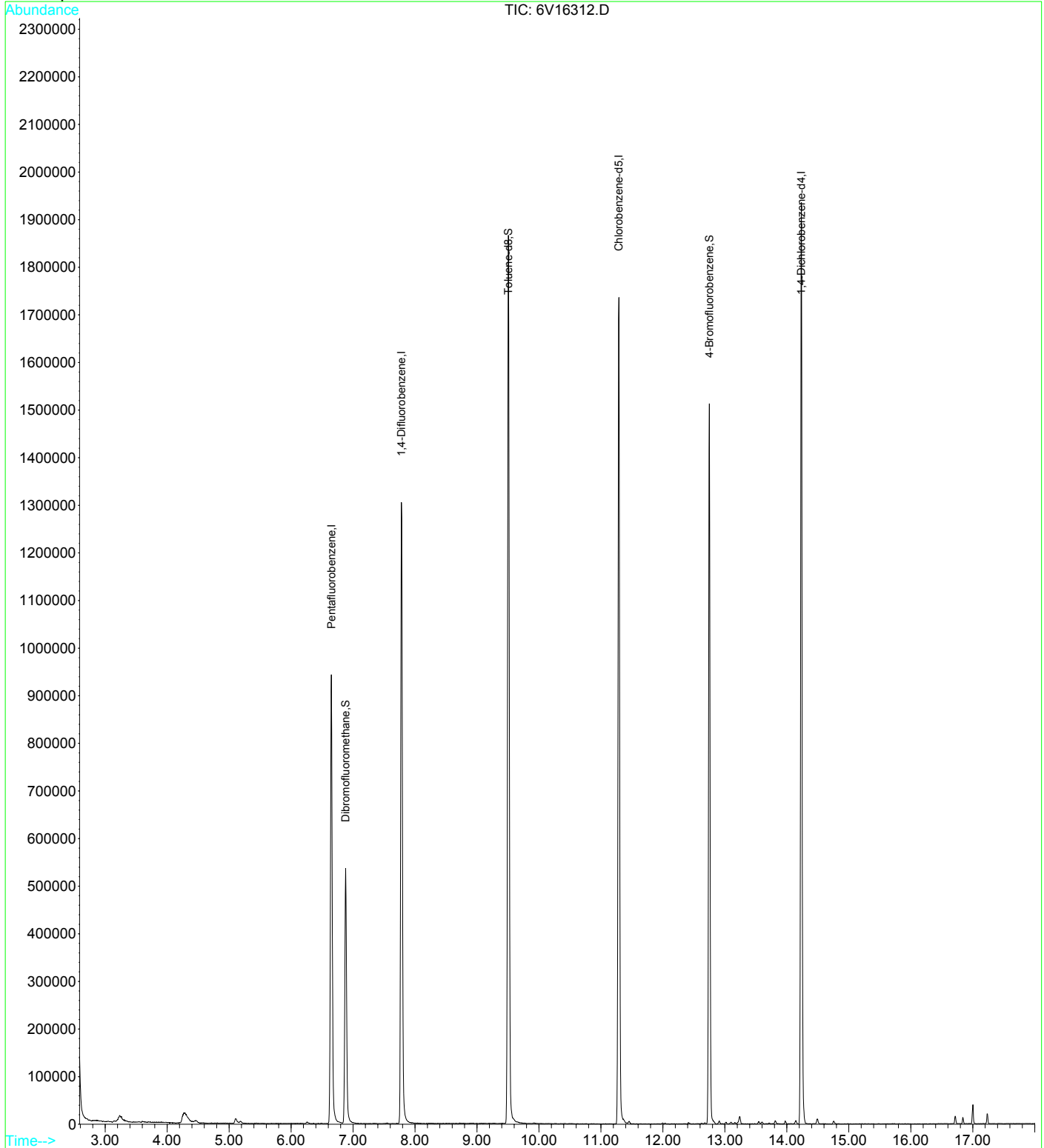
Quant Results File: 1114V06.RES

Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)

Title : VOC's by EPA Method 8260B

Last Update : Sun Nov 26 15:00:58 2017

Response via : Initial Calibration



6V16312.D 1114V06.M

Thu Dec 28 15:22:17 2017

SS

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10.1.

ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260B

Client: Brown and Caldwell USR
Client Sample ID: Blank
Lab Sample ID: B8A0226-BLK1

Project: Patchogue
Work Order: 7120696

Init/Final Vol:	5 mL / 5 mL	Prep Date:	12/29/2017 14:49	File ID:	6V16350.D
		Prep Batch:	B8A0226	Analyzed:	12/29/2017 14:49
		Matrix:	Ground Water	Sequence:	S8A0303
		Prep Method:	PURGE & TRAP 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
71-43-2	Benzene	ND	0.129	1.00	U
100-41-4	EthylBenzene	ND	0.244	1.00	U
179601-23-1	m+p-Xylenes	ND	0.461	2.00	U
1634-04-4	Methyl tert-Butyl Ether	ND	0.596	1.00	U
95-47-6	o-Xylene	ND	0.244	1.00	U
75-65-0	tert-Butyl alcohol	ND	8.17	10.0	U
108-88-3	Toluene	ND	0.205	1.00	U
1330-20-7	Total Xylenes	ND	0.705	1.00	U

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\6\DATA\12292017\6V16350.D Vial: 55
 Acq On : 29 Dec 2017 14:49 Operator: sdp
 Sample : B8A0226-BLK1 Inst : GCMS-6
 Misc : Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Jan 2 15:48 2018 Quant Results File: 1114V06.RES

Quant Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)
 Title : VOC's by EPA Method 8260B
 Last Update : Sun Nov 26 15:00:58 2017
 Response via : Initial Calibration
 DataAcq Meth : VOCRUN6

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.65	168	723600	30.00	ug/L	0.00
33) 1,4-Difluorobenzene	7.79	114	1075297	30.00	ug/L	0.00
52) Chlorobenzene-d5	11.29	82	500673	30.00	ug/L	0.00
74) 1,4-Dichlorobenzene-d4	14.23	152	509425	30.00	ug/L	0.00

System Monitoring Compounds

26) Dibromofluoromethane	6.88	113	310248	30.81	ug/L	0.00
Spiked Amount	30.000	Range 75 - 123	Recovery	=	102.70%	
43) Toluene-d8	9.51	98	1251636	30.43	ug/L	0.00
Spiked Amount	30.000	Range 76 - 130	Recovery	=	101.43%	
62) 4-Bromofluorobenzene	12.74	95	446009	28.78	ug/L	0.00
Spiked Amount	30.000	Range 75 - 141	Recovery	=	95.93%	

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
 6V16350.D 1114V06.M Tue Jan 02 17:54:49 2018 SS

Quantitation Report

Data File : G:\HPCHEM\6\DATA\12292017\6V16350.D

Vial: 55

Acq On : 29 Dec 2017 14:49

Operator: sdg

Sample : B8A0226-BLK1

Inst : GCMS-6

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Jan 2 15:48 2018

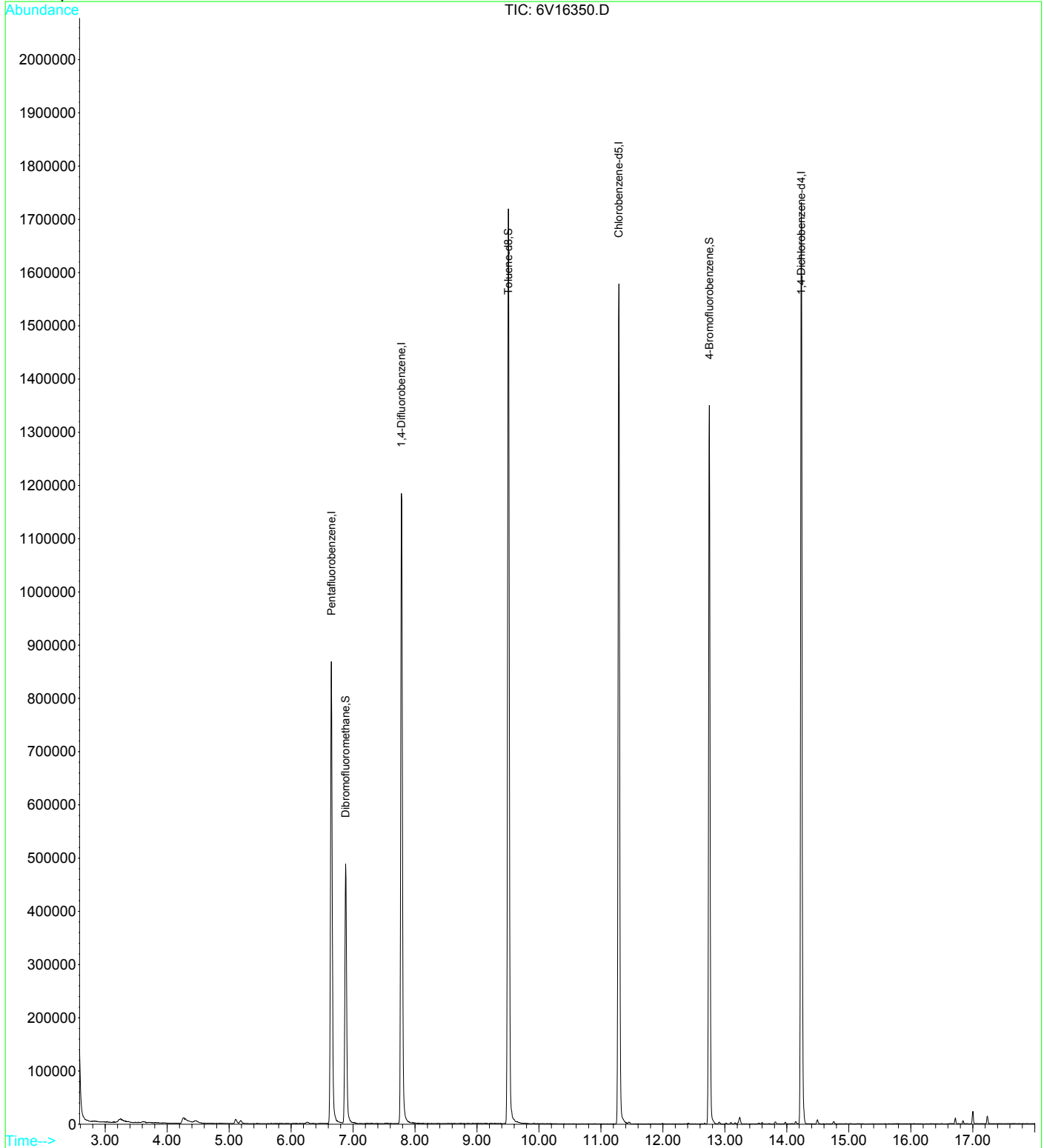
Quant Results File: 1114V06.RES

Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)

Title : VOC's by EPA Method 8260B

Last Update : Sun Nov 26 15:00:58 2017

Response via : Initial Calibration



6V16350.D 1114V06.M

Tue Jan 02 17:54:49 2018

SS

Page 2

ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260B

Client: Brown and Caldwell USR
Client Sample ID: MW-1 20171220
Lab Sample ID: 7120696-01
Project: Patchogue
Work Order: 7120696

Date Sampled:	12/20/17 12:49	Prep Date:	12/29/17 16:06	File ID:	6V16353.D
Init/Final Vol:	5 mL / 5 mL	Prep Batch:	B8A0226	Analyzed:	12/29/17 16:06
Dilution:	1	Matrix:	Ground Water	Sequence:	S8A0303
		Prep Method:	PURGE & TRAP 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
71-43-2	Benzene	ND	0.129	1.00	U
100-41-4	EthylBenzene	ND	0.244	1.00	U
179601-23-1	m+p-Xylenes	ND	0.461	2.00	U
1634-04-4	Methyl tert-Butyl Ether	ND	0.596	1.00	U
95-47-6	o-Xylene	ND	0.244	1.00	U
108-88-3	Toluene	ND	0.205	1.00	U
1330-20-7	Total Xylenes	ND	0.705	1.00	U

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

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

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\6\DATA\12292017\6V16353.D
 Acq On : 29 Dec 2017 16:06
 Sample : 7120696-01
 Misc :

Vial: 58
 Operator: sdp
 Inst : GCMS-6
 Multiplr: 1.00

MS Integration Params: RTEINT.P
 Quant Time: Jan 2 15:53 2018

Quant Results File: 1114V06.RES

Quant Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)
 Title : VOC's by EPA Method 8260B
 Last Update : Sun Nov 26 15:00:58 2017
 Response via : Initial Calibration
 DataAcq Meth : VOCRUN6

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.65	168	668405	30.00	ug/L	0.00
33) 1,4-Difluorobenzene	7.79	114	1019814	30.00	ug/L	0.00
52) Chlorobenzene-d5	11.29	82	472130	30.00	ug/L	0.00
74) 1,4-Dichlorobenzene-d4	14.23	152	477334	30.00	ug/L	0.00

System Monitoring Compounds

26) Dibromofluoromethane	6.88	113	294972	31.71	ug/L	0.00
Spiked Amount	30.000	Range 75 - 123	Recovery	=	105.70%	
43) Toluene-d8	9.51	98	1181154	30.28	ug/L	0.00
Spiked Amount	30.000	Range 76 - 130	Recovery	=	100.93%	
62) 4-Bromofluorobenzene	12.75	95	423274	28.97	ug/L	0.00
Spiked Amount	30.000	Range 75 - 141	Recovery	=	96.57%	

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
 6V16353.D 1114V06.M Tue Jan 02 17:54:54 2018 SS

Quantitation Report

Data File : G:\HPCHEM\6\DATA\12292017\6V16353.D

Vial: 58

Acq On : 29 Dec 2017 16:06

Operator: sdg

Sample : 7120696-01

Inst : GCMS-6

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Jan 2 15:53 2018

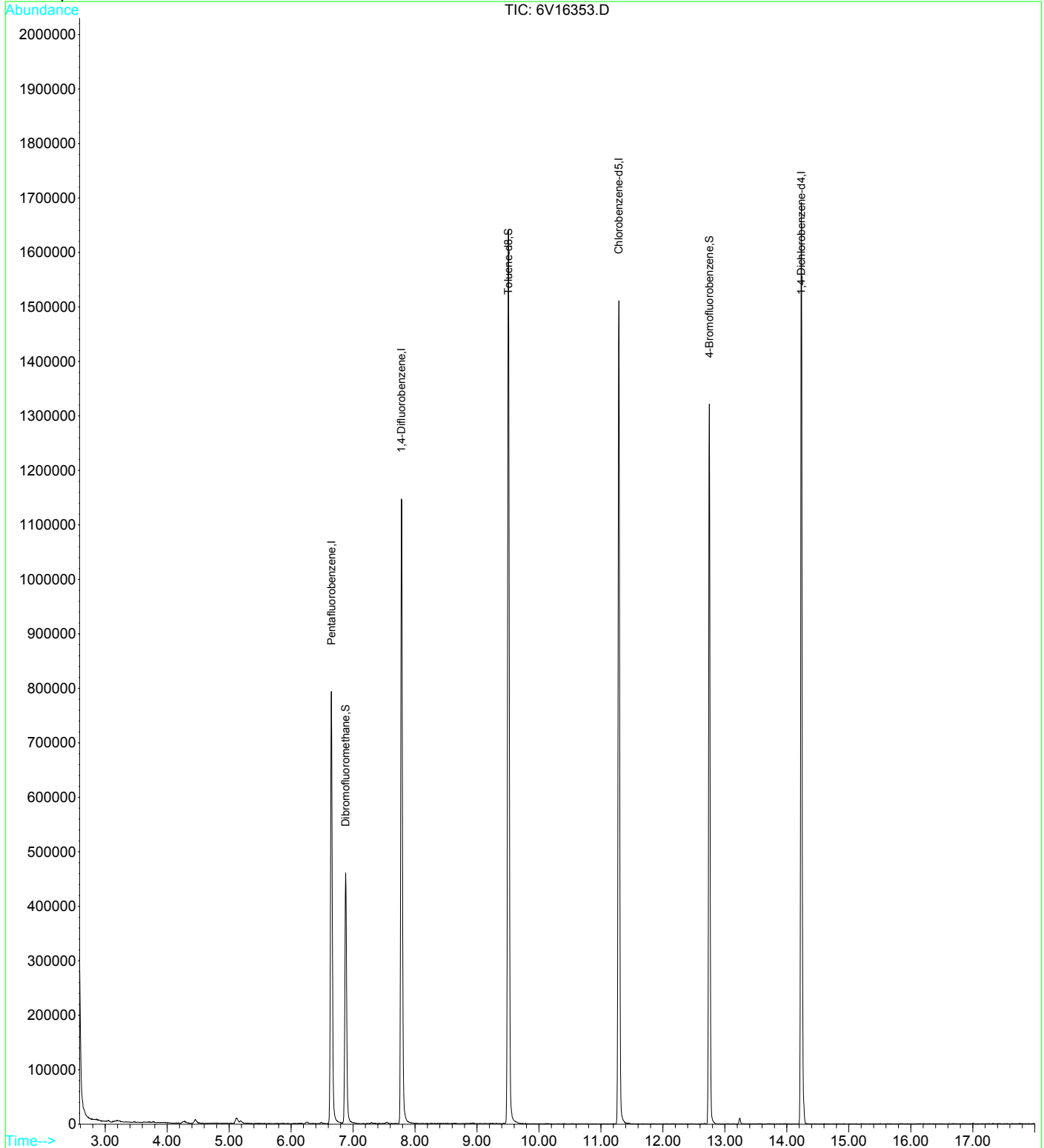
Quant Results File: 1114V06.RES

Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)

Title : VOC's by EPA Method 8260B

Last Update : Sun Nov 26 15:00:58 2017

Response via : Initial Calibration



6V16353.D 1114V06.M

Tue Jan 02 17:54:54 2018

SS

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10.2.

ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260B

Client: Brown and Caldwell USR
Client Sample ID: MW-7S 20171220
Lab Sample ID: 7120696-02
Project: Patchogue
Work Order: 7120696

Date Sampled:	12/20/17 14:11	Prep Date:	12/26/17 22:40	File ID:	6V16325.D
Init/Final Vol:	5 mL / 5 mL	Prep Batch:	B7L2718	Analyzed:	12/26/17 22:40
Dilution:	1	Matrix:	Ground Water	Sequence:	S7L2804
		Prep Method:	PURGE & TRAP 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
71-43-2	Benzene	ND	0.129	1.00	U
100-41-4	EthylBenzene	ND	0.244	1.00	U
179601-23-1	m+p-Xylenes	ND	0.461	2.00	U
1634-04-4	Methyl tert-Butyl Ether	ND	0.596	1.00	U
95-47-6	o-Xylene	ND	0.244	1.00	U
108-88-3	Toluene	ND	0.205	1.00	U
1330-20-7	Total Xylenes	ND	0.705	1.00	U

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

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

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\6\DATA\12262017\6V16325.D
 Acq On : 26 Dec 2017 22:40
 Sample : 7120696-02
 Misc :

Vial: 18
 Operator: sdp
 Inst : GCMS-6
 Multiplr: 1.00

MS Integration Params: RTEINT.P
 Quant Time: Dec 28 13:35 2017

Quant Results File: 1114V06.RES

Quant Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)
 Title : VOC's by EPA Method 8260B
 Last Update : Sun Nov 26 15:00:58 2017
 Response via : Initial Calibration
 DataAcq Meth : VOCRUN6

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.65	168	718038	30.00	ug/L	0.00
33) 1,4-Difluorobenzene	7.79	114	1136142	30.00	ug/L	0.00
52) Chlorobenzene-d5	11.29	82	529087	30.00	ug/L	0.00
74) 1,4-Dichlorobenzene-d4	14.23	152	546400	30.00	ug/L	0.00

System Monitoring Compounds

26) Dibromofluoromethane	6.88	113	323706	32.40	ug/L	0.00
Spiked Amount	30.000	Range 75 - 123	Recovery	=	108.00%	
43) Toluene-d8	9.51	98	1330483	30.62	ug/L	0.00
Spiked Amount	30.000	Range 76 - 130	Recovery	=	102.07%	
62) 4-Bromofluorobenzene	12.75	95	477520	29.16	ug/L	0.00
Spiked Amount	30.000	Range 75 - 141	Recovery	=	97.20%	

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
 6V16325.D 1114V06.M Thu Dec 28 15:22:35 2017 SS

Quantitation Report

Data File : G:\HPCHEM\6\DATA\12262017\6V16325.D

Vial: 18

Acq On : 26 Dec 2017 22:40

Operator: sdg

Sample : 7120696-02

Inst : GCMS-6

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 28 13:35 2017

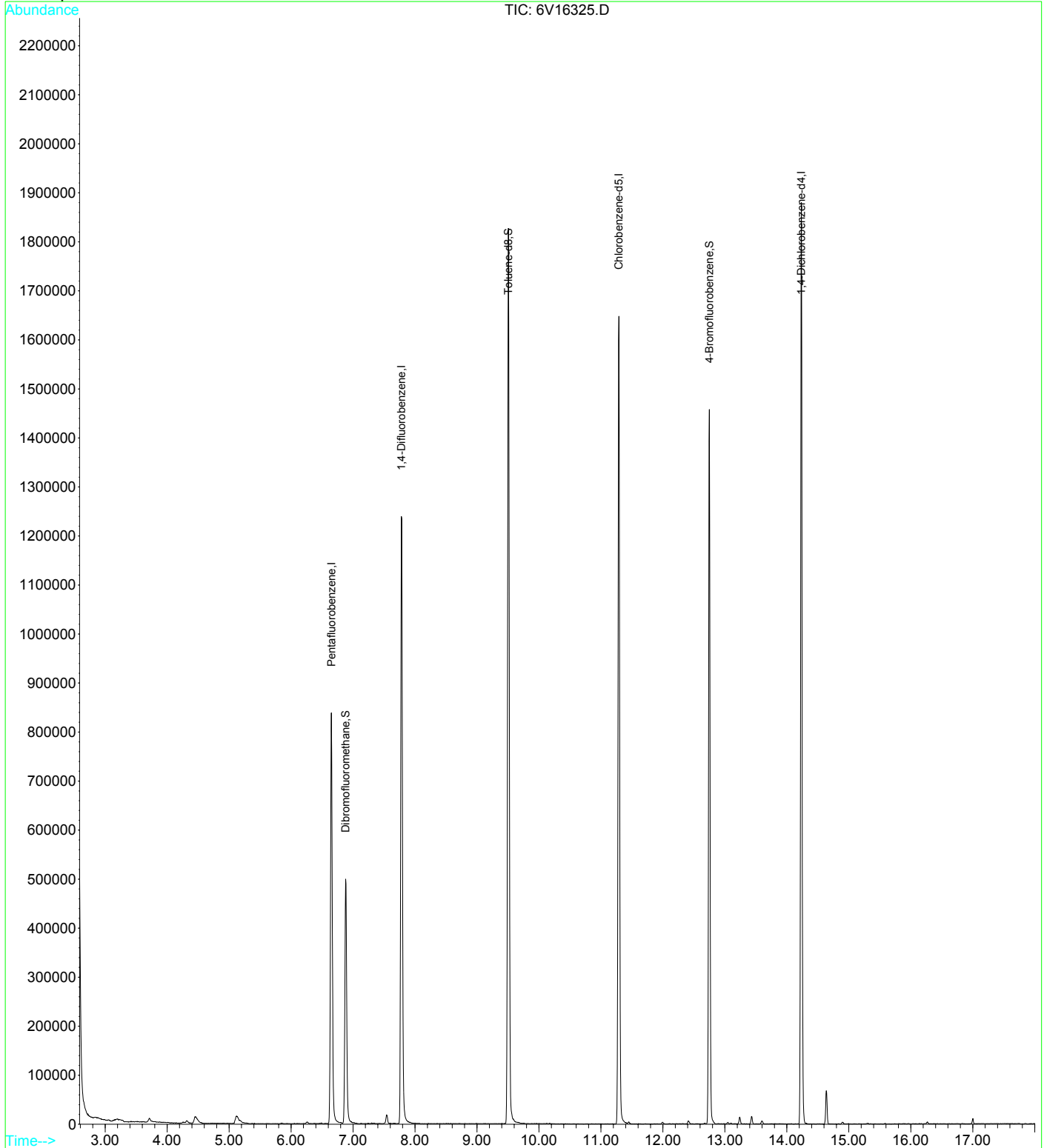
Quant Results File: 1114V06.RES

Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)

Title : VOC's by EPA Method 8260B

Last Update : Sun Nov 26 15:00:58 2017

Response via : Initial Calibration



6V16325.D 1114V06.M

Thu Dec 28 15:22:35 2017

SS

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10.2.

ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260B

Client: Brown and Caldwell USR
Client Sample ID: MW-7D 20171220
Lab Sample ID: 7120696-03
Project: Patchogue
Work Order: 7120696

Date Sampled:	12/20/17 15:05	Prep Date:	12/26/17 23:06	File ID:	6V16326.D
Init/Final Vol:	5 mL / 5 mL	Prep Batch:	B7L2718	Analyzed:	12/26/17 23:06
Dilution:	1	Matrix:	Ground Water	Sequence:	S7L2804
		Prep Method:	PURGE & TRAP 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
71-43-2	Benzene	ND	0.129	1.00	U
100-41-4	EthylBenzene	ND	0.244	1.00	U
179601-23-1	m+p-Xylenes	ND	0.461	2.00	U
1634-04-4	Methyl tert-Butyl Ether	ND	0.596	1.00	U
95-47-6	o-Xylene	ND	0.244	1.00	U
108-88-3	Toluene	ND	0.205	1.00	U
1330-20-7	Total Xylenes	ND	0.705	1.00	U

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

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

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\6\DATA\12262017\6V16326.D
 Acq On : 26 Dec 2017 23:06
 Sample : 7120696-03
 Misc :

Vial: 19
 Operator: sdp
 Inst : GCMS-6
 Multiplr: 1.00

MS Integration Params: RTEINT.P
 Quant Time: Dec 28 13:35 2017

Quant Results File: 1114V06.RES

Quant Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)
 Title : VOC's by EPA Method 8260B
 Last Update : Sun Nov 26 15:00:58 2017
 Response via : Initial Calibration
 DataAcq Meth : VOCRUN6

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.65	168	706896	30.00	ug/L	0.00
33) 1,4-Difluorobenzene	7.78	114	1115190	30.00	ug/L	0.00
52) Chlorobenzene-d5	11.28	82	520175	30.00	ug/L	0.00
74) 1,4-Dichlorobenzene-d4	14.23	152	525253	30.00	ug/L	0.00

System Monitoring Compounds

26) Dibromofluoromethane	6.88	113	321567	32.69	ug/L	0.00
Spiked Amount	30.000	Range 75 - 123	Recovery	=	108.97%	
43) Toluene-d8	9.51	98	1309915	30.71	ug/L	0.00
Spiked Amount	30.000	Range 76 - 130	Recovery	=	102.37%	
62) 4-Bromofluorobenzene	12.74	95	467185	29.02	ug/L	0.00
Spiked Amount	30.000	Range 75 - 141	Recovery	=	96.73%	

Target Compounds

Qvalue

(#) = qualifier out of range (m) = manual integration
 6V16326.D 1114V06.M Thu Dec 28 15:22:37 2017 SS

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Quantitation Report

Data File : G:\HPCHEM\6\DATA\12262017\6V16326.D

Vial: 19

Acq On : 26 Dec 2017 23:06

Operator: sdg

Sample : 7120696-03

Inst : GCMS-6

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 28 13:35 2017

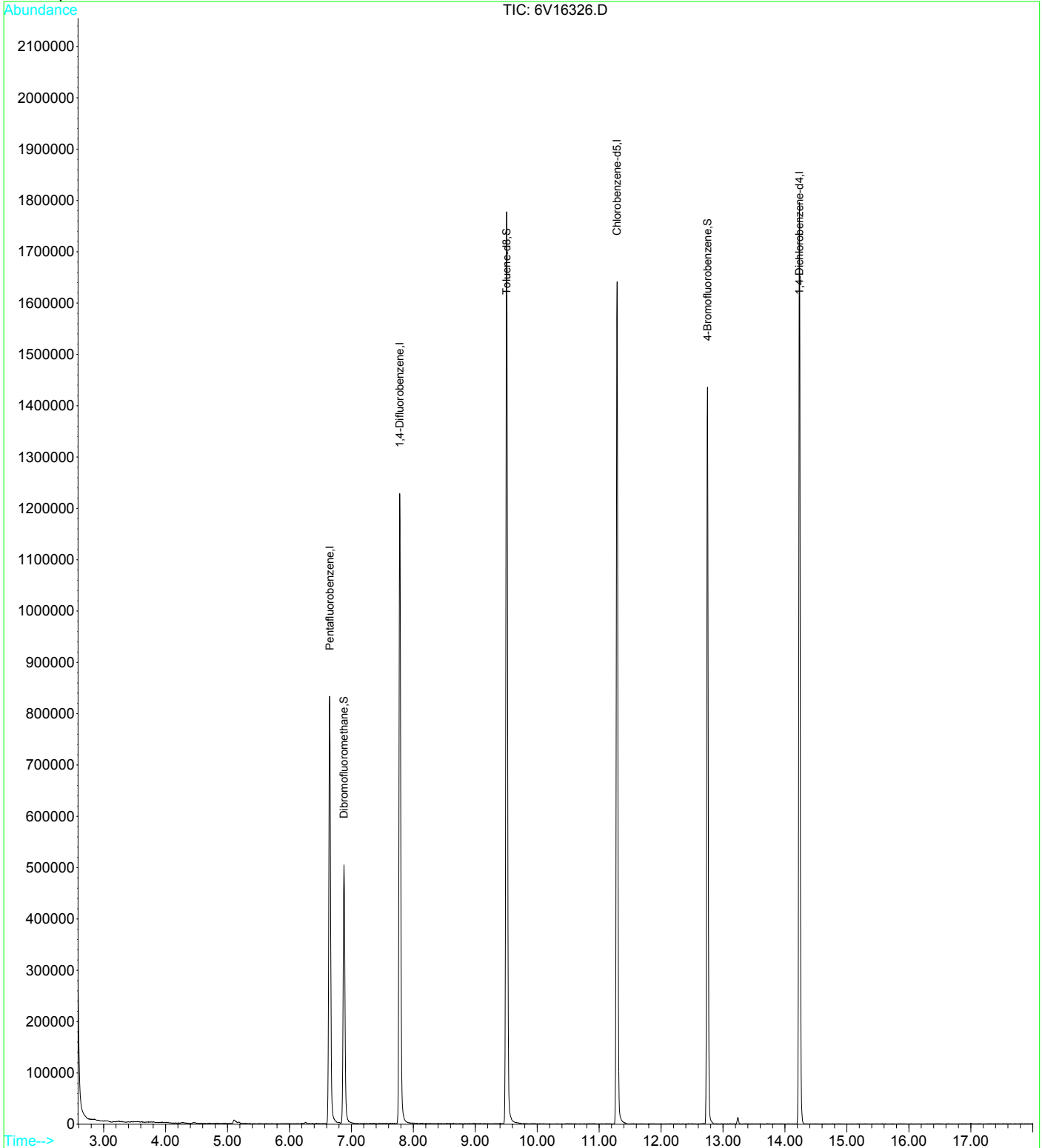
Quant Results File: 1114V06.RES

Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)

Title : VOC's by EPA Method 8260B

Last Update : Sun Nov 26 15:00:58 2017

Response via : Initial Calibration



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Thu Dec 28 15:22:37 2017

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10.2.

ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260B

Client: Brown and Caldwell USR
Client Sample ID: MW-8S 20171220
Lab Sample ID: 7120696-04
Project: Patchogue
Work Order: 7120696

Date Sampled:	12/20/17 16:09	Prep Date:	12/26/17 23:32	File ID:	6V16327.D
Init/Final Vol:	5 mL / 5 mL	Prep Batch:	B7L2718	Analyzed:	12/26/17 23:32
Dilution:	1	Matrix:	Ground Water	Sequence:	S7L2804
		Prep Method:	PURGE & TRAP 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
71-43-2	Benzene	ND	0.129	1.00	U
100-41-4	EthylBenzene	ND	0.244	1.00	U
179601-23-1	m+p-Xylenes	ND	0.461	2.00	U
1634-04-4	Methyl tert-Butyl Ether	ND	0.596	1.00	U
95-47-6	o-Xylene	ND	0.244	1.00	U
108-88-3	Toluene	ND	0.205	1.00	U
1330-20-7	Total Xylenes	ND	0.705	1.00	U

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

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

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\6\DATA\12262017\6V16327.D
 Acq On : 26 Dec 2017 23:32
 Sample : 7120696-04
 Misc :

Vial: 20
 Operator: sdp
 Inst : GCMS-6
 Multiplr: 1.00

MS Integration Params: RTEINT.P
 Quant Time: Dec 28 13:36 2017

Quant Results File: 1114V06.RES

Quant Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)
 Title : VOC's by EPA Method 8260B
 Last Update : Sun Nov 26 15:00:58 2017
 Response via : Initial Calibration
 DataAcq Meth : VOCRUN6

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.65	168	708661	30.00	ug/L	0.00
33) 1,4-Difluorobenzene	7.79	114	1112162	30.00	ug/L	0.00
52) Chlorobenzene-d5	11.29	82	521990	30.00	ug/L	0.00
74) 1,4-Dichlorobenzene-d4	14.23	152	517797	30.00	ug/L	0.00

System Monitoring Compounds

26) Dibromofluoromethane	6.88	113	320976	32.55	ug/L	0.00
Spiked Amount	30.000	Range 75 - 123	Recovery	=	108.50%	
43) Toluene-d8	9.51	98	1294008	30.42	ug/L	0.00
Spiked Amount	30.000	Range 76 - 130	Recovery	=	101.40%	
62) 4-Bromofluorobenzene	12.75	95	461937	28.59	ug/L	0.00
Spiked Amount	30.000	Range 75 - 141	Recovery	=	95.30%	

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
 6V16327.D 1114V06.M Thu Dec 28 15:22:38 2017 SS

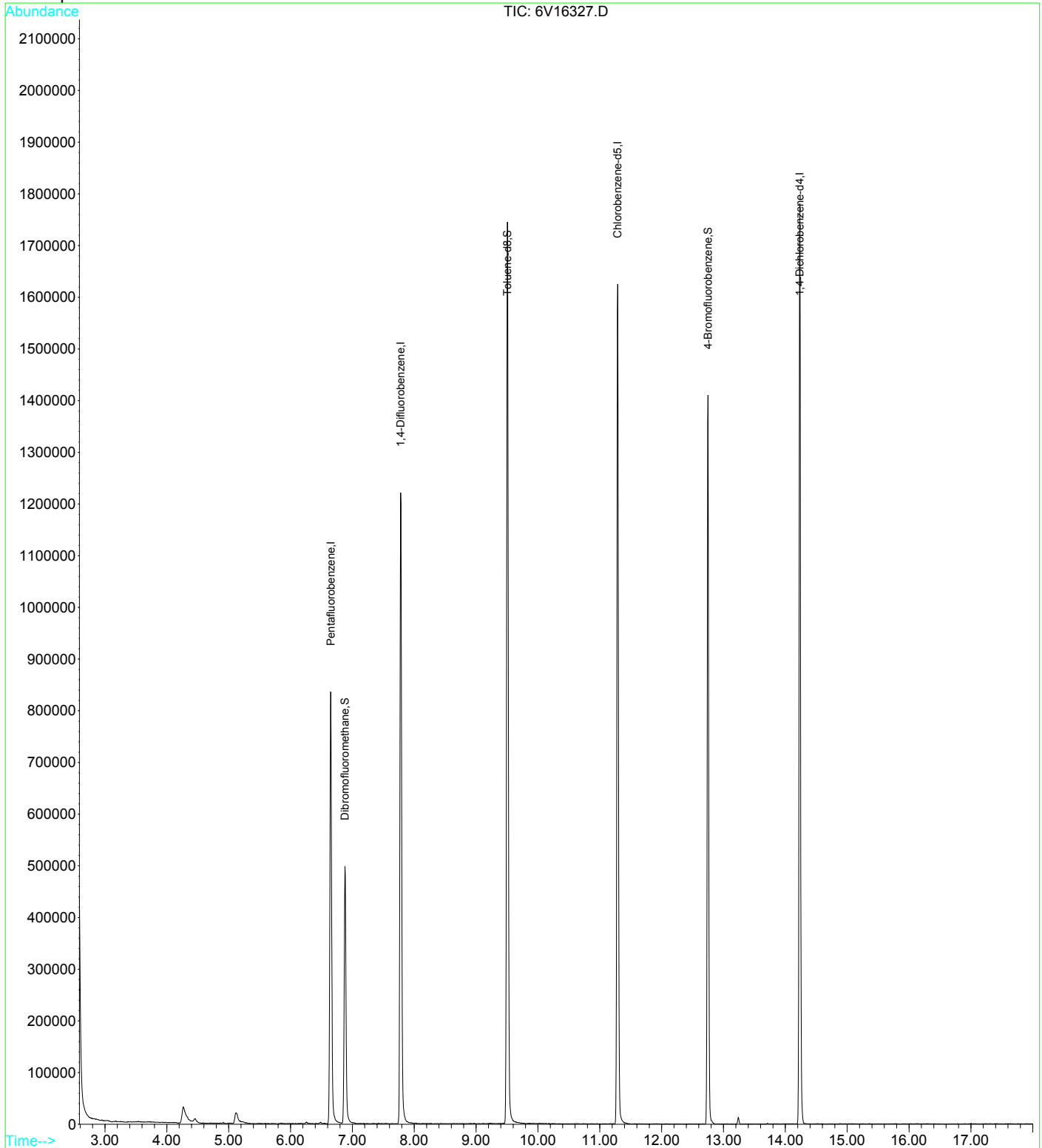
Quantitation Report

Data File : G:\HPCHEM\6\DATA\12262017\6V16327.D
Acq On : 26 Dec 2017 23:32
Sample : 7120696-04
Misc :
MS Integration Params: RTEINT.P
Quant Time: Dec 28 13:36 2017

Vial: 20
Operator: sdg
Inst : GCMS-6
Multiplr: 1.00

Quant Results File: 1114V06.RES

Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)
Title : VOC's by EPA Method 8260B
Last Update : Sun Nov 26 15:00:58 2017
Response via : Initial Calibration



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Thu Dec 28 15:22:38 2017

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10.2.

ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260B

Client: Brown and Caldwell USR
Client Sample ID: MW-8D 20171220
Lab Sample ID: 7120696-05
Project: Patchogue
Work Order: 7120696

Date Sampled:	12/20/17 16:49	Prep Date:	12/26/17 23:58	File ID:	6V16328.D
Init/Final Vol:	5 mL / 5 mL	Prep Batch:	B7L2718	Analyzed:	12/26/17 23:58
Dilution:	1	Matrix:	Ground Water	Sequence:	S7L2804
		Prep Method:	PURGE & TRAP 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
71-43-2	Benzene	ND	0.129	1.00	U
100-41-4	EthylBenzene	ND	0.244	1.00	U
179601-23-1	m+p-Xylenes	ND	0.461	2.00	U
1634-04-4	Methyl tert-Butyl Ether	ND	0.596	1.00	U
95-47-6	o-Xylene	ND	0.244	1.00	U
108-88-3	Toluene	ND	0.205	1.00	U
1330-20-7	Total Xylenes	ND	0.705	1.00	U

10
10.2.

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

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

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\6\DATA\12262017\6V16328.D
 Acq On : 26 Dec 2017 23:58
 Sample : 7120696-05
 Misc :

Vial: 21
 Operator: sdp
 Inst : GCMS-6
 Multiplr: 1.00

MS Integration Params: RTEINT.P
 Quant Time: Dec 28 14:04 2017

Quant Results File: 1114V06.RES

Quant Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)
 Title : VOC's by EPA Method 8260B
 Last Update : Sun Nov 26 15:00:58 2017
 Response via : Initial Calibration
 DataAcq Meth : VOCRUN6

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.65	168	702039	30.00	ug/L	0.00
33) 1,4-Difluorobenzene	7.78	114	1107495	30.00	ug/L	0.00
52) Chlorobenzene-d5	11.29	82	513338	30.00	ug/L	0.00
74) 1,4-Dichlorobenzene-d4	14.23	152	516530	30.00	ug/L	0.00

System Monitoring Compounds

26) Dibromofluoromethane	6.88	113	316050	32.35	ug/L	0.00
Spiked Amount	30.000	Range 75 - 123	Recovery	=	107.83%	
43) Toluene-d8	9.51	98	1294894	30.57	ug/L	0.00
Spiked Amount	30.000	Range 76 - 130	Recovery	=	101.90%	
62) 4-Bromofluorobenzene	12.75	95	452699	28.49	ug/L	0.00
Spiked Amount	30.000	Range 75 - 141	Recovery	=	94.97%	

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
 6V16328.D 1114V06.M Thu Dec 28 15:22:40 2017 SS

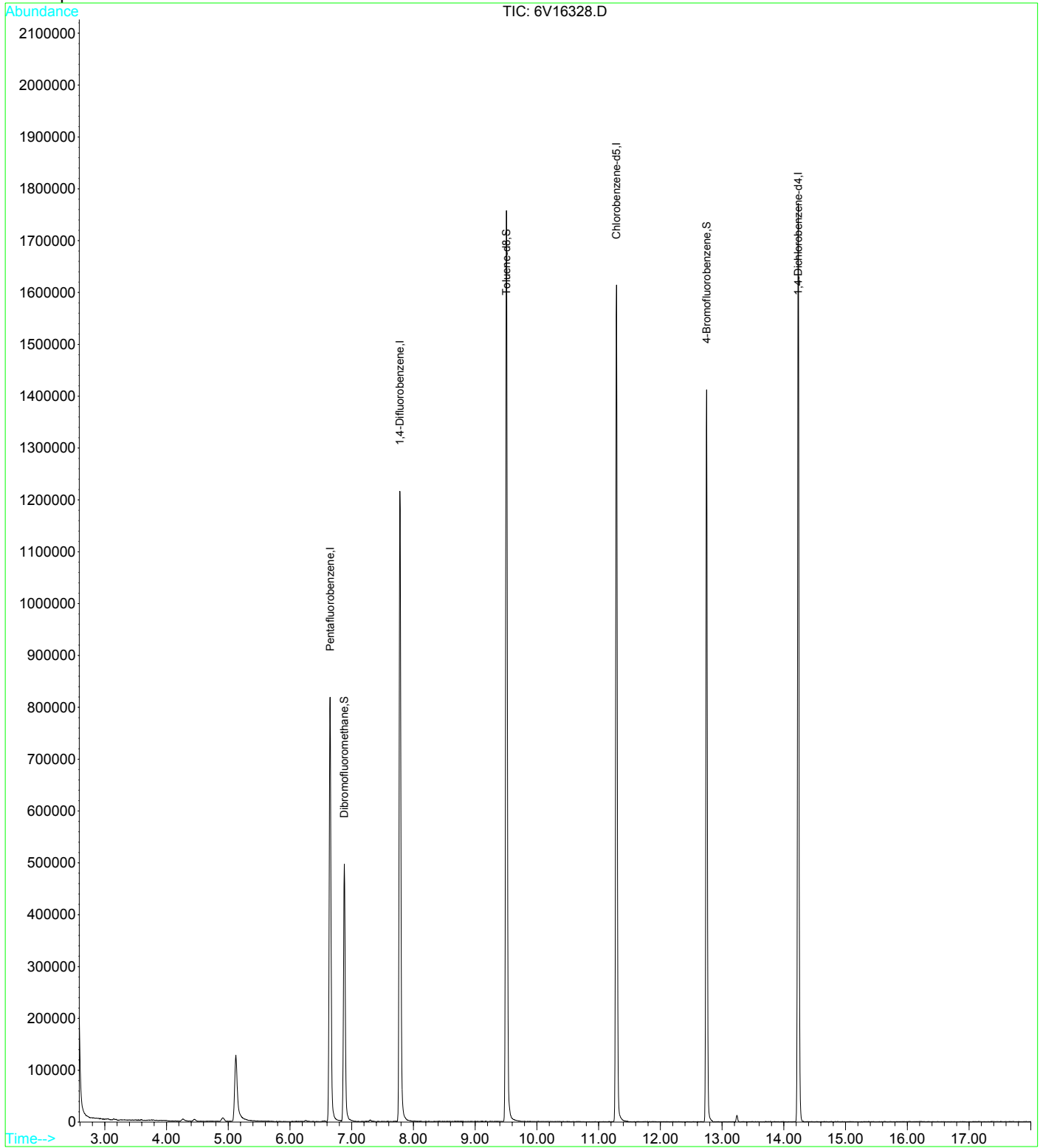
Quantitation Report

Data File : G:\HPCHEM\6\DATA\12262017\6V16328.D
Acq On : 26 Dec 2017 23:58
Sample : 7120696-05
Misc :
MS Integration Params: RTEINT.P
Quant Time: Dec 28 14:04 2017

Vial: 21
Operator: sdg
Inst : GCMS-6
Multiplr: 1.00

Quant Results File: 1114V06.RES

Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)
Title : VOC's by EPA Method 8260B
Last Update : Sun Nov 26 15:00:58 2017
Response via : Initial Calibration



6V16328.D 1114V06.M

Thu Dec 28 15:22:40 2017

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10.2.

ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260B

Client: Brown and Caldwell USR
Client Sample ID: MW-4S 20171221
Lab Sample ID: 7120696-06
Project: Patchogue
Work Order: 7120696

Date Sampled:	12/21/17 08:42	Prep Date:	12/27/17 00:23	File ID:	6V16329.D
Init/Final Vol:	5 mL / 5 mL	Prep Batch:	B7L2718	Analyzed:	12/27/17 00:23
Dilution:	1	Matrix:	Ground Water	Sequence:	S7L2804
		Prep Method:	PURGE & TRAP 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
71-43-2	Benzene	ND	0.129	1.00	U
100-41-4	EthylBenzene	ND	0.244	1.00	U
179601-23-1	m+p-Xylenes	ND	0.461	2.00	U
1634-04-4	Methyl tert-Butyl Ether	ND	0.596	1.00	U
95-47-6	o-Xylene	ND	0.244	1.00	U
108-88-3	Toluene	ND	0.205	1.00	U
1330-20-7	Total Xylenes	ND	0.705	1.00	U

10
10.2.

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

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

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\6\DATA\12262017\6V16329.D
 Acq On : 27 Dec 2017 00:23
 Sample : 7120696-06
 Misc :

Vial: 22
 Operator: sdp
 Inst : GCMS-6
 Multiplr: 1.00

MS Integration Params: RTEINT.P
 Quant Time: Dec 28 14:05 2017

Quant Results File: 1114V06.RES

Quant Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)
 Title : VOC's by EPA Method 8260B
 Last Update : Sun Nov 26 15:00:58 2017
 Response via : Initial Calibration
 DataAcq Meth : VOCRUN6

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.65	168	685746	30.00	ug/L	0.00
33) 1,4-Difluorobenzene	7.78	114	1083459	30.00	ug/L	0.00
52) Chlorobenzene-d5	11.29	82	506231	30.00	ug/L	0.00
74) 1,4-Dichlorobenzene-d4	14.23	152	513308	30.00	ug/L	0.00

System Monitoring Compounds

26) Dibromofluoromethane	6.88	113	311746	32.67	ug/L	0.00
Spiked Amount 30.000	Range 75 - 123		Recovery =	108.90%		
43) Toluene-d8	9.51	98	1262298	30.46	ug/L	0.00
Spiked Amount 30.000	Range 76 - 130		Recovery =	101.53%		
62) 4-Bromofluorobenzene	12.75	95	446362	28.49	ug/L	0.00
Spiked Amount 30.000	Range 75 - 141		Recovery =	94.97%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
 6V16329.D 1114V06.M Thu Dec 28 15:22:41 2017 SS

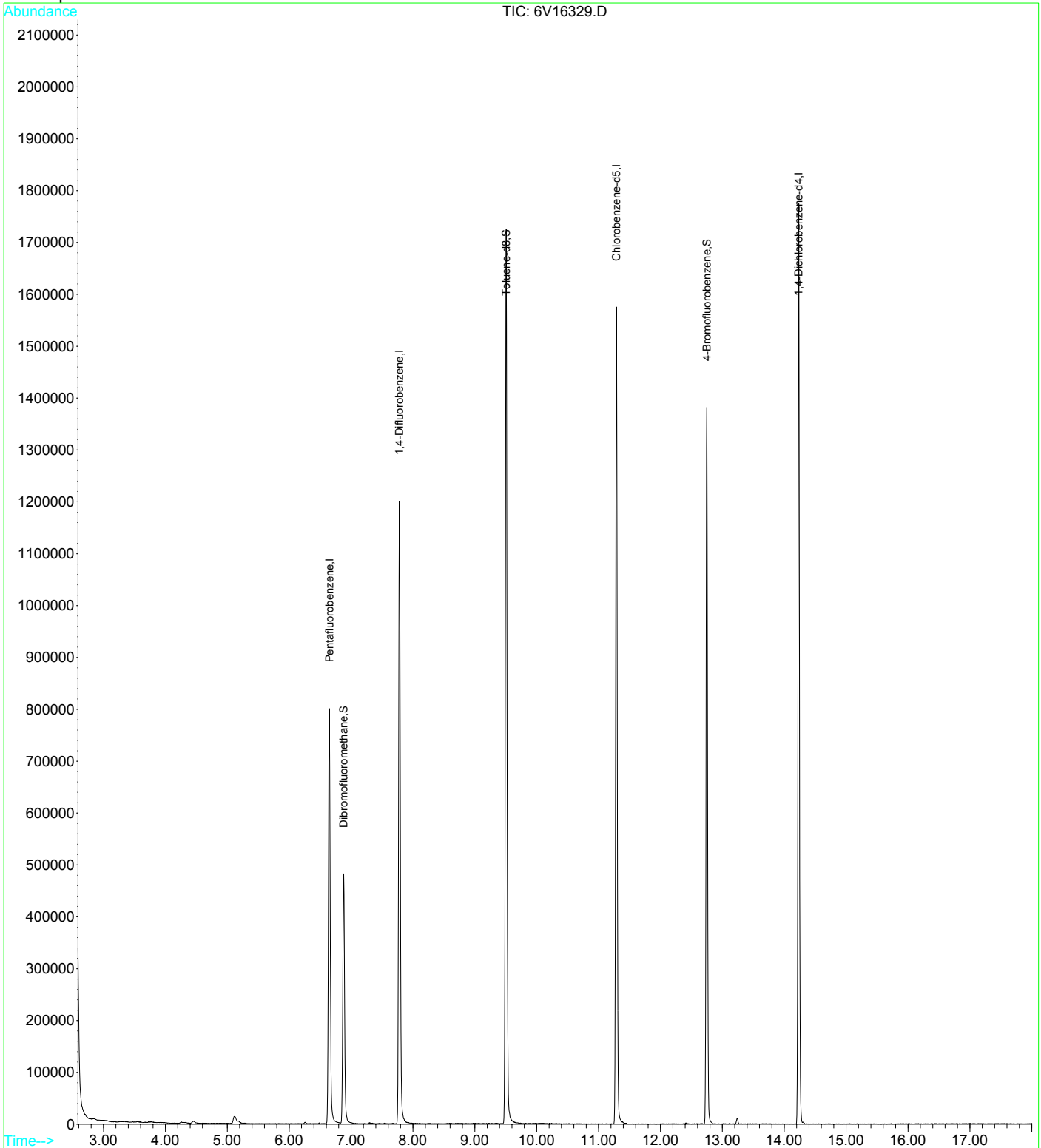
Quantitation Report

Data File : G:\HPCHEM\6\DATA\12262017\6V16329.D
Acq On : 27 Dec 2017 00:23
Sample : 7120696-06
Misc :
MS Integration Params: RTEINT.P
Quant Time: Dec 28 14:05 2017

Vial: 22
Operator: sdg
Inst : GCMS-6
Multiplr: 1.00

Quant Results File: 1114V06.RES

Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)
Title : VOC's by EPA Method 8260B
Last Update : Sun Nov 26 15:00:58 2017
Response via : Initial Calibration



6V16329.D 1114V06.M

Thu Dec 28 15:22:41 2017

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10.2.

ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260B

Client: Brown and Caldwell USR
Client Sample ID: MW-4D 20171221
Lab Sample ID: 7120696-07
Project: Patchogue
Work Order: 7120696

Date Sampled:	12/21/17 09:53	Prep Date:	12/27/17 00:49	File ID:	6V16330.D
Init/Final Vol:	5 mL / 5 mL	Prep Batch:	B7L2718	Analyzed:	12/27/17 00:49
Dilution:	1	Matrix:	Ground Water	Sequence:	S7L2804
		Prep Method:	PURGE & TRAP 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
71-43-2	Benzene	ND	0.129	1.00	U
100-41-4	EthylBenzene	ND	0.244	1.00	U
179601-23-1	m+p-Xylenes	ND	0.461	2.00	U
1634-04-4	Methyl tert-Butyl Ether	ND	0.596	1.00	U
95-47-6	o-Xylene	ND	0.244	1.00	U
108-88-3	Toluene	ND	0.205	1.00	U
1330-20-7	Total Xylenes	ND	0.705	1.00	U

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10.2.

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

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

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\6\DATA\12262017\6V16330.D
 Acq On : 27 Dec 2017 00:49
 Sample : 7120696-07
 Misc :

Vial: 23
 Operator: sdp
 Inst : GCMS-6
 Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 28 14:05 2017

Quant Results File: 1114V06.RES

Quant Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)

Title : VOC's by EPA Method 8260B

Last Update : Sun Nov 26 15:00:58 2017

Response via : Initial Calibration

DataAcq Meth : VOCRUN6

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.65	168	686683	30.00	ug/L	0.00
33) 1,4-Difluorobenzene	7.78	114	1088244	30.00	ug/L	0.00
52) Chlorobenzene-d5	11.29	82	493708	30.00	ug/L	0.00
74) 1,4-Dichlorobenzene-d4	14.23	152	509183	30.00	ug/L	0.00

System Monitoring Compounds

26) Dibromofluoromethane	6.88	113	310428	32.49	ug/L	0.00
Spiked Amount	30.000	Range 75 - 123	Recovery	=	108.30%	
43) Toluene-d8	9.51	98	1249666	30.02	ug/L	0.00
Spiked Amount	30.000	Range 76 - 130	Recovery	=	100.07%	
62) 4-Bromofluorobenzene	12.75	95	443365	29.01	ug/L	0.00
Spiked Amount	30.000	Range 75 - 141	Recovery	=	96.70%	

Target Compounds

Qvalue

(#) = qualifier out of range (m) = manual integration

6V16330.D 1114V06.M Thu Dec 28 15:22:43 2017 SS

Page 1

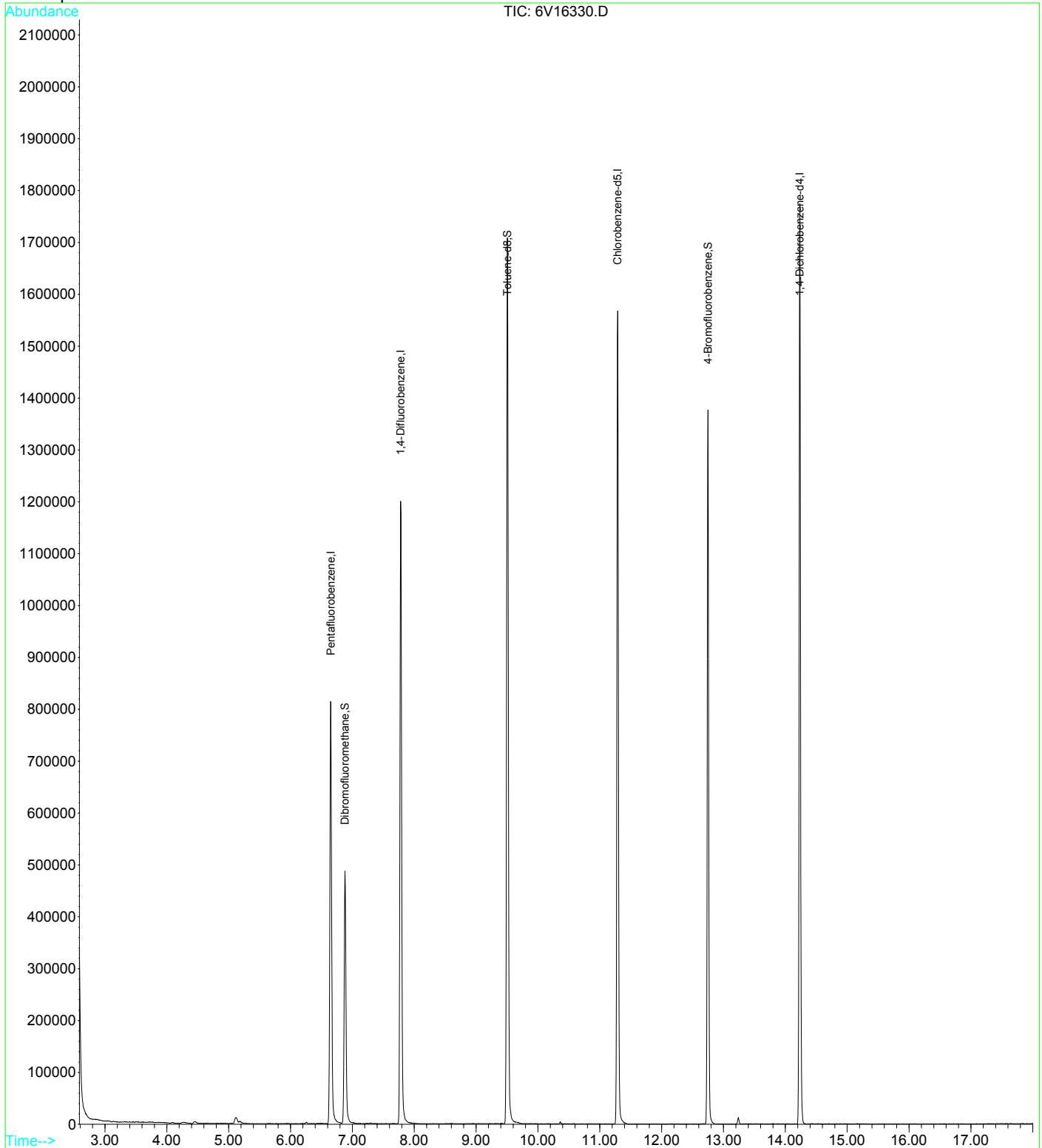
Quantitation Report

Data File : G:\HPCHEM\6\DATA\12262017\6V16330.D
Acq On : 27 Dec 2017 00:49
Sample : 7120696-07
Misc :
MS Integration Params: RTEINT.P
Quant Time: Dec 28 14:05 2017

Vial: 23
Operator: sdg
Inst : GCMS-6
Multiplr: 1.00

Quant Results File: 1114V06.RES

Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)
Title : VOC's by EPA Method 8260B
Last Update : Sun Nov 26 15:00:58 2017
Response via : Initial Calibration



6V16330.D 1114V06.M

Thu Dec 28 15:22:43 2017

SS

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10.2.

ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260B

Client: Brown and Caldwell USR
Client Sample ID: MW-3 20171221
Lab Sample ID: 7120696-08
Project: Patchogue
Work Order: 7120696

Date Sampled:	12/21/17 10:43	Prep Date:	12/27/17 01:14	File ID:	6V16331.D
Init/Final Vol:	5 mL / 5 mL	Prep Batch:	B7L2718	Analyzed:	12/27/17 01:14
Dilution:	1	Matrix:	Ground Water	Sequence:	S7L2804
		Prep Method:	PURGE & TRAP 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
71-43-2	Benzene	ND	0.129	1.00	U
100-41-4	EthylBenzene	ND	0.244	1.00	U
179601-23-1	m+p-Xylenes	ND	0.461	2.00	U
1634-04-4	Methyl tert-Butyl Ether	ND	0.596	1.00	U
95-47-6	o-Xylene	ND	0.244	1.00	U
108-88-3	Toluene	ND	0.205	1.00	U
1330-20-7	Total Xylenes	ND	0.705	1.00	U

10
10.2.

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

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

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\6\DATA\12262017\6V16331.D
 Acq On : 27 Dec 2017 1:14
 Sample : 7120696-08
 Misc :

Vial: 24
 Operator: sdp
 Inst : GCMS-6
 Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 28 14:05 2017

Quant Results File: 1114V06.RES

Quant Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)

Title : VOC's by EPA Method 8260B

Last Update : Sun Nov 26 15:00:58 2017

Response via : Initial Calibration

DataAcq Meth : VOCRUN6

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.65	168	694968	30.00	ug/L	0.00
33) 1,4-Difluorobenzene	7.78	114	1096888	30.00	ug/L	0.00
52) Chlorobenzene-d5	11.28	82	500903	30.00	ug/L	0.00
74) 1,4-Dichlorobenzene-d4	14.23	152	518416	30.00	ug/L	0.00

System Monitoring Compounds

26) Dibromofluoromethane	6.88	113	315917	32.67	ug/L	0.00
Spiked Amount	30.000	Range 75 - 123	Recovery	=	108.90%	
43) Toluene-d8	9.51	98	1268057	30.23	ug/L	0.00
Spiked Amount	30.000	Range 76 - 130	Recovery	=	100.77%	
62) 4-Bromofluorobenzene	12.75	95	453939	29.28	ug/L	0.00
Spiked Amount	30.000	Range 75 - 141	Recovery	=	97.60%	

Target Compounds

Qvalue

(#) = qualifier out of range (m) = manual integration

6V16331.D 1114V06.M Thu Dec 28 15:22:44 2017 SS

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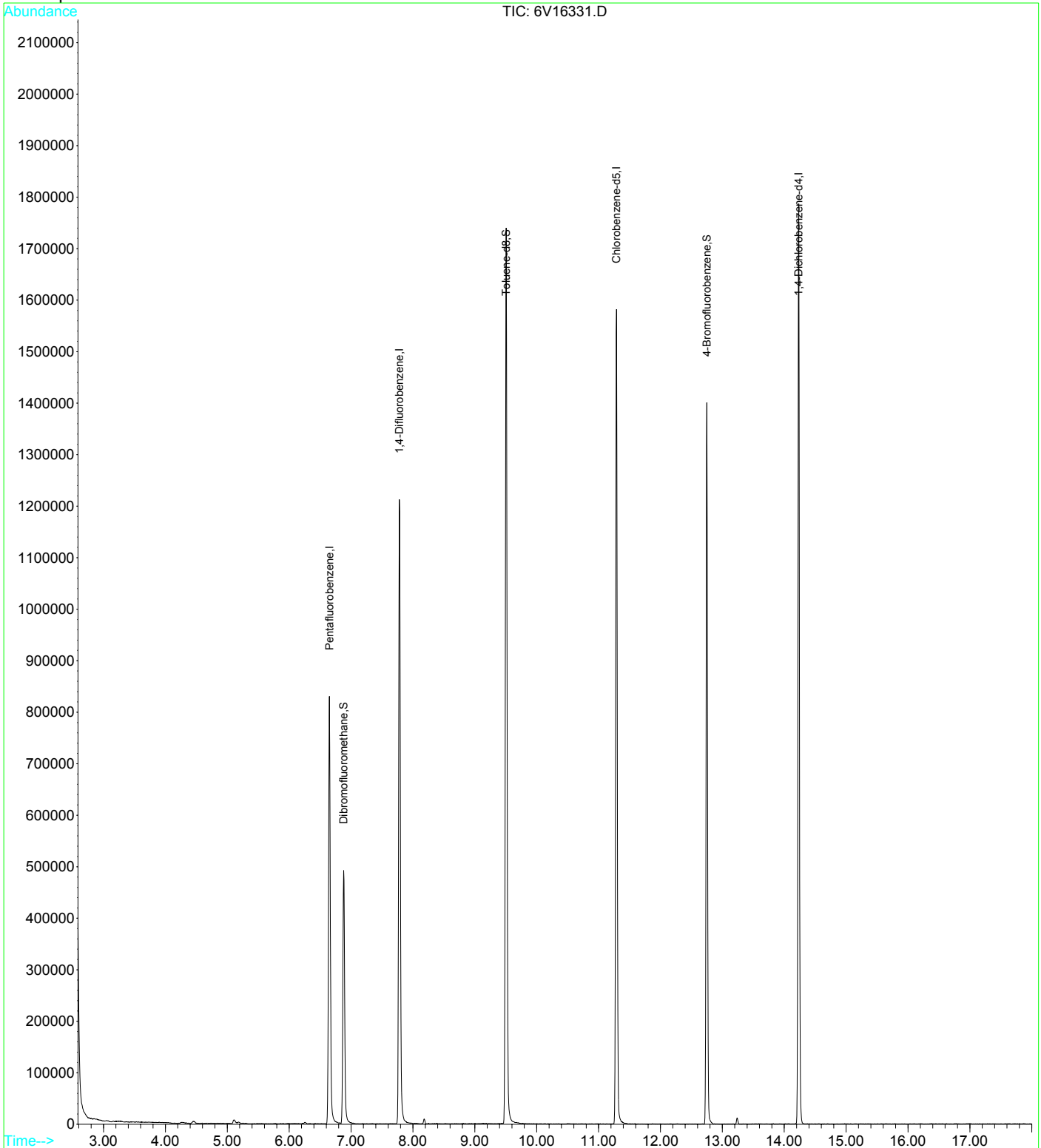
Quantitation Report

Data File : G:\HPCHEM\6\DATA\12262017\6V16331.D
Acq On : 27 Dec 2017 1:14
Sample : 7120696-08
Misc :
MS Integration Params: RTEINT.P
Quant Time: Dec 28 14:05 2017

Vial: 24
Operator: sdg
Inst : GCMS-6
Multiplr: 1.00

Quant Results File: 1114V06.RES

Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)
Title : VOC's by EPA Method 8260B
Last Update : Sun Nov 26 15:00:58 2017
Response via : Initial Calibration



6V16331.D 1114V06.M

Thu Dec 28 15:22:44 2017

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10.2.

ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260B

Client: Brown and Caldwell USR
Client Sample ID: DUP-20171221
Lab Sample ID: 7120696-09
Project: Patchogue
Work Order: 7120696

Date Sampled:	12/21/17 00:00	Prep Date:	12/27/17 01:40	File ID:	6V16332.D
Init/Final Vol:	5 mL / 5 mL	Prep Batch:	B7L2718	Analyzed:	12/27/17 01:40
Dilution:	1	Matrix:	Ground Water	Sequence:	S7L2804
		Prep Method:	PURGE & TRAP 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
71-43-2	Benzene	ND	0.129	1.00	U
100-41-4	EthylBenzene	ND	0.244	1.00	U
179601-23-1	m+p-Xylenes	ND	0.461	2.00	U
1634-04-4	Methyl tert-Butyl Ether	ND	0.596	1.00	U
95-47-6	o-Xylene	ND	0.244	1.00	U
108-88-3	Toluene	ND	0.205	1.00	U
1330-20-7	Total Xylenes	ND	0.705	1.00	U

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

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

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\6\DATA\12262017\6V16332.D

Vial: 25

Acq On : 27 Dec 2017 1:40

Operator: sdp

Sample : 7120696-09

Inst : GCMS-6

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 28 14:05 2017

Quant Results File: 1114V06.RES

Quant Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)

Title : VOC's by EPA Method 8260B

Last Update : Sun Nov 26 15:00:58 2017

Response via : Initial Calibration

DataAcq Meth : VOCRUN6

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.65	168	663034	30.00	ug/L	0.00
33) 1,4-Difluorobenzene	7.78	114	1044843	30.00	ug/L	0.00
52) Chlorobenzene-d5	11.29	82	474596	30.00	ug/L	0.00
74) 1,4-Dichlorobenzene-d4	14.23	152	490277	30.00	ug/L	0.00

System Monitoring Compounds

26) Dibromofluoromethane	6.88	113	299803	32.49	ug/L	0.00
Spiked Amount	30.000	Range 75 - 123	Recovery	=	108.30%	
43) Toluene-d8	9.51	98	1206773	30.20	ug/L	0.00
Spiked Amount	30.000	Range 76 - 130	Recovery	=	100.67%	
62) 4-Bromofluorobenzene	12.75	95	427218	29.08	ug/L	0.00
Spiked Amount	30.000	Range 75 - 141	Recovery	=	96.93%	

Target Compounds

Qvalue

(#) = qualifier out of range (m) = manual integration

6V16332.D 1114V06.M Thu Dec 28 15:22:45 2017 SS

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Quantitation Report

Data File : G:\HPCHEM\6\DATA\12262017\6V16332.D

Vial: 25

Acq On : 27 Dec 2017 1:40

Operator: sdg

Sample : 7120696-09

Inst : GCMS-6

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 28 14:05 2017

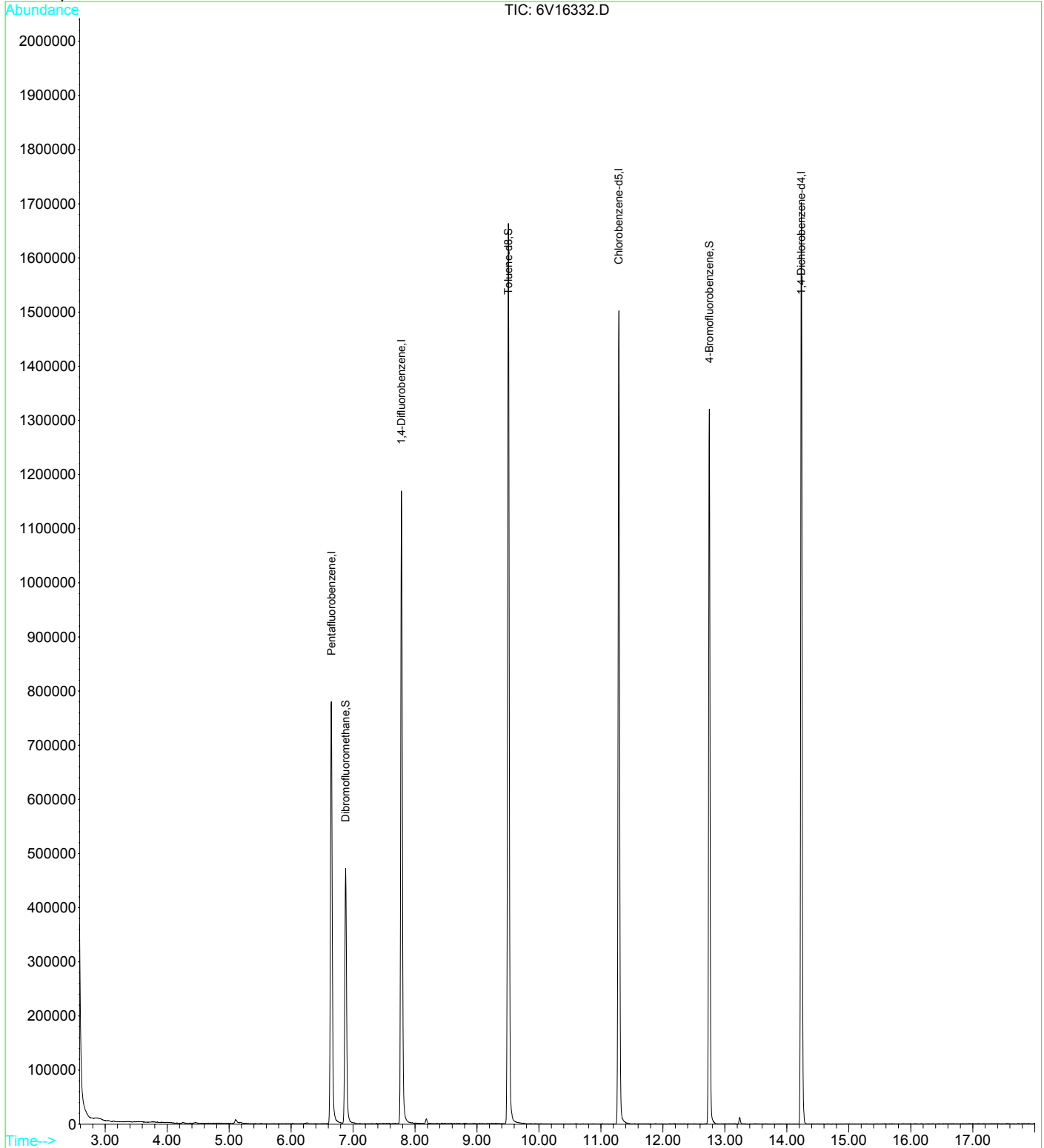
Quant Results File: 1114V06.RES

Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)

Title : VOC's by EPA Method 8260B

Last Update : Sun Nov 26 15:00:58 2017

Response via : Initial Calibration



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Thu Dec 28 15:22:45 2017

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10.2.

ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260B

Client: Brown and Caldwell USR
Client Sample ID: FB-20171221
Lab Sample ID: 7120696-10
Project: Patchogue
Work Order: 7120696

Date Sampled:	12/21/17 11:01	Prep Date:	12/27/17 02:06	File ID:	6V16333.D
Init/Final Vol:	5 mL / 5 mL	Prep Batch:	B7L2718	Analyzed:	12/27/17 02:06
Dilution:	1	Matrix:	Ground Water	Sequence:	S7L2804
		Prep Method:	PURGE & TRAP 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
71-43-2	Benzene	ND	0.129	1.00	U
100-41-4	EthylBenzene	ND	0.244	1.00	U
179601-23-1	m+p-Xylenes	ND	0.461	2.00	U
1634-04-4	Methyl tert-Butyl Ether	ND	0.596	1.00	U
95-47-6	o-Xylene	ND	0.244	1.00	U
108-88-3	Toluene	ND	0.205	1.00	U
1330-20-7	Total Xylenes	ND	0.705	1.00	U

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

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

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\6\DATA\12262017\6V16333.D
 Acq On : 27 Dec 2017 2:06
 Sample : 7120696-10
 Misc :

Vial: 26
 Operator: sdp
 Inst : GCMS-6
 Multiplr: 1.00

MS Integration Params: RTEINT.P
 Quant Time: Dec 28 14:06 2017

Quant Results File: 1114V06.RES

Quant Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)
 Title : VOC's by EPA Method 8260B
 Last Update : Sun Nov 26 15:00:58 2017
 Response via : Initial Calibration
 DataAcq Meth : VOCRUN6

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.65	168	666527	30.00	ug/L	0.00
33) 1,4-Difluorobenzene	7.78	114	1048040	30.00	ug/L	0.00
52) Chlorobenzene-d5	11.29	82	475972	30.00	ug/L	0.00
74) 1,4-Dichlorobenzene-d4	14.23	152	477924	30.00	ug/L	0.00

System Monitoring Compounds

26) Dibromofluoromethane	6.88	113	300497	32.40	ug/L	0.00
Spiked Amount	30.000	Range 75 - 123	Recovery	=	108.00%	
43) Toluene-d8	9.51	98	1206519	30.10	ug/L	0.00
Spiked Amount	30.000	Range 76 - 130	Recovery	=	100.33%	
62) 4-Bromofluorobenzene	12.75	95	422610	28.69	ug/L	0.00
Spiked Amount	30.000	Range 75 - 141	Recovery	=	95.63%	

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
 6V16333.D 1114V06.M Thu Dec 28 15:22:47 2017 SS

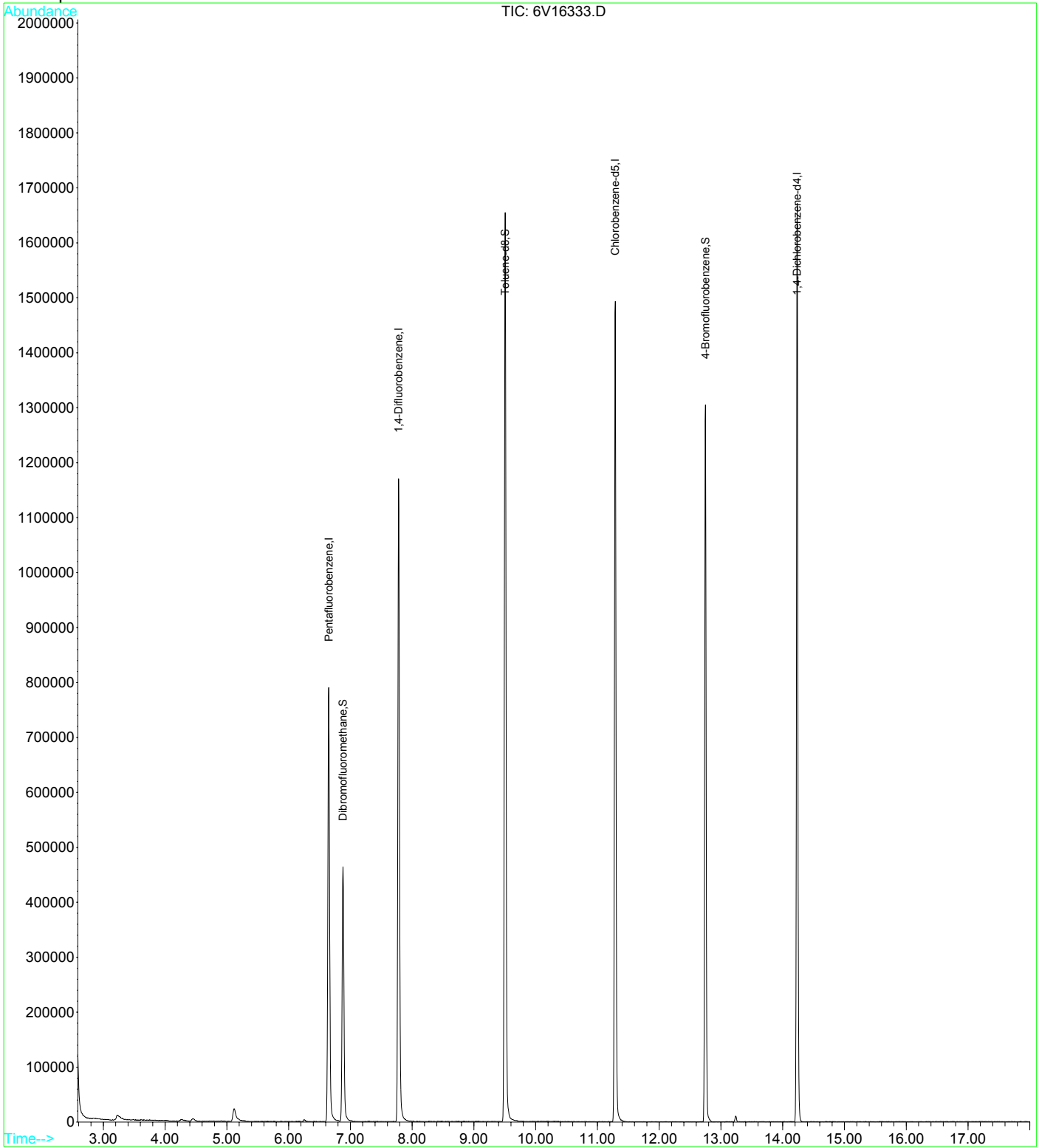
Quantitation Report

Data File : G:\HPCHEM\6\DATA\12262017\6V16333.D
Acq On : 27 Dec 2017 2:06
Sample : 7120696-10
Misc :
MS Integration Params: RTEINT.P
Quant Time: Dec 28 14:06 2017

Vial: 26
Operator: sdg
Inst : GCMS-6
Multiplr: 1.00

Quant Results File: 1114V06.RES

Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)
Title : VOC's by EPA Method 8260B
Last Update : Sun Nov 26 15:00:58 2017
Response via : Initial Calibration



6V16333.D 1114V06.M

Thu Dec 28 15:22:47 2017

SS

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10.2.

ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260B

Client: Brown and Caldwell USR
Client Sample ID: MW-9D 20171221
Lab Sample ID: 7120696-11
Project: Patchogue
Work Order: 7120696

Date Sampled:	12/21/17 11:34	Prep Date:	12/27/17 02:31	File ID:	6V16334.D
Init/Final Vol:	5 mL / 5 mL	Prep Batch:	B7L2718	Analyzed:	12/27/17 02:31
Dilution:	1	Matrix:	Ground Water	Sequence:	S7L2804
		Prep Method:	PURGE & TRAP 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
71-43-2	Benzene	ND	0.129	1.00	U
100-41-4	EthylBenzene	ND	0.244	1.00	U
179601-23-1	m+p-Xylenes	ND	0.461	2.00	U
1634-04-4	Methyl tert-Butyl Ether	ND	0.596	1.00	U
95-47-6	o-Xylene	ND	0.244	1.00	U
108-88-3	Toluene	ND	0.205	1.00	U
1330-20-7	Total Xylenes	ND	0.705	1.00	U

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

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

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\6\DATA\12262017\6V16334.D Vial: 27
 Acq On : 27 Dec 2017 2:31 Operator: sdp
 Sample : 7120696-11 Inst : GCMS-6
 Misc : Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Quant Time: Dec 28 14:06 2017 Quant Results File: 1114V06.RES

Quant Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)
 Title : VOC's by EPA Method 8260B
 Last Update : Sun Nov 26 15:00:58 2017
 Response via : Initial Calibration
 DataAcq Meth : VOCRUN6

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.65	168	732128	30.00	ug/L	0.00
33) 1,4-Difluorobenzene	7.78	114	1145777	30.00	ug/L	0.00
52) Chlorobenzene-d5	11.29	82	529599	30.00	ug/L	0.00
74) 1,4-Dichlorobenzene-d4	14.23	152	517155	30.00	ug/L	0.00

System Monitoring Compounds						
26) Dibromofluoromethane	6.88	113	331776	32.57	ug/L	0.00
Spiked Amount	30.000	Range 75 - 123	Recovery	=	108.57%	
43) Toluene-d8	9.51	98	1329058	30.33	ug/L	0.00
Spiked Amount	30.000	Range 76 - 130	Recovery	=	101.10%	
62) 4-Bromofluorobenzene	12.75	95	471573	28.77	ug/L	0.00
Spiked Amount	30.000	Range 75 - 141	Recovery	=	95.90%	

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
 6V16334.D 1114V06.M Thu Dec 28 15:22:48 2017 SS

Quantitation Report

Data File : G:\HPCHEM\6\DATA\12262017\6V16334.D

Vial: 27

Acq On : 27 Dec 2017 2:31

Operator: sdg

Sample : 7120696-11

Inst : GCMS-6

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 28 14:06 2017

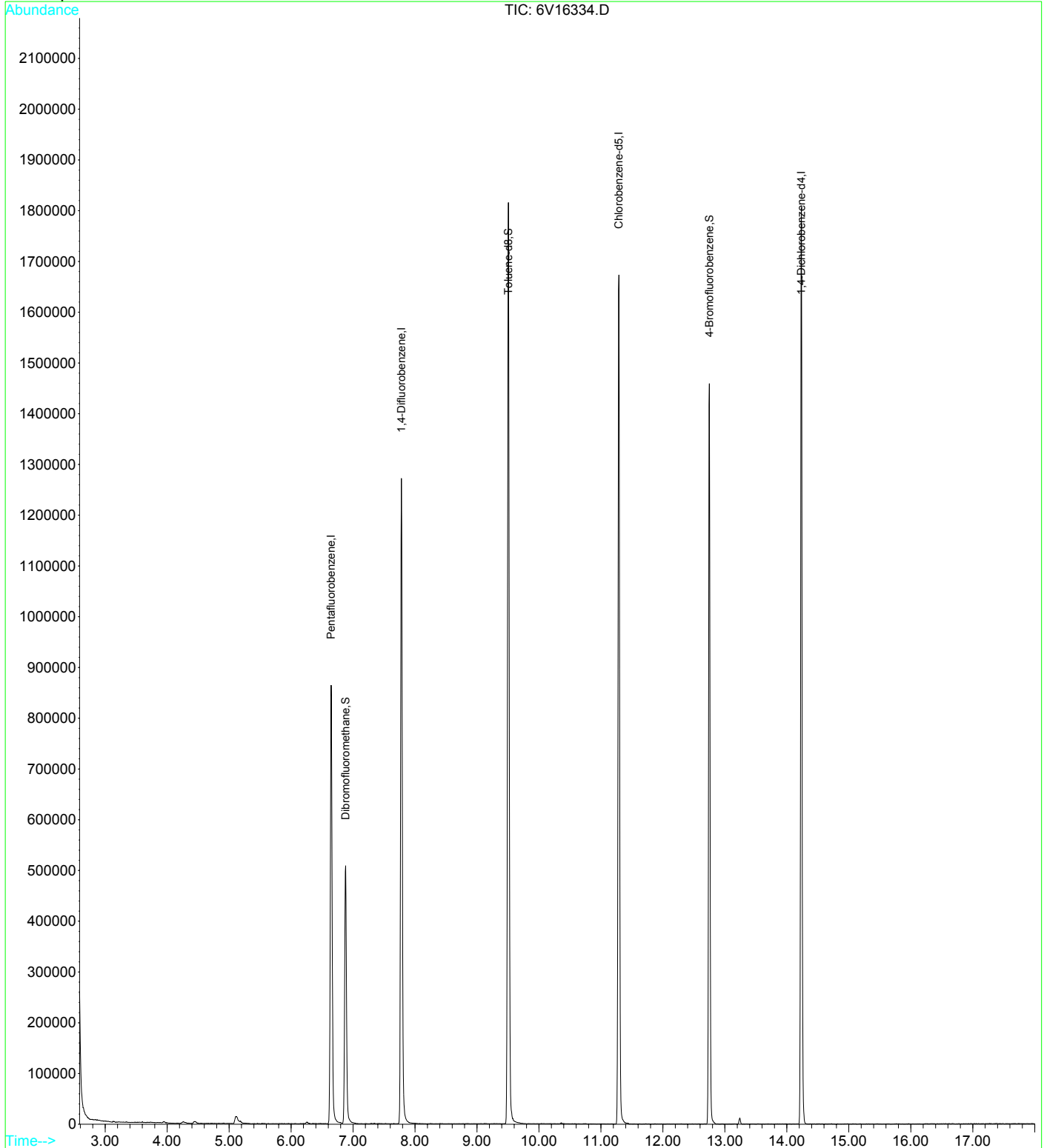
Quant Results File: 1114V06.RES

Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)

Title : VOC's by EPA Method 8260B

Last Update : Sun Nov 26 15:00:58 2017

Response via : Initial Calibration



6V16334.D 1114V06.M

Thu Dec 28 15:22:48 2017

SS

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10.2.

ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260B

Client: Brown and Caldwell USR
Client Sample ID: MW-9S 20171221
Lab Sample ID: 7120696-12
Project: Patchogue
Work Order: 7120696

Date Sampled:	12/21/17 00:00	Prep Date:	12/27/17 02:57	File ID:	6V16335.D
Init/Final Vol:	5 mL / 5 mL	Prep Batch:	B7L2718	Analyzed:	12/27/17 02:57
Dilution:	1	Matrix:	Ground Water	Sequence:	S7L2804
		Prep Method:	PURGE & TRAP 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
71-43-2	Benzene	ND	0.129	1.00	U
100-41-4	EthylBenzene	ND	0.244	1.00	U
179601-23-1	m+p-Xylenes	ND	0.461	2.00	U
1634-04-4	Methyl tert-Butyl Ether	ND	0.596	1.00	U
95-47-6	o-Xylene	ND	0.244	1.00	U
108-88-3	Toluene	ND	0.205	1.00	U
1330-20-7	Total Xylenes	ND	0.705	1.00	U

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

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

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\6\DATA\12262017\6V16335.D Vial: 28
Acq On : 27 Dec 2017 2:57 Operator: sdp
Sample : 7120696-12 Inst : GCMS-6
Misc : Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 28 14:06 2017 Quant Results File: 1114VO6.RES

Quant Method : G:\HPCHEM\6\METHODS\1114VO6.M (RTE Integrator)
Title : VOC's by EPA Method 8260B
Last Update : Sun Nov 26 15:00:58 2017
Response via : Initial Calibration
DataAcq Meth : VOCRUN6

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.65	168	668757	30.00	ug/L	0.00
33) 1,4-Difluorobenzene	7.78	114	1035282	30.00	ug/L	0.00
52) Chlorobenzene-d5	11.29	82	476983	30.00	ug/L	0.00
74) 1,4-Dichlorobenzene-d4	14.23	152	487469	30.00	ug/L	0.00

System Monitoring Compounds

26) Dibromofluoromethane	6.88	113	299940	32.23	ug/L	0.00
Spiked Amount	30.000	Range	75 - 123	Recovery	=	107.43%
43) Toluene-d8	9.51	98	1208503	30.52	ug/L	0.00
Spiked Amount	30.000	Range	76 - 130	Recovery	=	101.73%
62) 4-Bromofluorobenzene	12.75	95	422082	28.59	ug/L	0.00
Spiked Amount	30.000	Range	75 - 141	Recovery	=	95.30%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
23) cis-1,2-Dichloroethene	6.49	61	9734	0.76	ug/L	83

(#) = qualifier out of range (m) = manual integration

6V16335.D 1114VO6.M Thu Jan 25 11:33:34 2018 SS

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Quantitation Report

Data File : G:\HPCHEM\6\DATA\12262017\6V16335.D

Vial: 28

Acq On : 27 Dec 2017 2:57

Operator: sdp

Sample : 7120696-12

Inst : GCMS-6

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 28 14:06 2017

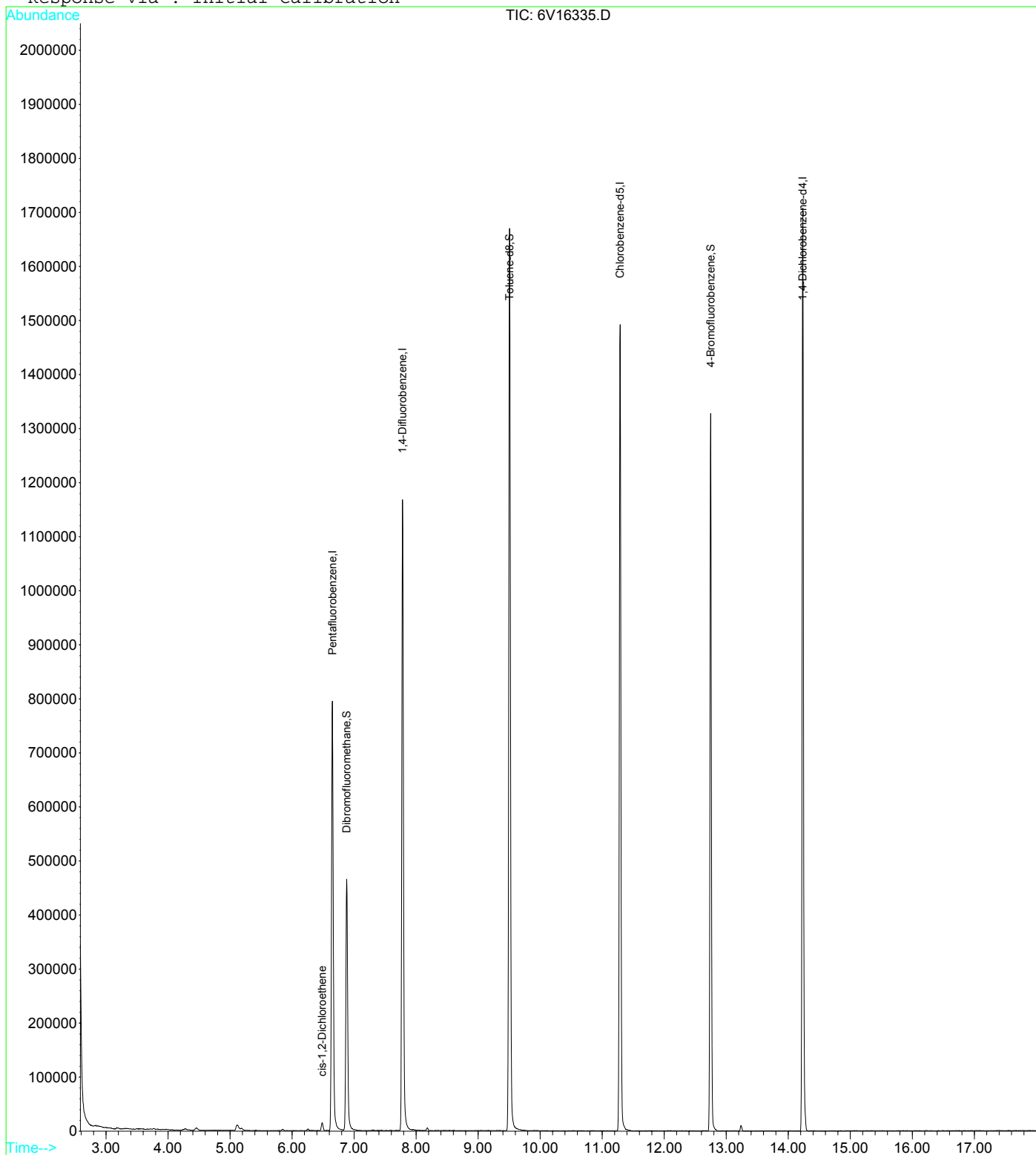
Quant Results File: 1114VO6.RES

Method : G:\HPCHEM\6\METHODS\1114VO6.M (RTE Integrator)

Title : VOC's by EPA Method 8260B

Last Update : Sun Nov 26 15:00:58 2017

Response via : Initial Calibration

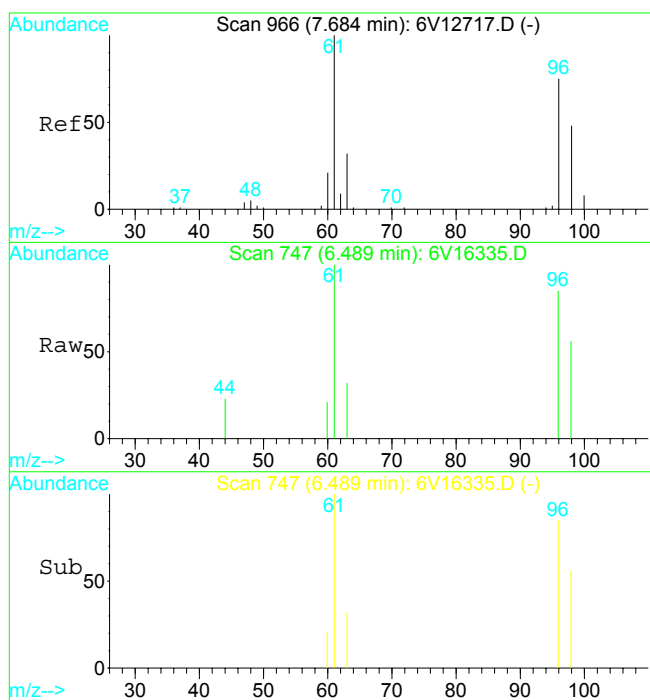


6V16335.D 1114VO6.M

Thu Jan 25 11:33:34 2018

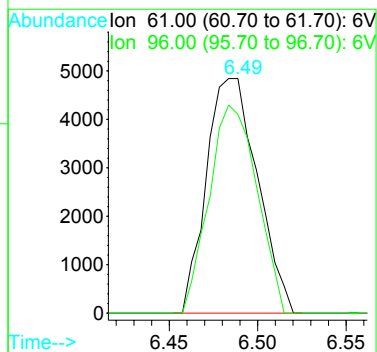
SS

Page 2



#23
 cis-1,2-Dichloroethene
 Concen: 0.76 ug/L
 RT: 6.49 min Scan# 747
 Delta R.T. 0.01 min
 Lab File: 6V16335.D
 Acq: 27 Dec 2017 2:57

Tgt Ion	Ratio	Lower	Upper
61	100		
96	83.0	34.6	103.9



ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260B

Client: Brown and Caldwell USR
Client Sample ID: Trip Blank-20171221
Lab Sample ID: 7120696-13
Project: Patchogue
Work Order: 7120696

Date Sampled:	12/21/17 00:00	Prep Date:	12/27/17 03:23	File ID:	6V16336.D
Init/Final Vol:	5 mL / 5 mL	Prep Batch:	B7L2718	Analyzed:	12/27/17 03:23
Dilution:	1	Matrix:	Ground Water	Sequence:	S7L2804
		Prep Method:	PURGE & TRAP 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
71-43-2	Benzene	ND	0.129	1.00	U
100-41-4	EthylBenzene	ND	0.244	1.00	U
179601-23-1	m+p-Xylenes	ND	0.461	2.00	U
1634-04-4	Methyl tert-Butyl Ether	ND	0.596	1.00	U
95-47-6	o-Xylene	ND	0.244	1.00	U
108-88-3	Toluene	ND	0.205	1.00	U
1330-20-7	Total Xylenes	ND	0.705	1.00	U

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

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

F-I

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\6\DATA\12262017\6V16336.D
 Acq On : 27 Dec 2017 3:23
 Sample : 7120696-13
 Misc :

Vial: 29
 Operator: sdp
 Inst : GCMS-6
 Multiplr: 1.00

MS Integration Params: RTEINT.P
 Quant Time: Dec 28 14:07 2017

Quant Results File: 1114V06.RES

Quant Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)
 Title : VOC's by EPA Method 8260B
 Last Update : Sun Nov 26 15:00:58 2017
 Response via : Initial Calibration
 DataAcq Meth : VOCRUN6

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.65	168	656710	30.00	ug/L	0.00
33) 1,4-Difluorobenzene	7.78	114	1015807	30.00	ug/L	0.00
52) Chlorobenzene-d5	11.29	82	460421	30.00	ug/L	0.00
74) 1,4-Dichlorobenzene-d4	14.23	152	473038	30.00	ug/L	0.00

System Monitoring Compounds

26) Dibromofluoromethane	6.88	113	293491	32.12	ug/L	0.00
Spiked Amount	30.000	Range 75 - 123	Recovery	=	107.07%	
43) Toluene-d8	9.51	98	1172384	30.18	ug/L	0.00
Spiked Amount	30.000	Range 76 - 130	Recovery	=	100.60%	
62) 4-Bromofluorobenzene	12.75	95	407809	28.62	ug/L	0.00
Spiked Amount	30.000	Range 75 - 141	Recovery	=	95.40%	

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
 6V16336.D 1114V06.M Thu Dec 28 15:22:51 2017 SS

Quantitation Report

Data File : G:\HPCHEM\6\DATA\12262017\6V16336.D

Vial: 29

Acq On : 27 Dec 2017 3:23

Operator: sdg

Sample : 7120696-13

Inst : GCMS-6

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 28 14:07 2017

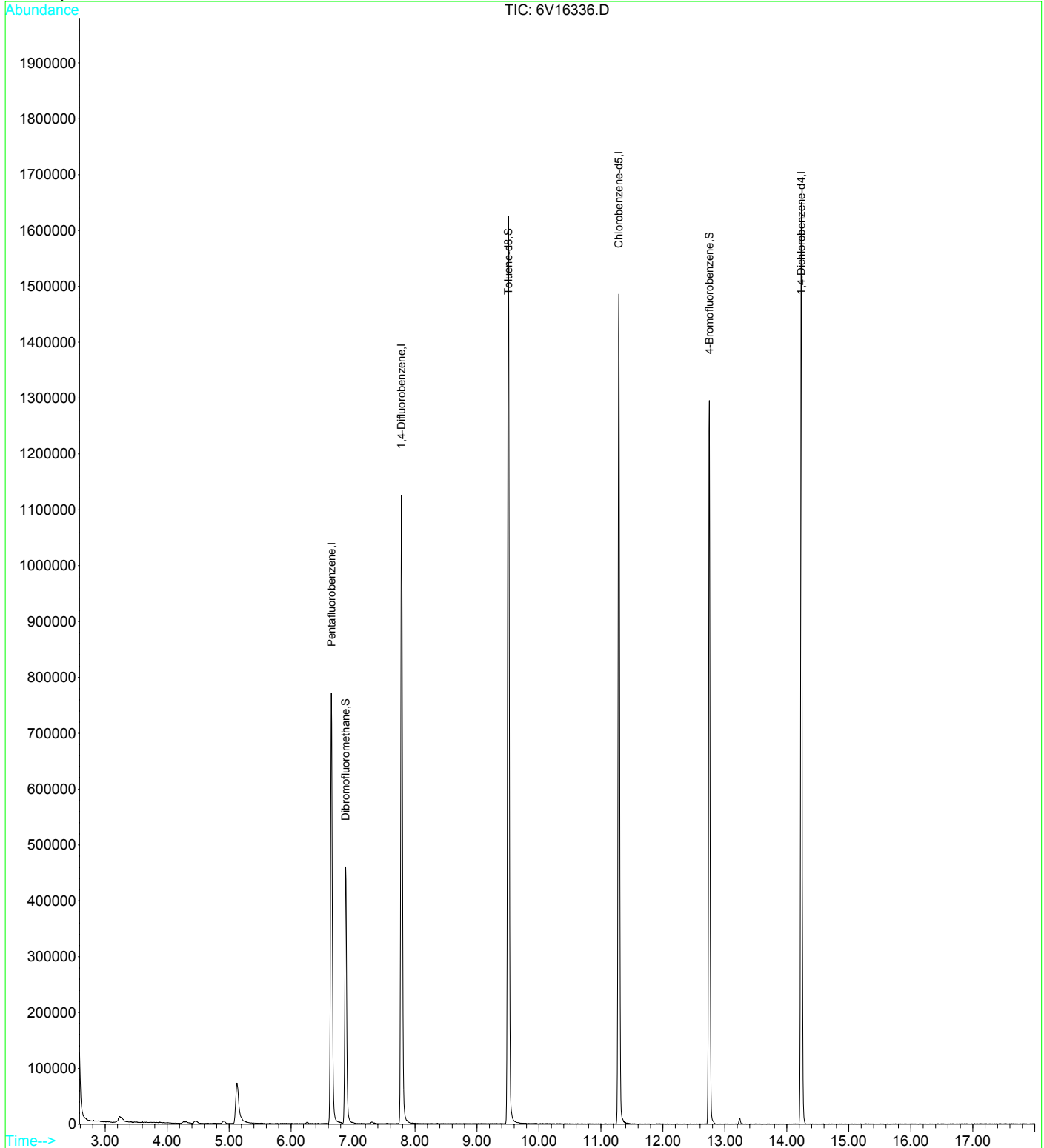
Quant Results File: 1114V06.RES

Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)

Title : VOC's by EPA Method 8260B

Last Update : Sun Nov 26 15:00:58 2017

Response via : Initial Calibration



6V16336.D 1114V06.M

Thu Dec 28 15:22:51 2017

SS

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10.2.

SURROGATE RECOVERIES

Analysis Class: VOLATILES

Matrix: Ground Water

Method: SW 846 8260B

VO-BTEX-MT

Lab Number	File ID	DBF	TOL-d8	BFB
7120696-01	6V16353.D	106	101	96.6
7120696-02	6V16325.D	108	102	97.2
7120696-03	6V16326.D	109	102	96.7
7120696-04	6V16327.D	108	101	95.3
7120696-05	6V16328.D	108	102	95.0
7120696-06	6V16329.D	109	102	95.0
7120696-07	6V16330.D	108	100	96.7
7120696-08	6V16331.D	109	101	97.6
7120696-09	6V16332.D	108	101	96.9
7120696-10	6V16333.D	108	100	95.6
7120696-11	6V16334.D	109	101	95.9
7120696-12	6V16335.D	107	102	95.3
7120696-13	6V16336.D	107	101	95.4
B7L2718-BLK1	6V16312.D	101	101	96.8
B7L2718-BS1	6V16311.D	101	99.9	99.3
B7L2718-MS1	6V16337.D	108	102	101
B7L2718-MSD1	6V16338.D	107	103	99.7
B8A0226-BLK1	6V16350.D	103	101	95.9
B8A0226-BS1	6V16349.D	104	103	102
B8A0226-MS1	6V16374.D	109	101	99.3
B8A0226-MSD1	6V16375.D	107	103	100

Surrogate Limits		Lo Limit	Hi Limit
DBF	Dibromofluoromethane	86.4	129
TOL-d8	Toluene-d8	81	107
BFB	4-Bromofluorobenzene	83.5	108

F-II

* - Outside of QC Limits

Volatile Organics - GC/MS - Quality Control
Aqua Pro-Tech Laboratories

Batch B7L2718			Method: SW 846 8260B			Prepared: 12/26/2017				
Lab Number	Source	Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
B7L2718-BS1		Benzene	49.9	ug/L	50.0		99.8	76.6-131		
B7L2718-BS1		EthylBenzene	49.8	ug/L	50.0		99.6	88.1-106		
B7L2718-BS1		m+p-Xylenes	100	ug/L	100		100	75-102		
B7L2718-BS1		Methyl tert-Butyl Ether	47.0	ug/L	50.0		94.0	75.2-118		
B7L2718-BS1		o-Xylene	53.7	ug/L	50.0		107	91-110		
B7L2718-BS1		tert-Butyl alcohol	422	ug/L	500		84.4	63.6-135		
B7L2718-BS1		Toluene	49.0	ug/L	50.0		98.1	86.6-125		

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10.4.

* - Outside of QC Limits

NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\6\DATA\12262017\6V16311.D
 Acq On : 26 Dec 2017 16:41
 Sample : B7L2718-BS1
 Misc :

Vial: 4
 Operator: sdp
 Inst : GCMS-6
 Multiplr: 1.00

MS Integration Params: RTEINT.P
 Quant Time: Dec 28 13:29 2017

Quant Results File: 1114V06.RES

Quant Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)

Title : VOC's by EPA Method 8260B

Last Update : Sun Nov 26 15:00:58 2017

Response via : Initial Calibration

DataAcq Meth : VOCRUN6

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.65	168	804534	30.00	ug/L	0.00
33) 1,4-Difluorobenzene	7.78	114	1202019	30.00	ug/L	0.00
52) Chlorobenzene-d5	11.29	82	555976	30.00	ug/L	0.00
74) 1,4-Dichlorobenzene-d4	14.23	152	567989	30.00	ug/L	0.00

System Monitoring Compounds

26) Dibromofluoromethane	6.88	113	339174	30.30	ug/L	0.00
Spiked Amount	30.000	Range 75 - 123	Recovery	=	101.00%	
43) Toluene-d8	9.51	98	1377541	29.96	ug/L	0.00
Spiked Amount	30.000	Range 76 - 130	Recovery	=	99.87%	
62) 4-Bromofluorobenzene	12.75	95	512672	29.79	ug/L	0.00
Spiked Amount	30.000	Range 75 - 141	Recovery	=	99.30%	

Target Compounds

Qvalue

2) Dichlorodifluoromethane	2.70	85	375492m	65.67	ug/L	
3) Chloromethane	3.20	50	187390m	51.19	ug/L	
4) Acrolein	4.40	56	105289	48.43	ug/L	94
5) Vinyl Chloride	3.10	62	372337m	49.28	ug/L	
6) Bromomethane	3.60	94	30189	44.73	ug/L	86
7) Chloroethane	3.68	64	318119	48.98	ug/L	100
8) Trichlorofluoromethane	3.95	101	655505	51.41	ug/L	99
9) 1,1,2-Trichloro-1,2,2 Trif	4.38	101	523760	50.23	ug/L	89
10) Acetone	4.46	43	301957m	46.50	ug/L	
11) 1,1-Dichloroethene	4.61	61	766748	49.53	ug/L	83
12) tert-Butyl Alcohol	4.67	59	1189860m	422.02	ug/L	
13) Methyl Acetate	4.91	43	627977	48.59	ug/L	# 86
14) Methylene Chloride	5.10	84	562055	52.17	ug/L	86
15) Carbon Disulfide	5.19	76	1573940	46.61	ug/L	100
16) Acrylonitrile	5.22	53	347763	46.86	ug/L	95
17) Methyl tert-Butyl Ether	5.23	73	1368118	47.02	ug/L	96
18) trans-1,2-Dichloroethene	5.41	61	744029	48.31	ug/L	86
19) 1,1-Dichloroethane	5.85	63	971662	47.82	ug/L	99
20) Vinyl Acetate	5.80	43	895537	41.16	ug/L	91
21) 2-Butanone	6.26	43	452779	42.14	ug/L	89
22) 2,2-Dichloropropane	6.43	77	702396	48.34	ug/L	98
23) cis-1,2-Dichloroethene	6.48	61	759534	49.46	ug/L	82
24) Chloroform	6.65	83	918690	46.90	ug/L	100
25) Bromochloromethane	6.84	49	398973	50.83	ug/L	67
27) Cyclohexane	7.11	56	847634	52.66	ug/L	88
28) 1,1,1-Trichloroethane	7.08	97	766944	47.71	ug/L	98
29) 1,1-Dichloropropene	7.24	75	805057	50.43	ug/L	94
30) Carbon Tetrachloride	7.36	117	644738	49.62	ug/L	99
31) 1,2-Dichloroethane	7.51	62	649707	46.20	ug/L	99
32) Benzene	7.54	78	2262637	49.91	ug/L	97
34) Trichloroethene	8.18	130	655481	47.63	ug/L	93
35) Methylcyclohexane	8.26	83	819810	51.29	ug/L	94
36) 1,2-Dichloropropane	8.37	63	569237	47.73	ug/L	100
37) Bromodichloromethane	8.64	83	659764	46.75	ug/L	99
38) p-Dioxane	8.64	88	150028	499.13	ug/L	# 86
39) Dibromomethane	8.72	174	393093	45.44	ug/L	82
41) 4-Methyl-2-Pentanone	8.94	43	725214	45.24	ug/L	89
42) cis-1,3-Dichloropropene	9.21	75	840572	49.02	ug/L	96
44) Toluene	9.60	91	2439486	49.05	ug/L	99
45) trans-1,3-Dichloropropene	9.77	75	704652	48.96	ug/L	97
46) 1,1,2-Trichloroethane	9.97	97	487538	47.34	ug/L	99
47) 2-Hexanone	9.92	43	581992	44.89	ug/L	90
48) 1,3-Dichloropropane	10.25	76	819606	50.09	ug/L	99
49) Tetrachloroethene	10.36	166	681414	48.99	ug/L	99

(#) = qualifier out of range (m) = manual integration

6V16311.D 1114V06.M Thu Dec 28 15:22:15 2017 SS

Page 1

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\6\DATA\12262017\6V16311.D

Vial: 4

Acq On : 26 Dec 2017 16:41

Operator: sdp

Sample : B7L2718-BS1

Inst : GCMS-6

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 28 13:29 2017

Quant Results File: 1114V06.RES

Quant Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)

Title : VOC's by EPA Method 8260B

Last Update : Sun Nov 26 15:00:58 2017

Response via : Initial Calibration

DataAcq Meth : VOCRUN6

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
50) Chlorodibromomethane	10.62	129	496545	50.88	ug/L	100
51) 1,2-Dibromoethane	10.86	107	528113	53.67	ug/L	97
53) Chlorobenzene	11.34	112	1592425	47.83	ug/L	99
54) 1,1,1,2-Tetrachloroethane	11.37	131	515577	46.52	ug/L	98
55) Ethylbenzene	11.37	91	2536300	49.80	ug/L	94
56) m+p-Xylenes	11.46	106	2066666	99.97	ug/L	85
57) o-Xylene	12.00	91	1969486	53.72	ug/L	93
58) Styrene	12.04	104	1663892	51.91	ug/L	95
59) Isopropylbenzene	12.41	105	2329944	54.68	ug/L	96
60) Bromoform	12.50	173	366834	47.24	ug/L	97
61) 1,1,2,2-Tetrachloroethane	12.63	83	777094	47.73	ug/L	100
63) 1,2,3-Trichloropropane	12.82	110	220717	46.04	ug/L	95
64) n-Propylbenzene	12.91	91	2618966	51.78	ug/L	96
65) Bromobenzene	13.02	77	892566	47.35	ug/L	83
66) 2-Chlorotoluene	13.17	91	1539728	48.16	ug/L	92
67) 4-Chlorotoluene	13.21	91	1636696	49.03	ug/L	95
68) 1,3,5-Trimethylbenzene	13.10	105	1714840	51.82	ug/L	91
69) tert-Butylbenzene	13.55	119	1452005	49.29	ug/L	91
70) 1,2,4-Trimethylbenzene	13.60	105	1709073	51.04	ug/L	93
71) sec-Butylbenzene	13.82	105	2015157	53.37	ug/L	96
72) 4-Isopropyltoluene	13.97	119	1676009	51.10	ug/L	95
73) 1,3-Dichlorobenzene	14.15	146	1040650	45.83	ug/L	95
75) 1,4-Dichlorobenzene	14.28	146	1039343	47.41	ug/L	94
76) n-Butylbenzene	14.49	91	1359060	57.64	ug/L	98
77) 1,2-Dichlorobenzene	14.76	146	927349	49.50	ug/L	92
78) 1,2-Dibromo-3-chloropropan	15.74	75	149217	48.90	ug/L	73
79) 1,2,4-Trichlorobenzene	16.72	180	391829	50.95	ug/L	94
80) Hexachlorobutadiene	16.84	225	168563	47.15	ug/L	98
81) Naphthalene	17.00	128	1378122	53.13	ug/L	99
82) 1,2,3-Trichlorobenzene	17.24	180	326055	47.97	ug/L	97

(#) = qualifier out of range (m) = manual integration

6V16311.D 1114V06.M Thu Dec 28 15:22:15 2017 SS

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Quantitation Report

Data File : G:\HPCHEM\6\DATA\12262017\6V16311.D

Vial: 4

Acq On : 26 Dec 2017 16:41

Operator: sdp

Sample : B7L2718-BS1

Inst : GCMS-6

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 28 13:29 2017

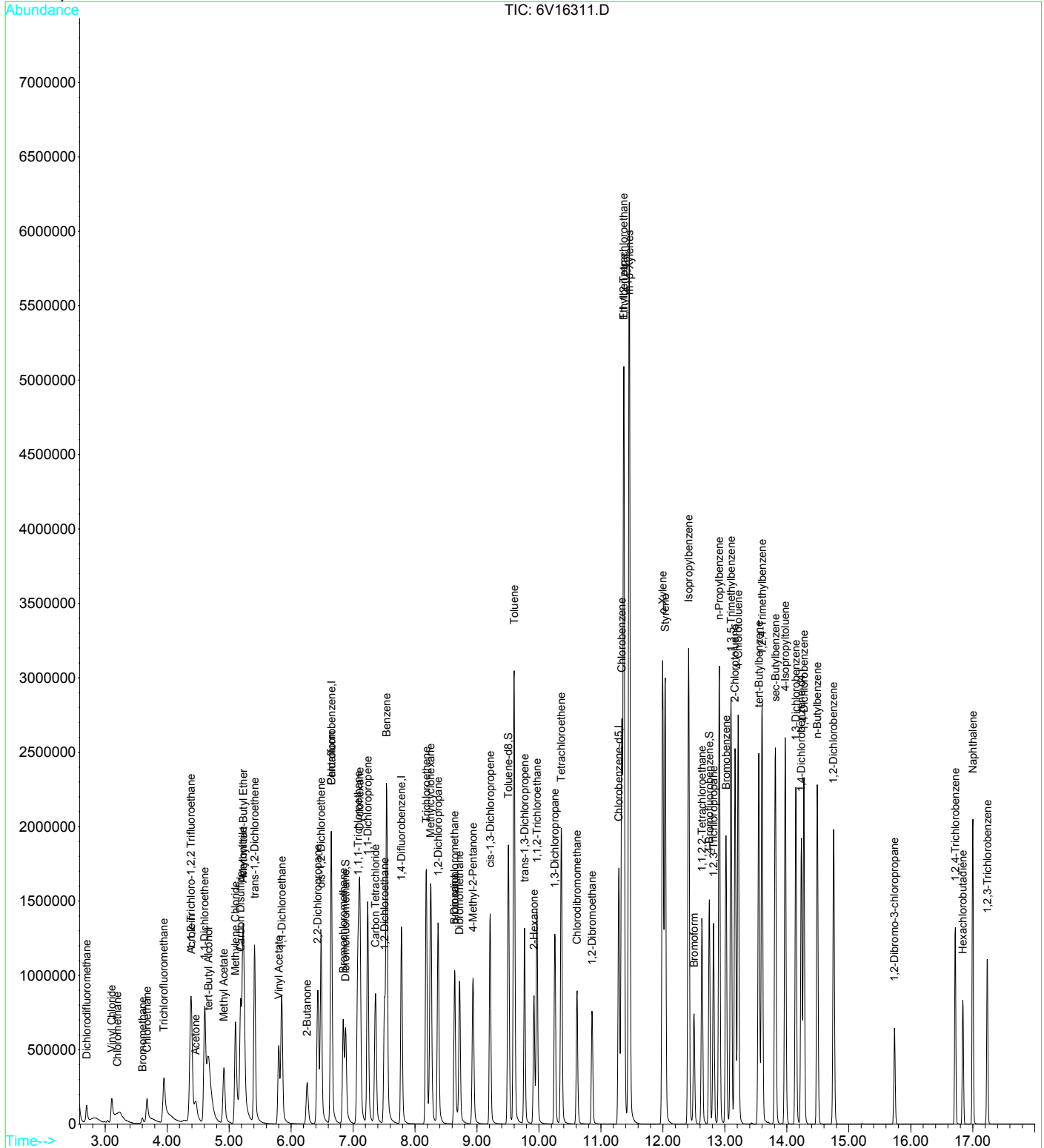
Quant Results File: 1114V06.RES

Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)

Title : VOC's by EPA Method 8260B

Last Update : Sun Nov 26 15:00:58 2017

Response via : Initial Calibration



6V16311.D 1114V06.M

Thu Dec 28 15:22:15 2017

SS

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10.4.

Volatile Organics - GC/MS - Quality Control
Aqua Pro-Tech Laboratories

Batch B7L2718			Method: SW 846 8260B			Prepared: 12/27/2017				
Lab Number	Source	Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
B7L2718-MS1	7120733-01	Benzene	51.6	ug/L	50.0	0.00	103	68.6-141		
B7L2718-MS1	7120733-01	EthylBenzene	50.1	ug/L	50.0	0.00	100	84.2-110		
B7L2718-MS1	7120733-01	m+p-Xylenes	100	ug/L	100	0.00	100	78.4-106		
B7L2718-MS1	7120733-01	Methyl tert-Butyl Ether	49.0	ug/L	50.0	0.00	98.0	69.5-127		
B7L2718-MS1	7120733-01	o-Xylene	54.4	ug/L	50.0	0.00	109	86.7-114		
B7L2718-MS1	7120733-01	tert-Butyl alcohol	414	ug/L	500	0.00	82.8	70-130		
B7L2718-MS1	7120733-01	Toluene	49.3	ug/L	50.0	0.00	98.7	83.5-131		

* - Outside of QC Limits

NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\6\DATA\12262017\6V16337.D
 Acq On : 27 Dec 2017 3:49
 Sample : B7L2718-MS1
 Misc :

Vial: 30
 Operator: sdp
 Inst : GCMS-6
 Multiplr: 1.00

MS Integration Params: RTEINT.P
 Quant Time: Dec 28 15:02 2017

Quant Results File: 1114V06.RES

Quant Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)

Title : VOC's by EPA Method 8260B

Last Update : Sun Nov 26 15:00:58 2017

Response via : Initial Calibration

DataAcq Meth : VOCRUN6

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.65	168	655305	30.00	ug/L	0.00
33) 1,4-Difluorobenzene	7.78	114	1007426	30.00	ug/L	0.00
52) Chlorobenzene-d5	11.29	82	470247	30.00	ug/L	0.00
74) 1,4-Dichlorobenzene-d4	14.23	152	510497	30.00	ug/L	0.00

System Monitoring Compounds

26) Dibromofluoromethane	6.88	113	296210	32.48	ug/L	0.00
Spiked Amount	30.000	Range 75 - 123	Recovery	=	108.27%	
43) Toluene-d8	9.51	98	1179765	30.62	ug/L	0.00
Spiked Amount	30.000	Range 76 - 130	Recovery	=	102.07%	
62) 4-Bromofluorobenzene	12.74	95	440884	30.29	ug/L	0.00
Spiked Amount	30.000	Range 75 - 141	Recovery	=	100.97%	

Target Compounds

Qvalue

2) Dichlorodifluoromethane	2.70	85	232870m	50.00	ug/L	
3) Chloromethane	3.20	50	125118m	41.96	ug/L	
4) Acrolein	4.39	56	68345	38.60	ug/L	90
5) Vinyl Chloride	3.10	62	263286m	42.78	ug/L	
6) Bromomethane	3.60	94	20091	36.54	ug/L	96
7) Chloroethane	3.67	64	267952	50.65	ug/L	96
8) Trichlorofluoromethane	3.95	101	517251	49.81	ug/L	96
9) 1,1,2-Trichloro-1,2,2 Trif	4.39	101	398168	46.88	ug/L	87
10) Acetone	4.45	43	280711	53.07	ug/L	88
11) 1,1-Dichloroethene	4.61	61	616816	48.92	ug/L	85
12) tert-Butyl Alcohol	4.66	59	950393	413.85	ug/L	96
13) Methyl Acetate	4.91	43	468555	44.51	ug/L #	85
14) Methylene Chloride	5.10	84	479942	54.70	ug/L	89
15) Carbon Disulfide	5.19	76	1039206	37.78	ug/L	100
16) Acrylonitrile	5.22	53	307119	50.81	ug/L	95
17) Methyl tert-Butyl Ether	5.23	73	1160854	48.98	ug/L	96
18) trans-1,2-Dichloroethene	5.41	61	606125	48.31	ug/L	86
19) 1,1-Dichloroethane	5.85	63	817774	49.41	ug/L	98
20) Vinyl Acetate	5.80	43	801042	45.20	ug/L	93
21) 2-Butanone	6.26	43	389567	44.51	ug/L	90
22) 2,2-Dichloropropane	6.43	77	461540	39.00	ug/L	98
23) cis-1,2-Dichloroethene	6.48	61	636961	50.93	ug/L	84
24) Chloroform	6.65	83	993594	62.28	ug/L	99
25) Bromochloromethane	6.84	49	339093	53.04	ug/L	67
27) Cyclohexane	7.11	56	675391	51.51	ug/L	87
28) 1,1,1-Trichloroethane	7.08	97	640825	48.94	ug/L	99
29) 1,1-Dichloropropene	7.24	75	639076	49.15	ug/L	95
30) Carbon Tetrachloride	7.36	117	539501	50.97	ug/L	99
31) 1,2-Dichloroethane	7.50	62	576272	50.31	ug/L	99
32) Benzene	7.54	78	1904814	51.59	ug/L	98
34) Trichloroethene	8.18	130	539104	46.74	ug/L	95
35) Methylcyclohexane	8.25	83	621392	46.39	ug/L	93
36) 1,2-Dichloropropane	8.37	63	469297	46.95	ug/L	99
37) Bromodichloromethane	8.64	83	565057	47.77	ug/L	99
38) p-Dioxane	8.65	88	127465	505.98	ug/L #	87
39) Dibromomethane	8.72	174	343154	47.32	ug/L	82
41) 4-Methyl-2-Pentanone	8.94	43	630219	46.90	ug/L	90
42) cis-1,3-Dichloropropene	9.21	75	668768	46.53	ug/L	97
44) Toluene	9.60	91	2056371	49.33	ug/L	99
45) trans-1,3-Dichloropropene	9.77	75	552180	45.78	ug/L	96
46) 1,1,2-Trichloroethane	9.97	97	423290	49.04	ug/L	99
47) 2-Hexanone	9.92	43	509055	46.84	ug/L	92
48) 1,3-Dichloropropane	10.25	76	707681	51.61	ug/L	100
49) Tetrachloroethene	10.36	166	559311	47.98	ug/L	99

(#)=qualifier out of range (m)=manual integration

6V16337.D 1114V06.M

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Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\6\DATA\12262017\6V16337.D

Vial: 30

Acq On : 27 Dec 2017 3:49

Operator: sdp

Sample : B7L2718-MS1

Inst : GCMS-6

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 28 15:02 2017

Quant Results File: 1114V06.RES

Quant Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)

Title : VOC's by EPA Method 8260B

Last Update : Sun Nov 26 15:00:58 2017

Response via : Initial Calibration

DataAcq Meth : VOCRUN6

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
50) Chlorodibromomethane	10.62	129	425988	52.08	ug/L	99
51) 1,2-Dibromoethane	10.86	107	444206	53.86	ug/L	97
53) Chlorobenzene	11.34	112	1370262	48.66	ug/L	100
54) 1,1,1,2-Tetrachloroethane	11.37	131	447823	47.77	ug/L	99
55) Ethylbenzene	11.37	91	2157710	50.09	ug/L	94
56) m+p-Xylenes	11.46	106	1757195	100.49	ug/L	89
57) o-Xylene	12.00	91	1686622	54.39	ug/L	92
58) Styrene	12.04	104	1444497	53.28	ug/L	95
59) Isopropylbenzene	12.41	105	1980402	54.95	ug/L	97
60) Bromoform	12.50	173	315255	48.00	ug/L	96
61) 1,1,2,2-Tetrachloroethane	12.63	83	685217	49.76	ug/L	98
63) 1,2,3-Trichloropropane	12.82	110	196357	48.43	ug/L	97
64) n-Propylbenzene	12.91	91	2217561	51.84	ug/L	96
65) Bromobenzene	13.02	77	789118	49.49	ug/L	83
66) 2-Chlorotoluene	13.16	91	1348835	49.88	ug/L	95
67) 4-Chlorotoluene	13.21	91	1403249	49.70	ug/L	94
68) 1,3,5-Trimethylbenzene	13.10	105	1491779	53.30	ug/L	93
69) tert-Butylbenzene	13.54	119	1233143	49.49	ug/L	92
70) 1,2,4-Trimethylbenzene	13.60	105	1484136	52.40	ug/L	93
71) sec-Butylbenzene	13.81	105	1687246	52.84	ug/L	97
72) 4-Isopropyltoluene	13.97	119	1392958	50.21	ug/L	96
73) 1,3-Dichlorobenzene	14.15	146	911380	47.45	ug/L	95
75) 1,4-Dichlorobenzene	14.28	146	923195	46.86	ug/L	95
76) n-Butylbenzene	14.49	91	1102179	52.01	ug/L	97
77) 1,2-Dichlorobenzene	14.75	146	823448	48.90	ug/L	96
78) 1,2-Dibromo-3-chloropropan	15.74	75	128603	46.89	ug/L	67
79) 1,2,4-Trichlorobenzene	16.72	180	309605	44.80	ug/L	95
80) Hexachlorobutadiene	16.84	225	135938	42.31	ug/L	99
81) Naphthalene	17.00	128	1151231	49.38	ug/L	99
82) 1,2,3-Trichlorobenzene	17.24	180	267889	43.85	ug/L	98

(#) = qualifier out of range (m) = manual integration

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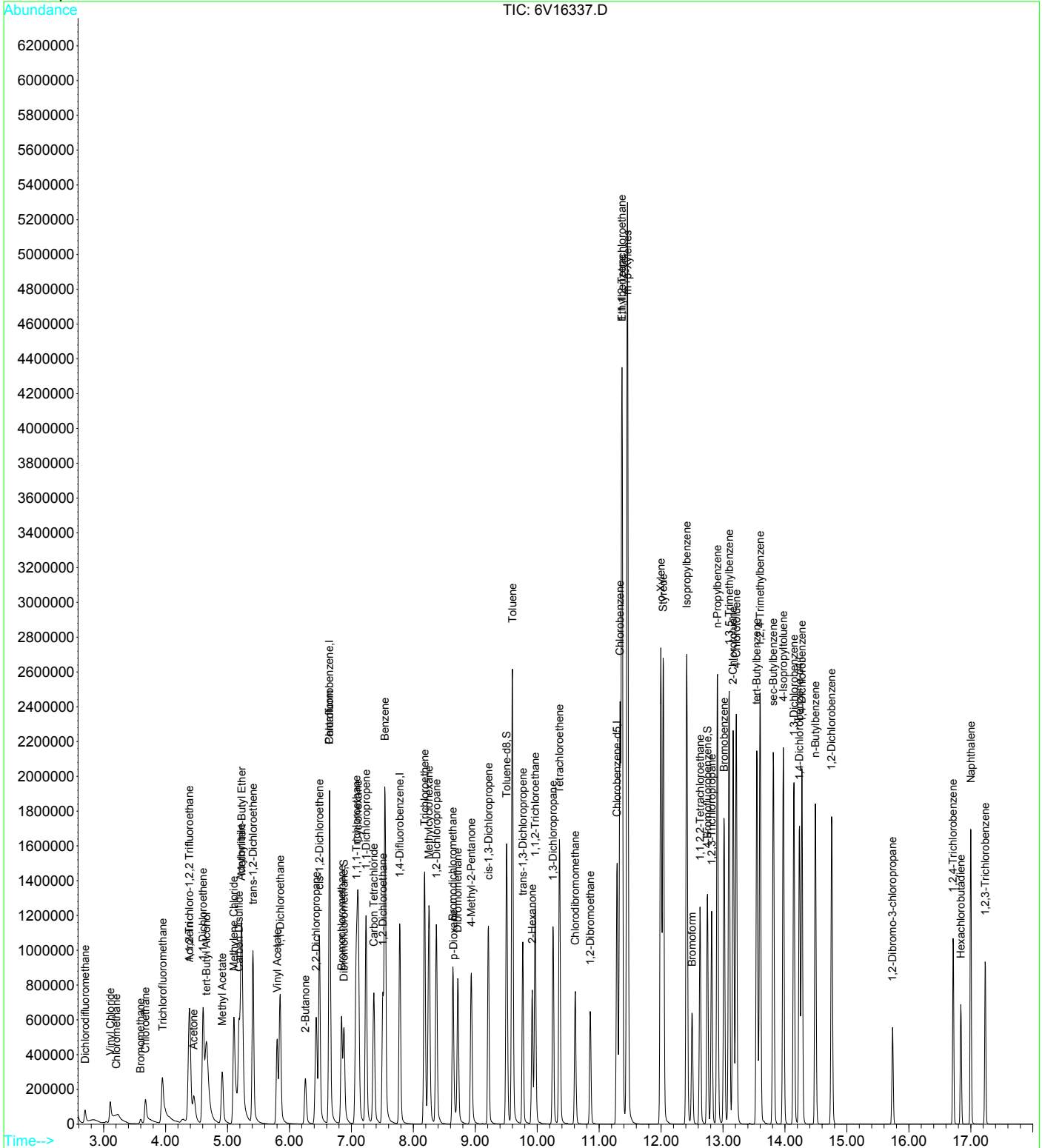
Quantitation Report

Data File : G:\HPCHEM\6\DATA\12262017\6V16337.D
 Acq On : 27 Dec 2017 3:49
 Sample : B7L2718-MS1
 Misc :
 MS Integration Params: RTEINT.P
 Quant Time: Dec 28 15:02 2017

Vial: 30
 Operator: sdg
 Inst : GCMS-6
 Multiplr: 1.00

Quant Results File: 1114V06.RES

Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)
 Title : VOC's by EPA Method 8260B
 Last Update : Sun Nov 26 15:00:58 2017
 Response via : Initial Calibration



6V16337.D 1114V06.M

Thu Dec 28 15:22:52 2017

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10.4.

Volatile Organics - GC/MS - Quality Control
Aqua Pro-Tech Laboratories

Batch B7L2718			Method: SW 846 8260B			Prepared: 12/27/2017				
Lab Number	Source	Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
B7L2718-MSD1	7120733-01	Benzene	50.1	ug/L	50.0	0.00	100	68.6-141	2.96	20
B7L2718-MSD1	7120733-01	EthylBenzene	49.0	ug/L	50.0	0.00	98.0	84.2-110	2.24	20
B7L2718-MSD1	7120733-01	m+p-Xylenes	97.6	ug/L	100	0.00	97.6	78.4-106	2.92	20
B7L2718-MSD1	7120733-01	Methyl tert-Butyl Ether	48.2	ug/L	50.0	0.00	96.3	69.5-127	1.67	20
B7L2718-MSD1	7120733-01	o-Xylene	53.0	ug/L	50.0	0.00	106	86.7-114	2.68	20
B7L2718-MSD1	7120733-01	tert-Butyl alcohol	402	ug/L	500	0.00	80.4	70-130	2.93	20
B7L2718-MSD1	7120733-01	Toluene	49.1	ug/L	50.0	0.00	98.1	83.5-131	0.539	20

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10.4.

* - Outside of QC Limits

NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\6\DATA\12262017\6V16338.D
 Acq On : 27 Dec 2017 4:14
 Sample : B7L2718-MSD1
 Misc :

Vial: 31
 Operator: sdp
 Inst : GCMS-6
 Multiplr: 1.00

MS Integration Params: RTEINT.P
 Quant Time: Dec 28 15:03 2017

Quant Results File: 1114V06.RES

Quant Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)

Title : VOC's by EPA Method 8260B

Last Update : Sun Nov 26 15:00:58 2017

Response via : Initial Calibration

DataAcq Meth : VOCRUN6

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.65	168	674355	30.00	ug/L	0.00
33) 1,4-Difluorobenzene	7.78	114	1021610	30.00	ug/L	0.00
52) Chlorobenzene-d5	11.29	82	483579	30.00	ug/L	0.00
74) 1,4-Dichlorobenzene-d4	14.23	152	523346	30.00	ug/L	0.00

System Monitoring Compounds

26) Dibromofluoromethane	6.88	113	301499	32.13	ug/L	0.00
Spiked Amount	30.000	Range 75 - 123	Recovery	=	107.10%	
43) Toluene-d8	9.51	98	1206071	30.87	ug/L	0.00
Spiked Amount	30.000	Range 76 - 130	Recovery	=	102.90%	
62) 4-Bromofluorobenzene	12.75	95	447867	29.92	ug/L	0.00
Spiked Amount	30.000	Range 75 - 141	Recovery	=	99.73%	

Target Compounds

Qvalue

2) Dichlorodifluoromethane	2.70	85	238500m	49.76	ug/L	
3) Chloromethane	3.19	50	141916m	46.25	ug/L	
4) Acrolein	4.40	56	73123	40.13	ug/L	92
5) Vinyl Chloride	3.10	62	275657m	43.53	ug/L	
6) Bromomethane	3.60	94	25985	45.93	ug/L	90
7) Chloroethane	3.68	64	264467	48.58	ug/L	95
8) Trichlorofluoromethane	3.95	101	480619	44.97	ug/L	96
9) 1,1,2-Trichloro-1,2,2 Trif	4.39	101	393965	45.08	ug/L	87
10) Acetone	4.45	43	276341	50.77	ug/L	91
11) 1,1-Dichloroethene	4.61	61	617234	47.57	ug/L	86
12) tert-Butyl Alcohol	4.66	59	949778	401.90	ug/L	94
13) Methyl Acetate	4.91	43	473828	43.74	ug/L	89
14) Methylene Chloride	5.10	84	478380	52.98	ug/L	88
15) Carbon Disulfide	5.19	76	1079960	38.15	ug/L	99
16) Acrylonitrile	5.22	53	307198	49.38	ug/L	97
17) Methyl tert-Butyl Ether	5.23	73	1174831	48.17	ug/L	98
18) trans-1,2-Dichloroethene	5.41	61	613135	47.49	ug/L	88
19) 1,1-Dichloroethane	5.85	63	815962	47.91	ug/L	99
20) Vinyl Acetate	5.80	43	829754	45.50	ug/L	92
21) 2-Butanone	6.26	43	390895	43.40	ug/L	89
22) 2,2-Dichloropropane	6.43	77	473470	38.87	ug/L	99
23) cis-1,2-Dichloroethene	6.48	61	633760	49.24	ug/L	83
24) Chloroform	6.65	83	788772	48.04	ug/L	99
25) Bromochloromethane	6.84	49	351044	53.35	ug/L	69
27) Cyclohexane	7.11	56	695465	51.55	ug/L	89
28) 1,1,1-Trichloroethane	7.08	97	646653	47.99	ug/L	99
29) 1,1-Dichloropropene	7.24	75	643334	48.08	ug/L	95
30) Carbon Tetrachloride	7.36	117	543291	49.88	ug/L	99
31) 1,2-Dichloroethane	7.51	62	579174	49.13	ug/L	100
32) Benzene	7.55	78	1903081	50.09	ug/L	98
34) Trichloroethene	8.18	130	539013	46.08	ug/L	94
35) Methylcyclohexane	8.26	83	643335	47.36	ug/L	94
36) 1,2-Dichloropropane	8.37	63	473015	46.67	ug/L	100
37) Bromodichloromethane	8.64	83	564601	47.07	ug/L	99
38) p-Dioxane	8.65	88	121072	473.93	ug/L #	86
39) Dibromomethane	8.72	174	343303	46.69	ug/L	82
41) 4-Methyl-2-Pentanone	8.94	43	637630	46.80	ug/L	90
42) cis-1,3-Dichloropropene	9.21	75	676462	46.42	ug/L	97
44) Toluene	9.60	91	2074117	49.07	ug/L	99
45) trans-1,3-Dichloropropene	9.77	75	561167	45.87	ug/L	97
46) 1,1,2-Trichloroethane	9.97	97	426314	48.70	ug/L	99
47) 2-Hexanone	9.92	43	509467	46.23	ug/L	92
48) 1,3-Dichloropropane	10.25	76	710438	51.09	ug/L	100
49) Tetrachloroethene	10.36	166	567363	47.99	ug/L	99

(#) = qualifier out of range (m) = manual integration

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Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\6\DATA\12262017\6V16338.D

Vial: 31

Acq On : 27 Dec 2017 4:14

Operator: sdp

Sample : B7L2718-MSD1

Inst : GCMS-6

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 28 15:03 2017

Quant Results File: 1114V06.RES

Quant Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)

Title : VOC's by EPA Method 8260B

Last Update : Sun Nov 26 15:00:58 2017

Response via : Initial Calibration

DataAcq Meth : VOCRUN6

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
50) Chlorodibromomethane	10.62	129	428285	51.63	ug/L	99
51) 1,2-Dibromoethane	10.86	107	458673	54.84	ug/L	96
53) Chlorobenzene	11.34	112	1357036	46.87	ug/L	100
54) 1,1,1,2-Tetrachloroethane	11.37	131	441850	45.83	ug/L	98
55) Ethylbenzene	11.37	91	2169781	48.98	ug/L	93
56) m+p-Xylenes	11.46	106	1755055	97.60	ug/L	89
57) o-Xylene	12.00	91	1688579	52.95	ug/L	91
58) Styrene	12.03	104	1446171	51.87	ug/L	96
59) Isopropylbenzene	12.41	105	2019962	54.50	ug/L	97
60) Bromoform	12.50	173	311874	46.18	ug/L	97
61) 1,1,2,2-Tetrachloroethane	12.63	83	686489	48.47	ug/L	97
63) 1,2,3-Trichloropropane	12.82	110	197282	47.32	ug/L	96
64) n-Propylbenzene	12.91	91	2261427	51.41	ug/L	95
65) Bromobenzene	13.02	77	784589	47.85	ug/L	84
66) 2-Chlorotoluene	13.16	91	1358781	48.87	ug/L	95
67) 4-Chlorotoluene	13.22	91	1435104	49.43	ug/L	95
68) 1,3,5-Trimethylbenzene	13.10	105	1512928	52.57	ug/L	90
69) tert-Butylbenzene	13.55	119	1272300	49.65	ug/L	90
70) 1,2,4-Trimethylbenzene	13.60	105	1512638	51.93	ug/L	97
71) sec-Butylbenzene	13.81	105	1768033	53.84	ug/L	97
72) 4-Isopropyltoluene	13.97	119	1471389	51.57	ug/L	96
73) 1,3-Dichlorobenzene	14.15	146	928515	47.01	ug/L	94
75) 1,4-Dichlorobenzene	14.28	146	943848	46.73	ug/L	95
76) n-Butylbenzene	14.49	91	1199268	55.21	ug/L	98
77) 1,2-Dichlorobenzene	14.76	146	839019	48.60	ug/L	95
78) 1,2-Dibromo-3-chloropropan	15.74	75	126170	44.87	ug/L	68
79) 1,2,4-Trichlorobenzene	16.72	180	331652	46.81	ug/L	95
80) Hexachlorobutadiene	16.84	225	162412	49.31	ug/L	99
81) Naphthalene	17.00	128	1173734	49.11	ug/L	100
82) 1,2,3-Trichlorobenzene	17.24	180	281868	45.01	ug/L	97

(#) = qualifier out of range (m) = manual integration

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Thu Dec 28 15:22:54 2017

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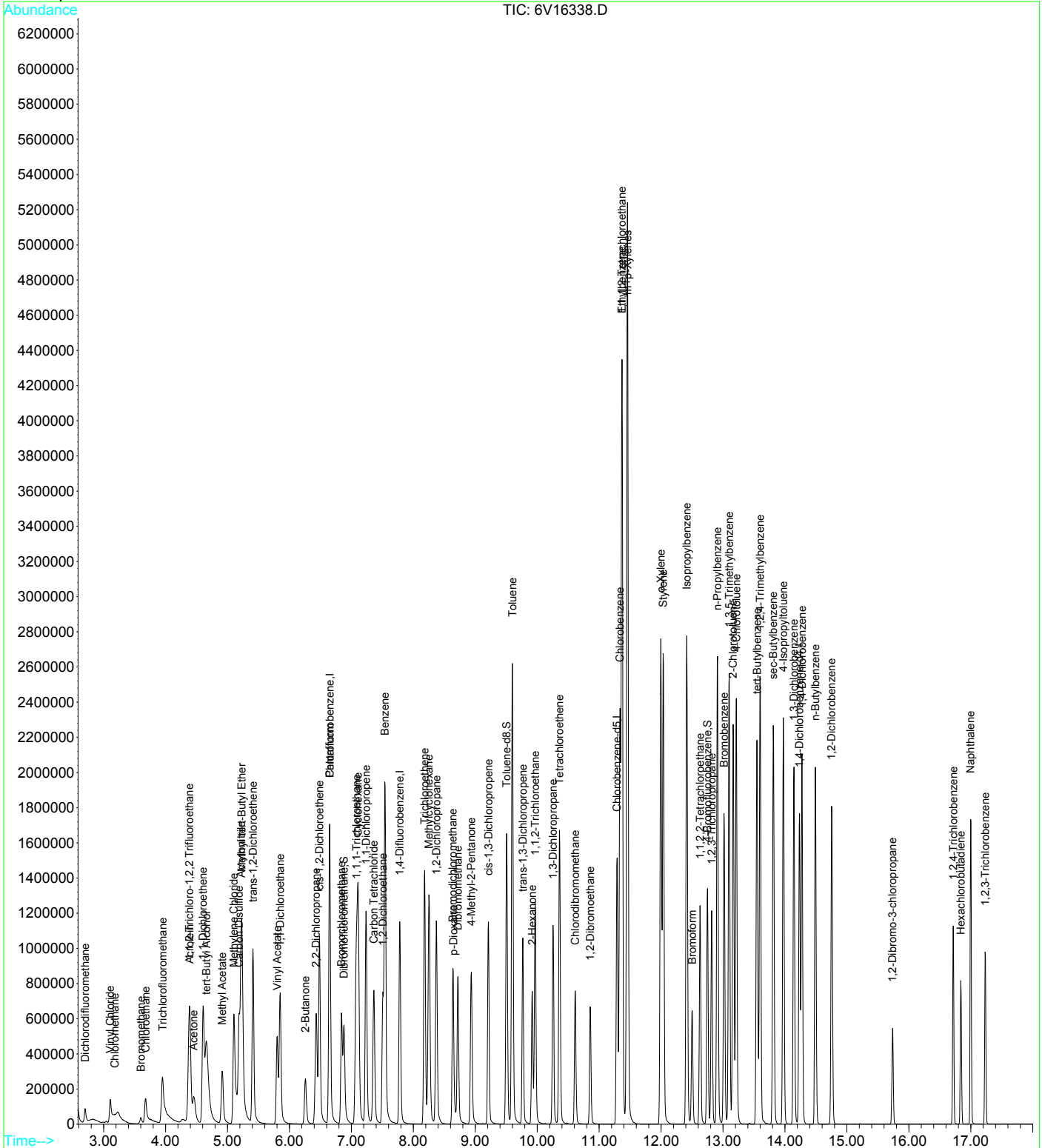
Quantitation Report

Data File : G:\HPCHEM\6\DATA\12262017\6V16338.D
 Acq On : 27 Dec 2017 4:14
 Sample : B7L2718-MSD1
 Misc :
 MS Integration Params: RTEINT.P
 Quant Time: Dec 28 15:03 2017

Vial: 31
 Operator: sdg
 Inst : GCMS-6
 Multiplr: 1.00

Quant Results File: 1114V06.RES

Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)
 Title : VOC's by EPA Method 8260B
 Last Update : Sun Nov 26 15:00:58 2017
 Response via : Initial Calibration



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Thu Dec 28 15:22:54 2017

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Volatile Organics - GC/MS - Quality Control
Aqua Pro-Tech Laboratories

Batch B8A0226			Method: SW 846 8260B			Prepared: 12/29/2017			
Lab Number	Source	Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD Limit
B8A0226-BS1		Benzene	51.0	ug/L	50.0		102	76.6-131	
B8A0226-BS1		EthylBenzene	51.0	ug/L	50.0		102	88.1-106	
B8A0226-BS1		m+p-Xylenes	101	ug/L	100		101	75-102	
B8A0226-BS1		Methyl tert-Butyl Ether	49.3	ug/L	50.0		98.6	75.2-118	
B8A0226-BS1		o-Xylene	54.4	ug/L	50.0		109	91-110	
B8A0226-BS1		tert-Butyl alcohol	419	ug/L	500		83.9	63.6-135	
B8A0226-BS1		Toluene	49.9	ug/L	50.0		99.9	86.6-125	

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10.4.

* - Outside of QC Limits

NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\6\DATA\12292017\6V16349.D
 Acq On : 29 Dec 2017 14:23
 Sample : B8A0226-BS1
 Misc :

Vial: 54
 Operator: sdp
 Inst : GCMS-6
 Multiplr: 1.00

MS Integration Params: RTEINT.P
 Quant Time: Jan 2 15:47 2018

Quant Results File: 1114V06.RES

Quant Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)

Title : VOC's by EPA Method 8260B

Last Update : Sun Nov 26 15:00:58 2017

Response via : Initial Calibration

DataAcq Meth : VOCRUN6

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.65	168	702695	30.00	ug/L	0.00
33) 1,4-Difluorobenzene	7.79	114	1041521	30.00	ug/L	0.00
52) Chlorobenzene-d5	11.29	82	490585	30.00	ug/L	0.00
74) 1,4-Dichlorobenzene-d4	14.23	152	520743	30.00	ug/L	0.00

System Monitoring Compounds

26) Dibromofluoromethane	6.88	113	303851	31.07	ug/L	0.00
Spiked Amount	30.000	Range 75 - 123	Recovery	=	103.57%	
43) Toluene-d8	9.51	98	1225878	30.77	ug/L	0.00
Spiked Amount	30.000	Range 76 - 130	Recovery	=	102.57%	
62) 4-Bromofluorobenzene	12.75	95	463244	30.51	ug/L	0.00
Spiked Amount	30.000	Range 75 - 141	Recovery	=	101.70%	

Target Compounds

Qvalue

2) Dichlorodifluoromethane	2.70	85	343173m	68.71	ug/L	
3) Chloromethane	3.18	50	176832m	55.30	ug/L	
4) Acrolein	4.40	56	85975	45.28	ug/L	92
5) Vinyl Chloride	3.11	62	343781m	52.10	ug/L	
6) Bromomethane	3.60	94	33518m	56.86	ug/L	
7) Chloroethane	3.67	64	301225	53.10	ug/L	99
8) Trichlorofluoromethane	3.95	101	610101m	54.79	ug/L	
9) 1,1,2-Trichloro-1,2,2 Trif	4.39	101	479147	52.61	ug/L	90
10) Acetone	4.46	43	265920m	46.89	ug/L	
11) 1,1-Dichloroethene	4.61	61	704912	52.13	ug/L	84
12) tert-Butyl Alcohol	4.66	59	1032753m	419.38	ug/L	
13) Methyl tert-Butyl Ether	4.91	43	593624	52.58	ug/L	93
14) Methylene Chloride	5.10	84	506210	53.80	ug/L	87
15) Carbon Disulfide	5.19	76	1426935	48.38	ug/L	99
16) Acrylonitrile	5.22	53	316186	48.78	ug/L	99
17) Methyl tert-Butyl Ether	5.23	73	1252537	49.28	ug/L	96
18) trans-1,2-Dichloroethene	5.41	61	680457	50.58	ug/L	88
19) 1,1-Dichloroethane	5.85	63	868305	48.93	ug/L	99
20) Vinyl Acetate	5.80	43	856934	45.10	ug/L	93
21) 2-Butanone	6.26	43	403029	42.95	ug/L	91
22) 2,2-Dichloropropane	6.43	77	662377	52.19	ug/L	99
23) cis-1,2-Dichloroethene	6.48	61	675845	50.39	ug/L	84
24) Chloroform	6.65	83	822636	48.09	ug/L	99
25) Bromochloromethane	6.84	49	373958	54.54	ug/L	72
27) Cyclohexane	7.11	56	756571	53.81	ug/L	89
28) 1,1,1-Trichloroethane	7.08	97	693923	49.42	ug/L	99
29) 1,1-Dichloropropene	7.24	75	715738	51.33	ug/L	95
30) Carbon Tetrachloride	7.36	117	586016	51.63	ug/L	100
31) 1,2-Dichloroethane	7.51	62	601197	48.95	ug/L	99
32) Benzene	7.55	78	2017558	50.96	ug/L	98
34) Trichloroethene	8.18	130	568181	47.64	ug/L	94
35) Methylcyclohexane	8.25	83	724682	52.33	ug/L	95
36) 1,2-Dichloropropane	8.37	63	505195	48.89	ug/L	100
37) Bromodichloromethane	8.64	83	591612	48.38	ug/L	100
38) p-Dioxane	8.64	88	122246	469.38	ug/L #	93
39) Dibromomethane	8.72	174	349659	46.64	ug/L	83
41) 4-Methyl-2-Pentanone	8.94	43	648610	46.69	ug/L	91
42) cis-1,3-Dichloropropene	9.21	75	753841	50.74	ug/L	97
44) Toluene	9.60	91	2151547	49.93	ug/L	98
45) trans-1,3-Dichloropropene	9.77	75	638405	51.19	ug/L	97
46) 1,1,2-Trichloroethane	9.97	97	435491	48.80	ug/L	100
47) 2-Hexanone	9.92	43	515342	45.87	ug/L	92
48) 1,3-Dichloropropane	10.26	76	733226	51.72	ug/L	100
49) Tetrachloroethene	10.36	166	583713	48.43	ug/L	98

(#) = qualifier out of range (m) = manual integration

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Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\6\DATA\12292017\6V16349.D

Vial: 54

Acq On : 29 Dec 2017 14:23

Operator: sdp

Sample : B8A0226-BS1

Inst : GCMS-6

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Jan 2 15:47 2018

Quant Results File: 1114V06.RES

Quant Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)

Title : VOC's by EPA Method 8260B

Last Update : Sun Nov 26 15:00:58 2017

Response via : Initial Calibration

DataAcq Meth : VOCRUN6

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
50) Chlorodibromomethane	10.62	129	445296	52.66	ug/L	100
51) 1,2-Dibromoethane	10.86	107	467496	54.83	ug/L	97
53) Chlorobenzene	11.34	112	1410599	48.02	ug/L	100
54) 1,1,1,2-Tetrachloroethane	11.37	131	462596	47.30	ug/L	98
55) Ethylbenzene	11.37	91	2293452	51.03	ug/L	92
56) m+p-Xylenes	11.46	106	1841251	100.94	ug/L	86
57) o-Xylene	12.00	91	1760185	54.41	ug/L	93
58) Styrene	12.04	104	1493788	52.81	ug/L	95
59) Isopropylbenzene	12.41	105	2087485	55.52	ug/L	97
60) Bromoform	12.50	173	336773	49.15	ug/L	97
61) 1,1,2,2-Tetrachloroethane	12.63	83	705295	49.09	ug/L	99
63) 1,2,3-Trichloropropane	12.82	110	200155	47.32	ug/L	97
64) n-Propylbenzene	12.91	91	2389864	53.55	ug/L	95
65) Bromobenzene	13.02	77	818183	49.19	ug/L	86
66) 2-Chlorotoluene	13.17	91	1392758	49.37	ug/L	93
67) 4-Chlorotoluene	13.21	91	1477411	50.16	ug/L	95
68) 1,3,5-Trimethylbenzene	13.10	105	1569286	53.75	ug/L	91
69) tert-Butylbenzene	13.55	119	1312940	50.51	ug/L	92
70) 1,2,4-Trimethylbenzene	13.60	105	1561960	52.86	ug/L	96
71) sec-Butylbenzene	13.82	105	1839585	55.22	ug/L	96
72) 4-Isopropyltoluene	13.97	119	1538896	53.17	ug/L	97
73) 1,3-Dichlorobenzene	14.15	146	953242	47.57	ug/L	93
75) 1,4-Dichlorobenzene	14.28	146	969600	48.24	ug/L	95
76) n-Butylbenzene	14.49	91	1264415	58.50	ug/L	96
77) 1,2-Dichlorobenzene	14.76	146	857367	49.91	ug/L	94
78) 1,2-Dibromo-3-chloropropan	15.74	75	137033	48.98	ug/L	76
79) 1,2,4-Trichlorobenzene	16.72	180	362338	51.39	ug/L	96
80) Hexachlorobutadiene	16.84	225	163208	49.80	ug/L	95
81) Naphthalene	17.00	128	1240194	52.15	ug/L	99
82) 1,2,3-Trichlorobenzene	17.24	180	309395	49.65	ug/L	98

(#) = qualifier out of range (m) = manual integration

6V16349.D 1114V06.M

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Volatile Organics - GC/MS - Quality Control
Aqua Pro-Tech Laboratories

Batch B8A0226			Method: SW 846 8260B			Prepared: 12/30/2017				
Lab Number	Source	Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
B8A0226-MS1	7120696-01	Benzene	52.2	ug/L	50.0	0.00	104	68.6-141		
B8A0226-MS1	7120696-01	EthylBenzene	50.7	ug/L	50.0	0.00	101	84.2-110		
B8A0226-MS1	7120696-01	m+p-Xylenes	101	ug/L	100	0.00	101	78.4-106		
B8A0226-MS1	7120696-01	Methyl tert-Butyl Ether	50.6	ug/L	50.0	0.00	101	69.5-127		
B8A0226-MS1	7120696-01	o-Xylene	55.0	ug/L	50.0	0.00	110	86.7-114		
B8A0226-MS1	7120696-01	tert-Butyl alcohol	420	ug/L	500	0.00	84.1	70-130		
B8A0226-MS1	7120696-01	Toluene	50.1	ug/L	50.0	0.00	100	83.5-131		

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10.4.

* - Outside of QC Limits

NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\6\DATA\12292017\6V16374.D
 Acq On : 30 Dec 2017 1:12
 Sample : B8A0226-MS1
 Misc :

Vial: 79
 Operator: sdp
 Inst : GCMS-6
 Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Jan 2 16:17 2018

Quant Results File: 1114V06.RES

Quant Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)

Title : VOC's by EPA Method 8260B

Last Update : Sun Nov 26 15:00:58 2017

Response via : Initial Calibration

DataAcq Meth : VOCRUN6

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.65	168	725361	30.00	ug/L	0.00
33) 1,4-Difluorobenzene	7.78	114	1111546	30.00	ug/L	0.00
52) Chlorobenzene-d5	11.29	82	514216	30.00	ug/L	0.00
74) 1,4-Dichlorobenzene-d4	14.23	152	538553	30.00	ug/L	0.00

System Monitoring Compounds

26) Dibromofluoromethane	6.88	113	329376	32.63	ug/L	0.00
Spiked Amount	30.000	Range 75 - 123	Recovery	=	108.77%	
43) Toluene-d8	9.51	98	1284731	30.22	ug/L	0.00
Spiked Amount	30.000	Range 76 - 130	Recovery	=	100.73%	
62) 4-Bromofluorobenzene	12.75	95	474276	29.80	ug/L	0.00
Spiked Amount	30.000	Range 75 - 141	Recovery	=	99.33%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	2.69	85	171905m	33.34	ug/L	
3) Chloromethane	3.19	50	98272m	29.77	ug/L	
4) Acrolein	4.40	56	72672	37.08	ug/L	96
5) Vinyl Chloride	3.10	62	257984m	37.87	ug/L	
6) Bromomethane	3.59	94	15848	26.04	ug/L	93
7) Chloroethane	3.67	64	266819m	45.56	ug/L	
8) Trichlorofluoromethane	3.94	101	512939	44.62	ug/L	97
9) 1,1,2-Trichloro-1,2,2 Trif	4.38	101	432723	46.03	ug/L	89
10) Acetone	4.46	43	293474	50.13	ug/L	91
11) 1,1-Dichloroethene	4.60	61	671475	48.11	ug/L	88
12) tert-Butyl Alcohol	4.66	59	1068870	420.49	ug/L	95
13) Methyl Acetate	4.91	43	562620	48.28	ug/L	94
14) Methylene Chloride	5.10	84	505013	51.99	ug/L	91
15) Carbon Disulfide	5.18	76	1176933	38.65	ug/L	99
16) Acrylonitrile	5.22	53	344446	51.48	ug/L	94
17) Methyl tert-Butyl Ether	5.23	73	1328127	50.63	ug/L	96
18) trans-1,2-Dichloroethene	5.41	61	688677	49.59	ug/L	90
19) 1,1-Dichloroethane	5.85	63	924045	50.44	ug/L	99
20) Vinyl Acetate	5.80	43	1003740	51.17	ug/L	94
21) 2-Butanone	6.26	43	443845	45.82	ug/L	91
22) 2,2-Dichloropropane	6.43	77	590929	45.11	ug/L	98
23) cis-1,2-Dichloroethene	6.48	61	713384	51.53	ug/L	83
24) Chloroform	6.65	83	904649	51.23	ug/L	100
25) Bromochloromethane	6.84	49	382437	54.04	ug/L	70
27) Cyclohexane	7.11	56	775329	53.43	ug/L	90
28) 1,1,1-Trichloroethane	7.07	97	739598	51.03	ug/L	100
29) 1,1-Dichloropropene	7.23	75	729750	50.70	ug/L	95
30) Carbon Tetrachloride	7.36	117	625981	53.43	ug/L	100
31) 1,2-Dichloroethane	7.50	62	663906	52.36	ug/L	100
32) Benzene	7.54	78	2131884	52.16	ug/L	98
34) Trichloroethene	8.18	130	609451	47.88	ug/L	95
35) Methylcyclohexane	8.25	83	709992	48.04	ug/L	94
36) 1,2-Dichloropropane	8.37	63	533040	48.34	ug/L	99
37) Bromodichloromethane	8.64	83	656170	50.28	ug/L	99
38) p-Dioxane	8.64	88	137929	496.23	ug/L #	85
39) Dibromomethane	8.72	174	385705	48.21	ug/L	83
41) 4-Methyl-2-Pentanone	8.94	43	731267	49.33	ug/L	92
42) cis-1,3-Dichloropropene	9.21	75	792157	49.96	ug/L	98
44) Toluene	9.60	91	2302711	50.07	ug/L	98
45) trans-1,3-Dichloropropene	9.77	75	656633	49.34	ug/L	97
46) 1,1,2-Trichloroethane	9.97	97	474596	49.83	ug/L	100
47) 2-Hexanone	9.92	43	582659	48.60	ug/L	93
48) 1,3-Dichloropropane	10.25	76	789378	52.17	ug/L	99
49) Tetrachloroethene	10.36	166	642056	49.92	ug/L	98

(#) = qualifier out of range (m) = manual integration

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Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\6\DATA\12292017\6V16374.D

Vial: 79

Acq On : 30 Dec 2017 1:12

Operator: sdp

Sample : B8A0226-MS1

Inst : GCMS-6

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Jan 2 16:17 2018

Quant Results File: 1114V06.RES

Quant Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)

Title : VOC's by EPA Method 8260B

Last Update : Sun Nov 26 15:00:58 2017

Response via : Initial Calibration

DataAcq Meth : VOCRUN6

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
50) Chlorodibromomethane	10.62	129	497533	55.13	ug/L	100
51) 1,2-Dibromoethane	10.86	107	499838	54.93	ug/L	98
53) Chlorobenzene	11.34	112	1498318	48.66	ug/L	100
54) 1,1,1,2-Tetrachloroethane	11.37	131	501198	48.89	ug/L	99
55) Ethylbenzene	11.37	91	2388312	50.70	ug/L	94
56) m+p-Xylenes	11.46	106	1937596	101.34	ug/L	88
57) o-Xylene	12.00	91	1863613	54.96	ug/L	93
58) Styrene	12.04	104	1564898	52.79	ug/L	95
59) Isopropylbenzene	12.41	105	2177706	55.26	ug/L	98
60) Bromoform	12.50	173	363270	50.58	ug/L	97
61) 1,1,2,2-Tetrachloroethane	12.63	83	746582	49.58	ug/L	96
63) 1,2,3-Trichloropropane	12.82	110	215011	48.50	ug/L	93
64) n-Propylbenzene	12.91	91	2427789	51.90	ug/L	97
65) Bromobenzene	13.02	77	864952	49.61	ug/L	83
66) 2-Chlorotoluene	13.17	91	1469067	49.68	ug/L	92
67) 4-Chlorotoluene	13.21	91	1561096	50.57	ug/L	96
68) 1,3,5-Trimethylbenzene	13.10	105	1607988	52.54	ug/L	94
69) tert-Butylbenzene	13.55	119	1344951	49.36	ug/L	92
70) 1,2,4-Trimethylbenzene	13.60	105	1618051	52.24	ug/L	97
71) sec-Butylbenzene	13.82	105	1834683	52.54	ug/L	97
72) 4-Isopropyltoluene	13.97	119	1521957	50.17	ug/L	95
73) 1,3-Dichlorobenzene	14.15	146	986141	46.95	ug/L	95
75) 1,4-Dichlorobenzene	14.28	146	1019580	49.05	ug/L	94
76) n-Butylbenzene	14.49	91	1229149	54.98	ug/L	96
77) 1,2-Dichlorobenzene	14.76	146	887343	49.95	ug/L	94
78) 1,2-Dibromo-3-chloropropan	15.74	75	140966	48.72	ug/L	71
79) 1,2,4-Trichlorobenzene	16.72	180	353502	48.48	ug/L	97
80) Hexachlorobutadiene	16.84	225	154875	45.69	ug/L	99
81) Naphthalene	17.00	128	1223036	49.73	ug/L	99
82) 1,2,3-Trichlorobenzene	17.24	180	296070	45.94	ug/L	98

(#) = qualifier out of range (m) = manual integration

6V16374.D 1114V06.M

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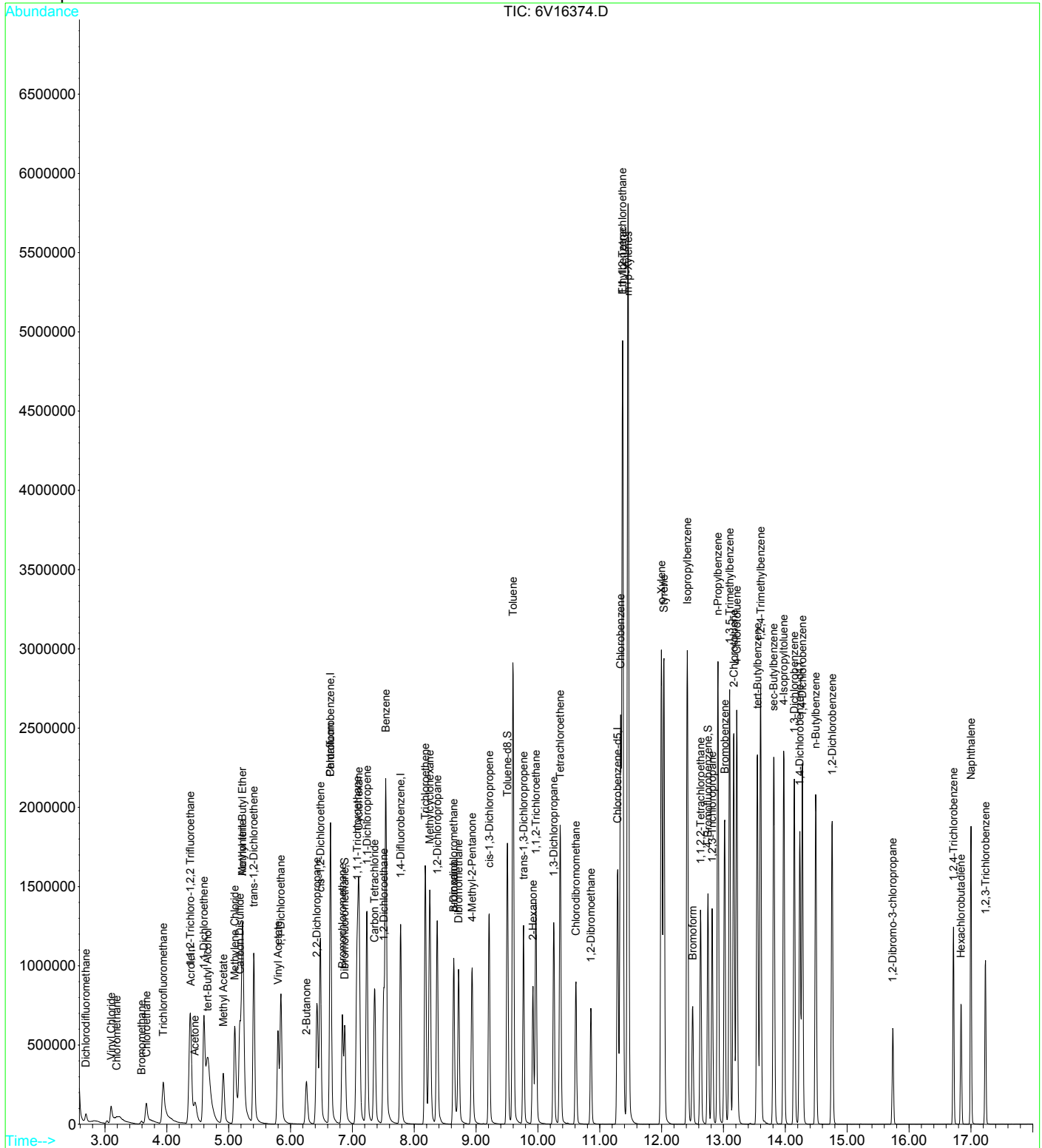
Quantitation Report

Data File : G:\HPCHEM\6\DATA\12292017\6V16374.D
 Acq On : 30 Dec 2017 1:12
 Sample : B8A0226-MS1
 Misc :
 MS Integration Params: RTEINT.P
 Quant Time: Jan 2 16:17 2018

Vial: 79
 Operator: sdg
 Inst : GCMS-6
 Multiplr: 1.00

Quant Results File: 1114V06.RES

Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)
 Title : VOC's by EPA Method 8260B
 Last Update : Sun Nov 26 15:00:58 2017
 Response via : Initial Calibration



6V16374.D 1114V06.M

Tue Jan 02 17:55:28 2018

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10.4.

Volatile Organics - GC/MS - Quality Control
Aqua Pro-Tech Laboratories

Batch B8A0226			Method: SW 846 8260B			Prepared: 12/30/2017				
Lab Number	Source	Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
B8A0226-MSD1	7120696-01	Benzene	50.8	ug/L	50.0	0.00	102	68.6-141	2.71	20
B8A0226-MSD1	7120696-01	EthylBenzene	50.0	ug/L	50.0	0.00	100	84.2-110	1.32	20
B8A0226-MSD1	7120696-01	m+p-Xylenes	99.0	ug/L	100	0.00	99.0	78.4-106	2.36	20
B8A0226-MSD1	7120696-01	Methyl tert-Butyl Ether	49.8	ug/L	50.0	0.00	99.6	69.5-127	1.66	20
B8A0226-MSD1	7120696-01	o-Xylene	54.3	ug/L	50.0	0.00	109	86.7-114	1.16	20
B8A0226-MSD1	7120696-01	tert-Butyl alcohol	494	ug/L	500	0.00	98.8	70-130	16.0	20
B8A0226-MSD1	7120696-01	Toluene	50.4	ug/L	50.0	0.00	101	83.5-131	0.650	20

10
10.4.

* - Outside of QC Limits

NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\6\DATA\12292017\6V16375.D
 Acq On : 30 Dec 2017 1:38
 Sample : B8A0226-MSD1
 Misc :

Vial: 80
 Operator: sdp
 Inst : GCMS-6
 Multiplr: 1.00

MS Integration Params: RTEINT.P
 Quant Time: Jan 2 16:18 2018

Quant Results File: 1114V06.RES

Quant Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)

Title : VOC's by EPA Method 8260B

Last Update : Sun Nov 26 15:00:58 2017

Response via : Initial Calibration

DataAcq Meth : VOCRUN6

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.65	168	621265	30.00	ug/L	0.00
33) 1,4-Difluorobenzene	7.78	114	935609	30.00	ug/L	0.00
52) Chlorobenzene-d5	11.29	82	454289	30.00	ug/L	0.00
74) 1,4-Dichlorobenzene-d4	14.23	152	501887	30.00	ug/L	0.00

System Monitoring Compounds

26) Dibromofluoromethane	6.88	113	277944	32.15	ug/L	0.00
Spiked Amount	30.000	Range 75 - 123	Recovery	=	107.17%	
43) Toluene-d8	9.51	98	1106942	30.93	ug/L	0.00
Spiked Amount	30.000	Range 76 - 130	Recovery	=	103.10%	
62) 4-Bromofluorobenzene	12.75	95	423600	30.13	ug/L	0.00
Spiked Amount	30.000	Range 75 - 141	Recovery	=	100.43%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	2.70	85	168077m	38.06	ug/L	
3) Chloromethane	3.21	50	111080m	39.29	ug/L	
4) Acrolein	4.40	56	66971	39.90	ug/L	90
5) Vinyl Chloride	3.10	62	243664	41.77	ug/L	96
6) Bromomethane	3.59	94	20513m	39.36	ug/L	
7) Chloroethane	3.67	64	236834m	47.22	ug/L	
8) Trichlorofluoromethane	3.94	101	486453	49.41	ug/L	99
9) 1,1,2-Trichloro-1,2,2 Trif	4.38	101	365543	45.40	ug/L	87
10) Acetone	4.46	43	280866	56.01	ug/L	91
11) 1,1-Dichloroethene	4.61	61	583100	48.78	ug/L	87
12) tert-Butyl Alcohol	4.67	59	1075186	493.84	ug/L	95
13) Methyl Acetate	4.91	43	493614	49.46	ug/L	88
14) Methylene Chloride	5.10	84	447633	53.81	ug/L	90
15) Carbon Disulfide	5.18	76	1026083	39.35	ug/L	99
16) Acrylonitrile	5.22	53	308257	53.79	ug/L	93
17) Methyl tert-Butyl Ether	5.23	73	1118764	49.79	ug/L	97
18) trans-1,2-Dichloroethene	5.41	61	570450	47.96	ug/L	88
19) 1,1-Dichloroethane	5.85	63	767147	48.89	ug/L	99
20) Vinyl Acetate	5.80	43	843400	50.20	ug/L	93
21) 2-Butanone	6.26	43	410794	49.51	ug/L	90
22) 2,2-Dichloropropane	6.43	77	483262	43.07	ug/L	99
23) cis-1,2-Dichloroethene	6.48	61	596687	50.32	ug/L	84
24) Chloroform	6.65	83	752020	49.72	ug/L	100
25) Bromochloromethane	6.84	49	336258	55.47	ug/L	71
27) Cyclohexane	7.11	56	633648	50.98	ug/L	89
28) 1,1,1-Trichloroethane	7.07	97	614545	49.50	ug/L	99
29) 1,1-Dichloropropene	7.24	75	600944	48.75	ug/L	95
30) Carbon Tetrachloride	7.36	117	516145	51.44	ug/L	100
31) 1,2-Dichloroethane	7.51	62	548809	50.54	ug/L	99
32) Benzene	7.54	78	1777041	50.77	ug/L	98
34) Trichloroethene	8.18	130	508748	47.49	ug/L	94
35) Methylcyclohexane	8.25	83	583093	46.87	ug/L	94
36) 1,2-Dichloropropane	8.37	63	444957	47.94	ug/L	100
37) Bromodichloromethane	8.64	83	543270	49.46	ug/L	100
38) p-Dioxane	8.64	88	39584	169.19	ug/L #	89
39) Dibromomethane	8.72	174	320892	47.65	ug/L	83
41) 4-Methyl-2-Pentanone	8.94	43	648844	52.00	ug/L	91
42) cis-1,3-Dichloropropene	9.21	75	653771	48.98	ug/L	97
44) Toluene	9.60	91	1950869	50.39	ug/L	99
45) trans-1,3-Dichloropropene	9.77	75	550780	49.16	ug/L	96
46) 1,1,2-Trichloroethane	9.97	97	399414	49.82	ug/L	100
47) 2-Hexanone	9.92	43	570246	56.50	ug/L	93
48) 1,3-Dichloropropane	10.25	76	673433	52.88	ug/L	100
49) Tetrachloroethene	10.36	166	520970	48.12	ug/L	99

(#) = qualifier out of range (m) = manual integration

6V16375.D 1114V06.M Tue Jan 02 17:55:29 2018 SS

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Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\6\DATA\12292017\6V16375.D

Vial: 80

Acq On : 30 Dec 2017 1:38

Operator: sdp

Sample : B8A0226-MSD1

Inst : GCMS-6

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Jan 2 16:18 2018

Quant Results File: 1114V06.RES

Quant Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)

Title : VOC's by EPA Method 8260B

Last Update : Sun Nov 26 15:00:58 2017

Response via : Initial Calibration

DataAcq Meth : VOCRUN6

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
50) Chlorodibromomethane	10.62	129	416787	54.86	ug/L	100
51) 1,2-Dibromoethane	10.86	107	424482	55.42	ug/L	97
53) Chlorobenzene	11.34	112	1286373	47.29	ug/L	99
54) 1,1,1,2-Tetrachloroethane	11.37	131	428284	47.29	ug/L	99
55) Ethylbenzene	11.37	91	2082378	50.04	ug/L	96
56) m+p-Xylenes	11.46	106	1671877	98.97	ug/L	89
57) o-Xylene	12.00	91	1627446	54.32	ug/L	93
58) Styrene	12.04	104	1382668	52.79	ug/L	96
59) Isopropylbenzene	12.41	105	1922435	55.22	ug/L	96
60) Bromoform	12.50	173	317447	50.03	ug/L	96
61) 1,1,2,2-Tetrachloroethane	12.63	83	672120	50.52	ug/L	98
63) 1,2,3-Trichloropropane	12.82	110	190074	48.53	ug/L	95
64) n-Propylbenzene	12.91	91	2181183	52.78	ug/L	95
65) Bromobenzene	13.02	77	770400	50.01	ug/L	82
66) 2-Chlorotoluene	13.16	91	1305261	49.97	ug/L	94
67) 4-Chlorotoluene	13.22	91	1403540	51.46	ug/L	96
68) 1,3,5-Trimethylbenzene	13.10	105	1457274	53.90	ug/L	90
69) tert-Butylbenzene	13.55	119	1220115	50.68	ug/L	90
70) 1,2,4-Trimethylbenzene	13.60	105	1475039	53.91	ug/L	95
71) sec-Butylbenzene	13.81	105	1672444	54.21	ug/L	99
72) 4-Isopropyltoluene	13.97	119	1413258	52.73	ug/L	97
73) 1,3-Dichlorobenzene	14.15	146	915611	49.35	ug/L	93
75) 1,4-Dichlorobenzene	14.28	146	929311	47.98	ug/L	96
76) n-Butylbenzene	14.49	91	1159446	55.66	ug/L	98
77) 1,2-Dichlorobenzene	14.76	146	832323	50.27	ug/L	95
78) 1,2-Dibromo-3-chloropropan	15.74	75	142499	52.85	ug/L	72
79) 1,2,4-Trichlorobenzene	16.72	180	358526	52.76	ug/L	94
80) Hexachlorobutadiene	16.84	225	156523	49.55	ug/L	98
81) Naphthalene	17.00	128	1287780	56.19	ug/L	100
82) 1,2,3-Trichlorobenzene	17.24	180	307080	51.13	ug/L	97

(#) = qualifier out of range (m) = manual integration

6V16375.D 1114V06.M

Tue Jan 02 17:55:29 2018

SS

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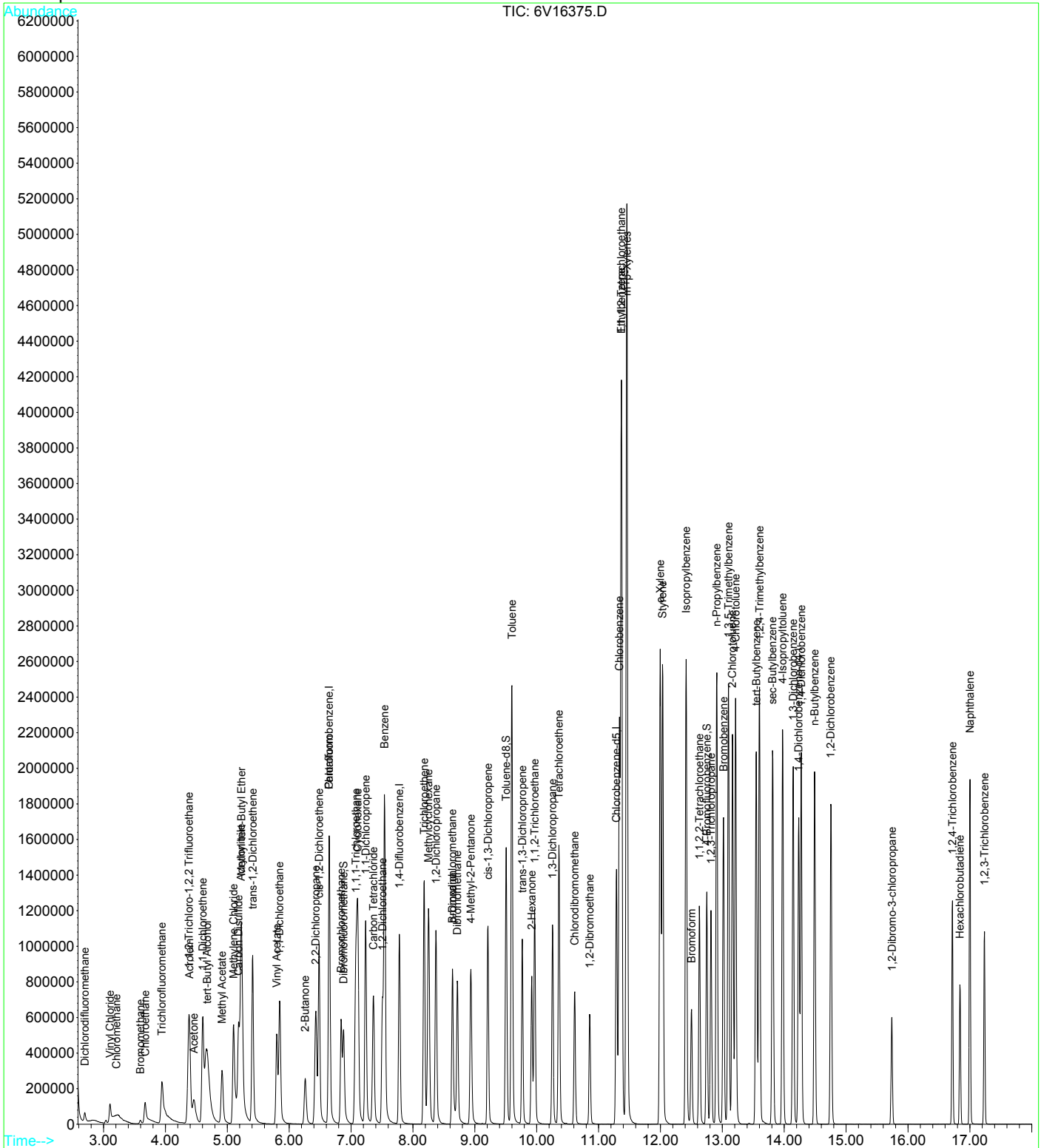
Quantitation Report

Data File : G:\HPCHEM\6\DATA\12292017\6V16375.D
 Acq On : 30 Dec 2017 1:38
 Sample : B8A0226-MSD1
 Misc :
 MS Integration Params: RTEINT.P
 Quant Time: Jan 2 16:18 2018

Vial: 80
 Operator: sdg
 Inst : GCMS-6
 Multiplr: 1.00

Quant Results File: 1114V06.RES

Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)
 Title : VOC's by EPA Method 8260B
 Last Update : Sun Nov 26 15:00:58 2017
 Response via : Initial Calibration



6V16375.D 1114V06.M

Tue Jan 02 17:55:30 2018

SS

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VOLATILE METHOD BLANK SUMMARY

Batch ID: B7L2718

Instrument: GCMS-6

Sequence ID: S7L2804

<u>Lab Number</u>	<u>Sample ID</u>	<u>Analyzed</u>	<u>File ID</u>
B7L2718-BLK1	BLK1	12/26/2017 17:07	6V16312.D
B7L2718-BS1	BS1	12/26/2017 16:41	6V16311.D
B7L2718-MS1	MS1	12/27/2017 3:49	6V16337.D
B7L2718-MSD1	MSD1	12/27/2017 4:14	6V16338.D
7120696-02	MW-7S 20171220	12/26/2017 22:40	6V16325.D
7120696-03	MW-7D 20171220	12/26/2017 23:06	6V16326.D
7120696-04	MW-8S 20171220	12/26/2017 23:32	6V16327.D
7120696-05	MW-8D 20171220	12/26/2017 23:58	6V16328.D
7120696-06	MW-4S 20171221	12/27/2017 0:23	6V16329.D
7120696-07	MW-4D 20171221	12/27/2017 0:49	6V16330.D
7120696-08	MW-3 20171221	12/27/2017 1:14	6V16331.D
7120696-09	DUP-20171221	12/27/2017 1:40	6V16332.D
7120696-10	FB-20171221	12/27/2017 2:06	6V16333.D
7120696-11	MW-9D 20171221	12/27/2017 2:31	6V16334.D
7120696-12	MW-9S 20171221	12/27/2017 2:57	6V16335.D
7120696-13	Trip Blank-20171221	12/27/2017 3:23	6V16336.D

Batch ID: B8A0226

Instrument: GCMS-6

Sequence ID: S8A0303

<u>Lab Number</u>	<u>Sample ID</u>	<u>Analyzed</u>	<u>File ID</u>
B8A0226-BLK1	BLK1	12/29/2017 14:49	6V16350.D
B8A0226-BS1	BS1	12/29/2017 14:23	6V16349.D
B8A0226-MS1	MS1	12/30/2017 1:12	6V16374.D
B8A0226-MSD1	MSD1	12/30/2017 1:38	6V16375.D
7120696-01	MW-1 20171220	12/29/2017 16:06	6V16353.D

10
10.5.

INSTRUMENT PERFORMANCE CHECK

Client: Brown and Caldwell USR
Instrument ID: GCMS-6
Sequence: S7K1615

Work Order: 7120696
Project: Patchogue

Lab Sample ID: **S7K1615-TUN1** Injection Date: 11/14/2017 Injection Time: 13:13
Lab File ID: 6V15727.D

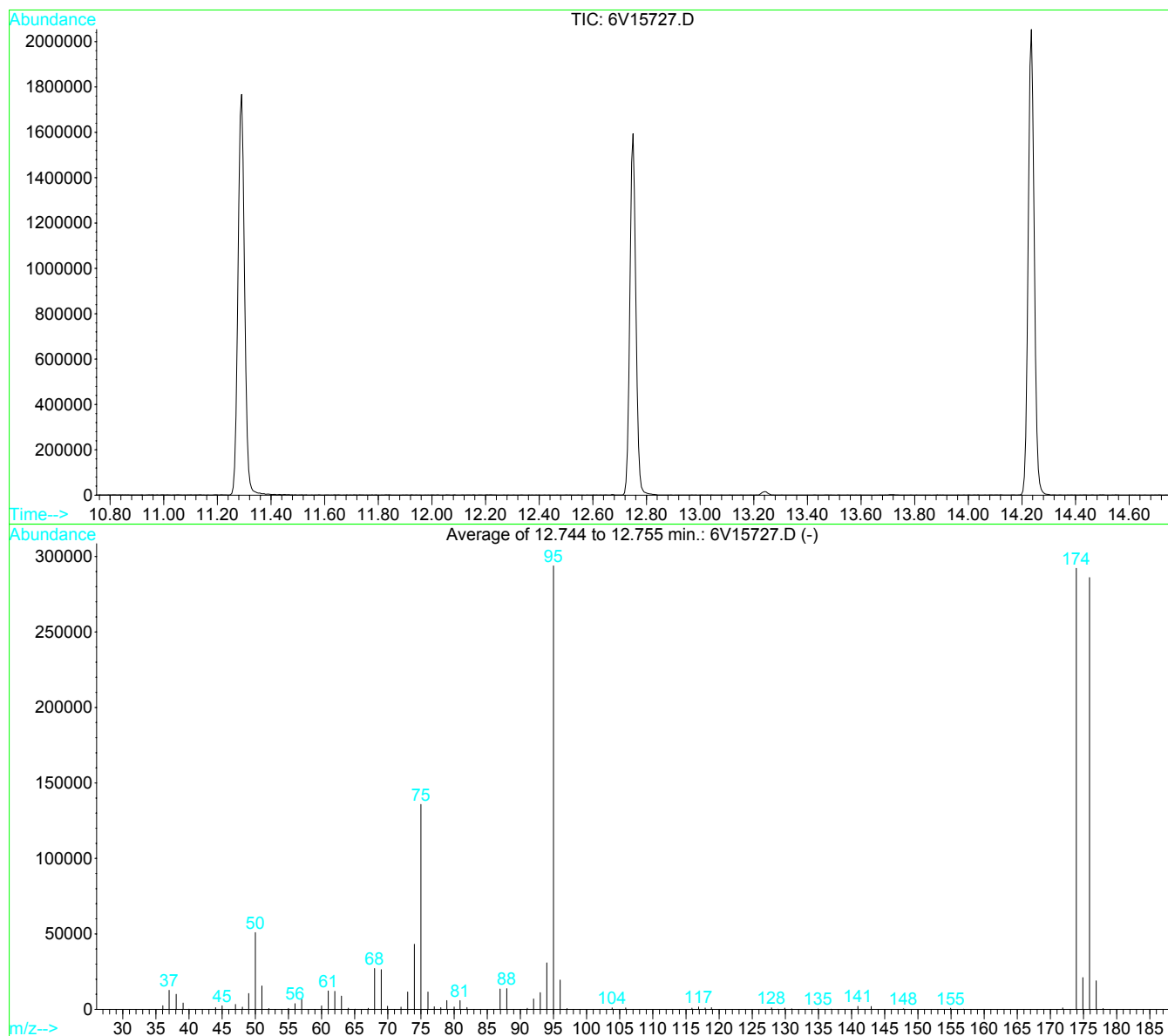
m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	PASS/FAIL
50	15 - 40% of 95	17.3	PASS
75	30 - 60% of 95	46.2	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	6.63	PASS
173	Less than 2% of 174	0	PASS
174	50 - 100% of 95	99.4	PASS
175	5 - 9% of 174	7.23	PASS
176	95 - 101% of 174	97.9	PASS
177	5 - 9% of 176	6.62	PASS

Samples Associated with Tune

Client ID or QC Type	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Cal Standard	S7K1615-CAL1	6V15728.D	11/14/2017	13:38.00
Cal Standard	S7K1615-CAL2	6V15729.D	11/14/2017	14:04.00
Cal Standard	S7K1615-CAL3	6V15730.D	11/14/2017	14:30.00
Cal Standard	S7K1615-CAL4	6V15731.D	11/14/2017	14:56.00
Cal Standard	S7K1615-CAL5	6V15732.D	11/14/2017	15:21.00
Cal Standard	S7K1615-CAL6	6V15733.D	11/14/2017	15:47.00
Cal Standard	S7K1615-CAL7	6V15734.D	11/14/2017	16:13.00

F-V

Data File : G:\HPCHEM\6\DATA\11142017\6V15727.D Vial: 2
 Acq On : 14 Nov 2017 13:13 Operator: sdp
 Sample : SEQ-TUN Inst : GCMS-6
 Misc : Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)
 Title : VOC's by EPA Method 8260B



AutoFind: Scans 1943, 1944, 1945; Background Corrected with Scan 1934

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.3	50883	PASS
75	95	30	60	46.2	135795	PASS
95	95	100	100	100.0	293803	PASS
96	95	5	9	6.6	19467	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	99.4	292139	PASS
175	174	5	9	7.2	21115	PASS
176	174	95	101	97.9	286016	PASS
177	176	5	9	6.6	18928	PASS

6V15727.D 1114V06.M Wed Nov 15 17:18:51 2017 SS

INSTRUMENT PERFORMANCE CHECK

Client: Brown and Caldwell USR
Instrument ID: GCMS-6
Sequence: S7L2804

Work Order: 7120696
Project: Patchogue

Lab Sample ID: **S7L2804-TUN1** Injection Date: 12/26/2017 Injection Time: 15:50
Lab File ID: 6V16309.D

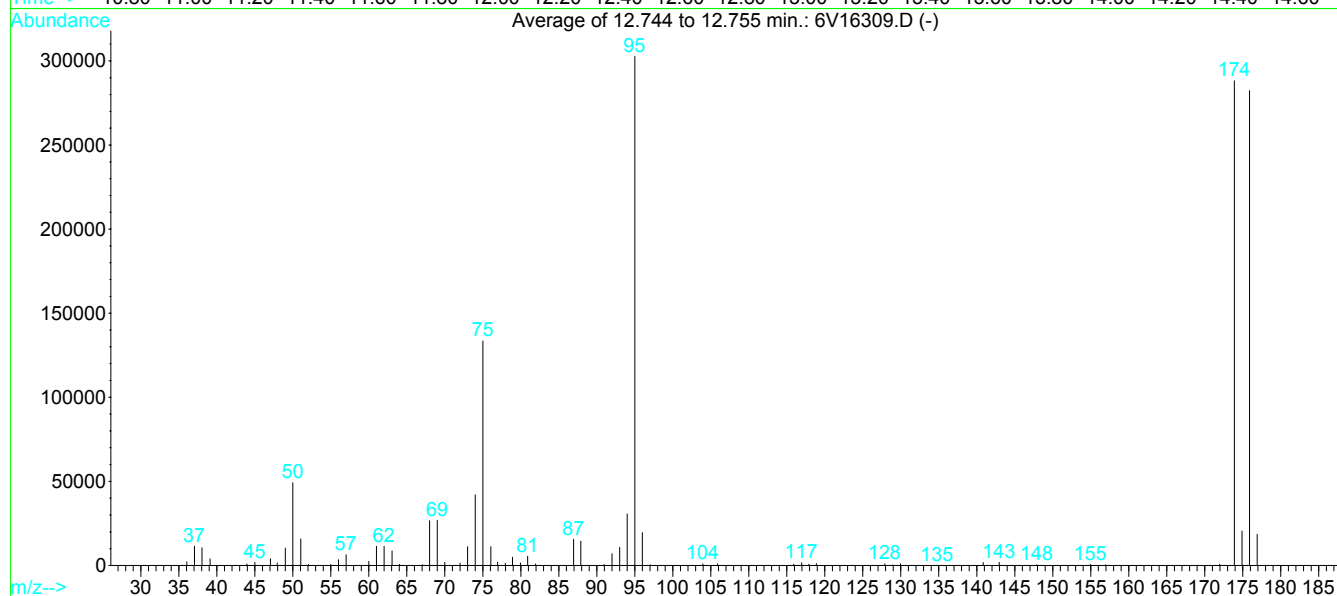
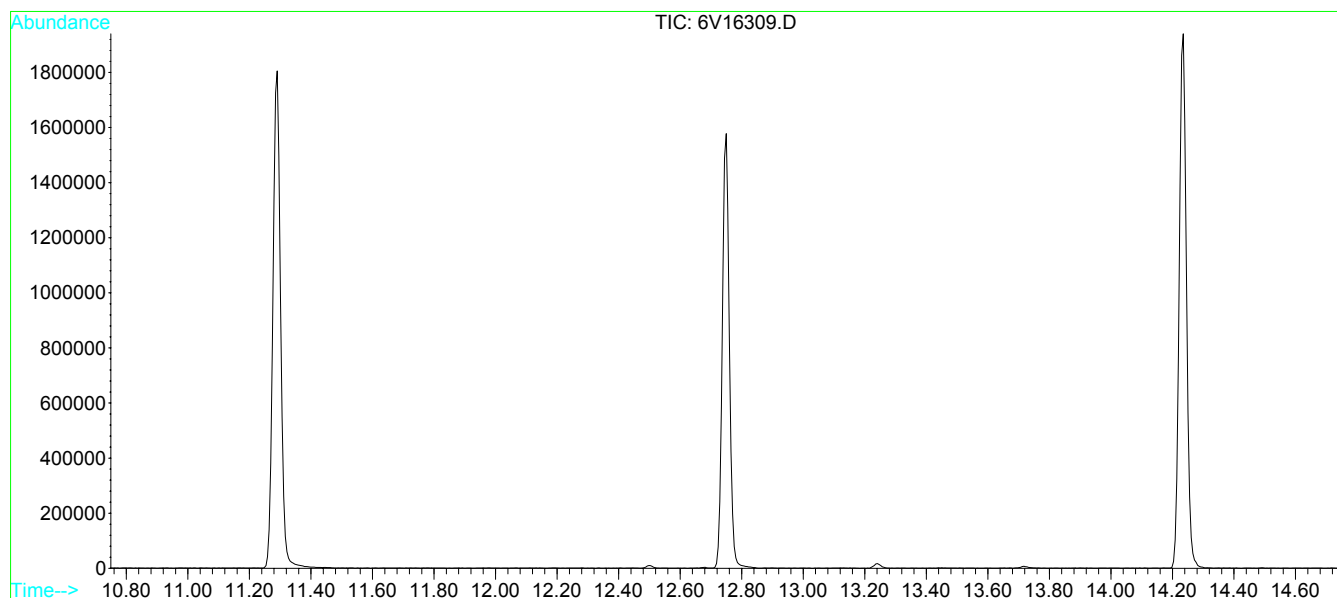
m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	PASS/FAIL
50	15 - 40% of 95	16.3	PASS
75	30 - 60% of 95	44.1	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	6.46	PASS
173	Less than 2% of 174	0	PASS
174	50 - 100% of 95	95.2	PASS
175	5 - 9% of 174	7.1	PASS
176	95 - 101% of 174	98	PASS
177	5 - 9% of 176	6.58	PASS

Samples Associated with Tune

Client ID or QC Type	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Calibration Check	S7L2804-CCV1	6V16310.D	12/26/2017	16:15.00
LCS	B7L2718-BS1	6V16311.D	12/26/2017	16:41.00
Blank	B7L2718-BLK1	6V16312.D	12/26/2017	17:07.00
MW-7S 20171220	7120696-02	6V16325.D	12/26/2017	22:40.00
MW-7D 20171220	7120696-03	6V16326.D	12/26/2017	23:06.00
MW-8S 20171220	7120696-04	6V16327.D	12/26/2017	23:32.00
MW-8D 20171220	7120696-05	6V16328.D	12/26/2017	23:58.00
MW-4S 20171221	7120696-06	6V16329.D	12/27/2017	0:23.00
MW-4D 20171221	7120696-07	6V16330.D	12/27/2017	0:49.00
MW-3 20171221	7120696-08	6V16331.D	12/27/2017	1:14.00
DUP-20171221	7120696-09	6V16332.D	12/27/2017	1:40.00
FB-20171221	7120696-10	6V16333.D	12/27/2017	2:06.00
MW-9D 20171221	7120696-11	6V16334.D	12/27/2017	2:31.00
MW-9S 20171221	7120696-12	6V16335.D	12/27/2017	2:57.00
Trip Blank-20171221	7120696-13	6V16336.D	12/27/2017	3:23.00
Matrix Spike	B7L2718-MS1	6V16337.D	12/27/2017	3:49.00
Matrix Spike Dup	B7L2718-MSD1	6V16338.D	12/27/2017	4:14.00

F-V

Data File : G:\HPCHEM\6\DATA\12262017\6V16309.D Vial: 2
 Acq On : 26 Dec 2017 15:50 Operator: sdg
 Sample : SEQ-TUN Inst : GCMS-6
 Misc : Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)
 Title : VOC's by EPA Method 8260B



AutoFind: Scans 1943, 1944, 1945; Background Corrected with Scan 1934

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.3	49221	PASS
75	95	30	60	44.1	133560	PASS
95	95	100	100	100.0	302677	PASS
96	95	5	9	6.5	19555	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	95.2	288256	PASS
175	174	5	9	7.1	20480	PASS
176	174	95	101	98.0	282368	PASS
177	176	5	9	6.6	18587	PASS

6V16309.D 1114V06.M Thu Dec 28 15:21:49 2017 SS

INSTRUMENT PERFORMANCE CHECK

Client: Brown and Caldwell USR
Instrument ID: GCMS-6
Sequence: S8A0303

Work Order: 7120696
Project: Patchogue

Lab Sample ID: **S8A0303-TUN1** Injection Date: 12/29/2017 Injection Time: 13:32
Lab File ID: 6V16347.D

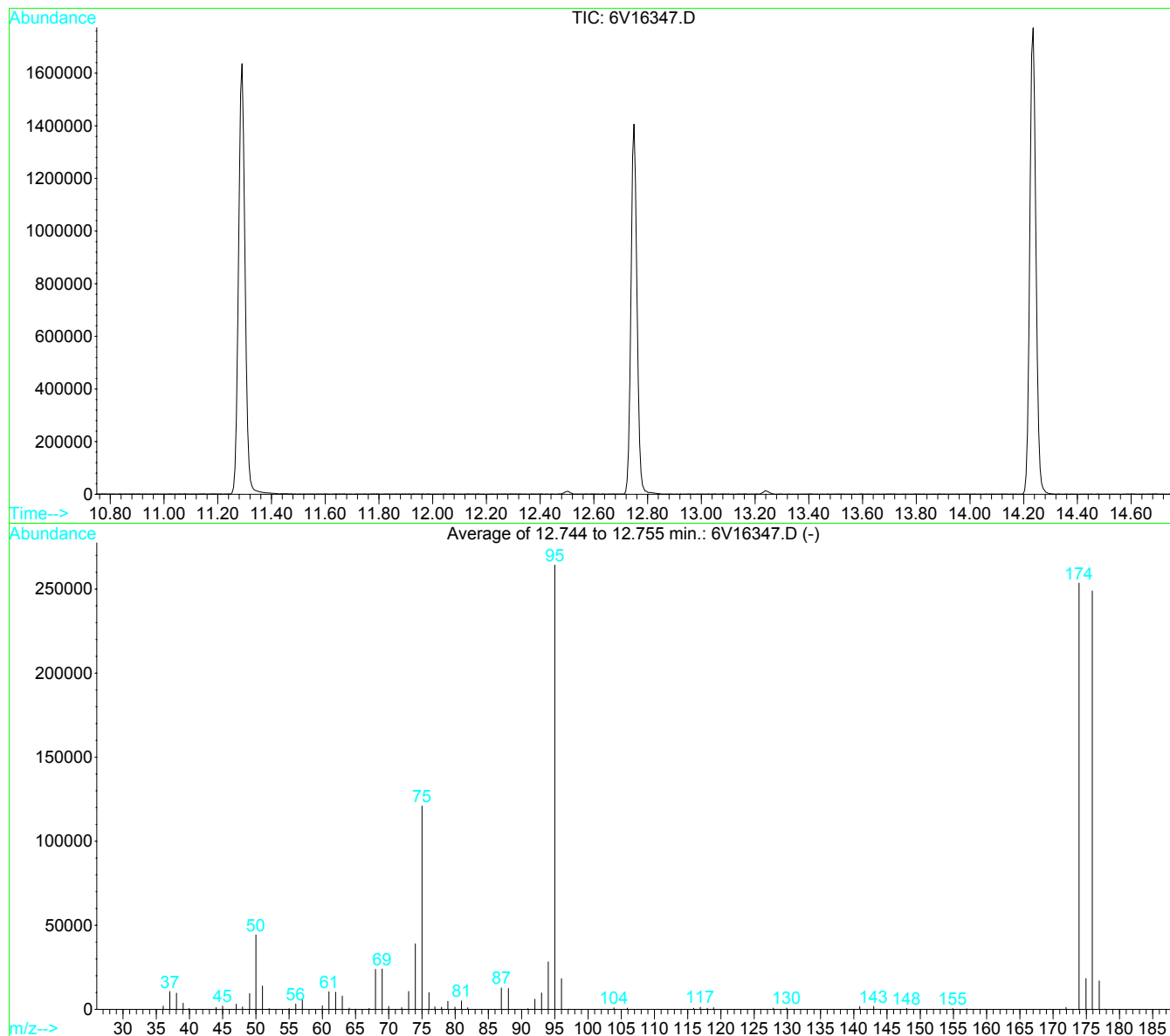
m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	PASS/FAIL
50	15 - 40% of 95	16.8	PASS
75	30 - 60% of 95	45.8	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	6.92	PASS
173	Less than 2% of 174	0	PASS
174	50 - 100% of 95	96	PASS
175	5 - 9% of 174	7.23	PASS
176	95 - 101% of 174	98.2	PASS
177	5 - 9% of 176	6.83	PASS

Samples Associated with Tune

Client ID or QC Type	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
Calibration Check	S8A0303-CCV1	6V16348.D	12/29/2017	13:57.00
LCS	B8A0226-BS1	6V16349.D	12/29/2017	14:23.00
Blank	B8A0226-BLK1	6V16350.D	12/29/2017	14:49.00
MW-1 20171220	7120696-01	6V16353.D	12/29/2017	16:06.00
Matrix Spike	B8A0226-MS1	6V16374.D	12/30/2017	1:12.00
Matrix Spike Dup	B8A0226-MSD1	6V16375.D	12/30/2017	1:38.00

F-V

Data File : G:\HPCHEM\6\DATA\12292017\6V16347.D Vial: 52
 Acq On : 29 Dec 2017 13:32 Operator: sdp
 Sample : SEQ-TUN Inst : GCMS-6
 Misc : Multiplr: 1.00
 MS Integration Params: RTEINT.P
 Method : G:\HPCHEM\6\METHODS\1114VO6.M (RTE Integrator)
 Title : VOC's by EPA Method 8260B



AutoFind: Scans 1943, 1944, 1945; Background Corrected with Scan 1934

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.8	44315	PASS
75	95	30	60	45.8	121003	PASS
95	95	100	100	100.0	264277	PASS
96	95	5	9	6.9	18284	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	96.0	253589	PASS
175	174	5	9	7.2	18341	PASS
176	174	95	101	98.2	248939	PASS
177	176	5	9	6.8	17007	PASS

6V16347.D 1114VO6.M Thu Jan 18 15:59:03 2018 SS

Response Factor Report GCMS-6

Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)
 Title : VOC's by EPA Method 8260B
 Last Update : Tue Nov 14 18:30:04 2017
 Response via : Initial Calibration

Calibration Files

1 =6V15728.D 2 =6V15729.D 5 =6V15730.D
 50 =6V15732.D 100 =6V15733.D 200 =6V15734.D

	Compound	1	2	5	50	100	200	Avg	%RSD
1) I	Pentafluorobenzene	-----ISTD-----							
2)	Dichlorodifluoromet		0.177	0.217	0.217	0.203	0.229	0.213	9.90
3)	Chloromethane	0.155	0.153	0.140	0.124	0.119	0.132	0.137	10.00
4)	Acrolein	0.072	0.071	0.075	0.083	0.092	0.093	0.081	11.40
5)	Vinyl Chloride	0.275	0.296	0.299	0.282	0.256	0.271	0.282	5.42
6)	Bromomethane		0.029	0.024	0.020	0.024	0.030	0.025	15.31
7)	Chloroethane	0.216	0.276	0.254	0.239	0.217		0.242	9.59
8)	Trichlorofluorometh	0.450	0.473	0.509	0.479	0.460	0.468	0.475	4.14
9)	1,1,2-Trichloro-1,2	0.392	0.387	0.401	0.406	0.386	0.364	0.389	3.47
10)	Acetone			0.437	0.258	0.240	0.241	0.292	28.39
11)	1,1-Dichloroethene	0.593	0.577	0.564	0.592	0.561	0.555	0.577	3.02
12)	tert-Butyl Alcohol	0.119	0.103	0.103	0.095	0.096	0.112	0.105	8.42
13)	Methyl Acetate	0.600	0.497	0.482	0.447	0.435	0.438	0.482	11.81
14)	Methylene Chloride	0.685	0.566	0.484	0.420	0.405	0.399	0.485	21.80
15)	Carbon Disulfide		1.493	1.302	1.227	1.155	1.107	1.259	10.76
16)	Acrylonitrile	0.292	0.279	0.276	0.272	0.270	0.257	0.277	4.43
17)	Methyl tert-Butyl E	1.101	1.117	1.104	1.107	1.067	0.999	1.085	3.78
18)	trans-1,2-Dichloroe	0.592	0.587	0.588	0.583	0.558	0.531	0.574	3.83
19)	1,1-Dichloroethane	0.798	0.793	0.762	0.760	0.720	0.711	0.758	4.34
20)	Vinyl Acetate	0.818	0.839	0.816	0.837	0.807	0.731	0.811	4.57
21)	2-Butanone		0.495	0.426	0.365	0.362	0.362	0.401	13.14
22)	2,2-Dichloropropane	0.548	0.543	0.526	0.564	0.544	0.526	0.542	2.44
23)	cis-1,2-Dichloroeth	0.637	0.596	0.587	0.583	0.530	0.491	0.573	8.30
24)	Chloroform	0.773	0.768	0.740	0.735	0.702	0.667	0.730	5.06
25)	Bromochloromethane	0.275	0.292	0.294	0.298	0.297	0.289	0.293	3.14
26) S	Dibromofluoromethan	0.420	0.412	0.413	0.423	0.418	0.417	0.417	0.93
27)	Cyclohexane	0.609	0.589	0.599	0.640	0.588	0.557	0.600	4.41
28)	1,1,1-Trichloroetha	0.590	0.595	0.599	0.626	0.600	0.581	0.599	2.35
29)	1,1-Dichloropropene	0.612	0.593	0.603	0.618	0.582	0.556	0.595	3.52
30)	Carbon Tetrachlorid	0.448	0.464	0.457	0.523	0.509	0.504	0.485	5.94
31)	1,2-Dichloroethane	0.534	0.552	0.527	0.533	0.512	0.486	0.524	3.97
32)	Benzene	1.882	1.869	1.786	1.705	1.533	1.303	1.690	12.24
33) I	1,4-Difluorobenzene	-----ISTD-----							
34)	Trichloroethene	0.362	0.346	0.341	0.349	0.338	0.330	0.344	2.99
35)	Methylcyclohexane	0.390	0.381	0.390	0.422	0.403	0.391	0.399	3.77
36)	1,2-Dichloropropane	0.315	0.309	0.303	0.299	0.288	0.272	0.298	4.76
37)	Bromodichloromethan	0.329	0.334	0.347	0.370	0.370	0.354	0.352	4.70
38)	p-Dioxane		0.007	0.007	0.008			0.008	9.73
39)	Dibromomethane	0.216	0.215	0.217	0.219	0.218	0.212	0.216	1.00
40)	2-Chloroethylvinyl							0.000	-1.00
41)	4-Methyl-2-Pentanone	0.410	0.399	0.402	0.398	0.395	0.378	0.400	3.21
42)	cis-1,3-Dichloropro	0.398	0.402	0.415	0.460	0.453	0.430	0.428	5.64
43) S	Toluene-d8	1.142	1.135	1.148	1.137	1.167	1.169	1.147	1.28
44)	Toluene	1.379	1.363	1.322	1.256	1.127	0.948	1.241	12.43
45)	trans-1,3-Dichlorop	0.332	0.317	0.330	0.392	0.393	0.384	0.359	9.03
46)	1,1,2-Trichloroetha	0.252	0.262	0.263	0.259	0.257	0.246	0.257	2.40
47)	2-Hexanone	0.326	0.308	0.326	0.319	0.324	0.321	0.324	3.13
48)	1,3-Dichloropropane	0.370	0.446	0.403	0.431	0.422	0.397	0.408	6.34
49)	Tetrachloroethene	0.339	0.360	0.322	0.368	0.361	0.353	0.347	5.17
50)	Chlorodibromomethan	0.203	0.212	0.211	0.265	0.291	0.287	0.244	15.26
51)	1,2-Dibromoethane	0.233	0.232	0.237	0.256	0.262	0.252	0.246	4.82
52) I	Chlorobenzene-d5	-----ISTD-----							
53)	Chlorobenzene	1.885	1.879	1.841	1.814	1.734	1.583	1.796	5.93
54)	1,1,1,2-Tetrachloro	0.559	0.566	0.578	0.626	0.628	0.624	0.598	5.02
55)	Ethylbenzene	2.720	2.839	2.952	2.896	2.625	2.192	2.748	10.15
56)	m+p-Xylenes	1.056	1.105	1.175	1.177	1.109	0.987	1.116	6.81
57)	o-Xylene	1.583	1.731	2.019	2.226	2.111	1.890	1.978	13.08

(#) = Out of Range ### Number of calibration levels exceeded format ###
 1114V06.M Thu Nov 16 18:06:45 2017 SS

Page 1

Response Factor Report GCMS-6

Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)
 Title : VOC's by EPA Method 8260B
 Last Update : Tue Nov 14 18:30:04 2017
 Response via : Initial Calibration

Calibration Files

1 =6V15728.D 2 =6V15729.D 5 =6V15730.D
 50 =6V15732.D 100 =6V15733.D 200 =6V15734.D

	Compound	1	2	5	50	100	200	Avg	%RSD
58)	Styrene	1.335	1.600	1.821	1.900	1.817	1.670	1.730	12.41
59)	Isopropylbenzene	1.767	1.995	2.382	2.648	2.453	2.137	2.299	15.11
60)	Bromoform	0.344	0.359	0.368	0.456	0.482	0.499	0.419	14.95
61)	1,1,2,2-Tetrachloro	0.891	0.885	0.897	0.863	0.854	0.843	0.879	2.97
62) S	4-Bromofluorobenzen	0.928	0.916	0.941	0.905	0.925	0.940	0.929	1.58
63)	1,2,3-Trichloroprop	0.254	0.251	0.265	0.256	0.256	0.262	0.259	2.23
64)	n-Propylbenzene	2.546	2.669	2.909	2.925	2.681	2.259	2.729	10.37
65)	Bromobenzene	1.017	1.009	1.043	1.018	0.999	0.975	1.017	2.74
66)	2-Chlorotoluene	1.641	1.727	1.797	1.750	1.728	1.587	1.725	5.12
67)	4-Chlorotoluene	1.725	1.765	1.904	1.854	1.753	1.646	1.801	6.13
68)	1,3,5-Trimethylbenz	1.471	1.548	1.834	1.955	1.889	1.762	1.785	11.71
69)	tert-Butylbenzene	1.132	1.193	1.472	1.637	1.622	1.578	1.476	15.26
70)	1,2,4-Trimethylbenz	1.490	1.662	1.949	1.918	1.853	1.733	1.807	10.53
71)	sec-Butylbenzene	1.698	1.772	2.095	2.231	2.139	1.961	2.037	11.85
72)	4-Isopropyltoluene	1.239	1.318	1.703	1.883	1.830	1.746	1.672	17.07
73)	1,3-Dichlorobenzene	1.195	1.195	1.254	1.220	1.213	1.219	1.225	2.60
74) I	1,4-Dichlorobenzene-d	-----ISTD-----							
75)	1,4-Dichlorobenzene	1.198	1.211	1.168	1.172	1.130	1.061	1.158	4.31
76)	n-Butylbenzene	0.965	1.050	1.248	1.431	1.349	1.261	1.245	14.28
77)	1,2-Dichlorobenzene	0.921	0.966	0.983	1.034	1.006	0.989	0.990	3.93
78)	1,2-Dibromo-3-chlor	0.142	0.133	0.153	0.167	0.170	0.190	0.161	12.12
79)	1,2,4-Trichlorobenz	0.362	0.336	0.363	0.421	0.436	0.485	0.406	13.19
80)	Hexachlorobutadiene	0.204	0.183	0.184	0.180	0.179	0.200	0.189	5.18
81)	Naphthalene	0.987	0.972	1.201	1.415	1.406	1.356	1.274	18.04
82)	1,2,3-Trichlorobenz	0.341	0.305	0.340	0.355	0.368	0.410	0.359	9.82

(#) = Out of Range ### Number of calibration levels exceeded format ###
 1114V06.M Thu Nov 16 18:06:46 2017 SS

Page 2

Compound List Report GCMS-6

Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)
 Title : VOC's by EPA Method 8260B
 Last Update : Tue Nov 14 18:30:04 2017
 Response via : Initial Calibration
 Total Cpnds : 82

PK#	Compound Name	QIon	Exp_RT	Rel_RT	Cal	#Qual	A/H	ID
1	I Pentafluorobenzene	168	6.65	1.000	A	2	A	B
2	Dichlorodifluoromethane	85	2.69	0.405	A	1	A	B
3	Chloromethane	50	3.23	0.487	A	1	A	B
4	Acrolein	56	4.39	0.660	A	1	A	B
5	Vinyl Chloride	62	3.10	0.466	A	1	A	B
6	Bromomethane	94	3.59	0.540	A	2	A	B
7	Chloroethane	64	3.66	0.551	A	1	A	B
8	Trichlorofluoromethane	101	3.94	0.593	A	1	A	B
9	1,1,2-Trichloro-1,2,2 Trifluor	101	4.38	0.658	A	2	A	B
10	Acetone	43	4.45	0.670	LO	1	A	B
11	1,1-Dichloroethene	61	4.60	0.692	A	2	A	B
12	tert-Butyl Alcohol	59	4.66	0.701	A	2	A	B
13	Methyl Acetate	43	4.91	0.739	A	1	A	B
14	Methylene Chloride	84	5.10	0.767	LO	2	A	B
15	Carbon Disulfide	76	5.18	0.779	A	1	A	B
16	Acrylonitrile	53	5.22	0.785	A	2	A	B
17	Methyl tert-Butyl Ether	73	5.23	0.787	A	1	A	B
18	trans-1,2-Dichloroethene	61	5.41	0.813	A	2	A	B
19	1,1-Dichloroethane	63	5.85	0.880	A	2	A	B
20	Vinyl Acetate	43	5.80	0.873	A	1	A	B
21	2-Butanone	43	6.26	0.942	A	1	A	B
22	2,2-Dichloropropane	77	6.43	0.968	A	1	A	B
23	cis-1,2-Dichloroethene	61	6.48	0.975	A	1	A	B
24	Chloroform	83	6.65	1.000	A	1	A	B
25	Bromochloromethane	49	6.84	1.029	A	2	A	B
26	S Dibromofluoromethane	113	6.88	1.035	A	2	A	B
27	Cyclohexane	56	7.11	1.069	A	2	A	B
28	1,1,1-Trichloroethane	97	7.07	1.065	A	2	A	B
29	1,1-Dichloropropene	75	7.24	1.089	A	2	A	B
30	Carbon Tetrachloride	117	7.36	1.107	A	2	A	B
31	1,2-Dichloroethane	62	7.50	1.129	A	1	A	B
32	Benzene	78	7.54	1.135	A	1	A	B
33	I 1,4-Difluorobenzene	114	7.78	1.000	A	2	A	B
34	Trichloroethene	130	8.18	1.051	A	2	A	B
35	Methylcyclohexane	83	8.25	1.060	A	2	A	B
36	1,2-Dichloropropane	63	8.37	1.076	A	2	A	B
37	Bromodichloromethane	83	8.64	1.110	A	1	A	B
38	p-Dioxane	88	8.65	1.112	A	2	A	B
39	Dibromomethane	174	8.72	1.121	A	2	A	B
40	2-Chloroethylvinyl Ether	63	8.93	1.148	A	1	A	B
41	4-Methyl-2-Pentanone	43	8.94	1.149	A	2	A	B
42	cis-1,3-Dichloropropene	75	9.21	1.184	A	2	A	B
43	S Toluene-d8	98	9.51	1.222	A	2	A	B
44	Toluene	91	9.60	1.234	A	1	A	B
45	trans-1,3-Dichloropropene	75	9.77	1.255	A	2	A	B
46	1,1,2-Trichloroethane	97	9.97	1.281	A	1	A	B
47	2-Hexanone	43	9.92	1.275	A	2	A	B
48	1,3-Dichloropropane	76	10.25	1.318	A	1	A	B
49	Tetrachloroethene	166	10.36	1.331	A	2	A	B
50	Chlorodibromomethane	129	10.62	1.364	A	1	A	B
51	1,2-Dibromoethane	107	10.86	1.395	A	1	A	B
52	I Chlorobenzene-d5	82	11.29	1.000	A	2	A	B
53	Chlorobenzene	112	11.34	1.004	A	1	A	B
54	1,1,1,2-Tetrachloroethane	131	11.37	1.007	A	2	A	B
55	Ethylbenzene	91	11.37	1.007	A	1	A	B
56	m+p-Xylenes	106	11.46	1.015	A	2	A	B
57	o-Xylene	91	12.00	1.063	A	2	A	B
58	Styrene	104	12.04	1.066	A	2	A	B
59	Isopropylbenzene	105	12.41	1.100	A	1	A	B
60	Bromoform	173	12.50	1.107	A	2	A	B
61	1,1,2,2-Tetrachloroethane	83	12.63	1.119	A	1	A	B
62	S 4-Bromofluorobenzene	95	12.75	1.129	A	2	A	B
63	1,2,3-Trichloropropane	110	12.82	1.135	A	1	A	B
64	n-Propylbenzene	91	12.91	1.144	A	2	A	B

65	Bromobenzene	77	13.02	1.153	A	2	A	B
66	2-Chlorotoluene	91	13.17	1.166	A	2	A	B
67	4-Chlorotoluene	91	13.21	1.170	A	2	A	B
68	1,3,5-Trimethylbenzene	105	13.10	1.160	A	1	A	B
69	tert-Butylbenzene	119	13.55	1.200	LO	2	A	B
70	1,2,4-Trimethylbenzene	105	13.60	1.205	A	1	A	B
71	sec-Butylbenzene	105	13.82	1.224	A	2	A	B
72	4-Isopropyltoluene	119	13.97	1.238	LO	2	A	B
73	1,3-Dichlorobenzene	146	14.15	1.253	A	2	A	B
74 I	1,4-Dichlorobenzene-d4	152	14.23	1.000	A	2	A	B
75	1,4-Dichlorobenzene	146	14.28	1.003	A	2	A	B
76	n-Butylbenzene	91	14.49	1.018	A	2	A	B
77	1,2-Dichlorobenzene	146	14.76	1.037	A	2	A	B
78	1,2-Dibromo-3-chloropropane	75	15.74	1.105	A	2	A	B
79	1,2,4-Trichlorobenzene	180	16.72	1.175	A	2	A	B
80	Hexachlorobutadiene	225	16.84	1.183	A	2	A	B
81	Naphthalene	128	17.00	1.194	LO	2	A	B
82	1,2,3-Trichlorobenzene	180	17.24	1.211	A	2	A	B

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin
 #Qual = number of qualifiers
 A/H = Area or Height
 ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

 1114V06.M Thu Nov 16 18:06:44 2017 SS

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\6\DATA\11142017\6V15728.D

Vial: 3

Acq On : 14 Nov 2017 13:38

Operator: sdp

Sample : SEQ-CAL@X1ppb

Inst : GCMS-6

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 14 18:18 2017

Quant Results File: 1114V06.RES

Quant Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)

Title : VOC's by EPA Method 8260B

Last Update : Tue Nov 14 18:16:14 2017

Response via : Initial Calibration

DataAcq Meth : VOCRUN6

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.65	168	875009	30.00	ug/L	0.00
33) 1,4-Difluorobenzene	7.79	114	1259322	30.00	ug/L	0.00
52) Chlorobenzene-d5	11.29	82	526961	30.00	ug/L	0.00
74) 1,4-Dichlorobenzene-d4	14.23	152	579474	30.00	ug/L	0.00

System Monitoring Compounds

26) Dibromofluoromethane	6.88	113	367346	28.71	ug/L	0.00
Spiked Amount	30.000	Range 75 - 123	Recovery	=	95.70%	
43) Toluene-d8	9.51	98	1437911	29.76	ug/L	0.00
Spiked Amount	30.000	Range 76 - 130	Recovery	=	99.20%	
62) 4-Bromofluorobenzene	12.75	95	488865	30.46	ug/L	0.00
Spiked Amount	30.000	Range 75 - 141	Recovery	=	101.53%	

Target Compounds

Qvalue

3) Chloromethane	3.26	50	4514m	1.06	ug/L	
4) Acrolein	4.40	56	2089	1.00	ug/L	93
5) Vinyl Chloride	3.11	62	8031m	1.01	ug/L	
6) Bromomethane	3.61	94	2678m	2.22	ug/L	
7) Chloroethane	3.69	64	6304m	0.95	ug/L	
8) Trichlorofluoromethane	3.96	101	13120m	0.93	ug/L	
9) 1,1,2-Trichloro-1,2,2 Trif	4.39	101	11445	0.99	ug/L #	88
10) Acetone	4.45	43	32506	3.58	ug/L	97
11) 1,1-Dichloroethene	4.61	61	17286	0.98	ug/L	95
12) tert-Butyl Alcohol	4.67	59	34693	11.14	ug/L	88
13) Methyl Acetate	4.91	43	17494	1.19	ug/L	91
14) Methylene Chloride	5.11	84	19970	1.10	ug/L	75
15) Carbon Disulfide	5.19	76	51616	1.43	ug/L	96
16) Acrylonitrile	5.22	53	8531	1.02	ug/L	84
17) Methyl tert-Butyl Ether	5.23	73	32099	0.93	ug/L	92
18) trans-1,2-Dichloroethene	5.42	61	17280	0.99	ug/L	81
19) 1,1-Dichloroethane	5.85	63	23271	1.02	ug/L	92
20) Vinyl Acetate	5.80	43	23868	0.89	ug/L	99
21) 2-Butanone	6.25	43	18935	1.59	ug/L	97
22) 2,2-Dichloropropane	6.43	77	15979	0.88	ug/L	98
23) cis-1,2-Dichloroethene	6.48	61	18574	1.04	ug/L	84
24) Chloroform	6.65	83	22548	1.03	ug/L	98
25) Bromochloromethane	6.84	49	8027	0.86	ug/L	71
27) Cyclohexane	7.10	56	17776	0.88	ug/L #	85
28) 1,1,1-Trichloroethane	7.09	97	17214	0.95	ug/L #	51
29) 1,1-Dichloropropene	7.24	75	17838	0.97	ug/L	95
30) Carbon Tetrachloride	7.37	117	13066	0.90	ug/L	98
31) 1,2-Dichloroethane	7.51	62	15575	0.98	ug/L	100
32) Benzene	7.55	78	54885	1.03	ug/L	99
34) Trichloroethene	8.18	130	15211	1.11	ug/L	94
35) Methylcyclohexane	8.25	83	16361	0.90	ug/L	96
36) 1,2-Dichloropropane	8.37	63	13240	1.06	ug/L	95
37) Bromodichloromethane	8.64	83	13807	0.95	ug/L	94
38) p-Dioxane	8.65	88	2417	6.90	ug/L #	74
39) Dibromomethane	8.72	174	9051	1.08	ug/L	80
41) 4-Methyl-2-Pentanone	8.94	43	17219	0.98	ug/L	95
42) cis-1,3-Dichloropropene	9.21	75	16698	0.89	ug/L	97
44) Toluene	9.60	91	57899	1.13	ug/L	99
45) trans-1,3-Dichloropropene	9.77	75	13939	0.93	ug/L	97
46) 1,1,2-Trichloroethane	9.97	97	10569	1.03	ug/L	98
47) 2-Hexanone	9.92	43	13664	1.01	ug/L #	91
48) 1,3-Dichloropropane	10.25	76	15526	0.91	ug/L	98
49) Tetrachloroethene	10.36	166	14237	1.05	ug/L	96
50) Chlorodibromomethane	10.62	129	8527	0.88	ug/L	97

(#)=qualifier out of range (m)=manual integration

6V15728.D 1114V06.M

Wed Nov 15 17:19:10 2017

SS

Page 1

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\6\DATA\11142017\6V15728.D

Vial: 3

Acq On : 14 Nov 2017 13:38

Operator: sdp

Sample : SEQ-CAL@X1ppb

Inst : GCMS-6

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 14 18:18 2017

Quant Results File: 1114V06.RES

Quant Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)

Title : VOC's by EPA Method 8260B

Last Update : Tue Nov 14 18:16:14 2017

Response via : Initial Calibration

DataAcq Meth : VOCRUN6

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
51) 1,2-Dibromoethane	10.86	107	9782	0.92	ug/L #	80
53) Chlorobenzene	11.34	112	33107	1.11	ug/L	98
54) 1,1,1,2-Tetrachloroethane	11.37	131	9812	1.04	ug/L #	1
55) Ethylbenzene	11.37	91	47786	0.96	ug/L	92
56) m+p-Xylenes	11.46	106	37085	1.79	ug/L	96
57) o-Xylene	12.00	91	27808	0.72	ug/L	98
58) Styrene	12.04	104	23447	0.76	ug/L	98
59) Isopropylbenzene	12.41	105	31045	0.71	ug/L	94
60) Bromoform	12.50	173	6039	0.92	ug/L	85
61) 1,1,2,2-Tetrachloroethane	12.63	83	15659	1.07	ug/L	94
63) 1,2,3-Trichloropropane	12.82	110	4461	1.09	ug/L	98
64) n-Propylbenzene	12.91	91	44723	0.91	ug/L	99
65) Bromobenzene	13.02	77	17862	1.02	ug/L	84
66) 2-Chlorotoluene	13.17	91	28822	0.96	ug/L	99
67) 4-Chlorotoluene	13.22	91	30295	0.97	ug/L	93
68) 1,3,5-Trimethylbenzene	13.09	105	25832	0.79	ug/L	96
69) tert-Butylbenzene	13.54	119	19892	0.72	ug/L	95
70) 1,2,4-Trimethylbenzene	13.60	105	26172	0.81	ug/L	97
71) sec-Butylbenzene	13.81	105	29830	0.79	ug/L	99
72) 4-Isopropyltoluene	13.97	119	21764	0.70	ug/L	99
73) 1,3-Dichlorobenzene	14.15	146	20989	1.03	ug/L	92
75) 1,4-Dichlorobenzene	14.28	146	23145	1.04	ug/L	94
76) n-Butylbenzene	14.50	91	18647	0.66	ug/L	94
77) 1,2-Dichlorobenzene	14.76	146	17787	0.90	ug/L	92
78) 1,2-Dibromo-3-chloropropan	15.74	75	2746	0.86	ug/L	88
79) 1,2,4-Trichlorobenzene	16.72	180	6992	0.81	ug/L	92
80) Hexachlorobutadiene	16.84	225	3931	1.04	ug/L	87
81) Naphthalene	17.00	128	19061	0.65	ug/L	96
82) 1,2,3-Trichlorobenzene	17.23	180	6584	0.94	ug/L	86

(#) = qualifier out of range (m) = manual integration

6V15728.D 1114V06.M

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SS

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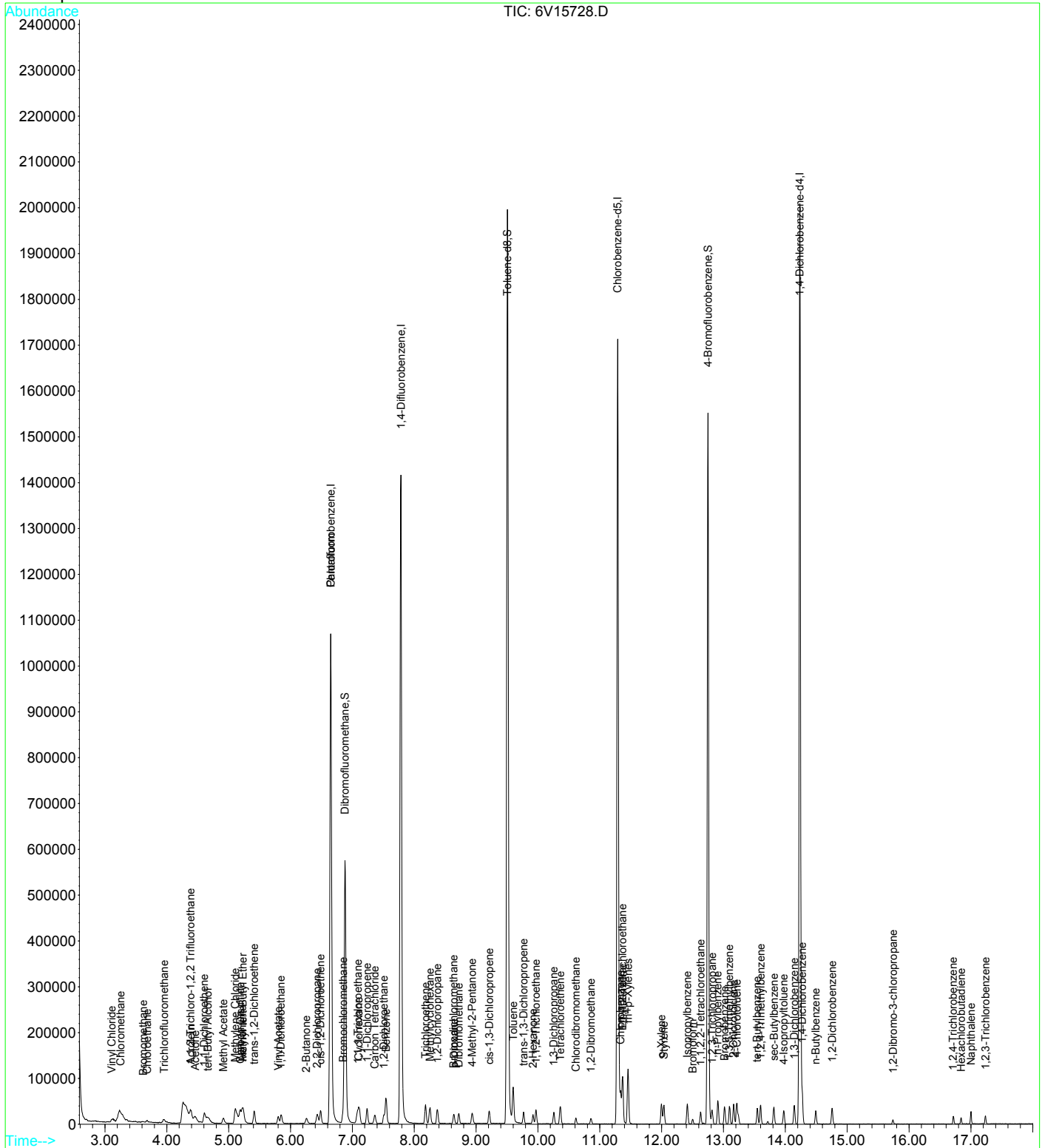
Quantitation Report

Data File : G:\HPCHEM\6\DATA\11142017\6V15728.D
 Acq On : 14 Nov 2017 13:38
 Sample : SEQ-CAL@X1ppb
 Misc :
 MS Integration Params: RTEINT.P
 Quant Time: Nov 14 18:18 2017

Vial: 3
 Operator: sdg
 Inst : GCMS-6
 Multiplr: 1.00

Quant Results File: 1114V06.RES

Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)
 Title : VOC's by EPA Method 8260B
 Last Update : Tue Nov 14 18:30:04 2017
 Response via : Initial Calibration



6V15728.D 1114V06.M

Wed Nov 15 17:19:10 2017

SS

Page 3

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\6\DATA\11142017\6V15729.D
 Acq On : 14 Nov 2017 14:04
 Sample : SEQ-CAL@X2ppb
 Misc :

Vial: 4
 Operator: sdp
 Inst : GCMS-6
 Multiplr: 1.00

MS Integration Params: RTEINT.P
 Quant Time: Nov 14 18:19 2017

Quant Results File: 1114V06.RES

Quant Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)

Title : VOC's by EPA Method 8260B

Last Update : Tue Nov 14 18:16:14 2017

Response via : Initial Calibration

DataAcq Meth : VOCRUN6

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.65	168	840692	30.00	ug/L	0.00
33) 1,4-Difluorobenzene	7.79	114	1208458	30.00	ug/L	0.00
52) Chlorobenzene-d5	11.29	82	505762	30.00	ug/L	0.00
74) 1,4-Dichlorobenzene-d4	14.23	152	549864	30.00	ug/L	0.00

System Monitoring Compounds

26) Dibromofluoromethane	6.88	113	345945	28.14	ug/L	0.00
Spiked Amount	30.000	Range 75 - 123	Recovery	=	93.80%	
43) Toluene-d8	9.51	98	1371602	29.59	ug/L	0.00
Spiked Amount	30.000	Range 76 - 130	Recovery	=	98.63%	
62) 4-Bromofluorobenzene	12.75	95	463424	30.09	ug/L	0.00
Spiked Amount	30.000	Range 75 - 141	Recovery	=	100.30%	

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	2.70	85	9917m	1.18	ug/L	
3) Chloromethane	3.29	50	8587m	2.10	ug/L	
4) Acrolein	4.39	56	3953	1.97	ug/L	100
5) Vinyl Chloride	3.11	62	16593m	2.16	ug/L	
6) Bromomethane	3.60	94	1638	1.41	ug/L	# 76
7) Chloroethane	3.69	64	15459m	2.43	ug/L	
8) Trichlorofluoromethane	3.96	101	26503m	1.95	ug/L	
9) 1,1,2-Trichloro-1,2,2 Trif	4.39	101	21716	1.96	ug/L	89
10) Acetone	4.45	43	39612	4.53	ug/L	86
11) 1,1-Dichloroethene	4.61	61	32350	1.92	ug/L	80
12) tert-Butyl Alcohol	4.66	59	57559	19.24	ug/L	87
13) Methyl Acetate	4.92	43	27847	1.97	ug/L	92
14) Methylene Chloride	5.11	84	31730	1.81	ug/L	86
15) Carbon Disulfide	5.19	76	83664	2.41	ug/L	97
16) Acrylonitrile	5.22	53	15634	1.94	ug/L	96
17) Methyl tert-Butyl Ether	5.23	73	62594	1.89	ug/L	99
18) trans-1,2-Dichloroethene	5.41	61	32878	1.97	ug/L	85
19) 1,1-Dichloroethane	5.85	63	44432	2.03	ug/L	98
20) Vinyl Acetate	5.80	43	47020	1.82	ug/L	96
21) 2-Butanone	6.26	43	27751	2.42	ug/L	96
22) 2,2-Dichloropropane	6.44	77	30446	1.75	ug/L	99
23) cis-1,2-Dichloroethene	6.48	61	33419	1.96	ug/L	85
24) Chloroform	6.65	83	43029	2.05	ug/L	97
25) Bromochloromethane	6.84	49	16339	1.83	ug/L	71
27) Cyclohexane	7.11	56	32998	1.69	ug/L	88
28) 1,1,1-Trichloroethane	7.08	97	33344	1.91	ug/L	98
29) 1,1-Dichloropropene	7.24	75	33235	1.89	ug/L	96
30) Carbon Tetrachloride	7.37	117	26026	1.87	ug/L	96
31) 1,2-Dichloroethane	7.51	62	30928	2.02	ug/L	98
32) Benzene	7.55	78	104740	2.05	ug/L	98
34) Trichloroethene	8.18	130	27876	2.12	ug/L	93
35) Methylcyclohexane	8.25	83	30698	1.75	ug/L	95
36) 1,2-Dichloropropane	8.37	63	24898	2.08	ug/L	97
37) Bromodichloromethane	8.64	83	26901	1.93	ug/L	98
38) p-Dioxane	8.63	88	5344	15.90	ug/L	# 76
39) Dibromomethane	8.72	174	17352	2.15	ug/L	80
41) 4-Methyl-2-Pentanone	8.94	43	32113	1.91	ug/L	95
42) cis-1,3-Dichloropropene	9.21	75	32391	1.80	ug/L	97
44) Toluene	9.60	91	109797	2.23	ug/L	97
45) trans-1,3-Dichloropropene	9.77	75	25509	1.77	ug/L	95
46) 1,1,2-Trichloroethane	9.97	97	21078	2.13	ug/L	97
47) 2-Hexanone	9.92	43	24833	1.92	ug/L	# 92
48) 1,3-Dichloropropane	10.25	76	35895	2.19	ug/L	100
49) Tetrachloroethene	10.36	166	29041	2.23	ug/L	99

(#) = qualifier out of range (m) = manual integration

6V15729.D 1114V06.M Wed Nov 15 17:19:12 2017 SS

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Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\6\DATA\11142017\6V15729.D

Vial: 4

Acq On : 14 Nov 2017 14:04

Operator: sdp

Sample : SEQ-CAL@X2ppb

Inst : GCMS-6

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 14 18:19 2017

Quant Results File: 1114V06.RES

Quant Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)

Title : VOC's by EPA Method 8260B

Last Update : Tue Nov 14 18:16:14 2017

Response via : Initial Calibration

DataAcq Meth : VOCRUN6

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
50) Chlorodibromomethane	10.62	129	17078	1.84	ug/L	99
51) 1,2-Dibromoethane	10.86	107	18701	1.84	ug/L	99
53) Chlorobenzene	11.34	112	63367	2.22	ug/L	97
54) 1,1,1,2-Tetrachloroethane	11.37	131	19071	2.10	ug/L	89
55) Ethylbenzene	11.37	91	95720	2.01	ug/L	95
56) m+p-Xylenes	11.46	106	74484	3.75	ug/L	94
57) o-Xylene	12.00	91	58363	1.58	ug/L	94
58) Styrene	12.04	104	53937	1.82	ug/L	92
59) Isopropylbenzene	12.41	105	67276	1.61	ug/L	98
60) Bromoform	12.50	173	12112	1.93	ug/L	94
61) 1,1,2,2-Tetrachloroethane	12.63	83	29829	2.13	ug/L	98
63) 1,2,3-Trichloropropane	12.82	110	8479	2.15	ug/L	100
64) n-Propylbenzene	12.91	91	90007	1.90	ug/L	98
65) Bromobenzene	13.02	77	34014	2.01	ug/L	76
66) 2-Chlorotoluene	13.17	91	58234	2.02	ug/L	99
67) 4-Chlorotoluene	13.21	91	59502	1.98	ug/L	98
68) 1,3,5-Trimethylbenzene	13.10	105	52197	1.67	ug/L	94
69) tert-Butylbenzene	13.55	119	40225	1.53	ug/L	95
70) 1,2,4-Trimethylbenzene	13.60	105	56031	1.80	ug/L	98
71) sec-Butylbenzene	13.82	105	59744	1.65	ug/L	94
72) 4-Isopropyltoluene	13.97	119	44427	1.48	ug/L	100
73) 1,3-Dichlorobenzene	14.15	146	40292	2.05	ug/L	93
75) 1,4-Dichlorobenzene	14.28	146	44389	2.10	ug/L	92
76) n-Butylbenzene	14.49	91	38500	1.43	ug/L	96
77) 1,2-Dichlorobenzene	14.76	146	35396	1.88	ug/L	93
78) 1,2-Dibromo-3-chloropropan	15.74	75	4891	1.61	ug/L	88
79) 1,2,4-Trichlorobenzene	16.72	180	12318	1.51	ug/L	94
80) Hexachlorobutadiene	16.84	225	6718	1.88	ug/L	87
81) Naphthalene	17.00	128	35634	1.28	ug/L	99
82) 1,2,3-Trichlorobenzene	17.24	180	11190	1.68	ug/L	92

(#) = qualifier out of range (m) = manual integration

6V15729.D 1114V06.M

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10.8.

Vial: 4

Operator: sdp

Inst : GCMS-6

Multiplr: 1.00

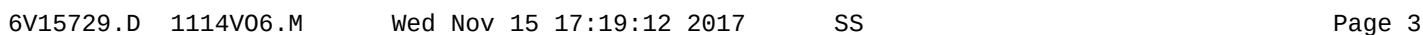
Quant Results File: 1114V06.RES

Quant Time: Nov 14 18:19 2017

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Title      : VOC's by EPA Method 8260B
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Last Update : Tue Nov 14 18:30:04 2017

Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\6\DATA\11142017\6V15730.D

Vial: 5

Acq On : 14 Nov 2017 14:30

Operator: sdp

Sample : SEQ-CAL@X5ppb

Inst : GCMS-6

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 14 18:20 2017

Quant Results File: 1114V06.RES

Quant Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)

Title : VOC's by EPA Method 8260B

Last Update : Tue Nov 14 18:16:14 2017

Response via : Initial Calibration

DataAcq Meth : VOCRUN6

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.65	168	827156	30.00	ug/L	0.00
33) 1,4-Difluorobenzene	7.79	114	1184400	30.00	ug/L	0.00
52) Chlorobenzene-d5	11.29	82	494045	30.00	ug/L	0.00
74) 1,4-Dichlorobenzene-d4	14.23	152	549415	30.00	ug/L	0.00

System Monitoring Compounds

26) Dibromofluoromethane	6.88	113	341954	28.27	ug/L	0.00
Spiked Amount	30.000	Range 75 - 123	Recovery	=	94.23%	
43) Toluene-d8	9.51	98	1360164	29.94	ug/L	0.00
Spiked Amount	30.000	Range 76 - 130	Recovery	=	99.80%	
62) 4-Bromofluorobenzene	12.75	95	464674	30.89	ug/L	0.00
Spiked Amount	30.000	Range 75 - 141	Recovery	=	102.97%	

Target Compounds

Qvalue

2) Dichlorodifluoromethane	2.71	85	29889m	3.62	ug/L	
3) Chloromethane	3.22	50	19318m	4.80	ug/L	
4) Acrolein	4.40	56	10347	5.23	ug/L	100
5) Vinyl Chloride	3.11	62	41155m	5.45	ug/L	
6) Bromomethane	3.61	94	3264m	2.87	ug/L	
7) Chloroethane	3.69	64	35084m	5.60	ug/L	
8) Trichlorofluoromethane	3.96	101	70214m	5.25	ug/L	
9) 1,1,2-Trichloro-1,2,2 Trif	4.40	101	55253	5.07	ug/L #	88
10) Acetone	4.45	43	60246m	7.01	ug/L	
11) 1,1-Dichloroethene	4.61	61	77791	4.69	ug/L	80
12) tert-Butyl Alcohol	4.66	59	141490	48.07	ug/L	93
13) Methyl Acetate	4.91	43	66433	4.78	ug/L	93
14) Methylene Chloride	5.11	84	66772	3.88	ug/L	89
15) Carbon Disulfide	5.19	76	179482	5.26	ug/L	99
16) Acrylonitrile	5.22	53	38104	4.82	ug/L	95
17) Methyl tert-Butyl Ether	5.23	73	152261	4.67	ug/L	96
18) trans-1,2-Dichloroethene	5.42	61	81089	4.93	ug/L	89
19) 1,1-Dichloroethane	5.85	63	105038	4.88	ug/L	99
20) Vinyl Acetate	5.80	43	112428	4.43	ug/L	96
21) 2-Butanone	6.26	43	58729	5.20	ug/L	93
22) 2,2-Dichloropropane	6.44	77	72524	4.24	ug/L	99
23) cis-1,2-Dichloroethene	6.49	61	80977	4.82	ug/L	87
24) Chloroform	6.65	83	101977	4.93	ug/L	99
25) Bromochloromethane	6.84	49	40559	4.60	ug/L	69
27) Cyclohexane	7.11	56	82556	4.30	ug/L	88
28) 1,1,1-Trichloroethane	7.08	97	82580	4.82	ug/L	99
29) 1,1-Dichloropropene	7.24	75	83062	4.80	ug/L	95
30) Carbon Tetrachloride	7.37	117	62935	4.60	ug/L	99
31) 1,2-Dichloroethane	7.51	62	72663	4.83	ug/L	100
32) Benzene	7.55	78	246269	4.91	ug/L	99
34) Trichloroethene	8.18	130	67279	5.22	ug/L	95
35) Methylcyclohexane	8.26	83	76996	4.49	ug/L	96
36) 1,2-Dichloropropane	8.38	63	59775	5.09	ug/L	97
37) Bromodichloromethane	8.64	83	68402	5.01	ug/L	98
38) p-Dioxane	8.65	88	14483	43.97	ug/L #	85
39) Dibromomethane	8.72	174	42741	5.40	ug/L	76
41) 4-Methyl-2-Pentanone	8.94	43	79257	4.81	ug/L	94
42) cis-1,3-Dichloropropene	9.21	75	81924	4.65	ug/L	96
44) Toluene	9.60	91	260951	5.40	ug/L	98
45) trans-1,3-Dichloropropene	9.77	75	65177	4.61	ug/L	96
46) 1,1,2-Trichloroethane	9.97	97	51958	5.37	ug/L	99
47) 2-Hexanone	9.92	43	64295	5.07	ug/L #	90
48) 1,3-Dichloropropane	10.26	76	79496	4.96	ug/L	98
49) Tetrachloroethene	10.36	166	63536	4.98	ug/L	100

(#)=qualifier out of range (m)=manual integration

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Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\6\DATA\11142017\6V15730.D

Vial: 5

Acq On : 14 Nov 2017 14:30

Operator: sdp

Sample : SEQ-CAL@X5ppb

Inst : GCMS-6

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 14 18:20 2017

Quant Results File: 1114V06.RES

Quant Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)

Title : VOC's by EPA Method 8260B

Last Update : Tue Nov 14 18:16:14 2017

Response via : Initial Calibration

DataAcq Meth : VOCRUN6

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
50) Chlorodibromomethane	10.62	129	41639	4.58	ug/L	100
51) 1,2-Dibromoethane	10.86	107	46710	4.69	ug/L	100
53) Chlorobenzene	11.34	112	151629	5.43	ug/L	98
54) 1,1,1,2-Tetrachloroethane	11.37	131	47598	5.38	ug/L	95
55) Ethylbenzene	11.37	91	243035	5.22	ug/L	98
56) m+p-Xylenes	11.46	106	193547	9.96	ug/L	97
57) o-Xylene	12.00	91	166215	4.61	ug/L	95
58) Styrene	12.04	104	149961	5.19	ug/L	94
59) Isopropylbenzene	12.41	105	196104	4.80	ug/L	98
60) Bromoform	12.50	173	30296	4.94	ug/L	95
61) 1,1,2,2-Tetrachloroethane	12.63	83	73897	5.39	ug/L	96
63) 1,2,3-Trichloropropane	12.82	110	21796	5.67	ug/L	98
64) n-Propylbenzene	12.91	91	239497	5.18	ug/L	97
65) Bromobenzene	13.02	77	85893	5.21	ug/L	77
66) 2-Chlorotoluene	13.16	91	147966	5.26	ug/L	95
67) 4-Chlorotoluene	13.21	91	156783	5.34	ug/L	92
68) 1,3,5-Trimethylbenzene	13.10	105	150997	4.96	ug/L	94
69) tert-Butylbenzene	13.55	119	121172	4.71	ug/L	93
70) 1,2,4-Trimethylbenzene	13.60	105	160506	5.28	ug/L	95
71) sec-Butylbenzene	13.82	105	172470	4.87	ug/L	98
72) 4-Isopropyltoluene	13.98	119	140267	4.78	ug/L	96
73) 1,3-Dichlorobenzene	14.15	146	103291	5.38	ug/L	89
75) 1,4-Dichlorobenzene	14.28	146	106984	5.06	ug/L	93
76) n-Butylbenzene	14.50	91	114280	4.25	ug/L	96
77) 1,2-Dichlorobenzene	14.76	146	89998	4.78	ug/L	94
78) 1,2-Dibromo-3-chloropropan	15.74	75	13973	4.62	ug/L	86
79) 1,2,4-Trichlorobenzene	16.72	180	33252	4.07	ug/L	94
80) Hexachlorobutadiene	16.84	225	16852	4.72	ug/L	98
81) Naphthalene	17.00	128	110018	3.97	ug/L	99
82) 1,2,3-Trichlorobenzene	17.24	180	31149	4.68	ug/L	93

(#) = qualifier out of range (m) = manual integration

6V15730.D 1114V06.M

Wed Nov 15 17:19:13 2017

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Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\6\DATA\11142017\6V15731.D
 Acq On : 14 Nov 2017 14:56
 Sample : SEQ-CAL@X20ppb
 Misc :

Vial: 6
 Operator: sdp
 Inst : GCMS-6
 Multiplr: 1.00

MS Integration Params: RTEINT.P
 Quant Time: Nov 14 18:21 2017

Quant Results File: 1114V06.RES

Quant Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)

Title : VOC's by EPA Method 8260B

Last Update : Tue Nov 14 18:16:14 2017

Response via : Initial Calibration

DataAcq Meth : VOCRUN6

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.65	168	827490	30.00	ug/L	0.00
33) 1,4-Difluorobenzene	7.79	114	1190931	30.00	ug/L	0.00
52) Chlorobenzene-d5	11.29	82	493353	30.00	ug/L	0.00
74) 1,4-Dichlorobenzene-d4	14.23	152	558699	30.00	ug/L	0.00

System Monitoring Compounds

26) Dibromofluoromethane	6.88	113	347558	28.72	ug/L	0.00
Spiked Amount	30.000	Range 75 - 123	Recovery	=	95.73%	
43) Toluene-d8	9.51	98	1351507	29.58	ug/L	0.00
Spiked Amount	30.000	Range 76 - 130	Recovery	=	98.60%	
62) 4-Bromofluorobenzene	12.75	95	466590	31.06	ug/L	0.00
Spiked Amount	30.000	Range 75 - 141	Recovery	=	103.53%	

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	2.70	85	130311m	15.77	ug/L	
3) Chloromethane	3.23	50	73125m	18.16	ug/L	
4) Acrolein	4.40	56	45224	22.87	ug/L	98
5) Vinyl Chloride	3.11	62	161135m	21.33	ug/L	
6) Bromomethane	3.61	94	12888m	11.31	ug/L	
7) Chloroethane	3.68	64	138350m	22.09	ug/L	
8) Trichlorofluoromethane	3.95	101	269997	20.16	ug/L	95
9) 1,1,2-Trichloro-1,2,2 Trif	4.39	101	212309	19.47	ug/L	89
10) Acetone	4.46	43	157548	18.32	ug/L	90
11) 1,1-Dichloroethene	4.61	61	330122	19.89	ug/L	87
12) tert-Butyl Alcohol	4.66	59	605417	205.60	ug/L	92
13) Methyl Acetate	4.91	43	261542	18.80	ug/L	88
14) Methylene Chloride	5.11	84	239552	13.91	ug/L	89
15) Carbon Disulfide	5.19	76	702022	20.57	ug/L	100
16) Acrylonitrile	5.22	53	160108	20.23	ug/L	94
17) Methyl tert-Butyl Ether	5.23	73	606758	18.61	ug/L	96
18) trans-1,2-Dichloroethene	5.41	61	320019	19.46	ug/L	89
19) 1,1-Dichloroethane	5.85	63	419550	19.49	ug/L	99
20) Vinyl Acetate	5.80	43	458094	18.04	ug/L	93
21) 2-Butanone	6.26	43	217062	19.23	ug/L	91
22) 2,2-Dichloropropane	6.43	77	298733	17.48	ug/L	99
23) cis-1,2-Dichloroethene	6.48	61	322264	19.15	ug/L	85
24) Chloroform	6.65	83	401498	19.39	ug/L	100
25) Bromochloromethane	6.84	49	168144	19.08	ug/L	70
27) Cyclohexane	7.11	56	341747	17.81	ug/L	88
28) 1,1,1-Trichloroethane	7.08	97	333547	19.45	ug/L	99
29) 1,1-Dichloropropene	7.24	75	333288	19.25	ug/L	95
30) Carbon Tetrachloride	7.36	117	268855	19.63	ug/L	99
31) 1,2-Dichloroethane	7.51	62	290525	19.32	ug/L	100
32) Benzene	7.55	78	967593	19.28	ug/L	99
34) Trichloroethene	8.18	130	268241	20.72	ug/L	94
35) Methylcyclohexane	8.26	83	329944	19.13	ug/L	95
36) 1,2-Dichloropropane	8.38	63	235484	19.95	ug/L	100
37) Bromodichloromethane	8.64	83	287102	20.93	ug/L	99
38) p-Dioxane	8.65	88	66643	201.23	ug/L #	89
39) Dibromomethane	8.72	174	170461	21.41	ug/L	81
41) 4-Methyl-2-Pentanone	8.94	43	332731	20.10	ug/L	92
42) cis-1,3-Dichloropropene	9.21	75	347544	19.60	ug/L	96
44) Toluene	9.60	91	1027925	21.15	ug/L	100
45) trans-1,3-Dichloropropene	9.77	75	290658	20.43	ug/L	97
46) 1,1,2-Trichloroethane	9.97	97	207406	21.30	ug/L	99
47) 2-Hexanone	9.92	43	271646	21.29	ug/L	94
48) 1,3-Dichloropropane	10.26	76	310399	19.25	ug/L	100
49) Tetrachloroethene	10.36	166	259644	20.26	ug/L	99

(#) = qualifier out of range (m) = manual integration

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Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\6\DATA\11142017\6V15731.D

Vial: 6

Acq On : 14 Nov 2017 14:56

Operator: sdp

Sample : SEQ-CAL@X20ppb

Inst : GCMS-6

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 14 18:21 2017

Quant Results File: 1114V06.RES

Quant Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)

Title : VOC's by EPA Method 8260B

Last Update : Tue Nov 14 18:16:14 2017

Response via : Initial Calibration

DataAcq Meth : VOCRUN6

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
50) Chlorodibromomethane	10.62	129	187859	20.57	ug/L	100
51) 1,2-Dibromoethane	10.86	107	196093	19.58	ug/L	98
53) Chlorobenzene	11.34	112	604375	21.68	ug/L	100
54) 1,1,1,2-Tetrachloroethane	11.37	131	199543	22.58	ug/L	99
55) Ethylbenzene	11.37	91	991290	21.34	ug/L	97
56) m+p-Xylenes	11.46	106	788888	40.66	ug/L	95
57) o-Xylene	12.00	91	752646	20.90	ug/L	94
58) Styrene	12.04	104	646018	22.38	ug/L	95
59) Isopropylbenzene	12.41	105	891830	21.86	ug/L	95
60) Bromoform	12.50	173	139876	22.82	ug/L	96
61) 1,1,2,2-Tetrachloroethane	12.63	83	301350	22.03	ug/L	100
63) 1,2,3-Trichloropropane	12.82	110	87644	22.83	ug/L	96
64) n-Propylbenzene	12.91	91	1024687	22.17	ug/L	97
65) Bromobenzene	13.02	77	348568	21.17	ug/L	75
66) 2-Chlorotoluene	13.16	91	607293	21.63	ug/L	96
67) 4-Chlorotoluene	13.21	91	645453	22.01	ug/L	94
68) 1,3,5-Trimethylbenzene	13.10	105	670910	22.05	ug/L	94
69) tert-Butylbenzene	13.55	119	558084	21.71	ug/L	93
70) 1,2,4-Trimethylbenzene	13.60	105	671719	22.11	ug/L	96
71) sec-Butylbenzene	13.82	105	777801	21.99	ug/L	96
72) 4-Isopropyltoluene	13.97	119	654169	22.34	ug/L	98
73) 1,3-Dichlorobenzene	14.15	146	421506	21.99	ug/L	93
75) 1,4-Dichlorobenzene	14.28	146	433474	20.16	ug/L	96
76) n-Butylbenzene	14.49	91	525834	19.25	ug/L	98
77) 1,2-Dichlorobenzene	14.76	146	382851	19.99	ug/L	94
78) 1,2-Dibromo-3-chloropropan	15.74	75	64032	20.81	ug/L	79
79) 1,2,4-Trichlorobenzene	16.72	180	163778	19.70	ug/L	96
80) Hexachlorobutadiene	16.84	225	71498	19.69	ug/L	96
81) Naphthalene	17.00	128	588721	20.88	ug/L	99
82) 1,2,3-Trichlorobenzene	17.24	180	146624	21.64	ug/L	97

(#) = qualifier out of range (m) = manual integration

6V15731.D 1114V06.M

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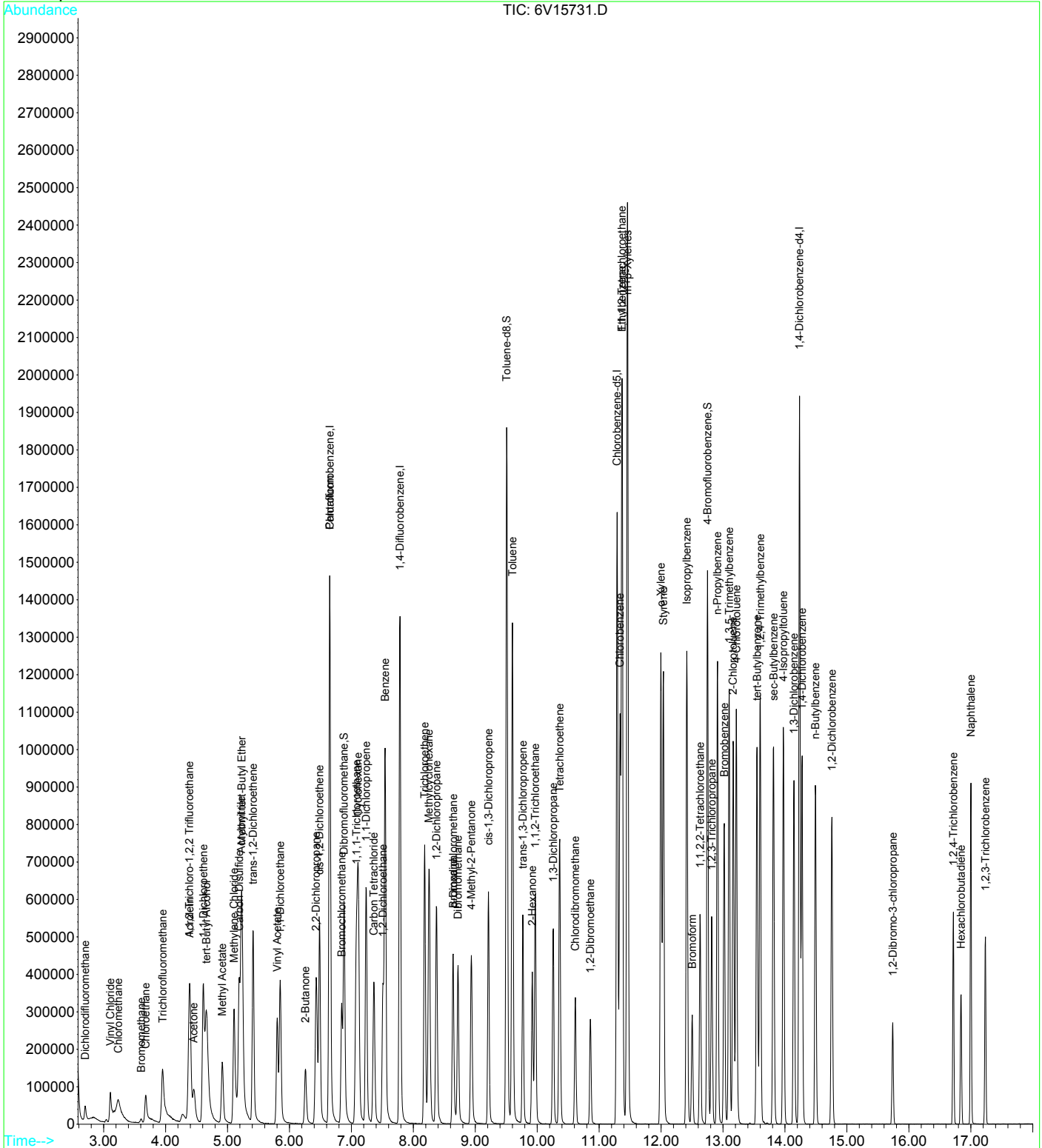
Quantitation Report

Data File : G:\HPCHEM\6\DATA\11142017\6V15731.D
 Acq On : 14 Nov 2017 14:56
 Sample : SEQ-CAL@X20ppb
 Misc :
 MS Integration Params: RTEINT.P
 Quant Time: Nov 14 18:21 2017

Vial: 6
 Operator: sdg
 Inst : GCMS-6
 Multiplr: 1.00

Quant Results File: 1114V06.RES

Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)
 Title : VOC's by EPA Method 8260B
 Last Update : Tue Nov 14 18:30:04 2017
 Response via : Initial Calibration



6V15731.D 1114V06.M

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10.8.

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\6\DATA\11142017\6V15732.D

Vial: 7

Acq On : 14 Nov 2017 15:21

Operator: sdp

Sample : SEQ-CAL@X50ppb

Inst : GCMS-6

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 14 18:15 2017

Quant Results File: 1114V06.RES

Quant Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)

Title : VOC's by EPA Method 8260B

Last Update : Tue Nov 14 18:14:40 2017

Response via : Initial Calibration

DataAcq Meth : VOCRUN6

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.65	168	957074	30.00	ug/L	0.00
33) 1,4-Difluorobenzene	7.78	114	1377291	30.00	ug/L	0.00
52) Chlorobenzene-d5	11.29	82	581707	30.00	ug/L	0.00
74) 1,4-Dichlorobenzene-d4	14.23	152	605546	30.00	ug/L	0.00

System Monitoring Compounds

26) Dibromofluoromethane	6.88	113	404522	28.90	ug/L	0.00
Spiked Amount	30.000	Range 75 - 123	Recovery	=	96.33%	
43) Toluene-d8	9.51	98	1565404	29.63	ug/L	0.00
Spiked Amount	30.000	Range 76 - 130	Recovery	=	98.77%	
62) 4-Bromofluorobenzene	12.75	95	526360	29.71	ug/L	0.00
Spiked Amount	30.000	Range 75 - 141	Recovery	=	99.03%	

Target Compounds

Qvalue

2) Dichlorodifluoromethane	2.69	85	346598m	36.26	ug/L	
3) Chloromethane	3.24	50	197488m	42.41	ug/L	
4) Acrolein	4.39	56	132074	57.74	ug/L	89
5) Vinyl Chloride	3.10	62	450566	51.56	ug/L	99
6) Bromomethane	3.59	94	32273m	24.49	ug/L	
7) Chloroethane	3.66	64	381948	52.72	ug/L	99
8) Trichlorofluoromethane	3.94	101	763779	49.31	ug/L	99
9) 1,1,2-Trichloro-1,2,2 Trif	4.38	101	647780	51.35	ug/L	89
10) Acetone	4.45	43	411646m	41.39	ug/L	
11) 1,1-Dichloroethene	4.60	61	944572	49.21	ug/L	89
12) tert-Butyl Alcohol	4.66	59	1510220	443.44	ug/L	91
13) Methyl Acetate	4.91	43	713769	44.35	ug/L	90
14) Methylene Chloride	5.10	84	670057	33.65	ug/L	89
15) Carbon Disulfide	5.18	76	1957065	49.57	ug/L	100
16) Acrylonitrile	5.22	53	434037	47.42	ug/L	94
17) Methyl tert-Butyl Ether	5.23	73	1766541	46.85	ug/L	96
18) trans-1,2-Dichloroethene	5.41	61	930631	48.92	ug/L	87
19) 1,1-Dichloroethane	5.85	63	1212076	48.69	ug/L	98
20) Vinyl Acetate	5.80	43	1334916	45.44	ug/L	93
21) 2-Butanone	6.26	43	581687	44.55	ug/L	91
22) 2,2-Dichloropropane	6.43	77	900115	45.53	ug/L	98
23) cis-1,2-Dichloroethene	6.48	61	929203	47.75	ug/L	83
24) Chloroform	6.65	83	1172802	48.96	ug/L	100
25) Bromochloromethane	6.84	49	474751	46.58	ug/L	67
27) Cyclohexane	7.11	56	1020825	45.99	ug/L	89
28) 1,1,1-Trichloroethane	7.07	97	999321	50.38	ug/L	99
29) 1,1-Dichloropropene	7.24	75	985229	49.19	ug/L	94
30) Carbon Tetrachloride	7.36	117	833782	52.64	ug/L	99
31) 1,2-Dichloroethane	7.50	62	850931	48.92	ug/L	99
32) Benzene	7.54	78	2719892	46.86	ug/L	97
34) Trichloroethene	8.18	130	800982	53.49	ug/L	94
35) Methylcyclohexane	8.25	83	968252	48.55	ug/L	95
36) 1,2-Dichloropropane	8.37	63	686978	50.33	ug/L	100
37) Bromodichloromethane	8.64	83	849624	53.55	ug/L	98
38) p-Dioxane	8.65	88	175453	458.09	ug/L #	88
39) Dibromomethane	8.72	174	502393	54.57	ug/L	80
41) 4-Methyl-2-Pentanone	8.94	43	914542	47.77	ug/L	91
42) cis-1,3-Dichloropropene	9.21	75	1055387	51.47	ug/L	96
44) Toluene	9.60	91	2883516	51.30	ug/L	98
45) trans-1,3-Dichloropropene	9.77	75	899817	54.68	ug/L	97
46) 1,1,2-Trichloroethane	9.97	97	594002	52.76	ug/L	99
47) 2-Hexanone	9.92	43	732899	49.67	ug/L	93
48) 1,3-Dichloropropane	10.25	76	988449	53.02	ug/L	99
49) Tetrachloroethene	10.36	166	843672	56.92	ug/L	99

(#)=qualifier out of range (m)=manual integration

6V15732.D 1114V06.M

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Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\6\DATA\11142017\6V15732.D

Vial: 7

Acq On : 14 Nov 2017 15:21

Operator: sdp

Sample : SEQ-CAL@X50ppb

Inst : GCMS-6

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 14 18:15 2017

Quant Results File: 1114V06.RES

Quant Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)

Title : VOC's by EPA Method 8260B

Last Update : Tue Nov 14 18:14:40 2017

Response via : Initial Calibration

DataAcq Meth : VOCRUN6

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
50) Chlorodibromomethane	10.62	129	608397	57.60	ug/L	100
51) 1,2-Dibromoethane	10.86	107	588467	50.80	ug/L	99
53) Chlorobenzene	11.34	112	1758671	53.51	ug/L	99
54) 1,1,1,2-Tetrachloroethane	11.37	131	606758	58.23	ug/L	98
55) Ethylbenzene	11.37	91	2807543	51.26	ug/L	92
56) m+p-Xylenes	11.46	106	2283126	99.81	ug/L	84
57) o-Xylene	12.00	91	2158109	50.82	ug/L	92
58) Styrene	12.04	104	1841716	54.12	ug/L	96
59) Isopropylbenzene	12.41	105	2567486	53.38	ug/L	97
60) Bromoform	12.50	173	441997	61.15	ug/L	97
61) 1,1,2,2-Tetrachloroethane	12.63	83	837156	51.91	ug/L	99
63) 1,2,3-Trichloropropane	12.82	110	248208	54.84	ug/L	96
64) n-Propylbenzene	12.91	91	2835359	52.04	ug/L	95
65) Bromobenzene	13.02	77	986580	50.81	ug/L	81
66) 2-Chlorotoluene	13.17	91	1696274	51.25	ug/L	93
67) 4-Chlorotoluene	13.21	91	1797117	51.98	ug/L	93
68) 1,3,5-Trimethylbenzene	13.10	105	1895364	52.84	ug/L	91
69) tert-Butylbenzene	13.55	119	1586923	52.35	ug/L	92
70) 1,2,4-Trimethylbenzene	13.60	105	1859510	51.91	ug/L	93
71) sec-Butylbenzene	13.82	105	2163130	51.87	ug/L	96
72) 4-Isopropyltoluene	13.97	119	1825404	52.86	ug/L	96
73) 1,3-Dichlorobenzene	14.15	146	1182681	52.34	ug/L	95
75) 1,4-Dichlorobenzene	14.28	146	1183266	50.76	ug/L	95
76) n-Butylbenzene	14.49	91	1444687	48.80	ug/L	96
77) 1,2-Dichlorobenzene	14.76	146	1043863	50.29	ug/L	93
78) 1,2-Dibromo-3-chloropropan	15.74	75	169020	50.68	ug/L	70
79) 1,2,4-Trichlorobenzene	16.72	180	425103	47.18	ug/L	94
80) Hexachlorobutadiene	16.84	225	181914	46.23	ug/L	97
81) Naphthalene	17.00	128	1428284	46.73	ug/L	99
82) 1,2,3-Trichlorobenzene	17.24	180	358647	48.84	ug/L	97

(#) = qualifier out of range (m) = manual integration

6V15732.D 1114V06.M

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Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\6\DATA\11142017\6V15733.D

Vial: 8

Acq On : 14 Nov 2017 15:47

Operator: sdp

Sample : SEQ-CAL@X100ppb

Inst : GCMS-6

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 14 18:21 2017

Quant Results File: 1114V06.RES

Quant Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)

Title : VOC's by EPA Method 8260B

Last Update : Tue Nov 14 18:16:14 2017

Response via : Initial Calibration

DataAcq Meth : VOCRUN6

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.65	168	890003	30.00	ug/L	0.00
33) 1,4-Difluorobenzene	7.78	114	1269975	30.00	ug/L	0.00
52) Chlorobenzene-d5	11.29	82	546337	30.00	ug/L	0.00
74) 1,4-Dichlorobenzene-d4	14.23	152	587652	30.00	ug/L	0.00

System Monitoring Compounds

26) Dibromofluoromethane	6.88	113	371791	28.56	ug/L	0.00
Spiked Amount	30.000	Range 75 - 123	Recovery	=	95.20%	
43) Toluene-d8	9.51	98	1481459	30.41	ug/L	0.00
Spiked Amount	30.000	Range 76 - 130	Recovery	=	101.37%	
62) 4-Bromofluorobenzene	12.75	95	505170	30.36	ug/L	0.00
Spiked Amount	30.000	Range 75 - 141	Recovery	=	101.20%	

Target Compounds

Qvalue

2) Dichlorodifluoromethane	2.69	85	602415m	67.78	ug/L	
3) Chloromethane	3.21	50	354240m	81.80	ug/L	
4) Acrolein	4.39	56	273684	128.66	ug/L	92
5) Vinyl Chloride	3.09	62	759742m	93.50	ug/L	
6) Bromomethane	3.58	94	71660m	58.47	ug/L	
7) Chloroethane	3.66	64	642489	95.37	ug/L	99
8) Trichlorofluoromethane	3.93	101	1363345	94.66	ug/L	98
9) 1,1,2-Trichloro-1,2,2 Trif	4.37	101	1144918m	97.60	ug/L	
10) Acetone	4.46	43	710849	76.87	ug/L	94
11) 1,1-Dichloroethene	4.60	61	1663520	93.19	ug/L	85
12) tert-Butyl Alcohol	4.67	59	2833341m	894.63	ug/L	
13) Methyl Acetate	4.91	43	1291921	86.33	ug/L	88
14) Methylene Chloride	5.10	84	1200835	64.84	ug/L	87
15) Carbon Disulfide	5.17	76	3426036	93.32	ug/L	100
16) Acrylonitrile	5.22	53	802247	94.26	ug/L	96
17) Methyl tert-Butyl Ether	5.23	73	3164941	90.26	ug/L	98
18) trans-1,2-Dichloroethene	5.40	61	1655981	93.61	ug/L	86
19) 1,1-Dichloroethane	5.85	63	2135723	92.26	ug/L	98
20) Vinyl Acetate	5.80	43	2394796	87.66	ug/L	92
21) 2-Butanone	6.26	43	1074172	88.46	ug/L	90
22) 2,2-Dichloropropane	6.43	77	1613790	87.78	ug/L	98
23) cis-1,2-Dichloroethene	6.48	61	1571324	86.84	ug/L	82
24) Chloroform	6.65	83	2083661	93.55	ug/L	100
25) Bromochloromethane	6.84	49	879713	92.82	ug/L	67
27) Cyclohexane	7.10	56	1744764	84.53	ug/L	87
28) 1,1,1-Trichloroethane	7.07	97	1778720	96.42	ug/L	98
29) 1,1-Dichloropropene	7.23	75	1726782	92.71	ug/L	93
30) Carbon Tetrachloride	7.36	117	1509282	102.47	ug/L	99
31) 1,2-Dichloroethane	7.50	62	1519726	93.96	ug/L	99
32) Benzene	7.54	78	4548741	84.28	ug/L	96
34) Trichloroethene	8.18	130	1432568	103.76	ug/L	94
35) Methylcyclohexane	8.25	83	1705638	92.75	ug/L	94
36) 1,2-Dichloropropane	8.37	63	1218630	96.82	ug/L	100
37) Bromodichloromethane	8.64	83	1566551	107.09	ug/L	99
38) p-Dioxane	8.64	88	150031	424.82	ug/L #	86
39) Dibromomethane	8.72	174	923070	108.74	ug/L	80
41) 4-Methyl-2-Pentanone	8.94	43	1673739	94.81	ug/L	90
42) cis-1,3-Dichloropropene	9.21	75	1918372	101.47	ug/L	96
44) Toluene	9.60	91	4768921	92.02	ug/L	94
45) trans-1,3-Dichloropropene	9.77	75	1665473	109.76	ug/L	96
46) 1,1,2-Trichloroethane	9.97	97	1086515	104.65	ug/L	99
47) 2-Hexanone	9.92	43	1370069	100.70	ug/L	93
48) 1,3-Dichloropropane	10.26	76	1787514	103.98	ug/L	98
49) Tetrachloroethene	10.36	166	1529431	111.91	ug/L	98

(#)=qualifier out of range (m)=manual integration

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Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\6\DATA\11142017\6V15733.D

Vial: 8

Acq On : 14 Nov 2017 15:47

Operator: sdp

Sample : SEQ-CAL@X100ppb

Inst : GCMS-6

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 14 18:21 2017

Quant Results File: 1114V06.RES

Quant Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)

Title : VOC's by EPA Method 8260B

Last Update : Tue Nov 14 18:16:14 2017

Response via : Initial Calibration

DataAcq Meth : VOCRUN6

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
50) Chlorodibromomethane	10.62	129	1230566	126.35	ug/L	100
51) 1,2-Dibromoethane	10.86	107	1107702	103.70	ug/L	98
53) Chlorobenzene	11.34	112	3158621	102.33	ug/L	97
54) 1,1,1,2-Tetrachloroethane	11.37	131	1142778	116.77	ug/L	98
55) Ethylbenzene	11.37	91	4781096	92.94	ug/L	84
56) m+p-Xylenes	11.46	106	4039668	188.04	ug/L	71
57) o-Xylene	12.00	91	3845032	96.41	ug/L	89
58) Styrene	12.04	104	3309879	103.56	ug/L	97
59) Isopropylbenzene	12.41	105	4467902	98.90	ug/L	96
60) Bromoform	12.50	173	878115	129.35	ug/L	97
61) 1,1,2,2-Tetrachloroethane	12.63	83	1555142	102.67	ug/L	98
63) 1,2,3-Trichloropropane	12.82	110	465834	109.59	ug/L	96
64) n-Propylbenzene	12.91	91	4882785	95.42	ug/L #	88
65) Bromobenzene	13.02	77	1820130	99.81	ug/L	74
66) 2-Chlorotoluene	13.17	91	3146718	101.22	ug/L	91
67) 4-Chlorotoluene	13.22	91	3192322	98.31	ug/L	90
68) 1,3,5-Trimethylbenzene	13.10	105	3439692	102.10	ug/L	86
69) tert-Butylbenzene	13.55	119	2953950	103.76	ug/L	94
70) 1,2,4-Trimethylbenzene	13.60	105	3375440	100.33	ug/L	89
71) sec-Butylbenzene	13.82	105	3895807	99.47	ug/L	94
72) 4-Isopropyltoluene	13.98	119	3332254	102.75	ug/L	94
73) 1,3-Dichlorobenzene	14.15	146	2208615	104.06	ug/L	94
75) 1,4-Dichlorobenzene	14.28	146	2213804	97.87	ug/L	95
76) n-Butylbenzene	14.50	91	2642188	91.96	ug/L	92
77) 1,2-Dichlorobenzene	14.76	146	1971091	97.85	ug/L	92
78) 1,2-Dibromo-3-chloropropan	15.74	75	333933	103.17	ug/L	74
79) 1,2,4-Trichlorobenzene	16.72	180	853557	97.62	ug/L	94
80) Hexachlorobutadiene	16.84	225	350248	91.72	ug/L	96
81) Naphthalene	17.00	128	2754630	92.87	ug/L	96
82) 1,2,3-Trichlorobenzene	17.24	180	720616	101.13	ug/L	98

(#) = qualifier out of range (m) = manual integration

6V15733.D 1114V06.M

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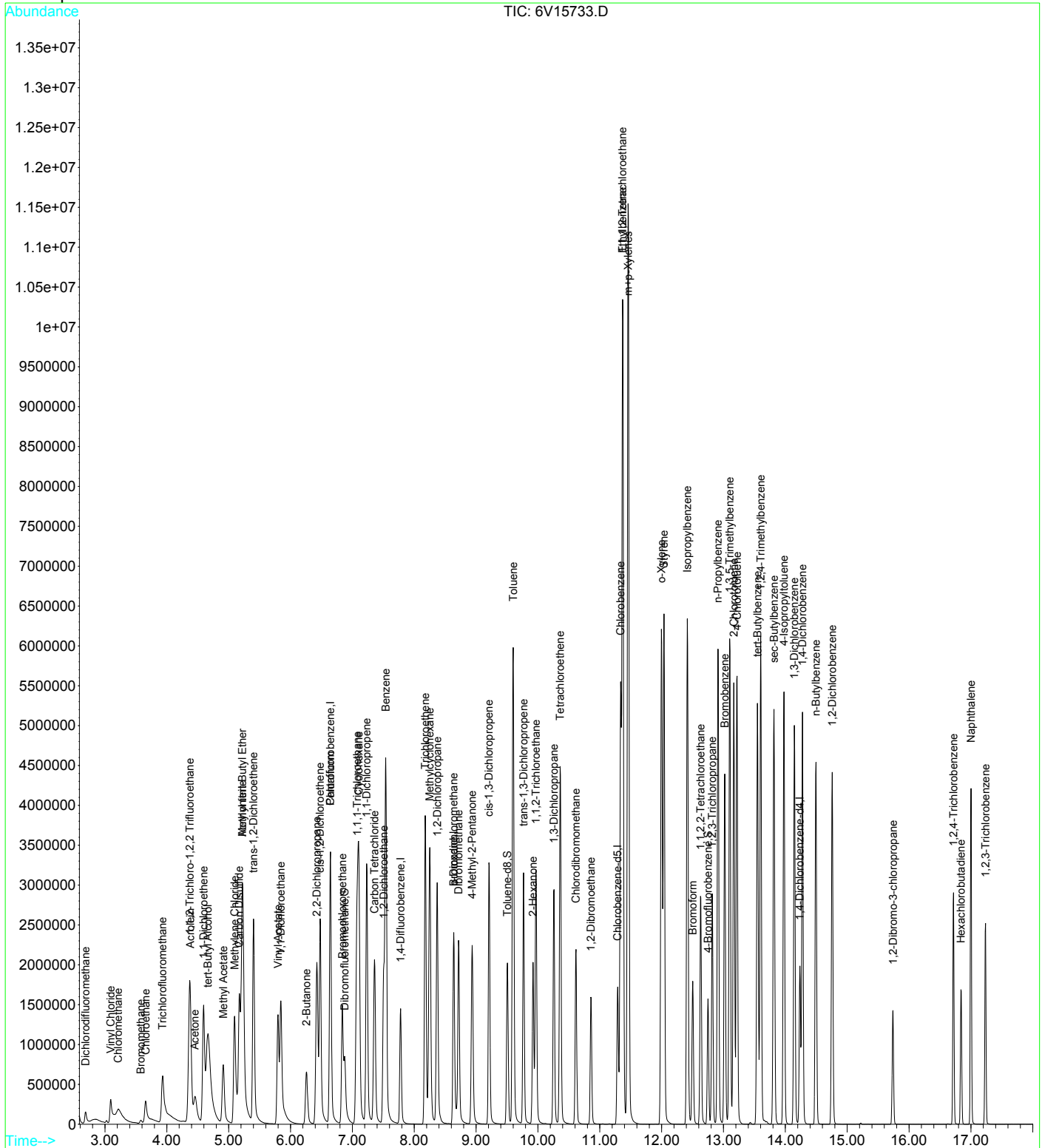
Quantitation Report

Data File : G:\HPCHEM\6\DATA\11142017\6V15733.D
 Acq On : 14 Nov 2017 15:47
 Sample : SEQ-CAL@X100ppb
 Misc :
 MS Integration Params: RTEINT.P
 Quant Time: Nov 14 18:21 2017

Vial: 8
 Operator: sdg
 Inst : GCMS-6
 Multiplr: 1.00

Quant Results File: 1114V06.RES

Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)
 Title : VOC's by EPA Method 8260B
 Last Update : Tue Nov 14 18:30:04 2017
 Response via : Initial Calibration



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Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\6\DATA\11142017\6V15734.D

Vial: 9

Acq On : 14 Nov 2017 16:13

Operator: sdp

Sample : SEQ-CAL@X200ppb

Inst : GCMS-6

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 14 18:17 2017

Quant Results File: 1114V06.RES

Quant Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)

Title : VOC's by EPA Method 8260B

Last Update : Tue Nov 14 18:16:14 2017

Response via : Initial Calibration

DataAcq Meth : VOCRUN6

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.64	168	780101	30.00	ug/L	0.00
33) 1,4-Difluorobenzene	7.78	114	1105468	30.00	ug/L	0.00
52) Chlorobenzene-d5	11.29	82	476135	30.00	ug/L	0.00
74) 1,4-Dichlorobenzene-d4	14.24	152	550184	30.00	ug/L	0.00

System Monitoring Compounds

26) Dibromofluoromethane	6.88	113	325410	28.52	ug/L	0.00
Spiked Amount	30.000	Range 75 - 123	Recovery	=	95.07%	
43) Toluene-d8	9.51	98	1292207	30.47	ug/L	0.00
Spiked Amount	30.000	Range 76 - 130	Recovery	=	101.57%	
62) 4-Bromofluorobenzene	12.75	95	447569	30.87	ug/L	0.00
Spiked Amount	30.000	Range 75 - 141	Recovery	=	102.90%	

Target Compounds

Qvalue

2) Dichlorodifluoromethane	2.68	85	1191216m	152.91	ug/L	
3) Chloromethane	3.23	50	685055m	180.47	ug/L	
4) Acrolein	4.39	56	484575	259.90	ug/L	89
5) Vinyl Chloride	3.09	62	1411681	198.20	ug/L	95
6) Bromomethane	3.85	94	157883m	146.96	ug/L	
7) Chloroethane	3.64	64	628011m	106.35	ug/L	
8) Trichlorofluoromethane	3.92	101	2435174	192.89	ug/L	99
9) 1,1,2-Trichloro-1,2,2 Trif	4.35	101	1893564	184.17	ug/L	90
10) Acetone	4.46	43	1254468	154.76	ug/L	93
11) 1,1-Dichloroethene	4.58	61	2888905	184.64	ug/L	85
12) tert-Butyl Alcohol	4.68	59	5810479m	2093.13	ug/L	
13) Methyl Acetate	4.91	43	2278502m	173.71	ug/L	
14) Methylene Chloride	5.09	84	2077151	127.96	ug/L	87
15) Carbon Disulfide	5.17	76	5756086	178.88	ug/L	98
16) Acrylonitrile	5.22	53	1334289	178.86	ug/L	93
17) Methyl tert-Butyl Ether	5.23	73	5195561	169.04	ug/L	99
18) trans-1,2-Dichloroethene	5.40	61	2763240	178.21	ug/L	86
19) 1,1-Dichloroethane	5.84	63	3697497	182.24	ug/L	97
20) Vinyl Acetate	5.80	43	3804061	158.86	ug/L	90
21) 2-Butanone	6.26	43	1885230	177.13	ug/L	90
22) 2,2-Dichloropropane	6.43	77	2734983	169.72	ug/L	97
23) cis-1,2-Dichloroethene	6.48	61	2555771	161.14	ug/L	77
24) Chloroform	6.64	83	3467149	177.59	ug/L	97
25) Bromochloromethane	6.83	49	1503209	180.95	ug/L	63
27) Cyclohexane	7.10	56	2896098	160.07	ug/L #	85
28) 1,1,1-Trichloroethane	7.07	97	3023352	186.99	ug/L	97
29) 1,1-Dichloropropene	7.23	75	2891130	177.09	ug/L	92
30) Carbon Tetrachloride	7.36	117	2621908	203.09	ug/L	99
31) 1,2-Dichloroethane	7.50	62	2524936	178.10	ug/L	98
32) Benzene	7.54	78	6775549	143.23	ug/L	92
34) Trichloroethene	8.18	130	2433085	202.44	ug/L	94
35) Methylcyclohexane	8.25	83	2883165	180.12	ug/L	93
36) 1,2-Dichloropropane	8.37	63	2007930	183.27	ug/L	99
37) Bromodichloromethane	8.64	83	2612019	205.12	ug/L	97
38) p-Dioxane	8.65	88	121309	394.61	ug/L #	87
39) Dibromomethane	8.72	174	1565044	211.80	ug/L	80
41) 4-Methyl-2-Pentanone	8.94	43	2783739	181.15	ug/L	88
42) cis-1,3-Dichloropropene	9.21	75	3171299	192.70	ug/L	94
44) Toluene	9.60	91	6983981	154.81	ug/L	88
45) trans-1,3-Dichloropropene	9.77	75	2831003	214.33	ug/L	94
46) 1,1,2-Trichloroethane	9.97	97	1813315	200.65	ug/L	98
47) 2-Hexanone	9.92	43	2363426	199.57	ug/L	91
48) 1,3-Dichloropropane	10.26	76	2922364	195.30	ug/L	97
49) Tetrachloroethene	10.36	166	2599066	218.47	ug/L	98

(#)=qualifier out of range (m)=manual integration

6V15734.D 1114V06.M

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Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\6\DATA\11142017\6V15734.D

Vial: 9

Acq On : 14 Nov 2017 16:13

Operator: sdp

Sample : SEQ-CAL@X200ppb

Inst : GCMS-6

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Nov 14 18:17 2017

Quant Results File: 1114V06.RES

Quant Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)

Title : VOC's by EPA Method 8260B

Last Update : Tue Nov 14 18:16:14 2017

Response via : Initial Calibration

DataAcq Meth : VOCRUN6

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
50) Chlorodibromomethane	10.62	129	2112971	249.23	ug/L	100
51) 1,2-Dibromoethane	10.86	107	1860338	200.08	ug/L	98
53) Chlorobenzene	11.34	112	5024407	186.77	ug/L	92
54) 1,1,1,2-Tetrachloroethane	11.37	131	1981451	232.31	ug/L	98
55) Ethylbenzene	11.37	91	6959219	155.22	ug/L #	64
56) m+p-Xylenes	11.46	106	6267857	334.77	ug/L	56
57) o-Xylene	12.00	91	5999029	172.61	ug/L #	74
58) Styrene	12.04	104	5301914	190.34	ug/L	90
59) Isopropylbenzene	12.42	105	6783551	172.29	ug/L #	87
60) Bromoform	12.50	173	1582453	267.47	ug/L	97
61) 1,1,2,2-Tetrachloroethane	12.63	83	2675089	202.64	ug/L	93
63) 1,2,3-Trichloropropane	12.82	110	832175	224.64	ug/L	93
64) n-Propylbenzene	12.92	91	7169410	160.76	ug/L #	70
65) Bromobenzene	13.02	77	3094693	194.73	ug/L	74
66) 2-Chlorotoluene	13.17	91	5036038	185.88	ug/L	82
67) 4-Chlorotoluene	13.22	91	5223800	184.59	ug/L	80
68) 1,3,5-Trimethylbenzene	13.10	105	5593814	190.53	ug/L	75
69) tert-Butylbenzene	13.55	119	5007999	201.85	ug/L #	94
70) 1,2,4-Trimethylbenzene	13.61	105	5502000	187.65	ug/L	77
71) sec-Butylbenzene	13.82	105	6224514	182.36	ug/L #	82
72) 4-Isopropyltoluene	13.98	119	5541632	196.07	ug/L #	84
73) 1,3-Dichlorobenzene	14.15	146	3868165	209.13	ug/L	90
75) 1,4-Dichlorobenzene	14.28	146	3891377	183.74	ug/L	92
76) n-Butylbenzene	14.50	91	4625616	171.97	ug/L #	83
77) 1,2-Dichlorobenzene	14.76	146	3629204	192.44	ug/L	93
78) 1,2-Dibromo-3-chloropropan	15.74	75	697706	230.24	ug/L	62
79) 1,2,4-Trichlorobenzene	16.72	180	1779995	217.43	ug/L	96
80) Hexachlorobutadiene	16.84	225	733026	205.04	ug/L	98
81) Naphthalene	17.00	128	4974275	179.12	ug/L	87
82) 1,2,3-Trichlorobenzene	17.24	180	1503239	225.33	ug/L	98

(#) = qualifier out of range (m) = manual integration

6V15734.D 1114V06.M

Wed Nov 15 17:19:20 2017

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CALIBRATION VERIFICATION SUMMARY

SW 846 8260B

CCV ID: S7L2804-CCV1

Analyzed: 12/26/17 16:15

Analyte	Response Factor	Expected Result	Result	% Drift	Limit(s)
Benzene	1.64179	50.00	48.56	3	20
EthylBenzene	2.666911	50.00	48.52	3	20 (CCC)
m+p-Xylenes	1.08493	100.00	97.26	3	20
Methyl tert-Butyl Ether	0.9921044	50.00	45.72	9	20
o-Xylene	2.100556	50.00	53.09	6	20
tert-Butyl alcohol	8.506074E-02	500.00	404.54	19	20
Toluene	1.201966	50.00	48.42	3	20 (CCC)

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10.9.

F-VII

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\6\DATA\12262017\6V16310.D

Vial: 3

Acq On : 26 Dec 2017 16:15

Operator: sdp

Sample : SEQ-CCV@X50ppb

Inst : GCMS-6

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 28 13:28 2017

Quant Results File: 1114V06.RES

Quant Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)

Title : VOC's by EPA Method 8260B

Last Update : Sun Nov 26 15:00:58 2017

Response via : Initial Calibration

DataAcq Meth : VOCRUN6

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.65	168	836494	30.00	ug/L	0.00
33) 1,4-Difluorobenzene	7.78	114	1233324	30.00	ug/L	0.00
52) Chlorobenzene-d5	11.29	82	570493	30.00	ug/L	0.00
74) 1,4-Dichlorobenzene-d4	14.23	152	591011	30.00	ug/L	0.00

System Monitoring Compounds

26) Dibromofluoromethane	6.88	113	351319	30.18	ug/L	0.00
Spiked Amount	30.000	Range 75 - 123	Recovery	=	100.60%	
43) Toluene-d8	9.51	98	1425588	30.22	ug/L	0.00
Spiked Amount	30.000	Range 76 - 130	Recovery	=	100.73%	
62) 4-Bromofluorobenzene	12.75	95	530492	30.04	ug/L	0.00
Spiked Amount	30.000	Range 75 - 141	Recovery	=	100.13%	

Target Compounds

Qvalue

2) Dichlorodifluoromethane	2.70	85	378022m	63.58	ug/L	
3) Chloromethane	3.19	50	189325m	49.74	ug/L	
4) Acrolein	4.40	56	94948	42.01	ug/L	90
5) Vinyl Chloride	3.10	62	369886	47.09	ug/L	100
6) Bromomethane	3.60	94	32124	45.78	ug/L	96
7) Chloroethane	3.67	64	322042m	47.68	ug/L	
8) Trichlorofluoromethane	3.95	101	622566	46.96	ug/L	97
9) 1,1,2-Trichloro-1,2,2 Trif	4.38	101	521728	48.12	ug/L	89
10) Acetone	4.46	43	303036m	44.88	ug/L	
11) 1,1-Dichloroethene	4.61	61	771905	47.96	ug/L	83
12) tert-Butyl Alcohol	4.66	59	1185880m	404.54	ug/L	
13) Methyl Acetate	4.91	43	623220	46.38	ug/L	# 86
14) Methylene Chloride	5.10	84	569951	50.88	ug/L	87
15) Carbon Disulfide	5.19	76	1585221	45.15	ug/L	99
16) Acrylonitrile	5.22	53	350628	45.44	ug/L	94
17) Methyl tert-Butyl Ether	5.23	73	1383149	45.72	ug/L	98
18) trans-1,2-Dichloroethene	5.41	61	754424	47.11	ug/L	88
19) 1,1-Dichloroethane	5.85	63	980261	46.40	ug/L	99
20) Vinyl Acetate	5.80	43	906099	40.06	ug/L	92
21) 2-Butanone	6.26	43	451120	40.38	ug/L	89
22) 2,2-Dichloropropane	6.43	77	704173	46.61	ug/L	98
23) cis-1,2-Dichloroethene	6.48	61	749697	46.96	ug/L	80
24) Chloroform	6.65	83	923535	45.35	ug/L	98
25) Bromochloromethane	6.84	49	400951	49.13	ug/L	66
27) Cyclohexane	7.11	56	857661	51.25	ug/L	88
28) 1,1,1-Trichloroethane	7.08	97	764110	45.72	ug/L	99
29) 1,1-Dichloropropene	7.24	75	807364	48.64	ug/L	93
30) Carbon Tetrachloride	7.36	117	637875	47.21	ug/L	100
31) 1,2-Dichloroethane	7.51	62	655203	44.81	ug/L	100
32) Benzene	7.55	78	2288912	48.56	ug/L	98
34) Trichloroethene	8.18	130	657213	46.54	ug/L	94
35) Methylcyclohexane	8.26	83	826391	50.39	ug/L	93
36) 1,2-Dichloropropane	8.37	63	567970	46.42	ug/L	100
37) Bromodichloromethane	8.64	83	661011	45.65	ug/L	100
38) p-Dioxane	8.64	88	147962	479.76	ug/L	# 85
39) Dibromomethane	8.72	174	396047	44.62	ug/L	81
41) 4-Methyl-2-Pentanone	8.94	43	716173	43.54	ug/L	90
42) cis-1,3-Dichloropropene	9.21	75	856878	48.70	ug/L	97
44) Toluene	9.60	91	2470689	48.42	ug/L	99
45) trans-1,3-Dichloropropene	9.77	75	703638	47.65	ug/L	96
46) 1,1,2-Trichloroethane	9.97	97	491280	46.49	ug/L	100
47) 2-Hexanone	9.92	43	570004	42.85	ug/L	90
48) 1,3-Dichloropropane	10.26	76	830211	49.45	ug/L	99
49) Tetrachloroethene	10.36	166	661545	46.35	ug/L	99

(#)=qualifier out of range (m)=manual integration

6V16310.D 1114V06.M

Thu Dec 28 15:22:13 2017

SS

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Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\6\DATA\12262017\6V16310.D

Vial: 3

Acq On : 26 Dec 2017 16:15

Operator: sdp

Sample : SEQ-CCV@X50ppb

Inst : GCMS-6

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Dec 28 13:28 2017

Quant Results File: 1114V06.RES

Quant Method : G:\HPCHEM\6\METHODS\1114V06.M (RTE Integrator)

Title : VOC's by EPA Method 8260B

Last Update : Sun Nov 26 15:00:58 2017

Response via : Initial Calibration

DataAcq Meth : VOCRUN6

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
50) Chlorodibromomethane	10.62	129	497453	49.68	ug/L	100
51) 1,2-Dibromoethane	10.86	107	531342	52.62	ug/L	95
53) Chlorobenzene	11.34	112	1593827	46.66	ug/L	99
54) 1,1,1,2-Tetrachloroethane	11.37	131	519093	45.64	ug/L	98
55) Ethylbenzene	11.37	91	2535757	48.52	ug/L	92
56) m+p-Xylenes	11.46	106	2063149	97.26	ug/L	86
57) o-Xylene	12.00	91	1997254	53.09	ug/L	91
58) Styrene	12.03	104	1690359	51.39	ug/L	96
59) Isopropylbenzene	12.41	105	2358516	53.94	ug/L	98
60) Bromoform	12.50	173	368392	46.24	ug/L	97
61) 1,1,2,2-Tetrachloroethane	12.63	83	782658	46.85	ug/L	96
63) 1,2,3-Trichloropropane	12.82	110	222057	45.15	ug/L	91
64) n-Propylbenzene	12.91	91	2647125	51.01	ug/L	96
65) Bromobenzene	13.02	77	902836	46.67	ug/L	86
66) 2-Chlorotoluene	13.16	91	1552689	47.33	ug/L	94
67) 4-Chlorotoluene	13.21	91	1630385	47.60	ug/L	95
68) 1,3,5-Trimethylbenzene	13.10	105	1748930	51.51	ug/L	95
69) tert-Butylbenzene	13.55	119	1458549	48.25	ug/L	91
70) 1,2,4-Trimethylbenzene	13.60	105	1717362	49.98	ug/L	97
71) sec-Butylbenzene	13.81	105	2054108	53.02	ug/L	97
72) 4-Isopropyltoluene	13.97	119	1695563	50.38	ug/L	95
73) 1,3-Dichlorobenzene	14.15	146	1061147	45.54	ug/L	93
75) 1,4-Dichlorobenzene	14.28	146	1054184	46.22	ug/L	95
76) n-Butylbenzene	14.49	91	1390668	56.69	ug/L	98
77) 1,2-Dichlorobenzene	14.76	146	937394	48.08	ug/L	93
78) 1,2-Dibromo-3-chloropropan	15.74	75	147199	46.36	ug/L	64
79) 1,2,4-Trichlorobenzene	16.72	180	381741	47.71	ug/L	95
80) Hexachlorobutadiene	16.84	225	181781	48.87	ug/L	98
81) Naphthalene	17.00	128	1314237	48.69	ug/L	100
82) 1,2,3-Trichlorobenzene	17.24	180	320743	45.35	ug/L	97

(#) = qualifier out of range (m) = manual integration

6V16310.D 1114V06.M

Thu Dec 28 15:22:13 2017

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CALIBRATION VERIFICATION SUMMARY

SW 846 8260B

CCV ID: S8A0303-CCV1

Analyzed: 12/29/17 13:57

Analyte	Response Factor	Expected Result	Result	% Drift	Limit(s)
Benzene	1.700961	50.00	50.32	1	20
EthylBenzene	2.749581	50.00	50.02	0	20 (CCC)
m+p-Xylenes	1.116266	100.00	100.07	0	20
Methyl tert-Butyl Ether	1.024318	50.00	47.20	6	20
o-Xylene	2.15257	50.00	54.40	9	20
tert-Butyl alcohol	8.424236E-02	500.00	400.65	20	20
Toluene	1.24311	50.00	50.07	0	20 (CCC)

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10.9.

F-VII

Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\6\DATA\12292017\6V16348.D

Vial: 53

Acq On : 29 Dec 2017 13:57

Operator: sdp

Sample : SEQ-CCV@X50ppb

Inst : GCMS-6

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Jan 2 15:46 2018

Quant Results File: 1114VO6.RES

Quant Method : G:\HPCHEM\6\METHODS\1114VO6.M (RTE Integrator)

Title : VOC's by EPA Method 8260B

Last Update : Sun Nov 26 15:00:58 2017

Response via : Initial Calibration

DataAcq Meth : VOCRUN6

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Pentafluorobenzene	6.65	168	712589	30.00	ug/L	0.00
33) 1,4-Difluorobenzene	7.78	114	1058617	30.00	ug/L	0.00
52) Chlorobenzene-d5	11.29	82	498938	30.00	ug/L	0.00
74) 1,4-Dichlorobenzene-d4	14.23	152	533234	30.00	ug/L	0.00

System Monitoring Compounds

26) Dibromofluoromethane	6.88	113	309231	31.18	ug/L	0.00
Spiked Amount	30.000	Range	75 - 123	Recovery	=	103.93%
43) Toluene-d8	9.51	98	1237190	30.56	ug/L	0.00
Spiked Amount	30.000	Range	76 - 130	Recovery	=	101.87%
62) 4-Bromofluorobenzene	12.75	95	466742	30.22	ug/L	0.00
Spiked Amount	30.000	Range	75 - 141	Recovery	=	100.73%

Target Compounds

Qvalue

2) Dichlorodifluoromethane	2.70	85	339454m	67.02	ug/L	
3) Chloromethane	3.17	50	167587m	51.68	ug/L	
4) Acrolein	4.40	56	81505	42.33	ug/L	92
5) Vinyl Chloride	3.11	62	339126	50.68	ug/L	97
6) Bromomethane	3.60	94	31941m	53.43	ug/L	
7) Chloroethane	3.68	64	299600	52.08	ug/L	99
8) Trichlorofluoromethane	3.95	101	606036	53.66	ug/L	98
9) 1,1,2-Trichloro-1,2,2 Trif	4.39	101	477070	51.66	ug/L	89
10) Acetone	4.46	43	267212m	46.46	ug/L	
11) 1,1-Dichloroethene	4.61	61	695635	50.73	ug/L	85
12) tert-Butyl Alcohol	4.66	59	1000503m	400.65	ug/L	
13) Methyl Acetate	4.91	43	597293	52.17	ug/L	88
14) Methylene Chloride	5.10	84	506519	53.08	ug/L	91
15) Carbon Disulfide	5.19	76	1442027	48.21	ug/L	99
16) Acrylonitrile	5.22	53	312941	47.61	ug/L	96
17) Methyl tert-Butyl Ether	5.23	73	1216529	47.20	ug/L	98
18) trans-1,2-Dichloroethene	5.41	61	675464	49.51	ug/L	89
19) 1,1-Dichloroethane	5.85	63	885122	49.18	ug/L	98
20) Vinyl Acetate	5.80	43	842100	43.70	ug/L	93
21) 2-Butanone	6.26	43	404723	42.53	ug/L	92
22) 2,2-Dichloropropane	6.43	77	671512	52.18	ug/L	98
23) cis-1,2-Dichloroethene	6.49	61	683159	50.23	ug/L	85
24) Chloroform	6.65	83	838855	48.35	ug/L	99
25) Bromochloromethane	6.84	49	365120	52.52	ug/L	71
27) Cyclohexane	7.11	56	766080	53.73	ug/L	90
28) 1,1,1-Trichloroethane	7.08	97	706139	49.59	ug/L	99
29) 1,1-Dichloropropene	7.24	75	722637	51.11	ug/L	95
30) Carbon Tetrachloride	7.36	117	597215	51.89	ug/L	99
31) 1,2-Dichloroethane	7.51	62	591796	47.51	ug/L	99
32) Benzene	7.55	78	2020143	50.32	ug/L	98
34) Trichloroethene	8.18	130	580410	47.88	ug/L	94
35) Methylcyclohexane	8.26	83	732197	52.02	ug/L	96
36) 1,2-Dichloropropane	8.37	63	506933	48.27	ug/L	100
37) Bromodichloromethane	8.64	83	598660	48.17	ug/L	99
38) p-Dioxane	8.65	88	114061	430.88	ug/L #	88
39) Dibromomethane	8.72	174	350383	45.99	ug/L	83
41) 4-Methyl-2-Pentanone	8.94	43	644404	45.64	ug/L	91
42) cis-1,3-Dichloropropene	9.21	75	759218	50.27	ug/L	97
44) Toluene	9.60	91	2193295	50.07	ug/L	99
45) trans-1,3-Dichloropropene	9.77	75	632952	49.93	ug/L	97
46) 1,1,2-Trichloroethane	9.97	97	430616	47.47	ug/L	99
47) 2-Hexanone	9.92	43	511778	44.82	ug/L	91
48) 1,3-Dichloropropane	10.25	76	732830	50.86	ug/L	100
49) Tetrachloroethene	10.36	166	608355	49.66	ug/L	99

(#)=qualifier out of range (m)=manual integration

6V16348.D 1114VO6.M

Thu Jan 18 15:58:11 2018

SS

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Quantitation Report (QT Reviewed)

Data File : G:\HPCHEM\6\DATA\12292017\6V16348.D

Vial: 53

Acq On : 29 Dec 2017 13:57

Operator: sdp

Sample : SEQ-CCV@X50ppb

Inst : GCMS-6

Misc :

Multiplr: 1.00

MS Integration Params: RTEINT.P

Quant Time: Jan 2 15:46 2018

Quant Results File: 1114VO6.RES

Quant Method : G:\HPCHEM\6\METHODS\1114VO6.M (RTE Integrator)

Title : VOC's by EPA Method 8260B

Last Update : Sun Nov 26 15:00:58 2017

Response via : Initial Calibration

DataAcq Meth : VOCRUN6

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
50) Chlorodibromomethane	10.62	129	446434	51.94	ug/L	99
51) 1,2-Dibromoethane	10.86	107	457622	52.80	ug/L	97
53) Chlorobenzene	11.34	112	1423925	47.66	ug/L	100
54) 1,1,1,2-Tetrachloroethane	11.37	131	463757	46.62	ug/L	97
55) Ethylbenzene	11.37	91	2286451	50.02	ug/L	94
56) m+p-Xylenes	11.46	106	1856491	100.07	ug/L	90
57) o-Xylene	12.00	91	1789998	54.40	ug/L	92
58) Styrene	12.04	104	1504929	52.32	ug/L	95
59) Isopropylbenzene	12.41	105	2124683	55.56	ug/L	97
60) Bromoform	12.50	173	336395	48.28	ug/L	97
61) 1,1,2,2-Tetrachloroethane	12.63	83	702390	48.07	ug/L	99
63) 1,2,3-Trichloropropane	12.82	110	200831	46.69	ug/L	95
64) n-Propylbenzene	12.91	91	2410256	53.10	ug/L	96
65) Bromobenzene	13.02	77	812242	48.01	ug/L	86
66) 2-Chlorotoluene	13.16	91	1415257	49.33	ug/L	97
67) 4-Chlorotoluene	13.21	91	1501804	50.13	ug/L	95
68) 1,3,5-Trimethylbenzene	13.10	105	1581460	53.26	ug/L	91
69) tert-Butylbenzene	13.55	119	1321989	50.00	ug/L	91
70) 1,2,4-Trimethylbenzene	13.60	105	1564111	52.05	ug/L	98
71) sec-Butylbenzene	13.82	105	1863387	55.00	ug/L	96
72) 4-Isopropyltoluene	13.98	119	1535331	52.16	ug/L	95
73) 1,3-Dichlorobenzene	14.15	146	948391	46.54	ug/L	95
75) 1,4-Dichlorobenzene	14.28	146	966410	46.96	ug/L	95
76) n-Butylbenzene	14.49	91	1275128	57.61	ug/L	98
77) 1,2-Dichlorobenzene	14.76	146	855515	48.64	ug/L	95
78) 1,2-Dibromo-3-chloropropan	15.74	75	134327	46.89	ug/L	61
79) 1,2,4-Trichlorobenzene	16.72	180	361592	50.09	ug/L	97
80) Hexachlorobutadiene	16.84	225	166636	49.65	ug/L	96
81) Naphthalene	17.00	128	1210596	49.71	ug/L	99
82) 1,2,3-Trichlorobenzene	17.24	180	306924	48.10	ug/L	98

(#) = qualifier out of range (m) = manual integration

6V16348.D 1114VO6.M

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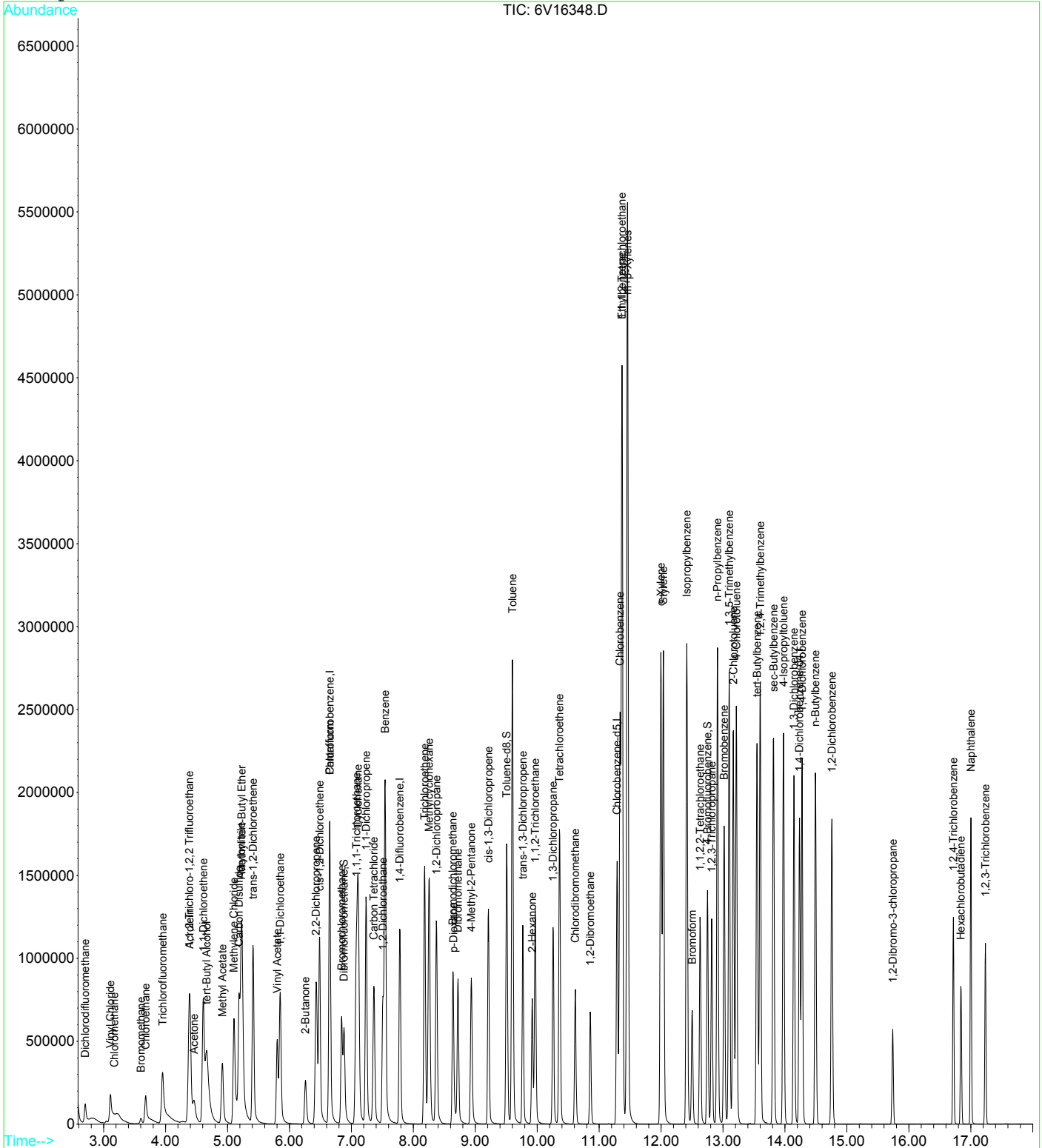
Quantitation Report

Data File : G:\HPCHEM\6\DATA\12292017\6V16348.D
 Acq On : 29 Dec 2017 13:57
 Sample : SEQ-CCV@X50ppb
 Misc :
 MS Integration Params: RTEINT.P
 Quant Time: Jan 2 15:46 2018

Vial: 53
 Operator: sdp
 Inst : GCMS-6
 Multiplr: 1.00

Quant Results File: 1114VO6.RES

Method : G:\HPCHEM\6\METHODS\1114VO6.M (RTE Integrator)
 Title : VOC's by EPA Method 8260B
 Last Update : Sun Nov 26 15:00:58 2017
 Response via : Initial Calibration



6V16348.D 1114VO6.M

Thu Jan 18 15:58:11 2018

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10.9.

INTERNAL STANDARD REPORT

Analysis Class: VOLATILES

Analysis Batch: S7L2804

Lab Number	File ID	PFB		DFB		CHB-D5		DCB-D4		Area	Rt	Area	Rt
		Area	Rt	Area	Rt	Area	Rt	Area	Rt				
B7L2718-BLK1	6V16312.D	804645	6.65	1192559	7.78	557263	11.28	563733	14.23				
7120696-02	6V16325.D	718038	6.65	1136142	7.79	529087	11.29	546400	14.23				
7120696-03	6V16326.D	706896	6.65	1115190	7.78	520175	11.28	525253	14.23				
7120696-04	6V16327.D	708661	6.65	1112162	7.79	521990	11.29	517797	14.23				
7120696-05	6V16328.D	702039	6.65	1107495	7.78	513338	11.29	516530	14.23				
7120696-06	6V16329.D	685746	6.65	1083459	7.78	506231	11.29	513308	14.23				
7120696-07	6V16330.D	686683	6.65	1088244	7.78	493708	11.29	509183	14.23				
7120696-08	6V16331.D	694968	6.65	1096888	7.78	500903	11.28	518416	14.23				
7120696-09	6V16332.D	663034	6.65	1044843	7.78	474596	11.29	490277	14.23				
7120696-10	6V16333.D	666527	6.65	1048040	7.78	475972	11.29	477924	14.23				
7120696-11	6V16334.D	732128	6.65	1145777	7.78	529599	11.29	517155	14.23				
7120696-12	6V16335.D	668757	6.65	1035282	7.78	476983	11.29	487469	14.23				
7120696-13	6V16336.D	656710	6.65	1015807	7.78	460421	11.29	473038	14.23				

Reference Std ID

S7L2804-CCV1

Internal Standard		Ref Area	Area Limit	Ref RT	RT Limit
PFB	Pentafluorobenzene	836494	418,247.00 - 1,672,988.00	6.65	0.50
DFB	1,4-Difluorobenzene	1233324	616,662.00 - 2,466,648.00	7.78	0.50
CHB-D5	Chlorobenzene-d5	570493	285,246.50 - 1,140,986.00	11.29	0.50
DCB-D4	1,4-Dichlorobenzene-d4	591011	295,505.50 - 1,182,022.00	14.23	0.50

* - Outside of QC Limits

F-VIII

INTERNAL STANDARD REPORT

Analysis Class: VOLATILES

Analysis Batch: S8A0303

Lab Number	File ID	PFB		DFB		CHB-D5		DCB-D4		Area	Rt	Area	Rt
		Area	Rt	Area	Rt	Area	Rt	Area	Rt				
B8A0226-BLK1	6V16350.D	723600	6.65	1075297	7.79	500673	11.29	509425	14.23				
7120696-01	6V16353.D	668405	6.65	1019814	7.79	472130	11.29	477334	14.23				

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10.10.

Reference Std ID
S8A0303-CCV1

Internal Standard		Ref Area	Area Limit	Ref RT	RT Limit
PFB	Pentafluorobenzene	712589	356,294.50 - 1,425,178.00	6.65	0.50
DFB	1,4-Difluorobenzene	1058617	529,308.50 - 2,117,234.00	7.78	0.50
CHB-D5	Chlorobenzene-d5	498938	249,469.00 - 997,876.00	11.29	0.50
DCB-D4	1,4-Dichlorobenzene-d4	533234	266,617.00 - 1,066,468.00	14.23	0.50

* - Outside of QC Limits

F-VIII

Appendix C: Data Usability Summary Report



**DATA USABILITY SUMMARY REPORT
NATIONAL GRID, PATCHOGUE, NEW YORK**

Client: Brown and Caldwell, Upper Saddle River, New Jersey
SDG: 7120696
Laboratory: Aqua Pro-Tech Laboratories, Fairfield, New Jersey
Site: National Grid, Patchogue, New York
Date: February 5, 2018

EDS ID	Client Sample ID	Laboratory Sample ID	Matrix
1	MW-1-20171220	7120696-01	Water
1MS†	MW-1-20171220MS	7120696-01MS	Water
1MSD†	MW-1-20171220MSD	7120696-01MSD	Water
2	MW-7S-20171220	7120696-02	Water
3	MW-7D-20171220	7120696-03	Water
4	MW-8S-20171220	7120696-04	Water
5	MW-8D-20171220	7120696-05	Water
6	MW-4S-20171221	7120696-06	Water
7	MW-4D-20171221	7120696-07	Water
8	MW-3-20171221	7120696-08	Water
9	DUP-20171221	7120696-09	Water
10	FB-20171221	7120696-10	Water
11	MW-9D-20171221	7120696-11	Water
12	MW-9S-20171221	7120696-12	Water
13*	TRIP BLANK-20171221	7120696-13	Water

* - VOC only † - VOC and PAH only

A Data Usability Summary Review was performed on the analytical data for eleven water samples, on aqueous equipment blank sample, and one aqueous trip blank sample collected on December 20-21, 2017 by Brown and Caldwell at the National Grid, Patchogue, New York Site. The samples were analyzed under Environmental Protection Agency (USEPA) "Test Methods for the Evaluation of Solid Waste, USEPA SW-846, Third Edition, September 1986, with revisions".

Specific method references are as follows:

Analysis

VOC (BTEX & MTBE)
SVOC (PAH)
SVOC SIM

Method References

USEPA SW-846 Method 8260B
USEPA SW-846 Method 8270D
USEPA SW-846 Method 8270D SIM

The data have been validated according to the protocols and quality control (QC) requirements of the analytical methods and the USEPA Region II Data Review Standard Operating Procedures (SOPs) as follows:

- SOP Number HW-24, Revision 4, September 2014: Validating Volatile Organic Compounds by SW-846 Method 8260B & 8260C;
- SOP Number HW-22, Revision 4, August 2008: Validating Semivolatile Organic Compounds by SW-846 Method 8270D;
- and the reviewer's professional judgment.

The following items/criteria were reviewed:

Organics

- Data Completeness
- Holding times and sample preservation
- Surrogate Spike recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) recoveries
- Laboratory Control Sample (LCS) recoveries
- Method blank and field blank contamination
- Gas Chromatography (GC)/Mass Spectrometry (MS) tuning
- Initial and continuing calibration summaries
- Compound Quantitation
- Internal standard area and retention time summary forms
- Field Duplicate sample precision

Data Usability Assessment

There were no rejections of data.

Overall the data is acceptable for the intended purposes. There were no qualifications.

Data Completeness

- The data is a complete Category B data package as defined under the requirements for the NYS Department of Environmental Conservation Analytical Services Protocol.

Volatile Organic Compounds (BTEX & MTBE)

Holding Times

- All samples were analyzed within 14 days for preserved water samples.

Surrogate Spike Recoveries

- All samples exhibited acceptable surrogate %R values.

Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries

- The MS/MSD samples exhibited acceptable percent recoveries (%R) and RPD values.

Laboratory Control Samples

- The LCS sample exhibited acceptable %R values.

Method Blank

- The method blanks were free of contamination.

Field Blank

- The following table summarizes field blank contamination.

Blank ID	Compound	Conc. ug/L	Qualifier	Affected Samples
FB-20171221	None - ND	-	-	-
TRIP BLANK-20171221	None - ND	-	-	-

GC/MS Tuning

- All criteria were met.

Initial Calibration

- All %RSD and average RRF criteria were met.

Continuing Calibration

- All %D and RRF criteria were met.

Compound Quantitation

- All criteria were met.

Internal Standard (IS) Area Performance

- All internal standards met response and retention time (RT) criteria.

Field Duplicate Sample Precision

- Field duplicate results are summarized below. The precision was acceptable.

VOC				
Compound	MW-3-20171221 ug/L	DUP-20171221 ug/L	RPD	Qualifier
None	ND	ND	-	-

Polynuclear Aromatic Hydrocarbons (PAH) and SIM

Holding Times

- All samples were extracted within 7 days for water samples and analyzed within 40 days.

Surrogate Spike Recoveries

- All samples exhibited acceptable surrogate %R values.

Matrix Spike/Matrix Spike Duplicate (MS/MSD) Recoveries

- The MS/MSD samples exhibited acceptable percent recoveries (%R) and RPD values.

Laboratory Control Samples

- The LCS samples exhibited acceptable %R values.

Method Blank

- The method blanks were free of contamination.

Field Blanks

- The following table summarizes field blank contamination.

Blank ID	Compound	Conc. ug/L	Action Level ug/L	Qualifier	Affected Samples
FB-20171221	None - ND	-	-	-	-

GC/MS Tuning

- All criteria were met.

Initial Calibration

- All %RSD and mean RRF criteria were met.

Continuing Calibration

- All %D and RRF criteria were met.

Compound Quantitation

- All criteria were met.

Internal Standard (IS) Area Performance

- All internal standards met response and retention time (RT) criteria.

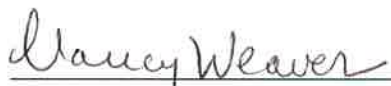
Field Duplicate Sample Precision

- Field duplicate results are summarized below. The precision was acceptable.

PAH				
Compound	MW-3-20171221 ug/L	DUP-20171221 ug/L	RPD	Qualifier
Fluoranthene	0.502	0.590	16%	None
Pyrene	ND	0.509	NC	
Benzo(a)anthracene	0.0281	0.0283	1%	

Please contact the undersigned at (757) 564-0090 if you have any questions or need further information.

Signed:


Nancy Weaver
Senior Chemist

Dated: 2/7/18

Data Qualifiers

- J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ = The analyte was not detected above the sample reporting limit; and the reporting limit is approximate.
- U = The analyte was analyzed for, but was not detected above the sample reporting limit.
- R = The sample results is rejected due to serious deficiencies. The presence or absence of the analyte cannot be verified.

ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260B

Client: Brown and Caldwell USR
 Client Sample ID: MW-1 20171220
 Lab Sample ID: 7120696-01
 Project: Patchogue
 Work Order: 7120696

Date Sampled: 12/20/17 12:49	Prep Date: 12/29/17 16:06	File ID: 6V16353.D
Init/Final Vol: 5 mL / 5 mL	Prep Batch: B8A0226	Analyzed: 12/29/17 16:06
Dilution: 1	Matrix: Ground Water	Sequence: S8A0303
Prep Method: PURGE & TRAP 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
71-43-2	Benzene	ND	0.129	1.00	U
100-41-4	EthylBenzene	ND	0.244	1.00	U
179601-23-1	m+p-Xylenes	ND	0.461	2.00	U
1634-04-4	Methyl tert-Butyl Ether	ND	0.596	1.00	U
95-47-6	o-Xylene	ND	0.244	1.00	U
108-88-3	Toluene	ND	0.205	1.00	U
1330-20-7	Total Xylenes	ND	0.705	1.00	U

10

10.2

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

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

F-I

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ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260B

Client: Brown and Caldwell USR
Client Sample ID: MW-7S 20171220
Lab Sample ID: 7120696-02
Project: Patchogue
Work Order: 7120696

Date Sampled:	12/20/17 14:11	Prep Date:	12/26/17 22:40	File ID:	6V16325.D
Init/Final Vol:	5 mL / 5 mL	Prep Batch:	B7L2718	Analyzed:	12/26/17 22:40
Dilution:	1	Matrix:	Ground Water	Sequence:	S7L2804
		Prep Method:	PURGE & TRAP 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
71-43-2	Benzene	ND	0.129	1.00	U
100-41-4	EthylBenzene	ND	0.244	1.00	U
179601-23-1	m+p-Xylenes	ND	0.461	2.00	U
1634-04-4	Methyl tert-Butyl Ether	ND	0.596	1.00	U
95-47-6	o-Xylene	ND	0.244	1.00	U
108-88-3	Toluene	ND	0.205	1.00	U
1330-20-7	Total Xylenes	ND	0.705	1.00	U

10
10.2

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

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

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ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260B

Client: Brown and Caldwell USR
 Client Sample ID: MW-7D 20171220
 Lab Sample ID: 7120696-03
 Project: Patchogue
 Work Order: 7120696

Date Sampled: 12/20/17 15:05	Prep Date: 12/26/17 23:06	File ID: 6V16326.D
Init/Final Vol: 5 mL / 5 mL	Prep Batch: B7L2718	Analyzed: 12/26/17 23:06
Dilution: 1	Matrix: Ground Water	Sequence: S7L2804
Prep Method: PURGE & TRAP 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
71-43-2	Benzene	ND	0.129	1.00	U
100-41-4	EthylBenzene	ND	0.244	1.00	U
179601-23-1	m+p-Xylenes	ND	0.461	2.00	U
1634-04-4	Methyl tert-Butyl Ether	ND	0.596	1.00	U
95-47-6	o-Xylene	ND	0.244	1.00	U
108-88-3	Toluene	ND	0.205	1.00	U
1330-20-7	Total Xylenes	ND	0.705	1.00	U

10

10.2

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

F-I

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

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ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260B

Client: Brown and Caldwell USR
Client Sample ID: MW-8S 20171220
Lab Sample ID: 7120696-04
Project: Patchogue
Work Order: 7120696

Date Sampled:	12/20/17 16:09	Prep Date:	12/26/17 23:32	File ID:	6V16327.D
Init/Final Vol:	5 mL / 5 mL	Prep Batch:	B7L2718	Analyzed:	12/26/17 23:32
Dilution:	1	Matrix:	Ground Water	Sequence:	S7L2804
		Prep Method:	PURGE & TRAP 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
71-43-2	Benzene	ND	0.129	1.00	U
100-41-4	EthylBenzene	ND	0.244	1.00	U
179601-23-1	m+p-Xylenes	ND	0.461	2.00	U
1634-04-4	Methyl tert-Butyl Ether	ND	0.596	1.00	U
95-47-6	o-Xylene	ND	0.244	1.00	U
108-88-3	Toluene	ND	0.205	1.00	U
1330-20-7	Total Xylenes	ND	0.705	1.00	U

10

10.2

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

F-I

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

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ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260B

Client: Brown and Caldwell USR
 Client Sample ID: MW-8D 20171220
 Lab Sample ID: 7120696-05
 Project: Patchogue
 Work Order: 7120696

Date Sampled: 12/20/17 16:49	Prep Date: 12/26/17 23:58	File ID: 6V16328.D
Init/Final Vol: 5 mL / 5 mL	Prep Batch: B7L2718	Analyzed: 12/26/17 23:58
Dilution: 1	Matrix: Ground Water	Sequence: S7L2804
Prep Method: PURGE & TRAP 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
71-43-2	Benzene	ND	0.129	1.00	U
100-41-4	EthylBenzene	ND	0.244	1.00	U
179601-23-1	m+p-Xylenes	ND	0.461	2.00	U
1634-04-4	Methyl tert-Butyl Ether	ND	0.596	1.00	U
95-47-6	o-Xylene	ND	0.244	1.00	U
108-88-3	Toluene	ND	0.205	1.00	U
1330-20-7	Total Xylenes	ND	0.705	1.00	U

10

10.2.

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

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

F-I

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ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260B

Client: Brown and Caldwell USR
 Client Sample ID: MW-4S 20171221
 Lab Sample ID: 7120696-06
 Project: Patchogue
 Work Order: 7120696

Date Sampled:	12/21/17 08:42	Prep Date:	12/27/17 00:23	File ID:	6V16329.D
Init/Final Vol:	5 mL / 5 mL	Prep Batch:	B7L2718	Analyzed:	12/27/17 00:23
Dilution:	1	Matrix:	Ground Water	Sequence:	S7L2804
		Prep Method:	PURGE & TRAP 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
71-43-2	Benzene	ND	0.129	1.00	U
100-41-4	EthylBenzene	ND	0.244	1.00	U
179601-23-1	m+p-Xylenes	ND	0.461	2.00	U
1634-04-4	Methyl tert-Butyl Ether	ND	0.596	1.00	U
95-47-6	o-Xylene	ND	0.244	1.00	U
108-88-3	Toluene	ND	0.205	1.00	U
1330-20-7	Total Xylenes	ND	0.705	1.00	U

10
10.2

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

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

F-1

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ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260B

Client: Brown and Caldwell USR
 Client Sample ID: MW-4D 20171221
 Lab Sample ID: 7120696-07
 Project: Patchogue
 Work Order: 7120696

Date Sampled: 12/21/17 09:53	Prep Date: 12/27/17 00:49	File ID: 6V16330.D
Init/Final Vol: 5 mL / 5 mL	Prep Batch: B7L2718	Analyzed: 12/27/17 00:49
Dilution: 1	Matrix: Ground Water	Sequence: S7L2804
Prep Method: PURGE & TRAP 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
71-43-2	Benzene	ND	0.129	1.00	U
100-41-4	EthylBenzene	ND	0.244	1.00	U
179601-23-1	m+p-Xylenes	ND	0.461	2.00	U
1634-04-4	Methyl tert-Butyl Ether	ND	0.596	1.00	U
95-47-6	o-Xylene	ND	0.244	1.00	U
108-88-3	Toluene	ND	0.205	1.00	U
1330-20-7	Total Xylenes	ND	0.705	1.00	U

10
10.2.

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

F-1

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

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ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260B

Client: Brown and Caldwell USR
 Client Sample ID: MW-3 20171221
 Lab Sample ID: 7120696-08
 Project: Patchogue
 Work Order: 7120696

Date Sampled:	12/21/17 10:43	Prep Date:	12/27/17 01:14	File ID:	6V16331.D
Init/Final Vol:	5 mL / 5 mL	Prep Batch:	B7L2718	Analyzed:	12/27/17 01:14
Dilution:	1	Matrix:	Ground Water	Sequence:	S7L2804
		Prep Method:	PURGE & TRAP 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
71-43-2	Benzene	ND	0.129	1.00	U
100-41-4	EthylBenzene	ND	0.244	1.00	U
179601-23-1	m+p-Xylenes	ND	0.461	2.00	U
1634-04-4	Methyl tert-Butyl Ether	ND	0.596	1.00	U
95-47-6	o-Xylene	ND	0.244	1.00	U
108-88-3	Toluene	ND	0.205	1.00	U
1330-20-7	Total Xylenes	ND	0.705	1.00	U

10
10.2.

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

F-I

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

9

ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260B

Client: Brown and Caldwell USR
 Client Sample ID: DUP-20171221
 Lab Sample ID: 7120696-09
 Project: Patchogue
 Work Order: 7120696

Date Sampled:	12/21/17 00:00	Prep Date:	12/27/17 01:40	File ID:	6V16332.D
Init/Final Vol:	5 mL / 5 mL	Prep Batch:	B7L2718	Analyzed:	12/27/17 01:40
Dilution:	1	Matrix:	Ground Water	Sequence:	S7L2804
		Prep Method:	PURGE & TRAP 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
71-43-2	Benzene	ND	0.129	1.00	U
100-41-4	EthylBenzene	ND	0.244	1.00	U
179601-23-1	m+p-Xylenes	ND	0.461	2.00	U
1634-04-4	Methyl tert-Butyl Ether	ND	0.596	1.00	U
95-47-6	o-Xylene	ND	0.244	1.00	U
108-88-3	Toluene	ND	0.205	1.00	U
1330-20-7	Total Xylenes	ND	0.705	1.00	U

10
10.2.

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

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

(10)

ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260B

Client: Brown and Caldwell USR
 Client Sample ID: FB-20171221
 Lab Sample ID: 7120696-10
 Project: Patchogue
 Work Order: 7120696

Date Sampled: 12/21/17 11:01	Prep Date: 12/27/17 02:06	File ID: 6V16333.D
Init/Final Vol: 5 mL / 5 mL	Prep Batch: B7L2718	Analyzed: 12/27/17 02:06
Dilution: 1	Matrix: Ground Water	Sequence: S7L2804
Prep Method: PURGE & TRAP 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
71-43-2	Benzene	ND	0.129	1.00	U
100-41-4	EthylBenzene	ND	0.244	1.00	U
179601-23-1	m+p-Xylenes	ND	0.461	2.00	U
1634-04-4	Methyl tert-Butyl Ether	ND	0.596	1.00	U
95-47-6	o-Xylene	ND	0.244	1.00	U
108-88-3	Toluene	ND	0.205	1.00	U
1330-20-7	Total Xylenes	ND	0.705	1.00	U

10
10.2

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

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

F-I

11

ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260B

Client: Brown and Caldwell USR
Client Sample ID: MW-9D 20171221
Lab Sample ID: 7120696-11
Project: Patchogue
Work Order: 7120696

Date Sampled:	12/21/17 11:34	Prep Date:	12/27/17 02:31	File ID:	6V16334.D
Init/Final Vol:	5 mL / 5 mL	Prep Batch:	B7L2718	Analyzed:	12/27/17 02:31
Dilution:	1	Matrix:	Ground Water	Sequence:	S7L2804
		Prep Method:	PURGE & TRAP 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
71-43-2	Benzene	ND	0.129	1.00	U
100-41-4	EthylBenzene	ND	0.244	1.00	U
179601-23-1	m+p-Xylenes	ND	0.461	2.00	U
1634-04-4	Methyl tert-Butyl Ether	ND	0.596	1.00	U
95-47-6	o-Xylene	ND	0.244	1.00	U
108-88-3	Toluene	ND	0.205	1.00	U
1330-20-7	Total Xylenes	ND	0.705	1.00	U

10
10.2.

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

F-1

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

12

ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260B

Client: Brown and Caldwell USR
 Client Sample ID: MW-9S 20171221
 Lab Sample ID: 7120696-12
 Project: Patchogue
 Work Order: 7120696

Date Sampled: 12/21/17 00:00	Prep Date: 12/27/17 02:57	File ID: 6V16335.D
Init/Final Vol: 5 mL / 5 mL	Prep Batch: B7L2718	Analyzed: 12/27/17 02:57
Dilution: 1	Matrix: Ground Water	Sequence: S7L2804
Prep Method: PURGE & TRAP 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
71-43-2	Benzene	ND	0.129	1.00	U
100-41-4	EthylBenzene	ND	0.244	1.00	U
179601-23-1	m+p-Xylenes	ND	0.461	2.00	U
1634-04-4	Methyl tert-Butyl Ether	ND	0.596	1.00	U
95-47-6	o-Xylene	ND	0.244	1.00	U
108-88-3	Toluene	ND	0.205	1.00	U
1330-20-7	Total Xylenes	ND	0.705	1.00	U

10
10.2

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

F-I

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

13

ANALYSIS DATA SHEET

Volatile Organics - GC/MS - SW 846 8260B

Client: Brown and Caldwell USR
 Client Sample ID: Trip Blank-20171221
 Lab Sample ID: 7120696-13
 Project: Patchogue
 Work Order: 7120696

Date Sampled: 12/21/17 00:00	Prep Date: 12/27/17 03:23	File ID: 6V16336.D
Init/Final Vol: 5 mL / 5 mL	Prep Batch: B7L2718	Analyzed: 12/27/17 03:23
Dilution: 1	Matrix: Ground Water	Sequence: S7L2804
Prep Method: PURGE & TRAP 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
71-43-2	Benzene	ND	0.129	1.00	U
100-41-4	EthylBenzene	ND	0.244	1.00	U
179601-23-1	m+p-Xylenes	ND	0.461	2.00	U
1634-04-4	Methyl tert-Butyl Ether	ND	0.596	1.00	U
95-47-6	o-Xylene	ND	0.244	1.00	U
108-88-3	Toluene	ND	0.205	1.00	U
1330-20-7	Total Xylenes	ND	0.705	1.00	U

10
10.2.

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

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

F-1

ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

Client: Brown and Caldwell USR
Client Sample ID: MW-1 20171220
Lab Sample ID: 7120696-01
Project: Patchogue
Work Order: 7120696

Date Sampled: 12/20/17 12:49	Prep Date: 12/22/17 09:16	File ID: AS03574.D
Init/Final Vol: 1000 mL / 1 mL	Prep Batch: B7L2204	Analyzed: 12/22/17 22:57
Dilution: 1	Matrix: Ground Water	Sequence: S7L2811
	Prep Method: Sep Funnel MS 8000	

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
83-32-9	Acenaphthene	ND	0.100	2.00	U
208-96-8	Acenaphthylene	ND	0.140	2.00	U
120-12-7	Anthracene	ND	0.121	2.00	U
191-24-2	Benzo(g,h,i)perylene	ND	0.0652	2.00	U
218-01-9	Chrysene	ND	0.129	2.00	U
206-44-0	Fluoranthene	ND	0.129	2.00	U
86-73-7	Fluorene	ND	0.109	2.00	U
91-20-3	Naphthalene	ND	0.0607	2.00	U
85-01-8	Phenanthrene	ND	0.0725	2.00	U
129-00-0	Pyrene	ND	0.115	2.00	U

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

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

F-1

2

ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

Client: Brown and Caldwell USR
 Client Sample ID: MW-7S 20171220
 Lab Sample ID: 7120696-02
 Project: Patchogue
 Work Order: 7120696

Date Sampled: 12/20/17 14:11	Prep Date: 12/22/17 09:16	File ID: AS03575.D
Init/Final Vol: 990 mL / 1 mL	Prep Batch: B7L2204	Analyzed: 12/22/17 23:21
Dilution: 1	Matrix: Ground Water	Sequence: S7L2811
Prep Method: Sep Funnel MS 8000		



8.2

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
83-32-9	Acenaphthene	ND	0.101	2.02	U
208-96-8	Acenaphthylene	ND	0.141	2.02	U
120-12-7	Anthracene	ND	0.122	2.02	U
191-24-2	Benzo(g,h,i)perylene	ND	0.0659	2.02	U
218-01-9	Chrysene	ND	0.130	2.02	U
206-44-0	Fluoranthene	ND	0.130	2.02	U
86-73-7	Fluorene	ND	0.110	2.02	U
91-20-3	Naphthalene	ND	0.0613	2.02	U
85-01-8	Phenanthrene	ND	0.0732	2.02	U
129-00-0	Pyrene	ND	0.116	2.02	U

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

F-I

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

3

ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

Client: Brown and Caldwell USR
 Client Sample ID: MW-7D 20171220
 Lab Sample ID: 7120696-03
 Project: Patchogue
 Work Order: 7120696

Date Sampled: 12/20/17 15:05	Prep Date: 12/22/17 09:16	File ID: AS03576.D
Init/Final Vol: 1000 mL / 1 mL	Prep Batch: B7L2204	Analyzed: 12/22/17 23:44
Dilution: 1	Matrix: Ground Water	Sequence: S7L2811
Prep Method: Sep Funnel MS 8000		



8.2

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
83-32-9	Acenaphthene	ND	0.100	2.00	U
208-96-8	Acenaphthylene	ND	0.140	2.00	U
120-12-7	Anthracene	ND	0.121	2.00	U
191-24-2	Benzo(g,h,i)perylene	ND	0.0652	2.00	U
218-01-9	Chrysene	ND	0.129	2.00	U
206-44-0	Fluoranthene	ND	0.129	2.00	U
86-73-7	Fluorene	ND	0.109	2.00	U
91-20-3	Naphthalene	ND	0.0607	2.00	U
85-01-8	Phenanthrene	ND	0.0725	2.00	U
129-00-0	Pyrene	ND	0.115	2.00	U

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

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

F-1

4

ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

Client: Brown and Caldwell USR
 Client Sample ID: MW-8S 20171220
 Lab Sample ID: 7120696-04
 Project: Patchogue
 Work Order: 7120696

Date Sampled: 12/20/17 16:09	Prep Date: 12/22/17 09:16	File ID: AS03577.D
Init/Final Vol: 1000 mL / 1 mL	Prep Batch: B7L2204	Analyzed: 12/23/17 00:08
Dilution: 1	Matrix: Ground Water	Sequence: S7L2811
	Prep Method: Sep Funnel MS 8000	

8

8.2

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
83-32-9	Acenaphthene	ND	0.100	2.00	U
208-96-8	Acenaphthylene	ND	0.140	2.00	U
120-12-7	Anthracene	ND	0.121	2.00	U
191-24-2	Benzo(g,h,i)perylene	ND	0.0652	2.00	U
218-01-9	Chrysene	ND	0.129	2.00	U
206-44-0	Fluoranthene	ND	0.129	2.00	U
86-73-7	Fluorene	ND	0.109	2.00	U
91-20-3	Naphthalene	ND	0.0607	2.00	U
85-01-8	Phenanthrene	ND	0.0725	2.00	U
129-00-0	Pyrene	ND	0.115	2.00	U

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

F-I

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

5

ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

Client: Brown and Caldwell USR
 Client Sample ID: MW-8D 20171220
 Lab Sample ID: 7120696-05
 Project: Patchogue
 Work Order: 7120696

Date Sampled:	12/20/17 16:49	Prep Date:	12/22/17 09:16	File ID:	AS03578.D
Init/Final Vol:	1000 mL / 1 mL	Prep Batch:	B7L2204	Analyzed:	12/23/17 00:31
Dilution:	1	Matrix:	Ground Water	Sequence:	S7L2811
		Prep Method:	Sep Funnel MS 8000		



CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
83-32-9	Acenaphthene	ND	0.100	2.00	U
208-96-8	Acenaphthylene	ND	0.140	2.00	U
120-12-7	Anthracene	ND	0.121	2.00	U
191-24-2	Benzo(g,h,i)perylene	ND	0.0652	2.00	U
218-01-9	Chrysene	ND	0.129	2.00	U
206-44-0	Fluoranthene	ND	0.129	2.00	U
86-73-7	Fluorene	ND	0.109	2.00	U
91-20-3	Naphthalene	ND	0.0607	2.00	U
85-01-8	Phenanthrene	ND	0.0725	2.00	U
129-00-0	Pyrene	ND	0.115	2.00	U

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

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

F-1

6

ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

Client: **Brown and Caldwell USR**
 Client Sample ID: **MW-4S 20171221**
 Lab Sample ID: **7120696-06**
 Project: **Patchogue**
 Work Order: **7120696**

Date Sampled: 12/21/17 08:42	Prep Date: 12/26/17 10:00	File ID: AS03600.D
Init/Final Vol: 930 mL / 1 mL	Prep Batch: B7L2204	Analyzed: 12/26/17 21:52
Dilution: 1	Matrix: Ground Water	Sequence: S7L2902
Prep Method: Sep Funnel MS 8000		

8

8.2

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
83-32-9	Acenaphthene	ND	0.108	2.15	U
208-96-8	Acenaphthylene	ND	0.151	2.15	U
120-12-7	Anthracene	ND	0.130	2.15	U
191-24-2	Benzo(g,h,i)perylene	ND	0.0701	2.15	U
218-01-9	Chrysene	ND	0.139	2.15	U
206-44-0	Fluoranthene	ND	0.139	2.15	U
86-73-7	Fluorene	ND	0.117	2.15	U
91-20-3	Naphthalene	ND	0.0653	2.15	U
85-01-8	Phenanthrene	ND	0.0780	2.15	U
129-00-0	Pyrene	ND	0.124	2.15	U

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

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

F-I

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ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

Client: Brown and Caldwell USR
 Client Sample ID: MW-4D 20171221
 Lab Sample ID: 7120696-07
 Project: Patchogue
 Work Order: 7120696

Date Sampled:	12/21/17 09:53	Prep Date:	12/26/17 10:00	File ID:	AS03601.D
Init/Final Vol:	1000 mL / 1 mL	Prep Batch:	B7L2204	Analyzed:	12/26/17 22:16
Dilution:	1	Matrix:	Ground Water	Sequence:	S7L2902
		Prep Method:	Sep Funnel MS 8000		

8
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CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
83-32-9	Acenaphthene	ND	0.100	2.00	U
208-96-8	Acenaphthylene	ND	0.140	2.00	U
120-12-7	Anthracene	ND	0.121	2.00	U
191-24-2	Benzo(g,h,i)perylene	ND	0.0652	2.00	U
218-01-9	Chrysene	ND	0.129	2.00	U
206-44-0	Fluoranthene	ND	0.129	2.00	U
86-73-7	Fluorene	ND	0.109	2.00	U
91-20-3	Naphthalene	ND	0.0607	2.00	U
85-01-8	Phenanthrene	ND	0.0725	2.00	U
129-00-0	Pyrene	ND	0.115	2.00	U

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

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

F-I

8

ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

Client: Brown and Caldwell USR
 Client Sample ID: MW-3 20171221
 Lab Sample ID: 7120696-08
 Project: Patchogue
 Work Order: 7120696

Date Sampled: 12/21/17 10:43	Prep Date: 12/26/17 10:00	File ID: AS03602.D
Init/Final Vol: 1000 mL / 1 mL	Prep Batch: B7L2204	Analyzed: 12/26/17 22:39
Dilution: 1	Matrix: Ground Water	Sequence: S7L2902
Prep Method: Sep Funnel MS 8000		

8

8.2

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
83-32-9	Acenaphthene	ND	0.100	2.00	U
208-96-8	Acenaphthylene	ND	0.140	2.00	U
120-12-7	Anthracene	ND	0.121	2.00	U
191-24-2	Benzo(g,h,i)perylene	ND	0.0652	2.00	U
218-01-9	Chrysene	ND	0.129	2.00	U
206-44-0	Fluoranthene	0.502	0.129	2.00	J
86-73-7	Fluorene	ND	0.109	2.00	U
91-20-3	Naphthalene	ND	0.0607	2.00	U
85-01-8	Phenanthrene	ND	0.0725	2.00	U
129-00-0	Pyrene	ND	0.115	2.00	U

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

F-I

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

9

ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

Client: Brown and Caldwell USR
 Client Sample ID: DUP-20171221
 Lab Sample ID: 7120696-09
 Project: Patchogue
 Work Order: 7120696

Date Sampled:	12/21/17 00:00	Prep Date:	12/26/17 10:00	File ID:	AS03603.D
Init/Final Vol:	1000 mL / 1 mL	Prep Batch:	B7L2204	Analyzed:	12/26/17 23:02
Dilution:	1	Matrix:	Ground Water	Sequence:	S7L2902
		Prep Method:	Sep Funnel MS 8000		

8

8.2

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
83-32-9	Acenaphthene	ND	0.100	2.00	U
208-96-8	Acenaphthylene	ND	0.140	2.00	U
120-12-7	Anthracene	ND	0.121	2.00	U
191-24-2	Benzo(g,h,i)perylene	ND	0.0652	2.00	U
218-01-9	Chrysene	ND	0.129	2.00	U
206-44-0	Fluoranthene	0.590	0.129	2.00	J
86-73-7	Fluorene	ND	0.109	2.00	U
91-20-3	Naphthalene	ND	0.0607	2.00	U
85-01-8	Phenanthrene	ND	0.0725	2.00	U
129-00-0	Pyrene	0.509	0.115	2.00	J

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

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

F-I

ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

Client: Brown and Caldwell USR
 Client Sample ID: FB-20171221
 Lab Sample ID: 7120696-10
 Project: Patchogue
 Work Order: 7120696

Date Sampled: 12/21/17 11:01	Prep Date: 12/26/17 10:00	File ID: AS03604.D
Init/Final Vol: 1000 mL / 1 mL	Prep Batch: B7L2204	Analyzed: 12/26/17 23:25
Dilution: 1	Matrix: Ground Water	Sequence: S7L2902
	Prep Method: Sep Funnel MS 8000	

8

8.2

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
83-32-9	Acenaphthene	ND	0.100	2.00	U
208-96-8	Acenaphthylene	ND	0.140	2.00	U
120-12-7	Anthracene	ND	0.121	2.00	U
191-24-2	Benzo(g,h,i)perylene	ND	0.0652	2.00	U
218-01-9	Chrysene	ND	0.129	2.00	U
206-44-0	Fluoranthene	ND	0.129	2.00	U
86-73-7	Fluorene	ND	0.109	2.00	U
91-20-3	Naphthalene	ND	0.0607	2.00	U
85-01-8	Phenanthrene	ND	0.0725	2.00	U
129-00-0	Pyrene	ND	0.115	2.00	U

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

F-I

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

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ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

Client: Brown and Caldwell USR
 Client Sample ID: MW-9D 20171221
 Lab Sample ID: 7120696-11
 Project: Patchogue
 Work Order: 7120696

Date Sampled: 12/21/17 11:34	Prep Date: 12/26/17 09:26	File ID: AS03608.D
Init/Final Vol: 1000 mL / 1 mL	Prep Batch: B7L2608	Analyzed: 12/27/17 00:58
Dilution: 1	Matrix: Ground Water	Sequence: S7L2902
Prep Method: Sep Funnel MS 8000		

8

8.2

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
83-32-9	Acenaphthene	ND	0.100	2.00	U
208-96-8	Acenaphthylene	ND	0.140	2.00	U
120-12-7	Anthracene	ND	0.121	2.00	U
191-24-2	Benzo(g,h,i)perylene	ND	0.0652	2.00	U
218-01-9	Chrysene	ND	0.129	2.00	U
206-44-0	Fluoranthene	ND	0.129	2.00	U
86-73-7	Fluorene	ND	0.109	2.00	U
91-20-3	Naphthalene	ND	0.0607	2.00	U
85-01-8	Phenanthrene	ND	0.0725	2.00	U
129-00-0	Pyrene	ND	0.115	2.00	U

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

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

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ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SW 846 8270D

Client: Brown and Caldwell USR
 Client Sample ID: MW-9S 20171221
 Lab Sample ID: 7120696-12
 Project: Patchogue
 Work Order: 7120696

Date Sampled: 12/21/17 00:00	Prep Date: 12/26/17 09:26	File ID: AS03609.D
Init/Final Vol: 1000 mL / 1 mL	Prep Batch: B7L2608	Analyzed: 12/27/17 01:22
Dilution: 1	Matrix: Ground Water	Sequence: S7L2902
	Prep Method: Sep Funnel MS 8000	

8
8.2

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
83-32-9	Acenaphthene	0.967	0.100	2.00	J
208-96-8	Acenaphthylene	ND	0.140	2.00	U
120-12-7	Anthracene	ND	0.121	2.00	U
191-24-2	Benzo(g,h,i)perylene	ND	0.0652	2.00	U
218-01-9	Chrysene	ND	0.129	2.00	U
206-44-0	Fluoranthene	1.28	0.129	2.00	J
86-73-7	Fluorene	ND	0.109	2.00	U
91-20-3	Naphthalene	ND	0.0607	2.00	U
85-01-8	Phenanthrene	ND	0.0725	2.00	U
129-00-0	Pyrene	1.72	0.115	2.00	J

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

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

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ANALYSIS DATA SHEET
Semivolatile Organics - GC/MS - SIM - SW 846 8270D

Client: Brown and Caldwell USR
Client Sample ID: MW-1 20171220
Lab Sample ID: 7120696-01
Project: Patchogue
Work Order: 7120696

Date Sampled: 12/20/17 12:49	Prep Date: 12/22/17 09:16	File ID: BM12751.D
Init/Final Vol: 1000 mL / 1 mL	Prep Batch: B7L2204	Analyzed: 12/23/17 01:09
Dilution: 1	Matrix: Ground Water	Sequence: S7L2809
Prep Method: Sep Funnel MS 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
56-55-3	Benzo(a)anthracene	ND	0.0165	0.0200	U
50-32-8	Benzo(a)pyrene	ND	0.0124	0.0200	U
205-99-2	Benzo(b)fluoranthene	ND	0.0177	0.0200	U
207-08-9	Benzo(k)fluoranthene	ND	0.00710	0.0200	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.0160	0.0200	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.0131	0.0200	U

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

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

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ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SIM - SW 846 8270D

Client: Brown and Caldwell USR
 Client Sample ID: MW-7S 20171220
 Lab Sample ID: 7120696-02
 Project: Patchogue
 Work Order: 7120696

Date Sampled: 12/20/17 14:11	Prep Date: 12/22/17 09:16	File ID: BM12752.D
Init/Final Vol: 990 mL / 1 mL	Prep Batch: B7L2204	Analyzed: 12/23/17 01:35
Dilution: 1	Matrix: Ground Water	Sequence: S7L2809
Prep Method: Sep Funnel MS 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
56-55-3	Benzo(a)anthracene	ND	0.0167	0.0202	U
50-32-8	Benzo(a)pyrene	ND	0.0125	0.0202	U
205-99-2	Benzo(b)fluoranthene	ND	0.0179	0.0202	U
207-08-9	Benzo(k)fluoranthene	ND	0.00717	0.0202	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.0162	0.0202	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.0132	0.0202	U

9
9.2

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

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

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7120696

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ANALYSIS DATA SHEET
Semivolatile Organics - GC/MS - SIM - SW 846 8270D

Client: Brown and Caldwell USR
Client Sample ID: MW-7D 20171220
Lab Sample ID: 7120696-03
Project: Patchogue
Work Order: 7120696

Date Sampled: 12/20/17 15:05	Prep Date: 12/22/17 09:16	File ID: BM12753.D
Init/Final Vol: 1000 mL / 1 mL	Prep Batch: B7L2204	Analyzed: 12/23/17 02:02
Dilution: 1	Matrix: Ground Water	Sequence: S7L2809
	Prep Method: Sep Funnel MS 8000	

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
56-55-3	Benzo(a)anthracene	0.0257	0.0165	0.0200	
50-32-8	Benzo(a)pyrene	0.0243	0.0124	0.0200	
205-99-2	Benzo(b)fluoranthene	0.0305	0.0177	0.0200	
207-08-9	Benzo(k)fluoranthene	0.0123	0.00710	0.0200	J
53-70-3	Dibenzo(a,h)anthracene	ND	0.0160	0.0200	U
193-39-5	Indeno(1,2,3-cd)pyrene	0.0147	0.0131	0.0200	J

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

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

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ANALYSIS DATA SHEET
Semivolatile Organics - GC/MS - SIM - SW 846 8270D

Client: Brown and Caldwell USR
Client Sample ID: MW-8S 20171220
Lab Sample ID: 7120696-04
Project: Patchogue
Work Order: 7120696

Date Sampled: 12/20/17 16:09	Prep Date: 12/22/17 09:16	File ID: BM12754.D
Init/Final Vol: 1000 mL / 1 mL	Prep Batch: B7L2204	Analyzed: 12/23/17 02:29
Dilution: 1	Matrix: Ground Water	Sequence: S7L2809
	Prep Method: Sep Funnel MS 8000	

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
56-55-3	Benzo(a)anthracene	ND	0.0165	0.0200	U
50-32-8	Benzo(a)pyrene	ND	0.0124	0.0200	U
205-99-2	Benzo(b)fluoranthene	ND	0.0177	0.0200	U
207-08-9	Benzo(k)fluoranthene	ND	0.00710	0.0200	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.0160	0.0200	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.0131	0.0200	U

9.2.

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

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

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m 2/5/18

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ANALYSIS DATA SHEET
Semivolatile Organics - GC/MS - SIM - SW 846 8270D

Client: Brown and Caldwell USR
Client Sample ID: MW-8D 20171220
Lab Sample ID: 7120696-05
Project: Patchogue
Work Order: 7120696

Date Sampled: 12/20/17 16:49	Prep Date: 12/22/17 09:16	File ID: BM12755.D
Init/Final Vol: 1000 mL / 1 mL	Prep Batch: B7L2204	Analyzed: 12/23/17 02:56
Dilution: 1	Matrix: Ground Water	Sequence: S7L2809
	Prep Method: Sep Funnel MS 8000	

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
56-55-3	Benzo(a)anthracene	0.0167	0.0165	0.0200	J
50-32-8	Benzo(a)pyrene	ND	0.0124	0.0200	U
205-99-2	Benzo(b)fluoranthene	ND	0.0177	0.0200	U
207-08-9	Benzo(k)fluoranthene	ND	0.00710	0.0200	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.0160	0.0200	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.0131	0.0200	U

9
9.2

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

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

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ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SIM - SW 846 8270D

Client: Brown and Caldwell USR
Client Sample ID: MW-4S 20171221
Lab Sample ID: 7120696-06
Project: Patchogue
Work Order: 7120696

Date Sampled:	12/21/17 08:42	Prep Date:	12/26/17 10:00	File ID:	BM12794.D
Init/Final Vol:	930 mL / 1 mL	Prep Batch:	B7L2204	Analyzed:	12/28/17 20:44
Dilution:	1	Matrix:	Ground Water	Sequence:	S8A0213
		Prep Method:	Sep Funnel MS 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
56-55-3	Benzo(a)anthracene	ND	0.0177	0.0215	U
50-32-8	Benzo(a)pyrene	ND	0.0133	0.0215	U
205-99-2	Benzo(b)fluoranthene	ND	0.0190	0.0215	U
207-08-9	Benzo(k)fluoranthene	ND	0.00763	0.0215	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.0172	0.0215	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.0141	0.0215	U

9.2.

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

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

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ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SIM - SW 846 8270D

Client: Brown and Caldwell USR
Client Sample ID: MW-4D 20171221
Lab Sample ID: 7120696-07
Project: Patchogue
Work Order: 7120696

Date Sampled:	12/21/17 09:53	Prep Date:	12/26/17 10:00	File ID:	BM12795.D
Ini/Final Vol:	1000 mL / 1 mL	Prep Batch:	B7L2204	Analyzed:	12/28/17 21:11
Dilution:	1	Matrix:	Ground Water	Sequence:	S8A0213
		Prep Method:	Sep Funnel MS 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
56-55-3	Benzo(a)anthracene	0.0180	0.0165	0.0200	J
50-32-8	Benzo(a)pyrene	0.0129	0.0124	0.0200	J
205-99-2	Benzo(b)fluoranthene	ND	0.0177	0.0200	U
207-08-9	Benzo(k)fluoranthene	ND	0.00710	0.0200	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.0160	0.0200	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.0131	0.0200	U

9

9.2.

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

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

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new 2/5/18

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ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SIM - SW 846 8270D

Client: Brown and Caldwell USR
Client Sample ID: MW-3 20171221
Lab Sample ID: 7120696-08
Project: Patchogue
Work Order: 7120696

Date Sampled:	12/21/17 10:43	Prep Date:	12/26/17 10:00	File ID:	BM12796.D
Init/Final Vol:	1000 mL / 1 mL	Prep Batch:	B7L2204	Analyzed:	12/28/17 21:38
Dilution:	1	Matrix:	Ground Water	Sequence:	S8A0213
		Prep Method:	Sep Funnel MS 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
56-55-3	Benzo(a)anthracene	0.0281	0.0165	0.0200	
50-32-8	Benzo(a)pyrene	ND	0.0124	0.0200	U
205-99-2	Benzo(b)fluoranthene	ND	0.0177	0.0200	U
207-08-9	Benzo(k)fluoranthene	ND	0.00710	0.0200	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.0160	0.0200	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.0131	0.0200	U

9

9.2.

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

F-I

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

nw 2/5/18

9

ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SIM - SW 846 8270D

Client: Brown and Caldwell USR
 Client Sample ID: DUP-20171221
 Lab Sample ID: 7120696-09
 Project: Patchogue
 Work Order: 7120696

Date Sampled:	12/21/17 00:00	Prep Date:	12/26/17 10:00	File ID:	BM12797.D
Init/Final Vol:	1000 mL / 1 mL	Prep Batch:	B7L2204	Analyzed:	12/28/17 22:04
Dilution:	1	Matrix:	Ground Water	Sequence:	S8A0213
		Prep Method:	Sep Funnel MS 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
56-55-3	Benzo(a)anthracene	0.0283	0.0165	0.0200	
50-32-8	Benzo(a)pyrene	ND	0.0124	0.0200	U
205-99-2	Benzo(b)fluoranthene	ND	0.0177	0.0200	U
207-08-9	Benzo(k)fluoranthene	ND	0.00710	0.0200	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.0160	0.0200	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.0131	0.0200	U

9
9.2

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

F-I

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

new 2151.8

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ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SIM - SW 846 8270D

Client: Brown and Caldwell USR
 Client Sample ID: FB-20171221
 Lab Sample ID: 7120696-10
 Project: Patchogue
 Work Order: 7120696

Date Sampled: 12/21/17 11:01	Prep Date: 12/26/17 10:00	File ID: BM12798.D
Init/Final Vol: 1000 mL / 1 mL	Prep Batch: B7L2204	Analyzed: 12/28/17 22:31
Dilution: 1	Matrix: Ground Water	Sequence: S8A0213
	Prep Method: Sep Funnel MS 8000	

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
56-55-3	Benzo(a)anthracene	ND	0.0165	0.0200	U
50-32-8	Benzo(a)pyrene	ND	0.0124	0.0200	U
205-99-2	Benzo(b)fluoranthene	ND	0.0177	0.0200	U
207-08-9	Benzo(k)fluoranthene	ND	0.00710	0.0200	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.0160	0.0200	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.0131	0.0200	U

9
9.2.

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

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

F-1

NW215h8

ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SIM - SW 846 8270D

Client: Brown and Caldwell USR
 Client Sample ID: MW-9D 20171221
 Lab Sample ID: 7120696-11
 Project: Patchogue
 Work Order: 7120696

Date Sampled:	12/21/17 11:34	Prep Date:	12/26/17 09:26	File ID:	BM12799.D
Init/Final Vol:	1000 mL / 1 mL	Prep Batch:	B7L2608	Analyzed:	12/28/17 22:58
Dilution:	1	Matrix:	Ground Water	Sequence:	S8A0213
		Prep Method:	Sep Funnel MS 8000		

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
56-55-3	Benzo(a)anthracene	0.0292	0.0165	0.0200	
50-32-8	Benzo(a)pyrene	0.0303	0.0124	0.0200	
205-99-2	Benzo(b)fluoranthene	0.0396	0.0177	0.0200	
207-08-9	Benzo(k)fluoranthene	0.0181	0.00710	0.0200	J
53-70-3	Dibenzo(a,h)anthracene	ND	0.0160	0.0200	U
193-39-5	Indeno(1,2,3-cd)pyrene	0.0184	0.0131	0.0200	J

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

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

F-1

MW 2/5/18

12

ANALYSIS DATA SHEET

Semivolatile Organics - GC/MS - SIM - SW 846 8270D

Client: Brown and Caldwell USR
 Client Sample ID: MW-9S 20171221
 Lab Sample ID: 7120696-12
 Project: Patchogue
 Work Order: 7120696

Date Sampled: 12/21/17 00:00	Prep Date: 12/26/17 09:26	File ID: BM12800.D
Init/Final Vol: 1000 mL / 1 mL	Prep Batch: B7L2608	Analyzed: 12/28/17 23:25
Dilution: 1	Matrix: Ground Water	Sequence: S8A0213
	Prep Method: Sep Funnel MS 8000	

CAS NO.	COMPOUND	CONC. (ug/L)	MDL	RL	Q
56-55-3	Benzo(a)anthracene	0.595	0.0165	0.0200	
50-32-8	Benzo(a)pyrene	0.499	0.0124	0.0200	
205-99-2	Benzo(b)fluoranthene	0.431	0.0177	0.0200	
207-08-9	Benzo(k)fluoranthene	0.202	0.00710	0.0200	
53-70-3	Dibenzo(a,h)anthracene	0.0533	0.0160	0.0200	
193-39-5	Indeno(1,2,3-cd)pyrene	0.215	0.0131	0.0200	

9
9.2.

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

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

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new 2/5/18

Appendix D: Electronic Data Deliverable (CD-ROM)

